



**CITY OF SOUTH PASADENA
CITY COUNCIL REGULAR MEETING AGENDA**

**Council Chamber
1424 Mission Street, South Pasadena, CA 91030
December 16, 2020, at 7:30 p.m.**

South Pasadena City Council Statement of Civility

As your elected governing board, we will treat each other, members of the public, and city employees with patience, civility and courtesy as a model of the same behavior we wish to reflect in South Pasadena for the conduct of all city business and community participation. The decisions made tonight will be for the benefit of the South Pasadena community and not for personal gain.

NOTICE ON PUBLIC PARTICIPATION & ACCESSIBILITY

Pursuant to Section 3 of Executive Order N-29-20, issued by Governor Newsom on March 17, 2020, the regular meeting of the City Council for December 16, 2020 will be conducted remotely and held by video conference.

The Meeting will be broadcast live on the City's website:
(http://www.spectrumstream.com/streaming/south_pasadena/live.cfm).

Please be advised that pursuant to the Executive Order, and to ensure the health and safety of the public by limiting human contact that could spread the COVID-19 virus, the Council Chambers will not be open for the meeting. Council Members will be participating remotely and will not be physically present in the Council Chambers.

If you would like to comment on an agenda item, members of the public may submit their comments for City Council consideration, **by one of the following options:**

Option 1:

1. Dial (626) 322-2344 and leave a recording of your public comment. Please state your name; if you are providing public comment for open or closed session; and, the agenda item number. If no agenda item number is provided, your public comment will automatically be played under the general public comment portion of the open session meeting. The cutoff time for public comment to be submitted via phone recording is 4 p.m. the day of the Council Meeting.

Option 2:

2. Email your public comments to ccpubliccomment@southpasadenaca.gov. Public Comments received in writing **will not be read aloud at the meeting**. Written public comments will be announced at the meeting and become part of the meeting record. Written public comments will be uploaded online for public viewing under Additional Documents. There is no word limit on

emailed Public Comment. Please make sure to indicate: 1) your name, and 2) what agenda item you are submitting public comment on.

CALL TO ORDER: Mayor Diana Mahmud

ROLL CALL: Councilmembers Jack Donovan; Jon Primuth; and Evelyn G. Zneimer; Mayor Pro Tem Michael Cacciotti; and Mayor Diana Mahmud

PLEDGE OF ALLEGIANCE: Councilmember Jack Donovan

CLOSED SESSION ANNOUNCEMENTS

1. CLOSED SESSION ANNOUNCEMENTS: A Closed Session Agenda has been posted separately.

PUBLIC COMMENT AND SUGGESTIONS
The City Council welcomes public input. If you would like to comment on an agenda item, members of the public may submit their comments for City Council consideration **by one of the following options:**

Option 1:

1. Dial (626) 322-2344 and leave a recording of your public comment. Please state your name; if you are providing public comment for open or closed session; and, the agenda item number. If no agenda item number is provided, your public comment will automatically be played under the general public comment portion of the open session meeting. The cutoff time for public comment to be submitted via phone recording is 4 p.m. the day of the Council Meeting.

Option 2:

2. Email your public comments to ccpubliccomment@southpasadenaca.gov. Public Comments received in writing will not be read aloud at the meeting. Written public comments will be announced at the meeting and become part of the meeting record. Written public comments will be uploaded online for public viewing under Additional Documents. There is no word limit on emailed Public Comment. Please make sure to indicate: 1) your name, and 2) what agenda item you are submitting public comment on.

Pursuant to state law, the City Council may not discuss or take action on issues not on the meeting agenda, except that members of the City Council or staff may briefly respond to statements made or questions posed by persons exercising public testimony rights (Government Code Section 54954.2). Staff may be asked to follow up on such items.

2. Public Comment – General

COMMISSION APPOINTMENTS**3. Authorize Commission Appointments**Recommendation

It is recommended that the City Council:

1. Appoint the following resident to a three-year term ending December 31, 2023:
 - Michelle Hammond, Natural Resources and Environmental Commission
2. Appoint the following resident to a vacant unexpired term ending December 31, 2021:
 - David Uwins, Library Board of Trustees
3. Reappoint the following residents to three-year terms ending December 31, 2023:
 - Mark Gallatin, Cultural Heritage Commission
 - Ed Elsner, Finance Commission
 - Fred Findley, Finance Commission
 - Kristine Kwong, Parks and Recreation Commission
 - Laura Dahl, Planning Commission
 - Janet Braun, Planning Commission
 - Kris Kuramitsu, Public Art Commission
 - Steven Wong, Public Art Commission
 - Sam Hernandez, Public Works Commission
 - Charles Trevino, Public Works Commission

COMMUNICATIONS**4. Councilmembers Communications**

Time allotted per Councilmember is three minutes. Additional time will be allotted at the end of the City Council Meeting agenda, if necessary.

5. City Manager Communications**6. Reordering of and Additions to the Agenda****OPPORTUNITY TO COMMENT ON CONSENT CALENDAR**

Items listed under the consent calendar are -considered by the City Manager to be routine in nature and will be enacted by one motion unless a public comment has been received or Councilmember requests otherwise, in which case the item will be removed for separate consideration. Any motion relating to an ordinance or a resolution shall also waive the reading of the ordinance or resolution and include its introduction or adoption as appropriate.

CONSENT CALENDAR

7. Approval of Prepaid Warrants

NOTE: The agenda will be updated on Monday, December 14 to include the warrant register.

Recommendation

It is recommended that the City Council approve the Warrants as presented.

8. Approval of 2021 City Council Meeting ScheduleRecommendation

It is recommended that the City Council approve a City Council meeting schedule for the 2021 calendar year.

9. Appointment of Acting City ClerkRecommendation

It is recommended that the City Council appoint Maria E. Ayala, Chief City Clerk, to also serve as Acting City Clerk for the remaining, and final, term of the elected City Clerk, expiring December 2022.

10. Monthly Investment Reports for October 2020Recommendation

It is recommended that the City Council receive and file the monthly investment reports for October 2020.

11. Adoption of a Resolution Continuing the Proclamation of a Local Emergency Due to the Outbreak of COVID-19, Authorizing the City Manager to Take All Necessary Actions as the Director of Emergency ServicesRecommendation

It is recommended that the City Council adopt a resolution:

1. Continuing the proclamation of a local emergency due to the outbreak of COVID-19;
2. Authorizing the City Manager to take all necessary actions as the Director of Emergency Services.

12. Approval of a CalPERS Resolution Correcting the Employer Contribution under the Public Employees' Medical and Hospital Care Act at an Equal Amount for Employees and Annuity; and Approval of Resolution Establishing Unrepresented Management BenefitsRecommendation

It is recommended that the City Council:

1. Approve the proposed resolution, to reflect revised language to the employer contribution under the Public Employees' Medical and Hospital Care Act (PEMCHA) at amounts specified in the attached resolution for annuitants.

- 2. Approval of the Unrepresented Management Benefit Resolution correcting the amount the City contributes for retiree health insurance.

13. Adoption of a Resolution Approving a Memorandum of Agreement (MOA) Between the City of South Pasadena and the Los Angeles Police Department Internet Crimes Against Children (ICAC) Task Force

Recommendation

It is recommended that the City Council:

- 1. Approve a resolution adopting an MOA between the City and the Los Angeles Police Department Internet Crimes Against Children (ICAC) Task Force
- 2. Delegate authority to the City Manager to approve and execute any further amendments to the MOA.

14. Authorize a First Amendments to each of the Professional Services Agreements with Rincon Consultants and Interwest Consulting Group for providing Major Project Review for a Total Not-To-Exceed Amount of \$300,000 Per Contract

Recommendation

It is recommended that the City Council authorize the City Manager to execute a first amendment to each of the Professional Services Agreements (PSAs) with Rincon Consultants and Interwest Consulting Group to extend the term of the PSA for two years to continue providing service for Major Project Review, for a total not-to-exceed amount of \$300,000 per contract.

15. Authorize Staff to Accept Funding from the Certified Local Government Grant Program for the Preparation of an Amendment to the City’s Accessory Dwelling Units Ordinance

Recommendation

It is recommended that the City Council authorize City staff to accept a \$40,000 award from the California Office of Historic Preservation Local Government Unit Certified Local Government Grant Program for the preparation of an amendment to the City’s existing Accessory Dwelling Units Ordinance.

16. Adoption of a Resolution Authorizing Submittal of an Application to CalRecycle for the Tire Rubberized Grant Program (TRP)

Recommendation

It is recommended that the City Council:

- 1. Adopt a resolution authorizing the submittal of a grant application in the amount of \$200,000 to participate in the State of California Department of Resources Recycling and Recovery's (CalRecycle) Tire Rubberized Grant Program (TRP); and
- 2. Authorize the City Manager to execute documents required to obtain the grant.

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17. Approve the Revised Scope of the Project to Evaluate Different Alternatives for the State Route 110 and Fair Oaks Avenue Interchange Modification Project Approved by the Metro Board as a Measure R State Route 710 Mobility Improvement Project, Direct Staff to Proceed with the Traffic Study for the Revised Scope and Authorize the Allocation of \$200,000 in Prop C Funds for the Traffic Study.

Recommendation

It is recommended that the City Council:

1. Approve the revised scope of the project to evaluate alternatives for the State Route 110 (SR-110) and Fair Oaks Interchange Modification Project approved by the Metro Board as a Measure R State Route 710 (SR-710) Mobility Improvement Project (MIP); and
2. Direct staff to conduct a traffic study associated with the revised scope.
3. Authorize the allocation of \$200,000 of Prop C funds for the traffic study.

PUBLIC HEARING

18. Continued Public Hearing for Discussion of Additional Tenant Protections; Adoption of Ordinance Extending the 45-day Moratorium on Evictions for Substantial Remodels without building permits for an Additional 10 Months and 15 Days

Recommendation

It is recommended that the City Council:

1. Continue the Public Hearing (opened on November 18) and provide direction to staff on additional tenant protections; and
2. Adopt an Ordinance to extend the 45-day moratorium on evictions for substantial remodels without building permits for an additional 10 months and 15 days, or until City Council repeals or replaces the Ordinance.

ACTION / DISCUSSION

19. Eliminate Library Overdue Material Fees to Ensure Equitable Access to Library Services

Recommendation

It is recommended that the City Council adopt a resolution to eliminate fees for overdue library material, effective January 1, 2021.

20. Consideration of Appointment of City Council Athens Contract Ad Hoc Committee

Recommendation

It is recommended that the City Council:

1. Appoint two members of the City Council to the Athens Contract Ad Hoc Committee and approve its revised scope of work, and
2. Recommend two City Council members to serve on the Committee.

21. Approve a List of Capital Improvement Projects and Allocation from the Capital Improvement Funds of \$77,000 for the San Pascual Stables

Recommendation

It is recommended that the City Council approve the attached list of capital improvement projects and an allocation of \$77,000 from the San Pascual Stables Capital Improvement Fund (CIF) to finance the enumerated improvements at San Pascual Stables, LLC (SPS).

22. Approval of a Lease Purchase Agreement with Motorola Solutions, Inc., for Purchase of Equipment and Software, Training and Support of a Computer Aided Dispatch and Records Management System for a Not-to-Exceed Amount of \$570,999.84, and an Additional \$50,000 for Implementation Costs, and Authorize Use of COPS Grant Funds for the Project

Recommendation

It is recommended that the City Council:

1. Approve a lease purchase agreement with Motorola Solutions, Inc., beginning in Fiscal Year 2021-2022, for the purchase of a new Computer Aided Dispatch (CAD) and Records Management System (RMS) for a not-to-exceed amount of \$570,999.84, as allowed by SPMC Sec 2.99-29 (21), and authorize \$50,000 in implementation costs to be included in the Fiscal Year 2020-21 Budget.
2. Authorize the use of State Citizens’ Option for Public Safety (COPS) grant fund reserves and each year’s grant allocation from Fiscal Years 2022 through 2027 to pay for the Motorola Solutions contract and associated implementation costs.

23. Adoption of California Environmental Quality Act Initial Study and Negative Declaration and the Proposed Climate Action Plan

Recommendation

It is recommended that the City Council;

1. Adopt the California Environmental Quality Act (CEQA) Initial Study and Negative Declaration for Climate Action Plan; and
2. Adopt the proposed Climate Action Plan

ADJOURNMENT

**FUTURE CITY COUNCIL MEETINGS
(OPEN SESSION)**

January 6, 2021	*Pending Cancellation*		
January 20, 2021	Regular City Council Meeting	Council Chamber	7:30 p.m.
February 3, 2021	Regular City Council Meeting	Council Chamber	7:30 p.m.

PUBLIC ACCESS TO AGENDA DOCUMENTS AND BROADCASTING OF MEETINGS

City Council Meeting agenda packets and any agenda related documents are available online for public inspection on the City website: <https://www.southpasadenaca.gov/government/city-council-meetings/2019-council-meetings-copy>. Additional Documents, when presented to City Council, will also be uploaded and available on the City’s website.

Currently, regular meetings are streamed live via the internet at: http://www.spectrumstream.com/streaming/south_pasadena/live.cfm

AGENDA NOTIFICATION SUBSCRIPTION

Individuals can be placed on an email notification list to receive forthcoming agendas by emailing CityClerk@southpasadenaca.gov or calling the City Clerk’s Division at (626) 403-7230.

ACCOMMODATIONS



The City of South Pasadena wishes to make all of its public meetings accessible to the public. If special assistance is needed to participate in this meeting, please contact the City Clerk's Division at (626) 403-7230 or CityClerk@southpasadenaca.gov. Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities. Notification at least 48 hours prior to the meeting will assist staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting (28 CFR 35.102-35.104 ADA Title II).

I declare under penalty of perjury that I posted this notice of agenda on the bulletin board in the courtyard of City Hall at 1414 Mission Street, South Pasadena, CA 91030, and on the City’s website as required by law.

12/10/2020

/s/

Date

Maria E. Ayala
Chief City Clerk



City Council Agenda Report

ITEM NO. 3

DATE: December 16, 2020
FROM: Diana Mahmud, Mayor
PREPARED BY: Maria E. Ayala, Chief City Clerk
SUBJECT: **Authorize Commission Appointments**

Recommendation

It is recommended that the City Council:

1. Appoint the following resident to three-year term ending December 31, 2023:
 - Michelle Hammond, Natural Resources and Environmental Commission
2. Appoint the following resident to a vacant unexpired term ending December 31, 2021:
 - David Uwins, Library Board of Trustees
3. Reappoint the following residents to three-year terms ending December 31, 2023:
 - Mark Gallatin, Cultural Heritage Commission
 - Ed Elsner, Finance Commission
 - Fred Findley, Finance Commission
 - Kristine Kwong, Parks and Recreation Commission
 - Laura Dahl, Planning Commission
 - Janet Braun, Planning Commission
 - Kris Kuramitsu, Public Art Commission
 - Steven Wong, Public Art Commission
 - Sam Hernandez, Public Works Commission
 - Charles Trevino, Public Works Commission

Legal Review

The City Attorney has not reviewed this item.

Fiscal Impact

There are no financial implications to the City.

Environmental Analysis

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(a) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environmental.

Public Notification of Agenda Item

Commission Appointments and Re-Appointments

December 16, 2020

Page 2 of 2

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City's website and/or notice in the *South Pasadena Review* and/or the *Pasadena Star-News*.



City Council Agenda Report

ITEM NO. 8

DATE: December 16, 2020
FROM: Sean Joyce, Interim City Manager
PREPARED BY: Maria E. Ayala, Chief City Clerk
SUBJECT: **Approval of 2021 City Council Meeting Schedule**

Recommendation

It is recommended that the City Council approve a City Council meeting schedule for the 2021 calendar year.

Discussion/Analysis

Pursuant to South Pasadena Municipal Code, Chapter 2, Article I, Section 2.1, City Council meetings are held on the first and third Wednesdays of each month. Closed Session begins at 6:30 p.m. and Open Session begins at 7:30 p.m. Adopting a meeting schedule will give the City Council, staff, and the community the ability to plan their schedules for the upcoming calendar year. The City Council maintains the ability to adjust, cancel, and/or add other meetings as deemed appropriate.

There are two meeting cancellations proposed for 2021:

- January 6, 2021 – The City is closes for winter break starting Thursday, December 24, 2020 and reopens on Monday, January 4, 2021. This does not allow sufficient time to prepare and post a full agenda.
- August 4, 2021 – The City Council provided direction at its meeting of June 19, 2013 to cancel the first meeting in August unless there was a special need to conduct City business.

Legal Review

The City Attorney has not reviewed this item.

Fiscal Impact

There is no fiscal impact associated with this item.

Environmental Analysis

The action being considered does not constitute a "project" within the meaning of the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15378(a) as it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City's website and/or notice in the *South Pasadena Review* and/or the *Pasadena Star-News*.

Attachments:

1. Proposed 2021 City Council Meeting Schedule

ATTACHMENT 1
Proposed 2021 City Council Meeting Schedule



CITY OF SOUTH PASADENA
2021 CITY COUNCIL MEETING SCHEDULE

City Council Meeting Date	Notes
January 6, 2021	CANCELLED Due to preceding City Hall Winter Break Closure (City Hall Closes Thursday, December 24, 2020 and reopens Monday, January 4, 2021)
January 20, 2021	
February 3, 2021	
February 17, 2021	
March 3, 2021	
March 17, 2021	
April 7, 2021	
April 21, 2021	
May 5, 2021	
May 19, 2021	
June 2, 2021	
June 16, 2021	
July 7, 2021	
July 21, 2021	
August 4, 2021	CANCELLED Due to Council Directive from 6/19/2013 City Council Meeting: No Council Meeting the First Week of August
August 18, 2021	
September 1, 2021	
September 15, 2021	
October 6, 2021	
October 20, 2021	
November 3, 2021	
November 17, 2021	
December 1, 2021	
December 15, 2020	



City Council Agenda Report

ITEM NO. 9

DATE: December 16, 2020
FROM: Sean Joyce, Interim City Manager
PREPARED BY: Maria E. Ayala, Chief City Clerk
SUBJECT: **Appointment of Acting City Clerk**

Recommendation

It is recommended that the City Council appoint Maria E. Ayala, Chief City Clerk, to also serve as Acting City Clerk for the remaining, and final, term of the elected City Clerk, expiring December 2022.

Discussion/Analysis

Councilmember Evelyn G. Zneimer was elected to City Council, Council District 1, on November 3, 2020. Councilmember Zneimer took her oath of office as Councilmember on December 2, 2020. Her installation as Councilmember effectuated her resignation as elected City Clerk effective the same date. The elected City Clerk office is now vacant.

Government Code § 36512 provides that the City Council shall, within 60 days from the commencement of the vacancy either a) fill the vacancy by appointment for the remainder of the applicable term or b) call a special election to be held at the next regularly established election date which is not less than 114 days from the call of the special election.

The elected City Clerk Office is in its final term as a result of a 2019 the South Pasadena ballot measure that converted the elected City Clerk to an appointed position. The appointed full-time Chief City Clerk already performs the same ceremonial and signature duties as the elected City Clerk, in addition to managing all other functions of the City Clerk's Division. The proposed appointment would allow for a seamless transition without further action from City Council or staff as the new appointment would not change daily operations.

Alternatives Considered

City Council may also consider the following alternatives to the proposed appointment:

1. Conduct a special election to fill the elected City Clerk office. This would necessitate conducting a costly, at large special election. The last special election (also an at-large election) in November 2019, was conducted at a cost to the City of \$172,492.35.
2. Conduct an application process to fill the vacancy by Council appointment of a qualified registered voter to serve out the 2-year term remaining on this elected office.

Background

At a Special Election on November 5, 2019, the City of South Pasadena voters passed Ballot Measure C, to make the City Clerk office an appointed position, rather than an elected position, so that all duties would be continued to be performed by a full-time professional employee experienced in performing all city clerk duties and eliminating the duplication of some of the ceremonial duties currently performed by an elected City Clerk. The passage of Measure C eliminated the City Clerk as an elected position upon the expiration of the term of the current elected City Clerk, December 2022. There are two years remaining on the final term of an elected City Clerk, due to the recent resignation of Evelyn Zneimer in connection with her election to City Council.

Legal Review

The City Attorney has reviewed this item.

Fiscal Impact

The fiscal impact associated with the proposed appointment is a cost savings to the City of \$7,200, equal to the remaining monthly \$300 elected City Clerk stipend until the term expires (24 months). Appointing the current Chief City Clerk to also serve as “Acting City Clerk” will not result in added expenditures as the Chief City Clerk position is a salaried position accounted for in the annual budget.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City’s website and/or notice in the *South Pasadena Review* and/or the *Pasadena Star-News*.

Attachments

None



City Council Agenda Report

ITEM NO. 10

DATE: December 16, 2020

FROM: Sean Joyce, Interim City Manager

PREPARED BY: Elaine Aguilar, Interim Assistant City Manager
Albert Trinh, Finance Manager

SUBJECT: **Monthly Investment Reports for October 2020**

Recommendation Action

It is recommended that the City Council receive and file the monthly investment reports for October 2020.

Commission Review and Recommendation

This matter was not reviewed by a commission.

Discussion/Analysis

The City's investments have shown a slight decrease from prior month. The market value of the investments held at Morgan Stanley decreased by \$19k from prior month. The decrease in market value of the investments were anticipated as the Federal interest rates are leveling off, in turn the market values of the bonds will follow suit.

While the City plans ahead and prepares for the potential economic downturn, the investments are held in a strategic manner where significant money is held in LAIF. The liquidity with LAIF is one business day-- this allows the City to access funds as needed.

Background

As required by law, a monthly investment report, including water bond funds, is presented to the City Council disclosing investment activities, types of investments, dates of maturities, amounts of deposits, rates of interest, and securities with a maturity of more than 12 months at current market values.

The reports reflect all investments at the above-referenced date and are in conformity with the City Investment Policy as stated in Resolution No. 7635. A copy of the Resolution is available at the City Clerk's Office.

Legal Review

The City Attorney has not reviewed this item.

Fiscal Impact

The investments herein provide sufficient cash flow liquidity to meet the estimated expenditures, as required in the investment policy.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City's website and/or notice in the *South Pasadena Review* and/or the *Pasadena Star-News*.

Attachments: City Investment Reports for October 2020

ATTACHMENT 1
City Investment Reports for October 2020

Exhibit A

**City of South Pasadena
INVESTMENT REPORT
October 31, 2020**

Investment Balances at Month End

INSTITUTION NAME	MATURITY DATE	CURRENT YIELD	PERCENT OF PORTFOLIO	COST	CURRENT MARKET VALUE *
LOCAL AGENCY INVESTMENT FUND:					
LAIF City	ON DEMAND	0.620%	46.99%	15,049,033.84	15,049,033.84
SUBTOTAL			46.99%	15,049,033.84	15,049,033.84
MORGAN STANLEY SMITH BARNEY					
Government Securities	See Exhibit B-1	1.76%	37.76%	12,091,949.47	12,466,571.87
Corporate Bonds	See Exhibit B-1	2.57%	15.25%	4,883,715.66	5,015,147.73
SUBTOTAL			53.01%	16,975,665.13	17,481,719.60
TOTAL INVESTMENTS			100.00%	\$32,024,698.97	\$32,530,753.44

BANK ACCOUNTS:

Bank of the West Account Balance:	\$8,703,516.95
Morgan Stanley Uninvested Cash Balance ¹ :	\$309,777.22
Morgan Stanley Unsettled Transactions ¹	(7,575.17)
BNY Mellon Uninvested Cash Balance ²	158,296.73

Footnotes:

¹ The Morgan Stanley Uninvested Cash Balance and Unsettled Transactions are separate from the investment portion. The sum of the three Morgan Stanley balance totals to the balance reflected on the provided statement.

² The BNY Mellon Uninvested Cash Balance is information-only as it is funds intended for 2016 Water Revenue Bond.

Required Disclosures:

Average weighted maturity of the portfolio	483 DAYS
Average weighted total yield to maturity of the portfolio	1.357%
Projected Expenditures for the next 6 months:	\$ 19,568,221

* Current market valuation is required for investments with maturities of more than twelve months.

In compliance with the California Code Section 53646, as the City Treasurer of the City of South Pasadena, I hereby certify that sufficient investment liquidity to meet the City's expenditure requirements for the next six months and that all investments are in compliance to the City's Statement of Investment Policy.

I also certify that this report reflects all Government Agency pooled investments and all City's bank balances.



Gary Pia, City Treasurer

11/30/2020

Date

CLIENT STATEMENT | For the Period October 1-31, 2020



STATEMENT FOR:

CITY OF SOUTH PASADENA
C/O GARY E PIA, LUCY DEMIRJIAN &
KAREN ACEVES

TOTAL VALUE OF YOUR ACCOUNT (as of 10/31/20)
Includes Accrued Interest

\$17,878,092.53

Your Financial Advisor Team
The Jewel City Group

Your Financial Advisors

[Redacted names and contact information for financial advisors]

Morgan Stanley Smith Barney LLC. Member SIPC.

#BWNJGWM

CITY OF SOUTH PASADENA
C/O GARY E PIA, LUCY DEMIRJIAN &
KAREN ACEVES
1414 MISSION STREET
S PASADENA CA 91030-3214

Your Branch

55 SOUTH LAKE AVE, STE 700
PASADENA, CA 91101
Telephone: 626-449-1240; Alt. Phone: 800-488-1240; Fax: 626-584-1251

Client Service Center (24 Hours a Day; 7 Days a Week): 800-869-3326

Access Your Account Online: www.morganstanley.com/online

*INVESTMENTS AND INSURANCE PRODUCTS: NOT FDIC INSURED • NOT A BANK DEPOSIT •
NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY • NOT BANK GUARANTEED •
MAY LOSE VALUE*

Standard Disclosures

The following Disclosures are applicable to the enclosed statement(s). Expanded Disclosures are attached to your most recent June and December statement (or your first Statement if you have not received a statement for those months). The Expanded Disclosures are also available by selecting Account Documents when you log on to www.morganstanley.com/online or, call 800-869-3326.

Questions?

Questions regarding your account may be directed to us by using the contact information on the statement cover page, or the Client Service Center at (800) 869-3326.

Errors and Inquiries

Be sure to review your statement promptly, and immediately address any concerns regarding entries that you do not understand or believe were made in error by contacting the Branch Manager of the office where you maintain your account. Oral communications regarding any inaccuracy or discrepancy in this statement should be re-confirmed in writing to further protect your rights, including rights under the Securities Investor Protection Act (SIPA). Your statement will be deemed correct unless we receive a written inquiry of a suspected error. See your account documentation for special rules regarding your rights and responsibilities with respect to erroneous electronic fund transfers, including a description of the transfers covered. For concerns or complaints, contact our Client Relations Department at (866) 227-2256.

Senior Investor Helpline

In order to provide Morgan Stanley's senior investor clients a convenient way to communicate with us, we offer a Senior Investor Helpline. Senior investors or those acting on their behalf may call (800) 280-4534, Monday-Friday 9am-7pm Eastern Time.

Availability of Free Credit Balances and Financial Statements

Under the customer protection rules of the SEC [17 CFR §240.15c3-3], we may use funds comprising free credit balances carried for customer accounts here, provided that these funds are payable to customers on demand (i.e., are free of a lien or right of set-off in our favor or on behalf of some third party to whom you have given control). A financial statement of this organization is available for your personal inspection at its offices, or a copy will be mailed to you upon your written request.

Listed Options

Information with respect to commissions and other charges related to the execution of options transactions has been included in confirmations of such transactions previously furnished to you and such information will be made available to you promptly at your request. Promptly advise us of any material change in your investment objectives or financial situation.

Important Information if you are a Margin Customer (not available for certain retirement accounts)

If you have margin privileges, you may borrow money from us in exchange for pledging assets in your accounts as collateral for any outstanding margin loan. The amount you may borrow is based on the value of the eligible securities in your margin accounts. If a security has eligible shares, the number of shares pledged as collateral will be indicated below the position.

Margin Interest Charges

We calculate interest charges on margin loans as follows: (1) multiply the applicable margin interest rate by the daily close of business net settled debit balance, and (2) divide by 360 (days). Margin interest accrues daily throughout the month and is added to your debit balance at month-end. The month-end interest charge is the sum of the daily accrued interest calculations for the month. We add the accrued interest to your debit balance and start a new calculation each time the applicable interest rate changes and at the close of every statement month. For interest rate information, log into your Morgan Stanley account at morganstanley.com/online. Select your account with a Margin agreement and click Interest Rates for more information.

Information regarding Special Memorandum Account

If you have a Margin Account, this is a combined statement of your Margin Account and Special Memorandum Account maintained for you under Section 220.5 of Regulation T issued by the Board of Governors of the Federal Reserve System. The permanent record of the Special Memorandum Account as required by Regulation T is available for your inspection at your request.

Important Information About Auction Rate Securities

For certain Auction Rate Securities there is no or limited liquidity. Therefore, the price(s) for these Auction Rate Securities are indicated by N/A (not available). There can be no assurance that a successful auction will occur or that a secondary market exists or will develop for a particular security.

Structured Investments Risks and Considerations

Structured Investments (Structured Products) are complex products and may be subject to special risks. Investors should consider the concentration risk of owning the related security and their total exposure to any underlying asset. Structured Investments, which may appear in various statement product categories and are identified on the Position Description Details line as "Asset Class: Struct Inv," may not perform in a manner consistent with the statement product category where they appear and therefore may not satisfy portfolio asset allocation needs for that category. For information on the risks and conflicts of interest related to Structured Investments generally, log in to Morgan Stanley Online and go to

www.morganstanley.com/structuredproductsrisksandconflicts.

Security Measures

This statement features several embedded security elements to safeguard its authenticity. One is a unique blue security rectangle, printed in heat-sensitive ink on the back of every page. When exposed to warmth, the color will disappear, and then reappear.

SIPC Protection

We are a member of Securities Investor Protection Corporation (SIPC), which protects securities of its customers up to \$500,000 (including \$250,000 for claims for cash). An explanatory brochure is available upon request or at www.sipc.org. Losses due to market fluctuation are not protected by SIPC and assets not held with us may not be covered by SIPC protection. To obtain information about SIPC, including an explanatory SIPC brochure, contact SIPC at 1-202-371-8300 or visit www.sipc.org.

Transaction Dates and Conditions

Upon written request, we will furnish the date and time of a transaction and the name of the other party to a transaction. We and/or our affiliates may accept benefits that constitute payment for order flow. Details regarding these benefits and the source and amount of any other remuneration received or to be received by us in connection with any transaction will be furnished upon written request.

Equity Research Ratings Definitions and Global Investment Manager Analysis Status

Some equity securities may have research ratings from Morgan Stanley & Co. LLC or Morningstar, Inc. Research ratings are the research providers' opinions and not representations or guarantees of performance. For more information about each research provider's rating system, see the Research Ratings on your most recent June or December statement (or your first statement if you have not received a statement for those months), go to www.morganstanley.com/online or refer to the research provider's research report. Research reports contain more complete information concerning the analyst's views and you should read the entire research report and not infer its contents from the rating alone. If your account contains an advisory component or is an advisory account, a GIMA status will apply.

Credit Ratings from Moody's Investors Service and Standard & Poor's
The credit rating from Moody's Investors Service and Standard & Poor's may be shown for certain securities. All credit ratings represent the opinions of the provider and are not representations or guarantees of performance. Please contact us if you need further information or assistance in interpreting these credit ratings.

Revised 10/2017

Consulting and Evaluation Services Basic Securities Acct.

CITY OF SOUTH PASADENA
C/O GARY E PIA, LUCY DEMIRJIAN &

Account Summary

CHANGE IN VALUE OF YOUR ACCOUNTS (includes accrued interest)

	This Period (10/1/20-10/31/20)	This Year (1/1/20-10/31/20)
TOTAL BEGINNING VALUE	\$17,907,875.83	\$17,256,598.35
Credits	—	7.90
Debits	(8,778.43)	(41,702.70)
Security Transfers	—	—
Net Credits/Debits/Transfers	\$(8,778.43)	\$(41,694.80)
Change in Value	(21,004.87)	663,188.98
TOTAL ENDING VALUE	\$17,878,092.53	\$17,878,092.53

Net Credits / Debits include investment advisory fees as applicable. See Activity section for details.

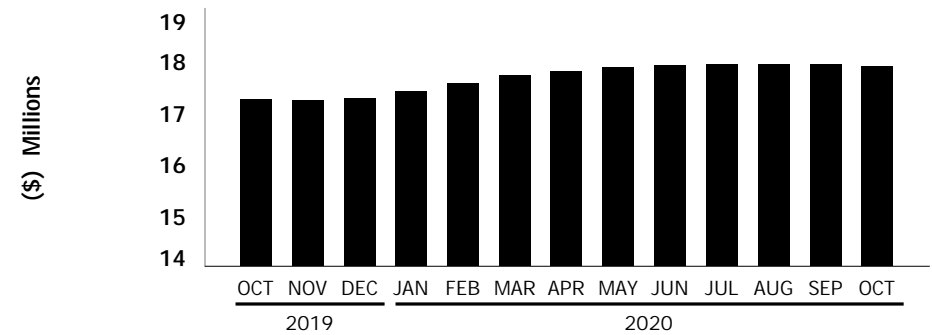
ASSET ALLOCATION (includes accrued interest)

	Market Value	Percentage
Cash	\$302,202.05	1.69
Fixed Income & Preferreds	17,575,890.48	98.31
TOTAL VALUE	\$17,878,092.53	100.00%

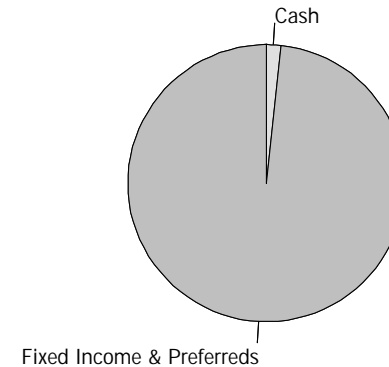
FDIC rules apply and Bank Deposits are eligible for FDIC insurance but are not covered by SIPC. Cash and securities (including MMFs) are eligible for SIPC coverage. See Expanded Disclosures. Values may include assets externally held, which are provided to you as a courtesy, and may not be covered by SIPC. For additional information, refer to the corresponding section of this statement.

MARKET VALUE OVER TIME

The below chart displays the most recent thirteen months of Market Value.



This chart does not reflect corrections to Market Value made subsequent to the dates depicted. It may exclude transactions in Annuities or positions where we are not the custodian, which could delay the reporting of Market Value.



This asset allocation represents holdings on a trade date basis, and projected settled Cash/BDP and MMF balances. These classifications do not constitute a recommendation and may differ from the classification of instruments for regulatory or tax purposes.

Consulting and Evaluation Services Basic Securities Acct.

CITY OF SOUTH PASADENA
C/O GARY E PIA, LUCY DEMIRJIAN &

Account Summary

BALANCE SHEET (^ includes accrued interest)

	Last Period (as of 9/30/20)	This Period (as of 10/31/20)
Cash, BDP, MMFs	\$501,757.22	\$309,777.22
Corporate Fixed Income ^	5,039,105.16	5,053,426.16
Government Securities ^	12,545,500.82	12,522,464.32
Net Unsettled Purchases/Sales	(178,487.37)	—
Total Assets	\$17,907,875.83	\$17,885,667.70
Cash, BDP, MMFs (Debit)	—	(7,575.17)
Total Liabilities (outstanding balance)	—	\$(7,575.17)
TOTAL VALUE	\$17,907,875.83	\$17,878,092.53

INCOME AND DISTRIBUTION SUMMARY

	This Period (10/1/20-10/31/20)	This Year (1/1/20-10/31/20)
Other Dividends	\$3.02	\$5.57
Interest	12,000.51	315,325.76
Income And Distributions	\$12,003.53	\$315,331.33
Tax-Exempt Income	—	—
TOTAL INCOME AND DISTRIBUTIONS	\$12,003.53	\$315,331.33

Taxable and tax exempt income classifications are based on the characteristics of the underlying securities and not the taxable status of the account.

CASH FLOW

	This Period (10/1/20-10/31/20)	This Year (1/1/20-10/31/20)
OPENING CASH, BDP, MMFs	\$501,757.22	\$131,739.39
Purchases	(268,292.90)	(4,563,393.76)
Sales and Redemptions	244,000.00	4,460,219.89
Prior Net Unsettled Purch/Sales	(178,487.37)	N/A
Income and Distributions	12,003.53	315,331.33
Total Investment Related Activity	\$(190,776.74)	\$212,157.46
Electronic Transfers-Credits	—	7.90
Other Debits	(8,778.43)	(41,702.70)
Total Cash Related Activity	\$(8,778.43)	\$(41,694.80)
CLOSING CASH, BDP, MMFs	\$302,202.05	\$302,202.05

GAIN/(LOSS) SUMMARY

	Realized This Period (10/1/20-10/31/20)	Realized This Year (1/1/20-10/31/20)	Unrealized Inception to Date (as of 10/31/20)
Short-Term Gain	—	\$2,847.19	\$45,769.19
Short-Term (Loss)	—	(1.57)	(5,597.41)
Total Short-Term	—	\$2,845.62	\$40,171.78
Long-Term Gain	—	38,446.43	465,978.54
Long-Term (Loss)	—	(843.46)	(95.85)
Total Long-Term	—	\$37,602.97	\$465,882.69
TOTAL GAIN/(LOSS)	—	\$40,448.59	\$506,054.47

The Gain/(Loss) Summary, which may change due to basis adjustments, is provided for informational purposes and should not be used for tax preparation. Refer to Gain/(Loss) in the Expanded Disclosures.

Consulting and Evaluation Services Basic Securities Acct.

CITY OF SOUTH PASADENA
C/O GARY E PIA, LUCY DEMIRJIAN &

Account Summary

ADDITIONAL ACCOUNT INFORMATION

Category	This Period (10/1/20-10/31/20)	This Year (1/1/20-10/31/20)	Category	This Period (10/1/20-10/31/20)	This Year (1/1/20-10/31/20)
Accrued Interest Paid	\$1,652.96	\$17,333.30	Accrued Interest Received	—	8,821.75
U.S. Treasury Coupon Interest	—	128,593.77			

All Municipal and U.S. Treasury coupon interest displayed in this section is also included in the Income and Distribution Summary. Municipal interest above is subject to federal income tax, but may be exempt from state and local income tax. U.S. Treasury interest is subject to federal income tax, but is exempt from both state and local income tax.

Consulting and Evaluation Services Basic Securities Acct. CITY OF SOUTH PASADENA
 [REDACTED] C/O GARY E PIA, LUCY DEMIRJIAN &

Account Detail

Investment Objectives (in order of priority): Income, Capital Appreciation, Aggressive Income, Speculation

Investment Advisory Account

Inform us if your investment objectives, as defined in the Expanded Disclosures, change.

Manager: CLEARBRIDGE ASSET MANAGEMENT

Account Holder Votes Proxy: No

The account holder has delegated the authority to vote proxies for the account to Institutional Shareholder Services or a third-party or Morgan Stanley-affiliated portfolio manager, as applicable.

HOLDINGS

This section reflects positions purchased/sold on a trade date basis. "Market Value" and "Unrealized Gain/(Loss)" may not reflect the value that could be obtained in the market. Your actual investment return may differ from the unrealized gain/(loss) displayed. Fixed Income securities are sorted by maturity or pre-refunding date, and alphabetically within date. Estimated Annual Income a) is calculated on a pre-tax basis, b) does not include any reduction for applicable non-US withholding taxes, c) may include return of principal or capital gains which could overstate such estimates, and d) for securities that have a defined maturity date within the next 12 months, is reflected only through maturity date. Actual income or yield may be lower or higher than the estimates. Current Yield reflects the income generated by an investment, and is calculated by dividing the total estimated annual income by the current market value of the entire position. It does not reflect changes in its price. Structured Investments, identified on the Position Description Details line as "Asset Class: Struct Inv," may appear in various statement product categories. When displayed, the accrued interest, annual income and current yield for those with a contingent income feature (e.g., Range Accrual Notes or Contingent Income Notes) are estimates and assume specified accrual conditions are met during the relevant period and payment in full of all contingent interest. For Floating Rate Securities, the accrued interest, annual income and current yield are estimates based on the current floating coupon rate and may not reflect historic rates within the accrual period.

CASH, BANK DEPOSIT PROGRAM AND MONEY MARKET FUNDS

Cash, Bank Deposit Program, and Money Market Funds are generally displayed on a settlement date basis. You have the right to instruct us to liquidate your bank deposit balance(s) or shares of any money market fund balance(s) at any time and have the proceeds of such liquidation remitted to you. Estimated Annual Income, Accrued Interest, and APY% will only be displayed for fully settled positions.

Description	Market Value	7-Day Current Yield %	Est Ann Income	APY %
CASH	\$(7,575.17)			
MS U.S. GOV'T MONEY MARKET TR	309,777.22	0.010	30.98	—
	Percentage of Holdings	Market Value	Est Ann Income	
CASH, BDP, AND MMFs	1.69%	\$302,202.05	\$30.98	
Total Cash, BDP, MMFs		\$309,777.22		
Total Cash, BDP, MMFs (Debit)		\$(7,575.17)		

Certain money market funds classified as government funds and retail funds seek (although they cannot guarantee) to maintain a share price of \$1.00, therefore the dollar amounts listed equal the number of shares. Additional information concerning these transactions is available upon request. For more information about the pricing of Money Market Funds, please see the Expanded Disclosures. The money market funds reflected above include the balances in your automatic sweep feature, if any, and may include other money market funds that have been purchased in your account.

Consulting and Evaluation Services Basic Securities Acct.

CITY OF SOUTH PASADENA
C/O GARY E PIA, LUCY DEMIRJIAN &

Account Detail

CORPORATE FIXED INCOME

CORPORATE BONDS

Security Description	Trade Date	Face Value	Orig Unit Cost Adj Unit Cost	Unit Price	Orig Total Cost Adj Total Cost	Market Value	Unrealized Gain/(Loss)	Est Ann Income Accrued Interest	Current Yield %
CHUBB INA HOLDINGS INC	6/1/16	61,000.000	\$101.978	\$100.000	\$62,207.19				
Coupon Rate 2.300%; Matures 11/03/2020; CUSIP 00440EAT4			\$100.001		\$61,000.79	\$61,000.00	\$(0.79) LT		
	5/17/17	62,000.000	101.187	100.000	62,735.94				
			100.001		62,000.61	62,000.00	(0.61) LT		
Total		123,000.000			124,943.13			1,415.00	1.15
					123,001.40	123,000.00	(1.40) LT	1,398.78	
<i>Interest Paid Semi-Annually May/Nov; Yield to Maturity 2.275%; Moody A3 S&P A; Issued 11/03/15; Asset Class: FI & Pref</i>									
CHEVRON CORP	6/8/16	55,000.000	102.673	100.083	56,470.15				
Coupon Rate 2.419%; Matures 11/17/2020; CUSIP 166764AY6			100.026		55,014.30	55,045.65	31.35 LT		
	6/22/16	25,000.000	102.888	100.083	25,722.25				
			100.028		25,007.08	25,020.75	13.67 LT		
Total		80,000.000			82,192.40			968.00	1.20
					80,021.38	80,066.40	45.02 LT	881.59	
<i>Interest Paid Semi-Annually May/Nov; Yield to Maturity .545%; Moody AA2 S&P AA; Issued 11/17/15; Asset Class: FI & Pref</i>									
VISA INC	5/8/17	162,000.000	100.744	100.148	163,206.90			1,782.00	1.09
Coupon Rate 2.200%; Matures 12/14/2020; CUSIP 92826CAB8			100.025		162,040.34	162,239.76	199.42 LT	1,356.30	
<i>Interest Paid Semi-Annually Jun/Dec; Callable \$100.00 on 11/29/20; Yield to Call .294%; Moody AA3 S&P AA-; Issued 12/14/15; Asset Class: FI & Pref</i>									
EXXON MOBIL CORP	6/21/16	162,000.000	102.355	100.492	165,815.10			1,800.00	1.10
Coupon Rate 2.222%; Matures 03/01/2021; CUSIP 30231GAV4			100.172		162,278.33	162,797.04	518.71 LT	599.94	
<i>Interest Paid Semi-Annually Mar/Sep; Callable \$100.00 on 02/01/21; Yield to Call .251%; Moody AA1 S&P AA; Issued 03/03/16; Asset Class: FI & Pref</i>									
HOME DEPOT INC	6/19/19	81,000.000	103.384	100.681	83,741.85			1,782.00	2.18
Coupon Rate 4.400%; Matures 04/01/2021; CUSIP 437076AW2			100.798		81,646.06	81,551.61	(94.45) LT	296.99	
<i>Interest Paid Semi-Annually Apr/Oct; Callable \$100.00 on 01/01/21; Yield to Call .307%; Moody A2 S&P A; Issued 03/31/11; Asset Class: FI & Pref</i>									
CHARLES SCHWAB CORP/THE	8/19/19	83,000.000	102.301	101.407	84,909.83			2,698.00	3.20
Coupon Rate 3.250%; Matures 05/21/2021; CUSIP 808513AW5			100.732		83,607.80	84,167.81	560.01 LT	1,198.88	
<i>Interest Paid Semi-Annually May/Nov; Callable \$100.00 on 04/21/21; Yield to Call .266%; Moody A2 S&P A; Issued 05/22/18; Asset Class: FI & Pref</i>									
PEPSICO INC	8/19/19	82,000.000	102.382	102.139	83,953.24			2,460.00	2.93
Coupon Rate 3.000%; Matures 08/25/2021; CUSIP 713448BW7			100.971		82,796.22	83,753.98	957.76 LT	450.99	
<i>Interest Paid Semi-Annually Feb/Aug; Moody A1 S&P A+; Issued 08/29/11; Asset Class: FI & Pref</i>									
LINDE INC/CT	8/21/19	82,000.000	102.248	102.199	83,843.36			2,460.00	2.93
Coupon Rate 3.000%; Matures 09/01/2021; CUSIP 74005PAZ7			100.930		82,762.90	83,803.18	1,040.28 LT	410.00	
<i>Interest Paid Semi-Annually Mar/Sep; Moody A2 S&P A; Issued 09/06/11; Asset Class: FI & Pref</i>									

Consulting and Evaluation Services Basic Securities Acct.

CITY OF SOUTH PASADENA
C/O GARY E PIA, LUCY DEMIRJIAN &

Account Detail

Security Description	Trade Date	Face Value	Orig Unit Cost Adj Unit Cost	Unit Price	Orig Total Cost Adj Total Cost	Market Value	Unrealized Gain/(Loss)	Est Ann Income Accrued Interest	Current Yield %
3M CO	9/20/16	65,000.000	100.122	101.104	65,079.95				
Coupon Rate 1.625%; Matures 09/19/2021; CUSIP 88579YAU5			100.022		65,014.56	65,717.60	703.04 LT		
	9/13/17	17,000.000	99.207	101.104	16,865.19				
			99.207		16,865.19	17,187.68	322.49 LT		
Total		82,000.000			81,945.14			1,333.00	1.60
					81,879.75	82,905.28	1,025.53 LT	155.45	
<i>Interest Paid Semi-Annually Mar/Sep; Callable \$100.00 on 08/19/21; Moody A1 S&P A+; Issued 09/19/16; Asset Class: FI & Pref</i>									
PRUDENTIAL FINANCIAL INC	8/12/19	80,000.000	105.396	104.375	84,316.80			3,600.00	4.31
Coupon Rate 4.500%; Matures 11/16/2021; CUSIP 74432QBT1			102.509		82,007.19	83,500.00	1,492.81 LT	1,649.99	
<i>Interest Paid Semi-Annually May/Nov; Moody A3 S&P A; Issued 11/16/11; Asset Class: FI & Pref</i>									
AMERICAN EXPRESS CREDIT CORP	9/6/17	162,000.000	102.081	102.978	165,371.22				
Coupon Rate 2.700%; Matures 03/03/2022; CUSIP 0258MOEGO			100.640		163,037.56	166,824.36	3,786.80 LT		
	6/2/20	10,000.000	103.550	102.978	10,355.10				
			102.710		10,270.99	10,297.80	26.81 ST		
Total		172,000.000			175,726.32			4,644.00	2.62
					173,308.55	177,122.16	3,786.80 LT 26.81 ST	748.19	
<i>Interest Paid Semi-Annually Mar/Sep; Callable \$100.00 on 01/31/22; Moody A2 S&P A-; Issued 03/03/17; Asset Class: FI & Pref</i>									
BURLINGTON NORTHERN SANTA FE LLC	9/12/17	79,000.000	103.846	102.997	82,039.13			2,410.00	2.96
Coupon Rate 3.050%; Matures 03/15/2022; CUSIP 12189LAH4			101.208		79,954.26	81,367.63	1,413.37 LT	307.88	
<i>Interest Paid Semi-Annually Mar/Sep; Callable \$100.00 on 12/15/21; Yield to Call .371%; Moody A3 S&P A+; Issued 03/02/12; Asset Class: FI & Pref</i>									
US BANCORP	6/26/19	165,000.000	102.095	103.482	168,456.75			4,950.00	2.89
Coupon Rate 3.000%; Matures 03/15/2022; CUSIP 91159HHC7			101.070		166,765.37	170,745.30	3,979.93 LT	632.50	
<i>Interest Paid Semi-Annually Mar/Sep; Callable \$100.00 on 02/15/22; Moody A1 S&P A+; Issued 03/02/12; Asset Class: FI & Pref</i>									
INTEL CORP	7/5/19	169,000.000	100.413	102.948	169,699.66			3,972.00	2.28
Coupon Rate 2.350%; Matures 05/11/2022; CUSIP 458140BB5			100.225		169,379.69	173,982.12	4,602.43 LT	1,875.43	
<i>Interest Paid Semi-Annually May/Nov; Callable \$100.00 on 04/11/22; Moody A1 S&P A+; Issued 05/11/17; Asset Class: FI & Pref</i>									
APPLE INC	9/6/17	160,000.000	102.677	103.710	164,284.80				
Coupon Rate 2.700%; Matures 05/13/2022; CUSIP 037833BF6			100.904		161,445.67	165,936.00	4,490.33 LT		
	6/2/20	10,000.000	104.837	103.710	10,483.80				
			103.804		10,380.43	10,371.00	(9.43) ST		
Total		170,000.000			174,768.60			4,590.00	2.60
					171,826.10	176,307.00	4,490.33 LT (9.43) ST	2,142.00	
<i>Interest Paid Semi-Annually May/Nov; Moody AA1 S&P AA+; Issued 05/13/15; Asset Class: FI & Pref</i>									
ORACLE CORP	10/3/17	81,000.000	101.621	102.944	82,313.01			2,025.00	2.42
Coupon Rate 2.500%; Matures 05/15/2022; CUSIP 68389XBB0			100.557		81,451.18	83,384.64	1,933.46 LT	933.74	

Consulting and Evaluation Services Basic Securities Acct.

CITY OF SOUTH PASADENA
C/O GARY E PIA, LUCY DEMIRJIAN &

Account Detail

Security Description	Trade Date	Face Value	Orig Unit Cost Adj Unit Cost	Unit Price	Orig Total Cost Adj Total Cost	Market Value	Unrealized Gain/(Loss)	Est Ann Income Accrued Interest	Current Yield %
<i>Interest Paid Semi-Annually May/Nov; Callable \$100.00 on 03/15/22; Yield to Call .347%; Moody A3 S&P A; Issued 05/05/15; Asset Class: FI & Pref</i>									
BRISTOL-MYERS SQUIBB CO	11/4/19	170,000.000	100.402	102.852	170,685.10			3,400.00	1.94
Coupon Rate 2.000%; Matures 08/01/2022; CUSIP 110122AT5			100.259		170,440.36	174,848.40	4,408.04 ST	850.00	
<i>Interest Paid Semi-Annually Feb/Aug; Moody A2 S&P A+; Issued 07/31/12; Asset Class: FI & Pref</i>									
GILEAD SCIENCES INC	1/25/19	164,000.000	100.162	104.668	164,265.68			5,330.00	3.10
Coupon Rate 3.250%; Matures 09/01/2022; CUSIP 375558BC6			100.085		164,138.80	171,655.52	7,516.72 LT	888.33	
<i>Interest Paid Semi-Annually Mar/Sep; Callable \$100.00 on 07/01/22; Yield to Call .436%; Moody A3 S&P BBB+; Issued 09/14/15; Asset Class: FI & Pref</i>									
LOCKHEED MARTIN CORP	12/17/19	82,000.000	103.259	105.505	84,673.20			2,542.00	2.93
Coupon Rate 3.100%; Matures 01/15/2023; CUSIP 539830BG3			102.353		83,929.11	86,514.10	2,584.99 ST	748.47	
<i>Interest Paid Semi-Annually Jan/Jul; Callable \$100.00 on 11/15/22; Yield to Call .387%; Moody A3 S&P A-; Issued 11/23/15; Asset Class: FI & Pref</i>									
JPMORGAN CHASE & CO	9/29/20	167,000.000	106.292	106.231	177,507.64			5,344.00	3.01
Coupon Rate 3.200%; Matures 01/25/2023; CUSIP 46625HJH4			106.045		177,094.67	177,405.77	311.10 ST	1,425.06	
<i>Interest Paid Semi-Annually Jan/Jul; Moody A2 S&P A-; Issued 01/25/13; Asset Class: FI & Pref</i>									
BANK OF NEW YORK MELLON CORP/THE	1/25/19	168,000.000	99.109	105.679	166,503.12			4,956.00	2.79
Coupon Rate 2.950%; Matures 01/29/2023; CUSIP 06406RAE7			99.109		166,503.12	177,540.72	11,037.60 LT	1,266.53	
<i>Interest Paid Semi-Annually Jan/Jul; Callable \$100.00 on 12/29/22; Moody A1 S&P A; Issued 01/29/18; Asset Class: FI & Pref</i>									
AMAZON.COM INC	2/7/19	125,000.000	98.568	104.532	123,210.00			3,000.00	2.29
Coupon Rate 2.400%; Matures 02/22/2023; CUSIP 023135AW6			98.568		123,210.00	130,665.00	7,455.00 LT	575.00	
<i>Interest Paid Semi-Annually Feb/Aug; Callable \$100.00 on 01/22/23; Moody A2 S&P AA-; Issued 02/22/18; Asset Class: FI & Pref</i>									
GENERAL DYNAMICS CORP	1/30/19	163,000.000	101.644	107.147	165,679.72			5,501.00	3.14
Coupon Rate 3.375%; Matures 05/15/2023; CUSIP 369550BD9			100.996		164,623.81	174,649.61	10,025.80 LT	2,536.68	
<i>Interest Paid Semi-Annually May/Nov; Callable \$100.00 on 04/15/23; Yield to Call .445%; Moody A2 S&P A; Issued 05/11/18; Asset Class: FI & Pref</i>									
CISCO SYSTEMS INC	2/5/19	84,000.000	97.479	105.052	81,882.36			1,848.00	2.09
Coupon Rate 2.200%; Matures 09/20/2023; CUSIP 17275RBH4			97.479		81,882.36	88,243.68	6,361.32 LT	210.46	
<i>Interest Paid Semi-Annually Mar/Sep; Callable \$100.00 on 07/20/23; Moody A1 S&P AA-; Issued 09/20/16; Asset Class: FI & Pref</i>									
JOHN DEERE CAPITAL CORP	4/11/19	161,000.000	103.761	109.570	167,055.21			5,877.00	3.33
Coupon Rate 3.650%; Matures 10/12/2023; CUSIP 24422EUM9			102.511		165,043.04	176,407.70	11,364.66 LT	310.14	
<i>Interest Paid Semi-Annually Apr/Oct; Moody A2 S&P A; Issued 10/12/18; Asset Class: FI & Pref</i>									
STATE STREET CORP	9/18/19	80,000.000	106.460	109.780	85,168.80				
Coupon Rate 3.700%; Matures 11/20/2023; CUSIP 857477AM5			104.777		83,821.21	87,824.00	4,002.79 LT		
	8/20/20	80,000.000	110.697	109.780	88,557.60				
			110.042		88,033.78	87,824.00	(209.78) ST		
Total		160,000.000			173,726.40			5,920.00	3.37
					171,854.99	175,648.00	4,002.79 LT (209.78) ST	2,647.55	
<i>Interest Paid Semi-Annually May/Nov; Moody A1 S&P A; Issued 11/19/13; Asset Class: FI & Pref</i>									

Consulting and Evaluation Services Basic Securities Acct.

CITY OF SOUTH PASADENA
C/O GARY E PIA, LUCY DEMIRJIAN &

Account Detail

Security Description	Trade Date	Face Value	Orig Unit Cost Adj Unit Cost	Unit Price	Orig Total Cost Adj Total Cost	Market Value	Unrealized Gain/(Loss)	Est Ann Income Accrued Interest	Current Yield %
CATERPILLAR FINANCIAL SERVICES CORP Coupon Rate 3.750%; Matures 11/24/2023; CUSIP 14912L5X5 <i>Interest Paid Semi-Annually May/Nov; Yield to Maturity .501%; Moody A3 S&P A-; Issued 11/26/13; Asset Class: FI & Pref</i>	7/5/19	79,000.000	105.820 104.124	109.865	83,598.59 82,257.96	86,793.35	4,535.39 LT	2,963.00 1,291.97	3.41
TRUIST FINANCIAL CORP Coupon Rate 3.750%; Matures 12/06/2023; CUSIP 05531F99 <i>Interest Paid Semi-Annually Jun/Dec; Callable \$100.00 on 11/06/23; Yield to Call .608%; Moody A3 S&P A-; Issued 12/06/18; Asset Class: FI & Pref</i>	2/5/19	121,000.000	102.566 101.687	109.368	124,106.07 123,040.82	132,335.28	9,294.46 LT	4,538.00 1,827.60	3.42
METLIFE INC Coupon Rate 3.600%; Matures 04/10/2024; CUSIP 59156RBH0 <i>Interest Paid Semi-Annually Apr/Oct; Yield to Maturity .649%; Moody A3 S&P A-; Issued 04/10/14; Asset Class: FI & Pref</i>	12/17/19	80,000.000	106.366 105.119	110.028	85,093.60 84,095.51	88,022.40	3,926.89 ST	2,880.00 167.99	3.27
COMCAST CORP Coupon Rate 3.700%; Matures 04/15/2024; CUSIP 20030NCRO <i>Interest Paid Semi-Annually Apr/Oct; Callable \$100.00 on 03/15/24; Yield to Call .655%; Moody A3 S&P A-; Issued 10/05/18; Asset Class: FI & Pref</i>	2/26/20	159,000.000	107.984 106.703	110.138	171,696.15 169,657.59	175,119.42	5,461.83 ST	5,883.00 261.46	3.35
TEXAS INSTRUMENTS INC Coupon Rate 2.625%; Matures 05/15/2024; CUSIP 882508BB9 <i>Interest Paid Semi-Annually May/Nov; Callable \$100.00 on 03/15/24; Yield to Call .563%; Moody A1 S&P A+; Issued 05/04/17; Asset Class: FI & Pref</i>	9/18/19	166,000.000	102.728 102.094	106.879	170,530.14 169,476.50	177,419.14	7,942.64 LT	4,358.00 2,009.29	2.45
UNITEDHEALTH GROUP INC Coupon Rate 2.375%; Matures 08/15/2024; CUSIP 91324PDR0	7/13/20 7/17/20	83,000.000 123,000.000	106.692 106.203 107.070 106.570	106.392	88,555.19 88,148.89 131,696.10 131,080.73	88,305.36 130,862.16	156.47 ST (218.57) ST		
Total		206,000.000			220,251.29 219,229.62	219,167.52	(62.10) ST	4,893.00 1,032.86	2.23
<i>Interest Paid Semi-Annually Feb/Aug; Yield to Maturity .664%; Moody A3 S&P A+; Issued 07/25/19; Asset Class: FI & Pref</i>									
UNITED PARCEL SERVICE INC Coupon Rate 2.200%; Matures 09/01/2024; CUSIP 911312BT2 <i>Interest Paid Semi-Annually Mar/Sep; Callable \$100.00 on 08/01/24; Yield to Call .592%; Moody A2 S&P A-; Issued 08/16/19; Asset Class: FI & Pref</i>	2/6/20	84,000.000	101.669 101.408	105.955	85,401.96 85,182.82	89,002.20	3,819.38 ST	1,848.00 308.00	2.07
PNC FINANCIAL SERVICES GROUP INC/THE Coupon Rate 2.200%; Matures 11/01/2024; CUSIP 693475AY1 <i>Interest Paid Semi-Annually May/Nov; Callable \$100.00 on 10/02/24; Yield to Call .672%; Moody A3 S&P A-; Issued 11/01/19; Asset Class: FI & Pref</i>	2/13/20	170,000.000	101.837 101.567	105.900	173,122.90 172,663.07	180,030.00	7,366.93 ST	3,740.00 1,870.00	2.07
COCA-COLA CO/THE Coupon Rate 2.950%; Matures 03/25/2025; CUSIP 191216CN8 <i>Interest Paid Semi-Annually Mar/Sep; Yield to Maturity .662%; Moody A1 S&P A+; Issued 03/25/20; Asset Class: FI & Pref</i>	10/27/20	81,000.000	110.137 110.106	109.905	89,211.78 89,186.24	89,023.05	(163.19) ST	2,390.00 238.95	2.68
CHEVRON CORP Coupon Rate 1.554%; Matures 05/11/2025; CUSIP 166764BW9 <i>Interest Paid Semi-Annually; Callable \$100.00 on 04/11/25; Yield to Call .818%; First Coupon 11/11/20; Moody AA2 S&P AA; Issued 05/11/20; Asset Class: FI & Pref</i>	8/13/20	172,000.000	103.760 103.589	103.207	178,467.20 178,172.79	177,516.04	(656.75) ST	2,673.00 1,262.19	1.50
BANK OF AMERICA CORP Coupon Rate 3.875%; Matures 08/01/2025; CUSIP 06051GFS3 <i>Interest Paid Semi-Annually Feb/Aug; Yield to Maturity 1.040%; Moody A2 S&P A-; Issued 07/30/15; Asset Class: FI & Pref</i>	10/22/20	156,000.000	113.735 113.658	113.107	177,428.16 177,305.96	176,446.92	(859.04) ST	6,045.00 1,511.25	3.42

Consulting and Evaluation Services Basic Securities Acct.

CITY OF SOUTH PASADENA
C/O GARY E PIA, LUCY DEMIRJIAN &

Account Detail

	Percentage of Holdings	Face Value	Orig Total Cost Adj Total Cost	Market Value	Unrealized Gain/(Loss)	Est Ann Income Accrued Interest	Current Yield %
CORPORATE FIXED INCOME		4,771,000.000	\$4,925,967.49 \$4,883,715.66	\$5,015,147.73	\$105,486.39 LT \$25,945.68 ST	\$128,818.00 \$38,278.43	2.57%
TOTAL CORPORATE FIXED INCOME (includes accrued interest)	28.27%			\$5,053,426.16			

GOVERNMENT SECURITIES

TREASURY SECURITIES

Security Description	Trade Date	Face Value	Orig Unit Cost Adj Unit Cost	Unit Price	Orig Total Cost Adj Total Cost	Market Value	Unrealized Gain/(Loss)	Est Ann Income Accrued Interest	Current Yield %
UNITED STATES TREASURY NOTE Coupon Rate 1.750%; Matures 07/31/2021; CUSIP 9128287F1	8/9/19	427,000.000	\$100.226 \$100.086	\$101.203	\$427,967.58 \$427,368.06	\$432,136.81	\$4,768.75 LT		
	8/21/19	599,000.000	100.390 100.151	101.203	601,339.69 599,904.22	606,205.97	6,301.75 LT		
Total		1,026,000.000			1,029,307.27 1,027,272.28	1,038,342.78	11,070.50 LT	17,955.00 4,488.75	1.72

Interest Paid Semi-Annually Jan/Jul; Moody AAA; Issued 07/31/19; Asset Class: FI & Pref

UNITED STATES TREASURY NOTE Coupon Rate 2.000%; Matures 10/31/2021; CUSIP 912828F96	11/1/17	494,000.000	100.312 100.080	101.836	495,543.75 494,394.97	503,069.84	8,674.87 LT		
	8/13/19	437,000.000	100.867 100.393	101.836	440,789.66 438,717.85	445,023.32	6,305.47 LT		
	6/2/20	25,000.000	102.566 101.810	101.836	25,641.60 25,452.57	25,459.00	6.43 ST		
Total		956,000.000			961,975.01 958,565.39	973,552.16	14,980.34 LT 6.43 ST	19,120.00 52.52	1.96

Interest Paid Semi-Annually Apr/Oct; Moody AAA; Issued 10/31/14; Asset Class: FI & Pref

UNITED STATES TREASURY NOTE Coupon Rate 1.625%; Matures 12/31/2021; CUSIP 912828YZ7	1/14/20	258,000.000	100.089 100.053	101.719	258,231.68 258,137.85	262,435.02	4,297.17 ST		
	2/6/20	259,000.000	100.336 100.206	101.719	259,869.98 259,534.32	263,452.21	3,917.89 ST		
Total		517,000.000			518,101.66 517,672.17	525,887.23	8,215.06 ST	8,401.00 2,808.02	1.59

Interest Paid Semi-Annually Jun/Dec; Moody AAA; Issued 12/31/19; Asset Class: FI & Pref

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Security Description	Trade Date	Face Value	Orig Unit Cost Adj Unit Cost	Unit Price	Orig Total Cost Adj Total Cost	Market Value	Unrealized Gain/(Loss)	Est Ann Income Accrued Interest	Current Yield %
UNITED STATES TREASURY NOTE	8/9/19	426,000.000	100.476	102.715	428,030.32				
Coupon Rate 1.750%; Matures 07/15/2022; CUSIP 9128287C8			100.279		427,188.92	437,565.90	10,376.98 LT		
	8/13/19	426,000.000	100.574	102.715	428,446.09				
			100.337		427,437.30	437,565.90	10,128.60 LT		
	8/21/19	33,000.000	100.722	102.715	33,238.49				
			100.428		33,141.12	33,895.95	754.83 LT		
Total		885,000.000			889,714.90			15,488.00	1.70
					887,767.34	909,027.75	21,260.41 LT	4,545.24	
<i>Interest Paid Semi-Annually Jan/Jul; Moody AAA; Issued 07/15/19; Asset Class: FI & Pref</i>									
UNITED STATES TREASURY NOTE	7/5/19	423,000.000	99.723	103.547	421,827.02				
Coupon Rate 1.750%; Matures 01/31/2023; CUSIP 912828P38			99.723		421,827.02	438,003.81	16,176.79 LT		
	8/21/19	2,000.000	100.879	103.547	2,017.58				
			100.578		2,011.56	2,070.94	59.38 LT		
	8/22/19	383,000.000	100.745	103.547	385,857.56				
			100.491		384,880.82	396,585.01	11,704.19 LT		
Total		808,000.000			809,702.16			14,140.00	1.69
					808,719.40	836,659.76	27,940.36 LT	3,535.00	
<i>Interest Paid Semi-Annually Jan/Jul; Moody AAA; Issued 02/01/16; Asset Class: FI & Pref</i>									
UNITED STATES TREASURY NOTE	5/1/19	434,000.000	96.477	103.172	418,708.44			5,968.00	1.33
Coupon Rate 1.375%; Matures 06/30/2023; CUSIP 912828S35			96.477		418,708.44	447,766.48	29,058.04 LT	1,994.57	
<i>Interest Paid Semi-Annually Jun/Dec; Moody AAA; Issued 06/30/16; Asset Class: FI & Pref</i>									
UNITED STATES TREASURY NOTE	6/25/19	730,000.000	104.961	108.184	766,214.57			20,988.00	2.65
Coupon Rate 2.875%; Matures 11/30/2023; CUSIP 9128285P1			103.483		755,425.00	789,743.20	34,318.20 LT	8,773.46	
<i>Interest Paid Semi-Annually May/Nov; Moody AAA; Issued 11/30/18; Asset Class: FI & Pref</i>									
UNITED STATES TREASURY NOTE	4/11/19	719,000.000	99.168	106.418	713,017.92			15,279.00	1.99
Coupon Rate 2.125%; Matures 03/31/2024; CUSIP 912828W71			99.168		713,017.92	765,145.42	52,127.50 LT	1,301.21	
<i>Interest Paid Semi-Annually Mar/Sep; Moody AAA; Issued 03/31/17; Asset Class: FI & Pref</i>									
UNITED STATES TREASURY NOTE	6/25/19	1,010,000.000	101.234	106.113	1,022,467.44			20,200.00	1.88
Coupon Rate 2.000%; Matures 04/30/2024; CUSIP 912828X70			100.900		1,019,090.37	1,071,741.30	52,650.93 LT	10,045.10	
<i>Interest Paid Semi-Annually Apr/Oct; Moody AAA; Issued 05/01/17; Asset Class: FI & Pref</i>									
UNITED STATES TREASURY NOTE	4/23/20	529,000.000	100.687	100.754	532,636.88			2,645.00	0.49
Coupon Rate 0.500%; Matures 03/31/2025; CUSIP 912828ZF0			100.615		532,251.06	532,988.66	737.60 ST	225.26	
<i>Interest Paid Semi-Annually Mar/Sep; Moody AAA; Issued 03/31/20; Asset Class: FI & Pref</i>									
TREASURY SECURITIES		7,614,000.000			\$7,661,846.25			\$140,184.00	1.78%
					\$7,638,489.37	\$7,890,854.74	\$243,406.28 LT	\$37,769.13	
							\$8,959.09 ST		

Consulting and Evaluation Services Basic Securities Acct.

CITY OF SOUTH PASADENA
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FEDERAL AGENCIES

Security Description	Trade Date	Face Value	Orig Unit Cost Adj Unit Cost	Unit Price	Orig Total Cost Adj Total Cost	Market Value	Unrealized Gain/(Loss)	Est Ann Income Accrued Interest	Current Yield %
FED HOME LN BK Coupon Rate 1.125%; Matures 07/14/2021; CUSIP 3130A8QS5 <i>Interest Paid Semi-Annually Jan/Jul; Moody AAA S&P AA+; Issued 07/14/16; Asset Class: FI & Pref</i>	8/11/16	665,000.000	\$99.305 \$99.305	\$100.698	\$660,378.25 \$660,378.25	\$669,641.70	\$9,263.45 LT	\$7,481.00 \$2,223.59	1.11
FED HOME LN MTG CORP MED TERM NOTE Coupon Rate 2.375%; Matures 01/13/2022; CUSIP 3137EADB2 <i>Interest Paid Semi-Annually Jan/Jul; Moody AAA S&P AA+; Issued 01/13/12; Asset Class: FI & Pref</i>	4/23/20	511,000.000	103.523 102.451	102.648	529,007.64 523,527.05	524,531.28	1,004.23 ST	12,136.00 3,640.87	2.31
FED NATL MTG ASSN Coupon Rate 2.875%; Matures 09/12/2023; CUSIP 3135G0U43	2/13/19 4/9/19	225,000.000	101.167 100.745 102.191 101.443	107.518	227,625.53 226,675.72 143,068.80 142,019.73	241,915.50 150,525.20	15,239.78 LT 8,505.47 LT		
Total		365,000.000			370,694.33 368,695.45	392,440.70	23,745.25 LT	10,494.00 1,428.31	2.67
<i>Interest Paid Semi-Annually Mar/Sep; Moody AAA S&P AA+; Issued 09/14/18; Asset Class: FI & Pref</i>									
FED NATL MTG ASSN Coupon Rate 2.500%; Matures 02/05/2024; CUSIP 3135G0V34 <i>Interest Paid Semi-Annually Feb/Aug; Moody AAA S&P AA+; Issued 02/08/19; Asset Class: FI & Pref</i>	4/9/19	833,000.000	100.714 100.491	107.253	838,947.62 837,086.29	893,417.49	56,331.20 LT	20,825.00 4,974.86	2.33
FED NATL MTG ASSN Coupon Rate 2.625%; Matures 09/06/2024; CUSIP 3135G0ZR7 <i>Interest Paid Semi-Annually Mar/Sep; Moody AAA S&P AA+; Issued 09/08/14; Asset Class: FI & Pref</i>	10/15/19	535,000.000	104.706 103.716	108.884	560,180.31 554,879.28	582,529.40	27,650.12 LT	14,044.00 2,145.57	2.41
FED HOME LN MTG CORP Coupon Rate 1.500%; Matures 02/12/2025; CUSIP 3137EAEP0 <i>Interest Paid Semi-Annually Feb/Aug; Moody AAA; Issued 02/14/20; Asset Class: FI & Pref</i>	4/8/20	681,000.000	103.893 103.444	104.581	707,511.33 704,453.18	712,196.61	7,743.43 ST	10,215.00 2,241.62	1.43
FED NATL MTG ASSN Coupon Rate 0.500%; Matures 06/17/2025; CUSIP 3135G04Z3 <i>Interest Paid Semi-Annually; Yield to Maturity .501%; First Coupon 12/17/20; Moody AAA S&P AA+; Issued 06/19/20; Asset Class: FI & Pref</i>	9/4/20	801,000.000	100.444 100.430	99.995	804,556.44 804,440.60	800,959.95	(3,480.65) ST	4,005.00 1,468.50	0.50
FEDERAL AGENCIES		4,391,000.000			\$4,471,275.92 \$4,453,460.10	\$4,575,717.13	\$116,990.02 LT \$5,267.01 ST	\$79,200.00 \$18,123.32	1.73%

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	Percentage of Holdings	Face Value	Orig Total Cost Adj Total Cost	Market Value	Unrealized Gain/(Loss)	Est Ann Income Accrued Interest	Current Yield %
GOVERNMENT SECURITIES		12,005,000.000	\$12,133,122.17 \$12,091,949.47	\$12,466,571.87	\$360,396.30 LT \$14,226.10 ST	\$219,384.00 \$55,892.45	1.76%
TOTAL GOVERNMENT SECURITIES (includes accrued interest)	70.04%			\$12,522,464.32			
	Percentage of Holdings		Total Cost	Market Value	Unrealized Gain/(Loss)	Est Ann Income Accrued Interest	Current Yield %
TOTAL VALUE			\$16,975,665.13	\$17,783,921.65	\$465,882.69 LT \$40,171.78 ST	\$348,232.98 \$94,170.88	1.95%
TOTAL VALUE (includes accrued interest)	100.00%			\$17,878,092.53			

Unrealized Gain/(Loss) totals only reflect positions that have both cost basis and market value information available. Cash, MMF, Deposits and positions stating 'Please Provide' or 'Pending Corporate Actions' are not included.

ALLOCATION OF ASSETS (^ includes accrued interest)

	Cash	Equities	Fixed Income & Preferred Securities	Alternatives	Structured Investments	Other
Cash, BDP, MMFs	\$309,777.22	—	—	—	—	—
Cash, BDP, MMFs (Debit)	(7,575.17)	—	—	—	—	—
Corporate Fixed Income ^	—	—	\$5,053,426.16	—	—	—
Government Securities ^	—	—	12,522,464.32	—	—	—
TOTAL ALLOCATION OF ASSETS ^	\$302,202.05	—	\$17,575,890.48	—	—	—

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ACTIVITY

INVESTMENT RELATED ACTIVITY

PURCHASES, DIVIDEND REINVESTMENTS, SALES AND REDEMPTIONS

Activity Date	Settlement Date	Activity Type	Description	Comments	Quantity	Price	Credits/(Debits)
10/19	10/19	Redemption	BANK OF AMERICA CORP	2.625% DUE2020-10-19 [06051GFT1] REDEMPTION OF MATURED BOND	163,000.000	\$100.0000	\$163,000.00
10/22	10/26	Bought	BANK OF AMERICA CORP 3.875% DUE2025-08-01 [06051GFS3]	ACTED AS AGENT; STEP-OUT TRADE ACCRUED INTEREST 1,427.29	156,000.000	113.7360	(178,855.45)
10/27	10/27	Redemption	COCA-COLA CO/THE	1.875% DUE2020-10-27 [191216BT6] REDEMPTION OF MATURED BOND	81,000.000	100.0000	81,000.00
10/27	10/29	Bought	COCA-COLA CO/THE 2.950% DUE2025-03-25 [191216CN8]	ACTED AS AGENT; STEP-OUT TRADE ACCRUED INTEREST 225.67	81,000.000	110.1380	(89,437.45)
TOTAL PURCHASES, DIVIDEND REINVESTMENTS, SALES AND REDEMPTIONS							\$(24,292.90)
TOTAL PURCHASES							\$(268,292.90)
TOTAL SALES AND REDEMPTIONS							\$244,000.00

For trades marked "STEP-OUT TRADE," you may have been assessed trading related costs (mark-ups, mark-downs and/or other fees or charges) by another broker dealer. These costs are in addition to your Morgan Stanley program fees and are included in the net price of the security. For additional information, visit <https://www.morganstanley.com/wealth/investmentsolutions/pdfs/adv/sotresponse.pdf>

Purchase and Sale transactions above may have received an average price execution. Details regarding the actual prices are available upon request.

TAXABLE INCOME AND DISTRIBUTIONS

Activity Date	Activity Type	Description	Comments	Credits/(Debits)
10/1	Interest Income	HOME DEPOT INC	4.400% DUE2021-04-01 [437076AW2]	\$1,782.00
10/12	Interest Income	METLIFE INC	3.600% DUE2024-04-10 [59156RBH0]	1,440.00
10/13	Interest Income	JOHN DEERE CAPITAL CORP	3.650% DUE2023-10-12 [24422EUM9]	2,938.25
10/15	Interest Income	COMCAST CORP	3.700% DUE2024-04-15 [20030NCRO]	2,941.50
10/19	Interest Income	BANK OF AMERICA CORP	2.625% DUE2020-10-19 [06051GFT1]	2,139.38
10/27	Interest Income	COCA-COLA CO/THE	1.875% DUE2020-10-27 [191216BT6]	759.38
10/30	Dividend	MS U.S. GOVT MONEY MARKET TR		3.02
TOTAL TAXABLE INCOME AND DISTRIBUTIONS				\$12,003.53
TOTAL OTHER DIVIDENDS				\$3.02
TOTAL INTEREST				\$12,000.51

CASH RELATED ACTIVITY

OTHER CREDITS AND DEBITS

Activity Date	Activity Type	Description	Comments	Credits/(Debits)
10/7	Service Fee	ADV FEE 10/01-10/31		\$(1,213.43)
10/15	Service Fee Adj	REBATE ON MSIM FUNDS	09/01-09/30	10.17
10/30	Service Fee	MGR FEE 10/01-12/31 *		(7,575.17)
TOTAL OTHER CREDITS AND DEBITS				\$(8,778.43)
TOTAL OTHER DEBITS				\$(8,778.43)

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MONEY MARKET FUND (MMF) AND BANK DEPOSIT PROGRAM ACTIVITY

Activity Date	Activity Type	Description	Credits/(Debits)
10/1	Automatic Investment	MS U.S. GOV'T MONEY MARKET TR	\$8,961.88
10/1	Automatic Redemption	MS U.S. GOV'T MONEY MARKET TR	(178,487.37)
10/2	Automatic Investment	MS U.S. GOV'T MONEY MARKET TR	1,782.00
10/9	Automatic Redemption	MS U.S. GOV'T MONEY MARKET TR	(1,213.43)
10/14	Automatic Investment	MS U.S. GOV'T MONEY MARKET TR	4,378.25
10/16	Automatic Investment	MS U.S. GOV'T MONEY MARKET TR	2,951.67
10/20	Automatic Investment	MS U.S. GOV'T MONEY MARKET TR	165,139.38
10/26	Automatic Redemption	MS U.S. GOV'T MONEY MARKET TR	(178,855.45)
10/29	Automatic Redemption	MS U.S. GOV'T MONEY MARKET TR	(7,678.07)
10/30	Automatic Investment	MS U.S. GOV'T MONEY MARKET TR	3.02
NET ACTIVITY FOR PERIOD			\$(183,018.12)

REALIZED GAIN/(LOSS) DETAIL

LONG-TERM GAIN/(LOSS)

Security Description	Date Acquired	Date Sold	Quantity	Sales Proceeds	Orig / Adj Total Cost	Realized Gain/(Loss)	Comments
BANK OD AMERICA 2625 200C19	12/12/17	10/19/20	163,000.000	\$163,000.00	\$163,000.00	\$0.00	
COCA-COLA CO THE 1875 200C27	06/01/16	10/27/20	62,000.000	62,000.00	62,000.00	0.00	
	06/22/16	10/27/20	19,000.000	19,000.00	19,000.00	0.00	
Long-Term This Period				\$244,000.00	\$244,000.00	\$0.00	
Long-Term Year to Date				\$4,095,478.45	\$4,057,875.48	\$37,602.97	
Net Realized Gain/(Loss) This Period				\$244,000.00	\$244,000.00	\$0.00	
Net Realized Gain/(Loss) Year to Date				\$4,451,398.14	\$4,410,949.55	\$40,448.59	

Treasury regulations require that we report on Form 1099-B a) adjusted cost basis on the sale of covered securities acquired on or after 1/1/11 (or the applicable date for the type of security), b) the gain or loss as either long-term or short-term, and c) basis adjustments on covered securities due to wash sales, certain corporate actions and transfers by gift or inheritance. This section may not reflect all the basis adjustments required when filing your tax return. Refer to the Expanded Disclosures.

COPIES OF THIS STATEMENT HAVE ALSO BEEN SENT TO:

GARY PIA

Account Detail

Consulting and Evaluation Services Basic Securities Acct. [REDACTED]

CITY OF SOUTH PASADENA
C/O GARY E PIA, LUCY DEMIRJIAN &

MESSAGES

Protecting Yourself from Fraudulent Scams—An Important Message For Our Clients

The COVID 19 crisis is creating opportunities for fraudsters to exploit individuals, especially senior citizens. The safety of our clients is of utmost importance to Morgan Stanley. We are taking this opportunity to alert our clients of the following scams that have been identified by a number of organizations. **Please be reminded that you should never provide your account numbers, passwords, or personal information, including your social security number, to anyone you do not know** Be aware that as a result of COVID 19, these scams have been identified: **Treatment scams; Supply scams; Provider scams; Charity scams; Phishing scams; App scams; Investment scams; Tech Support scams; Home Sanitation scams; and Government Assistance scams**

If you have any questions regarding these scams, please immediately contact us.

Senior Investor Helpline

For any inquiries or potential concerns, senior investors or someone acting on their behalf may contact our Firm by calling (800) 280-4534.

Important Information About Advisory Accounts

Please contact us if there have been any changes in your financial situation or investment objectives, or if you wish to impose any reasonable restrictions on the management of your Investment Advisory accounts, or to reasonably modify existing restrictions.

For a copy of the applicable ADV Brochure for Morgan Stanley Smith Barney LLC, or for any investment adviser with whom we contract to manage your investment advisory account, please visit www.morganstanley.com/ADV. These ADV Brochures contain important information about our advisory programs.

Online Availability of Client Relationship Summary and Other Disclosures

The Morgan Stanley Client Relationship Summary as well as other applicable regulatory disclosures are available at www.morganstanley.com/disclosures/account-disclosures. Please visit this website and review these documents carefully, as they provide important information.

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Exhibit B-2

**Funds and Investments
Held by Contracted (Third) Parties
October 31, 2020**

2016 Water Revenue Bonds

Investment Type	Issuer	Settlement Date	Par Value	Coupon Rate	Market Value	Current YTM	Maturity Date	Days to Maturity	CUSIP Account Number
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BNY Mellon Project Fund

1	Cash		7.36	0.010%	7.36	0.010%		1	
2	Morgan Stanley Treasury Portfolio		158,289.37	0.250%	158,289.37	0.250%		1	
Subtotal Cash & Cash Equivalents			158,296.73	0.250%	158,296.73	0.250%		1	
Total Project Fund			158,296.73	0.250%	158,296.73	0.250%		1	

Exhibit C

**City of South Pasadena
Investment Report**

Summary of Invested Funds -- Last Day of the Month

MONTH	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
JULY	11,604,558	14,003,563	17,332,153	20,958,651	26,306,572	28,541,631	74,033,803	33,187,829	34,119,395	39,309,559
AUGUST	11,595,476	13,043,563	17,330,985	12,658,088	26,294,151	28,405,544	73,122,925	31,258,493	34,245,197	35,205,219
SEPTEMBER	11,582,026	11,783,420	16,331,557	19,715,369	22,058,959	27,049,892	70,952,657	31,219,168	34,211,588	35,108,138
OCTOBER	10,575,907	11,795,960	13,841,158	17,221,779	22,325,114	27,023,005	70,917,973	26,989,542	30,424,551	32,530,753
NOVEMBER	8,992,178	11,800,260	13,836,635	17,221,849	22,287,418	73,246,265	26,547,176	26,916,772	30,394,571	
DECEMBER	10,185,282	11,805,140	16,837,192	20,603,990	22,253,300	71,499,585	28,949,643	27,028,835	30,398,333	
JANUARY	9,186,793	11,816,031	18,846,359	26,309,319	27,399,997	71,229,735	32,878,042	35,305,506	30,183,446	
FEBRUARY	9,184,331	13,818,580	18,845,663	26,260,788	30,108,605	71,084,575	33,013,420	34,571,287	35,784,459	
MARCH	9,126,552	13,319,038	13,145,894	26,315,158	28,939,924	72,604,964	32,833,141	32,568,840	35,894,036	
APRIL	11,130,863	17,327,604	13,153,853	26,326,876	28,276,276	75,018,330	33,064,100	32,242,202	36,081,161	
MAY	11,128,155	19,327,983	23,452,878	26,310,240	28,429,928	76,053,277	32,879,674	36,925,478	34,133,626	
JUNE	10,275,475	19,323,510	22,452,628	29,289,712	26,594,581	75,918,587	33,102,349	38,922,757	34,218,755	



City Council Agenda Report

ITEM NO. 11

DATE: December 16, 2020

FROM: Sean Joyce, Interim City Manager

PREPARED BY: Lucy Demirjian, Assistant to the City Manager
Teresa L. Highsmith, City Attorney

SUBJECT: **Adoption of a Resolution Continuing the Proclamation of a Local Emergency Due to the Outbreak of COVID-19, Authorizing the City Manager to Take All Necessary Actions as the Director of Emergency Services**

Recommendation

It is recommended that the City Council approve the attached resolution:

1. Continuing the proclamation of a local emergency due to the outbreak of COVID-19;
2. Authorizing the City Manager to take all necessary actions as the Director of Emergency Services.

Discussion/Analysis

On March 18, 2020, the City Council adopted Resolution No. 7646, declaring a local emergency, restricting private and public gatherings and establishing protections for residential and commercial tenants unable to pay all or a portion of their rent due to loss of income from the COVID-19 statewide emergency. Resolution No. 7646 was superseded by Resolution No. 7648, adopted by the City Council on May 6, 2020, continuing the declaration of a local emergency, adopting the April 14, 2020 Executive Order of the Los Angeles Board of Supervisors by reference, and imposing additional restrictions.

On June 17, 2020, the City Council adopted Resolution No. 7675, superseding the prior Resolutions and continuing the declaration of local emergency and reinstating the parking pass program, including the potential for citations for parking violations, effective July 6, 2020.

On October 6, 2020, the Los Angeles County Health Officer amended the local Revised Order Issued: "Reopening Safer at Work and in the Community for Control of COVID-19 – Blueprint for a Safer Economy, Tier 1, consistent with the state Public Health Officer Order of August 28, 2020, issuance of a Blue Print for a Safer Economy, which describes a tiered approach to relaxing and tightening restrictions on activities based upon specified criteria and as permitted by this Order based on County health conditions and circumstances.

On November 28, 2020, in response to the substantial rise the COVID-19 cases, hospitalizations, and deaths, the Los Angeles County Health Officer issued a Temporary Targeted Safer At Home

Order for Control of COVID-19: Tier 1 Substantial Surge Response, to temporarily replace the most recently issued Reopening Safer at Work and in the Community for Control of COVID-19 Order. This Temporary Order will be effective November 30, 2020 to December 20, 2020.

The State Public Health Officer issued the Regional Stay Home Order on December 3, 2020 which would go into effect at 11:59 PM the day after a region has been announced to have less than 15% ICU availability. The Order prohibits private gatherings of any size, closes sector operations except for critical infrastructure and retail, and requires 100% masking and physical distancing in all others. The Order is by region and the City and Los Angeles County are in the Southern California Region. On December 6, 2020 the Southern California region met the criteria for closure and the Order went into effect on December 6, 2020.

On August 4, 2020, the Los Angeles County Board of Supervisors unanimously approved an ordinance to cap fees charged to restaurants by third-party delivery services, such as Postmates, Door Dash, Grub Hub and Uber Eats.

On August 5, 2020, the City Council adopted Resolution No. 7669, to continue the proclamation of a local emergency and adding regulations for the expansion of the Al Fresco Dining and Retail Program and adopting by reference the Los Angeles County Ordinance Capping Fees for third-party delivery platforms for food delivery.

On August 19, 2020, the City Council adopted Resolution No. 7678, continue the proclamation of a local emergency and authorizing the expansion of the Al Fresco Dining and Retail Program to include the use of the public right-of-way for outdoor dining and retail.

As of October 1, 2020, the County's Temporary Eviction Moratorium no longer applies to residential tenants facing eviction for nonpayment of rent due to COVID-19 related financial hardship. Following the Governor's signing of AB 3088, the County's Moratorium has been replaced by the terms of AB 3088. Between October 1, 2020 and January 31, 2021, residential tenants must comply with the certification requirements established in AB 3088 in order to be protected from eviction. The Board of Supervisors did amend its Moratorium with respect to commercial tenants imposing a temporary moratorium on evictions for non-payment of rent by commercial tenants impacted by COVID-19 until October 31, 2020. The County Moratorium provisions apply to commercial tenants and landlords within the City. The Board of Supervisors may choose to extend that moratorium but has not yet done so.

AB 3088, known as the COVID-19 Tenant Relief Act of 2020, was signed on August 31, 2020 and is legislation that would protect millions of tenants from eviction and property owners from foreclosure due to the economic impacts of COVID-19. Under the new law, no tenant can be evicted before February 1, 2021 as a result of rent owed due to a COVID-19 related hardship accrued between March 4 through August 31, 2020, if the tenant provides a declaration of hardship according to the legislation's timelines. For a COVID-19 related hardship that accrues between September 1, 2020 – January 31, 2021, tenants must also pay at least 25 percent of the rent due to avoid eviction after February 1, 2021 for the unpaid rent.

Pursuant to Government Code Section 8630(c), the City Council shall review the continuing need for the declaration of local emergency at least once every 60 days until the local emergency is terminated.

The proposed updated resolution would expand the Al Fresco Dining and Retail Pilot Program to “Phase 2,” to include the use of the public right-of-way for outdoor dining and retail purposes to support local businesses during the pandemic. The definition of retail includes personal services, such as salons, and health facilities, such as gyms. Staff will review and approve the use of parking lanes and low volume side streets in the public right-of-way where feasible and implement a traffic control plan with K-rated concrete barriers. Additional uses within a travel lane or higher volume side streets will be subject to a traffic study and will be brought to the City Council for future consideration following completion of the necessary traffic studies.

The proposed actions to preserve life, property, and public order are consistent with California Government Code section 8634 and South Pasadena Municipal Code Chapter 11.

Background

An outbreak of pneumonia in Wuhan, China was reported to the World Health Organization on December 31, 2019, and an illness caused by a novel coronavirus called COVID-19 was soon identified as the cause. During the week of February 23, 2020, the Centers for Disease Control and Prevention reported evidence of community spread of the virus in cases located in California, Oregon, and Washington.

On March 4, 2020, Governor Gavin Newsom declared a state of emergency to exist in California as a result of COVID-19. The same day, the State of California and Los Angeles County Department of Public Health declared health emergencies. On March 13, 2020, President Donald Trump declared a national emergency as a result of COVID-19.

The State Public Health Officer issued the “Stay at Home” order on March 19, 2020. The Los Angeles County Health Officer on March 21, 2020 followed with the “Safer at Home” order. On April 28, 2020, Governor Gavin Newsom announced a 4-stage transition plan, titled “California’s Pandemic Resilience Roadmap,” to end the State Stay at Home order. The Stay at Home order and Safer at Home Order were revised on May 7, May 29, July 13, July 17, August 28, and November 19. The State Public Health Officer issued a Limited Stay at Home Order on November 19, 2020, effective in counties under Tier One (Purple) of California’s Blueprint for a Safer Economy. The State Public Health Officer issued the Regional Stay Home Order on December 3, 2020 which would go into effect at 11:59 PM the day after a region has been announced to have less than 15% ICU availability. On December 6, 2020 the Southern California region met the criteria for closure and the Order went into effect on December 6, 2020.

Legal Review

The City Attorney's office has reviewed this item.

Fiscal Impact

With the State declaration of a health emergency, local COVID-19 response efforts may be eligible for state or federal reimbursement. The costs of responding to COVID-19 are unknown at this time due to evolving conditions but are being tracked by staff. The reinstatement of the City's Parking Pass Program may generate additional revenue.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City's website and/or notice in the *South Pasadena Review* and/or the *Pasadena Star-News*.

Attachment:

1. City Council Resolution

RESOLUTION NO. ____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOUTH PASADENA, CALIFORNIA, CONTINUING ITS PROCLAMATION OF A LOCAL EMERGENCY DUE TO THE OUTBREAK OF COVID-19, ADDING REGULATIONS TO FACILITATE EXPANSION OF THE AL FRESCO DINING AND RETAIL PROGRAM, INCLUDING SUSPENSION OF OUTDOOR DINING PERMIT FEE, ADOPTION BY REFERENCE OF LOS ANGELES COUNTY ORDINANCE LIMITING THIRD-PARTY DELIVERY CHARGES FOR TAKE-OUT FOOD ORDERS, AND AUTHORIZING THE CITY MANAGER TO CONTINUE TO TAKE ALL NECESSARY ACTIONS AS THE DIRECTOR OF EMERGENCY SERVICES

WHEREAS, in December 2019, a novel severe acute respiratory syndrome coronavirus2, known as SARS-CoV-2, which has also been referred to as COVID-19, was first detected in Wuhan, Hubei Province, People’s Republic of China, causing outbreaks of the coronavirus disease COVID-19 that has now spread globally;

WHEREAS, on January 31, 2020, the United States Secretary of Health and Human Services declared a public health emergency in response to COVID-19;

WHEREAS, on March 4, 2020, Governor Gavin Newsom declared a state of emergency to exist in California as a result of COVID-19;

WHEREAS, on March 4, 2020, the Chair of the Los Angeles County Board of Supervisors and the Los Angeles County Health Officer declared a local emergency and a local health emergency, respectively, as a result of COVID-19;

WHEREAS, on March 12, 2020, Governor Gavin Newsom signed Executive Order N-25-20 giving state and local public health officials the authority to issue guidance limiting or recommending limitations upon attendance at public assemblies, conferences or other mass events;

WHEREAS, on March 13, 2020, President Donald Trump declared a national emergency as a result of COVID-19;

WHEREAS, on March 18, 2020, the South Pasadena City Council adopted Resolution No. 7646 declaring a local emergency, restricting private and public gatherings, and establishing protections for residential and commercial tenants, among other things;

WHEREAS, on March 19, 2020, the State Public Health Officer issued the “Stay at Home” order;

WHEREAS, on March 21, 2020, the Los Angeles County Health Officer issued the “Safer at Home” order;

WHEREAS, on April 28, 2020, Governor Gavin Newsom announced a 4-stage transition plan, titled “California’s Pandemic Resilience Roadmap,” to end the Stay at Home order;

WHEREAS, on May 6, 2020, the South Pasadena City Council adopted Resolution No. 7648 proclaiming the continuation of a local emergency and, among other things, suspended water and sewer utility terminations and the City’s Parking Pass Program;

WHEREAS, on May 7, 2020, the State Public Health Officer amended the Stay at Home order to allow for the reopening of lower-risk workplaces;

WHEREAS, on May 29, 2020, the Los Angeles County Health Officer amended the Safer at Home order with a new order titled “Reopening Safer at Work and in the Community for Control of COVID-19,” which seeks to limit residents’ exposure during Los Angeles County’s transition through Stage 2 of California’s Pandemic Resilience Roadmap;

WHEREAS, Section 6 of the Los Angeles County Health Officer’s May 29, 2020 order states, “This Order does not supersede any stricter limitation imposed by a local public entity within the County of Los Angeles Public Health Jurisdiction;”

WHEREAS, on June 17, 2020, the South Pasadena City Council adopted Resolution No. 7657, proclaiming the continuation of a local emergency and clarifying that any local regulations on public gatherings or private facilities as permissive as the Los Angeles County Health Officer’s May 29, 2020 order and any subsequent Los Angeles County Health Officer orders; resuming the City’s Parking Pass Program, and creating the Al Fresco Dining and Retail Program; and

WHEREAS, on July 18, 2020, the Los Angeles County Public Health Officer issued a revised Order regarding Reopening Safer at Work and specifying what businesses and services can be open either for inside shopping or outdoor pick-up only, what businesses can be open only by outside service, and what businesses and services are closed; and

WHEREAS, on August 5, 2020, the South Pasadena City Council adopted Resolution No.7669, proclaiming the continuation of a local emergency and clarifying that any local regulations on public gatherings or private facilities as permissive as the Los Angeles County Health Officer’s July 18, 2020 order and any subsequent Los Angeles County Health Officer orders; resuming the City’s Parking Pass Program, and expanding the Al Fresco Dining and Retail Program; and

WHEREAS, on August 12, 2020, the Los Angeles County Public Health Officer issued a revised Order, regarding Reopening Safer and Work.

WHEREAS, Section 6 of the Los Angeles County Health Officer’s August 12, 2020 order states, “This Order does not supersede any stricter limitation imposed by a local public entity within the County of Los Angeles Public Health Jurisdiction;”

WHEREAS, on June 30, 2020, Governor Newsom issued Executive Order N-71- 20, which, among other things, found that minimizing evictions during this period is critical to reducing the spread of COVID-19 in vulnerable populations by allowing those most vulnerable

to COVID-19 to self-quarantine, self-isolate, or otherwise remain in their homes to reduce the transmission of COVID-19, and extended through September 30, 2020 Executive Order N-28-20's suspension of any and all provisions of state law that would preempt or otherwise restrict a local government's exercise of its police powers to impose substantive limitations on residential and commercial evictions with respect to COVID-19-related rent payment issues;

WHEREAS, on August 31, 2020, California passed legislation, Assembly Bill 3088, the COVID-19 Tenant Relief Act of 2020, under which, among other things, no tenant can be evicted before February 1, 2021 as a result of rent owed due to a COVID-19 related hardship accrued between March 4 and August 31, 2020, if the tenant provides a declaration of COVID-19-related financial distress according to specified timelines; no tenant can be evicted for rent that accrues but is unpaid due to a COVID-19 hardship between September 1, 2020 and January 31, 2021 if the tenant submits declarations of COVID-19-related financial distress according to specified timelines and pays 25% of the unpaid rent due by January 31, 2020; and landlords are required to provide tenants a notice detailing their rights under the legislation;

WHEREAS, on September 1, 2020, the Los Angeles County Board of Supervisors amended its Executive Order imposing a temporary moratorium on evictions for non-payment of rent by commercial tenants impacted by COVID-19 until October 31, 2020;

WHEREAS, on September 4, 2020, the United States Center for Disease Control and Prevention, recognizing that "in the context of a pandemic, eviction moratoria – like quarantine, isolation, and social distancing – can be an effective public health measure utilized to prevent the spread of communicable disease," that eviction moratoria "facilitate self-isolation by people who become ill or who are at risk for severe illness from COVID-19 due to an underlying medical condition" and "allow State and local authorities to more easily implement stay-at-home and social distancing directives to mitigate the community spread of COVID-19," and that "housing stability helps protect public health because homelessness increases the likelihood of individuals moving into congregate settings, such as homeless shelters, which then puts individuals at higher risk to COVID-19" (Federal Register, Vol. 85, No. 173 at page 55292), issued an order, applicable in any State or local area without a moratorium on residential evictions that provides the same or greater level of public-health protections as the requirements in the order, requiring that, through December 31, 2020, subject to further extension, modification, or rescission, a landlord, owner of a residential property, or other person with a legal right to pursue eviction or possessory action shall not evict any covered person (as defined in the order) from any residential property in any State in which there are documented cases of COVID-19;

WHEREAS, on September 23, 2020, Governor Newsom signed Executive Order N-80-20, extending through March 31, 2021 Executive Order N-28-20, allowing local governments to impose commercial eviction moratoriums and restrictions for commercial tenants who are unable to pay their rent because of COVID-19;

WHEREAS, on November 19, 2020, the State Public Health Officer issued a Limited Stay at Home Order effective in counties under Tier One (Purple) of California's Blueprint for a Safer Economy, requiring that all gatherings with members of other households and all activities conducted outside the residence, lodging, or temporary accommodation with members of other

households cease between 10:00pm PST and 5:00am PST, except for those activities associated with the operation, maintenance, or usage of critical infrastructure[1] or required by law;

WHEREAS, on November 25, 2020, Los Angeles County Public Health Officer issued a revised Order aligning Los Angeles County with the State Public Health Officer’s Limited Stay at Home Order ordering the closure of restaurants for indoor and outdoor dining;

WHEREAS, on December 3, 2020, the State Public Health Officer issued the Regional Stay at Home Order applying to state regions with less than 15% ICU availability, and prohibiting private gatherings of any size, closes sector operations except for critical infrastructure and retail, and requiring masking and physical distancing in all others;

WHEREAS, on December 6, 2020, the State Public Health Officer issued a Supplemental Order to the Regional Stay at Home Order, ordering the Southern California region, including Los Angeles County, be placed under the December 3, 2020 Regional Stay at Home Order;

WHEREAS, despite sustained efforts, COVID-19 remains a threat, and continued efforts to control the spread of the virus to reduce and minimize the risk of infection are needed;

WHEREAS, these conditions warrant and necessitate that the City continue its proclamation of the existence of a local emergency;

WHEREAS, Chapter 11 of the South Pasadena Municipal Code empowers the City Council to proclaim the existence or threatened existence of a local emergency and to issue rules and regulations on matters reasonably related to the protection of life and property as affected by such emergency;

WHEREAS, Government Code section 8634 states, “During a local emergency the governing body of a political subdivision, or officials designated thereby, may promulgate orders and regulations necessary to provide for the protection of life and property, including orders or regulations imposing a curfew within designated boundaries where necessary to preserve the public order and safety. Such orders and regulations and amendments and rescissions thereof shall be in writing and shall be given widespread publicity and notice”; and

WHEREAS, Government Code section 8630 (c) states, “The governing body shall review the need for continuing the local emergency at least once every 60 days until the government body terminates the local emergency.”

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF SOUTH PASADENA, CALIFORNIA, DOES RESOLVE, DECLARE, DETERMINE AND ORDER AS FOLLOWS:

SECTION 1. Recitals. The preceding Recitals are true and correct and are hereby incorporated and adopted as findings and determinations by the City Council as if fully set forth herein.

SECTION 2. Proclamation. Pursuant to Government Code section 8630, subdivision (a), the City Council proclaims the continuation of a local emergency due to the outbreak of SARS-CoV-2 (COVID-19).

SECTION 3. Regulation of Public Gatherings. Any local regulations on public gatherings are ordered to be as permissive as the State Public Health Officer's December 3, 2020 Regional Stay at Home Order and December 6, 2020 Supplemental Order, attached as Attachment A, and any subsequent State Public Health Officer or Los Angeles County Health Officer orders;

SECTION 4. Regulation of Public Facilities. Commencing immediately, the Director of Emergency Services is directed to continue the closure to the public of all City-owned facilities that require close contact of vulnerable individuals, including those over 60 years old or with compromised immune systems.

SECTION 5. Regulation of Private Facilities. Any local regulations on private facilities are ordered to be as permissive as the State Public Health Officer's December 3, 2020 Regional Stay at Home Order and December 6, 2020 Supplemental Order, attached as Attachment A, and any subsequent State Public Health Officer or Los Angeles County Health Officer orders;

SECTION 6. Enforcement. Any violation of the above prohibitions may be punishable by a fine not to exceed \$1,000 or imprisonment not to exceed six months, pursuant to the South Pasadena Municipal Code section 11.11.

SECTION 7. Exemption of Delivery Vehicles. Trucks and other vehicles engaged in the delivery of grocery items to grocery stores, when such items are to be made available for sale to the public, remain exempt from having to comply with any City rules and regulations that limit the hours for such deliveries.

SECTION 8. Guidance for Religious Gatherings. The leaders of the City's houses of worship are urged, in the strongest possible terms, to limit gatherings on their premises and to explore and implement ways to practice their respective faiths while observing social distancing practices, and to comply with the current and any subsequent State Public Health Officer or Los Angeles County Health Officer orders.

SECTION 9. Protection of Affected Tenants. The provisions of the COVID-19 Tenant Relief Act of 2020, attached as Attachment E, shall apply to all residential tenants within the City. The Los Angeles County Board of Supervisor's Amended Executive Order imposing a temporary moratorium on evictions for non-payment of rent by certain commercial tenants adversely financially impacted by COVID-19 through October 31, 2020 shall control and apply to all those commercial tenants in the City as are protected by the County's Executive Order. Any further amendments or orders issued by the County Board imposing or extending a temporary evictions moratorium shall also control as they may become effective and per their terms and conditions.

SECTION 10. Suspension of Utility Terminations. For a period of 60 days from the date of this Resolution, for customers who are able to show an inability to pay their water and sewer bill due to the “financial impacts related to COVID-19” as defined in Section 9 above, the City hereby suspends:

- a) The discontinuation or shut-off of water service for residents and businesses in the City for non-payment of water and sewer bills;
- b) The imposition of late payment penalties or fees for delinquent water and/or sewer bills;

SECTION 11. Reinstatement of Parking Pass Program. Effective July 6, 2020, the City hereby reinstates the Parking Pass Program and authorizes the issuance of overnight parking passes and the imposition of late payment penalties or fees for parking violations.

SECTION 12. Temporary Modifications to Commercial Signage Requirements. No more than two temporary signs shall be allowed per business. All temporary signs must still comply with the size and location requirements set forth in SPMC Section 36.320.080.

Temporary window signs shall be limited to 20 percent of the window area.

No more than one temporary sign shall be located in the public right-of-way. During the Local Emergency Declaration, an application to place a temporary sign in the public right of way shall only require administrative approval by the Planning Director; an encroachment permit is still required to be issued by the Public Works Director, but the encroachment permit fee is waived.

Temporary signs shall be in place for no more than 30 days or until the Local Emergency Declaration has been lifted, whichever is later. Temporary signs may include a banner, in compliance with the size and locations of SPMC Section 36.320.080(B). During this Local Emergency Declaration, the \$50 application fees for a banner sign is waived.

SECTION 13. Al Fresco Dining and Retail Program. To support local businesses during the Coronavirus pandemic, an Al Fresco Dining and Retail Pilot Program, as set forth in Attachment C, is approved to temporarily relax Temporary Use Permit (TUP), Encroachment Permit, and parking requirements in order to facilitate the use of outdoor spaces for dining and retail purposes while maintaining the necessary social distancing protocols. This temporary program is valid for 90 days after the termination of the Declaration of Local Emergency. In order to facilitate outdoor dining, the City’s Outdoor Dining Permit Fee is waived for the duration of the Al Fresco Dining and Retail Program. Additionally, the City Manager or her designee has the discretion to relocate ADA parking spaces to other public right-of-way space or public facilities in order to facilitate the potential use of street frontage for outdoor dining spaces for applicants to the Al Fresco Dining and Retail Program. The Al Fresco Dining and Retail Pilot Program shall be suspended for the duration of the November 25, 2020, Los Angeles County Public Health Officer ordering the closure of restaurants for indoor and outdoor dining

SECTION 14. Capping Fees on Third-Party Delivery Services for Restaurants and Food Establishments. The August 4, 2020 Los Angeles County Ordinance (Attachment D) establishing a twenty percent cap on total fees including a fifteen percent cap on delivery fees that a food delivery platform may charge to restaurants, prohibiting reduction of delivery driver

compensation as a result, and requiring disclosures to be made by the food delivery platform to customers, in response to the COVID-19 health emergency is adopted by reference and incorporated into this Resolution.

SECTION 15. Emergency Authority. Pursuant to Government Code section 8634, the City Council reaffirms its authorization of the Director of Emergency Services to take any measures necessary to protect and preserve public health and safety, including activation of the Emergency Operations Center.

SECTION 16. Public Health Officials. The City Council reaffirms its authorization of the Director of Emergency Services to implement any guidance, recommendations, or requirements imposed by the State Department of Public Health or the Los Angeles County Health Officer.

SECTION 17. Termination. Pursuant to Government Code section 8630, subdivision (d), the City Council will proclaim the termination of the emergency at the earliest possible date that conditions warrant.

SECTION 18. Review. Pursuant to Government Code section 8630, subdivision (c), the City Council will review the need for continuing the local emergency in no event later than 60 days from the previous declaration or review, until the City Council terminates the local emergency.

SECTION 19. Cost Accounting. City staff will continue to account for their time and expenses related to addressing the local emergency caused by COVID-19.

SECTION 20. Cost Recovery. The City will seek recovery for the cost of responding to COVID-19, as this proclamation was originally made within 10 days of the Governor's Executive Order N-25-20 and the President's declaration of a national emergency, qualifying the City for assistance under the California Disaster Assistance Act and for reimbursement from the Federal Emergency Management Agency.

SECTION 21. Supersedes. This Resolution restates and supersedes the declaration of emergency set forth in Resolution No. 7657.

SECTION 22. Submissions. The City Clerk will transmit a copy of this Resolution at the earliest opportunity to the Los Angeles County Operational Area and the California Governor's Office of Emergency Services.

SECTION 23. Certification. The City Clerk will certify to the passage and adoption of this Resolution and its approval by the City Council and shall cause the same to be listed in the records of the City.

PASSED, APPROVED AND ADOPTED on this [DATE] of December 16, 2020.

Diana Mahmud, Mayor

ATTEST:

APPROVED AS TO FORM:

Maria E. Ayala, Chief City Clerk

Teresa L. Highsmith, City Attorney

I HEREBY CERTIFY the foregoing resolution was duly adopted by the City Council of the City of South Pasadena, California, at a regular meeting held on the 16th day of December, 2020, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

Maria E. Ayala, Chief City Clerk
(seal)



City Council Agenda Report

ITEM NO. 12

DATE: December 16, 2020

FROM: Sean Joyce, Interim City Manager

PREPARED BY: Michael A. Casalou, Human Resources Manager

SUBJECT: **Approval of a CalPERS Resolution Correcting the Employer Contribution under the Public Employees' Medical and Hospital Care Act at an Equal Amount for Employees and Annuitants; and Approval of Resolution Establishing Unrepresented Management Benefits**

Recommendation Action

It is recommended that the City Council:

1. Approve the proposed resolution, to reflect revised language to the employer contribution under the Public Employees' Medical and Hospital Care Act (PEMCHA) at amounts specified in the attached resolution for annuitants.
2. Approval of the Unrepresented Management Benefit Resolution correcting the amount the City contributes for retiree health insurance.

Discussion/Analysis

On May 20, 2020, the City Council approved its contract with the Public Employees' Medical and Hospital Care Act (PEMCHA) that governs the California Public Employees' Retirement System (CalPERS) Health program. CalPERS requires employers to adopt a resolution that establishes the contribution amounts for both safety and miscellaneous bargaining units. The proposed changes were consistent with amounts agreed to in the latest MOU and Management Benefit Resolution. However, during the implementation of these changes, it was discovered the City had been contributing towards dependent coverage, not just "retiree only" as required in the MOU and Resolutions. Since the only changes to retiree health contributions were to the Miscellaneous and Management groups, staff was able to make the appropriate corrections prior to the July 1, 2020 effective date. This revised agreement is required to make similar corrections to Police and Fire retirees, to be effective February 1, 2021.

Resolution No. 7626 was approved on July 17, 2019, establishing Unrepresented Management Benefits. One item approved in this resolution was for active employees to receive a \$200 per month increase to the "employee only" health contribution, bringing the total from \$715 per month to \$915 per month. Unfortunately, an error was made in the resolution giving the increase to retirees as well. The resolution tonight is being proposed to correct that mistake.

Alternatives

If the PEMCHA resolution is not approved tonight, the City will continue to contribute more than the current MOU requires toward retiree health for the Police and Fire groups. Staff does not recommend that alternative. Similarly, if the Management resolution is not approved, Management retirees will receive an additional \$200 per month that was not intended in the original resolution adoption.

Legal Review

This City Attorney and the City's outside labor counsel from Liberty Cassidy Whitmore have reviewed this item.

Fiscal Impact

The adoption of the two resolutions will save the City a significant amount of money moving forward.

Public Notification of Agenda Item

The public was made aware that this item was to be considered by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City's website and/or notice in the *South Pasadena Review* and/or the *Pasadena Star-News*.

Attachments:

1. CalPERS Resolution
2. Unrepresented Management Resolution

RESOLUTION NO. _____

**A RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF SOUTH PASADENA, CALIFORNIA,
CORRECTING AND RESTATEING
APPROVED UNREPRESENTED MANAGEMENT
EMPLOYEE BENEFITS AND MANAGEMENT
SALARY SCHEDULE SUPERSEDING RESOLUTIONS
NO. 7612 AND 7626 AND APPROVING THE JOB DESCRIPTIONS
FOR DEPUTY POLICE CHIEF AND POLICE LIEUTENANT
AND THE RECLASSIFICATION OF POLICE CAPTAIN TO
DEPUTY POLICE CHIEF**

WHEREAS, on July 17, 2019 the City Council approved Resolution No. 7626 which approved the salary schedule and benefits for the unrepresented management employees; and

WHEREAS, subsequent to the approval of Resolution No. 7626, the City discovered an error in the retiree medical benefit contribution for employees hired between July 1, 2012 and July 1, 2020, which inadvertently overstated the monthly City-paid contribution to a retiree’s Health Reimbursement Account by \$200; and

WHEREAS, in order to avoid confusion and to properly document the unrepresented management employee salary and benefits which were previously agreed to in July 2019, the City Council finds it necessary to restate and re-adopt approval of the unrepresented management employee salary schedule and benefits with the corrected retiree medical benefit applicable to employees hired between July1, 2012 and July 1, 2020.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SOUTH PASADENA, CALIFORNIA, DOES RESOLVE, DECLARE, DETERMINE AND ORDER AS FOLLOWS:

SECTION 1. Management Benefits as set forth in “Exhibit A” and the Management Salary Schedules set forth in “Exhibit B” shall be approved.

SECTION 2. The terms of this Resolution shall supersede the terms of Resolution Nos. 7612 and 7626.

SECTION 3. The City Clerk of the City of South Pasadena shall certify to the passage and adoption of this resolution and its approval by the City Council and shall cause the same to be listed in the records of the City.

PASSED, APPROVED AND ADOPTED ON this 16th day of December, 2020.

Mayor

ATTEST:

APPROVED AS TO FORM:

City Clerk
(seal)

Teresa L. Highsmith, City Attorney

I HEREBY CERTIFY the foregoing resolution was duly adopted by the City Council of the City of South Pasadena, California, at a regular meeting held on the 16 day of December 2020, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

City Clerk
(seal)

EXHIBIT A

MANAGEMENT BENEFITS

The following shall be the classifications, compensation and benefit plan for management employees:

SECTION 1. TERM

The following established classifications, salaries and benefits of employment for management employees shall be in effect upon adoption by the City Council.

SECTION 2. CLASSIFICATIONS

Accounting Manager
Assistant City Manager
Assistant Library Director
Assistant to the City Manager
Chief City Clerk
Community Services Director
Community Services Supervisor
Deputy Public Works Director – Engineering & Operations
Deputy Public Works Director – Water Utility & Sustainability
Deputy Fire Chief
Deputy Police Chief
Executive Assistant
Finance Director
Finance Manager
Fire Chief
Fire Division Chief
Human Resources Manager
Library Director
Planning & Community Development Director
Police Chief
Police Lieutenant
Principal Management Analyst
Public Works Director
Public Works Operations Manager
Water Operations Manager

SECTION 3. SALARY

Effective July 1, 2019, eligible classifications, shall be brought to 90% of the average of the salary data as reflected in the recent salary survey.

If the sales tax measure on the November 2019 ballot passes, the following increases will occur:

(a) On January 1, 2020, all eligible classifications shall be brought to 95% of the average of the salary data as reflected in the recent salary survey; and

(b) On July 1, 2020, all classifications shall receive a 2% salary increase; and

(c) On July 1, 2021, all classifications shall receive a 2% salary increase.

The salaries for management employees shall be those contained in Exhibit B, "Management Salary Schedules."

SECTION 4. RETIREMENT

A. The City agrees to participate in the California Public Service Employees' Retirement System (CalPERS). Classic CalPERS safety members (Police Chief, Fire Chief, Deputy Fire Chief, Fire Division Chief and Police Captains) i.e., those that do not qualify as "new" members under the California Public Employees' Pension Reform Act of 2013 ("PEPRA" or "AB 340") shall participate in the 2% @50 plan with single highest year compensation. Per AB 340, new CalPERS safety members shall participate in the 2.7% @57 plan with the highest average annual pensionable compensation earned during a period of 36 consecutive months rather than single highest year. For all non-safety Management employees, Classic CalPERS members shall participate in the 2% @55 plan with single highest year final compensation and per AB 340, new members shall participate in the 2.0% @62 plan with highest average annual pensionable compensation earned during a period of 36 consecutive months.

B. Classic members are statutorily subject to a member contribution rate of 7% (non-safety) or 9% (safety) of compensation and shall pay that rate. New members shall pay 50% of normal cost (as determined by CalPERS) as their member contribution.

C. The City's plan shall provide the sick leave conversion benefit.

SECTION 5. RETIRED EMPLOYEE'S MEDICAL COVERAGE

Employees who became annuitants prior to July 1, 2012 shall receive City payment of 100% of the medical insurance premium for the retired employee only, with said payment not exceeding the premium requirement for insurance programs offered through CalPERS, both prior to and after becoming Medicare eligible.

Effective on July 1, 2020, the City shall restructure the way it funds current employee and retiree medical insurance benefits. The City's goal is to keep all current retirees and employees whole while reducing the future retiree medical benefits of new employees hired on or after July 1, 2020. The City shall do as follows:

(a) Change the City's PEMHCA resolution with CalPERS to reduce the City's PEMHCA contribution to the PEMHCA minimum as it changes from year to year (currently \$136/month but increasing to \$139/month in 2020);

(b) Provide current retirees who are eligible for, and have elected to participate in, CalPERS health insurance as a retiree, and current employees when they become eligible retirees and elect retiree CalPERS medical coverage, with a contribution directly to CalPERS for the PEMHCA minimum contribution, and the difference between the PEMHCA minimum and \$715/month as a contribution to a Health Reimbursement Account that will be directed to the retiree; and

(c) For all employees hired on or after July 1, 2020, who retire from the City in the future and are eligible to, and elect to enroll in, CalPERS' health insurance plans, City retiree medical contributions shall be limited to the PEMHCA minimum employer contribution at the time.

SECTION 6. DEFERRED COMPENSATION

The City shall pay the equivalent of 1% of each management employees' salary into a deferred compensation plan.

SECTION 7. SICK LEAVE

A. Sick leave shall be earned at the rate of eight (8) hours per month of service to the City.

B. Management employees may accrue unlimited sick leave.

C. At the employee's termination, the accumulated sick leave hours shall have no cash value.

SECTION 8. CONVERSION TO CALPERS SERVICE CREDIT

Upon retirement, employees may convert unused accumulated sick leave to service credits based on the formula set forth by CalPERS. According to CalPERS, in order to receive sick leave credit, the employees' retirement date must be within 120 days from the date of separation from the City.

SECTION 9. BEREAVEMENT LEAVE

A. Bereavement leave shall be granted by the City Manager for the death of a spouse, parents, step-parents, child, step-child, grandparents, grandchildren, brothers, and/or sisters, for three work days per each fiscal year.

B. Additional occurrences shall be deducted from the employee's own sick leave.

C. Bereavement leave may be used not only for attendance at funerals, but for time spent in assisting in the preparation of funerals.

SECTION 10. MANAGEMENT LEAVE

A. Employees shall receive 80 hours of management leave each fiscal year.

B. Employees may cash out up to sixty (60) hours of unused Management Leave during a fiscal year. Consistent with the City's practice of granting Administrative or Management Leave prospectively, cash out of unused Management Leave is an annual compensation benefit for management staff, and as such will be distributed prospectively during the course of each fiscal year in accordance with this resolution.

C. Beginning July 1, 2014, employees can cash out up to thirty (30) hours of Management Leave, should they elect to do so, during a special payroll that will occur between the first and second regular payrolls in July of each year, and may cash out another thirty (30) hours of Management Leave, should they elect to do so, during a special payroll that will occur between the first and second regular payrolls in December of each year.

D. Unused or non-cashed out management leave may not at any time be carried over to the next fiscal year.

E. Beginning December 2019, employees shall qualify to cash out up to 60 hours of Management Leave. This cash out opportunity shall take place once a year and shall replace the previous procedure that allowed for two opportunities to cash out up to 30 hours each time throughout the year. To qualify to cash out Management Leave, the employee must irrevocably elect in writing, in December, the number of hours of Management Leave they elect to cash out in the next calendar year. Subject to a sixty (60) hour maximum. Employees must elect (12 months prior) via an election form to cash out up to 60 hours of Management Leave. The cash out of those hours will take place once a year in December of the calendar year after the election is made. The City will make a form available to make the irrevocable election. The form must be submitted to the City's Finance Department in December.

SECTION 11. VACATION

A. Vacation shall be accrued based on the years of service as follows:

1 – 5 years	120 hours
6 – 10 years	128 hours
11 – 15 years	136 hours
16 – 20 years	152 hours

Over 20 years 160 hours

B. Employees who have achieved more than twenty years of service with the City as of the date of this resolution and whose vacation benefits are subject to the terms of this resolution as of July 7, 1999 shall be allowed to accrue vacation pursuant to the schedule contained in City Council Resolution No. 6558.

C. Employees with twenty years of service with South Pasadena and who are appointed to management positions after July 7, 1999 shall receive vacation benefits in accordance with the provisions of Section 11A above.

D. Employees subject to this resolution shall endeavor to take annual vacation leave equal to the time accrued. An employee's accrued vacation shall be capped at two years' worth of vacation hours. Employees will cease accruing vacation hours until the accrued hours fall below the maximum accumulation allowed. Employees may carry over up to two (2) years accumulation of vacation time.

E. Beginning December 2019, employees shall qualify to cash out up to 80 hours of Vacation Leave. To qualify to cash out Vacation Leave, the employee must irrevocably elect in writing, in December, the number of hours of Vacation Leave they elect to cash out in the next calendar year. Subject to a eighty (80) hour maximum. Employees must elect (12 months prior) via an election form to cash out up to 80 hours of Vacation Leave. The cash out of those hours will take place once a year in December of the calendar year after the election is made. The City will make a form available to make the irrevocable election. The form must be submitted to the City's Finance Department in December.

SECTION 12. HOLIDAYS

Employees shall receive the following fourteen (14) paid holidays per fiscal year:

If any of the below listed holidays (listed as #1 to #11) falls on Friday that City Hall is closed, the employee will receive a floating holiday to use within the following 12 months. That floating holiday is not subject to cash out, nor can it be rolled over beyond the initial 12 months.

1. January 1 – New Year's Day
2. 3rd Monday in January – Martin Luther King, Jr. Birthday
3. 3rd Monday in February – President's Day
4. Last Monday in May – Memorial Day
5. July 4 – Independence Day
6. 1st Monday in September – Labor Day
7. 2nd Monday in October – Columbus Day

8. November 11 – Veteran’s Day
9. 4th Thursday in November – Thanksgiving Day
10. Friday after Thanksgiving – Substitute for Admission’s Day
11. December 25 – Christmas Day
12. Winter Holiday Closure – three additional paid days between December 25th to January 1

Winter Holiday Closure – City Hall shall close each year from December 25 to January 1. Employees shall receive three additional days off with pay during that period, in addition to December 25 and January 1.

If a recognized holiday (December 25 and/or January 1) falls on a Saturday, the employee shall receive the prior Friday as a day off with pay. If that Friday is the employee’s regular day off, the employee will receive a floating holiday to use within the following 12 months. That floating holiday is not subject to cash out, nor can it be rolled over beyond the initial 12 months.

If the recognized holiday (December 25 and/or January 1) falls on a Sunday, employees shall receive the following Monday as a day off with pay. If that Monday is the employee’s regular day off, employees will receive a floating holiday to use within the following 12 months. That floating holiday is not subject to cash out, nor can it be rolled over beyond the initial 12 months.

If the recognized holiday (December 25 and/or January 1) falls on the employee’s regular day off, the employee will receive either: 1) in the case of a regularly scheduled Monday off, Tuesday off with pay; or 2) in the case of a regularly scheduled Friday off, then Thursday off with pay.

A. Fire Division Chiefs and Police Lieutenants only –Fire Division Chiefs shall be paid at the rate of twelve (12) hours of the employee’s hourly rate for each City designated paid holiday. Police Lieutenants shall be paid at the rate of ten (10) hours of the employee’s hourly rate for each City designated paid holiday.

B. Management employees shall receive two (2) floating holidays per fiscal year. Floating holidays may not be carried over to the next fiscal year.

SECTION 13. INSURANCE

A. City paid medical insurance coverage is provided as follows:

The City's monthly contributions to the medical premium contribution plan shall be as follows to the maximum stated, depending on the level of coverage selected:

Employee only	= \$ 715
Employee + 1	= \$ 1,115
Employee + family	= \$ 1,290

Beginning July 1, 2020 the City's monthly contributions to the medical premium contribution plan shall be increased as follows to the maximum stated, depending on the level of coverage selected:

Employee only	\$ 200 = \$ 915
Employee + 1	\$ 0 = \$ 1,115
Employee + family	\$ 0 = \$ 1,290

For employee only coverage, the additional \$200 per month represents a maximum contribution made only if needed to pay for the employee's chosen medical insurance plan coverage, and may not be used as any form of cash in lieu.

- B. City paid dental coverage is provided up to \$75 per month.
- C. City paid vision care coverage is provided up to \$20 per month.
- D. City paid life insurance policy in the sum of \$50,000 provided.
- E. City paid accidental death & dismemberment insurance policy in the sum of \$50,000 provided. Additional coverage up to \$500,000 available at employee's expense.
- F. Optional Supplemental Insurance Plans available through AFLAC at the employee's expense.

SECTION 14. LONG TERM DISABILITY

A. For full-time employees who have been employed by the City for six months, the City shall provide long-term disability coverage under a self-insured status. The City may require reasonable proof of the disabling illness and retains the right to define "long term disability." The City will pay two-thirds of the employee's monthly salary effective the day disability is approved and for the duration the employee continues to be disabled or for one year, whichever is less.

B. There is a 30-day elimination period during which the employee must use his or her accrued sick leave. If the employee has less than 30 days of accrued sick leave, the employee may choose to use other accrued leave or take the remaining days unpaid.

C. Benefits shall be paid for one year for the approved disability. The City Manager may, upon review of the nature of the disability, grant up to one additional year of disability benefits.

D. The City shall continue to pay all of the insurance premiums listed in Section 13 during the City-recognized period of long term disability.

SECTION 15. UNIFORMS

Full-time Fire Chief, Police Chief, Deputy Police Chief and Deputy Fire Chief shall receive \$1,000 annually for the cleaning of and maintenance of their uniforms. Full-time Fire Division Chief and Police Lieutenant shall receive \$675 annually for the cleaning of and maintenance of their uniforms.

SECTION 16. WORK SCHEDULE

Beginning September 2019, City Hall employees shall operate on a 4/10 work schedule. All other departments shall if feasible transition to a 4/10 work schedule by December 31, 2019.

EXHIBIT B**MANAGEMENT MONTHLY SALARY SCHEDULE**

	A	B	C	D	E	F	G
Accounting Manager	\$6,612	\$6,942	\$7,289	\$7,654	\$8,036	\$8,438	\$8,860
Assistant City Manager	\$10,531	\$11,057	\$11,610	\$12,190	\$12,800	\$13,440	\$14,112
Assistant Library Director	\$7,075	\$7,429	\$7,800	\$8,190	\$8,600	\$9,029	\$9,481
Assistant to the City Manager	\$7,654	\$8,037	\$8,439	\$8,861	\$9,304	\$9,769	\$10,258
Chief City Clerk	\$7,654	\$8,037	\$8,439	\$8,861	\$9,304	\$9,769	\$10,258
Community Services Director	\$8,894	\$9,338	\$9,805	\$10,295	\$10,810	\$11,351	\$11,918
Community Services Supervisor	\$4,652	\$4,885	\$5,129	\$5,385	\$5,654	\$5,937	\$6,234
Deputy Director of Public Works – Engineering & Operations	\$7,911	\$8,307	\$8,722	\$9,158	\$9,616	\$10,097	\$10,602
Deputy Director of Public Works – Water Utility & Sustainability	\$7,911	\$8,307	\$8,722	\$9,158	\$9,616	\$10,097	\$10,602
Deputy Fire Chief	\$9,391	\$9,861	\$10,354	\$10,871	\$11,415	\$11,986	\$12,585
Deputy Police Chief	\$9,391	\$9,861	\$10,354	\$10,871	\$11,415	\$11,986	\$12,585
Director of Library, Arts & Culture	\$7,919	\$8,314	\$8,730	\$9,167	\$9,625	\$10,106	\$10,612
Executive Assistant	\$5,319	\$5,585	\$5,865	\$6,158	\$6,466	\$6,789	\$7,128
Finance Director	\$9,788	\$10,278	\$10,791	\$11,331	\$11,898	\$12,492	\$13,117
Finance Manager	\$6,612	\$6,942	\$7,289	\$7,654	\$8,036	\$8,438	\$8,860
Fire Chief	\$10,669	\$11,202	\$11,762	\$12,350	\$12,968	\$13,616	\$14,297
Fire Division Chief *	\$8,470	\$8,893	\$9,338	\$9,805	\$10,295	\$10,810	\$11,350
Human Resources Manager	\$7,858	\$8,251	\$8,664	\$9,097	\$9,552	\$10,030	\$10,531
Planning & Community Development Director	\$9,829	\$10,321	\$10,837	\$11,378	\$11,947	\$12,545	\$13,172
Police Chief	\$11,563	\$12,142	\$12,749	\$13,386	\$14,055	\$14,758	\$15,496
Police Lieutenant**	\$7,826	\$8,217	\$8,628	\$9,059	\$9,512	\$9,988	\$10,487
Principal Management Analyst	\$7,654	\$8,037	\$8,439	\$8,861	\$9,304	\$9,769	\$10,258
Public Works Director	\$9,788	\$10,277	\$10,791	\$11,331	\$11,897	\$12,492	\$13,117
Public Works Operations Manager	\$6,612	\$6,942	\$7,289	\$7,654	\$8,036	\$8,438	\$8,860
Water Operations Manager	\$7,090	\$7,444	\$7,816	\$8,207	\$8,618	\$9,049	\$9,501
*Special arrangement for additional hours for Fire Division Chief	\$48.87/hr	\$51.31/hr	\$53.88/hr	\$56.57/hr	\$59.40/hr	\$62.37/hr	\$65.49/hr
**Special arrangement for additional hours for Police Lieutenant	\$42.03/hr	44.13/hr	\$46.34/hr	\$48.66/hr	\$51.09/hr	\$53.64/hr	\$56.32/hr

Effective July 1, 2019

MANAGEMENT MONTHLY SALARY SCHEDULE

	A	B	C	D	E	F	G
Accounting Manager	\$6,612	\$6,942	\$7,289	\$7,654	\$8,036	\$8,438	\$8,860
Assistant City Manager	\$11,116	\$11,671	\$12,255	\$12,868	\$13,511	\$14,187	\$14,896
Assistant Library Director	\$7,075	\$7,429	\$7,800	\$8,190	\$8,600	\$9,029	\$9,481
Assistant to the City Manager	\$7,654	\$8,037	\$8,439	\$8,861	\$9,304	\$9,769	\$10,258
Chief City Clerk	\$7,654	\$8,037	\$8,439	\$8,861	\$9,304	\$9,769	\$10,258
Community Services Director	\$9,082	\$9,536	\$10,013	\$10,514	\$11,039	\$11,591	\$12,171
Community Services Supervisor	\$4,911	\$5,156	\$5,414	\$5,685	\$5,969	\$6,268	\$6,581
Deputy Director of Public Works – Engineering & Operations	\$7,940	\$8,337	\$8,754	\$9,191	\$9,651	\$10,133	\$10,640
Deputy Director of Public Works – Water Utility & Sustainability	\$8,121	\$8,527	\$8,953	\$9,401	\$9,871	\$10,365	\$10,883
Deputy Fire Chief	\$9,816	\$10,307	\$10,823	\$11,364	\$11,932	\$12,529	\$13,155
Deputy Police Chief	\$9,816	\$10,307	\$10,823	\$11,364	\$11,932	\$12,529	\$13,155
Director of Library, Arts & Culture	\$8,287	\$8,702	\$9,137	\$9,594	\$10,073	\$10,577	\$11,106
Executive Assistant	\$5,319	\$5,585	\$5,864	\$6,157	\$6,465	\$6,789	\$7,128
Finance Director	\$10,246	\$10,759	\$11,297	\$11,861	\$12,454	\$13,077	\$13,731
Finance Manager	\$6,612	\$6,942	\$7,289	\$7,654	\$8,036	\$8,438	\$8,860
Fire Chief	\$11,248	\$11,810	\$12,401	\$13,021	\$13,672	\$14,355	\$15,073
Fire Division Chief *	\$8,940	\$9,387	\$9,856	\$10,349	\$10,866	\$11,410	\$11,980
Human Resources Manager	\$8,295	\$8,710	\$9,145	\$9,602	\$10,083	\$10,587	\$11,116
Planning & Community Development Director	\$10,246	\$10,759	\$11,297	\$11,861	\$12,454	\$13,077	\$13,731
Police Chief	\$12,206	\$12,816	\$13,457	\$14,130	\$14,836	\$15,578	\$16,357
Police Lieutenant**	\$8,181	\$8,590	\$9,019	\$9,470	\$9,944	\$10,441	\$10,963
Principal Management Analyst	\$7,654	\$8,037	\$8,439	\$8,861	\$9,304	\$9,769	\$10,258
Public Works Director	\$10,246	\$10,759	\$11,297	\$11,861	\$12,454	\$13,077	\$13,731
Public Works Operations Manager	\$6,972	\$7,320	\$7,687	\$8,071	\$8,474	\$8,898	\$9,343
Water Operations Manager	\$7,484	\$7,858	\$8,251	\$8,663	\$9,097	\$9,551	\$10,029
*Special arrangement for additional hours for Fire Division Chief	\$51.58/hr	\$54.16/hr	\$56.87/hr	\$59.71/hr	\$62.70/hr	\$65.84/hr	\$69.13/hr
**Special arrangement for additional hours for Police Lieutenant	\$47.20/hr	\$49.56/hr	\$52.04/hr	\$54.64/hr	\$57.37/hr	\$60.24/hr	\$63.25/hr

Effective January 1, 2020 – *If sales tax measure scheduled for the November 2019 election is passed by the electorate*

MANAGEMENT MONTHLY SALARY SCHEDULE

	A	B	C	D	E	F	G
Accounting Manager	\$6,744	\$7,081	\$7,436	\$7,807	\$8,198	\$8,608	\$9,038
Assistant City Manager	\$11,338	\$11,905	\$12,500	\$13,125	\$13,781	\$14,470	\$15,194
Assistant Library Director	\$7,217	\$7,577	\$7,956	\$8,354	\$8,772	\$9,210	\$9,671
Assistant to the City Manager	\$7,807	\$8,197	\$8,607	\$9,038	\$9,490	\$9,964	\$10,462
Chief City Clerk	\$7,807	\$8,197	\$8,607	\$9,038	\$9,490	\$9,964	\$10,462
Community Services Director	\$9,264	\$9,727	\$10,213	\$10,724	\$11,260	\$11,823	\$12,414
Community Services Supervisor	\$5,009	\$5,260	\$5,522	\$5,799	\$6,089	\$6,393	\$6,713
Deputy Director of Public Works – Engineering & Operations	\$8,099	\$8,503	\$8,929	\$9,375	\$9,844	\$10,336	\$10,853
Deputy Director of Public Works – Water Utility & Sustainability	\$8,283	\$8,698	\$9,133	\$9,589	\$10,069	\$10,572	\$11,101
Deputy Fire Chief	\$10,013	\$10,513	\$11,039	\$11,591	\$12,171	\$12,779	\$13,418
Deputy Police Chief	\$10,013	\$10,513	\$11,039	\$11,591	\$12,171	\$12,779	\$13,418
Director of Library, Arts & Culture	\$8,453	\$8,876	\$9,320	\$9,786	\$10,275	\$10,789	\$11,328
Executive Assistant	\$5,425	\$5,697	\$5,982	\$6,281	\$6,595	\$6,924	\$7,271
Finance Director	\$10,451	\$10,974	\$11,522	\$12,099	\$12,704	\$13,339	\$14,006
Finance Manager	\$6,744	\$7,081	\$7,436	\$7,807	\$8,198	\$8,608	\$9,038
Fire Chief	\$11,487	\$12,061	\$12,665	\$13,298	\$13,963	\$14,661	\$15,394
Fire Division Chief *	\$9,118	\$9,574	\$10,053	\$10,556	\$11,084	\$11,638	\$12,220
Human Resources Manager	\$8,461	\$8,884	\$9,328	\$9,794	\$10,284	\$10,798	\$11,338
Planning & Community Development Director	\$10,451	\$10,974	\$11,522	\$12,099	\$12,704	\$13,339	\$14,006
Police Chief	\$12,450	\$13,072	\$13,726	\$14,412	\$15,133	\$15,890	\$16,684
Police Lieutenant	\$8,345	\$8,762	\$9,200	\$9,660	\$10,143	\$10,650	\$11,183
Principal Management Analyst	\$7,807	\$8,197	\$8,607	\$9,038	\$9,490	\$9,964	\$10,462
Public Works Director	\$10,451	\$10,974	\$11,522	\$12,099	\$12,704	\$13,339	\$14,006
Public Works Operations Manager	\$7,111	\$7,467	\$7,840	\$8,232	\$8,644	\$9,076	\$9,530
Water Operations Manager	\$7,633	\$8,015	\$8,416	\$8,837	\$9,279	\$9,742	\$10,230
*Special arrangement for additional hours for Fire Division Chief	\$52.61/hr	\$55.24/hr	\$58.00/hr	\$60.90/hr	\$63.95/hr	\$67.15/hr	\$70.51/hr
**Special arrangement for additional hours for Police Lieutenant	\$48.14/hr	\$49.56/hr	\$52.04/hr	\$54.64/hr	\$57.37/hr	\$60.24/hr	\$63.25/hr

Effective July 1, 2020 – *If sales tax measure scheduled for the November 2019 election is passed by the electorate*

MANAGEMENT MONTHLY SALARY SCHEDULE

	A	B	C	D	E	F	G
Accounting Manager	\$6,879	\$7,223	\$7,584	\$7,963	\$8,361	\$8,779	\$9,218
Assistant City Manager	\$11,565	\$12,143	\$12,750	\$13,388	\$14,057	\$14,760	\$15,498
Assistant Library Director	\$7,361	\$7,729	\$8,115	\$8,521	\$8,947	\$9,394	\$9,864
Assistant to the City Manager	\$7,963	\$8,361	\$8,779	\$9,218	\$9,679	\$10,163	\$10,671
Chief City Clerk	\$7,963	\$8,361	\$8,779	\$9,218	\$9,679	\$10,163	\$10,671
Community Services Director	\$9,449	\$9,922	\$10,418	\$10,939	\$11,485	\$12,060	\$12,663
Community Services Supervisor	\$5,109	\$5,365	\$5,633	\$5,915	\$6,210	\$6,521	\$6,847
Deputy Director of Public Works – Engineering & Operations	\$8,260	\$8,674	\$9,107	\$9,563	\$10,041	\$10,543	\$11,070
Deputy Director of Public Works – Water Utility & Sustainability	\$8,449	\$8,872	\$9,315	\$9,781	\$10,270	\$10,783	\$11,323
Deputy Fire Chief	\$10,213	\$10,724	\$11,260	\$11,823	\$12,414	\$13,035	\$13,686
Deputy Police Chief	\$10,213	\$10,724	\$11,260	\$11,823	\$12,414	\$13,035	\$13,686
Director of Library, Arts & Culture	\$8,622	\$9,053	\$9,506	\$9,981	\$10,480	\$11,004	\$11,555
Executive Assistant	\$5,534	\$5,811	\$6,101	\$6,406	\$6,727	\$7,063	\$7,416
Finance Director	\$10,660	\$11,193	\$11,753	\$12,341	\$12,958	\$13,605	\$14,286
Finance Manager	\$6,879	\$7,223	\$7,584	\$7,963	\$8,361	\$8,779	\$9,218
Fire Chief	\$11,717	\$12,303	\$12,918	\$13,564	\$14,242	\$14,954	\$15,702
Fire Division Chief *	\$9,301	\$9,766	\$10,254	\$10,767	\$11,305	\$11,870	\$12,464
Human Resources Manager	\$8,630	\$9,062	\$9,515	\$9,990	\$10,490	\$11,014	\$11,565
Planning & Community Development Director	\$10,660	\$11,193	\$11,753	\$12,341	\$12,958	\$13,605	\$14,286
Police Chief	\$12,699	\$13,334	\$14,001	\$14,701	\$15,436	\$16,207	\$17,018
Police Lieutenant	\$8,512	\$8,937	\$9,384	\$9,854	\$10,346	\$10,864	\$11,407
Principal Management Analyst	\$7,963	\$8,361	\$8,779	\$9,218	\$9,679	\$10,163	\$10,671
Public Works Director	\$10,660	\$11,193	\$11,753	\$12,341	\$12,958	\$13,605	\$14,286
Public Works Operations Manager	\$7,254	\$7,616	\$7,997	\$8,397	\$8,817	\$9,258	\$9,720
Water Operations Manager	\$7,786	\$8,175	\$8,584	\$9,013	\$9,464	\$9,937	\$10,434
*Special arrangement for additional hours for Fire Division Chief	\$53.66/hr	\$56.34/hr	\$59.16/hr	\$62.12/hr	\$65.23/hr	\$68.49/hr	\$71.91/hr
**Special arrangement for additional hours for Police Lieutenant	\$49.11/hr	\$51.57/hr	\$54.14/hr	\$56.85/hr	\$59.69/hr	\$62.68/hr	\$65.81/hr

Effective July 1, 2021 – *If sales tax measure scheduled for the November 2019 election is passed by the electorate*

Health Resolution Template Packet

Contract vs. Resolution

The CalPERS Health Program is governed by the Public Employees Medical and Hospital Care Act (PEMHCA), and the California Code of Regulations (CCR), of the California Public Employees Retirement Law (PERL). PEMHCA contains all the rules and regulations that a contracting agency must adhere to. We define PEMHCA as the actual *health contract*, and the *resolution* as the method by which an agency elects to become subject to PEMHCA.

Resolution Type (Enclosed)

Change Resolution	Purpose
Format: <input checked="" type="checkbox"/> All, Equal <input type="checkbox"/> All, Unequal <input type="checkbox"/> By Group, Equal <input type="checkbox"/> By Group, Unequal	An agency must file a <i>change resolution</i> to change the monthly employer health contribution. Contracting agencies may change their employer contribution anytime in the contracting year. A change resolution becomes effective on the first day of the second month in which the resolution is filed and received by CalPERS. It is the agency's responsibility to notify its active and retired employees of the change.

Instructions

- The enclosed resolution should be completed by filling in the editable fields with the information requested in the field tab. Contracting agencies may not add, edit, or remove language in the enclosed resolution, other than the editable fields. CalPERS may reject resolutions that are submitted with additional changes.
- The certification shown following the resolution is to be completed by those individuals authorized to sign for the contracting agency in legal actions and is to include the name of the governing body (i.e. Board of Directors, Board of Trustees, etc.), and the location and the date of signing.
- **This resolution serves as a legally binding document, and we require the original resolution, certified copy with original signatures, or a copy of the resolution with the agency's raised seal.** Please complete and include the enclosed cover sheet when mailing the resolution.

Questions or Additional Information

The Health Resolutions & Compliance Unit is responsible for authoring and maintaining this document. The unit can be contacted directly at HealthContracts@calpers.ca.gov.

**Please staple on top of your health resolution(s) or cover letter.
This will ensure that the CalPERS mailroom expedites delivery to our office.
Mail packet to either:**

Overnight Mail Service

California Public Employees' Retirement System
Health Resolutions & Compliance Services, HAMD
400 Q Street
Sacramento, CA 95811

Regular Mail

California Public Employees' Retirement System
Health Resolutions & Compliance Services, HAMD
PO BOX 942714
Sacramento, CA 94229-2714

HEALTH RESOLUTION

CalPERS ID #	2139696011
Agency Name	City of South Pasadena
Desired Effective Date	February 1, 2021

RESOLUTION NO. Number
FIXING THE EMPLOYER CONTRIBUTION
UNDER THE PUBLIC EMPLOYEES’ MEDICAL AND HOSPITAL CARE ACT
AT AN EQUAL AMOUNT FOR EMPLOYEES AND ANNUITANTS

WHEREAS, (1) City of South Pasadena is a contracting agency under Government Code Section 22920 and subject to the Public Employees’ Medical and Hospital Care Act (the “Act”); and

WHEREAS, (2) Government Code Section 22892(a) provides that a contracting agency subject to Act shall fix the amount of the employer contribution by resolution; and

WHEREAS, (3) Government Code Section 22892(b) provides that the employer contribution shall be an equal amount for both employees and annuitants, but may not be less than the amount prescribed by Section 22892(b) of the Act; now, therefore be it

RESOLVED, (a) That the employer contribution for each employee or annuitant shall be the amount necessary to pay the full cost of his/her enrollment, including the enrollment of family members, in a health benefits plan up to a maximum of:

Medical Group	Monthly Employer Health Contribution
001 POA Unit	100% Single Party Basic/Medicare Rate, not to exceed \$625.00
002 Fire Unit	100% Single Party Basic/Medicare Rate, not to exceed \$625.00
003 PSEA Unit	PEMHCA Minimum
004 Unrepresented Management Unit	PEMHCA Minimum

plus administrative fees and Contingency Reserve Fund assessments; and be it further

RESOLVED, (b) City of South Pasadena has fully complied with any and all applicable provisions of Government Code Section 7507 in electing the benefits set forth above; and be it further

RESOLVED, (c) That the participation of the employees and annuitants of City of South Pasadena shall be subject to determination of its status as an “agency or instrumentality of the state or political subdivision of a State” that is eligible to participate in a governmental plan within the meaning of Section 414(d) of the Internal Revenue Code, upon publication of final Regulations pursuant to such Section. If it is determined that City of South Pasadena would not qualify as an

agency or instrumentality of the state or political subdivision of a State under such final Regulations, CalPERS may be obligated, and reserves the right to terminate the health coverage of all participants of the employer; and be it further

RESOLVED, (d) That the executive body appoint and direct, and it does hereby appoint and direct Human Resources Manager to file with the Board a verified copy of this resolution, and to perform on behalf of City of South Pasadena all functions required of it under the Act; and be it further

RESOLVED, (e) That coverage under the Act be effective on February 1, 2021.

Adopted at a regular meeting of the City Council of the City of South Pasadena at South Pasadena, this Day day of Month, 2020.

Signed: _____
TBD, Mayor

Attest: _____
Evelyn Zneimer, City Clerk



City Council Agenda Report

ITEM NO. 13

DATE: December 16, 2020

FROM: Sean Joyce, Interim City Manager

PREPARED BY: Brian Solinsky, Interim Chief of Police
Tony Abdalla, Detective Bureau Sergeant

SUBJECT: **Adoption of a Resolution Approving a Memorandum of Agreement (MOA) Between the City of South Pasadena and the Los Angeles Police Department Internet Crimes Against Children (ICAC) Task Force**

Recommendation

It is recommended that the City Council:

1. Approve a resolution adopting an MOA between the City and the Los Angeles Police Department Internet Crimes Against Children (ICAC) Task Force
2. Delegate authority to the City Manager to approve and execute any further amendments to the MOA.

Commission Review and Recommendation

This matter was not reviewed by a Commission.

Discussion/Analysis

In the last several months, the South Pasadena Police Department Detective Bureau has received five child pornography investigation referrals from the regional Internet Crimes Against Children (ICAC) Task Force. Investigations of these type require subject matter and technical expertise, along with resources not readily available within the police department. The ICAC has offered the SPPD membership in the ICAC, pursuant to Office of Juvenile Justice and Delinquency Prevention (OJJDP) guidelines, to obtain training, equipment and investigative expertise related to crimes against children.

Background

The Los Angeles Police Department (LAPD) is the recipient of a United States Department of Justice, Office of Juvenile Justice and Delinquency Prevention (OJJDP) grant to enforce laws regarding ICAC and the LAPD utilizes this grant to administer and operate the Los Angeles ICAC Task Force. The OJJDP has created the ICAC Task Force Program, which is a national network of state and local law enforcement cybercrime units. The national ICAC program assists state and local law enforcement agencies develop an effective response to cyber enticement and child pornography cases. This helps encompass investigative and forensic components, training

and technical assistance, victim services and community education. Due in large part to the technological aspects of these cases, the ICAC Task Force Program promotes a multi-jurisdictional, multi-agency team approach to investigating and prosecuting ICAC cases.

The LAPD has offered the South Pasadena Police Department membership in the task force, pursuant to OJJDP guidelines, and to join Alhambra PD, Pasadena PD and Monterey Park PD on the task force. Staff has reviewed the attached proposed MOA between the LAPD and SPPD. There is no fiscal impact to the department for membership in the task force. Additionally, there is no department personnel commitment requirement specific to the task force. Our commitment pursuant to the MOA would be to investigate ICAC related cases specific to our jurisdiction, as we do currently, but without any additional investigative support. In return, our agency would receive training, equipment and additional investigative resources through the ICAC task force.

Legal Review

The City Attorney has reviewed this item.

Fiscal Impact

Approval of this agreement will have no impact to the General Fund.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City's website and/or notice in the *South Pasadena Review* and/or the *Pasadena Star-News*.

Attachments:

1. LAPD-ICAC Memorandum of Agreement
2. Proposed Resolution adopting the Agreement

ATTACHMENT 1
LAPD-ICAC Memorandum of Agreement



MEMORANDUM OF AGREEMENT
Between
Los Angeles Police Department
INTERNET CRIMES AGAINST CHILDREN TASK FORCE
and
South Pasadena Police Department

I. PARTIES

This Memorandum of Agreement (**MOA**) is entered into by and between the Los Angeles Police Department (**LAPD**) and the South Pasadena Police Department (**SPPD**).

II. BACKGROUND

The LAPD is the recipient of a United States Department of Justice, Office of Juvenile Justice and Delinquency Prevention (**OJJDP**) grant to enforce laws regarding Internet Crimes Against Children (**ICAC**), and the LAPD utilizes this grant to administer and operate the Los Angeles ICAC Task Force.

The OJJDP has created the ICAC Task Force Program, which is a national network of state and local law enforcement cybercrime units. The national ICAC program assists state and local law enforcement agencies in developing an effective response to cyber enticement and child pornography cases. This helps encompass investigative and forensic components, training and technical assistance, victim services and community education. Due in large part to the technological aspects of these cases, the ICAC Task Force Program promotes a multi-jurisdictional, multi-agency team approach to investigating and prosecuting ICAC cases.

The mission of the Los Angeles ICAC Task Force therefore is to: (1) properly investigate and prosecute those who sexually exploit children using the internet and/or computers; (2) provide training and equipment to those involved in investigating and prosecuting ICAC; and, (3) provide community education regarding the prevention of ICAC.

III. PURPOSE

The purpose of this MOA is to delineate the responsibilities and expectations of the SPPD and the LAPD, and to formalize their working relationship in the Los Angeles ICAC Task Force. By signing this MOA, SPPD agrees to join the ICAC Task Force for the primary purpose of vigorously and properly investigating ICAC. By joining this Task Force, SPPD will benefit

from grant resources, joint operations, and extensive training opportunities. By entering this MOA, the Los Angeles ICAC Task Force will benefit from SPPD's investigative support.

IV. INVESTIGATIONS

Investigations will follow guidelines established by each agency's respective policy manual or guidelines. However, ICAC investigations shall also be governed by the national ICAC program's Operational and Investigative Standards (attached). Violation of the ICAC operational standards is cause for cancellation of this MOA. This MOA is not intended to infringe on the ongoing investigations of any other agency. It is agreed that unilateral acts on the part of employees involved in Task Force investigations are not in the best interest of the Task Force.

A. South Pasadena Police Department Responsibilities

South Pasadena Police Department will:

1. Use "authorized personnel" who themselves lack powers of arrest but have been authorized by their respective agency to participate in investigations and are being supervised by "sworn personnel". Each investigator involved with undercover operations must receive ICAC training prior to initiating proactive investigations and shall submit reports of all undercover activity to the OJJDP.
2. Conduct reactive investigations where subjects are associated within SPPD's jurisdiction, including investigations of child pornography, CYBERTIP referrals from the National Center for Missing and Exploited Children (NCMEC), Internet Service Provider and law enforcement referrals, and other ICAC-related investigations. Additional case initiations may develop from subject interviews, documented public sources, direct observations of suspicious behavior, public complaints, etc.
3. Record and document all undercover online activity. Any deviations from this policy due to unusual circumstances shall be documented in the relevant case file and reviewed by the ICAC Task Force Unit Commander.
4. Provide the Los Angeles ICAC Task Force with access to all ICAC investigative files including, without limitation, computer records, in order to ensure compliance with all national ICAC standards for a period of no less than three years.
5. Locate its ICAC investigators in secured space provided by SPPD with controlled access to all equipment, software, and investigative files. At a minimum, information should be maintained in locked cabinets and under control of SPPD ICAC Task Force personnel, with restricted access to authorized personnel only.
6. Conduct education and prevention programs to foster awareness and provide practical, relevant guidance to children, parents, educators, librarians, the business and law enforcement communities, and other individuals concerned about internet child safety issues. Presenters shall not discuss ongoing investigative techniques and undercover operations utilized by the ICAC Task Force in the education and prevention programs.

V. SUPERVISION

The SPPD will be responsible for the day-to-day operational supervision, administrative control, and personal and professional conduct of its officers and agents assigned to the Task Force. Internet Crimes Against Children investigations are a cooperative effort and investigative decisions will be a joint process guided by ICAC standards.

VI. JURISDICTION

The principal sites of task force activity will be within the jurisdictional areas of the respective member law enforcement agencies. Nothing in this agreement shall otherwise limit or enhance the jurisdiction and powers normally possessed by an SPPD employee as a member of the SPPD.

VII. EVIDENCE

Seized evidence and any other related forfeiture will be handled in a manner consistent with the seizing law enforcement agency's policies.

VIII. LIABILITY

The SPPD is responsible and liable for the acts and omissions of its own officers, agents or employees in connection with the performance of their official duties under this MOA. For tort liability purposes, no participating agency shall be considered the agent of other participating agencies. Each participating agency shall be liable (if at all) only for the torts of its own officers, agents or employees that occur within the scope of their official duties.

IX. REPORTING STATISTICS

Using a form provided by the Los Angeles ICAC Task Force, SPPD shall submit monthly statistics to the Task Force on all ICAC investigations or other investigative work pertaining to the sexual exploitation of children via the Internet. These statistics shall be submitted in the appropriate format by the 10th day of each month, and shall include data on all related investigations opened or closed during the month, as well as forensic examinations, technical/investigative assistance provided to other agencies, subpoenas and court orders issued, training hours attended and taught, and community outreach provided.

In addition, a breakdown of basic case data shall be included for each sexual exploitation of a minor (child pornography) case, and/or criminal solicitation of a minor (enticement/traveler) case investigated by SPPD. The Task Force will be responsible for all required reporting to OJJDP.

X. RECORD RETENTION AND ACCESS

Records pertinent to the award that SPPD must retain for a period of three years from the date of submission of the final expenditure report (SF 425), unless a different retention period applies, and to which the recipient (and any sub recipient ["sub grantee"] at any tier) must provide access, and include performance measurement information, in addition to the financial records, supporting documents, statistical records, and other pertinent records indicated at 2 Code of Federal Regulations 200.333.

XI. COMPLIANCE WITH DOJ REGULATIONS PERTAINING TO CIVIL RIGHTS AND NONDISCRIMINATION - 28 C.F.R. Part 38

The recipient, and any sub recipient ("sub grantee") at any tier, must comply with all applicable requirements of 28 C.F.R. Part 38 (as may be applicable from time to time), specifically including any applicable requirements regarding written notice to program beneficiaries and prospective program beneficiaries.

Currently, among other things, 28 C.F.R. Part 38 includes rules that prohibit specific forms of discrimination based on religion, a religious belief, a refusal to hold a religious belief, or refusal to attend or participate in a religious practice. Part 38, currently, also sets out rules and requirements that pertain to recipient and sub recipient ("sub grantee") organizations that engage in or conduct explicitly religious activities, as well as rules and requirements that pertain to recipients and sub recipients that are faith-based or religious organizations.

The text of 28 C.F.R. Part 38 is available via the Electronic Code of Federal Regulations (currently accessible at <https://www.ecfr.gov/cgi-bin/ECFR?page=browse>), by browsing to Title 28-Judicial Administration, Chapter 1, Part 38, under e-CFR "current" data.

XII. TRAINING

The SPPD shall make investigators designated as Task Force members available for applicable specialized training provided through the national ICAC program and other appropriate training programs. The Task Force will review training requests and provide funding for ICAC-approved training when appropriate.

XIII. PARTICIPATING AGENCY OBLIGATIONS AND CIVIL IMMIGRATION ENFORCEMENT

The SPPD as a local law enforcement agency is responsible for enforcing state and local criminal laws. It is neither authorized nor responsible for the enforcement of civil immigration laws or regulations.

The Congress of the United States has vested United States Immigration and Customs Enforcement (US-ICE) and United States Customs and Border Protection (US-CBP) with the legal authority and responsibility for enforcing civil immigration laws including status violations and removal proceedings. Therefore, Task Force personnel must abide by the limitations in legal authority and responsibility for enforcing federal civil immigration laws.

The California Values Act (CVA or SB-54), other state laws, and each agency's existing policies and practices provide procedural protections to ensure that each agency's personnel do not go beyond existing legal authorities or contradict the agency's steadfast commitment to community and constitutional policing principles.

XIV. VEHICLES

The Los Angeles ICAC Task Force will provide ICAC vehicles to participating agency personnel assigned to ICAC for use in carrying out ICAC-related activities.

Participating agencies shall provide and maintain automobile liability/hold harmless insurance coverage (or a program of self-insurance) associated with its personnel’s temporary possession of use of ICAC-provided vehicles in accordance with established participating agency policies and procedures.

XV. EQUIPMENT

The Los Angeles ICAC Task Force will provide participating agency personnel with necessary ICAC assets, including supplies, investigative equipment, communication equipment and technical equipment for all ICAC-related activities. Such assets, supplies and equipment shall remain the property of ICAC and will be funded from the Program Operating Budget.

XVI. CONFIDENTIALITY


The parties agree that any confidential information pertaining to investigations of ICAC will be held in the strictest confidence, and will only be shared with Participating ICAC Task Force members or other law enforcement agencies where necessary or as otherwise permitted by federal and/or state law.

EFFECTIVE DATE

This MOA shall be effective on _____ and continue until such time as federal funding for the Grant ends or the MOA is canceled by either party upon written notice delivered to both agency directors.

Entered this _____ day of _____, 2020

Joe Ortiz, Chief of Police
South Pasadena Police Department



Michel R. Moore, Chief of Police
Los Angeles Police Department

ATTACHMENT 2
Proposed Resolution Adopting the Agreement

RESOLUTION NO. ____

**A RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF SOUTH PASADENA, CALIFORNIA,
AUTHORIZING THE CITY MANAGER TO SIGN A MEMORANADUM OF
AGREEMENT JOINING THE LOS ANGELES POLICE DEPARTMENT INTERNET
CRIMES AGAINST CHILDREN TASK FORCE FOR THE PURPOSE OF
INVESTIGATIVE SUPPORT FOR THE SOUTH PASADENA POLICE DEPARTMENT**

WHEREAS, the City of South Pasadena recognizes the need for specialized investigative support and resources to better investigate internet crimes against children; and,

WHEREAS, the Los Angeles Police Department Internet Crimes Against Children (ICAC) Task Force, via Memorandum of Agreement (MOA), can provide enhanced investigative support and resources; and,

WHEREAS, there has been sufficient information received by the City to warrant joining the ICAC Task Force for enhanced investigative support and resources involving internet crimes against children; and,

WHEREAS, the LAPD ICAC has agreed to provide enhanced investigative support and resources pursuant to an MOA.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SOUTH PASADENA HEREBY RESOLVE AS FOLLOWS:

SECTION 1: Pursuant to the City's authority under the Joint Exercise of Powers Act in California Government Code Section 6500 et. Seq., the Los Angeles Police Department Internet Crimes Against Children Task Force Memorandum of Agreement, attached hereto and incorporated herein, is approved thereby authorizing the City's membership in the Los Angeles Police Department Internet Crimes Against Children Task Force; and,

SECTION 2: The City Manager is authorized and directed to execute the MOA to effectuate the intent of this Resolution.

SECTION 3: This resolution is effective upon adoption; and,

SECTION 4: The Mayor is hereby authorized to affix her signature to this Resolution signifying its adoption and the City Clerk, or her duly appointed deputy, is directed to attest thereto.

PASSED, APPROVED AND ADOPTED ON this XX day of XX, 2020.

_____, Mayor

ATTEST:

APPROVED AS TO FORM:

_____, City Clerk
(seal)

Teresa L. Highsmith, City Attorney

I HEREBY CERTIFY the foregoing resolution was duly adopted by the City Council of the City of South Pasadena, California, at a regular meeting held on the XX day of XXX, 2020, by the following vote:

AYES:

NOES: None

ABSENT: None

ABSTAINED: None

_____, City Clerk
(seal)



City Council Agenda Report

ITEM NO. 14

DATE: December 16, 2020

TO: Honorable Mayor and Council Members

FROM: Sean Joyce, Interim City Manager

PREPARED BY: Joanna Hankamer, Director of Planning and Community Development
Kanika Kith, Planning Manager

SUBJECT: **Authorize a First Amendments to each of the Professional Services Agreements with Rincon Consultants and Interwest Consulting Group for providing Major Project Review for a Total Not-To-Exceed Amount of \$300,000 Per Contract**

Recommendation

It is recommended that the City Council authorize the City Manager to execute a first amendment to each of the Professional Services Agreements (PSAs) with Rincon Consultants and Interwest Consulting Group to extend the term of the PSA for two years to continue providing service for Major Project Review, for a total not-to-exceed amount of \$300,000 per contract.

Commission Review and Recommendation

This matter was not reviewed by a commission.

Executive Summary

On June 17, 2020, the City Council authorized the City Manager to execute a PSA with three on-call planning firms, Rincon Consultants, Interwest Consulting Group, and MIG, to assist with Major Project Review. Each PSA is in the amount not to exceed \$50,000 per firm and will expire on December 31, 2020. Since the execution of the Master PSAs, 22 applicants selected to use this process, and 8 projects submitted this year completed the process and obtained project approvals. This service is accomplished by entering into individual Engagement Letters for each project and the requirement that the project applicant deposit 100% of the estimated cost of the consultant service with the City. To continue providing this service, the proposed amendment to each of the PSAs extends each agreement for two years (expiration on December 31, 2022) and amends the total not-to-exceed amount of \$300,000 per contract. Note that this is a true “pass-through” arrangement with the applicable project applicant providing 100% of the funding. MIG has not been providing service, and therefore, the proposed amendment to the PSAs are only for Rincon and Interwest.

Discussion/Analysis

The Major Project Review process allows the City to contract with planning firms with project specific expertise to review major or complex projects and assign the additional cost to project applicants. Projects are assigned to a dedicated contract planner from one of the two firms with project specific expertise to guide a project, under the oversight of the City staff, through the City's review process. Each project applicant is responsible for the actual costs of the contract planner working on the project and is required to advance a deposit to cover the costs of the contract planner, plus 10% for the City's administrative costs of overseeing the projects. The process has been accelerating project review and approval at no cost to the City general fund.

The proposed amendment to each of the PSAs will continue to provide a timely option to project applicants for expedited review process. The proposed amendments will extend the agreements for Rincon and Interwest for two years and amends the maximum amount of each agreement to \$300,000.

Legal Review

The City Attorney has reviewed this item.

Fiscal Impact

No impact to the City's general fund because the applicant will be responsible to reimburse the City for the costs of using a contract planner. The City will not bear any costs associated with Major Project Reviews. However, in order to appropriately account for the funds, staff is requesting that the City Council authorize the deposit of funds to account number 101-0000-0000-2900-016, and the appropriation of the annual contract amount of \$300,000 to cover both contract to Planning Department Contract Services account 101-7010-7011-8180.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda and posting of the same agenda and reports on the City's website.

Attachments:

1. 1st Amendment to PSA for Rincon Consultants, Inc.
2. 1st Amendment to PSA for Interwest Consulting Group, Inc.
3. Original PSAs for Rincon and Interwest
4. June 17, 2020 City Council Staff Report for the Original PSAs

ATTACHMENT 1
1st Amendment to PSA
for Rincon Consultants, Inc.

**FIRST AMENDMENT TO
PROFESSIONAL SERVICES AGREEMENT FOR CONSULTANT SERVICES**
(City of South Pasadena / Rincon Consultants, Inc.)

THIS AMENDMENT (“Amendment”) is made and entered into on the 16th of December 2020, by and between the City of South Pasadena, a California municipal corporation (“City”), and Rincon Consultants, Inc., a California corporation (“Consultant”) (collectively, “parties”).

RECITALS

WHEREAS, on June 17, 2020, the City and Consultant entered into an Agreement for the provision of planning services on an as-needed, per-project basis, for expedited review of development applications, to be funded by the project applicant on a cost pass-through basis; and

WHEREAS, the parties desire to extend the term of the Agreement and clarify that any and all funding for use of expedited project review services shall be the sole responsibility of the project applicant.

NOW THEREFORE, THE CITY AND CONSULTANT AGREE AS FOLLOWS:

1. Paragraph 3.4 “Termination Date” is amended to read: “Termination Date” means December 31, 2022.

2. Paragraph 5.2 is amended to read:

“Consultant shall perform the services identified in the Scope of Services, as specified in the Engagement Letter. City shall have the right to request, in writing, changes in the Scope of Services. Any such changes mutually agreed upon by the parties, and any corresponding increase or decrease in compensation, shall be incorporated by written amendment to this Agreement and/or the Engagement Letter. In no event shall the total compensation and costs payable to Consultant under this Agreement exceed the sum of three hundred thousand dollars (\$300,000.00) unless specifically approved in advance and in writing by City.”

3. PROVISIONS OF AGREEMENT. All other terms, conditions, and provisions of the Amended and Restated Agreement and applicable Side Letter to the extent not modified by this Amendment, shall remain in full force and effect.

TO EFFECTUATE THIS AMENDMENT, the parties have caused their duly authorized representatives to execute this Amendment on the dates set forth below.

“City”
City of South Pasadena

By: _____
Sean Joyce, Interim City Manager

Date: _____

Attest:


By _____

Date: _____

Approved as to form:

By _____
Teresa L. Highsmith, City Attorney

“Consultant”
Rincon Consultants, Inc.

By:  _____
Beanna Hansen, Principal

Date: 12/4/2020 _____

ATTACHMENT 2
1st Amendment to PSA
for Interwest Consulting Group, Inc.

**FIRST AMENDMENT TO
PROFESSIONAL SERVICES AGREEMENT FOR CONSULTANT SERVICES**
(City of South Pasadena / Interwest Consulting Group, Inc.)

THIS AMENDMENT (“Amendment”) is made and entered into on the 16th of December 2020, by and between the City of South Pasadena, a California municipal corporation (“City”), and Interwest Consulting Group, Inc., a California corporation (“Consultant”) (collectively, “parties”).

RECITALS

WHEREAS, on June 17, 2020, the City and Consultant entered into an Agreement for the provision of planning services on an as-needed, per-project basis, for expedited review of development applications, to be funded by the project applicant on a cost pass-through basis; and

WHEREAS, the parties desire to extend the term of the Agreement and clarify that any and all funding for use of expedited project review services shall be the sole responsibility of the project applicant.

NOW THEREFORE, THE CITY AND CONSULTANT AGREE AS FOLLOWS:

1. Paragraph 3.4 “Termination Date” is amended to read: “Termination Date” means December 31, 2022.

2. Paragraph 5.2 is amended to read:

“Consultant shall perform the services identified in the Scope of Services, as specified in the Engagement Letter. City shall have the right to request, in writing, changes in the Scope of Services. Any such changes mutually agreed upon by the parties, and any corresponding increase or decrease in compensation, shall be incorporated by written amendment to this Agreement and/or the Engagement Letter. In no event shall the total compensation and costs payable to Consultant under this Agreement exceed the sum of three hundred thousand dollars (\$300,000.00) unless specifically approved in advance and in writing by City”

3. PROVISIONS OF AGREEMENT. All other terms, conditions, and provisions of the Amended and Restated Agreement and applicable Side Letter to the extent not modified by this Amendment, shall remain in full force and effect.

TO EFFECTUATE THIS AMENDMENT, the parties have caused their duly authorized representatives to execute this Amendment on the dates set forth below.

“City”
City of South Pasadena

By: _____
Sean Joyce, Interim City Manager

Date: _____

Attest:

By _____

Date: _____

Approved as to form:

By _____
Teresa L. Highsmith, City Attorney

“Consultant”
Interwest Consulting Group, Inc.

By: _____
Michael Kashiwagi
Chief Operations Officer

Date: December 4, 2020

ATTACHMENT 3
Original PSAs for Rincon and Interwest

Professional Services Agreement
(City of South Pasadena / Rincon Consultants, Inc.)

PROFESSIONAL SERVICES AGREEMENT FOR CONSULTANT SERVICES
(City of South Pasadena / Rincon Consultants, Inc.)

1. IDENTIFICATION

This PROFESSIONAL SERVICES AGREEMENT (“Agreement”) is entered into as of the last date indicated below by and between the City of South Pasadena, a California municipal corporation (“City”), and Rincon Consultants, Inc., a California corporation (“Consultant”) (collectively, “parties”).

2. RECITALS

- 2.1 City has determined that it requires the following professional services from a consultant: **As-needed, per-project basis, for expeditious review of development projects**
- 2.2 Consultant represents that it is fully qualified to perform such professional services by virtue of its experience and the training, education and expertise of its principals and employees. Consultant further represents that it is willing to accept responsibility for performing such services in accordance with the terms and conditions set forth in this Agreement.

NOW, THEREFORE, for and in consideration of the mutual covenants and conditions herein contained, City and Consultant agree as follows:

3. DEFINITIONS

- 3.1 “Scope of Services” means such professional services as are set forth in Consultant’s Scope of Work to City attached hereto as **“Exhibit A”** and fully incorporated herein by this reference and as described below:
 - 3.1.1 Consultant shall be required to enter into an Engagement Letter for each project for which Consultant is selected to provide services.
 - 3.1.2 Engagement Letters shall define the scope of the work for the specific project, estimated schedule for completion, and estimated not-to-exceed cost for completing the project. Engagement Letters shall identify tasks to be performed and anticipated hours for each tasks.
 - 3.1.3 Consultant acknowledges that the cost for services provided pursuant to any Engagement Letter shall be no greater than the not-to-exceed total compensation for the project unless the City has given specific advance approval in writing.
 - 3.1.4 Consultant shall notify the City Agreement Administrator, in writing, when

Professional Services Agreement
(City of South Pasadena /Rincon Consultants, Inc.)

fees and expenses incurred under this Agreement have reached eighty percent (80%) of the maximum amount payable above. Consultant shall concurrently inform the City Agreement Administrator, in writing, of Consultant's estimate of total expenditures required to complete its current assignments before proceeding, when the remaining work on such assignments would exceed the maximum amount provided in the Engagement Letters.

3.1.5 At the time of entering into an Engagement Letter, the Consultant shall be required to furnish: 1) a copy of the Consultant's current City of South Pasadena Business License, and 2) a current Certificate of Liability Insurance and Additional Insured Endorsement.

3.2 "Approved Fee Schedule" means such compensation rates as are set forth in Fee Schedule attached hereto as "**Exhibit B**" and fully incorporated herein by this reference. This fee schedule shall remain in effect for the duration of this Agreement unless modified in writing by mutual agreement of the parties.

3.3 "Commencement Date" means June 18, 2020.

3.4 "Termination Date" means December 31, 2020.

3.5 "City Agreement Administrator" means Joanna Hankamer, Director of Planning and Community Development.

3.6 "Consultant Project Administrator" means Deanna Hansen, Principal.

4. TERM

The term of this Agreement shall commence at 12:00 a.m. on the Commencement Date and shall terminate at 11:59 p.m. on the Termination Date unless extended in writing by mutual agreement of the parties or terminated earlier in accordance with Section 18 ("Termination") below.

5. CONSULTANT'S SERVICES

5.1 Time is of the essence in Consultant's performance of services under this Agreement.

5.2 Consultant shall perform the services identified in the Scope of Services. City shall have the right to request, in writing, changes in the Scope of Services. Any such changes mutually agreed upon by the parties, and any corresponding increase or decrease in compensation, shall be incorporated by written amendment to this Agreement. In no event shall the total compensation and costs payable to

Professional Services Agreement
(City of South Pasadena /Rincon Consultants, Inc.)

Consultant under this Agreement exceed the sum of **fifty thousand dollars (\$50,000.00)** unless specifically approved in advance and in writing by City. Consultant shall notify the City Agreement Administrator, in writing, when fees and expenses incurred under this Agreement have reached eighty percent (80%) of the maximum amount payable above. Consultant shall concurrently inform the City Agreement Administrator, in writing, of Consultant's estimate of total expenditures required to complete its current assignments before proceeding, when the remaining work on such assignments would exceed the maximum amount payable above.

- 5.3 Consultant shall perform all work to the highest standards of Consultant's profession and in a manner reasonably satisfactory to City. Consultant shall comply with all applicable federal, state and local laws and regulations, including the conflict of interest provisions of Government Code Section 1090 and the Political Reform Act (Government Code Section 81000 *et seq.*).
- 5.4 Consultant represents that it has advised City in writing prior to the date of signing this Agreement of any known relationships with third parties, City Council Members, or employees of City which would (1) present a conflict of interest with the rendering of services under this Agreement under Government Code Section 1090, the Political Reform Act (Government Code Section 81000 *et seq.*), or other applicable law, (2) prevent Consultant from performing the terms of this Agreement, or (3) present a significant opportunity for the disclosure of confidential information.
- 5.5 During the term of this Agreement, Consultant shall not perform any work for another person or entity for whom Consultant was not working at the Commencement Date if both (i) such work would require Consultant to abstain from a decision under this Agreement pursuant to a conflict of interest statute and (ii) City has not consented in writing to Consultant's performance of such work.
- 5.6 Consultant represents that it has, or will secure at its own expense, all personnel required to perform the services identified in the Scope of Services. All such services shall be performed by Consultant or under its supervision, and all personnel engaged in the work shall be qualified to perform such services. **Deanna Hansen** shall be the Consultant Project Administrator and shall have direct responsibility for management of Consultant's performance under this Agreement. No other person shall serve as Consultant Project Administrator without City's prior written consent.
- 5.7 This Agreement covers professional services of a specific and unique nature. Except as otherwise provided herein, Consultant shall not assign or transfer its interest in this Agreement or subcontract any services to be performed without amending this Agreement.

Professional Services Agreement
(City of South Pasadena /Rincon Consultants, Inc.)

- 5.8 Consultant shall be responsible to City for all services to be performed under this Agreement. All subconsultants shall be approved by the City Agreement Administrator and their billing rates identified in the Approved Fee Schedule, **Exhibit B**. City shall pay Consultant for work performed by its subconsultants (including labor) only at Consultant's actual cost plus an approved mark-up as set forth in the Approved Fee Schedule, **Exhibit B**. Consultant shall be liable and accountable for any and all payments, compensation, and federal and state taxes to all subconsultants performing services under this Agreement. City shall not be liable for any payment, compensation, or federal and state taxes for any subconsultants.
- 5.9 Consultant shall notify the City Agreement Administrator, in writing, of any change in name, ownership or control of Consultant's firm or of any subconsultant. Change of ownership or control of Consultant's firm may require an amendment to the Agreement.
- 5.10 This Agreement is subject to prevailing wage law, for all work performed under the Agreement for which the payment of prevailing wages is required under the California Labor Code. In particular, Consultant acknowledges that prevailing wage determinations are available for the performance of inspection and survey work.

6. COMPENSATION

- 6.1 City agrees to compensate Consultant for the services provided under this Agreement, and Consultant agrees to accept payment in accordance with the Approved Fee Schedule in full satisfaction for such services.
- 6.2 Consultant shall submit to City an invoice, on a monthly basis or less frequently, for services performed pursuant to this Agreement. Each invoice shall identify the maximum amount payable above, the services rendered during the billing period, the amount due for the invoice, and the total amount previously invoiced. All labor charges shall be itemized by employee name and classification/position with the firm, the corresponding hourly rate, the hours worked, a description of each labor charge, and the total amount due for labor charges. City shall not withhold applicable taxes or other payroll deductions from payments made to Consultant except as otherwise required by law. Consultant shall include a copy of each subconsultant invoice for which reimbursement is sought in the invoice.
- 6.3 The parties agree to meet and confer at mutually agreeable times to resolve any disputed amounts contained in an invoice submitted by Consultant.
- 6.4 Payments for any services requested by City and not included in the Scope of Services may be made to Consultant by City on a time-and-materials basis pursuant

to the Approved Fee Schedule and without amendment of this Agreement, so long as such payment does not cause the maximum amount payable above to be exceeded.

7. OWNERSHIP OF WRITTEN PRODUCTS

All reports, documents or other written material, and all electronic files, including computer-aided design files, developed by Consultant in the performance of this Agreement (such written material and electronic files are collectively known as “written products”) shall be and remain the property of City without restriction or limitation upon its use or dissemination by City except as provided by law. Consultant may take and retain copies of such written products as desired, but no such written products shall be the subject of a copyright application by Consultant.

8. RELATIONSHIP OF PARTIES

Consultant is, and shall at all times remain as to City, a wholly independent contractor. Consultant shall have no power to incur any debt, obligation, or liability on behalf of City or otherwise to act on behalf of City as an agent. Neither City nor any of its agents shall have control over the conduct of Consultant or any of Consultant’s employees, except as set forth in this Agreement. Consultant shall not represent that it is, or that any of its agents or employees are, in any manner employees of City.

Under no circumstances shall Consultant look to the City as its employer. Consultant shall not be entitled to any benefits. City makes no representation as to the effect of this independent contractor relationship on Consultant’s previously earned California Public Employees Retirement System (“CalPERS”) retirement benefits, if any, and Consultant specifically assumes the responsibility for making such a determination. Consultant shall be responsible for all reports and obligations including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, workers’ compensation, and other applicable federal and state taxes.

9. AGREEMENT ADMINISTRATOR

In performing services under this Agreement, Consultant shall coordinate all contact with City through its City Agreement Administrator. City reserves the right to change this designation upon written notice to Consultant. All services under this Agreement shall be performed at the request of the City Agreement Administrator, who will establish the timetable for completion of services and any interim milestones.

10. INDEMNIFICATION

10.1 The parties agree that City, its officers, agents, employees and volunteers should, to the fullest extent permitted by law, be protected from any and all loss, injury, damage, claim, lawsuit, cost, expense, attorneys’ fees, litigation costs, taxes, or any

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other cost arising out of or in any way related to the performance of this Agreement. Accordingly, the parties intend the provisions of this indemnity provision to be interpreted and construed to provide the City with the fullest protection possible under the law. Consultant acknowledges that City would not enter into this Agreement in the absence of Consultant's commitment to indemnify and protect City as set forth herein.

- 10.2 To the fullest extent permitted by law, Consultant shall indemnify, hold harmless, and when the City requests with respect to a claim provide a deposit for the defense of, and defend City, its officers, agents, employees and volunteers from and against any and all claims, losses, costs and expenses for any damage due to death or injury to any person, whether physical, emotional, consequential or otherwise, and injury to any property arising out of or in connection with Consultant's alleged negligence, recklessness or willful misconduct or other wrongful acts, errors or omissions of Consultant or any of its officers, employees, servants, agents, or subcontractors, or anyone directly or indirectly employed by either Consultant or its subcontractors, in the performance of this Agreement or its failure to comply with any of its obligations contained in this Agreement, except such loss or damage which is caused by the sole active negligence or willful misconduct of the City. Such costs and expenses shall include reasonable attorneys' fees due to counsel of City's choice, expert fees and all other expenses of litigation. Consultant shall not be entitled to any refund of attorneys' fees, defense costs or expenses in the event that it is adjudicated to have been non-negligent.
- 10.3 City shall have the right to offset against any compensation due Consultant under this Agreement any amount due City from Consultant as a result of Consultant's failure to pay City promptly any indemnification arising under this Section 10 of this Agreement and any amount due City from Consultant arising from Consultant's failure either to (i) pay taxes on amounts received pursuant to this Agreement or (ii) comply with applicable workers' compensation laws.
- 10.4 The obligations of Consultant under this Section 10 of this Agreement are not limited by the provisions of any workers' compensation or similar statute. Consultant expressly waives its statutory immunity under such statutes as to City, its officers, agents, employees and volunteers.
- 10.5 Consultant agrees to obtain executed indemnity agreements with provisions identical to those set forth here in Section 10 of this Agreement from each and every subcontractor or any other person or entity involved by, for, with or on behalf of Consultant in the performance of this Agreement. If Consultant fails to obtain such indemnity obligations from others, Consultant agrees to indemnify, hold harmless and defend City, its officers, agents, employees and volunteers from and against any and all claims, losses, costs and expenses for any damage due to death or injury to any person and injury to any property resulting from any alleged intentional,

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reckless, negligent, or otherwise wrongful acts, errors or omissions of Consultant's subcontractors or any other person or entity involved by, for, with or on behalf of Consultant in the performance of this Agreement. Such costs and expenses shall include reasonable attorneys' fees incurred by counsel of City's choice.

- 10.6 City does not, and shall not, waive any rights that it may possess against Consultant because of the acceptance by City, or the deposit with City, of any insurance policy or certificate required pursuant to this Agreement. This hold harmless and indemnification provision shall apply whether or not any insurance policies apply to a claim, demand, damage, liability, loss, cost or expense.
- 10.7 In the event that Consultant or any employee, agent, or subcontractor of Consultant providing services under this Agreement claims or is determined by a court of competent jurisdiction or CalPERS to be eligible for enrollment in CalPERS as an employee of the City, Consultant shall indemnify, defend, and hold harmless City for the payment of any employee and/or employer contributions for CalPERS benefits on behalf of Consultant or its employees, agents, or subcontractors, as well as for the payment of any penalties and interest on such contributions, which would otherwise be the responsibility of City.
- 10.8 Notwithstanding any federal, state, or local policy, rule, regulation, law or ordinance to the contrary, Consultant and any of its employees, agents, and subcontractors providing service under this Agreement shall not qualify for or become entitled to, and hereby agree to waive any claims to, any compensation, benefit, or any incident of employment by City, including but not limited to eligibility to enroll in CalPERS as an employee of City and entitlement to any contribution to be paid by City for employer contribution and/or employee contributions for CalPERS benefits.

11. INSURANCE

- 11.1 During the term of this Agreement, Consultant shall carry, maintain, and keep in full force and effect insurance against claims for death or injuries to persons or damages to property that may arise from or in connection with Consultant's performance of this Agreement.
- 11.2 Any available insurance proceeds broader than or in excess of the specified minimum Insurance coverage requirements or limits shall be available to City as an Additional Insured as provided below. Furthermore, the requirements for coverage and limits shall be the greater of (1) the minimum coverage and limits specified in this Agreement, or (2) the broader coverage and maximum limits of coverage of any Insurance policy or proceeds available to the named Insured.

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- 11.3 Insurance required under this Agreement shall be of the types set forth below, with minimum coverage as described:
- 11.3.1 Comprehensive General Liability Insurance with coverage limits of not less than One Million Dollars (\$1,000,000) including products and operations hazard, contractual insurance, broad form property damage, independent consultants, personal injury, underground hazard, and explosion and collapse hazard where applicable.
 - 11.3.2 Automobile Liability Insurance for vehicles used in connection with the performance of this Agreement with minimum limits of One Million Dollars (\$1,000,000) per claimant and One Million dollars (\$1,000,000) per incident.
 - 11.3.3 Worker's Compensation insurance if and as required by the laws of the State of California.
 - 11.3.4 Professional Errors and Omissions Insurance with coverage limits of not less than One Million Dollars (\$1,000,000).
- 11.4 Consultant shall require each of its subconsultants to maintain insurance coverage that meets all of the requirements of this Agreement provided however, that the City Agreement Administrator may waive the provision of Errors and Omissions Insurance by subconsultants in his or her sole discretion.
- 11.5 The policy or policies required by this Agreement shall be issued by an insurer admitted in the State of California and with a rating of at least A:VII in the latest edition of Best's Insurance Guide.
- 11.6 Consultant agrees that if it does not keep the insurance coverages required by this Agreement in full force and effect, City may either (i) immediately terminate this Agreement; or (ii) take out the necessary insurance and pay the premium(s) thereon at Consultant's expense.
- 11.7 At all times during the term of this Agreement, Consultant shall maintain on file with City's Risk Manager a certificate or certificates of insurance showing that the required coverages are in effect and naming City and its officers, employees, agents and volunteers as Additional Insureds. Prior to commencement of work under this Agreement, Consultant shall file with City's Risk Manager such certificate(s) and Forms CG 20 10 07 04 and CG 20 37 07 04 or the substantial equivalent showing City as an Additional Insured.
- 11.8 Consultant shall provide proof that policies of insurance required by this Agreement expiring during the term of this Agreement have been renewed or replaced with

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other policies providing at least the same coverage. Such proof will be furnished at least two weeks prior to the expiration of the coverages.

- 11.9 The general liability and automobile policies of insurance required by this Agreement shall contain an endorsement naming City and its officers, employees, agents and volunteers as Additional Insureds. All of the policies required under this Agreement shall contain an endorsement providing that the policies cannot be canceled or reduced except on thirty days' prior written notice to City. Consultant agrees to require its insurer to modify the certificates of insurance to delete any exculpatory wording stating that failure of the insurer to mail written notice of cancellation imposes no obligation, and to delete the word "endeavor" with regard to any notice provisions.
- 11.10 The insurance provided by Consultant shall be primary to any other coverage available to City. Any insurance or self-insurance maintained by City and/or its officers, employees, agents or volunteers shall be in excess of Consultant's insurance and shall not contribute with it.
- 11.11 All insurance coverage provided pursuant to this Agreement shall not prohibit Consultant, and Consultant's employees, agents or subcontractors, from waiving the right of subrogation prior to a loss. Consultant hereby waives all rights of subrogation against the City.
- 11.12 Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of City, Consultant shall either reduce or eliminate the deductibles or self-insured retentions with respect to City, or Consultant shall procure a bond in the amount of the deductible or self-insured retention to guarantee payment of losses and expenses.
- 11.13 Procurement of insurance by Consultant shall not be construed as a limitation of Consultant's liability or as full performance of Consultant's duties to indemnify, hold harmless and defend under Section 10 of this Agreement.
- 11.14 Consultant may be self-insured under the terms of this Agreement only with express written approval from the City.
 - 11.14.1 All self-insured retentions (SIR) must be disclosed to the City for approval and shall not reduce the limits of liability.
 - 11.14.2 Policies containing any SIR provision shall provide or be endorsed to provide that the SIR may be satisfied by either the named Insured or the City.

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11.15 City reserves the right to obtain a full certified copy of any Insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of the right to exercise later.

12. MUTUAL COOPERATION

12.1 City shall provide Consultant with all pertinent data, documents and other requested information as is reasonably available for the proper performance of Consultant's services under this Agreement.

12.2 If any claim, action, or proceeding is brought against City relating to Consultant's performance in connection with this Agreement, Consultant shall render any reasonable assistance that City may require in the defense of that claim, action, or proceeding.

13. CONFIDENTIALITY

All data, documents, discussion, or other information developed or received by Consultant or provided for performance of this Agreement are deemed confidential and shall not be disclosed by Consultant without prior written consent by City. City shall grant such consent if disclosure is legally required. Upon request, all City data shall be returned to City upon the termination or expiration of this Agreement.

14. RECORDS AND INSPECTIONS

Consultant shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, and other records or documents evidencing or relating to charges for services or expenditures and disbursements charged to City under this Agreement for a minimum of three (3) years, or for any longer period required by law, from the date of final payment to Consultant under this Agreement. All such documents shall be made available for inspection, audit, and/or copying at any time during regular business hours, upon oral or written request of City. City shall further have the right to make transcripts therefrom and to inspect all program data, documents, proceedings, and activities.

In addition, pursuant to Government Code Section 8546.7, if the amount of public funds expended under this Agreement exceeds ten thousand dollars, all such documents and this Agreement shall be subject to the examination and audit of the State Auditor, at the request of City or as part of any audit of City, for a period of three (3) years after final payment under the Agreement.

15. PERMITS AND APPROVALS

Consultant shall obtain, at its sole cost and expense, all permits and regulatory approvals necessary for Consultant’s performance of this Agreement. This includes, but shall not be limited to, professional licenses, encroachment permits and building and safety permits and inspections.

16. NOTICES

Any notices, bills, invoices, or reports required by this Agreement shall be deemed received on: (i) the day of delivery if delivered by hand, facsimile or overnight courier service during Consultant’s and City’s regular business hours; or (ii) on the third business day following deposit in the United States mail if delivered by mail, postage prepaid, to the addresses listed below (or to such other addresses as the parties may, from time to time, designate in writing).

If to City:

Joanna Hankamer
City of South Pasadena
Planning and Building
1414 Mission Street
South Pasadena, CA 91030
Telephone: (626) 403-7220
Facsimile: (626) 403-7241

If to Consultant:

Deanna Hansen
Rincon Consultants, Inc.
250 East 1st Street, Suite 1400
Los Angeles, CA 90012
Telephone: (213) 788-4828

With courtesy copy to:

Teresa L. Highsmith, City Attorney
Colantuono, Highsmith & Whatley, PC
790 E. Colorado Blvd, Suite 850
Pasadena, California 91101
Telephone: (213) 542-5700
Facsimile: (213) 542-5710

17. SURVIVING COVENANTS

The parties agree that the covenants contained in Section 10, Section 13, Paragraph 12.2 and Section 14 of this Agreement shall survive the expiration or termination of this Agreement.

18. TERMINATION

17.1. City may terminate this Agreement for any reason on five calendar days’ written notice to Consultant. Consultant may terminate this Agreement for any reason on

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thirty calendar days' written notice to City. Consultant agrees to cease all work under this Agreement on or before the effective date of any notice of termination. All City data, documents, objects, materials or other tangible things shall be promptly returned to City upon the termination or expiration of this Agreement.

- 17.2 If City terminates this Agreement due to no fault or failure of performance by Consultant, then Consultant shall be paid based on the work satisfactorily performed at the time of termination. In no event shall Consultant be entitled to receive more than the amount that would be paid to Consultant for the full performance of the services required by this Agreement as provided in Section 5.2 above and as otherwise provided in this Agreement.

18. GENERAL PROVISIONS

- 18.1 Consultant shall not delegate, transfer, subcontract or assign its duties or rights hereunder, either in whole or in part, without City's prior written consent, and any attempt to do so shall be void and of no effect. City shall not be obligated or liable under this Agreement to any party other than Consultant.
- 18.2 In the performance of this Agreement, Consultant shall not discriminate against any employee, subcontractor, or applicant for employment because of race, color, creed, religion, sex, marital status, sexual orientation, national origin, ancestry, age, physical or mental disability, medical condition or any other unlawful basis.
- 18.3 The captions appearing at the commencement of the sections hereof, and in any paragraph thereof, are for convenience in reference to this Agreement. Should there be any conflict between such heading, and the section or paragraph thereof at the head of which it appears, the section or paragraph shall govern construction of this Agreement. Masculine or feminine pronouns shall be substituted for the neuter form and vice versa, and the plural shall be substituted for the singular and vice versa, in any place or places herein in which the context requires such substitution(s).
- 18.4 The waiver by City or Consultant of any breach of any term, covenant or condition herein contained shall not be deemed to be a waiver of any other term, covenant or condition or of any subsequent breach of the same or any other term, covenant or condition herein contained. No term, covenant or condition of this Agreement shall be deemed to have been waived by City or Consultant unless in writing signed by one authorized to bind the party to be charged with the waiver.
- 18.5 Consultant shall not be liable for any failure to perform if Consultant presents acceptable evidence, in City's sole judgment, that such failure was due to causes beyond the control and without the fault or negligence of Consultant.

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- 18.6 Each right, power and remedy provided for herein or now or hereafter existing at law, in equity, by statute, or otherwise shall be cumulative and shall be in addition to every other right, power, or remedy provided for herein or now or hereafter existing at law, in equity, by statute, or otherwise. The exercise, the commencement of the exercise, or the forbearance from the exercise by any party of any one or more of such rights, powers or remedies shall not preclude the simultaneous or later exercise by such party of any or all of such other rights, powers or remedies. If legal action shall be necessary to enforce any term, covenant or condition contained in this Agreement, the party prevailing in such action, whether or not reduced to judgment, shall be entitled to its reasonable court costs, including any accountants' and attorneys' fees expended in the action. The venue for any litigation shall be Los Angeles County, California and Consultant hereby consents to jurisdiction in Los Angeles County for purposes of resolving any dispute or enforcing any obligation arising under this Agreement.
- 18.7 If any term or provision of this Agreement or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, then such term or provision shall be amended to, and solely to the extent necessary to, cure such invalidity or unenforceability, and in its amended form shall be enforceable. In such event, the remainder of this Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and be enforced to the fullest extent permitted by law.
- 18.8 This Agreement shall be governed and construed in accordance with the laws of the State of California.
- 18.9 All documents referenced as exhibits in this Agreement are hereby incorporated into this Agreement. In the event of any material discrepancy between the provisions of this Agreement and those of any document incorporated herein by reference, the provisions of this Agreement shall prevail. This instrument contains the entire Agreement between City and Consultant with respect to the transactions contemplated herein. No other prior oral or written agreements are binding upon the parties. Amendments hereto or deviations herefrom shall be effective and binding only if made in writing and executed on behalf of the City and Consultant.
- 18.10 Consultant shall not discriminate against any employee or applicant for employment because of race, sex (including pregnancy, childbirth, or related medical condition), creed, national origin, color, disability as defined by law, disabled veteran status, Vietnam veteran status, religion, age (40 and above), medical condition (cancer-related), marital status, ancestry, or sexual orientation. Consultant shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to race, sex (including pregnancy, childbirth, or related medical condition), creed, national

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origin, color, disability as defined by law, disabled veteran status, Vietnam veteran status, religion, age (40 and above), medical condition (cancer-related), marital status, ancestry, or sexual orientation. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; or in terms, conditions or privileges of employment, and selection for training, Consultant agrees to post in conspicuous places, available to employees and applicants for employment, the provisions of this nondiscrimination clause.

TO EFFECTUATE THIS AGREEMENT, the parties have caused their duly authorized representatives to execute this Agreement as of the last date indicated below:

“City”

City of South Pasadena

DocuSigned by:
Stephanie DeWolfe
By: C4433931F72E445...
Stephanie DeWolfe, City Manager

“Consultant”

Rincon Consultants, Inc.

By: *Deanna Hansen*
Deanna Hansen, Principal

Date: 07/31/2020

Date: June 3, 2020

Attest:

DocuSigned by:
[Signature]
By: F69D694F8A024D0... 07/31/2020

Date: _____

Approved as to form:

DocuSigned by:
Teresa Highsmith
By: 3657EFA936854DF...
Teresa L. Highsmith, City Attorney

Date: 07/31/2020

"EXHIBIT A"
SCOPE OF WORK

EXHIBIT A SCOPE OF WORK

Upon authorization from the City and under the supervision of City Staff, Consultant shall provide planning services for managing and expediting planning applications. Tasks shall include, but not limited to the following:

- **Application Completeness Review.** As required under the Permit Streamlining Act, Consultant shall prepare a completeness review letter within 30 days of the City's receipt of application. The letter shall be provided to the City for review and approval prior to 30-day deadline.
- **Application Routing.** Within three (3) days of Project Initiation, the Consultant shall organize application materials for routing to City departments and affected agencies. The purposes of this routing are to 1) allow departments and agencies to review materials and to identify materials required for a complete application and 2) provide all City department and affected agencies an early look at the project to begin to identify any key issues of concern or additional information required of the applicants. Consultant will circulate materials electronically to departments and affected agencies on the City's standard routing form.
- **Coordination and Communication.** Consultant shall coordinate the review of entitlement applications with City staff and the applicant team. This will include scheduling of meetings to review project materials, circulation of work products to appropriate parties, maintaining log of project schedule, and other efforts as required.
- **Site Visit:** If required for a specific project, Consultant shall conduct site visit(s).
- **Code and Design Conformance:** Consultant shall review, analyze, and evaluate project for consistency with the General Plan and compliance with the Zoning Code/ Specific Plan, Cultural Heritage Ordinance, Secretary of the Interior's Standards, and Design Guidelines. Consultant shall prepare comment/correction letter providing recommends for compliance with standards and guidelines for City review within two (2) weeks of submittal (or resubmittal).
- **CEQA:** Review project for conformance with the California Environmental Quality Act (CEQA) and prepare appropriate environmental document as needed. Environmental documents, including, but not limited to, Initial Studies and Negative Declarations, notices, and response to comments as required by CEQA. If required, Consultant shall review for adequacy any Mitigated Negative Declaration or Environmental Impact Report, response to comments, and all related documents prepared by other consultants for the project.
- **Technical Studies:** Consultant shall review the adequacy of all technical studies (Historic Resource Evaluation Report, Biological Survey, Traffic Impact Analysis, etc.) related to the project.

- **Tribal Consultations.** If required for a specific project, the Consultant shall prepare all appropriate documents and conduct tribal consultations.
- **Community Outreach.** If required for a specific application, Consultant shall develop outreach strategies and participate in and/or facilitate the outreach events. Deliverables may include: written analysis of finding and recommendations; graphics, charts, photographs, and electronic presentations; and handouts and presentations. Consultant shall prepare meeting summary and incorporate in the reports to the Planning Commission, Cultural Heritage Commission, Design Review Board, and/or City Council.
- **Public Notices:** Consultant shall prepare all public hearing notices (newspaper, postcard, on-site notices) for the project.
- **Commission/Board/City Council Review.** Consultant shall prepare the complete packets for Planning Commission, Cultural Heritage Commission, Design Review Board, and/or City Council hearings that include, but may not be limited to: staff report, conditions of approval, CEQA determination, resolution(s) and/or ordinance, associated project exhibits, and meeting presentation. These materials will be organized and presented in a form and format consistent with City practices and shall be submitted consistent with the City schedule. If an applicant's project materials will not be available on schedule for timely delivery of a meeting packet, the Consultant shall consult with the City prior to deadlines to determine how to proceed. Consultant shall be available to consult with City staff prior to the public hearing and shall present the project to for consideration, unless decided otherwise by the City. If a project is appealed, Consultant shall be available to process the appeal.
- **Closeout of Application:** Upon final action, Consultant shall prepare decision letters, final conditions of approval, notice of exemption/determination, other associated documents, and provide electronic stamped approved plans. Consultant shall provide an organized project file with all key documents at closeout (hardcopy and digital).

"EXHIBIT B"
FEE SCHEDULE

EXHIBIT B FEE SCHEDULE



Standard Fee Schedule for Environmental Sciences and Planning Services

Professional, Technical and Support Personnel*	Hourly Rate
Principal II	\$240
Director II	\$240
Principal I	\$220
Director I	\$220
Senior Supervisor II	\$205
Supervisor I	\$195
Senior Professional II	\$175
Senior Professional I	\$160
Professional IV	\$145
Professional III	\$130
Professional II	\$115
Professional I	\$105
Associate III	\$95
Associate II	\$90
Associate I	\$82
Project Assistant	\$75
Senior GIS Specialist	\$140
GIS/CADD Specialist II	\$125
GIS/CADD Specialist I	\$112
Technical Editor	\$112
Production Specialist	\$88
Clerical	\$75

*Professional classification includes: environmental scientists, urban planners, biologists, geologists, marine scientists, GHG verifiers, sustainability experts, cultural resources experts and other professionals. Expert witness services consisting of depositions or in-court testimony are charged at the hourly rate of \$350

Reimbursable Expenses

Direct Cost	Rates
Photocopies – Black and White	\$0.20 (single-sided), \$0.36 (double-sided)
Photocopies – Color	\$1.50 (single-sided), \$3.20 (double-sided)
Photocopies – 11 x 17	\$0.50 (B&W), \$3.20 (color)
Oversized Maps	\$8.00/square foot
Digital Production	\$15.00 (CD) and \$20.00 (flash drive)
Light-Duty and Passenger Vehicles*	\$85.00/day
4WD and Off-Road Vehicles*	\$135.00/day

* \$0.65/mile for mileage over 50 and for all miles incurred in employee-owned vehicles

Other Direct Costs associated with the execution of a project, that are not included in the hourly rates above, are billed at cost plus 15%. These may include, but are not limited to, laboratory and drilling services, subcontractor services, authorized travel expenses, permit charges and filing fees, mailings and postage, performance bonds, sample handling and shipment, rental equipment and vehicles other than covered by the above charges.

Annual Escalation. Standard rates subject to annual escalation

Payment Terms. All fees will be billed to Client monthly and shall be due and payable upon receipt. Invoices are delinquent if not paid within ten (10) days from receipt.

Environmental Scientists

Planners

Engineers

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Equipment	Day Rate
Environmental Site Assessment	
Brass Sample Sleeves, Bailers, Disposable Bailers	\$25
Water Level Indicator, DC Purge Pump	\$40
Hand Auger Sampler	\$55
Oil-Water Interface Probe	\$85
Four Gas Monitor or Photo-Ionization Detector	\$120
Soil Vapor Extraction Monitoring Equipment	\$140
Flame Ionization Detector	\$200
Natural Resources Field Equipment	
Trimble GPS (sub-meter accuracy)	\$190
UAS Drone	\$250
Pettersson Bat Ultrasound Detector/Recording Equipment	\$150
Spotting or Fiberoptic Scope	\$150
Amphibian/Vernal Pool Field Package (digital camera, GPS, thermometer, decon chlorine, waders, float tube, hand net, field microscope)	\$150
Remote Field Package (digital camera, GPS, thermometer, binoculars, tablet and mifi, Delorme Satellite Beacon, 24-hour safety phone)	\$125
Sound Level Metering Field Package (anemometer, tripod and digital camera)	\$100
Standard Field Package (digital camera, GPS, thermometer, binoculars, tablet, safety equipment, and botanic collecting equipment)	\$95
Fisheries Equipment Package (waders, wetsuits, dip nets, seine nets, bubblers, buckets)	\$50
Water Quality Equipment (DO, pH, turbidity, refractometer, temperature)	\$55
Large Block Nets	\$100
Minnow Trap	\$85
Infrared Sensor Digital Camera or Computer Field Equipment	\$50
Scent Station	\$20
Laser Rangefinder/Altitude	\$10
Net, Hand/Large Seine	\$10/\$50
Pit-fall Traps, Spotlights, Anemometer, GPS Units, Sterilized Sample Jar	\$8
Mammal Trap, Large/Small	\$1.50/\$0.50
Water and Marine Resources Equipment	
Refractometer (salinity) or Turbidity Meter	\$35
Multi Parameter Sonde (temperature, conductivity, turbidity, DO, pH) with GPS	\$150
Boat (20 ft. Boston Whaler or similar)	\$300
Boat (26 ft. Radon or similar)	\$550
Side Scan or Single Beam Sonar	\$700
Underwater and Marine Sampling Gear includes: U/W Photo/Video Camera, SCUBA Equipment (tanks, BCD, regulators, wetsuits, etc.)	\$50/diver
Marine Field Package: (personal flotation devices (PFDs), 100 ft. reel tapes with stainless carabiners, Pelican floats, underwater slates, thermometer, refractometer, anemometer, various field guides)	\$50
Insurance, Hazard and Safety Fees	
L&H Dive Insurance	\$50/diver
Hazard Premium (In or Underwater ONLY per/hour)	\$1.25/hour
Level C Health and Safety	\$60 person

NON-COLLUSION DECLARATION

TO BE EXECUTED BY
BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].”

Signature

Printed Name of Signatory

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WORKERS' COMPENSATION
INSURANCE CERTIFICATE

The Contractor shall execute the following form as required by the California Labor Code, Sections 1860 and 1861:

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

DATE: _____

Contractor

By:

Signature

Title

Attest:

By:

Signature

Title

Professional Services Agreement
(City of South Pasadena /Interwest Consulting Group, Inc.)

PROFESSIONAL SERVICES AGREEMENT FOR CONSULTANT SERVICES
(City of South Pasadena / Interwest Consulting Group, Inc.)

1. IDENTIFICATION

This PROFESSIONAL SERVICES AGREEMENT (“Agreement”) is entered into as of the last date indicated below by and between the City of South Pasadena, a California municipal corporation (“City”), and Interwest Consulting Group, Inc., a California corporation (“Consultant”) (collectively, “parties”).

2. RECITALS

- 2.1 City has determined that it requires the following professional services from a consultant: **As-needed, per-project basis, for expeditious review of development projects**
- 2.2 Consultant represents that it is fully qualified to perform such professional services by virtue of its experience and the training, education and expertise of its principals and employees. Consultant further represents that it is willing to accept responsibility for performing such services in accordance with the terms and conditions set forth in this Agreement.

NOW, THEREFORE, for and in consideration of the mutual covenants and conditions herein contained, City and Consultant agree as follows:

3. DEFINITIONS

- 3.1 “Scope of Services” means such professional services as are set forth in Consultant’s Scope of Work to City attached hereto as “**Exhibit A**” and fully incorporated herein by this reference and as described below:
 - 3.1.1 Consultant shall be required to enter into an Engagement Letter for each project for which Consultant is selected to provide services.
 - 3.1.2 Engagement Letters shall define the scope of the work for the specific project, estimated schedule for completion, and estimated not-to-exceed cost for completing the project. Engagement Letters shall identify tasks to be performed and anticipated hours for each tasks.
 - 3.1.3 Consultant acknowledges that the cost for services provided pursuant to any Engagement Letter shall be no greater than the not-to-exceed total compensation for the project unless the City has given specific advance approval in writing.
 - 3.1.4 Consultant shall notify the City Agreement Administrator, in writing, when

Professional Services Agreement
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fees and expenses incurred under this Agreement have reached eighty percent (80%) of the maximum amount payable above. Consultant shall concurrently inform the City Agreement Administrator, in writing, of Consultant's estimate of total expenditures required to complete its current assignments before proceeding, when the remaining work on such assignments would exceed the maximum amount provided in the Engagement Letters.

3.1.5 At the time of entering into an Engagement Letter, the Consultant shall be required to furnish: 1) a copy of the Consultant's current City of South Pasadena Business License, and 2) a current Certificate of Liability Insurance and Additional Insured Endorsement.

3.2 "Approved Fee Schedule" means such compensation rates as are set forth in Fee Schedule attached hereto as "**Exhibit B**" and fully incorporated herein by this reference. This fee schedule shall remain in effect for the duration of this Agreement unless modified in writing by mutual agreement of the parties.

3.3 "Commencement Date" means June 18, 2020.

3.4 "Termination Date" means December 31, 2020.

3.5 "City Agreement Administrator" means Joanna Hankamer, Director of Planning and Community Development.

3.6 "Consultant Project Administrator" means Paul Junker, Planning Group Leader.

4. TERM

The term of this Agreement shall commence at 12:00 a.m. on the Commencement Date and shall terminate at 11:59 p.m. on the Termination Date unless extended in writing by mutual agreement of the parties or terminated earlier in accordance with Section 18 ("Termination") below.

5. CONSULTANT'S SERVICES

5.1 Time is of the essence in Consultant's performance of services under this Agreement.

5.2 Consultant shall perform the services identified in the Scope of Services. City shall have the right to request, in writing, changes in the Scope of Services. Any such changes mutually agreed upon by the parties, and any corresponding increase or decrease in compensation, shall be incorporated by written amendment to this Agreement. In no event shall the total compensation and costs payable to

Professional Services Agreement
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Consultant under this Agreement exceed the sum of **fifty thousand dollars (\$50,000.00)** unless specifically approved in advance and in writing by City. Consultant shall notify the City Agreement Administrator, in writing, when fees and expenses incurred under this Agreement have reached eighty percent (80%) of the maximum amount payable above. Consultant shall concurrently inform the City Agreement Administrator, in writing, of Consultant's estimate of total expenditures required to complete its current assignments before proceeding, when the remaining work on such assignments would exceed the maximum amount payable above.

- 5.3 Consultant shall perform all work to the highest standards of Consultant's profession and in a manner reasonably satisfactory to City. Consultant shall comply with all applicable federal, state and local laws and regulations, including the conflict of interest provisions of Government Code Section 1090 and the Political Reform Act (Government Code Section 81000 *et seq.*).
- 5.4 Consultant represents that it has advised City in writing prior to the date of signing this Agreement of any known relationships with third parties, City Council Members, or employees of City which would (1) present a conflict of interest with the rendering of services under this Agreement under Government Code Section 1090, the Political Reform Act (Government Code Section 81000 *et seq.*), or other applicable law, (2) prevent Consultant from performing the terms of this Agreement, or (3) present a significant opportunity for the disclosure of confidential information.
- 5.5 During the term of this Agreement, Consultant shall not perform any work for another person or entity for whom Consultant was not working at the Commencement Date if both (i) such work would require Consultant to abstain from a decision under this Agreement pursuant to a conflict of interest statute and (ii) City has not consented in writing to Consultant's performance of such work.
- 5.6 Consultant represents that it has, or will secure at its own expense, all personnel required to perform the services identified in the Scope of Services. All such services shall be performed by Consultant or under its supervision, and all personnel engaged in the work shall be qualified to perform such services. **Paul Junker** shall be the Consultant Project Administrator and shall have direct responsibility for management of Consultant's performance under this Agreement. No other person shall serve as Consultant Project Administrator without City's prior written consent.
- 5.7 This Agreement covers professional services of a specific and unique nature. Except as otherwise provided herein, Consultant shall not assign or transfer its interest in this Agreement or subcontract any services to be performed without amending this Agreement.

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- 5.8 Consultant shall be responsible to City for all services to be performed under this Agreement. All subconsultants shall be approved by the City Agreement Administrator and their billing rates identified in the Approved Fee Schedule, **Exhibit B**. City shall pay Consultant for work performed by its subconsultants (including labor) only at Consultant's actual cost plus an approved mark-up as set forth in the Approved Fee Schedule, **Exhibit B**. Consultant shall be liable and accountable for any and all payments, compensation, and federal and state taxes to all subconsultants performing services under this Agreement. City shall not be liable for any payment, compensation, or federal and state taxes for any subconsultants.
- 5.9 Consultant shall notify the City Agreement Administrator, in writing, of any change in name, ownership or control of Consultant's firm or of any subconsultant. Change of ownership or control of Consultant's firm may require an amendment to the Agreement.
- 5.10 This Agreement is subject to prevailing wage law, for all work performed under the Agreement for which the payment of prevailing wages is required under the California Labor Code. In particular, Consultant acknowledges that prevailing wage determinations are available for the performance of inspection and survey work.

6. COMPENSATION

- 6.1 City agrees to compensate Consultant for the services provided under this Agreement, and Consultant agrees to accept payment in accordance with the Approved Fee Schedule in full satisfaction for such services.
- 6.2 Consultant shall submit to City an invoice, on a monthly basis or less frequently, for services performed pursuant to this Agreement. Each invoice shall identify the maximum amount payable above, the services rendered during the billing period, the amount due for the invoice, and the total amount previously invoiced. All labor charges shall be itemized by employee name and classification/position with the firm, the corresponding hourly rate, the hours worked, a description of each labor charge, and the total amount due for labor charges. City shall not withhold applicable taxes or other payroll deductions from payments made to Consultant except as otherwise required by law. Consultant shall include a copy of each subconsultant invoice for which reimbursement is sought in the invoice.
- 6.3 The parties agree to meet and confer at mutually agreeable times to resolve any disputed amounts contained in an invoice submitted by Consultant.
- 6.4 Payments for any services requested by City and not included in the Scope of Services may be made to Consultant by City on a time-and-materials basis pursuant

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to the Approved Fee Schedule and without amendment of this Agreement, so long as such payment does not cause the maximum amount payable above to be exceeded.

7. OWNERSHIP OF WRITTEN PRODUCTS

All reports, documents or other written material, and all electronic files, including computer-aided design files, developed by Consultant in the performance of this Agreement (such written material and electronic files are collectively known as “written products”) shall be and remain the property of City without restriction or limitation upon its use or dissemination by City except as provided by law. Consultant may take and retain copies of such written products as desired, but no such written products shall be the subject of a copyright application by Consultant.

8. RELATIONSHIP OF PARTIES

Consultant is, and shall at all times remain as to City, a wholly independent contractor. Consultant shall have no power to incur any debt, obligation, or liability on behalf of City or otherwise to act on behalf of City as an agent. Neither City nor any of its agents shall have control over the conduct of Consultant or any of Consultant’s employees, except as set forth in this Agreement. Consultant shall not represent that it is, or that any of its agents or employees are, in any manner employees of City.

Under no circumstances shall Consultant look to the City as its employer. Consultant shall not be entitled to any benefits. City makes no representation as to the effect of this independent contractor relationship on Consultant’s previously earned California Public Employees Retirement System (“CalPERS”) retirement benefits, if any, and Consultant specifically assumes the responsibility for making such a determination. Consultant shall be responsible for all reports and obligations including, but not limited to: social security taxes, income tax withholding, unemployment insurance, disability insurance, workers’ compensation, and other applicable federal and state taxes.

9. AGREEMENT ADMINISTRATOR

In performing services under this Agreement, Consultant shall coordinate all contact with City through its City Agreement Administrator. City reserves the right to change this designation upon written notice to Consultant. All services under this Agreement shall be performed at the request of the City Agreement Administrator, who will establish the timetable for completion of services and any interim milestones.

10. INDEMNIFICATION

10.1 The parties agree that City, its officers, agents, employees and volunteers should, to the fullest extent permitted by law, be protected from any and all loss, injury, damage, claim, lawsuit, cost, expense, attorneys’ fees, litigation costs, taxes, or any

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other cost arising out of or in any way related to the performance of this Agreement. Accordingly, the parties intend the provisions of this indemnity provision to be interpreted and construed to provide the City with the fullest protection possible under the law. Consultant acknowledges that City would not enter into this Agreement in the absence of Consultant's commitment to indemnify and protect City as set forth herein.

- 10.2 To the fullest extent permitted by law, Consultant shall indemnify, hold harmless, and when the City requests with respect to a claim provide a deposit for the defense of, and defend City, its officers, agents, employees and volunteers from and against any and all claims, losses, costs and expenses for any damage due to death or injury to any person, whether physical, emotional, consequential or otherwise, and injury to any property arising out of or in connection with Consultant's alleged negligence, recklessness or willful misconduct or other wrongful acts, errors or omissions of Consultant or any of its officers, employees, servants, agents, or subcontractors, or anyone directly or indirectly employed by either Consultant or its subcontractors, in the performance of this Agreement or its failure to comply with any of its obligations contained in this Agreement, except such loss or damage which is caused by the sole active negligence or willful misconduct of the City. Such costs and expenses shall include reasonable attorneys' fees due to counsel of City's choice, expert fees and all other expenses of litigation. Consultant shall not be entitled to any refund of attorneys' fees, defense costs or expenses in the event that it is adjudicated to have been non-negligent.
- 10.3 City shall have the right to offset against any compensation due Consultant under this Agreement any amount due City from Consultant as a result of Consultant's failure to pay City promptly any indemnification arising under this Section 10 of this Agreement and any amount due City from Consultant arising from Consultant's failure either to (i) pay taxes on amounts received pursuant to this Agreement or (ii) comply with applicable workers' compensation laws.
- 10.4 The obligations of Consultant under this Section 10 of this Agreement are not limited by the provisions of any workers' compensation or similar statute. Consultant expressly waives its statutory immunity under such statutes as to City, its officers, agents, employees and volunteers.
- 10.5 Consultant agrees to obtain executed indemnity agreements with provisions identical to those set forth here in Section 10 of this Agreement from each and every subcontractor or any other person or entity involved by, for, with or on behalf of Consultant in the performance of this Agreement. If Consultant fails to obtain such indemnity obligations from others, Consultant agrees to indemnify, hold harmless and defend City, its officers, agents, employees and volunteers from and against any and all claims, losses, costs and expenses for any damage due to death or injury to any person and injury to any property resulting from any alleged intentional,

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reckless, negligent, or otherwise wrongful acts, errors or omissions of Consultant's subcontractors or any other person or entity involved by, for, with or on behalf of Consultant in the performance of this Agreement. Such costs and expenses shall include reasonable attorneys' fees incurred by counsel of City's choice.

- 10.6 City does not, and shall not, waive any rights that it may possess against Consultant because of the acceptance by City, or the deposit with City, of any insurance policy or certificate required pursuant to this Agreement. This hold harmless and indemnification provision shall apply whether or not any insurance policies apply to a claim, demand, damage, liability, loss, cost or expense.
- 10.7 In the event that Consultant or any employee, agent, or subcontractor of Consultant providing services under this Agreement claims or is determined by a court of competent jurisdiction or CalPERS to be eligible for enrollment in CalPERS as an employee of the City, Consultant shall indemnify, defend, and hold harmless City for the payment of any employee and/or employer contributions for CalPERS benefits on behalf of Consultant or its employees, agents, or subcontractors, as well as for the payment of any penalties and interest on such contributions, which would otherwise be the responsibility of City.
- 10.8 Notwithstanding any federal, state, or local policy, rule, regulation, law or ordinance to the contrary, Consultant and any of its employees, agents, and subcontractors providing service under this Agreement shall not qualify for or become entitled to, and hereby agree to waive any claims to, any compensation, benefit, or any incident of employment by City, including but not limited to eligibility to enroll in CalPERS as an employee of City and entitlement to any contribution to be paid by City for employer contribution and/or employee contributions for CalPERS benefits.

11. INSURANCE

- 11.1 During the term of this Agreement, Consultant shall carry, maintain, and keep in full force and effect insurance against claims for death or injuries to persons or damages to property that may arise from or in connection with Consultant's performance of this Agreement.
- 11.2 Any available insurance proceeds broader than or in excess of the specified minimum Insurance coverage requirements or limits shall be available to City as an Additional Insured as provided below. Furthermore, the requirements for coverage and limits shall be the greater of (1) the minimum coverage and limits specified in this Agreement, or (2) the broader coverage and maximum limits of coverage of any Insurance policy or proceeds available to the named Insured.

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- 11.3 Insurance required under this Agreement shall be of the types set forth below, with minimum coverage as described:
- 11.3.1 Comprehensive General Liability Insurance with coverage limits of not less than One Million Dollars (\$1,000,000) including products and operations hazard, contractual insurance, broad form property damage, independent consultants, personal injury, underground hazard, and explosion and collapse hazard where applicable.
 - 11.3.2 Automobile Liability Insurance for vehicles used in connection with the performance of this Agreement with minimum limits of One Million Dollars (\$1,000,000) per claimant and One Million dollars (\$1,000,000) per incident.
 - 11.3.3 Worker's Compensation insurance if and as required by the laws of the State of California.
 - 11.3.4 Professional Errors and Omissions Insurance with coverage limits of not less than One Million Dollars (\$1,000,000).
- 11.4 Consultant shall require each of its subconsultants to maintain insurance coverage that meets all of the requirements of this Agreement provided however, that the City Agreement Administrator may waive the provision of Errors and Omissions Insurance by subconsultants in his or her sole discretion.
- 11.5 The policy or policies required by this Agreement shall be issued by an insurer admitted in the State of California and with a rating of at least A:VII in the latest edition of Best's Insurance Guide.
- 11.6 Consultant agrees that if it does not keep the insurance coverages required by this Agreement in full force and effect, City may either (i) immediately terminate this Agreement; or (ii) take out the necessary insurance and pay the premium(s) thereon at Consultant's expense.
- 11.7 At all times during the term of this Agreement, Consultant shall maintain on file with City's Risk Manager a certificate or certificates of insurance showing that the required coverages are in effect and naming City and its officers, employees, agents and volunteers as Additional Insureds. Prior to commencement of work under this Agreement, Consultant shall file with City's Risk Manager such certificate(s) and Forms CG 20 10 07 04 and CG 20 37 07 04 or the substantial equivalent showing City as an Additional Insured.
- 11.8 Consultant shall provide proof that policies of insurance required by this Agreement expiring during the term of this Agreement have been renewed or replaced with

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(City of South Pasadena /Interwest Consulting Group, Inc.)

other policies providing at least the same coverage. Such proof will be furnished at least two weeks prior to the expiration of the coverages.

- 11.9 The general liability and automobile policies of insurance required by this Agreement shall contain an endorsement naming City and its officers, employees, agents and volunteers as Additional Insureds. All of the policies required under this Agreement shall contain an endorsement providing that the policies cannot be canceled or reduced except on thirty days' prior written notice to City. Consultant agrees to require its insurer to modify the certificates of insurance to delete any exculpatory wording stating that failure of the insurer to mail written notice of cancellation imposes no obligation, and to delete the word "endeavor" with regard to any notice provisions.
- 11.10 The insurance provided by Consultant shall be primary to any other coverage available to City. Any insurance or self-insurance maintained by City and/or its officers, employees, agents or volunteers shall be in excess of Consultant's insurance and shall not contribute with it.
- 11.11 All insurance coverage provided pursuant to this Agreement shall not prohibit Consultant, and Consultant's employees, agents or subcontractors, from waiving the right of subrogation prior to a loss. Consultant hereby waives all rights of subrogation against the City.
- 11.12 Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of City, Consultant shall either reduce or eliminate the deductibles or self-insured retentions with respect to City, or Consultant shall procure a bond in the amount of the deductible or self-insured retention to guarantee payment of losses and expenses.
- 11.13 Procurement of insurance by Consultant shall not be construed as a limitation of Consultant's liability or as full performance of Consultant's duties to indemnify, hold harmless and defend under Section 10 of this Agreement.
- 11.14 Consultant may be self-insured under the terms of this Agreement only with express written approval from the City.
 - 11.14.1 All self-insured retentions (SIR) must be disclosed to the City for approval and shall not reduce the limits of liability.
 - 11.14.2 Policies containing any SIR provision shall provide or be endorsed to provide that the SIR may be satisfied by either the named Insured or the City.

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11.15 City reserves the right to obtain a full certified copy of any Insurance policy and endorsements. Failure to exercise this right shall not constitute a waiver of the right to exercise later.

12. MUTUAL COOPERATION

12.1 City shall provide Consultant with all pertinent data, documents and other requested information as is reasonably available for the proper performance of Consultant's services under this Agreement.

12.2 If any claim, action, or proceeding is brought against City relating to Consultant's performance in connection with this Agreement, Consultant shall render any reasonable assistance that City may require in the defense of that claim, action, or proceeding.

13. CONFIDENTIALITY

All data, documents, discussion, or other information developed or received by Consultant or provided for performance of this Agreement are deemed confidential and shall not be disclosed by Consultant without prior written consent by City. City shall grant such consent if disclosure is legally required. Upon request, all City data shall be returned to City upon the termination or expiration of this Agreement.

14. RECORDS AND INSPECTIONS

Consultant shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, and other records or documents evidencing or relating to charges for services or expenditures and disbursements charged to City under this Agreement for a minimum of three (3) years, or for any longer period required by law, from the date of final payment to Consultant under this Agreement. All such documents shall be made available for inspection, audit, and/or copying at any time during regular business hours, upon oral or written request of City. City shall further have the right to make transcripts therefrom and to inspect all program data, documents, proceedings, and activities.

In addition, pursuant to Government Code Section 8546.7, if the amount of public funds expended under this Agreement exceeds ten thousand dollars, all such documents and this Agreement shall be subject to the examination and audit of the State Auditor, at the request of City or as part of any audit of City, for a period of three (3) years after final payment under the Agreement.

15. PERMITS AND APPROVALS

Consultant shall obtain, at its sole cost and expense, all permits and regulatory approvals necessary for Consultant’s performance of this Agreement. This includes, but shall not be limited to, professional licenses, encroachment permits and building and safety permits and inspections.

16. NOTICES

Any notices, bills, invoices, or reports required by this Agreement shall be deemed received on: (i) the day of delivery if delivered by hand, facsimile or overnight courier service during Consultant’s and City’s regular business hours; or (ii) on the third business day following deposit in the United States mail if delivered by mail, postage prepaid, to the addresses listed below (or to such other addresses as the parties may, from time to time, designate in writing).

If to City:

Joanna Hankamer
City of South Pasadena
Planning and Building
1414 Mission Street
South Pasadena, CA 91030
Telephone: (626) 403-7220
Facsimile: (626) 403-7241

If to Consultant:

Jim Ross
Interwest Consulting Group, Inc.
15140 Transistor Lane
Huntington Beach, CA 92649
Telephone: (714) 899-9039 Phone

With courtesy copy to:

Teresa L. Highsmith, City Attorney
Colantuono, Highsmith & Whatley, PC
790 E. Colorado Blvd, Suite 850
Pasadena, California 91101
Telephone: (213) 542-5700
Facsimile: (213) 542-5710

17. SURVIVING COVENANTS

The parties agree that the covenants contained in Section 10, Section 13, Paragraph 12.2 and Section 14 of this Agreement shall survive the expiration or termination of this Agreement.

18. TERMINATION

17.1. City may terminate this Agreement for any reason on five calendar days’ written notice to Consultant. Consultant may terminate this Agreement for any reason on

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(City of South Pasadena /Interwest Consulting Group, Inc.)

thirty calendar days' written notice to City. Consultant agrees to cease all work under this Agreement on or before the effective date of any notice of termination. All City data, documents, objects, materials or other tangible things shall be promptly returned to City upon the termination or expiration of this Agreement.

- 17.2 If City terminates this Agreement due to no fault or failure of performance by Consultant, then Consultant shall be paid based on the work satisfactorily performed at the time of termination. In no event shall Consultant be entitled to receive more than the amount that would be paid to Consultant for the full performance of the services required by this Agreement as provided in Section 5.2 above and as otherwise provided in this Agreement.

18. GENERAL PROVISIONS

- 18.1 Consultant shall not delegate, transfer, subcontract or assign its duties or rights hereunder, either in whole or in part, without City's prior written consent, and any attempt to do so shall be void and of no effect. City shall not be obligated or liable under this Agreement to any party other than Consultant.
- 18.2 In the performance of this Agreement, Consultant shall not discriminate against any employee, subcontractor, or applicant for employment because of race, color, creed, religion, sex, marital status, sexual orientation, national origin, ancestry, age, physical or mental disability, medical condition or any other unlawful basis.
- 18.3 The captions appearing at the commencement of the sections hereof, and in any paragraph thereof, are for convenience in reference to this Agreement. Should there be any conflict between such heading, and the section or paragraph thereof at the head of which it appears, the section or paragraph shall govern construction of this Agreement. Masculine or feminine pronouns shall be substituted for the neuter form and vice versa, and the plural shall be substituted for the singular and vice versa, in any place or places herein in which the context requires such substitution(s).
- 18.4 The waiver by City or Consultant of any breach of any term, covenant or condition herein contained shall not be deemed to be a waiver of any other term, covenant or condition or of any subsequent breach of the same or any other term, covenant or condition herein contained. No term, covenant or condition of this Agreement shall be deemed to have been waived by City or Consultant unless in writing signed by one authorized to bind the party to be charged with the waiver.
- 18.5 Consultant shall not be liable for any failure to perform if Consultant presents acceptable evidence, in City's sole judgment, that such failure was due to causes beyond the control and without the fault or negligence of Consultant.

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- 18.6 Each right, power and remedy provided for herein or now or hereafter existing at law, in equity, by statute, or otherwise shall be cumulative and shall be in addition to every other right, power, or remedy provided for herein or now or hereafter existing at law, in equity, by statute, or otherwise. The exercise, the commencement of the exercise, or the forbearance from the exercise by any party of any one or more of such rights, powers or remedies shall not preclude the simultaneous or later exercise by such party of any or all of such other rights, powers or remedies. If legal action shall be necessary to enforce any term, covenant or condition contained in this Agreement, the party prevailing in such action, whether or not reduced to judgment, shall be entitled to its reasonable court costs, including any accountants' and attorneys' fees expended in the action. The venue for any litigation shall be Los Angeles County, California and Consultant hereby consents to jurisdiction in Los Angeles County for purposes of resolving any dispute or enforcing any obligation arising under this Agreement.
- 18.7 If any term or provision of this Agreement or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, then such term or provision shall be amended to, and solely to the extent necessary to, cure such invalidity or unenforceability, and in its amended form shall be enforceable. In such event, the remainder of this Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each term and provision of this Agreement shall be valid and be enforced to the fullest extent permitted by law.
- 18.8 This Agreement shall be governed and construed in accordance with the laws of the State of California.
- 18.9 All documents referenced as exhibits in this Agreement are hereby incorporated into this Agreement. In the event of any material discrepancy between the provisions of this Agreement and those of any document incorporated herein by reference, the provisions of this Agreement shall prevail. This instrument contains the entire Agreement between City and Consultant with respect to the transactions contemplated herein. No other prior oral or written agreements are binding upon the parties. Amendments hereto or deviations herefrom shall be effective and binding only if made in writing and executed on behalf of the City and Consultant.
- 18.10 Consultant shall not discriminate against any employee or applicant for employment because of race, sex (including pregnancy, childbirth, or related medical condition), creed, national origin, color, disability as defined by law, disabled veteran status, Vietnam veteran status, religion, age (40 and above), medical condition (cancer-related), marital status, ancestry, or sexual orientation. Consultant shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to race, sex (including pregnancy, childbirth, or related medical condition), creed, national

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origin, color, disability as defined by law, disabled veteran status, Vietnam veteran status, religion, age (40 and above), medical condition (cancer-related), marital status, ancestry, or sexual orientation. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; or in terms, conditions or privileges of employment, and selection for training, Consultant agrees to post in conspicuous places, available to employees and applicants for employment, the provisions of this nondiscrimination clause.

TO EFFECTUATE THIS AGREEMENT, the parties have caused their duly authorized representatives to execute this Agreement as of the last date indicated below:

“City”

City of South Pasadena

DocuSigned by:
Stephanie DeWolfe
By: C4433931F72E445...
Stephanie DeWolfe, City Manager

“Consultant”

Interwest Consulting Group, Inc.

By: *Jim Ross*
Jim Ross, Public Works Group Leader

Date: 7/31/2020

Date: June 3, 2020

Attest:

DocuSigned by:
[Signature]
By: F89D894F8A024D0...

Date: 7/31/2020

Approved as to form:

DocuSigned by:
Teresa Highsmith
By: 3657EFA936854DF...
Teresa L. Highsmith, City Attorney

Date: 7/31/2020

"EXHIBIT A"
SCOPE OF WORK

EXHIBIT A SCOPE OF WORK

Upon authorization from the City and under the supervision of City Staff, Consultant shall provide planning services for managing and expediting planning applications. Tasks shall include, but not limited to the following:

- **Application Completeness Review.** As required under the Permit Streamlining Act, Consultant shall prepare a completeness review letter within 30 days of the City's receipt of application. The letter shall be provided to the City for review and approval prior to 30-day deadline.
- **Application Routing.** Within three (3) days of Project Initiation, the Consultant shall organize application materials for routing to City departments and affected agencies. The purposes of this routing are to 1) allow departments and agencies to review materials and to identify materials required for a complete application and 2) provide all City department and affected agencies an early look at the project to begin to identify any key issues of concern or additional information required of the applicants. Consultant will circulate materials electronically to departments and affected agencies on the City's standard routing form.
- **Coordination and Communication.** Consultant shall coordinate the review of entitlement applications with City staff and the applicant team. This will include scheduling of meetings to review project materials, circulation of work products to appropriate parties, maintaining log of project schedule, and other efforts as required.
- **Site Visit:** If required for a specific project, Consultant shall conduct site visit(s).
- **Code and Design Conformance:** Consultant shall review, analyze, and evaluate project for consistency with the General Plan and compliance with the Zoning Code/ Specific Plan, Cultural Heritage Ordinance, Secretary of the Interior's Standards, and Design Guidelines. Consultant shall prepare comment/correction letter providing recommends for compliance with standards and guidelines for City review within two (2) weeks of submittal (or resubmittal).
- **CEQA:** Review project for conformance with the California Environmental Quality Act (CEQA) and prepare appropriate environmental document as needed. Environmental documents, including, but not limited to, Initial Studies and Negative Declarations, notices, and response to comments as required by CEQA. If required, Consultant shall review for adequacy any Mitigated Negative Declaration or Environmental Impact Report, response to comments, and all related documents prepared by other consultants for the project.
- **Technical Studies:** Consultant shall review the adequacy of all technical studies (Historic Resource Evaluation Report, Biological Survey, Traffic Impact Analysis, etc.) related to the project.

- **Tribal Consultations.** If required for a specific project, the Consultant shall prepare all appropriate documents and conduct tribal consultations.
- **Community Outreach.** If required for a specific application, Consultant shall develop outreach strategies and participate in and/or facilitate the outreach events. Deliverables may include: written analysis of finding and recommendations; graphics, charts, photographs, and electronic presentations; and handouts and presentations. Consultant shall prepare meeting summary and incorporate in the reports to the Planning Commission, Cultural Heritage Commission, Design Review Board, and/or City Council.
- **Public Notices:** Consultant shall prepare all public hearing notices (newspaper, postcard, on-site notices) for the project.
- **Commission/Board/City Council Review.** Consultant shall prepare the complete packets for Planning Commission, Cultural Heritage Commission, Design Review Board, and/or City Council hearings that include, but may not be limited to: staff report, conditions of approval, CEQA determination, resolution(s) and/or ordinance, associated project exhibits, and meeting presentation. These materials will be organized and presented in a form and format consistent with City practices and shall be submitted consistent with the City schedule. If an applicant's project materials will not be available on schedule for timely delivery of a meeting packet, the Consultant shall consult with the City prior to deadlines to determine how to proceed. Consultant shall be available to consult with City staff prior to the public hearing and shall present the project to for consideration, unless decided otherwise by the City. If a project is appealed, Consultant shall be available to process the appeal.
- **Closeout of Application:** Upon final action, Consultant shall prepare decision letters, final conditions of approval, notice of exemption/determination, other associated documents, and provide electronic stamped approved plans. Consultant shall provide an organized project file with all key documents at closeout (hardcopy and digital).

"EXHIBIT B"
FEE SCHEDULE

Exhibit B Fee Schedule

Interwest Consulting Group

Hourly Rates

The rates displayed in the fee schedule below reflect Interwest’s current fees. Hourly rates are typically reviewed yearly on July 1 and may be subject to revision unless under specific contract obligations. In addition, there is no charge for shipping, supply or material costs.

Classification	Hourly Billing Rate
Senior Advisor.....	\$165
Principal Planner.....	\$150
Senior Planner.....	\$140
Associate Planner.....	\$125
Assistant Planner.....	\$100

NON-COLLUSION DECLARATION

TO BE EXECUTED BY
BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].”

Signature

Printed Name of Signatory

Professional Services Agreement
(City of South Pasadena / Interwest Consulting Group, Inc.)

WORKERS' COMPENSATION
INSURANCE CERTIFICATE

The Contractor shall execute the following form as required by the California Labor Code, Sections 1860 and 1861:

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

DATE: _____

Contractor

By:

Signature

Title

Attest:

By:

Signature

Title

ATTACHMENT 4
June 17, 2020 City Council Staff Report
([Click Here](#))



City Council Agenda Report

ITEM NO. 15

DATE: December 16, 2020

TO: Honorable Mayor and Council Members

FROM: Sean Joyce, Interim City Manager

PREPARED BY: Joanna Hankamer, Planning and Community Development Director
Kanika Kith, Planning Manager

SUBJECT: **Authorize Staff to Accept Funding from the Certified Local Government Grant Program for the Preparation of an Amendment to the City's Accessory Dwelling Units Ordinance**

Recommendation

It is recommended that the City Council authorize City staff to accept a \$40,000 award from the California Office of Historic Preservation Local Government Unit Certified Local Government Grant Program for the preparation of an amendment to the City's existing Accessory Dwelling Units Ordinance.

Discussion/Analysis

South Pasadena is fully committed to providing its fair share of affordable housing. The City recognizes the important role that accessory dwelling units (ADUs) play as one tool in helping to solve the crisis of housing affordability in California. The City's Housing Element seeks to facilitate the development of ADUs to promote this housing type as an affordable housing option.

Part of what makes South Pasadena one of Southern California's most unique and desirable communities is the extent to which it has preserved, protected, and retained its historic small-town character and scale. Residential development in the city takes place in the context of a community where over one-third of all properties are listed on the Inventory of Historic Resources (Inventory). As such, there is a definite need to ensure that when ADUs are proposed on such properties, they are architecturally compatible with the historic homes to the fullest extent allowed under state law. The development of design standards and guidelines that can be applied in those cases will directly address this local historic preservation need.

In May 2020, staff, with help from the Chair of the Cultural Heritage Commission and couple of local historians, applied for a \$40,000 grant from the Certified Local Government Program (CLG) to amend the City's ADUs Ordinance to develop objective design standards to be sensitive to historic properties and protect preservation efforts. Funding for amending the ADUs

Ordinance is a priority because demand for ADUs has grown exponentially. By way of comparison, during the period covered by the 2006-2014 Housing Element, only three ADUs were approved in the entire city. In contrast, from 2017 to May 2020, 30 ADUs have been approved, a ten-fold increase. Of these, fully two-thirds (20) were on properties listed on the Inventory. Without proactive preservation policies, new construction of ADUs could potentially erode the integrity of South Pasadena's historic properties and districts.

On October 6, 2020, staff received a notification from the California Office of Historic Preservation that the City has been awarded the full amount of \$40,000 requested in the grant application. On November 10, 2020, the California Office of Historic Preservation sent a Grant Agreement.

CLG Grant Implementation

The awarded grant will benefit the community by funding the development of objective design standards that specifies how ADUs can be accommodated in historic neighborhoods without sacrificing character and quality of life. The resulting guidelines and policies will offer a clear road map for ADUs design and entitlement. The project implements several policies and strategies of the City's General Plan Historic Preservation Element and Goal 5 of the City's Strategic Plan. Policy 4.3 of the Historic Preservation Element is to develop and maintain design guidelines that promote architectural continuity for infill development within existing historic districts. Strategy 2.7 of the Element is to develop design guidelines to be used in the entitlement process by all City reviewing bodies, while Strategies 4.1 and 4.4, respectively, call for the adoption of guidelines for infill development that stress the use of traditional materials and techniques similar to what exists in the surrounding neighborhood and for the development and maintenance of design guidelines to provide consistency in the City's permit process to protect the historic and other unique features of South Pasadena. Goal 5 of the Strategic Plan calls for adoption and update of the ADUs ordinance to support affordable housing.

The grant funding will support a robust community outreach program to ensure that the proposed amendments reflect local values, interests, and address concerns. The updated ADUs ordinance will be tailored to South Pasadena's many historic properties, districts, and neighborhoods, with a clear process for the design and review of applications. The ADUs ordinance update will apply to qualifying properties and historic districts listed in the City's Inventory (which includes eligible properties and districts) and the Register of Cultural Resources (which includes designated properties and districts).

To develop these standards, staff will issue a Request for Proposals to hire a qualified firm that meets the United States Secretary of the Interior's professional qualification standards for historian or architectural historian. The selected consultant will work closely with the City's Cultural Heritage Commission (CHC) and under the general direction of the Planning Manager. A CHC subcommittee consisting of Chair Gallatin and Vice Chair Thompson will help guide and assist this process.

Background

The 1980 amendments to the National Historic Preservation Act of 1966, as amended, provided for the establishment of a Certified Local Government Program (CLG) to encourage the direct participation of local governments in the identification, evaluation, registration, and preservation of historic properties within their jurisdictions and promote the integration of local preservation interests and concerns into local planning and decision-making processes. The CLG program is a partnership among local governments, the State of California Office of Historic Preservation, and the National Park Service, which is responsible for administering the National Historic Preservation Program. Through the CLG Program, local governments receive federal grants to assist with historic preservation.

As part of the CLG Program, federal grants are awarded annually to local governments to assist with a variety of historic preservation issues. The City of South Pasadena was awarded \$40,000 in CLG grant monies in 2020 for the purpose of amending the ADUs Ordinance to be sensitive to historic properties and protect preservation efforts.

Legal Review

The City Attorney has reviewed this item.

Fiscal Impact

The City has the opportunity to accept \$40,000 in competitive grant funding for amending the City's ADUs Ordinance. There is a local match requirement of 40% (or \$16,000) and the CLG grant application showed that the match is satisfied with in-kind staff time working on the amendment. Staff time is estimated to be \$34,720, which exceeds the 40% match requirement. The in-kind match for city staff time will be charged to the Planning Department's salary and contract staff accounts. The \$40,000 in grant funding will be budgeted in the revenue account 267-0000-0000-5071-015 (Historic Preservation Grant). The \$40,000 in grant expenditures will be budgeted in the Planning Department's Professional Services Account (276-7010-7011-8170-000).

Environmental Analysis

This item is exempt from any California Environmental Quality Act (CEQA) documentation.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City's website.

Attachment:

1. 2020 CLG Historic Preservation Grant Agreement

ATTACHMENT 1
2020 CLG Historic Preservation
Grant Agreement

**NATIONAL HISTORIC PRESERVATION ACT OF 1966
HISTORICAL RESOURCES PRESERVATION PROJECT AGREEMENT**

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

SUBGRANT PROGRAM

2020 HISTORIC PRESERVATION FUND GRANT

PARTICIPANT

CITY OF SOUTH PASADENA

PROJECT PERIOD

OCTOBER 1, 2020- SEPTEMBER 30, 2021

PROJECT NUMBER

PROJECT SCOPE

The City of South Pasadena, hereafter the Participant, will contract with a consultant to undertake revisions to its existing Accessory Dwelling Units (ADU) Ordinance to better integrate city preservation planning guidelines found in the Cultural Heritage Ordinance and the General Plan. The project will include development of historic preservation-focused design standards and guidelines.

Work will be carried out by city staff with assistance by a consultant who is experienced in preparing historic preservation ordinances.

All work shall be performed and deliverables produced in accordance with the *Secretary of the Interior's Standards for Preservation Planning, Identification, Evaluation and Registration* when such standards are applicable.

PROGRESS REPORTS

Participant shall submit to the State Office of Historic Preservation (OHP) regular progress reports in accordance with the following schedule. A work plan will be developed and the deliverables to be included with each progress report will be determined in consultation with the OHP coordinator, the chosen consultant, and the CLG grant manager at the beginning of the grant period and the agreed upon work plan will become part of the contract.

Progress reports will include any deliverables specified in the work plan, detail the work accomplished to date, and identify and discuss any problems or issues which have the potential to adversely affect the scope or progress of the project.

OHP may ask for additional progress reports or drafts of work papers during the project period. OHP reserves the right to withhold disbursement of up to half the grant amount until the final products have been determined to meet the Secretary of the Interior's Standards. Participant may submit billings for partial payment as the work progresses.

Continued on Page--1a-- Attached

PROJECT FUNDING

Total costs supported by Federal grant funds under the National Historic Preservation Act of 1966:

Forty thousand dollars and no cents (\$40,000.00).

Minimum contributions of the Participant to match Federal grant funds under the National Historic Preservation

Act of 1966: Twenty-six thousand, six hundred, sixty-six dollars and no cents (\$26,666.00).

AGENCY

STATE DEPARTMENT OF PARKS AND RECREATION

PARTICIPANT

CITY OF SOUTH PASADENA

BY

BY

TITLE

STATE HISTORIC PRESERVATION OFFICER

TITLE

DATE

DATE

29 January 2021: On or before this date, Participant shall submit a progress report for OHP's review and comment that will provide evidence that a consultant is under contract for the project and that a project kick-off meeting occurred, including a summary of the participants, agenda, and results.

31 March 2021: On or before this date, Participant shall submit a progress report for OHP's review and comment that will include a description of work to date on Community Outreach #1 (online community survey and postcard survey). It will also include a draft of proposed ordinance and design standards.

30 July 2021: On or before this date, Participant shall submit a progress report for OHP's review and comment that will include a description of work to date on Community Outreach #2 (results of consultation with the Cultural Heritage Commission and Design Review Board, and members of the public regarding the ordinance and design standards). It will also include a draft of proposed ordinance and design standards.

31 August 2021: On or before this date, Participant shall submit a progress report for OHP's review and comment that will include a description of work to date on Community Outreach #3 (public hearing for review of draft ordinance and design standards) and Community Outreach #4 (Planning Commission hearing for draft ordinance and standards.) It will also include a Final Draft of proposed ordinance and design standards.

30 September 2021: On or before this date, Participant shall submit a Final Performance Report summarizing the outcome of the comprehensive project efforts comparing actual accomplishments to planned objectives, discussing lessons learned, and description of future needs or activities that will benefit from the project.

11 October 2021: On or before this date, the final Request for Reimbursement (DPR 417) shall be submitted to OHP with all claims for project costs incurred prior to the end of the project period (30 September 2021).

FINAL PRODUCTS WILL INCLUDE:

The Final Performance Report (referenced above).

Electronic copy of the final draft.

The attached General and Special Provisions (17 pages) are incorporated and made a part hereof. Additionally, the budget as submitted in the grant application with revisions, if approved by OHP, is incorporated and made a part hereof.

GENERAL PROVISIONS

I. GENERAL

A. Performance

1. The Participant agrees to complete the project in accordance with this agreement.
2. The Participant shall perform all work and supply material necessary to complete the project described in the paragraph entitled "Project Scope:" on p.1 of this agreement within the period specified. Failure of the Participant to render satisfactory progress or to complete this or any other project which is subject to federal assistance under this program to the satisfaction of the OHP may be cause for suspension of all obligations of Interior and the State of California (State) under this agreement.
3. However, failure of the Participant to comply with the terms of this agreement shall not be cause for the suspension of all such obligations if, in the judgement of the OHP, such failure was due to no fault of the Participant. In such case, any amount required to settle at minimum costs any irrevocable obligations properly incurred shall be eligible for assistance under this agreement.

B. Cost Sharing/Matching Requirement.

1. At least 40 percent non-Federal cost-share/match is required for costs incurred under this Agreement. A minimum of 40 percent in eligible non-Federal cost share/match as identified on the cover page of this agreement, that is allowable and properly documented, must be expended for work approved under Scope of Work during the Period of Performance in addition to the Federal grant share.
2. Non-monetary contribution may constitute part or all of the Participant's match. Valuation of such contribution shall be set forth by the OHP.
3. Failure to expend the required non-Federal matching share will result in the disallowance of costs reimbursed, and/or the deobligation of remaining unexpended funds.
4. Non-Federal cost share or match must meet the same requirements as the Federal share.
5. The OHP shall not pay federal funds hereunder if the Participant has used financial assistance under any other federal program or activity (not including federal revenue sharing funds, community block grants, and any other federal funds allowable as match) as a match on the project.

- C. **Agreement Amendment.** This agreement may be amended only by agreement in writing executed by both of the parties hereto.

D. Agreement Termination

1. The Participant may, upon written notice to the OHP, unilaterally terminate this agreement at any time prior to the commencement of the project.
2. The OHP may, upon written notice to the Participant, unilaterally terminate this agreement at any time prior to the commencement of the project.
3. The project shall be deemed commenced when the Participant makes any expenditure or incurs any obligations with respect to the project.
4. After the project commences, the Participant and the OHP may terminate the agreement by mutual consent, in which case they shall negotiate termination conditions.

- E. **Non-Compliance.** If the Participant materially fails to comply with the terms of the agreement, the OHP shall provide written notice of non-compliance, which states the nature of the deficiency. If the Participant is still not in compliance in thirty (30) days after receipt of the notice, the OHP may in addition to other remedies: (1) withhold cash payments until deficiency is removed; (2) terminate the agreement and make no further payments hereunder; (3) disallow costs; and (4) disqualify the Participant from further subgrants.
- F. **Indemnification.** The Participant hereby waives all claims and recourse against the State including the right to contribution for loss or damage to persons or property arising from, growing out of, or in any way connected with or incident to this agreement, except claims arising from the concurrent or sole negligence of the State, its officers, agents, and employees. The Participant shall indemnify the State and its officers, agents, and employees against and hold the same free and harmless from any and all claims, demands, damages, losses, costs, and/or expenses of liability due to, or arising out of, either in whole or in part, whether directly or indirectly, the organization, development, construction, operation, or maintenance of the project. Participant shall waive and indemnify State only in proportion to and to the extent that such claims, damages, losses, costs, and/or expenses of indemnification are caused by or result from the negligent or intentional acts or omission of Participant, its officers, agents, or employees.
- G. **Severability.** This agreement shall be governed by the laws of the State of California. If any provision of the agreement, including without limitation these General Conditions shall be invalid, illegal, or unenforceable, the validity, legality, and enforceability of the remaining provisions shall not in any other way be affected or impaired.
- H. **Survival.** Any and all provisions which, by themselves or their nature, are reasonably expected to be performed after the expiration or termination of this Agreement shall survive and be enforceable after the expiration or termination of this Agreement. Any and all liabilities, actual or contingent, which have arisen during the term of and in connection with this Agreement shall survive expiration or termination of this Agreement.
- I. **Partial Invalidity.** If any provision of this Agreement or the application thereof to any party or circumstance shall, to any extent, be held invalid or unenforceable, the remainder of this Agreement or the application of such provision to the parties or circumstances other than those to which it is held invalid or unenforceable, shall not be affected thereby and each provision of this Agreement shall be valid and be enforced to the fullest extent permitted by law.
- J. **Captions and Headings.** The captions, headings, article numbers and paragraph numbers appearing in this Agreement are inserted only as a matter of convenience and in no way shall be construed as defining or limiting the scope or intent of the provision of this Agreement nor in any way affecting this Agreement.

II. PROJECT EXECUTION

- A. **Standards.** The Participant shall carry out its work in accordance with the "Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation", including standards for planning, identification, evaluation, registration, historical documentation, architectural and engineering documentation, archaeological

documentation, historic preservation projects, and professional qualifications, as published in the Federal Register, September 29, 1983 (Vol. 48, No. 190), pp. 44716 et seq..

- B. Qualifications.** If the project scope requires research in history, architectural history, or archeology, the Participant shall ensure that the principal investigator meets the applicable Secretary of the Interior's professional qualifications standards. If the project scope requires architectural plans, the Participant shall ensure that the architect producing those plans meets the applicable Secretary of the Interior's professional qualifications standards. If the project scope requires an expert practitioner in another field, the Participant shall ensure that such expert meets standards of education and experience similar to those of the Secretary of the Interior's professional qualifications standards.
- C. OHP Review.**
1. After selection of an employee or contractor to perform professional work outlined in the previous paragraph, but before making any financial commitment to that person, the Participant shall submit the person's resume to the OHP for review. The OHP shall either approve or disapprove use of the person on the project within twenty (20) working days after receipt of the resume. The Participant may consider failure of the OHP to respond within the period to constitute approval.
 2. When requested to do so by the OHP, the Participant shall make available to the OHP draft reports, studies, plans, drawings, or other preliminary documents prepared during the project. The Participants shall permit periodic site visits by the OHP to ensure that work is progressing on scheduled and according to applicable instructions and standards.
- D. Reporting.**
1. As outlined in this agreement, or date approved by the OHP, the Participant shall furnish to the OHP all final work products mentioned in the project scope and elsewhere in this agreement.
 2. Participant shall submit progress reports and interim work products on the dates indicated in this agreement. Progress reports shall be in such form and contain such information as the OHP instructs.
 3. The OHP shall not be obligated to provide federal funds for work products that, in the opinion of the OHP, do not conform to the terms of this agreement or to the applicable Secretary of the Interior's Standards.
 4. As outlined in this agreement, the Participant shall furnish to the OHP a final performance report, acceptable to the OHP, which compares actual accomplishments to planned objectives and, if appropriate, gives reasons that the objectives were not met as planned. The OHP shall provide further instructions for form the form and content of the final report.

III. FINANCIAL ADMINISTRATION

- A. Financial Management.** The Participant shall use a financial management system that: permits the preparation of financial reports required herein, permits the preparation of financial reports required herein, provides an accounting of funds expended on the project, and follows the standards set forth by the Office of Management and Budget Circulars referenced herein. The Participant shall expend funds only on allowable costs as set forth in the budget established in the approved project notification.

- B. Determination of Value of Goods and Services.** Goods in the form of equipment, whether owned, purchased, leased, or donated, will be valued on a use basis of actual costs of operation or of purchase or lease or prevailing costs of goods if donated. Residual market value of purchased equipment shall be credited to project costs upon completion. Goods in the form of supplies and material will be valued at actual direct costs to Participant or, if donated, according to the prevailing costs in the marketplace. Services will be valued in the actual amounts of salaries, wages, and direct overhead costs expended on the project.
- C. Volunteer Services.**
1. Volunteer services will be valued for contribution purposes at the rates paid for similar technical skills and work in other activities. Specific procedures for the Participant in establishing the value of in-kind contributions from non-Federal third parties are set forth below:
 2. Valuation of Volunteer Services: Volunteer services may be furnished by professional and technical personnel, consultants, and other skilled and unskilled labor. Volunteered service maybe counted as cost sharing or matching if the service is an integral and necessary part of an approved program.
 3. Rates for Volunteer Services: Rates for volunteers should be consistent with those paid for similar work in other activities of state and local government. In those instances in which the required skills are not found in the Participant's organization, rates should be consistent with those paid for similar work in the 15 labor markets in which the Participant competes for the kind of services involved. Volunteers with no historic preservation education or experience may claim only the minimum wage rate.
 4. Volunteers Employed by Other Organizations: When an employer, other than the Grantee, furnishes the services of an employee, these services shall be valued at the employee's regular rate of any (exclusive of fringe benefits and overhead costs), provided these services are in the same skill for which the employee is normally paid. This rate shall not exceed the maximum daily rate of compensation for a GS-18 position in the federal civil service, as established by law.
- D. Billing.**
1. Taking into account a four-to-six-week delay between the time a payment request is submitted to the OHP and the time the OHP provides the requested federal funds, the Participant shall submit its payment requests so as to minimize the time elapsing between receipt and disbursement of funds.
 2. The Participant shall have sufficient working capital to ensure that the project progresses on schedule even though payments from the OHP are unexpectedly delayed.
 3. When seeking reimbursements, the Participant shall base its billings upon financial records for both the federal and nonfederal shares of project costs which are supported by appropriate documentation. All reimbursement requests shall be accompanied by copies of timesheets, cancelled checks, receipts, etc., for OHP's verification before payment.
 4. The Participant shall submit billings during the project period for this agreement. The final billing statement with documentation sufficient for audit dated prior to end of the contract period, shall be submitted with the Final Report as described in this agreement.

5. Participant may also submit supplemental billing statements during the project period with progress reports but must include an itemization of expenditures or receipts or timesheets of work completed.
6. The Participant shall submit billings on the billing statement form (DPR 417) prescribed by the OHP. The OHP need not make payment on billings submitted in other formats. The Participant shall submit billings in duplicate, each with an original signature, to: Office of Historic Preservation, Department of Parks and Recreation, ATTN: Fiscal and Grants Coordinator, 1725 23rd Street, Suite 100, Sacramento CA 95816. The Participant shall ensure that the billing form bears the signature of the Participant's project representative.
7. After reviewing each billing for accuracy and appropriateness, the OHP shall pay the least of the following: (a) sixty percent of the amount of the total project costs incurred during the billing period shown on the billing; (b) the amount of cash outlays made during the billing period as shown on the billing; and (c) the amount of federal grant funds available for support of the project as shown in the project funding section of this agreement.
8. The OHP will not reimburse more than ninety (90%) percent of allocated grant funds until the OHP has verified completion of the project, and if necessary, until an audit approval has been received by the OHP for the Audits Section of the Department of Parks and Recreation.

E. Approved Indirect Rate. The federally negotiated indirect rate plus administrative costs to be applied against this agreement shall not by statute 54 U.S.C. 302902, commonly known as Section 102(e) of the NHPA, exceed 25 percent of the total project cost. Indirect costs will not be allowable charges against this agreement unless specifically included as a line item in the approved budget incorporated into this agreement. If indirect costs are allowable charges, a copy of the Participant's approved negotiated indirect rate shall be provided to the OHP.

F. Pre-Award Incurrence of Costs. The Participant shall be entitled to costs incurred on or after Start date. In accordance with 2 CFR 200.458, such costs are allowable only to the extent that they would have been allowable if incurred after the date of the Federal award and only with the written approval of the Awarding agency. Pre-award costs shall only be applied to the non-Federal cost share and are not eligible for reimbursement.

IV. CHANGES

- A. **Budget.** The Participant and OHP understand that the Participant is permitted to re-budget within the approved direct cost budget to meet unanticipated requirements and may make program changes to the project.
- B. **OHP Approval.** Notwithstanding the provisions of the foregoing paragraph, the Participant shall obtain from the OHP prior approval for: (a) any substantive revision of the scope, objectives, or budget of the project; (b) extension of the need for federal funds; (c) changes in key persons, including all persons filling positions for which the incumbent must meet the Secretary of the Interior's professional qualifications standards; (d) additional contracts or hiring to perform activities that are central to the project; and (e) new or revised performance or reporting milestones. The Participant shall make requests for such changes in writing. The OHP shall approve or disapprove in writing. If

appropriate, the Participant and the OHP shall amend this agreement to include approved changes.

V. REPORTS AND RECORDS

- A. **General.** All Participant financial and programmatic records, supporting documents, statistical records, and other grants-related records shall be maintained and available for access in accordance with 2 CFR 200-200.337 and the Historic Preservation Fund Grants Manual.
- B. **Service Records.** Records of personal services contributions, whether paid or volunteer, shall include timesheets bearing the signature of the person whose time is contributed and of the supervisor verifying that the record is accurate. "Personnel Activity Reports" as specified in OMB Circular A-21 and its successors shall be acceptable as documentation of time spent on this project by "professional" and "professorial" staff. Volunteer records shall show the actual hours worked, the specific duties performed, and the basis for determining the rate of contribution. These records shall be included with the audit material. The Participant shall keep such records, maps, and reports as the OHP and Interior prescribe, including records that fully disclose the dispositions by the Participant of federal grant funds, total cost of the project, the amount and nature of that portion of the cost of the project supplied by other sources, and such other records as will facilitate an effective audit.
- C. **Financial Records.** During its regular office hours, the Participant shall make financial records available to the OHP, Interior, the Comptroller General of the United States, or any of their duly authorized representatives for the purpose of inspection, copying, and audit. The Participant shall provide copies of such records to the OHP if requested to do so by the OHP and shall retain such records for three years following project termination. Project records shall be retained by Participant for three years following project completion or longer until notification that the Federal audit covering the project has been closed.
- D. **Single Audit Act.** If a local government, the Participant shall comply with the Single Audit Act of 1984, and furnish the OHP with a copy of the audit report within thirty (30) days after issuance. If a university or nonprofit organization, the Participant shall comply with the audit requirements of OMB Circular A-133. The Participant shall reimburse the OHP for costs disallowed during an audit.
- E. **Publications.** In regard to all copyrightable material, which are produced as a deliverable under this project, including but not limited to books reports, plans, photographs, drawings, films, recordings, videotapes, and computer programs, which are produced as part or result of this project, the Participant must grant the United States of America a royalty-free non-exclusive and irrevocable license to publish, reproduce and use, and dispose of in any manner and for any purpose without limitation, and to authorize or ratify publication, reproduction or use of others, of all copyrightable material first produced or composed under this Agreement by the Participant, its employees or any individual or concern specifically employed or assigned to originate and prepare such material.
1. Any publications resulting from the project shall contain the following statements: "The activity which is the subject of this (type of publication) has been financed in part with Federal funds from the National Park Service, Department of the Interior, through the

California Office of Historic Preservation. However, the contents and opinions do not necessarily reflect the views or policies of the Department of the Interior or the California Office of Historic Preservation, nor does mention of trade names or commercial products constitute endorsement or recommendation by the Department of the Interior or the California Office of Historic Preservation. Regulations of the U.S. Department of the Interior strictly prohibit unlawful discrimination in departmental Federally assisted programs on the basis of race, color, sex, age, disability, or national origin. Any person who believes he or she has been discriminated against in any program, activity, or facility operated by a recipient of Federal assistance should write to: Director, Equal Opportunity Program, U.S. Department of the Interior, National Park Service, P.O. Box 37127, Washington, D.C. 20013-7127

2. The Participant shall provide three copies of all publications to the OHP no later than at the end of the project period.

VI. OTHER REQUIREMENTS

A. **OMB Circulars and Other Regulations.** The following Federal Regulations are incorporated by reference into this Agreement (full text can be found at <http://www.ecfr.gov>):

1. **Administrative Requirements:**
 - a. 2 CFR 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards"
2. **Determination of Allowable Costs:**
 - a. 2 CFR 200, Subpart E, "Cost Principles"
3. **Audit Requirements:**
 - a. 2 CFR 200, Subpart F, "Audit Requirements"
4. **Code of Federal Regulations/Regulatory Requirements:**
 - a. 2 CFR 182 and 1401, "Government-wide Requirements for a Drug-Free Workplace"
 - b. 2 CFR 180 and 1400, "Non-Procurement Debarment and Suspension" (previously located at 43 CFR, 42, "Government wide Debarment and Suspension (NonProcurement)")
 - c. 43 CFR 18, "New Restrictions on Lobbying"
 - d. 2 CFR 175, "Trafficking Victims Protections Act of 2000"
 - e. FAR Clause 52.203-12, Paragraphs (a) and (b), "Limitation on Payments to Influence Certain Federal Transactions"
 - f. 2 CFR 25, "System for Award Management (www.SAM.gov) and Data Universal Numbering System (DUNS)"
 - g. 2 CFR 170, "Reporting Subawards and Executive Compensation" or FFATA (Refer to XII.B.11)

B. **Non-Discrimination.** All activities pursuant to this Agreement shall be in compliance with the requirements of Executive Order 11246, as amended; Title VI of the Civil Rights Act of 1964, as amended, (78 Stat. 252; 42 U.S.C. §2000d et seq.); Title V. Section 504 of the Rehabilitation Act of 1973, as amended, (87 Stat. 394; 29 U.S.C. §794); the Age Discrimination Act of 1975 (89 Stat. 728; 42 U.S.C. §6101 et seq.); and with all other federal laws and regulations prohibiting discrimination on grounds of race, color, sexual orientation, national origin, disabilities religion, age, or sex.

- C. **Lobbying Prohibition.** 18 U.S.C. §1913, Lobbying with Appropriated Moneys, as amended by Public Law 107-273, Nov. 2, 2002. No part of the money appropriated by any enactment of Congress shall, in the absence of express authorization by Congress, be used directly or indirectly to pay for any personal service, advertisement, telegram, telephone, letter printed or written matter, or other device, intended or designed to influence in any manner a Member of Congress, a jurisdiction, or an official of any government, to favor, adopt, or oppose, by vote or otherwise, any legislation, law, ratification, policy, or appropriation, whether before or after the introduction of any bill, measure, or resolution proposing such legislation, law, ratification, policy, or appropriation; but this shall not prevent officers or employees of the United States or of its departments or agencies from communicating to any such Members or official, at his request, or to Congress or such official, through the proper official channels, requests for legislation, law, ratification, policy, or appropriations which they deem necessary for the efficient conduct of the public business, or from making any communication whose prohibition by this section might, in the opinion of the Attorney General, violate the Constitution or interfere with the conduct of foreign policy, counter-intelligence, intelligence, or national security activities. Violations of this section shall constitute violation of section 1352(a) title 31. In addition to the above, the related restrictions on the use of appropriated funds found in Div. F, §402 of the Omnibus Appropriations Act of 2008(P.L. 110-161) also apply.
- D. **Anti-Deficiency Act.** Pursuant to 31 U.S.C. §1341 nothing contained in this Agreement shall be construed as binding the NPS to expend in any one fiscal year any sum in excess of appropriations made by Congress, for the purposes of this Agreement for that fiscal year, or other obligation for the further expenditure of money in excess of such appropriations.
- E. **Minority Business Enterprise Development.** Pursuant to Executive Order 12432 it is national policy to award a fair share of contracts to small and minority firms. NPS is strongly committed to the objectives of this policy and encourages all recipients of its Grant Agreements to take affirmative steps to ensure such fairness by ensuring procurement procedures are carried out in accordance with the Executive Order.
- F. **Assignment.** No part of this Agreement shall be assigned to any other party without prior written approval of the OHP and the Assignee.
- G. **Member of Congress.** Pursuant of 41 U.S.C. §22. No Member of Congress shall be admitted to any share or part of any contract or agreement made, entered into, or adopted by or on behalf of the United States, or to any benefit to arise thereupon.
- H. **Agency.** The Participant is not an agent or representative of the United States, the Department of the Interior, NPS, or the State, nor will the Participant represent its self as such to third parties. NPS and State employees are not agents of the Participant and will not act on behalf of the Participant.
- I. **Non-Exclusive Agreement.** This Agreement in no way restricts the Participant or OHP from entering into similar agreements or participating in similar activities or arrangements, with other public or private agencies, organizations, or individuals.

- J. **No Employment Relationship.** This Agreement is not intended to and shall not be construed to create an employment relationship between NPS or OHP and Participant or its representatives. No representative of Participant shall perform any function or make any decision properly reserved by law or policy to the Federal government.
- K. **No Third-Party Right.** This Agreement creates enforceable obligations between NPS, OHP and Participant. Except as expressly provided herein, it is not intended nor shall it be construed to create any right of enforcement by or any duties or obligation in favor of persons or entities not a party to this Agreement.
- L. **Foreign Travel.** The Participant shall comply with the provisions of the Fly American Act (49 U.S.C. 40118). The implementing regulations of the Fly American Act are found at 41 CFR 301-10.131 through 301-10.143.
- M. **Public Information and Endorsements**
1. Participant shall not publicize or otherwise circulate promotional material (such as advertisement, sales brochures, press releases, speeches, still and motion pictures, articles, manuscripts or other publications) which states or implies governmental, Departmental, bureau, or government employee endorsement of a business, product, service, or position which the Participant represents. No release of information relating to this award may state or imply that the Government approves of the Participant's work product to be superior to other or services.
 2. Participant must provide a digital copy of any public information releases concerning this award that refer to the Department of the Interior, National Park Service, OHP or Historic Preservation Fund. Specific text, layout photographs, etc. of the proposed release may be submitted for prior approval.
 3. As stipulated in 36 CFR 800, public views and comments regarding all Federally-funded undertaking on historic properties must be sought and considered by the authorizing Federal agency. Therefore, the grantee is required to post a press release regarding the undertaking under this grant in on or more major newspapers or news sources that cover the area affected by the project within 30 days of receiving the signed grant agreement. A copy of the posted release must be submitted to NPS within 30 days of the posting.
 4. The grantee must transmit notice of any public ceremonies planned to publicize the project or its results in a timely enough manner so that NPS, Department of the Interior, Congressional or other Federal officials can attend if desired.
- N. **Publications of Results of Studies.** No party will unilaterally publish a joint publication without consulting the other party. This restriction does not apply to popular publications of previously published technical matter. Publications pursuant to this Agreement may be produced independently or in collaboration with other; however, in all cases proper credit will be given to the efforts of those parties contribution to the publication. In the event no agreement is reached concerning the manner of publication or interpretation of results, either party may publish data after due notice and submission of the proposed manuscripts to the other. In such instances, the party publishing the data will give due credit to the cooperation but assume full responsibility for any statements on which there is a difference of opinion.

O. **Audit Requirements**

1. Non-Federal entities that expend \$750,000 or more during a year in Federal awards shall have a single or program-specific audit conducted for that year in accordance with the Single Audit Amendments of 1996 (31 U.S.C. 7501-7507) and 2 CFR 200, Subpart F.
2. Non-federal entities that expend less than \$750,000 for a fiscal year in Federal awards are exempt from Federal audit requirements for that year, but records must be available for review or audit by appropriate officials of the Federal agency, pass-through entity, and General Accounting Office (GAO).
3. Audits shall be made by an independent auditor in accordance with generally accepted government auditing standards covering financial audits. Additional audit requirements applicable to this agreement are found at 2 CFR 200, Subpart F, as applicable. Additional information on single audits is available from the Federal Audit Clearinghouse at <https://harvester.census.gov/facweb/Default.aspx>.

P. Procurement Procedures. It is a national policy to place a fair share of purchases with minority business firms. The Department of the Interior is strongly committed to the objectives of this policy and encourages all recipients of its grants and cooperative agreements to take affirmative steps to ensure such fairness. Positive efforts shall be made by recipients to utilize small businesses, minority-owned firms, and women's business enterprises, whenever possible. Recipients of Federal awards shall take all of the following steps to further this goal:

1. Ensure that small businesses, minority-owned firms, and women's business enterprises are used to the fullest extent practicable.
2. Make information on forthcoming opportunities available and arrange time frames for purchases and contracts to encourage and facilitate participation by small businesses, minority-owned firms, and women's business enterprises.
3. Consider in the contract process whether firms competing for larger contracts intend to subcontract with small businesses, minority-owned firms, and women's business enterprises.
4. Encourage contracting with consortiums of small businesses, minority-owned firms, and women's business enterprises when a contract is too large for one of these firms to handle individually.
5. Use the services and assistance, as appropriate, of such organizations as the Small Business Development Agency in the solicitation and utilization of small business, minority-owned firms and women's business enterprises.

Q. Prohibition on Text Messaging and Using Electronic Equipment Supplied by the Government while Driving. Executive Order 13513, Federal Leadership On Reducing Text Messaging While Driving, was signed by President Barack Obama on October 1, 2009. This Executive Order introduces a Federal Government-wide prohibition on the use of the text messaging while driving on official business or while using Government-supplied equipment. Additional guidance enforcing the ban will be issued at a later date. In the meantime, please adopt and enforce policies that immediately ban text messaging while driving company-owned or -rented vehicles, government-owned, or leased vehicles, or while driving privately owned vehicles when on official government business or when performing any work for or on behalf of the government.

R. Seat Belt Provision. The Participant is encouraged to adopt and enforce on-the-job seat belt use policies and programs for their employees when operating company-owned, rented or personally owned vehicles. These measures include, but are not limited to,

conducting education, awareness, and other appropriate programs for their employees about the importance of wearing seat belts and the consequences of not wearing them.

S. Participant Employee Whistleblower Rights and Requirement to Inform Employees of Whistle-blower Rights.

1. This award and employees working on this financial assistance agreement will be subject to the whistleblower rights and remedies in the pilot program on Award Recipient employee whistle-blower protections established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act of Fiscal Year 2013 (P.L. 112-239).
2. The Participant shall inform its employees in writing, in the predominant language of the workplace, of employee whistleblower rights and protections under 41 U.S.C. 4712.
3. The Participant shall insert the substance of this clause, including this subsection (3), in all subawards or subcontracts over the simplified acquisition threshold, 42 CFR §52.203-17 (as referenced 42 CFR §3.908-9).

T. Reporting Executive Compensation

1. Reporting Total Compensation of Participant Executives.
 - a. Applicability and what to report. You must report total compensation of each of your five most highly compensated executives for the preceding completed fiscal year, if:
 - i. The total Federal funding authorized to date under this award is \$25,000.00 or more; and,
 - ii. In the preceding fiscal year, you received:
 - 1) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subawards) and/or Federal financial assistance subject the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - 2) Those revenues are greater than \$25,000,000 annually; and
 - iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a) 78o(d) or section 6104 of the Internal Revenue Code of 1986. (to determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)
 - b. Where and when to report. You must report executive total compensation described in Section 1.a of this award condition:
 - i. As part of Participant registration profile at <http://www.sam.gov>
 - ii. By the end of the month following the month in which this award is made , and annually thereafter.
2. Reporting of Total Compensation of Subrecipient Executives.
 - a. Applicability and what to report. Unless you are exempt as provided in Section 4 of this award condition, for each first-tier subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if:
 - i. In the subrecipient's preceding fiscal year, the subrecipient received:

- 1) 80% or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and
 - 2) \$25,000,000.00 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and
- ii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a) 78o(d) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <http://www.sec.gov/answers/execomp.htm>.)
- b. Where and when to report. You must report subrecipient executive total compensation described in Section 3.a of this award condition:
 - i. To the recipient.
 - ii. By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (i.e. between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.
3. Exemptions.
 - a. If, in the previous tax year, you had gross income, from all sources, under \$300,000.00, you are exempt from the requirements to report:
 - i. Subawards; and
 - ii. The total compensation of the five most highly compensated executives of any subrecipient.
 4. Definitions. For purposes of this award condition:
 - a. Entity means all of the following, as defined in 2 CFR part 25:
 - i. A Governmental organization, which is a State, local government, or Indian tribe;
 - ii. A foreign public entity;
 - iii. A domestic or foreign nonprofit organization;
 - iv. A domestic or foreign for-profit organization.
 - v. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.
 - b. Executive means officers, managing partners, or any other employees in management positions.
 - c. Subaward.
 - i. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.
 - ii. The term includes your procurement of property and services needed to carry out the project or program. The term does not include procurement of incidental property and services needed to carry out the award project or program.
 - iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.
 - d. Subrecipient means an entity that:
 - i. Receives a subaward from you (the recipient) under this award; and

- ii. Is accountable to you for the use of the Federal funds provided by the subaward.
- e. Total compensation means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229-402(d)(2):
 - i. Salary and bonus.
 - ii. Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.
 - iii. Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.
 - iv. Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.
 - v. Above-market earnings on deferred compensation which is not tax-qualified.
 - vi. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or properties) for the executive exceeds \$10,000.00.

U. Conflict of Interest

1. The Participant must establish safeguards to prohibit its employees from using their positions for purposes that constitute or present the appearance of a personal or organizational conflict of interest. The Participant is responsible for notifying the Awarding Officer in writing of any actual or potential conflicts of interest that may arise during the life of this award. Conflicts of interest include any relationship or matter which might place the Participant or its employees in a position of conflict, real or apparent, between their responsibilities under the agreement and any other outside interests. Conflicts of interest may also include, but are not limited to, direct or indirect financial interests, close personal relationships, positions of trust in outside organizations, or decision-making affecting the award that would cause a reasonable person with knowledge of the relevant facts to question the impartiality of the Participant and/or Participant's employees and Sub-recipients in the matter.
2. The Awarding Officer and the servicing Ethics Counselor will determine if a conflict of interest exists. If a conflict of interest exists, the Awarding Officer will determine whether a mitigation plan is feasible. Mitigation plans must be approved by the Awarding Officer in writing.
3. Failure to resolve conflicts of interest in a manner that satisfies the government may be cause for termination of the award. Failure to make required disclosures may result in any of the remedies described in 2 CFR §200.338, Remedies/or Noncompliance, including suspension or debarment (see also 2 CFR part 180).

V. Minimum Wages Under Executive Order 13658 (January 2015)

1. Definitions. As used in this clause:
 - a. "United States" means the 50 states and the District of Columbia.
 - b. "Worker"

- i. Means any person engaged in performing work on, or in connection with, an agreement covered by Executive Order 13568; and
 - ii. Whose wage under such agreements are governed by the Fair Labor Standards Act (29 U.S.C. chapter 8), the Service Contract Labor Standards statute (41 U.S.C. chapter 67), or the Wage Rate requirements (Construction) statute (40 U.S.C. chapter 31, subchapter IV);
 - iii. Other than individuals employed in a bona fide executive, administrative, or professional capacity, as those terms are defined in 29 CFR 541.
 - iv. Regardless of the contractual relationship alleged to exist between the individual and the employer.
 - v. Includes workers performing on, or in connection with, the agreement whose wages are calculated to special certificates issued under 29 U.S.C. §214(c).
 - vi. Also includes any person working on, or in connection with, the agreement and individually registered in a bona fide apprenticeship or training program registered with the Department of Labor's Employment and Training Administration, Office of Apprenticeship, or with a State Apprenticeship Agency recognized by the Office of Apprenticeship.
2. Executive Order Minimum Wage rate.
- a. The Participant shall pay to workers, while performing in the United States, and performing on, or in connection with, this agreement, a minimum hourly wage rate of \$10.60 per hour beginning January 1, 2019.
 - b. The Participant shall adjust the minimum wage paid, if necessary, beginning January 1, 2019, and annually thereafter, to meet the Secretary of Labor's annual E.O. minimum wage. The Administrator of the Department of Labor's Wage and Hour Division (the Administrator) will publish annual determination in the Federal Register no later than 90 days before the effective date of the new E.O. minimum wage rate. The Administrator will also publish the applicable E.O. minimum wage on www.wdol.gov (or any successor Web site) and on all wage determinations issued under the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute. The applicable published E.O. minimum wage is incorporated by reference into this agreement.
 - c. The Participant may request a price adjustment only after the effective date of the new annual E.O. minimum wage determination. Prices will be adjusted only if labor costs increase as a result of an increase in the annual E.O. minimum wage, and for associated labor costs and relevant subaward costs. Associated labor costs shall include increases or decreases that result from changes in social security and unemployment taxes and workers' compensation insurance, but will not otherwise include any amount for general and administrative costs, overhead, or profit.
 - i. Subrecipients may be entitled to adjustments due to the new minimum wage, pursuant to paragraph (b)(2). Participants shall consider any Subrecipient requests for such price adjustment.
 - ii. The Awarding Officer will not adjust the agreement price under the clause for any costs other than those identified in paragraph (b)(3)(i) of this clause, and will not provide duplicate price adjustments with any price adjustment under clauses implements the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute.
 - d. The Participant warrants that the prices in this agreement do not include allowance for any contingency to cover increased costs for which adjustment is provided under this clause.

- e. The Participant shall pay, unconditionally to each worker, all wages due free and clear without subsequent rebate or kickback. The Participant may make deductions that reduce a worker's wages below the E.O. minimum wage rate only if done in accordance with 29 CFR §10.23, Deductions.
 - f. The Participant shall not discharge any part of its minimum wage obligation under this clause by furnishing fringe benefits or, with respect to workers whose wages are governed by the Service Contract Labor Standards statute, the cash equivalent thereof.
 - g. Nothing in this clause shall excuse the Participant from compliance with any applicable Federal or State prevailing wage law or any applicable law or municipal ordinance establishing a minimum wage higher than the E.O. minimum wage. However, wage increases under such other laws or municipal ordinances are not subject to price adjustment under this subpart.
 - h. The Participant shall pay the E.O. minimum wage rate whenever it is higher than any applicable collective bargaining agreement(s) wage rate.
 - i. The Participant shall follow the policies and procedures in 29 CFR 10.24(b) and 10.28 for treatment of workers engaged in an occupation in which they customarily and regularly receive more than \$30.00 a month in tips.
3. This clause applies to workers as defined in Section 1.b of this agreement condition. As provided in that definition:
- a. Workers are covered regardless of the contractual relationship alleged to exist between the Participant or Subrecipient and the worker;
 - b. Workers with disabilities whose wages are calculated pursuant to special certificates issued under 29 U.S.C. 214(c) are covered; and
 - c. Workers who are registered in a bona fide apprenticeship program or training program registered with the Department of Labor's Employment and Training Administration, Office of Apprenticeship, or with a State Apprenticeship Agency recognized by the Office of Apprenticeship, are covered.
4. This clause does not apply to:
- a. Fair Labor Standards Act (FLSA) - covered individuals performing in connection with contracts covered by the E.O., *i.e.* those individuals who perform duties necessary to the performance of the agreement, but who are not directly engaged in performing the specific work called for by the agreement, and who spend less than 20% of their hours worked in a particular workweek performing in connection with such agreements;
 - b. Individuals exempted from the minimum wage requirements of the FLSA under 29 U.S.C. §213 (a) and (b), unless otherwise covered by the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute. These individuals include but are not limited to:
 - i. Learners, apprentices, or messengers whose wages are calculated pursuant to special certificates issued under 29 U.S.C. §214(a).
 - ii. Students whose wages are calculated pursuant to special certificates issued under 29 U.S.C. §214(b).
 - iii. Those employed in a bona fide executive, administrative, or professional capacity (29 U.S.C. §213(a)(1) and 29 CFR 541).
5. Notice. The Participant shall notify all workers performing work on, or in connection with, this agreement of the applicable E.O. minimum wage rate under this clause. With respect to workers covered by the Service Contract Labor Standards statute or the Wage Rate Requirements (Construction) statute, the Contractor may meet this requirement by posting, in a prominent and accessible place at the worksite, the

applicable wage determination under those statutes. With respect to workers whose wages are governed by the FLSA, the Participant shall post notice, utilizing the poster provided by the Administrator, which can be obtained at www.dol.gov/whl/govcontracts, in a prominent and accessible place at the worksite. Participants that customarily post notices to workers electronically may post the notice electronically provided the electronic posting is displayed prominently on any Web site that is maintained by the Participant, whether external or internal, and customarily use for notices to workers about terms and conditions of employment.

6. Payroll Records
 - a. The Participant shall make and maintain records, for three years after completion of the work, containing the following information for each worker:
 - i. Name, address, and social security number,
 - ii. The worker's occupation(s) and classification(s);
 - iii. The rate or rates of wages paid;
 - iv. The number of daily and weekly hours worked by each worker;
 - v. Any deductions made; and
 - vi. Total wages paid.
 - b. The Participant shall make records pursuant to paragraph (e)(1) of this clause available for inspection and transcription by authorized representatives of the Administrator. The Participant shall also make such records available upon request of the Contracting Officer.
 - c. The Participant shall make a copy of the agreement available, as applicable, for inspection or transcription by authorized representatives of the Administrator.
 - d. Failure to comply with this paragraph (e) shall be a violation of 29 CFR §10.26 and this agreement. Upon direction of the Administrator or upon the Awarding Officer's own action, payment shall be withheld until such time as the noncompliance is corrected.
 - e. Nothing in this clause limits or otherwise modifies the Participant's payroll and recordkeeping obligations, if any, under the Service Contract Labor Standards statute, the Wage Rate Requirements (Construction) statute, the Fair Labor Standards Act, or any other applicable law.
7. Access. The Participant shall permit authorized representatives of the Administrator to conduct investigations, including interviewing workers at the worksite during normal working hours.
8. Withholding. The Awarding Officer, upon his or her own action or upon written request of the Administrator, will withhold funds or cause funds to be withheld from the Participant under this or any other Federal agreement with the same Participant, sufficient to pay workers the full amount of wages required by this clause.
9. Disputes. Department of Labor has set forth in 29 CFR §10.51, Disputes concerning the Participant's compliance with Department of Labor regulations at 29 CFR §10. Such disputes shall be resolved in accordance with those. This includes disputes between the Participant (or any of its Subrecipients) and the contracting agency, the Department of Labor, or the workers or their representatives.
10. Antiretaliation. The Participant shall not discharge or in any other manner discriminate against any worker because such worker has filed any complaint or instituted or caused to be instituted any proceeding under or related to compliance with the E.O. or this clause, or has testified or is about to testify in any such proceeding.
11. Subcontractor compliance. The Participant is responsible for Subrecipient compliance with the requirements of this clause and may be held liable for unpaid wages due Subrecipient workers.

W. **Patents and Inventions.** Participants of agreements which support experimental, developmental, or research work shall be subject to applicable regulations governing patents and inventions, including the government-wide regulations issued by the Department of Commerce at 37 CFR 401, Rights to Inventions Made by Non-profit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements. These regulations do not apply to any agreement made primarily for educational purposes.



City Council Agenda Report

ITEM NO. 16

DATE: December 16, 2020

FROM: Sean Joyce, Interim City Manager

PREPARED BY: Shahid Abbas, Director of Public Works
Garrett Crawford, Acting Deputy Director of Public Works

SUBJECT: **Adoption of a Resolution Authorizing Submittal of an Application to CalRecycle for the Tire Rubberized Grant Program (TRP)**

Recommendation

It is recommended that the City Council:

1. Adopt a resolution authorizing the submittal of a grant application in the amount of \$200,000 to participate in the State of California Department of Resources Recycling and Recovery's (CalRecycle) Tire Rubberized Grant Program (TRP); and
2. Authorize the City Manager to execute documents required to obtain the grant.

Background

CalRecycle is seeking grant applications for its Rubberized Pavement Grant Program. The grant's purpose is to encourage the use of Rubberized Asphalt Concrete (RAC) made with crumb rubber derived from California-generated waste tires for roadway maintenance and rehabilitation. The maximum grant amount is \$250,000 for a minimum roadway area of 40,000 square yards. The significant advantages of RAC are:

- Less expensive, almost half of the cost of traditional hot asphalt mix.
- Durability is almost twice the life of the traditional hot asphalt mix.
- Reduced road noise by up to 80 percent.
- Better ride quality.
- Reduced heat island effect.
- Environmentally friendly.

The City is required to adopt a resolution of support identifying the possible candidate road maintenance projects to apply for this grant.

Discussion/Analysis

If awarded, the grant funds will be used to apply Rubberized Chip Seal pavement preservation treatment to at least 40,000 square yards of residential streets throughout South Pasadena. The following list of the candidate residential streets are chosen from the City's Pavement Management system with a Pavement Condition Index of 65 and less:

CalRecycle Tire Rubberized Grant Program (TRP)

November 12, 2020

Page 2 of 2

No.	Street Name	From	To	PCI
1	Camden Parkway	Oak Street	Camden Avenue	17
2	Hardison Lane	Garfield Avenue	Dead End	37
3	Raymond Hill Road	Mockingbird Lane	Mockingbird Lane	38
4	Orange Grove Terrace	Orange Grove Ave	Cul-De Sac	41
5	Stoney Drive	San Pasqual Ave.	Lohman Lane	42
6	Court Avenue	Huntington Drive	Camden Parkway	46
7	Camden Avenue	Huntington Drive	Camden Parkway	48
8	Fletcher Avenue	Huntington Drive	Oak Street	49
9	Raymond Hill Road	Fair Oaks Ave.	Mockingbird Lane	49
10	La France Avenue	Maple Street	Huntington Drive	50
11	Stratford Avenue	Monterey Road	Oxley Street	51
12	Stratford Avenue	Mission Street	Clark Place	55
13	Magnolia Street	Meridian Ave.	Cul-De-Sac	55
14	Magnolia Street	Orange Grove Avenue	Meridian Avenue	57
15	Magnolia Street	Fremont Street	Mound Avenue	57
16	Grace Drive	Columbia Street	Caul-De-Sac	57
17	Prospect Drive	Orange Grove Ave	Prospect Circle	58
18	Stratford Avenue	Oak Street	Monterey Road	59
19	Prospect Circle	Buena Vista Street	Meridian Avenue	60
20	Grand Avenue	Hermosa Street	North City Limits	62
21	La France Avenue	South City Limits	Maple Street	63

Legal Review

The City Attorney has reviewed this item.

Fiscal Impact

The Cal Recycle Grants program does not require a match. Grant funds can be used for City staff time required for processing and administering the grant. The award amount for Fiscal Year 2019-20 is \$250,000.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City's website and/or notice in the *South Pasadena Review* and/or the *Pasadena Star-News*.

Attachment: Resolution

ATTACHMENT 1
Cal Recycle Resolution

**RESOLUTION OF THE CITY OF SOUTH PASADENA
AUTHORIZING SUBMITTAL OF APPLICATION(S) FOR ALL CALRECYCLE
GRANTS FOR WHICH CITY OF SOUTH PASADENA IS ELIGIBLE**

WHEREAS, Public Resources Code sections 48000 et seq. authorize the Department of Resources Recycling and Recovery (CalRecycle) to administer various grant programs (grants) in furtherance of the State of California's (state) efforts to reduce, recycle and reuse solid waste generated in the state thereby preserving landfill capacity and protecting public health and safety and the environment; and

WHEREAS, in furtherance of this authority CalRecycle is required to establish procedures governing the application, awarding, and management of the grants; and

WHEREAS, CalRecycle grant application procedures require, among other things, an applicant's governing body to declare by resolution certain authorizations related to the administration of CalRecycle grants.

NOW, THEREFORE, BE IT RESOLVED that the City of South Pasadena authorizes the submittal of application(s) to CalRecycle for the Tire Rubberized Grant Program (TRP) for which the City of South Pasadena is eligible; and

BE IT FURTHER RESOLVED that the City Manager, or his/her designee is hereby authorized and empowered to execute in the name of the City of South Pasadena all grant documents, including but not limited to, applications, agreements, amendments and requests for payment, necessary to secure grant funds and implement the approved grant project; and

BE IT FURTHER RESOLVED that these authorizations are effective for five (5) years from the date of adoption of this resolution

PASSED, APPROVED AND ADOPTED ON this 16th day of December 2020.

Mayor

ATTEST:

APPROVED AS TO FORM:

City Clerk
(seal)

Teresa L. Highsmith, City Attorney

I HEREBY CERTIFY the foregoing resolution was duly adopted by the City Council of the City of South Pasadena, California, at a regular meeting held on the 16th day of December 2020, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

City Clerk
(seal)



City Council Agenda Report

ITEM NO. 17

DATE: December 16, 2020

FROM: Sean Joyce, Acting City Manager

PREPARED BY: Shahid Abbas, Public Works Director

SUBJECT: **Approve the Revised Scope of the Project to Evaluate Different Alternatives for the State Route 110 and Fair Oaks Avenue Interchange Modification Project Approved by the Metro Board as a Measure R State Route 710 Mobility Improvement Project, Direct Staff to Proceed with the Traffic Study for the Revised Scope and Authorize the Allocation of \$200,000 in Prop C Funds for the Traffic Study.**

Recommendation Action

It is recommended that the City Council:

1. Approve the revised scope of the project to evaluate alternatives for the State Route 110 (SR-110) and Fair Oaks Interchange Modification Project approved by the Metro Board as a Measure R State Route 710 (SR-710) Mobility Improvement Project (MIP); and
2. Direct staff to conduct a traffic study associated with the revised scope.
3. Authorize the allocation of \$200,000 of Prop C funds for the traffic study.

Commission Review and Recommendation

The revised scope was reviewed and approved by the Mobility and Transportation Infrastructure Commission (MTIC) on September 15, 2020, with the condition that the Early Action Projects List, developed by the former Public Works and Freeway and Transportation Commissions, and approved by City Council in 2017, be evaluated as part of the study. The MTIC has also formed a sub-committee to work with staff to track the progress and facilitate the deployment of the project.

The MTIC unanimously approved the revised scope of work and recommended the City Council to approve the revised scope of work for the project.

Background

On May 25, 2017, the Metro Board unanimously adopted the Transportation System Management/Transportation Demand Management (TSM/TDM) Alternative as the Locally Preferred Alternative for the SR-710 North Extension Project, allocating \$1 Billion in remaining Measure R. On November 21, 2017, the City Council approved a letter to the Metro Board

recommending SR-110 and Fair Oaks Avenue Interchange modifications as a Measure R SR-710 MIP for the City of South Pasadena.

Discussion/Analysis

The Metro Board approved \$70 million of funding for the City over two cycles for the SR-110 and Fair Oaks Avenue Interchange Modification (“loop ramp” previously known as “hook ramp”) Project as a Measure R SR-710 MIP: In December 2018, Cycle 1 included \$38 Million and in September 2019 Cycle 2 included another \$32 million of project funding. As it now stands, the original loop ramp funding was only awarded for the modifications of SR-110 and Fair Oaks Interchange. The “loop ramp” interchange modification project as originally proposed in 2004 could not be implemented due to right of way constraints and lack of engineering data to support the project. Modification to the SR-110 and Fair Oaks Interchange and construction of a loop ramp without the proper supporting engineering studies may lead to induced traffic demand for the Fair Oaks Corridor and can potentially create additional congestion/bottlenecks at this site and at other locations along the Fair Oaks Corridor. Such conditions can potentially push additional traffic to other streets in the City, in particular the adjacent corridors, such as Fremont Avenue.

Staff from three agencies (the City, Caltrans, and Metro) worked collaboratively to propose a revised expanded scope of the project to include performing a traffic study to select a more viable and practical alternative to include consideration of the loop ramp to reduce congestion along the Fair Oaks Avenue Corridor while reducing the risk of shifting congestion to different locations. Staff from the three agencies agreed that the expanded project scope should include a traffic study of any combination of the following alternates:

1. On-ramp configurations from northbound Fair Oaks Avenue to southbound SR-110, i.e., “loop ramp.”
2. Off-ramp configurations from northbound SR-110 to Fair Oaks Avenue, including adding an off-ramp lane.
3. Identification of bottlenecks along Fair Oaks Avenue Corridor and suggested improvements.
4. Traffic signal improvements throughout the corridor with the deployment of advanced adaptive traffic management systems and signal coordination and synchronization.
5. Other possible viable alternatives to improve the interchange and reduce congestion along Fair Oaks Avenue to keep traffic off adjacent corridors.

The study will include advanced modeling and micro simulation techniques to assess the impacts and analyze the proposed alternatives. To select the best alternative, the study will consider measures of effectiveness such as travel times, delay times, congestion levels, queue lengths, volume and capacity ratios, and impacts to bike and pedestrian passage.

Recently, Metro has received mixed signals from South Pasadena representatives and advised City staff to keep the project within the original scope of work approved by the Metro board, that

is, construction of SR-110 and Fair Oaks Interchange on-ramp (loop ramp) and expansion of off-ramp. Staff requests the City Council approve the revised expanded scope of work for the project so staff can work with Metro staff to obtain formal approval of the proposed revised scope of work. In the event the revised scope is not approved, a traffic study will still be required to assess the traffic demand at the SR-110 and Fair Oaks Interchange and the possibility of a different interchange configuration(s).

Legal Review

The City Attorney has reviewed this item.

Fiscal Impact

The Metro Board approved \$70M of Measure R MIP funding for the City of South Pasadena SR-110 and Fair Oaks Avenue Interchange Modification (loop ramp) project. To execute an agreement with Metro, the City needs to have a detailed project scope of work. The proposed traffic study will evaluate the best alternative(s) to develop the project scope for the proposed agreement. Once the agreement is finalized, the City will be eligible for reimbursement of the traffic study as the results of the study will be utilized for the project environmental and design phases. It is therefore proposed to fund the initial traffic study from the Prop C and Measure R local returns.

The approximate cost of the proposed traffic study is \$800,000. Sufficient funds are available in the Measure R (\$700,000) and Prop C (\$457,000) accounts to fund this study. \$600,000 has already been reserved in Measure R funds for this study, and an additional \$200,000 is reserved in Prop C funds. It is recommended that the City Council approve the allocation of \$200,000 of Prop C funds for the proposed traffic study. Staff will not know the full cost of the study until we receive proposals.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda, and reports on the City's website and/or notice in the *South Pasadena Review* and/or the *Pasadena Star-News*.



City Council Agenda Report

ITEM NO. 18

DATE: December 16, 2020

FROM: Sean Joyce, Interim City Manager

PREPARED BY: Joanna Hankamer, Director of Planning and Community Development
Lucy Demirjian, Assistant to the City Manager

SUBJECT: **Continued Public Hearing for Discussion of Additional Tenant Protections; Adoption of Ordinance Extending the 45-day Moratorium on Evictions for Substantial Remodels without building permits for an Additional 10 Months and 15 Days**

Recommendation

It is recommended that the City Council:

1. Continue the Public Hearing (opened on November 18) and provide direction to staff on additional tenant protections; and
2. Adopt an Ordinance to extend the 45-day moratorium on evictions for substantial remodels without building permits for an additional 10 months and 15 days, or until City Council repeals or replaces the Ordinance.

Commission Review and Recommendation

On October 13, 2020, the Planning Commission received 6 written and 14 verbal public comments requesting the adoption of an urgency ordinance to provide tenant protections from evictions. The Planning Commission found the item to be a priority and requested that staff bring this item back to the Commission for further discussion after additional outreach with both tenant and landlord groups. The Planning Commission held special meetings on November 17 and 19, 2020 for this purpose. The item will continue to be discussed at a special Planning Commission meeting on December 15, 2020.

Discussion/Analysis

On November 4, 2020, the City Council approved an urgency ordinance establishing a 45-day moratorium on evictions due to substantial remodels without building permits as an interim measure and directed staff to further study the issue. On November 18, 2020, the City Council conducted a public hearing to receive initial findings from staff and continued the hearing to December 16, 2020, to allow staff to conduct further stakeholder outreach. Staff recommends extending the current term of the moratorium on substantial remodel evictions without building permits until November 3, 2021, to allow staff to further study the issues, conduct additional stakeholder outreach, and allow for Planning Commission review. The City Council can repeal

and/or replace the moratorium at any time before this date. The City Council may also provide direction to staff on the development of an ordinance to replace the moratorium.

Substantial Remodels

On January 1, 2020, the California Tenant Protection Act of 2019 (AB 1482) established an annual rent increase cap of 5% plus inflation or 10%, whichever is lower, and prohibits evictions without just cause. However, AB 1482 allows owners to issue no-fault termination of tenancies for the following reasons:

- Intent to occupy the residential real property by the owner;
- Withdrawal of the residential real property from the rental market;
- An order issued by a government agency; or
- Intent to demolish or to substantially remodel the residential real property.

The limited definition of “substantial remodel” as outlined by state law (CA Civil Code § 1946.2); includes:

“the replacement or substantial modification of any structural, electrical, plumbing, or mechanical system that requires a permit from a governmental agency, or the abatement of hazardous materials, including lead-based paint, mold, or asbestos, in accordance with applicable federal, state, and local laws, that cannot be reasonably accomplished in a safe manner with the tenant in place and that requires the tenant to vacate the residential real property for at least 30 days. Cosmetic improvements alone, including painting, decorating, and minor repairs, or other work that can be performed safely without having the residential real property vacated, do not qualify as substantial rehabilitation.”

The City has the authority under Civil Code Section 1946.2(g)(1)(B) to adopt a local ordinance, as long as findings are made that the ordinance is consistent with the terms of AB 1482 and that the provisions of the local ordinance are more protective in the areas of (i) further limits to the reasons for just cause eviction, (ii) higher relocation assistance amounts or (iii) additional tenant protections not prohibited by other provisions of law. The cities of Inglewood, Long Beach, Los Angeles and the County of Los Angeles have adopted local ordinances that include additional requirements to address this loophole.

Tenant Relocation Fees

On November 18, 2020, the City Council received a report from staff for consideration of additional relocation assistance above and beyond those established in AB 1482. The City Council directed staff to conduct stakeholder outreach on additional relocation assistance and further study additional tenant protections including moving allowance, utility deposit allowance, and penalties for noncompliance. The City Council further requested review by the Planning Commission before a recommendation is brought back for Council consideration.

AB 1482 establishes that tenants evicted as a result of no-fault just cause are entitled to relocation assistance or rent waiver equal to “one month of the tenant’s rent that was in effect when the owner issued the notice to terminate the tenancy. Any relocation assistance shall be provided within 15 calendar days of service of the notice.” The cities of Pasadena, Glendale,

Burbank, Los Angeles, and West Hollywood have established tenant relocation programs that extend beyond the protections offered by AB 1482. Many smaller cities in the San Gabriel Valley do not have additional relocation assistance beyond what is required under AB 1482.

Stakeholder Outreach

Staff met with various groups representing both tenants and property owners to better understand their concerns.

Tenant Concerns

Tenants have expressed concerns that AB 1482 does not explicitly require owners to: (1) obtain the necessary permits associated with the substantial remodel prior to serving a Notice of Termination; or (2) include information in the Notice of Termination regarding the type and scope of work to be performed. Tenants want the information provided to include reasons why the work cannot be completed with the tenant in place or why the work cannot be completed within 30 days. Tenant representatives posited that the substantial remodel provision in AB 1482 has created an unintended loophole for property owners to make claims that they are conducting substantial remodels as a justification to evict no-fault tenants. Staff recommends more outreach, including a proposed public workshop in January, be conducted to solicit more feedback from tenants.

Landlord Concerns

Landlords were concerned that the proposed permit requirements would create undue hardships on property owners who are already suffering from deferred rent. Landlords and property managers said that it is inconvenient to both landlords and tenants for a landlord or property manager to access an occupied unit prior to determining the scope of work; that work is done sequentially by tradespeople rather than coordinated by a contractor or an architect; that landlords often renovate just one unit at a time; and that the scope of work for a project is unknown at the start and sometimes requires that walls be opened and building systems explored before a permit is obtained. Representatives also noted that many landlords have other jobs and tight budgets; and that they do only the work required to maintain the unit, which is many times less than was anticipated. Landlords noted some tenants obstruct landlords or managers from accessing the unit, either by changing the appointment at the last minute, or ignoring requests in the first place. Landlords argued that pursuing permits prior to having the unit vacated and explored by a variety of tradespeople is inconvenient, inefficient, and cumbersome compared to the way they approach the work; and some landlords were concerned about short lifespans of permits. One landlord who owns more than 600 units in a variety of building sizes (primarily of 12-15 units) dispersed throughout different cities, said that he would comply with whatever rules are in place, but would rather defer payment for permit until after the unit is vacated.

Landlords typically felt that the permit requirements were punitive and heavy-handed when considering the scope of the issue; and disagreed with any increased relocation assistance because such assistance would equate to giving a tenant money back for time already lived in the unit; and would like to see high-earning tenants disqualified for relocation assistance. However, landlords were in agreement that bad actors should be penalized for abusing the substantial renovation provision of the law. Suggested alternatives included more education and

enforcement, exemption for smaller property owners, and harsher penalties for property owners who abuse the current law.

Landlord representative groups did not see the need for more restrictions and cited existing and pending legislation in response to the COVID-19 that protect tenants against certain no-fault just cause evictions. AB 3088, which is set to expire on February 1, 2021, provides protections for tenants against 60 days just cause eviction notices during the state of emergency, and prohibits a “no fault, just cause” eviction in retaliation for a tenant’s complaint to the local jurisdiction regarding bed bugs or other habitability reasons.

Enforcement

Regarding enforcement of the substantial remodel provision in AB 1482, tenants want enforcement to occur prior to having to vacate a unit; and landlords prefer for enforcement to occur months after a unit is vacated - in the form of high penalties for landlords who do not substantially renovate a unit after having it vacated. Both tenants and landlords suggested that the City would enforce the laws, but acknowledged that doing so would require proactive and reactive enforcement.

Areas of Agreement

There were some areas of agreement between tenants and landlords. All were in agreement that additional education and outreach efforts were required on current laws related to housing, tenant rights, and landlord responsibilities. After conducting initial stakeholder meetings, staff believes that more education is also needed regarding what constitutes a substantial remodel, when permits are required or not, and the benefit to landlords of obtaining a permit prior to having a unit vacated.

Misconceptions

In conducting stakeholder outreach, staff noted some misconceptions that could be problematic for both tenants and landlords regarding existing laws, when a permit is required, what constitutes a substantial remodel, and the benefits of having a permit to clarify the scope. For landlords, there seems to be an inconsistent understanding of what requires a permit. For example, some landlords said they need a unit to be vacant in order to do exploratory demolition to determine the scope of a remodel; however, a permit is required prior to any demolition. It is also clear that some landlords are proceeding, and sometimes completing work in a unit without obtaining the required permits. It is important to note that many of the City’s code enforcement cases are due to unpermitted construction; and some of the violators do not realize what work requires a permit. Furthermore, in South Pasadena, most changes to the exterior of a building require discretionary planning approvals which can take between 2 weeks and 6 months or more, depending on the proposed revisions and whether the building is historic. Given the misconceptions expressed in the stakeholder outreach and the prevalence of unpermitted construction in code enforcement cases, it is clear that public education is needed regarding what scope of work requires a permit.

Another misconception is regarding current law. AB 1482 already prohibits some of the preferred practices that many landlords discussed. For example, many landlords, property

managers, and representatives focused on the inconvenience of trying to determine the scope of work while a tenant is in place; however, under AB 1482, evicting a tenant prior to determining the scope of work (and therefore whether or not it is substantial) is illegal. As well, evicting a tenant for work that could have been completed with the tenant in place and under 30 days, regardless of how inconvenient for the landlord, is illegal under AB 1482. Alternatively, if the landlord had assessed the scope of work and obtained a permit before having the unit vacated, the landlord would know whether the scope is substantial and therefore not be at risk of illegally evicting a tenant.

The benefits of a permit to a tenant includes protection from being evicted unnecessarily and that the burden of proof is placed with the landlord. While permits are perceived by landlords as punitive or heavy handed, there are several benefits to obtaining a permit prior to having a unit vacated. A permit proving substantial renovation could protect the landlord from a frivolous lawsuit, or from illegally evicting a tenant if the scope is not substantial; would allow the landlord to collect rent while preparing for the permit (which is required prior to demolition or construction anyway); would allow the landlord to commence demolition or construction as soon as the tenant vacates; and would allow the landlord to schedule and sequence the work more efficiently. A building permit is valid for 1 year, and is automatically extended with each inspection; therefore, the permit is not at risk of expiring before the work can be completed. However, based on stakeholder outreach conducted thus far and longstanding remodeling practices, more outreach and education is needed to make landlords aware of their existing responsibilities, to provide guidance on how to determine if the scope of work is substantial, and to provide guidance on how obtain permits efficiently with a tenant in place.

Occupancy Inspection Program

As one of the housing programs that was proposed during a series of 2019 housing workshops, a future Occupancy Inspection Program is anticipated to provide an inventory and the condition of the city's housing stock through mandatory periodic inspections of housing units. Within the next few months, the Planning Commission is scheduled to consider program elements, including enforcement of code compliance for unpermitted construction, for example. The relationship between AB 1482, including any potential additional local restrictions, and the Occupancy Inspection Program is unknown at this time but will be considered as the program is developed

Background

On October 8, 2019, Governor Newsom signed AB 1482, also known as the Tenant Protection Act of 2019. AB 1482 included the following provisions:

- Prevent property owners from terminating a tenancy without just cause;
- Require property owners to provide the tenant with an opportunity to correct violations before being terminated;
- Require property owners to provide tenants relocation assistance limited to one month's rent, if residency is terminated for certain specified "no cause" reasons, which include the ability of the owner to perform substantial rehabilitation on a unit, or to take it off the market entirely for occupancy by the owner or owner's family; and

Ordinance Extending Moratorium on Evictions for Substantial Remodels

December 16, 2020

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- Prevent property owners from increasing rent over the course of any 12-month period more than five percent plus the rate of inflation, or 10 percent, whichever is lower; this restriction requires the rent in existence as of March 1, 2019 as the “base rent” of a tenant remaining in the unit after January 1, 2020 for purposes of calculating an annual rent increase.

In October 2019, Council learned of several tenants facing unexpected eviction or rent increases, likely resulting from the new State law which prompted many landlords to increase rent or evict tenants prior to the new law going into effect. In response, the City Council adopted an urgency ordinance (Ordinance No. 2334) to temporarily establish just cause for termination of tenancies until the state law became effective.

As part of ongoing efforts to address concerns related to housing and tenant protections the City hosted a series of workshops in Fall 2019 regarding housing initiatives; including tenant protections (relocation assistance program and occupancy inspection program); Accessory Dwelling Units; and Inclusionary Housing. The City continues to provide education and information on fair housing laws for landlords and tenants through the Housing Right Center.

On November 4, 2020, the City Council approved an urgency ordinance establishing a 45-day moratorium on evictions due to substantial remodels as an interim measure and directed staff to further study the issue and develop an ordinance establishing procedures and requirements to provide additional protections. The City Council also directed staff to bring back options for additional relocation assistance, beyond what is available under state law.

On November 18, 2020, the City Council opened a public hearing to receive initial findings from staff on additional tenant protections and continued the public hearing to December 16, 2020, to allow staff to conduct further stakeholder outreach.

Next Steps

1. Staff will conduct additional stakeholder outreach on both the substantial remodel issue as well as additional relocation assistance, including a community workshop.
2. Staff will develop a recommendation for a future City Council meeting after review by the Planning Commission and additional stakeholder meetings, and in advance of the expiration of the moratorium.

Legal Review

The City Attorney has reviewed this item.

Fiscal Impact

There is no fiscal impact with the adoption of an ordinance extending the moratorium. Staff time will be necessary in studying the issue, conducting stakeholder outreach, and developing recommendations.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City's website and/or notice in the *South Pasadena Review* and/or the *Pasadena Star-News*.

Attachments

1. Ordinance extending 45-day moratorium on evictions for substantial remodels

Attachment 1

ORDINANCE NO. ____

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF
SOUTH PASADENA, CALIFORNIA,
EXTENDING AN INTERIM MORATORIUM ON EVICTIONS
OF RESIDENTIAL TENANCIES DUE TO SUBSTANTIAL
REMODELING OR DEMOLITION OF THE UNIT IN THE
CITY OF SOUTH PASADENA, AND DECLARING THE
URGENCY THEREOF**

WHEREAS, effective January 1, 2020, Assembly Bill 1482 (2019-2020, the “Tenant Protection Act of 2019”), established a state-wide just cause eviction protections intended to “help families afford to keep a roof over their heads, and...will provide California with important new tools to combat our state’s broader housing and affordability crisis.”

WHEREAS, the eviction protections of AB 1482 allow for a “no fault” just cause eviction of a tenant where the property owner intends to demolish or remodel the unit requiring the tenant to vacate for a minimum of 30 days; and

WHEREAS, tenants of residential real property in South Pasadena have recently reported that the evictions for alleged purposes of substantial remodeling have been served by property owners who have not substantiated the eviction with building permits or other appropriate notice, thereby taking advantage of an unintended loophole for property owners to make unwarranted claims that they are conducting substantial remodels to issue no-fault eviction notices; and

WHEREAS, without a temporary moratorium on evictions for purposes of “substantial remodeling” or demolition of the unit, tenants will suffer harm which is not adequately addressed by the one month of relocation benefits required under AB 1482 and the City will suffer immediate harm in the loss of a dwelling unit in the case of intended demolition; and

WHEREAS, the City Council finds that an urgency measure is necessary and essential to prevent the irreparable injury tenants would suffer due to the unintended loophole in AB 1482; and

WHEREAS, the City Council finds that an urgency measure is necessary and essential to further the important interests of the State in passing of AB 1482, which law the City supports’ and

WHEREAS, on November 4, 2020, the City Council, in order to protect the health, safety and welfare of its residents, of which approximately 50% are renters, adopted Urgency Ordinance No. ____ imposing a 45-day moratorium on evictions for reasons of “substantial remodel” or demolition without having obtained permits prior to issuing a Notice of Termination; and

WHEREAS, as directed by the City Council on November 4, 2020, staff recommenced a review of the applicable regulations, including AB 1482 and SB 3088, the application of similar more protective provisions within other Los Angeles County cities and its own zoning and development code to identify possible amendments to the City’s Municipal and Zoning Code, including potential increases to tenant relocation benefits. Staff needs additional time to develop actual regulations and have the regulations reviewed by the Planning Commission prior to consideration by the City Council; and

WHEREAS, the City Council finds that these issues constitute a current and immediate threat to the public health, safety, and welfare, within the meaning of Government Code Section 65858 remain in effect pending completion of the City’s study and adoption of amendments to the City Municipal and Zoning Code; and

WHEREAS, for reasons set forth above, this ordinance is declared by the City Council to be necessary for immediate preservation of the public peace, health, and safety, and the recitals above taken together constitute the City Council’s statements of the reasons constituting such necessity and urgency.

WHEREAS, the City Council has conducted a properly noticed public hearing in accordance with Government Code section 65090 and has duly considered all written and verbal testimony during the hearing; and

WHEREAS, adoption of this ordinance is exempt from review under the California Environmental Quality Act (“CEQA”) pursuant to the following, each a separate and independent basis: CEQA Guideline section 15183 (“Action Consistent with the General Plan and Zoning”); section 15378 (“No Project”); and section 15061(b)(3) (“No Significant Environmental Impact”).

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SOUTH PASADENA, CALIFORNIA, DOES HEREBY ORDAIN AS FOLLOWS:

Section 1. The emergency findings set forth in the Recitals above are true and correct and incorporated by reference into this ordinance.

Section 2. As of November 1, 2020, no eviction of any tenant within the City of South Pasadena for reasons of vacation of the unit for the purpose of substantial remodel or demolition as defined by 1946.2(b)(2)(D)(ii), shall be effective unless building permits were first secured from the City of South Pasadena, and the tenant was provided with copies of the building permit(s) and a written detailed account of the scope of work, why the work cannot be reasonably accomplished in a safe manner with the tenant in place, and why the work cannot be completed within 30 days.

Section 3. City staff shall promptly commence studies they may deem necessary and appropriate to make a recommendation to the City Council regarding an amendment to the City’s Municipal Code regarding additional tenant protections pertaining to just cause evictions, the amount and scope of relocation benefits paid to tenants evicted for “no fault” just cause, which are

more protective than as provided by AB 1482. Pursuant to Government Code Section 65858(d), City staff shall prepare and submit for City Council adoption at least 10 days prior to the expiration of this interim ordinance or any extension hereof, a written report describing the measures taken to alleviate the conditions which lead to the adoption of this interim ordinance.

Section 4. CEQA. The City Council hereby finds and determines that this ordinance is not subject to the requirements of the California Environmental Quality Act (“CEQA”), pursuant to CEQA Guideline section 15183 (“Action Consistent with General Plan and Zoning”); section 15378 (“No Project”), and section 15061(b)(3) (“No Significant Environmental Impact”).

Section 5. Severability. If any section, subsection, sentence, clause, or phrase of this ordinance is for any reason held by a court of competent jurisdiction to be invalid, or otherwise not in force or effect, such decision shall not affect the validity, force, or effect, of the remaining portions of this ordinance. The City Council declares that it would have adopted this ordinance and each section, subsection, sentence, clause, and phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared invalid or otherwise not in force or effect.

Section 6. Effective Date. This ordinance is adopted by a 4/5 vote of the South Pasadena City Council, and shall take effect immediately upon its adoption as provided by Government Code Section 65858, and shall be of no further force at 11:59 p.m. on November 3, 2021 (which is 10 months and 15 days after adoption of Ordinance No. ____) unless extended or terminated by further action of the City Council.

Section 7. Certification. The City Clerk shall certify to the passage and adoption of this Ordinance and shall cause the same to be published or posted according to law.

PASSED, APPROVED, and ADOPTED ON this 16th day of December 2020.

Diana Mahmud, Mayor

ATTEST:

APPROVED AS TO FORM:

City Clerk
(seal)

Teresa L. Highsmith, City Attorney

Date: _____

I HEREBY CERTIFY the foregoing resolution was duly adopted by the City Council of the City of South Pasadena, California, at a regular meeting held on the 4th day of November, 2020, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

City Clerk



City Council Agenda Report

ITEM NO. 19

DATE: December 16, 2020

FROM: Sean Joyce, Interim City Manager

PREPARED BY: Cathy Billings, Library Director

SUBJECT: **Eliminate Library Overdue Material Fees to Ensure Equitable Access to Library Services**

Recommendation

It is recommended that the City Council adopt a resolution to eliminate fees for overdue library material, effective January 1, 2021.

Commission Review and Recommendation

This matter has been studied and discussed by the Library Board of Trustees for over a year. At its meeting on September 14, 2020 the trustees voted unanimously to approve a proposal to eliminate library overdue material fees.

Executive Summary

This staff report and the related resolution address the proposed elimination of overdue library material fees only. The report makes a distinction between overdue fees, which are daily charges for material not returned by the due date, and lost item fees, which are charges for damaged or lost material, including those that are considered lost when they are significantly overdue. No changes to the fees currently charged related to lost items are recommended.

Overdue material fees disproportionately impact families and individuals with limited resources and are a barrier to library access for a portion of the population that the public library seeks to serve. The movement to eliminate fees to make public library access more equitable is colloquially known as “fine free”. Making the South Pasadena Public Library (SPPL) fine free would follow the recommendation of the American Library Association and the lead of other public libraries in the region. Going fine free will provide equal access to tax payer funded resources and services and will increase library usage. The elimination of overdue fees is not expected to have a significant impact on the City’s budget as revenue from overdue fees has steadily decreased over the past six years and is expected to continue to decline due to the recent implementation of automatic renewal of borrowed material.

Discussion/Analysis

Studies have shown that fees disproportionately affect economically disadvantaged individuals and families, seniors on fixed incomes, and children and teens. In January 2019 the American Library Association passed a resolution (Attachment 1) which recognizes fines (or fees) as "a form of social inequity" and calls on libraries nationwide to find a way to eliminate fines.

Eliminate Library Overdue Material Fees to Ensure Equitable Access to Library Services

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Proponents of library overdue fees argue that they incentivize borrowers to return checked-out items on time, however there is little evidence that overdue fines have a significant effect on the timely return of library material. In fact, much of the existing research suggests that fees do not decrease the number of overdue items and instead deter customers from borrowing material in the first place because they are worried about accruing overdue fees that they may not be able to pay. Most public libraries, including South Pasadena, suspend borrower privileges when fees owed reach or exceed a designated amount. These borrowers' cards are described as "blocked", and they cannot checkout material, use library digital resources, or use public computers at the library until their account balance due is below the designated amount.

Staff analyzed data to determine how SPPL cardholders are impacted by overdue fees. It was found that as of March 3, 2020, among active users, 12% of juvenile cards and 16% of teen cards were blocked due to having exceeded the designated fine limit. 5% of adult cards were blocked. The percentage of young cardholders not able to use library resources is in direct opposition to our mission to support education, provide enrichment and opportunity, and instill a love of reading and lifelong learning.

Libraries that have gone fine free have identified benefits and motivations for eliminating overdue fees that go beyond equitable access, including:

1. Increase circulation. A survey conducted by the County of Los Angeles Public Library found that 80% of parents said they are more likely to let children check out material because of the more lenient overdue fine policies they have adopted.
2. Return of assets in the form of long-overdue "lost" material. The Chicago Public Library saw a 240% increase in returns within three weeks of implementing its fine free policy.
3. Save money. The staff time spent on collecting and processing fees cancels out much of the revenue brought in by overdue fees. The San Diego Public Library calculated that it would actually be saving money if it stopped tracking down patrons to collect fines and recover material. The city had spent nearly \$1 million (staffing costs, collection agency fees) to collect \$675,000 in fees each year.
4. Eliminate the "hidden cost" of enforcing late fees. The time and energy staff and customers spend in negative engagement disputing overdue fees would be much better spent providing customers with positive experiences and helpful information about library services and programs.

Alternatives Considered

The Library Board of Trustees (LBT) considered whether fine free should apply to youth only, or to both youth and adult cardholders. Given the urgency of providing equal access to library material and services regardless of age, the relatively small dollar amounts in question, and the Los Angeles Public Library system's decision in late 2019 to go fine free for all ages—which will be experienced by SPPL's users and likely come to be expected by them no matter which library system they are using—the LBT determined that fine free at the South Pasadena Public Library should apply to all cardholders.

Next Steps

See Attachment 3: Fine Free Implementation Project Overview.

1. Update Library Administrative Policies related to circulation and fees as needed.

Eliminate Library Overdue Material Fees to Ensure Equitable Access to Library Services

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2. Configure technology and systems for fine free.
3. Revise library processes and procedures related to overdue material and fee collection.
4. Publicize that the South Pasadena Public Library will stop charging overdue fees.
5. Track metrics to analyze changes in usage attributable to the elimination of overdue fees.
6. Update City of South Pasadena Master Fee Schedule.

Background

The movement toward fine free libraries has gained momentum over the past 5 years as studies have shown how harmful these fees are to customers who have a great need for public library resources. Library staff and the Board of Trustees have been studying the issue for some time. The Los Angeles Public Library's announcement in December 2019 that they would go fine free in Spring 2020 was a catalyst for the Library Board to take action. In addition to LAPL, Altadena, Glendale, Santa Monica and many other libraries in the region are either fully or partially fine free.

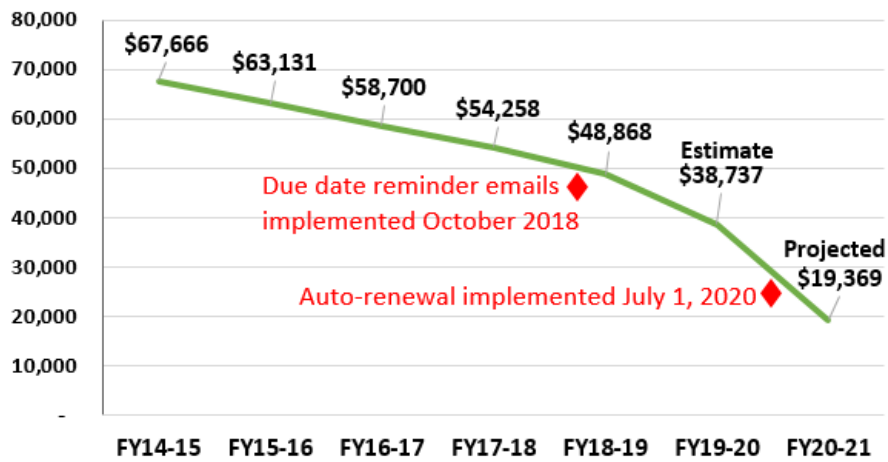
Only overdue material fees are affected by this resolution. SPPL will continue to assess fees for lost or damaged items. Borrowers with excessively overdue material will be incentivized to return them when the items are automatically designated as "lost" in the Integrated Library System, at which time the total value of the item is assessed as a fee on the cardholder's account, along with a flat replacement processing fee per item (currently \$15). Borrowers' cards will be blocked when the amount due balance for lost or damaged items reaches \$25.00. Customers who carry a balance that meets a designated threshold will continue to be referred to Unique Management, the asset recovery service the library uses. Borrowers are currently reminded to return overdue material through a series of automated email courtesy notices and mailed overdue notices. With the elimination of overdue fees, the notification schedule and number of email notices sent will be adjusted to incentivize the timely return of checked-out items, and only the final billing notification will be sent by mail.

At SPPL, fees collected for overdue material have been steadily declining since fiscal year 2014-2015. This is likely because circulation of physical material has declined overall during the same period, from a high of 420,000 in FY 2014-2015 to 304,279 in FY 2018-2019. In addition, circulation of digital material, which do not incur overdue fees, continues to rise.

In Fiscal Year 2018-2019, \$48,868 in overdue material fees were collected. The library collected \$29,053 in Fiscal Year 2019-2020, a reduction over the prior year that is only in part the result of the suspension of overdue fees by the City Manager through emergency ordinance authority in response to the pandemic. Had the library been open and operating normally in April, May and June, it is estimated that approximately \$38,737 in overdue fees for the fiscal year would have been collected, which is a 20% reduction from the prior year. The notable decline in projected overdue revenue from FY 2018-2019 to FY 2019-2020 may be attributable to the implementation in October 2018 of email due date reminder notices, which tend to reduce the number of overdue items and associated fees overall.

The Library implemented automatic renewal of checked-out items on July 1, 2020. Based on reports from other libraries that have enabled auto-renewal, it is anticipated that the service will reduce overdue fees by as much as 50%, making the amount of fees projected to be collected in Fiscal Year 2020-2021 just \$19,369.

Library Overdue Fee Revenue Actual & Projected



Legal Review

The City Attorney has reviewed this matter.

Fiscal Impact

Eliminating fees for overdue material would result in a projected net loss of \$18,139 in Fiscal Year 2020-2021. As a point of reference, this amount is less than 1% of the library’s total budget. It may also reduce the amount spent on asset recovery services, however, those amounts are largely recouped through the fees that are charged to customers referred to the collection agency.

Though challenging to quantify in dollars, the reallocation of staff time from duties related to collecting fees to more meaningful and impactful work is significant. Library staff spend approximately one hour per day reconciling the cash drawer and preparing the daily deposit. Cash transaction data from the week of March 9, 2020 shows that the low number of daily transactions during 7 days was 10, and the high was 26. If each transaction takes between 2 to 5 minutes, on the busiest day staff spent anywhere from 52 minutes to 2 hours and 10 minutes collecting fees. It should also be noted that the amount of time it takes the Finance Department to process these daily deposits is probably not insignificant, given that they are made up mostly of cash in small bills and coins or checks for small amounts.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City’s website and/or notice in the *South Pasadena Review* and/or the *Pasadena Star-News*.

Attachments:

1. Resolution to Eliminate Library Overdue Material Fees to Ensure Equitable Access to Library Services
2. American Library Association Resolution on Monetary Library Fines as a Form of Social Inequity
3. Fine Free Implementation Project Overview

ATTACHMENT 1

Resolution to Eliminate Library Overdue Material Fees to Ensure Equitable Access to Library Services

RESOLUTION NO. _____

**A RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF SOUTH PASADENA, CALIFORNIA,
TO ELIMINATE LIBRARY OVERDUE MATERIAL FEES TO
ENSURE EQUITABLE ACCESS TO LIBRARY SERVICES**

WHEREAS, the South Pasadena Public Library (SPPL) currently charges overdue fees for materials not returned on time; and

WHEREAS, SPPL and the Library Board of Trustees have reviewed studies by the American Library Association and other library systems regarding the practice of imposing overdue fees on library customers; and

WHEREAS, overdue fees have been found to present an economic barrier to accessing library materials and services that is detrimental to the population SPPL seeks to serve; and

WHEREAS, there is evidence that eliminating overdue fines increases library usage and library card registration and results in the recovery of lost material assets; and

WHEREAS, fees for lost, damaged, or unreturned materials remain in place and incentivize the return of library material;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SOUTH PASADENA, CALIFORNIA, DOES RESOLVE, DECLARE, DETERMINE AND ORDER AS FOLLOWS:

SECTION 1. Effective January 1, 2021, the City of South Pasadena Public Library shall be a “fine free” library. No fines shall be imposed or collected for any overdue materials as of January 1, 2021.

SECTION 2. The City Clerk of the City of South Pasadena shall certify to the passage and adoption of this resolution and its approval by the City Council and shall cause the same to be listed in the records of the City.

PASSED, APPROVED AND ADOPTED ON this 16th day of December, 2020.

xxxxxxxxxxx, Mayor

ATTEST:

APPROVED AS TO FORM:

Maria E. Ayala, Chief City Clerk
(seal)

Teresa L. Highsmith, City Attorney

I HEREBY CERTIFY the foregoing resolution was duly adopted by the City Council of the City of South Pasadena, California, at a regular meeting held on the 16th day of December, 2020, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

Maria E. Ayala, Chief City Clerk
(seal)

ATTACHMENT 2
American Library Association Resolution on
Monetary Library Fines as a Form of Social Inequity

Resolution on Monetary Library Fines as a Form of Social Inequity

Whereas monetary fines present an economic barrier to access of library materials and services;

Whereas there is mounting evidence that indicates eliminating fines increases library card adoption and library usage;

Whereas monetary fines create a barrier in public relations, and absorb valuable staff time applying, collecting, and managing dues;

Whereas the first policy objective listed in ALA Policy B.8.10 (Library Services to the Poor) as approved by ALA Council on January 27, 2019, states that the American Library Association shall implement these objectives by “Promoting the removal of barriers to library and information services, particularly fees, and overdue charges”;

Whereas ALA Policy B.4.2 (Free Access to Information) “asserts that the charging of fees and levies for information services, including those services utilizing the latest information technology, is discriminatory in publicly supported institutions providing library and information services”;

Whereas in Economic Barriers to Information Access, An Interpretation of the Library Bill of Rights, ALA states “All library policies and procedures, particularly those involving fines, fees, or other user charges, should be scrutinized for potential barriers to access;

Whereas libraries will need to take determined and pragmatic action to dismantle practices of collecting monetary fines

Whereas libraries of all types are responsive to bodies, be they school districts, boards of trustees, college and university administration, or government entities and therefore need to be able to make the case to those bodies about eliminating fines; and

Whereas monetary fines ultimately do not serve the core mission of the modern library; now, therefore, be it

Resolved, that the American Library Association (ALA), on behalf of its members

1. adds a statement to the Policy Manual that establishes that “The American Library Association asserts that imposition of monetary library fines creates a barrier to the provision of library and information services.”;
2. urges libraries to scrutinize their practices of imposing fines on library patrons and actively move towards eliminating them; and
3. urges governing bodies of libraries to strengthen funding support for libraries so they are not dependent on monetary fines as a necessary source of revenue.

Mover: Peter Hepburn, Councilor At-Large, 773.426.8082

Seconders: Matt Ciszek, Councilor At-Large, 330.397.3650

Sara Dallas, Councilor At-Large, 518.859.0742

Ed Garcia, Councilor At-Large, 401-497-8992

Version: Final. 1.27.19 4:51 PM

ATTACHMENT 3
Fine Free Implementation Project Overview

FINE FREE IMPLEMENTATION PROJECT OVERVIEW - SOUTH PASADENA PUBLIC LIBRARY

Prepared by Cathy Billings (Director) and Barbara Posner (Support Services Manager)

Proposed fine free effective date: January 1, 2020.

Overdue fines currently suspended through December 31, 2020 by City Manager emergency ordinance authority.

SPPL FINE FREE IMPLEMENTATION PLAN							
Steps	WEEK OF						Responsible
	Dec 14	Dec 21	Dec 28	Jan 4	Jan 11	Jan 18	
1	Resolution Adopted by City Council	12/16					Library Admin
2	Press Release (overview/effective date)	12/18					Library Admin
3	Contact blocked customers: return materials to avoid replacement fees.		start 12/21 (weekly reports/reminders)				Support Svcs
4	SirsiDynix "fine free" system configuration services	initiate 12/17	start when consultant available (work around holidays)				Support Svcs
5	Coordinate with asset recovery vendor		depending on availability				Support Svcs
6	Reconfigure Notices						Support Svcs
7	Bring block threshold to \$25						Support Svcs
8	Publicity (follow standard publicity workflow*)						Library Admin & Public Services
9	Update Library Administrative Policies consistent with eliminating overdue fees				LBT mtg 1/11		Library Admin
10	Run reports with baseline data for comparison and assessment		pre-config			post-config	Support Svcs & Library Admin

*Publicity workflow: design graphic, print piece, press release, website, catalog homepage, social media, email to Library list, City Hall Scoop blog, Neighborhood Pulse email newsletter, outreach to SPUSD/schools and impacted customers.

OVERDUE NOTICE/BILLING SCHEDULE					
Current			Fine Free		
	Notice			Notice	
Timing	Email	Mail	Timing	Email*	Mail
Due date -3	Due date courtesy		Due date -3	Due date courtesy	
Due date	Auto-renewal		Due date	Auto-renewal	
Due date +14		Overdue #1	Due date +7	Overdue #1	
Due date +28		Overdue #2	Due date +14	Overdue #2	Overdue #1
Due date +45		Bill	Due date +21	Overdue #3	
Due date +56	<i>No notice: Collections referral</i>		Due date +28	Bill	Bill
			Due date +56	<i>No notice: Collections referral</i>	

*When text notices become available, they would follow the email schedule.

FEES / LIMITS						
Current			Fee No.	Fine Free		Fee No.
\$.25	Overdue fee per item per day		182	eliminate		
\$10.00	Max overdue fee per item-Adult		183	eliminate		
\$5.00	Max overdue fee per item-Child		184	eliminate		
\$3.00	Max overdue fee per item*		185	eliminate		
\$15.00	Lost item processing fee		172	\$15.00	Lost item processing fee	172
\$10.00	Collections referral fee		175	\$10.00	Collections referral fee	175
Cost	Lost item replacement		173	Cost	Lost item replacement	173
\$10.00	Card block		n/a	\$25.00	Card block	n/a
\$25.00	Collections trigger		n/a	\$25.00	Collections trigger	n/a

*Inexpensive materials such as magazines, mass market paperbacks, and children's board books.

DEFINITIONS	
Auto-renewal	System process by which items are automatically renewed for three weeks if they are not on hold for another borrower, and have not reached their limit of two renewals.
Blocked Account	Library card that is disabled due to having reached a max amount of money owed the library.
Fee: Library Asset Recovery	Fee added to account when accounts are referred to collections. Amount charged is actual cost of service.
Fee: Lost Item	The fee charged when cardholder does not return materials, for any reason. Fee is the actual cost of item, per the library database.
Fee: Overdue Material	Daily charges applied to items not returned by their specified due date.
Fee: Processing	Fee charged related to the administrative and staff costs associated with lost items. Added to account when item becomes "lost".
Library Asset Recovery (AKA Collections)	Service provided by an outside vendor to contact customers to attempt to recover long overdue items.
Lost Item	A checked out item is automatically assigned "lost" status 45 days after the due date.



City Council Agenda Report

ITEM NO. 20

DATE: December 16, 2020

FROM: Sean Joyce, Interim City Manager

PREPARED BY: Shahid Abbas, Director of Public Works
Julian Lee, Deputy Director of Public Works

SUBJECT: **Consideration of Appointment of City Council Athens Contract Ad Hoc Committee**

Recommendation

It is recommended that the City Council:

1. Appoint two members of the City Council to the Athens Contract Ad Hoc Committee and approve its revised scope of work, and
2. Recommend two City Council members to serve on the Committee.

Commission Review and Recommendation

This matter was not discussed at any Commission meeting. However, reinstatement of the ad hoc committee would assist Public Works Department staff to review and provide recommendations to the City Council concerning the Refuse and Recyclable Materials collection, transportation, and disposal service contract with Athens Services.

Discussion

In September 2014, Governor Brown signed AB1594, mandating that, effective January 1, 2020, the use of green material as alternative daily cover (ADC) will no longer constitute diversion through recycling and will instead be considered disposal in terms of measuring a jurisdiction's annual 50 percent per capita disposal rate. This requirement increased Athens' operational cost since January 1, 2020, which has resulted in Athens' requesting an increase of the Refuse and Recyclable Materials collection, transportation, and disposal service rate.

In addition, in 2016 Governor Brown signed into law SB1383 establishing methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants (SLCP). SB1383 establishes targets to achieve a 50 percent reduction of statewide disposal of organic waste from our 2014 level by 2020 and a 75 percent reduction by 2025. This mandate will also increase the operational cost for Athens starting January 1, 2022

The Athens Contract Ad Hoc Committee was established to coordinate negotiations of the Refuse and Recyclable Materials collection, transportation and disposal service contract with Athens in 2013. The reinstatement of the ad hoc Committee would support Public Works staff

during negotiations of an amendment to the existing Refuse and Recyclable Materials collection, transportation and disposal service contract with Athens promulgated by recent regulations. The proposed ad hoc committee would not be subject to the Brown Act.

- Scope: To assist staff:
 - Review Athens' request for the Refuse and Recyclable Materials collection, transportation, and disposal service rate increases;
 - Support during negotiations of an amendment to existing Refuse and Recyclable Materials collection, transportation, and disposal service contract rates with Athens Disposal;
 - Consult the City Attorney concerning the proposed amendment to existing Refuse and Recyclable Materials collection, transportation, and disposal service contract with Athens Disposal;
 - Provide recommendations to the City Council concerning a potential amendment to Athens' existing Refuse and Recyclable Materials collection, transportation, and disposal service contract.
- Composition:
 - Two members of the City Council, as determined by the City Council, and
 - Two members of the NREC Commission as determined by the selected Ad Hoc Committee councilmembers.

Legal Review

The City Attorney has reviewed this item.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City's website and/or notice in the *South Pasadena Review* and/or the *Pasadena Star-News*.



City Council Agenda Report

ITEM NO. 21

DATE: December 16, 2020

FROM: Sean Joyce, Interim City Manager

PREPARED BY: Sheila Pautsch, Community Services Director *SP*

SUBJECT: **Approve a List of Capital Improvement Projects and Allocation from the Capital Improvement Funds of \$77,000 for the San Pascual Stables**

Recommendation

It is recommended that the City Council approve the attached list of capital improvement projects and an allocation of \$77,000 from the San Pascual Stables Capital Improvement Fund (CIF) to finance the enumerated improvements at San Pascual Stables, LLC (SPS).

Commission Review and Recommendation

This matter was reviewed by the Parks and Recreation Commission at its November 9, 2020 meeting. The Commission recommends that the City Council approve the attached capital projects and allocate \$77,000 from the CIF to make improvements to the stables. The Commission believes SPS has done its due diligence and fulfilled the lease agreement requirements by repairing the Historic Residence and making it habitable. In addition, SPS funded and completed improvements such as shade structure repairs, perimeter fencing replacement, arena lighting replacement, new footings in the front arena and office remodel.

Discussion/Analysis

The lease holder, SPS, has prepared a two-phase project proposal to enhance the Stables. The improvements will assist in generating new revenue by providing In & Out stalls that are in high demand, as they provide shelter from the elements and increase riding/training activities with a new arena.

Phase 1

Build In & Out stalls with a cost estimate of approximately \$22,000. The current corral pipe stalls will be relocated to convert the previously unoccupied inside red barn stalls into high demand In & Out stalls. The same number of stalls will be replaced.

Phase 2

Build a third arena with a cost estimate of \$72,000. The completion of Phase 1 allows for a large third arena, which will increase the riding/training activities.

Approve a List of Capital Improvement Projects and Allocation from the Capital Improvement Funds of \$77,000 for the San Pascual Stables

December 16, 2020

Page 2 of 2

Alternatives Considered

1. Allow Phase 1 to be completed at this time and place Phase 2 on hold.
2. Allow only Phase 2 and just remove corral pipe stall.

Next Steps

1. Work with SPS to obtain bids for the projects to ensure financial compliance.

Background

The San Pascual Stables was leased to SPS in December 2018. The monthly lease payment is 6% of the gross revenue and an additional 2.75% of the gross revenue is placed in a capital improvement fund (CIF) for future projects, as outlined in the lease agreement and agreed upon between both entities. Since the commencement of this lease, the CIF has accumulated approximately \$77,400 for use for City-approved capital improvement projects for the San Pascual Stables. Per the lease agreement, SPS has completed several improvements at its cost, such as an office remodel, shade structure repair, perimeter fencing, arena lighting, and renovation of the Historical Residence.

Capital Improvement projects are listed in the lease agreement. On an annual basis SPS will choose from the list and submit the improvement request to the Community Services Director. Per the lease agreement, no capital improvement project shall begin without the City's written consent. Items listed are discussed upon by the Parks and Recreation Commission and brought before the City Council for final approval.

Legal Review

The City Attorney has reviewed this item.

Fiscal Impact

The proposed projects will exhaust the CIF fund reserves, approximately \$77,400 as of this date. There is no fiscal impact to the General Fund. The approximate combined total for the completion of both phases is \$94,000. SPS will supplement any additional funds required to complete the project.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City's website and/or notice in the *South Pasadena Review* and/or the *Pasadena Star-News*.

Attachments:

1. Project Phase 1
2. Project Phase 2

ATTACHMENT 1
Project Phase 1



Project Phase 1:

Building In & Out (Indoor/Outdoor) Stalls

Prepared for: City of South Pasadena

Prepared by: SPS LLC

January 9, 2020



EXECUTIVE SUMMARY

Objective

Displace the corral pipe stalls in order to attach them to the Red Barn (#i) and convert previously empty red barn stalls to high-demand In & Out (indoor/outdoor) stalls. This will allow the Stables to use the area to build a larger third arena to increase riding/training activities and to be able to fill the previously empty stalls with boarders.

Goals

As of today, the ratio of stalls to arena availability isn't proportioned. By adding a third arena, we will be able to fill the empty stalls to meet demand for in-and-out stalls, increase the riding school activities and respond better to the demand of the community.

Phase 1 outline

- Preparation and cleaning of the concerned area, including placing horses currently in pipe stalls into temporary stalls.
- Dismantling the existing pipe stalls and conducting a selection of the reusable parts.
- Removing and storing the doors of the Red Barn (#i). These doors are not necessary for In & Out stalls, as the new stalls will be box stalls which open into pipe corralls. Doors will be used as spares for the other Red Barn stalls.
- Modifying the current pipes to be fitted to the Red Barn (#i). Only half of each pipe will be used, as the other half of the stall will be an indoor box stall.
- Installation of a wood fence and Ficus trees for aesthetics.



SAN PASCUAL STABLES (SPS LLC)

BUDGET

Built of the In&Out stalls

Description			Cost
Preparation and cleaning			\$ 3,000
Dismantling of existing pipes and selection of the reusable materials			\$ 4,000
Removing existing doors from the stalls (Red Barn #i)			\$ 1,000
Installation of the pipes and modifications to fit to the red barn #i			\$ 8,500
Wood fence installation			\$ 4,500
10 Ficus trees			\$ 300
Hardware			\$ 660
			\$ 0
			\$ 0
Total			\$ 21,960



ATTACHMENT 2
Project Phase 2



Project Phase 2

Building of 3rd Arena

Prepared for: City of South Pasadena

Prepared by: SPS LLC

January 9, 2020



EXECUTIVE SUMMARY

Project Outline

- Removal of the walker and its concrete base. (See picture #1)
- Removal of the large turn out and selection of the reusable material (See picture #2)
- Removal of the entire metal rail of the arena and concrete bases (See picture #3)
- Removal of the existing lighting, pole and concrete base (See picture #4)
- Removal of the existing watering and irrigation system of the arena
- Installation of 300 cubic yards of dirt to level the old Corral Pipe area to the large turn out. (See picture #5)
- Installation of the watering and irrigation system with 10 sprinklers
- Laser leveling of the arena prior to the installation of footing
- Installation of the lighting system
- Installation of the wood fence for aesthetics (See picture #)
- Installation of the footing 1st layer - 4 loads washed plaster
- Installation of the 2nd layer of footing - 8 Loads Silica sand
- Planting of 50 Ficus trees on the north side length of the Arena to create a separation with the In & Outs for safety and aesthetics



SAN PASCUAL STABLES (SPS LLC)

BUDGET

Building of 3rd Arena

Description	Quantity	Unit Price	Cost
Removal of the walker			\$ 3,000
Removal of the large turnout			\$ 2,000
Removal of the metal rail			\$ 4,500
Removal of the existing lighting			\$ 800
Removal of the water system			\$ 1,200
Installation of dirt to level the arena area 300 cubic yards (30 trucks)			\$ 6,000
Installation of the watering system			\$ 12,000
Laser leveling of the footing area			\$ 1,200
Installation of the lighting system			\$ 8,000
Installation of the wood fence			\$ 14,000
Installation of the footing, 1st layer - 4 loads washed plaster	4	\$ 875	\$ 3,500
Installation of the footing, 2nd layer - 8 Loads Silica sand	8	\$ 1,750	\$ 14,000
50 Ficus trees	50	\$ 30	\$ 1,500
Total			\$ 71,700





City Council Agenda Report

ITEM NO. 22

DATE: December 16, 2020

FROM: Sean Joyce, Interim City Manager

VIA: Brian Solinsky, Interim Police Chief
Shannon Robledo, Lieutenant

SUBJECT: **Approval of a Lease Purchase Agreement with Motorola Solutions, Inc., for Purchase of Equipment and Software, Training and Support of a Computer Aided Dispatch and Records Management System for a Not-to-Exceed Amount of \$570,999.84, and an Additional \$50,000 for Implementation Costs, and Authorize Use of COPS Grant Funds for the Project**

Recommendation

It is recommended that the City Council:

1. Approve a lease purchase agreement with Motorola Solutions, Inc., beginning in Fiscal Year 2021-2022, for the purchase of a new Computer Aided Dispatch (CAD) and Records Management System (RMS) for a not-to-exceed amount of \$570,999.84, as allowed by SPMC Sec 2.99-29 (21), and authorize \$50,000 in implementation costs to be included in the Fiscal Year 2020-21 Budget.
2. Authorize the use of State Citizens' Option for Public Safety (COPS) grant fund reserves and each year's grant allocation from Fiscal Years 2022 through 2027 to pay for the Motorola Solutions contract and associated implementation costs.

Commission Review and Recommendation

On May 13, 2020, the Public Safety Commission (PSC) reviewed this item during its regularly scheduled meeting. The PSC unanimously gave support to purchase a new CAD and RMS system and approved staff's recommendation for a lease purchase agreement with Motorola Solutions, Inc.

Executive Summary

For over 15 years, the South Pasadena Police Department has utilized ARMS, a software system for CAD and RMS capabilities developed by End2End Inc. The current system is outdated and has surpassed its useful life cycle. Critical components in its functionality are becoming unreliable and can no longer support necessary functions that public safety requires, necessitating its replacement. The proposed replacement of our CAD/RMS system will allow the Police Department the ability to retrieve relevant data from an integrated public safety software system to complete reports, manage cases, and respond to calls for service. The system also provides field personnel the capacity to access this critical information offsite. This is crucial for accessing vital information needed to investigate crimes, provide evidence, and establish probable cause for possible arrests.

Furthermore, there is an urgency to replace the system to comply with State and Federal reporting requirements that go into effect as early as January 1, 2021. The proposed agreement provides for a 0% interest lease/purchase arrangement with payments made over 74 months for the software system. The amount of the contract, \$570,999.84, includes annual maintenance and support services for the first five years. The sixth-year maintenance payment is estimated at \$37,000, with a 5% annual adjustment thereafter. No General Fund resources are requested for this project at this time, however, it is acknowledged that the City will be responsible for annual maintenance costs in the years after year 6. Funding for the Motorola Solutions, Inc., Spillman Flex CAD/RMS software system will be paid by State Citizens' Option for Public Safety (COPS) grant funds and reserves, over a six-year period starting in January 2022.

Discussion / Analysis

For every public safety agency, technology is a critical component to ensuring the safety of its community and that of first responders. The technology used by each agency is one of the most significant factors that affect the efficiency and operations of the organization. A CAD system is utilized by dispatchers and officers to prioritize and record incident calls, identify the status and location of first responders in the field, effectively dispatch first responder personnel to calls for service. A records management system (RMS) is an agency-wide system that provides for the storage, retrieval, retention, archiving, and viewing of information, records, documents, or files pertaining to law enforcement operations. The CAD and RMS database systems that are utilized have a tremendous impact on officer safety, operational efficiency, workload and dispatching process, which in turn affects Department culture, morale, and retention of staff.

The intent of the Department is to make a long-term acquisition/investment that will propel the City forward with a long-term solution that is designed to adapt to emerging needs of public safety for many, many years to come. The mission-critical nature of public safety systems makes these technology solutions crucial to the South Pasadena Police Department (SPPD) operations. The most fundamental mission-critical systems utilized by all police departments are the radio, telephone, and CAD/RMS. Motorola Solutions is a preferred vendor for two of these mission-critical systems. Motorola Solutions provides SPPD's current radio infrastructure and devices and its Vesta 911 telephone system.

The current software is outdated and does not meet new State and Federal reporting requirements. For example, large media files such as body camera footage cannot always be uploaded and saved. The system allows for numerous duplicate name and address files, which inaccurately alters crime statistics. The current system neither provides the tools nor the ability to assist public safety personnel on the field as they gather critical information and prepare reports.

Since the utilization of End2End began, monumental updates in technology have occurred, making an immediate replacement essential in order to reduce workloads, increase officer safety and availability, and to provide accurate and robust data necessary for 21st century policing. The Department has opted to maintain legacy data in a separate, query-only database. The contract with Motorola Solutions includes the query-only database and Query tool, which is configured to serve as a data viewer. As such, the tool will connect to the query-only database, enabling users to query the agency's legacy data. The Department will maintain the legacy data for five years as required by law.

The acquisition of the modern Motorola Solutions CAD and RMS system, “Flex,” will permit the Department to share data with nearly 20 regional partners in Los Angeles and Orange County that utilize this same system. The Cities of Alhambra, Azusa, Baldwin Park, Bell Gardens, Covina, El Monte, Glendora, Irwindale, Monrovia, La Verne, and are currently using the same software system. The benefit of having an equivalent system is that it will aid in transitioning to a regional San Gabriel Valley dispatch center in the future.

The Motorola Solution’s Flex CAD/RMS public safety software will not only overcome the current limitations experienced by South Pasadena but provide the Department with a level of functionality that meets industry standards and provides a robust platform that the department will continue to build upon for future technology needs. With this new software system, the Department will be better equipped to accomplish safety goals and more effectively serve the public.

Background

The FBI and State of California require every law enforcement agency to collect and report on certain incidents every month. The current system neither provides the tools nor the ability to assist our personnel ensure that they gather and report on all of this critical information. The Department has experienced an increased workload with all employees due to this outdated system in the form of redundant and labor-intensive data entry. Basic data needs are not captured and require system users to often use Microsoft Excel, or other third-party applications to track data that would ideally and securely be kept in the CAD/RMS system.

As a result, the Department has found it necessary to purchase and maintain additional standalone software applications or hire an outside vendor, such as Crime Reduction & Information Management Experts for Predictive Policing, at a cost of \$24,960 per year, which will no longer be required with the purchase of a new system. End2End, another vendor that supports network infrastructure, has provided system updates in the past that have proven to be cosmetic and not functional.

Additionally, there are new State and Federal reporting requirements that will go into effect as early as January 1, 2021. These are Penal Code 11115 (Arrest Reports and Disposition of Cases), California Assembly Bill 953 (Racial Profiling Tracking and Prevention), and a Federal Department of Justice requirement for crime statistics to be reported through the National Incident Based Reporting System.

Currently End2End does not provide software capable of capturing this mandated information, nor has End2End provided a solution or interest in meeting these new requirements. Continuing with End2End is a nonviable solution as the system cannot meet new regulatory demands.

Selection Process

The Department has a demonstrated need for a software upgrade. The search for a replacement solution was motivated by many long-standing issues experienced with the current software platform and impending State and Federal requirements.

In July 2018, the SPPD formed an internal working group comprised of various branches of the Department to evaluate replacement options for the current CAD and RMS software. Research into upgrading the current system revealed an upgrade was not possible as the vendor did not have software available to address the pending State and Federal reporting requirements. The committee identified

industry leaders and innovators in the public safety software marketplace to provide in-depth demonstrations and competitive proposals for a long-term service agreement. The committee hosted product demonstrations and conducted on-site visits with partner law enforcement agencies currently using these providers’ software systems. Feedback was given and each provider was thoroughly vetted to find the best fit for the Department’s long-term operational needs.

Proposals were received from Motorola Solutions and Mark43. The software from Motorola Solutions is recommended as it will better integrate with the Department’s radio infrastructure and 911 telephone system.

Motorola Solutions has demonstrated a commitment to build upon its existing relationship with the City. Its proposal includes Esri licensing (geographic information system) as well as first line support. This will result in approximately \$10,000 in savings for the Department and streamline support of the system and mapping for the service period of the new Motorola Solutions system. Additionally, understanding the challenges of data conversion, Motorola will provide a query mapping tool to access legacy data. The contract includes 5 terabytes (TB) of cloud storage annually during the term of the initial 6-year agreement, allowing the Department to migrate data from other sources (e.g., body cam data storage with another vendor) to achieve efficiency and realize additional savings through consolidation of services.

Motorola has offered to provide in-house financing at 0% interest for the initial term and agreed to delay the first payment until January of 2022. This also allows for the Department to spread the cost of this project over 6 payments, making it possible for the Department to utilize grant funding for all payments. The proposed agreement is the best long-term solution at the lowest cost.

Inclusions	Price
Total Software	\$287,051.84
Total Professional Services	\$128,965.32
Total Hardware/Third Party	\$6,930.81
Sales Tax	\$78.78
Total Annual Maintenance Term 5 Years	\$147,973.09
Incentives – December 21, 2020 Expiration	
Motorola 0% Finance Proposal – 6 Year Plan	Estimated Savings Over (\$70,000)
Grand Total	\$570,999.84

The replacement is also timely as the City recently approved upgrades to its network servers. The City’s IT team met with Motorola representatives to discuss system requirements and the implementation timeline. As part of the City’s network upgrade project, IT will create a separate virtual server to the specifications required by the new software. A schedule and timeline was developed to identify additional tasks required to be completed internally, including expedited

upgrades of Windows licensing. Acorn, the City’s IT contractor, has experience providing support for the upgrade and configuration of the same software for its other clients. IT staff will meet regularly with the Department and the vendor to ensure milestones are met.

If approved, the initial planning phase will begin in early January, with final system setup by August 2022. Staff is confident the software upgrade will overcome the current system’s many limitations, will bring South Pasadena contemporary technology, and better permit the Department to accomplish its goals to serve the public effectively, including integration with neighboring San Gabriel Valley partners. The proposed system will grow and adapt to Department needs well beyond the next decade.

Legal Review

The City Attorney has reviewed the staff report and agreement.

Fiscal Impact

It is anticipated that no General Fund resources will be used for this project. All costs will be paid by State Citizens’ Option for Public Safety (COPS) grant fund annual revenue and fund reserves (Account # 272-0000-0000-5005-000). In the Fiscal Year 2020-2021 Budget, a total of \$50,000 will be appropriated to CIP Account Number 272-9000-9000-9010-000 for implementation of the new software, e.g., Windows licensing upgrades, virtual server deployment and IT support, and will comply with the City’s current IT program, purchasing procedures and rates. In the Fiscal Year 2021-22 Budget, \$100,000 will be budgeted in the same account number for the first year’s Motorola payment. For the remaining four years, a total of \$470,999.84 will be budgeted to pay off the remaining project cost.

Grant Funding				
Grant Source	Year	Amount	Matching Funds	Account Number
COPS Funds	2021	\$50,000.00	Not Required	272-9000-9000-9010-000
COPS Funds	2022	\$100,000.00	Not Required	272-9000-9000-9010-000
COPS Funds	2023	\$100,000.00	Not Required	272-9000-9000-9010-000
COPS Funds	2024	\$100,000.00	Not Required	272-9000-9000-9010-000
COPS Funds	2025	\$100,000.00	Not Required	272-9000-9000-9010-000
COPS Funds	2026	\$100,000.00	Not Required	272-9000-9000-9010-000
COPS Funds	2027	\$70,999.84	Not Required	272-9000-9000-9010-000

The South Pasadena Police Department will receive the equipment and software up-front and Motorola will provide in-house financing at 0% interest. Maintenance costs beginning year six will be accounted for in the Department’s annual budget, estimated at \$37,000 with a 5% annual adjustment thereafter.

Lastly, the contract requires the loan value to be insured by the City. The estimated premium is no more than \$350 annually.

The State COPS grant is a public safety program funded through the State’s Vehicle Licensing Fee

program and provides supplemental funding for law enforcement purposes to enhance public safety per California Government Code Sections 30061, et. seq. State COPS grants funds have been awarded annually since 1996 based on population with a minimum award of \$100,000 for each recipient city. State COPS funds may only be used to supplement existing services and shall not be used to supplant any existing funding.

These funds do not require any matching contribution from the City. Staff has contacted the granting agency and obtained approval of the use of funds for the purchase as it fulfills the purpose of the grant to support front-line services. Should COPS grant funds not be available in future years, because the grant program ceases, it will be necessary to return to the City Council to designate an alternate funding source.

Environmental Analysis

This item is exempt from any California Environmental Quality Act (CEQA) analysis based on State CEQA Guidelines Section 15061 (b)(3), the General Rule that CEQA only applies to projects that may have an effect on the environment.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City's website and/or notice in the South Pasadena Review and/or the Pasadena Star-News.

Attachments:

1. Motorola Solutions Municipal Lease Purchase Agreement
2. Motorola Solutions Computer Aided Dispatch and Records System and Services Agreement

Attachment 1.



December 3, 2020

CITY OF SOUTH PASADENA, CA

Enclosed for your review, please find the **Municipal Lease** documentation in connection with the radio equipment to be lease purchased from Motorola Solutions Inc. The interest rate and payment streams outlined in Equipment Lease Purchase Agreement #24845 are valid for contracts that are executed and returned on or before **December 18, 2020**. After **12/18/20**, the Lessor reserves the option to re-quote and re-price the transaction based on current market interest rates.

Once complete, a set with **ORIGINAL "wet" signatures** should be returned to me at the address below:

Motorola Solutions Credit Company LLC
Attn: Paul Mecaskey / 44th Floor
500 W. Monroe
Chicago, IL 60661

To help expedite the order process & given the Covid-19 crisis, I can work off a scanned copy with the originals to follow. Please scan prior to mailing & keep a copy for your records.

Should you have any questions, please contact me at 847-538-3707.

Thank You,

MOTOROLA SOLUTIONS CREDIT COMPANY LLC
Paul Mecaskey

LESSEE FACT SHEET

Please help Motorola Solutions Inc. provide excellent billing service by providing the following information:

1. Complete **Billing** Address CITY OF SOUTH PASADENA, CA

Attention: _____

Phone: _____

2. Lessee County Location: _____

3. Federal Tax I.D. Number _____

4. Purchase Order Number to be referenced on invoice (if necessary) or other “descriptions” that may assist in determining the applicable cost center or department: _____

5. Equipment description that you would like to appear on your invoicing: _____

Appropriate Contact for Documentation / System Acceptance Follow-up:

6. Appropriate Contact & Mailing Address _____

E-mail: _____

Phone: _____

Fax: _____

7. Payment remit to address: **Motorola Solutions Credit Company LLC
P.O. Box 71132
Chicago IL 60694-1132**

Thank you

EQUIPMENT LEASE-PURCHASE AGREEMENT

Lease Number: 24845

LESSEE:

CITY OF SOUTH PASADENA, CA
1414 Mission Street
South Pasadena, CA 91030

LESSOR:

Motorola Solutions, Inc.
500 W. Monroe
Chicago, IL 60661

Lessor agrees to lease to Lessee and Lessee agrees to lease from Lessor, the equipment, software, upgrades of same, extended warranties and other support, and other personal property described in Schedule A attached hereto ("Equipment") in accordance with the following terms and conditions of this Equipment Lease-Purchase Agreement ("Lease").

1. TERM. This Lease will become effective upon the execution hereof by Lessor. The Term of this Lease will commence on date specified in Schedule A attached hereto and unless terminated according to terms hereof or the purchase option, provided in Section 18, is exercised this Lease will continue until the Expiration Date set forth in Schedule B attached hereto ("Lease Term").

2. RENT. Lessee agrees to pay to Lessor or its assignee the Lease Payments (herein so called), including the interest portion, in the amounts specified in Schedule B. The Lease Payments will be payable without notice or demand at the office of the Lessor (or such other place as Lessor or its assignee may from time to time designate in writing), and will commence on the first Lease Payment Date as set forth in Schedule B and thereafter on each of the Lease Payment Dates set forth in Schedule B. Any payments received later than ten (10) days from the due date will bear interest at the highest lawful rate from the due date. Except as specifically provided in Section 5 hereof, the Lease Payments will be absolute and unconditional in all events and will not be subject to any set-off, defense, counterclaim, or recoupment for any reason whatsoever. Lessee reasonably believes that funds can be obtained sufficient to make all Lease Payments during the Lease Term and hereby covenants that a request for appropriation for funds from which the Lease Payments may be made will be requested each fiscal period, including making provisions for such payment to the extent necessary in each budget submitted for the purpose of obtaining funding. It is Lessee's intent to make Lease Payment for the full Lease Term if funds are legally available therefor and in that regard Lessee represents that the Equipment will be used for one or more authorized governmental or proprietary functions essential to its proper, efficient and economic operation.

3. DELIVERY AND ACCEPTANCE. Lessor will cause the Equipment to be delivered to Lessee at the location specified in Schedule A ("Equipment Location"). Lessee will accept the Equipment as soon as it has been delivered and is operational. Lessee will evidence its acceptance of the Equipment either (a) by executing and delivering to Lessor a Delivery and Acceptance Certificate in the form provided by Lessor; or (b) by executing and delivering the form of acceptance provided for in the Contract (defined below).

Even if Lessee has not executed and delivered to Lessor a Delivery and Acceptance Certificate or other form of acceptance acceptable to Lessor, if Lessor believes the Equipment has been delivered and is operational, Lessor may require Lessee to notify Lessor in writing (within five (5) days of Lessee's receipt of Lessor's request) whether or not Lessee deems the Equipment (i) to have been delivered and (ii) to be operational, and hence be accepted by Lessee. If Lessee fails to so respond in such five (5) day period, Lessee will be deemed to have accepted the Equipment and be deemed to have acknowledged that the Equipment was delivered and is operational as if Lessee had in fact executed and delivered to Lessor a Delivery and Acceptance Certificate or other form acceptable to Lessor.

4. REPRESENTATIONS AND WARRANTIES. Lessee acknowledges that the Equipment leased hereunder is being manufactured and installed by Motorola Solutions, Inc. (or one of its wholly owned subsidiaries) pursuant to contract (the "Contract") covering the Equipment. Lessee acknowledges that on or prior to the date of acceptance of the Equipment, Lessor intends to sell and assign Lessor's right, title and interest in and to this Agreement and the Equipment to an assignee ("Assignee"). LESSEE FURTHER ACKNOWLEDGES THAT EXCEPT AS EXPRESSLY SET FORTH IN THE CONTRACT, LESSOR MAKES NO EXPRESS OR IMPLIED WARRANTIES OF ANY NATURE OR KIND WHATSOEVER, AND AS BETWEEN LESSEE AND THE ASSIGNEE, THE PROPERTY SHALL BE ACCEPTED BY LESSEE "AS IS" AND "WITH ALL FAULTS". LESSEE AGREES TO SETTLE ALL CLAIMS DIRECTLY WITH LESSOR AND WILL NOT ASSERT OR SEEK TO ENFORCE ANY SUCH CLAIMS AGAINST THE ASSIGNEE. NEITHER LESSOR NOR THE ASSIGNEE SHALL BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER AS A RESULT OF THE LEASE OF THE EQUIPMENT, INCLUDING WITHOUT LIMITATION, LOSS OF PROFITS, PROPERTY DAMAGE OR LOST PRODUCTION WHETHER SUFFERED BY LESSEE OR ANY THIRD PARTY.

Lessor is not responsible for, and shall not be liable to Lessee for damages relating to loss of value of the Equipment for any cause or situation (including, without limitation, governmental actions or regulations or actions of other third parties).

5. NON-APPROPRIATION OF FUNDS. Notwithstanding anything contained in this Lease to the contrary, Lessee has the right to not appropriate funds to make Lease Payments required hereunder in any fiscal period and in the event no funds are appropriated or in the event funds appropriated by Lessee's governing body or otherwise available by any lawful means whatsoever in any fiscal period of Lessee for Lease Payments or other amounts due under this Lease are insufficient therefor, this Lease shall terminate on the last day of the fiscal period for which appropriations were received without penalty or expense to Lessee of any kind whatsoever, except as to the portions of Lease Payments or other amounts herein agreed upon for which funds shall have been appropriated and budgeted or are otherwise available. The Lessee will immediately notify the Lessor or its Assignee of such occurrence. In the event of such termination, Lessee agrees to promptly discontinue use of the Equipment, remove or delete any software which is part of the Equipment from all of Lessee's computers and electronic devices, and peaceably surrender possession of the Equipment to Lessor or its Assignee on the date of such termination, packed for shipment in accordance with manufacturer specifications and freight prepaid and insured to any location in the continental United States designated by Lessor. Lessor will have all legal and equitable rights and remedies to take possession of the Equipment. Non-appropriation of funds shall not constitute a default hereunder for purposes of Section 16.

6. LESSEE CERTIFICATION. Lessee represents, covenants and warrants that: (i) Lessee is a state or a duly constituted political subdivision or agency of the state of the Equipment Location; (ii) the interest portion of the Lease Payments shall be excludable from Lessor's gross income pursuant to Section 103 of the Internal Revenue Code of 1986, as it may be amended from time to time (the "Code"); (iii) the execution, delivery and performance by the Lessee of this Lease have been duly authorized by all necessary action on the part of the Lessee; (iv) this Lease constitutes a legal, valid and binding obligation of the Lessee enforceable in accordance with its terms; (v) Lessee will comply with the information reporting requirements of Section 149(e) of the Internal Revenue Code of 1986 (the "Code"), and such compliance shall include but not be limited to the execution of information statements requested by Lessor; (vi) Lessee will not do or cause to be done any act which will cause, or by omission of any act allow, the Lease to be an arbitrage bond within the meaning of Section 148(a) of the Code; (vii) Lessee will not do or cause to be done any act which will cause, or by omission of any act allow, this Lease to be a private activity bond within the meaning of Section 141(a) of the Code; (viii) Lessee will not do or cause to be done any act which will cause, or by omission of any act allow, the interest portion of the Lease Payment to be or become includible in gross income for Federal income taxation purposes under the Code; (ix) Lessee will be the only entity to own, use and operate the Equipment

during the Lease Term; and (x) Lessee agrees that the Equipment shall be and remain personal property notwithstanding the manner in which the same may be attached or affixed to realty, and Lessee shall do all acts and enter into all agreements necessary to insure that the Equipment remains personal property.

Lessee represents, covenants and warrants that: (i) it will do or cause to be done all things necessary to preserve and keep the Lease in full force and effect, (ii) it has complied with all laws relative to public bidding where necessary, and (iii) it has sufficient appropriations or other funds available to pay all amounts due hereunder for the current fiscal period.

If Lessee breaches the covenant contained in this Section, the interest component of Lease Payments may become includible in gross income of the owner or owners thereof for federal income tax purposes. In such event, notwithstanding anything to the contrary contained in Section 11 of this Agreement, Lessee agrees to pay promptly after any such determination of taxability and on each Lease Payment date thereafter to Lessor an additional amount determined by Lessor to compensate such owner or owners for the loss of such excludibility (including, without limitation, compensation relating to interest expense, penalties or additions to tax), which determination shall be conclusive (absent manifest error). Notwithstanding anything herein to the contrary, any additional amount payable by Lessee pursuant to this Section 6 shall be payable solely from Legally Available Funds.

It is Lessor's and Lessee's intention that this Agreement not constitute a "true" lease for federal income tax purposes and, therefore, it is Lessor's and Lessee's intention that Lessee be considered the owner of the Equipment for federal income tax purposes.

7. TITLE TO EQUIPMENT; SECURITY INTEREST. Upon shipment of the Equipment to Lessee hereunder, title to the Equipment (other than any intellectual property rights in the software comprising part of the Equipment) will vest in Lessee subject to any applicable license; provided, however, that (i) in the event of termination of this Lease by Lessee pursuant to Section 5 hereof; or (ii) upon the occurrence of an Event of Default hereunder, and as long as such Event of Default is continuing, title will immediately vest in Lessor or its Assignee, and Lessee shall immediately discontinue use of the Equipment, remove the Equipment from Lessee's computers and other electronic devices and deliver the Equipment to Lessor or its Assignee. In order to secure all of its obligations hereunder, Lessee hereby (i) grants to Lessor a first and prior security interest in any and all right, title and interest of Lessee in the Equipment and in all additions, attachments, accessions, and substitutions thereto, and on any proceeds therefrom; (ii) agrees that this Lease may be filed as a financing statement evidencing such security interest; and (iii) agrees to execute and deliver all financing statements, certificates of title and other instruments necessary or appropriate to evidence such security interest.

8. USE; REPAIRS. Lessee will use the Equipment in a careful manner for the use contemplated by the manufacturer of the Equipment and shall comply with all laws, ordinances, insurance policies, the Contract, any licensing or other agreement, and regulations relating to, and will pay all costs, claims, damages, fees and charges arising out of the possession, use or maintenance of the Equipment. Lessee, at its expense will keep the Equipment in good repair and furnish and/or install all parts, mechanisms, updates, upgrades and devices required therefor.

9. ALTERATIONS. Lessee will not make any alterations, additions or improvements to the Equipment without Lessor's prior written consent unless such alterations, additions or improvements may be readily removed without damage to the Equipment.

10. LOCATION; INSPECTION. The Equipment will not be removed from, [or if the Equipment consists of rolling stock, its permanent base will not be changed from] the Equipment Location without Lessor's prior written consent which will not be unreasonably withheld. Lessor will be entitled to enter upon the

Equipment Location or elsewhere during reasonable business hours to inspect the Equipment or observe its use and operation.

11. LIENS AND TAXES. Lessee shall keep the Equipment free and clear of all levies, liens and encumbrances except those created under this Lease. Lessee shall pay, when due, all charges and taxes (local, state and federal) which may now or hereafter be imposed upon the ownership, licensing, leasing, rental, sale, purchase, possession or use of the Equipment, excluding however, all taxes on or measured by Lessor's income. If Lessee fails to pay said charges and taxes when due, Lessor shall have the right, but shall not be obligated, to pay said charges and taxes. If Lessor pays any charges or taxes, Lessee shall reimburse Lessor therefor within ten days of written demand.

12. RISK OF LOSS: DAMAGE; DESTRUCTION. Lessee assumes all risk of loss or damage to the Equipment from any cause whatsoever, and no such loss of or damage to the Equipment nor defect therein nor unfitness or obsolescence thereof shall relieve Lessee of the obligation to make Lease Payments or to perform any other obligation under this Lease. In the event of damage to any item of Equipment, Lessee will immediately place the same in good repair with the proceeds of any insurance recovery applied to the cost of such repair. If Lessor determines that any item of Equipment is lost, stolen, destroyed or damaged beyond repair (an "Event of Loss"), Lessee at the option of Lessor will: either (a) replace the same with like equipment in good repair; or (b) on the next Lease Payment date, pay Lessor the sum of : (i) all amounts then owed by Lessee to Lessor under this Lease, including the Lease payment due on such date; and (ii) an amount equal to all remaining Lease Payments to be paid during the Lease Term as set forth in Schedule B.

In the event that Lessee is obligated to make such payment with respect to less than all of the Equipment, Lessor will provide Lessee with the pro rata amount of the Lease Payment and the Balance Payment (as set forth in Schedule B) to be made by Lessee with respect to that part of the Equipment which has suffered the Event of Loss.

13. INSURANCE. Lessee will, at its expense, maintain at all times during the Lease Term, fire and extended coverage, public liability and property damage insurance with respect to the Equipment in such amounts, covering such risks, and with such insurers as shall be satisfactory to Lessor, or, with Lessor's prior written consent, Lessee may self-insure against any or all such risks. All insurance covering loss of or damage to the Equipment shall be carried in an amount no less than the amount of the then applicable Balance Payment with respect to such Equipment. The initial amount of insurance required is set forth in Schedule B. Each insurance policy will name Lessee as an insured and Lessor or its Assigns as an additional insured, and will contain a clause requiring the insurer to give Lessor at least thirty (30) days prior written notice of any alteration in the terms of such policy or the cancellation thereof. The proceeds of any such policies will be payable to Lessee and Lessor or its Assigns as their interests may appear. Upon acceptance of the Equipment and upon each insurance renewal date, Lessee will deliver to Lessor a certificate evidencing such insurance. In the event that Lessee has been permitted to self-insure, Lessee will furnish Lessor with a letter or certificate to such effect. In the event of any loss, damage, injury or accident involving the Equipment, Lessee will promptly provide Lessor with written notice thereof and make available to Lessor all information and documentation relating thereto.

14. INDEMNIFICATION. Lessee shall, to the extent permitted by law, indemnify Lessor against, and hold Lessor harmless from, any and all claims, actions, proceedings, expenses, damages or liabilities, including attorneys' fees and court costs, arising in connection with the Equipment, including, but not limited to, its selection, purchase, delivery, licensing, possession, use, operation, rejection, or return and the recovery of claims under insurance policies thereon.

15. ASSIGNMENT. Without Lessor's prior written consent, Lessee will not either (i) assign, transfer, pledge, hypothecate, grant any security interest in or otherwise dispose of this Lease or the Equipment or any interest in this Lease or the Equipment or; (ii) sublet or lend the Equipment or permit it to be used by anyone other than Lessee or Lessee's employees. Lessor may assign its rights, title and interest in and to this Lease, the Equipment and any documents executed with respect to this Lease and/or grant or assign a security interest in this Lease and the Equipment, in whole or in part. Any such assignees shall have all of the rights of Lessor under this Lease. Subject to the foregoing, this Lease inures to the benefit of and is binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

Lessee covenants and agrees not to assert against the Assignee any claims or defenses by way of abatement, setoff, counterclaim, recoupment or the like which Lessee may have against Lessor. No assignment or reassignment of any Lessor's right, title or interest in this Lease or the Equipment shall be effective unless and until Lessee shall have received a notice of assignment, disclosing the name and address of each such assignee; provided, however, that if such assignment is made to a bank or trust company as paying or escrow agent for holders of certificates of participation in the Lease, it shall thereafter be sufficient that a copy of the agency agreement shall have been deposited with Lessee until Lessee shall have been advised that such agency agreement is no longer in effect. During the Lease Term Lessee shall keep a complete and accurate record of all such assignments in form necessary to comply with Section 149(a) of the Code, and the regulations, proposed or existing, from time to time promulgated thereunder. No further action will be required by Lessor or by Lessee to evidence the assignment, but Lessee will acknowledge such assignments in writing if so requested.

After notice of such assignment, Lessee shall name the Assignee as additional insured and loss payee in any insurance policies obtained or in force. Any Assignee of Lessor may reassign this Lease and its interest in the Equipment and the Lease Payments to any other person who, thereupon, shall be deemed to be Lessor's Assignee hereunder.

16. EVENT OF DEFAULT. The term "Event of Default", as used herein, means the occurrence of any one or more of the following events: (i) Lessee fails to make any Lease Payment (or any other payment) as it becomes due in accordance with the terms of the Lease when funds have been appropriated sufficient for such purpose, and any such failure continues for ten (10) days after the due date thereof; (ii) Lessee fails to perform or observe any other covenant, condition, or agreement to be performed or observed by it hereunder and such failure is not cured within twenty (20) days after written notice thereof by Lessor; (iii) the discovery by Lessor that any statement, representation, or warranty made by Lessee in this Lease or in writing delivered by Lessee pursuant hereto or in connection herewith is false, misleading or erroneous in any material respect; (iv) proceedings under any bankruptcy, insolvency, reorganization or similar legislation shall be instituted against or by Lessee, or a receiver or similar officer shall be appointed for Lessee or any of its property, and such proceedings or appointments shall not be vacated, or fully stayed, within twenty (20) days after the institution or occurrence thereof; or (v) an attachment, levy or execution is threatened or levied upon or against the Equipment.

17. REMEDIES. Upon the occurrence of an Event of Default, and as long as such Event of Default is continuing, Lessor may, at its option, exercise any one or more of the following remedies: (i) by written notice to Lessee, declare all amounts then due under the Lease, and all remaining Lease Payments due during the fiscal period in effect when the default occurs to be immediately due and payable, whereupon the same shall become immediately due and payable; (ii) by written notice to Lessee, request Lessee to (and Lessee agrees that it will), at Lessee's expense, promptly discontinue use of the Equipment, remove the Equipment from all of Lessee's computers and electronic devices, return the Equipment to Lessor in the manner set forth in Section 5 hereof, or Lessor, at its option, may enter upon the premises where the Equipment is located and take immediate possession of and remove the same; (iii) sell or lease the Equipment or sublease it for the account of Lessee, holding Lessee liable for all Lease Payments and other amounts due prior to the effective date of such selling,

leasing or subleasing and for the difference between the purchase price, rental and other amounts paid by the purchaser, Lessee or sublessee pursuant to such sale, lease or sublease and the amounts payable by Lessee hereunder; (iv) promptly return the Equipment to Lessor in the manner set forth in Section 5 hereof; and (v) exercise any other right, remedy or privilege which may be available to it under applicable laws of the state of the Equipment Location or any other applicable law or proceed by appropriate court action to enforce the terms of the Lease or to recover damages for the breach of this Lease or to rescind this Lease as to any or all of the Equipment. In addition, Lessee will remain liable for all covenants and indemnities under this Lease and for all legal fees and other costs and expenses, including court costs, incurred by Lessor with respect to the enforcement of any of the remedies listed above or any other remedy available to Lessor.

18. PURCHASE OPTION. Upon thirty (30) days prior written notice from Lessee to Lessor, and provided that no Event of Default has occurred and is continuing, or no event, which with notice or lapse of time, or both could become an Event of Default, then exists, Lessee will have the right to purchase the Equipment on the Lease Payment dates set forth in Schedule B by paying to Lessor, on such date, the Lease Payment then due together with the Balance Payment amount set forth opposite such date. Upon satisfaction by Lessee of such purchase conditions, Lessor will transfer any and all of its right, title and interest in the Equipment (other than any intellectual property rights in the software comprising part of the Equipment) to Lessee as is, without warranty, express or implied, except that the Equipment is free and clear of any liens created by Lessor.

18.1 PARTIAL PAYMENT/PURCHASE OPTION – GRANT FUNDING. Upon thirty (30) days prior written notice from Lessee to Lessor, and provided no Event of Default has occurred and is continuing, or no event, which with notice or lapse of time, or both could become an Event of Default, then exists, Lessee will have the right to make a partial payment against the Lease one time per calendar year at an amount no less than \$175,000.00 SO LONG AS SUCH PAYMENT IS BEING MADE FROM A FEDERAL GRANT FUNDING AWARD and upon Lessor's request, Lessee will provide Lessor certification of such. Application of said payment shall first be applied to accrued interest with the remainder going against the principal. Should Lessee make such payment, all remaining Lease Payments will be adjusted accordingly over the remainder of the Lease Term and Lessor shall provide to Lessee a revised Schedule B. Any reduction in outstanding principal can be viewed as the Lessee obtaining a greater equity position in the Lease subject to Lessor's rights pursuant to the other terms of this Lease.

19. NOTICES. All notices to be given under this Lease shall be made in writing and mailed by certified mail, return receipt requested, to the other party at its address set forth herein or at such address as the party may provide in writing from time to time. Any such notice shall be deemed to have been received five days subsequent to such mailing.

20. SECTION HEADINGS. All section headings contained herein are for the convenience of reference only and are not intended to define or limit the scope of any provision of this Lease.

21. GOVERNING LAW. This Lease shall be construed in accordance with, and governed by the laws of, the state of the Equipment Location.

22. DELIVERY OF RELATED DOCUMENTS. Lessee will execute or provide, as requested by Lessor, such other documents and information as are reasonably necessary with respect to the transaction contemplated by this Lease.

23. ENTIRE AGREEMENT; WAIVER. This Lease, together with Schedule A Equipment Lease-Purchase Agreement, Schedule B, Evidence of Insurance, Statement of Essential Use/Source of Funds, Certificate of Incumbency, Certified Lessee Resolution (if any), Bank Qualified Statement, Information Return for Tax-Exempt Governmental Obligations and the Delivery and Acceptance Certificate and other attachments

hereto, and other documents or instruments executed by Lessee and Lessor in connection herewith, constitutes the entire agreement between the parties with respect to the Lease of the Equipment, and this Lease shall not be modified, amended, altered, or changed except with the written consent of Lessee and Lessor. Any provision of the Lease found to be prohibited by law shall be ineffective to the extent of such prohibition without invalidating the remainder of the Lease.

The waiver by Lessor of any breach by Lessee of any term, covenant or condition hereof shall not operate as a waiver of any subsequent breach thereof.

24. EXECUTION IN COUNTERPARTS. This Lease may be executed in several counterparts, either electronically or manually, all of which shall constitute but one and the same instrument. Lessor reserves the right to request receipt of a manually-executed counterpart from Lessee. Lessor and Lessee agree that the only original counterpart for purposes of perfection by possession shall be the original counterpart manually executed by Lessor and identified as “Original”, regardless of whether Lessee’s execution or delivery of said counterpart is done manually or electronically.

*** *SIGNATURE PAGE TO FOLLOW* ***

IN WITNESS WHEREOF, the parties have executed this Agreement as of the 31st day of December, 2020.

LESSEE:
CITY OF SOUTH PASADENA, CA

LESSOR:
MOTOROLA SOLUTIONS, INC.

By: _____

By: _____

Print Name: _____

Title: _____

Title: _____

CERTIFICATE OF INCUMBENCY

I, _____ do hereby certify that I am the duly elected or
(Printed Name of Secretary/Clerk)

appointed and acting Secretary or Clerk of the CITY OF SOUTH PASADENA, CA, an entity duly organized and existing under the laws of the **State of California**, that I have custody of the records of such entity, and that, as of the date hereof, the individual(s) executing this agreement is/are the duly elected or appointed officer(s) of such entity holding the office(s) below his/her/their respective name(s). I further certify that (i) the signature(s) set forth above his/her/their respective name(s) and title(s) is/are his/her/their true and authentic signature(s) and (ii) such officer(s) have the authority on behalf of such entity to enter into that certain Equipment Lease Purchase Agreement number **24845**, between CITY OF SOUTH PASADENA, CA and Motorola Solutions, Inc. If the initial insurance requirement on Schedule B exceeds \$1,000,000, attached as part of the Equipment Lease Purchase Agreement is a Certified Lessee Resolution adopted by the governing body of the entity.

IN WITNESS WHEREOF, I have executed this certificate and affixed the seal of CITY OF SOUTH PASADENA, CA, hereto this

_____ day of _____, 2020.

By: _____

(Signature of Secretary/Clerk)

SEAL

OPINION OF COUNSEL

With respect to that certain Equipment Lease-Purchase Agreement 24845 by and between Motorola Solutions, Inc. and the Lessee, I am of the opinion that: (i) the Lessee is, within the meaning of Section 103 of the Internal Revenue Code of 1986, a state or a fully constituted political subdivision or agency of the State of the Equipment Location described in Schedule A hereto; (ii) the execution, delivery and performance by the Lessee of the Lease have been duly authorized by all necessary action on the part of the Lessee, (iii) the Lease constitutes a legal, valid and binding obligation of the Lessee enforceable in accordance with its terms; and (iv) Lessee has sufficient monies available to make all payments required to be paid under the Lease during the current fiscal year of the Lease, and such monies have been properly budgeted and appropriated for this purpose in accordance with State law. This opinion may be relied upon by the Lessor and any assignee of the Lessor's rights under the Lease.

Attorney for CITY OF SOUTH PASADENA, CA

**SCHEDULE A
EQUIPMENT LEASE-PURCHASE AGREEMENT**

**Schedule A 24845
Lease Number:**

This Equipment Schedule is hereby attached to and made a part of that certain Equipment Lease-Purchase Agreement Number **24845** ("Lease"), between MOTOROLA SOLUTIONS INC. ("Lessor") and CITY OF SOUTH PASADENA, CA ("Lessee").

Lessor hereby leases to Lessee under and pursuant to the Lease, and Lessee hereby accepts and leases from Lessor under and pursuant to the Lease, subject to and upon the terms and conditions set forth in the Lease and upon the terms set forth below, the following items of Equipment

QUANTITY	DESCRIPTION (Manufacturer, Model, and Serial Nos.)
	Refer to attached Equipment List.
Equipment Location: CA	

**Initial Term: 74 Months Commencement Date: 12/31/2020
First Payment Due Date: 2/1/2022**

Six (6) consecutive annual payments as outlined in the attached Schedule B, plus Sales/Use Tax of \$0.00, payable on the Lease Payment Dates set forth in Schedule B.

Lessee: CITY OF SOUTH PASADENA, CA

Schedule B (Lease #24845)

Total Contract (incl tax) \$ 570,999.84
 less: Out-yrs Services \$ (147,973.09)
Amt Financed \$ 423,026.75

Compound Period: Annual
 Nominal Annual Rate: 0.000%

CASH FLOW DATA

Event	Date	Amount	Number	Period	End Date
1 Loan	12/31/2020	423,026.75	1		
2 Payment	2/1/2022	70,504.46	6	Annual	2/1/2027

AMORTIZATION SCHEDULE - Normal Amortization, 360 Day Year

	Date	Lease Payment	Interest	Principal	Balance	Out-Yrs Support	TOTAL PAYMENT
Loan	12/31/2020				423,026.75		
2020 Totals		0.00	0.00	0.00			
1	2/1/2022	70,504.46	0.00	70,504.46	352,522.29	\$ 29,495.54	\$ 100,000.00
2022 Totals		70,504.46	0.00	70,504.46			
2	2/1/2023	70,504.46	0.00	70,504.46	282,017.83	\$ 29,495.54	\$ 100,000.00
2023 Totals		70,504.46	0.00	70,504.46			
3	2/1/2024	70,504.46	0.00	70,504.46	211,513.37	\$ 29,495.54	\$ 100,000.00
2024 Totals		70,504.46	0.00	70,504.46			
4	2/1/2025	70,504.46	0.00	70,504.46	141,008.91	\$ 29,495.54	\$ 100,000.00
2025 Totals		70,504.46	0.00	70,504.46			
5	2/1/2026	70,504.46	0.00	70,504.46	70,504.45	\$ 29,495.54	\$ 100,000.00
2026 Totals		70,504.46	0.00	70,504.46			
6	2/1/2027	70,504.46	0.01	70,504.45	0.00	\$ 495.40	\$ 70,999.86
2027 Totals		70,504.46	0.01	70,504.45			
Grand Totals		423,026.76	0.01	423,026.75		\$ 147,973.09	\$ 570,999.84

INITIAL INSURANCE REQUIREMENT: \$423,026.75

Except as specifically provided in Section five of the Lease hereof, Lessee agrees to pay to Lessor or its assignee the Lease Payments, including the interest portion, in the amounts and dates specified in the above payment schedule.

ORIGINAL ISSUE DISCOUNT (if applicable):

Lessee acknowledges that the amount financed by Lessor is \$381,049.75 and that such amount is the issue price for this Lease Payment Schedule for federal income tax purposes. The difference between the principal amount of this Lease Payment Schedule and the issue price is original issue discount as defined in Section 1288 of the Code. The yield for this Lease Payment Schedule for federal income tax purposes is 2.99%. Such issue price and yield will be stated in the applicable Form 8038-G.

EVIDENCE OF INSURANCE

Fire, extended coverage, public liability and property damage insurance for all of the Equipment listed on Schedule A number **24845** to that Equipment Lease Purchase Agreement number **24845** will be maintained by **CITY OF SOUTH PASADENA, CA** as stated in the Equipment Lease Purchase Agreement.

This insurance is provided by:

Name of insurance provider

Address of insurance provider

City, State and Zip Code

Phone number of local insurance provider

E-mail address

In accordance with the Equipment Lease Purchase Agreement Number **24845**, **CITY OF SOUTH PASADENA, CA**, hereby certifies that following coverage are or will be in full force and effect:

Type	Amount	Effective Date	Expiration Date	Policy Number
Fire and Extended Coverage	_____	_____	_____	_____
Property Damage	_____	_____	_____	_____
Public Liability	_____	_____	_____	_____

Certificate shall include the following:

Description: All Equipment listed on Schedule A number 24845 to that Equipment Lease Purchase Agreement number 24845. Please include equipment cost equal to the Initial Insurance Requirement on Schedule B to Equipment Lease Purchase Agreement number 24845 and list any deductibles.

Certificate Holder:

MOTOROLA SOLUTIONS, INC. and or its assignee as additional insured and loss payee
500 W Monroe
Chicago, IL 60661

If self insured, contact Motorola representative for template of self insurance letter.

STATEMENT OF ESSENTIAL USE/SOURCE OF FUNDS (# 24845)

To further understand the essential governmental use intended for the equipment together with an understanding of the sources from which payments will be made, **please address the following questions** by completing this form or by sending a separate letter:

- 1.** What is the specific use of the equipment?

- 2.** Why is the equipment essential to the operation of **CITY OF SOUTH PASADENA, CA**?

- 3.** Does the equipment replace existing equipment?

If so, why is the replacement being made?

- 4.** Is there a specific cost justification for the new equipment?

If yes, please attach outline of justification.

- 5.** What is the expected source of funds for the payments due under the Lease for the current fiscal year and future fiscal years?

General Fund
- Have dollars already been appropriated for the Lease Payment? Yes -or- No

- If yes, for what fiscal year(s) have appropriations been made? _____

Combination of Federal Grant funding supplemented by General Revenues

- What fiscal year(s) is expected to be funded via federal grants: _____

- What fiscal year(s) is expected to be funded via general revenues: _____

- Have these general revenues already been appropriated for the Lease Payment(s)? Yes -or- No

Other (please describe): _____

CERTIFIED LESSEE RESOLUTION (Lease# 24845)

At a duly called meeting of the Governing Body of the Lessee (as defined in the Lease) *held on or before the execution date of the Lease*, the following resolution was introduced and adopted.

BE IT RESOLVED by the Governing Board of Lessee as follows:

1. Determination of Need. The Governing Body of Lessee has determined that a true and very real need exists for the acquisition of the Equipment or other personal property described in the Lease between CITY OF SOUTH PASADENA, CA (Lessee) and Motorola Solutions, Inc. (Lessor).
2. Approval and Authorization. The Governing body of Lessee has determined that the Lease, substantially in the form presented to this meeting, is in the best interests of the Lessee for the acquisition of such Equipment or other personal property, and the Governing Board hereby approves the entering into of the Lease by the Lessee and hereby designates and authorizes the following person(s) referenced in the Lease to execute and deliver the Lease on Lessee's behalf with such changes thereto as such person deems appropriate, and any related documents, including any escrow agreement, necessary to the consummation of the transactions contemplated by the Lease.
3. Adoption of Resolution. The signatures in the Lease from the designated individuals for the Governing Body of the Lessee evidence the adoption by the Governing Body of this Resolution.

Bank Qualified Statement (Lease# 24845)

LESSEE CERTIFIES THAT IT (circle one) HAS or HAS NOT

DESIGNATED THIS LEASE AS A QUALIFIED TAX-EXEMPT OBLIGATION IN ACCORDANCE WITH SECTION 265(b)(3) OF THE CODE AND IF THE LESSEE HAS DESIGNATED THIS LEASE AS A QUALIFIED TAX-EXEMPT OBLIGATION, IT HAS NOT DESIGNATED MORE THAN \$10,000,000 OF ITS OBLIGATIONS AS QUALIFIED TAX-EXEMPT OBLIGATIONS IN ACCORDANCE WITH SUCH SECTION FOR THE CURRENT CALENDAR YEAR AND THAT IT REASONABLY ANTICIPATES THAT THE TOTAL AMOUNT OF TAX-EXEMPT OBLIGATIONS TO BE ISSUED BY LESSEE DURING THE CURRENT CALENDAR YEAR WILL NOT EXCEED \$10,000,000.

Form **8038-G**

Information Return for Tax-Exempt Governmental Bonds

(Rev. September 2018)

Under Internal Revenue Code section 149(e)
See separate instructions.

OMB No. 1545-0720

Department of the Treasury
Internal Revenue Service

Caution: If the issue price is under \$100,000, use Form 8038-GC.
Go to www.irs.gov/F8038G for instructions and the latest information.

Part I Reporting Authority		If Amended Return, check here <input type="checkbox"/>	
1 Issuer's name City of South Pasadena, CA		2 Issuer's employer identification number (EIN)	
3a Name of person (other than issuer) with whom the IRS may communicate about this return (see instructions)		3b Telephone number of other person shown on 3a	
4 Number and street (or P.O. box if mail is not delivered to street address) 1414 Mission Street	Room/suite	5 Report number (For IRS Use Only) 3	
6 City, town, or post office, state, and ZIP code South Pasadena, CA 91030		7 Date of issue 12/31/2020	
8 Name of issue Equipment Lease Purchase Agreement 24845		9 CUSIP number	
10a Name and title of officer or other employee of the issuer whom the IRS may call for more information (see instructions)		10b Telephone number of officer or other employee shown on 10a	

Part II Type of Issue (enter the issue price). See the instructions and attach schedule.

11 Education	11		
12 Health and hospital	12		
13 Transportation	13		
14 Public safety	14	\$381,049	75
15 Environment (including sewage bonds)	15		
16 Housing	16		
17 Utilities	17		
18 Other. Describe	18		
19a If bonds are TANs or RANs, check only box 19a			<input type="checkbox"/>
19b If bonds are BANs, check only box 19b			<input type="checkbox"/>
20 If bonds are in the form of a lease or installment sale, check box			<input type="checkbox"/>

Part III Description of Bonds. Complete for the entire issue for which this form is being filed.

	(a) Final maturity date	(b) Issue price	(c) Stated redemption price at maturity	(d) Weighted average maturity	(e) Yield
21	2/1/27	\$381,049.75	\$423,026.75	6.167 years	2.99 %

Part IV Uses of Proceeds of Bond Issue (including underwriters' discount)

22 Proceeds used for accrued interest	22		
23 Issue price of entire issue (enter amount from line 21, column (b))	23		
24 Proceeds used for bond issuance costs (including underwriters' discount)	24		
25 Proceeds used for credit enhancement	25		
26 Proceeds allocated to reasonably required reserve or replacement fund	26		
27 Proceeds used to refund prior tax-exempt bonds. Complete Part V	27		
28 Proceeds used to refund prior taxable bonds. Complete Part V	28		
29 Total (add lines 24 through 28)	29		
30 Nonrefunding proceeds of the issue (subtract line 29 from line 23 and enter amount here)	30		

Part V Description of Refunded Bonds. Complete this part only for refunding bonds.

31 Enter the remaining weighted average maturity of the tax-exempt bonds to be refunded	_____ years
32 Enter the remaining weighted average maturity of the taxable bonds to be refunded	_____ years
33 Enter the last date on which the refunded tax-exempt bonds will be called (MM/DD/YYYY)	_____
34 Enter the date(s) the refunded bonds were issued (MM/DD/YYYY)	_____

Part VI Miscellaneous

35 Enter the amount of the state volume cap allocated to the issue under section 141(b)(5)	35		
36a Enter the amount of gross proceeds invested or to be invested in a guaranteed investment contract (GIC). See instructions	36a		
b Enter the final maturity date of the GIC ▶ (MM/DD/YYYY) _____			
c Enter the name of the GIC provider ▶ _____			
37 Pooled financings: Enter the amount of the proceeds of this issue that are to be used to make loans to other governmental units	37		
38a If this issue is a loan made from the proceeds of another tax-exempt issue, check box ▶ <input type="checkbox"/> and enter the following information:			
b Enter the date of the master pool bond ▶ (MM/DD/YYYY) _____			
c Enter the EIN of the issuer of the master pool bond ▶ _____			
d Enter the name of the issuer of the master pool bond ▶ _____			
39 If the issuer has designated the issue under section 265(b)(3)(B)(i)(III) (small issuer exception), check box ▶ <input type="checkbox"/>			
40 If the issuer has elected to pay a penalty in lieu of arbitrage rebate, check box ▶ <input type="checkbox"/>			
41a If the issuer has identified a hedge, check here ▶ <input type="checkbox"/> and enter the following information:			
b Name of hedge provider ▶ _____			
c Type of hedge ▶ _____			
d Term of hedge ▶ _____			
42 If the issuer has superintegrated the hedge, check box ▶ <input type="checkbox"/>			
43 If the issuer has established written procedures to ensure that all nonqualified bonds of this issue are remediated according to the requirements under the Code and Regulations (see instructions), check box ▶ <input type="checkbox"/>			
44 If the issuer has established written procedures to monitor the requirements of section 148, check box ▶ <input type="checkbox"/>			
45a If some portion of the proceeds was used to reimburse expenditures, check here ▶ <input type="checkbox"/> and enter the amount of reimbursement ▶ _____			
b Enter the date the official intent was adopted ▶ (MM/DD/YYYY)			

Signature and Consent	Under penalties of perjury, I declare that I have examined this return and accompanying schedules and statements, and to the best of my knowledge and belief, they are true, correct, and complete. I further declare that I consent to the IRS's disclosure of the issuer's return information, as necessary to process this return, to the person that I have authorized above.				
	▶ _____ Signature of issuer's authorized representative	Date	▶ _____ Type or print name and title		
Paid Preparer Use Only	Print/Type preparer's name	Preparer's signature	Date	Check <input type="checkbox"/> if self-employed	PTIN
	Firm's name ▶ _____	Firm's EIN ▶ _____			
	Firm's address ▶ _____	Phone no. _____			

EQUIPMENT LEASE PURCHASE AGREEMENT DELIVERY AND ACCEPTANCE CERTIFICATE

The undersigned Lessee hereby acknowledges receipt of the Equipment described below (“Equipment”) and Lessee hereby accepts the Equipment after full inspection thereof as satisfactory for all purposes of lease Schedule A to the Equipment Lease Purchase Agreement executed by Lessee and Lessor.

Equipment Lease Purchase Agreement No.: 24845

Lease Schedule A No. : 24845

EQUIPMENT INFORMATION

QUANTITY	MODEL NUMBER	EQUIPMENT DESCRIPTION
		Equipment referenced in lease Schedule A# 24845. See Schedule A for a detailed Equipment List.

LESSEE:

CITY OF SOUTH PASADENA, CA

By: ___ to be completed after delivery___

Date: _____

Attachment 2.

Computer Aided Dispatch and Records System and Services Agreement (Lease)

Motorola Solutions, Inc. ("Motorola") and South Pasadena Police Department ("Customer") enter into this Computer Aided Dispatch ("CAD") and Records System and Services Agreement ("Agreement"), pursuant to which Customer will purchase and Motorola will sell the System and Services, as described below. Motorola and Customer may be referred to individually as a "Party" and collectively as the "Parties." For good and valuable consideration, the Parties agree as follows:

Section 1 ATTACHMENTS:

1.1. EXHIBITS. The Exhibits listed below are exhibits related to the System sale and implementation. These Exhibits are incorporated into and made a part of this Agreement.

Exhibit A Software License Agreements

Exhibit A-1 "Motorola Software License Agreement"

Exhibit A-2 Microsoft "End-User License Agreement(s)", if applicable

Exhibit A-3 "Microsoft Products terms", if applicable

Exhibit A-4 "ESRI OEM Software terms", if applicable

Exhibit B "Payment Schedule", if applicable

Exhibit C Technical and Implementation Documents

C-1 "Pricing Summary and Equipment List"

C-2 "Statement of Work" May 1, 2020

C-3 "Project Schedule" (To be mutually developed)

C-4 "Training Plan" (To be mutually developed)

C-5 "Technical Product Descriptions"

C-6 "Acceptance Test Plan"

C-7 "Data Conversion Scope of Work"

Exhibit D "Maintenance and Support Agreement", if applicable

Exhibit E "System Acceptance Certificate"

Exhibit F "Subscription Services Addendum"

Exhibit G "Equipment Lease Purchase Agreement Delivery and Acceptance Certificate"

1.2. ADDENDUM (ADDENDA). Customer may elect to purchase professional or subscription services in addition to the System and related services. Any such services will be governed by the terms in the main body of the Agreement and an applicable Addendum containing terms specific to such service. Such Addenda will be labeled with the name of the service being purchased.

1.3 In interpreting this Agreement and resolving any ambiguities: 1) the main body of this Agreement takes precedence over the exhibits and any inconsistency between Exhibits A through G will be resolved in their listed order, and 2) The applicable service Addendum will take precedence over the main body of the Agreement and the Exhibits.

Section 2 DEFINITIONS

Capitalized terms used in this Agreement have the following meanings:

“Acceptance Tests” means those tests described in the Acceptance Test Plan.

“Addendum (Addenda)” is the title of the document(s) containing a specific set of terms and conditions applicable to a particular service or other offering beyond the communication System and System implementation services. The terms in the Addendum are applicable only to the specific service or offering described therein.

“Acceptance Tests” means those tests described in the Acceptance Test Plan, as applicable.

“Beneficial Use” means when Customer first uses the System or a Subsystem for operational purposes (excluding training or testing).

“Confidential Information” means all non-public information consistent with the fulfillment of this Agreement provided by either Party to the other that is (i) disclosed under this Agreement in oral, written, graphic, machine recognizable, and/or sample form, being clearly designated, labeled or marked as confidential or its equivalent or (ii) obtained by examination, testing or analysis of any hardware, software or any component part thereof provided by discloser to recipient. The nature and existence of this Agreement are considered Confidential Information. Confidential Information that is disclosed orally must be identified as confidential at the time of disclosure and confirmed by the discloser by submitting a written document to the recipient within thirty (30) days after such disclosure. The written document must contain a summary of the Confidential Information disclosed with enough specificity for identification purpose and must be labeled or marked as confidential or its equivalent.

“Contract Price” means the price for the System and implementation Services, excluding applicable sales or similar taxes and freight charges. Further, unless otherwise stated in Exhibit B, “Payment Schedule” or the pricing pages of the proposal, recurring fees for maintenance, SUA, or subscription services are not included in the Contract Price.

“Customer Provided Equipment” means any hardware, software or ancillary equipment provided for use with the System by the Customer. Motorola provides no warranty for Customer Provided Equipment.

“Deliverables” means all written information (such as reports, specifications, designs, plans, drawings, analytics, Solution Data, or other technical or business information) that Motorola prepares for Customer in the performance of the Services and is obligated to provide to Customer under this Agreement. The Deliverables, if any, are more fully described in the Statement of Work.

“Derivative Proprietary Materials” means derivatives of the Proprietary Materials that Motorola may from time to time, including during the course of providing the Services, develop and/or use and/or to which Motorola provides Customer access.

“Effective Date” means that date upon which the last Party executes this Agreement.

“Equipment” means the hardware components of the Solution that Customer purchases from Motorola under this Agreement. Equipment that is part of the System is described in the Equipment List.

“Equipment Lease-Purchase Agreement” means the agreement by which Customer finances all or a portion of the Contract Price.

“Feedback” means comments or information, in oral or written form, given to Motorola by Customer in connection with or relating to Equipment or Services, during the term of this Agreement.

“Final System Acceptance” means the Live Operations Cutover and any applicable reliability period have been completed and the System Acceptance Certificate has been memorialized.

“Force Majeure” means an event, circumstance, or act that is beyond a Party’s reasonable control, such as an act of God, an act of the public enemy, an act of a government entity, strikes, other labor disturbances, supplier performance, hurricanes, earthquakes, fires, floods, epidemics, embargoes, war, riots, or any other similar cause.

“Live Operations Cut Over” means the transition of operations from the legacy system to the System.

“Microsoft Product” means a Microsoft SQL Server and/or a Microsoft System Center Operations Manager, either or both of which may be integrated with the Motorola Products. Microsoft Products are subject to the following acknowledgement: “© Copyright 20__ Microsoft Corporation. All rights reserved.”

“Motorola Software” means software that Motorola or its affiliated companies owns.

“Non-Motorola Software” means software provided by Motorola that a party other than Motorola or its affiliated companies owns, including software licensed by the third party to Motorola for distribution to Motorola’s customers with the Software, such as mapping software, database software, paging software, or open source software.

“Open Source Software” (also called “freeware” or “shareware”) means software with either freely obtainable source code, license for modification, or permission for free distribution.

“Proprietary Materials” means certain software tools and/or other technical materials, including, but not limited to, data, modules, components, designs, Utilities, subsets, objects, program listings, models, methodologies, programs, systems, analysis frameworks, leading practices and specifications which Motorola has developed prior to, or independently from, the provision of the Services and/or which Motorola licenses from third parties.

“Proprietary Rights” means the patents, patent applications, inventions, copyrights, trade secrets, trademarks, trade names, mask works, know-how, and other intellectual property rights in and to the Equipment and Software, including those created or produced by Motorola under this Agreement and any corrections, bug fixes, enhancements, updates or modifications to or derivative works from the Software whether made by Motorola or another party.

“Services” means system implementation, maintenance, support, subscription, or other professional services provided under this Agreement, which may be further described in the applicable Addendum and/or SOW.

“Software” (i) means proprietary software in object code format, and adaptations, translations, de-compilations, disassemblies, emulations, or derivative works of such software; (ii) means any modifications, enhancements, new versions and new releases of the software provided by Motorola; and (iii) may contain one or more items of software owned by a third party supplier. The term "Software" does not include any third party software provided under separate license or third party software not licensable under the terms of this Agreement.

“Software License Agreement” means the Motorola Software License Agreement (Exhibit A-1).

“Solution” means the combination of the System(s) and Services provided by Motorola under this Agreement.

“Solution Data” means Customer data that is transformed, altered, processed, aggregated, correlated or operated on by Motorola, its vendors or other data sources and data that has been manipulated or

retrieved using Motorola know-how to produce value-added content to data consumers, including customers or citizens which is made available to Customer with the Solution and Services.

“Specifications” means the functionality and performance requirements that are described in the Technical and Implementation Documents.

“Subsystem” means a major part of the System that performs specific functions or operations. Subsystems are described in the Technical and Implementation Documents.

“System” means the Equipment, including incidental hardware and materials, Software, and design, installation and implementation services that are combined together into an integrated system; the System(s) is (are) described in the Technical and Implementation Documents.

“System Data” means data created by, in connection with or in relation to Equipment or the performance of Services under this Agreement.

“System Acceptance” means the Acceptance Tests have been successfully completed.

“Utilities” means the software utilities and tools provided by Motorola as part of the Software, including Motorola’s XML Query, ODBC interface and implementation code, ctpperl, dbdump, and dbload, as well as any other software utilities provided by Motorola in connection with the Software.

“Warranty Period” for System Hardware, Software, or services related to system implementation means one (1) year from the date of System Acceptance or Beneficial Use, whichever occurs first. Unless otherwise stated in the applicable Addendum, Warranty Period for other Services means ninety (90) days from performance of the Service.

Section 3 SCOPE OF AGREEMENT AND TERM

3.1. **SCOPE OF WORK.** Motorola will provide, install and test the System(s), and perform its other contractual responsibilities to provide the Solution, all in accordance with this Agreement. Customer will perform its contractual responsibilities in accordance with this Agreement.

3.2. **CHANGE ORDERS.** Either Party may request changes within the general scope of this Agreement in accordance with Change Control Process in Technical and Implementation Documents. If a requested change causes an increase or decrease in the cost or time required to perform this Agreement, the Parties will agree to an equitable adjustment of the Contract Price or applicable subscription fees, Performance Schedule, or both, and will reflect the adjustment in a change order or Addendum. Neither Party is obligated to perform requested changes unless both Parties execute a written change order.

3.3. **TERM.** Unless terminated in accordance with other provisions of this Agreement or extended by mutual agreement of the Parties, the term of this Agreement begins on the Effective Date and continues until the date of Final Project Acceptance or expiration of the Warranty Period, whichever occurs last. The term and the effective date of recurring Services will be set forth in the applicable Addendum.

3.4. **ADDITIONAL EQUIPMENT OR SOFTWARE.** For three (3) years after the expiration date of the Agreement, Customer may order additional Equipment or Software, if it is then available. Each purchase order must refer to this Agreement, the expiration date of the Agreement, and must specify the pricing and delivery terms. The Parties agree that, notwithstanding expiration of the Agreement, the applicable provisions of this Agreement (except for pricing, delivery, passage of title and risk of loss to Equipment, warranty commencement, and payment terms) will govern the purchase and sale of the additional Equipment or Software. Additional or contrary terms in the purchase order will be inapplicable, unless signed by both parties. Title and risk of loss to additional Equipment will pass at

shipment, warranty will commence upon delivery, and payment is due within thirty (30) days after the invoice date. Motorola will send Customer an invoice as the additional Equipment is shipped or Software is licensed. Alternatively, Customer may register with and place orders through Motorola Online ("MOL"), and this Agreement will be the "Underlying Agreement" for those MOL transactions rather than the MOL On-Line Terms and Conditions of Sale. MOL registration and other information may be found at <https://businessonline.motorolasolutions.com> and the MOL telephone number is (800) 814-0601.

- 3.5. **MOTOROLA SOFTWARE.** Any Motorola Software, including subsequent releases, is licensed to Customer solely in accordance with the Software License Agreement. Customer hereby accepts and agrees to abide by all of the terms and restrictions of the Software License Agreement.
- 3.6. **NON-MOTOROLA SOFTWARE.** Any Non-Motorola Software is licensed to Customer in accordance with the standard license, terms, and restrictions of the copyright owner on the Effective Date unless the copyright owner has granted to Motorola the right to sublicense the Non-Motorola Software pursuant to the Software License Agreement, in which case it applies and the copyright owner will have all of Licensor's rights and protections under the Software License Agreement. Motorola makes no representations or warranties of any kind regarding Non-Motorola Software. Non-Motorola Software may include Open Source Software.
- 3.7. **SHARED AGENCY ARRANGEMENTS.** If Customer and another agency (a "Shared Agency") desire to enter into an arrangement whereby Customer will act as a "Host Agency" and permit the Shared Agency to access the Software through Customer, the Shared Agency and Motorola will execute a Shared Agency Agreement for such arrangement and attach it to this Agreement as an additional exhibit. Unless otherwise expressly agreed in the Shared Agency Agreement, Motorola will invoice Customer for the full fees set forth in Exhibit B and Customer will be responsible for timely payment of such fees. Customer may at its option seek reimbursement from Shared Agencies for their share of such fees. However, if at any time a Shared Agency elects to purchase licenses to additional Motorola Software modules for its own use, the party responsible for payment and the payment terms will be mutually agreed in writing by the parties. Customer shall require the Shared Agency to comply with the terms of the Motorola Software License Agreement and Exhibits A-2, A-3, and A-4 as applicable, and shall notify Motorola and cooperate as reasonably requested by Motorola in the event of any non-compliance by the Shared Agency.
- 3.8. **COOPERATIVE PURCHASING.** Upon request of a third party state or local agency located in the same state as Customer (the "New Agency"), Motorola will negotiate an agreement with such New Agency that contains the same terms and conditions as this Agreement (excepting the terms described below), subject to the eligibility and validity of such cooperative arrangement under state law, and provided that Motorola and the New Agency agree in writing upon the software, products and Services to be licensed and purchased by the New Agency and the prices thereof, which shall be paid by the New Agency. Motorola shall require the New Agency's to comply with the terms of the Motorola Software License Agreement. New Agency's use of Microsoft or ESRI OEM software is subject to the terms of Exhibits A-2, A-3, and A-4 respectively, as applicable.
- 3.9. **THIRD PARTY PRODUCTS.**
 - 3.9.1 **THIRD PARTY PRODUCTS.** Customer acknowledges that Non-Motorola Software is included in the Solution. Further, Motorola may recommend purchase of additional third party software. In such case, Customer agrees to purchase from Motorola the third party software and hardware identified in Exhibit C. Motorola makes no representations or warranties with respect to third party software or hardware, but agrees to pass through to Customer any warranties provided by the manufacturers of such products, to the extent permitted.

3.9.2 MICROSOFT PRODUCTS

- a. As to any Microsoft Products being furnished, the Microsoft software for those Microsoft Products is sublicensed to Licensee from Motorola pursuant to the Customer's Motorola Software License Agreement and is subject to the additional Microsoft End-User License Agreement terms, Exhibit A-2 and Microsoft Products terms, Exhibit A-3.

3.9.3 ESRI OEM SOFTWARE. Notwithstanding any provisions herein to the contrary, the provisions in ESRI OEM Software terms, Exhibit A-4, apply concerning the ESRI OEM Software.

3.10. SUBSTITUTIONS. At no additional cost to Customer, Motorola may substitute any Equipment, Software, or services to be provided by Motorola, if the substitute meets or exceeds the Specifications and is of equivalent or better quality to the Customer. Any substitution will be reflected in a change order.

3.11. OPTIONAL EQUIPMENT OR SOFTWARE. This paragraph applies only if a "Priced Options" exhibit is shown in Section 1, or if the parties amend this Agreement to add a Priced Options exhibit. During the term of the option as stated in the Priced Options exhibit (or if no term is stated, then for one (1) year after the Effective Date), Customer has the right and option to purchase the equipment, software, and related services that are described in the Priced Options exhibit. Customer may exercise this option by giving written notice to Seller which must designate what equipment, software, and related services Customer is selecting (including quantities, if applicable). To the extent they apply, the terms and conditions of this Agreement will govern the transaction; however, the parties acknowledge that certain provisions must be agreed upon, and they agree to negotiate those in good faith promptly after Customer delivers the option exercise notice. Examples of provisions that may need to be negotiated are: specific lists of deliverables, statements of work, acceptance test plans, delivery and implementation schedules, payment terms, maintenance and support provisions, additions to or modifications of the Software License Agreement, hosting terms, and modifications to the acceptance and warranty provisions.

3.12. RESERVED. Not applicable.

3.13 UTILITIES; RESTRICTIONS ON USAGE.

3.13.1 UTILITIES. Motorola provides certain software Utilities as part of the Software. Motorola may add, modify, or remove Utilities from the Software during the term of this Agreement. The Utilities contain material that is proprietary to Motorola and/or its licensors, and may be used only as permitted by this Agreement.

3.13.2 USE OF UTILITIES. Customer is permitted to use the Utilities for read-only operations in connection with the authorized use of the Software, but may not allow third parties to use the Utilities unless an authorized official of Motorola consents in writing. Customer is also permitted to use the Utilities to write to Motorola's database, but any such use is solely at Customer's risk, as set forth in Section 3.13.3 below. Motorola strongly advises Customer to limit any such usage to personnel who have advanced training and experience in the use of such software tools.

3.13.3 DISCLAIMER. Motorola permits customers to use the Utilities, as set forth above. However, there is a high risk of data corruption and system slowdown or damage that may result from Customer's use of the Utilities or other software tools. Customer assumes all risk and is responsible for any damages arising from or in connection with such use, regardless of Motorola's approval. Further, Motorola disclaims all liability for damages caused by Customer's use of the Utilities. Motorola is NOT responsible for any breach of warranty, damages to the Software or its database, data corruption, support

issues, security issues or performance issues arising out of Customer's or a third party's use of the Utilities (even if permitted by Motorola) or use of any other software not specifically licensed in this Agreement (including any third party querying or writing to the database).

Section 4 SERVICES

- 4.1. If Customer desires and Motorola agrees to continue Services beyond the Term, Customer's issuance and Motorola's acceptance of a purchase order for Services will serve as an automatic extension of the Agreement for purposes of the continuing Services. Only the terms and conditions applicable to the performance of Services will apply to the extended Agreement.
- 4.2. **MAINTENANCE AND SUPPORT SERVICES.** During the Warranty Period, in addition to warranty services, Motorola will provide maintenance Services for the Equipment and support for the Motorola Software pursuant to the Statement of Work set forth in the applicable Exhibit C-2, Maintenance and Support Agreement. Maintenance Services and support during the Warranty Period are included in the Contract Price. Customer's purchase of post Warranty Period Maintenance and Support services is subject to the terms and conditions of Exhibit D. If after the execution of this Agreement Customer subsequently wishes to purchase 1) additional maintenance or software support services during the Warranty Period; or 2) continue or expand maintenance, software support, and installation Services after the Warranty Period, Motorola will provide the description of and pricing for such services in a separate proposal document. Unless otherwise agreed by the Parties in writing, the terms and conditions in this Agreement applicable to those maintenance, support, and installation Services will be included in the Maintenance and Support Agreement, the applicable Statements of Work, and the proposal. These collective terms will govern the provision of such Services. Unless otherwise agreed in writing, Motorola reserves the right to change its pricing of Maintenance and Support services, effective upon no less than ninety (90) days written notice to Customer prior to the end of the Warranty Period, if such Services were quoted but not purchased at the time of the System sale. Maintenance and Support fees that have been previously prepaid by Customer are not affected by any subsequent change in such fees.

To obtain any such additional Services, Customer will issue a purchase order referring to this Agreement and the separate proposal document. Omission of reference to this Agreement in Customer's purchase order will not affect the applicability of this Agreement. Motorola's proposal may include a cover page entitled "Maintenance and Support Agreement", as applicable, and other attachments. These cover pages and other attachments are incorporated into this Agreement by this reference.

- 4.3. **PROFESSIONAL AND SUBSCRIPTION SERVICES.** If Customer purchases professional or subscription Services as part of the Solution, additional or different terms specific to such Service will be included in the applicable Addendum and will apply to those Services. Customer may purchase additional professional or subscription services by issuing a purchase order referencing this Agreement and Motorola's proposal for such additional services.
- 4.4. Any information in the form of specifications, drawings, reprints, technical information or otherwise furnished to Customer in providing Services under this Agreement or data viewed, accessed, will remain Motorola's property, will be deemed proprietary, Confidential Information. This Confidential Information will be promptly returned at Motorola's request.
- 4.5. **TOOLS.** All tools, equipment, dies, gauges, models, drawings or other materials paid for or furnished by Motorola for the purpose of providing Services under this Agreement will be and remain the sole property of Motorola. Customer will safeguard all such property while it is in Customer's custody or control, be liable for any loss or damage to this property, and return it to Motorola upon request. This property will be held by Customer for Motorola's use without charge and may be

removed from Customer's premises by Motorola at any time without restriction. Upon termination of the contract for any reason, Customer shall return to Motorola all equipment delivered to Customer.

- 4.6. **COVENANT NOT TO EMPLOY.** During the term of this Agreement and continuing for a period of two (2) years thereafter, Customer will not hire, engage on contract, solicit the employment of, or recommend employment to any third party of any employee of Motorola or its subcontractors without the prior written authorization of Motorola. This provision applies only to those employees of Motorola or its subcontractors who are responsible for rendering Services under this Agreement. If this provision is found to be overly broad under applicable law, it will be modified as necessary to conform to applicable law.
- 4.7. **CUSTOMER OBLIGATIONS.** If the applicable Statement of Work or Addendum contains assumptions that affect the Services or Deliverables, Customer will verify that they are accurate and complete. Any information that Customer provides to Motorola concerning the Services or Deliverables will be accurate and complete in all material respects. Customer will make timely decisions and obtain any required management approvals that are reasonably necessary for Motorola to perform the Services and its other duties under this Agreement. Unless the Statement of Work states the contrary, Motorola may rely upon and is not required to evaluate, confirm, reject, modify, or provide advice concerning any assumptions and Customer-provided information, decisions and approvals described in this paragraph.
- 4.7.1 **LOCATION OF SOFTWARE.** Customer may install, access and use the Software only in Customer's own facilities, including any authorized mobile sites. Such mobile devices may log in and access the Software remotely from any location. Customer shall give Motorola two (2) weeks prior written notice of any change in the location of Customer's primary facility where the server-based Software is installed. However, if an immediate change in location is required due to an emergency or disaster recovery, Customer may do so provided that it notifies Motorola as soon as is feasible. Except as provided above, Customer shall not install the Software in any other computer system or use it at any other location without Motorola's express prior authorization, which will not be unreasonably withheld.
- 4.7.2 **RESTRICTIONS, COPIES.** Customer will not, and will not allow or enable any third party to: (i) reverse engineer, disassemble, peel components, decompile, reprogram or otherwise reduce the Software or any portion to a human perceptible form or otherwise attempt to recreate the source code; (ii) modify, adapt, create derivative works of, or merge the Software; (iii) copy, reproduce, distribute, lend, or lease the Software or related documentation to any third party, grant any sublicense or other rights in the Software or related documentation to any third party, or take any action that would cause the Software or related documentation to be placed in the public domain; (iv) remove, or in any way alter or obscure, any copyright notice or other notice of Motorola's Proprietary Rights; (v) provide, copy, transmit, disclose, divulge or make the Software or Documentation available to, or permit the use of the Software by any third party or on any machine except as expressly authorized by this Agreement; or (vi) use, or permit the use of, the Software in a manner that would result in the production of a copy of the Software solely by activating a machine containing the Software, except as necessary for system backup or disaster recovery. Customer may make one copy of Software to be used solely for archival, back-up, or disaster recovery purposes; provided that Motorola's copyright notice is included, and Customer may not operate that copy of the Software at the same time as the original Software is being operated. Customer may make as many copies of the documentation as it may reasonably require for the internal use of the Software. The foregoing restrictions on modifications and copying do not apply to open source software, which is governed by the license of the copyright owner.
- 4.7.3 **CUSTOMER USE ONLY.** Customer may use and execute the Software only for purposes of serving the internal needs of Customer's business, except as specifically set forth in this Agreement. Any other use of the Software is strictly prohibited. Without limiting the general

nature of these restrictions, Customer will not make the Software available for use by third parties on a "time sharing," "application service provider," or "service bureau" basis or for any other similar rental or sharing arrangement, except as expressly authorized in writing by Motorola.

- 4.7.4 THIRD PARTY ACCESS AND QUERIES. Except as expressly authorized in writing by Motorola, (i) Customer may not allow any other agency, entity, or individual to use or have access to the Software in any manner other than inquire-only; and (ii) such queries may be conducted solely for Customer's internal business purposes. Customer may not query the Software, or permit any third party to query the Software, for a third party's business purposes.
- 4.7.5 COMPETITIVE USE. Customer may not utilize or permit a third party to access or utilize any part of the Software (including the Utilities) in any manner that competes, directly or indirectly, with any product or Service provided by Motorola, without the express written permission of Motorola. This includes, without limitation, using the Software (or its Utilities) to develop any software, interfaces, or other products that compete with Motorola's products or Services, or using interfaces or other products connecting to the database of the Software in connection with a third party's competing product.
- 4.7.6 ADDITIONAL COMPONENTS. Other components (hardware and/or third party software) may be required for the use of the Software. For example, unless otherwise detailed in the Technical and Implementation Documents, Customer is required to provide workstations and personal computers, network, operating system, Internet connectivity and other components (e.g., cables, and wiring) associated with and necessary to effectively use the system that are typically supplied by the customer of such a system. Motorola has provided hardware specifications to Customer for use of the Software system. Motorola assumes no responsibility under this Agreement for obtaining and/or supporting such components except as expressly agreed in writing.
- 4.7.7 PROPER ENVIRONMENT. Customer is responsible for ensuring a proper environment and proper utilities for the computer system on which the Software will operate, including housing and operating the server equipment in a secure environment and according to the specifications for the equipment as specified by its manufacturer. Customer will ensure that all work sites it provides will be safe, secure, and in compliance with all applicable industry and OSHA standards. To the extent applicable, Customer will ensure that these work sites have adequate: physical space; air conditioning and other environmental conditions; adequate and appropriate electrical power outlets, distribution, equipment and connections; and adequate telephone or other communication lines (including modem access and adequate interfacing networking capabilities), all for the installation, use and maintenance of the Software system. Before installing the Software or any related hardware at a work site, Motorola may inspect the work site and advise Customer of any apparent deficiencies or non-conformities with the requirements of this section.
- 4.7.8 DATA CONVERSION SERVICES. If the parties have agreed that Motorola (or its subcontractor) will convert Customer's data files for use with the Software, such services will be set forth in Exhibit C and detailed in a data conversion scope of work. Except as agreed by the parties in writing, Motorola is not responsible for any data conversion services.
- 4.8. ASSUMPTIONS. If any assumptions or conditions contained in this Agreement, applicable Addenda or Statements of Work prove to be incorrect or if Customer's obligations are not performed, Motorola's ability to perform under this Agreement may be impacted and changes to the Contract Price, subscription fees, project schedule, Deliverables, or other changes may be necessary.
- 4.9. NON-PRECLUSION. If, as a result of the Services performed under this Agreement, Motorola recommends that Customer purchase products or other services, nothing in this Agreement

precludes Motorola from participating in a future competitive bidding process or otherwise offering or selling the recommended products or other services to Customer. Customer represents that this paragraph does not violate its procurement or other laws, regulations, or policies.

- 4.10. PROPRIETARY MATERIALS. Customer acknowledges that Motorola may use and/or provide Customer with access to Proprietary Materials and Derivative Proprietary Materials. The Proprietary Materials and the Derivative Proprietary Materials are the sole and exclusive property of Motorola and Motorola retains all right, title and interest in and to the Proprietary Materials and Derivative Proprietary Materials.
- 4.11. ADDITIONAL SERVICES. Any services performed by Motorola outside the scope of this Agreement at the direction of Customer will be considered to be additional Services which are subject to additional charges. Any agreement to perform additional Services will be reflected in a written and executed change order, Addendum or amendment to this Agreement.

Section 5 PROJECT SCHEDULE

The Parties will perform their respective responsibilities in accordance with the Project Schedule. Unless otherwise agreed in writing, the Project Schedule is based upon work being accomplished Monday through Friday during normal business hours with the exception of holidays. On-site work activities will be performed Tuesday through Thursday during normal business hours.

Section 6 CONTRACT PRICE, PAYMENT AND INVOICING

- 6.1. Customer affirms that a purchase order or notice to proceed is not required for contract performance or for subsequent years of service, if any, and that sufficient funds have been appropriated in accordance with applicable law. The Customer will pay all invoices as received from Motorola and any changes in scope will be subject to the change order process as described in this Agreement. At the time of execution of this Agreement, the Customer will provide all necessary reference information to include on invoices for payment in accordance with this Agreement. By executing this Agreement, Customer authorizes Motorola to proceed with contract performance.
- 6.2. CONTRACT PRICE. The Contract Price in U.S. dollars is \$579,257.83. The Contract Price will be paid via the disbursement of the financing proceeds pursuant to the Equipment Lease-Purchase Agreement executed between the parties. If applicable, a pricing summary is included with the Payment schedule in Exhibit B. Motorola has priced the Services, Software, and Equipment as an integrated System. A reduction in Software or Equipment quantities, or Services, may affect the overall Contract Price, including discounts if applicable. Fees for professional, and/or subscription services which are not included in the Contract Price may be listed in Exhibit B, the pricing pages of the proposal, or the applicable Addendum.
- 6.3. INVOICING AND PAYMENT. Motorola will submit invoices to Customer according to the Payment schedule in Exhibit B, if applicable. Invoices will be mailed or emailed to Customer pursuant to Section 6.5, Invoicing and Shipping Addresses. Except for a payment that is due on the Effective Date, Customer will make payments to Motorola within thirty (30) days after the date of each invoice. Customer will make payments when due in the form of a wire transfer, check, or cashier's check from a U.S. financial institution. Overdue invoices will bear simple interest at the maximum allowable rate. For reference, the Federal Tax Identification Number for Motorola is 36-1115800.
- 6.4. FREIGHT, TITLE, AND RISK OF LOSS. Motorola will pre-pay and add all freight charges to the invoices. Unless otherwise stated in the Equipment Lease-Purchase Agreement, title and risk of loss to the Equipment will pass to Customer upon shipment. Title to Software will not pass to Customer at any time. Motorola will pack and ship all Equipment in accordance with good commercial practices.

6.5. INVOICING AND SHIPPING ADDRESSES. Invoices will be sent to the Customer at the following address:

Name: Lt. Shannon Robledo
Address: 1414 Mission Street, South Pasadena, CA 91030
Phone: 626.319.1628
E-INVOICE.
To receive invoices via email: srobledo@southpasadeanca.gov
Customer Account Number: 1000412495
Customer Accounts Payable
Email: _____
Customer CC (optional) Email: _____

The address which is the ultimate destination where the Equipment will be delivered to Customer is:

Name: Lt. Shannon Robledo
Address: 1414 Mission Street, South Pasadena, CA 91030

The Equipment will be shipped to the Customer at the following address (insert if this information is known):

Name: Lt. Shannon Robledo
Address: 1414 Mission Street, South Pasadena, CA 91030
Phone: 626.319.1628

Customer may change this information by giving written notice to Motorola.

Section 7 SITES AND SITE CONDITIONS

7.1. ACCESS TO SITES. In addition to its responsibilities described elsewhere in this Agreement, Customer will provide a designated project manager; all necessary construction and building permits, zoning variances, licenses, and any other approvals that are necessary to develop or use the sites and mounting locations; and access to the worksites or vehicles identified in the Technical and Implementation Documents as reasonably requested by Motorola so that it may perform its duties in accordance with the Performance Schedule and Statement of Work. If the Statement of Work so indicates, Motorola may assist Customer in the local building permit process.

7.2. SITE CONDITIONS. Customer will ensure that all work sites it provides will be safe, secure, and in compliance with all applicable industry and OSHA standards. To the extent applicable and unless the Statement of Work states to the contrary, Customer will ensure that these work sites have adequate: physical space; air conditioning and other environmental conditions; adequate and appropriate electrical power outlets, distribution, equipment and connections; and adequate telephone or other communication lines (including modem access and adequate interfacing networking capabilities), all for the installation, use and maintenance of the System. Before installing the Equipment or Software at a work site, Motorola may inspect the work site and advise Customer of any apparent deficiencies or non-conformities with the requirements of this Section. This Agreement is predicated upon normal soil conditions as defined by the version of E.I.A. standard RS-222 in effect on the Effective Date.

- 7.3. **SITE ISSUES.** If a Party determines that the sites identified in the Technical and Implementation Documents are no longer available or desired, or if subsurface, structural, adverse environmental or latent conditions at any site differ from those indicated in the Technical and Implementation Documents, the Parties will promptly investigate the conditions and will select replacement sites or adjust the installation plans and specifications as necessary. If change in sites or adjustment to the installation plans and specifications causes a change in the cost or time to perform, the Parties will equitably amend the Contract Price, Performance Schedule, or both, by a change order.
- 7.4 **CUSTOMER PROVIDED EQUIPMENT.** Customer will hold all Customer Provided Equipment free and clear of any liens, charges, or encumbrances of any kind. Customer, at its sole cost and expense will maintain Customer Provided Equipment in good working order and repair, and will provide spare parts for all Customer Provided Equipment. Customer will be fully liable for Customer Provided Equipment and will immediately notify Motorola of any Customer Provided Equipment damage, loss, or theft that may impact Motorola's ability to provide Services under this Agreement. Customer will compensate Motorola for any re-work or changes to Services, and allow for changes to Project Schedule as a result of damage, loss or theft of Customer Provided Equipment. For all Customer Provided Equipment, (i) Customer is responsible for resolving issues affecting the performance of CAD application software; (ii) not provided per the agreed upon specification and within the project schedule time frame, the project is subject to delay.

Section 8 TRAINING

Any training to be provided by Motorola to Customer will be described in the applicable Training Plan (Exhibit C-4). Customer will notify Motorola immediately if a date change for a scheduled training program is required. If Motorola incurs additional costs because Customer: (i) reschedules a training program less than thirty (30) days before its scheduled start date; (ii) does not adhere to the session attendance outlined in the Training Plan; Customer will compensate Motorola in whole for these additional costs.

Section 9 SYSTEM ACCEPTANCE

Many Systems require formal completion of an Acceptance Test Plan. If Customer is purchasing a System that does not require acceptance testing, then only Sections 9.3, 9.4, and 9.5 apply.

- 9.1 **COMMENCEMENT OF ACCEPTANCE TESTING.** Motorola will provide to Customer at least ten (10) days notice before the Acceptance Tests commence. System testing will occur only in accordance with the Acceptance Test Plan.
- 9.2 **SYSTEM ACCEPTANCE.** System Acceptance will occur upon successful completion of the Acceptance Tests. Upon System Acceptance, the Parties will memorialize this event by promptly executing a System Acceptance Certificate. If Customer believes the System has failed the completed Acceptance Tests, Customer will provide to Motorola a written notice that includes the specific details of the failure. If Customer does not provide to Motorola a failure notice within thirty (30) days after completion of the Acceptance Tests, System Acceptance will be deemed to have occurred as of the completion of the Acceptance Tests. Minor omissions or variances in the System that do not materially impair the operation of the System as a whole will not postpone System Acceptance or Subsystem acceptance, but Customer reported anomalies will be validated and corrected according to a mutually agreed schedule.
- 9.3 **LIVE OPERATION CUTOVER.** Following System Acceptance, if applicable, transition to the live production use of the System will be conducted as set out in the Statement of Work and the Live Operations Cutover ("Go-Live") plan and constitute Beneficial Use.
- 9.4 **BENEFICIAL USE.** Customer acknowledges that Motorola's ability to perform its implementation and testing responsibilities may be impeded if Customer begins using the System before System

Acceptance and Live Operation Cutover. Therefore, Customer will not commence Beneficial Use before System Acceptance and Live Operation Cutover without Motorola's prior written authorization, which will not be unreasonably withheld. Motorola is not responsible for System performance deficiencies that occur during unauthorized Beneficial Use. Upon commencement of Beneficial Use, Customer assumes responsibility for the use and operation of the System.

- 9.5 FINAL SYSTEM ACCEPTANCE. Final System Acceptance will occur as described in the Technical and Implementation documents as may be amended as described in Section 3.2. Notwithstanding, the Final System Acceptance will be deemed complete upon Live Operations Cut Over, and after any applicable reliability period when all deliverables have been completed. When Final System Acceptance occurs, the Parties will promptly memorialize this final event by so indicating on the System Acceptance Certificate (Exhibit E) and the Equipment Lease Purchase Agreement Delivery and Acceptance Certificate (Exhibit F).

Section 10 REPRESENTATIONS AND WARRANTIES

- 10.1. SYSTEM FUNCTIONALITY. Motorola represents that the System will perform in accordance with the Specifications in all material respects. Upon System Acceptance or Beneficial Use or Go-Live, whichever occurs first, this System functionality representation is fulfilled. Motorola is not responsible for System performance deficiencies that are caused by ancillary equipment not furnished by Motorola which is attached to or used in connection with the System or for reasons or parties beyond Motorola's control, such as natural causes; or Customer changes to load usage or configuration outside the Specifications or Customer network availability.
- 10.2. EQUIPMENT WARRANTY. During the Warranty Period, Motorola warrants that the Equipment under normal use and service will be free from material defects in materials and workmanship. If System Acceptance is delayed beyond six (6) months after shipment of the Equipment by events or causes beyond Motorola's control, this warranty expires eighteen (18) months after the shipment of the Equipment. In no event does the Warranty Period exceed 12 months from Live Operations Cut Over or Beneficial Use, whichever occurs first.
- 10.3. SOFTWARE WARRANTY. Except as otherwise stated in the Software License Agreement, during the Warranty Period, Motorola warrants the Software in accordance with the warranty terms set forth in the Software License Agreement and the provisions of this Section that are applicable to the Software. The warranty set forth Section 10.1 shall apply only to the most current version of the Software issued by Motorola. Issuance of updated versions of the Software does not result in a renewal or extension of the Warranty Period. Motorola assumes no responsibility for the use of superseded, outdated, or uncorrected versions of the Software. Such warranty also excludes non-performance issues that result from Non Motorola Software or hardware malfunctions or defects; modification of the Software by any person other than Motorola, or defects or problems that are outside the reasonable control of Motorola, including defects or damage resulting from use of the Software in other than its normal, customary, and authorized manner; accident, liquids, neglect, or acts of God; testing, maintenance, disassembly, repair, installation, alteration, modification, or adjustment not provided or authorized in writing by Motorola; or Customer's failure to comply with all applicable industry standards. Customer will reimburse Motorola for its reasonable time and expenses for any Services provided at Customer's request to remedy excluded non-performance issues. Additionally, Motorola is not responsible for any problems or errors with the Software or Customer's system resulting from Customer's use of the Utilities (e.g., ctpertl, dbload or ODBC) in any manner other than read-only. Customer expressly acknowledges that any use of the "write" or "update" features of these Utilities may damage Customer's database or cause other problems with its system.

If System Acceptance is delayed beyond six (6) months after shipment of the Motorola Software by events or causes beyond Motorola's control, this warranty expires eighteen (18) months after the shipment of the Motorola Software.

- 10.4. **EXCLUSIONS TO EQUIPMENT AND SOFTWARE WARRANTIES.** These warranties do not apply to: (i) defects or damage resulting from: use of the Equipment or Software in other than its normal, customary, and authorized manner; accident, liquids, neglect, or acts of God; testing, maintenance, disassembly, repair, installation, alteration, modification, or adjustment not provided or authorized in writing by Motorola; Customer's failure to comply with all applicable industry and OSHA standards; (ii) breakage of or damage to antennas unless caused directly by defects in material or workmanship; (iii) Equipment that has had the serial number removed or made illegible; (iv) batteries (because they carry their own separate limited warranty) or consumables; (v) freight costs to ship Equipment to the repair depot; (vi) scratches or other cosmetic damage to Equipment surfaces that does not affect the operation of the Equipment; (vii) Customer Provided Equipment or equipment not provided by Motorola; and (viii) normal or customary wear and tear. Motorola is not responsible for obsolescence of the Software that may result from changes in Customer's requirements.
- 10.5. **SERVICE WARRANTY.** During the Warranty Period, Motorola warrants that the Services will be provided in a good and workmanlike manner and will conform in all material respects to the applicable Statement of Work. Services will be free of defects in materials and workmanship for a period of ninety (90) days from the date the performance of the Services are completed. Customer acknowledges that the Deliverables may contain recommendations, suggestions or advice from Motorola to Customer (collectively, "recommendations"). Motorola makes no warranties concerning those recommendations, and Customer alone accepts responsibility for choosing whether and how to implement the recommendations and the results to be realized from implementing them.
- 10.6. **THIRD PARTY PRODUCTS.** Notwithstanding any provisions herein to the contrary, the warranty provisions of Exhibit A-3 and Exhibit A-4 apply respectively to Microsoft Products and ESRI OEM Software.
- 10.7. **WARRANTY CLAIMS.** To assert a warranty claim, Customer must notify Motorola in writing of the claim before the expiration of the Warranty Period. Upon receipt of this notice, Motorola will investigate the warranty claim. If this investigation confirms a valid Equipment or Software warranty claim, Motorola will (at its option and at no additional charge to Customer) repair the defective Equipment or Motorola Software, replace it with the same or equivalent product, or refund the price of the defective Equipment or Motorola Software. These actions will be the full extent of Motorola's liability for the warranty claim. In the event of a valid Services warranty claim, Customer's sole remedy is to require Motorola to re-perform the non-conforming Service or to refund, on a pro-rata basis, the fees paid for the non-conforming Service. If this investigation indicates the warranty claim is not valid, then Motorola may invoice Customer for responding to the claim on a time and materials basis using Motorola's then current labor rates. Repaired or replaced product is warranted for the balance of the original applicable warranty period. All replaced products or parts will become the property of Motorola.
- 10.8. **ORIGINAL END USER IS COVERED.** These express limited warranties are extended by Motorola to the original user purchasing the System or Services for commercial, industrial, or governmental use only, and are not assignable or transferable.
- 10.9. **DISCLAIMER OF OTHER WARRANTIES.** THESE WARRANTIES ARE THE COMPLETE WARRANTIES FOR THE EQUIPMENT AND MOTOROLA SOFTWARE PROVIDED UNDER THIS AGREEMENT AND ARE GIVEN IN LIEU OF ALL OTHER WARRANTIES. MOTOROLA DISCLAIMS ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, AND FITNESS FOR A PARTICULAR PURPOSE. In addition, Motorola disclaims any warranty to any person other than Customer with respect to the Software or Documentation. Customer agrees that Motorola is not responsible, and Motorola disclaims all liability for any claims or damages

arising out of or related to any unauthorized persons hacking into or accessing Customer's database or the Software.

Section 11 DELAYS

- 11.1. **FORCE MAJEURE.** Neither Party will be liable for its non-performance or delayed performance if caused by a Force Majeure. A Party that becomes aware of a Force Majeure that will significantly delay performance will notify the other Party promptly (but in no event later than fifteen days) after it discovers the Force Majeure. If a Force Majeure occurs, the Parties will execute a change order to extend the Performance Schedule or applicable Addenda for a time period that is reasonable under the circumstances.
- 11.2. **PERFORMANCE SCHEDULE DELAYS CAUSED BY CUSTOMER.** If Customer (including its other contractors) delays the Performance Schedule, it will make the promised payments according to the Payment Schedule as if no delay occurred; and the Parties will execute a change order to extend the Performance Schedule and, if requested, compensate Motorola for all reasonable charges incurred because of the delay. Delay charges may include costs incurred by Motorola or its subcontractors for additional freight, warehousing and handling of Equipment; extension of the warranties; travel; suspending and re-mobilizing the work; additional engineering, project management, and standby time calculated at then current rates; and preparing and implementing an alternative implementation plan.
- 11.3. **SOFTWARE SUPPORT.** Support for Software will be provided during System deployment. If the "Go-Live" date, as reflected in the Schedule, is delayed for greater than thirty (30) days for any reason beyond Motorola's control, Motorola will continue to provide Software support during the remainder of the deployment of the System at the then current support rates. In the case of delay or Schedule modifications, the Parties will execute a Change Order to reflect the duration of the extended Software support and the applicable fees.

Section 12 DISPUTES

The Parties will use the following procedure to address any dispute arising under this Agreement (a "Dispute").

- 12.1. **GOVERNING LAW.** This Agreement will be governed by and construed in accordance with the laws of the State in which the System is installed.
- 12.2. **NEGOTIATION.** Either Party may initiate the Dispute resolution procedures by sending a notice of Dispute ("Notice of Dispute"). The Parties will attempt to resolve the Dispute promptly through good faith negotiations including 1) timely escalation of the Dispute to executives who have authority to settle the Dispute and who are at a higher level of management than the persons with direct responsibility for the matter and 2) direct communication between the executives. If the Dispute has not been resolved within ten (10) days from the Notice of Dispute, the Parties will proceed to mediation.
- 12.3. **MEDIATION.** The Parties will choose an independent mediator within thirty (30) days of a notice to mediate from either Party ("Notice of Mediation"). Neither Party may unreasonably withhold consent to the selection of a mediator. If the Parties are unable to agree upon a mediator, either Party may request that American Arbitration Association nominate a mediator. Each Party will bear its own costs of mediation, but the Parties will share the cost of the mediator equally. Each Party will participate in the mediation in good faith and will be represented at the mediation by a business executive with authority to settle the Dispute.
- 12.4. **LITIGATION, VENUE and JURISDICTION.** If a Dispute remains unresolved for sixty (60) days after receipt of the Notice of Mediation, either Party may then submit the Dispute to a court of

competent jurisdiction in the state in which the System is installed. Each Party irrevocably agrees to submit to the exclusive jurisdiction of the courts in such state over any claim or matter arising under or in connection with this Agreement.

- 12.5. CONFIDENTIALITY. All communications pursuant to subsections 12.2 and 12.3 will be treated as compromise and settlement negotiations for purposes of applicable rules of evidence and any additional confidentiality protections provided by applicable law. The use of these Dispute resolution procedures will not be construed under the doctrines of laches, waiver or estoppel to affect adversely the rights of either Party.

Section 13 DEFAULT AND TERMINATION

- 13.1. DEFAULT BY A PARTY. If either Party fails to perform a material obligation under this Agreement - including the Maintenance and Support Agreement (Exhibit D) or any Statement of Work executed by the Parties- and does not correct such breach within a reasonable time, the other Party may consider the non-performing Party to be in default (unless a Force Majeure causes the failure) and may assert a default claim by giving the non-performing Party a written and detailed notice of default. Except for a default by Customer for failing to pay any amount when due under this Agreement which must be cured immediately, the defaulting Party will have thirty (30) days after receipt of the notice of default to either cure the default or, if the default is not curable within thirty (30) days, provide a written cure plan. The defaulting Party will begin implementing the cure plan immediately after receipt of notice by the other Party that it approves the plan. If Customer is the defaulting Party, Motorola may stop work on the project until it approves the Customer's cure plan. Repudiation or failure to accept the Software without cause constitutes a material breach of this Agreement.
- 13.2. FAILURE TO CURE. If a defaulting Party fails to cure the default as provided above in Section 13.1, unless otherwise agreed in writing, the non-defaulting Party may terminate any unfulfilled portion of this Agreement. In the event of termination for default, the defaulting Party will promptly return to the non-defaulting Party any of its Confidential Information. If Customer is the non-defaulting Party, terminates this Agreement as permitted by this Section, and completes the System through a third Party, Customer may as its exclusive remedy recover from Motorola reasonable costs incurred to complete the System to a capability not exceeding that specified in this Agreement less the unpaid portion of the Contract Price. Customer will mitigate damages and provide Motorola with detailed invoices substantiating the charges. In the event Customer elects to terminate this Agreement for any reason other than default, Customer shall pay Motorola for the conforming Equipment and/or Software delivered and all services performed.
- 13.3. SUPPORT REQUIRED. Customer is required to continue purchasing support and maintenance Services from Motorola throughout the term of this Agreement, as a condition to the license of the Software under this Agreement. This Agreement shall automatically terminate if Customer ceases paying the required fees for maintenance and support of the Software, unless Motorola terminates the Support Agreement without cause.
- 13.4. EFFECT OF TERMINATION. Upon termination of this Agreement, all rights granted to Customer will terminate and revert to Motorola and/or its licensors. Promptly upon termination of this Agreement for any reason or upon discontinuance or abandonment of Customer's possession or use of the Software, Customer must return or destroy, as requested by Motorola, all copies of the Software and Non-Motorola Software in Customer's possession, and all related Documentation, Confidential Information and other materials pertaining to the Software (including all copies thereof). However, the recipient of Confidential Information may retain one (1) archival copy of such Confidential Information (excluding the Software, Non-Motorola Software, and related Documentation), which it may use only in case of a dispute concerning this Agreement. Customer agrees to certify Customer's compliance with such obligations, and that Customer is no longer using the Software, upon Motorola's request. Customer will permit Motorola to repossess the

Software and any products sold hereunder for which Customer has not fully paid the license fees or purchase price, as applicable. If Customer has any outstanding payment obligations under this Agreement, Motorola may accelerate and declare all such obligations of Customer immediately due and payable by Customer as a liquidated sum and proceed against Customer in any lawful way for satisfaction of such sum.

Section 14 INDEMNIFICATION

- 14.1. **GENERAL INDEMNITY BY Motorola.** Motorola will indemnify and hold Customer harmless from any and all liability, expense, judgment, suit, cause of action, or demand for personal injury, death, or direct damage to tangible property which may accrue against Customer to the extent it is caused by the negligence of Motorola, its subcontractors, or their employees or agents, while performing their duties under this Agreement, if Customer gives Motorola prompt, written notice of any claim or suit. Customer will cooperate with Motorola in its defense or settlement of the claim or suit. This Section sets forth the full extent of Motorola's general indemnification of Customer from liabilities that are in any way related to Motorola's performance under this Agreement.
- 14.2. **GENERAL INDEMNITY BY CUSTOMER.** Customer will indemnify and hold Motorola harmless from any and all liability, expense, judgment, suit, cause of action, or demand for personal injury, death, or direct damage to tangible property which may accrue against Motorola to the extent it is caused by the negligence of Customer, its other contractors, or their employees or agents, while performing their duties under this Agreement, if Motorola gives Customer prompt, written notice of any claim or suit. Motorola will cooperate with Customer in its defense or settlement of the claim or suit. This Section sets forth the full extent of Customer's general indemnification of Motorola from liabilities that are in any way related to Customer's performance under this Agreement.
- 14.3. **PATENT AND COPYRIGHT INFRINGEMENT.**
- 14.3.1 Motorola will defend at its expense any suit brought against Customer to the extent it is based on a third-party claim alleging that the Equipment manufactured by Motorola or the Motorola Software ("Motorola Product") directly infringes a United States patent or copyright ("Infringement Claim"). Motorola's duties to defend and indemnify are conditioned upon: Customer promptly notifying Motorola in writing of the Infringement Claim; Motorola having sole control of the defense of the suit and all negotiations for its settlement or compromise; and Customer providing to Motorola cooperation and, if requested by Motorola, reasonable assistance in the defense of the Infringement Claim. In addition to Motorola's obligation to defend, and subject to the same conditions, Motorola will pay all damages finally awarded against Customer by a court of competent jurisdiction for an Infringement Claim or agreed to, in writing, by Motorola in settlement of an Infringement Claim.
- 14.3.2 If an Infringement Claim occurs, or in Motorola's opinion is likely to occur, Motorola may at its option and expense: (a) procure for Customer the right to continue using the Motorola Product; (b) replace or modify the Motorola Product so that it becomes non-infringing while providing functionally equivalent performance; or (c) accept the return of the Motorola Product and grant Customer a credit for the Motorola Product, less a reasonable charge for depreciation. The depreciation amount will be calculated based upon generally accepted accounting standards.
- 14.3.3 Motorola will have no duty to defend or indemnify for any Infringement Claim that is based upon: (a) the combination of the Motorola Product with any software, apparatus or device not furnished by Motorola; (b) the use of ancillary equipment or software not furnished by Motorola and that is attached to or used in connection with the Motorola Product; (c) Motorola Product designed or manufactured in accordance with Customer's designs, specifications, guidelines or instructions, if the alleged infringement would not have

occurred without such designs, specifications, guidelines or instructions; (d) a modification of the Motorola Product by a party other than Motorola; (e) use of the Motorola Product in a manner for which the Motorola Product was not designed or that is inconsistent with the terms of this Agreement; or (f) the failure by Customer to install an enhancement release to the Motorola Software that is intended to correct the claimed infringement. In no event will Motorola's liability resulting from its indemnity obligation to Customer extend in any way to royalties payable on a per use basis or the Customer's revenues, or any royalty basis other than a reasonable royalty based upon revenue derived by Motorola from Customer from sales or license of the infringing Motorola Product.

- 14.3.4. This Section 14 provides Customer's sole and exclusive remedies and Motorola's entire liability in the event of an Infringement Claim. Customer has no right to recover and Motorola has no obligation to provide any other or further remedies, whether under another provision of this Agreement or any other legal theory or principle, in connection with an Infringement Claim. In addition, the rights and remedies provided in this Section 14 are subject to and limited by the restrictions set forth in Section 15.

Section 15 LIMITATION OF LIABILITY

Except for personal injury or death, Motorola's total liability, whether for breach of contract, warranty, negligence, strict liability in tort, indemnification, or otherwise, will be limited to the direct damages recoverable under law, but not to exceed the price of the Equipment, Software, or implementation and other one-time Services with respect to which losses or damages are claimed. With respect to all subscription or other ongoing Services and unless as otherwise provided under the applicable Addenda, Motorola's total liability will be limited to the direct damages recoverable under law, but not to exceed the price of twelve (12) months of Services preceding the incident giving rise to the claim. ALTHOUGH THE PARTIES ACKNOWLEDGE THE POSSIBILITY OF SUCH LOSSES OR DAMAGES, THEY AGREE THAT MOTOROLA WILL NOT BE LIABLE FOR ANY COMMERCIAL LOSS, INCONVENIENCE, LOSS OF USE, LOSS TIME, DATA, GOODWILL, REVENUES, PROFITS OR SAVINGS; OR OTHER SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO OR ARISING FROM THIS AGREEMENT, THE SALE OR USE OF THE EQUIPMENT OR SOFTWARE, OR THE PERFORMANCE OF SERVICES BY MOTOROLA PURSUANT TO THIS AGREEMENT. This limitation of liability provision survives the expiration or termination of the Agreement and applies notwithstanding any contrary provision. No action for contract breach or otherwise relating to the transactions contemplated by this Agreement may be brought more than one (1) year after the accrual of the cause of action, except for money due upon an open account.

Section 16 CONFIDENTIALITY AND PROPRIETARY RIGHTS

16.1. CONFIDENTIAL INFORMATION.

- 16.1.1. Each party is a disclosing party ("Discloser") and a receiving party ("Recipient") under this Agreement. All Deliverables will be deemed to be Motorola's Confidential Information. During the term of this Agreement and for a period of three (3) years from the expiration or termination of this Agreement, Recipient will (i) not disclose Confidential Information to any third party; (ii) restrict disclosure of Confidential Information to only those employees (including, but not limited to, employees of any wholly owned subsidiary, a parent company, any other wholly owned subsidiaries of the same parent company), agents or consultants who must be directly involved with the Confidential Information for the purpose and who are bound by confidentiality terms substantially similar to those in this Agreement; (iii) not disclose the Software or its related documentation to any competitor of Motorola; (iv) not copy, reproduce, reverse engineer, de-compile or disassemble any Confidential Information; (v) use the same degree of care as for its own information of like importance, but at least use reasonable care, in safeguarding against disclosure of Confidential Information; (vi) promptly notify Discloser upon discovery of any

unauthorized use or disclosure of the Confidential Information and take reasonable steps to regain possession of the Confidential Information and prevent further unauthorized actions or other breach of this Agreement; and (vii) only use the Confidential Information as needed to fulfill this Agreement.

16.1.2. Recipient is not obligated to maintain as confidential, Confidential Information that Recipient can demonstrate by documentation (i) is now available or becomes available to the public without breach of this agreement; (ii) is explicitly approved for release by written authorization of Discloser; (iii) is lawfully obtained from a third party or parties without a duty of confidentiality; (iv) is known to the Recipient prior to such disclosure; or (v) is independently developed by Recipient without the use of any of Discloser's Confidential Information or any breach of this Agreement. Additionally, the Recipient may disclose Confidential Information to the extent required by a judicial or legislative order or proceeding, or by any applicable federal or state open records act or freedom of information act requirements provided that it gives the Discloser prompt prior notice of the intended disclosure and an opportunity to respond or object to the disclosure, if permissible.

16.1.3. All Confidential Information remains the property of the Discloser and will not be copied or reproduced without the express written permission of the Discloser, except for copies that are absolutely necessary in order to fulfill this Agreement. Within ten (10) days of receipt of Discloser's written request, Recipient will return all Confidential Information to Discloser along with all copies and portions thereof, or certify in writing that all such Confidential Information has been destroyed. However, Recipient may retain one (1) archival copy of the Confidential Information that it may use only in case of a dispute concerning this Agreement. No license, express or implied, in the Confidential Information is granted other than to use the Confidential Information in the manner and to the extent authorized by this Agreement. The Discloser warrants that it is authorized to disclose any Confidential Information it discloses pursuant to this Agreement.

16.2. PRESERVATION OF MOTOROLA'S PROPRIETARY RIGHTS. Motorola, the third party manufacturer of any Equipment, and the copyright owner of any Non-Motorola Software own and retain all of their respective Proprietary Rights in the Equipment and Software, and nothing in this Agreement is intended to restrict their Proprietary Rights. The Software and all related documentation and materials provided by Motorola are licensed (not sold) to Customer. Motorola and the copyright owner of any Non- Motorola Software own and retain all of their respective Proprietary Rights in the Software and Non- Motorola Software respectively, and nothing in this Agreement is intended to restrict their Proprietary Rights. All intellectual property developed, originated, or prepared by Motorola in connection with providing to Customer the Equipment, Software, or related services remain vested exclusively in Motorola, and this Agreement does not grant to Customer any shared development rights of intellectual property. Motorola and its licensors specifically reserve all rights not expressly granted to Customer in this Agreement. Customer must keep the Software free and clear of all claims, liens, and encumbrances. Except as explicitly provided in the Software License Agreement, Motorola does not grant to Customer, either directly or by implication, estoppel, or otherwise, any right, title or interest in Motorola's Proprietary Rights. Customer will not modify, disassemble, peel components, decompile, otherwise reverse engineer or attempt to reverse engineer, derive source code or create derivative works from, adapt, translate, merge with other software, reproduce, distribute, sublicense, sell or export the Software, or permit or encourage any third party to do so. The preceding sentence does not apply to Open Source Software which is governed by the standard license of the copyright owner.

16.3 PROPRIETARY MATERIALS. Customer acknowledges that Motorola may use and/or provide Customer with access to certain software tools and/or other technical materials, including, but not limited to, data, modules, components, designs, utilities, subsets, objects, program listings, models, methodologies, programs, systems, analysis frameworks, leading practices and

specifications which Motorola has developed prior to, or independently from, the provision of the Services and/or which Motorola licenses from third parties, and derivatives thereof (collectively, "Proprietary Materials"). The Proprietary Materials are the sole and exclusive property of Motorola and Motorola retains all right, title and interest in and to the Proprietary Materials.

16.4 VOLUNTARY DISCLOSURE. Except as required to fulfill its obligations under this Agreement, Motorola will have no obligation to provide Customer with access to its Confidential Information and/or proprietary information. Under no circumstances will Motorola be required to provide any data related to cost and pricing.

16.5 DATA AND FEEDBACK.

16.5.1 To the extent permitted by law, Customer owns all right, title and interest in System Data created solely by it or its agents (hereafter, "Customer Data"), and grants to Motorola the right to use, host, cache, store, reproduce, copy, modify, combine, analyze, create derivatives from, communicate, transmit, publish, display, and distribute such Customer Data.

16.5.2 Motorola owns all right, title and interest in data resulting from System Data that is or has been transformed, altered, processed, aggregated, correlated or operated on (hereafter, "Derivative Data").

16.5.3 Any Feedback given by Customer is and will be entirely voluntary and, even if designated as confidential, will not create any confidentiality obligation for Motorola. Motorola will be free to use, reproduce, license or otherwise distribute and exploit the Feedback without any obligation to Customer. Customer acknowledges that Motorola's receipt of the Feedback does not imply or create recognition by Motorola of either the novelty or originality of any idea. The parties further agree that all fixes, modifications and improvements made to Motorola products or services conceived of or made by Motorola that are based, either in whole or in part, on the Feedback are the exclusive property of Motorola and all right, title and interest in and to such fixes, modifications or improvements to the Motorola product or service will vest solely in Motorola.

Section 17 GENERAL

17.1 TAXES. The Contract Price does not include any excise, sales, lease, use, property, or other taxes, assessments or duties, all of which will be paid by Customer except as exempt by law. If Motorola is required to pay any of these taxes, Motorola will send an invoice to Customer and Customer will pay to Motorola the amount of the taxes (including any interest and penalties) within thirty (30) days after the date of the invoice. Customer will be solely responsible for reporting the Equipment for personal property tax purposes, and Motorola will be solely responsible for reporting taxes on its income or net worth.

17.2 ASSIGNABILITY AND SUBCONTRACTING. Except as provided herein, neither Party may assign this Agreement or any of its rights or obligations hereunder without the prior written consent of the other Party, which consent will not be unreasonably withheld. Any attempted assignment, delegation, or transfer without the necessary consent will be void. Notwithstanding the foregoing, Motorola may assign this Agreement to any of its affiliates or its right to receive payment without the prior consent of Customer. In addition, in the event Motorola separates one or more of its businesses (each a "Separated Business"), whether by way of a sale, establishment of a joint venture, spin-off or otherwise (each a "Separation Event"), Motorola may, without the prior written consent of the other Party and at no additional cost to Motorola, assign this Agreement such that it will continue to benefit the Separated Business and its affiliates (and Motorola and its affiliates, to the extent applicable) following the Separation Event. Motorola may subcontract any of the work, but subcontracting will not relieve Motorola of its duties under this Agreement.

- 17.3 WAIVER. Failure or delay by either Party to exercise a right or power under this Agreement will not be a waiver of the right or power. For a waiver of a right or power to be effective, it must be in a writing signed by the waiving Party. An effective waiver of a right or power will not be construed as either a future or continuing waiver of that same right or power, or the waiver of any other right or power.
- 17.4 SEVERABILITY. If a court of competent jurisdiction renders any part of this Agreement invalid or unenforceable, that part will be severed and the remainder of this Agreement will continue in full force and effect.
- 17.5 INDEPENDENT CONTRACTORS. Each Party will perform its duties under this Agreement as an independent contractor. The Parties and their personnel will not be considered to be employees or agents of the other Party. Nothing in this Agreement will be interpreted as granting either Party the right or authority to make commitments of any kind for the other. This Agreement will not constitute, create, or be interpreted as a joint venture, partnership or formal business organization of any kind.
- 17.6 HEADINGS AND SECTION REFERENCES. The section headings in this Agreement are inserted only for convenience and are not to be construed as part of this Agreement or as a limitation of the scope of the particular section to which the heading refers. This Agreement will be fairly interpreted in accordance with its terms and conditions and not for or against either Party.
- 17.7 NOTICES. Notices required under this Agreement to be given by one Party to the other must be in writing and either personally delivered or sent to the address provided by the other Party by certified mail, return receipt requested and postage prepaid (or by a recognized courier service, such as Federal Express, UPS, or DHL), or by facsimile with correct answerback received, and will be effective upon receipt.
- 17.8 COMPLIANCE WITH APPLICABLE LAWS. Each Party will comply with all applicable federal, state, and local laws, regulations and rules concerning the performance of this Agreement or use of the System. Customer will obtain and comply with all Federal Communications Commission ("FCC") licenses and authorizations required for the installation, operation and use of the System before the scheduled installation of the Equipment. Although Motorola might assist Customer in the preparation of its FCC license applications, neither Motorola nor any of its employees is an agent or representative of Customer in FCC or other matters.
- 17.9 AUTHORITY TO EXECUTE AGREEMENT. Each Party represents that it has obtained all necessary approvals, consents and authorizations to enter into this Agreement and to perform its duties under this Agreement; the person executing this Agreement on its behalf has the authority to do so; upon execution and delivery of this Agreement by the Parties, it is a valid and binding contract, enforceable in accordance with its terms; and the execution, delivery, and performance of this Agreement does not violate any bylaw, charter, regulation, law or any other governing authority of the Party.
- 17.10. ADMINISTRATOR LEVEL ACCOUNT ACCESS. If applicable to the type of System purchased by Customer, Motorola will provide Customer with Administrative User Credentials. Customer agrees to only grant access to the Administrative User Credentials to those personnel with the training and experience to correctly use them. Customer is responsible for protecting Administrative User Credentials from disclosure and maintaining Credential validity by, among other things, updating passwords when required. Customer may be asked to provide valid Administrative User Credentials when in contact with Motorola System support personnel. Customer understands that changes made as the Administrative User can significantly impact the performance of the System. Customer agrees that it will be solely responsible for any negative impact on the System or its users by any such changes. System issues occurring as a result of changes made using the

Administrative User Credentials may impact Motorola's ability to perform Services or other obligations under the Agreement. In such cases, a revision to the appropriate provisions of the Agreement, including the Statement of Work, may be necessary. To the extent Motorola provides assistance to correct any issues caused by or arising out of the use of or failure to maintain Administrative User Credentials, Motorola will be entitled to bill Customer and Customer will pay Motorola on a time and materials basis for resolving the issue.

17.11. SURVIVAL OF TERMS. The following provisions will survive the expiration or termination of this Agreement for any reason: Section 3.6 (Motorola Software); Section 3.7 (Non-Motorola Software); if any payment obligations exist, Sections 6.2 and 6.3 (Contract Price and Invoicing and Payment); Subsection 10.9 (Disclaimer of Implied Warranties); Section 12 (Disputes); Section 15 (Limitation of Liability); and Section 16 (Confidentiality and Proprietary Rights); and all of the General provisions in Section 17.

17.12. ENTIRE AGREEMENT. This Agreement, including all Exhibits, constitutes the entire agreement of the Parties regarding the subject matter of the Agreement and supersedes all previous agreements, proposals, and understandings, whether written or oral, relating to this subject matter. This Agreement may be executed in multiple counterparts, and shall have the same legal force and effect as if the Parties had executed it as a single document. The Parties may sign in writing, or by electronic signature, including by email. An electronic signature, or a facsimile copy or computer image, such as a PDF or tiff image, of a signature, shall be treated as and shall have the same effect as an original signature. In addition, an electronic signature, a true and correct facsimile copy or computer image of this Agreement shall be treated as and shall have the same effect as an original signed copy of this document. This Agreement may be amended or modified only by a written instrument signed by authorized representatives of both Parties. The preprinted terms and conditions found on any Customer purchase or purchase order, acknowledgment or other form will not be considered an amendment or modification of this Agreement, even if a representative of each Party signs that document.

The Parties hereby enter into this Agreement as of the Effective Date.

Customer

Signature: _____
Print Name: _____
Title: _____
Date: _____

Motorola Solutions, Inc.

Signature: _____
Print Name: _____
Title: _____
Date: _____

Exhibit A-1
MOTOROLA SOFTWARE LICENSE AGREEMENT

This Exhibit A Motorola Software License Agreement ("Agreement") is between Motorola Solutions, Inc., ("Motorola"), and South Pasadena Police Department ("Licensee").

For good and valuable consideration, the parties agree as follows:

Section 1 DEFINITIONS

- 1.1 "Designated Products" means products provided by Motorola to Licensee with which or for which the Software and Documentation is licensed for use.
- 1.2 "Documentation" means product and software documentation that specifies technical and performance features and capabilities, and the user, operation and training manuals for the Software (including all physical or electronic media upon which such information is provided).
- 1.3 "Open Source Software" means software with either freely obtainable source code, license for modification, or permission for free distribution.
- 1.4 "Open Source Software License" means the terms or conditions under which the Open Source Software is licensed.
- 1.5 "Primary Agreement" means the agreement to which this exhibit is attached.
- 1.6 "Security Vulnerability" means a flaw or weakness in system security procedures, design, implementation, or internal controls that could be exercised (accidentally triggered or intentionally exploited) and result in a security breach such that data is compromised, manipulated or stolen or the system damaged.
- 1.7 "Software" (i) means proprietary software in object code format, and adaptations, translations, de-compilations, disassemblies, emulations, or derivative works of such software; (ii) means any modifications, enhancements, new versions and new releases of the software provided by Motorola; and (iii) may contain one or more items of software owned by a third party supplier. The term "Software" does not include any third party software provided under separate license or third party software not licensable under the terms of this Agreement.

Section 2 SCOPE

Motorola and Licensee enter into this Agreement in connection with Motorola's delivery of certain proprietary software or products containing embedded or pre-loaded proprietary software, or both. This Agreement contains the terms and conditions of the license Motorola is providing to Licensee, and Licensee's use of the proprietary software and affiliated documentation.

Section 3 GRANT OF LICENSE

- 3.1. Subject to the provisions of this Agreement and in consideration of the payment of applicable license fees, Motorola grants to Licensee a personal, limited, non-transferable (except as permitted in Section 7) and non-exclusive license under Motorola's copyrights and Confidential Information (as defined in the Primary Agreement) embodied in the Software to use the Software, in object code form, and the Documentation solely in connection with Licensee's use of the Designated Products. If Exhibit C lists one or more agencies of Customer as "Authorized Users," Shared Agencies, or a similar term, or otherwise identifies the agencies that the parties intend to use the Software, then, notwithstanding any other terms of this Agreement, the parties

acknowledge and agree that all rights and licenses granted under this Agreement for the use of the Software and related materials are granted solely to such Authorized Users, including Shared Agencies, and their personnel. As required by the Primary Agreement, Customer will require Authorized Users including Shared Agencies to commit in writing to the obligations in the Software License Agreement. Additional agencies may be added to Exhibit C as Authorized Users, or may be added as Shared Agencies pursuant to Section 3.7 of the Primary Agreement, by mutual written agreement of Customer and Motorola, subject to payment of the applicable license and support fees for the additional agencies.

This Agreement does not grant any rights to source code.

- 3.2. If the Software licensed under this Agreement contains or is derived from Open Source Software, the terms and conditions governing the use of such Open Source Software are in the Open Source Software Licenses of the copyright owner and not this Agreement. If there is a conflict between the terms and conditions of this Agreement and the terms and conditions of the Open Source Software Licenses governing Licensee's use of the Open Source Software, the terms and conditions of the license grant of the applicable Open Source Software Licenses will take precedence over the license grants in this Agreement. If requested by Licensee, Motorola will use commercially reasonable efforts to: (i) determine whether any Open Source Software is provided under this Agreement; and (ii) identify the Open Source Software (or specify where that license may be found).
- 3.3. If the Designated Products being acquired by Licensee include a Microsoft SQL Server or a Microsoft System Center Operations Manager, the Microsoft software for these Microsoft Products is sublicensed to Licensee from Motorola and is subject to additional Microsoft End-User License Agreement terms.
- 3.4 TO THE EXTENT, IF ANY, THAT THERE IS A SEPARATE LICENSE AGREEMENT PACKAGED WITH, OR PROVIDED ELECTRONICALLY WITH, A PARTICULAR PRODUCT THAT BECOMES EFFECTIVE ON AN ACT OF ACCEPTANCE BY THE END USER, THEN THAT AGREEMENT SUPERSEDES THE SOFTWARE LICENSE AGREEMENT AS TO THE END USER OF EACH SUCH PRODUCT.

Section 4 LIMITATIONS ON USE

- 4.1. Licensee may use the Software only for Licensee's internal business purposes and only in accordance with the Documentation. Any other use of the Software is strictly prohibited. Without limiting the general nature of these restrictions, Licensee will not make the Software available for use by third parties on a "time sharing," "application service provider," or "service bureau" basis or for any other similar commercial rental or sharing arrangement.
- 4.2. Licensee will not, and will not allow or enable its employees, agents, and independent contractors and any third party to: (i) reverse engineer, disassemble, peel components, decompile, reprogram or otherwise reduce the Software or any portion to a human perceptible form or otherwise attempt to recreate the source code; (ii) modify, adapt, create derivative works of, or merge the Software; (iii) copy, reproduce, distribute, lend, or lease the Software or Documentation to any third party, grant any sublicense or other rights in the Software or Documentation to any third party, or take any action that would cause the Software or Documentation to be placed in the public domain; (iv) remove, or in any way alter or obscure, any copyright notice or other notice of Motorola's proprietary rights; (v) provide, copy, transmit, disclose, divulge or make the Software or Documentation available to, or permit the use of the Software by any third party or on any machine except as expressly authorized by this Agreement; or (vi) use, or permit the use of, the Software in a manner that would result in the production of a copy of the Software solely by activating a machine containing the Software. Licensee may make one copy of Software to be used solely for archival, back-up, or disaster

recovery purposes; provided that Licensee may not operate that copy of the Software at the same time as the original Software is being operated. Licensee may make as many copies of the Documentation as it may reasonably require for the internal use of the Software. Licensee is liable for any breach of this Agreement by any of its employees, agents, or independent contractors.

- 4.3. Unless otherwise authorized by Motorola in writing, Licensee will not, and will not enable or allow any third party to: (i) install a licensed copy of the Software on more than one unit of a Designated Product; or (ii) copy onto or transfer Software installed in one unit of a Designated Product onto one other device. Licensee may temporarily transfer Software installed on a Designated Product to another device if the Designated Product is inoperable or malfunctioning, if Licensee provides written notice to Motorola of the temporary transfer and identifies the device on which the Software is transferred. Temporary transfer of the Software to another device must be discontinued when the original Designated Product is returned to operation and the Software must be removed from the other device. Licensee must provide prompt written notice to Motorola at the time temporary transfer is discontinued.
- 4.4. The license for Cityworks or Customer Service Request Software is for the use of the Software with the Designated System or for the specified number of Concurrent Users for which it was provided, the purpose for which it was designed and only for the application specific use covered by this Agreement, or the Primary Agreement. This license does not allow access to the Software through other Designated Systems except as specifically permitted. "Concurrent User" means the maximum number of concurrent connections to Software authorized by this Agreement or the Primary Agreement at any one instance in time. "Designated System" means the computer hardware and operating system configuration specified in the Primary Agreement for which the Software is licensed for use. Additional Designated System licenses are required for communication with additional instances of a database or additional databases.
- 4.5 Licensee will maintain, during the term of this Agreement and for a period of two years thereafter, accurate records relating to this license grant to verify compliance with this Agreement. Motorola or an independent third party ("Auditor") may inspect Licensee's premises, books and records, upon reasonable prior notice to Licensee, during Licensee's normal business hours and subject to Licensee's facility and security regulations. Motorola is responsible for the payment of all expenses and costs of the Auditor. Any information obtained by Motorola and the Auditor will be kept in strict confidence by Motorola and the Auditor and used solely for the purpose of verifying Licensee's compliance with the terms of this Agreement.

Section 5 OWNERSHIP AND TITLE

Motorola, its licensors, and its suppliers retain all of their proprietary rights in any form in and to the Software and Documentation, including, but not limited to, all rights in patents, patent applications, inventions, copyrights, trademarks, trade secrets, trade names, and other proprietary rights in or relating to the Software and Documentation (including any corrections, bug fixes, enhancements, updates, modifications, adaptations, translations, de-compilations, disassemblies, emulations to or derivative works from the Software or Documentation, whether made by Motorola or another party, or any improvements that result from Motorola's processes or, provision of information services). No rights are granted to Licensee under this Agreement by implication, estoppel or otherwise, except for those rights which are expressly granted to Licensee in this Agreement. All intellectual property developed, originated, or prepared by Motorola in connection with providing the Software, Designated Products, Documentation or related services, remains vested exclusively in Motorola, and Licensee will not have any shared development or other intellectual property rights.

Section 6 LIMITED WARRANTY; DISCLAIMER OF WARRANTY

- 6.1. Unless otherwise stated in the Primary Agreement, the commencement date and the term of the Software warranty will be a period of ninety (90) days from Motorola's shipment of the Software (the "Warranty Period"). If Licensee is not in breach of any of its obligations under this Agreement, Motorola warrants that the unmodified Software, when used properly and in accordance with the Documentation and this Agreement, will be free from a reproducible defect that eliminates the functionality or successful operation of a feature critical to the primary functionality or successful operation of the Software. Whether a defect occurs will be determined by Motorola solely with reference to the Documentation. Motorola does not warrant that Licensee's use of the Software or the Designated Products will be uninterrupted, error-free, completely free of Security Vulnerabilities, or that the Software or the Designated Products will meet Licensee's particular requirements. Motorola makes no representations or warranties with respect to any third party software included in the Software. Notwithstanding, any warranty provided by a copyright owner in its standard license terms will flow through to Licensee for third party software provided by Motorola.
- 6.2 Motorola's sole obligation to Licensee and Licensee's exclusive remedy under this warranty is to use reasonable efforts to remedy any material Software defect covered by this warranty. These efforts will involve either replacing the media or attempting to correct significant, demonstrable program or documentation errors or Security Vulnerabilities. If Motorola cannot correct the defect within a reasonable time, then at Motorola's option, Motorola will replace the defective Software with functionally-equivalent Software, license to Licensee substitute Software which will accomplish the same objective, or terminate the license and refund the Licensee's paid license fee.
- 6.3. Warranty claims are described in the Primary Agreement.
- 6.4. The express warranties set forth in this Section 6 are in lieu of, and Motorola disclaims, any and all other warranties (express or implied, oral or written) with respect to the Software or Documentation, including, without limitation, any and all implied warranties of condition, title, non-infringement, merchantability, or fitness for a particular purpose or use by Licensee (whether or not Motorola knows, has reason to know, has been advised, or is otherwise aware of any such purpose or use), whether arising by law, by reason of custom or usage of trade, or by course of dealing. In addition, Motorola disclaims any warranty to any person other than Licensee with respect to the Software or Documentation.

Section 7 TRANSFERS

Licensee will not transfer the Software or Documentation to any third party without Motorola's prior written consent. Motorola's consent may be withheld at its discretion and may be conditioned upon transferee paying all applicable license fees and agreeing to be bound by this Agreement. If the Designated Products are Motorola's radio products and Licensee transfers ownership of the Motorola radio products to a third party, Licensee may assign its right to use the Software (other than CPS and Motorola's FLASHport® software) which is embedded in or furnished for use with the radio products and the related Documentation; *provided* that Licensee transfers all copies of the Software and Documentation to the transferee, and Licensee and the transferee sign a transfer form to be provided by Motorola upon request, obligating the transferee to be bound by this Agreement.

Section 8 TERM AND TERMINATION

- 8.1 Licensee's right to use the Software and Documentation will begin when the Primary Agreement is signed by both parties and will continue for the life of the Designated Products with which or for which the Software and Documentation have been provided by Motorola, unless Licensee breaches this Agreement, in which case this Agreement and Licensee's right to use the Software and Documentation may be terminated immediately upon notice by Motorola.

- 8.2 Within thirty (30) days after termination of this Agreement, Licensee must certify in writing to Motorola that all copies of the Software have been removed or deleted from the Designated Products and that all copies of the Software and Documentation have been returned to Motorola or destroyed by Licensee and are no longer in use by Licensee.
- 8.3 Licensee acknowledges that Motorola made a considerable investment of resources in the development, marketing, and distribution of the Software and Documentation and that Licensee's breach of this Agreement will result in irreparable harm to Motorola for which monetary damages would be inadequate. If Licensee breaches this Agreement, Motorola may terminate this Agreement and be entitled to all available remedies at law or in equity (including immediate injunctive relief and repossession of all non-embedded Software and associated Documentation unless Licensee is a Federal agency of the United States Government).

Section 9 Commercial Computer Software

- 9.1 *This Section 9 only applies to U.S. Government end users.* The Software, Documentation and updates are commercial items as that term is defined at 48 C.F.R. Part 2.101, consisting of "commercial computer software" and "computer software documentation" as such terms are defined in 48 C.F.R. Part 252.227-7014(a)(1) and 48 C.F.R. Part 252.227-7014(a)(5), and used in 48 C.F.R. Part 12.212 and 48 C.F.R. Part 227.7202, as applicable. Consistent with 48 C.F.R. Part 12.212, 48 C.F.R. Part 252.227-7015, 48 C.F.R. Part 227.7202-1 through 227.7202-4, 48 C.F.R. Part 52.227-19, and other relevant sections of the Code of Federal Regulations, as applicable, the Software, Documentation and Updates are distributed and licensed to U.S. Government end users: (i) only as commercial items, and (ii) with only those rights as are granted to all other end users pursuant to the terms and conditions contained herein.
- 9.2 If Licensee is licensing Software for end use by the United States Government or a United States Government agency, Licensee may transfer such Software license, but only if: (i) Licensee transfers all copies of such Software and Documentation to such United States Government entity or interim transferee, and (ii) Licensee has first obtained from the transferee (if applicable) and ultimate end user an enforceable end user license agreement containing restrictions substantially identical to the ones contained in this Agreement. Except as stated in the foregoing, Licensee and any transferee(s) authorized by this subsection 9.2 may not otherwise use or transfer or make available any Motorola software to any third party nor permit any party to do so.

Section 10 CONFIDENTIALITY

Licensee acknowledges that the Software and Documentation contain Motorola's valuable proprietary and Confidential Information and are Motorola's trade secrets, and that the provisions in the Primary Agreement concerning Confidential Information apply.

Section 11 LIMITATION OF LIABILITY

The Limitation of Liability provision is described in the Primary Agreement.

Section 12 NOTICES

Notices are described in the Primary Agreement.

Section 13 GENERAL

- 13.1. **COPYRIGHT NOTICES.** The existence of a copyright notice on the Software will not be construed as an admission or presumption of publication of the Software or public disclosure of any trade secrets associated with the Software.
- 13.2. **COMPLIANCE WITH LAWS.** Licensee acknowledges that the Software is subject to the laws and regulations of the United States and Licensee will comply with all applicable laws and regulations, including export laws and regulations of the United States. Licensee will not, without the prior authorization of Motorola and the appropriate governmental authority of the United States, in any form export or re-export, sell or resell, ship or reship, or divert, through direct or indirect means, any item or technical data or direct or indirect products sold or otherwise furnished to any person within any territory for which the United States Government or any of its agencies at the time of the action, requires an export license or other governmental approval. Violation of this provision is a material breach of this Agreement.
- 13.3. **ASSIGNMENTS AND SUBCONTRACTING.** Motorola may assign its rights or subcontract its obligations under this Agreement, or encumber or sell its rights in any Software, without prior notice to or consent of Licensee.
- 13.4. **GOVERNING LAW.** This Agreement is governed by the laws of the United States to the extent that they apply and otherwise by the internal substantive laws of the State to which the Software is shipped if Licensee is a sovereign government entity, or the internal substantive laws of the State of Illinois if Licensee is not a sovereign government entity. The terms of the U.N. Convention on Contracts for the International Sale of Goods do not apply. In the event that the Uniform Computer Information Transaction Act, any version of this Act, or a substantially similar law (collectively "UCITA") becomes applicable to a party's performance under this Agreement, UCITA does not govern any aspect of this Agreement or any license granted under this Agreement, or any of the parties' rights or obligations under this Agreement. The governing law will be that in effect prior to the applicability of UCITA.
- 13.5. **THIRD PARTY BENEFICIARIES.** This Agreement is entered into solely for the benefit of Motorola and Licensee. No third party has the right to make any claim or assert any right under this Agreement, and no third party is deemed a beneficiary of this Agreement. Notwithstanding the foregoing, any licensor or supplier of third party software included in the Software will be a direct and intended third party beneficiary of this Agreement.
- 13.6. **SURVIVAL.** Sections 4, 5, 6.4, 7, 8, 9, 10, 11 and 13 survive the termination of this Agreement.
- 13.7. **ORDER OF PRECEDENCE.** In the event of inconsistencies between this Exhibit and the Primary Agreement, the parties agree that this Exhibit prevails, only with respect to the specific subject matter of this Exhibit, and not the Primary Agreement or any other exhibit as it applies to any other subject matter.
- 13.8. **SECURITY.** Motorola uses reasonable means in the design and writing of its own Software and the acquisition of third party Software to limit Security Vulnerabilities. While no software can be guaranteed to be free from Security Vulnerabilities, if a Security Vulnerability is discovered, Motorola will take the steps set forth in Section 6 of this Agreement.

Exhibit A-2
Microsoft End User License Agreements, if applicable

Exhibit A-3 Microsoft Terms, if applicable

This Exhibit A-3 to the Computer Aided Dispatch ("CAD") and Records System and Services Agreement ("Primary Agreement") only concerns the Microsoft Products included with the CAD Solution provided by Motorola. Motorola and Customer agree that this Exhibit applies only to the Microsoft Products as fully described herein.

1. **SOFTWARE LICENSE.** As to any Microsoft Products being furnished, the Microsoft software for those Microsoft Products is sublicensed to Licensee from Motorola pursuant to the Customer's Motorola Software License Agreement and is subject to the additional Microsoft End-User License Agreement terms, Exhibit A-2.
2. **CUSTOMER USERS.** Notwithstanding any provisions herein to the contrary, the following provisions apply concerning the Microsoft Products. If Customer is acquiring from Motorola a Microsoft SQL Server and/or a Microsoft System Center Operations Manager, then Customer warrants 1) that the number of users that may access the System are correctly indicated in the Exhibits to this Agreement; 2) that Customer is not being licensed the SQL Server or Microsoft System Center Operations Manager under a license from Microsoft, but rather under a sublicense from Motorola; 3) that the copies of the referenced Microsoft Products it receives from Motorola do not entitle it to maintain on its computer systems any more copies of the Microsoft Products than it previously licensed from Motorola or Microsoft; 4) that Customer possesses and will maintain sufficient quantities of fully valid Microsoft licenses to support the maximum number of users and/or devices that may access or use the System under the provisions of the End-User License Agreement, 5) that Microsoft will be an intended third party beneficiary of the End-User License Agreement, with the right to enforce the warranties and any other provisions of the End-User License Agreement provisions and to verify compliance of the End User with the same, 6) that Customer shall not run on a mirrored database server for more than 30 days without obtaining a SQL license for that server, 7) that the Customer grants permission for the disclosure of End-User information by Motorola as required in Motorola's Monthly royalty reports and ordering information reports to Microsoft, 8) that Microsoft does not transfer any ownership rights in any Product, and 9) that Motorola is solely responsible for providing technical support for the Microsoft Products.
3. **LIMITATIONS.** The rights granted in this Agreement with respect to Microsoft Products are subject to the following limitations: 1) Customer has no copyright interest in the Microsoft Products; 2) Customer may not rent, lease, lend or provide hosting services with the Products; 3) Customer may not reverse engineer, decompile or disassemble any Product; 4) Customer may not remove, modify or obscure any copyrights, trademarks or other proprietary right notices contained in the Products; and 5) The Microsoft Products are not designed or intended for use in any situation where failure or fault of the product could lead to death or serious bodily injury of any person, or to severe physical or environmental damage ("High Risk Use"). Motorola's right to sublicense Microsoft Products excludes the right to use, or distribute the Microsoft Products for Customer's use in, or in conjunction with, High Risk Use, therefore, High Risk Use is strictly prohibited. High Risk use, by way of example, includes aircraft or other modes of human mass transportation, nuclear or chemical facilities, and Class III medical devices under the Federal Food, Drug and Cosmetic Act. Notwithstanding the foregoing, as long as PremierOne CAD is used in a manner for which it was designed and in accordance with the documentation provided, Motorola declares such use is not considered to be High Risk Use as defined by Microsoft.
4. **MICROSOFT PRODUCTS WARRANTY.** Notwithstanding any provisions herein to the contrary, the following provisions apply to the Microsoft Products:
 - 4.1 Microsoft Products are not fault tolerant or free from errors, conflicts, interruptions or other imperfections. Performance may vary depending upon what hardware platform they are

installed on, the interactions with other software applications and each product's configurations.

- 4.2. Microsoft Corporation is providing the Microsoft Products "as-is" with no warranty of any kind and disclaims all warranties, express and implied, to the maximum extent allowed by applicable law. Microsoft further disclaims any liability of Microsoft for any damages, whether direct, indirect incidental or consequential, as a result of the use or installation of the Products. Additionally, to the extent permitted under applicable law, Microsoft Corporation excludes for itself and its suppliers all warranties of any kind, including:
 - a. any warranties of title, non-infringement, merchantability and fitness for a particular purpose;
 - b. any implied warranty arising from course of dealing or usage of trade;
 - c. any common law duties relating to accuracy or lack of negligence with respect to the Microsoft Products, any Master Copy, and any Software Documentation; and
 - d. that the products will operate properly in connection with the System, the Motorola products or on any Customer system(s).

If applicable law gives Customer any implied warranties, guarantees or conditions despite the foregoing exclusion, those warranties will be limited to one year and Customer remedies will be limited to the maximum extent allowed by this Agreement.

5. **THIRD PARTY PROVIDED DOCUMENTATION.** Non-Motorola authored documentation will be provided in the format available from the vendor and in accordance with the vendors distribution policy.

Exhibit A-4 ESRI Terms, if applicable

This Exhibit A-4 to the Computer Aided Dispatch (“CAD”) and Records System and Services Agreement (“Primary Agreement”) only concerns the ESRI OEM Software included with the CAD Solution provided by Motorola. Motorola and Customer agree that this Exhibit applies only to the ESRI OEM Software as fully described herein.

1. ESRI OEM SOFTWARE. Notwithstanding any provisions herein to the contrary, the following provisions apply concerning the ESRI OEM Software.
 - 1.1 The use of ESRI OEM Software is restricted to executable code.
 - 1.2 The following are prohibited: (i) transfer of the OEM Software, except for a temporary transfer in the event of a computer malfunction; (ii) assignment, time-sharing, lend or lease, or rental of the OEM Software or use for commercial network services or interactive cable or remote processing services; and (iii) title to the OEM Software from passing to Customer or any other party.
 - 1.3 Also prohibited are the reverse engineering, disassembly, or decompilation of the OEM Software and the duplication of the OEM Software, except for a single archival copy; reasonable Customer backup copies are permitted.
 - 1.4 To the extent permitted by law, ESRI’s liability is disclaimed for any damages, or loss of any kind, whether special, direct, indirect, incidental, or consequential, arising from the use of the OEM Software, including damages resulting from any ESRI provided Data (Data is not warranted) and damages resulting from use in High Risk Activities such as the operation of nuclear facilities, aircraft navigation or aircraft communications systems, air traffic control, life support, or weapon systems. ESRI specifically disclaims any express or implied warranty of fitness for High Risk Activities.
 - 1.5 Upon termination of the contract, Customer agrees to certify in writing to Motorola that it has discontinued use and has destroyed or will return to Motorola all copies of the OEM Software and documentation.
 - 1.6 Customer will fully comply with all relevant export laws and regulations of the United States to assure that the OEM Software, or any direct product thereof, is not exported, directly or indirectly, in violation of United States law.
 - 1.7 Customer shall not remove or obscure any copyright, trademark notice, or restrictive legend.
 - 1.8 In any sublicense to the United States Government, the OEM Software shall be provided with “Restricted Rights.”
2. ESRI WARRANTY.
 - 2.1 As to ESRI OEM Software, during the term of this Agreement ESRI represents and warrants the Software will substantially perform in conformance with the Specifications and its Documentation, provided the Software is used as specified in the Documentation, and will provide Updates, Upgrades, timely system releases, error corrections, and such improvements outlined in the ESRI life cycle maintenance policy. The foregoing warranties do not apply to errors, defects, or nonconformities due to: a) misuse of the Software solely by the Customer; b) unauthorized modification of the Software by Customer; or c) failure of Customer to use compatible hardware and software as set forth in the specifications.

- 2.2 If included under this Agreement, the Data has been obtained from sources believed to be reliable, but its accuracy and completeness is not guaranteed. The Data may contain some nonconformities, defects, errors or omissions. ESRI and Motorola make no warranty with respect to the Data. Without limiting the generality of the preceding sentence, ESRI and Motorola do not warrant the Data will meet the Customer's needs or expectations, the use of Data will be uninterrupted, or that all nonconformities can or will be corrected. ESRI and Motorola are not inviting reliance on the Data, and Customer should always verify actual Data, including, but not limited to, map, spatial, raster and tabular information.
- 2.3 EXCEPT FOR THE ABOVE EXPRESS LIMITED WARRANTIES, ESRI DISCLAIMS ALL OTHER WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINTERFERENCE, SYSTEM INTEGRATION AND NON-INFRINGEMENT. ESRI DOES NOT WARRANT THAT THE DATA WILL MEET CUSTOMER'S NEEDS OR EXPECTATIONS, THE USE OF THE SAME WILL BE UNINTERRUPTED, OR THAT ALL NONCONFORMITIES CAN OR WILL BE CORRECTED.
- 2.4 Customer's exclusive remedy and ESRI's entire liability for breach of the limited warranties set forth herein shall be limited, at ESRI's sole discretion, to (a) replacement of any defective media; (b) repair, correction, or a work-around for the Software subject to the ESRI Support Services Policy, (c) return of the license fees paid for the Software, Data, or Documentation that does not meet ESRI's limited warranty, provided that Customer uninstalls, removes, and destroys all copies of the Software, Data, or Documentation and executes and delivers evidence of such de-installation and destruction to ESRI.
3. THIRD PARTY PROVIDED DOCUMENTATION. Non-Motorola authored documentation will be provided in the format available from the vendor and in accordance with the vendors distribution policy

Exhibit B
PAYMENT SCHEDULE

For the System purchase financed through Motorola, please refer to the payment schedule included in the Equipment Lease-Purchase Agreement

If Customer has purchased additional Professional or Subscription services, payment will be in accordance with the applicable addenda.

Motorola shall make partial shipments of equipment and will request payment upon shipment of such equipment. In addition, Motorola shall invoice for installations completed on a site-by-site basis or when professional services are completed, when applicable. The value of the equipment shipped/services performed will be determined by the value shipped/services performed as a percentage of the total milestone value. Unless otherwise specified, contract discounts are based upon all items proposed and overall system package. Overdue invoices will bear simple interest at the maximum allowable rate by state law.

For Maintenance and Support Plan and Subscription Based Services:
After the initial term which is included in the Lease Purchase Agreement, Motorola will then invoice Customer annually in advance of each year of the plan.

Exhibit C
Implementation and Technical Documents

- C-1 "Pricing Summary and Equipment List"
- C-2 "Statement of Work" dated May 1, 2020
- C-3 "Project Schedule" (To be mutually developed)
- C-4 "Training Plan" (To be mutually developed)
- C-5 "Technical Product Descriptions"
- C-6 "Acceptance Test Plan"
- C-7 "Data Conversion Scope of Work"

**Exhibit C-1
Pricing Summary and Equipment List**

Pricing reflects the products and services requested. We welcome the opportunity to discuss any pricing questions as needed.

Software, Services and Hardware

Inclusions	Price
Total Software	\$287,051.84
Total Professional Services	\$128,965.32
Total Hardware/Third Party	\$6,930.81
Sales Tax	\$78.78
Total Annual Maintenance Term 5 Years	\$147,973.09
Incentives – December 21, 2020 Expiration	
Motorola 0% Finance Proposal – 6 Year Plan	Estimated Savings Over (\$70,000)
Grand Total	\$570,999.84

Motorola Advantages

- The Flex site license enables agencies to utilize the system to its full potential and adapt to changing needs. Additionally, the Flex system provides room for agency growth, eliminating agency concerns regarding growth and expanding user needs.
- The Motorola Flex system includes first year maintenance, a comprehensive twelve (12) month warranty, unlimited standard business support, and free enhancements.
- Professional services are included in this estimate for administrative training and setup assistance, as well as thorough end user training, Go-live, and refresher Go-live. All on-site services include travel and per diem, with no hidden costs.

Administration

Module	License	Price
CompStat Management Dashboard	Site License	\$37,935.00
Administration Total		\$37,935.00

CAD

Module	License	Price
E9-1-1 Interface – VESTA Integration	Site License	\$7,935.65
CAD	Site License	\$35,598.46
CAD Mapping	Site License	\$15,114.45
CAD Total		\$58,648.56

Crime Analysis

Module	License	Price
Pin Mapping	Site License	\$8,861.00
Crime Analysis Total		\$8,861.00

Hardware/Third Party

Module	Quantity	Price
ESRI Arc Desktop Basic License	1	\$1,275.00
FLEX GIS OEM Server License HA	Site License	\$3,951.25
Sentryx GIS (Geobase)	Site License	\$936.00
Etherlite	1	\$768.56
Hardware/Third Party Total		\$6,930.81

Mobile

Module	License	Price
Mobile Field Report with Field Interview	Site License	\$14,615.25
Mobile Records	Site License	\$11,927.76
Driver License Scanning (devices not included)	Site License	\$4,614.52
Mobile Voiceless CAD	Site License	\$10,991.76
Mobile State & National Queries	Site License	\$11,927.76
Mobile AVL and Mapping	Site License	\$12,614.16
Mobile Arrest Form	Site License	\$11,178.96
Mobile Total		\$77,870.17

Other

Module	License	Price
Acceptance Testing - Basic	Site License	\$13,520.00
Vault - Digital Evidence & Judicial Sharing	Site License	\$37,829.19
Learning Management System	Site License	\$2,236.40
Legacy Data - Query Tool (ARMS system)	Site License	\$27,466.67
Other Total		\$81,052.26

Records

Module	License	Price
Evidence Management	Site License	\$8,798.60
Equipment Maintenance	Site License	\$7,400.06
Hub	Site License	\$62,936.12
Law Records – Includes CA IBR	Site License	\$29,355.30
Traffic Information	Site License	\$8,798.60
AB953 (RIPA)	Site License	Included
Records Total		\$117,288.68

State Specific

Module	License	Price
California State Crash Form (CHP 555)	Site License	\$10,921.84
California LA County StateLink (CLETS)	Site License	\$23,439.65
State Specific Total		\$34,361.49

Included Services

First Year Maintenance – For the specific module(s) listed in this document, all upgrades and live phone support services are included for the first year, as well as any additional pre-purchased years.

Project Management and Installation – Motorola Solutions will assign a Flex Project Manager as the agency’s single point of contact. This individual will coordinate with Motorola's expert installation and training staff as needed to ensure a smooth upgrade transition.

Data Query Tool - Motorola Solutions will work with the customer during implementation to build the queries/reports (up to five) that will best meet the needs of the department. Motorola will support this data query tool as part of system maintenance.

Prepaid Services

Module	Price
Total Annual Maintenance Term 5 Years <ul style="list-style-type: none"> • 1st Year Included at No Cost • Years 2-5 Included - • Esri Arc Desktop Maintenance not included <ul style="list-style-type: none"> ○ South Pasadena responsible for Arc Desktop maintenance 	\$147,973.09
Services Total	\$147,973.09

2020 Second Quarter Financing Incentive
Payment Terms – 6 Year – 0% Financing Proposal
(Sales Tax Included)

Module	Price
Due by February 1, 2022	\$100,099.08
Due by February 1, 2023	\$100,099.08
Due by February 1, 2024	\$100,099.08
Due by February 1, 2025	\$100,099.08
Due by February 1, 2026	\$100,099.08
Due by February 1, 2027	\$70,504.46
See payment schedule in Finance Agreement	

Future Maintenance

	Prepaid Years	Year 6 Mntc
South Pasadena Police Department	4	\$36,993.27
Total		\$36,993.27

*** The sixth year maintenance payment is estimated for your planning purposes and is not included in this purchase price. First year maintenance is included in the total purchase price.*

Subscription

	Optional	
5TB: Digital Evidence & Judicial Sharing	\$4,800.00	
Total		\$4,800.00

*** This is an optional subscription price for continued purchase after the initial 6 year term.*

**Exhibit C-2
Statement of Work**



MOTOROLA SOLUTIONS

**Public Safety Software Implementation
Statement of Work (“SOW”)**

Between

**Motorola Solutions, Inc.
 (“Motorola”)**

And

**South Pasadena Police Department
 (“Customer”)**

Prepared

May 1st, 2020

By

Motorola Solutions, Inc.

This information is the property of Motorola and is provided on a confidential and restricted basis. This information shall not be disclosed outside of Customer organization and shall not be duplicated, used, or disclosed in whole or in part for any reason other than to evaluate this SOW.

Introduction and Purpose

Motorola provides comprehensive public safety software for police departments, sheriff's offices, fire departments, communication centers and correctional facilities. Under the guidance and participation of Customer, Motorola will facilitate the delivery and implementation of its integrated software solutions, which includes all purchased products and services in the Purchase and License Agreement.

Together, the integrated software solutions are referred to as the "System."

Motorola is committed to building a lifelong partnership with Customer by providing professional project management assistance through implementation, account management, technical services, and both initial and ongoing training. Motorola will provide Customer with software tools and services to implement a system that provides for the storage, retrieval, retention, manipulation, and viewing of documents, or files pertaining to Customer operations.

This SOW guides the primary activities and responsibilities for the System's implementation. It documents project implementation requirements, identifies each major task within the implementation process, sets expectations for each party, and identifies the criteria by which Motorola and Customer will consider a task complete.

Project Objectives

Ongoing objectives of the Public Safety Software Implementation project:

- Provide a comprehensive public safety software solution to facilitate data management
- Provide the software and services necessary to enable interoperability and real-time data sharing
- Provide initial and ongoing system and application administration training to ensure proper setup and the efficient use of software modules
- Facilitate the implementation of data entry standards

Specific SOW objectives:

- Complete the project implementation plan
- Configure, set up, and install the server
- Install and configure core Flex software modules
- Install and configure the external interfaces
- Provide onsite system setup consultation and system and application administration training
- Perform initial system acceptance
- Provide comprehensive end user training and assistance with code table set up
- Provide Go-live assistance
- Perform final system acceptance

Change Management Procedures

In the event it is necessary to change this SOW or, if applicable, a Scope of Work document, the following procedure will be used:

- The party requesting the change will issue a Change Request document (“Change Request”). The Change Request will describe the nature of the change, the reason for the change, and the effect of the change, which may include changes to the work product. The Change Request will also include any changes in pricing.
- Either party may initiate a Change Request for any material changes to this SOW and any applicable Scope of Work. The requesting party will review the proposed change with the other party and the parties will negotiate reasonably and in good faith to agree upon the requested change and any changes to the fees or schedule that may result therefrom. Upon the parties’ agreement, the appropriate authorized representatives of the parties will sign the Change Request, indicating acceptance of the changes by the parties.
- Upon execution of the Change Request, the Motorola and Customer Project Managers will incorporate the change into the SOW or Scope of Work.

Project Assumptions and General Responsibilities

Project Assumptions

- The Flex System will be implemented in a Linux or Windows environment.
- Customer network is available and appropriately configured.
- Hardware is available that meets or exceeds Motorola’s current hardware recommendations, is patched per Motorola’s recommendations, and is appropriately configured.
- A TCP/IP-capable network is available for Flex Mobile; specifically, a broadband wireless data network (3G or greater) or a similar high speed private network. At a minimum, wireless networks should accommodate average bi-directional data rates of 256 kbit/s (kilobits per second) between the mobile client and the Flex server.
- Customer obtains State user and terminal ORIs in a timely fashion.
 - State/NCIC (StateLink) interface may not be ready for end user training; a live connection is not necessary for training exercises.
- Third party vendors provide required information for interface configuration.
- This engagement will begin on a mutually acceptable date after Motorola is in receipt of a signed contract from Customer that covers the fees and expenses described therein.
- Customer will provide appropriate technical and management resources to participate in the implementation as identified in the project tasks and responsibilities.

Customer Responsibilities

- Maintain effective communications with the Motorola Project Manager
- Participate in onsite project status meetings
- Respond to issues and concerns as communicated by the Motorola Project Manager
- Provide Motorola with Customer-approved project change requests
- Coordinate required Customer tasks and responsibilities with the Motorola Project Manager
- Manage all third party vendors for which Customer contracts facilitate project activities

- Ensure Customer project team members have the knowledge and expertise to meet required project responsibilities
- Provide onsite and dedicated VPN remote access as required to facilitate installation and Motorola's continued system support
- Install Flex application client on all computers
- Install Mobile application client on mobile computers
- Provide physical training facilities and supplies (e.g., projector, screen, whiteboard or equivalent) as well as personal computers required for training end users
- Ensure management and end user personnel are scheduled and available for training

Motorola Project Team Responsibilities

- Function as the liaisons with Customer's designated project manager
- Provide Customer with a project management plan, including a cut-over plan for Go-live
- Supply system test plans, setup, administration and configuration documentation, student manuals (training plans), and end user Documentation
- Manage all aspects of the implementation, including project communications
- Participate in the project planning and system setup
- Coordinate and schedule the delivery of all products and services provided by Motorola
- Conduct onsite project status meetings at Customer facility and attend all major project events including project kickoff meeting, system acceptance tests, project team training, and Go-live activities
- Facilitate the submission and approval of Customer change requests
- Provide responses and recommend resolutions to Customer issues
- Facilitate the server configuration and core system installation, and coordinate external interface installation
- Manage all third party vendors contracted by Motorola

Project Tasks and Responsibilities

This section outlines all project phases, individual tasks, and responsible parties required to meet the goals and objectives of this SOW. Motorola and Customer will perform their respective tasks through a combination of onsite collaboration, coordination via telephone, email communications, and other remote means, as appropriate.

Tasks may or may not be completed in the order in which they appear. Some tasks may be sequential while other tasks may be concurrent with other tasks.

Some tasks will involve 3rd party entities (government agencies, vendors, etc.) to successfully complete this project. Motorola will cooperate and use good faith efforts to work effectively with all third party representatives from other vendors or government agencies as may be necessary to ensure successful Project completion.

Project Planning and Pre-Installation

Task Description

Project Planning will consist of a series of tasks and activities to help prepare the Customer and Motorola for the implementation process:

- **Pre-Implementation Meeting**

Motorola will conduct a Pre-Implementation Meeting (PIM), which includes a project review session and product demonstration. The Project review session will include a detailed discussion of the contract documents, project timelines, goals and objectives, and roles and responsibilities of both parties. The Project review session will be designed to ensure the project managers and key personnel on both sides are familiar with the contract documents and have the same understanding of the overall scope of the project and project approach.

- **Workflow and Forms Review Sessions/Project Team Planning Session**

Motorola will schedule and conduct Workflow and Forms Review Sessions with each agency/department to identify paper forms and manual reports that can/will be eliminated by installing the new System, and the changes that will be required in forms that will remain in use after system go-live. This task will also include a detailed discussion/presentation and recommendations on how each agency will/should streamline work processes and adjust current staffing resources to match Software utilization.

Deliverables

Upon completion of Project Planning, Motorola and Customer will:

- Document results of the workflow and forms review for each agency. Motorola will provide recommendations on forms that can potentially be eliminated and/or consolidated for each agency. Motorola will provide recommendations for forms that should remain in use after go-live occurs.
- Identify and document estimated Customer resources and estimated time requirements for Customer-related tasks so the Customer is better prepared to assign the type of resources when necessary to do so and for what duration. This information will be based on Motorola's previous experience in installing similar systems. The

Project Planning and Pre-Installation

goal is to help ensure the Customer is well aware in advance of tasks and resource requirements so as to avoid potential project delays during the implementation process.

Prerequisites

- Signed Agreement

Completion Criteria

This task will be considered complete following the Pre-Implementation Meeting, and completion of the Workflow and Forms Review Sessions.

Motorola	Customer
<p>Responsibilities</p> <ul style="list-style-type: none"> • Conduct pre-implementation meeting • Conduct product demonstrations • Conduct workflow and forms review 	<p>Responsibilities</p> <ul style="list-style-type: none"> • Assist with workflow and forms analysis • Assist with project team planning sessions
<p>Required Staff</p> <ul style="list-style-type: none"> • Project manager • Trainer • Systems Engineer 	<p>Required Staff</p> <ul style="list-style-type: none"> • Project manager • Project team members (staff from agencies or departments)

Order Hardware

Order Hardware

Task Description

The purpose of this task is to order the hardware required for the Flex system. Customer or Motorola (as specified in the Agreement) will be responsible for procuring the server needed to meet Motorola's hardware specifications, as well as dedicating/procuring servers for the solution's GIS component, HipLink paging module and Compstat Dashboard module. Together, Motorola and Customer will review the purchase order to verify the purchased hardware meets system specifications. Hardware will then be shipped to Customer's location.

If Customer desires a disaster recovery solution, Customer (or a mutually agreed upon third party, as specified in the Agreement) will be responsible for procuring a second server and facilitating the setup of that solution. All costs associated with the setup and testing of the disaster recovery solution will be borne by Customer.

Deliverables

- Hardware recommendations

Prerequisites

- Pre-implementation conference call

Completion Criteria

This task will be complete once the hardware has been ordered.

Motorola	Customer
Responsibilities <ul style="list-style-type: none"> • Verify hardware order • Order hardware (per Contract) • Provide minimum and recommended hardware requirements for all workstations 	Responsibilities <ul style="list-style-type: none"> • Order hardware (per Contract) • Ensure hardware (workstation) upgrades, as needed
Required Staff <ul style="list-style-type: none"> • Project manager • Installation manager • Systems engineer 	Required Staff <ul style="list-style-type: none"> • Project manager • IT personnel (as needed) • System administrator

Order Third Party Products

Task Description

Motorola will order third party products as specified in the Agreement. Customer will be responsible for any third party requirements not listed in the Agreement.

Deliverables

- Not applicable

Prerequisites

- Signed agreement

Completion Criteria

This task will be complete once Motorola and Customer have placed all orders for third party products.

Motorola	Customer
<p>Responsibilities</p> <ul style="list-style-type: none"> • Order third party products as specified in the Agreement 	<p>Responsibilities</p> <ul style="list-style-type: none"> • Order third party products for which Customer is responsible
<p>Required Staff</p> <ul style="list-style-type: none"> • Project manager • Systems engineer 	<p>Required Staff</p> <ul style="list-style-type: none"> • Project manager • System administrator • IT personnel (as needed)

Finalize Project Schedule

Task Description

Prior to signing the Agreement, Motorola and Customer may have developed a preliminary project schedule. During this task, the project managers from both Motorola and Customer, as well as Customer personnel who make decisions regarding resource allocations or scheduling, will meet and review the project schedule. These individuals will make any necessary adjustments based on known changes in resource availability. Motorola's project manager will then update the schedule.

The project schedule will be further updated as necessary over the course of the project. All changes to the schedule will be mutually agreed upon and, if required, documented via the mutually agreed upon change order process. Any schedule changes that occur will be a part of the project status reports provided by Motorola's project manager.

Deliverables

- Final project schedule

Prerequisites

- Not applicable

Completion Criteria

This task will be complete when the parties agree upon the final project schedule; approval shall not be unreasonably withheld or delayed.

Motorola	Customer
Responsibilities <ul style="list-style-type: none"> • Lead Customer through a review of the project schedule • Update the project schedule 	Responsibilities <ul style="list-style-type: none"> • Ensure personnel who can make resource allocation and scheduling decisions attend Project Schedule review
Required Staff <ul style="list-style-type: none"> • Project manager • Training coordinator 	Required Staff <ul style="list-style-type: none"> • Project manager • System administrator • Department supervisors (as needed, for approving the schedule)

Develop Data Entry Standards

Develop Data Entry Standards

Task Description

Customer is responsible for developing data entry standards and policies to ensure users enter data correctly and in conformity with quality assurance expectations. At the kickoff meeting, Motorola will provide and explain sample data entry standards as a starting point for Customer. Customer will need to revise the sample standards to meet its specific needs. Once standards have been established, Customer will be expected to formalize the policy as standard operating procedure for data entry tasks. Motorola will incorporate the data entry standards into end user training. Therefore, Customer must complete this task prior to end user training. Motorola is not responsible for project delays due to Customer not completing this task in a timely manner.

Deliverables

- Motorola-supplied sample data entry standard
- Final, Customer-defined data entry standards

Completion Criteria

This task will be complete after Customer develops formal data entry standards that Motorola can incorporate into end user training.

Motorola	Customer
Responsibilities <ul style="list-style-type: none"> • Provide sample data entry standards • Explain data entry standards 	Responsibilities <ul style="list-style-type: none"> • Revise sample standards form to meet Customer's needs • Create formal policies and standard operating procedures to guide data entry tasks
Required Staff <ul style="list-style-type: none"> • Project manager • Lead trainer 	Required Staff <ul style="list-style-type: none"> • Project team

Conduct First Web Based Map Training

Task Description

Customer must prepare its GIS data for the Flex geofile and then build the Flex geofile database. Prior to training, Customer will collect current map data for assessment. Motorola will send Customer a document to guide Customer in the collection of this data. A Motorola GIS trainer will assess the current map data and provide feedback on ways to improve the quality of the data for use in the Flex geofile.

During this time, Motorola's GIS trainer will also instruct Customer's personnel responsible for building the geofile on how to build and update the maps for use in the Flex applications. After training, Customer is responsible for building the geofile. Motorola will remotely provide additional assistance, as needed.

Deliverables

- Map data collection guide
- GIS modification recommendations
- Remote assistance as needed

Prerequisites

- Existing customer map files

Completion Criteria

This task will be complete after Motorola concludes the onsite map build training.

Motorola	Customer
Responsibilities <ul style="list-style-type: none"> • Provide map data collection guide • Assess current map data • Provide feedback on ways to improve quality of map data • Provide map build training • Provide remote assistance during Customer's map build activities 	Responsibilities <ul style="list-style-type: none"> • Collect current available map data • Attend map training • Build geofile per Motorola's specifications
Required Staff <ul style="list-style-type: none"> • Trainer (GIS) 	Required Staff <ul style="list-style-type: none"> • System Administrator • GIS Department

Install and Configure Hardware and Operating System

Task Description

After Customer receives the server hardware, Motorola's systems engineer will install the server at Customer site, and install and configure the operating system. The systems engineer will also help Customer configure the GIS server to accommodate Esri® Network Analyst, which is necessary if Customer wants routing and closest unit dispatching capabilities.

Deliverables

- Servers installed and configured

Prerequisites

- Addresses for servers and VPN identified
- Server location, equipment, and supply of power provided

Completion Criteria

This task will be complete when Motorola has installed and configured the Linux or Windows server and operating system, conducted initial tests of the equipment, corrected any material problems or deficiencies, and established connectivity to Motorola's Flex headquarters.

Motorola	Customer
Responsibilities <ul style="list-style-type: none"> • Install Linux or Windows server and operating system at Customer site • Configure database storage space allocation • Guide Customer through network configuration • Conduct initial tests of the equipment and correct any problems or deficiencies • Establish connectivity to Motorola's Flex headquarters 	Responsibilities <ul style="list-style-type: none"> • Facilitate installation of Linux or Windows server • Set up disaster recovery solution • Configure network • Assist with establishing connectivity to Motorola's Flex headquarters
Required Staff <ul style="list-style-type: none"> • Project manager • Systems engineer 	Required Staff <ul style="list-style-type: none"> • System administrator • IT department

Install Core Flex Application

Task Description

After installing the servers and configuring the operating system and database storage, Motorola's systems engineer will install the core Flex application and the Flex side of interfaces. The systems engineer will configure the database environments and create the initial administrative user accounts.

Motorola will provide Customer with Mobile and Flex client applications. Customer is responsible for installing the client application on the mobile and desktop computers.

Deliverables

- Installation of Flex applications, as specified in the Agreement
- Installation of Flex components of external interfaces
- Installation of Flex Mobile client application

Prerequisites

- Hardware installed

Completion Criteria

This task will be complete when Motorola has installed the core Flex applications, created the training user accounts and administrative accounts, initiated the installation of external interfaces, and performed the tests required for end user training and Go-live.

Motorola	Customer
Responsibilities <ul style="list-style-type: none"> • Install core Flex applications • Configure databases (live and training) • Create administrative user accounts • Create training user accounts • Initiate installation of external interfaces 	Responsibilities <ul style="list-style-type: none"> • Install Flex client application on PCs • Install Flex Mobile client application on mobile computers
Required Staff <ul style="list-style-type: none"> • Systems engineer 	Required Staff <ul style="list-style-type: none"> • IT personnel • System administrator

Configure StateLink/NCIC, E9-1-1, LiveScan and Other External Interfaces

Task Description

Motorola installs the NCIC and E9-1-1 interfaces with configuration parameters set to default values. While most external interfaces require only configuration prior to execution, these interfaces require additional technical and administrative steps for operability.

Motorola will install the State Link and Mobile StateLink NCIC interface. Customer, however, is responsible for obtaining a state connection and obtaining state user and terminal ORIs. Should Customer require assistance, Motorola can help with the process. Together, Motorola and Customer will enter the ORI and terminal information and test the connection.

Motorola will install the E9-1-1 interface. To configure this interface, Motorola will require a sample ANI/ALI data stream from Customer, as well as dispatch terminal IP addresses and a port for connectivity to the ANI/ALI box. After receiving this information and the required connectivity, Motorola will configure the E9-1-1 interface and, together with Customer, will test the connection to verify the correct data stream and format transfers to the CAD screens.

Motorola will also install and test all other external interfaces specified in the Agreement. The development process for other interfaces will include programming, testing, and demonstrating to Customer the successful completion of all included interfaces and software modifications, as set forth in the Agreement.

Deliverables

- Installation, configuration, and testing of StateLink and Mobile State Link StateLink/NCIC, E9-1-1, and LiveScan interfaces

Prerequisites

- Methods of connectivity defined
- Contact information for all third party vendors

Completion Criteria

This task will be complete when Motorola and Customer have tested the StateLink and Mobile StateLink/NCIC, E9-1-1 interface, LiveScan interface, and other external interfaces included in the Agreement and they are installed and working correctly in all material respects.

Configure StateLink/NCIC, E9-1-1, LiveScan and Other External Interfaces

Motorola	Customer
<p>Responsibilities</p> <ul style="list-style-type: none"> • StateLink Interface <ul style="list-style-type: none"> - Install StateLink/NCIC interface - Work with Customer to enter ORI and terminal information - Test StateLink/NCIC interface • E9-1-1 Interface <ul style="list-style-type: none"> - Install interface - Configure ANI/ALI connection to Flex - Verify data stream/format to CAD screens • Other External Interfaces <ul style="list-style-type: none"> - Serve as prime contractor to develop interfaces - Test and successfully demonstrate completion to Customer - Update interface and system Documentation, as necessary 	<p>Responsibilities</p> <ul style="list-style-type: none"> • StateLink Interface <ul style="list-style-type: none"> - Obtain state connection - Obtain state user and terminal ORIs - Work with Motorola to enter ORI and terminal information - Test StateLink and Mobile StateLink State/NCIC interface • E9-1-1 Interface <ul style="list-style-type: none"> - Provide ANI/ALI port for connection - Provide dispatch computer IP addresses - Verify data stream/format to CAD screens
<p>Required Staff</p> <ul style="list-style-type: none"> • Project manager • Systems engineer • Development (programmers) 	<p>Required Staff</p> <ul style="list-style-type: none"> • IT department • Any applicable third party vendors • System administrator

Conduct Project Team Training

Task Description

Motorola will conduct a three-day training course for Customer's project team. Part of this training includes an overview of the purchased application. During the overview, Motorola will demonstrate the functionality of the various modules. As Motorola demonstrates this functionality, Motorola and Customer will jointly verify the project acceptance sign off for the modules purchased. Should Motorola and Customer discover any discrepancies between the demonstrated product and Motorola's proposal, they will mutually agree on the reason for the discrepancy and develop a plan of action to resolve the discrepancy. Motorola will resolve the discrepancy if possible. If an immediate resolution is not possible, Motorola and Customer will agree on, and document, an alternative plan of action (i.e., a workaround by Customer or a Motorola product enhancement in a future release).

Following the project team training, the Motorola project manager and Customer will work on any documented changes that need to be made to the module acceptance testing documents (the "Acceptance Documents"). Customer's project team will review the Acceptance Documents for accuracy. Once Motorola and Customer agree on the accuracy of the Acceptance Documents, the documents will be used as a basis for functional testing and final project acceptance.

Deliverables

- Project team training
- Module acceptance test documents

Prerequisites

- Server installation complete
- Training room set up with server connectivity

Completion Criteria

This task will be complete when the parties have agreed upon the Acceptance Documents.

Motorola	Customer
Responsibilities <ul style="list-style-type: none"> • Project team training (system overview) • Demonstrate Motorola application • Work with Customer to review and modify (as needed) module acceptance tests 	Responsibilities <ul style="list-style-type: none"> • Provide appropriately equipped training location • Ensure appropriate personnel attend project team training Work with Motorola to review and modify module acceptance tests
Required Staff <ul style="list-style-type: none"> • Project manger • Trainer 	Required Staff <ul style="list-style-type: none"> • Project team • Trainer

Conduct System Administration Training

Task Description

Motorola will conduct the following system administration training courses:

- Specialist Flex application administration (3 days)
- Module-specific administration training, as appropriate

System administration training includes training to set up, enter, and administer the operational and administrative code tables. Following training, Customer will be responsible for entering code tables. Customer must enter data before user training begins. Motorola will provide training on user/group setup, including granting system privileges.

Additionally, Customer should have a good draft of its data entry standards. During this training, Motorola will work with Customer to review and finalize the data entry standards. Following training, Customer will be responsible for formalizing data entry standards. This task must be complete before user training begins.

Deliverables

- System administration training per the training plan

Prerequisites

- Motorola application installation
- Project team training
- Customer completion of data entry standards

Completion Criteria

This task will be complete when Motorola has provided the system administration training per the training plan.

Motorola	Customer Responsibilities
Responsibilities <ul style="list-style-type: none"> • System administrator training • Module administration training • Code table setup training 	Responsibilities <ul style="list-style-type: none"> • Provide properly equipped location • Ensure personnel attend training • Finalize data entry standards • Enter code tables
Required Staff <ul style="list-style-type: none"> • Trainer 	Required Staff <ul style="list-style-type: none"> • Project manager (as needed) • Project team • System administrator • IT personnel • Department managers (as needed for code tables decisions)

Conduct Module Acceptance Testing

Conduct Module Acceptance Testing

Task Description

At Customer location, Motorola and Customer will conduct acceptance tests on the installed system. Motorola will provide Customer with its standard acceptance tests for each Motorola application module. Should it desire to do so, Customer can develop additional, mutually agreeable tests and scenarios.

With Motorola's assistance, Customer will conduct functional tests to verify that commands work as intended within mutually developed test scenarios, and that each module and all interfaces, function according to the Acceptance Documents.

In the process of testing the requirements, Customer will also test specific commands to determine whether the command executes the intended function in the manner expected, the command generates the appropriate acknowledgement message, information transfers correctly, and the commands generate the appropriate error messages when input incorrectly.

During module testing, Motorola and Customer will track whether requirements pass or fail a test, classifying requirements that test as a "Failure." If a material Failure is identified, it will be documented and Motorola will begin work to correct the Failure. Once a correction is established, Motorola and Customer will conduct additional testing of that requirement to verify it passes the test.

Deliverables

- Flex standard functional tests

Prerequisites

- Flex application installation
- System Administration training

Completion Criteria

This task will be complete when the Flex application operates in all material respects according to the Acceptance Testing Documents, and Motorola either has remedied all material Failures or has provided a mutually acceptable written explanation of when it will correct the Failures.

Motorola	Customer Responsibilities
<p>Responsibilities</p> <ul style="list-style-type: none"> • Provide standard functional tests • Work with Customer to review and agree upon additional tests and scenarios • Conduct module testing with Customer and track results • Correct any failures following Acceptance Testing plan 	<p>Responsibilities</p> <ul style="list-style-type: none"> • Review standard Flex functional tests • Create additional tests and scenarios, if desired • Conduct functional testing with Flex and track results • Re-test any corrections made by Motorola

Conduct Module Acceptance Testing

Required Staff	Required Staff
<ul style="list-style-type: none">• Project manger• Trainer	<ul style="list-style-type: none">• Project manager• Project team• End users (as needed)

Conduct Follow Up Map Training and Final Map Setup Training

Task Description

Motorola GIS trainers will conduct multiple (as needed) training sessions to review the geofile map build and direct the necessary GIS modifications. These trainers will identify areas where the maps could be improved and assist Customer with any issues or problems it is experiencing.

Prior to Go-live, Motorola will conduct a final review session to assess the condition of Customer map data and ensure it is ready for go live.

Deliverables

- GIS professional services (consulting)
- Final map review

Prerequisites

- Flex application installation
- System administration training
- Significant progress on Customer map build

Completion Criteria

This task will be complete when the final map is prepared and ready for Go-live.

Motorola	Customer
Responsibilities <ul style="list-style-type: none"> • Provide map build assistance to Customer • Assist with final map review and go live preparation 	Responsibilities <ul style="list-style-type: none"> • Map build and GIS modifications • Perform final map review
Required Staff <ul style="list-style-type: none"> • Trainer (GIS) 	Required Staff <ul style="list-style-type: none"> • GIS department • System administrator

Conduct End User Training

Task Description

Motorola will conduct end user training per the mutually agreed upon training plan.

Deliverables

- End user training

Prerequisites

- Functional testing completed
- Interfaces installed and configured

Completion Criteria

This task will be complete when Motorola has provided all end user training per the training plan.

Motorola Responsibilities	Customer Responsibilities
<p>Responsibilities</p> <ul style="list-style-type: none"> • Provide end user training per the training plan 	<p>Responsibilities</p> <ul style="list-style-type: none"> • Provide training facilities and equipment • Ensure appropriate personnel attend each training class
<p>Required Staff</p> <ul style="list-style-type: none"> • Trainers 	<p>Required Staff</p> <ul style="list-style-type: none"> • All employees (end users)

Cutover to Live Operation

Task Description

Motorola trainers will be onsite to assist Customer with cutover to live operation (Go-live).

On the day of cutover to live operation, Motorola will facilitate a Go-live kickoff ensuring all tasks are completed and Customer personnel are prepared for pre and post-cutover roles.

After cutover, Motorola's trainers will assist Customer personnel with initial live database entry, providing guidance and training as needed. The trainers will troubleshoot live database problems that may arise and make minor configuration modifications as Customer makes initial database entries and enacts entire work processes in the live environment.

Motorola's project manager and trainers will hold meetings with Customer project team, as needed, to discuss concerns and issues that arise.

Customer's system administrators, project team, and other "supervisory users" shall be present to provide guidance to Customer personnel needing additional assistance. Customer personnel are free to ask questions. The system administrators, project team, and other supervisory users should report issues and concerns they encounter to Motorola's trainers and project manager, who will incorporate the issues and concerns into daily meetings and one-on-one training.

Deliverables

- Trainers onsite for Go-live

Prerequisites

- Completion of all previous tasks

Completion Criteria

This task will be complete once live operation of the entire System has commenced and the other tasks described above been completed.

Motorola Responsibilities	Customer Responsibilities
<p>Responsibilities</p> <ul style="list-style-type: none"> • Facilitate Go-live kickoff meeting (first day of Go-live) • Assist with initial live database entry • Observe operations and troubleshoot live database problems • Make minor modifications as needed • Work one-on-one with individuals 	<p>Responsibilities</p> <ul style="list-style-type: none"> • Ensure appropriate personnel attend Go-live kickoff meeting • Provide guidance to individuals who need extra assistance • Relay issues and concerns to Motorola
<p>Required Staff</p> <ul style="list-style-type: none"> • Project manager • Systems engineer 	<p>Required Staff</p> <ul style="list-style-type: none"> • Project manager • All employees (end users)

Cutover to Live Operation

- Trainers

Perform Site Audit and Analysis

Task Description

Approximately a few weeks following cutover to live operation, a Motorola trainer will be onsite to observe how Customer personnel are using the System. The trainer will be available to answer any follow up questions and provide additional training to enhance user capabilities, showing the users alternative ways to use the System.

Deliverables

- Onsite analysis and training for up to three days

Prerequisites

- Go-live operations

Completion Criteria

This task will be complete after the Motorola trainer has conducted the site audit and analysis.

Motorola	Customer
Responsibilities <ul style="list-style-type: none"> • Answer follow up questions • Show users alternative ways to use the system 	Responsibilities <ul style="list-style-type: none"> • Communicate questions or concerns
Required Staff <ul style="list-style-type: none"> • Trainer 	Required Staff <ul style="list-style-type: none"> • Applicable staff

Obtain Project Acceptance Sign Off

Task Description

Customer will sign off on final system acceptance. The system will be deemed accepted by Customer following the completion of the items in the Acceptance Test Plan.

Deliverables

- Corrections or workarounds to material errors per the Acceptance Test Plan

Prerequisites

- Cutover to live operations

Completion Criteria

This task will be complete when the System has been fully tested in an operational environment and Acceptance has occurred as per the Acceptance Test Plan.

Motorola	Customer
<p>Responsibilities</p> <ul style="list-style-type: none"> • Resolve performance and reliability issues per the Acceptance Test Plan 	<p>Responsibilities</p> <ul style="list-style-type: none"> • Monitor Flex System • Log errors with appropriate detail
<p>Required Staff</p> <ul style="list-style-type: none"> • Project manger 	<p>Required Staff</p> <ul style="list-style-type: none"> • Project manager • Project team

Major Milestones

- Agreement signing
- Hardware delivery/Core installation
- Project team training/Administration training complete
- Initial acceptance
- Interfaces
- End user training complete
- Go-live complete
- Final acceptance

**Exhibit C-3
Project Schedule**

(To be mutually developed)

**Exhibit C-4
Training Plan**

(To be mutually developed)

Exhibit C-5 Technical Product Descriptions

Technical product documents for the following interfaces are provided in the following pages:

- E9-1-1 Interface
- California Crash Form (CHP 555)
- LA County StateLink Interface
- Sentryx GIS

E9-1-1 Interface Product Description

Summary

Receive automatic number and location information (ANI/ALI) from a standard E911 system and transmit the information to your Flex CAD system. Used in conjunction with the CAD and CAD Mapping modules, the interface enables you to view real-time locations of both wireless and landline calls on a digital map. Automatic field entry inserts agency-specified information from incoming calls to minimize manual data entry. The E911 Interface ensures your agency meets federal Phase I and Phase II compliance standards.

Feature List

- Automatic Field Entry
- Visual Call Locations
- Mapping ALI Data
- Cellular Location Data

Requirements

General

- The Flex software must be loaded on a Motorola Solutions-approved hardware platform as outlined in current Motorola Solutions policies.
- Flex technicians must have access to the server where the Flex software is loaded.
- Installation is completed partially on site and partially over remote connection.
- The agency must provide E9-1-1 protocol documentation and ALI text format information.
- The agency must provide a static IP address and computer name for each Flex 9-1-1 dispatch station.
- The agency must provide the ANI/ALI station number for each Flex 9-1-1 dispatch station.

Hardware

Hardware	Model	Vendor/Company	Support	Notes
ANI/ALI				<ul style="list-style-type: none"> • ANI/ALI equipment that is installed and functional • A Digi serial port server (Motorola Solutions will purchase the initial serial port server) • A power source for the serial port server that is within 15 feet of the ANI/ALI CAD port • The agency must provide a static IP address for the serial port server
TCP/IP				A TCP/IP network connection to the Flex server that is within 15 feet of the ANI/ALI CAD port.

Software

Software	Version	Vendor/Company	Notes
Flex	Version 4.6 or higher	Motorola Solutions, Inc.	User documentation is included in the Flex CAD User's Guide. Administrator documentation is located in the Flex SAA Application Setup and Maintenance Manual.
CAD module		Motorola Solutions, Inc.	User documentation is included in the Flex CAD User's Guide. Administrator documentation is located in the Flex SAA Application Setup and Maintenance Manual.

California State Crash Form Product Description

Summary

The California State Crash Form provides a simple, easy to use, tool for officers in the field to complete electronic citations following the format of the CHP 555. The CA Crash form can be completed by officers quickly and efficiently using Name and Vehicle records from the Flex database. Validation is built into the form to ensure the information entered is complete and correct. Workflow records can be created for each CA Crash form to allow an agency to define the workflow process for approval.

Requirements

Software

Software	Version	Vendor/Company	Notes
Flex	Version 6.2 or higher	Motorola Solutions, Inc.	
Mobile	Version 4.6 or higher	Motorola Solutions, Inc.	
.NET	Version 4.0 or higher	Microsoft	

California StateLink (Los Angeles County) Product Description

Summary

This document covers the StateLink protocol interfaces and available transactions for the state of California (Los Angeles County).

Feature List

The transactions listed below encompass every type of transaction currently available through StateLink in California (Los Angeles County). New transactions are custom work and will take time to be added.

If an agency is establishing a new connection with Flex, the CLETS Upgrade Application packet must be submitted to and accepted by the DOJ before the StateLink installation. This process can take 3–6 months, so it is recommended that this be started early.

Available Transactions			
Transaction Type	Screen Name & Description	Flex Command Line Access	Message Keys Sent
Administration	Administrative Message	AM	AM, AML
	CLETS Administrative Message	CAM	CAM
	Free Format Entry	FREE	FREE
	JDIC Administrative Message	PGTO	
	Query ORION File	TQ	TQ
	Query ORI	QO	QO, ZO
	Hit Confirmation Query	YQ	YQ
	Hit Confirmation Query CA	YQCA	YQ
	Hit Confirmation Response	YR	YR
	Hit Confirmation Response CA	YRCA	YR
Article	Query Bicycle	BIKE	QAB
	Enter Bicycle	BIKE1	EA, EAA, EP, EPN
	Modify Bicycle	BIKE2	MA, MAA, LA, LAA, R.LA, R.LAA, XA, XAA
	Query Article	QA	QA, QAB, QAH, QAK, QAM, QAN
	Enter Article	EA	EA, EAA, EP, EPN
	Modify Article	MA	MA, MAA
	Locate Article	LA	LA, LAA, R.LA, R.LAA
	Clear Article	CA	CA, CAA

	Cancel Article	XA	XA
Boat	Query Boat Registration	BQ	BQ
	Query Boat	QB	QB
	Enter Stolen/Stored/Repo Boat	EB	EB, EBR, EBRL, EBS
	Enter Boat Part	EBP	EBP
	Modify Boat	MB	MB, MBA
	Locate Boat	LB	LB, R.LB
	Clear Boat	CB	CB
	Cancel Boat	XB	XB
Booking	Query Booking	BK	SI01, SI02, BC01, BK05, RL13, BK04, BC02
	Request Booking Number	BK1	BK10
	Enter Booking Part 1	BK2	BK01, R.QW, QHA, ID, IN, CJSBJSH3, QW, IW, JNAM, QVC
	Enter Booking Part 2	BK3	BK02
	Enter Booking Part 3	BK4	BK03
	Update Arrest Disposition (Accessed from BK6 response)	BK5	BC01
	Update Booking	BK6	MC07, BC01, DA02, RL13, BK07
	Update Jail Location (Accessed from BK6 response)	BK7	MC07
	Update Booking Release (Accessed from BK6 response)	BK8	RL13
	Additional AKA's (Accessed from BK6 response)	BK9	BK05
	Additional Charges	BK10	BK04
	Update Booking Information (Accessed from BK6 response)	BK11	BK07
Update Court Information (Accessed from BK6 response)	BK12	DA02	
Countywide Wants	Warrant Abstract	WABS	AM, CAM, PGTO
	Query Wanted Persons	WNT	IW, IP, AS, MA, II, QW, R.QW, R.QV, QVC, QCF
	Enter Want	WNT1	CN
	Updated Wanted Persons	WNT2	MA, MW

	WIS Req/Rel/Abst/Recall	WNT3	IW, BM, BW, WS, RS, OR
	Add/Change AKA (Accessed from WNT2 response)	WNT4	MA
	Add Investigative Information	WNT5	CI
	Update Warrant Booking (Accessed from WNT3 response)	WNT6	BM
	Request WIS (Accessed from WNT response)	WNT7	IW, WS, IP, AS
	Add/Modify Personal Identifier	WNT10	WM
	Add/Modify Vehicle Identifier	WNT11	WM
	Remove Vehicle/Address	WNT13	DI
Criminal History	CHRI Additional Info Request	AQ	AQ
	Query CHRI by State ID	FQ	FQ
	Query CHRI by Name	IQ	IQ
	Query CII RAPS by Name	QHA	QHA
	Query CII RAPS by Misc. Number	QHN	QHN
	Query CII RAPS by CII Number	QHY	QHY, QHT
	Query NCIC III History	RQH	R.QH
	Query NCIC III Rap Sheet	RQR	R.QR
Driver License	Query Driver by Name	DNQ	DNQ
	Query Driver License	DQ	DQ, DQG
	Query CA Driver License (Num.)	ID	ID
	Query CA Occupational License	IL	IL
	Query CA Driver License (Name)	IN	IN
	Query Driver History	KQ	KQ
	Query Canadian Driver License	UQ	UQ
Gun	Query Gun	QGB	QG, QGB, QGC, QGG, QGH, QGHX, QGM, QGMX, QGK, QYG, QYP, QYN, R.QG
	Stolen Gun Enter	EG	EG
	Modify Gun	MG	MG
	Locate Gun	LG	LG, R.LG

	Cancel Gun	XG	XG
Identity Theft	Query Identity Theft	QID	QID
	Enter Identity Theft	EID	EID
	Modify Identity Theft	MID	MID
	Cancel Identity Theft	XID	XID
Juvenile	Query Juvenile	JAI	JNAM, JINQ, PINQ, JPDI, CC03, JNUM, JFIL
	Enter Juvenile	JAI1	JADD
	Additional Arrests (Access from JAI6 Response)	JAI2	JARA
	Update AKA (Access from JAI6 Response)	JAI3	JAKA
	Update Personal Information (Access from JAI6 Response)	JAI4	JUPD
	Update Arrest Information (Access from JAI6 Response)	JAI5	JARU
	Update Juvenile	JAI6	JAKA, JUPD, JARU, JARA
Missing Persons	Query CA/NCIC Missing Person	QM	QM
	Query NCIC Missing Person	RQM	R.QM
	Enter Missing Person	EMP	EMP
	Enter MP Identifiers	EMID	EMID
	Enter Missing Suspect	EMSU	EMS
	Enter Missing Person Vehicle	EMV	EMV
	Modify Missing Person Description	MMPD	MMPD
	Modify MP Identifiers	MMID	MMID
	Modify Missing Person	MMP	MMP
	Modify Missing Suspect	MMS	MMS
	Modify Missing Suspect Description	MMSD	MMSD
	Modify Missing Vehicle	MMV	MMV
	Locate Missing Person	LMP	LMP, R.LM
	Cancel Missing Person	XMP	XMP
	Cancel Missing Suspect	XMS	XMS
Cancel Missing Person Vehicle	XMV	XMV	

Other	Query Hazardous Material	MQ	MQ
Protection/ Restraining Order	Query Restrained Person	QRP	QRP
	Query Restraining/Protective	QRR	QRR, QRR1, QRRH
	Enter Restraining Order	ERO	ERO
	Violation Message Entry	EVM	EVM
	Modify Restraining/Protective	MRO	MRO
	Modify RO/Violation Message	MVM	MVM
	Serve Restraining/Protective	SRO	SRO
	Cancel Restraining/Protective	XRO	XRO
Securities	Query Securities	QS	QS
	Enter Securities	ES	ES, ESS
	Modify Securities	MS	MS, MSS
	Locate Securities	LS	LS, LSS
	Clear Securities	CS	CS, CSS
	Cancel Securities	XS	XS, XSS
Sex and Arson	Sex and Arson Inquiry	QSA	QSA
	Enter Sex and Arson	ESA	ESA
	Update Sex and Arson	USA	USA
Super Queries	Query DL/SRF	CU01	IN, QVC
	Query DL/CII/SRF	CU02	IN, QHA, QVC
	Query Reg/Vehicle by License	CU03	IV, QV
	Query Reg/Vehicle by VIN	CU04	IV, QV
	Query AFS/APS/WPS/CARPOS/SRF	GPW	QGH, QAN, QW, QRR, QVC
	Query APS/WPS/CARPOS/SRF	PW	QAN, QW, QRR, QVC
	Query AFS/APS	GP	QAN, QGH
	Query AFS/WPS/CARPOS/SRF	GW	QGH, QW, QRR, QVC
	Query DL/SRF	CU01	IN, QVC
Supervised Release	Query Supervised Release	QVC	QVC
	Enter Supervised Release	EVC	ECA, EYA, EPR, EFR, ECR, ERC, ESV
	Modify Supervised Release	MVC	MCA, MYA, MPR, MFR, MCR, MMH, MRC, MSV

	Cancel Supervised Release	XVC	XVC
	Enter Contact Message	LCA	LCA
Unidentified Person	Enter UP Identifiers	EUID	EUID
	Enter Unidentified Person	EUP	EUP
	Modify UP Identifiers	MUID	MUID
	Modify Unidentified Person	MUP	MUP, MUPD
	Query Unidentified Person	QU	QU, R.QU
	Cancel Unidentified Person	XUP	XUP
	Vehicle	Clear Vehicle	CV
Enter Stolen/Felony Vehicle		EV	EV, EVF
Enter Stolen/Lost/Found Plate		EVL	EVL1, EVL2, EVFL, EVLE
Enter Vehicle Part		EVPR	EVPR, EVPF
Enter Stored/Impounded/Pawn/Repo		EVS	EVS, EVSH, EVSH-Z, EVR, EVRL, EVP
Query CA Registration		IV	IV
Locate Part/Plate/Vehicle		LV	LV, LVA, R.LV, R.LL, R.LP, R.LF, MV, MVA
Modify Vehicle		MV	MV, MVA
Query Vehicle		QV	QV
Query LoJack		LE	QV
Query Registration by Name		RNQ	RNQ
Query Vehicle Registration		RQ	RQ, RQG
Query Snowmobile Registration		SQ	SQ
Query Canada Registration		XQ	XQ
Query Aircraft Registration		GQ	GQ
Cancel Vehicle	XV	XV	
Wanted	Clear Wanted Person	CW	CW
	Enter Wanted Person	EWR	EWR
	Query Wanted Person	QW	QW
	Locate Wanted Person	LW	LW, R.LW
	Modify Wanted Person	MWR	MWR
	Query State Warrant	SWQ	SWQ
	Cancel Wanted Person	XW	XW

Requirements

Hardware

Hardware	Model	Vendor/Company	Support	Notes
Requirements				Typical hardware requirements are needed for StateLink and can be found in the Flex Hardware Recommendations document.

Software

Software	Version	Vendor/Company	Notes
Flex	Version 6.2 or higher	Motorola Solutions, Inc.	
StateLink	Version 2.0	Motorola Solutions, Inc.	<ul style="list-style-type: none"> Executable: StateLinkCALA.war
O/S	AIX, Linux, Windows		
Other Requirements			<ul style="list-style-type: none"> Communications Protocol: CLETS/ JDIC Message Type: NLETS TEXT, CLETS Text, and JDIC Text NCIC 2000 Standard: Yes Mnemonic Pooling: Yes Displays Images in Returns: No Voiced Responses: Yes Highlighting: Yes Import to Flex: Yes Requesting Unit Auto Forward: Yes Hit Alerts: Yes Auto Query Registered Owner: Yes

Summary

Sentryx Geobase incorporates a geographic information system (GIS) into an agency's Flex database, simplifying address entry and ensuring consistency. Appropriate dispatch zones and reporting areas are automatically assigned. Addresses verified by geobase link together people, alerts, prior calls and any other records sharing a common address. Records with verified addresses can be pin-mapped and used to find other "nearby" locations.

Sentryx Geobase uses an interface between the Flex database and an ESRI ArcGIS server to provide live access to GIS data. GIS data does not need to be loaded into the Flex database.

Feature List

- Efficient Mapping
- Safe Incident Response
- Address Selection
- Complete CAD Integration
- Address Information Screen
- Reverse Geocoding
- Quick Call Dispatching
- Common Place Address Names

Requirements

General

- The Flex software, version 6.0 or later, must be loaded on a Motorola Solutions-approved hardware platform as outlined in current Motorola Solutions policies.
- A TCP/IP connection must be in place between the Flex Server and the ArcGIS Server.
- The agency must have the necessary GIS source data (map files) covering their jurisdiction formatted to meet Flex requirements. Agencies who are using ArcGIS 10.1, ArcGIS 10.2 and ArcGIS 10.3 must create web published map and geocoding services. Source data should include:
 - Addressing information such as address points, parcels and/or street centerlines.
 - Common places
 - Dispatch zones and reporting areas
 - City boundaries
- The agency's SAA must be familiar with Geobase setup instructions.

Hardware

Hardware	Model	Vendor/Company	Support	Notes
Processor	Pentium or Xeon	Intel Core Duo		Running at 2 GHz or faster.
RAM				2GB or more.
Disk Space				500 MB or more.

O/S	Windows 2000 Server, 2003 Server, 2008 Server or XP Professional	Microsoft		
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Software

Software	Version	Vendor/Company	Notes
Flex	Version 6.0 or later	Motorola Solutions, Inc.	
Geobase Module		Motorola Solutions, Inc.	
ArcGIS	Version 9.31, 10.1, 10.2 and 10.3 Desktop	Motorola Solutions, Inc.	For map development and maintenance. Note that even with ArcGIS 10.0 only ArcGIS 9.3 style locators are supported. (ArcGIS 10.1, ArcGIS 10.2 and ArcGIS 10.3 are compatible only with Flex 6.2 and Flex 6.3). Customers using ArcGIS 10.1, ArcGIS 10.2 and ArcGIS 10.3 must use ArcGIS 10.0 Server.
ArcGIS	9.3 Server or 10.0 Server	Motorola Solutions, Inc.	
Edition: Standard or Advanced			
Level: Workgroup or Enterprise			
.NET		Microsoft	
Customers Using			ArcGIS 10.1, ArcGIS 10.2 and ArcGIS 10.3 must use ArcGIS 10.0 Server

Exhibit C-6 Acceptance Test Plan

1. Acceptance Testing Overview

Motorola Solutions will work in conjunction with the Customer to perform three types of acceptance tests: functional, performance, and reliability. This Acceptance Test Plan (ATP) is incorporated as part of the Purchase and License Agreement (“License Agreement”) to identify a mutually agreeable methodology for completing these testing activities.

Failures are defined as the inability of the System or a System component to conform in all material respects to Product Specifications as defined in the License Agreement. All tracking of test results will be done via a mutually agreeable tracking form.

2. Functional Testing

Prior to Go-live, Motorola Solutions will provide the Customer with its standard functional acceptance tests for each Flex application module.

With assistance from Motorola Solutions, the Customer will conduct Functional Tests on the System to verify that that commands work as intended within mutually developed test scenarios, and that each module, as well as all System interfaces, functions according to the Functional Specifications Document developed as a System implementation task.

In the process of testing the requirements, the Customer will also test specific commands to determine whether the command executes the function it was intended to execute in the manner expected, whether the command generates the appropriate acknowledgement message, if information is correctly sent and received, and whether the commands generate the appropriate error messages when input incorrectly.

During Functional Testing, Motorola Solutions and the Customer will track whether requirements pass or fail a test. If a requirement fails a test, it will be classified as a “Failure.” Motorola Solutions shall have up to ten (10) days to correct any Failure or provide an explanation of when the Failure will be corrected. Motorola Solutions shall resolve the Failure either by fixing the Failure or by providing a mutually agreeable resolution. Once a Failure is corrected, Motorola Solutions and the Customer will conduct additional testing of that requirement to verify that it passes the test.

The System will be deemed to have passed Functional Testing when all requirements pass the test or mutually acceptable remedies for the Failures have been developed.

3. Performance Testing

The purpose of the Performance Test is to verify that the System meets the transaction performance standards in **Attachment 1** (Performance and Reliability Standards). Prior to Go-live, the Customer will be responsible for conducting the Performance Testing. Once all System components have been installed, a final Performance test will be conducted in a live environment to ensure that performance standards are maintained when all System components are in use. For the purposes of Performance Testing, command transactions times are measured from operator action until visual response or operation completion. As part of Performance Testing, prior to go live operations, Motorola Solutions will stress test the System

using an automated load tester. The automated load tester will simulate large volumes of calls being created, dispatched, etc. utilizing data from the standard practice database.

3.1 Performance Testing

The purpose of performance testing is to verify the System meets the transaction performance standards in **Attachment 1** (Performance and Reliability Standards).

The Customer will be responsible for monitoring and measuring System Performance during the 30-day test period. The Customer can conduct any performance test it desires, but must be able to systematically document and track any discovered performance deficiencies, including detailed information as to the sequence of events leading up to the problem, time of day, node name or unit involved and other pertinent details.

If performance degradation, defined as a replicable inability to meet the performance standards in **Attachment 1** (Performance and Reliability Standards) is discovered, the Customer may choose to stop use of the application or use whatever operational portion may be available. The Customer and Motorola Solutions will determine a mutually acceptable error level and remedy as per the Error Designation and Remedies Section in Section 4.1.

4. Reliability Testing

Upon Go-live, the System will undergo a 30-day Performance and Reliability Period. The Performance and Reliability Test Period consists of Performance Testing and Reliability Testing. During this test period, the Customer will need to maintain a log of any discovered errors. Errors will be classified and remedied according to severity using the Error Level Designations and Remedies listed in Section 4.1.

4.1 Error Level Designations and Remedies

1.0 During the Performance and Reliability Test Periods, the Customer will maintain a log of any discovered errors. Motorola Solutions' services and response times are based on the severity levels of the error a Customer is experiencing, as defined below. This method of response allows Motorola Solutions to prioritize its resources for availability on our Customer's more severe service needs. Severity level response time defines the actions that will be taken by Motorola Solutions' Support team. Due to the urgency involved in some service cases, Motorola Solutions will make every commercially reasonable effort to provide a temporary or work around solution. When a permanent solution is developed and certified through testing, it will be incorporated in to the applicable Supplemental and or Standard Release.

4.1.1 Error Level 1 (P1)

A Priority One Level Error (P1) is a failure to meet Product Specifications that results in:

- Total System Failure – The System is not functioning and there is no workaround; such as a Central Server is down or when the workflow of an entire agency is not functioning. This level is meant to represent a major issue that results in an unusable System, Subsystem, Product, or critical features. No work around or immediate solution is available.

In the event a P1 Error occurs, the Customer will immediately notify Motorola Solutions and the Performance and Reliability period will be cancelled. Motorola Solutions will be available via telephone conference within one hour of initial voice notification, and Motorola Solutions personnel shall promptly resolve the problem at no additional cost to the Customer.

4.1.2 Error Level 2 (P2)

A Priority Two Level (P2) Error is a failure to meet Product Specifications that results in:

- Critical Failure – A crucial element in the System that does not prohibit continuance of basic operations is not functioning and there is usually no suitable work around. Note that this may not be applicable to intermittent problems. This level is meant to represent a moderate issue that limits a Customer's normal use of the System, Subsystem, Product or major non-critical features.

In the event a P2 Error occurs, the Customer will immediately notify Motorola Solutions and the Performance and Reliability period will restart. Motorola Solutions will be available via telephone conference within three business hours of initial voice notification, during normal business hours, and Motorola Solutions personnel shall promptly resolve the problem at no additional cost to the Customer.

4.1.3 Error Level 3 (P3)

A Priority Three Level (P3) Error is a failure to meet Product Specifications that results in:

- Non-Critical Failure – A System component is not functioning, but the System is still useable for its intended purpose, or there is a reasonable workaround. This level is meant to represent a minor issue that does not preclude use of the System, Subsystem, Product, or critical features.

In the event a P3 Error occurs, the Customer will immediately notify Motorola Solutions, but the Reliability period will continue. Motorola Solutions will be available via telephone conference within six business hours of initial voice notification, during normal business hours, and Motorola Solutions personnel shall resolve the problem during the Reliability period, if possible.

If not, resolution will occur within a future bug fixes release, fixes release or software update of the product. P3 Errors do not need to be resolved for Final System Acceptance, but must be resolved, either by remedying the error or by developing a mutually acceptable plan to remedy the error in a future bug fix release.

4.1.4 Error Level 4 (P4)

A Priority Four Level (P4) Error is a minor failure to meet Product Specifications that results in:

- Inconvenience – The System causes a minor disruption in the way tasks are performed but does not stop workflow. This level is meant to represent very minor issues, such as cosmetic issues, documentation errors, general usage questions, and product or System Update requests.

In the event a P4 Error occurs, the Customer will immediately notify Motorola Solutions, and Motorola Solutions will be available via telephone conference within two standard business days of initial notification. Motorola Solutions may or may not correct the error within a future software release, however if the error affects functionality that is identified in the functional requirements document, Motorola Solutions will work with Customer to reclassify the error to a mutually agreed upon error level. Note that requested enhancements to the application are not errors and fall outside of the scope of the Error Levels and Reliability Testing.

4.2 Reliability Testing

The purpose of the Reliability Testing is to verify the Subsystem will perform in a live environment as per the reliability standards stated in **Attachment 1** (Performance and Reliability Standards).

If a Failure is detected, the errors will be classified and remedied as per the Error Designation and Remedies Section above in Section 4.1.

5. Final System Acceptance

Final System Acceptance can occur when:

- The Flex System has operated for 30 consecutive days without a P1 error
- The Flex System has operated for 30 days without a P2 error
- All P3 Errors have been corrected or a mutually agreeable resolution or plan to resolve all P3 errors has been developed

Motorola Solutions needs to be notified in writing of any errors before the end of the reliability period. All errors must be reproducible. If Motorola Solutions has not been notified of any Errors within the 30-day Reliability Test period, the System will be deemed accepted.

6. Final Acceptance Notification Form

Customer agrees acceptance testing has been completed as follows:

- The Flex System has operated for 30 consecutive days without a P1 error
- The Flex System has operated for 30 days without a P2 error
- All P3 Errors have been corrected or a mutually agreeable resolution or plan to resolve all P3 errors has been developed

Exhibit C-7 Data Conversion Scope of Work

This statement of work provides an overview of Motorola Solutions' data conversion services, and guides the primary activities and responsibilities for the conversion process. It documents project assumptions, sets expectations for each party, and identifies each major task within the conversion process.

Our primary objective as your partner is to minimize risks to data accuracy and provide exceptional service. Your agency can rest assured that your data and needs will be our top priority throughout the entire conversion process.

Scope of Work

Legacy Data-Viewer

Data Location – Our customers have the option to “dump” legacy data into a separate, query-only database. This query-only database can be accessed with Motorola Solutions' Query tool, which is configured to serve as a data viewer. As such, the tool will connect to the query-only database, enabling users to query your agency's legacy data. Although legacy data is not available in the live environment, it is preserved without the need to maintain South Pasadena PD's old system.

Legacy Data

- CAD, Law, and Jail data is in a relational database. Customer will provide legacy data in CSV, Excel, or Access database file format if legacy data is not in an MS SQL or Oracle server.

The following queries for CAD, RMS, and Jail are included in the base price of this option:

- CAD – Motorola will build two queries which will contain key information from legacy CAD incidents, incident history, involve people, vehicle, and unit information. Custom queries search parameters and query results will be finalized during the data mapping workshop.
- RMS – Motorola will build three queries which will contain key information from legacy RMS incidents, people, and property information. These custom queries search parameters and query results will be finalized during the data mapping workshop.
- Jail – Motorola will build three queries which will contain key information from legacy booking inmate, arrest, bond, bond payment, master people, master person address, offense, sentence, housing information. These custom query search parameters and query results will be finalized during data mapping workshop.
- Additional custom queries will require a change order and will be priced separately.

Customer Responsibilities

- Provide Motorola Solutions with adequate documentation of the legacy database and field mapping information
- If possible, cleanse data in the legacy database prior to data conversion by merging duplicate records, specifically duplicate Master records
- Participate in the preparatory Data Conversion Workshop
- Approve the data conversion requirements prepared by Motorola Solutions
- Review and verify query results for accuracy within each iteration

Motorola Solutions' Project Team Responsibilities

- Create the initial query mapping document and search parameters
- Prepare the Data Conversion Workshop
- Develop queries and modify the user interface
- Set up query tool and validate – including two test iterations, and final deployment

Preliminary Quote

Below is an initial price estimate for the data conversion services provided by Motorola Solutions, as detailed on the previous pages. We look forward to working closely with your agency to determine the most beneficial approach for this project.

\$27,466.67

Attachment 1

Performance and Reliability Standards

1. Overview

This Document outlines the performance and reliability standards for the System. In the event of a conflict between the terms and conditions of this document and the License Agreement, the terms and conditions of the License Agreement shall apply.

2. Performance Standards

Subject to the terms and conditions in the Agreement, Motorola Solutions will ensure that during the Project the System meets the performance standards stated herein in all material respects.

2.1 Performance Standards Assumptions and Exceptions

All performance standards are based on the following assumptions:

The Flex Software is configured and maintained according to Motorola Solutions' recommendations for networks, servers, workstations, storage systems, system and application configuration, as well as for database maintenance

The workstations used to access the Software meet the recommended Flex workstation specifications

The servers housing the Flex Software meet the recommended Flex server specifications

The storage system storing the database and application files meets the recommended storage system specifications

A maximum average round-trip latency (as measured by "ping") of 10ms between client workstations and the Flex server

Performance standards are not guaranteed in the following conditions:

The physical integrity of the network (bad cables, etc.), other applications competing for bandwidth, or issues with switches and routers which can cause network noise, throughput drop-offs, or network activity spikes

Third party applications operating on workstation clients negatively influence response times of the Flex Software

Anti-virus scanning software configuration, client registry errors, firewalls, and spyware negatively affect performance

Network and system diagnostic testing affects performance

Functions requiring responses from external data sources, such as queries to external systems, which may take longer based on the responsiveness of the external system and the network

2.2 Measurement of Transaction Response Times

Transaction response times are measured from operator action until visual response or operation completion.

2.3 Flex CAD Performance Standards

The CAD performance standards are based on the **Performance Standards Assumptions and Exceptions** and the following additional assumptions:

CAD client workstation to the Flex Server must maintain a constant connection speed of 100Mbps for optimum performance, since response time for query transactions, searches and canned reports will depend greatly on the network connection speeds

Subject to the Customer meeting the CAD performance assumptions, Motorola Solutions commits to the following response times during the Project:

An average of less than 1 second for the following Dispatcher commands executed purely from the command line:

- Unit Status Update
- Dispatch Unit
- Call Comment
- Update Call Status
- Close Call

An average of less than 3 seconds for the following Dispatcher commands:

- Geoverify Address (from Add Call screen)
- Initiate New Call (open Add Call screen, no address)
- Call History (Incident History)
- Unit History

From the Add Call Screen or the Call Information screen, an average of less than 5 seconds for the following amplifying information

- Previous calls at address
- Duplicate calls at address
- Names with alerts at address
- Warrants at address
- Address alerts

Many factors influence response time, including network latency, map display complexity, and interaction with external systems and data volumes retained on the production database servers. The majority of the CAD application commands will meet the criteria stated above. However, commands requiring responses from external data sources (i.e., queries to external systems) may take longer based on the responsiveness of the external system and the network. With regard to external database queries, the System will meet the performance requirement in most cases. However, due to factors such as network latency and external system responsiveness, it is not possible to commit to the response time for all ad hoc external database query requests.

Notwithstanding this provision, Motorola Solutions will resolve, in accordance with the requirements of the Agreement, problems or Defects caused by Products and/or Services provided by Motorola Solutions that interfere with, or impede, the System's ability to achieve the performance standards as stated herein.

Please note that Motorola Solutions cannot guarantee response times when the transaction depends on the performance of the network, load on external systems or any external systems (e.g., queries to state databases) outside the responsibilities of Motorola Solutions, as defined by the Agreement.

2.4 Flex Mobile Performance Standards

The Mobile performance standards are based on the **Performance Standards Assumptions and Exceptions** and the following additional assumptions:

Either a commercial or managed IP-based wireless network with average data rates of 256 Kbs between the Flex Mobile client and the Flex server

Acceptable performance for mobile transactions shall be defined as achieving two-way (query and response) transactions on a channel without congestion (i.e., no delay for channel access due to traffic contention)

Subject to the Customer meeting the Mobile performance assumptions, Motorola Solutions commits to the following response times during the Project:

The frequency of dispatch updates is configurable. The default configuration is set to 15 seconds, thus the maximum time between dispatch updates is less than 30 seconds.

Query response times are directly related to network latency and bandwidth. When Mobile network performance assumptions are met indexed query responses, unit history and call history lookups, and message transactions are less than 7 seconds

Note that the Mobile response time does not apply to the following:

Records with images or attachments, such as mug shots. For example, a 1 MB mug shot will take approximately 32 seconds to download over a 256 kbit/s connection or approximately 16 seconds to download over a 512 kbit/s connection. (<http://www.download-time.com/>)

Queries to external systems

Functions that are size and complexity dependent (i.e., report generation)

2.5 Flex RMS Performance Standards

The Flex RMS performance standards are based on the **Performance Standards Assumptions and Exceptions** and the following additional assumptions:

RMS client workstation to the Flex Server must maintain a constant connection speed of 100 Mbps for optimum performance, since response time for query transactions, searches and canned reports will depend greatly on the network connection speeds

Subject to the above-noted assumptions and exceptions, Motorola Solutions commits to the following performance standards during the Project:

Basic Query (Indexed Search) and Select Response Times

With the exception of large reports or database searches that cover a time span of a week or more and excluding network communication times and other delays beyond the Licensed Software control, the RMS system will complete the majority of activities with a transaction Response Time of 3 seconds or less.

Data entry operations (i.e., manual entry of information into data entry fields) and option selections (e.g., selecting one or more alternatives from drop down menu, with a pointing device or keyboard command) are completed with an average response time of 1 second or less.

Extended Records Query (Non-indexed Search)

The Flex RMS allows searching on un-indexed fields. The response time for un-indexed searches varies greatly and depends on the amount of data stored in the database, the search criteria, and the position of the matching records in the table. An exact response time cannot be guaranteed, but the Flex RMS will search approximately 1,000 records in less than 7 seconds.

Name Query with List Response

When configured to show a list response the Flex RMS will complete a names search in less than 7 seconds

2.6 Flex Field Reporting Performance Standards

The Field Reporting performance standards are based on the **Performance Standards Assumptions and Exceptions** and the following additional assumptions:

Either a commercial or managed IP-based wireless network with average data rates of 256 kbit/s between the Flex Field Reporting client and the Flex server

Acceptable performance for AFR transactions shall be defined as achieving two-way (query and response) transactions on a channel without congestion (i.e., no delay for channel access due to traffic contention)

These performance standards do not apply to third party Field Reporting applications that interface with the Flex system

The form load time will be very dependent upon the mobile/Field Reporting client workstation hardware memory and CPU specifications required by the application.

Subject to the above noted assumptions and exceptions, Motorola Solutions commits to the following performance standards during the Project:

Field Reporting queries to the Flex Server over the LAN will be completed within 7 seconds. Field Reporting queries to the Flex Server over-the-air (wireless network) are not subjected to the 7-second response time due to wireless network traffic and server response.

Selecting drop-down menu pick-list items will be provided within 1 second. A few large pick-list items will be provided within 7 seconds.

Generation and display of report forms from the “New” report screen will be provided within 30 seconds.

Generation and display of report forms from the “New” report screen will be provided within 12 seconds, with the exception of the first time the form is displayed after logging into Flex Mobile, for Mobile clients that meet or exceed Motorola Solutions’ Mobile Client hardware recommendations.

Field Reporting Workflow, Retrieval and Submissions

Loading of existing saved draft reports, reports from a user’s inbox and submission of reports may take longer than 30 seconds. The time for submitting and saving reports to the Flex Server may also exceed 30 seconds. This transaction time will be contingent upon the number of included data elements in a draft or completed report, any media attachments associated with the form, and the number of reports a user allows to be queued in their inbox.

2.7 Flex JMS Performance Standards

The Flex JMS performance standards are based on the general assumptions and exceptions and the following additional assumptions:

JMS client workstation to the Flex Server must maintain a constant connection speed of 100Mbps for optimum performance, since response time for query transactions, searches and canned reports will depend greatly on the network connection speeds

Subject to above noted assumptions and exceptions, Motorola Solutions commits to the following performance standards:

Basic Query (Indexed Search Only) and Select Response Times

With the exception of large reports or database searches that cover a time span of a week or more and excluding network communication times and other delays beyond the Licensed Software control, the JMS system will retrieve and display the first matching record in 3 seconds or less.

Data entry operations (i.e., manual entry of information into data entry fields) and option selections (e.g., selecting one or more alternatives from drop down menu, with a pointing device or keyboard command) are completed with a response time of 3 seconds or less.

Inmate Quick Search

The Inmate Quick Search displays a list of inmates that match the entered search criteria. For indexed searches, the Inmate Quick Search is completed with a response time of less than 7 seconds.

3. System Availability

Flex software has consistently operated in a 99.99% to 99.999% rate of uptime for many years. For the past 12 months, Flex customers as a whole have averaged an uptime of 99.9968 (excluding planned downtime for updates). That said, because performance of the Flex application is also dependent on hardware, operating systems, and other non-Flex systems, we hesitate to guarantee a defined system availability level.

Motorola Solutions is firmly committed to the continued development of our extremely reliable public safety software, and stand by the products we currently offer to more than 2,100 customers across the United States. We will work closely with the agency to ensure proper expectations are established.

The calculation of system uptime excludes planned downtime for maintenance, patches, and upgrades. System uptime is a measure of software uptime and excludes downtime caused by factors outside the control of the Flex software, such as power outages and hardware failures.

4. System Reliability

Motorola Solutions commits that the System will operate in material conformity with the performance standards described herein and the requirements as defined in the Agreement through Final System Acceptance. Should the System fail to meet these requirements, upon notice from Customer, Motorola Solutions will take appropriate steps to bring the System back into compliance by correcting the problem.

EXHIBIT D Maintenance and Support Agreement

This Exhibit D, Flex Maintenance and Support Agreement ("Agreement"), is between Motorola Solutions, Inc., ("Motorola"), and South Pasadena Police Department ("Customer").

For good and valuable consideration, the parties agree as follows:

Section 1: Definitions

- 1.1 **"Coverage Hours"** means the hours between 5:00 a.m. and 6:00 p.m., Mountain Time, Monday through Friday, excluding regularly scheduled holidays of Motorola.
- 1.2 **"Documentation"** means all written or electronic user documentation for the Software provided by Motorola to Customer. Documentation does not include Motorola marketing materials.
- 1.3 **"Enhancement"** means any modification or addition that, when made or added to the Software, changes its utility, efficiency, functional capability, or application, but that does not constitute solely an Error Correction. Motorola may designate Enhancements as minor or major, depending on Motorola's assessment of their value and of the function added to the preexisting Software.
- 1.4 **"Error"** means any failure of the Software to conform in all material respects to its functional specifications as published from time to time by Motorola, subject to the exceptions set forth in Section 4.
- 1.5 **"Error Correction"** means either a software modification or addition that, when made or added to the Software, establishes material conformity of the Software to the functional specifications, or a procedure or routine that, when observed in the regular operation of the Software, eliminates the practical adverse effect on Customer of such nonconformity. Error Correction services are subject to the exceptions set forth in Section 4.
- 1.6 **"Primary Agreement"** means the agreement to which this exhibit is attached.
- 1.7 **"Releases"** means new versions of the Software, including all Error Corrections and Enhancements.
- 1.8 **"Response Time"** means six (6) or less Coverage Hours, from the time Customer first notifies Motorola of an Error until Motorola initiates work toward development of an Error Correction.
- 1.9 **"Software"** means the package of Motorola computer program(s), interfaces and/or data, in machine-readable form only, as well as related materials, including Documentation, initially or subsequently licensed by Customer. Software also includes all Utilities, modifications, new Releases and Enhancements. "Software" specifically excludes Third Party Software, except to the extent otherwise expressly stated in this Agreement.
- 1.10 **"System Application Administrator"** means an agent of Customer appointed by Customer, who has been certified on the Software by Motorola, pursuant to the procedures set forth in Section 6 hereof, and is able to communicate effectively with Motorola support personnel in the description and resolution of problems associated with the Software.
- 1.11 **"Support Term"** means the entire period during which Customer is receiving support services for the Software under the terms of this Support Agreement, beginning on the installation date of the Software. Support services are included during the Software's Warranty Period, as defined in Section 6.1 of Exhibit A, which is the "Initial Support Term." Thereafter, the Support Term shall

automatically renew for successive periods of one year each, unless and until terminated pursuant to Section 8 hereof. In no event, however, shall the Support Term extend beyond the term of the Software License in Exhibit A

- 1.12 **“Third Party Software”** means software owned by third parties, whether (i) licensed by the third party to Motorola for distribution to Motorola’s customers with the Software, such as mapping software, database software, paging software or open source software, or (ii) separately acquired by Customer as necessary or appropriate for use in conjunction with the Software, such as word processors, spreadsheets, terminal emulators, etc.
- 1.13 **“Utilities”** means the software utilities and tools provided by Motorola as part of the Software, including Motorola’s XML Query, ODBC interface and implementation code, ctpperl, dbdump, and dbload, as well as any other software utilities provided by Motorola in connection with the Software.

Section 2: Eligibility For Support

- 2.1 **Support Termination.** Motorola’s obligation to provide the support and maintenance services described in this Support Agreement with respect to the Software may be terminated pursuant to Section 8.2.2 or suspended, at Motorola’s discretion, if at any time during the term of this Support Agreement any of the following requirements are not met:
- 2.1.1 The Software License in Exhibit A must remain valid and in effect at all times;
 - 2.1.2 The Software must be operated on a hardware platform, operating system and version approved by Motorola; and
 - 2.1.3 Customer must be current on payment of maintenance and support fees.
- 2.2 **SAA Replacement.** Motorola may require Customer to appoint a new Motorola Application Administrator (“SAA”) in order to continue receiving support services or increase Customer’s support fees, if Motorola reasonably determines that the acting SAA does not have the training or experience necessary to communicate effectively with Motorola support personnel.

Section 3: Scope of Services

During the Support Term, Motorola shall render the following services in support of the Software, during Coverage Hours:

- 3.1 **Support Center.** Motorola shall maintain a Support Services Control Center capable of receiving from the SAA reports of any software irregularities, and requests for assistance in use of the Software.
- 3.2 **Services Staff.** Motorola shall maintain a trained staff capable of rendering support services set forth in this Support Agreement.
- 3.3 **Error Correction.** Motorola shall be responsible for using all reasonable diligence in correcting verifiable and reproducible Errors when reported to Motorola in accordance with Motorola’s standard reporting procedures. Motorola shall, after verifying that such an Error is present, initiate work within the Response Time in a diligent manner toward development of an Error Correction. Following completion of the Error Correction, Motorola shall provide the Error Correction through a “temporary fix” consisting of sufficient programming and operating instructions to implement the Error Correction and Motorola shall include the Error Correction in all subsequent Releases of the Software. Motorola supports two (2) versions back from the most recent release version. However, Motorola may, but is not obligated to, provide Error Corrections for any version of the Software other than the most recent Release.

- 3.4 **Software Releases.** Motorola may, from time to time, issue new Releases of the Software to its Customers generally, containing Error Corrections, minor Enhancements, and, in certain instances, if Motorola so elects, major Enhancements. Motorola reserves the right to require additional license fees for major Enhancements. Motorola shall provide Customer with one copy of each new Release, without additional charge. Motorola shall provide reasonable assistance to help Customer install and operate each new Release, provided that such assistance, if required to be provided at Customer's facility, shall be subject to the supplemental charges set forth in Motorola's current Fee Schedule.
- 3.5 **Enhancements.** Motorola shall consider and evaluate the development of Enhancements for the specific use of Customer and shall respond to Customer's requests for additional services pertaining to the Software (including, without limitation, data conversion if applicable and report-formatting assistance), provided that such assistance, if agreed to be provided, shall be subject to supplemental charges mutually agreed to in writing by Motorola and Customer.

Section 4: Services Not Covered by this Support Agreement

The services identified in this section are NOT covered by this Support Agreement. Motorola strongly recommends that Customer secure a separate support agreement with third party vendors for all non-Motorola products. Motorola may, in its discretion, provide such services to Customer upon request, for an additional fee as the parties may agree in writing.

- 4.1 **Third Party Products.** Motorola will not provide support for any third party products, including hardware, or support for hardware failure due to the use of any third party products. Motorola may in its discretion provide first-line support for Third Party Software distributed by Motorola; if not, Motorola will refer Customer to the vendor of such software for resolution of support issues.
- 4.2 **Customized Interfaces and Software.** Motorola's standard support does not include support for any custom interfaces or other customized Software developed by Motorola or any third party for Customer. Support and maintenance services for customized Software are subject to an additional support fee, if agreed in writing between the parties. Such support and maintenance services include bug fixes and minor modifications to the custom interface or software. They do NOT include major revisions or rewrites, such as those required to make a custom interface work with a new or upgraded version of the applicable third party software. Custom interfaces and support therefore are specific to the designated version of the applicable third party software or system. Any major changes to such third party software or system will require a new custom quote for Motorola to modify the custom interface to work with the new version of the third party software or system. Motorola's support fees may also differ for the new version of the custom interface.
- 4.3 **Network Failures.** Motorola will not provide support for any network failures or problems including, but not limited to, cabling, communication lines, routers, connectors, and network software.
- 4.4 **Data Recovery.** Motorola's standard support does not include restoration and/or recovery of data files and/or the operating system. Motorola will, upon request of Customer and subject to its then-current fees for such services, use reasonable efforts to assist Customer in recovering lost data.
- 4.5 **Unauthorized Use.** Motorola will not provide support where the problem arises out of any breach of warranty, damages to the Software or its database, data corruption, or support issues, security issues, or performance issues arising out of Customer's or a third party's use of the Utilities or any software not specifically licensed by Motorola to Customer for use in connection with the Software. Any assistance provided by Motorola in resolving such problems shall be charged to Customer on a time and materials basis. Additionally, any unauthorized use of the Utilities or other software in connection with the Software by Customer (or by a third party with Customer's knowledge) may result, at Motorola's sole option, in voidance of warranties, an increase in the annual maintenance

and support fees under this Support Agreement, and/or loss of rights to upgrades under this Support Agreement.

- 4.6 **Database Modifications.** Motorola will not provide support for any damages to or problems with the Software or its database, data corruption, support issues, security issues, or performance issues arising from Customer's utilization of the "write" feature of the ODBC interface to write to or modify the database in any way.
- 4.7 **Misuse or Damage.** Motorola will not provide support for Software problems caused by Customer misuse, alteration or damage to the Software or Customer's combining or merging the Software with any hardware or software not supplied by or identified as compatible by Motorola, customizing of programs, accident, neglect, power surge or failure, lightning, operating environment not in conformance with the manufacturer's specifications (for electric power, air quality, humidity or temperature), or Third Party Software or hardware malfunction.
- 4.8 **Operating System.** Motorola is not responsible for supporting, configuring, maintaining, or upgrading the operating system, including, but not limited to, backups, restores, fixes, and patches, or for providing assistance with problems caused by operating system installation, configuration, errors, maintenance or repair, or using incorrect versions of the operating system.
- 4.9 **Onsite Visits.** Onsite service visits to Customer's facility by Motorola are subject to additional charges, as set forth in Section 7.5.
- 4.10 **Printers.** Motorola is not responsible for supporting printers connected to the back of terminals/personal computers (commonly called pass-through printing) or network printers are not supported by Motorola.

Section 5: Obligations of Customer

- 5.1 **Software Connectivity.** Customer must maintain and provide, at no cost to Motorola, a CJIS-approved broadband internet connection to the server used with the Software, 24 hours per day, 7 days per week, to facilitate remote support utilities enabling Motorola support personnel to connect to and provide assistance with the server used with the Software. Third party connectivity tools, such as client VPN software, which must be installed on Motorola equipment, cannot be required by Customer.
- 5.2 **Customer Representative During Onsite Visits.** Customer's SAA or another authorized representative of Customer must be present when any onsite support is provided. Customer agrees that if such representative is not present when the Motorola representative arrives onsite, the Motorola representative shall notify an appropriate representative of Customer, if feasible, that there is no Customer IT representative present. If Customer's IT representative does not arrive within a reasonable time, no work will be performed and Customer will be charged for Motorola's expenses relating to the visit. If Motorola's on-site support person determines that changes to Customer's system (hardware or software) are required or advisable, it will inform Customer's representative. If such representative is not authorized to make or approve changes to Customer's system, as applicable, Customer will promptly make available such a person.
- 5.3 **English Language.** All communications between Customer and Motorola must be in the English language.
- 5.4 **SAA Assignment.** Customer is responsible for providing one or more qualified Motorola Application Administrators as described in Section 6 hereof. At least one authorized representative, identified to Motorola by Customer in writing with contact information, must be available at all times; however, after-hours availability is required only when and if Customer is requesting after-hours support from Motorola.

- 5.5 **Security.** Customer is responsible for providing all network and server security.
- 5.6 **Error Information.** Customer must provide Motorola with information sufficient for Motorola to duplicate the circumstances under which an Error in the Software became apparent.
- 5.7 **CJIS Compliance.** Customer is responsible for its own adherence to the FBI Criminal Justice Information Services (CJIS) Security Policy, the Health Insurance Portability and Accountability Act of 1996 (HIPAA) (to the extent applicable) and any other applicable security and privacy laws and regulations. Motorola will reasonably cooperate with Customer in connection therewith.

Section 6: SAA and Support Contact Requirements

- 6.1 **Certification.** Customer's designated SAA must be certified by Motorola within one year of the date of Customer's cutover to live operation of the Software ("Go-live"). The designated SAA must meet the following requirements in order to certify at the basic level:
- 6.1.1 Attend and participate in, and successfully pass the final written and practical examinations from the following courses within one hundred twenty (120) days of installation of the Software:
 - i. System Introduction – Inquiry,
 - ii. System Introduction – Data Entry & Modification,
 - iii. Basic System Administration, and
 - iv. General training applicable to the Software used by Customer.
 - 6.1.2 Pass the Basic SAA exam within one year after the agency's Go-live date.
- 6.2 **SAA Training Costs.** Customer will be responsible for the costs of such training, including any course fees, travel, and lodging expenses.
- 6.3 **SAA and Support Contact Information.** Contact information for Customer's SAA(s) and other authorized support contacts must be provided by Customer to Motorola's Technical Services department. Any changes to Customer's SAA and support contacts names and contact information must be promptly provided to Motorola's support department.
- 6.4 **Qualifications.** Each designated SAA and Customer support contact must be qualified to address, or have other support resources to address, without the aid of Motorola, all problems relating to hardware, software, or operating system not directly associated with the Software.

Section 7: Fees and Charges

- 7.1 **Support Fees.** During the Initial Support Term, support services are included as part of the initial purchase price paid by Customer. Thereafter, Customer shall pay Motorola the applicable support fees or Motorola support invoice, and any other charges or fees described herein. Motorola reserves the right to change its support fee, effective upon no less than 90 days written notice to Customer prior to the end of the current annual period.
- 7.2 **Support Fee Invoices.** Motorola shall invoice Customer for annual Support Fees at the beginning of each contract year. In the event that additional billable work is performed, all billable charges and expenses will be invoiced to Customer at the beginning of the month following the month in which those charges and expenses accrued or were incurred. Customer shall pay the invoiced amounts immediately upon receipt of such invoices. Any amount not paid within thirty (30) days after the invoice date shall bear interest at the rate of eighteen (18) percent per year or the highest rate allowed by applicable law, whichever is less.

- 7.3 **Equipment Fees.** Customer shall be responsible for and agrees to pay the fees and charges incurred for procuring, installing, and maintaining all equipment, telephone lines, modems, communications interfaces, networks, and other products necessary to operate the Software.
- 7.4 **After-Hours Charges.** Customer agrees to pay additional charges according to the Motorola Fee Schedule for all work required by Customer and performed outside of Coverage Hours. These charges are applicable for any work performed outside of the Coverage Hours, REGARDLESS OF THE CAUSE, even if the requested work was reported and/or initiated during normal Coverage Hours.
- 7.5 **Onsite Support** If Customer requests onsite support services, Customer shall reimburse Motorola for all labor, travel, and related expenses incurred by Motorola in providing such support services.
- 7.6 **Additional Fees.** Additional support fees may be required by Motorola if there is a significant increase in Customer's size with respect to use of the Software. An increase in size may arise either out of Customer's internal growth or out of a Host Agency/Shared Agency arrangement as described in Section 1 of Exhibit F, if applicable. Relevant factors include number of employees, number of dispatchers and/or number of jail beds. Payment of such additional Support Fees is due within thirty (30) days of the date of the invoice for such fees. Such fees will be prorated, based upon the date during the contract year the increase in Customer's size occurred. Additionally, Motorola may adjust support fees based on changes in (1) additional licenses or modules purchased by Customer, (2) Customer's hardware, (3) the Coverage Hours selected by Customer, or (4) Customer's violation of the restrictions set forth in Section 4.5 hereof.
- 7.6.1 **Inflation Adjustment.** At the end of the first year of the Agreement and each year thereafter, a CPI percentage change calculation shall be performed using the U.S. Department of Labor, Consumer Price Index, all Items, Unadjusted Urban Areas (CPI-U). Should the annual inflation rate increase greater than 3% during the previous year, Motorola shall have the right to increase all future maintenance prices by the CPI increase amount exceeding 3%. All items, not seasonally adjusted shall be used as the measure of CPI for this price adjustment. Measurement will take place once the annual average for the New Year has been posted by the Bureau of Labor Statistics. For purposes of illustration, if in year 5 the CPI reported an increase of 8%, Motorola may increase the Year 6 price by 5% (8%-3% base).

Section 8: Termination

- 8.1 **Automatic Termination.** This Support Agreement shall automatically terminate immediately upon termination of the Software License in Exhibit A for any reason.
- 8.2 **Termination by a Party.** Either party may terminate this Support Agreement as follows:
- 8.2.1 If either Motorola or Customer provides a written notice to the other party, at least 90 days prior to the end of the then-current Support Term, of its intent to terminate this Support Agreement at the end of such Support Term; or
- 8.2.2 Upon 30 days prior written notice, if the other party has materially breached any provision of this Support Agreement and the offending party has not cured such breach within the 30-day notice period.
- 8.3 **Final Invoicing upon Termination.** Following termination of this Support Agreement, Motorola shall immediately invoice Customer for all accrued fees, charges, and reimbursable expenses; and Customer shall pay the invoiced amount immediately upon receipt of such invoice.

Section 9: General

- 9.1 **Incorporation of Additional Terms.** The terms of Section 3.5 (Motorola Software); Section 3.6, (Non-Motorola Software); Section 10.9 (Disclaimer of Other Warranties); Section 12 (Disputes); Section 15 (Limitation of Liability); Section 16 (Confidentiality and Proprietary Rights); and all of the General provisions in Section 17 are hereby incorporated into this Agreement by reference.

Exhibit E
SYSTEM ACCEPTANCE CERTIFICATE
Public Safety Applications

Customer Name: _____

Project Name: _____

This System Acceptance Certificate memorializes the occurrence of System Acceptance. Motorola and Customer acknowledge that:

1. The Acceptance Tests set forth in the Acceptance Test Plan have been successfully completed.
2. The System is accepted.

Customer Representative

Signature: _____
Print Name: _____
Title: _____
Date: _____

Motorola Representative

Signature: _____
Print Name: _____
Title: _____
Date: _____

FINAL PROJECT ACCEPTANCE:

Motorola has provided and Customer has received all deliverables, and Motorola has performed all other work required for Final Project Acceptance.

Customer Representative

Signature: _____
Print Name: _____
Title: _____
Date: _____

Motorola Representative

Signature: _____
Print Name: _____
Title: _____
Date: _____

Exhibit F

Subscription Services Addendum

This Addendum to the Communications System and Services Agreement or other previously executed and currently in force Agreement, as applicable (“Primary Agreement”) provides additional or different terms and conditions to govern the sale of Subscription Services. The terms in this Addendum are integral to and incorporated into the Primary Agreement signed by the Parties.

The terms of the Addendum, including addendums, exhibits, and attachments combined with the terms of any applicable Incorporated Documents will govern the products and services offered pursuant to this Addendum. To the extent there is a conflict between the terms and conditions of the Addendum and the terms and conditions of the applicable Incorporated Documents, the Incorporated Documents take precedence.

1. DEFINITIONS

All capitalized terms not otherwise defined in this Addendum shall have the same meaning as defined in the Primary Agreement.

Any reference to the purchase or sale of software or other Intellectual Property shall mean the sale or purchase of a license or sublicense to use such software or Intellectual Property in accordance with this Addendum.

“**Administrator**” means Customer's designated system administrator who receives administrative logins for the Subscription Services and issues access rights to Customer's Users.

“**Anonymized**” means having been stripped of any personal or correlating information revealing original source or uniquely identifying a person or entity.

“**Confidential Information**” means any information that is disclosed in written, graphic, verbal, or machine-recognizable form, and is marked, designated, or identified at the time of disclosure as being confidential or its equivalent; or if the information is in verbal form, it is identified as confidential at the time of disclosure and is confirmed in writing within thirty (30) days of the disclosure. Confidential Information does not include any information that: is or becomes publicly known through no wrongful act of the receiving Party; is already known to the receiving Party without restriction when it is disclosed; is or becomes, rightfully and without breach of this Agreement, in the receiving Party's possession without any obligation restricting disclosure; is independently developed by the receiving Party without breach of this Addendum; or is explicitly approved for release by written authorization of the disclosing Party.

“**Customer Data**” means Native Data provided by Customer to Motorola hereunder to be processed and used in connection with the Subscription Services. Customer Data does not include data provided by third parties and passed on to Motorola.

“**Documentation**” means the technical materials provided by Motorola to Customer in hard copy or electronic form describing the use and operation of the Solution and Software, including any technical manuals, but excluding any sales, advertising or marketing materials or proposals.

“**Effective Date**” means, as applicable, the date of the last signature to include this Addendum., unless access to the Subscription Service occurs later, in which case, the Effective Date will be the date when Customer first has access to the Subscription Services.

“**Feedback**” means comments or information, in oral or written form, given to Motorola by Customer, in connection with or relating to the Solution and Subscription Services.

“Force Majeure” which means an event, circumstance, or act that is beyond a Party’s reasonable control, such as an act of God, an act of the public enemy, an act of a government entity, strikes, other labor disturbances, supplier performance, hurricanes, earthquakes, fires, floods, epidemics, embargoes, war, riots, or any other similar cause.

“Licensed Product” means 1) Software, whether hosted or installed at Customer’s site, 2) Documentation; 3) associated user interfaces; 4) help resources; and 5) any related technology or other services made available by the Solution.

“Native Data” means data that is created solely by Customer or its agents.

“Proprietary Rights” means the patents, patent applications, inventions, copyrights, trade secrets, trademarks, trade names, mask works, know-how, ideas and concepts, moral rights, processes, methodologies, tools, techniques, and other intellectual property rights.

“Software” means the Motorola owned or licensed off the shelf software programs delivered as part of the Licensed Products used to provide the Subscription Services, including all bug fixes, updates and upgrades.

“Solution” means collectively, the Software, servers and any other hardware or equipment operated by Motorola and used in conjunction with the Subscription Services.

“Statement of Work” If included, the Statement of Work (“SOW”) describes the Subscription Services, Deliverables (if any), Licensed Products and Solution that Motorola will provide to Customer under this Agreement, and the other work-related responsibilities that the parties owe to each other. The Statement of Work may contain a performance schedule.

“Subscription Services” means those subscription services to be provided by Motorola to Customer under this Agreement, the nature and scope of which are more fully described in the Documentation, proposal, SOW, or other Solution materials provided by Motorola, as applicable.

“Users” means Customer’s authorized employees or other individuals authorized to utilize the Subscription Services on behalf of Customer and who will be provided access to the Subscription Services by virtue of a password or equivalent security mechanism implemented by Customer.

2. SCOPE

2.1 Subscription Services. Motorola will provide to Customer the Subscription Services and Deliverables (if any). As part of the Subscription Services, Motorola will allow Customer to use the Solution described in the Statement of Work, Documentation, proposal, or other Solution materials provided by Motorola (“Incorporated Document(s)”), as applicable. Some Subscription Services will also be subject to additional terms unique to that specific Subscription Service. Such additional terms will be set forth in an Addendum. In the event of a conflict between an Addendum and the body of the Agreement, the Addendum will govern resolution of the conflict. Motorola and Customer will perform their respective responsibilities as described in this Agreement and any applicable Incorporated Documents.

2.2 Changes. Customer may request changes to the Services. If Motorola agrees to a requested change, the change must be confirmed in writing and signed by authorized representatives of both parties. A reasonable price adjustment will be made if any change affects the time of performance or the cost to perform the Services.

2.3 **Non-solicitation.** During the term of this Addendum and for twelve (12) months thereafter, Customer will not actively solicit the employment of any Motorola personnel who is involved directly with providing any of the Services.

3. TERM

3.1 **Term.** Unless a different Term is set forth in an applicable Addendum or the Incorporated Documents, the Term of this Agreement begins on the Effective Date and continues for twelve (12) months. The Agreement renews automatically annually on the anniversary of the Effective Date, unless either Party notifies the other of its intention to not renew the Agreement (in whole or part) at least thirty (30) days before the anniversary date or until termination by either Party in accordance with the Termination section of this Agreement.

3.2 **Minimum Initial Term.** For certain Subscription Services, a minimum initial term greater than one year may be required ("Minimum Initial Term"). Following the Minimum Initial Term, this Agreement will automatically renew upon each anniversary of the Effective Date for a successive renewal term of the same duration as the Minimum Initial Term, unless either Party: 1) notifies the other of its intention to not renew the Agreement (in whole or part) at least thirty (30) days before the anniversary date; 2) requests an alternate term; or 3) terminates in accordance with the termination provision in the Agreement, including non-payment of fees for the renewal period by the anniversary date.

3.3 **Renewals.** The terms and conditions of the Agreement will govern any renewal periods.

4. **CUSTOMER OBLIGATIONS.** Customer will fulfill all of its obligations in this Agreement, including applicable addendums and Incorporated Documents in a timely and accurate manner. Failure to do so may prevent Motorola from performing its responsibilities.

4.1 **Access.** To enable Motorola to perform the Subscription Services, Customer will provide to Motorola reasonable access to relevant Customer information, personnel, systems, and office space when Motorola's employees are working on Customer's premises, and other general assistance. Further, if any equipment is installed or stored at Customer's location in order to provide the Subscription Services, Customer will provide, at no charge, a non-hazardous environment with adequate shelter, heat, light, power, security, and full and free access to the equipment.

4.2 **Customer Information.** If the Documentation, Statement of Work, proposal, or other related documents contain assumptions that affect the Subscription Services or Deliverables, Customer will verify that they are accurate and complete. Any information that Customer provides to Motorola concerning the Subscription Services or Deliverables will be accurate and complete in all material respects. Customer will make timely decisions and obtain any required management and third party approvals or consents that are reasonably necessary for Motorola to perform the Subscription Services and its other duties under this Agreement. Unless the Statement of Work states the contrary, Motorola may rely upon and is not required to evaluate, confirm, reject, modify, or provide advice concerning any assumptions and Customer-provided information, decisions and approvals described in this paragraph.

4.3 **Risk of Loss.** If any portion of the Solution resides on Customer premises or is under Customer's control in any way, Customer shall at all times exercise reasonable care in using and maintaining the Solution in accordance with Motorola's instructions for proper use and care. Risk of loss to any equipment in Customer's possession will reside with Customer until removed by Motorola or its agent or returned by Customer. Customer will be responsible for replacement costs of lost or damaged equipment, normal wear and tear excluded.

4.4 **Equipment Title.** Unless Customer is purchasing equipment pursuant to the terms in the Primary Agreement and unless stated differently in this Addendum or in the Incorporated Documents, title to any equipment provided to Customer in connection with the Subscription Services remains vested in Motorola

at all times. Any sale of equipment pursuant to this Addendum will be governed by the terms and conditions set forth in the Primary Agreement.

4.5 Enable Users. Customer will properly enable its Users to use the Subscription Services, including providing instructions for use, labeling, required notices, and accommodation pursuant to applicable laws, rules, and regulations. Unless otherwise agreed in the Incorporated Documents, Customer will train its Users on proper operation of the Solution and Licensed Products. Customer agrees to require Users to acknowledge and accept the limitations and conditions of use of the Licensed Products in this Agreement prior to allowing Users to access or use Subscription Services.

4.6 Non-preclusion. If, as a result of the Subscription Services performed under this Agreement, Motorola recommends that Customer purchase products or other services, nothing in this Agreement precludes Motorola from participating in a competitive opportunity or otherwise offering or selling the recommended products or other services to Customer. Customer represents that this paragraph does not violate its procurement or other laws, regulations, or policies.

5. Subscription Fees.

5.1 Recurring Fees. Unless stated differently in an applicable addendum, Incorporated Documents or otherwise arranged in writing with Motorola, Services will be provided in exchange for annual pre-paid Subscription Fees. Motorola will submit an invoice for the first year of subscription fees on the Effective Date. On each anniversary of the Effective Date, Motorola will issue an invoice for the annual subscription fees for the following year.

5.1.1 No Purchase Order Requirement. For a Subscription Services Term exceeding one year, Customer affirms that a purchase order or notice to proceed is not required for Motorola to proceed with the entire scope of work described in the Incorporated Documents for subsequent years, including but not limited to multi-year subscription agreements.

5.2 Start Up Fees. Start up fees apply to certain Subscription Services. If the Subscription Service includes start up fees, Motorola will submit an invoice for the start up fees on the Effective Date.

5.3 Fee Change. Motorola reserves the right to change the subscription fees at the end of each Subscription Services Term. Except for any payment that is due on the Effective Date, Customer will make payments to Motorola within thirty (30) days after the date of each invoice. Motorola reserves the right to terminate Service for non-payment of fees.

5.4 No Price Guarantee. Notwithstanding any language to the contrary, the pricing and fees associated with this Agreement will not be subject to any most favored pricing commitment or other similar low price guarantees.

5.5 Taxes. The Subscription Fees and start up fees do not include any excise, sales, lease, use, property, or other taxes, assessments or duties, all of which will be paid by Customer, except as exempt by law. If Motorola is required to pay any of those taxes, it will send an invoice to Customer and Customer will pay to Motorola the amount of the taxes (including any interest and penalties) within thirty (30) days after the date of the invoice. Motorola will be solely responsible for reporting taxes on its income or net worth.

6. ACCEPTANCE; SCHEDULE; FORCE MAJEURE

6.1 Acceptance. The Licensed Products will be deemed accepted upon the delivery of usernames and passwords or other validation mechanism to Customer. If usernames and passwords have been issued to Customer prior to the Effective Date, the Licensed Products will be deemed accepted on the

Effective Date.

6.2 **Schedule.** All Subscription Services will be performed in accordance with the performance schedule included in the Statement of Work, or if there is no performance schedule, within a commercially reasonable time period.

6.3 **Force Majeure.** Neither Party will be liable for its non-performance or delayed performance if caused by a Force Majeure. Each Party will notify the other in writing if it becomes aware of any Force Majeure that will significantly delay performance. The notifying Party will give the notice promptly (but in no event later than fifteen (15) days) after it discovers the Force Majeure.

7. LIMITED LICENSE

7.1 **Licensed Products.** Use of the Licensed Products by Customer and its Users is strictly limited to use in connection with the Solution or Subscription Services during the Term. Customer and Users will refrain from, and will require others to refrain from, doing any of the following with regard to the Software in the Solution: (i) directly or indirectly, by electronic or other means, copy, modify, or translate the Software; (ii) directly or indirectly, by electronic or other means, reproduce, reverse engineer, distribute, sell, publish, commercially exploit, rent, lease, sublicense, assign or otherwise transfer or make available the Licensed Products or any part thereof to any third party, or otherwise disseminate the Licensed Product in any manner; (iii) directly or indirectly, by electronic or other means, modify, decompile, or disassemble the Software or part thereof, or attempt to derive source code from the Software; or (iv) remove any proprietary notices, labels, or marks on the Software or any part of the Licensed Products. Motorola Solutions reserves all rights to the Software and other Licensed Products not expressly granted herein, including without limitation, all right, title and interest in any improvements or derivatives conceived of or made by Motorola that are based, either in whole or in part, on knowledge gained from Customer Data. Customer agrees to abide by the copyright laws of the United States and all other relevant jurisdictions, including without limitation, the copyright laws where Customer uses the Solution. Customer agrees to immediately cease using the Solution if it fails to comply with this paragraph or any other part of this Agreement. If Software is subject to a click wrap, end user license agreement or is otherwise packaged with or subject to a separate end user license, such license will apply to the use of Software and Licensed Product.

7.2 **Proprietary Rights.** Regardless of any contrary provision in the Agreement, Motorola or its third party providers own and retain all of their respective Proprietary Rights in the Software, Solution, and Licensed Product. Nothing in this Agreement is intended to restrict their Proprietary Rights. All intellectual property developed, originated, or prepared by Motorola in connection with providing Services to Customer remain vested exclusively in Motorola, and this Agreement does not grant to Customer any shared development rights of intellectual property. No custom development work is to be performed under this Agreement.

8. DATA AND FEEDBACK

8.1 **Solution Data.** To the extent permitted by law, Motorola, its vendors and licensors are the exclusive owners of all right, title, and interest, in and to the Solution Data, including all intellectual property rights therein. Motorola grants Customer a personal, royalty-free, non-exclusive license to: (i) access, view, use, copy, and store the Solution Data for its internal business purposes and, (ii) when specifically permitted by the applicable Statement of Work, publish Solution Data on its websites for viewing by the public.

8.2 **Customer Data.** To the extent permitted by law, Customer retains ownership of Customer Data. Customer grants Motorola and its subcontractors a personal, royalty-free, non-exclusive license to use, host, cache, store, reproduce, copy, modify, combine, analyze, create derivatives from, communicate, transmit, publish, display, and distribute such Customer Data for the purpose of providing the Subscription

Services to Customer, other Motorola Customers and end users, including without limitation, the right to use Customer Data for the purpose of developing new or enhanced solutions. In addition to the rights listed above, Customer grants Motorola a license to sell an Anonymized version of Customer Data for any purpose.

8.3 **Feedback.** Any Feedback given by Customer is entirely voluntary and, even if designated as confidential, will create no confidentiality obligation for Motorola. Motorola is free to use, reproduce, license or otherwise distribute and exploit the Feedback without any obligation to Customer. Customer acknowledges that Motorola's receipt of the Feedback does not imply or create recognition by Motorola of either the novelty or originality of any idea. The parties further agree that all fixes, modifications and improvement to the Licensed Product or Subscription Service conceived of or made by Motorola that are based, either in whole or in part, on the Feedback are the exclusive property of Motorola and all right, title and interest in and to such fixes, modifications or improvements to the Licensed Product or Subscription Service will vest solely in Motorola.

9 WARRANTY

9.1 **"AS IS".** THE SOLUTION AND SUBSCRIPTION SERVICES ARE PROVIDED "AS IS". MOTOROLA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. Customer acknowledges that the Deliverables may contain recommendations, suggestions or advice from Motorola to Customer (collectively, "Recommendations"). Motorola makes no warranties concerning those Recommendations, and Customer alone accepts responsibility for choosing whether and how to implement the Recommendations and the results to be realized from implementing them.

9.2 **Availability and Accuracy.** Customer acknowledges that functionality of the Solution as well as availability and accuracy of Solution Data is dependent on many elements beyond Motorola's control, including databases managed by Customer or third parties and Customer's existing equipment, software, and Customer Data. Therefore, Motorola does not guarantee availability or accuracy of data, or any minimum level of coverage or connectivity. Interruption or interference with the Subscription Services or Solution may periodically occur. Customer agrees not to represent to any third party that Motorola has provided such guarantee.

9.3 **Equipment Sale.** Warranty for any equipment sold pursuant to this Addendum will be set forth in the Primary Agreement.

10. DISCLAIMERS

10.1 **Existing Equipment and Software.** If Customer's existing equipment and software is critical to operation and use of the Subscription Services, Customer is solely responsible for supporting and maintaining Customer's existing equipment and software. Connection to or interface with Customer's existing equipment and software may be required to receive Subscription Services. Any failures or deficiencies of Customer's existing equipment and software may impact the functionality of the Solution and the Subscription Services to be delivered. Any vulnerabilities or inefficiencies in Customer's system may also impact the Solution and associated Subscription Services.

10.2 **Privacy.** Customer bears sole responsibility for compliance with any laws and regulations regarding tracking; location based services; gathering, storing, processing, transmitting, using or misusing; or otherwise handling personally identifiable information ("PII"), including information about Users of the Solution or citizens in the general public. Further, it is Customer's sole responsibility to comply with any laws or regulations prescribing the measures to be taken in the event of breach of privacy or accidental disclosure of any PII. Enacting and enforcing any internal privacy policies for the protection of PII, including individual disclosure and consent mechanisms, limitations on use of the information, and commitments with respect to the storage, use, deletion and processing of PII in a manner that complies with applicable laws and regulations will be Customer's sole responsibility. Motorola will not

evaluate the sufficiency of such policies and disclaims any responsibility or liability for privacy practices implemented by Customer, or lack thereof. Customer acknowledges and agrees that Subscription Services and the Solution are not designed to ensure individual privacy. Customer will inform Users that the Solution may enable visibility to PII, as well as physical location of individuals. Further, if the Solution or Subscription Services are available to the general public pursuant to this Agreement, Customer will provide the appropriate privacy notification. Neither Motorola nor Customer can provide any assurance of individual privacy in connection with the Solution. Further, Customer is solely responsible for determining whether and how to use data gathered from social media sources for the purpose of criminal investigations or prosecution. Customer will hold Motorola harmless from any and all liability, expense, judgment, suit, or cause of action, which may accrue against Motorola for causes of action for damages related to tracking, location based services, breach of privacy, and the use or misuse of PII provided that Motorola gives Customer prompt, written notice of any such claim or suit. Motorola shall cooperate with Customer in its defense or settlement of such claim or suit.

10.3 Social Media. If Customer purchases Subscription Services that utilize social media, Customer acknowledges and agrees that such Subscription Services are not designed to ensure individual privacy. In such case, Customer will inform Users that the Solution and Subscription Services may enable visibility to PII, as well as physical location of individuals. Further, if the Solution or Subscription Services are available to the general public pursuant to this Agreement, Customer will provide the appropriate privacy notification. Neither Motorola nor Customer can provide any assurance of individual privacy in connection with the Solution or Subscription Services utilizing social media. Further, Customer is solely responsible for determining whether and how to use data gathered from social media sources for the purpose of criminal investigations or prosecution. Customer will hold Motorola harmless from any and all liability, expense, judgment, suit, or cause of action, which may accrue against Motorola for causes of action for damages related to tracking, location based services, breach of privacy, and the use or misuse of PII provided that Motorola gives Customer prompt, written notice of any such claim or suit. Motorola shall cooperate with Customer in its defense or settlement of such claim or suit.

10.4 Misuse. Motorola reserves the right to discontinue service at any time without notice to Users that misuse the Service, jeopardize the Licensed Product or public safety in any way.

11. LIMITATION OF LIABILITY

11.1 Liability Limit. Except for personal injury or death, Motorola's total liability, whether for breach of contract, warranty, negligence, strict liability in tort, or otherwise, will be limited to the direct damages recoverable under law, but not to exceed the price of twelve (12) months of Subscription Services provided under this Agreement. **ALTHOUGH THE PARTIES ACKNOWLEDGE THE POSSIBILITY OF SUCH LOSSES OR DAMAGES, THEY AGREE THAT MOTOROLA WILL NOT BE LIABLE FOR ANY COMMERCIAL LOSS; INCONVENIENCE; LOSS OF USE, TIME, DATA, GOODWILL, REVENUES, PROFITS OR SAVINGS; OR OTHER SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO OR ARISING FROM THIS AGREEMENT OR THE PERFORMANCE OF THE SUBSCRIPTION SERVICES BY MOTOROLA.** This limitation of liability provision survives the expiration or termination of this Agreement and applies notwithstanding any contrary provision. No action for contract breach or otherwise relating to the transactions contemplated by this Agreement may be brought more than one (1) year after the accrual of the cause of action, except for money due upon an open account.

11.2 Additional Disclaimers. MOTOROLA DISCLAIMS ANY AND ALL LIABILITY FOR ANY AND ALL LOSS OR COSTS OF ANY KIND ASSOCIATED WITH 1) THE INTERRUPTION, INTERFERENCE OR FAILURE OF CONNECTIVITY, VULNERABILITIES OR SECURITY EVENTS, WHETHER OR NOT THEY ARE DISCOVERED BY MOTOROLA; 2) PERFORMANCE OF CUSTOMER'S EXISTING EQUIPMENT AND SOFTWARE OR ACCURACY OF CUSTOMER DATA; 3) IF ANY PORTION OF THE SOLUTION OR LICENSED PRODUCT RESIDES ON CUSTOMER'S PREMISES, DISRUPTIONS OF AND/OR DAMAGE TO CUSTOMER'S OR A THIRD PARTY'S INFORMATION SYSTEMS, EQUIPMENT,

AND THE INFORMATION AND DATA, INCLUDING, BUT NOT LIMITED TO, DENIAL OF ACCESS TO A LEGITIMATE SYSTEM USER, AUTOMATIC SHUTDOWN OF INFORMATION SYSTEMS CAUSED BY INTRUSION DETECTION SOFTWARE OR HARDWARE, OR FAILURE OF THE INFORMATION SYSTEM RESULTING FROM THE PROVISION OR DELIVERY OF THE SERVICE; 4) AVAILABILITY OR ACCURACY OF SOLUTION DATA; 5) INTERPRETATION, USE OR MISUSE IN ANY WAY OF SOLUTION DATA; 6) IMPLEMENTATION OF RECOMMENDATIONS PROVIDED IN CONNECTION WITH THE SUBSCRIPTION SERVICES; 7) TRACKING, AND LOCATION BASED SERVICES, BREACH OF PRIVACY, AND THE USE OR MISUSE OF PERSONALLY IDENTIFIABLE INFORMATION.

11.3 **Essential term.** The parties acknowledge that the prices have been set and the Agreement entered into in reliance upon these limitations of liability and that all such limitations form an essential basis of the bargain between the parties.

12 DEFAULT AND TERMINATION

12.1 **Default By a Party.** If either Party fails to perform a material obligation under this Agreement, the other Party may consider the non-performing Party to be in default (unless a Force Majeure causes the failure) and may assert a default claim by giving the non-performing Party a written, detailed notice of default. Except for a default by Customer for failing to pay any amount when due under this Agreement which must be cured immediately, the defaulting Party will have thirty (30) days after receipt of the notice of default to either cure the default or, if the default is not curable within thirty (30) days, provide a written cure plan. The defaulting Party will begin implementing the cure plan immediately after receipt of notice by the other Party that it approves the plan. If Customer is the defaulting Party, Motorola may stop work on the project until it approves the Customer's cure plan.

12.2 **Failure To Cure.** If a defaulting Party fails to cure the default as provided above in Section 12.1, unless otherwise agreed in writing, the non-defaulting Party may terminate any unfulfilled portion of this Agreement. In the event of a termination for default, the defaulting Party will promptly return to the non-defaulting Party any of its Confidential Information. If Customer is the non-defaulting Party, terminates this Agreement as permitted by this Section, and procures the Services through a third party, Customer may as its exclusive remedy recover from Motorola reasonable costs incurred to procure the Services (but not additional or out of scope services) less the unpaid portion of the Contract Price. Customer agrees to mitigate damages and provide Motorola with detailed invoices substantiating the charges.

12.3 **No Refund.** If a subscription is terminated for any reason prior to the end of the Subscription Services Term or other subscription period set forth in the Incorporated Documents or otherwise agreed to in writing by the Parties, no refund or credit will be provided.

12.4 **Cancellation Fee.** If an Initial Minimum Term applies and Customer terminates prior to the end of the Initial Minimum Term, Customer will be required to pay a cancellation fee of up to fifty percent (50%) of the remaining balance of subscription fees for the Initial Minimum Term.

12.5 **Return of Discount.** If Customer is afforded a discount in exchange for a term commitment longer than one year, early termination will result in an early termination fee, representing a return of the discount off of list price.

12.6 **Return Confidential Information.** Upon termination or expiration of the Agreement, Customer will return or certify the destruction of all Confidential Information and Solution Data.

12.7 **Connection Terminated.** Certain Subscription Services require a connection to Customer systems to access Customer Data (e.g. predictive or analytic services). Upon termination, connection to

relevant data sources will be disconnected and Motorola will no longer extract any Customer Data.

12.8 Equipment Return. Any equipment provided by Motorola for use with the Subscription Services, must be returned within thirty (30) days of the date of termination, at Customer's expense. If equipment is not returned within this time frame, Motorola reserves the right to invoice the Customer for the purchase price of the unreturned equipment.

12.9 Five Year Term. Motorola provides equipment for use in connection with certain Subscription Services. Upon expiration and non-renewal of a five (5) year subscription Term, Title to the equipment will automatically transfer to Customer upon the subscription expiration date.

13. DISPUTES

13.1 Settlement. The parties will attempt to settle any dispute arising from this Agreement (except for a claim relating to intellectual property or breach of confidentiality) through consultation and a spirit of mutual cooperation. The dispute will be escalated to appropriate higher-level managers of the parties, if necessary. If cooperative efforts fail, the dispute will be mediated by a mediator chosen jointly by the parties within thirty (30) days after notice by one of the parties demanding non-binding mediation. The parties will not unreasonably withhold consent to the selection of a mediator, will share the cost of the mediation equally, may agree to postpone mediation until they have completed some specified but limited discovery about the dispute, and may replace mediation with some other form of non-binding alternative dispute resolution ("ADR").

13.2 Litigation. A Party may submit to a court of competent jurisdiction any claim relating to intellectual property, breach of confidentiality, or any dispute that cannot be resolved between the parties through negotiation or mediation within two (2) months after the date of the initial demand for non-binding mediation. Each Party consents to jurisdiction over it by that court. The use of ADR procedures will not be considered under the doctrine of laches, waiver, or estoppel to affect adversely the rights of either Party. Either Party may resort to the judicial proceedings described in this section before the expiration of the two-month ADR period if good faith efforts to resolve the dispute under these procedures have been unsuccessful; or interim relief from the court is necessary to prevent serious and irreparable injury to the Party.

14. SECURITY.

14.1 Industry Standard. Motorola will maintain industry standard security measures to protect the Solution from intrusion, breach, or corruption. During the term of Agreement, if the Solution enables access to Criminal Justice Information ("CJI"), as defined by the Criminal Justice Information Services Security Policy ("CJIS"), Motorola will provide and comply with a CJIS Security Addendum. Any additional Security measure desired by Customer may be available for an additional fee.

14.2 Background checks. Motorola will require its personnel that access CJI to submit to a background check based on submission of FBI fingerprint cards.

14.3 Customer Security Measures. Customer is independently responsible for establishing and maintaining its own policies and procedures and for ensuring compliance with CJIS and other security requirements that are outside the scope of the Subscription Services provided. Customer must establish and ensure compliance with access control policies and procedures, including password security measures. Further, Customer must maintain industry standard security and protective data privacy measures. Motorola disclaims any responsibility or liability whatsoever for the security or preservation of Customer Data or Solution Data once accessed or viewed by Customer or its representatives. Motorola

further disclaims any responsibility or liability whatsoever that relates to or arise from Customer's failure to maintain industry standard security and data privacy measures and controls, including but not limited to lost or stolen passwords. Motorola reserves the right to terminate the Service if Customer's failure to maintain or comply with industry standard security and control measures negatively impacts the Service, Solution, or Motorola's own security measures.

14.4 **Breach Response Plan.** Both parties will maintain and follow a breach response plan consistent with the standards of their respective industries.

15. CONFIDENTIAL INFORMATION AND PROPRIETARY RIGHTS

15.1. CONFIDENTIAL INFORMATION.

15.1.1. **Treatment of Confidential Information.** During the term of this Agreement, the parties may provide each other with Confidential Information. Licensed Products, and all Deliverables will be deemed to be Motorola's Confidential Information. Each Party will: maintain the confidentiality of the other Party's Confidential Information and not disclose it to any third party, except as authorized by the disclosing Party in writing or as required by a court of competent jurisdiction; restrict disclosure of the Confidential Information to its employees who have a "need to know" and not copy or reproduce the Confidential Information; take necessary and appropriate precautions to guard the confidentiality of the Confidential Information, including informing its employees who handle the Confidential Information that it is confidential and is not to be disclosed to others, but those precautions will be at least the same degree of care that the receiving Party applies to its own confidential information and will not be less than reasonable care; and use the Confidential Information only in furtherance of the performance of this Agreement or pursuant to the license granted immediately below.

15.1.2. **Ownership of Confidential Information.** The disclosing Party owns and retains all of its Proprietary Rights in and to its Confidential Information, except the disclosing Party hereby grants to the receiving Party the limited right and license, on a non-exclusive, irrevocable, and royalty-free basis, to use the Confidential Information for any lawful, internal business purpose in the manner and to the extent permitted by this Agreement.

15.2. PRESERVATION OF PROPRIETARY RIGHTS.

15.2.1 **Proprietary Solution.** Customer acknowledges that the Licensed Products and any associated Documentation, data, and methodologies used in providing Services are proprietary to Motorola or its third party licensors and contain valuable trade secrets. In accordance with this Agreement, Customer and its employees shall treat the Solution and all Proprietary Rights as Confidential Information and will maintain the strictest confidence.

15.2.2. **Ownership.** Each Party owns and retains all of its Proprietary Rights that exist on the Effective Date. Motorola owns and retains all Proprietary Rights that are developed, originated, or prepared in connection with providing the Deliverables or Services to Customer, and this Agreement does not grant to Customer any shared development rights. At Motorola's request and expense, Customer will execute all papers and provide reasonable assistance to Motorola to enable Motorola to establish the Proprietary Rights. Unless otherwise explicitly stated herein, this Agreement does not restrict a Party concerning its own Proprietary Rights and is not a grant (either directly or by implication, estoppel, or otherwise) of a Party's Proprietary Rights to the other Party.

15.3 **Remedies.** Because Licensed Products contain valuable trade secrets and proprietary information of Motorola, its vendors and licensors, Customer acknowledges and agrees that any actual or threatened breach of this Section will constitute immediate, irreparable harm to Motorola for which monetary damages would be an inadequate remedy, and that injunctive relief is an appropriate remedy for such breach. Notwithstanding anything in this Agreement to the contrary, Motorola reserves the right to obtain injunctive relief and any other appropriate remedies from any court of competent jurisdiction in connection with any actual, alleged, or suspected breach of Section 3, infringement, misappropriation or violation of Motorola's Property Rights, or the unauthorized use of Motorola's Confidential Information. Any such action or proceeding may be brought in any court of competent jurisdiction. Except as otherwise expressly provided in this Agreement, the parties' rights and remedies under this Agreement are cumulative.

16. GENERAL

16.1 **Future Regulatory Requirements.** The Parties acknowledge and agree that this is an evolving technological area and therefore, laws and regulations regarding Subscription Services and use of the Solution may change. Changes to existing Subscription Services or Solution required to achieve regulatory compliance may be available for an additional fee. Any required changes may also impact the Fees for services.

16.2 **Compliance with Applicable Laws.** Each Party will comply with all applicable federal, state, and local laws, regulations and rules concerning the performance of this Agreement. Further, Customer will comply with all applicable export and import control laws and regulations in its use of the Licensed Products and Subscription Services. In particular, Customer will not export or re-export the Licensed Products without Motorola's prior written consent, and, if such consent is granted, without Customer first obtaining all required United States and foreign government licenses. Customer further agrees to comply with all applicable laws and regulations in providing the Customer Data to Motorola, and Customer warrants and represents to Motorola that Customer has all rights necessary to provide such Customer Data to Motorola for the uses as contemplated hereunder. Customer shall obtain at its expense all necessary licenses, permits and regulatory approvals required by any and all governmental authorities as may from time to time be required in connection with its activities related to this Agreement. To the extent permitted by applicable law, Customer will defend, indemnify, and hold harmless Motorola from and against any violation of such laws or regulations by Customer or any of its agents, officers, directors, or employees.

16.3 **Audit.** Motorola reserves the right to monitor and audit use of the Subscription Services. Customer will cooperate and will require Users to cooperate with such monitoring or audit.

16.4 **Assignability.** Except as provided herein, neither Party may assign this Agreement or any of its rights or obligations hereunder without the prior written consent of the other Party, which consent will not be unreasonably withheld. Any attempted assignment, delegation, or transfer without the necessary consent will be void. Notwithstanding the foregoing, Motorola may assign this Agreement to any of its affiliates or its right to receive payment without the prior consent of Customer. In addition, in the event Motorola separates one or more of its businesses (each a "Separated Business"), whether by way of a sale, establishment of a joint venture, spin-off or otherwise (each a "Separation Event"), Motorola may, without the prior written consent of the other Party and at no additional cost to Motorola, assign this Agreement such that it will continue to benefit the Separated Business and its affiliates (and Motorola and its affiliates, to the extent applicable) following the Separation Event. Motorola may subcontract any of the work, but subcontracting will not relieve Motorola of its duties under this Agreement.

16.5 **Subcontracting.** Motorola may subcontract any portion of the Subscription Services without prior notice or consent of Customer.

16.6 **Waiver.** Failure or delay by either Party to exercise a right or power will not be a waiver of the right or power. For a waiver of a right or power to be effective, it must be in a writing signed by the waiving Party. An effective waiver of a right or power will not be construed as either a future or continuing waiver of that same right or power, or the waiver of any other right or power.

16.7 **Severability.** If a court of competent jurisdiction renders any part of this Agreement invalid or otherwise unenforceable, that part will be severed and the remainder of this Agreement will continue in full force and effect.

16.8 **Independent Contractors.** Each Party will perform its duties under this Agreement as an independent contractor. The parties and their personnel will not be considered to be employees or agents of the other Party. Nothing in this Agreement will be interpreted as granting either Party the right or authority to make commitments of any kind for the other. This Agreement will not constitute, create, or be interpreted as a joint venture, partnership or formal business organization of any kind.

16.9 **Headings.** The section headings in this Agreement are inserted only for convenience and are not to be construed as part of this Agreement or as a limitation of the scope of the particular section to which the heading refers. This Agreement will be fairly interpreted in accordance with its terms and conditions and not for or against either Party.

16.10 **Governing Law.** This Agreement and the rights and duties of the parties will be governed by and interpreted in accordance with the laws of the State of Illinois.

16.11 **Notices.** Notices required under this Agreement to be given by one Party to the other must be in writing and either personally delivered or sent to the address provided by the other Party by certified mail, return receipt requested and postage prepaid (or by a recognized courier service, such as Federal Express, UPS, or DHL), or by facsimile with correct answerback received, and will be effective upon receipt.

16.12 **Authority To Execute Agreement.** Each Party represents that it has obtained all necessary approvals, consents and authorizations to enter into this Agreement and to perform its duties under this Agreement; the person executing this Agreement on its behalf has the authority to do so; upon execution and delivery of this Agreement by the parties, it is a valid and binding contract, enforceable in accordance with its terms; and the execution, delivery, and performance of this Agreement does not violate any bylaw, charter, regulation, law or any other governing authority of the Party.

16.13 **Return of Equipment.** Upon termination of the contract for any reason, Customer shall return to Motorola all equipment delivered to Customer, if any.

16.14. **Survival Of Terms.** The following provisions survives the expiration or termination of this Agreement for any reason: if any payment obligations exist, Section 5 (Subscription Fees); Section 11 (Limitation of Liability); Section 12 (Default and Termination); Section 13 (Disputes); Section 15 (Confidential Information and Proprietary Rights);; and all General provisions in Section 16.

16.15. **ENTIRE AGREEMENT.** This Addendum, the Primary Agreement, and any Incorporated Documents or related attachments constitute the entire agreement of the Parties regarding the subject matter of this Agreement and supersedes all previous agreements, proposals, and understandings, whether written or oral, relating to this subject matter. This Agreement may be amended or modified only by a written instrument signed by authorized representatives of both Parties. The preprinted terms and conditions found on any Customer purchase or purchase order, acknowledgment or other form will not be considered an amendment or modification of this Agreement, even if a representative of each Party signs that document.

In witness whereof, the parties hereto have executed this Agreement as of the Effective Date.

CUSTOMER

MOTOROLA SOLUTIONS, INC.

BY: _____

BY: _____

NAME: _____

NAME: _____

TITLE: _____

TITLE: _____

DATE: _____

DATE: _____

BILL TO ADDRESS:

SHIP TO ADDRESS (If applicable):

Name: _____

Name: _____

Address: _____

Address: _____

Address: _____

Address: _____

Phone #: _____

Phone #: _____

FINAL DESTINATION (If applicable):

Name: _____

Address: _____

Address: _____

Phone #: _____

**ADDENDUM
DIGITAL EVIDENCE MANAGEMENT SOLUTION**

The following additional terms will apply to Subscription Services from Motorola's Digital Evidence Management Solution.

If any term in this Attachment conflicts with a term in the main body of the Agreement, this Attachment will govern.

1. DATA STORAGE. Motorola will determine, in its sole discretion, the location of the stored content for CommandCentral Vault Services. All data, replications, and backups will be stored at a location in the United States for Customers in the United States.

2. DATA RETRIEVAL. CommandCentral Services will leverage different types of storage to optimize the Subscription Services, as determined in Motorola's sole discretion. For multimedia data, such as videos, pictures, audio files, Motorola will, in its sole discretion, determine the type of storage medium used to store the content. The type of storage and medium selected by Motorola will determine the data retrieval speed. Access to content in archival storage may take up to 8 hours to be viewable.

3. API SUPPORT. Motorola will use commercially reasonable efforts to maintain the Application Programming Interface ("API") offered as part of the CommandCentral Services during the term of this Addendum. APIs will evolve and mature over time, requiring changes and updates. Previous versions of APIs will be supported for a minimum of a 6 month time period after new version is introduced. If support of the API is no longer a commercially reasonable option, Motorola will provide reasonable advance notification to Customer. If an API presents a security risk to the Subscription Services or the Solution, Motorola will discontinue an API without prior warning.

4. SERVICE LEVEL TARGETS.

Commercially reasonable efforts will be made to provide monthly availability of 99.9% with the exception of maintenance windows. There are many factors beyond Motorola's control that may impact Motorola's ability to achieve this goal, including but not limited to a Force Majeure.

Additionally, Motorola will strive to meet the response time goals set forth in the table below.

RESPONSE TIME GOALS

SEVERITY LEVEL	DEFINITION	RESPONSE TIME
1	Total System Failure - occurs when the System is not functioning and there is no workaround; such as a Central Server is down or when the workflow of an entire agency is not functioning. This level is meant to represent a major issue that results in an unusable System, Subsystem, Product, or critical features. No work around or immediate solution is available.	Telephone conference within 1 Hour of initial voice notification

2	<p>Critical Failure - Critical process failure occurs when a crucial element in the System that does not prohibit continuance of basic operations is not functioning and there is usually no suitable work-around. Note that this may not be applicable to intermittent problems. This level is meant to represent a moderate issue that limits a Customer's normal use of the System, Subsystem, Product or major non-critical features.</p>	<p>Telephone conference within 3 Business Hours of initial voice notification during normal business hours</p>
3	<p>Non-Critical Failure - Non-Critical part or component failure occurs when a System component is not functioning, but the System is still useable for its intended purpose, or there is a reasonable workaround. This level is meant to represent a minor issue that does not preclude use of the System, Subsystem, Product, or critical features.</p>	<p>Telephone conference within 6 Business Hours of initial notification during normal business hours</p>
4	<p>Inconvenience - An inconvenience occurs when System causes a minor disruption in the way tasks are performed but does not stop workflow. This level is meant to represent very minor issues, such as cosmetic issues, documentation errors, general usage questions, and product or System Update requests.</p>	<p>Telephone conference within 2 Standard Business Days of initial notification</p>

5. MAINTENANCE

Scheduled maintenance of CommandCentral Solutions will be performed periodically. Motorola will make commercially reasonable efforts to notify customers a week in advance. Unscheduled and emergency maintenance may be required from time to time. Motorola will make commercially reasonable efforts to notify customers of unscheduled or emergency maintenance 24 hours in advance.

6. DEVICES. If Customer elects Motorola's service option for Devices, such service option will be governed by the additional terms and conditions set forth below in this Section.

6.1. For Devices to be eligible for the Device as a Service ("DaaS") offering the Devices must be on the then current firmware version. The Capture Mobile Camera feature requires the latest version of the Android or iOS operating system. Additionally, Customer's Wi-Fi network must comply with the requirements found below, Wi-Fi Network Requirements. If Customer's Wi-Fi network does not comply with these requirements Customer will be responsible for additional costs that may be incurred related to bring the Wi-Fi network into compliance.

6.2. Smart Interface Device Refresh: Customers who have chosen a 5-year Term for the DaaS offering will receive a new version of the Device 30 months from the start of the Term or as soon as a new version is available. The new version Device must be in the same family as the previously selected model. The refresh will only include the Device. Any carry holders, batteries or other accessories will not be refreshed. The Devices being refreshed must be returned to Motorola within 60 days of the refreshed devices being shipped. The customer will be invoiced for any devices not returned or returned damaged or nonfunctional. Subject to Motorola's receipt of all applicable fees for the 5-year service offering, on expiration of the 5-year term title to any covered Devices will pass to Customer.

6.3. If Customer elects a 5-year or greater Term for the DaaS offering, Motorola will provide the equipment necessary to enable the DaaS. Accessories for the Devices will not be provided and must be purchased separately, if desired.

6.4. Content will be downloadable at any time through the administrative interface during the Term of the Agreement. During the Initial Term, Motorola may provide general assistance as Customer learns to download or store content. After the Initial Term, additional storage term or assistance with downloading of content may be available for an additional fee.

6.5 Wi-Fi Network Requirements

6.5.1 If any of the below items apply, additional deployment services fees may apply:

- Customer's internet is through county/city IT, strict firewall policies, not able to install software on PC's
- Customer requires multiple upload locations through different internet providers at each site
- Customer has slow internet (<20MBps or higher for 4k video upload)
- Customer doesn't have Wi-Fi
- Customer doesn't use Google Chrome or uses Google Chrome but has conflicting Chrome extensions
- Customer requires multiple upload locations
- Customer has multicast disabled on their wireless network
- Customer wants to utilize MAC address filtering

6.5.2 The following are not supported:

- Wi-Fi AP's do not support 802.11AC
- Customer AP does not support DNS-SD, and/or the Apple Bonjour suite

Exhibit G
EQUIPMENT LEASE PURCHASE AGREEMENT
DELIVERY AND ACCEPTANCE CERTIFICATE

See the following pages.



City Council Agenda Report

ITEM NO. 23

DATE: December 16, 2020

FROM: Sean Joyce, City Manager

PREPARED BY: Shahid Abbas, Public Works Director
Julian Lee, P.E., Deputy Public Works Director
Arpy Kasparian, Water Conservation & Sustainability Analyst

SUBJECT: **Adoption of California Environmental Quality Act Initial Study and Negative Declaration and the Proposed Climate Action Plan**

Recommendation

It is recommended that the City Council;

1. Adopt the California Environmental Quality Act (CEQA) Initial Study and Negative Declaration for Climate Action Plan; and
2. Adopt the proposed Climate Action Plan

Commission Review and Recommendation

The proposed Climate Action Plan (CAP) was reviewed by the Natural Resources and Environmental Commission (NREC) at its October 27, 2020 meeting. The Commission unanimously recommended that the City Council adopt the proposed CAP.

Executive Summary

Sustainability is an important aspect in the City of South Pasadena's way of life, as exemplified by the City's participation in the Clean Power Alliance, the adoption of the expanded polystyrene ban ordinance, and the adoption of the South Pasadena Green Action Plan (Green Plan). To further strengthen the City's commitment to sustainability, City staff and Rincon Consultants, Inc. (Rincon) have created the City's first Climate Action Plan (CAP).

The creation of the CAP was a collaborative effort between City staff, the NREC, and South Pasadena residents and business operators. This plan reviews the City's baseline Green House Gas (GHG) inventory; sets emissions reduction targets, lists specific Plays (strategies) and Moves (actions) for reaching the targets, suggests a funding strategy, and introduces an implementation monitoring mechanism.

Environmental Review

Pursuant to the CEQA Guidelines of the City of South Pasadena, an Initial Study and Negative Declaration (IS/ND) have been prepared for the proposed project. The public comment period for the Negative Declaration began October 7, 2020 and ended November 5, 2020. The City only

received comments from California Department of Transportation (Caltrans), which are general in nature and pertain to Vehicle Miles Traveled (VMT) thresholds, complete streets, and active transportation. These elements are adequately addressed in the Final IS-MND and warrant no changes to the IS/MND and CAP documents. Caltrans supports South Pasadena's CAP to reduce GHG emissions and adapt to changing climate conditions.

Background

Sustainability is an important aspect in the City of South Pasadena's way of life as exemplified by the City's participation in the Clean Power Alliance, the adoption of the expanded polystyrene ban ordinance, and the adoption of the South Pasadena GAP. South Pasadena has proved to be a leader in sustainability by becoming the first City in the nation to be a Certified Green Zone City preventing the creation of 31 tons of pollutants every year. In addition, South Pasadena banned plastic bags two years before it became state law and it is one of the few cities with a comprehensive water conservation program.

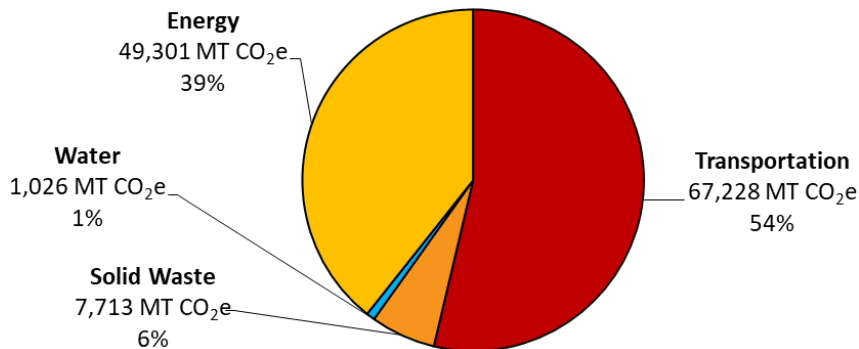
The CAP is a long-range planning document that guides the City towards long-term emissions reductions in accordance with State of California targets. The CAP analyzes emission sources within the City, forecasts future emissions, and establishes emission reduction targets. The CAP is the City of South Pasadena's roadmap to achieving the City's 2030 target and the State mandated goal of 40% below 1990 levels by 2030 and demonstrates substantial progress towards achieving carbon neutrality by 2045. The CAP also establishes a framework for implementation and monitoring of reduction activities, and further promotes adaptation and preparedness actions. The plan is a qualified GHG Reduction Plan and meets the requirements of California Code of Regulations (CCR) Title 14, Division 6, Chapter 3, Article 12, Section 15183.5 - Tiering and Streamlining the Analysis of Greenhouse Gas Emissions.

Discussion/Analysis

The effects of climate change are already felt on the local level and are projected to worsen over the next century without a concerted global effort to address the sources of GHG. This CAP details a set of strategies for South Pasadena to reduce its emissions, prepare for and mitigate approaching risks, and chart the course towards a sustainable future. The CAP outlines 15 Plays and 90 Moves in the Energy, Transportation, Water, Solid Waste, Carbon Sequestration, and Municipal sectors.

Baseline GHG Emissions Inventory

The CAP includes a 2016 baseline inventory of GHG emissions from community-wide activities within the City. In 2016, the South Pasadena community emitted approximately 125,269 Metric Ton (MT) Carbon Dioxide Equivalent (CO₂e). As shown in figure below, the transportation sector was the largest source of emissions, generating approximately 67,228 MT CO₂e, or 54 percent of total 2016 emissions. Electricity and natural gas consumption within the residential and commercial sectors were the second largest source of 2016 emissions, generating 49,301 MT CO₂e, or 39 percent of the total.



Forecast and Targets

Emissions forecasts (what we predict GHG emissions to be in the future) are generated from the 2016 baseline inventory to help identify actions that must be taken now to meet future targets. The following GHG reduction targets were established by the City of South Pasadena to remain consistent with the State’s 2030 (SB 32) goal and be in line with the reduction trajectory to achieve the State’s long-term 2045 goal:

- Reduce GHG emissions to 2.9 MT CO₂e per capita by 2030 (the SB 32 target year).
- Reduce GHG emissions to 0.0 MT CO₂e per capita by 2045 (the EO B-55-18 target year).

South Pasadena would be required to reduce 18,578 MT CO₂e by 2030, 53,874 MT CO₂e by 2040, and 73,969 MT CO₂e by 2045 to meet the State goals. These reductions will be achieved through implementation of local Plays and Moves developed from best practices of other similar and neighboring jurisdictions, as well as those recommended by state organizations and agencies.

Game Plan

The CAP defined into fifteen (15) Plays and ninety (90) Moves in the seven (7) Sectors; Energy, Transportation, Water, Solid Waste, Carbon Sequestration, and Municipal. The Plays and Moves were examined by the City staff and the community and were established and refined to meet the City’s GHG emission reduction target for 2030. They provide substantial progress toward meeting the longer-term target of carbon neutrality by 2045, which align with the State’s goals and is the City’s fair share toward achieving the State’s overall climate goals. Furthermore, the Plays and Moves established in the CAP help the City meet the 2030 target and put the City on the trajectory toward meeting the 2045 target of carbon neutrality.

The greatest volume of emissions would be reduced in the transportation and energy sectors, which also are the greatest emission generating sectors. Emissions from the transportation sector would be reduced through the reduction of Vehicle Miles Traveled (VMT), increased Active Transportation Mode Share, and increased adoption of electric vehicles. Primary emission reductions in the energy sector through 2030 would be attributable to the renewable energy used by the City. Additionally, as new buildings are built and existing buildings are retrofitted, further energy emission reductions would be achieved through electrification.

Keeping Score: Implementation and the Next Steps

The CAP is the City's roadmap to achieving its 2030 target and the State mandated goal of 40 percent below 1990 levels by 2030, with the ultimate goal of achieving carbon neutrality by 2045. To track the annual emission reductions achieved through implementation of each Play, the City will utilize CAPDash, a customizable, automated interactive web-based dashboard developed by Rincon for the City.

Full implementation of the City's CAP will require investments on the part of the City, local households and property owners, and commercial businesses. In most cases, the expenditures will not only help to reduce GHG emissions but will also bring other valuable co-benefits as described in the Plays and Moves. Three primary principles can help the City determine the best approach to funding various Plays and Moves, including; equity, cost-effectiveness, and ability to leverage local resources. An overview of funding sources and a detailed Funding Strategy is provided as a part of the CAP.

Community Outreach

The City has been actively engaging with the community throughout the entire process of the CAP as highlighted:

- The City hosted 11 outreach events, including 4 Council and Commission Meetings, 3 Community Meetings, and presentation to the Chamber of Commerce.
- Community organizations such as NREC, South Pasadena Beautiful, Transition South Pasadena, Nature Park, Women Involved in South Pasadena Political Activism (WISPPA), etc. participated in these events.
- Even with COVID-19, City staff conducted virtual meetings to keep everyone involved. More than 150 people attended the community meeting and over 345 views were logged on the virtual events.
- A survey was conducted over a 3-week period and the City received input from 58 participants to help prioritize measures.
- The official CAP website provided resources and information about the plan, upcoming events, recorded meetings, and a comment box.
- We received 103 comments on draft CAP and community survey to prioritize the Plays and Moves.
- The adopted CAP will be available on the City's website.
- An announcement of the adoption will be posted on the City blog, Neighborhood Pulse, and Sustainable South Pasadena Newsletter.
- City staff will present annual updates on the progress of the plan during NREC public meetings.

Next Steps

Once the plan is adopted, Staff will present annual updates on the progress of the plan.

Legal Review

The City Attorney has reviewed this item.

Adoption of Initial Study and Negative Declaration
and the Proposed Climate Action Plan
December 16, 2020
Page 5 of 5

Fiscal Impact

The CAP includes a Funding Strategy chapter that outlines potential funding sources such as General Funds, CED Energy Partnership Program, Edison, AB2766, Propositions A/C/R, City Water Conservation funds, and grants.

Public Notification of Agenda Item

The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda, posting of the same agenda and reports on the City's website and/or notice in the *South Pasadena Review* and/or the *Pasadena Star-News*.

Attachment

City of South Pasadena Climate Action Plan
Initial Study and Negative Declaration for Climate Action Plan

ATTACHMENT 1
City of South Pasadena Climate Action Plan



South Pasadena 2020 Final Climate Action Plan

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South Pasadena 2020 Final Climate Action Plan



Adopted by City Council:
Date TBD

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Acknowledgements

This Climate Action Plan was a coordinated effort between:

- ✓ South Pasadena Community Members
- ✓ South Pasadena Natural Resource and Environmental Commission (NREC)
- ✓ South Pasadena City Staff
- ✓ Southern California Association of Governments (SCAG)
- ✓ Rincon Consultants, Inc., Iteris, Inc., and BAE Urban Economics

Thank you for participating! We appreciate your feedback, insight, and passion – South Pasadena’s Climate Action Plan is better because of you!

NREC Commissioners and Liaisons:

Madeline C. Di Giorgi, Chair

Rona Bortz, Vice Chair

Amy Davis Jones, Commissioner

William Kelly, Commissioner

Stephen Leider, Commissioner

Cynthia Liu, Commissioner

Lauren Myles, Commissioner

Marina Khubesrian, M.D., City Council Liaison

Diana Mahmud, City Council Liaison

City Staff

Shahid Abbas, Public Works Director

Julian Lee, Deputy Public Works Director

Arpy Kasparian, Water Conservation & Sustainability Analyst



Message from City Council

One of the greatest global crises that we face today is climate change. However small our City may be, it is imperative that we take actions immediately to reduce our global footprint. The effects of climate change can be felt right at home by the longer heat waves, higher temperatures, and more frequent extreme heat days. The Covid-19 pandemic has taught us that environmental protections and actions cannot be delayed any longer.

It is a privilege to lead a community that is not only overwhelmingly supportive of a sustainable lifestyle, but is not afraid to step up, take action, and truly make a difference. Our City's youth have taken a leading role inciting change and innovation in the City and it is their calls to action that keep us motivated to establish policies and pathways to a carbon-neutral future. The City of South Pasadena has a history of pushing the envelope and leading the way in sustainability. This is exemplified by the City's plastic bag ban that was established two years ahead of the state, our expanded polystyrene ban that helps avoid long-term environmental damage, and being the first City in the nation to be an American Green Zone Alliance (AGZA) Green Zone City preventing the creation of 41 metric tons (MT) of carbon dioxide equivalents (CO₂e) per year. In 2019, we continued our leadership efforts by joining the Clean Power Alliance with 100% clean power as the default rate for the residential and municipal sectors. In addition, City Council adopted the South Pasadena Green Action Plan, first of its kind, with implementable actions toward a plastic free, water conscious, high organics diverting, and heat island mitigating City.

We do not plan on stopping to advance our environmental stewardship. South Pasadena is doing it again with its first Climate Action Plan. With more than 90 actions (or Moves), this Climate Action Plan outlines a pathway to reduce the City's greenhouse gas emissions to ultimately reach our goal of carbon neutrality by 2045. With any good plan, we will be revisiting these actions every few years to make sure that the pathway is still relevant and ambitious and that we are on schedule toward goal attainment.

An incredible team of city staff, community leaders, residents, businesses, city youth, and city commissioners came together to create this plan through a transparent and collaborative process. This is our community's Climate Action Plan. With this plan, we strive to create a resilient, sustainable, and proactive community of which anyone would be proud.



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Implementation and the Next Steps

Instant Replays:

Appendix A – Regulatory Summary

Appendix B – Cal-Adapt

Appendix C – Inventory, Forecast, and Targets

Appendix D – Substantial Evidence

Appendix E – Funding Strategy

Appendix F – CEQA Document

Glossary

Term	Definition
Adaptation	Adjustment or preparation of natural or human systems to a new or changing environment which moderates harm or exploits beneficial opportunities.
Anthropogenic	Made by people or resulting from human activities; usually used in the context of emissions that are produced as a result of human activities
CAP	Climate Action Plan – comprehensive roadmap that outlines the specific activities that an agency will undertake to reduce greenhouse gas emissions
CARB	California Air Resources Board – the lead agency for climate change programs and oversees all air pollution control efforts in California to attain and maintain health-based air quality standards
Carbon-neutrality	Achieving net-zero carbon dioxide (CO ₂) emissions by balancing carbon emissions with carbon removal
Carbon Dioxide (CO ₂)	A naturally occurring gas and a by-product of burning fossil fuels and biomass, as well as land-use changes and other industrial processes.
Carbon Dioxide Equivalent (CO ₂ e)	A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential (GWP)
Climate	The average of weather patterns over a long period of time (usually 30 or more years)
Climate Change	A change in the average conditions — such as temperature and rainfall — in a region over a long period of time
Co-Benefit	The benefits of policies that are implemented for various reasons at the same time including climate change mitigation acknowledging that most policies designed to address greenhouse gas mitigation also have other, often at least equally important, rationales (e.g., related to objectives of development, sustainability, and equity)
COVID-19	Coronavirus disease 2019 – a novel disease that was first identified in 2019 and spread throughout the rest of the world in 2020, leading to an economic shutdown in many countries.
Decarbonization	The reduction or removal of carbon
Electrification	The process of generating power from electricity and, in many contexts, the introduction of such power by changing over from an earlier power source.
Emissions	The release of a substance (usually a gas when referring to the subject of climate change) into the atmosphere
Environmental Justice	The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies
EV	Electric Vehicle – a vehicle that uses one or more electric motors or traction motors for propulsion
Fossil Fuel	A general term for fuel formed from decayed plants and animals that have been converted to crude oil, coal, natural gas, or heavy oils by exposure to heat and pressure in the Earth's crust

GHG	Greenhouse Gas – a gas that absorbs infrared radiation, traps heat in the atmosphere, and contributes to the greenhouse effect
Greenhouse Effect	A process that occurs when gases in Earth's atmosphere trap the Sun's heat
GWP	Global Warming Potential - total contribution to global warming resulting from the emission of one unit of that gas relative to one unit of the reference gas, carbon dioxide, which is assigned a value of 1
ICLEI	International Council for Local Environmental Initiatives – emissions estimates were calculated using ICLEI's best available methodologies
IPCC	United Nations Intergovernmental Panel on Climate Change – prepares comprehensive Assessment Reports about the state of scientific, technical and socio-economic knowledge on climate change, its impacts and future risks, and options for reducing the rate at which climate change is taking place
Methane (CH ₄)	A hydrocarbon that is a greenhouse gas that is produced through anaerobic (without oxygen) decomposition of waste in landfills, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion
Mitigation	An action that will reduce or prevent greenhouse gas emissions, such as electrifying
MT	Metric Ton – Common international measurement for the quantity of greenhouse gas emissions – one metric ton is equal to 2205 pounds or 1.1 short tons
MT CO ₂ e	Metric tons of carbon dioxide equivalent
Nitrous Oxide (N ₂ O)	A powerful GHG with a high global warming potential; major sources of nitrous oxide include soil cultivation practices, especially the use of commercial and organic fertilizers, fossil fuel combustion, nitric acid production, and biomass burning.
PV	Photovoltaic (Solar energy)
Qualified GHG Reduction Plan	A Plan that accommodates growth in a manner that does not hinder the state's ability to reach further emission reduction goals.
RCP	Representative Concentration Pathway – Greenhouse gas concentration trajectory scenarios adopted by the IPCC.
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy – a Plan adopted by SCAG to promote mobility, accessibility, sustainability, and a high-quality of life
SCAG	Southern California Association of Governments – designated Metropolitan Planning Organization (MPO) for the counties of Los Angeles, Riverside, San Bernardino, Ventura, Orange, and Imperial, pursuant to Title 23, United States Code Section 134(d) – the funding entity of this Climate Action Plan
Social Equity	All people having equal access to and influence on the resources and benefits of society
U.S. EPA	United States Environmental Protection Agency - the mission of the U.S. EPA is to protect human health and the environment
VMT	Vehicle Miles Traveled
Weather	The state of the atmosphere over a short period of time (usually an hour or day), describing if it is hot or cold, wet or dry, calm or stormy, clear or cloudy, etc.
ZEV	Zero Emission Vehicle – a vehicle that never emits exhaust gas from the onboard source of power



Carbon-neutrality
 Achieving net-zero carbon dioxide (CO₂) emissions by balancing carbon emissions with carbon removal.



Social Equity
 All people having equal access to and influence on the resources and benefits of society.



Qualified GHG Reduction Plan
 A Plan that accommodates growth in a manner that does not hinder the state's ability to reach.

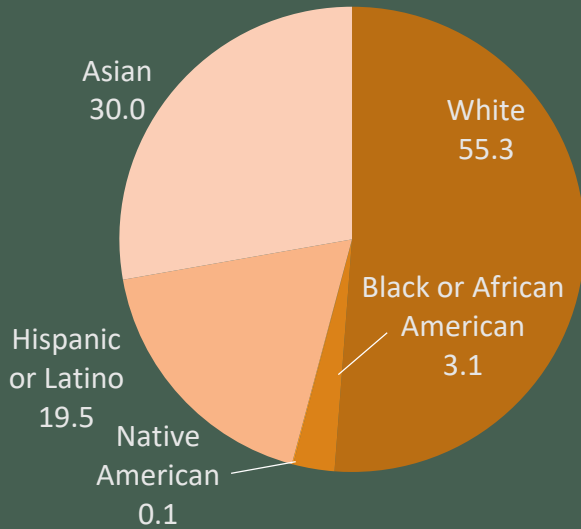


Introduction



Who are we?

Race and Origin
Percent of Population



3.44 square miles of Flatlands and Hillside



2019 Population:

25,329



Population per square-mile:

7,524



Tree City USA

21,000

trees

Age of Population

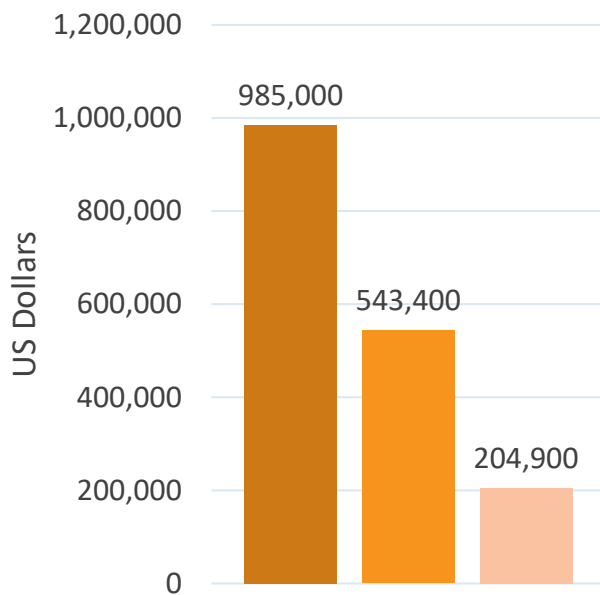
Persons under 5 years

5.3%

Persons over 65 years

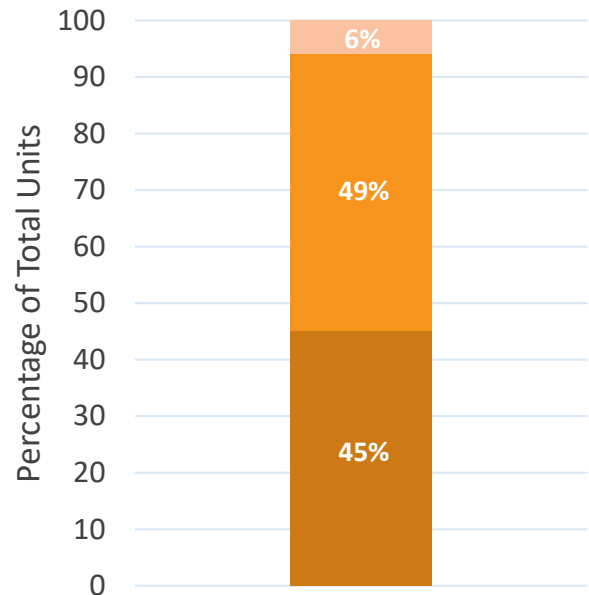
13.9%

Median Housing Value



■ South Pasadena ■ Los Angeles County ■ U.S.

City Housing Statistics



■ Owner-Occupied ■ Rented ■ Vacant

Sources: United States Census Bureau, 2019 and City of South Pasadena "About Us" webpage: <https://www.southpasadenaca.gov/visitors/about-us>



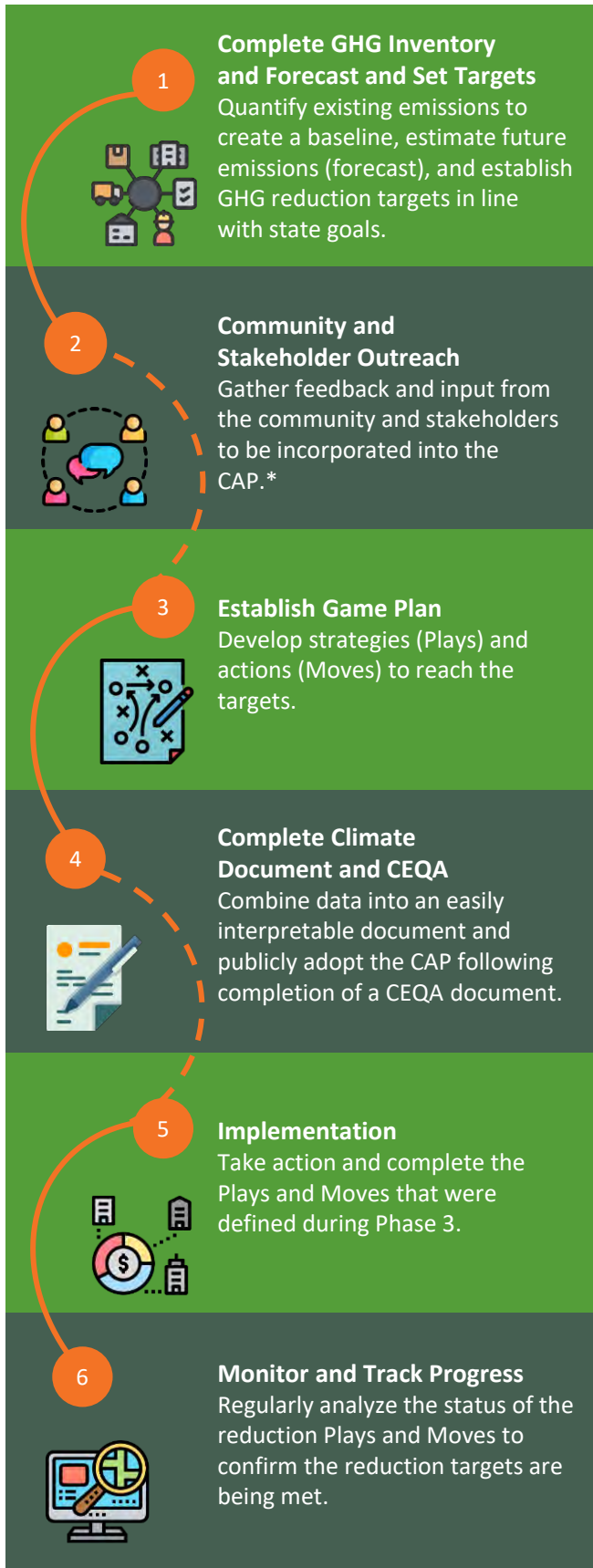
Climate Action Vision

The effects of climate change are already felt on the local level and are projected to worsen over the next century without a concerted global effort to address the sources of greenhouse gas (GHG) emissions. This Climate Action Plan (CAP) details a set of strategies for South Pasadena to reduce its emissions, prepare for and mitigate approaching risks, and chart the course towards a sustainable future. Key components of that future include:

- ✓ **Vibrant Communities** – Healthy neighborhoods and ecosystems with cleaner air, safer streets, increased mobility options, and more adaptive and resilient systems
- ✓ **Engaged Citizens** – Communities that are aware of and interested in the potential environmental, social, and economic impacts of climate change and that seek various solutions surrounding climate change through inspiring educational and outreach programs
- ✓ **Social Equity** – Protecting those most vulnerable against the impacts of climate change and improving the quality of life for all members of the community by working towards a shared and collaborative civic identity



Figure 1 Qualified GHG Reduction Plan Elements



- ✓ **Resilient Economy** – Powered by clean and renewable energy sources, making it more resilient to unpredictable climate emergencies, providing more efficient and affordable utilities, creating clean energy jobs, and promoting resource conservation
- ✓ **Environmental Stewardship** – Responsible use and protection of South Pasadena’s natural and cultural resources, encouraging active and meaningful enjoyment by present and future generations of residents
- ✓ **Regional Leadership in Sustainability** – Encouraging effective collaboration throughout the community to promote collective change and become an example of successful climate action planning in the Los Angeles region

Background

South Pasadena committed to tackling climate change in 2017 by securing grant funding from the Southern California Association of Governments (SCAG) to adopt a CAP. In 2019, the City renewed its commitment to sustainability by unanimously adopting the South Pasadena Green Action Plan (Green Plan).¹ The goals of the Green Plan are to: move towards being a plastic-free city; enhance water conservation efforts; increase organics diversion from landfill; mitigate urban heat island impacts; and prepare for future sustainability initiatives. The Green Plan’s short-term initiatives served as a stepping-stone in setting the future targets and initiatives presented in this long-term CAP. Additionally, the Green Action Plan and other City documents focus on general sustainability (e.g. waste reduction and reduced water use), while the CAP focuses specifically on reducing emissions in the City.

The CAP is a long-range planning document that guides the City towards long-term emissions reductions in accordance with State of California goals. The CAP analyzes emission sources within the City, forecasts future emissions, and establishes emission reduction targets (See *The Playing Field* and the Appendix C). This CAP is the City of South Pasadena’s roadmap to achieving the City’s 2030 target and state mandated goal of 40% below 1990 levels by 2030 and demonstrates substantial progress towards achieving carbon neutrality by 2045. The CAP also establishes a framework for implementation and monitoring of

* Outreach is ongoing throughout the climate action planning process

1. <https://www.southpasadenaca.gov/government/departments/public-works/environmental-programs/sustainable-south-pasadena/south-pasadena-green-action-plan>

reduction activities, and further promotes adaptation and preparedness actions. The plan is intended to be a qualified GHG Reduction Plan and meets the requirements of CEQA 15183.5(b), see Figure 1.

COVID-19 and Climate Action

The COVID-19 pandemic has disrupted our daily lives and both the local and national economies, bringing the intersection of climate change and public health to the public eye. The pandemic has also shone a light on how disasters disproportionately affect already-vulnerable communities. Disadvantaged communities, already suffering from exposure to higher levels of toxic air pollution, are more vulnerable to respiratory disease and are dying at disproportionately higher rates from the pandemic. Similarly, the economic shutdown has destabilized everyone; but, small business owners and “income-insecure workers” are among those least able to draw on financial reserves and wait for economic recovery. At the same time, global response to the pandemic has shown that an extreme reaction to disasters of this magnitude is both possible and necessary. We can and should strive for a future with cleaner air, safe homes and public spaces, secure jobs, and reliable access to resources. Planning for resilience, particularly at the local level, should include a focus on addressing environmental justice and climate equity. The CAP outlines how South Pasadena can work towards this future.

Purpose

This CAP will guide the City of South Pasadena towards reducing GHG emissions consistent with the targets set out by Assembly Bill (AB) 32 and Senate Bill (SB) 32, as well as fulfill the requirements of the California Environmental Quality Act (CEQA) Guidelines § 15183.5(b). California AB 32 established a statewide target to reduce GHG emissions to 1990 levels by 2020 and SB 32 established a statewide target to reduce GHG emissions to 40 percent below 1990 levels by 2030. Please see Figure 2 and Appendix A, *Regulatory Summary*, for a written description and a timeline of the regulations related to climate action planning.²

The CAP and its accompanying environmental documentation are consistent with the criteria set forth in CEQA Guidelines Section 15183.5(b) as outlined below:

- A. Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area (See *Playing Field*);
- B. Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable (See *Playing Field*);
- C. Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area (See *Playing Field*);
- D. Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level (See *Plays and Moves*);
- E. Establish a mechanism to monitor the plan’s progress toward achieving the level and to require amendment if the plan is not achieving specified levels (See *Implementation*);
- F. Be adopted in a public process following environmental review (See Appendix F).

If projects are consistent with the CAP, CEQA analysis can be streamlined by presuming that the project’s GHG emissions are not significant.³

Greenhouse Gas Emission Background

Most of the energy that affects Earth’s climate comes from the sun. When solar radiation reaches the Earth’s atmosphere, some of it is reflected back into space and a small portion is absorbed by Earth’s surface. As Earth absorbs the solar radiation, its surface gains heat and then re-radiates it back into the atmosphere. Some of this heat gets trapped by gases in the atmosphere, causing Earth to stay warm enough to sustain life.

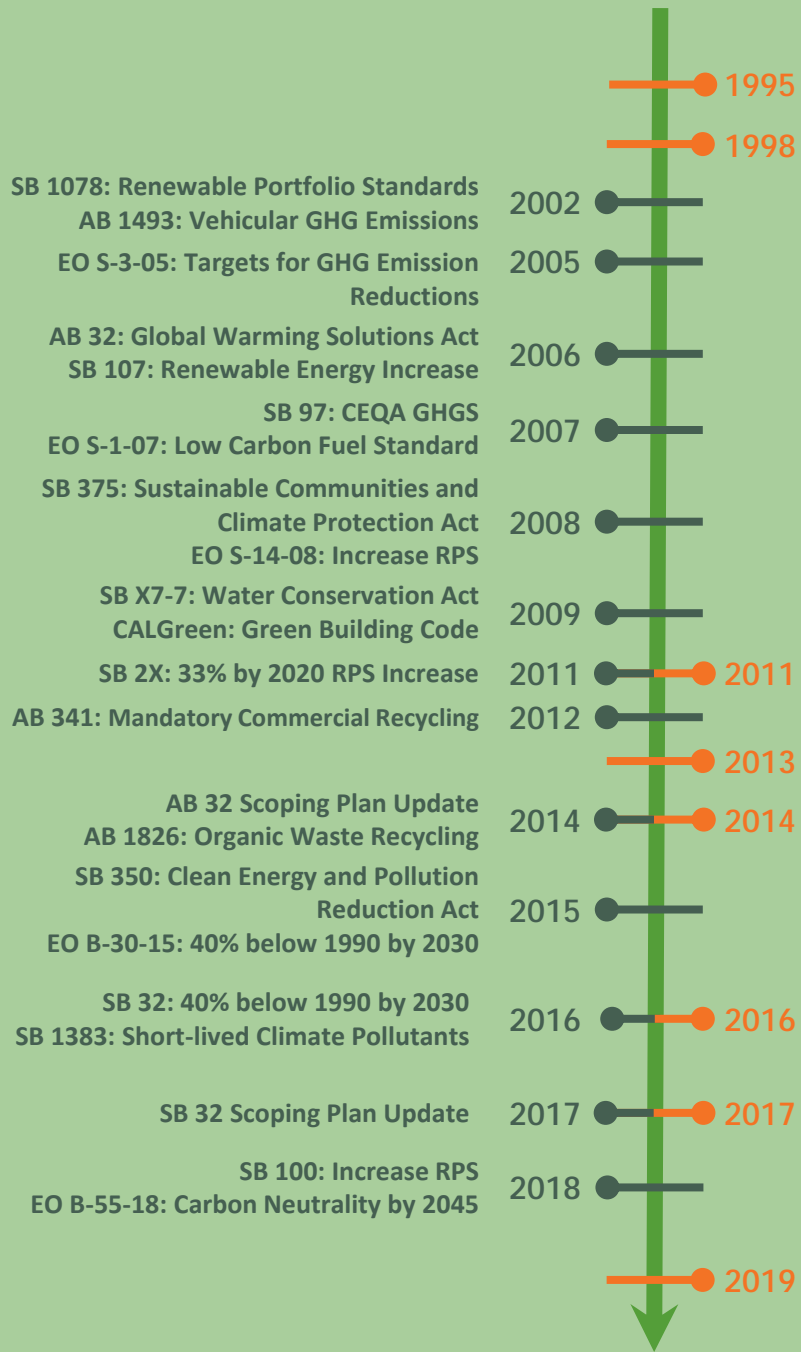
2. See the Regulatory Summary Appendix (Appendix A) for a full summary on the regulatory background that drives the climate action planning process.

3. https://opr.ca.gov/docs/OPR_C8_final.pdf

Figure 2 Leading Climate Action

California Climate Legislative History

South Pasadena Sustainability





This is known as the “greenhouse effect” and the gases trapping the heat are known as “greenhouse gases”⁴ (see Figure 3).

The greenhouse effect is integral to sustaining life on Earth. However, human activities emit GHGs in excess of natural ambient concentrations, thereby contributing to the enhancement of the natural greenhouse effect. This enhanced greenhouse effect contributes to global warming, an accelerated rate of warming of Earth’s average surface temperature. More specifically, by burning fossil fuels to power homes, businesses, and automobiles, we increase the amount of GHGs emitted into the atmosphere,⁵ which, in turn, leads to increased absorption of infrared radiation by the Earth’s atmosphere and increasing temperatures near the surface.

Types of Greenhouse Gases

Greenhouse gases listed by the United Nations Intergovernmental Panel on Climate Change (IPCC) include: carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), as well as chlorofluorocarbons, hydrochlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, which are collectively called fluorinated gases.⁶ Ninety-seven percent of the annual GHG emissions generated in the United States consist of CO₂, CH₄, and N₂O,⁷ while fluorinated gases⁸ result in the remaining three percent of emissions. Because CO₂, CH₄, and N₂O comprise a large majority of GHG emissions at the community level, these are the gases considered in this analysis.

Each of these gases has its own global warming potential (GWP), or extent to which it traps energy in the atmosphere, ranging from a decade to several thousand years. CO₂ is used as the reference point to compare the potential impact of different GHGs, therefore CO₂ has a GWP of 1. Methane has a GWP of 28, meaning that each metric ton (MT) of methane causes 28 times more warming than 1 MT of CO₂. Nitrous oxide has a GWP of 265 or 265 times the GWP of 1 MT of CO₂.⁹

4. <https://scied.ucar.edu/longcontent/greenhouse-effect>

5. <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

6. <https://www.c2es.org/content/main-greenhouse-gases/>

7. <https://www.wri.org/blog/2020/02/greenhouse-gas-emissions-by-country-sector>

8. Fluorinated gases, which includes four main types: hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆) and nitrogen trifluoride (NF₃), are man-made gases that can stay in the atmosphere for centuries and contribute to the GHG effect.

9. <https://www.ipcc.ch/assessment-report/ar5/>

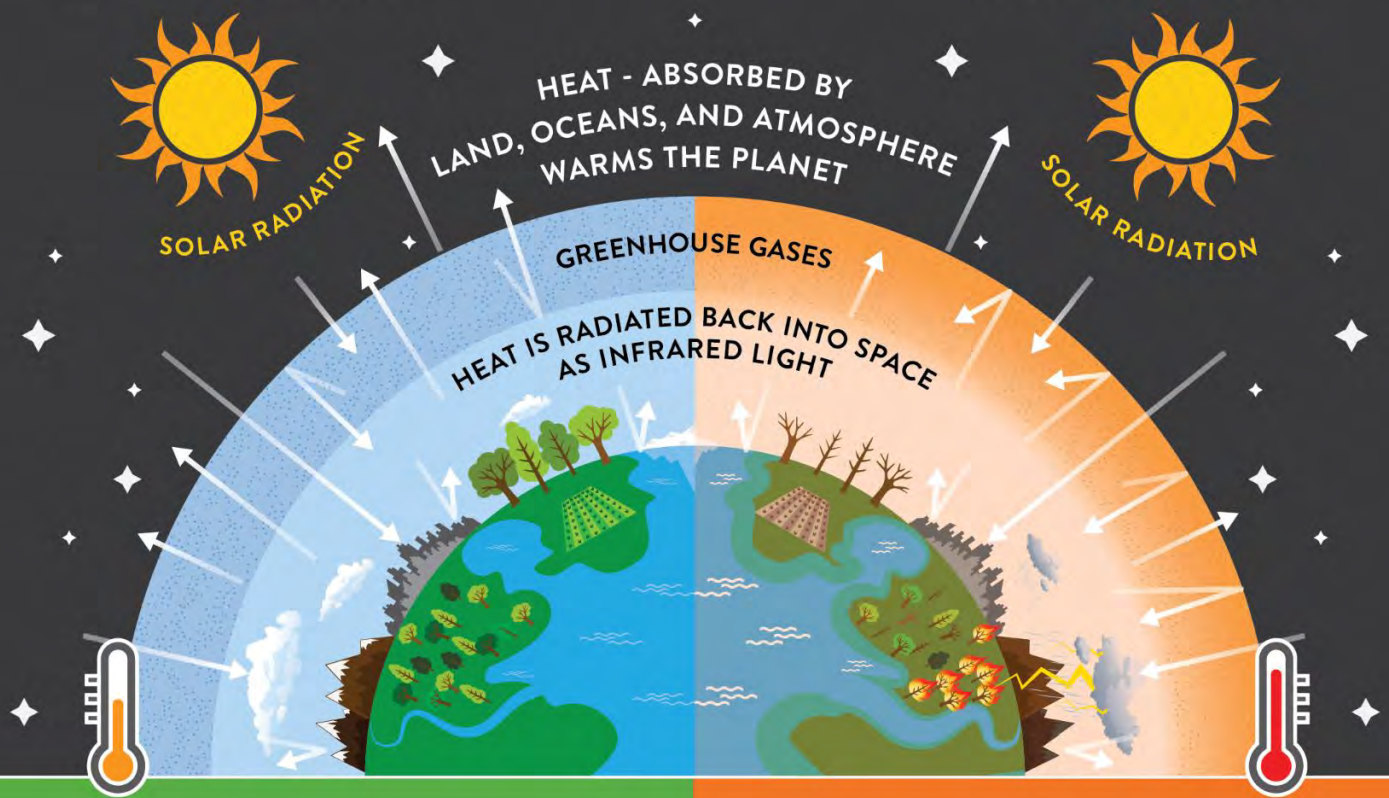
Figure 3 Greenhouse Gas Effect

In the last century, human activities such as burning fossil fuels and deforestation have caused a jump in the concentration of greenhouse gases in the atmosphere.

THE RESULT: Extra trapped heat and higher global temperatures.

WITH NORMAL GREENHOUSE GASES

WITH INCREASED GREENHOUSE GASES



Some heat continues into space while the rest, trapped by greenhouse gases, help maintain the planet's relatively comfortable temperatures.

Increased greenhouse gases means less heat escapes to space. Between preindustrial times and now, the earth's average temperature has risen by 1.8°F (1.0°C).

LESS GAS =
LESS HEAT TRAPPED IN THE ATMOSPHERE

MORE GAS =
MORE HEAT TRAPPED IN THE ATMOSPHERE

Retaining more reliable:

More intense:

- Weather
- Temperature
- Rainfall
- Sea Level

- Storms
- Heat
- Drought
- Sea Level Rise

When all GHG's are normalized based on their GWP's they are referred to as carbon dioxide equivalents or CO₂e.

Sources of Greenhouse Gas Emissions

The combustion of fossil fuels (such as natural gas and gasoline), the decomposition of waste, and industrial processes are the primary sources of GHG emissions. With the accelerated increase in fossil fuel combustion and deforestation since the Industrial Revolution of the 19th century, concentrations of GHG emissions in the atmosphere have increased exponentially. The United States Environmental Protection Agency (U.S. EPA) tracks the country-wide emissions and publishes an annual report: *Inventory of U.S. Greenhouse Gas Emissions and Sinks*.¹⁰

According to the U.S. EPA, gross GHG emissions nationwide have increased by 1.3 percent since 1990. Annual flux of GHG emissions can be attributed to changes in the economy, the price of fuel, and land-use change. For example, in 2017, nationwide GHG emissions decreased compared to 2016 levels, but rose again in 2018 by 3.1 percent. The fluctuation in CO₂ emissions from fossil fuel combustion was a result of multiple factors: although there continues to be a shift from coal to natural gas and increased use of renewables in the electric power sector, more extreme weather (colder winter, hotter summer) led to increased overall electricity use.

Climate Impacts

Anthropogenic (human) caused climate change is well-understood and widely accepted by the scientific community, with over 97 percent of climate scientists agreeing that the planet is warming and human activities are the root cause.¹¹ Essentially, climate change is the addition of excess GHGs to the atmosphere which traps energy (heat) and causes changes to temperature, wind patterns, and precipitation. Because of human activities, these GHGs are now higher than they have been in the past 400,000 years, raising carbon dioxide levels from 280 parts per million to 410 parts per

10. <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>

11. <https://climate.nasa.gov/scientific-consensus/>

million in the last 150 years.¹² Although many changes to climate are governed by natural processes, human activities have contributed an increasing amount of GHGs to the atmosphere at a rate that is unprecedented in Earth's history.

Effects of Climate Change

Globally, climate change is already linked to several changes which will impact biological life forms. Scientists have measured shrinking ice sheets, warming oceans, increasing global temperatures, less snow cover, sea level rise, and species extinction. Consequently, climate change has the potential to result in flooding of low-lying areas (due to sea level rise), reduction of fresh-water supply (due to rainfall and snowfall changes), adverse changes to biological resources and public health (due to increased temperature, less-productive habitats, and expansion of disease vectors), as well as many other adverse environmental consequences.¹³

Globally, a warming trend is abundantly clear, with all the top five hottest years on record happening during the past five years.¹⁴ Additionally, the 20 hottest years on record have all occurred since 1998.¹⁵ Climate change is a global phenomenon that has the potential to impact local health, natural resources, infrastructure, emergency response, tourism, and many other facets of society. The direct impacts projected for the City of South Pasadena include increased temperatures and potential changes in precipitation patterns.

Climate Change in the City of South Pasadena

In the City of South Pasadena, the most pronounced effects of climate change will be increased average temperature, more days of extreme heat, and elevated drought risk, all of which may lead to increased wildfires. Air quality impacts from fires, both local and throughout the western region, may also continue to be an issue. The projections in Figures 4 and 5 were taken from Cal-Adapt, an interactive platform that allows users to explore how climate change might affect California at the local level under different emissions scenarios and climate models. See Appendix B for more information on Cal-Adapt.

12. <https://www.ametsoc.org/ams/index.cfm/publications/bulletin-of-the-american-meteorological-society-bams/state-of-the-climate/>

13. <https://www.ipcc.ch/sr15/chapter/chapter-3/>

14. <https://climate.nasa.gov/evidence/>

15. <https://www.ncdc.noaa.gov/cag/>

The emissions scenario used in this analysis is Representative Concentration Pathway (RCP) 8.5, also known as the high emissions scenario, which is intended to project business-as-usual continuation of current emissions. A range of climate models exist to cover the variability of physical processes, leading to warm/dry simulations and cool/wet simulations. Best practices for conservative planning indicates that an average of all models gives the most representative value. See Appendix B for further information on RCPs and climate models used.

Average maximum temperatures in the City of South Pasadena are expected to rise between 6.5°F and 11.5°F from 2005 to 2100, depending on the emissions scenario.¹⁶ Figure 4 shows observed and projected annual average maximum temperatures in South Pasadena. South Pasadena is also projected to experience more extreme heat conditions. The annual number of heat waves, defined as four or more days over 100.6°F, is projected to increase from an average of 0.2 between 1975 and 2005 to an average of 4.9 between 2070 and 2099, based on the high emissions scenario. Additionally, the annual number of extreme heat days, with temperatures greater than 100.6°F, is projected to increase from 7 in 2005 to approximately 14 by the end of the century. This combination will result in longer heat waves. From 1950 to 2005, the observed duration of heat waves was on average 2.4 days. By the end of the century the business as usual emissions scenario projects the longest heat wave to last about 11 days.

In addition, the timing of extreme heat days is expected to change. In 1990, the only extreme heat days were in June through September; however, by 2099, the earliest day of extreme heat is expected to occur in mid-April with the latest day of extreme heat occurring in the beginning of November, under the high emissions scenario. This would extend the period of extreme heat days by approximately three months.

The Cal-Adapt projections show little change in total annual precipitation in South Pasadena with no clear or consistent trend during the next century, as illustrated in Figure 5. However, even small changes in precipitation can lead to significant impacts such as altered water availability throughout the year, decreased agricultural output in the region, and altered seasonal patterns which could cause increased droughts and/or flooding.

16. <https://cal-adapt.org/tools/annual-averages/>

Figure 4 Annual average maximum temperature for South Pasadena (Grid Cell 34.09375, -118.15625) under RCP 8.5 (emissions continue to rise strongly through 2050 and plateau around 2100)

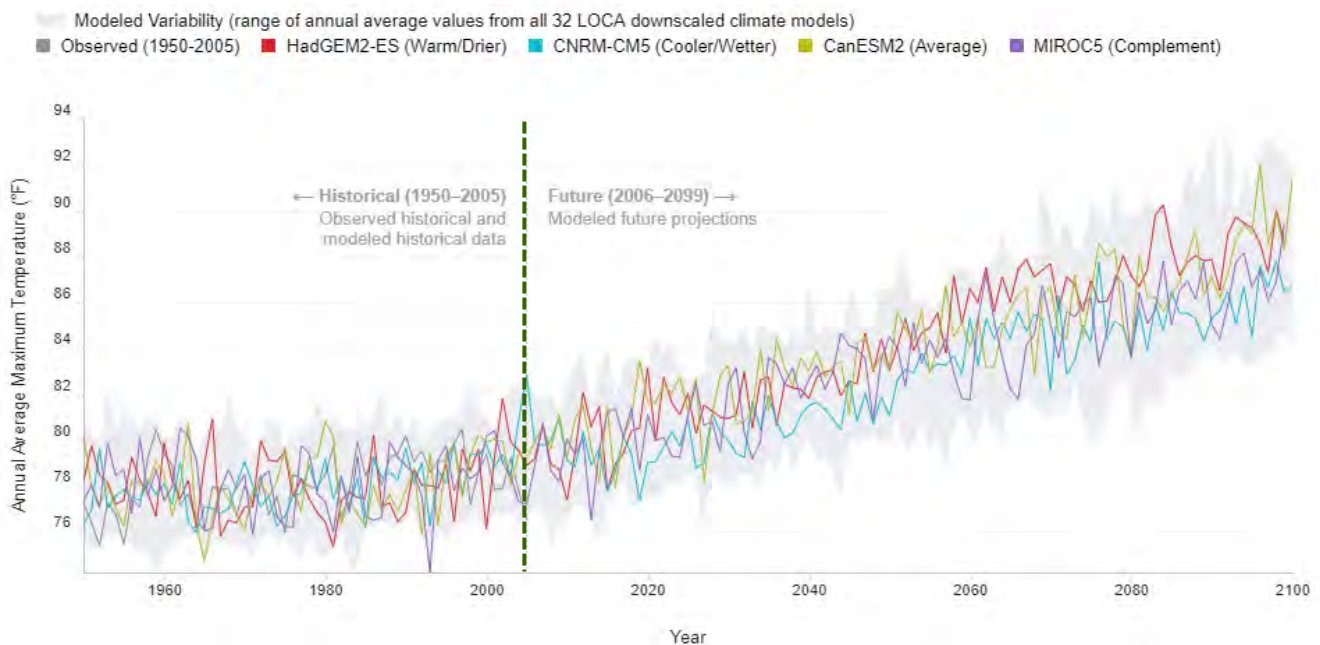
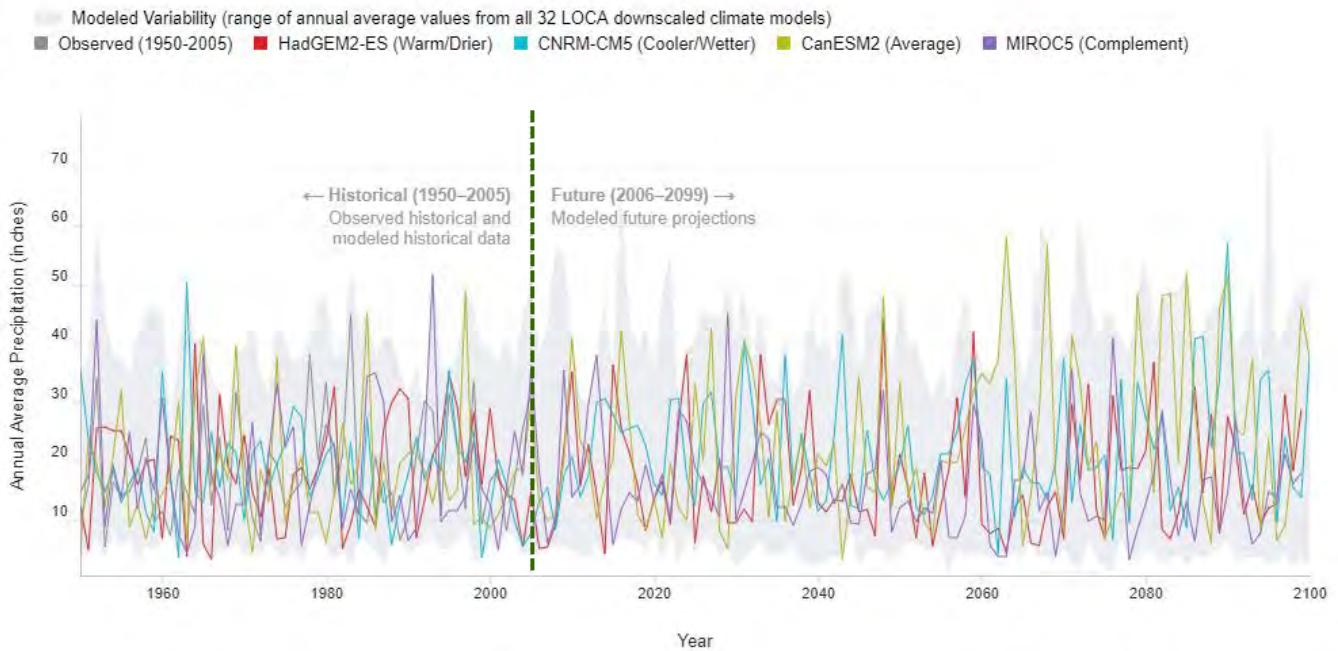


Figure 5 Historical and Projected Annual Average Precipitation in South Pasadena



The entire Los Angeles County region will have to face those kind of precipitation impacts, according to studies from the University of California Los Angeles (UCLA) Institute of the Environment and Sustainability.¹⁷ Regional mountains could lose up to half their snowpack above 6,500 feet by mid-century without the implementation of climate mitigation strategies. Increases in temperature could also worsen local heat island effects in South Pasadena and the surrounding area, meaning that urban areas could experience a compounded level of heating due to built environments absorbing more heat than rural communities.¹⁸ Children, the elderly, asthmatics, and others susceptible to harm from air pollution exposure, are at the greatest risk of the negative impacts associated with climate change.¹⁹

Social Vulnerability

Those that are most vulnerable will bear the greatest burden associated with the potential impacts of a changing climate. Race, ethnicity, gender identity, sexual orientation, age, social class, physical ability, religious or ethical value systems, national origin,

17. <https://www.ioes.ucla.edu/project/climate-change-in-the-los-angeles-region/>

18. <https://www.epa.gov/heatislands/learn-about-heat-islands>

19. <https://ww2.arb.ca.gov/capp-resource-center/community-assessment/sensitive-receptor-assessment>

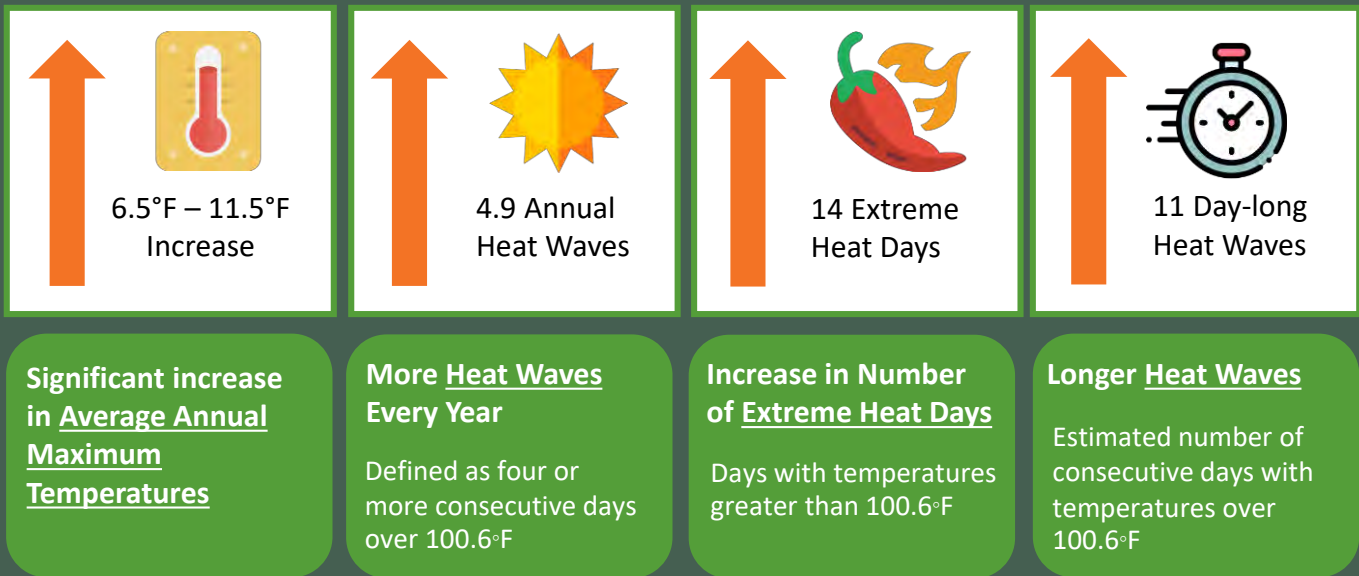
immigration status, linguistic ability, and zip code do not make an individual inherently vulnerable. Instead, vulnerabilities relate to deficiencies in the system rather than a judgement of any particular community member or neighborhood. This document provides a foundation to even the playing field for all members of society and to ultimately reduce potential burdens of climate change on vulnerable populations.

Potential Impacts to the Community

The City of South Pasadena may experience a variety of impacts due to climate change including an increase in average temperature and changes in precipitation, as outlined above under *Climate Change in the City of South Pasadena*. Increased temperatures have the potential to affect the City in a variety of ways, especially through decreased public health. Public health may be negatively impacted by a changing climate as a result of changing environmental conditions including extreme weather events, changes in temperature and rainfall that decrease water supply, worsening air quality, and increases in allergens and air pollutants.

This could lead to hazardous conditions such as heat stroke and respiratory ailments for community

Figure 6 Impacts of Climate Change in the City of South Pasadena (~2100)



members. Potential impacts to public health include cardiovascular disease, exacerbation of asthma, increased risk of skin cancer and cataracts, and heat-related illnesses such as heat stroke, heat exhaustion, and kidney stones.²⁰ Those in the community without health insurance (about 5.9 percent of the population under 65) and those living under the poverty line (approximately 8.7 percent of the population) are particularly vulnerable.²¹

With anticipated increases in temperature, those without health insurance and/or those that are economically disadvantaged may find it more difficult to afford the additional costs of cooling their homes. Consequently, many low-income households, especially those of seniors and the disabled may become physically vulnerable to the effects of extreme heat events.

It is imperative that the City of South Pasadena take action now to mitigate and prepare for these climate threats and hazards. The measures included in this

Climate Action Plan set a path to achieving GHG reduction goals that will contribute to long-term stability. These Plays and Moves will build and decarbonize the local economy in a cost-effective manner that prioritizes benefits to the community. This Plan includes actions in which every part of the community – residents, property owners, businesses, and City government – can participate to improve quality of life. The City of South Pasadena will strive to set an example at the municipal level by doing its part to achieve climate goals and fostering a safe, healthy, vibrant, and resilient community for all South Pasadenans.

Let's be bold! We have the momentum; we can do it! The kids are counting on us!
- City of South Pasadena Resident

20. https://resources.ca.gov/CNRALegacyFiles/docs/climate/01APG_Planing_for_Adaptive_Communities.pdf

21. <https://www.census.gov/quickfacts/southpasadenacitycalifornia>

11

Total Outreach Events

150+

Community Event Attendees

103

Comments Received and Survey Responses

345+

Views on Virtual Events

Summary of Outreach Events

Date	Topic	Audience
10/30/19	CAP Intro and Inventory	Staff
11/14/19	CAP Intro and Inventory	Community
1/15/20	CAP Intro and Inventory	City Council
3/12/20	GHG Reduction Strategies	Staff
5/26/20	GHG Reduction Strategies	NREC
5/28/20	GHG Reduction Strategies	Community
8/25/20	Draft CAP Review	NREC
9/1/20	Draft CAP Review	Chamber
9/10/20	Draft CAP Review	Community
10/27/20	Final CAP Review	NREC
12/16/20	Final CAP Adoption	City Council

Natural Resources and Environmental Commission (NREC)
Chamber of Commerce (Chamber)

Developing the Plan

Purposeful and transparent stakeholder group and community participation in the climate action planning process ensured that this CAP is representative of the needs and desires of all members of the South Pasadena community. The CAP was developed through an integrated partnership between City staff from all departments, the Natural Resources and Environmental Commission (NREC), and the community. The NREC is an advisory group to the City Council in all matters pertaining to energy, science and technology, and natural resources and the environment and played an integral role in the development of the CAP. In addition, community members were provided with numerous opportunities to provide direct feedback on all aspects of the CAP via surveys, the comment box on the CAP website, in-person/virtually at community events, and via direct email to City staff.



Over the course of the 20-month (April 2019 – December 2020) CAP development process, eleven outreach events were held including three community meetings, three NREC presentations, two staff meetings, and three City Council presentations. A series of in-person community workshops and focus group meetings were scheduled for Spring through Winter of 2020; however, due to the COVID-19 pandemic, the events beginning in May 2020 were shifted to a virtual format. This virtual format provided opportunities for additional



community members to participate, either by tuning in to the virtual event or watching it while it streamed live online. In addition, these events were recorded and posted on the CAP website allowing community members who were unable to participate at the time of the event to view the important presentations at their convenience. The virtual events were participated by and viewed by hundreds of community members during the duration of the CAP preparation.

During the first set of outreach events, where the CAP process was introduced and the GHG inventory was reviewed, feedback was provided by stakeholders and community members regarding which strategies they'd like included in the Final CAP. This feedback was incorporated into the development phase of the Plays and Moves, which were reviewed during the second set of outreach events in Spring of 2020. Upon completion of the Spring 2020 outreach events, a survey was released to gain feedback on the emission reduction strategies (Plays and Moves). In total, 58 insightful responses were received on the survey and six Moves were added based on the feedback provided. Please see the Moves marked with an asterisk in the *Plays and Moves* Section for a complete summary of the additions that were made based on the community feedback received.

A public-facing Climate Action Plan website was linked to the City's website to share information and be an avenue to accept public comments and feedback. These comments were reviewed as they came in and re-reviewed with the survey results to see if any additional Plays or Moves were necessary based on feedback provided. In addition to the outreach avenues detailed above, feedback was solicited and CAP updates were communicated to the community via press releases, City Hall Scoop blog articles, the Neighborhood Pulse monthly newsletters, the Environmental Programs listserv¹, City social media pages, the City website, Council and Commission meetings, and local organizations. The feedback received from the community and stakeholders shaped the Final CAP and helped establish an implementable and shared path forward to reach the City's climate action goals.

What we heard from the Community:

“Education is paramount - getting this information to the high school, middle school, and elementary school in an engaging format is essential to informing ALL South Pasadena residents!”

“I'd love to see community solar and a neighborhood micro electric grid for City offices and in public spaces like the library/senior center complex and for the schools.”



“Our tree canopy is one of the few things that distinguishes us from nearby cities. It's our treasure and we should do everything to protect it and expand it.”

“Having our residents use 100% renewable energy, whether or not they can install photovoltaic (PV) solar panels on their structures, is one of the most efficient ways of reducing City GHGs.”

Comments included in the CAP were received during the survey and via the City's CAP Website comment box! Thank you for providing your feedback, we appreciate it!

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The Playing Field

GHG Emissions Inventory, Forecast, and Targets





Baseline GHG Emissions

This Climate Action Plan includes a 2016 baseline inventory of GHG emissions from municipal operations and community-wide activities within the City. It is important to note that the municipal operations inventory is a subset of the community inventory, meaning that the municipal emissions are included within the community-wide inventory. To allow for comparison among GHG emissions sources, all emissions are translated to the equivalent of one metric ton of carbon dioxide, or MT CO₂e. One MT CO₂e is the equivalent of using 113 gallons of gasoline or driving 2,492 miles in a standard combustion vehicle.²²

Inventory

Methodology

Emissions estimates were calculated using the best available methodologies from the International Council for Local Environmental Initiatives (ICLEI). Specifically, the U.S. Community Protocol for Accounting and Reporting Greenhouse Gas Emissions Version 1.2 (Community) is used to calculate community-wide emissions and the Local Government Operations Protocol Version 1.1 (LGOP) is used to calculate municipal emissions. See Appendix C for more information.

1 MT CO₂e = 2,492 miles traveled in a standard combustion vehicle, which is the approximate distance from South Pasadena City Hall to Pittsburg Pennsylvania!

2016 Municipal Baseline Emissions

In 2016, the City of South Pasadena's GHG emissions associated with municipal operations totaled 2,755 MT CO₂e. As shown in Table 1 and Figure 7, emissions from the City's energy use were the largest sector (1,613 MT CO₂e, or 59 percent). The second largest source of emissions (584 MT CO₂e, or 21 percent) was waste generated by municipal employees and facilities.

22. <https://developer.epa.gov/greenhouse-gas-equivalencies-calculator-widget/>

Table 1 2016 Municipal Emissions Summary by Sector

Sector	GHG Emissions (MT CO ₂ e)	Percentage of Total Emissions
Energy	1,613	59
Electricity	1,504	55
Natural Gas	109	4
Transportation	539	19
Vehicle Fleet	173	6
Employee Commute	366	13
Water and Wastewater	19	1
Solid Waste	584	21
Total	2,755	100 %

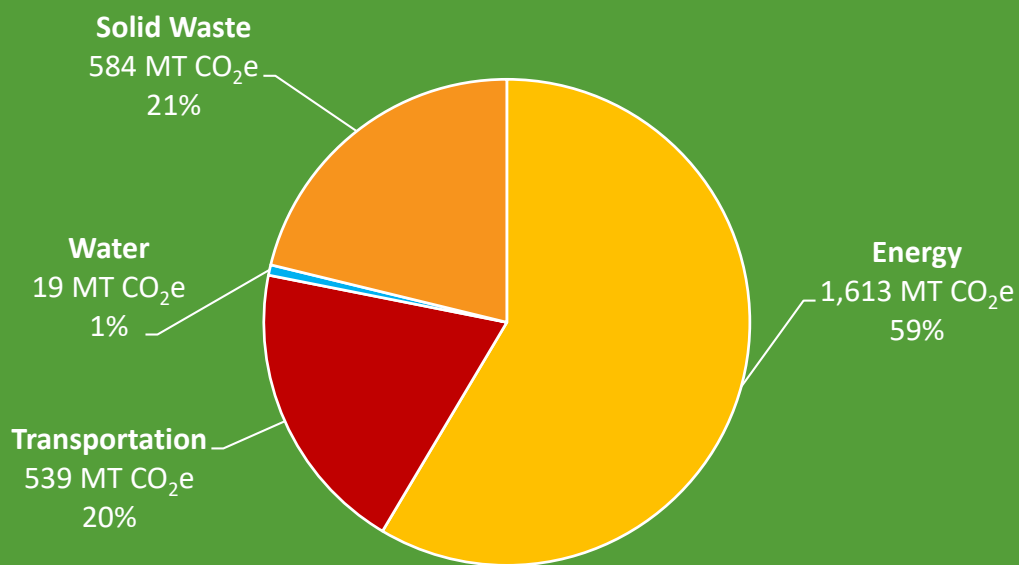
Notes:

MT: Metric tons

1. Emissions have been rounded and therefore sums may not match.

Source: Emissions were calculated following ICLEI LGOP (May 2010) and using data provided and approved by the City.

Figure 7 2016 Municipal Emissions Summary by Sector



Transportation associated with the City fleet and employee commuting generated emissions equivalent to 539 MT CO₂e, or 19 percent. The remaining municipal emissions (19 MT CO₂e) were from water use and wastewater generation by the City's operations.

2016 Community-wide Baseline Emissions

In 2016, the South Pasadena community emitted approximately 125,269 MT CO₂e. As shown in Table 2 and Figure 8, the transportation sector was the largest source of emissions, generating approximately 67,228 MT CO₂e, or 54 percent of total 2016 emissions. Electricity and natural gas consumption within the residential and commercial sectors were the second largest source of 2016 emissions, generating 49,301 MT CO₂e, or 39 percent of the total. Waste generation, including processing and the decomposition of waste, resulted in six percent (7,712 MT CO₂e) of the City's emissions, while water use and wastewater generation resulted in the remaining one percent (1,026 MT CO₂e).

Emissions Forecast

Emissions forecasts (what we predict GHG emissions to be in the future) are generated from the 2016 baseline inventory to help identify actions that must be taken now in order to meet future targets. This CAP identifies provisional GHG emissions reduction targets for the years 2020 (AB 32 target year), 2030 (SB 32 target year), 2040 (City of South Pasadena's General Plan horizon year), and 2045 (EO B-55-18 target year).

A business-as-usual scenario provides a forecast of how GHG emissions would change in the years 2020, 2030, 2040, and 2045 if consumption trends continue as they did in 2016 and growth were to occur as projected in the City's General Plan. South Pasadena's business-as-usual GHG emissions are projected to increase to 126,337 MT CO₂e in 2020, 128,792 MT CO₂e in 2030, 131,675 MT CO₂e in 2040, and 133,121 MT CO₂e in 2045 (see Table 3).

However, since 2016, several state regulations (i.e., SB 1, SB 100, AB 1493) have been enacted that will reduce future local emissions. These regulations have been incorporated into an adjusted forecast, which provides a more accurate picture of future

emissions growth and the emission reduction the City and community will be responsible for after state regulations have been implemented (see Table 3).

Emissions Targets

After analyzing the City's baseline inventory and forecast scenarios, emission targets were set to create quantitative goals that will further the City's ability to measure emission reduction progress from the baseline scenarios. The 2016 baseline emissions were reduced by 40 percent to establish a 2030 target of 75,161 MT CO₂e for the City. In accordance with the new California Air Resource Board (CARB) methodology and the statewide goal established in SB 32, this absolute emissions²³ target was then translated into a 2030 per capita emission target of 2.9 MT CO₂e per year by dividing the 2030 absolute target by South Pasadena's projected population in 2030.

The following GHG reduction targets were established by the City of South Pasadena to remain consistent with the state's 2030 (SB 32) goal and be in line with the reduction trajectory to achieve the state's long-term 2045 goal:

- Reduce GHG emissions to 2.9 MT CO₂e per capita by 2030 (the SB 32 target year)
- Reduce GHG emissions to 0.0 MT CO₂e per capita by 2045 (the EO B-55-18 target year)

As shown in Table 4 and Figure 9, South Pasadena would require implementing local reduction measures to meet the state targets established for 2030 and 2045 even after accounting for reductions that will result from state regulations. Table 4 shows that South Pasadena would be required to reduce 18,578 MT CO₂e by 2030, 53,874 MT CO₂e by 2040, and 73,969 MT CO₂e by 2045 to meet the state goals. Table 4 also shows the remaining per capita reductions needed to meet the goal (MT CO₂e per capita).

These reductions will be achieved through implementation of local Plays (strategies) and Moves (actions) developed from best practices of other similar and neighboring jurisdictions, as well

23. Absolute emissions refer to the total quantity of GHG emissions being emitted.

Table 2 2016 Community-wide Emissions Summary by Sector

Sector	GHG Emissions (MT CO ₂ e)	Percentage of Total Emissions
Energy	49,301	39
Electricity	23,987	19
Natural Gas	24,287	19
Electricity Transmission and Distribution Losses	1,027	1
Transportation	67,228	54
On-road Transportation	65,351	52
Off-road Equipment	829	1
Transit ²	1,048	1
Water and Wastewater	1,026	1
Water transport, distribution and treatment	700	1
Wastewater collection and treatment	326	<1
Solid Waste	7,713	6
Waste Sent to Landfills	7,509	6
Process Emissions	203	<1
Combustion Emissions	1	<1
Total	125,269	100%

Notes:

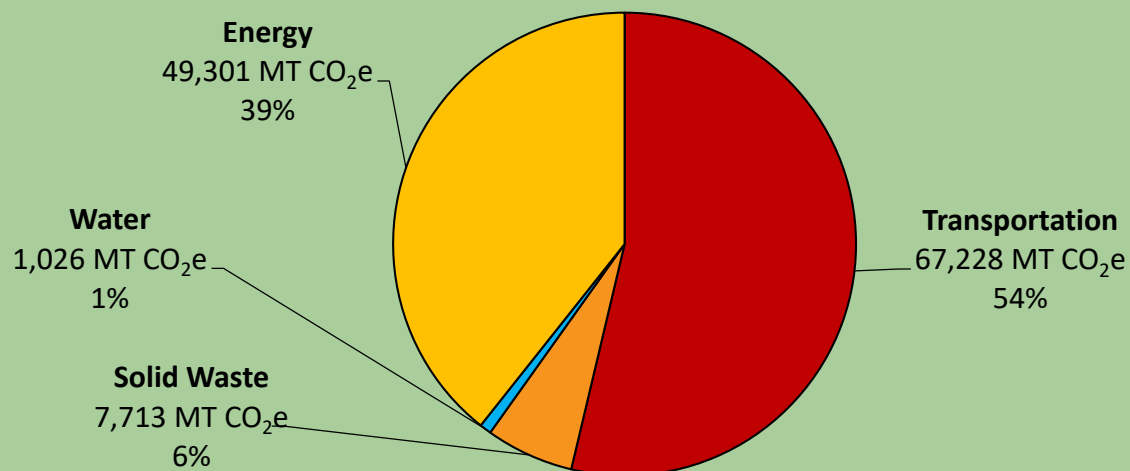
MT: Metric tons

1. Emissions have been rounded and therefore sums may not match.

2. Transit in South Pasadena is provided by Los Angeles Metro.

Source: Emissions were calculated following ICLEI U.S. Community Protocol and using data provided and approved by the City.

Figure 8 2016 Community-wide Emissions Summary by Sector



as those recommended by state organizations and agencies. The Plays and Moves were vetted by City staff and the community and are quantified to identify their overall contribution to meeting the City’s 2020, 2030, 2040, and 2045 GHG reduction targets, as outlined in the *Game Plan*. See Appendix C for more information on the forecast and targets.

Table 3 Business-as-Usual and Adjusted Forecast for City of South Pasadena

Emission Forecast	2020 (MT CO ₂ e)	2030 (MT CO ₂ e)	2040 (MT CO ₂ e)	2045 (MT CO ₂ e)
Business-as-Usual Forecast	126,337	128,792	131,675	133,121
Emission Reductions from State Measures	9,638	35,052	52,747	59,152
Adjusted Forecast	116,699	93,740	78,927	73,969

Notes: Emissions have been rounded to the nearest whole number and therefore sums may not match.

Table 4 Community Emissions, Targets, and Reductions Needed to Meet Targets

Emission Forecast	2020 (MT CO ₂ e)	2030 (MT CO ₂ e)	2040 (MT CO ₂ e)	2045 (MT CO ₂ e)
Adjusted Forecast	116,699	93,740	78,927	73,969
Provisional Emissions Target	125,268	75,161	25,054	0
Remaining Reductions Needed to Meet Target	-8,570	18,578	53,874	73,969
Population ¹	26,198	26,649	27,100	27,327
Per Capita Adjusted Forecast (MT CO ₂ e per capita)	4.5	3.5	2.9	2.7
Per Capita Targets (MT CO ₂ e per capita)	4.8	2.9	1.0	0.0
Remaining Per Capita Reductions Needed to Meet Target (MT CO₂e per capita)	-0.4	0.6	1.9	2.7

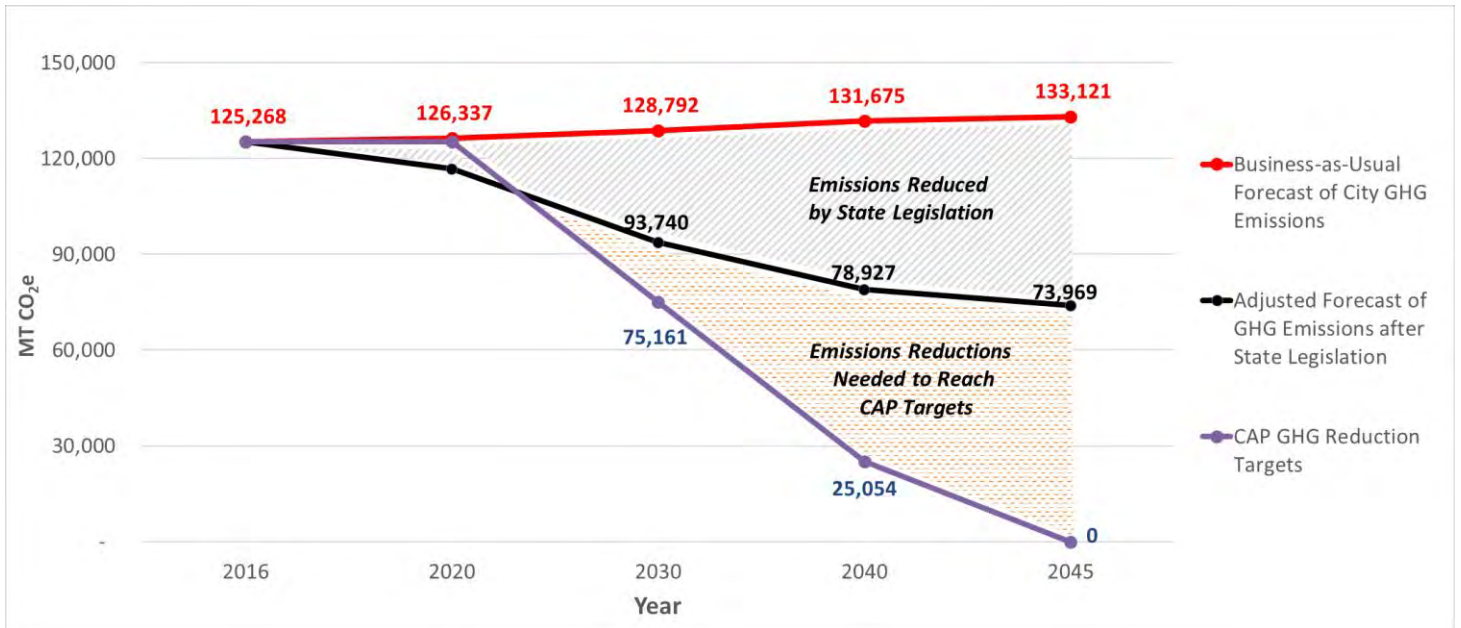
1. Population from SCAG 2016 RTP/SCS Demographic and Growth Forecast.

http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf

Note: Emissions have been rounded to the nearest whole number and therefore sums may not match.



Figure 9 Community Emissions, Targets, and Reductions Needed to Meet Targets



2016
City's GHG Emissions
Baseline Year

2020
AB32 Target,
1990 Emissions
Level

2030
SB32 Target, 40%
below 1990 level

2040
General Plan
Horizon Year

2045
EO B-55-18,
Carbon Neutral

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Game Plan

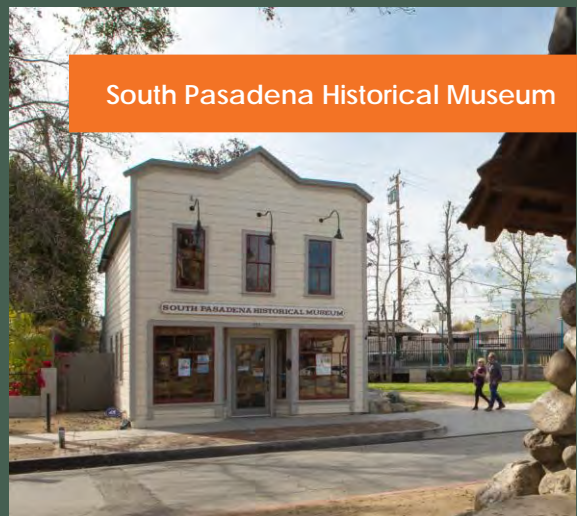
Greenhouse Gas Emission Reduction Plays and Moves





Reducing Emissions in South Pasadena

At its core, the CAP aims to reduce GHG emissions in the City of South Pasadena through equitable, achievable, and implementable actions that benefit all South Pasadenans. The City of South Pasadena has actively worked to reduce GHG emissions and increase the resilience of the City for decades. However, there has not been a mechanism to quantify the reductions achieved to-date. Nonetheless, these efforts should be recognized as the foundation of mitigating the impacts of climate change in the City. This CAP further encourages sustainability and implementation of the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) strategies, which include, among other initiatives: focusing new growth around transit, managing congestion, and promoting safety and security. Since, the City is nearly built-out, the majority of sustainable development includes rethinking how the system works and revamping existing infrastructure. However, it is important to recognize that housing near transit is a fundamental component of the emission reduction puzzle as it would increase walkability and reduce air pollution, among other things; housing will be discussed in the upcoming (2021) General Plan Housing Element, as required by Governors Office of Planning and Research. As mentioned in the *Introduction*, the Plays and Moves outlined in this CAP were created through a collaborative process with City staff, the NREC, and the community. The Moves marked with an asterisk were added based on community feedback received. The City is actively engaged in creating unique solutions and working with other jurisdictions and local partners to solve problems that may arise, as demonstrated by the reduction Plays and supporting Moves, which are summarized in Table 5.



South Pasadena Historical Museum

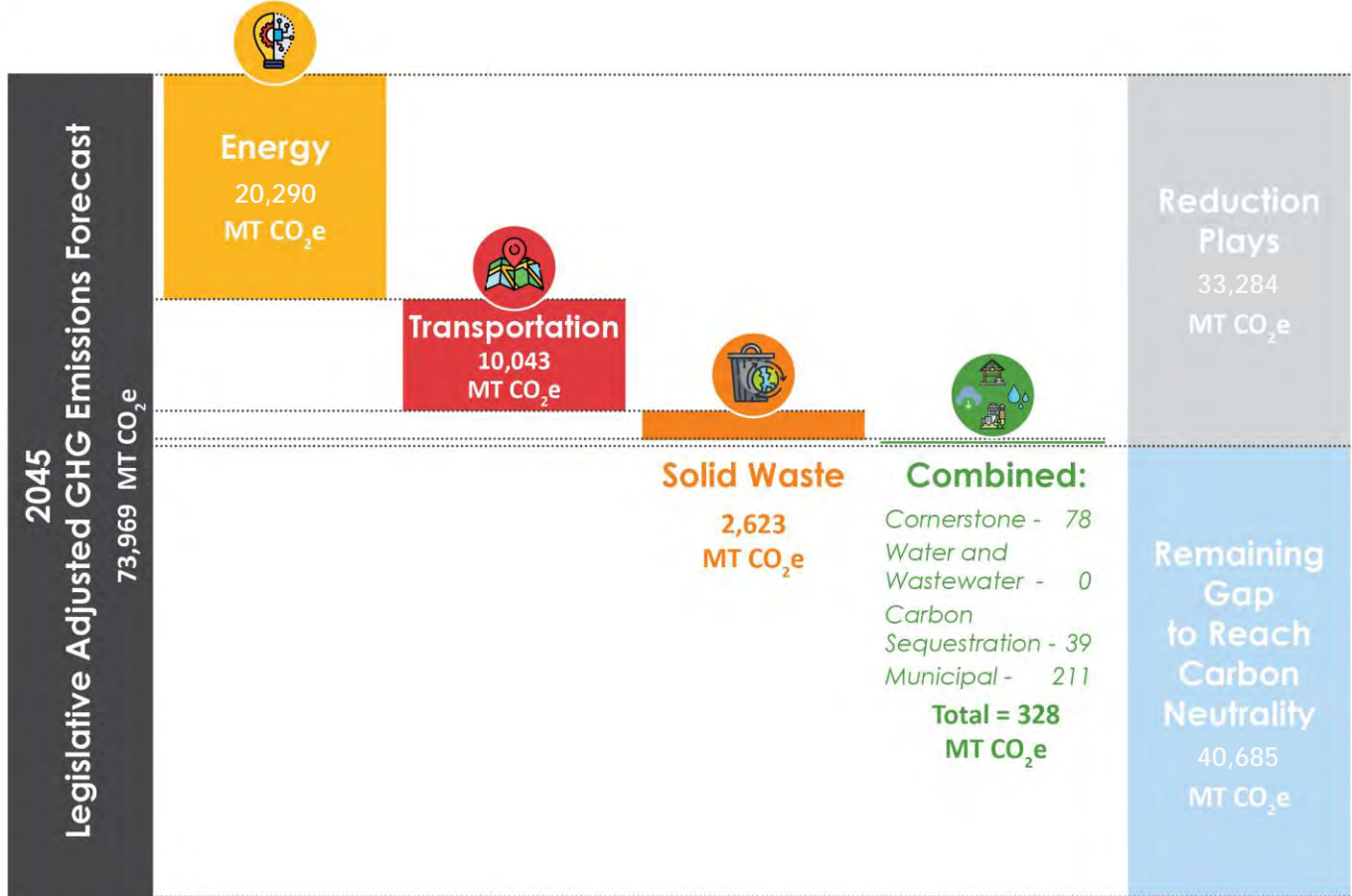
Table 5 Emission Reduction Plays and Moves Summary

Sector	Play	GHG Emissions Reduction Contribution
Cornerstone	C.1 Engage South Pasadena youth in climate action and provide education on ways to live a sustainable lifestyle.	2030: 25 MT CO ₂ e 2045: 78 MT CO ₂ e
Energy	E.1 Maximize the usage of renewable power within the community, by continuing to achieve an opt-out rate lower than 4% for the Clean Power Alliance.	2030: 13,408 MT CO ₂ e 2045: 0 MT CO ₂ e
	E.2 Electrify 100% of newly constructed buildings.	2030: 228 MT CO ₂ e 2045: 935 MT CO ₂ e
	E.3 Electrify 5% of existing buildings by 2030 and 80% by 2045.	2030: 1,184 MT CO ₂ e 2045: 19,355 MT CO ₂ e
	E.4 Develop and promote reduced reliance on natural gas through increased clean energy systems that build off of renewable energy development, production, and storage.	Supportive of 2030 and 2045 Goals
Transportation	T.1 Increase zero-emission vehicle and equipment adoption to 13% by 2030 and 25% by 2045.	2030: 3,774 MT CO ₂ e 2045: 6,629 MT CO ₂ e
	T.2 Implement programs for public and shared transit that decrease passenger car vehicle miles traveled 2% by 2030 and 4% by 2045.	2030: 807 MT CO ₂ e 2045: 1,399 MT CO ₂ e
	T.3 Develop and implement an Active Transportation Plan to shift 3% of passenger car vehicle miles traveled to active transportation by 2030, and 6% by 2045.	2030: 1,186 MT CO ₂ e 2045: 2,015 MT CO ₂ e
Water and Wastewater ¹	W.1 Reduce per capita water consumption by 10% by 2030 and 35% by 2045.	2030: 414 MT CO ₂ e 2045: 0 MT CO ₂ e
Solid Waste	SW.1 Implement and enforce SB 1383 organics and recycling requirements to reduce landfilled organics waste emissions 50% by 2022 and 75% by 2025.	2030: 1,702 MT CO ₂ e 2045: 1,764 MT CO ₂ e
	SW.2 Reduce residential and commercial waste sent to landfills by 50% by 2030 and 100% by 2045.	2030: 415 MT CO ₂ e 2045: 859 MT CO ₂ e
Carbon Sequestration	CS.1 Increase carbon sequestration through increased tree planting and green space.	2030: 19 MT CO ₂ e 2045: 39 MT CO ₂ e
Municipal	M.1 Reduce carbon intensity of City operations.	2030: 188 MT CO ₂ e 2045: 188 MT CO ₂ e
	M.2 Electrify the municipal vehicle fleet and mobile equipment.	2030: 23 MT CO ₂ e 2045: 23 MT CO ₂ e
	M.3 Increase City's renewable energy production and energy resilience.	Supportive of 2030 and 2045 Goals
Total		2030: 22,959 MT CO₂e 2045: 33,284 MT CO₂e

Note: South Pasadena would be required to reduce 18,578 MT CO₂e by 2030, 53,874 MT CO₂e by 2040, and 73,969 MT CO₂e by 2045 to meet the City's targets and state goals.

1. There is risk of double counting emission reductions from Play W.1 with Play E.1. Play W.1 emission reductions totals are provided for informational purposes, but are not added to the emission reduction totals.

Figure 10 Path to Carbon Neutrality



Meeting the State's Goals

The Plays and Moves outlined in this section were established and refined to meet the City's GHG emission reduction target for 2030 and provide substantial progress towards meeting the longer-term target of carbon neutrality by 2045, which align with the state's goals and is the City's fair share towards achieving the state's overall climate goals (see Appendix D for more information on the emission reductions anticipated to be achieved from each Play). As shown in Figure 10, the Plays and Moves established in this Plan help the City of South Pasadena meet the 2030 target and put the City on the trajectory towards meeting the 2045 target of carbon neutrality.

Specifically, Figure 10 shows the adjusted emissions forecast on the left with the emission reductions required to meet the 2030 and 2045 goal on the right. As demonstrated, while the Plays and Moves help reach the 2030 targets, more work is needed to reach the longer-term 2045 emission reduction

target. It is anticipated that the CAP will be updated on a regular (triennial basis) as outlined in *Keeping Score*. Future iterations of the CAP will outline additional ways to meet the longer-term 2045 emission reduction target as new technologies and solutions become available.

Making meaningful progress towards reducing the City's GHG emissions starts with the leadership of City government, through strong actions like providing permit incentives and developing equitable outreach programs that spur change in the community. There is a wealth of opportunities for South Pasadena to take action, to improve the community while also reducing its GHG emissions. It is important that these opportunities are taken advantage of, so real momentum can be built upon and we can meet California's 2030 GHG emission reduction goal. See the following pages for more information on the specific Plays and Moves included in this Climate Action Plan.



Reducing Emissions in South Pasadena

The greatest amount of emissions would be reduced in the energy and transportation sectors, which also are the greatest emission generating sectors (as shown in Figure 8). Primary emission reductions in the energy sector through 2030 would be attributable to the renewable energy used by the City. Additionally, as new buildings are built and existing buildings are retrofit, further energy emission reductions would be achieved through electrification. Emissions from the transportation sector would be reduced through the reduction of vehicle miles traveled and increased adoption of electric vehicles.

All emission reductions attributable to the Plays and Moves included in this CAP are based on currently available substantial and reasonable evidence. Therefore, although in some instances, it would be beneficial to increase the implementation goals, there is not strong evidence at this time at this time that these reductions would be achievable.

Key Electrification Drivers

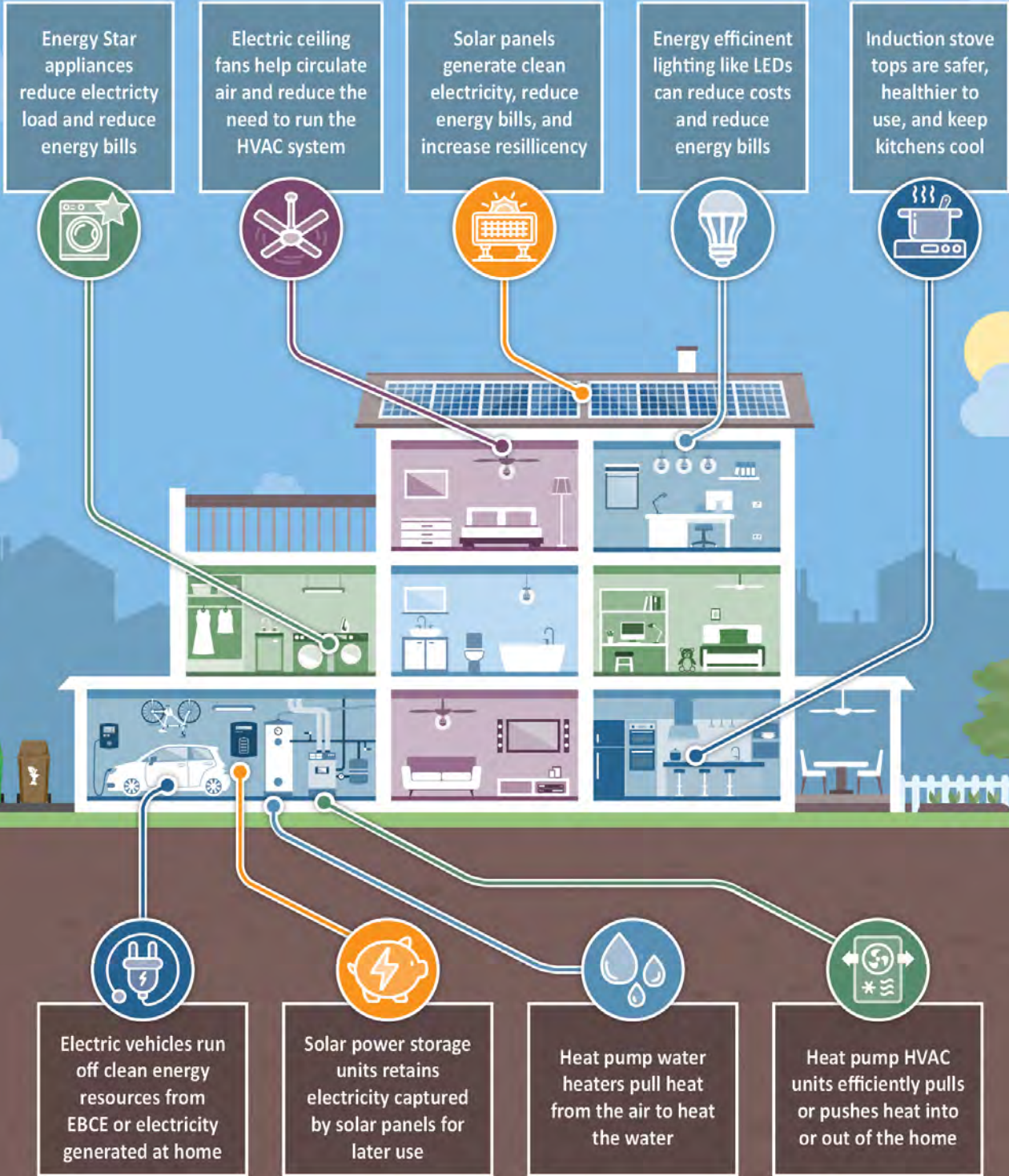
Electrification of new buildings is a cost-effective and socially equitable way many cities in California are reducing GHG emissions and protecting public health. Specifically, all-electric buildings are more efficient, and in California, produce lower utility bills. For example, an all electric new single-family home in South Pasadena can cost around \$3,000 less to build and produce lower energy bills as compared to a mixed fuel home.²⁴ The reduced energy bills of all electric homes is also expected to relieve the future energy burden of low-income families due to a projected increase of natural gas prices resulting from more efficient appliances and wider adoption of electrification across the state.²⁵ Lastly, the burning of natural gas in poorly ventilated areas can cause a drastic increase of harmful indoor pollutants that are linked to increased risk of respiratory illnesses, so switching to electric appliances is a step towards improving public health.²⁶

24. <https://explorer.localenergycodes.com/studies/city-south-pasadena/results?studies=1,2,3&cz=09>

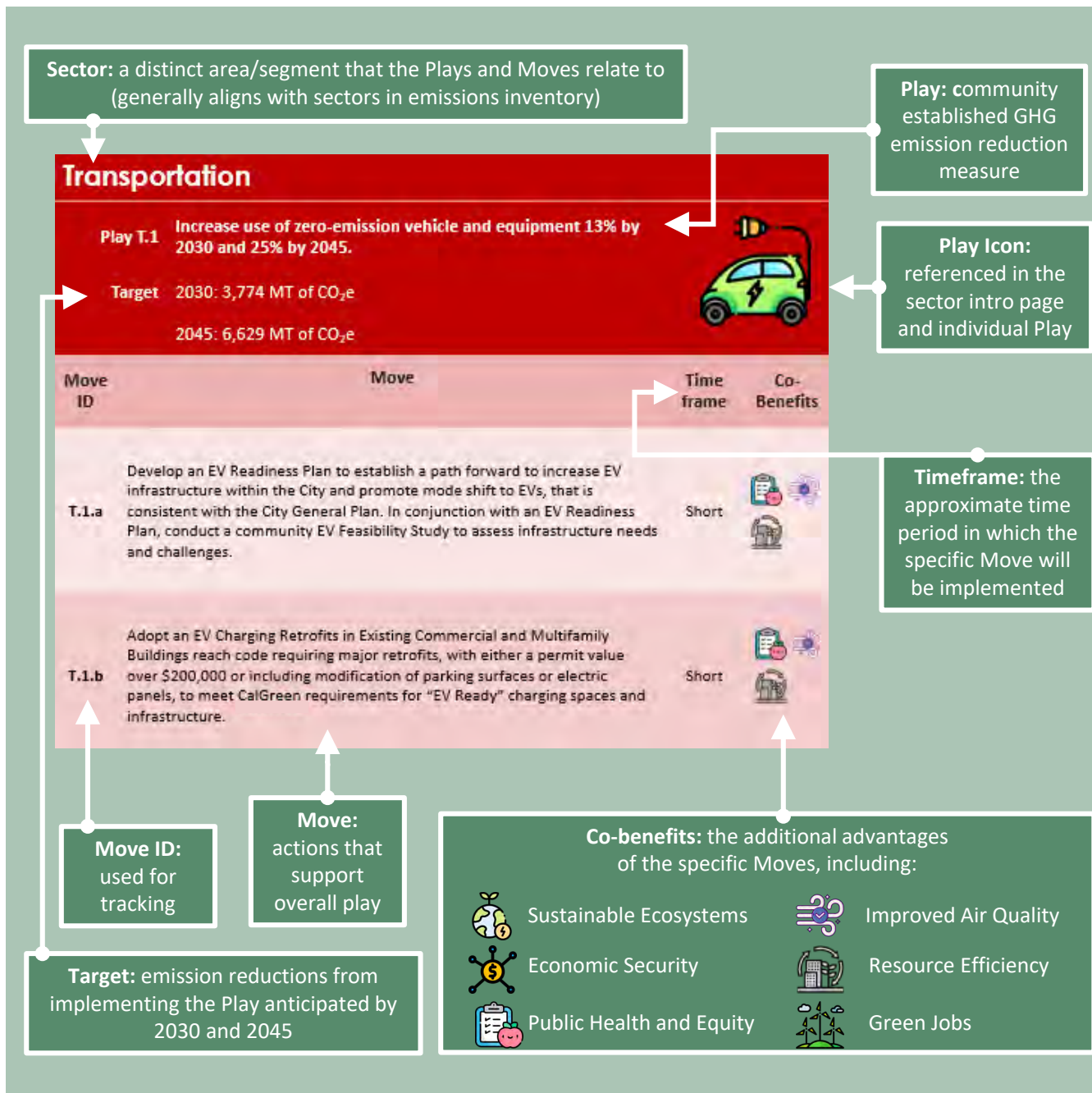
25. <https://ww2.energy.ca.gov/2019publications/CEC-500-2019-055/CEC-500-2019-055-F.pdf>

26. <https://rmi.org/insight/gas-stoves-pollution-health>

Electrification at Home









Reading the Game Plan



“Supportive” Plays and Moves

Do not directly result in quantitative greenhouse gas emission reductions, although they support the overall goals of the Climate Action Plan.

Table 6 Co-Benefit Summary

Icon	Co-Benefit	Description
	Sustainable Ecosystems	Promotes the ability of non-human aspects of South Pasadena and the world to thrive
	Economic Security	Contributes to the stability of financial resources for the City of South Pasadena and/or residents/business owners in the City
	Public Health and Equity	Supports the health and wellbeing of all members of the South Pasadena community, while also promoting equity
	Improved Air Quality	Reduces the presence of harmful substances in the local atmosphere
	Resource Efficiency	Improves the effective use of resources while minimizing waste
	Green Jobs	Creates or advances employment opportunities in sectors contributing to sustaining or improving environmental quality

Implementation Timeframes



Cornerstones of Climate Action Planning

The City of South Pasadena acknowledges that long-term sustainable change must occur to reduce our GHG emissions and limit our impact on climate change. This change will come from a collective commitment to reduce emissions through implementation of effective and equitable emission reduction strategies, such as the Plays and Moves outlined in this CAP. High-quality climate action planning is built on six essential components that result in implementable and effective GHG emission reduction strategies.

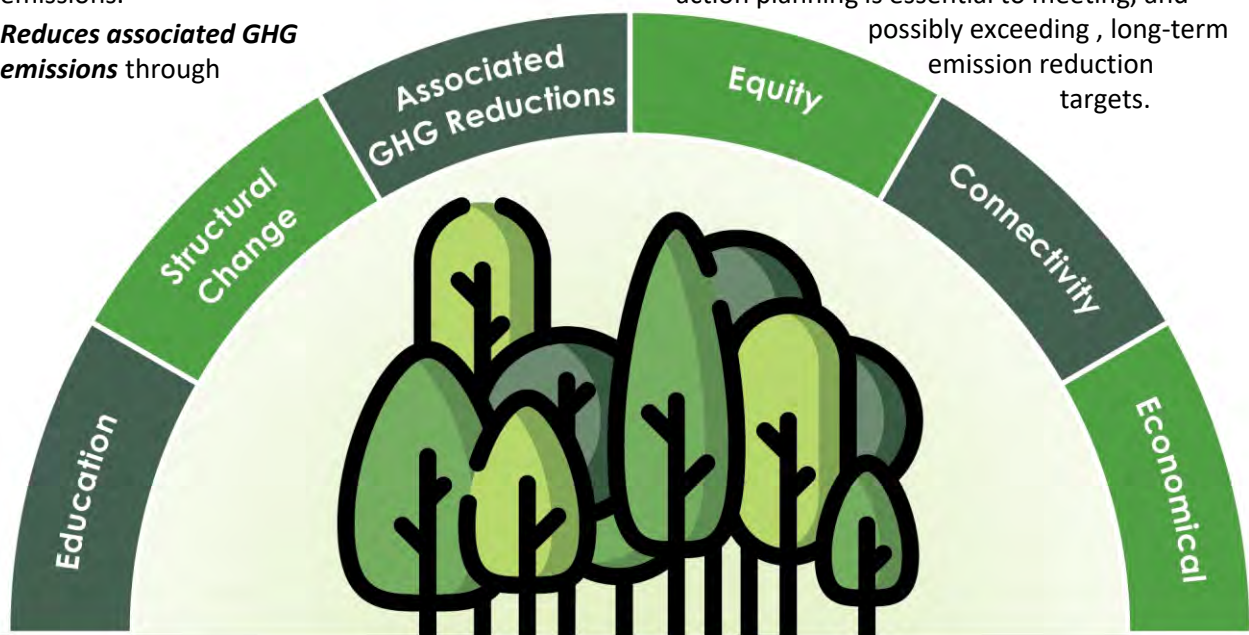
These six essential components, **education, structural change, associated GHG reductions, equity, connectivity, and economical design**, are the cornerstones that lay the foundation for transformational change and are essential to creating Plays that will engage the community and fulfill the emissions reductions goals laid out in the Plan. As an example, the Cornerstone Measure (C.1) embodies and illustrates the components of a well-designed strategy that can be implemented over the long-term. Specifically, C.1:

- ✓ Provides **education** to students, staff, and the community as part of the foundation to engage, inform, and empower all community members regarding decarbonization.
- ✓ Supports **structural change** by establishing a specific program to increase tree planting in South Pasadena, which will in-turn increase carbon sequestration and reduce GHG emissions.
- ✓ **Reduces associated GHG emissions** through

carbon sequestration, which is a key component to climate action planning as all sources of emissions will not be able to be reduced entirely and some sequestration will be required to reach the City’s long-term targets.

- ✓ Demonstrates **equitability** by working to identify cost-effective plants/trees that can be planted in the ground or remain potted for students living in rental/multi-family homes. It is essential that climate action planning consists of inclusive participation in decision making and equal benefits and impacts for the community.
- ✓ **Connects** the South Pasadena Unified School District with important tools to educate students, staff, and the community on ways to reduce GHG emissions. Connecting with various entities is an important part of this CAP because it helps establish sustainable progress by teaming with and empowering organizations and community groups that are uniquely skilled and positioned to implement emission reductions Plays and Moves.
- ✓ Outlines feasible and **economical** carbon reduction pathways and solutions, such as identifying grant opportunities and working with local nurseries to provide students with cost-effective California native plants/trees.

Implementing emission reduction Plays and Moves, such as C.1 and the others outlined in this CAP, that embody the cornerstones of high-quality climate action planning is essential to meeting, and possibly exceeding, long-term emission reduction targets.



Cornerstone



C.1



Engage South Pasadena youth in climate action and provide education on ways to live a sustainable lifestyle.

Cornerstone

Play C.1 Engage South Pasadena youth in climate change and provide education on ways to live a sustainable lifestyle.

Target 2030: 25 MT of CO₂e
2045: 78 MT of CO₂e

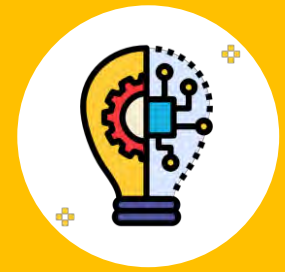


Move ID	Move	Time frame	Co-Benefits
C.1.a	Support South Pasadena Unified School District by providing students with information on climate change and the beneficial role of trees.	Short	
C.1.b	Utilize South Pasadena's historic neighborhoods to demonstrate to students the importance of mature urban trees in providing shade and reducing the urban heat island effect.	Short	
C.1.c	Identify grant funding opportunities and engage with local nurseries and tree planting programs to identify appropriate and cost-effective California native plants/trees that can be both planted in the ground or remain potted for students living in rental/multi-family homes.	Short	

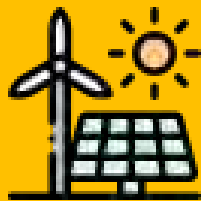
Sustainable Ecosystems
 Economic Security
 Public Health
 Improved Air Quality
 Resource Efficiency
 Green Jobs

Short- Mid- Long-term
 Now 3 years 5 years 10+ years
**Move added based on community feedback*

Energy



E.1



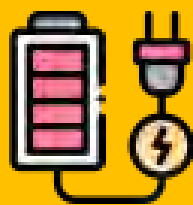
Maximize the usage of renewable power within the community, by continuing to achieve an opt-out rate lower than 4% for the the Clean Power Alliance.

E.2



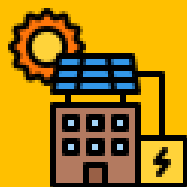
Electrify 100% of newly constructed buildings.

E.3



Electrify 5% of existing buildings by 2030 and 80% by 2045.

E.4



Develop and promote reduced reliance on natural gas through increased clean energy systems that build off of renewable energy development, production, and storage.

Energy

Play E.1 Maximize the usage of renewable power within the community, by continuing to achieve an opt-out rate lower than 4% for the Clean Power Alliance.

Target 2030: 13,408 MT of CO₂e
2045: 0 MT of CO₂e



Move ID	Move	Time frame	Co-Benefits
E.1.a	<p>Monitor progress and perform public outreach and education campaigns highlighting the benefits of 100% renewable energy, including:</p> <ul style="list-style-type: none"> ✓ Monitoring opt-out rates on an annual basis ✓ Tabling at community events ✓ Establishing an informational resource page on the City website ✓ Regular social media posts ✓ Energy bill inserts 	Short	

Play E.2 Electrify 100% of newly constructed buildings.



Target 2030: 228 MT of CO₂e
2045: 935 MT of CO₂e




Move ID	Move	Time frame	Co-Benefits
E.2.a	Develop a webpage and materials for display at City Hall promoting the benefits of electrification and resources that can assist with the fuel-switching process.	Short	
E.2.b	Provide financial and technical resources, including hosting workforce development trainings for installers and building owners/operators to discuss benefits and technical requirements of electrification.	Short	
E.2.c	Perform regular internal trainings with planners and building officials on current state decarbonization goals and incentives available for electric homes.	Short	

Sustainable Ecosystems
 Economic Security
 Public Health
 Improved Air Quality
 Resource Efficiency
 Green Jobs

Short- Mid- Long-term
 Now 3 years 5 years 10+ years
**Move added based on community feedback*


Move ID	Move	Time frame	Co-Benefits
E.2.d*	Provide education around cooking with electric appliances, including demonstrations from chefs and/or local restaurants, as available.	Short	
E.2.e	<p>Adopt an Electrification Readiness Reach Code per California Energy Commission (CEC) reach code requirements for all new buildings and accessory dwelling units which eliminates the piping of natural gas. In doing so the City will:</p> <ul style="list-style-type: none"> ✓ Engage with stakeholders, both internal stakeholders, such as City staff and officials, and external stakeholders, such as local developers regarding the purpose and impact of the reach code ✓ Conduct a cost effectiveness study ✓ Develop and draft an ordinance ✓ Conduct public hearings, public notices, and formally adopt the ordinance ✓ Submit the adopted ordinance to the California Energy Commission (CEC) 	Mid	



E.2.f	Adopt an ordinance that allows granting of minor allowances for certain site development standards when there is no practical ways to design a project to be all electric.	Mid	
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Play E.3 Electrify 5% of existing buildings by 2030 and 80% by 2045.

Target 2030: 1,184 MT of CO₂e

























2045: 19,355 MT of CO₂e



Move ID	Move	Time frame	Co-Benefits
E.3.a	Develop an existing building electrification permit tracking program to track annual progress in achieving the targeted electrification goal.	Short	
E.3.b	Keep an updated list of rebates and incentives available to residents who would like to convert their buildings to electric power.	Short	



**Move added based on community feedback*

Move ID	Move	Time frame	Co-Benefits
E.3.c	Provide education on the potential energy savings and benefits of electric heat pumps for water heating and space heating when permits for replacement are obtained.	Short	   
E.3.d	Work with Southern California Edison (SCE) and/or the Clean Power Alliance to provide rebates for residential replacement of natural gas-powered air and water heating appliances with electric-powered.	Short	   
E.3.e	Promote water heater, space heating, and appliance (electric stoves/dryers) replacement programs and incentives (residential) at time of construction permit.	Mid	   
E.3.f	Perform an existing buildings analysis in order to understand the potential for electrification retrofitting in South Pasadena and establish a roadmap for eliminating natural gas from existing buildings.	Mid	  
E.3.g	Establish a comprehensive, coordinated education campaign focused towards property owners, landlords, property management companies, and occupants for reducing the use of natural gas in homes and businesses. Establish a shared understanding of existing incentives for electric appliances and upgrades, and how to access them, including SCE incentive programs and rebates.	Mid	   
E.3.h	Perform a cost-effectiveness study for electrification retrofitting, including requirements for newly permitted HVAC/hot water heaters and other appliances to be electric.	Mid	   
E.3.i	Develop a best practices model based on the progress electrifying existing buildings in South Pasadena and outside of South Pasadena to significantly increase electrification post-2030.	Long	


Sustainable Ecosystems


Economic Security


Public Health


Improved Air Quality

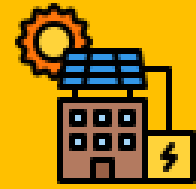

Resource Efficiency


Green Jobs

Short- Mid- Long-term
Now 3 years 5 years 10+ years

**Move added based on community feedback*

Play E.4 Develop and promote reduced reliance on natural gas through increased clean energy systems that build off of renewable energy development, production, and storage.



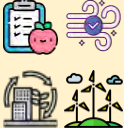



Target Supportive of 2030 Goals







Supportive of 2045 Goals

Move ID	Move	Time frame	Co-Benefits
E.4.a	Conduct a Feasibility Study to assess cost and applicable locations for installation of battery back-up systems or generators throughout the City.	Short	
E.4.b	Promote installation of storage technology in concert with renewable energy infrastructure through educational programs, outreach, and information provided via City platforms.	Short	
E.4.c	Conduct "micro-grid" Feasibility/Pilot Study in support of the General Plan.	Short	
E.4.d	In support of the General Plan, develop and implement a Solar Action Plan with a goal of meeting 50% of South Pasadena's power demand through solar by 2040.	Short	
E.4.e	In support of the 2018-2019 City Strategic Plan, develop a strategy and implementation schedule for the Renewable Energy Plan, after completion of the feasibility study.	Short	
E.4.f	Adopt a PV (Solar) Ordinance requiring newly constructed and majorly renovated multi-family and commercial buildings to install PV systems with an annual output greater or equal to 25% of buildings electricity demand.	Mid	



**Move added based on community feedback*

Move ID	Move	Time frame	Co-Benefits
E.4.g	Require all new structures or major retrofits to be pre-wired for solar panels.	Mid	
E.4.h	Work with various City departments to establish and streamline battery storage requirements to allow for easier implementation of these technologies throughout the City.	Mid	
E.4.i*	Work with home and business owners, including those in the historic districts, to identify and promote renewable energy demonstration projects to showcase the benefits.	Mid	
E.4.j*	Work with SCE and the CPA to develop a program and timeline for increasing resilience to power losses, including Public Safety Power Shutoffs (PSPS), and climate-driven extreme weather events for low-income, medically dependent, and elderly populations through installation of renewable energy and onsite energy storage with islanding capabilities, following appropriate project-level environmental review.	Mid	

 Sustainable Ecosystems
  Economic Security
  Public Health
  Improved Air Quality
  Resource Efficiency
  Green Jobs

Now — Short- (3 years) — Mid- (5 years) — Long-term (10+ years)

**Move added based on community feedback*

Transportation

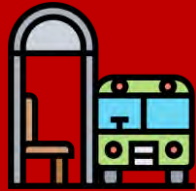


T.1



Increase zero-emission vehicle and equipment adoption to 13% by 2030 and 25% by 2045.

T.2



Implement programs for public and shared transit that decrease passenger car vehicle miles traveled 2% by 2030 and 4% by 2045.

T.3



Develop and implement an Active Transportation Plan to shift 3% of passenger car vehicle miles traveled to active transportation by 2030, and 6% by 2045.

Transportation

Play T.1 Increase zero-emission vehicle and equipment to 13% by 2030 and 25% by 2045.

Target 2030: 3,774 MT of CO₂e
2045: 6,629 MT of CO₂e



Move ID	Move	Time frame	Co-Benefits
T.1.a	Develop an EV Readiness Plan to establish a path forward to increase EV infrastructure within the City and promote mode shift to EVs that is consistent with the City General Plan. In conjunction with an EV Readiness Plan, conduct a community EV Feasibility Study to assess infrastructure needs and challenges.	Short	
T.1.b	Adopt an EV Charging Retrofits in Existing Commercial and Multifamily Buildings reach code requiring major retrofits, with either a permit value over \$200,000 or including modification of parking surfaces or electric panels, to meet CalGreen requirements for “EV Ready” charging spaces and infrastructure.	Short	
T.1.c	Streamline permit processes (city, county, state, utility) for electric vehicle charging infrastructure and alternative fuel stations.	Short	
T.1.d	Enhance promotion of public and private conversion to zero-emission vehicles through implementation of the City General Plan; including use of City events, social media, and the City website to educate on benefits of zero-emission vehicles and available incentives.	Short	
T.1.e	Establish an ordinance that restricts use of gas-powered lawn equipment, including leaf blowers, and provide information on the City website outlining available incentives.	Short	

Sustainable Ecosystems
 Economic Security
 Public Health
 Improved Air Quality
 Resource Efficiency
 Green Jobs




**Move added based on community feedback*

Move ID	Move	Time frame	Co-Benefits
T.1.f	<p>Adopt an EV Readiness Reach Code requiring new commercial construction to provide the minimum number of EV capable spaces to meet Tier 2 requirements (20% of total). In doing so the City will:</p> <ul style="list-style-type: none"> ✓ Engage with stakeholders, both internal stakeholders, such as local government staff and officials, and external stakeholders, such as local developers regarding the purpose and impact of the reach code ✓ Conduct a cost effectiveness study ✓ Develop and draft an ordinance ✓ Conduct public hearings, public notices, and formally adopt the ordinance ✓ Submit the adopted ordinance to the California Energy Commission (CEC) 	Short	
T.1.g	Earmark and identify additional funding for implementation of the EV Readiness Plan to include public charging infrastructure in key locations.	Short / Mid	
<p>Play T.2 Implement programs for public and shared transit that decrease passenger car vehicle miles traveled 2% by 2030 and 4% by 2045.</p> <p>Target 2030: 807 MT of CO₂e 2045: 1,399 MT of CO₂e</p>			
Move ID	Move	Time frame	Co-Benefits
T.2.a	Conduct a Feasibility and Community Interest Study on the four transit improvement options of the City's General Plan.	Short	
T.2.b	Pursue a community car, bike, or e-scooter "micro-transit" share pilot consistent with the City General Plan.	Short	
Sustainable Ecosystems Economic Security Public Health Improved Air Quality Resource Efficiency Green Jobs	<p>Short- Mid- Long-term Now 3 years 5 years 10+ years</p> <p><i>*Move added based on community feedback</i></p>		

Move ID	Move	Time frame	Co-Benefits
T.2.c	Conduct local transportation surveys to better understand the community's needs and motivation for traveling by car versus other alternatives such as bus or Metro Gold Line light rail. Use survey results to inform transit expansion and improvement projects.	Short / Mid	
T.2.d	Adopt a Transportation Demand Management (TDM) Plan for the City that includes a transit system focus. Provide incentives for implementation of TDM measures at local businesses and new developments.	Mid	
T.2.e	Facilitate transportation equity through targeted provision of programs that encourage minority, low-income, disabled, and senior populations to take transit, walk, bike, use rideshare or car share.	Mid	

Develop and implement an Active Transportation Plan to shift Play T.3 3% of passenger car vehicle miles traveled to active transportation by 2030, and 6% by 2045.

















Target 2030: 1,186 MT of CO₂e
2045: 2,015 MT of CO₂e



Move ID	Move	Time frame	Co-Benefits
T.3.a	Develop and adopt an Active Transportation Plan consistent with Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) that will identify funding strategies and policies for development of pedestrian, bicycle, and other alternative modes of transportation projects. Establish citywide events, outreach, educational programs, and platforms to promote active transportation in the community in support of the General Plan.	Short	
T.3.b	In conjunction with the City's Complete Streets Policy, conduct a Street/Intersection Study to identify streets and intersections that can be improved for pedestrians and bicyclists through traffic calming measures and/or where multi-use pathway opportunities exist to increase active transportation.	Short	



Short- Mid- Long-term
Now 3 years 5 years 10+ years
**Move added based on community feedback*

Move ID	Move	Time frame	Co-Benefits
T.3.c	Periodically review and update the City's Bicycle and Pedestrian Network Map and post throughout City.	Short	  
T.3.d*	Work with South Pasadena Active, Active San Gabriel Valley (ActiveSGV), and/or Metro to develop programs and classes to teach and promote bicycle riding education and safety to residents of all ages and skill levels, as well as educate drivers.	Short	  
T.3.e	Conduct a nexus study and develop an ordinance requiring payment of fees from development projects to implement safe active transportation routes and infrastructure citywide.	Mid	   
T.3.f	Amend zoning code to require installation of bike stalls or lockers at new developments, "mobility hubs", and during change of use of existing buildings, consistent with the General Plan.	Mid	  
T.3.g	Adopt a Trip Reduction Ordinance that includes requirements in the Zoning Code to require end-of-trip facilities for cyclists (e.g., showers, bike repair kiosks, and lockers) in new, non-residential building projects of a specified size.	Mid	  

 Sustainable Ecosystems
  Economic Security
  Public Health
  Improved Air Quality
  Resource Efficiency
  Green Jobs

Now — Short- (3 years) — Mid- (5 years) — Long-term (10+ years)

**Move added based on community feedback*

Water



W.1



















Reduce per capita water consumption by 10% by 2030 and 35% by 2045.

Water

Play W.1 Reduce per capita water consumption by 10% by 2030 and 35% by 2045.

Target 2030: 414 MT of CO₂e
These emissions not added to the total because they are accounted for in Play E-1.
 2045: 0 MT of CO₂e



Move ID	Move	Time frame	Co-Benefits
W.1.a	Continue to enforce the Model Water Efficient Landscapes Ordinance.	Short	 
W.1.b	Work with the Los Angeles County Sanitation District (LACSD) and/or the Upper San Gabriel Valley Municipal Water District to bring recycled water lines and infrastructure to the City.	Short	  
W.1.c	In conjunction with the Downtown Specific Plan Action and City General Plan, adopt an ordinance restricting the use of potable water for non-potable uses and requiring greywater capture for land uses that are excess water users (e.g. golf courses, car washes, large fields, etc.).	Short	 
W.1.d	Implement Plays 1 through 4 under Goal II of the Green Action Plan on the provided implementation timeline, aiming to provide education and promotion of greywater systems. (See the City's Green Action Plan for more information).	Short	  
W.1.e	In conjunction with Move II.1.1 of the City Green Action Plan, develop a Recycled Water Use Master Plan that identifies access to recycled water and quantity of recycled water available to the City, as well as establishes an implementation plan. The implementation plan shall identify land use types (i.e., landscaping, gold courses, fields) and specific projects that will switch from potable to recycled water use allowing for a goal of 20% of City's potable water use to be replaced with recycled water.	Short	 
W.1.f	Implement 100% renewable power for all pumping and treatment of water.	Short	   

 Sustainable Ecosystems
  Economic Security
  Public Health
  Improved Air Quality
  Resource Efficiency
  Green Jobs

● Short- ● Mid- ● Long-term
 Now 3 years 5 years 10+ years
**Move added based on community feedback*

Solid Waste



SW.1



Implement and enforce SB 1383 organics and recycling requirements to reduce landfilled organics waste emissions 50% by 2022 and 75% by 2025.

SW.2



Reduce residential and commercial waste sent to landfills by 50% by 2030 and 100% by 2045.

Solid Waste

Play SW.1 Implement and enforce SB 1383 organics and recycling requirements to reduce landfilled organics waste emissions 50% by 2022 and 75% by 2025.

Target 2030: 1,702 MT of CO₂e
2045: 1,764 MT of CO₂e



Move ID	Move	Time frame	Co-Benefits
SW.1.a	Adopt procurement policies to comply with SB 1383 requirements for jurisdictions to purchase recovered organic waste products.	Short	
SW.1.b	Adopt an ordinance requiring compliance with SB 1383. Ensure ordinances established through the City General Plan are consistent with SB 1383 requirements; and revise ordinances if necessary.	Short	
SW.1.c	Adopt an Edible Food Recovery Ordinance for edible food generators, food recovery services, or organization that are required to comply with SB 1383.	Short	
SW.1.d	Partner with the City's waste hauler, to provide organic waste collection and recycling services to all commercial and residential generators of organic waste.	Short	
SW.1.e	Adopt an ordinance requiring all residential and commercial customers to subscribe to an organic waste collection program and/or report self-hauling or backhauling of organics.	Short	
SW.1.f	Conduct a Feasibility Study and prepare an action plan to ensure edible food reuse infrastructure is sufficient to accept capacity needed to recover 20% of edible food disposed or identify proposed new or expanded food recovery capacity.	Short	
SW.1.g	Establish an education and outreach program for school children and adults around food waste prevention, nutrition education, and the importance of edible food recovery. Support City Green Action Plan Play III identified educational goals (Move III.1.3., Move III.1.4., Move III.1.6., Move III.2.1, Move III. 3.3, and Move III.4.2) through an established educational program.	Mid	



Sustainable Ecosystems



Economic Security



Public Health



Improved Air Quality



Resource Efficiency















Green Jobs



**Move added based on community feedback*

Move ID	Move	Time frame	Co-Benefits			
SW.1.h	Establish an edible food recovery program supporting the City General Plan and the City Green Action Plan Move III.1.2 to minimize food waste.	Short / Mid				
SW.1.i	Adopt an ordinance or enforceable mechanism to regulate haulers collecting organic waste, including collection program requirements and identification of organic waste receiving facilities.	Short / Mid				
SW.1.j	Partner with City waste services to: <ul style="list-style-type: none"> ✓ Ensure organic waste collection from mixed waste containers are transported to a high diversion organic waste processing facility. ✓ Provide quarterly route reviews to identify prohibited contaminants potentially found in containers that are collected along route. ✓ Clearly label all new containers indicating which materials are accepted in each container, and by January 1, 2025, place or replace labels on all containers. 	Mid				
Play SW.2	<p>Reduce residential and commercial waste sent to landfills by 50% by 2030 and 100% by 2045.</p> <p>Target 2030: 415 MT of CO₂e</p> <p>2045: 859 MT of CO₂e</p>					
Move ID	Move	Time frame	Co-Benefits			
SW.2.a	Develop and implement a Zero Waste Plan in order to reach South Pasadena's goal of zero waste by 2040.	Short				
SW.2.b*	Provide ongoing education to residents, business owners, and South Pasadena School District regarding waste reduction, composting, and recycling.	Short				
 Sustainable Ecosystems	 Economic Security	 Public Health	 Improved Air Quality	 Resource Efficiency	 Green Jobs	 <p><i>*Move added based on community feedback</i></p>

Move ID	Move	Time frame	Co-Benefits
SW.2.c	Increase reuse, recycling, and composting at temporary public events by mandating the installation of public recycling and composting containers and collection service; and encouraging reusable food ware, when relevant, according to the California State Retail Food Code.	Short	 
SW.2.d	Develop a waste department or working group to enhance recycling and composting outreach and provide technical assistance or information in support of City Green Action Plan Move III. Additionally, implement and share a Recycle and Reuse Directory through City platforms, in support of Green Action Plan Move I.2.5.	Short	  
SW.2.e	Adopt an ordinance requiring compliance with Sections 4.410.2, 5.410.1, 4.408.1, and 5.408.1 of the California Green Building Standards Code related to construction of buildings with adequate space for recycling containers and construction and demolition (C&D) recycling.	Short	
SW.2.f	Require construction sites to separate waste for proper diversion and reuse or recycling.	Short	
SW.2.g	Develop and implement a Waste Stream Education Program targeting property managers of multi-family residences and the commercial sector, in support of Goal III of the City Green Action Plan.	Short	
SW.2.h	Develop policies to mandate/encourage reduction of waste and reuse in the food industry (e.g. facilities serving prepared food and prepackaged food; home meal delivery services), hospitality industry, and other commercial industries. Efforts may include developing ordinances for food service ware and a ban on single-use individual toiletry bottles in hotels/motels, grant/discount programs for switching to reusables, fast food champion pilot project, and working with home meal delivery services (e.g., Blue Apron), etc. to explore opportunities to reduce single-use packaging and encourage reuse.	Short	 
SW.2.i	Encourage reusable foodware; or if reusable foodware is not a feasible option, explore opportunities to mandate/encourage a switch to more environmentally friendly alternatives for various products in the commercial industry, when relevant.	Short	 



Sustainable Ecosystems


Economic Security


Public Health


Improved Air Quality


Resource Efficiency


Green Jobs



**Move added based on community feedback*

Carbon Sequestration



CS.1



Increase carbon sequestration through increased tree planting and green space.

Carbon Sequestration

Play CS.1 Increase carbon sequestration through increased tree planting and green space.

Target 2030: 19 MT CO₂e

2045: 39 MT CO₂e



Move ID	Move	Time frame	Co-Benefits
CS.1.a	Identify and map public spaces that can be converted to green space, including public parking that can be converted to parklets, freeway airspace that can be made into green space, vertical walls that can be planted with vines, and rooftops of public buildings that can be developed into gardens.	Short	
CS.1.b	Adopt a Greenscaping Ordinance that has a street tree requirement for all zoning districts, has a shade tree requirement for new development, requires greening of parking lots, and increases permeable surfaces in new development.	Short	
CS.1.c	Prepare and adopt an Urban Forest Management Plan for the City that includes an inventory of existing trees, identifies future tree planting opportunities, and a climate-ready tree palette, as well as ongoing operations and maintenance needs.	Short / Mid	
CS.1.d	Adopt a standard policy and set of practices for expanding urban tree canopy and placing vegetative barriers between busy roadways and developments to reduce exposure to air pollutants from traffic.	Short / Mid	



Sustainable Ecosystems



Economic Security



Public Health



Improved Air Quality



Resource Efficiency



Green Jobs



**Move added based on community feedback*

Municipal



M.1



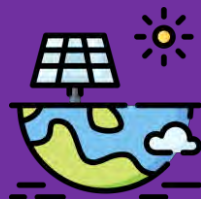
Reduce carbon intensity of City operations.

M.2



Electrify the municipal vehicle fleet and mobile equipment.

M.3



Increase City's renewable energy production and energy resilience.

Municipal

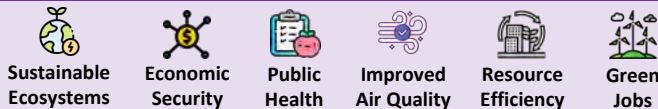
Play M.1 Reduce carbon intensity of City operations.

Target 2030: 188 MT of CO₂e

2045: 188 MT of CO₂e



Move ID	Move	Time frame	Co-Benefits
M.1.a	As recommended in the 2016 Renewable Energy Council Report, complete energy audits for all City facilities and implement all feasible recommendations for fuel switching and efficiency upgrades.	Short	
M.1.b	As recommended in the 2016 Renewable Energy Council Report, purchase renewable natural gas (RNG) for applicable City fleet vehicles.	Short	
M.1.c*	Establish an employee rideshare program.	Short	
M.1.d	As recommended in the 2016 Renewable Energy Council Report, install PV solar systems at the City Hall and at Wilson Reservoir.	Mid	
M.1.e	Adopt retrofitting policy for City owned buildings such that energy efficient and electrification retrofits are incorporated into City buildings as they become available.	Mid	
M.1.f	Develop a policy for the City which would require all new building RFP's to include life cycle costing over 30 years and tie this directly to energy consumption and building electrification. This would include the buildings operational and maintenance costs and ensure that the City has the most cost effective (and sustainable) building possible.	Mid / Long	
M.1.g	As recommended in the 2016 Renewable Energy Council Report, invest all savings from City energy efficiency projects into a new revolving green fund that can be used to fund additional energy efficiency and GHG reduction projects.	Long	



*Move added based on community feedback

Play M.2 Electrify the municipal vehicle fleet and mobile equipment.



Target 2030: 23 MT of CO₂e

2045: 23 MT of CO₂e

Move ID	Move	Time frame	Co-Benefits
M.2.a	Develop a suite of transportation demand management tools to incentivize alternative transportation methods for employees, including telecommute options.	Short	
M.2.b	Provide bicycles and bicycle storage for employees to use during work hours for short business or personal trips.	Short	
M.2.c	Develop and adopt a policy to apply lifecycle assessment to all new vehicle and equipment purchases.	Mid	
M.2.d	Implement the City Fleet Alternative Fuel Conversion Policy developed under the City General Plan, electrifying the City vehicle fleet and using it to encourage residents to convert as well.	Mid	
M.2.e	Install EV charging stations at municipal buildings.	Mid	

Sustainable Ecosystems
 Economic Security
 Public Health
 Improved Air Quality
 Resource Efficiency
 Green Jobs

Short- (Now) Mid- (3 years) Long-term (5 years, 10+ years)

**Move added based on community feedback*

Play M.3 **Increase City's renewable energy production and energy resilience.**

Target Supportive of 2030 Goals

Supportive of 2045 Goals



Move ID	Move	Time frame	Co-Benefits
M.3.a	Conduct a Feasibility Study to determine which City buildings would serve as ideal resilience centers including solar and battery installations.	Short	
M.3.b	Convert all streetlights to light emitting diode (LED) bulbs.	Short	
M.3.c	Work with the CPA to identify and develop local solar projects to connect to the grid.	Mid	
M.3.d	Install solar arrays at facilities that currently do not have solar arrays and work with emergency services to add solar and battery storage at priority locations. Review options for potential to combine multiple buildings into micro-grid systems.	Mid	
M.3.e*	Explore opportunities and partnerships to develop renewable-powered fuel cell micro-grids to provide back-up or primary power for critical facilities such as facilities providing essential services (e.g. water pumping facilities) and schools as a clean alternative to diesel generators.	Long	

Sustainable Ecosystems
 Economic Security
 Public Health
 Improved Air Quality
 Resource Efficiency
 Green Jobs

Short- Mid- Long-term
 Now 3 years 5 years 10+ years
**Move added based on community feedback*

Adaptation





Even if all GHG emission generating sources stopped producing and emitting GHG emissions today, the current concentration of emissions in the atmosphere would continue to impact the climate and City of South Pasadena. Specifically, as mentioned in the *Introduction*, the City of South Pasadena is likely to increasingly experience extreme heat events, reductions in fresh-water supply, and increased average temperatures.²⁷ These impacts will have heterogeneous effects on the City's residents, business owners, and visitors; infrastructure; environment; and economy and, therefore, adaptive measures must be taken to increase the City's resilience. This section connects the Plays and Moves presented in this CAP to measures to further adapt and increase the City's resilience to climate change.



Junior High School Bell Tower

Increased Average Temperatures and Extreme Heat

As previously mentioned, the City of South Pasadena is expected to see increasing trends in extreme-heat days. This increase in extreme heat days coupled with more heat waves will result in longer heat waves.²⁸ Extreme

27. <https://www.ipcc.ch/sr15/chapter/chapter-3/>

28. <https://cal-adapt.org/tools/annual-averages/>

heat events will have greater effects on populations such as the homeless, aging adults, outdoor workers, people with chronic illnesses, and pregnant women. Homeless people may not have access to indoor spaces or even shade to escape these temperatures. Whereas, aging adult populations and those who are chronically ill have a reduced ability to adapt to temperature changes and are therefore more susceptible to heat strokes and other serious heat-induced illnesses. To help increase the City's resilience to these events, there are long-term preventative strategies such as strategic planting of trees and vegetation cover, improvements in the built environment, and rebate and home-cooling programs, which are included in the various Plays and Moves. For example, trees provide shade and reduce temperatures through evapotranspiration. These benefits from strategically planted trees and vegetation can help reduce peak summer temperatures by 2-9°F.²⁹ Increased tree cover and vegetation will help mitigate the effects of urban heat islands, which include areas in South Pasadena that experience compounded heating due to built environments absorbing more heat than rural communities.³⁰

Reductions in Fresh Water

As weather patterns continue to change, more precipitation is likely to occur as rain which will affect regional snowpack and therefore South Pasadena's water resources. Changes in precipitation coupled with increased temperatures can cause periods of abnormally dry weather, further affecting water-supply. While many of these issues occur at a greater regional and even global scale, the City and community can take steps to conserve water at a local level. Planting drought-tolerant landscaping can lessen the demand for irrigation and help decrease stormwater runoff. At home, residents can install high-efficiency toilets and showerheads, only run full loads of laundry and dishes, and take shorter showers; these small changes can save hundreds of gallons of water a month. The community must be

educated on these practices to reap the water saving benefits and the City government will play a role in this education.

Air Pollution

The City's urban environment and location decreases the direct risk of wildfire. However, the wildland interface in the hillside area, specifically the section of the City located south of Monterey Road and west of Meridian Avenue, is at risk to wildfire.³¹ South Pasadena has robust fire-readiness efforts detailed in the General Plan Safety Element. Nonetheless, if a wildfire were to occur in this area, the air quality would significantly decrease and greatly affect human health, especially the respiratory systems of young children, older adults, homeless communities, and those with chronic illnesses. The combustion of fossil fuels, especially within the transportation sector, also leads to decreased local air quality and health consequences for local communities.

If temperatures continue to rise as predicted in the Cal-Adapt scenarios, there will be more days with weather conducive to ozone formation, leading to reduced air quality and increased health problems. To help improve local air quality, community members can opt to bike, take public transit, or carpool instead of taking their personal vehicle.³² All of the City's Moves detailed under Transportation, Play T.1, aim to increase the use of zero-emission vehicles and equipment which will help increase local air quality. The transportation section incentivizes the transition to electric vehicles by increasing charging stations, conducting an EV feasibility study, exploring ordinances on gas-powered lawn equipment, and developing an Active Transportation Plan, to name a few, which will all lead to increased air quality.

29. <https://www.osti.gov/biblio/10180633>

30. <https://www.epa.gov/heatislands/learn-about-heat-islands>

31. <https://www.southpasadenaca.gov/home/showdocument?id=18657>

32. <https://ww2.arb.ca.gov/our-work/topics/simple-solutions-improve-air-quality>

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Keeping Score

Implementation and the Next Steps





Implementation

The Team

This Climate Action Plan is the City of South Pasadena's roadmap to achieving the City's 2030 target and state mandated goal of 40 percent below 1990 levels by 2030, with the ultimate goal of achieving carbon neutrality by 2045. While substantial evidence suggests that the Plays and Moves outlined in this CAP will achieve the 2030 targets, uncertainty increases over time (see Appendix D for a discussion on the substantial evidence used to quantify the emission reductions attributable to each Play). The adoption rates of each Play and Move, costs of technology, legislative environment, and benefits assumed in this report will continue to evolve over time. Therefore, this CAP should be viewed as a strategic framework that will be reevaluated on a tri-annual basis. This section outlines how the City will implement the actions included in the CAP, monitor progress, and prepare updates over time.

Achieving long-term emission reduction goals will require participation from everyone. The City can update building codes, provide electric vehicle charging infrastructure and designate bike lanes, but it is up to the broader community to embrace these new services and technologies and gain the benefits outlined in this Plan. Making meaningful progress towards reducing our GHG emissions starts with City leadership, through policies, education, ordinances, and investments that act as catalysts for change throughout the wider community. Community partners like the Clean Power Alliance, Los Angeles Metro, and utility providers, then support these policies with incentives and programs. Businesses can then leverage these policies to provide new services and adopt more sustainable practices. Finally, residents and visitors that have been provided with the incentives and education, can actively work together to reduce our impacts and decrease GHG emissions. As policies and programs are developed and infrastructure is constructed, City staff will continue to engage the community, provide informative progress updates, and create ongoing opportunities to solicit community feedback. The City looks forward to working together to reduce our long-term impact from GHG emissions through new/updated programs and opportunities that will help meet the GHG emissions reduction goals. Thanks for being part of our team!

Figure 11 CAPDash – Implementation and Monitoring Tool



CAPDash

CAPDash is a customizable, web-based dashboard developed by Rincon Consultants, Inc. that allows the City of South Pasadena to track the annual emission reductions achieved through implementation of each Play and meet the requirements of CEQA Section 15183.5(b) (see Figure 11). The City will conduct annual implementation monitoring of the GHG emissions reduction measures and report out on this progress to City Council every third year beginning in 2023. The process for monitoring and quantifying measure implementation status relies on key target metrics identified for each of the Plays and Moves. By committing to annual monitoring of CAP implementation progress and adjusting where necessary, South Pasadena will rise to meet the local and global imperative of reducing greenhouse gas emissions. In the process of meeting that challenge,

we will benefit from the supplemental health, economic, resilience, and other co-benefits of the GHG emissions reduction measures. This game plan marks another major milestone in the City's commitment to a sustainable future.

Funding Strategy

This Plan focuses first and foremost on Plays and Moves that are either no or low-cost to the community. The single largest GHG emissions reduction will come from a communitywide switch to the Clean Power Alliance's carbon-free power portfolio at very low cost to the community, which occurred in 2019. Not only will this single Play reduce GHG emissions, but it will also provide the foundation for the City's long-term GHG emissions reduction plan. Other Plays and Moves, such as electrification of existing buildings may not yet be feasible for everyone. However, more and more resources are becoming available and being provided

Figure 12 Funding Strategy Principles



Equity

Limit the imposition of new costs on the segments of the community that have the least ability to shoulder increased cost; target assistance to low- and moderate-income households



Cost-Effectiveness

Prioritize the use of available local resources to implement the Plays and Moves that have the highest GHG reduction potential; when possible, the Plays and Moves in the CAP will generate long-term cost savings that will repay and even generate a return on investment (ROI)



Leveraging Local Resources

Leverage General Fund resources and in-kind staff time to aggressively seek grants (such as the grant that funded this CAP), matching funds, in-kind contributions, and other resources from state, federal, and philanthropic sources to help pay for actions and limit the cost to the City, local residents, and businesses

by the state, local government, and utilities to help fund this transition. The City will seek grants, matching funds, in-kind contributions, and other resources to help pay for Plays and Moves and limit the cost of implementation to the City and our collective community.

Full implementation of the City's CAP will require investments on the part of the City, local households and property owners, and commercial businesses. In most cases, the expenditures will not only help to reduce GHG emissions but will also bring other valuable co-benefits as described in the *Plays and Moves*. The CAP will be implemented over time. Funding sources for some actions can be identified at the outset, while the best means to fund other actions will be determined at the time the City is ready to implement them, depending on the resources available. Three primary principles can help the City determine the best approach to funding various Plays and Moves, including: equity, cost-effectiveness, and ability to leverage local resources, as outlined in Figure 12. An overview of funding sources can be found in Table 7³³ and a detailed Funding Strategy is provided in Appendix E.












Shown in Table 7 is the estimated cost for each Move and combined for each Play based on a conservative, high-level estimate. For example, Play C.1 has three Moves, that are each estimated to cost \$10,000 or less. Therefore, it is conservatively assumed that the entire Play could cost up to approximately \$30,000.

Going the Distance

If the City has not made sufficient progress on GHG emissions reduction goals by the next triennial review, a CAP update may be required to establish new or more robust emission reduction goals to increase emissions reductions and maintain status as a CEQA-qualified GHG emissions reduction plan. The CAP update could require additional implementation of the existing actions and/or additional actions such as shifting incentive and educational programs to mandatory requirements. A complete CAP update for post-2030 emissions reductions targets will be required, and City staff shall begin this effort by 2029, during the third triennial review.

33. It is important to note that the costs shown in Table 7 outline the full implementation of each Move and are not representative of an annual cost.

Table 7 Funding Matrix

Move	Total Cost	City Lead	Potential Funding Source
Play C.1 Engage South Pasadena youth in climate action and provide education on ways to live a sustainable lifestyle.			~ \$30k
C.1.a Support South Pasadena Unified School District by providing students with information on climate change and the beneficial role of trees.	\$	 	U.S. EPA - Environmental Education Grants
C.1.b Utilize South Pasadena’s historic neighborhoods to demonstrate to students the importance of mature urban trees in providing shade and reducing the urban heat island effect.	\$	 	U.S. EPA - Environmental Education Grants
C.1.c Identify grant funding opportunities and engage with local nurseries and tree planting programs to identify appropriate and cost-effective California native plants/trees that can be both planted in the ground or remain potted for students living in rental/multi-family homes.	\$	 	General Fund
Play E.1 Maximize the usage of renewable power within the community, by continuing to achieve an opt-out rate lower than 4% for the Clean Power Alliance.			~ \$10k
E.1.a Monitor progress and perform public outreach and education campaigns highlighting the benefits of 100% renewable energy, including: <ul style="list-style-type: none"> ✓ Monitoring opt-out rates on an annual basis ✓ Tabling at community events ✓ Establishing an informational resource page on the City website ✓ Regular social media posts ✓ Energy bill inserts 	\$		General Fund
Play E.2 Electrify 100% of newly constructed buildings.			~ \$120k
E.2.a Develop a webpage and materials for display at City Hall promoting the benefits of electrification and resources that can assist with the fuel-switching process.	\$	 	General Fund
E.2.b Provide financial and technical resources, including hosting workforce development trainings for installers and building owners/operators to discuss benefits and technical requirements of electrification.	\$ \$		Foothill Workforce Development Board – job training
E.2.c Perform regular internal trainings with planners and building officials on current state decarbonization goals and incentives available for electric homes.	\$		General Fund

 <\$10k Minimal Cost
  \$10k to \$50k Low Cost
  \$50k to 100k Medium Cost
  \$100k+ High Cost
  Public Works
  Finance
  Management Services
  Community Services
  Planning and Building

Move	Total Cost	City Lead	Potential Funding Source
E.2.d Provide education around cooking with electric appliances, including demonstrations from chefs and/or local restaurants, as available.	\$		General Fund
E.2.e Adopt an Electrification Readiness Reach Code per California Energy Commission (CEC) reach code requirements for all new buildings and accessory dwelling units which eliminates the piping of natural gas. In doing so the City will: <ul style="list-style-type: none"> ✓ Engage with stakeholders, both internal stakeholders, such as City staff and officials, and external stakeholders, such as local developers regarding the purpose and impact of the reach code ✓ Conduct a cost effectiveness study ✓ Develop and draft an ordinance ✓ Conduct public hearings, public notices, and formally adopt the ordinance ✓ Submit the adopted ordinance to the California Energy Commission (CEC) 	\$ \$		Grant Funding
E.2.f Adopt an ordinance that allows granting of minor allowances for certain site development standards when there is no practical ways to design a project to be all electric	\$ \$		Grant Funding
Play E.3 Electrify 5% of existing buildings by 2030 and 80% by 2045.			~ \$195k
E.3.a Develop an existing building electrification permit tracking program to track annual progress in achieving the targeted electrification goal.	\$		General Fund
E.3.b Keep an updated list of rebates and incentives available to residents who would like to convert their buildings to electric power.	\$	 	General Fund
E.3.c Provide education on the potential energy savings and benefits of electric heat pumps for water heating and space heating when permits for replacement are obtained.	\$	 	General Fund
E.3.d Work with Southern California Edison (SCE) and/or the Clean Power Alliance to provide rebates for residential replacement of natural gas-powered air and water heating appliances with electric-powered.	\$		1. General Fund 2. SCE 3. Clean Power Alliance for rebate funding
E.3.e Promote water heater, space heating, and appliance (electric stoves/dryers) replacement programs and incentives (residential) at time of construction permit.	\$	 	General Fund
E.3.f Perform an existing buildings analysis in order to understand the potential for electrification retrofitting in South Pasadena and establish a roadmap for eliminating natural gas from existing buildings.	\$ \$ \$ \$ \$ \$ \$ \$		California Energy Commission – Energy Partnership Program

\$ <\$10k Minimal Cost
\$ \$ \$ \$ \$10k to \$50k Low Cost
\$ \$ \$ \$ \$50k to 100k Medium Cost
\$ \$ \$ \$ \$100k+ High Cost
 Public Works
 Finance
 Management Services
 Community Services
 Planning and Building

Move	Total Cost	City Lead	Potential Funding Source
E.3.g Establish a comprehensive, coordinated education campaign focused towards property owners, landlords, property management companies, and occupants for reducing the use of natural gas in homes and businesses. Establish a shared understanding of existing incentives for electric appliances and upgrades, and how to access them, including SCE incentive programs and rebates.	💰 💰	 	1. SCE/CPA or SCG – rebates, incentives, and financing programs 2. U.S. EPA - Environmental Education Grants
E.3.h Perform a cost-effectiveness study for electrification retrofitting, including requirements for newly permitted HVAC/hot water heaters and other appliances to be electric.	💰		California Energy Commission
E.3.i Develop a best practices model based on the progress electrifying existing buildings in South Pasadena and outside of South Pasadena to significantly increase electrification post-2030.	💰		Grant Funding
Play E.4 Develop and promote reduced reliance on natural gas through increased clean energy systems that build off of renewable energy development, production, and storage.			~ \$ 360k
E.4.a Conduct a Feasibility Study to assess cost and applicable locations for installation of battery back-up systems or generators throughout the City.	💰 💰		California Energy Commission (CEC) - Energy Partnership Program
E.4.b Promote installation of storage technology in concert with renewable energy infrastructure through educational programs, outreach, and information provided via City platforms.	💰		General Fund
E.4.c Conduct "micro-grid" Feasibility/Pilot Study in support of the General Plan.	💰 💰		California Energy Commission (CEC) - Energy Partnership Program
E.4.d In support of the General Plan, develop and implement a Solar Action Plan with a goal of meeting 50% of South Pasadena's power demand through solar by 2040.	💰 - 💰 💰 - 💰		Private Solar Dealers/Installers
E.4.e In support of the 2018-2019 City Strategic Plan, develop a strategy and implementation schedule for the Renewable Energy Plan, after completion of the feasibility study.	💰 💰	 	Grant Funding
E.4.f Adopt a PV (Solar) Ordinance requiring newly constructed and majorly renovated multi-family and commercial buildings to install PV systems with an annual output greater or equal to 25% of buildings electricity demand.	💰 💰		Grant Funding
E.4.g Require all new structures or major retrofits to be pre-wired for solar panels.	💰 💰		General Fund



 <\$10k
 Minimal Cost



 \$10k to \$50k
 Low Cost



 \$50k to 100k
 Medium Cost



 \$100k+
 High Cost













 Public Works


 Finance


 Management Services


 Community Services






 Planning and Building



Move	Total Cost	City Lead	Potential Funding Source
E.4.h Work with various City departments to establish and streamline battery storage requirements to allow for easier implementation of these technologies throughout the City.	⌘	 	General Fund
E.4.i Work with home and business owners, including those in the historic districts, to identify and promote renewable energy demonstration projects to showcase the benefits.	⌘	 	General Fund
E.4.j Work with SCE and the CPA to develop a program and timeline for increasing resilience to power losses, including Public Safety Power Shutoffs (PSPS), and climate-driven extreme weather events for low-income, medically dependent, and elderly populations through installation of renewable energy and onsite energy storage with islanding capabilities, following appropriate project-level environmental review.	⌘ ⌘ ⌘ - ⌘ ⌘ ⌘ ⌘		1. SCE 2. CPA
Play T.1 Increase zero-emission vehicle and equipment adoption to 13% by 2030 and 25% by 2045.			~ \$130k
T.1.a Develop an EV Readiness Plan to establish a path forward to increase EV infrastructure within the City and promote mode shift to EVs that is consistent with the City General Plan. In conjunction with an EV Readiness Plan, conduct a community EV Feasibility Study to assess infrastructure needs and challenges.	⌘ ⌘		1. Moving California, California Climate Investments - Sustainable Transportation Equity Project (STEP) 2. CARB- Clean Vehicle Rebate Program
T.1.b Adopt an EV Charging Retrofits in Existing Commercial and Multifamily Buildings reach code requiring major retrofits, with either a permit value over \$200,000 to meet CalGreen requirements for “EV Ready” charging spaces and infrastructure.	⌘ ⌘	 	1. Moving California, California Climate Investments - STEP 2. CAL eVIP - Southern California Incentive Project (SCIP)
T.1.c Streamline permit processes (city, county, state, utility) for electric vehicle charging infrastructure and alternative fuel stations.	⌘		General Fund
T.1.d Enhance promotion of public and private conversion to zero-emission vehicles through implementation of the City General Plan; including use of City events, social media, and the City website to educate on benefits of zero-emission vehicles and available incentives.	⌘		General Fund
T.1.e Establish an ordinance that restricts use of gas-powered lawn equipment, including leaf blowers, and provide information on the City website outlining available incentives.	⌘ ⌘		General Fund

 <\$10k Minimal Cost
 \$10k to \$50k Low Cost
 \$50k to 100k Medium Cost
 \$100k+ High Cost
 Public Works
 Finance
 Management Services
 Community Services
 Planning and Building

Move	Total Cost	City Lead	Potential Funding Source
<p>T.1.f Adopt an EV Readiness Reach Code requiring new commercial construction to provide the minimum number of EV capable spaces to meet Tier 2 requirements (20% of total). In doing so the City will:</p> <ul style="list-style-type: none"> ✓ Engage with stakeholders, both internal stakeholders, such as local government staff and officials, and external stakeholders, such as local developers regarding the purpose and impact of the reach code ✓ Conduct a cost effectiveness study ✓ Develop and draft an ordinance ✓ Conduct public hearings, public notices, and formally adopt the ordinance ✓ Submit the adopted ordinance to the California Energy Commission (CEC) 		 	<ol style="list-style-type: none"> 1. Grant Funding 2. AB 2766 funds
<p>T.1.g Earmark and identify additional funding for implementation of the EV Readiness Plan to include public charging infrastructure in key locations.</p>			<ol style="list-style-type: none"> 1. General Fund 2. AB 2766 – local subventions 3. Funding from EV charging station companies
<p>Play T.2 Implement programs for public and shared transit that decrease passenger car vehicle miles traveled 2% by 2030 and 4% by 2045.</p>			<p>~ \$125k</p>
<p>T.2.a Conduct a Feasibility and Community Interest Study on the four transit improvement options of the City's General Plan.</p>			<ol style="list-style-type: none"> 1. SCAG - Sustainable Communities Program 2. AB 2766 - Local Subventions 3. LA County Measures A, C, R, M - Local Return Program
<p>T.2.b Pursue a community car, bike, or e-scooter "micro-transit" share pilot consistent with the City General Plan.</p>			<p>AB2766 - Local Subventions</p>
<p>T.2.c Conduct local transportation surveys to better understand the community's needs and motivation for travelling by car versus other alternatives such as bus or Metro Gold Line light rail. Use survey results to inform transit expansion and improvement projects.</p>	 	 	<p>General Fund</p>
<p>T.2.d Adopt a Transportation Demand Management (TDM) Plan for the City that includes a transit system focus. Provide incentives for implementation of TDM measures at local businesses and new developments.</p>	 		<p>LA County Measures A, C, R, M – Local Return Program</p>

<\$10k Minimal Cost
 \$10k to \$50k Low Cost
 \$50k to 100k Medium Cost
 \$100k+ High Cost
 Public Works
 Finance
 Management Services
 Community Services
 Planning and Building

Move	Total Cost	City Lead	Potential Funding Source
T.2.e Facilitate transportation equity through targeted provision of programs that encourage minority, low-income, disabled, and senior populations to take transit, walk, bike, use rideshare or car share.	\$	 	LA County Measures A, C, R, M – Local Return Program
Play T.3 Develop and implement an Active Transportation Plan to shift 3% of passenger car VMT to active transportation by 2030, and 6% by 2045.			~ \$190
Play T.3.a Develop and adopt an Active Transportation Plan consistent with SCAG 2016 RTP/SCS that will identify funding strategies and policies for development of pedestrian, bicycle, and other alternative modes of transportation projects. Establish citywide events, outreach, educational programs, and platforms to promote active transportation in the community in support of the General Plan.	\$ \$ \$ - \$ \$ \$ \$ \$	 	1. California Transportation Commission (CTC) - Active Transportation Program (ATP) 2. LA Metro - TDA Article 3
Play T.3.b In conjunction with the City’s Complete Streets Policy, conduct a Street/Intersection Study to identify streets and intersections that can be improved for pedestrians and bicyclists through traffic calming measures and/or where multi-use pathway opportunities exist to increase active transportation.	\$ - \$ \$		1. California Transportation Commission (CTC) - Local Partnership Program (LPP) 2. Mitigation fees paid by new development projects that contribute to VMT - Local VMT-based transportation impact fee or local/regional VMT bank/exchange program 3. LA Metro - TDA Article 3
Play T.3.c Periodically review and update the City’s Bicycle and Pedestrian Network Map and post throughout City.	\$		General Fund
Play T.3.d Work with South Pasadena Active, Active San Gabriel Valley (ActiveSGV), and/or Metro to develop programs and classes to teach and promote bicycle riding education and safety to residents of all ages and skill levels, as well as educate drivers.	\$		General Fund
Play T.3.e Conduct a nexus study and develop an ordinance requiring payment of fees from development projects to implement safe active transportation routes and infrastructure citywide.	\$ - \$ \$		Mitigation fees paid by new development projects
Play T.3.f Amend zoning code to require installation of bike stalls or lockers at new developments, "mobility hubs", and during change of use of existing buildings, consistent with the General Plan.	\$	 	General Fund, combine with Play T.3.g
 <p> \$ <\$10k Minimal Cost \$ \$ \$ \$10k to \$50k Low Cost \$ \$ \$ \$ \$50k to 100k Medium Cost \$ \$ \$ \$ \$ \$ \$100k+ High Cost  Public Works  Finance  Management Services  Community Services  Planning and Building </p>			

Move	Total Cost	City Lead	Potential Funding Source
Play T.3.g Adopt a Trip Reduction Ordinance that includes requirements in the Zoning Code to require end-of-trip facilities for cyclists (e.g., showers, bike repair kiosks, and lockers) in new, non-residential building projects of a specified size.	\$ - \$ \$	 	General Fund
Play W.1 Reduce per capita water consumption by 10% by 2030 and 35% by 2045.			~\$170k
W.1.a Continue to enforce the Model Water Efficient Landscapes Ordinance.	\$	 	Water Conservation Funds
W.1.b Work with the Los Angeles County Sanitation District (LACSD) and/or the Upper San Gabriel Valley Municipal Water District to bring recycled water lines and infrastructure to the City.	\$ \$ \$ - \$ \$ \$ \$		1. User Fees 2. Water Resources Control Board- Water Recycling Funding Program - Construction Grant
W.1.c In conjunction with the Downtown Specific Plan Action and City General Plan, adopt an ordinance restricting the use of potable water for non-potable uses and requiring greywater capture for land uses that are excess water users (e.g. golf courses, car washes, large fields, etc.).	\$ - \$ \$		Water Conservation Funds
W.1.d Implement Plays 1 through 4 under Goal II of the Green Action Plan on the provided implementation timeline, aiming to provide education and promotion of greywater systems. (See the City's Green Action Plan for more information).	\$		Water Conservation Funds
W.1.e In conjunction with Move II.1.1 of the City Green Action Plan, develop a Recycled Water Use Master Plan that identifies access to recycled water and quantity of recycled water available to the City, as well as establishes an implementation plan. The implementation plan shall identify land use types (i.e., landscaping, golf courses, fields) and specific projects that will switch from potable to recycled water use allowing for a goal of 20% of City's potable water use to be replaced with recycled water.	\$ \$ \$ - \$ \$ \$ \$		Water Resources Control Board - Water Recycling Funding Program - Planning Grant
W.1.f Implement 100% renewable power for all pumping and treatment of water.	\$		General Fund
Play SW.1 Implement and enforce SB 1383 organics and recycling requirements to reduce landfilled organics waste emissions 50% by 2022 and 75% by 2025.			~\$150k
SW.1.a Adopt procurement policies to comply with SB 1383 requirements for jurisdictions to purchase recovered organic waste products.	\$		General Fund


<\$10k
Minimal Cost


\$10k to \$50k
Low Cost


\$50k to 100k
Medium Cost


\$100k+
High Cost


Public Works


Finance


Management
Services






Community
Services














Planning
and Building

Move	Total Cost	City Lead	Potential Funding Source
SW.1.b Adopt an ordinance requiring compliance with SB 1383. Ensure ordinances established through the City General Plan are consistent with SB 1383 requirements; and revise ordinances if necessary.	\$ - \$ \$		User fees for solid waste services
SW.1.c Adopt an Edible Food Recovery Ordinance for edible food generators, food recovery services, or organization that are required to comply with SB 1383.	\$ - \$ \$		User fees for solid waste services
SW.1.d Partner with the City's waste hauler, to provide organic waste collection and recycling services to all commercial and residential generators of organic waste.	\$		User fees for solid waste services
SW.1.e Adopt an ordinance requiring all residential and commercial customers to subscribe to an organic waste collection program and/or report self-hauling or backhauling of organics.	\$ - \$ \$		User fees for solid waste services
SW.1.f Conduct a Feasibility Study and prepare an action plan to ensure edible food reuse infrastructure is sufficient to accept capacity needed to recover 20% of edible food disposed or identify proposed new or expanded food recovery capacity.	\$ - \$ \$		CalRecycle - Food Waste Prevention and Rescue Grant Program
SW.1.g Establish an education and outreach program for school children and adults around food waste prevention, nutrition education, and the importance of edible food recovery. Support City Green Action Plan Play III identified educational goals (Move III.1.3., Move III.1.4., Move III.1.6., Move III.2.1, Move III. 3.3, and Move III.4.2) through an established educational program.	\$		U.S. EPA - Environmental Education Grants
SW.1.h Establish an edible food recovery program supporting the City General Plan and the City Green Action Plan Move III.1.2 to minimize food waste.	\$		CalRecycle - Food Waste Prevention and Rescue Grant Program
SW.1.i Adopt an ordinance or enforceable mechanism to regulate haulers collecting organic waste, including collection program requirements and identification of organic waste receiving facilities.	\$ - \$ \$		General Fund, possibly incorporate costs into franchise agreement.
SW.1.j Partner with City waste services to: <ul style="list-style-type: none"> ✓ Ensure organic waste collection from mixed waste containers are transported to a high diversion organic waste processing facility. ✓ Provide quarterly route reviews to identify prohibited contaminants potentially found in containers that are collected along route. ✓ Clearly label all new containers indicating which materials are accepted in each container, and by January 1, 2025, place or replace labels on all containers. 	\$		User fees for solid waste services; incorporate into agreement with Athens Services

 <\$10k Minimal Cost
 \$10k to \$50k Low Cost
 \$50k to 100k Medium Cost
 \$100k+ High Cost
 Public Works
 Finance
 Management Services
 Community Services
 Planning and Building

Move	Total Cost	City Lead	Potential Funding Source
Play SW.2 Reduce residential and commercial waste sent to landfills by 50% by 2030 and 100% by 2045.			~\$130k
SW.2.a Develop and implement a Zero Waste Plan in order to reach South Pasadena’s goal of zero waste by 2040.	\$ - \$ \$		User fees
SW.2.b Provide ongoing education to residents, business owners, and South Pasadena School District regarding waste reduction, composting, and recycling.	\$		U.S. EPA - Environmental Education Grants
SW.2.c Increase reuse, recycling, and composting at temporary public events by mandating the installation of public recycling and composting containers and collection service; and encouraging reusable food ware, when relevant, according to the California State Retail Food Code.	\$		CalRecycle - Beverage Container Recycling Grants
SW.2.d Develop a waste department or working group to enhance recycling and composting outreach and provide technical assistance or information in support of City Green Action Plan Move III. Additionally, implement and share a Recycle and Reuse Directory through City platforms, in support of Green Action Plan Move I.2.5.	\$ - \$ \$		General Fund
SW.2.e Adopt an ordinance requiring compliance with Sections 4.410.2, 5.410.1, 4.408.1, and 5.408.1 of the California Green Building Standards Code related to construction of buildings with adequate space for recycling containers and construction and demolition (C&D) recycling.	\$ - \$ \$		General Fund, planning and building permit fees.
SW.2.f Require construction sites to separate waste for proper diversion and reuse or recycling.	\$	 	General Fund, planning and building permit fees.
SW.2.g Develop and implement a Waste Stream Education Program targeting property managers of multi-family residences and the commercial sector, in support of Goal III of the City Green Action Plan.	\$		General Fund
SW.2.h Develop policies to mandate/encourage reduction of waste and reuse in the food industry (e.g. facilities serving prepared food and prepackaged food; home meal delivery services), hospitality industry, and other commercial industries. Efforts may include developing ordinances for food service ware and a ban on single-use individual toiletry bottles in hotels/motels, grant/discount programs for switching to reusables, fast food champion pilot project, and working with home meal delivery services (e.g., Blue Apron), etc. to explore opportunities to reduce single-use packaging and encourage reuse.	\$ - \$ \$		General Fund, affected businesses
SW.2.i Encourage reusable foodware; or if reusable foodware is not a feasible option, explore opportunities to mandate/encourage a switch to more environmentally friendly alternatives for various products in the commercial industry, when relevant.	\$		General Fund

 <\$10k Minimal Cost
 \$10k to \$50k Low Cost
 \$50k to 100k Medium Cost
 \$100k+ High Cost
 Public Works
 Finance
 Management Services
 Community Services
 Planning and Building

Move	Total Cost	City Lead	Potential Funding Source
Play CS.1 Increase carbon sequestration through increased tree planting and green space.			~\$100k
CS.1.a Identify and map public spaces that can be converted to green space, including public parking that can be converted to parklets, freeway airspace that can be made into green space, vertical walls that can be planted with vines, and rooftops of public buildings that can be developed into gardens.	\$		CalFire - Urban and Community Forestry
CS.1.b Adopt a Greenscaping Ordinance that has a street tree requirement for all zoning districts, has a shade tree requirement for new development, requires greening of parking lots, and increases permeable surfaces in new development.	\$ \$ \$	 	General Fund
CS.1.c Prepare and adopt an Urban Forest Management Plan for the City that includes an inventory of existing trees, identifies future tree planting opportunities, and a climate-ready tree palette, as well as ongoing operations and maintenance needs.	\$ \$ \$ \$ \$ \$		CalFire - Urban and Community Forestry
CS.1.d Adopt a standard policy and set of practices for expanding urban tree canopy and placing vegetative barriers between busy roadways and developments to reduce exposure to air pollutants from traffic.	\$		General Fund
Play M.1 Reduce carbon intensity of City operations.			~\$170k
M.1.a As recommended in the 2016 Renewable Energy Council Report, complete energy audits for all City facilities and implement all feasible recommendations for fuel switching and efficiency upgrades.	\$ \$ \$ \$ \$ \$		California Energy Commission Energy Partnership Program
M.1.b As recommended in the 2016 Renewable Energy Council Report, purchase renewable natural gas (RNG) for applicable City fleet vehicles.	\$		General Fund
M.1.c Establish an employee rideshare program.	\$		General Fund
M.1.d As recommended in the 2016 Renewable Energy Council Report, install PV solar systems at the City Hall and at Wilson Reservoir.	\$ \$ \$ \$ \$ \$		Grant Funding
M.1.e Adopt retrofitting policy for City owned buildings such that energy efficient and electrification retrofits are incorporated into City buildings as they become available.	\$		General Fund
M.1.f Develop a policy for the City which would require all new building RFP's to include life cycle costing over 30 years and tie this directly to energy consumption and building electrification. This would include the buildings operational and maintenance costs and ensure that the City has the most cost effective (and sustainable) building possible.	\$		General Fund
M.1.g As recommended in the 2016 Renewable Energy Council Report, invest all savings from City energy efficiency projects into a new revolving green fund that can be used to fund additional energy efficiency and GHG reduction projects.	\$		General Fund

 <\$10k Minimal Cost
 \$10k to \$50k Low Cost
 \$50k to 100k Medium Cost
 \$100k+ High Cost
 Public Works
 Finance
 Management Services
 Community Services
 Planning and Building

Move	Total Cost	City Lead	Potential Funding Source
Play M.2 Electrify the municipal vehicle fleet and mobile equipment.			>\$150k
M.2.a Develop a suite of transportation demand management tools to incentivize alternative transportation methods for employees, including telecommute options.	\$		General Fund
M.2.b Provide bicycles and bicycle storage for employees to use during work hours for short business or personal trips.	\$		General Fund
M.2.c Develop and adopt a policy to apply lifecycle assessment to all new vehicle and equipment purchases.	\$		General Fund
M.2.d Implement the City Fleet Alternative Fuel Conversion Policy developed under the City General Plan, electrifying the City vehicle fleet and using it to encourage residents to convert as well.	\$		Southern California Air Quality Management District (SCAQMD) - Carl Moyer Program
M.2.e Install EV charging stations at municipal buildings.	\$ \$ \$ \$	 	1. Moving California, California Climate Investments, CARB - STEP 2. CAL eVIP, CA Energy Commission - Southern California Incentive Project (SCIP)
Play M.3 Increase City's renewable energy production and energy resilience.			>\$200k
M.3.a Conduct a Feasibility Study to determine which City buildings would serve as ideal resilience centers including solar and battery installations.	\$		General Fund
M.3.b Convert all streetlights to light emitting diode (LED) bulbs.	\$ \$ \$ \$		General Fund
M.3.c Work with the CPA to identify and develop local solar projects to connect to the grid.	\$		General Fund, possibly incorporate costs into Lighting and Landscaping Assessment District
M.3.d Install solar arrays at facilities that currently do not have solar arrays and work with emergency services to add solar and battery storage at priority locations. Review options for potential to combine multiple buildings into micro-grid systems.	\$ \$ \$ \$		General Fund
M.3.e Explore opportunities and partnerships to develop renewable-powered fuel cell micro-grids to provide back-up or primary power for critical facilities such as facilities providing essential services (e.g. water pumping facilities) and schools as a clean alternative to diesel generators.	\$		General Fund
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p><\$10k Minimal Cost</p> </div> <div style="text-align: center;"> <p>\$10k to \$50k Low Cost</p> </div> <div style="text-align: center;"> <p>\$50k to 100k Medium Cost</p> </div> <div style="text-align: center;"> <p>\$100k+ High Cost</p> </div> <div style="text-align: center;"> <p>Public Works</p> </div> <div style="text-align: center;"> <p>Finance</p> </div> <div style="text-align: center;"> <p>Management Services</p> </div> <div style="text-align: center;"> <p>Community Services</p> </div> <div style="text-align: center;"> <p>Planning and Building</p> </div> </div>			

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Appendix A: Regulatory Context

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Regulatory Summary

As the impacts of climate change are being recognized, many strategies that address climate change have emerged at all levels of government. This section provides an overview of the regulatory context at the international, state, and local levels relative to the City of South Pasadena's actions toward reducing greenhouse gas (GHG) emissions.

International Climate Action Guidance

1992 United Nations Framework Convention on Climate Change

The primary international regulatory framework for GHG reduction is the United Nations Framework Convention on Climate Change Paris Agreement (UNFCCC). The UNFCCC is an international treaty adopted in 1992 with the objective of stabilizing atmospheric GHG concentrations to prevent disruptive anthropogenic climate change. The framework established non-binding limits on global GHG emissions and specified a process for negotiating future international climate-related agreements.¹

1997 Kyoto Protocol

The Kyoto Protocol is an international treaty that was adopted in 1997 to extend and operationalize the UNFCCC. The protocol commits industrialized nations to reduce GHG emissions per country-specific targets, recognizing that they hold responsibility for existing atmospheric GHG levels. The Kyoto Protocol involves two commitment periods during which emissions reductions are to occur, the first of which took place between 2008-2012 and the second of which has not entered into force.²

2015 The Paris Agreement

The Paris Agreement is the first-ever universal, legally binding global climate agreement that was adopted in 2015 and has been ratified by 189 countries worldwide.³ The Paris Agreement establishes a roadmap to keep the world under 2° C of warming with a goal of limiting an increase of temperature to 1.5° C. The agreement does not dictate one specific reduction target, instead relying on individual countries to set nationally determined contributions (NDCs) or reductions based on GDP and other factors. According to the International Panel on Climate Change (IPCC) limiting global warming to 1.5° C will require global emissions to reduce through 2030 and hit carbon neutrality by mid-century.⁴

1 United Nations Framework Convention on Climate Change (UNFCCC). United Nations Framework Convention on Climate Change.

https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf

2 UNFCCC. What is the Kyoto Protocol? https://unfccc.int/kyoto_protocol

3 UNFCCC. Paris Agreement - Status of Ratification. <https://unfccc.int/process/the-paris-agreement/status-of-ratification>

4 IPCC. Global Warming of 1.5 C. <https://www.ipcc.ch/sr15/>

California Regulations and State GHG Targets

California remains a global leader in the effort to reduce GHG emissions and combat climate change through its mitigation and adaptation strategies. With the passage of Assembly Bill (AB) 32 in 2006, California became the first state in the United States to mandate GHG emission reductions across its entire economy. To support AB 32, California has enacted legislation, regulations, and executive orders (EO) that put it on course to achieve robust emission reductions and address the impacts of a changing climate. The following is a summary of executive and legislative actions most relevant to the CAP.

2002 Senate Bill 1078

In 2002, SB 1078, established the California Renewables Portfolio Standards (RPS) Program and was accelerated in 2006 by SB 107, requiring that 20 percent of retail electricity sales be composed of renewable energy sources by 2010. EO S-14-08 was signed in 2008 to further streamline California's renewable energy project approval process and increase the state's RPS to the most aggressive in the nation at 33 percent renewable power by 2020.

2002 Assembly Bill 1493

In 2002, AB 1493, also known as the Pavley Regulations, directed the California Air Resources Board (CARB) to establish regulations to reduce GHG emissions from passenger vehicles to the maximum and most cost-effective extent feasible. CARB approved the first set of regulations to reduce GHG emissions from passenger vehicles in 2004, with the regulations initially taking effect with the 2009 model year.

2005 Executive Order S-3-05

Executive Order (EO) S-3-05 was signed in 2005, establishing statewide GHG emissions reduction targets for the years 2020 and 2050. The EO calls for the reduction of GHG emissions in California to 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050. The 2050 emission reductions target would put the state's emissions in line with the worldwide reductions needed to reach long-term climate stabilization as concluded by the IPCC *2007 Fourth Assessment Report*.

2006 Assembly Bill 32

California's major initiative for reducing GHG emissions is outlined in AB 32, the "California Global Warming Solutions Act of 2006," which was signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main state strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions.

Based on this guidance, CARB approved a 1990 statewide GHG baseline and 2020 emissions limit of 427 million metric tons of CO₂ equivalent (MMT CO₂e). The Scoping Plan was approved by CARB on December 11, 2008 and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced

Clean Car standards,⁵ and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

In May 2014, CARB approved the first update to the AB 32 Scoping Plan. The 2014 Scoping Plan update defined CARB's climate change priorities for the next five years and set the groundwork to reach post-2020 statewide goals. The update highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the state's longer-term GHG reduction strategies with other state policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

2007 Executive Order S-1-07

Also known as the Low Carbon Fuel Standard, EO S-1-07, issued in 2007, established a statewide goal that requires transportation fuel providers to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. EO S-1-07 was readopted and amended in 2015 to require a 20 percent reduction in carbon intensity by 2030, the most stringent requirement in the nation. The new requirement aligns with California's overall 2030 target of reducing climate changing emissions 40 percent below 1990 levels by 2030, which was set by Senate Bill 32 and signed by the governor in 2016.

2007 Senate Bill 97

Signed in August 2007, SB 97 acknowledges that climate change is an environmental issue that requires analysis in California Environmental Quality Act (CEQA) documents. In March 2010, the California Natural Resources Agency adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts.

2008 Senate Bill 375

SB 375, signed in August 2008, enhances the state's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPOs), including the Southern California Association of Governments (SCAG) in Los Angeles, to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the MPO's Regional Transportation Plan (RTP).

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The SCAG, of which South Pasadena is a member, was assigned targets of an 8% reduction in GHGs from transportation sources by 2020 and a 19% reduction in GHGs from transportation sources by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of subregional plans by the subregional Councils of Governments and the County Transportation Commissions to meet SB 375 requirements.

⁵ On September 19, 2019 the National Highway Traffic Safety Agency (NHTSA) and the US Environmental Protection Agency (EPA) issued a final action entitled the One National Program on Federal Preemption of State Fuel Economy Standards Rule. This action finalizes Part I of the Safer, Affordable, Fuel-Efficient (SAFE) Vehicles Rule. This rule states that federal law preempts State and local tailpipe greenhouse gas (GHG) emissions standards as well as zero emission vehicle (ZEV) mandates. The SAFE Rule withdraws the Clean Air Act waiver it granted to California in January 2013 as it relates to California's GHG and zero emission vehicle programs.

2009 California Green Building Code

The California Green Building Standards Code (CALGreen) is Part 11 of the California Building Standards Code or Title 24 and is the first statewide “green” building code in the nation. The purpose of CALGreen is to improve public health, safety, and general welfare by enhancing the design and construction of buildings. Enhancements include reduced negative impact designs, positive environmental impact designs, and encouragement of sustainable construction practices. The first CALGreen Code was adopted in 2009 and has been updated in 2013, 2016, and 2019. The CALGreen Code will have subsequent, and continually more stringent, updates every three years.

2009 Senate Bill X7-7

In 2009, SB X7-7, also known as the Water Conservation Act, was signed, requiring all water suppliers to increase water use efficiency. This legislation sets an overall goal of reducing per capita urban water use by 20 percent by 2020.

2011 Senate Bill 2X

In 2011, SB 2X was signed, requiring California energy providers to buy (or generate) 33 percent of their electricity from renewable energy sources by 2020.

2012 Assembly Bill 341

AB 341 directed the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling. As of July 2012, businesses are required to recycle, and jurisdictions must implement a program that includes education, outreach, and monitoring. AB 341 also set a statewide goal of 75 percent waste diversion by the year 2020.

2014 Assembly Bill 32 Scoping Plan Update

In 2014, CARB approved the first update to the Scoping Plan. This update defines CARB’s climate change priorities and sets the groundwork to reach the post-2020 targets set forth in EO S-3-05. The update highlights California’s progress toward meeting the near-term 2020 GHG emissions reduction target, defined in the original Scoping Plan. It also evaluates how to align California’s longer-term GHG reduction strategies with other statewide policy priorities, such as water, waste, natural resources, clean energy, transportation, and land use.

2014 Assembly Bill 1826

AB 1826 was signed in 2014 to increase the recycling of organic material. GHG emissions produced by the decomposition of these materials in landfills were identified as a significant source of emissions contributing to climate change. Therefore, reducing organic waste and increasing composting and mulching are goals set out by the AB 32 Scoping Plan. AB 1826 specifically requires jurisdictions to establish organic waste recycling programs by 2016, and phases in mandatory commercial organic waste recycling over time.

2015 Senate Bill 350

SB 350, the Clean Energy and Pollution Reduction Act of 2015, has two objectives: to increase the procurement of electricity from renewable sources from 33 percent to 50 percent by 2030 and to double the energy efficiency of electricity and natural gas end users through energy efficiency and conservation.

2015 Executive Order B-30-15

In 2015, EO B-30-15 was signed, establishing an interim GHG emissions reduction target to reduce emissions to 40 percent below 1990 levels by 2030. The EO also calls for another update to the CARB Scoping Plan.

2016 Senate Bill 32

On September 8, 2016, the governor signed SB 32 into law, extending AB 32 by requiring the state to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). The bill charges CARB to adopt the regulation so that the maximum technologically feasible emissions reductions are achieved in the most cost-effective way.

2016 Senate Bill 1383

Adopted in September 2016, SB 1383 requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. The bill requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires the CalRecycle, in consultation with the CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills. The bill further requires 20% of edible food disposed of at the time to be recovered by 2025.

2017 Scoping Plan Update

On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 goal set by SB 32. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies, such as SB 350 and SB 1383 .

The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2014 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of six metric tons (MT) CO₂e by 2030 and two MT CO₂e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the state (CARB 2017).

2018 Senate Bill 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

2018 Executive Order B-55-18

Also, on September 10, 2018, the governor issued Executive Order B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

City of South Pasadena Sustainability Plans and Regulations

The City of South Pasadena has established actions related to increasing sustainability and reducing GHG emissions and the potential impacts of climate change. These actions are outlined in the City's Green Action Plan, Draft 2020 General Plan, and Draft Downtown Specific Plan.

2019 South Pasadena Green Action Plan

In November 2019, the City of South Pasadena adopted the South Pasadena Green Action Plan (Green Plan), which includes five main goals: work towards making South Pasadena a plastic-free City; enhance water conservation projects and programs; increase organics diversion from landfills; mitigate impacts of the urban heat island effect; and prepare for the consideration of future sustainability initiatives. The Green Plan was a collaborative effort that encompassed the values, ideas, and efforts from all City Department Staff, City Council, the City's Natural Resources and Environmental Commission, and the passionate residents of South Pasadena. This short-term plan aimed to implement essential and attainable sustainability initiatives that would set the foundation of the City's first Climate Action Plan.

2020 General Plan Update

The City's General Plan is currently being updated and a draft version was released to the public in November 2019. The General Plan is a blueprint for how the City should develop over time, and consists of several mandated topics called "Elements." In general, these Elements include broad policies that identify the overall pattern of future development, determining when, where, and what type of new growth and investment may occur. The "Our Natural Community" Element of the Draft General Plan includes policies which promote alternative transportation and use of energy-efficient vehicles, and works to minimize the adverse impacts of growth and development on air quality and climate.

2020 Downtown Specific Plan Update

The 2020 Downtown Specific Plan Draft was also released in November 2019 and has policies related to energy efficiency and climate resilience. The primary goals of the Downtown Specific Plan are to leverage public transit and multimodality, focusing on responsible infill development, and preserving and rehabilitating historic buildings.

Appendix B:

Cal-Adapt

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Cal-Adapt Resource Guide

[Cal-Adapt](https://cal-adapt.org/)¹ is an interactive platform that allows users to explore how climate change might affect California at the local level. The site was developed by the University of California, Berkeley's Geospatial Innovation Facility (GIF) with funding and advisory oversight by the California Energy Commission's Public Interest Energy Research (PIER) Program. The data used within the Cal-Adapt visualization tools have been gathered from California's scientific community, and represent peer-reviewed, high-quality scientific information.²

The site includes the following climate change projections:

- Annual Averages (temperature and precipitation)
- Extreme Precipitation Events
- Extreme Heat Days & Warm Nights
- Cooling Degree Days & Heating Degree Days
- Snowpack
- Sea Level Rise
- Wildfire
- Streamflow
- Extended Drought

These localized climate change projections are available on the Cal-Adapt landing page or via the *Tools* tab. Another way to download data is through the *Data* tab. The *Data* tab allows you to download data from individual publishers and spatial data. This technical appendix describes downloading data from the landing page, or *Tools tab*, as it is more interactive and provides visualizations of the data.



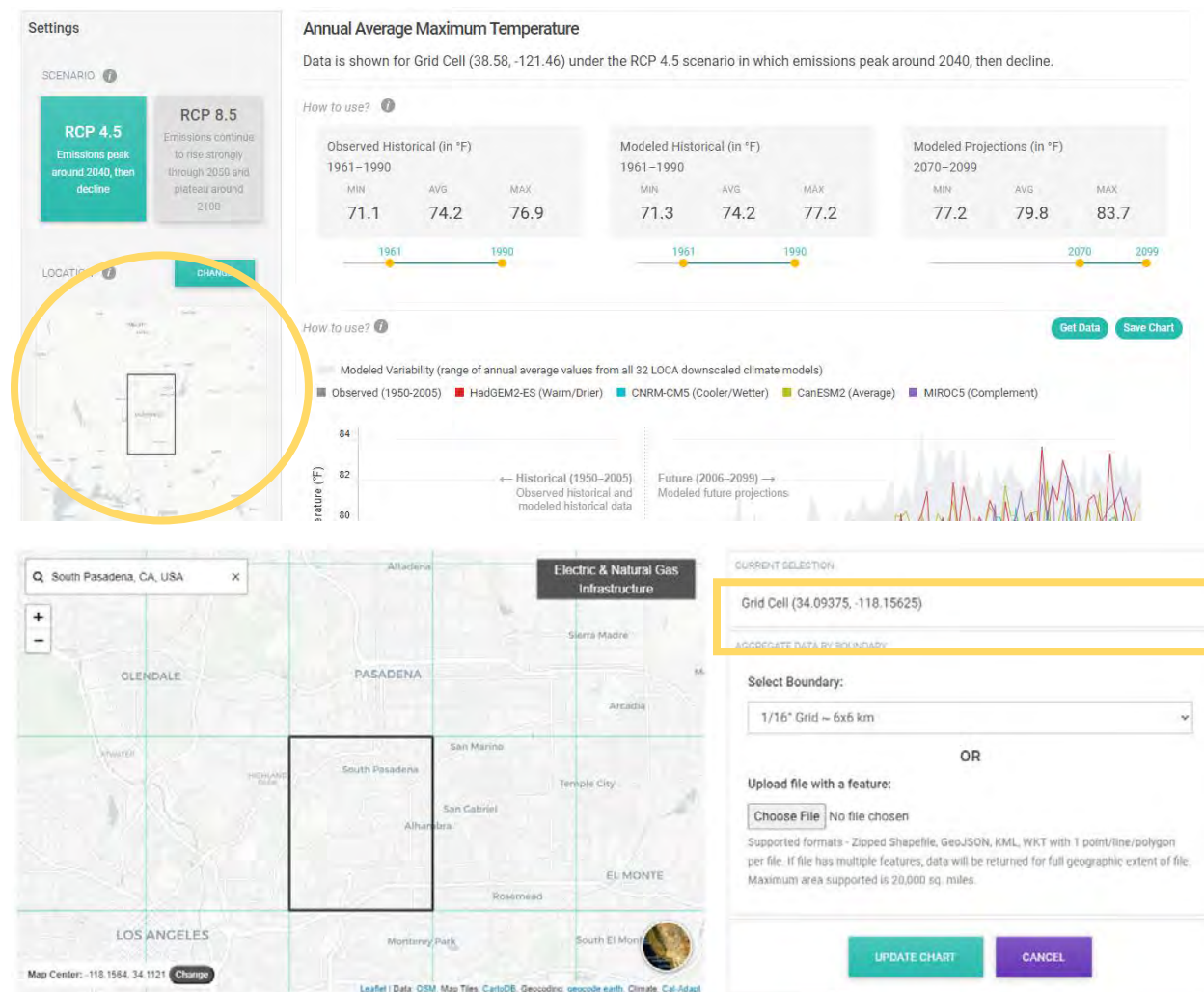
¹ Cal-Adapt <https://cal-adapt.org/>

² Cal-Adapt <https://cal-adapt.org/about/>

Best Practices

Location

When choosing a location, Cal-Adapt will prompt you to select a 6x6 kilometer grid cell or a county, among other options. The grid cell used for South Pasadena is shown below (Grid Cell 34.09375, -118.15625).



Representative Concentration Pathways (RCP)

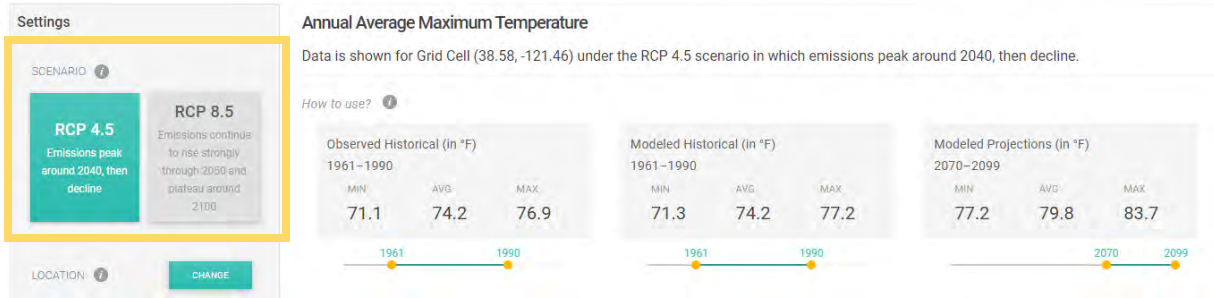
These are scenarios that include time series of emissions and concentrations of the full suite of greenhouse gases (GHGs). Each RCP provides only one of many possible scenarios that would lead to the specific radiative forcing, which is the difference between sunlight absorbed by the Earth and energy radiated back to space.

The [California Adaptation Planning Guide](#)³ recommends always using the high emissions scenario (RCP 8.5).⁴ The stabilizing scenario (RCP 4.5)⁵ may also be used to provide a wider range of possible futures.

³ https://resources.ca.gov/CNRALegacyFiles/docs/climate/01APG_Planning_for_Adaptive_Communities.pdf

⁴ Emissions continue to rise through the end of the century before leveling off

⁵ Emissions rise through 2050 before leveling off

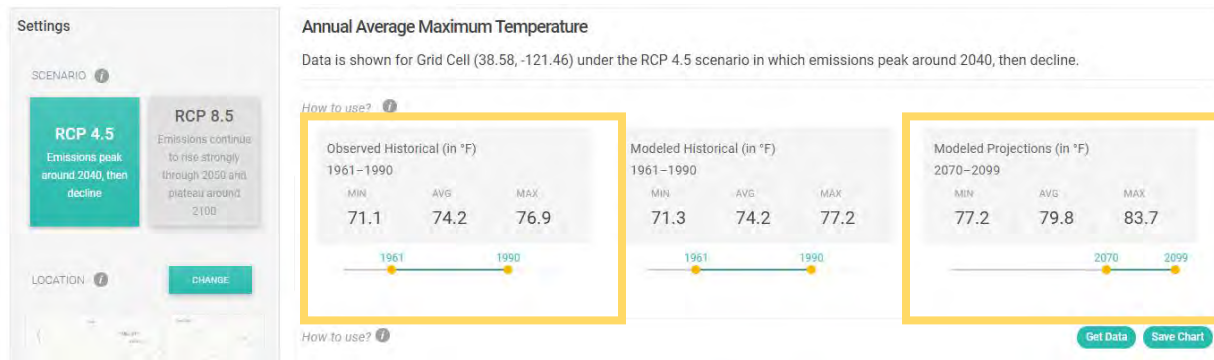


Past and Future Year Horizons

To gain an understanding of how climate change may impact a location, we need to know the historical and projected conditions. Below are the past and future year horizons used for the *Climate Change in the City of South Pasadena* subsection of the South Pasadena CAP.

- Historical/Current: 1990 and 2005
- Long-term: 2099

It is important to consider a long-term benchmark year when working with climate change projections as it allows us to understand the potential impacts over a specific period of time.



Climate Models

Cal-Adapt allows you to choose whether to use the minimum, average, or maximum estimates (shown below). These are calculated over all models shown in the chart provided by Cal-Adapt. For a representative value of all models combined, rather than selecting the lowest or highest predicting model, it's best to use the average value. The four models used in this assessment are:

- HadGEM2-ES: a warm/drier simulation
- CNRM-CM5: a cooler/wetter simulation
- CanESM2: an average simulation
- MIROC5: a complement simulation (most unlike the other three models).

These models were selected by California's Climate Action Team Research Working Group as the priority models for research contributing to California's Fourth Climate Change Assessment. To determine projected timing of extreme heat days, Rincon used the range all four priority models. This allows for conservative planning, recommended by the California Adaptation Planning Guide.

Resources

Cal-Adapt <https://cal-adapt.org/>

California Adaptation Planning Guide

https://resources.ca.gov/CNRALegacyFiles/docs/climate/01APG_Planning_for_Adaptive_Communities.pdf

Appendix C:

Inventory, Forecast, and Targets

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City of South Pasadena Climate Action Plan

GHG Emissions: Municipal Inventory, Community Inventory, Forecast and Target Setting Methodology

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1 Introduction

California considers greenhouse gas (GHG) emissions and the impacts of climate change to be a serious threat to the public health, environment, economic well-being, and natural resources of the state, and has taken an aggressive stance to mitigate the impact on climate change at the state-level through the adoption of legislation and policies. Many cities have developed local climate action plans and aligned goals to correspond with state emissions reduction goals. The two major state GHG-related goals are established by Assembly Bill (AB) 32 and Senate Bill (SB) 32. AB 32 required state agencies reduce state GHG emissions to 1990 levels by 2020 whereas SB 32 requires a 40 percent reduction below 1990 levels by 2030. The goals set by AB 32 were achieved by the state in 2016¹ and many jurisdictions are completing GHG inventories to quantify progress toward their own 2020 goals as well as develop targets to align with the requirements of SB 32. A long-term goal of carbon neutrality by 2045 for the state was established, but not codified, through Executive Order (EO) B-55-18. While it is not required for jurisdictions to meet this target, many are establishing or exceeding this goal to show alignment with the aggressive decarbonization goals of the state.

This technical appendix provides the detailed methodology used for the City of South Pasadena 2016 Municipal and Community GHG inventory, Community GHG Emissions Forecast, and the setting of emission reduction targets. Emissions are forecasted for the years 2020, 2030, 2040 (the General Plan horizon year), and 2045 to align with state and City targets.

Estimating GHG emissions enables local governments to establish an emissions baseline, track emissions trends, identify the greatest sources of GHG emissions within their jurisdictions, and set targets for future reductions. This inventory is intended to inform completion of a qualified GHG reduction plan for the City of South Pasadena and is compliant with the Local Governments for Sustainability (ICLEI) *U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions*² (*U.S. Community Protocol*) as well as California Environmental Quality Act (CEQA) Guidelines Section 15183.5(b) for the requirements of a 'qualified' GHG emissions reduction plan. Methodology for some sections has been updated slightly to conform with the industry standard for California cities as recommended in the Association for Environmental Professionals (AEP) *California Supplement to the United States Community-Wide GHG Emissions Protocol* (California Supplement). Emissions inventories are an iterative process and each year must be viewed in the context of other inventories and relative trends of each sector to maintain consistency with the emissions inventory methods and factors.

Emissions contained within this inventory include activities under the jurisdictional control or significant influence of the City of South Pasadena, as recommended by AEP in preparing Community Protocol and CEQA-compliant inventories.³ The municipal operations inventory is a subset of the community-wide inventory, meaning the municipal emissions are included within the community-wide inventory.

¹ California Air Resources Board. California Greenhouse Gas Emissions Inventory. Accessed at: <https://ww3.arb.ca.gov/cc/inventory/inventory.htm>. Accessed on: July 2019

² ICLEI. 2013. U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions, Version 1.1

³ Association of Environmental Professionals. 2013. The California Supplement to the United States Community-Wide Greenhouse Gas (GHG) Protocol.

1.1 Greenhouse Gases

The 2016 City of South Pasadena Community Inventory was developed using the Community Protocol⁴ and California Supplement.⁵ Emissions from nitrous oxide (N₂O), methane (CH₄), and carbon dioxide (CO₂) are included in this assessment. Each GHG has a different capability of trapping heat in the atmosphere, known as its global warming potential (GWP), which is normalized relative to CO₂ and expressed as carbon dioxide equivalent, or CO₂e. The CO₂e values for these gases are derived from the Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC) GWP values for consistency with the yearly California Air Resources Board (CARB) GHG inventory, as shown in Table 1.⁶

Table 1 Global Warming Potentials of Greenhouse Gases

Greenhouse Gas	Molecular Formula	Global Warming Potential (CO ₂ e)
Carbon Dioxide	CO ₂	1
Methane	CH ₄	25
Nitrous Oxide	N ₂ O	298

Notes: MT CO₂e = metric tons of carbon dioxide equivalent

1.2 Excluded GHG Emissions and Emission Sources

The following GHG emissions and emission sources are excluded from the 2016 inventory and emissions forecast.

Consumption-Based GHG Emissions

GHG emissions from consumption of goods and services (such as food, clothing, electronic equipment, etc.) by residents of a city are excluded from the inventory and forecast of City of South Pasadena emissions. Currently there exists no widely accepted standard methodology for reporting consumption-based inventories.

Natural and Working Lands

GHG emissions from carbon sinks and sources in natural and working lands are not included in this inventory and forecast due to the lack of granular data and standardized methodology. Natural and working lands are comprised of the forests, woodlands, rangelands, coastal areas, farmlands and urban green spaces of California. GHG emissions from these lands result from the loss of carbon sequestration through land use change and fires. CARB has included a state-level inventory of natural and working lands in the 2017 Scoping Plan Update⁷ greenhouse gas inventory; however, at the time of this City of South Pasadena community-wide inventory, sufficient data and tools were not available to conduct a jurisdiction-specific working lands inventory. The Nature Conservancy and

⁴ ICLEI. 2012. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions.

⁵ Association of Environmental Professionals. 2013. The California Supplement to the United States Community-Wide Greenhouse Gas (GHG) Protocol. Accessed at: https://califaep.org/docs/California_Supplement_to_the_National_Protocol.pdf. Accessed on: June 20, 2019

⁶ Intergovernmental Panel on Climate Change. 2007. Fourth Assessment Report: Climate Change. Direct Global Warming Potentials.

⁷ California Air Resources Board. 2017. California's Climate Change Scoping Plan.

California Department of Conservation⁸ are exploring options for a tool which may be able to perform these inventories at a more specific geographic level.

Agricultural Emissions

Emissions from agricultural activities are not included in this inventory as the Community Protocol and California Supplement⁹ both note agricultural activity is not a required component of Community Protocol inventories and should be included only if relevant to the community conducting the inventory. Regulations exist to encourage urban agriculture within the City boundaries. Many of the emissions from these activities (e.g. energy) are covered under other sectors included in this inventory and no major commercial-scale livestock activity is noted within the City boundaries.

Industrial Emissions

Emissions from industrial activities are not included in this inventory as the City of South Pasadena does not have direct control of GHG emissions from industrial operations, which are regulated through the state Cap-and-Trade Program. Additionally, energy data was not available for the industrial sector due to the industrial energy data set not meeting Southern California Edison's (SCE's) 5/25 Aggregation Rule, where the data set must contain at least five customers and no single customer makes up more than 25 percent of the total energy consumption.

High GWP

High GWP emissions, including chlorofluorocarbons (CFCs) and hydrofluorocarbons (HFCs) used as substitutes for ozone-depleting substances are not included in this inventory as it is not a required component of the Community Protocol and the California Supplement notes these emissions are not generally included in California inventories.

1.3 Calculating GHG Emissions

GHG emissions are estimated using calculation-based methodologies to derive emissions using activity data and emissions factors. To estimate emissions, the basic equation below is used:

$$\text{Activity Data} \times \text{Emission Factor} = \text{Emissions}$$

Activity data refer to the relevant measurement of energy use or other GHG-generating processes such as fuel consumption by fuel type, metered annual electricity consumption, and annual vehicle miles travelled. Emission factors are used to convert energy usage or other activity data into associated emissions quantities. They are usually expressed in terms of emissions per unit of activity data (e.g., lbs. CO₂/kWh).

As mentioned in the *Introduction*, GHG emissions calculation methodologies follow the guidance of the ICLEI *U.S. Community Protocols* for the Community Inventory, and the ICLEI *Local Government Operations Protocols (LGOP)* for the Municipal Inventory.

⁸ California Department of Conservation. TerraCount Scenario Planning Tool. Accessed at: <https://maps.conservation.ca.gov/terraaccount/>. Accessed on: May 15, 2019

⁹ Association of Environmental Professionals. 2013. *The California Supplement to the United States Community-Wide Greenhouse Gas (GHG) Emissions Protocol*. https://califaep.org/docs/California_Supplement_to_the_National_Protocol.pdf

1.4 Reporting GHG Emissions

The following section discusses reporting of GHG emissions by scope and sector.

1.4.1 GHG Emissions by Scope

For municipal and community-wide inventories, emissions sources can be categorized by “scope” according to the entity’s degree of control over the emissions source and the location of the source. Emissions sources are categorized as direct (scope 1) or indirect (scope 2 or scope 3), in accordance with the World Resources Institute and the World Business Council for Sustainable Development’s *Global protocol for Community-Scale Emissions* and the ICLEI *LGOP*.

MUNICIPAL SCOPE DEFINITIONS

- **Scope 1:** Direct GHG emissions from sources within a local government’s operations that it owns and/or controls. This includes stationary combustion to produce electricity, steam, heat, and power equipment; mobile combustion of fuels; process emissions from physical or chemical processing; fugitive emissions that result from production, processing, transmission, storage and use of fuels; and other sources.
- **Scope 2:** Indirect GHG emissions associated with the consumption of electricity, steam, heating, or cooling that are purchased from a utility provider that also provides energy to other jurisdictions and/or is located outside City boundaries.
- **Scope 3:** All other indirect GHG emissions not covered in scope 2, such as emissions resulting from the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the City (e.g., employee commuting and business travel, outsourced activities, waste disposal, etc.).

COMMUNITY-WIDE SCOPE DEFINITIONS

- **Scope 1:** Direct GHG emissions from sources located within the jurisdictional boundaries of the community, including emissions from fuel combustion vehicles¹⁰ in the community and direct emissions from natural gas combustion in homes and businesses within the community.
- **Scope 2:** Indirect GHG emissions associated with the consumption of electricity within the community.
- **Scope 3:** All other indirect or embodied GHG emissions not covered in scope 2, which occur because of activity within the jurisdictional boundaries (e.g., methane emitted at landfills outside the community resulting from solid waste generated within the community).

1.4.2 Emissions by Sector

In addition to categorizing emissions by scope, ICLEI recommends that local governments examine their emissions in the context of the sector that is responsible for those emissions. Many local governments will find a sector-based analysis more directly relevant to policy making and project management, as it assists in formulating sector-specific reduction measures and Climate Action Plan components.

¹⁰ This accounts for GHG emissions from running exhaust, idle exhaust, starting exhaust, diurnal, resting loss, running loss, and hot soak.

The municipal and community inventories report emissions by the following sectors:

- Energy
- Transportation
- Water consumption and wastewater treatment
- Solid waste

Table 2 summarizes the scopes of each sector in the municipal and community-wide inventories.

Table 2 Emissions by Sector and Scope

Sector	Scope 1	Scope 2	Scope 3
Municipal Inventory			
Energy	Natural Gas	Electricity	NA
Vehicle Fleet	Gasoline, diesel, CNG	NA	Employee Commute
Water and Wastewater	NA	Electricity (associated with water conveyance and treatment)	Electricity (associated with wastewater treatment)
Solid Waste	NA	NA	Methane from decomposition and process emission
Community-wide Inventory			
Energy	Natural Gas	Electricity	NA
Transportation	Gasoline and Diesel	NA	Transit (i.e. public transit)
Water Consumption	NA	NA	Electricity (associated with water conveyance)
Wastewater	NA	NA	Electricity (associated with water treatment)
Solid Waste	NA	NA	Methane from decomposition and process emissions

Notes: CNG: Condensed natural gas; NA: Not applicable

1.5 GHG Emissions Forecast Target Years

The GHG emissions forecast is based on the latest available data from City GHG inventories, in this case the 2016 inventory completed as part of this Climate Action Plan. This forecast uses benchmark years of 2020, 2030, 2040, and 2045, consistent with currently codified state GHG reduction goals set by legislation and executive orders, and the City's General Plan horizon year, as summarized below:

- 2020 (AB 32)
- 2030 (SB 32)
- 2040 (General Plan horizon year)
- 2045 (EO B-55-18)

The 2030 and 2040 targets are required for consistency with SB 32 and the City of 2040 General Plan respectively, while the remainder of the targets identify a clear path and milestones of progress toward the long-term state reduction goals.

2 2016 Municipal GHG Inventory

The Municipal GHG Inventory quantifies the GHG emissions generated by local government operations for the City of South Pasadena. By better understanding the relative scale of emissions from each sector, the City can more effectively focus strategies to achieve the greatest emissions reductions.

Reporting emissions by sector provides a useful way to understand the sources of the City's emissions. The ICLEI *LGOP* further categorizes sectors by the following sub-sectors for local government operations: 1) buildings and other facilities, 2) streetlights and traffic signals, 3) water delivery facilities, 4) port facilities, 5) airport facilities, 6) vehicle fleet, 7) transit fleet, 8) power generation facilities, 9) solid waste facilities, 10) wastewater facilities, and 11) all processes and fugitive emissions. The City of South Pasadena does not have operational control of a port, airport, transit fleet, power generation facility, or wastewater facility. Additionally, the City does not have an operational landfill¹¹ within the jurisdictional boundaries. Local government operations are discussed only in terms of sectors and sub-sectors the City has operational control over. Accordingly, the GHG emission sectors reported are provided in Table 3, with the associated GHG emissions sources.

Table 3 Municipal GHG Emissions Sectors and Sources

Sector	Emissions Source
Energy	Natural Gas (buildings & facilities)
	Electricity (buildings & facilities)
	Electricity (parks and outdoor lighting)
	Electricity (traffic signals and streetlights)
	Electricity (water delivery facilities)
Transportation	Vehicle Fleet
	Employee Commute
Water and Wastewater	Water Consumption
	Wastewater Generation
Waste	Solid Waste Generation

¹¹ As mentioned in Section 5.2.4, *Solid Waste*, the City of South Pasadena has a landfill within City jurisdictional boundaries, the South Pasadena City Dump; however, this facility has been closed since 1958, and is excluded from this inventory due to a lack of data.

2.1 Municipal GHG Inventory Methodology

The Municipal GHG Inventory uses activity data obtained from the City of South Pasadena to calculate the GHG emissions associated with the local government operations based on the ICLEI *LGOP*, developed in partnership with CARB, California Climate Action Registry, and the Climate Registry.¹² Activity data was obtained from the City of South Pasadena, primarily through communication with the City’s Water Conservation and Sustainability Analyst. The following is a description of the methodology and data used to calculate emissions for each of the municipal GHG emission sectors.

Municipal Energy

Energy emissions consist of natural gas burned in City facilities and buildings for water and space heating (scope 1), and electricity consumed in buildings and facilities, lighting, traffic signals, and water delivery facilities (scope 2). Emissions associated with natural gas and electricity consumption were calculated using ICLEI *LGOP* Method 6.1.1 and 6.2.1, respectively. Table 4 provides the activity data and emission factors used for emission calculations, and the GHG emission results.

Table 4 Energy Sector Municipal GHG Emissions

Sector/Emission Source	Activity	Emission Factor	Total Emissions (MT CO ₂ e)
Natural Gas¹			109
Buildings and Facilities	20,512 therms	0.00531 MT CO ₂ e/Therm ²	109
Electricity³			1,504
Traffic and Street Lighting	1,053,468 kWh	0.000240 MT CO ₂ e/kWh ⁴	253
Parks and Outdoor Lighting	206,152 kWh		49
Water Delivery Facilities	4,017,424 kWh		964
Building & Other Facility Use	990,594 kWh		238
Energy Sector Total			1,613

Notes: MT CO₂e = Metric Tons of Carbon Dioxide Equivalent; kWh = kilowatt-hour

1. Natural Gas activity data was provided by the City of South Pasadena in the form of “SCG - Customer Gas Usage and Total Billed Summary for 2016”, on July 5th, 2019 for all municipal natural gas accounts.
2. Emission factors obtained from United States Environmental Protection Agency Emission Factors for Greenhouse Gas Inventories, Table 1. https://www.epa.gov/sites/production/files/2015-07/documents/emission-factors_2014.pdf.
3. Electricity consumption activity data was provided by the City of South Pasadena, in the form of total electricity consumption in 2016 for each municipal electricity meter, on July 29th, 2019.
4. Delivered electricity emission factors as CO₂e used. Edison International 2017 Sustainability Report (p. 10), June 2018. <https://www.edison.com/content/dam/eix/documents/sustainability/eix-2017-sustainability-report.pdf>.

Municipal Transportation

Municipal GHG emissions from the transportation sector are categorized into two primary sources, employee commute and municipal fleet, for which the activity data and emission calculations are described in the following section.

¹² CARB, et al.. 2010. Local Government Operations Protocol For the quantification and reporting of greenhouse gas emissions inventories. <https://www.theclimateregistry.org/tools-resources/reporting-protocols/local-government-operations-protocol/>

Employee Commute

Employee commute emissions are a scope 3 emissions source and largely out of the direct control of the City; however, the City can provide incentive for employees to utilize less carbon intensive means of commuting, such as cycling/walking/scooting, ridesharing, or public transit. In 2016, the City of South Pasadena had a total of 152 full-time City employees and 125 part-time employees.¹³ Employee commute vehicle miles traveled (VMT) was calculated using the results of an employee commute survey, issued in September 2019. The survey had 47 respondents who also worked at the City of South Pasadena in 2016. Based on the average commute distance and mode for each respondent to the employee commute survey, an annual average employee commute factor was calculated, which equates to each employee traveling an average 4,946 miles by passenger car, 181 miles by motorcycle, 22 miles by bus, and 35 trips by train in 2016 to get to and from work. This annual average employee commute factor was applied to the number of City employees in 2016 to estimate travel for each mode for all employee commutes. It was estimated that full-time employees work an average of 240 days per year, and part-time employees an average of 120 days per year; assuming all employees did not work on federal holidays and that full-time employees would take two weeks of vacation, with part-time employees assumed to work half the time of full-time employees. The average employee commute factor and assumptions above are considered to give a conservative estimate of employee commute patterns. CARB's Emission Factors (EMFAC) model EMFAC2017¹⁴ emission factors for the Los Angeles County region in 2016 were used to determine employee commute emissions. The activity data, emission factors, and resulting emissions are provided in Table 5.

Table 5 Employee Commute Municipal GHG Emissions

Sector/Emission Source	Activity ¹	Emission Factor	Total Emissions (MT CO ₂ e)
Passenger Vehicle Commute	1,060,992 VMT/year	0.000322 MT CO ₂ e/mile ²	342
Motorcycle Commute	38,778 VMT/year	0.000253 MT CO ₂ e/mile ²	10
Public Bus Commute	4,663 VMT/year	0.002290 MT CO ₂ e/mile ²	11
Light Rail Commute	7,531 trips/year	0.000044 MT CO ₂ e/trip ³	3
Employee Commute Total	NA	NA	366

Notes: MT CO₂e = Metric Tons of Carbon Dioxide Equivalent; VMT = Vehicle Miles Traveled.

1. All employee commute activity data was derived from the Employee Commute Survey issued in September of 2019. The compilation of responses for daily commutes (47 in total), was extrapolated for the total number of employees in 2016. Annual values were calculated assuming full-time employees work 240 days per year and part-time employees 120 days per year.

2. Vehicle emission factors were obtained from EMFAC2017 emission rates for Los Angeles County in 2016, aggregated by fuel type.

3. Derivation of the light rail emission factor per trip is further described in the *Community Public Transit* section of the 2016 Community GHG Inventory.

Municipal Fleet

Municipal fleet vehicles and equipment combust gasoline, diesel, and compressed natural gas (CNG), generating scope 1 GHG emissions. The City owns and operates a number of on-road vehicles, including passenger vehicles, light-duty trucks, and light- and medium-heavy duty trucks; as well as off-road equipment, including: a tractor, two backhoes, two trailers, and two air

¹³ City of South Pasadena provided employee data via email on August 28, 2019.

¹⁴ CARB 2018. EMFAC2017 v1.0.2. Mobile Source Analysis Branch, Air Quality Planning & Science Division. <https://www.arb.ca.gov/emfac/2017/>

compressors. In 2015, all of the City-owned landscape equipment used for regular grounds work were converted to electric power, which are accounted for under the energy sector and accounted for in the *Community Off-Road Transportation* sector. GHG emissions are calculated using ICLEI *LGOP* Methods 7.1.1 and 7.1.3.2.1, with emission factors obtained from CARB’s EMFAC2017¹⁵ model output and the United States Environmental Protection Agency’s (USEPA) *Emission Factors for Greenhouse Gas Inventories*.¹⁶ Each gasoline and diesel fueled on-road vehicle in the fleet were assigned an emission factor according to the vehicle’s year, class, and fuel type, from which an average fleet-wide emission factor was derived for both gasoline and diesel fueled vehicles. CNG vehicle emissions were calculated using emission factors from USEPA’s *Emission Factors for Greenhouse Gas Inventories*, with fuel volumes attributed equally to each vehicle in the fleet, which includes one passenger vehicle and two medium-duty trucks. Emissions for off-road equipment were calculated using the emission factors provided for diesel and gasoline fueled construction equipment in USEPA’s *Emission Factors for Greenhouse Gas Inventories*. Table 6 provides the fuel consumption associated with the municipal fleet, emission factors, and calculated total emissions.

Table 6 Municipal Fleet GHG Emissions

Sector/Emission Source	Activity		Emission Factor	Total Emissions (MT CO ₂ e)
On-Road Fleet Vehicles				165
Diesel	5 Vehicles	1,220 Gal	0.010666 MT CO ₂ e/Gal ¹	13
Unleaded Gasoline	24 Vehicles	8,382 Gal	0.008763 MT CO ₂ e/Gal ¹	73
Compressed Natural Gas (GNC)	3 Vehicles	13,395 therms	0.00588 MT CO ₂ e/Therm ²	79
Non-Road Equipment				8
Diesel	NA	449 Gal	0.010302 MT CO ₂ e/Gal ²	5
Unleaded Gasoline	NA	395 Gal	0.08858 MT CO ₂ e/Gal ²	4
Municipal Fleet Total				173

Notes: MT CO₂e = Metric Tons of Carbon Dioxide Equivalent; Gal = Gallon
 Totals may not add up due to rounding.

1. Vehicle emission factors were obtained from EMFAC2017 emission rates for Los Angeles County in 2016, aggregated by fuel type.
2. Emission factors obtained from United States Environmental Protection Agency Emission Factors for Greenhouse Gas Inventories, Table 1. https://www.epa.gov/sites/production/files/2015-07/documents/emission-factors_2014.pdf.

Municipal Water and Wastewater

Municipal GHG emissions from water and wastewater were calculated based on the total water consumption of municipal operations. It was conservatively estimated that wastewater generation was equivalent to water consumption. In 2016, the City of South Pasadena used approximately 19 million gallons (MG) of potable water for facilities operations and irrigation of public parks maintained by the City.¹⁷ The City obtains water for use in municipal and irrigation operations

¹⁵ CARB 2018. EMFAC2017 v1.0.2. Mobile Source Analysis Branch, Air Quality Planning & Science Division. <https://www.arb.ca.gov/emfac/2017/>

¹⁶ USEPA. 2018. Emission Factors for Greenhouse Gas Inventories. https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf

¹⁷ The City of South Pasadena provided water consumption totals for 2016 for each of the municipal water accounts.

through City operated groundwater wells. Emissions generated from water usage and wastewater generation is due to the indirect electricity use to distribute water and collect and treat wastewater. The energy intensity for water use in the City of South Pasadena was not available; therefore, the energy intensities for water conveyance and distribution for the San Gabriel Water Valley Company (SGWVC) was used as a proxy, since SGWVC's service area is directly adjacent to the City of South Pasadena and SGWVC obtains most of its water from local groundwater pumping, similar to South Pasadena.¹⁸ The energy intensity factor used for water use was 2.604 MWh/MG and 1.577 MWh/MG¹⁹ for wastewater collection and treatment for LACSD. As such, water usage and wastewater generation by City operations generated approximately 12 MT of CO₂e and 7 MT of CO₂e, respectively. Activity data, energy intensity factors, emission factors, and GHG emission totals are provided in Table 7.

Table 7 Water and Wastewater Sector Municipal GHG Emissions

Emission Source	Activity	Energy Intensity	Emission Factor	Total Emissions (MT CO ₂ e)
Water Consumption	18.68 MG	2.064 MWh/MG ¹	0.240 MT CO ₂ e/MWh ³	12
Wastewater Generation		1.577 MWh/MG ²		7
Water and Wastewater Sector Total				19

Notes: MT CO₂e = Metric Tons of Carbon Dioxide Equivalent; MWh = Megawatt-hour; MG = Million Gallons

1. The City of South Pasadena procures water by pumping from the San Gabriel Basin. Water energy intensities for San Gabriel Valley Water Company (SGVWC), as provided in the CPUC *Embedded Energy in Water Studies*, were used as a proxy for City of South Pasadena since SGVWC is adjacent to the City of South Pasadena, and pumps groundwater from the San Gabriel Basin.

2. California Public Utilities Commission (CPUC). 2010. *Embedded Energy in Water Studies; Study 2: Water Agency and Function Component Study and Embedded Energy-Water Load Profiles*. <http://www.cpuc.ca.gov/general.aspx?id=4388>.

3. Delivered electricity emission factors as CO₂e used. Edison International 2017 Sustainability Report (p. 10), June 2018.

<https://www.edison.com/content/dam/eix/documents/sustainability/eix-2017-sustainability-report.pdf>.

Municipal Waste

Many local government facilities and operations generate solid waste, much of which is eventually sent to a landfill. Typical sources of solid waste from local government operations include paper and food waste from offices and facilities, construction waste from public works, and plant debris from parks departments. Organic materials generate methane as they decay in the anaerobic environment of a landfill. The City keeps a record of the amount of waste sent to landfills and diverted. In 2016, 1,431 short tons of waste was sent to landfills from City operations and 451 short tons was recycled, resulting in an estimated 584 MT of CO₂e generated from municipal solid waste generation.²⁰ GHG emissions were calculated using ICLEI *U.S. Community Protocol Method SW.4*, where the landfill gas capture rate for the facilities for which the community's waste is sent to was estimated at 73 percent efficiency, and the default emission factor of 0.06 tons of CH₄ per ton of waste. The methodology is further detailed in Section 3.5. Solid waste activity data, emission factors, and total emissions are provided in Table 8.

¹⁸ The City of South Pasadena procures water by pumping from the San Gabriel Basin. Water energy intensities for San Gabriel Valley Water Company (SGVWC), as provided in the CPUC *Embedded Energy in Water Studies*, were used as a proxy for City of South Pasadena since SGVWC is adjacent to the City of South Pasadena, and pumps groundwater from the San Gabriel Basin.

¹⁹ California Public Utilities Commission (CPUC). 2010. *Embedded Energy in Water Studies; Study 2: Water Agency and Function Component Study and Embedded Energy-Water Load Profiles*. (<http://www.cpuc.ca.gov/general.aspx?id=4388>)

²⁰ Based on communication with the Water Conservation and Sustainability Analyst, there was no municipal organic waste materials collected in 2016.

Table 8 Waste Sector Municipal GHG Emissions

Emission Source	Activity	LFG capture rate	Emission Factor	Total Emissions (MT CO ₂ e)
Solid Waste Landfilled	1,431 short tons ¹	0.73 ²	0.06 MT CH ₄ /short ton ³	584 ⁴
Waste Sector Total				584

Notes: MT CO₂e = Metric Tons of Carbon Dioxide Equivalent; MT CH₄ = Metric Tons of Methane; LFG = Landfill Gas Capture

- Based on communication with the Water Conservation and Sustainability Analyst on August 5, 2019.
- LFG capture rate was derived based on the average landfill gas capture of each facility that South Pasadena sent waste to in 2016, weighted by the mass of waste sent. The derivation is further detailed in the 2016 Community GHG Inventory section *Community Generated Waste*.
- Emission factor and oxidation rate used for emission calculations is the default provided in the ICLEI *U.S. Community Protocol Method SW.4*.
- Total GHG emissions are calculated ICLEI *U.S. Community Protocol Method SW.4* as:
 GHG Emissions = Activity Data x (1-LFG Capture Rate) x (1-Oxidation Rate) x Emission Factor x CH₄ Global Warming Potential

2.2 Municipal GHG Inventory Results

Municipal operations of the City of South Pasadena generated a total of 2,755 MT CO₂e in 2016. As shown in Table 9 and Figure 1, energy use resulted in the greatest quantity of emissions, resulting in 1,613 MT CO₂e (59% of total municipal emissions) where emissions from natural gas use generated 109 MT CO₂e (4% of total municipal emissions), building electricity use generated 238 MT CO₂e (9% of total municipal emissions), the City’s streetlights and traffic signals produced 253 MT CO₂e (9% of total municipal emissions), the City’s water delivery facilities produced 964 MT CO₂e (35% of total municipal emissions), and electricity for parks and outdoor lighting resulted in the remaining energy related emissions (49 MT CO₂e or 2% of total municipal emissions). The generation of solid waste was the second largest source of emissions, generating 584 MT CO₂e (21% of total municipal emissions). The City’s transportation emissions were the third largest source of emissions in 2016, where 366 MT CO₂e (14% of total municipal emissions) was due to employee commute and 173 MT CO₂e (6% of total municipal emissions) was from City fleet vehicle use. The remaining City emissions resulted from the consumption of water and generation of wastewater (19 MT CO₂e or 1% of total municipal emissions).

Figure 1 Municipal GHG Emissions by Sector

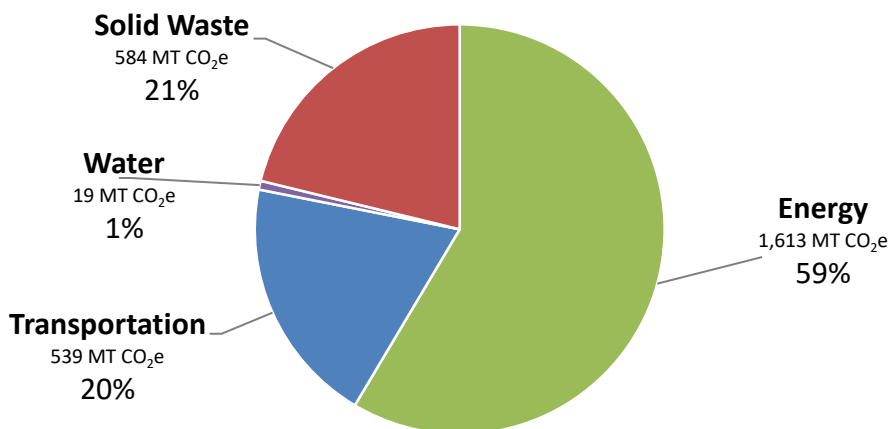


Table 9 Baseline Municipal GHG Emissions Summary by Sector

Sector	GHG Emissions (MT CO ₂ e)	Percent of Total Emissions
Energy	1,613	59%
Natural Gas (buildings & facilities)	109	4%
Electricity (buildings & facilities)	238	9%
Electricity (parks and outdoor lighting)	49	2%
Electricity (traffic signals and streetlights)	253	9%
Electricity (water delivery facilities)	964	35%
Transportation	539	20%
Vehicle Fleet	173	6%
Employee Commute	366	14%
Water and Wastewater	19	<1%
Water Consumption	12	<1%
Wastewater Generation	7	<1%
Waste	584	21%
Total Emissions	2,755	100%

Notes: MT CO₂e = Metric Tons of Carbon Dioxide Equivalent

3 2016 Community GHG Inventory

The 2016 Community GHG Inventory provides a baseline for forecasting of future GHG emissions and setting of GHG reduction targets to be included as part of the CAP. GHG emissions were calculated and reported based on the guidance of the ICLEI *U.S. Community Protocols*. Methodologies, data sources, calculations, and results of the 2016 Community GHG Inventory are included in this section.

3.1 2016 Community GHG Inventory Data Sources

The data used to complete the 2016 Community GHG Inventory came from multiple sources, including utility providers, traffic consultants and the City of South Pasadena. The data sources for the 2016 Community GHG Inventory are summarized in Table 10.

Table 10 Community GHG Inventory Data Sources

Sector	Activity Data	Unit	Source
Inventory			
Energy	Electricity consumption	kWh	SCE
	Natural gas consumption	therms	SCG
Transportation	Vehicle miles traveled	VMT	Iteris Inc., Traffic Consultants
Water	Water consumption	MG	City of South Pasadena
Wastewater	Wastewater generation rate = 60 gallons per person per day for residential and commercial activity	gpcd	Los Angeles County Sanitation Districts (LACSD)
Solid Waste	Landfilled solid waste	Tons	CalRecycle Jurisdiction Disposal Summary Report

Notes: kWh = kilowatt hours; SCE = Southern California Electricity; SCG = Southern California Gas Company; VMT = vehicle miles traveled; gpcd = gallons per capita per day; MG = Million Gallons

3.2 Community Energy

The community energy sector includes GHG emissions resulting from the consumption of electricity and natural gas. Both energy sources are used in residential, commercial, and industrial buildings and for other power needs throughout the City of South Pasadena. A summary of the community energy sector GHG emissions is provided in Table 11, with the methodology of emission calculations detailed in the following section.

Table 11 Community Energy GHG Emissions Summary

Emission Source	Activity Data ¹	Emissions (MT CO ₂ e)
Natural Gas	NA	23,987
Electricity	NA	24,287
Transmission and Distribution Losses	NA	1,027
Total	NA	49,301

Notes: kWh = kilowatt-hour; MT CO₂e = metric tons of carbon dioxide equivalent; NA = Not Applicable
1. Due to California Public Utilities customer privacy rules, natural gas and electricity consumption data requested through the Energy Data Request Program cannot be published.

Natural Gas

GHG emissions from community natural gas consumption were calculated using the ICLEI *U.S. Community Protocol* Method BE.1.1. The total natural gas consumed was provided by Southern California Gas (SCG) in therms and converted to MMBtu.²¹ The natural gas value was then multiplied by the USEPA recommended natural gas emission factors of 53.06 kg CO₂/MMBtu, 0.001 kg CH₄/MMBtu and 0.0001 kg N₂O/MMBtu; equating to 0.00531 MT CO₂e/therm.²² Due to California Public Utilities Commission (CPUC) privacy regulations, the 2016 industrial natural gas use was not provided and is not included in this GHG inventory. Additionally, the CPUC prohibits the public disclosure of natural gas consumption data that has been provided through the Energy Data Request Program (EDRP). Therefore, only emission totals for the entire community are provided, which aggregates the residential and commercial customer classes. Accordingly, South Pasadena community natural gas consumption in 2016 resulted in GHG emissions equivalent to 23,987 MT CO₂e.

Electricity

GHG emissions from community electricity consumption were calculated using the ICLEI *U.S. Community Protocol* Method BE.2 by multiplying annual electricity consumption in the City of South Pasadena by an electricity emission factor representing the average emissions associated with generation of one megawatt hour (MWh) of electricity. In 2016, electricity was supplied to South Pasadena by SCE. To calculate emissions from electricity, the total electricity use reported by SCE was multiplied by the carbon intensity factor of 529 pounds CO₂e per MWh, which was converted to 0.240 MT CO₂e per MWh.²³ The community energy consumption was obtained from SCE through the EDRP. Similar to natural gas activity data, the CPUC prohibits the public disclosure of electricity consumption data that has been provided through the EDRP. Therefore, only emission totals for the entire community are provided, which aggregates the residential and commercial customer classes. Industrial sector consumption is not included in the electricity consumption data. In 2016, a total 24,287 MT CO₂e was generated within the community due to electricity use.

²¹ 1 MMBtu = 10.0024 therms; 1 kg CO₂e = 1 kg CO₂ + 1/(25 kg CH₄) + 1/(298 kg N₂O)

²² USEPA. 2014. Emission Factors for Greenhouse Gas Inventories. Table 1. https://www.epa.gov/sites/production/files/2015-07/documents/emission-factors_2014.pdf

²³ Edison International. 2018. Edison International 2017 Sustainability Report. pp. 10 <https://www.edison.com/content/dam/eix/documents/sustainability/eix-2017-sustainability-report.pdf>.

Community Transmission and Distribution Losses

In addition to energy consumption, the amount of emissions generated due to electricity transmission and distribution (T&D) losses were determined, as recommended by the ICLEI *U.S. Community Protocol*. T&D losses occur as electricity is transported from its generation source to its final end use destination. Transmission losses occur in the form of heat as electricity meets the small resistance in wires, and distribution losses occur when electricity is transformed from higher to lower voltage wires. Although emissions generated due to electricity T&D losses are outside of the City’s operational control, emissions related to T&D losses are directly related to electricity use within the community and should be included in the community emissions.²⁴ GHG emissions from community T&D losses were calculated using the ICLEI *U.S. Community Protocol* Method BE.4. T&D loss associated emissions were determined by multiplying the total community electricity consumption in 2016 by 4.23%, the grid loss factor for the California sub-region (CAMX) most recently determined by the United States Environmental Protection Agency (USEPA) *Emissions and Generating Resource Integrated Databases (eGRID)*.²⁵ Due to the CPUC data privacy restrictions of the EDRP, the total community electricity consumption cannot be published. Emissions associated with community electricity T&D losses were 1,027 MT of CO₂e in 2016. Table 13 provides the activity data, emission factor, and GHG emission calculation results for community T&D losses.

3.3 Community Transportation

The transportation sector for the 2016 Community GHG Inventory consists of GHG emissions from on-road commercial and passenger vehicle travel, public transit buses and light rail, and off-road equipment. A summary of the community transportation sector GHG emissions is provided in Table 12, with the methodology of emission calculations detailed in the following section.

Table 12 Community Transportation GHG Emissions Summary

Emission Source	Activity Data	Emissions (MT CO ₂ e)
Passenger On-Road Transportation	164,015,449 VMT	60,400
Commercial On-Road Transportation	3,581,387 VMT	4,951
Public Transit - Bus	190,670 VMT	435
Public Transit - Light rail	1,375,500 Annual Riders	613
Off-road Equipment	NA	829
Total	NA	67,228

Notes: VMT = Vehicle Miles Traveled; MT CO₂e = metric tons of carbon dioxide equivalent; NA = Not Applicable

Community On-Road Transportation

Community on-road transportation emissions were calculated for passenger and commercial vehicles based on VMT. Accordingly, ICLEI *U.S. Community Protocol* Methods TR.1.B and TR.2.C were

²⁴ ICLEI 2019. U.S. Community Protocol for Account and Reporting Greenhouse Gas Emissions. Pg. 36.

²⁵ USEPA’s 2016 eGRID database, February 2018. <https://www.epa.gov/energy/emissions-generation-resource-integrated-database-egrid>

used to estimate GHG emissions for 2016. Activity data was obtained through transportation modeling for VMT attributed to the City of South Pasadena, completed by Iteris, Inc., a traffic consultant. The Southern California Association of Governments (SCAG) Trip Based Regional Travel Demand Model, based on the SCAG 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), was used to model traffic volumes and quantify VMT attributed to South Pasadena. The VMT modeling results allocate VMT to the City of South Pasadena using the Origin-Destination (O-D) method. The O-D VMT method is the preferred method recommended by the *U.S. Community Protocol* in on-road methodology TR.1 and TR.2 to estimate VMT based on trip start and end locations. Under these recommendations, all VMT associated with trips that start and end entirely within the City (Internal-Internal or I-I) are attributed to the City. Additionally, one half of the VMT associated with trips that start internally and end externally and vice versa (Internal-External or I-E and External Internal or E-I) are attributed to the City. The remainder of the trips are not attributed to the City and are instead attributed to the Cities in which the trips originate or end.

The emissions associated with on-road transportation were calculated by multiplying the estimated VMT and the average vehicle emissions rate established by CARB EMFAC2017 modeling for vehicles within the region. Emissions factors are established using the latest CARB and EPA-approved emissions modeling software, state EMFAC2017 Model. Carbon dioxide, nitrous oxide, and methane emissions from engine combustion were multiplied by their GWP to determine emission factors in CO₂e per VMT. Emissions for both passenger and commercial vehicles were established using the EMFAC2017 GHG module and weighted by VMT to establish an average emissions factor per VMT for the City. Emissions from electricity used to charge electric vehicles is captured under the electricity sector. Technical details on the EMFAC2017 modeling tool can be found on the EMFAC Mobile Source Emissions Inventory Technical Support Documentation Portal.²⁶

In 2016 on-road transportation attributed to the City of South Pasadena resulted in 65,351 MT CO₂e. The activity data, emission factors and total GHG emissions from on-road transportation are provided in Table 13. Activity data is provided in O-D format, with VMT categorized based on whether the associated trips originate and end within the City (I-I), begin outside of the City and end within (X-I), or vice versa (I-X).

²⁶ California Air Resources Board. EMFAC Software and Technical Support Documentation. Accessed at: <https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/road-documentation/msei-modeling-tools-emfac> Accessed on: October 4, 2019.

Table 13 Community On-road Transportation GHG Emissions

O-D Trip Type ¹	Activity Data (Daily VMT)	Annual Aggerated Activity Data (Annual VMT) ²	Emission Factor (MT CO ₂ e per VMT) ³	Emissions (MT CO ₂ e)
Passenger Vehicle				
I-I	4,846			
X-I	233,909	164,015,449	0.000368	60,400
I-X	233,912			
Commercial Vehicle				
I-I	21			
X-I	5,134	3,581,387	0.01382	4,951
I-X	5,166			
Total Emissions		NA	NA	65,351

Notes: MT CO₂e = metric tons of carbon dioxide equivalent; VMT = vehicle miles traveled
 1. O-D trip type represent the origin destination pair designation of each vehicle trip contributing to community VMT. This is based on whether the associated trips originate and end within the City (Internal-Internal or I-I), begin outside of the City and end within (External- Internal or X-I), or vice versa (Internal-External or I-X)
 2. Weekday to annual conversion of 347 is used per CARB guidance on VMT modeling.
 3. Emissions factors are established using the latest CARB and EPA-approved emissions modeling software, 2017 state EMISSIONS FACTors (EMFAC) Model. Carbon dioxide, nitrous oxide, and methane emissions from engine combustion are multiplied by their GWP to determine CO₂e per VMT

Community Public Transit

GHG emissions from public transit are attributed to South Pasadena based on the miles of public bus routes within the City and the light rail ridership from stops within the City. Los Angeles County Metropolitan Transportation Authority (LA Metro) operates both the public buses and Gold Line light rail which provide service within South Pasadena. An analysis of the length of each bus route and the number of buses servicing the routes weekly were performed by Iteris, Inc. to provide total VMT from public buses in 2016, as provided in Table 14.

Table 14 VMT for Bus Services within the City of South Pasadena

Route	Length (miles)	Number of Buses				VMT	
		Weekday	Saturday	Sunday	Weekly	Daily	Annual
79	1.48	330	52	52	434	642	33,401
176	2.66	200	0	0	200	532	27,664
258	1.43	190	0	0	190	272	14,128
260/762	2.28	810	88	76	974	2,221	115,477
Total	7.9	1,530	140	128	1,798	3,667	190,670

Notes: VMT = Vehicle Miles Traveled
 Data provided by Iteris, Inc. Bus routes are LA Metro routes that operate in South Pasadena, with the length of each route that lies within the city borders provided.

Emissions from buses were calculated using vehicle emissions rate established by CARB EMFAC2017 modeling for buses within the region for the year 2016. Light rail activity data was estimated as the annual ridership from the Mission Station in South Pasadena. Because 2016 ridership from the Mission Station was not available, it was estimated from the total light rail ridership in 2016, using the proportion of riders using Mission Station in 2014 compared to total light rail ridership in 2014.²⁷ It was estimated that there was an average of 3,768 riders boarding or arriving at the Mission Station each day, equating to 1,375,500 riders per year. In order to calculate GHG emissions from riders on the Gold Line, an energy intensity per rider was derived based on the total ridership for the light rail system and the total energy consumption of the entire light rail system. The derived ridership and energy intensity are provided in Table 15.

Table 15 LA Metro Light Rail Ridership and Energy Intensity

Year	Daily Light Rail Ridership ¹				Annual Ridership	Energy consumption	
	Weekday	Saturday	Sunday	Weekly Average		Total Annual (kWh) ²	Per Rider (kWh/rider)
2014	351,833	236,085	181,747	311,000	113,514,844	210,937,940	1.858
2016	348,505	220,647	187,851	307,289	112,160,485	208,270,782	1.857

Notes: kWh = kilowatt-hour

1. Metro ridership data provided from Interactive Estimated Ridership Stats: <http://isotp.metro.net/MetroRidership/IndexRail.aspx>

2. Annual energy consumption obtained from the Metro's 2017 Energy and Resources Report .

https://media.metro.net/projects_studies/sustainability/images/report_sustainability_energyandresource_2017.pdf

GHG emissions were calculated for light rail by multiplying the energy consumption per rider by the total number of riders and the SCE electricity emission factor. The activity data, emission factors, and resulting GHG emission for public transit are provided in Table 16.

Table 16 Community Public Transit GHG Emissions

Emission Source	Activity Data	Energy Consumption	Emission Factor	Emissions (MT CO ₂ e)
Bus	190,670 VMT	NA	0.002281 MT CO ₂ e/VMT	435
Light Rail	1,375,500 Annual Riders	2,554,168 kWh ¹	0.000240 MT CO ₂ e/kWh	613
Total	NA	NA	NA	1048

Notes: kWh = kilowatt hours; MT CO₂e = metric tons of carbon dioxide equivalent; VMT = Vehicle Miles Traveled; NA = Not Applicable

1. The total energy consumption of light rail attributed to South Pasadena was derived by multiplying the estimated energy consumption per rider for 2016, as provided in Table 17, by the annual riders at Mission Station in South Pasadena.

Community Off-Road Transportation

GHG emission from off-road transportation was estimated using ICLEI U.S. Community Protocol Method TR. 8, based on the CARB's OFFROAD2007 model and the population of South Pasadena. The OFFROAD2007 model provides emissions data related to various sub-categories and use of off-road equipment, such as construction or lawn and garden equipment, based on county inventories

²⁷ Metro ridership data provided from Interactive Estimated Ridership Stats: <http://isotp.metro.net/MetroRidership/IndexRail.aspx>

(i.e. Los Angeles County). The 2016 emissions from each sub-category applicable to South Pasadena were converted from tons per day to annual emissions by multiplying the daily emissions by 365.25 days per year.²⁸ The data was scaled by South Pasadena’s population estimating that 0.26 percent of the total Los Angeles County population lives in South Pasadena, with emissions from off-road equipment attributed to the City of South Pasadena accordingly. To ensure the emissions were representative of South Pasadena, emissions from off-road equipment that would not be used in South Pasadena were excluded, including emissions related to: railroad activities, airport activities, port activities, and boat use; as there is not a railyard, airport, port, or access to a large body of water within South Pasadena. Additionally, emissions from "Transport Refrigeration Units" were excluded due to a lack of specific information related to these types of units within South Pasadena. "Recreational Equipment" emissions was limited to specialty vehicle or golf cart emissions, as South Pasadena has a golf course. All-terrain vehicles (ATVs), off-road motorcycles, minibikes, and snowmobiles were not included as there is no designated open space within South Pasadena’s jurisdictional boundaries to use such off-road recreational equipment. Thus, off-road equipment included in the OFFROAD2007 model pertained to the following sectors: construction, entertainment, lawn and garden, light commercial, and recreational.

The City of South Pasadena converted City-operated regular maintenance and grounds equipment from diesel and gas powered to electric, resulting in an annual reduction of off-road equipment emissions of 41 MT of CO₂e per year.²⁹ Thus, this reduction is subtracted from the OFFROAD2007 output, equating to community-wide off-road transportation emissions totaling 829 MT CO₂e.

3.4 Community Water and Wastewater

Water sector GHG emissions include those generated from electricity used in water consumption, centralized wastewater treatment plant (WWTP) processes, and fugitive emissions. The inclusion of these emission sources in the water sector is based on the guidance of the ICLEI *U.S. Community Protocol*. A summary of the water and wastewater emissions is provided in Table 17, with the methodology of emission calculations detailed in the following section.

Table 17 Community Water and Wastewater GHG Emissions Summary

Emission Source	Activity Data	Emissions (MT CO₂e)
Water Supply	1,118 MG	700
Wastewater Fugitive and Process Emissions		111
Wastewater Treatment and Collection Emissions	540 MG	216
Total	NA	1,027

Notes: MG = Million Gallons; MT CO₂e = metric tons of carbon dioxide equivalent

²⁸ 365.25 days were used to account for leap year, which occurs every four years.

²⁹ South Coast Air Quality Management District 2019. Cities in Action – South Pasadena. *ADVISOR*. Vol. 26 No.3. May/June 2019.

Community Water Supply

Water supplied to the community indirectly contributes emissions through the use of energy to extract, convey, treat, and deliver water. The amount of energy required for community water usage was calculated following ICLEI *U.S. Community Protocol* Method WW.14, where energy required for each segment of the water cycle was estimated using energy intensities specific to the water segment. Water supplied to South Pasadena is approximately 99.5% sourced from well production from the San Gabriel Basin with the remainder purchased from Pasadena Water and Power (PWP) and Metropolitan Water District (0.47 and 0.07 percent, respectively). The energy intensity for the City of South Pasadena was not available; therefore, the energy intensities for water conveyance and distribution for the SGWVC was used as a proxy, since SGWVC's service area is directly adjacent to the City of South Pasadena and SGWVC obtains most of its water from local groundwater pumping of the San Gabriel Basin.³⁰ The City of South Pasadena uses chlorination treatment for local groundwater which requires additional energy.³¹ Since water purchases from Metropolitan Water District are very small, they are considered negligible (<0.1 percent of water) and are not included in the inventory calculations. The total water volume undergoing each process (conveyance, treatment, and pumping) was multiplied by the energy intensity of each process to obtain a total energy consumption, which was then multiplied by the SCE electricity emission factor to obtain total GHG emissions. The volume of water, process, energy intensity, and resulting emissions are provided in Table 18. In 2016, the City of South Pasadena generated 700 MT CO_{2e} of GHG emissions from electricity consumed as a result of water supplied to the community.

³⁰ San Gabriel Valley Water Company (SGVWC) Energy Intensity values are used as a surrogate for local groundwater because the agency's supply is almost wholly pumped from San Gabriel Basin (CPUC 2010. Embedded Water Study 2. Appendix B, pg. 265. Water Agency and Function Component Study and Embedded Energy-Water Load Profiles). The energy intensities used are the averages of the lower and upper ranges: 2,501.5 kWh/MG for groundwater conveyance, and 93.5 kWh/MG for booster and raw water pumps.

³¹ Treatment for City of South Pasadena water is chlorination. According to *Energy requirements of water production, treatment, end use, reclamation and disposal* published in Renewable and Sustainable Energy Review 2012, energy intensity of chlorination treatment is 0.0024 kWh per cubic meter, which equates to 9.0. kWh per Million Gallons.

Table 18 Community Water Consumption GHG Emissions

Water Supplier	Water Process	Water Volume (MG)	Energy Intensity (kWh/MG) ^{1,2}	Emission Factor(MT CO ₂ e/kWh)	Emissions (MT CO ₂ e)
City of South Pasadena	Groundwater Pumping	1,113	2,502	0.000240	668
	Treatment		9		2
	Distribution		94		25
Pasadena Water and Power	Conveyance, Treatment and Distribution	5	3,428		4
Total	NA	NA	NA	NA	700

Notes: kWh = kilowatt hours; MT CO₂e = metric tons of carbon dioxide equivalent; MG = Million Gallons; NA = not applicable
 1. Energy intensity of the City of South Pasadena water supply was estimated to be similar to that of San Gabriel Valley Water Company (SGVWC), for which both agencies obtain their water supply almost entirely from groundwater pumping in the San Gabriel Basin. The energy intensity for SGVWC was obtained from the CPUC 2010 *Embedded Energy Water Studies Study 2: Water Agency and Function Component Study and Embedded Energy-Water Load Profiles*; Appendix B-Agency Profiles (pg 333). The average of high and low values were used from Table 3-22.
 2. The energy intensity of the entire water supply for Pasadena Water and Power was obtained from the 2015 Urban Water Management Plan. https://ww5.cityofpasadena.net/water-and-power/wp-content/uploads/sites/54/2017/08/2015_Final_UWMP.pdf.

Community Wastewater

Wastewater generated in the City of South Pasadena is collected in local sewer lines that ultimately discharge into regional treatment and disposal facilities managed by the LACSD. Community-wide generated wastewater is accounted for as a per capita generation rate (PCGR) and includes both residential and commercial wastewater flows. In 2016, the PCGR was 60 gallons per day.³² A population estimate for 2016 of 26,018, was provided by the Department of Finance, to estimate the total wastewater generated in South Pasadena.³³ Accordingly, it was estimated that in 2016 the South Pasadena community generated approximately 1.56 million gallons of wastewater per day (MGD) The City of South Pasadena does not operate a wastewater facility nor is there one within the City boundaries. According to the City of South Pasadena 2015 Urban Water Management Plan (UWMP), generated wastewater entering the sewer system is conveyed to the Whittier Narrows Water Reclamation Plant (WNWRP) where primary, secondary, and tertiary treatment is provided. WNWRP treats an average flow of 7.4 million gallons of wastewater per day, serving a population of approximately 150,000 from which effluent flow is primarily discharged to the San Gabriel and Rio Hondo Rivers for groundwater recharge purposes.^{34,35} Primary and secondary biosolids generated from processing at the WNWRP are returned to the LACSD outfall system and are pumped to anaerobic digestors at the Joint Waters Pollution Control Plant (JWPCP) which processes

³² City of South Pasadena 2015 UWMP. Pg. 6-15. (<https://www.southpasadenaca.gov/home/showdocument?id=2905>).

³³ Department of Finance. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2019 with 2010 Census Benchmark. (<http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>)

³⁴ Whittier Narrows average treatment: City of El Monte Downtown Main Street TOD Specific Plan Final EIR. Update of the EIR. 2017. Pg. 42. <http://www.elmonteca.gov/DocumentCenter/View/1420/Final-EIR-and-Responses-to-Comments-March-2017?bidid=>

³⁵ Sanitation District of Los Angeles. 2012. Joint Outfall Systems 2010 Master Facilities Plan Final EIR/EIS. Chapter 2. Pg. 2-17. <https://www.lacsd.org/civicax/filebank/blobload.aspx?blobid=3258>

approximately 257 million gallons of wastewater per day, serving a population of approximately 3,500,000.³⁶

Since separate phases of the wastewater treatment occur at separate facilities, ICLEI *U.S. Community Protocol* Method WW.13 was used to attribute these emissions to the plant associated with the emission sources, scaled by the population of South Pasadena relative to the total population served by the plant. Accordingly, emissions associated with anaerobic digesters were attributed to the JWPCP facility using ICLEI *U.S. Community Protocol* Method WW.1 and WW.2, and fugitive emissions associated with the nitrification-denitrification process and effluent discharge from the plant were attributed to the WNWRP using ICLEI *U.S. Community Protocol* Method WW.7 and WW.12. The total emissions, as calculated from each of the wastewater treatment facilities and the attribution of these emissions to South Pasadena, are provided in Table 19.

³⁶ Sanitation District of Los Angeles. 2012. Joint Outfall Systems 2010 Master Facilities Plan Final EIR/EIS. Chapter 2. Pg. 2-12. <https://www.lacsd.org/civicax/filebank/blobdload.aspx?blobid=3258>

Table 19 Community Wastewater Treatment Process and Fugitive GHG Emissions

Emission Source	Population Served ^{1,2}	Emission Process	Total Facility Emissions (MT CO ₂ e) ³	South Pasadena Attribution Factor (City Pop./Facility Service Pop.) ⁴	Attributed Emissions (MT CO ₂ e)
Whittier Narrows Water Reclamation Plant (WNWRP)	150,000	Process N ₂ O from Nitrification-Denitrification	278	0.1735	48
		Fugitive N ₂ O from Effluent Discharge	360		62
Joint Waters Pollution Control Plant (JWPCP)	1,000,000	CH ₄ Emissions from Combustion of Digester Gas	<1	0.0074	<1
		N ₂ O Emissions from Combustion of Digester Gas	<1		<1
Total	NA	NA	NA	NA	111

Notes: Value may not add up due to rounding

MT CO₂e = metric tons of carbon dioxide equivalent; CH₄ = Methane; N₂O = Nitrous Oxide; Pop. = Population; NA = not applicable

1. Population served by LACSD's WNWRP by LACSD website

https://lacs.org/wastewater/wwfacilities/joint_outfall_system_wrp/whittier_narrows.asp.

2. Population served by LACSD's JWPCP by LACSD website <https://lacs.org/wastewater/wwfacilities/jwpcp/default.asp>

3. N₂O and CH₄ emissions were converted to MT CO₂e using the appropriate global warming potentials (CH₄ GWP = 28; N₂O HGWP = 265).

4. The South Pasadena attribution factor is used to attribute a portion of the total emissions from each wastewater treatment facility to the City of South Pasadena based on population, as recommended by ICLEI *U.S. Community Protocol* WW.13. The South Pasadena 2016 population of 26,018 was divided by the total population served by the respective facility to derive the attribution factor.

Wastewater treatment technology specifications can vary widely between jurisdictions, as a result of process specifics, influent characteristics, and the age of infrastructure. As noted in the U.S. *Community Protocols*, the wastewater emissions calculation methodologies used here were designed as a generalized top-down approach for countries where detailed information was not available; they are a simplified approach that sacrifice accuracy. These methods have a range of accuracy for CH₄ emissions of +37% to -47% and +76% to -93% for N₂O, compared to direct source measurements.³⁷ While there is significant uncertainty in the fugitive and process emissions associated with wastewater treatment, providing estimates of their emissions provides a general understanding of the magnitude of this emission source in comparison to others.

Energy-related emissions associated with the collection and treatment of wastewater generated in South Pasadena were calculated using ICLEI *U.S. Community Protocol* Method WW.15 where emissions are due to the amount of energy required to collect and treat wastewater. LACSD specific energy intensity factors for wastewater collection and treatment were used to calculate emissions.³⁸ Based on the 1.56 MGD wastewater generation rate, it was estimated that approximately 570 MG

³⁷ ICLEI 2019. U.S. Community Protocol for Accounting and Reporting Greenhouse Gas Emissions. Appendix F – Wastewater and Water Emission Activities and Sources.

³⁸ California Public Utilities Commission (CPUC). 2010. Embedded Energy in Water Studies; Study 2: Water Agency and Function Component Study and Embedded Energy-Water Load Profiles. (<http://www.cpuc.ca.gov/general.aspx?id=4388>)

of wastewater was collected and treated in 2016, resulting in 216 MT CO₂e being generated from the associated electricity consumption. Table 20 provides the activity data, energy intensity, energy consumption, and emissions associated with wastewater collection and treatment. In 2016, approximately 216 MT CO₂e were generated from electricity used to collect and treat wastewater in South Pasadena.

Table 20 Community Wastewater Treatment and Collection GHG Emissions

Process	Annual Wastewater Flow (MG)	Energy Intensity (kWh/MG) ¹	Annual Energy Consumption (kWh)	Emission Factor(MT CO ₂ e/kWh)	Emissions (MT CO ₂ e)
Wastewater Collection	570	302	172,196	0.000240	41
Wastewater Treatment		1,275	726,985		174
Total	NA	NA	NA	NA	216

Notes: kWh = kilowatt hours; MT CO₂e = metric tons of carbon dioxide equivalent; MG = Million Gallons; NA = not applicable
Totals may not add due to rounding

1. Agency specific (LACSD) energy intensities were obtained from CPUC 2010. Embedded Energy Water Studies Study 2: Water Agency and Function Component Study and Embedded Energy-Water Load Profiles; Table 4.2 Appendix B-Agency Profiles (pg. 134); average of low and high value were applied.

3.5 Solid Waste

GHG emissions result from solid waste management and decay of organic material in solid waste. ICLEI *U.S. Community Protocol* provides multiple accounting methods to address both emissions arising from solid waste generated by a community (regardless of where it is disposed of) as well as emissions arising from solid waste disposed of inside a community’s boundaries (regardless of where it was generated). GHG emissions from the decomposition of organic material in this sector are broken down into two parts:

- Methane emissions from solid waste generated by the community in the year of the inventory, using ICLEI *U.S. Community Protocol* Method SW.4.
- Methane emissions from existing solid waste-in-place at landfills located within the community limits (waste-in-place), using ICLEI *U.S. Community Protocol* Method SW.1.

Due to the slow rate of emissions generation associated with decomposition of solid waste, this two-pronged approach also allows policy makers to target solid waste activity in a particular year, similar to other sectors (e.g., fuel combustion resulting in immediate emissions). Accounting for both of these sources will lead to some double counting in the waste sector; however, both methodologies convey different aspects of the solid waste emissions profile and are included for consistency with previous inventories. No landfills exist within the South Pasadena’s jurisdictional boundary; therefore, solid waste decay methane emissions were estimated using only ICLEI *U.S. Community Protocol* Method SW.4 to calculate the methane commitment of solid waste generated by South Pasadena in 2016. While these methane emissions are attributed to a single inventory year, the actual emissions will occur over time as waste decays in the landfill.

In addition to the GHG emissions resulting from the decomposition of solid waste in landfills, the collection, transportation, and processing of solid waste produces GHG emissions. Specifically, for

the City of South Pasadena, a small portion of the waste stream is sent to combustion facilities, which produces additional GHG emissions. The emissions from the collection of solid waste are included in the transportation sector; therefore, they are not included in the solid waste sector total emissions. However, it is beneficial to quantify these emissions for informational purposes in policy development. The following ICLEI methodologies are used to quantify solid waste process emissions:

- Process emissions, generated at landfills, associated with landfilling of community-generated waste, using ICLEI *U.S. Community Protocol Method SW.5*
- Combustion emissions associated with community-generated waste sent to combustion facilities, using ICLEI *U.S. Community Protocol Method SW.7*

A summary of the community waste sector GHG emissions is provided in Table 21, with the methodology of emission calculations detailed in the following section.

Table 21 Community Waste GHG Emissions Summary

Emission Source	Activity Data	Emissions (MT CO ₂ e)
Landfill Methane Emissions	18,484 tons	7,509
Landfilling Process Emissions	18,484 tons	203
Waste Sent to Combustion Facilities	3 tons	1
Total	NA	7,713

Notes: Totals may not add due to rounding.

kWh = kilowatt-hour; MT CO₂e = metric tons of carbon dioxide equivalent; NA = Not Applicable

Community Generated Waste

In 2016, South Pasadena produced 18,484 tons of waste which was disposed of in landfills.³⁹ ICLEI *U.S. Community Protocol Method SW.4.1* was used to calculate methane emissions based on the mass of waste landfilled, organic content of waste, and the landfill gas (LFG) capture rate of the facilities to which waste was sent. Waste generated in South Pasadena was sent to numerous landfills; therefore, the LFG capture rate used for waste generated in South Pasadena was derived from the average LFG capture of each facility, weighted by the mass of waste received. The estimated LFG capture rate was 73%, with calculation details provided in Table 22.

³⁹ Waste disposed of by landfill from South Pasadena was obtained via CalRecycle 2016 Disposal Reports by Jurisdiction. <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility>

Table 22 Community Waste Landfill Gas Capture Rate

Facility	Waste Received (tons) ¹	Percent of Total Landfilled Waste	LFG Capture Rate ²	Weighted LFG Capture Rate
Mid-Valley Sanitary Landfill	7,602	41.1%	67.4%	
Scholl Canyon Sanitary Landfill	3,913	21.2%	79.0%	
Chiquita Canyon Sanitary Landfill	3,639	19.7%	96.9%	
San Timoteo Sanitary Landfill	2,602	14.1%	54.6%	
Azusa Land Reclamation Co. Landfill	286	1.6%	42.7%	73%
Victorville Sanitary Landfill	183	1.0%	29.1%	
Olinda-Alpha Sanitary Landfill	173	0.9%	88.6%	
Frank R. Bowerman Sanitary Landfill	45	0.2%	None Reported	
Antelope Valley Public Landfill	32	0.2%	77.6%	

Notes: LFG = Landfill Gas
1. Total waste sent to destination landfills was obtained from CalRecycle 2016 Disposal Reports by Jurisdiction. <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility>
2. LFG capture rates determined from the United States Environmental Protection Agency's Landfill Methane Outreach Program (LMOP) database. <https://www.epa.gov/lmop/project-and-landfill-data-state>

Using the above calculated LFG capture rate, it was estimated that the waste sent to landfill by the community in 2016 would generate approximately 7,509 MT CO₂e. The activity data, calculation details, emission factors, and GHG emissions are provided in Table 23.

Table 23 Community Waste Landfill Methane Emissions

Process ¹	Solid Waste (tons)	Emission Factor (MT CH ₄ /ton of waste) ²	Oxidation Rate ³	LFG Capture Rate ⁴	Emissions (MT CO ₂ e) ⁵
Landfilled Solid Waste	18,484	0.06	0.01	0.73	7,509

Notes: LFG = Landfill Gas ; MT CO₂e = metric tons of carbon dioxide equivalent; MT CH₄ = metric tons of methane
1. Emissions calculated using *U.S. Community Protocol Method SW.4.1*.
2. Default emission factor from *U.S. Community Protocol Method SW.4.1* used for calculations.
3. Oxidation rate represents the remaining fraction of waste mass that is not converted to methane.
4. LFG capture rate derivation provided in Table 24.
5. Total emissions are converted to CO₂e using the appropriate methane global warming potential.

Landfilling Process Emissions

Landfilling process emissions encompass the contribution of the City of South Pasadena's waste to the emissions associated with operations at the destination landfill. These emissions were calculated using ICLEI *U.S. Community Protocol Method SW.5*. The primary destination landfills for South Pasadena's waste are assumed to use natural gas to fuel their equipment.⁴⁰ In 2016,

⁴⁰ It is assumed that the primary fuel used for processing equipment is natural gas; however, EPA GHG Reports the primary landfills South Pasadena waste is disposed at use natural gas and propane to power stationary combustion equipment rather than purely natural gas. <https://ghgdata.epa.gov/ghgp/main.do>

landfilling process emissions attributed to South Pasadena were 203 MT of CO₂e. The activity data, calculation details, emission factors, and GHG emissions are provided in Table 24.

Table 24 Community Waste Landfilling Process GHG Emissions

Process ¹	Solid Waste (tons)	Emission Factor (MT CO ₂ /ton of waste) ²	Emissions (MT CO ₂ e) ⁵
Landfilled Solid Waste	18,484	0.011	203

Notes: MT CO₂e = metric tons of carbon dioxide equivalent
 1. Emissions calculated using U.S. Community Protocol Method SW.5
 2. Default emission factor from U.S. Community Protocol Method SW.5 used for calculations, assuming natural gas fueled equipment.

Waste Sent to Combustion Facilities

A small portion of the waste generated in the City of South Pasadena is sent to waste combustion facilities and ICLEI U.S. Community Protocols Method SW.7 was used to calculate these emissions. In 2016, the City of South Pasadena sent 3 tons of waste to waste combustion facilities.⁴¹ Emission from the waste-to-energy facilities were attributed to South Pasadena based on the attribution factor of the proportion of waste sent to the facilities to the total annual waste processed by the facility. Table 25 provides the total emissions generated from each facility for which waste from South Pasadena was sent, the total GHG emissions from the facility, and the emissions attributed to South Pasadena.

Table 25 Community Waste Sent to Combustion Facilities GHG Emissions

Facility	Total Facility Waste Processed (Tons) ¹	Waste Sent from South Pasadena (Tons) ²	Attribution Factor	Total Facility Emissions (MT CO ₂ e) ³	Emissions (MT CO ₂ e) ⁵
Commerce Refuse-To-Energy Facility	109,103	2	0.00002	58,222	1
Southeast Resource Recovery Facility	417,925	1	0.000002	141,708	<1
Total	NA	NA	NA	NA	1

Notes: MT CO₂e = metric tons of carbon dioxide equivalent
 1. Total waste received by the facility in 2016 obtained from CalRecycle Single-year Countywide Destination Detail for Los Angeles County. <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/CountywideDetail>
 2. Total waste sent to destination landfills was obtained from CalRecycle 2016 Disposal Reports by Jurisdiction. <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility>.
 3. Total facility emissions obtained from the U.S. EPA Facility Level Information on Greenhouse gases Tool (FLIGHT). <https://ghgdata.epa.gov/ghgp/main.do>

⁴¹ Total waste sent to destination landfills was obtained from CalRecycle 2016 Disposal Reports by Jurisdiction. <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility>

3.6 Community GHG Inventory Results

In 2016, the South Pasadena community emitted approximately 125,269 MT CO₂e. As shown in Figure 2 and Table 26, the transportation sector was the largest source of emissions, generating approximately 67,228 MT CO₂e, or 54% of total 2016 GHG emissions. Electricity and natural gas consumption within the residential and commercial sectors were the second largest source of 2016 emissions, generating 49,301 MT CO₂e, or 39% of the total. Waste generation, including waste decay and processing resulted in 6% of the City’s emissions, while water use and wastewater generation resulted in the remaining 1%.

Figure 2 2016 Community-wide GHG Emissions by Sector

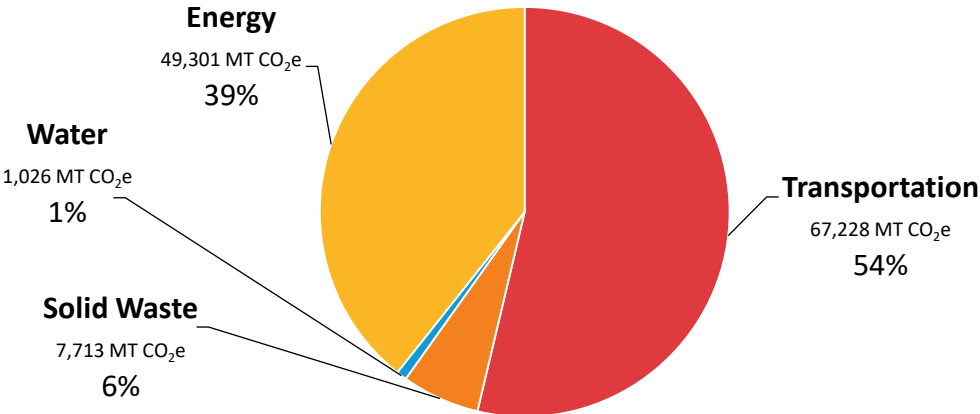


Table 26 Baseline Community-wide GHG Emissions Summary by Sector

Sector	Emissions (MT CO₂e)	Percent of Total Emissions
Energy	49,301	39%
Electricity	23,987	19%
Natural Gas	24,287	19%
Electricity Transmission and Distribution Losses	1,027	1%
Transportation	67,228	54%
On-road Transportation	65,351	52%
Off-road Equipment	829	1%
Public Transit	1,048	1%
Water	1,026	1%
Water conveyance, distribution, and treatment	700	1%
Wastewater collection and treatment	216	<1%
Wastewater Fugitive and Process Emissions	111	<1%
Solid Waste	7,712	6%
Waste Sent to Landfills	7,509	6%
Process Emissions	203	<1%
Waste Sent to Combustion Facilities	1	<1%
Total	125,269	100%

Notes: Emissions have been rounded and therefore sums may not match
MT CO₂e : Metric tons of Carbon Dioxide Equivalent

4 GHG Emissions Forecast

A baseline inventory (i.e., the City of South Pasadena’s 2016 community inventory) sets a reference point for a single year; however, annual emissions change over time due to external factors such as population and job growth. An emissions forecast accounts for projected growth and presents an estimate of GHG emissions in a future year. Calculating the difference between the GHG emissions forecast and the reduction targets set by the City determines the gap to be closed through City Climate Action Plan policies. This section quantifies an estimate of the future GHG emissions in South Pasadena and the reduction impact state regulations will have on the forecasted GHG emissions for the years 2020, 2030, 2040 and 2045.

Several indicator growth rates were developed from demographic growth projections and the results of the 2016 Community GHG Inventory and applied to the various emissions sectors to forecast future GHG emissions. These growth rates were developed from the SCAG 2016 RTP/SCS population and job projections. This forecast based solely on the 2016 GHG inventory and growth projections is considered the *business-as-usual scenario (BAU)*, where it is assumed that no additional action will occur to reduce future GHG emissions. Once *BAU* forecasted GHG emissions are established, a *legislative adjusted (adjusted) scenario* of future GHG emissions is developed which considers the GHG reduction impact of state and federal legislation on the *BAU* forecasted GHG emissions. The applicable state and federal regulatory requirements, including Corporate Average Fuel Economy standards, Advanced Clean Car Standards, Renewable Portfolio Standard, and Title 24 efficiencies, are then incorporated to accurately reflect expected reductions from state programs. The *adjusted scenario* provides a more accurate picture of future emissions growth and the responsibility of the City and community for GHG reductions to align with state GHG reduction goals.

4.1 Business-as-Usual Scenario GHG Emissions Forecast

The City of South Pasadena *BAU scenario* forecast provides an estimate of how GHG emissions would change in the forecast years if consumption trends continue as in 2016, absent any new regulations or actions that would reduce local emissions. Several indicator growth rates were developed from the 2016 GHG inventory activity levels and applied to the various emissions sectors to project future year activity data. Additionally, as part of the *BAU scenario*, forecast emission factors are assumed to remain the same as in 2016. Table 27 contains growth and emission factors used to develop the business-as-usual scenario forecast. Not included in this table is on-road transportation VMT and off-road equipment. VMT as provided from the SCAG Trip Based Regional Travel Demand Model is linked to the same SCAG 2016 RTP/SCS demographic projections used for this *BAU scenario* forecast. Forecasted emission from off-road equipment was estimated using the CARB OFFROAD2007 model and the methodology described in the *Community Off-Road Transportation* Section.

Table 27 Business-as-Usual Growth and Emission Factors

Sector	Growth Factor	Emission Factor
Residential Electricity	2,317 kWh/capita	0.000240 MT CO ₂ e/kWh
Commercial Electricity	4,323 kWh/job	0.000240 MT CO ₂ e/kWh
Residential Natural Gas	144 therm/capita	0.00531 MT CO ₂ e/therm
Commercial Natural Gas	80.1 therm/job	0.00531 MT CO ₂ e/therm
Solid Waste	0.521 tons/SP	0.417 MT CO ₂ e/ton
Water Conveyance, Distribution and Treatment Electricity	82.2 kWh/SP	0.000240 MT CO ₂ e/kWh
Wastewater Collection and Treatment Electricity	25.3 kWh/SP	0.000240 MT CO ₂ e/kWh
Wastewater Fugitive and Process Emissions	NA	0.0197 MT CO ₂ e/SP
Public Transit – Buses	5.37 VMT/SP	0.00228 MT CO ₂ e/VMT
Public Transit – Light Rail	71.7 kWh/SP	0.000240 MT CO ₂ e/kWh
Passenger On-Road Transportation	See Table 30	0.000368 MT CO ₂ e/VMT
Commercial On-Road Transportation	See Table 30	0.00138 MT CO ₂ e/VMT

Notes: kwh = kilowatt-hour; MT CO₂e = Metric Tons of Carbon Dioxide Equivalent; SP = Service Population; VMT = Vehicle Miles Traveled; NA = Not Applicable

To estimate future activity data and GHG emissions for the *BAU scenario* forecast, the growth and emission factors were applied to the demographic and VMT projections as provided in Table 28.

Table 28 Business-as-Usual Demographic and VMT projections

Sector	2020	2030	2040	2045
Population ¹	26,198	26,649	27,100	27,327
Employment ¹	9,643	10,071	10,500	10,716
Service Population ²	35,841	36,720	37,600	38,043
Passenger VMT ³	164,447,117	164,913,485	166,607,886	167,455,087
Commercial VMT ³	3,750,723	4,174,063	4,597,750	4,809,594

Notes: VMT = Vehicle Miles Traveled
 1. Employment and Population projections obtained from the SCAG 2016 RTP/SCS Demographics and Growth Forecast. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf.
 2. Service population is the sum of employment and population in the jurisdiction
 3. Projected VMT attributed to the City of South Pasadena was completed by Iteris, Inc.. The SCAG Trip Based Regional Travel Demand Model, based on the SCAG 2016 RTP/SCS was used to model traffic volumes and quantify VMT attributed to South Pasadena.

Under the *BAU scenario* forecast, the City of South Pasadena’s GHG emissions are projected to continue increasing through 2045, as shown in Table 29.

Table 29 Business-as-usual Forecast by Sector

Sector	2020 (MT CO ₂ e)	2030 (MT CO ₂ e)	2040 (MT CO ₂ e)	2045 (MT CO ₂ e)
Residential Electricity	14,562	14,813	15,063	15,189
Non-residential Electricity	10,002	10,447	10,892	11,116
Transmission and Distribution Losses	1,039	1,068	1,098	1,113
Residential Gas	20,095	20,441	20,787	20,961
Non-Residential Natural Gas	4,102	4,285	4,467	4,559
Passenger On-road Transportation	60,559	60,731	61,355	61,667
Commercial On-road Transportation	5,203	5,832	6,462	6,776
Public Transit	1,056	1,082	1,107	1,121
Off-Road Equipment	892	1,050	1,184	1,251
Waste	7,789	7,981	8,172	8,268
Water	707	724	742	750
Wastewater	330	338	346	350
Total Emissions	126,337	128,792	131,675	133,121

Notes: Emissions have been rounded and therefore sums may not match
MT CO₂e = Metric Tons of Carbon Dioxide Equivalent;

4.2 Legislative Adjusted Scenario GHG Emissions Forecast

The *adjusted scenario* is based on the same base data as the *BAU scenario* but includes an adjustment for the legislative actions and associated emissions reductions occurring at the state and federal levels. These actions include regulatory requirements to increase vehicle fuel efficiency or standards to reduce the carbon intensity of electricity. The difference between the emissions projected in the *adjusted scenario* and the GHG reduction targets established for each horizon year is the amount of GHG reductions which are the responsibility of the City to align with California goals. This “gap analysis” provides the City with the total GHG emissions reduction required as well as information on the emissions sectors and sources which have the most GHG reduction opportunities.

The *adjusted scenario* forecast estimates future City of South Pasadena emissions under codified GHG reduction strategies currently being implemented at the state and federal level. The 2017 Scoping Plan Update identified several existing state programs and targets, or known commitments required by statute which can be assumed to achieve GHG reductions without City action, such as increased fuel efficiency standards of mobile vehicles. The following known commitments are factored into the *adjusted scenario* projection and a summary of the programs can be found in Table 30.

Table 30 Summary of Legislative Reductions

Legislation	2020 (MT CO ₂ e)	2030 (MT CO ₂ e)	2040 (MT CO ₂ e)	2045 (MT CO ₂ e)
Senate Bill 100 and Renewable Portfolio Standards	2,636	12,035	23,235	29,054
Title 24	31	346	660	96
Transportation (Pavley, Innovative Clean Transit, etc.)	6,971	22,671	28,852	30,001
Total	9,638	35,052	52,747	59,152

Notes: Emissions have been rounded and therefore sums may not match
 MT CO₂e = metric tons of carbon dioxide equivalent

Significant GHG reductions realized by state programs in South Pasadena will occur from the increasing decarbonization of the electricity supply due to SB 100 and the Renewable Portfolio Standard (RPS), avoiding an estimated 29,054 MT CO₂e by 2045. The City’s transportation sector will also experience a reduction of approximately 30,000 MT CO₂e by 2045 through state and federal fuel efficiency and tailpipe emissions standards. The following discussion provides an overview of the legislation included in the *adjusted scenario* forecast and the emission reduction impact of each of the legislation categories addressed.

4.2.1 Transportation Legislation

The CARB EMFAC2017 transportation modeling program incorporates legislative requirements and regulations including the Advanced Clean Cars program (Low Emissions Vehicles III, Zero Emissions Vehicles program, etc.) and Phase 2 federal GHG Standards. Signed into law in 2002, AB 1493 (Pavley Standards) required vehicle manufactures to reduce GHG emissions from new passenger vehicles and light-duty trucks from 2009 through 2016, with a target of 30 percent reductions by 2016, while simultaneously improving fuel efficiency and reducing motorists’ costs.⁴²

Prior to 2012, mobile emissions regulations were implemented on a case-by-case basis for GHG and criteria pollutant emissions separately. In January 2012, CARB approved a new emissions-control program (the Advanced Clean Cars program) combining the control of smog, soot causing pollutants, and GHG emissions into a single coordinated package of requirements for passenger cars and light-duty trucks model years 2017 through 2025. The Advanced Clean Cars program coordinates the goals of the Low Emissions Vehicles, Zero Emissions Vehicles, and Clean Fuels Outlet programs. The new standards will reduce Californian GHG emissions by 34 percent in 2025.⁴³

Reductions in GHG emissions from the above referenced standards were calculated using the CARB EMFAC2017 model for Los Angeles County. The EMFAC2017 model integrates the estimated reductions into the mobile source emissions portion of the model.⁴⁴

⁴² California Air Resources Board. Clean Car Standards – Pavley, Assembly Bill 1493. May 2013.

⁴³ California Air Resources Board. Facts About the Advanced Clean Cars Program. December 2011. Accessed at: http://www.arb.ca.gov/msprog/zevprog/factsheets/advanced_clean_cars_eng.pdf. Accessed on: May 20, 2019

⁴⁴ Additional details are provided in the EMFAC2017 Technical Documentation, July 2018. Accessed at: <https://www.arb.ca.gov/msei/downloads/emfac2017-volume-iii-technical-documentation.pdf>. Accessed on: May 20, 2019. The Low Carbon Fuel Standard (LCFS) regulation is excluded from EMFAC2017 because most of the emissions benefits due to the LCFS come from the production cycle (upstream emissions) of the fuel rather than the combustion cycle (tailpipe). As a result, LCFS is assumed to not have a significant impact on CO₂ emissions from EMFAC’s tailpipe emissions estimates.

At the time of this forecast, the future impacts of state legislation on tailpipe emission standard in California remains uncertain due to the federal Safer Affordable Fuel Efficient (SAFE) Rule. The SAFE Rule proposes to amend certain existing Corporate Average Fuel Economy (CAFE) and GHG emission standards.⁴⁵ This specifically affects the ability of California to set its own fuel efficiency standards that supersede federal standards. The sunset year of the SAFE Rule is 2026, which is before the 2030 and 2045 target years of this CAP. Thus, there is uncertainty in the long-term impact the SAFE Rule may have on GHG emissions.

Public transit GHG emissions will also be reduced in the future through the Innovative Clean Transit (ICT) regulation, which was adopted in December 2018. It requires all public transit agencies to gradually transition to a 100-percent zero-emission bus fleet by 2040. Under ICT, large transit agencies are expected to adopt Zero-Emission Bus Rollout Plans to establish a roadmap towards zero emission public transit busses.⁴⁶

GHG Emission Reduction Impact

Transportation legislation will reduce forecasted GHG emissions from the *BAU scenario* for on-road transportation and public transit. The emission reductions are calculated based on the incorporation of the impact on vehicle emission factors, as provided in the CARB EMFAC2017 emission factor modeling software. *BAU scenario* emissions were calculated based on projected activity data and the emission factors that were used in the 2016 Community GHG Inventory. The legislative adjustments for passenger and commercial on-road transportation are calculated by using the emission factors provided by EMFAC for the indicated forecast target year. Legislative adjustments for public transit buses are estimated by assuming emission from public transit buses will be zero in 2040, in alignment with the ICT Rule, with a gradual reduction of bus emission factors to zero from 2016 levels. The activity data, emission factors, legislative reductions, and adjusted emissions for each of the emission sources impacted by transportation legislation are provided in Table 31.

⁴⁵ USEPA. Regulations for Emissions from Vehicles and Engines. <https://www.epa.gov/regulations-emissions-vehicles-and-engines/safer-affordable-fuel-efficient-safe-vehicles-proposed>. Accessed July 26th, 2020.

⁴⁶ Innovative Clean Transit. Approved August 13, 2019. https://ww2.arb.ca.gov/sites/default/files/2019-10/ictfro-Clean-Final_0.pdf?utm_medium=email&utm_source=govdelivery

Table 31 Transportation Adjusted Scenario Forecast Results by Target Year

Calculation Factor	2020	2030	2040	2045
Passenger Vehicles				
VMT	164,447,117	164,913,485	166,607,886	167,455,087
Adjusted Emission Factor (MT CO ₂ e/VMT)	0.000332	0.000245	0.000214	0.000209
Adjusted Emissions (MT CO ₂ e)	54,555	40,351	35,611	34,981
BAU Emissions (MT CO ₂ e)	60,559	60,731	61,355	61,667
Legislative Reductions (MT CO ₂ e)	6,004	20,380	25,744	26,684
Commercial Vehicles				
VMT	3,750,723	4,174,063	4,597,750	4,809,594
Adjusted Emission Factor (MT CO ₂ e/VMT)	0.001149	0.000911	0.000830	0.000816
Adjusted Emissions (MT CO ₂ e)	4,308	3,803	3,814	3,926
BAU Emissions (MT CO ₂ e)	5,203	5,832	6,462	6,776
Legislative Reductions (MT CO ₂ e)	894	2,029	2,648	2,850
Public Transit - Buses				
VMT	192,560	197,286	202,012	204,391
Adjusted Emission Factor (MT CO ₂ e/VMT)	0.000332	0.000950	0	0
Adjusted Emissions (MT CO ₂ e)	366	187	0	0
BAU Emissions (MT CO ₂ e)	439	450	461	466
Legislative Reductions (MT CO ₂ e)	73	262	461	466
Total Legislative Reductions	6,971	22,671	28,852	30,001

Notes: Emissions have been rounded and therefore sums may not match
 MT CO₂e = metric ton of carbon dioxide equivalent; VMT = vehicle miles traveled

4.2.2 Title 24

Although it was not originally intended to reduce GHG emissions, California Code of Regulations Title 24, Part 6: California’s Energy Efficiency Standards for Residential and Nonresidential Buildings, was adopted in 1978 in response to a legislative mandate to reduce California’s energy consumption, which in turn reduces fossil fuel consumption and associated GHG emissions. The standards are updated triennially to allow consideration and possible incorporation of new energy-efficient technologies and methods. Starting in 2020, new residential developments will include on-site solar generation and near-zero net energy use. For projects implemented after January 1, 2020, the California Energy Commission estimates the 2019 standards will reduce consumption by 53% for residential buildings and 30% for commercial buildings, relative to the 2016 standards. These percentage savings relate to space heating and cooling, lighting, and water heating only and do not include other appliances, outdoor lighting not attached to buildings, plug loads, or other energy

uses. The calculations and GHG emissions forecast assume all growth in the residential and commercial/industrial sectors is from new construction.

The 2017 Scoping Plan Update calls for the continuation of ongoing triennial updates to Title 24 which will yield regular increases in the mandatory energy and water savings for new construction. Future updates to Title 24 standards for residential and non-residential alterations past 2023 are not taken into consideration due to uncertainty about the magnitude of energy savings realized with each subsequent update.

GHG Emission Reduction Impact

Emission reduction from Title 24 impact the electricity and natural gas used in buildings. Emission reductions are based only on efficiency gained in new buildings from the 2019 code cycle, as the impact of future code cycles are uncertain. Reductions in future energy consumption from Title 24 were calculated from the estimated increase in energy consumption from new development in South Pasadena. This is assumed to be equivalent to the increase in energy consumption as estimated from employment and population growth in the *BAU scenario* forecast, above the baseline 2016 Community Inventory energy consumption. To account for the requirements of Title 24, new estimated residential energy consumption was reduced by 53% and new estimated non-residential energy consumption was reduced by 30%. The emission reductions from Title 24 are equivalent to the difference between *BAU scenario* energy consumption and the adjusted energy consumption multiplied by the baseline emission factor. The activity data, emission factors, legislative reductions, and adjusted emissions for each of the emission sources impacted by Title 24 are provided in Table 34. The total emissions and emission reductions provided in Table 32 are not representative of the final emission totals for the *adjusted scenario* forecast and are instead provided to show emission reductions from Title 24. Some of the emission reductions from Title 24 are offset by the emission reduction from the Renewable Portfolio Standards (RPS) and SB 100.

Table 32 Title 24 Adjusted Scenario Forecast Results by Target Year

Calculation Factor	2020	2030	2040	2045
Electricity				
BAU Residential Consumption (kWh)	60,690,232	61,734,618	62,779,004	63,304,243
Adjusted Residential Consumption (kWh)	60,634,879	61,125,741	61,616,602	61,863,465
BAU Non-Residential Consumption (kWh)	41,686,415	43,539,985	45,393,555	46,327,940
Adjusted Non-Residential Consumption (kWh)	41,630,808	42,928,307	44,225,806	44,879,876
BAU T&D Losses Consumption (kWh)	4,330,532	4,453,116	4,575,699	4,637,441
Adjusted T&D Losses Consumption (kWh)	4,325,839	4,401,486	4,477,134	4,515,243
Total Title 24 Energy Reduction (kWh)	115,653	1,272,185	2,428,717	3,011,042
Baseline Electricity Emission Factor (MT CO ₂ e/kWh)	0.000240	0.000240	0.000240	0.000240
Legislative Reductions (MT CO ₂ e)	28	305	583	722
Natural Gas				
BAU Residential Consumption (Therm)	3,784,340	3,849,463	3,914,586	3,947,337
Adjusted Residential Consumption (Therm)	3,783,884	3,844,448	3,905,012	3,935,471
BAU Non-Residential Consumption (Therm)	772,558	806,909	841,261	858,577
Adjusted Non-Residential Consumption (Therm)	772,317	804,264	836,211	852,315
Total Title 24 Energy Reduction (Therm)	696	7,660	14,623	18,127
Baseline Natural Gas Emission Factor (MT CO ₂ e/Therm)	0.00531	0.00531	0.00531	0.00531
Legislative Reductions (MT CO ₂ e)	4	41	78	96
Total Legislative Reductions¹	32	346	661	818

Notes: Values have been rounded and therefore sums may not match

MT CO₂e = metric ton of carbon dioxide equivalent; T&D Losses = Transmission and Distribution Losses; kWh = kilowatt-hour

1. Total legislative reductions may not add up to the values provided in Table 32. Some of the emission reductions that would have been realized in absence of other legislation are eroded by Renewable Portfolio Standards and Senate Bill 100. The full emission reductions are provided here for informational purposes; however, the effective emission reductions are provided in Table 38.

4.2.3 Renewables Portfolio Standard & Senate Bill 100

Established in 2002 under SB 1078, enhanced in 2015 by SB 350, and accelerated in 2018 under SB 100, California's RPS is one of the most ambitious renewable energy standards in the country. The RPS program requires investor-owned utilities, public owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 50 percent of total procurement by 2026 and 60 percent of total procurement by 2030. The RPS program further requires these entities to increase procurement from GHG-free sources to 100 percent.

SCE provides electricity in South Pasadena and is subject to the RPS requirements. SCE forecast emissions factors include reductions based on compliance with RPS requirements through 2045. In 2016, SCE reported an emissions factor of 529 pounds CO₂e per MWh.

GHG Emission Reduction Impact

GHG emission reduction from the RPS and SB 100 impact the GHG emissions from electricity used in buildings, electric powered light rail, and water and wastewater movement and treatment. Emission reductions are the change in emissions when calculating emissions based on baseline SCE electricity emission factor and the RPS-adjusted electricity emission factors. The baseline RPS for SCE in 2016 was 28%, with an emission factor of 0.000240 MT CO₂e per kWh. Adjusted electricity emission factors are calculated based on the RPS carbon-free energy percentage as compared to the baseline emission factor. The activity data, emission factors, legislative reductions, and adjusted emissions for each of the emission sources impacted by RPS and SB 100 are provided in Table 33.

Table 33 RPS and SB 100 Adjusted Scenario Forecast Results by Target Year

Calculation Factor	2020	2030	2040	2045
Adjusted Emission Factor				
RPS percentage	37%	60%	87%	100%
Adjusted Emission Factor (MT CO ₂ e/kWh)	0.000217	0.000137	0.000046	0
Building Electricity				
Adjusted Residential Consumption (kWh)	60,634,879	61,125,741	61,616,602	61,863,465
Adjusted Residential Emissions (MT CO ₂ e)	13,135	8,279	2,577	0
Adjusted Non-Residential Consumption (kWh)	41,630,808	42,928,307	44,225,806	44,879,876
Adjusted Non-Residential Emissions (MT CO ₂ e)	9,018	5,795	1,785	0
Adjusted T&D Losses Consumption (kWh)	4,325,839	4,401,486	4,477,134	4,515,243
Adjusted T&D Losses Emissions (MT CO ₂ e)	937	595	184	0
Legislative Reductions (MT CO ₂ e)	2,486	11,354	21,924	27,418
Public Transit – Light Rail				
Adjusted Light Rail Consumption (kWh)	2,569,390	2,632,446	2,695,502	2,727,251
Adjusted Light Rail Emissions (MT CO ₂ e)	557	547	123	0
Legislative Reductions (MT CO ₂ e)	60	272	524	654
Water Conveyance, Treatment and Distribution				
Adjusted Water Consumption (kWh)	2,946,398	3,018,707	3,091,015	3,127,422
Adjusted Water Emissions (MT CO ₂ e)	638	412	141	0
Legislative Reductions (MT CO ₂ e)	69	312	601	750
Wastewater Collection and Treatment				
Adjusted Wastewater Consumption (kWh)	908,095	930,381	952,667	963,888
Adjusted Wastewater Emissions (MT CO ₂ e)	197	127	43	0
Legislative Reductions (MT CO ₂ e)	21	96	185	231
Total Legislative Reductions	2,636	12,035	23,235	29,054

Notes: Values have been rounded and therefore sums may not match
 MT CO₂e = metric ton of carbon dioxide equivalent; T&D Losses = Transmission and Distribution Losses; kWh = kilowatt-hour

4.2.4 Assembly Bill 939 & Assembly Bill 341

In 2011, AB 341 set the target of 75 percent recycling, composting, or source reduction of solid waste by 2020 calling for the California Department of Resources Recycling and Recovery (also known as CalRecycle) to take a statewide approach to decreasing California’s reliance on landfills. This target was an update to the former target of 50 percent waste diversion set by AB 939.

As actions under AB 341 are not assigned to specific local jurisdictions, actions beyond the projected waste diversion target of 5.9 pounds per person per day set under AB 939 for the City of South Pasadena were quantified and credited to the City during the Climate Action Plan Play/Move development process.

4.2.5 Senate Bill 1383

SB 1383 established a methane emissions reduction target for short-lived climate pollutants in various sectors of the economy, including waste. Specifically, SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025.⁴⁷ Additionally, SB 1383 requires a 20 percent reduction in “current” edible food disposal by 2025. Although SB 1383 has been signed into law, compliance at the jurisdiction-level has proven difficult. For example, Santa Clara County suggests the 75 percent reduction in organics is not likely achievable under the current structure; standardized bin colors are impractical; and the general requirement is too prescriptive.⁴⁸ As such, SB 1383 is not included as part of the adjusted forecast. Instead measures addressing compliance with SB 1383 are addressed through newly identified GHG reduction measures included in the Climate Action Plan.

4.3 Adjusted Scenario GHG Emissions Forecast Results

In the *adjusted scenario* emissions forecast, the electricity and water and wastewater sectors all experience a strong downward trend, approaching near-zero in 2045 due to stringent RPS requirements from SB 100. Natural gas emissions are expected to continue an upward trajectory until 2035 due to population and employment growth projections. This trend is partially offset due to the increasingly stringent efficiency requirements for new construction in the upcoming Title 24 code cycles. Transportation emissions are expected to decrease sharply in the next 10 to 15 years due to existing fuel efficiency requirements and fleet turnover rates. As most current regulations expire in 2025 or 2030, emissions standards will experience diminishing returns while VMT continues to increase, leading to lower rates of emissions reduction in the transportation sector. A detailed summary of South Pasadena’s projected GHG emissions under the *adjusted scenario* forecast by sector and year through 2045 can be found Table 34.

⁴⁷ CalRecycle. April 16, 2019. Short-Lived Climate Pollutants (SLCP): Organic Waste Methane Emissions Reductions (General Information). Accessed at: <https://www.calrecycle.ca.gov/climate/slcp>. Accessed on: May 20, 2019

⁴⁸ Santa Clara County. June 20, 2018. SB 1383 Rulemaking Overview. Accessed at: <https://www.sccgov.org/sites/rwr/rwrc/Documents/SB%201383%20PowerPoint.pdf>. Accessed on: May 20, 2019

Table 34 Adjusted Scenario Forecast Summary by Target Year

Sector	2016 (MT CO₂e)	2020 (MT CO₂e)	2030 (MT CO₂e)	2040 (MT CO₂e)	2045 (MT CO₂e)
Demographics					
Population	26,018	26,198	26,649	27,100	27,327
Jobs	9,471	9,643	10,071	10,500	10,716
Emissions					
Residential Electricity	14,462	13,135	8,279	2,577	0
Nonresidential Electricity	9,825	9,018	5,795	1,785	0
Transmission and Distribution Losses	1,027	937	595	184	0
Residential Natural Gas ¹	NA	20,102	20,424	20,745	20,907
Non-residential Natural Gas ¹	NA	4,103	4,273	4,442	4,528
Waste	7,713	7,789	7,981	8,172	8,268
Water Conveyance, Treatment, and Distribution	700	638	412	141	0
Wastewater Collection and Treatment	216	197	127	43	0
Wastewater Process and Fugitive Emissions	111	112	114	117	119
On-Road Transportation (Passenger)	60,400	54,555	40,351	35,611	34,981
On-Road Transportation (Commercial)	4,951	4,308	3,803	3,814	3,926
Public Transit - Buses	435	366	187	0	0
Public Transit – Light Rail	613	557	359	123	0
Off-Road Transportation and Equipment	829	892	1,050	1,184	1,251
Total Emissions	125,269	116,699	93,740	78,927	73,969
Emissions Per Capita²	4.8	4.5	3.5	2.9	2.7

Notes: Emissions have been rounded and therefore sums may not match
MT CO₂e = metric tons of carbon dioxide equivalent; NA = Not available

1. Residential and Non-residential natural gas consumption cannot be disclosed due to California Public Utilities Commission data privacy policies.

2. Emissions per Capita are the total emissions divided by the population of South Pasadena.

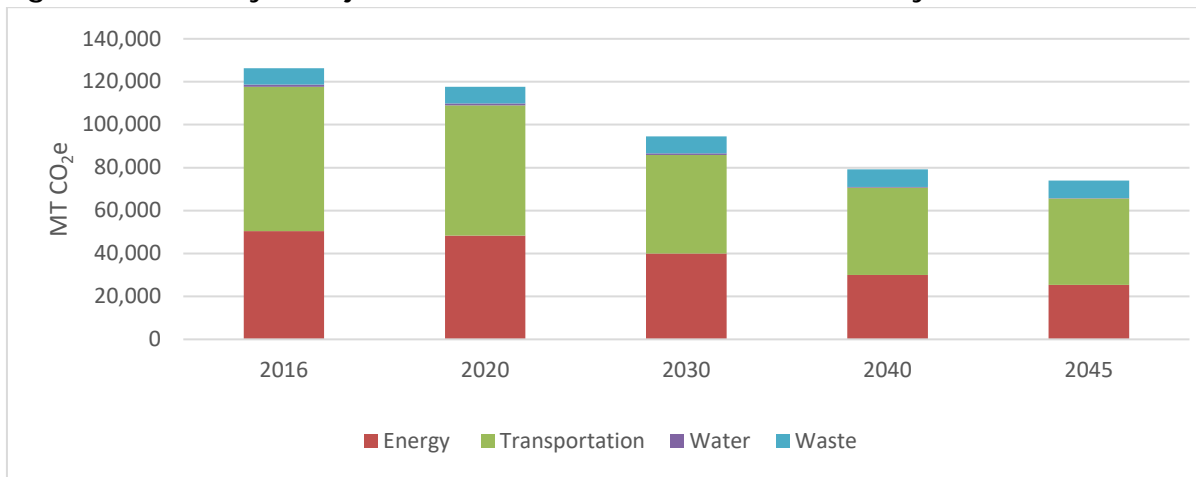
Table 35 and Figure 3 provide a summary of the *adjusted scenario* GHG emissions forecast categorized into the four primary emission sectors: energy, transportation, water and waste.

Table 35 Adjusted Scenario Forecast Sector Consolidated Summary by Target Year

Sector	2016 (MT CO ₂ e)	2020 (MT CO ₂ e)	2030 (MT CO ₂ e)	2040 (MT CO ₂ e)	2045 (MT CO ₂ e)
Energy	49,301	47,284	39,355	29,723	25,424
Transportation	67,228	60,678	45,751	40,732	40,159
Water ¹	1,026	947	653	301	119
Waste	7,713	7,789	7,981	8,172	8,268
Total Emissions	125,269	116,699	93,740	78,927	73,969

Notes: Emissions have been rounded and therefore sums may not match
 MT CO₂e = metric tons of carbon dioxide equivalent
 1. Water sector emissions include Wastewater emissions

Figure 3 Summary of Adjusted Scenario GHG Emissions Forecast by Sector



GHG emissions in the energy, transportation, and water sector are expected to decline due to the influence of state legislation. The primary emission reduction driver of the energy and waste sectors is the increased renewable energy requirements of the RPS and SB 100. These reductions decrease electricity associated emissions to zero by 2045. The transportation sector emissions are primarily reduced from increased fuel efficiency and vehicle emission standards, while some reductions come from the ICT impact to public buses and the RPS and SB 100 impact to GHG emissions from electricity used by light rail. These emission reductions from legislation offset the emissions impact from increased activity data that would be expected under the *BAU scenario*. The RPS and SB 100 emissions reductions also have an influence on water sector emissions, as the energy used for the conveyance, treatment, and distribution of water and the treatment and collection of wastewater will be reduced to zero by 2045.

GHG emission sources that are not impacted by legislation included in the *adjusted scenario* forecast are waste, off-road equipment, and wastewater process and fugitive emissions. These emissions sources are expected to continue to scale upwards with population and employment growth. Natural gas consumption is slightly reduced by Title 24 requirements, but this emissions source cannot be reduced below the baseline consumption in the 2016 Community GHG Inventory without additional action by the City of South Pasadena.

4.4 GHG Emissions Forecast Results Summary

The *BAU scenario* and *adjusted scenario* forecasts provide an assessment of how the City of South Pasadena’s future GHG emissions will change based on current conditions (*BAU scenario*) and the impact that state legislation will have on these GHG emissions (*adjusted scenario*). The *adjusted scenario* provides a metric to compare future GHG emissions against state GHG emissions targets. The difference between the adjusted forecast and the state targets, or “the gap”, represents the GHG emission reduction that South Pasadena will be responsible with the policies included in this Climate Action Plan. Table 36 and Figure 4 provide a summary of the *adjusted scenario* forecast in comparison to the *BAU scenario* emission and the baseline 2016 Community GHG Inventory.

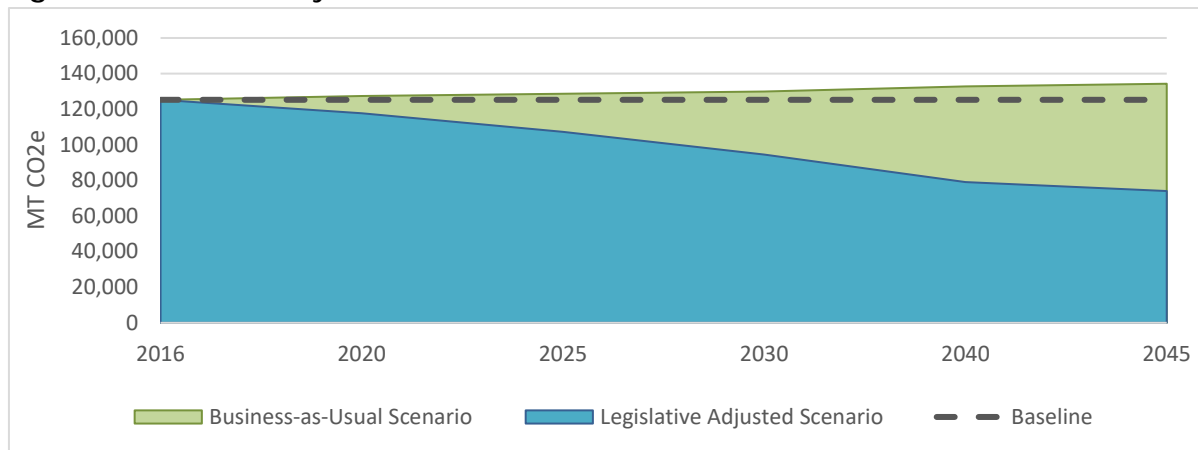
Table 36 BAU and Adjusted Scenario Forecast Summary by Target Year

Scenario	2016 (MT CO ₂ e) ¹	2020 (MT CO ₂ e)	2030 (MT CO ₂ e)	2040 (MT CO ₂ e)	2045 (MT CO ₂ e)
Business-as-Usual Scenario	125,269	126,337	128,792	131,675	133,121
Emission Reductions from Legislation	0	9,638	35,052	52,747	59,152
Legislative Adjusted Scenario	125,269	116,699	93,740	78,927	73,969

Notes: Emissions have been rounded and therefore sums may not match
 MT CO₂e = metric tons of carbon dioxide equivalent

1. 2016 GHG emission totals are the baseline from which the emission forecast scenarios are assessed.

Figure 4 Summary of GHG Emissions Forecast Scenarios



5 GHG Emissions Reduction Target Setting

GHG-reduction targets can be set as either an efficiency target (MT CO₂e per capita or per service population per year) or as a community wide mass emissions target (total MT CO₂e). With CARB's publication in 2017 of the Scoping Plan Update, the state recommended using efficiency metrics for local targets to incentivize growth in a coordinated manner and not penalize cities which are growing at significant rates.⁴⁹ Throughout this section, targets are discussed in terms of per capita metrics; however, they must occasionally be translated into absolute emissions reductions to quantify reduction measures and identify the magnitude of reductions required.

5.1 GHG Emissions Reduction Target Setting

Target setting is an iterative process which must be informed by the reductions that can realistically be achieved through the development of feasible GHG reduction measures. The purpose of target setting is to develop the trajectory toward achieving the state's 2030 goal and prepare for the deep decarbonization needed by 2045 in a cost-effective manner by setting an incremental path toward achieving the EO B-55-18 goals. There are several target pathways available to be consistent with state reduction goals, discussed further below.

- **SB 32 Target Pathway** is the pathway toward achieving the minimum reductions required by state law. This will require minimal reductions until 2030 and then steep reductions from 2030 to 2045.
- **Linear Carbon Neutrality Pathway** is an incremental linear pathway from current per capita emissions levels straight to carbon neutrality in 2045. This pathway is also compliant with the 2030 state goal.
- **Mass Emissions Reduction Pathway** is the pathway determined by reducing mass emissions without consideration to population growth. This pathway will require steep reductions to 2030 and then a slightly more gradual reduction to the 2045 carbon neutrality goal. This pathway is also compliant with the 2030 goal.

The City's baseline GHG emission inventory was completed for this CAP. As summarized in the GHG Emission Inventory (October 2019), the City generated 125,269 metric tons (MT) of carbon dioxide equivalents (CO₂e) in 2016. Based on the South Pasadena's population of 26,018 in 2016, the emissions per capita were approximately 4.81 MT CO₂e.

California achieved its 2020 goal of reaching the 1990 emissions level in 2016⁵⁰ and it is assumed that South Pasadena likewise is currently at 1990 levels;⁵¹ therefore, the 2016 baseline emissions were reduced by 40 percent to establish a 2030 target for the City. In accordance with the new CARB methodology and the statewide goal established in SB 32, this absolute emissions⁵² target was

⁴⁹ California Air Resources Board. 2017. California's Climate Change Scoping Plan, p. 99-102.

⁵⁰ CARB. July 11, 2018. Climate pollutants fall below 1990 levels for the first time. <https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levels-first-time>

⁵¹ Although there may have been GHG emission reductions between 2016 and 2017 at the state and local level, the most recent state inventory that is available was completed in 2016; therefore, 2017 emissions are conservatively assumed to be the same as they were in 2016 as this methodology is the most conservative pathway to calculate South Pasadena's 1990 baseline.

⁵² Absolute emissions refer to the total quantity of GHG emissions being emitted.

then translated into a 2030 per capita efficiency target of 2.9 MT CO₂e per year by dividing the 2030 absolute target by the South Pasadena’s projected population in 2030.

South Pasadena would require local reduction measures to meet the state goals established for 2030 and 2045. Since it is assumed that South Pasadena’s 2016 emissions were equivalent to 1990 levels, South Pasadena will exceed the 2020 emissions target with no further action. The year 2030 coincides with the state targets established by SB 32, which equates to a 40% reduction below the baseline 2016 year GHG Inventory. The year 2040 is included as an interim target for reaching the 2045 state goal set by EO-B-55-18, establishing a carbon neutral emission target. South Pasadena would be required to reduce 18,578 MT CO₂e per year by 2030, 53,874 MT CO₂e per year by 2040, and 73,969 MT CO₂e per year by 2045. The *adjusted scenario* forecast emissions and the emission reduction targets are provided in Table 37, in both absolute emissions and per capita emissions metrics.

Table 37 GHG Emissions Reduction Target and Gap Analysis

Scenario	2020 (MT CO ₂ e) ³	2030 (MT CO ₂ e) ⁴	2040 (MT CO ₂ e) ⁵	2045 (MT CO ₂ e) ⁶
Absolute Emissions Target and Gap				
Absolute Emissions Adjusted Forecast (MT CO ₂ e)	116,699	93,740	78,927	73,969
Absolute Emissions Targets (MT CO ₂ e) ²	125,269	75,161	25,054	0
Remaining Emissions Gap (MT CO ₂ e)	-8,570	18,578	53,874	73,969
Per Capita Emissions Target and Gap				
Population ¹	26,198	26,649	27,100	27,327
Per Capita Adjusted Forecast (MT CO ₂ e per capita)	4.5	3.5	2.9	2.7
Per Capita Targets (MT CO ₂ e per capita) ²	4.8	2.9	1.0	0.0
Remaining Per Capita Emissions Gap (MT CO ₂ e per capita)	-0.4	0.6	1.9	2.7

Notes: MT CO₂e = metric tons of carbon dioxide equivalent
Emissions have been rounded to the nearest whole number and therefore sums may not match.
1. Population from SCAG 2016 RTP/SCS Demographic and Growth Forecast.
http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf.
2. These provisional targets are consistent with both SB 32 and a trajectory set forth to achieve EO B-55-18 targets set by the state.
3. According to CARB, climate pollutants fell below 1990 levels for first time in 2016; therefore, the 2020 emissions target is equivalent to 2016 emission levels.
4. SB 32 requires the CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030
5. Recommended interim target year
6. EO-B-55-18 sets a 2045 target of Carbon Neutrality.

5.2 Meeting the Targets

The 2020, 2030, 2040, and 2045 targets identified above will be achieved through a combination of existing state measures and the implementation of local measures that are identified in the South Pasadena Climate Action Plan. Local measures were identified through a comprehensive assessment of existing local and regional policies, programs, and actions and by assessing any gaps and identifying additional opportunities. Additional measures were developed from best practices of other similar and neighboring jurisdictions, as well as those recommended by organizations and

agencies, such as the California Air Pollution Control Officers Association (CAPCOA), the Office of Planning and Research, CARB's 2017 Scoping Plan, and Association of Environmental Professionals (AEP). Measures were vetted by City staff, stakeholders, and the community and were quantified to identify their overall contribution to meeting the City's 2020, 2030, 2040, and 2045 GHG reduction targets in the Climate Action Plan.

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Appendix D:

Substantial Evidence for Plays and Moves

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City of South Pasadena Climate Action Plan

Play and Move Substantial Evidence and Reduction Quantification

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1 Introduction

The California Environmental Quality Act (CEQA) Guidelines Section 15183.5(b) establishes criteria to guide the preparation of a “plan for the reduction of greenhouse gas emissions.” Subsection (D) notes that a CEQA Guideline-consistent climate action plan (CAP) must include, “measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.” This appendix details the evidence to demonstrate that the Plays and Moves included in the South Pasadena CAP can achieve the City’s emission reduction targets for 2030.

In support of achieving compliance with the greenhouse gas (GHG) emission reduction targets developed by City of South Pasadena’s (City’s) which are consistent with the states GHG reduction goals established by Senate Bill (SB) 32 and Executive Order (EO) B-55-18. SB 32 establishes a statewide goal of reducing GHG emission to 40% below 1990 levels, while EO-B-55-18 sets the long-term goal of statewide carbon neutrality by 2045. The City has also established GHG emissions sector specific GHG reduction targets and foundational actions (Plays and Moves) to achieve them. The sector targets were developed by quantifying the GHG reductions anticipated through the implementation of the foundational Plays and Moves. The GHG reductions were calculated using published evidence provided through adequately controlled investigations, studies, and articles carried out by qualified experts that establish the effectiveness for Plays and Moves. Further, the Plays and Moves were developed to achieve the 2030 target and make substantial progress towards the 2045 target. The estimates and underlying calculations, provided in this report, include the substantial evidence and a transparent approach to achieving the City’s GHG emissions reduction target.

To focus efforts on achieving the 2030 and 2045 goals, the City is building upon previous efforts in the South Pasadena Green Action Plan, adopted November of 2019, to exceed the near-term state GHG reduction targets and achieve carbon neutrality by 2045. The City partnered with Rincon Consultants Inc. (Rincon) to identify a quantified path to achieving these goals. Rincon worked closely with City staff, stakeholders, and the community to craft and refine comprehensive, realistic, and achievable Plays and Moves that can meet or exceed the GHG reduction goals while reflecting the conditions and character of the South Pasadena community. The quantification in this report is intended to illustrate one of several viable paths to pursue as the Plays and Moves of the CAP are implemented at full scale. As required in CEQA Guidelines Section 15183.5(b)(e), mechanisms to monitor the CAP’s progress toward achieving the GHG emission reductions provided in this report have been established through the CAP development process. If, based on the tracking of community GHG emissions, the City is found to not be on target to reach the GHG reduction levels specified here for meeting SB 32 targets, the CAP as a whole or specific Plays and Moves will be required to be amended and a CAP update will be prepared that includes altered or additional Plays and Moves and evidence that upon implementation can achieve the City’s targets.

The quantification in this report also provides substantial evidence that the City can achieve consistency with SB 32’s target of 40% below 1990 by 2030 and ensure defensibility for streamlining development under the CAP as identified in CEQA Guidelines Section 15183.5(a).

Strategies are summarized by specific sector, with supporting Plays as outlined in Table 1.

Table 1 CAP Moves and Associated Emission Reductions

Sector	Play		GHG Emissions Reduction Contribution
Cornerstone	C.1	Engage South Pasadena youth in climate change action and provide education on ways to live a sustainable lifestyle.	2030: 25 MT CO ₂ e 2045: 78 MT CO ₂ e
	E.1	Maximize the usage of renewable power within the community, by continuing to achieve an opt-out rate lower than 4% for the Clean Power Alliance.	2030: 13,408 MT CO ₂ e 2045: 0 MT CO ₂ e
Energy	E.2	Electrify 100% of newly constructed buildings.	2030: 228 MT CO ₂ e 2045: 935 MT CO ₂ e
	E.3	Electrify 5% of existing buildings by 2030 and 80% by 2045.	2030: 1,184 MT CO ₂ e 2045: 19,355 MT CO ₂ e
	E.4	Develop and promote reduced reliance on natural gas through increased clean energy systems that build off of renewable energy development, production, and storage.	Supportive of 2030 and 2045 Goals
Transportation	T.1	Increase zero-emission vehicle and equipment adoption to 13% by 2030 and 25% by 2045.	2030: 3,774 MT CO ₂ e 2045: 6,629 MT CO ₂ e
	T.2	Implement programs for public and shared transit that decrease passenger car vehicle miles traveled 2% by 2030 and 4% by 2045.	2030: 807 MT CO ₂ e 2045: 1,399 MT CO ₂ e
	T.3	Develop and implement an Active Transportation Plan to shift 3% of passenger car vehicle miles traveled to active transportation by 2030, and 6% by 2045.	2030: 1,186 MT CO ₂ e 2045: 2,015 MT CO ₂ e
Water and Wastewater	W.1	Reduce per capita water consumption by 10% by 2030 and 35% by 2045.	2030: 0 MT CO ₂ e 2045: 0 MT CO ₂ e
Solid Waste	SW.1	Implement and enforce SB 1383 organics and recycling requirements to reduce landfilled organics waste emissions 50% by 2022 and 75% by 2025.	2030: 1,702 MT CO ₂ e 2045: 1,764 MT CO ₂ e
	SW.2	Reduce residential and commercial waste sent to landfills by 50% by 2030 and 100% by 2045.	2030: 415 MT CO ₂ e 2045: 859 MT CO ₂ e
Carbon Sequestration	CS.1	Increase carbon sequestration through increased tree planting and green space.	2030: 19 MT CO ₂ e 2045: 39 MT CO ₂ e

	M.1	Reduce carbon intensity of City operations.	2030: 188 MT CO ₂ e 2045: 188 MT CO ₂ e
Municipal	M.2	Electrify the municipal vehicle fleet and mobile equipment.	2030: 23 MT CO ₂ e 2045: 23 MT CO ₂ e
	M.3	Increase City's renewable energy production and energy resilience.	Supportive of 2030 and 2045 Goals
Total			2030: 23,373 MT CO₂e 2045: 33,284 MT CO₂e

Under each of the above Plays are a number of Moves that ensure establishment of mechanisms and supportive actions that will guide the City towards complete implementation of the Plays.

1.1 Greenhouse Gas Emission Reductions from Moves and Plays

This report presents an analysis of the GHG reduction pathway to achieve the City's fair share of GHG emissions reductions necessary to support the state's achievement of the SB 32 GHG reduction goal and provide substantial progress to achieve the 2045 goal of carbon neutrality. The reduction Plays and Moves reflect local policy and document industry best practices for achieving deep decarbonization. The emission reductions from the Moves are calculated individually to identify which Moves are most impactful for each Play and then combined to determine the total emissions reductions that can be achieved by the Play. Some Plays and Moves provide minimal or non-quantifiable GHG emission reductions; however, they support the implementation and sustainability of the play through education, teaming with the community, encouraging equity, identifying funding, evaluating feasibility, and increasing resilience to the impacts of climate. These Plays and Moves are considered "supportive," as they do not directly result in measurable GHG emission reductions; however, they support the overall goals of the CAP. The supportive Plays include: E.4, and M.3. A summary of the expected GHG emission reductions from each of the quantifiable Plays in 2030 and 2045 are provided Table 2.

Table 2 Summary of GHG Emission Reduction from CAP Plays

Move	2030 Emission Reductions (MT CO ₂ e)	2045 Emission Reductions (MT CO ₂ e)
Cornerstone 1 (C.1)	25	78
Energy 1 (E.1)	13,408	0
Energy 2 (E.2)	228	935
Energy 3 (E.3)	1,184	19,355
Energy 4 (E.4)	Supportive	Supportive
Transportation 1 (T.1)	3,774	6,629
Transportation 2 (T.2)	807	1,399
Transportation 3 (T.3)	1,186	2,015
Water 1 (W.1) ¹	414	0
Solid Waste 1 (SW.1)	1,702	1,764
Solid Waste 2 (SW.2)	415	859
Carbon Sequestration (CS.1)	19	39
Municipal 1 (M.1)	188	188
Municipal 2 (M.2)	23	23
Municipal 3 (M.3)	Supportive	Supportive
Total Reduction from Plays	22,959	33,284
Total Reduction from Current Legislation	35,052	59,152
Cumulative Reduction Below Baseline (2016)	58,011	92,436
Percent Reduction Below Baseline (2016)	46%	74%

Notes: MT CO₂e = metric tons of carbon dioxide equivalent

Supportive Plays are not discussed in this document because they do not have quantifiable emission reductions. The nature of the supportive Plays are to improve resilience promote GHG reduction.

1. There is risk of double counting emission reductions from Play W.1 with Play E.1. Play W.1 emission reductions totals are provided for informational purposes, but are not added to the emission reduction totals.

To assess the magnitude of GHG emission reductions needed to provide a fair share GHG emission reduction and contribute to achieving the state’s goal for 2030 (40% below 1990 levels) and 2045 (carbon neutrality), the City developed a *business-as-usual scenario* GHG emissions forecast which assessed the impact of growth on the City’s GHG emissions. From the *business-as-usual scenario*, a *legislative adjusted scenario* was developed which accounts for the impacts of state and federal policies on GHG emissions, to assess the GHG emission reductions the City would be responsible for to meet its emission reduction targets¹. The combined annual reductions from existing state and federal law is expected to result in a reduction of 35,052 metric tons of carbon dioxide equivalent (MT CO₂e) by 2030 and 59,152 MT CO₂e by 2045. The combined local reductions from the Plays and Moves, if implemented entirely, could result in a reduction of 22,959 MT CO₂e by 2030 and 33,284 MT CO₂e in 2045. In reference to the GHG reduction targets established using the 2016 Community GHG Inventory as the 1990 baseline, this results in a total 58,011 MT CO₂e, or 46%, reduction below the baseline in 2030, and an 92,436 MT CO₂e, or 74%, reduction below the baseline projected in

¹ The city has identified targets for 2030 (40% below 1990 levels) and 2045 (carbon neutrality) that are consistent with the state’s goals and are intended to establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by this CAP would not be cumulatively considerable

2045. Accordingly, the total GHG emission reductions exceed the state targets established by SB 32, of a 40% reduction in GHG emissions below 1990 levels, by 4,380 MT CO₂e. The remaining gap to reach carbon neutrality in 2045 remains at 40,587 MT CO₂e. While the Plays and Moves identified in this CAP will lead to a significant progress in reducing in GHG emissions and provide a foundation for achieving net carbon neutrality; achieving carbon neutrality will require significant additional changes to the technology and systems currently in place at both the state and local level and will require further policies and programs that build on this plan. Future CAP updates will outline new measures needed to reach the ultimate target of carbon neutrality.² The GHG emissions forecast scenarios, targets, and emission reductions attained from the Plays are provided in Table 3.

Table 3 GHG Emissions Forecasts, Reduction Targets and Impact of Plays

GHG Emissions Scenario	2030 (MT CO ₂ e)	2045 Emission (MT CO ₂ e)
<i>Business-as-Usual Scenario Forecast</i> ¹	128,792	133,121
Reductions from Current Legislation	35,052	59,152
<i>Legislative Adjusted Scenario Forecast</i> ¹	93,740	73,969
Targets (SB 32 and Carbon Neutrality) ¹	75,161	0
Reductions from Plays	22,959	33,284
GHG Emissions after Reductions from Plays	70,781	40,685
Remaining Gap to Meet Targets	Target Met (-4,380)	40,587²
Percent Reduction Below Baseline (2016)	46%	74%

Notes: MT CO₂e = metric tons of carbon dioxide equivalent

1. See Appendix C for the methodology and details for establishing the forecast scenarios and the reduction targets.

2. The emissions reductions required to meet the 2045 goal will be addressed in future iterations of the Climate Action Plan through new and potentially unknown technologies that allow furthering of the following efforts: full electrification of building and transportation systems, an increased shift to shared and active mobility, and increased waste reduction and diversion

With implementation of the Plays and Moves in the CAP, the 2030 state goals can be reasonably achieved through local actions and substantial progress towards reaching the long-term goal of carbon neutrality can be demonstrated. While the CAP does not provide the GHG emissions reductions to achieve carbon neutrality by 2045, it provides evidence-based actions the City can take towards eventually attaining this target. It also illustrates the that reaching carbon neutrality will require significant additional effort and support from the state and federal governments.

²²

Consistent with AEP Climate Change Committee recommendations, SB 32 is considered an interim target toward meeting the 2045 State goal. Consistency with SB 32 is considered to be contributing substantial progress toward meeting the State's long-term 2045 goals. Avoiding interference with, and making substantial progress toward, these long-term State targets is important as these targets have been set at levels that achieve California's fair share of international emissions reduction targets that will stabilize global climate change effects and avoid the adverse environmental consequences described under Section 3.1.3, *Potential Effects of Climate Change* (Executive Order B-55-18).

1.2 Greenhouse Gas Emission Reduction Calculation Methodology

The analysis and emission reduction calculations for each of the Plays of the CAP outlined in the following pages includes:

- Description of background behind the Play and the basis for GHG emission reductions
- Description of the methodology and assumptions for calculating GHG emissions reductions for applicable Plays and Moves, including reference to data sources.
- A summary of the GHG reduction impact results of GHG emissions reduction calculations.
- Summary table of the impact that the specific Play has on the overall GHG profile of the City in 2030 and 2045

GHG emission reduction calculations use conservative values to avoid over-representing the GHG emission reduction potential for any individual Move or Play. Special care has been taken to avoid double counting GHG emission reductions for Plays and Moves. Specifically, potential overlap between Municipal Sector reductions from Play M.1 and Energy Sector Play E.1, or between Transportation Sector Plays, have been closely scrutinized to eliminate potential for double counting.

Limitations and uncertainties regarding future trends in technology, behavior, and social norms are discussed in the final section of this analysis. Given time and the increasing shifts in financial markets, private industry, and governmental programs towards carbon reduction programs, these shifts may be able to help close the gap between South Pasadena's projected GHG reductions and true carbon neutrality.

2 Greenhouse Gas Emission Reductions

As mentioned above, the Moves and Plays are summarized by Sector: cornerstone, energy, transportation, water, carbon sequestration, waste, and municipal operations. This document is summarized similarly and the substantial evidence for each quantifiable Play and Move is detailed below.

2.1 Cornerstone

Play C.1 Engage South Pasadena youth in climate action and provide education on ways to live a sustainable lifestyle.

Background

The Cornerstone Play represents a unique GHG reduction Play that is specific to and a focus of pride for the community and clearly illustrates the six important components that facilitate transformational change by engaging the community and fulfilling GHG emission reduction goals. The six components of a well drafted-designed GHG reduction strategy include:

- **Education:** engage and empower residents
- **Structural Change:** set institutional and policy framework to support proposed changes
- **Associated GHG Reductions:** target emissions reductions for long-term sustainability and short-term air quality improvements
- **Equity:** ensure inclusive participation in decision making
- **Connectivity:** promote access to community resources
- **Economical:** cost effective efforts that benefit resilience and sustainability

Play C.1 embodies these ideas by working to establish a climate change education and tree planting program through the South Pasadena Unified School District.

Methodology and Assumptions

The emission reduction impact of Play C.1 results from the increased carbon sequestration capacity that is realized through an increased number of trees in South Pasadena. Move C.3 will attain GHG emission reductions through providing students with plants and trees that they can plant in their own yards or keep in pots, while Moves C.1 and C.2 are supportive to the overall success of the Play. A number of assumptions were made to estimate the number of students who would participate in a tree planting program where new trees could be planted in the yards of a student's homes. While the intent of the Play is to provide an equitable chance for all students of all income-levels and home types (i.e. multi-family, single-family, etc.) to participate in this program, the quantification of GHG reductions accounts for a conservative constraint that many residents who rent their homes do not have the ability to dig holes and plant trees on the property without the property owner's or landlord's consent. As such, GHG emission reductions only account for the number of trees that are expected to reach maturity, which is assumed to be a proportion of those that could be planted in the yards of owner-occupied homes. This number also assumes that the program would be

implemented in one single grade school level each year across all of South Pasadena Unified School District, beginning in 2023.

The number of students that would participate in the program each year was estimated as the number of students in each grade level during a school year in South Pasadena Unified School District. In 2020, there were 4,800 students enrolled in South Pasadena School District Schools.³ Based on national statistics, it was estimated that each grade level makes up about 8% of the student population; therefore, in South Pasadena, the total number of students in each grade level would be about 370.⁴

An estimate of the percentage of students living in owner-occupied homes and the participation and results of a similar residential tree giveaway program provides a conservative constraint to estimate the number of trees that would be planted annually and expected to reach maturity of greater than five years. It was assumed that the number of students in a single grade that would be living in an owner-occupied home would be proportional to the number of owner-occupied homes in South Pasadena, which is approximately 46%.⁵ Accordingly, it is estimated that 171 students in the participating grade level would live in an owner-occupied home. A review of a similar residential tree giveaway program in Sacramento, which is another Tree City USA, found that about 85% of trees given to community members were actually planted, and 71% of the trees planted reached a maturity of five years or older.⁶ Applying these percentages to the total trees planted at owner-occupied homes in South Pasadena from the program, results in an estimate that approximately 100 trees would be planted each year that would reach a maturity of five years. While the life span of these trees beyond five years is uncertain, it is assumed that this proportion of the trees planted would eventually reach full maturity and provide carbon sequestration value.

The total amount of carbon sequestered in 2030 and 2045 is estimated using the assumption that 100 trees would be planted each year, throughout the life of the program, and would provide a carbon sequestration value consistent with the amount of sequestration per tree provided in the California Air Pollution Control Officers Association (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures*. The full implementation of Play C.1 is expected by 2023, which equates to seven full years of implementation as of 2030 and 22 years as of 2045. With 100 trees planted per year expected to reach maturity, Play C.1 would result in 700 and 2200 new trees expected to provide carbon sequestration value in 2030 and 2045 respectively. Applying the CAPCOA carbon sequestration of 0.0354 MT CO₂e,⁷ play C.1 would result in 25 MT CO₂e and 78 MT CO₂e sequestered in 2030 and 2045, respectively. The calculations and assumptions used to estimate emission reductions from Play C.1 are provided in Table 4.

³ City of South Pasadena General Plan Update Draft, Introduction. <https://www.southpasadenaca.gov/home/showdocument?id=18657>.

⁴ Kurt Bauman and Jessica Davis, 2013, Estimates of School Enrollment by Grade in the American Community Survey, the Current Population Survey, and the Common Core of Data. U.S. Census Bureau. https://www.census.gov/content/dam/Census/library/publications/2013/demo/acs-cps-ccd_02-18-14.pdf

⁵ United States Census Bureau. 2020. Quick Facts: South Pasadena City, California. https://www.census.gov/quickfacts/fact/table/southpasadenacitycalifornia_US/PST045219. Accessed October 22, 2020. .

⁶ Lara A. Roman. 2013. Urban Tree Mortality. https://escholarship.org/content/qt0sh9g9gk/qt0sh9g9gk_noSplash_ad0c50431b856312557f037a2bda0dd1.pdf?t=mtggar

⁷ CAPCOA Quantifying Greenhouse Gas Mitigation Measures

Table 4 Play C.1 GHG Emission Reduction Calculations

Calculation Factor	2030	2045
Total South Pasadena Unified School District Students ¹	4,800	4,800
National Average Proportion of Students at Each Grade Level ²	8%	8%
Estimated Number of Students Participating in Tree/Plant Giveaway ³	370	370
Students Participating in Program living in Owner-Occupied Homes ⁴	171	171
Percentage of Trees Planted ⁵	85%	85%
Percentage of Trees Reaching Maturity of 5 Years or Older ⁵	71%	71%
Total Trees Planted Each Year that Provide Carbon Sequestration Value	100	100
Cumulative Trees Planted through Play C.1 ⁶	700	2200
Carbon Sequestration Value of One Mature Tree (MT CO ₂ e/tree/year) ⁷	0.0354	0.0354
Total Play C.1 GHG Emissions Reductions (MT CO₂e)	25	78

Notes: MT CO₂e = metric tons of carbon dioxide; kWh = kilowatt-hour

1. City of South Pasadena 2020 General Plan Update Draft, Introduction.

<https://www.southpasadenaca.gov/home/showdocument?id=18657>.

2. Kurt Bauman and Jessica Davis, 2013, Estimates of School Enrollment by Grade in the American Community Survey, the Current Population Survey, and the Common Core of Data. U.S. Census Bureau.

https://www.census.gov/content/dam/Census/library/publications/2013/demo/acs-cps-ccd_02-18-14.pdf

3. The Estimated Number of Students Participating in Tree/Plant Giveaway assumes that the program would be implemented for one grade level each year.

4. It is conservatively assumed that trees planted at owner-occupied homes would provide carbon sequestration value, as the planting and continued maintenance of trees at rented homes can be out of the control of occupants. This number is based on 46% of total homes in South Pasadena being owner-occupied, and the assumption that an equivalent proportion of students live in owner-occupied homes. United States Census Bureau. 2020. Quick Facts: South Pasadena City, California.

<https://www.census.gov/quickfacts/fact/table/southpasadenacitycalifornia,US/PST045219>. Accessed October 22, 2020.

5. Lara A. Roman. 2013. Urban Tree Mortality.

https://escholarship.org/content/qt0sh9g9gk/qt0sh9g9gk_noSplash_ad0c50431b856312557f037a2bda0dd1.pdf?t=mtggar

6. Assumes Play C.1 is fully implemented by 2023; therefore 2030 would be the 7th year of implementation and 2045 would be the 22nd.

7. CAPCOA Quantifying Greenhouse Gas Mitigation Measures

Results

Play C.1 would result in a reduction of 25 MT CO₂e in 2030 and 78 MT CO₂e in 2045, as shown in Table 5.

Table 5 GHG Emission Reductions Associated with Play C.1

Moves	Emission Reductions (MT CO ₂ e)		Source
	2030	2045	
C.1.a Support South Pasadena Unified School District by providing students with information on climate change and the beneficial roles of trees.	Supportive		N/A
C.1.b Utilize South Pasadena’s historic neighborhoods to demonstrate to students the importance of mature urban trees in providing shade and reducing the urban heat island effect.	Supportive		N/A
C.1.c. Identify grant funding opportunities and engage with local nurseries and tree planting programs to identify appropriate and cost-effective California native plants/trees that can be both planted in the ground or remain potted for students living in rental/multi-family homes.	25	78	N/A

2.2 Energy Sector

Play E.1 Maximize the usage of renewable power within the community, by continuing to achieve an opt-out rate lower than 4% for the Clean Power Alliance.

Background

In 2019, the residential electricity customers in the City of South Pasadena began receiving “100% Green Power” (100% renewable energy), and non-residential customers began receiving “Clean Power” (50% renewable energy) under the Clean Power Alliance (CPA). This transition from the traditional grid mix from which South Pasadena residents purchased power at the time of the 2016 Community GHG Inventory, meant that customers would begin to receive electricity purchased primarily from renewable sources. Residential customers have the option to opt-down to lower percentages of renewable sourced energy to “Clean” or “Lean” (36% renewable energy) power options, while non-residential customers can opt-up to “100% Green Power” or opt-down to “Lean Power.” Additionally, all customers have the ability to opt-out of the program entirely and continue to purchase their electricity from Southern California Edison (SCE). This is included in the CAP as a GHG Reduction Play, as it is a specific action taken by the City that will reduce the GHG emissions associated with electricity consumption. As of 2020, the City had maintained an effective 4% opt-out rate, which it will work to maintain at this level through a concerted effort to encourage customers to remain at or opt-up to the “100% Green Power” option. Through public outreach and education, the City of South Pasadena can reasonably retain the participation rates of 2020 and can also engage in more aggressive tactics if the established monitoring of CPA participation finds that participation begins to decline.

Methodology and Assumptions

The emission reduction impact of Play E.1 results from the increased renewable and carbon free electricity supplied to South Pasadena from the community’s participation in the CPA. The adjusted scenario GHG emission forecast, from which emission reduction targets are established, assumes

that energy will continue to be purchased from SCE through 2045, with the renewable and carbon free energy supply generally following the transition to 100% renewable power rate outlined in Renewable Portfolio Standards (RPS) established by Senate Bill 100.⁸ The benefit of participation in the CPA is the ability to procure its own energy sources and exceed RPS requirements. In 2020, the CPA already exceeds the RPS with its lowest renewable power option, “Lean Power,” at 36% renewable electricity. As the RPS requirements continue to increase, it is assumed that the renewable energy procured by the CPA will increase linearly until reaching 100% in 2045. The resulting future GHG emission reductions that are expected from continued implementation of Play E.1 are calculated as the difference between electricity emissions calculated in the *Legislative Adjusted* scenario GHG emissions forecast (see Appendix C) and electricity emissions that are expected under a 4% opt-out rate from the CPA.

A large percentage of the energy procured by the CPA comes from large hydroelectric power sources. Large hydroelectric power sources are not considered by the California Energy Commission to be renewable energy under the RPS;⁹ however, this power source does not generate direct GHG emissions as a result of power generation, and for the purpose of quantifying GHG emissions from energy consumption, can be considered a carbon-free electricity source.¹⁰ As such, the CPA “Lean Power” option provides energy that is considered 81% carbon-free (36% renewable and 45% carbon-free from large hydroelectric), with the remainder originating from unspecified sources of grid energy. As the RPS requirements continue to increase, it is assumed that the renewable energy procured by CPA will increase linearly until reaching 100% in 2045. The effective future emission reductions that South Pasadena will achieve from Play E.1 are calculated by assessing the GHG emissions that would be generated under a scenario with the current 2020 participation rates in the CPA and increased RPS for both the CPA and SCE.

In 2020, the City of South Pasadena had an effective CPA opt-out rate of 4.0% across both the residential and non-residential customer classes, with 2.5% of the 1,373 non-residential customers and 4.2% of the 11,052 residential customers having opted-out to receive electricity from SCE.¹¹ The 2020 rates of participation are provided in Table 6.

Table 6 2020 CPA Participation Rates

Customer Class	Number of Customers in Class	Power Option Participation Percentage			
		100% Green Power	Clean Power	Lean Power	Opt-out
Non-Residential	1,373	7.6%	88.5%	1.4%	2.5%
Residential	11,052	91.7%	0.7%	3.5%	4.2%
Total (Weighted)	12,425	82.4%	10.4%	3.2%	4.0%

Source: South Pasadena CPA Customer Statistics Report for June 2020.

⁸ Senate Bill (SB) 100 established a landmark policy requiring renewable energy and zero-carbon resources supply 100% of electric retail sales to end-use customers by 2045. SB 100 also sets in interim target of 60% renewable or carbon free electricity by 2030.

⁹ California Energy Commission. 2020. California Power Generation and Power Sources: Hydroelectric Power. <https://www.energy.ca.gov/data-reports/california-power-generation-and-power-sources/hydroelectric-power>.

¹⁰ United States Department of Energy, Office of Energy Efficiency and Renewable Energy. 2020. How Hydropower Works. <https://www.energy.gov/eere/water/how-hydropower-works>.

¹¹ South Pasadena CPA Customer Statistics Report for June 2020.

The RPS percentage of each of the CPA options for 2030 and 2045 is estimated based on the 2018 Power Content Label,¹² while SCE RPS percentage is based on the minimum RPS requirements of SB 100. As mentioned previously, the CPA RPS percentage is assumed to be a gradual increase to 100% in 2045, while SCE is presumed to be 60% in 2030 and 100% in 2045. As discussed previously, for the purpose of calculating the resulting GHG emissions from electricity consumption, large hydroelectric power sources are included as a carbon-free electricity sources and are therefore included in the total amount of carbon-free electricity provided to customers. The assumptions of the percentage of carbon-free electricity mix (RPS plus large hydroelectric) for 2018, 2030, and 2045 are provided in Table 7.

Table 7 CPA and SCE Carbon-free Electricity Mix Assumptions

Year	RPS Percentage + Large Hydroelectric			
	100% Green Power	Clean Power	Lean Power	SCE
2018	100%	87%	81%	34%
2030	100%	93%	89%	60%
2045	100%	100%	100%	100%

Source: <https://cleanpoweralliance.org/power-sources/>

Notes: Large hydroelectric power sources are not considered by the California Energy Commission to be renewable energy under the RPS; however, this power source does not generate direct GHG emissions as a result of power generation, and for the purpose of quantifying GHG emissions from energy consumption, can be considered a carbon-free electricity source.

An emission factor for electricity consumption for each of the electricity purchase options can be calculated from the respective RPS rates, assuming that the energy that is not from a renewable or carbon-free source (unspecified source) is provided at the same emission factor as the United States Environmental Protection Agency’s (USEPA) Emissions and Generation Resource Integrated Database (eGRID) 2018 Western Electricity Coordinating Council California (CAMX) emission factor of 0.0002262 MT CO₂e per kilowatt-hour (kWh).¹³ The estimated effective emission factor for each CPA option is weighted by the percentage of unspecified source energy. These respective emission factors for 2030 and 2045 for each of the CPA power option, as well as opting out to SCE’s standard power mix, are provided in Table 8. In 2045, it is expected that all electricity generation in California will have 100% renewable power, consistent with SB 100 and will therefore, generate effectively GHG emissions.

¹² <https://cleanpoweralliance.org/power-sources/>

¹³ USEPA. 2019. Emissions & Generation Resource Integrated Database (eGRID). <https://www.epa.gov/egrid/emissions-generation-resource-integrated-database-egrid>. Accessed July 24th, 2020.

Table 8 CPA and SCE Future Emission Factors

Year	Electricity Generation Emission Factor (MT CO ₂ e/kWh)			
	100% Green Power	Clean Power ¹	Lean Power ¹	Opt-out ²
2018 ³	0.000226	0.000226	0.000226	0.000226
2030	0	0.0000158	0.0000249	0.0001465
2045	0	0	0	0

Notes: MT CO₂e = metric tons of carbon dioxide; kWh =-kilowatt-hour

1. Emission factors for CPA electricity are estimated based on the Renewable Portfolio Standards provided in Table 7 and the USEPA CAMX eGRID2018 emission factors. https://www.epa.gov/sites/production/files/2020-01/documents/egrid2018_summary_tables.pdf.

2. To maintain consistency with the *Legislative Adjusted* Forecast GHG Emissions estimates used to develop GHG reduction targets, the same 2030 emissions factors for forecasted GHG emissions provided in Appendix C.

3. In 2018, South Pasadena had not yet began receiving power from CPA. Values are provided to demonstrate the reduction in electricity emission factor that occurred from South Pasadena becoming a member of the CPA.

Using the estimated emission factors in Table 8 and the estimated future electricity consumption provided in the *Legislative Adjusted* GHG Emissions Forecast, as provided in Appendix C of the CAP, the future GHG emissions under the scenario of maintaining the CPA opt-out rates of 2020 can be calculated. The difference in total GHG emissions in these two scenarios provides the expected GHG emission reductions from Play E.1. The forecasted electricity consumption, GHG emission calculations and expected GHG emission reductions for the year 2030 are provided in Table 9.

Table 9 2030 Play E.1 GHG Emission Reduction Calculations

Calculation Factor	100% Green Power	Clean Power ¹	Lean Power ¹	Opt-out ²	Total
2030 Non-Residential Electricity Consumption (kWh) ^{1 2}	3,262,551	37,991,552	600,996	1,073,208	42,928,307
2030 Residential Electricity Consumption (kWh) ^{1 2}	56,052,304	427,880	2,139,401	2,567,281	61,186,866
2030 Transmission and Distribution Losses (kWh) ^{1 2 3}	2,509,018	1,625,142	115,919	153,993	4,404,072
2030 Total Energy Consumption (kWh)	61,823,874	40,044,574	2,856,316	3,794,481	108,519,245
Play E.1 CPA Scenario GHG Emissions (MT CO ₂ e) ⁴	0	634	71	556	1,261
2030 <i>Legislative Adjusted</i> GHG Emissions Forecast Electricity Emissions (MT CO ₂ e) ¹			14,669		
Total 2030 Play E.1 GHG Emissions Reductions⁵			13,408		

Notes: MT CO₂e = metric tons of carbon dioxide; kWh =-kilowatt-hour

1. Electricity consumption by customer class, transmission and distribution losses, and total electricity GHG emissions are obtained from the *Legislative Adjusted* Forecast GHG Emissions estimates used to develop GHG reduction targets, provided in Appendix C.

2. Electricity consumption is attributed to each of the Clean Power Alliance power options according to the power option participation percentages provided in Table 6.

3. Transmission and distribution losses occur from energy lost as heat through the transmission of electricity over long distances and the distribution to lower voltage power lines. This energy is attributed by multiplying the sum of the non-residential and residential energy consumption of each customer class by the CAMX eGRID general loss factor of 4.23% for 2016. USEPA's 2016 eGRID database, February 2018. <https://www.epa.gov/energy/emissions-generation-resource-integrated-database-egrid>.

4. Play E.1 Scenario GHG Emissions are calculated by multiplying the 2030 total energy consumption by the appropriate electricity emission factors for 2030 each power option, as provided in Table 8.

5. Total Play E.1 GHG Emissions Reductions are calculated by subtracting the total Play E.1 CPA Scenario GHG Emissions from the 2030 *Legislative Adjusted* GHG Emissions Forecast Electricity Emissions. This total represents emission reductions beyond those that would be attained from SB 100 and RPS minimum requirements.

Continued implementation of Play E.1, to maintain an effective opt-out rate from the CPA of 4% or below would result in GHG emission reductions of 13,408 MT CO₂e in 2030. By dividing the resulting 2030 GHG emissions in the Play E.1 scenario (1,261 MT CO₂e) by the total electricity consumption in 2030 (108,519,245 kWh), an average electricity emission factor of 0.00001162 MT CO₂e per kWh can be derived. This accounts for all CPA power options and 4% opt-out rate and is used in emission reduction calculations for other plays so that emission reductions from this play are not double counted. No emission reductions from Play E.1 will be achieved in 2045, as GHG emissions from all electricity sources is expected to be zero. Nonetheless, the 2045 calculations are demonstrated in Table 10 for consistency.

Table 10 2045 Play E.1 GHG Emission Reduction Calculations

Calculation Factor	Total
2045 Non-Residential Electricity Consumption (kWh) ^{1,2}	61,863,465
2045 Residential Electricity Consumption (kWh) ^{1,2}	44,879,876
2045 Transmission and Distribution Losses (kWh) ^{1,2,3}	4,515,243
2045 Total Energy Consumption (kWh)	111,258,584
Play E.1 CPA Scenario GHG Emissions (MT CO ₂ e) ⁴	0
2045 <i>Legislative Adjusted</i> GHG Emissions Forecast Electricity Emissions (MT CO ₂ e) ¹	0
Total 2045 Play E.1 GHG Emissions Reductions (MT CO₂e)⁵	0

Notes: MT CO₂e = metric tons of carbon dioxide; kWh =-kilowatt-hour

1. Electricity consumption by customer class, transmission and distribution losses, and total electricity GHG emissions are obtained from the *Legislative Adjusted* Forecast GHG Emissions estimates used to develop GHG reduction targets, provided in Appendix C.
2. Electricity consumption for all power options is aggregated as all have the same emission factor and RPS percentages, as provided in Table 8.
3. Transmission and distribution losses occur from energy lost as heat through the transmission of electricity over long distances and the distribution to lower voltage power lines. This energy is attributed by multiplying the sum of the non-residential and residential energy consumption of each customer class by the CAMX eGRID general loss factor of 4.23% for 2016. USEPA’s 2016 eGRID database, February 2018. <https://www.epa.gov/energy/emissions-generation-resource-integrated-database-egrid>.
4. Play E.1 Scenario GHG Emissions are calculated by multiplying the 2045 total energy consumption by the emission factor of 0 MT CO₂e/kWh , as detailed in Table 8.
5. Total Play E.1 GHG Emissions Reductions are calculated by subtracting the total Play E.1 CPA Scenario GHG Emissions from the 2045 *Legislative Adjusted* GHG Emissions Forecast Electricity Emissions.

Results

Play E.1 would result in a reduction of 13,408 MT CO₂e in 2030 and 0 MT CO₂e in 2045, as shown in Table 11.

Table 11 GHG Emission Reductions Associated with Play E.1

Moves	Emission Reductions (MT CO ₂ e)		
	2030	2045	Source
<p>E.1.a Monitor progress and perform public outreach and education campaigns highlighting the benefits of 100% renewable energy, including:</p> <ul style="list-style-type: none"> ▪ Monitoring opt-out rates on an annual basis, ▪ Tabling at community events ▪ Establishing an informational resource page on the City website ▪ Regular social media posts ▪ Energy bill inserts 	13,408	0	City provided effective opt-out rate of 4% in 2020

Play E.2 Electrify 100% of newly constructed buildings.

Background

To reach carbon neutrality by 2045, the majority of the buildings in the City, including those that have not yet been constructed, will need to be carbon neutral. Natural gas combustion for heating and cooking in commercial and residential buildings currently¹⁴ contributes nearly 14% of South Pasadena's total GHG emissions. By transitioning buildings from the consumption of natural gas to electricity, emissions from this source can be reduced through SB100 requirements for increased renewable electricity and the associated GHG emissions. A variety of studies have found that electrification of buildings, combined with renewable power generation is a potential path towards reaching carbon neutrality.¹⁵ Additionally, the benefits in annual utility bill savings and decreased cost associated with piping of natural gas into new construction makes all-electric buildings more cost effective in some California Building Climate Zones; including, Zone 9, where South Pasadena is located.^{16,17} As of May 2020, 30 California cities have adopted building codes that reduce reliance on natural gas.¹⁸

Methodology and Assumptions

Move E.2.e, the adoption of an Electrification Readiness reach code eliminating the piping of natural gas in new buildings and accessory dwelling units, would result in all of the emissions reductions associated with Play E.2 by transitioning the energy consumption of any new construction to primarily renewable electricity. All other Moves included would incrementally support the Play. The timing of the adoption of the Electrification Readiness ordinance will decide the amount of emission reductions that are achieved, as delaying its adoption may allow for additional development to

¹⁴ Based on 2016 Community GHG Inventory. See Appendix C.

¹⁵ Williams, James et al., Pathways to Deep Decarbonization in the United States (San Francisco: Energy and Environmental Economics, 2014); Northeastern Regional Assessment of Strategic Electrification (Northeast Energy Efficiency Partnerships, 2017); Steinberg, Daniel et al., Electrification and Decarbonization: Exploring US Energy Use and Greenhouse Gas Emissions in Scenarios with Widespread Electrification and Power Sector Decarbonization (National Renewable Energy Laboratory, 2017).

¹⁶ California Energy Codes and Standards. 2019. 2019 Cost Effectiveness Study: Low-Rise Residential New Construction. <https://localenergycodes.com/content/2019-local-energy-ordinances/>. Accessed May 25th, 2019.

¹⁷ California Energy Codes and Standards. 2019. 2019 Nonresidential New Construction Reach Code Cost Effectiveness Study. <https://localenergycodes.com/content/2019-local-energy-ordinances/>. Accessed May 25th, 2019.

¹⁸ Gough, Matt. 2020. Sierra Club. California's Cities Lead the Way to a Gas-Free Future. <https://www.sierraclub.org/articles/2020/03/californias-cities-lead-way-gas-free-future>. Accessed May 25th, 2020.

include mixed fuels, for which the natural gas emissions will not be reduced by this ordinance. Therefore, for the purposes of this calculation, it is assumed that the ordinance will be adopted by 2025, as time will be needed from the adoption of the CAP and completion of the necessary actions under Moves E.2.e and E.2.f. The amount of future new development that will occur in South Pasadena is evaluated based on increases in employment and population provided by the Southern California Association of Governments (SCAG) 2016 *Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) demographic projections. This growth is assumed to be constant year-over-year in the GHG emissions forecast, with each additional resident's or employee's contribution towards natural gas consumption being equivalent to the per capita or per employment natural gas consumption in the baseline inventory year, while also accounting for efficiency increases from future Title 24 requirements. The resulting calculated increase in natural gas consumption is conservative as it is assumed to be purely from new construction, and any increases beyond the time the ordinance is adopted would be shifted to electricity consumption.

Electrification of new residential and commercial construction will eliminate the use of natural gas for space heating, water heating, clothes drying, and cooking. Space heating is the largest energy use in buildings and is dominated by non-electric fuels.¹⁹ According to the U.S. Energy Information Administration (EIA) *2020 Annual Energy Outlook*, electric heat pumps for commercial space heating and cooling are two to five times more efficient than natural gas fueled equipment.²⁰ Residential electric heat pumps for space heating and cooling are six to 20 times more efficient than natural gas equipment.²¹ Emission reductions account for this increased efficiency by conservatively assuming all electric constructions will use electric equipment that is three times more efficient than natural gas fueled equipment.

As mentioned above, emission reduction calculations assume the ordinance will be adopted by 2025; therefore, increased natural gas consumption from population and employment growth beyond 2025 would be replaced by electricity consumption. Since electric appliances are approximately three times more efficient over similar natural gas burning equipment and appliances,²² the use of electric equipment instead of natural gas would result in improved energy efficiency and a reduction in overall energy consumption for replaced natural gas equipment. The electricity consumption would generate GHG emissions that would offset the reduction in natural gas emissions from electrification; however, these emissions would be minimized assuming full implementation of Play E.1. Additionally, Move E.2.f allows for some uses to not be required to convert to all electric under to be determined circumstances, such as restaurants or commercial uses that cannot operate without combustion of natural gas. It is conservatively assumed that 5% of future growth in the City will fall under this category. The calculations and assumptions used to estimate emission reductions from Play E.2 are provided in Table 11.

¹⁹ Deason, Jeff. et al.. 2018. Electrification of buildings and Industry in the United States. pp.10. https://pdfs.semanticscholar.org/27f0/d125d5316ee10565560545c0fc17d6c447a8.pdf?_ga=2.3238896.1101123906.1590438648-1004765093.1590438648. Accessed May 25th, 2020.

²⁰ EIA. 2020. Annual Energy Outlook. Table 22. Commercial Sector Energy Consumption, Floorspace, Equipment Efficiency, and Distributed Generation. <https://www.eia.gov/outlooks/aeo/data/browser/#/?id=32-AEO2020&cases=ref2020&sourcekey=0>. Accessed May 25th, 2020.

²¹ EIA. 2020. Annual Energy Outlook. Table 21. Residential Sector Equipment Stock and Efficiency, and Distributed Generation. <https://www.eia.gov/outlooks/aeo/data/browser/#/?id=30-AEO2020&cases=ref2020&sourcekey=0>. Accessed May 25th, 2020.

²² Dennis, Keith. 2015. Environmentally Beneficial Electrification: Electricity as the End-Use Option. *The Electricity Journal*. 28(9). pp. 100-112. <https://doi.org/10.1016/j.tej.2015.09.019>

Table 12 Play E.2 GHG Emission Reduction Calculations

Calculation Factor	2030	2045
Natural Gas Consumption Growth Beyond 2025 (therms) ¹	46,255	185,330
Natural Gas from Uses that Cannot be All-Electric (assumed to be 5%) ²	2,313	9,267
Resulting Natural Gas Consumption Avoided from Electrification	43,942	176,063
Natural Gas Emission Factor (MT CO ₂ e/therm) ³	0.00531	0.00531
Natural Gas GHG Emissions Avoided (MT CO ₂ e)	233	935
Resulting Increase in Electricity Consumption (kWh) ^{4,5}	451,762	1,810,053
Electricity Emission Factor Assuming Implementation of Play E.1.(MT CO ₂ e/kWh) ⁶	0.00001162	0
Additional GHG Emissions from Increased Electricity Consumption (MT CO ₂ e)	5	0
Total Play E.2 GHG Emissions Reductions (MT CO₂e)⁷	228	935

Notes: MT CO₂e = metric tons of carbon dioxide; kWh =-kilowatt-hour

1. Natural gas consumption beyond 2025 is obtained from the *Legislative Adjusted* Forecast GHG Emissions estimates used to develop GHG reduction targets, provided in Appendix C.

2. Move E.2.f allows for some new construction to not be all-electric when special circumstances prohibit, such as specific commercial processes. This is conservatively assumed to be 5% of new construction in South Pasadena.

3. Emission factors obtained from United States Environmental Protection Agency Emission Factors for Greenhouse Gas Inventories, Table 1. https://www.epa.gov/sites/production/files/2015-07/documents/emission-factors_2014.pdf.

4. The resulting increase in electricity consumption estimates a three times increase in efficiency due to the improved efficiency of electric heat pumps and other electrical equipment of natural gas. Dennis, Keith. 2015. Environmentally Beneficial Electrification: Electricity as the End-Use Option. *The Electricity Journal*. 28(9). pp. 100-112. <https://doi.org/10.1016/j.tej.2015.09.019>

5. Natural gas consumption converted to electricity using the conversion: 1 Therm = 29.3 kWh. <https://dothemath.ucsd.edu/useful-energy-relations/>

6. The electricity emission factor assuming full implementation of Play E.1 is estimated by dividing the total Play E.1 CPA Scenario GHG Emissions by the Total Energy Consumption in Table 9.

7. Total Play E.2 GHG Emissions Reductions are calculated by subtracting the Additional GHG Emissions from Increased Electricity Consumption from the Natural Gas GHG Emissions Avoided.

Results

The Moves associated with Play E.2 would result in a reduction of 241 MT CO₂e in 2030 and 984 MT CO₂e in 2045, as shown in Table 13.

Table 13 GHG Emission Reductions Associated with Play E.2

Moves	Emission Reductions (MT CO ₂ e)		Source
	2030	2045	
E.2.a Develop a webpage and materials for display at City Hall promoting the benefits of electrification and resources that can assist with the fuel-switching process.	Supportive		N/A
E.2.b Provide financial and technical resources, including hosting workforce development trainings for installers and building owners/operators to discuss benefits and technical requirements of electrification.	Supportive		N/A
E.2.c Perform regular internal trainings with planners and building officials on current state decarbonization goals and incentives available for electric homes.	Supportive		N/A
E.2.d Provide education around cooking with electric appliances, including demonstrations from chefs and/or local restaurants, as available.	Supportive		N/A
E.2.e Adopt an Electrification Readiness reach code per California Energy Commission (CEC) reach code requirements for all new buildings and accessory dwelling units which eliminates the piping of natural gas. In doing so the City will: <ul style="list-style-type: none"> ▪ Engage with stakeholders, both internal stakeholders, such as City staff and officials, and external stakeholders, such as local developers regarding the purpose and impact of the reach code ▪ Conduct a cost effectiveness study ▪ Develop and draft an ordinance ▪ Conduct public hearings, public notices, and formally adopt the ordinance ▪ Submit the adopted ordinance to the California Energy Commission (CEC) 	228	935	California Energy Codes and Standards. 2019 Cost Effectiveness Study: Low-Rise Residential New Construction. California Energy Codes and Standards. 2019 Nonresidential New Construction Reach Code Cost Effectiveness Study. Gough, Matt. 2020. Sierra Club. California’s Cities Lead the Way to a Gas-Free Future. Deason, Jeff. et al. 2018. Electrification of buildings and Industry in the United States. EIA. 2020. Annual Energy Outlook.
E.2.f Adopt an ordinance that allows granting of minor allowances for certain site development standards when there is no practical ways to design a project to be all electric.			N/A

Play E.3 Electrify 5% of existing buildings by 2030 and 80% by 2045.

Background

To further the efforts of Play E.2 in electrifying South Pasadena, the City intends to support the electrification of existing buildings through voluntary adoption of all electric appliances. The Moves the City will take to encourage fuel switching include:

- Maintaining an updated list of rebates and incentives for electric conversions and appliances (Move E.3.b)
- Providing education on the benefits of electric appliances when building permits and permits for replacement are obtained (Moves E.3.c and E.3.e)

- Working with utility providers to provide rebates on electric HVAC and water heating equipment (Move E.3.d)
- Establishing a coordinated education campaign to reduce use of natural gas (Move E.3.g)

In addition to these voluntary efforts, South Pasadena will make steps towards developing and adopting an electrification retrofit ordinance through performing an existing buildings analysis and a cost-effectiveness study (Moves E.3.f and E.3.h).

Methodology and Assumptions

The 5% target for electrification of existing buildings by 2030 is based on the voluntary replacement of natural gas fueled equipment with electric equipment, through strategic education and public outreach efforts by South Pasadena. The 2045 target of electrifying 80% of existing buildings assumes the adoption of an electrification ordinance banning the installation or replacement of natural gas burning equipment in any existing building, with the majority of the natural gas fueled equipment in the City to have reached its operational end of life by 2045.

A 2016 analysis of the effectiveness of marketing, education, and outreach associated with the Energy Upgrade California program found that approximately 10% of people reached through one-on-one interactions had decided to purchase ENERGY STAR certified appliances after the interaction.²³ Similarly, South Pasadena expects to encourage 10% of the people reached through their efforts in public education and one-on-one interactions at the permitting counter to purchase electric appliances and equipment instead of natural gas fueled alternatives. Additionally, the promotion of rebates and incentives offered through SCE would provide motivation for voluntary electrification.²⁴

It is assumed that the majority of natural gas fueled equipment would be replaced with electric equipment at its operational end-of-life. The 2018 EIA report, *Updated Buildings Sector Appliance and Equipment Cost and Efficiencies*, provides the average lifespans of various equipment types. Residential gas fired furnaces, water heaters, and stoves/cook tops have an average lifespan of 21.5, 13, and 12 years, respectively; while commercial natural gas fired furnaces, boilers, and water heaters have an average lifespan of 23, 25, and 10 years, respectively.²⁵ Taking the average lifespan of these equipment types, it is estimated that in the 10 years between 2020 and 2030, approximately 65% of all of these types of equipment in South Pasadena will have been replaced. Furthermore, under this same assumption, in the fifteen years between 2030 and 2045 approximately 80% of all of these types of equipment would reach their end of life and need to be replaced.

By 2030, with a 10% voluntary participation rate in converting to all electric equipment and an approximate 65% turnover of all natural gas appliances and equipment in South Pasadena, it is conservatively estimated that 5% of the existing buildings would be electrified. Under the assumption that replacement of natural gas equipment will be required in South Pasadena with the

²³ California Public Utilities Commission (CPUC). 2016. 2013-2015 California Statewide Marketing, Education, and Outreach Program: Verification and Integrated Effectiveness Study. pp. 88. <https://www.cpuc.ca.gov/statewidemeo/>. Accessed May 25th, 2020.

²⁴ In regions where natural gas and electric utilities are separate entities, electrification incentives are strongest. Deason, Jeff. et al.. 2018. Electrification of buildings and Industry in the United States. pp. 39. https://pdfs.semanticscholar.org/27f0/d125d5316ee10565560545c0fc17d6c447a8.pdf?_ga=2.3238896.1101123906.1590438648-1004765093.1590438648

²⁵ EIA. 2018. Updated Buildings Sector Appliance and Equipment Cost and Efficiencies. Appendix C. pp. 9, 51, 75, 90, 98, 120 <https://www.eia.gov/analysis/studies/buildings/equipcosts/pdf/full.pdf>. Accessed May 25, 2020.

adoption of an Electrification Retrofit Ordinance by 2030, the estimated turnover of 80% of natural gas equipment would result in 80% of South Pasadena buildings being electrified.

Play E.3 GHG emission reduction calculations assume that baseline natural gas consumption would be reduced by 5% by 2030 and 80% by 2045. Since electric appliances are approximately three times more efficient over similar natural gas burning equipment and appliances,²⁶ the use of electric equipment instead of natural gas would result in improved energy efficiency and a reduction in overall energy consumption for replaced natural gas equipment. This electricity consumption would generate GHG emissions that would offset the reduction in natural gas emissions from electrification; however, these emissions would be minimized assuming full implementation of Play E.1. The calculations and assumptions used to estimate emission reductions from Play E.3 are provided in Table 14.

Table 14 Play E.3 GHG Emission Reduction Calculations

Calculation Factor	2030	2045
Electrification Retrofit Goal	5%	80%
Natural Gas Consumption Reductions from Retrofits Below 2020 Baseline Consumption (therms) ¹	227,810	3,644,961
Natural Gas Emission Factor (MT CO ₂ e/therm) ²	0.00531	0.00531
Natural Gas GHG Emissions Avoided (MT CO ₂ e)	1,210	19,355
Resulting Increase in Electricity Consumption (kWh) ^{3 4}	2,224,945	35,599,120
Electricity Emission Factor Assuming Implementation of Play E.1.(MT CO ₂ e/kWh) ⁵	0.00001162	0
Additional GHG Emissions from Increased Electricity Consumption (MT CO ₂ e)	26	0
Total Play E.3 GHG Emissions Reductions (MT CO₂e)⁶	1,184	19,355

Notes: MT CO₂e = metric tons of carbon dioxide; kWh = kilowatt-hour

1. 2020 Baseline Natural Gas Consumption is obtained from the *Legislative Adjusted Forecast* GHG Emissions estimates used to develop GHG reduction targets, provided in Appendix C.

2. Emission factors obtained from United States Environmental Protection Agency Emission Factors for Greenhouse Gas Inventories, Table 1. https://www.epa.gov/sites/production/files/2015-07/documents/emission-factors_2014.pdf.

3. The resulting increase in electricity consumption estimates a three times increase in efficiency due to the improved efficiency of electric heat pumps and other electrical equipment of natural gas. Dennis, Keith. 2015. Environmentally Beneficial Electrification: Electricity as the End-Use Option. *The Electricity Journal*. 28(9). pp. 100-112. <https://doi.org/10.1016/j.tej.2015.09.019>

4. Natural gas consumption converted to electricity using the conversion: 1 Therm = 29.3 kWh. <https://dothemath.ucsd.edu/useful-energy-relations/>

5. The electricity emission factor assuming full implementation of Play E.1 is estimated by dividing the total Play E.1 CPA Scenario GHG Emissions by the Total Energy Consumption in Table 9.

6. Total Play E.3 GHG Emissions Reductions are calculated by subtracting the Additional GHG Emissions from Increased Electricity Consumption from the Natural Gas GHG Emissions Avoided.

Results

Play E.3 would result in a reduction of 1,184 MT CO₂e in 2030 and 19,355 MT CO₂e in 2045, as shown in Table 15.

²⁶ Dennis, Keith. 2015. Environmentally Beneficial Electrification: Electricity as the End-Use Option. *The Electricity Journal*. 28(9). pp. 100-112. <https://doi.org/10.1016/j.tej.2015.09.019>

Table 15 GHG Emission Reductions Associated with Play E.3

Moves	Emission Reductions (MT CO ₂ e)		
	2030	2045	Source
E.3.a Develop an existing building electrification permit tracking program to track annual progress in achieving the targeted electrification goal.		Supportive	N/A
E.3.b Keep an updated list of rebates and incentives available to residents who would like to convert their buildings to electric power.			CPUC. 2016. 2013-2015 California Statewide Marketing, Education, and Outreach Program: Verification and Integrated Effectiveness Study.
E.3.c Provide education on the potential energy savings and benefits of electric heat pumps for water heating and space heating when permits for replacement are obtained.			Deason, Jeff. et al. 2018. Electrification of buildings and Industry in the United States.
E.3.d Work with Southern California Edison (SCE) and/or the Clean Power Alliance to provide rebates for residential replacement of natural gas-powered air and water heating appliances with electric-powered.			EIA. 2018. Updated Buildings Sector Appliance and Equipment Cost and Efficiencies. Appendix C.
E.3.e Promote water heater, space heating, and appliance (electric stoves/dryers) replacement programs and incentives (residential) at time of construction permit.	1,187	19,355	
E.3.f Perform an existing buildings analysis in order to understand the potential for electrification retrofitting in South Pasadena and establish a roadmap for eliminating natural gas from existing buildings.			
E.3.g Establish a comprehensive, coordinated education campaign focused towards property owners, landlords, property management companies, and occupants for reducing the use of natural gas in homes and businesses. Establish a shared understanding of existing incentives for electric appliances and upgrades, and how to access them, including SCE incentive programs and rebates.			
E.3.h Perform a cost-effectiveness study for electrification retrofitting, including requirements for newly permitted HVAC/hot water heaters and other appliances to be electric.		Supportive	N/A
E.3.i Develop a best practices model based on the progress electrifying existing buildings in South Pasadena and outside of South Pasadena to significantly increase electrification post-2030.		Supportive	N/A

Play E.4 Develop and promote reduced reliance on natural gas through increased clean energy systems that build off of renewable energy development, production, and storage.

Background

Efforts under Play E.4 are intended to increase South Pasadena's energy resilience rather than emission reductions. South Pasadena will reduce its reliance on natural gas and the electricity grid as natural disasters and warming temperatures pose significant risk to the disruption of power supply and safety. Reducing reliance on natural gas can reduce the risk of disasters such as major gas leaks, as well improving public health by reducing the inhalation of combustion by-products known to degrade indoor air quality.²⁷ Reducing reliance on the electricity grid can also help maintain resilience during Public Safety Power Shutoffs, which will continue to occur as wildfire

²⁷ CARB. 2020. Indoor Air Pollution from Cooking. <https://ww2.arb.ca.gov/resources/documents/indoor-air-pollution-cooking>. Accessed May 25th, 2020

seasons become longer and more destructive, due to the effects of climate change.²⁸ The City has already included many of the Moves under this Play as part of their General Plan and Strategic Plans. Play E.4 and the associated Moves are not expected to reduce overall GHG emissions and are therefore not quantified; however, they are detailed in Table 16 for reference.

Table 16 GHG Emission Reductions Associated with Play E.4

Play	Emission Reductions (MT CO ₂ e)		Source
	2030	2045	
E.4.a Conduct a Feasibility Study to assess cost and applicable locations for installation of battery back-up systems or generators throughout the City.	Supportive		N/A
E.4.b Promote installation of storage technology in concert with renewable energy infrastructure through educational programs, outreach, and information provided via City platforms.	Supportive		N/A
E.4.c Conduct "micro-grid" Feasibility/Pilot Study in support of the General Plan.	Supportive		N/A
E.4.d In support of the General Plan, develop and implement a Solar Action Plan with a goal of meeting 50% of South Pasadena's power demand through solar by 2040.	Supportive		N/A
E.4.e In support of the 2018-2019 City Strategic Plan, develop a strategy and implementation schedule for the Renewable Energy Plan, after completion of the feasibility study.	Supportive		N/A
E.4.f Adopt a PV (solar) Ordinance requiring newly constructed and majorly renovated multi-family and commercial buildings to install PV systems with an annual output greater or equal to 25% of buildings electricity demand.	Supportive		N/A
E.4.g Require all new structures or major retrofits to be pre-wired for solar panels.	Supportive		N/A
E.4.h Work with various City departments to establish and streamline battery storage requirements to allow for easier implementation of these technologies throughout the City.	Supportive		N/A
E.4.i Work with home and business owners, including those in the historic districts, to identify and promote renewable energy demonstration projects to showcase the benefits.	Supportive		N/A
E.4.j Work with SCE and the CPA to develop a program and timeline for increasing resilience to power losses, including Public Safety Power Shutoffs (PSPS), and climate-driven extreme weather events for low-income, medically dependent, and elderly populations through installation of renewable energy and onsite energy storage with islanding capabilities, following appropriate project-level environmental review.	Supportive		N/A

2.3 Transportation Sector

Play T.1 Increase zero-emission vehicle and equipment adoption to 13% by 2030 and 25% by 2045.

Background

A transition to zero-emission vehicles (ZEV) will play an essential role in the reduction of fossil fuel consumption needed for South Pasadena, and California as a whole, to reach GHG reduction targets.

²⁸ California Public Utilities Commission (CPUC). De-Energization (PSPS). <https://www.cpuc.ca.gov/deenergization/>. Accessed May 25th, 2020.

South Pasadena has established a 2030 target of having 13% of the passenger vehicle fleet be ZEV, and 25% by 2045, which aligns with the state target set by Governor Brown with Executive Order (EO) B-48-18.^{29,30} While the state and South Pasadena cannot require the purchase of ZEVs, they can work to provide sufficient electric vehicle (EV) charging infrastructure that would be required to support ZEV adoption. As market trends continue to shift towards more ZEVs being purchased, South Pasadena can facilitate this transition by:

- Developing, implementing, and funding a plan for providing, and assessing the challenges associated with, adequate EV infrastructure (Moves T.1.a and T.1.f)
- Ensuring adequate charging is available at commercial land uses and workplaces (Moves T.3.b and T.3.g)
- Promoting the benefits of ZEVs and available rebates and incentives for ZEVs and fueling infrastructure (Move T.1.d)
- Streamlining the permitting process for ZEV infrastructure (Move T.1.c)

Methodology and Assumptions

While these ZEV adoption rate targets align with state targets established by EO B-48-18, the recent federal Safer Affordable Fuel Efficient (SAFE) Vehicles Rule creates uncertainty in California's ability to set policies to reach the desired ZEV adoption. Although California may not be able to take direct action that increases ZEV adoption, EO B-48-18 outlines EV charging infrastructure needs that would allow the state to reasonably reach its target of five million ZEVs on the road in 2030. EO B-48-18 indicates that 250,000 public charging stations installed by 2025 would support the desired EV adoption, which would equate to approximately one public EV charger for every 112 passenger vehicles on the road.³¹ In order to meet the state target for ZEV public charging, this would equate to approximately 180 public EV charging stations in South Pasadena. The actual number and ideal locations for these EV charging stations would need to be further investigated through an EV Readiness Plan and Feasibility Study.

In addition to well-planned public charging stations, workplace and residential EV charging infrastructure would further support ZEV adoption. A 2015 report by Idaho National Laboratory, *Plugged In: How Americans Charge Their Electric Vehicles*, found that nearly 98% of all EV charging events occurred at home or work. In support of these findings, and to address the challenges faced by those who may not be able to install their own home chargers, adoption of an EV Readiness Reach Code would support increased infrastructure at new and existing commercial and multi-family residential developments.

²⁹ Executive Order B-48-18 provides a target of 5 million ZEVs to be in California's vehicle fleet in 2030. While this target does not provide what amount are to be passenger and light-duty vehicles, as compared to medium- and heavy- duty vehicles, it is assumed that 80% of ZEVs will be light-duty passenger vehicles, which is consistent with the previous target of 1.5 million ZEVs by 2030 (1.2 million of which are expected to be light-duty passenger vehicles, as shown in Figure 15 of the CARB 2016 *Mobile Sources Strategy*). Under these assumptions, of the 30 million expected passenger vehicles in California in 2030 (CARB 2016 *Mobile Sources Strategy*, page 67), 13% would be ZEVs. Assuming the same increase of ZEV adoption between 2030 and 2045, as occurred before 2030, there would be an approximate doubling of ZEVs by 2045.

³⁰ This analysis does not account for EO N-79-20, which directs CARB to develop regulations to achieve 100% electric vehicle car sales in CA by 2035 & 100% ZEV medium/heavy-duty vehicles by 2045. These are some pretty ambitious and exciting goals and was signed after the analysis was completed.

³¹ According to California Department of Motor Vehicles Registration Statistics, as of October 2018, there were approximately 20,000 light-duty vehicles registered in South Pasadena, 326 of which were ZEVs (1.6 percent). https://www.dmv.ca.gov/portal/dmv/detail/pubs/media_center/statistics. Accessed May 21st, 2020.

GHG emission reductions from the adoption of ZEVs assumes that the collective impact of each Move under this Play will incentivize and provide the infrastructure needed for South Pasadena to meet the ZEV adoption targets that align with state targets. The calculations assume that the 13% adoption rate in 2030 and 25% adoption rate in 2045 will result in an equivalent reduction in vehicle miles traveled (VMT) powered by fossil fuels, and emissions associated with these miles traveled would instead be accounted for in additional electricity use. The emission factors used in the *Legislative Adjusted* GHG Emissions Forecast assume that approximately 3% of total South Pasadena Passenger VMT in 2030 would be by ZEVs, and 4% in 2045.³² Increasing ZEV adoption to 13% by 2030 and 25% by 2045 would reduce GHG emissions from fossil fuel combustion by 10% and by 21% in 2045. The GHG emission reductions of Play T.1 are applied after the VMT reductions attained by Play T.2 and T.3 through increased public and shared transit and active transportation. This GHG reduction would be offset by electricity consumption which would generate a small amount of GHG emissions. The calculations and assumptions used to estimate emission reductions from Play T.1 are provided in Table 17.

³² Emission factors for the *Legislative Adjusted* GHG Emissions Forecast were obtained from the California Air Resources Board (CARB) EMFAC2017 vehicle emissions model. The model was run for 2030 and 2045 for Los Angeles County. <https://arb.ca.gov/emfac/2017/>

Table 17 Play T.1 GHG Emission Reduction Calculations

Calculation Factor	2030	2045
EV adoption target	13%	25%
<i>Legislative Adjusted</i> GHG Forecast Projected EV adoption	3%	4%
Effective Increase in EV Adoption Above <i>Legislative Adjusted</i> GHG Forecast ¹	10%	21%
Forecasted Passenger Vehicle VMT(VMT) ²	156,766,759	151,111,470
Play T.1 Reduction in VMT from Fossil Fuel Combustion (VMT) ³	15,676,676	31,733,409
Forecasted Passenger Vehicle GHG Emissions (MT CO ₂ e) ²	38,358	31,567
Play T.1 Reduction in GHG Emissions from Fossil Fuel Combustion (MT CO ₂ e) ³	3,836	6,629
Estimated 2020 Model Year Average Electricity Consumption (kwh/100 miles) ⁴	34	34
Estimated Increase in Electricity Consumption Resulting from Increased EV Adoption (kWh)	5,330,070	10,789,359
Electricity Emission Factor Assuming Implementation of Play E.1.(MT CO ₂ e/kWh) ⁵	0.0000116	0.0000000
Additional GHG Emissions from Increased Electricity Consumption (MT CO ₂ e)	62	0
Total Play T.1 GHG Emissions Reductions (MT CO₂e)⁶	3,774	6,629

Notes: MT CO₂e = metric tons of carbon dioxide; kWh =-kilowatt-hour; VMT = vehicle miles traveled; EV = electric vehicle

1. The Effective Increase in EV Adoption Above *Legislative Adjusted* GHG Forecast represents the gap in EV adoption in the Los Angeles County vehicle fleet that will allow South Pasadena to reach its EV adoption target. The *Legislative Adjusted* GHG Forecast obtained EV adoption rates from the California Air Resources Board (CARB) EMFAC2017 vehicle emissions model. The model was run for 2030 and 2045 for Los Angeles County. <https://arb.ca.gov/emfac/2017/>.

2. Total Forecasted Passenger VMT and Total Forecasted Passenger Vehicle GHG Emissions account for the reductions in VMT and GHG emissions that would be realized upon full implementation of Play T.2 and T.3. See Table 21 for derivation of these values.

3. Play T.1 Reduction in VMT from Fossil Fuel Combustion and Play T.1 Reduction in GHG Emissions from Fossil Fuel Combustion are calculated as the reduction resulting from the increased adoption of EV above baseline EV adoption.

4. The Estimated 2020 Model Year Average Electricity Consumption is used to convert the reduction of VMT from fossil fuel combustion to consumption by the increased adoption of electric vehicles. 2020 model year all electric vehicles, excluding Porsche make vehicles, consume an average 34 kWh per 100 miles. <https://www.fueleconomy.gov/feg/powerSearch.jsp>. Search Criteria: 2020 model year, All Electric vehicle type. Accessed May 21st, 2020.

5. The electricity emission factor assuming full implementation of Play E.1 is estimated by dividing the total Play E.1 CPA Scenario GHG Emissions by the Total Energy Consumption in Table 9.

6. Total Play T.1 GHG Emissions Reductions are calculated by subtracting the Additional GHG Emissions from Increased Electricity Consumption from the Play T.1 Reduction in GHG Emissions from Fossil Fuel Combustion.

Results

There is no single Move under Play T.1 that will reduce GHG emission on its own. Instead, all of the Moves are collectively supportive towards increasing ZEV adoption to a level consistent with state goals. Play T.3 would result in a reduction of 3,774 MT CO₂e in 2030 and 6,629 MTCO₂e in 2045, as shown in Table 18.

Table 18 GHG Emission Reductions Associated with Play T.1

Move	Emission Reductions (MT CO ₂ e)		
	2030	2045	Source
T.1.a Develop an EV Readiness Plan to establish a path forward to increase EV infrastructure within the City and promote mode shift to EVs that is consistent with the City General Plan. In conjunction with an EV Readiness Plan, conduct a community EV Feasibility Study to assess infrastructure needs and challenges.			
T.1.b Adopt an EV Charging Retrofits in Existing Commercial and Multifamily Buildings reach code requiring major retrofits, with either a permit value over \$200,000 or including modification of parking surfaces or electric panels, to meet CalGreen requirements for “EV Ready” charging spaces and infrastructure.			CARB. 2016.
T.1.c Streamline permit processes (city, county, state, utility) for electric vehicle charging infrastructure and alternative fuel stations.			Mobile Sources Strategy
T.1.d Enhance promotion of public and private conversion to zero-emission vehicles through implementation of the City General Plan including use of City events, social media, and the City website to educate on benefits of zero-emission vehicles and available incentives.			California Department of Motor Vehicles Registration Statistics
T.1.e Establish an ordinance that restricts use of gas-powered lawn equipment, including leaf blowers, and provide information on the City website outlining available incentives.	3,774	6,629	https://www.fueleconomy.gov/feg/powerSearch.jsp
T.1.f Adopt an EV Readiness Reach Code requiring new commercial construction to provide the minimum number of EV capable spaces to meet Tier 2 requirements (20% of total). In doing so the City will: <ul style="list-style-type: none"> ▪ Engage with stakeholders, both internal stakeholders, such as local government staff and officials, and external stakeholders, such as local developers regarding the purpose and impact of the reach code ▪ Conduct a cost effectiveness study ▪ Develop and draft an ordinance ▪ Conduct public hearings, public notices, and formally adopt the ordinance; and ▪ Submit the adopted ordinance to the California Energy Commission (CEC) 			
T.1.g Earmark and identify additional funding for implementation of the EV Readiness Plan to include public charging infrastructure in key locations.			

Play T.2 Implement programs for public and shared transit that decrease passenger car vehicle miles traveled 2% by 2030 and 4% by 2045.

Background

Reducing VMT means reducing the number of miles and trips taken by on-road vehicles both intercity and intracity. South Pasadena will reduce VMT by moving trips from single occupancy vehicles to shared mobility option, such as ride-shares, buses, and LA Metro Gold Line. To do this, the City must work to increase the ease of access to various types of safe shared and public transit. South Pasadena intends to do so by:

- Conducting a Feasibility and Community Interest Study for transit improvement options to maximize utilization of near term transit improvements (Move T.2.a)
- Adopting a Transportation Demand Management (TDM) Plan that incentivizes shared transit options to and from new developments, with a focus on increasing access to public transit (MoveT.2.d)
- Pursuing shared “micro-transit” options to improve first/last mile connectivity (Move T.2.b)

- Better understanding the community’s need and motivation for traveling by car instead of by public transit (Move T.2.c)
- Providing programs that encourage minority, low-income, and senior populations to use public or shared transportation (Move T.2.e)

Methodology and Assumptions

South Pasadena is expected to experience an increase in transit ridership that is consistent with the SCAG 2016 RTP/SCS projections because Play T.2 aligns with SCAG’s strategies and recommendations. According to the SCAG 2016 RTP/SCS, an increased mode shift away from passenger vehicles will require improved operational and accessibility strategies for public transit.³³ The majority of these improvements will need to come from the transit agencies themselves; however, South Pasadena will work with these agencies to understand the needs of their community and increase public transit accessibility for all social and demographic groups. Approximately 4.5% of trips in Los Angeles County are by public transit, and through the proposed strategies for improve operations and accessibility included in the SCAG 2016 RTP/SCS, a 67% increase of trips by transit is expected by 2040.^{34,35} This corresponds to an increase of transit ridership of 3% by 2030, and a 4% increase by 2045.

It is unclear how future increases in transit ridership will change the GHG emissions associated with public transit in South Pasadena. Emissions associated with increases in service frequency by LA Metro’s Gold Line and buses are likely to be offset largely by decreased electricity emission factors and decreased tailpipe emissions from public transportation options. Thus, for calculation replicability and transparency, it is assumed that the reductions in passenger vehicle GHG emissions associated with increased transit ridership will not be offset by additional GHG emissions from increased transit ridership. The calculations and assumptions used to estimate emission reductions from Play T.2 are provided in Table 19.

³³ Southern California Association of Governments (SCAG). 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Transit Appendix. Pp. 74-76. http://scagrtpscsc.net/Documents/2016/final/f2016RTPSCS_Transit.pdf

³⁴ Southern California Association of Governments (SCAG). 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Transit Appendix. Table 4. Pp. 12. http://scagrtpscsc.net/Documents/2016/final/f2016RTPSCS_Transit.pdf

³⁵ Southern California Association of Governments (SCAG). 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Transit Appendix. Table 29. Pp. 76. http://scagrtpscsc.net/Documents/2016/final/f2016RTPSCS_Transit.pdf

Table 19 Play T.2 GHG Emission Reduction Calculations

Calculation Factor	2030	2045
Target Reduction in Passenger Vehicle VMT	2%	4%
Total Forecasted Passenger VMT (VMT) ¹	164,913,485	167,455,087
Reduction in Passenger Vehicle VMT from Play T.2 (VMT)	3,298,270	6,698,203
Total Forecasted Passenger Vehicle GHG Emissions (MT CO ₂ e) ¹	40,351	34,981
Play T.2 GHG Emissions Reductions from Reductions in Passenger Vehicle VMT (MT CO₂e)⁶	807	1,399

Notes: MT CO₂e = metric tons of carbon dioxide; VMT = vehicle miles traveled

1. Total Forecasted Passenger VMT and Total Forecasted Passenger Vehicle GHG Emissions are obtained from the *Legislative Adjusted Forecast GHG Emissions* estimates used to develop GHG reduction targets, provided in Appendix C.

Results

There is no single Move under Play T.2 that will reduce GHG emission on its own. Instead, all of the Moves are collectively supportive towards increasing transit ridership to a level consistent with the SCAG 2016 RTP/SCS. Play T.2 would result in a reduction of 807 MT CO₂e in 2030 and 1,399 MT CO₂e in 2045, as shown in Table 20.

Table 20 GHG Emission Reductions Associated with Play T.2

Move	Emission Reductions (MT CO ₂ e)		
	2030	2045	Source
T.2.a Conduct a Feasibility and Community Interest Study on the four transit improvement options of the City's General Plan.			Southern California Association of Governments (SCAG). 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)
T.2.b Pursue a community car, bike, or e-scooter "micro-transit" share pilot consistent with City General Plan.			
T.2.c Conduct local transportation surveys to better understand the community's needs and motivation for traveling by car versus other alternatives such as bus or Metro Gold Line light rail. Use survey results to inform transit expansion and improvement projects.	807	1,399	
T.2.d Adopt a Transportation Demand Management (TDM) Plan for the City that includes a transit system focus. Provide incentives for implementation of TDM measures at local businesses and new developments.			
T.2.e Facilitate transportation equity through targeted provision of programs that encourage minority, low-income, disabled, and senior populations to take transit, walk, bike, use rideshare or car share.			

Play T.3 Develop and implement an Active Transportation Plan to shift 3% of baseline passenger car VMT to active transportation by 2030, and 6% by 2045.

Background

Increasing active transportation is an essential aspect of reducing the amount of VMT in South Pasadena. An Active Transportation Plan, which provides an understanding of the current conditions of sidewalks and bike lanes, will provide a framework and timeline for making the most effective infrastructure improvements to increase trips by biking and walking and reduce trips by passenger

car. A successful plan also includes identification of funding sources for which South Pasadena will pursue the establishment of developer fees. The SCAG 2016 RTP/SCS outlines specific measures and actions that are to be implemented, effectively shifting 6% of trips to active transportation by 2040, from the 2012 baseline. As part of this plan, local governments are expected to develop and implement active transportation plans that include the development of a comprehensive local bikeway and pedestrian network, using Complete Streets principles.

Move T.3.a, to develop and implement an Active Transportation Plan consistent with the General Plan and the SCAG 2016 RTP/SCS, is the cornerstone Move of Play T.3, from which the majority of GHG emission reductions will be attained. South Pasadena will provide equitable and safe access to active transportation through additional supportive Moves under Play T.3, including identifying funding for plan implementation, increasing availability of bicycle storage, conducting intersection studies, and requiring new active transportation infrastructure be developed with safety as a primary focus.

Methodology and Assumptions

This analysis assumes of South Pasadena’s design and implementation of an Active Transportation Plan that is consistent with the strategies of the SCAG 2016 RTP/SCS. It is therefore assumed that South Pasadena would attain the same active transportation mode-shift estimated for a “Semi Urban place”,³⁶ under implementation of the SCAG 2016 RTP/SCS.³⁷ Under the SCAG 2016 RTP/SCS, mode share for active transportation trips are expected to increase by 6% from the baseline year (2012) to the plan horizon year of 2040. Reduction calculations assume that this mode shift will result in a 6% reduction of passenger vehicle trips by 2040, and the baseline year for South Pasadena is the 2016 inventory year. Accordingly, with successful implementation the Active Transportation Plan, South Pasadena is expected to attain a 3% decrease in passenger vehicle VMT by 2030, and a 6% decrease in 2040. As the horizon year for the SCAG 2016 RTP/SCS is 2040, it is assumed that VMT reductions will remain at 6% beyond 2040, and into 2045. The calculations and assumptions used to estimate emission reductions from Play T.3 are provided in Table 21.

Table 21 Play T.3 GHG Emission Reduction Calculations

Calculation Factor	2030	2045
Target Reduction in Passenger Vehicle VMT	3%	6%
Forecasted Passenger VMT (VMT) ¹	161,615,215	160,756,883
Reduction in Passenger Vehicle VMT from Play T.3 (VMT)	4,848,456	9,645,413
Total Forecasted Passenger Vehicle GHG Emissions (MT CO ₂ e) ¹	39,544	33,582
Play T.3 GHG Emissions Reductions from Reductions in Passenger Vehicle VMT (MT CO₂e)⁶	1,186	2,015

Notes: MT CO₂e = metric tons of carbon dioxide; VMT = vehicle miles traveled

1. Total Forecasted Passenger VMT and Total Forecasted Passenger Vehicle GHG Emissions account for the reductions in VMT and total GHG emissions from implementation of Play T.2. See Table 19 for derivation of VMT and GHG emissions.

³⁶ Under the SCAG 2016 RTP/SCS Active Transportation Appendix the City of South Pasadena is designated as a Semi-Urban place. http://scagrtpscsc.net/Documents/2016/final/f2016RTPSCS_ActiveTransportation.pdf

³⁷ Southern California Association of Governments (SCAG). 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Active Transportation Appendix. Table 20. Pp. 69. http://scagrtpscsc.net/Documents/2016/final/f2016RTPSCS_ActiveTransportation.pdf

Results

Move T.3.a associated with Play T.3 would result in a reduction of 1,186 MT CO₂e in 2030 and 2,015 MT CO₂e in 2045, as shown in Table 22. The additional Moves under this Play are considered supportive towards effectively implementing Move T.3.a and reaching the overall goal of Play T.3.

Table 22 GHG Emission Reductions Associated with Play T.3

Move	Emission Reductions (MT CO ₂ e)		
	2030	2045	Source
T.3.a Develop and adopt an Active Transportation Plan consistent with SCAG 2016 RTP/SCS that will identify funding strategies and policies for development of pedestrian, bicycle, and other alternative modes of transportation projects. Establish citywide events, outreach, educational programs, and platforms to promote active transportation in the community in support of the General Plan.	1,186	2,015	SCAG 2016 RTP/SCS
T.3.b In conjunction with the City’s Complete Streets Policy, conduct a Street/Intersection Study to identify streets and intersections that can be improved for pedestrians and bicyclists through traffic calming measures and/or where multi-use pathway opportunities exist to increase active transportation.	Supportive		N/A
T.3.c Periodically review and update the City’s Bicycle and Pedestrian Network Map and post throughout City.	Supportive		N/A
T.3.d Work with South Pasadena Active, Active San Gabriel Valley (ActiveSGV), and/or Metro to develop programs and classes to teach and promote bicycle riding education and safety to residents of all ages and skill levels, as well as educate drivers.	Supportive		N/A
T.3.e Conduct a nexus study and develop an ordinance requiring payment of fees from development projects to implement safe active transportation routes and infrastructure citywide.	Supportive		N/A
T.3.f Amend zoning code to require installation of bike stalls or lockers at new developments, "mobility hubs", and during change of use of existing buildings, consistent with the General Plan.	Supportive		N/A
T.3.g Adopt a Trip Reduction Ordinance that includes requirements in the Zoning Code to require end-of-trip facilities for cyclists (e.g., showers, bike repair kiosks, and lockers) in new, non-residential building projects of a specified size.	Supportive		N/A

2.4 Water Sector

Play W.1 Reduce per capita water consumption by 10% by 2030 and 35% by 2045.

Background

Water use and wastewater collection and treatment resulted in less than 1% (0.8%) of total community emissions in the City of South Pasadena in 2016. Although this is a small amount of overall emissions, a holistic approach to climate change allows for GHG emission reductions and the co-benefits of protecting one of California’s scarcest resources. A majority of emissions associated with water use and wastewater generation is associated with the electricity use for the pumping and treatment of potable water (68%) and the collection and conveyance of generated wastewater (21%). Therefore, strategies related to this sector include promoting water conservation by reducing per capita potable water consumption, increasing access to and use of recycled water, and utilizing renewable power for the pumping and treatment of local water sources.

Methodology and Assumptions

The GHG emission reduction calculations are provided to demonstrate the emission that would occur from implementation of the Moves under Play W.1; however, since emission from water consumption are directly related to electricity purchased through CPA, there is risk of double counting the emission reductions from the water sector. As such, emission reduction calculations are provided here for informational purposes and are not intended to be added to the total overall emission reductions associated with the CAP.

In 2016, approximately 1,119 MG of potable water was delivered to South Pasadena community with 99.46% supplied by local well production from the San Gabriel Basin. Based on the City's service population of 35,489 in 2016,³⁸ per capita water consumption is approximately 31,523 gallons annually or approximately 86 gallons per capita per day (gpcd).

Because the City of South Pasadena is primarily made up of low-density residential development, it was assumed that 30-70% of community water use is associated with outdoor usage as found in a 2006 analysis of California water demand trends.³⁹ As such, a majority of the Moves supporting Play W.1 focus on the regulation of landscaping and the switch from use of potable water to recycled water for purposes such as irrigation that do not require potable water.

The 10% target for reduction in per capita water consumption by 2030 is based on the continued support and implementation of the City's current water conservation policies and programs incorporated into the Draft City General Plan, the 2020 Draft Downtown Specific Plan, and the City Green Action Plan. The 2045 target of reduction in per capita water use by 35% assumes the adoption of ordinances restricting the use of potable water for non-potable uses and the implementation of the Integrated Water and Wastewater Resources Management Plan (IWWRMP) that will aid in increased usage of greywater and recycled water over potable water for specific land-uses and support management strategies as it relates to infrastructure needs. These reduction potential assumptions are based on studies that have shown that the use of devices such as smart controllers can reduce residential outdoor water use by approximately 20-30% while transitioning to water-wise landscape options can reduce outdoor water use up to 70%.³⁹

As previously mentioned, a majority of emissions associated with the water sector are associated with energy usage for water pumping, treatment, conveyance, and wastewater collection and treatment. Therefore, emission reductions achieved through Move W.1 are based on the energy savings associated with the reduction in water use per service population. It was also assumed that the reduction in water consumption would also be directly reflected in a reduction in wastewater generated. Water consumption and wastewater generation was calculated based on the forecasted service population of South Pasadena in 2030 and 2045 and the 2030 and 2045 target of 10% and 35% reduction in per capita water consumption from the 2016 baseline, respectively. Energy savings for water consumption is based on the water cycle energy intensity of 2,604 kWh/MG.⁴⁰ Energy savings for wastewater collection and treatment is based on Los Angeles County Sanitation Districts (LACSD) specific energy intensities where the overall energy intensity for wastewater is 1,577 kWh/MG.⁴⁰ Accordingly, it is estimated that there would be an energy savings of 428,326 kWh in 2030 and 1,553,006 kWh in 2045. Based on the forecasted SCE electricity emission factor in 2030 of

³⁸ Department of Finance. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2019 with 2010 Census Benchmark. (<http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>)

³⁹ Hanak, Ellen, and Davis, Matthew. "Lawns and Water Demand in California," *California Economic Policy*, Vol. 2, No 2, July 2006.

⁴⁰ See the Technical Appendix – GHG Inventory for complete description of energy intensities for water pumping, conveyance, and treatment by water provider and wastewater collection and treatment energy intensities specific to LACSD.

0.0001365 MT CO₂e/kWh, the energy savings from a 10% reduction in water consumption per capita by 2030 would equate to a reduction in approximately 59 MT CO₂e. Due to the requirements of SB 100, by 2045 SCE electricity will be 100% carbon neutral and the emission factor in 2045 will be 0 MT CO₂e/kWh. As such, no reduction in emissions due to energy savings is estimated for 2045.

In addition to a reduction in per service population water consumption, Play W.1.f focuses on the replacement of energy used for local water pumping and treatment with 100% renewable sources. As of 2020, all municipal electricity accounts receive 100% renewable under the “100% Green Power” option for the CPA, which includes energy consumed in groundwater pumping and treatment.⁴¹ Therefore, South Pasadena has already achieved this goal; however, this transition to the “100% Green Power” option is already captured in the emission reductions in Play E.1, so the emission reductions from Play W.1 are not added to emission totals to avoid double counting.

The City of South Pasadena supplied 99.57% of the total community water in 2016, which was all obtained from the San Gabriel Groundwater Basin.⁴² It was assumed that the City of South Pasadena would continue to supply the community with 99.57% of their water needs. The average energy intensity for local groundwater pumping from the San Gabriel Groundwater Basin is 2,501.5 kWh/MG, while the energy intensity for chlorination treatment of local groundwater is 9 kWh/MG.^{43 44} Emission reductions from the implementation of 100% renewable energy for local groundwater pumping and treatment were based on the forecasted community water consumption, the specific energy intensities listed above, and SCE electricity emission factors. It was assumed that Play W.1 would be implemented to reduce water consumption per service population by 10% in 2030 and 35% by 2045; therefore, the forecasted community water consumption incorporated the reduction described previously. SCE emission factors used in this analysis included the requirements of SB 100. As mentioned above, due to the requirements of SB 100, by 2045 SCE electricity will be 100% carbon neutral and the emission factor in 2045 will be 0 MT CO₂e/kWh. Therefore, a switch to 100% renewable energy for local groundwater pumping at treatment would equate to a reduction in approximately 355.4 MT CO₂e in 2030 and 0 MT CO₂e in 2045. The calculations and assumptions used to estimate emission reductions from Play W.1 are provided in Table 23.

⁴¹ In an email from Arpy Kasparian on June 5th, 2020, it was indicated that the City of South Pasadena had upgraded all of its municipal accounts to the “100% Green Power” option of the Clean Power Alliance in March of 2020, meaning the City would receive 100% GHG emission free electricity for all of its accounts. The GHG emission reductions for this are accounted for under Play E.1.

⁴² City of South Pasadena 2015 UWMP. Pg. 6-15. (<https://www.southpasadenaca.gov/home/showdocument?id=2905>)

⁴³ San Gabriel Valley Water Company (SGVWC) Energy Intensity values are used as a surrogate for local groundwater because the agency's supply is almost wholly pumped from San Gabriel Basin (CPUC 2010. Embedded Water Study 2. Appendix B, pg. 265. Water Agency and Function Component Study and Embedded Energy-Water Load Profiles). The energy intensities used are the averages of the lower and upper ranges: 2,501.5 kWh/MG for groundwater conveyance, and 93.5 kWh/MG for booster and raw water pumps.

⁴⁴ Treatment for City of South Pasadena water is chlorination. According to *Energy requirements of water production, treatment, end use, reclamation and disposal* published in Renewable and Sustainable Energy Review 2012, energy intensity of chlorination treatment is 0.0024 kWh per cubic meter, which equates to 9.0 kWh per Million Gallons.

Table 23 Play W.1 GHG Emission Reduction Calculations

Calculation Factor	2030	2045
Target Reduction in per capita water consumption	10%	35%
Per Capita Water Consumption Growth Beyond 2025 (gallons/year) ¹	28,370	20,490
Per Capita Wastewater Generation Growth Beyond 2025 (gallons/year) ¹	19,724	14,245
Forecasted service population ²	36,720	38,040
Reduced Water Consumption (MG) ³	116	420
Reduced Wastewater Generation (MG) ³	80	292
Energy intensity for water cycle (kWh/MG) ⁴	2,604	2,604
Energy intensity for wastewater treatment (kWh/MG) ⁵	1,577	1,577
Resulting Decrease in Electricity Consumption (kWh) ⁶	428,326	1,553,006
SB 100 Adjusted Electricity Emission Factor (MT CO ₂ e/MWh) ⁷	0.136	0
Total Move W.1 a-e GHG Emissions Reductions (MT CO₂e)	58.5	0
Forecasted Water Consumption from Local Sources (MG) ^{8,9}	1,037	776
Energy intensity for Local Water Pumping and Treatment (kWh/MG) ¹⁰	2,510.5	2,510.5
Resulting Decrease in Electricity Consumption (kWh) ⁶	2,604,133	1,948,339
Total Move W.1 f GHG Emissions Reductions (MT CO₂e)	355.4	0
Total Play W.1 GHG Emissions Reductions (MT CO₂e)	414	0

Notes: MT CO₂e = metric tons of carbon dioxide; kWh =kilowatt-hour; MG = million gallons

1. Per capita water consumption and wastewater generation annually is based on the 2016 per capita water consumption of 31,523 gallons/capita/year and wastewater generation of 21,915 gallons/capita/year.

2. Forecasted service population is equivalent to the population plus number of jobs. Population and job numbers were obtained from the Department of Finance. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2019 with 2010 Census Benchmark. (<http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>)

3. Reduced water consumption and wastewater generation is based on the difference between the baseline per capita water consumption and baseline per capita wastewater generation rates listed in note and the adjusted per capita rates given the reduction targets, multiplied by the current service population.

4. Energy intensity factors for water consumption are based on the combined intensities needed for groundwater pumping, treatment and distribution as described in the inventory analysis in Appendix C – Community Technical Appendix and in the above written section. The energy intensities obtained from the CPUC Embedded Water Study 2 (2010) are used a proxy.

5. Agency specific (LACSD) energy intensities for wastewater generation were obtained from CPUC 2010. Embedded Energy Water Studies Study 2: Water Agency and Function Component Study and Embedded Energy-Water Load Profiles; Table 4.2 Appendix B-Agency Profiles (pg. 134); average of low and high value were applied.

6. Total electricity saved through reduction in water consumption and wastewater generation is estimated by multiplying the amount of reduced water or wastewater by the corresponding energy intensity factor.

7. SCE emission factors used in this analysis included the requirements of SB 100.

8. Play W.1 f focuses on the use of 100% renewable power for all pumping and treatment of local water sources which currently make up 99.57% of all water supplied to the City of South Pasadena; it is assumed that this will be the same in the future.

9. To avoid double counting potential reductions, forecasted water consumption assumes that Play W.1 a-e have been implemented.

10. Energy intensity for local water pumping and treatment is based on the average values for the San Gabriel Basin presented in CPUC 2010. Embedded Energy Water Studies Study 2: Water Agency and Function Component Study and Embedded Energy-Water Load Profiles.

Results

As shown in Table 24, Moves W.1.a through W.1.e associated with Play W.1 would result in a reduction of 59 MT CO₂e in 2030 and 0 MT CO₂e in 2045 through energy savings due to reduction in water consumption. Additional reductions of 355 MT CO₂e in 2030 and 0 MT CO₂e in 2045 would be achieved with the implementation of Move W.1.f with the purchase of 100% renewable energy through CPA for local water groundwater pumping and treatment by 2030 , for a total of 414 MT CO₂e.

Table 24 GHG Emission Reductions Associated with Play W.1

Moves	Emission Reductions (MT CO ₂ e)		Source
	2030	2045	
W.1.a Continue to enforce the Model Water Efficient Landscapes Ordinance.			CPUC 2010. Embedded Energy
W.1.b Work with the Los Angeles County Sanitation District (LACSD) and/or the Upper San Gabriel Valley Municipal Water District to bring recycled water lines and infrastructure to the City.			Water Studies Study 2: Water Agency and Function Component Study and Embedded Energy-Water Load Profiles; Appendix B-Agency Profiles
W.1.c In conjunction with the Downtown Specific Plan and City General Plan, adopt an ordinance restricting the use of potable water for non-potable uses and requiring greywater capture for land uses that are excess water users (e.g. golf courses, car washes, large fields, etc.).			Energy-Water Load Profiles; Appendix B-Agency Profiles
W.1.d Implement Plays 1 through 4 under Goal II of the Green Action Plan on the provided implementation timeline, aiming to provide education and promotion of greywater systems. (See the City's Green Action Plan for more information).	59	0	Hanak, Ellen, and Davis, Matthew. "Lawns and Water Demand in California," <i>California Economic Policy</i> , Vol. 2, No 2, July 2006.
W.1.e In conjunction with Move II.1.1 of the City Green Action Plan, develop a Recycled Water Use Master Plan that identifies access to recycled water and quantity of recycled water available to the City, as well as establishes an implementation plan. The implementation plan shall identify land use types (i.e., landscaping, gold courses, fields) and specific projects that will switch from potable to recycled water use allowing for a goal of 20% of City's potable water use to be replaced with recycled water.			City of South Pasadena 2015 UWMP
W.1.f Implement 100% renewable power for all pumping and treatment of water.	355	0	LACSD 2015 UWMP

Notes: GHG emission reductions for Play W.1 are provided for informational purposes, as there is risk of double counting emission reductions with Play E.1.

2.5 Waste Sector

Play SW.1 Implement and enforce SB 1383 organics and recycling requirements to reduce landfilled organics waste emissions 50% by 2022 and 75% by 2025.

Background

Organic materials are the focus of the recent landmark legislation SB 1383 (Short-Lived Climate Pollutants: Organic Waste Reductions). Now in the final rulemaking stage, this new state law has the immediate goal of reducing organic waste sent to landfill and the ultimate objective of reaching statewide methane emissions reduction goals. Specifically, it sets a statewide goal for the reduction in organic waste to landfills – 50% by 2020 and 75% by 2025 – in addition to the recovery of 20% of edible food waste for human consumption. SB 1383 will require local governments to provide organics collection to all generators and require all generators to subscribe. It also has specific mandates for container systems, education and outreach programs, monitoring and contamination

reporting, and enforcement of regulations. Full SB 1383 implementation will begin in 2022, allowing some time for jurisdictions to plan and prepare for achieving compliance.⁴⁵

The City of South Pasadena has already started the development of a Zero Waste Plan through their Draft City General Plan and City Green Action Plan and has begun to build out the infrastructure to reduce landfilled organics and increase recycling from local businesses. The adoption of ordinances requiring compliance with SB 1383 and actively working with the City's waste hauler will help to achieve the goals of SB 1383.

Methodology and Assumptions

The requirements and actions associated with SB 1383 have been developed to produce a 75% reduction in organics by the State of California.⁴⁶ The State's efforts towards such goals have been ongoing with previously enacted laws such as AB 341 and AB 1826 establishing commercial recycling requirements. The State recognizes that individual jurisdictions cannot achieve the goals of SB 1383 alone and therefore SB 1383 stipulates how waste generators and local governments must operate to achieve SB 1383 goals. Therefore, by taking the actions required, City of South Pasadena can expect to achieve an equivalent reduction level. The emissions reductions associated with a 75% reduction in organics was calculated using the 2014 Waste Characterization Study for the County of Los Angeles pursuant to the SB 1383 guidelines.⁴⁷ The City of South Pasadena did not have City-specific waste characterization data; therefore, it was assumed that 41% of the waste landfilled from the City was proportional to the percentage of organics as reported in the CalRecycle Waste Characterization Study for the County of Los Angeles. A 50% reduction to the City's organic waste stream was applied in 2022, the year of full implementation, and 75% reduction to the City's organic waste stream was applied in 2025 and continued through 2030. The reduced amount of organic waste was multiplied by the weighted average of the USEPA's emission factors for various organics from the Waste Reduction Model (WARM) based on the organic waste characterization (Emission Factor = 0.289 MT CO₂e/short ton of waste).⁴⁸ The calculations and assumptions used to estimate emission reductions from Play SW.1 are provided in Table 25.

⁴⁵ California Air Resources Board. (2017). Short-Lived Climate Pollution Reduction Strategy.

⁴⁶ https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB1383

⁴⁷ <https://www2.calrecycle.ca.gov/WasteCharacterization/ResidentialStreams%3fcy%3d19%26lg%3d443>

⁴⁸ The WARM model is a waste reduction model created by USEPA to help solid waste planners and organizations track and report GHG reductions from several different waste management practices. https://www.epa.gov/sites/production/files/2019-06/documents/warm_v15_organics.pdf

Table 25 Play SW.1 GHG Emission Reduction Calculations

Calculation Factor	2030	2045
Target Reduction in Landfilled Organics	75%	75%
Forecasted service population ¹	36,720	38,040
Forecasted Waste Generation (tons) ²	19,125	19,813
Forecasted Organic Waste Generation (tons) ³	7,841	8,123
Diverted Organic Waste (tons) ⁴	5,881	6,092
Organics Waste Emission Factor (MT CO ₂ e/ton) ⁵	0.2895	0.2895
Total Play SW.1 GHG Emissions Reductions (MT CO₂e)	1,702	1,764

Notes: MT CO₂e = metric tons of carbon dioxide; kWh =-kilowatt-hour

1. Forecasted service population is equivalent to the population plus number of jobs. Population and job numbers were obtained from the Department of Finance. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2019 with 2010 Census Benchmark. (<http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>)
2. Forecasted waste generation is estimated as the forecasted service population multiplied by the per capita waste generation factor obtained from the 2016 inventory (0.5208 tons/service population)
3. Data on the composition of the waste stream by waste type was not available for the City of South Pasadena, therefore the Cal Recycle statewide average composition was used where ~59% of the waste stream is mixed municipal solid waste (MSW) and ~41% is organics.
4. Diverted organics is based on the total forecasted organics generation multiplied by the targeted reduction.
5. The emission factor for organics waste is the weighted average of emission factors for all organic materials listed in the U.S. EPA’s WARM model Version 15 using the Cal Recycle 2014 Waste Characterization study prepared for California Regions (<https://www2.calrecycle.ca.gov/WasteCharacterization/ResidentialStreams?lg=443&cy=19>) for tonnage by waste type.

*Values may not add up due to rounding

Results

The Moves associated with Play SW.1 would result in a reduction of 1,702 MT CO₂e in 2030 and 1,764 MT CO₂e in 2045, as shown in Table 26.

Table 26 GHG Emission Reductions Associated with Play SW.1

Moves	Emission Reductions (MT CO ₂ e)		Source
	2030	2045	
SW.1.a Adopt procurement policies to comply with SB 1383 requirements for jurisdictions to purchase recovered organic waste products.			
SW.1.b Adopt an ordinance requiring compliance with SB 1383. Ensure ordinances established through the City General Plan are consistent with SB 1383 requirements; and revise ordinances if necessary.			
SW.1.c Adopt an Edible Food Recovery Ordinance for edible food generators, food recovery services, or organization that are required to comply with SB 1383.			
SW.1.d Partner with the City's waste hauler, to provide organic waste collection and recycling services to all commercial and residential generators of organic waste.			
SW.1.e Adopt an ordinance requiring all residential and commercial customers to subscribe to an organic waste collection program and/or report self-hauling or backhauling of organics.			
SW.1.f Conduct a Feasibility Study and prepare an action plan to ensure edible food reuse infrastructure is sufficient to accept capacity needed to recover 20% of edible food disposed or identify proposed new or expanded food recovery capacity.			CalRecycle Waste Stream Characterization ¹
SW.1.g Establish an education and outreach program for school children and adults around food waste prevention, nutrition education, and the importance of edible food recovery. Support City Green Action Plan Play III identified educational goals (Move III.1.3., Move III.1.4., Move III.1.6., Move III.2.1, Move III. 3.3, and Move III.4.2) through an established educational program.	1,702	1,764	EPA. Waste Reduction Model (WARM) Version 15. May 2019. ²
SW.1.h Establish an edible food recovery program supporting the City General Plan and the City Green Action Plan Move III.1.2 to minimize food waste.			SB 1383
SW.1.i Adopt an ordinance or enforceable mechanism to regulate haulers collecting organic waste, including collection program requirements and identification of organic waste receiving facilities.			
SW.1.j Partner with City Waste Services to: <ul style="list-style-type: none"> ▪ Ensure organic waste collection from mixed waste containers are transported to a high diversion organic waste processing facility; ▪ Provide quarterly route reviews to identify prohibited contaminants potentially found in containers that are collected along route; ▪ Clearly label all new containers indicating which materials are accepted in each container, and by January 1, 2025, place or replace labels on all containers. 			

Notes: MT CO₂e = metric tons of carbon dioxide
 1.Source: <https://www2.calrecycle.ca.gov/WasteCharacterization/>
 2. WARM Model Emission factors (<https://www.epa.gov/warm/documentation-chapters-greenhouse-gas-emission-energy-and-economic-factors-used-waste-reduction>)

Play SW.2 Reduce residential and commercial waste sent to landfills by 50% by 2030 and 100% by 2045.

Background

Play SW.2 aims to reduce residential and commercial waste landfilled through the implementation of a Zero Waste Plan which primarily focuses on increased organics diversion through composting, reduction of construction and demolition (C&D) waste through a C&D recycling ordinance in compliance with 2019 CALGreen building codes, and ordinances banning single use food ware and hospitality items (i.e. single use toiletry bottles).

Methodology and Assumptions

The 2014 waste characterization study for the County of Los Angeles pursuant to the SB 1383 guidelines indicated that approximately 41% of landfilled waste is organics while the remaining 59% of the waste landfilled is a mixture of various types of material.⁴⁹ As the City of South Pasadena does not characterize its waste stream, it is assumed that the County of Los Angeles waste characterization data is representative. To avoid double counting of emission reductions generated from Play SW.1, the organic diversion from the landfill due to SB 1383 was incorporated into quantification of SW.2 such that additional reduction in waste to the landfill was evaluated based on the altered waste stream post Play SW.1 implementation. With the compliance of SB 1383 requirements, the City of South Pasadena's organic waste contribution to landfills would be reduced to approximately 10.25% of the total waste stream by 2030.

No case studies on the waste reduction impacts of single use foodware and single-use individual toiletry items in the hospitality industry are publicly available. However, several cities including Richmond, Oakland, Berkeley, and Palo Alto have passed ordinances banning them and California recently enacted a law, effective 2023, that bans most single-use toiletry items at hotels.^{50 51 52 53 54} Additionally, Palo Alto calculated that the ordinance should result in a 1% (290 ton reduction of 27,000 tons total) reduction in total City waste due to the banning of plastic straws, utensils, stirrer sticks, drink plugs, produce bags, and other disposable plastic items.⁵⁵ These estimates do not account for other foodware which was banned in previous ordinances. Marriot estimates that approximately 500 million plastic bottles or 1.7 million pounds of plastic are landfilled each year and that by eliminating single-use plastic toiletry bottles in hotels, that this will reduce amenity plastic usage by 30%.⁵⁶ In the County of Los Angeles, about 12% of commercial waste and 10% of residential waste is plastic, according to CalRecycle's waste characterization tool.⁵⁷ Of that, approximately 3% is "Remainder/Composite" plastic and Styrofoam that cannot be recycled. Therefore, the City of South Pasadena can conservatively anticipate waste reduction between 1% and 2.5% would be derived from a food service ware ban. An additional 2.1% could be expected from the reduction in single-use hotel bottles. This equates to a 30% reduction from the commercial plastic waste stream; the commercial plastic waste makes up approximately 12% of the commercial waste stream and 7% of the total community waste stream (i.e. residential and commercial waste). Therefore, it is conservatively estimated that through ordinances targeting single-use plastic items would reduce landfilled waste by approximately 5%.

The 2019 CALGreen Building code requires that 65% of C&D waste be recycled or used, diverting it from being landfilled.⁵⁸ Based on CalRecycle's Waste Characterization Tool, in the County of Los

⁴⁹ <https://www2.calrecycle.ca.gov/WasteCharacterization/ResidentialStreams%3f3d19%26g%3d443>

⁵⁰ <http://www2.oaklandnet.com/Government/o/PWA/o/FE/s/GAR/OAK024416>

⁵¹ <https://www.waste360.com/legislation-regulation/berkeley-calif-disposable-foodware-ordinance-clamps-down-plastics>

⁵² <https://www.ci.richmond.ca.us/1824/Food-Ware-Ordinance>

⁵³ <https://www.cityofpaloalto.org/gov/depts/pwd/zerowaste/projects/foodware.asp>

⁵⁴ https://leginfo.legislature.ca.gov/faces/billCompareClient.xhtml?bill_id=201920200AB1162

⁵⁵ <https://www.cityofpaloalto.org/civicax/filebank/blobdload.aspx?t=53734.77&BlobID=71714>

⁵⁶ <https://news.marriott.com/2019/08/marriott-international-to-eliminate-single-use-shower-toiletry-bottles-from-properties-worldwide-expanding-successful-2018-initiative/>

⁵⁷ <https://www2.calrecycle.ca.gov/WasteCharacterization/>

⁵⁸ <https://www.contracosta.ca.gov/DocumentCenter/View/44118/CalGreen-Project-Recycling-Requirements-as-Amended-eff-1-1-2020?bidId=>

Angeles about 10% of commercial waste and 12% of residential waste is from C&D materials. The adoption of 2019 CALGreen building code standards and an ordinance requiring compliance, the City of South Pasadena can conservatively anticipate an approximate 4% reduction in total waste that is landfilled.

The 4% reduction in total landfilled waste from diversion of C&D materials in addition to the above discussed 5% reduction in landfilled waste related to ordinances targeting single-use plastics would reduce landfilled waste by 9% in 2030 in addition to the 75% reduction from SB 1383. The reduced amount was multiplied by a weighted average of the USEPA’s emission factors from the WARM v15 model taking into account the change in waste stream characterization with the implementation of SB 1383.⁵⁹ After the implementation of SB 1383, the waste stream would be made up of approximately 10% organics and 90% mixed municipal solid waste (MSW) such that the emission factor would be 0.35 MT CO₂e per short ton of waste landfilled. It was conservatively assumed that the reduction in waste to landfill would be doubled to 18% by 2045 with continued efforts by the City and implementation of the Zero Waste Plan. To reach zero waste by 2045, policies and current efforts by the City may need to be more aggressive. The calculations and assumptions used to estimate emission reductions from Play SW.2 are provided in Table 27.

Table 27 Play SW.2 GHG Emission Reduction Calculations

Calculation Factor	2030	2045
Reduction in Landfilled Waste post SW.1 ¹	9%	18%
Forecasted Waste Generation after SW. 1 (tons) ²	13,244	13,720
Diverted Landfilled Waste (tons) ³	1,192	2,470
Waste Emission Factor (MT CO ₂ e/ton) ⁴	0.3480	0.3480
Total Play SW.2 GHG Emissions Reductions (MT CO₂e)	414.8	859.4

Notes: MT CO₂e = metric tons of carbon dioxide; kWh =-kilowatt-hour

1. Although the targets of this measure are for a 50% reduction in landfilled waste by 2030 and 100% by 2045, the measure proposed City-wide ordinances and 2019 Cal Green Code relied upon to achieve the measure will not meet those targets. The percent reduction used to calculate GHG reductions is based on substantial evidence as described in the preceding section.

2. Forecasted waste generation is estimated as the forecasted service population multiplied by the per capita waste generation factor obtained from the 2016 inventory (0.5208 tons/service population). To avoid double counting of emission reductions, the additional reduction in landfilled waste is based on the remaining waste after implementation of SW.1.

3. Diverted landfilled waste is based on forecasted waste generation post implementation of SW.1 multiplied by the estimated reduction.

4. The emission factor is the weighted average of the U.S. EPA’s WARM model Version 15 emission factors for organics - food waste & yard trimmings (0.32 MT CO₂e/ton), mixed organics - includes textiles (0.21 MT CO₂e/ton), and mixed MSW (0.36 MT CO₂e/ton), where the waste stream post implementation of SW.1 is 15% organics – food waste & yard trimmings, 4% mixed organics – including textiles, and 81% mixed MSW in 2030. SW.1 assumes 75% organic diversion in 2030 and 2045, therefore the ratio of organics in the waste stream was not assumed to change between 2030 and 2045 and the weighted emission factor remains consistent from 2030 to 2045 in Play SW.2 calculations.

*Values may not add up due to rounding

Results

The Moves associated with Play SW.2 would result in a reduction of 415 MT CO₂e in 2030 and 859 MT CO₂e in 2045, as shown in Table 28.

⁵⁹ The WARM model is a waste reduction model created by USEPA to help solid waste planners and organizations track and report GHG reductions from several different waste management practices. https://www.epa.gov/sites/production/files/2019-06/documents/warm_v15_organics.pdf

Table 28 GHG Emission Reductions Associated with Play SW.2

Moves	Emission Reductions (MT CO ₂ e)		Source
	2030	2045	
SW.2.a Develop and implement a Zero Waste Plan, consistent with the General Plan, in order to reach South Pasadena’s goal of zero waste by 2040.			
SW.2.b Provide ongoing education to residents, business owners, and South Pasadena School District regarding waste reduction, composting, and recycling.			
SW.2.c Increase reuse, recycling, and composting at temporary public events by mandating the installation of public recycling and composting containers and collection service; and encouraging reusable food ware, when relevant, according to the California State Retail Food Code.			
SW.2.d Develop a waste department or working group to enhance recycling and composting outreach and provide technical assistance or information in support of City Green Action Plan Move III. Additionally, implement and share a Recycle and Reuse Directory through City platforms, in support of Green Action Plan Move I.2.5.			CalRecycle Waste Stream Characterization ⁶⁰
SW.2.e Adopt an ordinance requiring compliance with Sections 4.410.2, 5.410.1, 4.408.1, and 5.408.1 of the California Green Building Standards Code related to construction of buildings with adequate space for recycling containers and construction and demolition (C&D) recycling.	415	859	EPA. Waste Reduction Model (WARM) Version 15. May 2019 ⁶¹
SW.2.f Implement the City General Plan, requiring construction sites to separate waste for proper diversion and reuse or recycling.			2019 CALGreen Building Code
SW.2.g Develop and implement a Waste Stream Education Program targeting property managers of multi-family residences and the commercial sector, in support of Goal III of the City Green Action Plan.			AB-1162 Section 1. Chapter 6.1
SW.2.h Develop policies to mandate/encourage reduction of waste and reuse in the food industry (e.g. facilities serving prepared food and prepackaged food; home meal delivery services), hospitality industry, and other commercial industries. Efforts may include developing ordinances for food service ware and a ban on single-use individual toiletry bottles in hotels/motels, grant/discount programs for switching to reusables, fast food champion pilot project, and working with home meal delivery services (e.g., Blue Apron), etc. to explore opportunities to reduce single-use packaging and encourage reuse.			
SW.2.i Encourage reusable foodware; or if reusable foodware is not a feasible option, explore opportunities to mandate/encourage a switch to more environmentally friendly alternatives for various products in the commercial industry, when relevant.			

⁶⁰ <https://www2.calrecycle.ca.gov/WasteCharacterization/>

⁶¹ <https://www.epa.gov/warm/documentation-chapters-greenhouse-gas-emission-energy-and-economic-factors-used-waste-reduction>

2.6 Carbon Sequestration Sector

Play CS.1 Increase carbon sequestration through increased tree planting and green space.

Background

The City of South Pasadena is generally considered a built-out city where a majority of new development or growth will involve the redevelopment of underutilized parcels or renovation of existing structures. However, about 4% of the existing land use in the City of South Pasadena is devoted to parks and open space that are considered “urban green-space” within California’s Natural and Working Lands Sector. There are approximately 36.6 acres devoted to parks and 44 acres of open space that includes natural open space, recreational trails and linkages, utility easements, and flood control channels.⁶² Although built-out, the City has the opportunity to engage in carbon sequestration activities through enhancing open space, urban greening, and protecting and increasing the City’s urban forest or tree stock. At this time only the carbon benefits of urban forestry can be assessed as additional research is needed to assess the benefits of vegetation and soil management. Nonetheless, over time as emissions are removed from more and more sectors, carbon sequestration will play an increasingly important role in California’s ability to achieve carbon neutrality.

Methodology and Assumptions

As stated in the City’s General Plan Land Use Element, the current urban forest stock consists of approximately 11,000 trees.⁶³ Based on the carbon sequestration potential of 0.0354 MT CO₂e per tree per year, an estimate of the total amount of GHGs that are captured in the urban forest is 389.4 MT CO₂e per year.⁶⁴ This amount is in the City’s current stock and cannot be counted as a GHG reduction measures. The goal is to maintain the amount and health of the current tree stock and then add trees to increase the carbon storage capacity of the urban forest. Assuming that the urban forest is not 100% stocked, which is typical even of communities that have well-managed forests such as South Pasadena, there is the ability to increase the size of the urban forest by 15% - 25% as summarized by American Forests, the oldest national nonprofit conservation organization in the United States, in a 2017 article titled *Why We No Longer Recommend a 40 Percent Urban Tree Canopy Goal*.^{65, 66} Based on this information it was conservatively assumed that the City of South Pasadena has the capacity to increase the City’s tree inventory by 5% in 2030 and 10% in 2045, or by 550 trees in 2030 and 1,100 trees in 2045. Annual CO₂e emissions reductions were estimated based on the number of trees to be added to the inventory and the average CO₂e accumulation factor per

⁶² City of South Pasadena General Plan, Chapter 2: Land use (<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>)

⁶³ <https://www.southpasadenaca.gov/government/departments/public-works/parks-division>

⁶⁴ CAPCOA. 2011. Quantifying Greenhouse Gas Mitigation Measures. <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

⁶⁵ <https://www.americanforests.org/blog/no-longer-recommend-40-percent-urban-tree-canopy-goal/>

⁶⁶ <https://sfgov.org/sfplanningarchive/urban-forest-plan>

tree (0.0354 MT CO₂e/tree/year).⁶⁷ The calculations and assumptions used to estimate emission reductions from Play CS.1 are provided in Table 29.

Although not quantified herein, urban greening can further reduce building carbon emissions by reducing the heat island effect in cities which reduces the need to rely on air conditioning in homes.⁶⁸ Additionally, the application of suitable composted organic material to existing opens spaces can be used to enhance the sequestration of CO₂e. The application of compost allows for carbon to be stored in the soil and, over time, to be captured in the stems, leaves, and roots of grasses, woody plants, and trees.

Table 29 Play CS.1 GHG Emission Reduction Calculations

Calculation Factor	2030	2045
Target Increase in Tree Inventory	5%	10%
Newly Planted Trees ¹	550	1,100
Tree Sequestration Factor (MT CO ₂ e/tree/year) ²	0.0354	0.0354
Total Play CS.1 GHG Emissions Reductions (MT CO₂e/year)	19.5	38.9

Notes: MT CO₂e = metric tons of carbon dioxide; kWh =-kilowatt-hour

1. The number of trees to be planted are based on the target increase in tree inventory multiplied by the existing tree inventory of about 11,000.
2. Default annual CO₂e sequestration per tree per year with a maximum lifespan of 20 years per tree is 0.0354 MT CO₂e/tree/year was obtained from CAPCOA. 2010. Quantifying Greenhouse Gas Mitigation Measures.

*Values may not add up due to rounding

Results

There is no single Move under Play CS.1 that will reduce GHG emission on its own. Instead, all of the Moves are collectively supportive towards increasing carbon sequestration. The Moves associated with Play CS.1 would result in a reduction of 19.5 MT CO₂e in 2030 and 39 MT CO₂e in 2045, as shown in Table 30.

⁶⁷ CAPCOA. 2011. Quantifying Greenhouse Gas Mitigation Measures. <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

⁶⁸ The Trust for Public Land (TPL). Quantifying the greenhouse gas benefits of urban parks. August 2008.

Table 30 GHG Emission Reductions Associated with Play CS.1

Moves	Emission Reductions (MT CO ₂ e)		Source
	2030	2045	
CS.1.a Identify and map public spaces that can be converted to green space, including public parking that can be converted to parklets, freeway airspace that can be made into green space, vertical walls that can be planted with vines, and rooftops of public buildings that can be developed into gardens.			CAPCOA. Quantifying Greenhouse Gas Mitigation Measures. August 2010
CS.1.b Adopt a Greenscaping Ordinance that has a street tree requirement for all zoning districts, has a shade tree requirement for new development, requires greening of parking lots, and increases permeable surfaces in new development.	19	39	City of South Pasadena. Public Works Department – Urban Forestry
CS.1.c Prepare and adopt an Urban Forest Management Plan for the City that includes an inventory of existing trees, identifies future tree planting opportunities, and a climate-ready tree palette, as well as ongoing operations and maintenance needs.			The Trust for Public Land (TPL). Quantifying the greenhouse gas benefits of urban parks. August 2008.
CS.1.d Adopt a standard policy and set of practices for expanding urban tree canopy and placing vegetative barriers between busy roadways and developments to reduce exposure to air pollutants from traffic. ⁶⁹			

2.7 Municipal Operations Sector

Play M.1 Reduce Carbon Intensity of Operations

Background

In the baseline year of 2016, City of South Pasadena operations generated approximately 2,755 MT CO₂e. Nearly 60% of these emissions were a result of natural gas and electricity consumption. Under Play M.1, South Pasadena will implement the recommendations of the 2016 *Renewable Energy Council Report*, which includes increasing the energy efficiency of City operations and reducing the reliance on fossil natural gas (Moves M.1.a through M.1.d). The Moves under Play M.1 also include development of a sustainable buildings Request for Proposals (RFP) policy (Move M.1.e) and creating a new revolving green fund, funded by the energy cost savings from efficiency projects (Move.1.f).

Methodology and Assumptions

Implementation of Moves M.1.a, M.1.d, M.1.e and M.1.f under Play M.1 will reduce the grid electricity and natural gas consumption of City facilities, with GHG reductions being attained from switching natural gas fueled equipment to electric. The installation of solar PV and increased efficiency at City facilities would not result in GHG emission reductions as energy purchased by the City is already 100% renewable under the “100% Green Power” option for the CPA.⁷⁰ Additional GHG reductions would be attained for Move M.1.b, with the use of renewable natural gas (RNG) in

⁶⁹ This Move can be tied into the complete streets work identified in Active Transportation Play (Play T.3).

⁷⁰ In an email from Arpy Kasparian on June 5th, 2020, it was indicated that the City of South Pasadena had upgraded all of its municipal accounts to the “100% Green Power” option of the Clean Power Alliance in March of 2020, meaning the City would receive 100% GHG emission free electricity for all of its accounts. The GHG emission reductions for this are accounted for under Play E.1.

City fleet vehicles that currently are fueled by natural gas. Emissions reductions associated with conversion of fleet vehicles to EV are captured under Play M.2.

In 2016, the City of South Pasadena buildings and operations consumed 20,512 therms of pipeline natural gas, generating 109 MT CO₂e. With currently available technology, it is possible to electrify nearly 100% of commercial and residential buildings.⁷¹ Considering the City of South Pasadena's operations are similar to that of the commercial sector, with facilities and offices that need to be heated and cooled, public works operations garages, as well as operation and maintenance yards, it is assumed that 100% of South Pasadena's operations can be similarly electrified. Move M.1.a would provide the City with a full assessment of the electrification potential that exists for current facilities and Move M.1.e would enact the policy requiring replacement of equipment with electric at the end of life. Under full implementation of Moves M.1.a and M.1.e by 2030, South Pasadena will have electrified its operations, eliminating the need for pipeline natural gas. This would result in an emissions reduction of 109 MT CO₂e by 2030 continuing through 2045. The increased electricity consumption needed to offset these energy needs would not generate additional GHG emissions as the City of South Pasadena purchases 100% renewable electricity for its municipal accounts. GHG emission reduction calculations for Move M.1.a are provided in Table 31.

⁷¹ Deason, Jeff. et al.. 2018. Electrification of buildings and Industry in the United States. pp. 16.
https://pdfs.semanticscholar.org/27f0/d125d5316ee10565560545c0fc17d6c447a8.pdf?_ga=2.3238896.1101123906.1590438648-1004765093.1590438648

Table 31 Move M.1.a GHG Emission Reduction Calculations

Calculation Factor	2030	2045
Baseline Municipal Natural Gas Consumption (therms) ¹	20,512	20,512
Baseline Municipal Natural Gas GHG Emissions (MT CO ₂ e) ¹	109	109
Additional GHG Emissions from Increased Electricity Consumption (MT CO ₂ e) ²	0	0
Move M.1.a GHG Emissions Reductions from Fuel Switching (MT CO₂e)	109	109

Notes: MT CO₂e = metric tons of carbon dioxide

1. Baseline Municipal Natural Gas Consumption and Baseline Municipal Natural Gas GHG Emissions are obtained from the 2016 Municipal GHG Emission Inventory, provided in Appendix C.

2. Energy consumed in equipment and appliances by natural gas equipment would be replaced by electric powered equipment. The energy consumption that would be needed to fuel the replacement electric equipment would generate no additional GHG because the City of South Pasadena obtains carbon free electricity through the “100% Green Power” option through the Clean Power Alliance.

In 2016, South Pasadena had three operational natural gas fueled fleet vehicles, that consumed 13,395 therms of natural gas, generating 79 MT CO₂e. With full implementation of Move M.1.b by 2030, based on the City’s vehicle replacement schedule or as needed based on the condition of the vehicles, these vehicles would be transitioned to either RNG or electric, resulting in a 79 MT CO₂e emissions reduction. Combustion of replacement RNG is considered to be biogenic and therefore, would not generate CO₂ emissions; however, there would be CH₄ and N₂O emissions associated with this combustion that would offset emissions reductions by less than 1 MT CO₂e.^{72,73} Any replacement of natural gas fueled vehicles with electric would also generate no additional emissions, as the City of South Pasadena purchases 100% renewable electricity for municipal accounts. GHG emission reduction calculations for Move M.1.b are provided in Table 32.

Table 32 Move M.1.b GHG Emission Reduction Calculations

Calculation Factor	2030	2045
Baseline Municipal Fleet CNG Consumption (therms) ¹	13,395	13,395
Baseline Municipal Natural Gas GHG Emissions (MT CO ₂ e) ¹	79	79
Additional GHG Emissions from RNG Combustion - CH ₄ and N ₂ O (MT CO ₂ e) ²	<1	<1
Move M.1.b GHG Emissions Reductions from Purchasing RNG for Fleet Vehicles (MT CO₂e)	79	79

Notes: MT CO₂e = metric tons of carbon dioxide; CNG = compressed natural gas; RNG = renewable natural gas; CH₄ = methane; N₂O = nitrous oxide

1. Baseline Municipal Fleet CNG Consumption and Baseline Municipal Fleet CNG GHG Emissions are obtained from the 2016 Municipal GHG Emission Inventory, provided in Appendix C.

2. CH₄ and N₂O emission factors for gaseous biomass fuels are 3.2 and 0.63 grams per mmBtu, respectively. By converting mmBtu to therm (10 therm = 1 mmBtu), these emission factors become 0.32 g CH₄ per therm and 0.063 g N₂O per therm. Multiplying by 13,395 therms and using the appropriate Global Warming Potentials (1 g CH₄ = 28 g CO₂e equivalent and 1 g N₂O = 265 g CO₂e), this equates to an additional 0.3 MT CO₂e. https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf

Results

Move M.1.a associated with Play M.1 would result in a reduction of 109 MT CO₂e in 2030, which would be consistent through 2045. Additional reductions of 79 MT CO₂e in 2030, which would be

⁷² CARB. 2018. LCFS Basics. slide 21. <https://ww2.arb.ca.gov/sites/default/files/2020-05/basics-notes.pdf>. Accessed May 25th, 2020.

⁷³ CH₄ and N₂O emission factors for gaseous biomass fuels are 3.2 and 0.63 grams per mmBtu, respectively. By converting mmBtu to therm (10 therm = 1 mmBtu), these emission factors become 0.32 g CH₄ per therm and 0.063 g N₂O per therm. Multiplying by 13,395 therms and using the appropriate Global Warming Potentials (1 g CH₄ = 28 g CO₂e equivalent and 1 g N₂O = 265 g CO₂e), this equates to an additional 0.3 MT of CO₂e. https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf

consistent through 2045 would be achieved with the implementation of Move M.1.b. As provided in Table 33, total GHG emission reductions of 188 MT CO₂e in 2030, through 2045 would be achieved through full implementation of Play M.1

Table 33 GHG Emission Reductions Associated with Play M.1

Play	Emission Reductions (MT CO ₂ e)		Source
	2030	2045	
M.1.a As recommended in the 2016 Renewable Energy Council Report, complete energy audits for all City facilities and implement all feasible recommendations for fuel switching and efficiency upgrades.	109		Deason, Jeff. et al.. 2018. Electrification of buildings and Industry in the United States
M.1.b As recommended in the 2016 Renewable Energy Council Report, purchase renewable natural gas (RNG) for applicable City fleet vehicles.	79		USEPA. 2018. Emission Factors for GHG Inventories CARB. 2018. LCFS Basics
M.1.c Establish an employee rideshare program.	Supportive		N/A
M.1.d As recommended in the 2016 Renewable Energy Council Report, install PV solar systems at the City Hall and at Wilson Reservoir.	Supportive		N/A
M.1.e Adopt retrofitting policy for City owned buildings such that energy efficient and electrification retrofits are incorporated into City buildings as they become available.	Supportive		N/A
M.1.f Develop a policy for the City which would require all new building RFP's to include life cycle costing over 30 years and tie this directly to energy consumption and building electrification. This would include the buildings operational and maintenance costs and ensure that the City has the most cost effective (and sustainable) building possible.	Supportive		N/A
M.1.g As recommended in the 2016 Renewable Energy Council Report, invest all savings from City energy efficiency projects into a new revolving green fund that can be used to fund additional energy efficiency and GHG reduction projects.	Supportive		N/A

Play M.2 Electrify the municipal vehicle fleet and mobile equipment.

Background

Municipal transportation emissions for the City of South Pasadena come from two distinct sources, City-owned vehicles and equipment and employee commutes. In order to reduce these emission sources, the City will implement policies for purchasing electric vehicles where possible and utilize a lifecycle assessment for other vehicles and equipment (Moves M.2.c and M.2.d). The City will also incentivize employees to reduce the amount single occupancy vehicles (SOVs) and encourage them to adopt EVs, through transportation demand management tools (Move M.2.a), providing bicycles at City facilities for short trips (Move M.2.b), and installing EV charging stations at municipal buildings (Move M.2.e).

Methodology and Assumptions

Electrification of South Pasadena’s vehicle fleet will consist of the future replacement of gasoline- and diesel-powered light-duty passenger vehicles and light-duty trucks with vehicles having electric drivetrains. South Pasadena has a baseline vehicle fleet consisting of 32 vehicles including heavy-duty trucks, light-duty trucks, and passenger vehicles. Full electric options for heavy-duty trucks are currently limited; therefore, electrification of the vehicle fleet assumes that these trucks will remain on some type of fuel combustion through 2030, and only light-duty trucks and passenger vehicles will be converted to electric based on the City’s vehicle replacement schedule or as needed based on the condition of the vehicles.

The GHG emission reductions from electrification of South Pasadena’s vehicle fleet through implementation of Move M.2.d would reduce the emissions of the three light-duty passenger cars and eight light duty trucks in the baseline fleet to zero by 2030, through 2045. It is likely that these vehicles will have reached their end of life and be replaced by 2030, as the typical lifespan of modern vehicles is 15.6 years, and these vehicles were manufactured prior to 2014.⁷⁴ Collectively, these vehicles generated 24 MT CO₂e in the baseline inventory year; therefore, replacing them with electric vehicles will result in an equivalent emissions reduction. Any replacement vehicles with electric would also generate no additional emissions, as the City of South Pasadena purchases 100% renewable electricity. The technologies that would replace heavy-duty vehicles is uncertain; therefore, emission reductions are not calculated for the remaining vehicles in the fleet. GHG emission reduction calculations for Move M.2.d are provided in Table 34.

Table 34 Move M.2.d GHG Emission Reduction Calculations

Calculation Factor	2030	2045
Baseline Municipal Fleet Passenger and Light Duty Fuel Consumption (Gallons) ¹	2,209	2,209
Unleaded Gasoline Combustion Emission Factor (MT CO ₂ e/Gallon) ²	0.0103	0.0103
Baseline GHG Emissions Fleet Passenger and Light Duty Vehicles (MT CO ₂ e)	23	23
Additional GHG Emissions from Increased Electricity Consumption (MT CO ₂ e) ³	0	0
Move M.2.d GHG Emissions Reductions from Electrification of Fleet Vehicles (MT CO₂e)	24	24

Notes: MT CO₂e = metric tons of carbon dioxide

1. Baseline Municipal Fleet Passenger and Light Duty Vehicle Fuel Consumption was provided by the City of South Pasadena on September 11, 2019.
2. Unleaded Gasoline Combustion Emission Factor obtained from EPA Emission Factors for Greenhouse Gas Inventories, updated 3/9/2018. CO₂ emission factors from Table 2 and CH₄ and N₂O emission factors from Table 5. Emission factors were converted to CO₂e using the respective Global Warming Potentials (1 g CH₄ = 28 g CO₂e equivalent and 1 g N₂O = 265 g CO₂e) https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf
3. The energy consumption that would be needed to fuel the replacement electric vehicles would generate no additional GHG because the City of South Pasadena obtains carbon free electricity through the “100% Green Power” option through the Clean Power Alliance.

GHG reductions from implementation of transportation demand management (TDM) measures to reduce commute by single occupancy vehicles for municipal employees are not quantified due to the uncertainty of voluntary actions associated with Move M.2.a. Although it is likely that measure to promote telecommuting and vanpooling will be adopted by some commuters, there is a large range of commute distances for City employee’s and it is unclear how these will affect the commute

⁷⁴ Bento, Antonio, et. al.. 2016. Vehicle Lifetime Trends and Scrapage Behavior in the U.S. Used Car Market. https://faculty.sites.uci.edu/kevinroth/files/2011/03/Scrapage_18Jan2016.pdf

patterns of individuals.⁷⁵ Therefore, even though there will likely be GHG emissions reductions associated with the program, the uncertainty of individual actions does not warrant an accurate analysis of expected reductions.

Results

Move M.2.d associated with Play M.2 would result in a reduction of 23 MT CO₂e in 2030, which would be consistent through 2045, as shown in Table 35. The additional Moves under this Play are considered supportive towards effectively implementing Move M.2.d and reaching the overall goal of Play M.2.

Table 35 GHG Emission Reductions Associated with Play M.2

Play	Emission Reductions (MT CO ₂ e)		
	2030	2045	Source
M.2.a Develop a suite of transportation demand management tools to incentivize alternative transportation methods for employees, including telecommute options.	Not Quantified		N/A
M.2.b Provide bicycles and bicycle storage for employees to use during work hours for short business or personal trips.	Supportive		N/A
M.2.c Develop and adopt a policy to apply lifecycle assessment to all new vehicle and equipment purchases.	Supportive		N/A
M.2.d Implement the City Fleet Alternative Fuel Conversion Policy developed under the City General Plan, electrifying the City vehicle fleet and using it to encourage residents to convert as well.	23		Bento, Antonio, et. al.. 2016. Vehicle Lifetime Trends and Scrappage Behavior in the U.S. Used Car Market.
M.2.e Install EV charging stations at municipal buildings.	Supportive		N/A

Play M.3 Increase City’s renewable energy production and energy resilience.

Background

Similar to Play E.4, the City of South Pasadena will take action to improve the resilience and energy independence of operations. The City will:

- Conduct a feasibility study to determine which City buildings would be ideal resilience centers with solar and battery installations (Move M.3.a)
- Convert all streetlights to LED bulbs (Move M.3.b)
- Work with utility providers to develop grid connected local solar projects (Move M.3.c)
- Install solar arrays at all municipal buildings, working with emergency services to add solar and battery storage at priority locations (Move M.3.d)
- Review options for microgrid systems in existing municipal buildings (Move M.3.d)

⁷⁵ Southern California Association of Governments (SCAG). Transportation Demand Management Strategic Plan and Final Report. <http://www.scag.ca.gov/Documents/TDMStrategicPlanFinalReportwAppendicesweb.pdf>.

While these measures will reduce the City’s reliance on grid supplied electricity, they will not achieve GHG reductions, as the City of South Pasadena already purchases 100% renewable electricity for all municipal accounts. The Moves associated with Play M.3 are provided in Table 36.

Table 36 GHG Emission Reductions Associated with Play M.3

Play	Emission Reductions (MT CO ₂ e)		Source
	2030	2045	
M.3.a Conduct a Feasibility Study to determine which City buildings would serve as ideal resilience centers including solar and battery installations.	Supportive		N/A
M.3.b Convert all streetlights to light emitting diode (LED) bulbs.	Supportive		N/A
M.3.c Work with the CPA to identify and develop local solar projects to connect to the grid.	Supportive		N/A
M.3.d Install solar arrays at facilities that currently do not have solar arrays and work with emergency services to add solar and battery storage at priority locations. Review options for potential to combine multiple buildings into micro-grid systems.	Supportive		N/A
M.3.e Explore opportunities and partnerships to develop renewable-powered fuel cell micro-grids to provide back-up or primary power for critical facilities such as facilities providing essential services (e.g. water pumping facilities) and schools as a clean alternative to diesel generators	Supportive		N/A

3 Conclusion

The Plays and Moves identified in this CAP will lead to a significant reduction in GHG emissions and provide a foundation for achieving net carbon neutrality. However, achieving carbon neutrality will require significant additional changes to the technology and systems currently in place and will require further policies and programs that build on this plan including full electrification of building and transportation systems, an increased shift to shared and active mobility, and increased waste reduction and diversion. The Moves and Plays developed to meet the 2030 goals established in SB 32 provide the foundation and establishes the trajectory for this long-term transformation. However, the 2045 GHG emissions reductions quantified in this CAP are not yet enough to meet the long-term 2045 goal of carbon neutrality. As the current Moves and Plays are implemented, the City will gain more information, new technologies will emerge, and current pilot projects and programs are anticipated to scale to the size needed to reach carbon neutrality. Furthermore, the state is expected to continue providing updated regulations and support once the 2030 target is achieved. To monitor the progress overtime, the City will conduct annual implementation monitoring of the GHG emission reduction measures and report out on this progress to City Council every third year beginning in 2023. The process for monitoring and quantifying measure implementation status relies on key target metrics identified for each of the Plays and Moves. By committing to annual monitoring of CAP implementation progress and adjusting where necessary, South Pasadena will rise to meet the local and global imperative of reducing GHG emissions.

Appendix E:

Funding Strategy

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Funding Strategy

Full implementation of the Climate Action Plan (CAP) will require investments on the part of the City of South Pasadena, local households and businesses, and property owners. In many cases, the expenditures will not only help to reduce greenhouse gas (GHG) emissions, but will also bring other valuable co-benefits such as cleaner air, water conservation, off-setting savings on energy and utility expenditures, more robust and flexible transportation systems, improved public health, and enhanced local quality of life.

Some expenditures will not represent net-cost increases, but instead will involve substituting investments on climate-friendly equipment, materials, and technologies for expenditures that would otherwise have been made on less climate-friendly options. For example, residents and businesses are encouraged to make investments in water and energy conservation improvements; the initial expenditure on the improvements will be offset by long-term savings from reduced water or energy usage. Further, the City and local partners such as Southern California Edison (SCE), Southern California Gas (SoCalGas), and/or water providers can help households and businesses make these transitions by promoting available low-cost financing programs.

In some cases, expenditures may represent net-cost increases compared to a “status quo” approach to climate change. As such, these costs represent an accounting for the costs to address the negative externalities¹ associated with current practices that are now recognized as not sustainable.

Below are general descriptions of principles that will guide the City’s approach to funding the CAP and descriptions of key funding sources that the City may use. A more detailed matching of specific CAP actions with potential funding sources and tools is included in the Climate Action Plan and Table 1 below (The Funding Matrix).

Funding Strategy Principles

The CAP will be implemented over time. Funding sources for some actions can be identified at the outset, while the best means to fund other actions will be determined at the time the City is ready to implement them, depending on the resources available at the time. Several principles will help the City to determine the best approach to funding various actions, as follows:

Equity

The costs of implementing the CAP should be spread as equitably as possible, taking care to limit the imposition of new costs on the segments of the community that have the least ability to shoulder increased costs. Where certain segments of the community will benefit disproportionately from an action, the costs should be spread accordingly. Where possible, funding options and resources have been included which target assistance to low- and moderate-income households.

¹ “A negative externality is a cost that is suffered by a third party as a result of an economic transaction. In a transaction, the producer and consumer are the first and second parties, and third parties include any individual, organization, property owner, or resource that is indirectly affected.” Accessed August 12, 2020 at: https://www.economicsonline.co.uk/Market_failures/Externalities.html

Cost-Effectiveness

The CAP prioritizes cost-effective Plays and Moves which can generate cost savings that will offset the costs to those who are required to pay for implementation. While some Plays and Moves may require some initial capital outlay, whenever possible these actions should generate long-term cost savings that will repay and even generate a return on investment (ROI). The City will prioritize the use of available local resources to implement those Moves that have the highest GHG reduction potential.

Leveraging Local Resources

Leveraging local resources will involve using outside sources of funding to augment local resources to fund implementation of the CAP. The City will leverage General Fund resources and in-kind staff time to aggressively seek grants, matching funds, in-kind contributions, and other resources from state, federal, and philanthropic sources to help pay for actions and limit the cost to the City, residents, and local businesses. The CAP also includes actions through which City staff will monitor and publicize grants and incentives that will help households and businesses make the necessary climate-friendly investments.

Types of Funding Sources

The CAP will rely on a variety of funding sources for implementation. Below are general descriptions of some key funding sources identified that can be used to pay for climate-friendly actions:

Grants

From time to time, the City is able to secure funds for specific projects through grant programs provided by state and federal agencies. This includes various grant programs funded through the State of California's Cap and Trade program, which generates money for the State's Greenhouse Gas Reduction Fund, some of which is granted to local governments. State and federal grants may be a useful source of funding to pay for the portion of mitigation programs or actions that is attributable to the City's existing residential and non-residential development, which cannot be funded through impact fees collected on new development. State and federal grants can also be used to fund climate-friendly actions and programs that have broad community benefits, or to help defray costs that might otherwise have been too burdensome for lower-income households or small businesses. Additionally, utility companies may also provide grants within their service areas through various programs designed to incentivize energy conservation.

Pros and Cons

Grants are beneficial because they represent an opportunity to reduce the cost burden for implementation programs and projects on the City itself and the burden on local residents and businesses. Grants are one funding source that the City can use to pay existing development's share of project costs when the costs must be split between new development and existing development.

The primary disadvantages of grants are that the availability of funds is not certain due to competition for limited funds, timing of funding availability may not match with necessary implementation timelines, and grants are not always available for the types of projects which need funding. Exceptions to this include the Transportation Development Act (TDA) Article 3 Bicycle and Pedestrian Funds from Metro and upcoming Senate Bill (SB) 2 allocations from the state that are allocated to cities in a formulaic manner. The City will need to prioritize the funds for CAP implementation projects from these sources along with other eligible uses that may be of community interest.

General City Funds

The City's General Fund receives the revenues over which the City Council exercises discretionary funding authority. The General Fund receives major funding sources including sales tax revenues, property tax revenues, property tax in-lieu of vehicle license fees, and many other smaller revenue streams. The City Council spends these monies on public services that broadly benefit the community at large. While balancing all of its budgetary needs, the City Council may elect to spend some General Fund money on CAP implementation, such as providing staff support for climate-friendly programs or actions.

The CAP contains numerous Moves that are likely to be implemented through in-kind City staff efforts; however, it is not likely that existing City staff will have adequate capacity to take on all the responsibilities of CAP implementation that are identified as "Staff in-kind." To leverage the available staff resources, the City will seek to partner with other agencies and/or contract out certain services (e.g. using consultants for specialized studies), when that is more cost-effective. One such potential opportunity that is not tied to any single CAP Move is to apply to host a Civic Spark fellow who could work under the direction of the City's Sustainability Staff to help with CAP implementation activities. Civic Spark Fellows are provided through an AmeriCorps program that places fellows with local governments and other entities that are engaged in sustainability projects. The Civic Spark program covers most of the cost to host a Fellow so the City's General Fund can leverage this opportunity to acquire more staff than the City could otherwise afford to support.

Pros and Cons

A benefit of using General Fund monies to fund climate-friendly actions is that the City Council already has authority to allocate General Fund monies to implement climate-friendly actions. Therefore, reallocation of General Fund dollars to such actions is not restricted by governmental approval or outside agencies. However, it must also be recognized that the General Fund supports many other critical public services, such as law enforcement and fire protection, as well as parks and roadway maintenance. The City likely has little ability to allocate General Fund monies to new programs without impacting existing programs. The COVID-19 pandemic has significantly reduced the General Fund through decreases in revenue sources such as sales tax, property tax, and increases in health-related expenses. These reductions to the City's General funds will make it more difficult to directly fund implementation of some CAP Plays and Moves.

Restricted Funds

Restricted funds are monies that the City receives, but which can only be used for specified purposes. This is often the case with funds that are passed through to the City from other governmental entities, such as state or federal agencies. Relevant examples of such restricted funds include money allocated to the City from regional funding sources such as: transportation development funds received from the Local Return Program which is administered by Los Angeles Metro from Los Angeles County sales tax Measures A, C, R, and M; the local subvention funds that the City receives from the Southern California Air Quality Management District (SCAQMD)² and from Assembly Bill (AB) 2766³ vehicle license fees for air quality improvement projects; and the TDA Article 3 funds which are distributed by Metro.⁴ For these revenue examples, the City receives

² https://www.metro.net/projects/local_return_pgm/

³ <http://www.aqmd.gov/docs/default-source/transportation/ab2766-motor-vehicle-subvention-fund-program/ab2766-resource-guide.pdf?sfvrsn=8>

⁴ <https://www.metro.net/projects/tda/>

annual allocations of funds on a per-capita basis and the City can use those funds consistent with the relevant program guidelines, which include many purposes that align with the overall CAP goals as well as the objectives of specific transportation-related Moves.

Pros and Cons

A benefit of the Local Return Program and Local Subvention funds is that they are existing funding sources which will continue to accrue annually at fairly predictable levels. Given the alignment of these two programs' goals with the goals of the CAP, many of the Moves included in the CAP could be eligible for the use of these monies. The challenge with using these funds is that they are typically fully allocated and directing funds towards CAP projects will require prioritizing CAP projects over other potentially worthy uses of the funds.

Fees for Service/User Fees

The City operates some services on a cost recovery basis. The City collects funds in the form of user fees to provide specific services to various user groups and the fees charged are designed to offset the cost of the services provided. An example of user fees that support services provided to a specific segment of the community includes building permit fees, which are charged to cover the cost of reviewing plans and conducting inspections to verify that buildings are constructed properly. To the extent that these types of services incorporate climate-friendly actions, the costs of these actions can be recovered through user fees. User fees and ratepayer charges can also be applicable to utilities such as SCE, SoCalGas, water providers, and other businesses that provide goods and services that come under the auspices of the CAP.

Pros and Cons

Implementation projects and actions that are funded via fees for service, user fees, or ratepayer charges are similar to actions that are funded directly via household or business income, in that they uphold the "user pays" principle. They are also similar in that a disadvantage is that they could disproportionately burden lower income households or small and disadvantaged businesses that have more limited resources. The City will want to be particularly careful where users of affected services have limited ability to change their behavior to limit their exposure to increased costs. For example, some utility incentive programs can be structured to provide relatively low rates for "baseline" consumption then charging higher rates for consumption above established baseline levels to incentivize the minimization of consumption.

Financing Tools

Financing tools are not funding sources per se; however, while many climate-friendly actions may generate long-term cost savings, they may also require significant up-front expenditures which could be a challenge for the City, households, or businesses to finance. There are various financing tools that can be used to essentially borrow the funds needed "up front" for CAP implementation, to be paid back over time using one or more funding sources that will generate money over time. Examples of such tools include home mortgages and equity lines, Property Assessed Clean Energy (PACE) programs, on-bill financing programs sponsored by utilities, various state or federal financing programs, "green bond" programs used in places such as San Francisco, and private financing innovations such as the Metered Energy Efficiency Transaction Structure (MEETS) pioneered in Seattle. Another option to be considered for municipal expenditures is "interfund borrowing" whereby the City could self-finance certain improvements by using money from idle fund balances, and then repay those funds over time with other revenue streams. In particular, the City should consider using financing mechanisms to pay for up-front costs of large capital projects that will yield

long-term annual budget savings that can offset the annual debt service from the financings. In this way, the City can benefit from long-term costs savings of investments such as solar power generation facilities on City property and water and energy conservation improvements. The City should consider the possibility of undertaking a “green bond” issuance to finance a package of such investments, to be repaid using annual budget expenditures that otherwise would have been spent in the absence of the cost savings created by the investments. Additionally, if the City identifies the use of Los Angeles County Measure A, C, R, and M funds (Local Return Program) to help pay for transportation-related CAP projects, the City can consider utilizing borrowing options outlined in Metro’s program guidelines⁵ to obtain up-front funds for investments, to be repaid using the City’s future Local Return Program formulaic allocations.

Pros and Cons

As described above, various financing tools can be beneficial because they can help make large expenditures achievable by providing funds up-front and then allowing the cost to be repaid over an extended period of time. The disadvantage of most financing programs is that the cost of financing (e.g., interest charged on the outstanding balance while the financing is being repaid) adds to overall project costs. It will be beneficial for the City to fund its CAP implementation activities on a pay-as-you-go basis whenever practical and to reserve financing techniques for those situations where funds are needed up-front but are not available without using financing tools, or where long-term annual operational cost savings are sufficient to offset the necessary debt service payments.

⁵ http://media.metro.net.s3.amazonaws.com/projects_studies/local_return/images/borrowing_guidelines_prop_a_c_measure_r_m.pdf

Table 1 Detailed Funding Matrix

Move	Cost	City Lead Department	Potential Funding Source	Notes
Play C.1 Engage South Pasadena youth in climate change action and provide education on ways to live a sustainable lifestyle.				
C.1.a Support South Pasadena Unified School District by providing students with information on climate change and the beneficial role of trees.	Low	Public Works and Community Services	U.S. EPA - Environmental Education Grants (Need to Partner with a qualified education agency)	Grants support environmental education projects that promote environmental awareness and stewardship and help provide people with the skills to take responsible actions to protect the environment. This grant program provides financial support for projects that design, demonstrate, and/or disseminate environmental education practices, methods, or techniques.
C.1.b Utilize South Pasadena’s historic neighborhoods to demonstrate to students the importance of mature urban trees in providing shade and reducing the urban heat island effect.	Low	Public Works and Community Services		
C.1.c Identify grant funding opportunities and engage with local nurseries and tree planting programs to identify appropriate and cost-effective California native plants/trees that can be both planted in the ground or remain potted for students living in rental/multi-family homes.	Low	Public Works and Community Services	General Fund	Staff in-kind
Play E.1. Maximize the usage of renewable power within the community, by continuing to achieve an opt-out rate lower than 4% for the Clean Power Alliance.				
E.1.a Monitor progress and perform public outreach and education campaigns highlighting the benefits of 100% renewable energy, including: <ul style="list-style-type: none"> ✓ Monitoring opt-out rates on an annual basis ✓ Tabling at community events ✓ Establishing an informational resource page on the City website ✓ Regular social media posts ✓ Energy bill inserts 	Low	Public Works	General Fund	Staff in-kind

Move	Cost	City Lead Department	Potential Funding Source	Notes
Play E.2 Electrify 100% of newly constructed buildings.				
E.2.a Develop a webpage and materials for display at City Hall promoting the benefits of electrification and resources that can assist with the fuel-switching process.	Low	Public Works and Planning and Building	General Fund	Staff in-kind or contractor
E.2.b Provide financial and technical resources, including hosting workforce development trainings for installers and building owners/operators to discuss benefits and technical requirements of electrification.	Med	Planning and Building	Foothill Workforce Development Board – job training	Possibility to recruit vendors to assist with training and provide sponsorships and seek to partner with Foothill Workforce Development Board to arrange training – Workforce Development Board partners with businesses to provide job training to upgrade employee skills.
E.2.c Perform regular internal trainings with planners and building officials on current state decarbonization goals and incentives available for electric homes.	Low	Planning and Building	General Fund	Staff in-kind or contractor
E.2.d Provide education around cooking with electric appliances, including demonstrations from chefs and/or local restaurants, as available.	Low	Planning and Building	General Fund	Staff in-kind or contractor; could charge registration fees to off-set costs
E.2.e Adopt an Electrification Readiness Reach Code per California Energy Commission (CEC) reach code requirements for all new buildings and accessory dwelling units which eliminates the piping of natural gas. In doing so the City will: <ul style="list-style-type: none"> ✓ Engage with stakeholders, both internal stakeholders, such as City staff and officials, and external stakeholders, such as local developers regarding the purpose and impact of the reach code ✓ Conduct a cost effectiveness study ✓ Develop and draft an ordinance ✓ Conduct public hearings, public notices, and formally adopt the ordinance ✓ Submit the adopted ordinance to the California Energy Commission (CEC) 	Low/ Med	Planning and Building	Grant Funding	Consultant

Move	Cost	City Lead Department	Potential Funding Source	Notes
E.2.f Adopt an ordinance that allows granting of minor allowances for certain site development standards when there is no practical ways to design a project to be all electric.	Low/ Med	Planning and Building	Grant Funding	Consultant
Play E.3 Electrify 5% of existing buildings by 2030 and 80% by 2045.				
E.3.a Develop an existing building electrification permit tracking program to track annual progress in achieving the targeted electrification goal.	Low	Planning and Building	General Fund	Staff in-kind; potentially include costs of tracking in building permit fees.
E.3.b Keep an updated list of rebates and incentives available to residents who would like to convert their buildings to electric power.	Low	Public Works and Planning and Building	General Fund	Staff in-kind; partner with SCE
E.3.c Provide education on the potential energy savings and benefits of electric heat pumps for water heating and space heating when permits for replacement are obtained.	Low	Public Works and Planning and Building	General Fund	Staff in-kind; partner with SCE
E.3.d Work with Southern California Edison (SCE) and/or the Clean Power Alliance to provide rebates for residential replacement of natural gas-powered air and water heating appliances with electric-powered.	Low	Public Works	1. General Fund 2. SCE 3. Clean Power Alliance for rebate funding	Partner with SCE and/or Clean Power Alliance
E.3.e Promote water heater, space heating, and appliance (electric stoves/dryers) replacement programs and incentives (residential) at time of construction permit.	Low	Public Works and Planning and Building	General Fund	Staff in-kind - Could partner with local contractors, retailers, and building supply companies to host a building electrification expo to educate consumers. Vendors could also provide sponsorships to defray costs.
E.3.f Perform an existing buildings analysis in order to understand the potential for electrification retrofitting in South Pasadena and establish a roadmap for eliminating natural gas from existing buildings.	Med/ High	Planning and Building	California Energy Commission – Energy Partnership Program	This would likely require consultant contract and would also likely need General Fund support. Depending on level of detail of retrofit analysis, study cost could be significantly above \$50,000. This program offers services to help identify the most cost-effective, energy-

Move	Cost	City Lead Department	Potential Funding Source	Notes
				<p>saving opportunities for buildings and new construction. The Energy Partnership Program can be used to conduct energy audits and prepare feasibility studies. The Energy Commission provides technical assistance services up to \$20,000 of a consultant's costs. The program is a continuously open with no final filing date.</p>
<p>E.3.g Establish a comprehensive, coordinated education campaign focused towards property owners, landlords, property management companies, and occupants for reducing the use of natural gas in homes and businesses. Establish a shared understanding of existing incentives for electric appliances and upgrades, and how to access them, including SCE incentive programs and rebates.</p>	<p>Med</p>	<p>Public Works and Planning and Building</p>	<p>1. Southern California Edison, SoCalGas – rebates, incentives, and financing programs or 2. U.S. EPA - Environmental Education Grants (Need to Partner with a qualified education agency)</p>	<p>Staff in-kind and/or consultant contract – would likely need General Fund support SCE and SoCalGas offer a range of incentives, rebates, and financing programs for residential and non-residential customers. Grants support environmental education projects that promote environmental awareness and stewardship and help provide people with the skills to take responsible actions to protect the environment. This grant program provides financial support for projects that design, demonstrate, and/or disseminate environmental education practices, methods, or techniques.</p>
<p>E.3.h Perform a cost-effectiveness study for electrification retrofitting, including requirements for newly permitted HVAC/hot water heaters and other appliances to be electric.</p>	<p>Low</p>	<p>Planning and Building</p>	<p>California Energy Commission</p>	<p>This program offers services to help identify the most cost-effective, energy-saving opportunities for buildings and new construction. The Energy Partnership Program can be used to conduct energy audits and prepare feasibility studies. The Energy Commission provides technical assistance services up to \$20,000 of a</p>

Move	Cost	City Lead Department	Potential Funding Source	Notes
				consultant's costs. The program is a continuously open with no final filing date. See studies completed by Sacramento Municipal Utility District and other utilities on the same topic.
E.3.i Develop a best practices model based on the progress electrifying existing buildings in South Pasadena and outside of South Pasadena to significantly increase electrification post-2030.	Low	Planning and Building	Grant Funding	Consultant
Play E.4 Develop and promote reduced reliance on natural gas through increased clean energy systems that build off of renewable energy development, production, and storage.				
E.4.a Conduct a Feasibility Study to assess cost and applicable locations for installation of battery back-up systems or generators throughout the City in support of the General Plan.	Med	Public Works	California Energy Commission - Energy Partnership Program	The Feasibility Study would likely require a consultant contract, which may need General Fund support. This program offers services to help identify the most cost-effective, energy-saving opportunities for buildings and new construction. The Energy Partnership Program can be used to conduct energy audits and prepare feasibility studies. The Energy Commission provides technical assistance services up to \$20,000 of a consultant's costs. The program is a continuously open with no final filing date.
E.4.b Promote installation of storage technology in concert with renewable energy infrastructure through educational programs, outreach, and information provided via City platforms.	Low	Public Works	General Fund	Staff in-kind

Move	Cost	City Lead Department	Potential Funding Source	Notes
<p>E.4.c Conduct "micro-grid" Feasibility/Pilot Study in support of the General Plan.</p>	<p>Med</p>	<p>Public Works</p>	<p>California Energy Commission - Energy Partnership Program</p>	<p>The Feasibility Study/Pilot Study would likely require a consultant contract, which may need General Fund support.</p> <p>This program offers services to help identify the most cost-effective, energy-saving opportunities for buildings and new construction. The Energy Partnership Program can be used to conduct energy audits and prepare feasibility studies. The Energy Commission provides technical assistance services up to \$20,000 of a consultant's costs. The program is a continuously open with no final filing date.</p>
<p>E.4.d In support of the General Plan, develop and implement a Solar Action Plan with a goal of meeting 50% of South Pasadena's power demand through solar by 2040.</p>	<p>Med/High</p>	<p>Public Works and Planning and Building</p>	<p>Private Solar Dealers/Installers - End-users buy or lease systems with costs offset by long-term energy savings. Solar developers construct and manage new solar systems to supply end-users pursuant to a power purchase agreement.</p>	<p>The Move would likely require a consultant contract, which may need General Fund support.</p> <p>Implementation of the Solar Action Plan would cost many millions of dollars; however, costs would be mostly absorbed by end users who would benefit from the renewable energy savings.</p> <p>Private companies offer their customers financing programs for purchasing and installing systems, lease programs, and power purchase agreements to convert to solar energy.</p>
<p>E.4.e In support of the 2018-2019 City Strategic Plan, develop a strategy and implementation schedule for the Renewable Energy Plan, after completion of the feasibility study.</p>	<p>Med</p>	<p>Public Works and Planning and Building</p>	<p>Grant Funding</p>	<p>The Move would likely require a consultant contract, which may need General Fund support.</p>
<p>E.4.f Adopt a PV (Solar) Ordinance requiring newly constructed and majorly renovated multi-family and</p>	<p>Low/Med</p>	<p>Planning and Building</p>	<p>Grant Funding</p>	<p>Consultant</p>

Move	Cost	City Lead Department	Potential Funding Source	Notes
commercial buildings to install PV systems with an annual output greater or equal to 25% of buildings electricity demand. Ensure consistency of ordinance with the City General Plan.				
E.4.g Require all new structures or major retrofits to be pre-wired for solar panels, consistent with the General Plan.	Low	Planning and Building	General Fund	Staff in-kind
E.4.h Work with various City departments to establish and streamline battery storage requirements to allow for easier implementation of these technologies throughout the City.	Low	Public Works and Planning and Building	General Fund	Staff in-kind
E.4.i Work with home and business owners, including those in the historic districts, to identify and promote renewable energy demonstration projects to showcase the benefits.	Low	Public Works and Planning and Building	General Fund	Staff in-kind
E.4.j Work with SCE and the CPA to develop a program and timeline for increasing resilience to power losses, including Public Safety Power Shutoffs (PSPS), and climate-driven extreme weather events for low-income, medically dependent, and elderly populations through installation of renewable energy and onsite energy storage with islanding capabilities, following appropriate project-level environmental review.	High	Public Works	1. SCE 2. CPA	Staff in-kind; work with SCE and CPA to determine if there is potential to create a program similar to Search Results Web results Low Income Home Energy Assistance Program (LIHEAP) that utilizes funds collected from ratepayers at large to fund assistance for vulnerable populations. Implementation costs could be substantially over \$50,000, depending on the number of sites served.
Play T.1 Increase use of zero-emission vehicle and equipment 13% by 2030 and 25% by 2045.				
T.1.a Develop an EV Readiness Plan to establish a path forward to increase EV infrastructure within the City and promote mode shift to EVs that is consistent with the City General Plan. In conjunction with an EV Readiness Plan, conduct a community EV Feasibility Study to assess infrastructure needs and challenges.	Med	Public Works and Planning and Building	1. Moving California, California Climate Investments - Sustainable Transportation Equity Project (STEP) 2. California Air Resources Board -	The EV Readiness Plan would likely require a consultant contract, which may need General Fund support. STEP is a new pilot with \$2 million for Clean Transportation Planning & Capacity Building Grants, and \$20 million for Implementation Grants. Eligible Planning projects include mobility plans and needs assessments. Eligible implementation

Move	Cost	City Lead Department	Potential Funding Source	Notes
			Clean Vehicle Rebate Program	<p>projects include infrastructure, capital, operations, planning, policy-making, and outreach projects.</p> <p>The Clean Vehicle Rebate Program provides rebates for income eligible-consumers. Enhanced rebates for lower-income consumers.</p>
<p>T.1.b Adopt an EV Charging Retrofits in Existing Commercial and Multifamily Buildings reach code requiring major retrofits, with either a permit value over \$200,000 or including modification of parking surfaces or electric panels, to meet CalGreen requirements for “EV Ready” charging spaces and infrastructure.</p>	Low/Med	Public Works and Planning and Building	<p>1. Moving California, California Climate Investments - Sustainable Transportation Equity Project (STEP)</p> <p>2. CAL eVIP - Southern California Incentive Project (SCIP)</p>	<p>The Southern California Incentive Project (SCIP) offers rebates for the purchase and installation of eligible public electric vehicle (EV) chargers in Los Angeles, Orange, Riverside and San Bernardino counties – with a total of \$29 million in available funds.</p> <p>Eligible rebates include up to \$70,000 per DC fast charger (DCFC) for installations at new sites and sites with stub-outs and up to \$40,000 per DC fast charger for installations at replacement and make-ready sites. Installations in designated disadvantaged communities (DACs) are eligible for rebates up to \$80,000 per DC fast charger regardless of installation site type"</p> <p>Consultant to develop reach code.</p>
<p>T.1.c Streamline permit processes (city, county, state, utility) for electric vehicle charging infrastructure and alternative fuel stations.</p>	Low	Planning and Building	General Fund	Staff in-kind
<p>T.1.d Enhance promotion of public and private conversion to zero-emission vehicles through implementation of the City General Plan; including use of City events, social media, and</p>	Low	Public Works	General Fund	Staff in-kind

Move	Cost	City Lead Department	Potential Funding Source	Notes
the City website to educate on benefits of zero-emission vehicles and available incentives.				
T.1.e Establish an ordinance that restricts use of gas-powered lawn equipment, including leaf blowers, and provide information on the City website outlining available incentives.	Low/ Med	Public Works	General Fund	Staff in-kind
T.1.f Adopt an EV Readiness Reach Code requiring new commercial construction to provide the minimum number of EV capable spaces to meet Tier 2 requirements (20% of total). In doing so the City will: <ul style="list-style-type: none"> ✓ Engage with stakeholders, both internal stakeholders, such as local government staff and officials, and external stakeholders, such as local developers regarding the purpose and impact of the reach code ✓ Conduct a cost effectiveness study ✓ Develop and draft an ordinance ✓ Conduct public hearings, public notices, and formally adopt the ordinance ✓ Submit the adopted ordinance to the California Energy Commission (CEC) 	Low/ Med	Public Works and Planning and Building	1. Grant Funding 2. AB 2766 funds	The EV Readiness Reach Code would require a consultant contract, which may need General Fund support. Funding from the South Coast Air Quality Management District (SCAQMD) to support air pollution reduction projects.
T.1.g Earmark and identify additional funding for implementation of the EV Readiness Plan to include public charging infrastructure in key locations.	Low	Public Works	1. General Fund 2. AB 2766 – local subventions 3. Funding from EV charging station companies	Staff in-kind; potential partnership with commercial EV charging station companies. Funding from the South Coast Air Quality Management District (SCAQMD) to support air pollution reduction projects.
T.2 Implement programs for public and shared transit that decrease passenger car VMT 3% by 2030 and 6% by 2045.				
T.2.a Conduct a Feasibility and Community Interest Study on the four transit improvement options of the City's General Plan.	Med	Planning and Building	1. Southern California Association of Governments (SCAG)	The Move would require a consultant contract

Move	Cost	City Lead Department	Potential Funding Source	Notes
			- Sustainable Communities Program 2. AB 2766 - Local Subventions 3. Los Angeles County Measures A, C, R, M - Local Return Program	SCAG - Non-infrastructure funding for projects that help to implement the regional SCS AB 2766 - Annual allocations of funds can be used on projects that reduce air pollution. LA Metro - Annual formulaic grants to local jurisdictions from LA County voter-approved sales tax measures. Can fund numerous transportation improvement projects, including planning, capital investments, and services.
T.2.b Pursue a community car, bike, or e-scooter "micro-transit" share pilot consistent with the City General Plan.	Low	Planning and Building	AB2766 - Local Subventions	Staff in-kind; potential partnership with commercial shared mobility provider, San Gabriel Valley Council of Governments (SVGCOG) Annual allocations of funds can be used on projects that reduce air pollution.
T.2.c Conduct local transportation surveys to better understand the community's needs and motivation for travelling by car versus other alternatives such as bus or Metro Gold Line light rail. Use survey results to inform transit expansion and improvement projects.	Low/ Med	Public Works and Planning and Building	General Fund	The Move would likely require staff in-kind time or a consultant contract, which may need General Fund support.
T.2.d Adopt a Transportation Demand Management (TDM) Plan for the City that includes a transit system focus. Provide incentives for implementation of TDM measures at local businesses and new developments.	Med/ High	Planning and Building	Los Angeles County Measures A, C, R, M – Local Return Program	Form local Transportation Management Association (TMA); potential funding from TMA dues/assessments and grant funding to offset eligible services. The Move may also require staff in-kind time Annual formulaic grants to local jurisdictions from LA County voter-approved sales tax measures. Can fund numerous transportation improvement

Move	Cost	City Lead Department	Potential Funding Source	Notes
				projects, including planning, capital investments, and services.
<p>T.2.e Facilitate transportation equity through targeted provision of programs that encourage minority, low-income, disabled, and senior populations to take transit, walk, bike, use rideshare or car share.</p>	Low	Public Works and Community Services	Los Angeles County Measures A, C, R, M – Local Return Program	<p>Staff in-kind; incorporate equity considerations into other actions.</p> <p>Annual formulaic grants to local jurisdictions from LA County voter-approved sales tax measures. Can fund numerous transportation improvement projects, including planning, capital investments, and services.</p>
<p>Play T.3 Develop and implement an Active Transportation Plan to shift 3% of passenger car VMT to active transportation by 2030, and 5% by 2045.</p>				
<p>Play T.3.a Develop and adopt an Active Transportation Plan consistent with SCAG 2016 RTP/SCS that will identify funding strategies and policies for development of pedestrian, bicycle, and other alternative modes of transportation projects. Establish citywide events, outreach, educational programs, and platforms to promote active transportation in the community in support of the General Plan.</p>	High	Public Works and Planning and Building	<p>1. California Transportation Commission (CTC) - Active Transportation Program (ATP)</p> <p>2. LA Metro - TDA Article 3</p>	<p>contractor; cost may be well over \$50,000</p> <p>CTC ATP - The goals of the ATP include increasing the proportion of trips accomplished by biking and walking and increasing the safety and mobility for nonmotorized users. Each ATP programming cycle will include four years of funding. New programming capacity for the 2021 ATP will be for state fiscal years 2021-22, 2022-23, 2023-24 and 2024-25 Funding from the ATP may be used to fund the development of community-wide active transportation plans within or, for area-wide plans, encompassing disadvantaged communities, including bicycle, pedestrian, safe routes to schools, or comprehensive active transportation plans</p> <p>LA Metro - Metro Administers Transportation Development Act Article 3 funds for cities within LA County. Funds</p>

Move	Cost	City Lead Department	Potential Funding Source	Notes
				are allocated annually on a per capita basis and can be used for bicycle and pedestrian improvement projects.
<p>Play T.3.b In conjunction with the City’s Compete Streets Policy conduct a Street/Intersection Study to identify streets and intersections that can be improved for pedestrians and bicyclists through traffic calming measures and/or where multi-use pathway opportunities exist to increase active transportation.</p>	Low/Med	Public Works	<ol style="list-style-type: none"> 1. California Transportation Commission (CTC) - Local Partnership Program (LPP) 2. Mitigation fees paid by new development projects that contribute to VMT - Local VMT-based transportation impact fee or local/regional VMT bank/exchange program 3. LA Metro - TDA Article 3 	<p>contractor; potential grant funding</p> <p>CTC LPP - The primary objective of this program is to provide funding to counties, cities, districts, and regional transportation agencies in which voters have approved fees or taxes dedicated solely to transportation improvements or that have imposed fees, including uniform developer fees, dedicated solely to transportation improvements. The Local Partnership Program provides funding to local and regional agencies to improve Aging Infrastructure, Road Conditions, Active Transportation, Transit and rail, Health and Safety Benefits. The Local Partnership Program funds are distributed through a 40% statewide competitive component and a 60% formulaic component. FY20 Funding deadline for 2020 applications was June 30, 2020.</p> <p>Development projects would pay impact fees to offset VMT impacts or pay into a VMT bank or exchange program to offset their contributions to VMT. Funds collected in this manner would be spent on VMT-reducing projects. This can be implemented in tandem with the switch from LOS-based to VMT-based mitigations for CEQA traffic impacts.</p>

Move	Cost	City Lead Department	Potential Funding Source	Notes
				Metro TDA Article 3 - Metro Administers Transportation Development Act Article 3 funds for cities within LA County. Funds are allocated annually on a per capita basis and can be used for bicycle and pedestrian improvement projects.
Play T.3.c Periodically review and update the City’s Bicycle and Pedestrian Network Map and post throughout City.	Low	Planning and Building	General Fund	Staff in-kind; additionally, potential sponsorships from local bike shops and other businesses may be pursued
Play T.3.d Work with South Pasadena Active, Active San Gabriel Valley (ActiveSGV), and/or Metro to develop programs and classes to teach and promote bicycle riding education and safety to residents of all ages and skill levels, as well as educate drivers.	Low	Public Works	General Fund	Staff in-kind
Play T.3.e Conduct a nexus study and develop an ordinance requiring payment of fees from development projects to implement safe active transportation routes and infrastructure citywide.	Low/ Med	Public Works	Mitigation fees paid by new development projects that contribute to VMT	Local VMT-based transportation impact fee or local/regional VMT bank/exchange program. Development projects would pay impact fees to offset VMT impacts or pay into a VMT bank or exchange program to offset their contributions to VMT. Funds collected in this manner would be spent on VMT-reducing projects. This can be implemented in tandem with the switch from LOS-based to VMT-based mitigations for CEQA traffic impacts.
Play T.3.f Amend zoning code to require installation of bike stalls or lockers at new developments, "mobility hubs", and during change of use of existing buildings, consistent with the General Plan.	Low	Public Works and Planning and Building	General Fund, combine with Play T.3.g	Staff in-kind New developments would incorporate costs; costs could be offset by reducing vehicle parking requirements commensurately.

Move	Cost	City Lead Department	Potential Funding Source	Notes
<p>Play T.3.g Adopt a Trip Reduction Ordinance that includes requirements in the Zoning Code to require end-of-trip facilities for cyclists (e.g., showers, bike repair kiosks, and lockers) in new, non-residential building projects of a specified size.</p>	<p>Low/ Med</p>	<p>Public Works and Planning and Building</p>	<p>General Fund</p>	<p>Staff in-kind New developments would incorporate costs; costs could be offset by reducing vehicle parking requirements commensurately.</p>
<p>W.1 Reduce per capita water consumption by 10% by 2030 and 35% by 2045.</p>				
<p>W.1.a Continue to enforce the Model Water Efficient Landscapes Ordinance.</p>	<p>Low</p>	<p>Public Works and Planning and Building</p>	<p>Water Conservation Funds</p>	<p>Staff in-kind (existing program)</p>
<p>W.1.b Work with the Los Angeles County Sanitation District (LACSD) and/or the Upper San Gabriel Valley Municipal Water District to bring recycled water lines and infrastructure to the City.</p>	<p>High</p>	<p>Public Works</p>	<p>1. User Fees 2. Water Resources Control Board- Water Recycling Funding Program - Construction Grant</p>	<p>Staff in-kind; implementation costs could be in the multiple millions of dollars. User fees could potentially reimburse costs; partner with Upper San Gabriel Valley Municipal Water District to conduct the study. Integrated Water & Wastewater Resources Management Plan (currently being studied) will address recycled water feasibility. Water recycling construction projects must offset or augment state or local fresh water supplies. Eligible projects include construction of recycled water treatment facilities, storage facilities, pumping facilities, groundwater recharge facilities, and recycled water distribution systems, including onsite improvements.</p>
<p>W.1.c In conjunction with the Downtown Specific Plan and City General Plan actions, adopt an ordinance restricting the use of potable water for non-potable uses and requiring</p>	<p>Low/ Med</p>	<p>Public Works</p>	<p>Water Conservation Funds</p>	<p>Staff in-kind</p>

Move	Cost	City Lead Department	Potential Funding Source	Notes
greywater capture for land uses that are excess water users (e.g. golf courses, car washes, large fields, etc.).				
W.1.d Implement Plays 1 through 4 under Goal II of the Green Action Plan on the provided implementation timeline, aiming to provide education and promotion of greywater systems. (See the City's Green Action Plan for more information).	Low	Public Works	Water Conservation Funds	Staff in-kind
W.1.e In conjunction with Move II.1.1 of the City Green Action Plan, develop a Recycled Water Use Master Plan that identifies access to recycled water and quantity of recycled water available to the City, as well as establishes an implementation plan. The implementation plan shall identify land use types (i.e., landscaping, golf courses, fields) and specific projects that will switch from potable to recycled water use allowing for a goal of 20% of City's potable water use to be replaced with recycled water.	High	Public Works	Water Resources Control Board - Water Recycling Funding Program - Planning Grant	Contractor; costs to implement could be in the multiple millions of dollars; combine with W.1.b; potentially reimburse up-front costs through user fees. WRF Planning Grants encourage Local Public Agencies to investigate the feasibility of recycling wastewater and assist them with completing planning for water recycling projects by supplementing local funds. Applications are accepted continuously.
W.1.f Implement 100% renewable power for all pumping and treatment of water.	Low	Public Works	General Fund	Marginal cost increase above current costs; incorporate costs into rate structure
Play SW.1 Implement and enforce SB 1383 organics and recycling requirements to reduce landfilled organics waste emissions 50% by 2022 and 75% by 2025.				
SW.1.a Adopt procurement policies to comply with SB 1383 requirements for jurisdictions to purchase recovered organic waste products.	Low	Public Works	General Fund	Possible marginal cost increase above standard products that are already purchased
SW.1.b Adopt an ordinance requiring compliance with SB 1383. Ensure ordinances established through the City General Plan are consistent with SB 1383 requirements; and revise ordinances if necessary.	Low/Med	Public Works	User fees for solid waste services	Staff in-kind; partner with waste hauler Costs for implementation of organics recycling could be recovered through solid waste user fees.

Move	Cost	City Lead Department	Potential Funding Source	Notes
SW.1.c Adopt an Edible Food Recovery Ordinance for edible food generators, food recovery services, or organization that are required to comply with SB 1383.	Low/ Med	Public Works	User fees for solid waste services	Staff in-kind; partner with waste hauler Costs for implementation of organics recycling could be recovered through solid waste user fees.
SW.1.d Partner with the City's waste hauler, to provide organic waste collection and recycling services to all commercial and residential generators of organic waste.	Low	Public Works	User fees for solid waste services	Staff in-kind; partner with waste hauler Costs for implementation of organics recycling could be recovered through solid waste user fees.
SW.1.e Adopt an ordinance requiring all residential and commercial customers to subscribe to an organic waste collection program and/or report self-hauling or backhauling of organics.	Low/ Med	Public Works	User fees for solid waste services	Staff in-kind; partner with waste hauler Costs for implementation of organics recycling could be recovered through solid waste user fees.
SW.1.f Conduct a Feasibility Study and prepare an action plan to ensure edible food reuse infrastructure is sufficient to accept capacity needed to recover 20% of edible food disposed or identify proposed new or expanded food recovery capacity.	Low/ Med	Public Works	CalRecycle - Food Waste Prevention and Rescue Grant Program	Staff in-kind or contractor; potential grant funding The purpose of this competitive grant program is to lower overall greenhouse gas emissions by expanding existing or establishing new food waste prevention and/or rescue projects in California to reduce the amount of food being disposed in landfills. Eligible projects include food waste prevention projects that prevent food waste and from being generated Food rescue projects that result in edible food being rescued and distributed to people Availability of application materials for fiscal year (FY) 2019-20 is to be determined
SW.1.g Establish an education and outreach program for school children and adults around food waste prevention, nutrition education, and the importance of edible food	Low	Public Works	U.S. EPA - Environmental Education Grants	Staff in-kind Grants support environmental education projects that promote environmental

Move	Cost	City Lead Department	Potential Funding Source	Notes
recovery. Support City Green Action Plan Play III identified educational goals (Move III.1.3., Move III.1.4., Move III.1.6., Move III.2.1, Move III. 3.3, and Move III.4.2) through an established educational program.				awareness and stewardship and help provide people with the skills to take responsible actions to protect the environment. This grant program provides financial support for projects that design, demonstrate, and/or disseminate environmental education practices, methods, or techniques. 2020 grant applications were announced in October 2019 and due January 6, 2020.
SW.1.h Establish an edible food recovery program supporting the City General Plan and the City Green Action Plan Move III.1.2 to minimize food waste.	Low	Public Works	CalRecycle - Food Waste Prevention and Rescue Grant Program	Staff in-kind; partner with local food bank or similar organization to implement The purpose of this competitive grant program is to lower overall greenhouse gas emissions by expanding existing or establishing new food waste prevention and/or rescue projects in California to reduce the amount of food being disposed in landfills. Eligible projects include food waste prevention projects that prevent food waste and from being generated Food rescue projects that result in edible food being rescued and distributed to people Availability of application materials for fiscal year (FY) 2019-20 is to be determined
SW.1.i Adopt an ordinance or enforceable mechanism to regulate haulers collecting organic waste, including collection program requirements and identification of organic waste receiving facilities.	Low/ Med	Public Works	General Fund, possibly incorporate costs into franchise agreement.	Staff in-kind
SW.1.j Partner with City waste services to:	Low	Public Works	User fees for solid waste services; incorporate into	Staff in-kind; incorporate costs in user fees for waste hauler

Move	Cost	City Lead Department	Potential Funding Source	Notes
<ul style="list-style-type: none"> ✓ Ensure organic waste collection from mixed waste containers are transported to a high diversion organic waste processing facility. ✓ Provide quarterly route reviews to identify prohibited contaminants potentially found in containers that are collected along route. ✓ Clearly label all new containers indicating which materials are accepted in each container, and by January 1, 2025, place or replace labels on all containers. 			agreement with Athens Services	
Play SW.2 Reduce residential and commercial waste sent to landfills by 50% by 2030 and 100% by 2045.				
SW.2.a Develop and implement a Zero Waste Plan, consistent with the General Plan, in order to reach South Pasadena’s goal of zero waste by 2040.	Low/ Med	Public Works	User fees	Contractor - Incorporate costs of study and implementation into solid waste user fees.
SW.2.b Provide ongoing education to residents, business owners, and South Pasadena School District regarding waste reduction, composting, and recycling.	Low	Public Works	U.S. EPA - Environmental Education Grants	Staff in-kind; partner with waste hauler Grants support environmental education projects that promote environmental awareness and stewardship and help provide people with the skills to take responsible actions to protect the environment. This grant program provides financial support for projects that design, demonstrate, and/or disseminate environmental education practices, methods, or techniques. 2020 grant applications were announced in October 2019 and due January 6, 2020.
SW.2.c Increase reuse, recycling, and composting at temporary public events by mandating the installation of public recycling and composting containers and collection service; and encouraging reusable food ware, when relevant, according to the California State Retail Food Code.	Low	Public Works	CalRecycle - Beverage Container Recycling Grants	Staff in-kind Provides funding to assist organizations with establishing convenient beverage container recycling and litter abatement

Move	Cost	City Lead Department	Potential Funding Source	Notes
				projects. The next application cycle is expected in Fall 2020.
SW.2.d Develop a waste department or working group to enhance recycling and composting outreach and provide technical assistance or information in support of City Green Action Plan Move III. Additionally, implement and share a Recycle and Reuse Directory through City platforms, in support of Green Action Plan Move I.2.5.	Low/ Med	Public Works	General Fund	Staff in-kind; costs would increase if new staff needed
SW.2.e Adopt an ordinance requiring compliance with Sections 4.410.2, 5.410.1, 4.408.1, and 5.408.1 of the California Green Building Standards Code related to construction of buildings with adequate space for recycling containers and construction and demolition (C&D) recycling.	Low/ Med	Planning and Building	General Fund, planning and building permit fees.	Consultant Costs for implementation could be recovered through planning and building plan review fees charged to projects subject to requirements.
SW.2.f Implement the City General Plan, requiring construction sites to separate waste for proper diversion and reuse or recycling.	Low	Public Works and Planning and Building	General Fund, planning and building permit fees.	Staff in-kind; possible cost recovery through permit surcharge Costs for implementation could be recovered through planning and building plan review fees charged to projects subject to requirements.
SW.2.g Develop and implement a Waste Stream Education Program targeting property managers of multi-family residences and the commercial sector, in support of Goal III of the City Green Action Plan.	Low	Public Works	General Fund	Staff in-kind; partner with property owner organizations and/or Chamber of Commerce for outreach and education.
SW.2.h Develop policies to mandate/encourage reduction of waste and reuse in the food industry (e.g. facilities serving prepared food and prepackaged food; home meal delivery services), hospitality industry, and other commercial industries. Efforts may include developing ordinances for food service ware and a ban on single-use individual toiletry bottles in hotels/motels, grant/discount programs for switching to reusables, fast food champion pilot project, and working with home meal delivery services (e.g., Blue Apron),	Low/ Med	Public Works	General Fund, affected businesses	Staff in-kind; partner with Chamber of Commerce to gain business input on policy and to educate affected businesses. Possible regulatory fees charged to affected businesses.

Move	Cost	City Lead Department	Potential Funding Source	Notes
etc. to explore opportunities to reduce single-use packaging and encourage reuse.				
SW.2.i Encourage reusable foodware; or if reusable foodware is not a feasible option, explore opportunities to mandate/encourage a switch to more environmentally friendly alternatives for various products in the commercial industry, when relevant.	Low	Public Works	General Fund	Staff in-kind; partner with Chamber of Commerce to gain business input on policy and to educate affected businesses.
Play CS.1 Increase carbon sequestration through increased tree planting and green space.				
CS.1.a Identify and map public spaces that can be converted to green space, including public parking that can be converted to parklets, freeway airspace that can be made into green space, vertical walls that can be planted with vines, and rooftops of public buildings that can be developed into gardens.	Low	Public Works	CalFire - Urban and Community Forestry	Staff in-kind or contractor to identify and map; implementation could be funded with combination of grants and private property owner investments Funds projects to expand and manage urban forests. 2019-20 concept proposals were due 11-27-2019. The next round of funding has not yet been announced.
CS.1.b Adopt a Greenscaping Ordinance that has a street tree requirement for all zoning districts, has a shade tree requirement for new development, requires greening of parking lots, and increases permeable surfaces in new development.	Low/ Med	Public Works and Planning and Building	General Fund	Staff in-kind; property owners fund improvements Implementation costs would be covered by building permit fees charged to construction projects.
CS.1.c Prepare and adopt an Urban Forest Management Plan for the City that includes an inventory of existing trees, identifies future tree planting opportunities, and a climate-ready tree palette, as well as ongoing operations and maintenance needs.	High	Public Works	CalFire - Urban and Community Forestry	Consultant; costs for implementation and long-term maintenance would likely be in the multiple millions of dollars; possible grant funding and funding from private property owners to plant trees; maintenance costs could potentially be incorporated into a lighting and landscaping assessment district. Funds projects to expand and manage urban forests. 2019-20 concept proposals

Move	Cost	City Lead Department	Potential Funding Source	Notes
				were due 11-27-2019. The next round of funding has not yet been announced.
CS.1.d Adopt a standard policy and set of practices for expanding urban tree canopy and placing vegetative barriers between busy roadways and developments to reduce exposure to air pollutants from traffic.	Low	Public Works	General Fund	Staff in-kind
M.1 Reduce carbon intensity of City operations.				
M.1.a As recommended in the 2016 Renewable Energy Council Report, complete energy audits for all City facilities and implement all feasible recommendations for decarbonization and efficiency upgrades.	High	Public Works	California Energy Commission Energy Partnership Program	Consultant; costs for implementation could be substantially over \$50,000; offset by potential long-term savings from improvements This program offers services to help identify the most cost-effective, energy-saving opportunities for buildings and new construction. The Energy Partnership Program can be used to conduct energy audits and prepare feasibility studies. The Energy Commission provides technical assistance services up to \$20,000 of a consultant's costs. The program is continuously open with no final filing date.
M.1.b As recommended in the 2016 Renewable Energy Council Report, purchase renewable natural gas (RNG) for applicable City fleet vehicles.	Low	Public Works	General Fund	Marginal costs for substitution of fuels
M.1.c Establish an employee rideshare program.	Low	Public Works	General Fund	Staff in-kind
M.1.d As recommended in the 2016 Renewable Energy Council Report, install PV solar systems at the City Hall and at Wilson Reservoir.	High	Public Works	Grant Funding	Up-front costs are likely substantially over \$50,000, but offset by long-term electricity cost savings. Solar generation facilities would be a candidate for Green Bond financing, to be

Move	Cost	City Lead Department	Potential Funding Source	Notes
				repaid using General Fund monies that otherwise would have been spent on purchasing electricity.
M.1.e Adopt retrofitting policy for City owned buildings such that energy efficient and electrification retrofits are incorporated into City buildings as they become available.	Low	Public Works	General Fund	Staff in-kind Energy efficiency projects would be good candidates for Green Bond financing, to be repaid using General Fund monies that otherwise would have been spent on utility costs.
M.1.f Develop a policy for the City which would require all new building RFP's to include life cycle costing over 30 years and tie this directly to energy consumption and building electrification. This would include the buildings operational and maintenance costs and ensure that the City has the most cost effective (and sustainable) building possible.	Low	Public Works	General Fund	Staff in-kind to develop policy; City benefits from lifecycle savings Lifecycle costing will help the City to identify potential for long-term cost savings. Green Bond financing could be used to make the necessary up-front investment in efficient buildings.
M.1.g As recommended in the 2016 Renewable Energy Council Report, invest all savings from City energy efficiency projects into a new revolving green fund that can be used to fund additional energy efficiency and GHG reduction projects.	Low	Finance	General Fund	Calls for using energy efficiency dividends to fund new projects The Green Fund could help to repay Green Bond financings.
M.2 Electrify the municipal vehicle fleet and mobile equipment.				
M.2.a Develop a suite of transportation demand management tools to incentivize alternative transportation methods for employees, including telecommute options.	Low	Management Services	General Fund	Staff in-kind City is adapting to telecommuting for COVID-19. Develop continuing telecommuting policies for post-pandemic.
M.2.b Provide bicycles and bicycle storage for employees to use during work hours for short business or personal trips.	Low	Public Works	General Fund	Limited capital expenditure and maintenance costs

Move	Cost	City Lead Department	Potential Funding Source	Notes
M.2.c Develop and adopt a policy to apply lifecycle assessment to all new vehicle and equipment purchases.	Low	Public Works	General Fund	Staff in-kind to develop policy; City benefits from lifecycle savings Lifecycle costing will help the City to identify potential for long-term cost savings. Green Bond financing could be used to make the necessary up-front investment in efficient buildings.
M.2.d Implement the City Fleet Alternative Fuel Conversion Policy developed under the City General Plan, electrifying the City vehicle fleet and using it to encourage residents to convert as well.	Low	Public Works	Southern California Air Quality Management District (SCAQMD) - Carl Moyer Program	Long-term savings from reduced maintenance and fuel costs Replacement of older heavy duty diesel vehicles and equipment with clean technologies. Eligible equipment includes trucks, public agency utility vehicles, emergency vehicles.
M.2.e Install EV charging stations at municipal buildings.	Med	Public Works and Planning and Building	1. Moving California, California Climate Investments, CARB - Sustainable Transportation Equity Project (STEP) 2. CAL eVIP, CA Energy Commission - Southern California Incentive Project (SCIP)	Possible low to no-cost of partnered with commercial EV charging company STEP - is a new pilot with \$2 million for Clean Transportation Planning & Capacity Building Grants, and \$20 millions for Implementation Grants. Eligible Planning projects include mobility plans and needs assessments. Eligible implementation projects include infrastructure, capital, operations, planning, policy-making, and outreach projects. The Southern California Incentive Project (SCIP) offers rebates for the purchase and installation of eligible public electric vehicle (EV) chargers in Los Angeles, Orange, Riverside and San Bernardino counties – with a total of \$29 million in available funds.

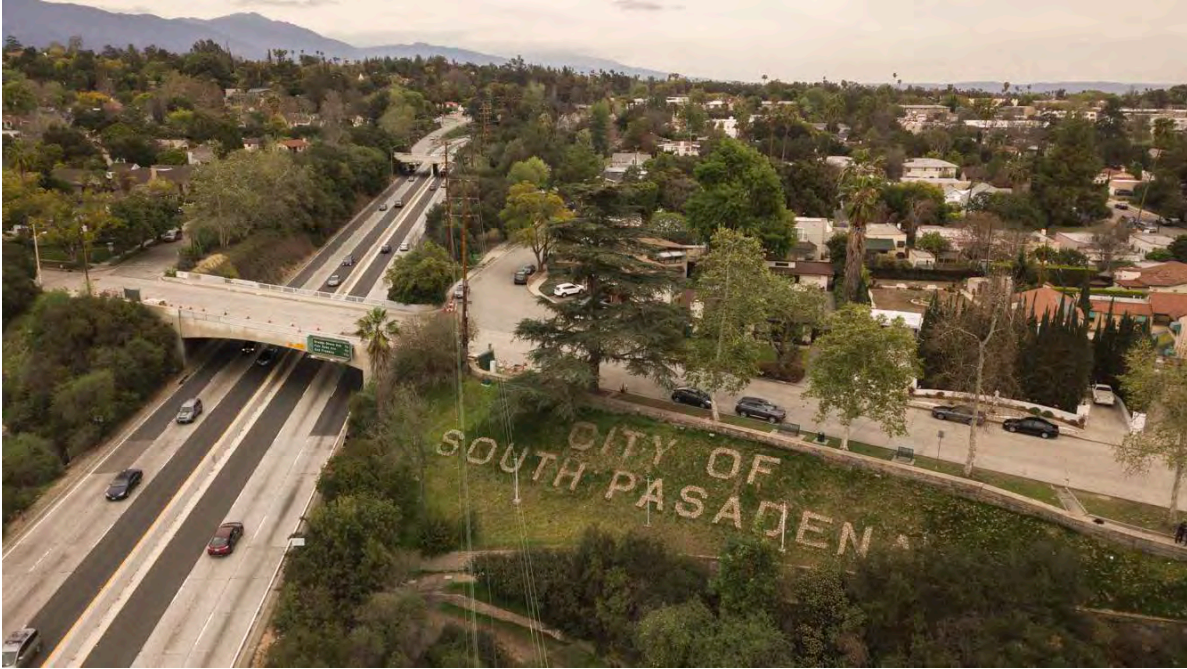
Move	Cost	City Lead Department	Potential Funding Source	Notes
				Eligible rebates include up to \$70,000 per DC fast charger (DCFC) for installations at new sites and sites with stub-outs and up to \$40,000 per DC fast charger for installations at replacement and make-ready sites. Installations in designated disadvantaged communities (DACs) are eligible for rebates up to \$80,000 per DC fast charger regardless of installation site type. Applications accepted on an ongoing basis while funds available.
M.3 Increase City's renewable energy production and energy resilience.				
M.3.a Conduct a Feasibility Study to determine which City buildings would serve as ideal resilience centers including solar and battery installations.	Low	Public Works	General Fund	Consultant
M.3.b Convert all streetlights to light emitting diode (LED) bulbs.	High	Public Works	General Fund	Up-front costs are potentially over \$1 million, but offset by long-term electricity cost savings. Energy efficiency projects would be good candidates for Green Bond financing, to be repaid using General Fund monies that otherwise would have been spent on utility costs.
M.3.c Work with SCE to identify and develop local solar projects to connect to the grid.	Low	Public Works	General Fund, possibly incorporate costs into Lighting and Landscaping Assessment District	Staff in-kind; solar development funded by sale of power generated Solar projects would be good candidates for Green Bond financing, to be repaid using General Fund monies that otherwise would have been spent on utility costs.

Move	Cost	City Lead Department	Potential Funding Source	Notes
<p>M.3.d Install solar arrays at facilities that currently do not have solar arrays and work with emergency services to add solar and battery storage at priority locations. Review options for potential to combine multiple buildings into micro-grid systems.</p>	High	Public Works	General Fund	<p>Up-front costs would be substantially over \$50,000, but offset by long-term electricity cost savings.</p> <p>Solar projects would be good candidates for Green Bond financing, to be repaid using General Fund monies that otherwise would have been spent on utility costs. Coordinate with Move E.4.c.</p>
<p>M.3.e Explore opportunities and partnerships to develop renewable-powered fuel cell micro-grids to provide back-up or primary power for critical facilities such as facilities providing essential services (e.g. water pumping facilities) and schools as a clean alternative to diesel generators.</p>	Low	Public Works	General Fund	<p>Staff in-kind</p> <p>Coordinate with Move E.4.c.</p>

Appendix F:

CEQA Document

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2020 Climate Action Plan

Draft Initial Study – Negative Declaration

prepared for

City of South Pasadena

1414 Mission Street

South Pasadena, California 91030

Contact: Shahid Abbas, Public Works Director

prepared by

Rincon Consultants, Inc.

706 South Hill Street, Suite 1200

Los Angeles, California 90014

October 7, 2020



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

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23-255

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Draft Initial Study – Negative Declaration

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Appendices

Appendix A	Sources, Health Effects, and Typical Controls Associated with Criteria Pollutants
Appendix B	Description of Greenhouse Gases of California Concern

Initial Study

1. Proposed Plan Title

South Pasadena 2020 Climate Action Plan (CAP)

2. Lead Agency / Plan Sponsor Contact

Lead Agency/Plan Sponsor

City of South Pasadena
1414 Mission Street
South Pasadena, CA 91030

Contact Person

Shahid Abbas
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3. Plan Location and Physical Setting

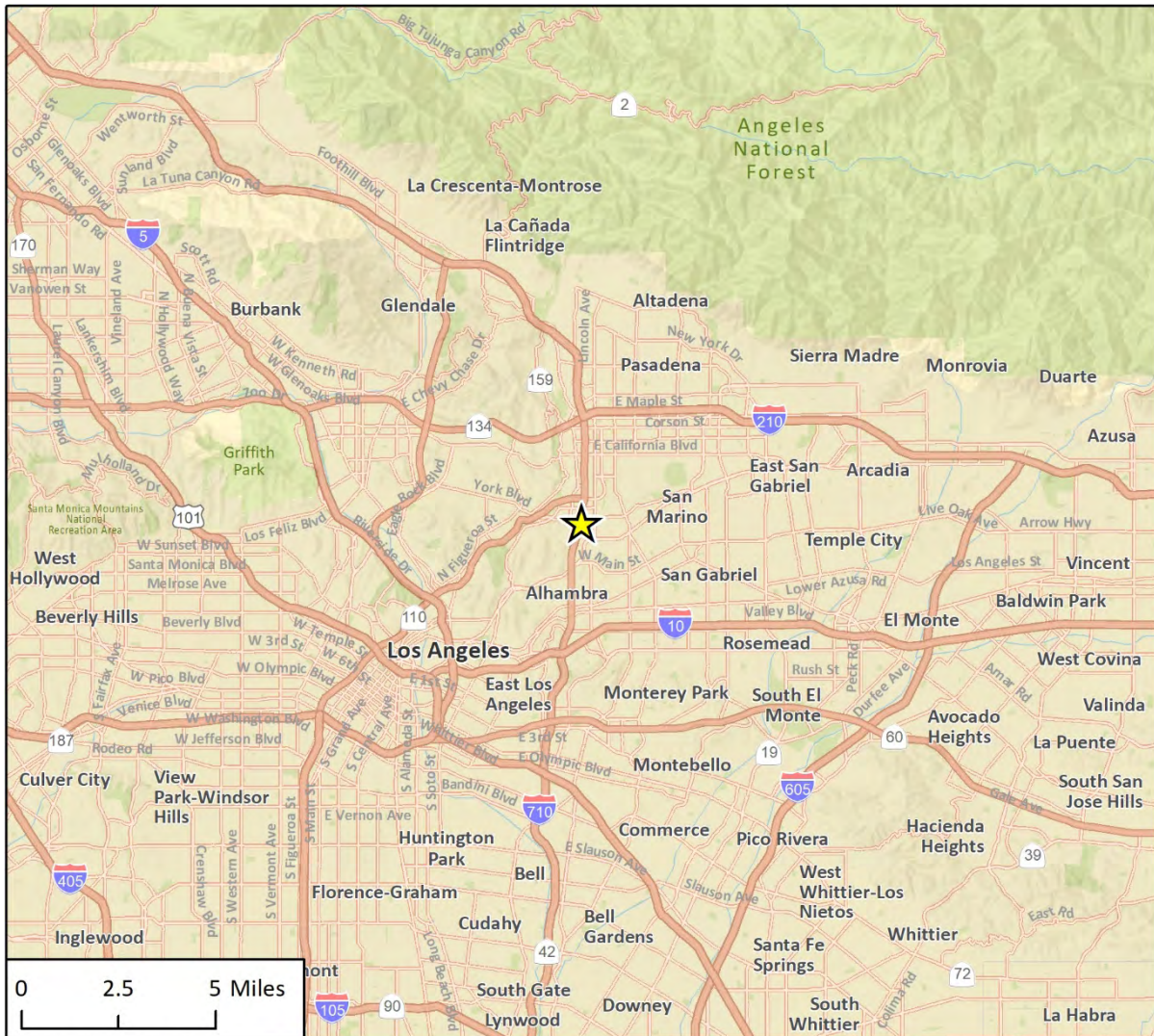
The City of South Pasadena 2020 CAP applies to all areas and plans/projects within the City of South Pasadena limits. Figure 1 shows the regional location, and Figure 2 shows the plan location. The plan location includes all of South Pasadena's incorporated lands.

Regional Location and Setting



The City of South Pasadena is located within Los Angeles County, approximately nine miles northeast of downtown Los Angeles. South Pasadena is part of the greater Los Angeles metropolitan area (see Figure 1) and occupies 3.44 square miles of central Los Angeles County (see Figure 2). South Pasadena is located in the West San Gabriel Valley, with the San Gabriel Mountains to the north, San Rafael Hills to the south, and Arroyo Seco River to the west. Surrounding communities include the Cities of Los Angeles and Alhambra to the south; Cities of San Marino and San Gabriel to the east; the City of Pasadena to the north; and the City of Los Angeles to the west.

Principal regional transportation facilities serving South Pasadena are State Route 110, State Route 710, Interstate Highway 210, Interstate Highway 10, the Los Angeles County Metropolitan Authority (Metro), and the Hollywood Burbank Airport. The Los Angeles County Metropolitan Transportation Authority (LA Metro) provides bus services in South Pasadena via six bus lines (79, 176, 256, 258, 260, and 762) and rail service in South Pasadena via the Metro L Line (formerly the Gold Line) with primary station location at the corner of Mission and Meridian Streets. The Hollywood Burbank Airport is located approximately 13 miles northwest of the City.

Figure 1 Regional Location



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 City of South Pasadena (Plan Location)
 

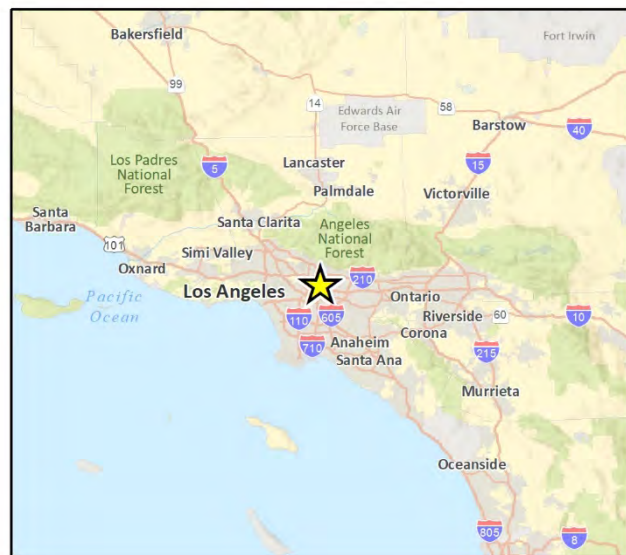
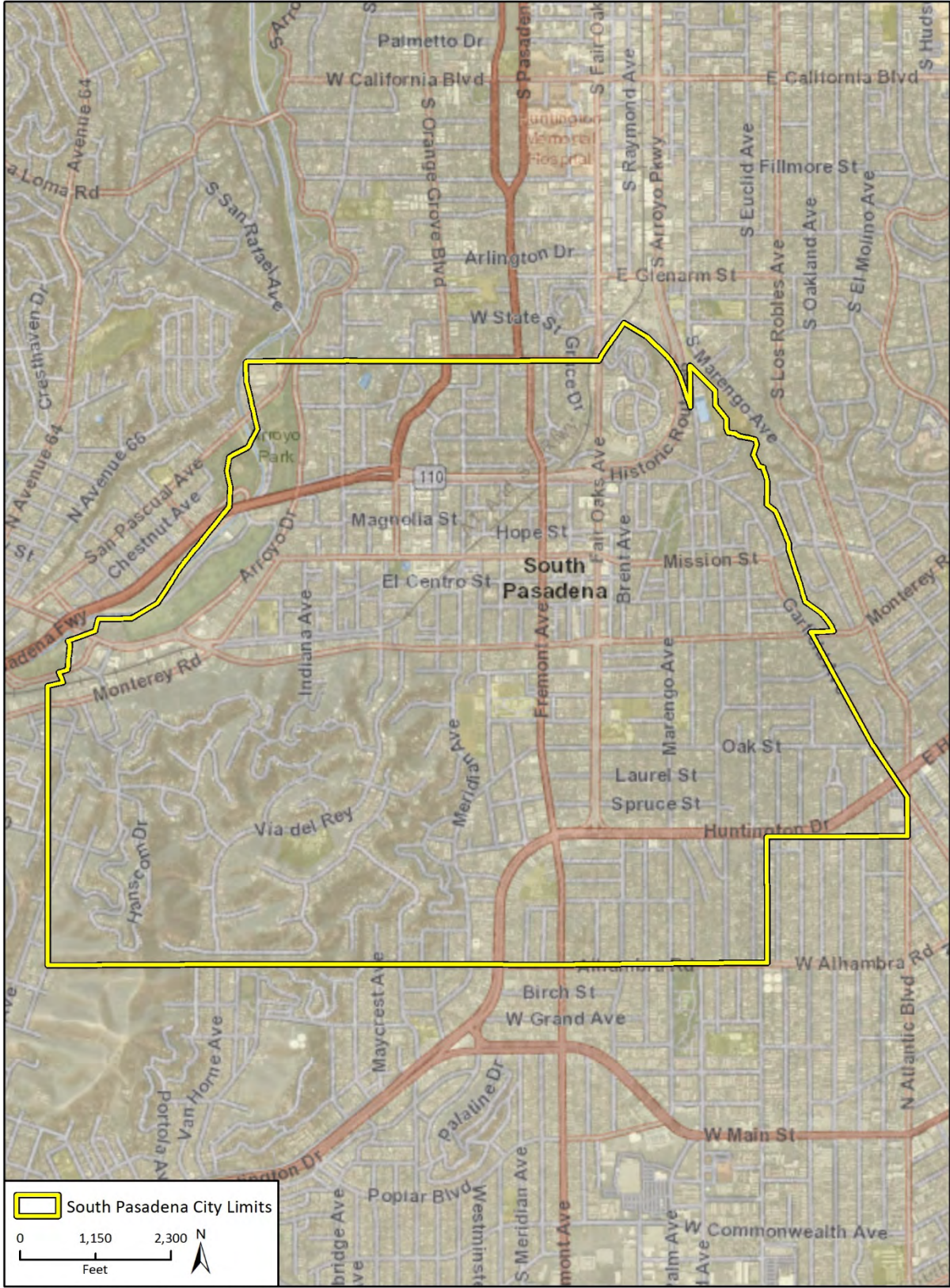


Fig. 1 Regional Location

Figure 2 Plan Location



Local Setting

The City is characterized as a suburban residential community with many mature trees as well as historic landmarks and districts. The City has a focus on continuity of its natural landscape, historic character, scale, and small-town atmosphere. Most of South Pasadena's land is occupied with residential uses, a mixture of single-family and multi-family. Commercial and office uses are primarily located along major transportation corridors such as Fair Oaks Avenue, Huntington Drive, Mission Street, and Monterey Road. The remaining portions of City land are occupied by community facilities, open space, parks, streets, highways, and transit lines.¹

South Pasadena's topography ranges from flatlands in the northern and eastern parts of the City to hills and watershed lands and hills in the southwestern and western portions of the City. The City has an average elevation of 659 feet above mean sea level. The Arroyo Seco Watershed stretches from the Angeles National Forest in the San Gabriel Mountains to the downtown Los Angeles area and is channelized through urban areas such as the City of South Pasadena and ultimately ends at the confluence with the Los Angeles River north of Dodger Stadium. South Pasadena's climate is characterized by hot, arid summers with mostly clear skies and cool, wet winters with partly cloudy skies. The Köppen-Geiger climate classification is Csa, which is a typical Mediterranean climate. As such, the average temperature ranges from 46 to 88 degrees Fahrenheit. Similar to the rest of the Los Angeles Air Basin, a temperature inversion, where warm dry air overrides cool marine air and traps air pollutants close to the ground, often occurs during late summer and autumn.

4. Existing Setting

Sustainability and (Greenhouse Gas) GHG Reduction Efforts Setting

City of South Pasadena Sustainability and GHG Reduction Efforts

The City of South Pasadena has established actions related to increasing sustainability and reducing GHG emissions and the potential impacts of climate change. These actions are outlined in the City's Green Action Plan, Draft 2020 General Plan, and Draft Downtown Specific Plan.

2019 SOUTH PASADENA GREEN ACTION PLAN

In November 2019, the City of South Pasadena adopted the South Pasadena Green Action Plan (Green Plan), which includes five main goals: work towards making South Pasadena a plastic-free City; enhance water conservation projects and programs; increase organics diversion from landfills; mitigate impacts of the urban heat island effect; and prepare for the consideration of future sustainability initiatives. The Green Plan was a collaborative effort that encompassed the values, ideas, and efforts from all City Department Staff, City Council, the City's Natural Resources and Environmental Commission, and the passionate residents of South Pasadena. This short-term plan aimed to implement essential and attainable sustainability initiatives that would set the foundation of the City's first Climate Action Plan.

2020 GENERAL PLAN UPDATE

The City's General Plan is currently being updated and a draft version was released to the public in November 2019. The General Plan is a blueprint for how the City should develop over time, and

¹ South Pasadena, City of. 2020. Land Use Policy Map. Available: <<https://www.southpasadenaca.gov/home/showdocument?id=211>>. Accessed September 18, 2020.

consists of several mandated topics called “Elements.” In general, these Elements include broad policies that identify the overall pattern of future development, determining when, where, and what type of new growth and investment may occur. The “Our Natural Community” Element of the Draft General Plan includes policies that promote alternative transportation and use of energy-efficient vehicles, and work to minimize the adverse impacts of growth and development on air quality and climate.

2020 DOWNTOWN SPECIFIC PLAN UPDATE

The 2020 Downtown Specific Plan Draft was also released in November 2019 and has policies related to energy efficiency and climate resilience. The primary goals of the Downtown Specific Plan are to leverage public transit and multimodality, focusing on responsible infill development, and preserving and rehabilitating historic buildings.

Regional Sustainability and GHG Reduction Efforts

In coordination with Los Angeles County, the Southern California Association of Governments (SCAG) the State of California, and the federal government, the City of South Pasadena has committed to implementing regional and State policies related to GHG emissions reduction. As follows is a summary of the regional GHG emissions reduction efforts, which the City of South Pasadena CAP is intended to be consistent with or exceed.

SCAG 2016-2040 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

SCAG adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which identified how the southern California region would meet its GHG emission reduction targets.² The SCAG 2016 RTP/SCS is supported by a combination of transportation and land use strategies that help the region achieve State greenhouse gas emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry and utilize resources more efficiently.³

OUR NEXT LA: DRAFT 2020 LONG RANGE TRANSPORTATION PLAN

The Los Angeles County Metropolitan Transportation Authority has prepared the Draft 2020 Long Range Transportation Plan to provide Los Angeles County (88 cities and unincorporated County) with a long-range, comprehensive transportation plan for identifying and resolving transportation issues.⁴ Transportation planning objectives and policies include improving mobility options through an equitable and sustainable approach, and reducing Los Angeles County roadway congestion.

State Sustainability and GHG Reduction Efforts

As follows is a summary of the State GHG emissions reduction efforts, which the City of South Pasadena CAP is intended to be consistent with or exceed.

² Southern California Association of Governments (SCAG). 2016. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. Available: <<http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx#toc>>. Accessed September 17, 2020.

³ SCAG. 2016. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. What is the 2016 RTP/SCS? <<http://scagrtpscs.net/Pages/2016RTPSCS.aspx>>. Accessed September 17, 2020.

⁴ Los Angeles County Metropolitan Transportation Authority (LA Metro). 2020. Draft 2020 Long Range Transportation Plan. Available: <<https://media.metro.net/2020/LRTP-Draft-Doc-Web.pdf>>. Accessed September 17, 2020.

CALIFORNIA SENATE BILL 375

In 2008, Senate Bill 375 (SB 375) enhanced the State’s ability to reach Assembly Bill (AB) 32 targets by directing CARB to develop regional GHG emissions reduction targets to be achieved from passenger vehicles for 2020 and 2035. In addition, SB 375 directs each of the State’s 18 major Metropolitan Planning Organizations (MPO) to prepare a sustainable community’s strategy (SCS) that contains a growth strategy to meet such regional GHG emissions reduction targets for inclusion in the respective regional transportation plan (RTP).

CALIFORNIA EXECUTIVE ORDER S-3-05

In 2005, the California governor issued Executive Order (EO) S-3-05, which identifies Statewide GHG emissions reduction targets to achieve long-term climate stabilization as follows:

Reduce GHG emissions to 1990 levels by 2020

Reduce GHG emissions to 80 percent below 1990 levels by 2050

In response to EO S-3-05, California Environmental Protection Agency (CalEPA) created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the “2006 CAT Report”). The *2006 CAT Report* identified a recommended list of strategies that the State could pursue to reduce GHG emissions. These are strategies that could be implemented by various State agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the State agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture, among others.

CALIFORNIA ASSEMBLY BILL 32

In 2006, the California legislature signed AB 32 – the Global Warming Solutions Act – into law, requiring a reduction in Statewide GHG emissions to 1990 levels by 2020 and California Air Resources Board (CARB) preparation of a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 required CARB to adopt regulations to require reporting and verification of Statewide GHG emissions. Based on this guidance, CARB approved a 1990 Statewide GHG level and 2020 limit of 427 metric tons of carbon dioxide equivalent (MTCO₂e).

CALIFORNIA CLIMATE CHANGE SCOPING PLAN

In 2008, CARB approved the original California Climate Change Scoping Plan, which included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted and implemented since approval of the Scoping Plan.

CALIFORNIA CLIMATE CHANGE SCOPING PLAN UPDATE (2013)

In 2013, CARB approved the first update to the California Climate Change Scoping Plan. The 2013 Scoping Plan Update defined CARB climate change priorities for the next five years and set the groundwork to reach post-2020 Statewide GHG emissions reduction goals. The 2013 Scoping Plan Update highlighted California’s progress toward meeting the “near-term” 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State’s

longer-term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use.

CALIFORNIA EXECUTIVE ORDER B-30-15

In 2015, the California governor issued Executive Order B-30-15, which established a Statewide mid-term GHG reduction target of 40 percent below 1990 levels by 2030.

CALIFORNIA SENATE BILL 32

In 2016, the California legislature signed Senate Bill 32 (SB 32) into law, extending AB 32 by requiring further reduction in Statewide GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies, such as SB 350 and SB 1383 (see below).

CALIFORNIA CLIMATE CHANGE SCOPING PLAN UPDATE (2017)

In 2017, CARB approved the second update to the California Climate Change Scoping Plan. The 2017 Scoping Plan put an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan Update does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with Statewide per-capita goals of 6 MTCO_{2e} by 2030 and 2 MTCO_{2e} by 2050.⁵ As stated in the 2017 Scoping Plan Update, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects, because they include all GHG emissions sectors in the State.

CALIFORNIA EXECUTIVE ORDER B-55-18

In 2018, the California governor issued Executive Order B-55-18, which established a new Statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing Statewide GHG reduction targets established by SB 32.

For more information on the Senate and Assembly Bills, Executive Orders, and Scoping Plans discussed above, and to view reports and research referenced above, please refer to the following websites: www.climatechange.ca.gov and www.arb.ca.gov/cc/cc.htm.

ASSEMBLY BILL 197, STATE AIR RESOURCES BOARD GREENHOUSE GASES REGULATIONS

In 2016, the California legislature approved AB 197, a bill linked to SB 32, which increases legislature oversight over the California Air Resources Board and directs the California Air Resources Board to prioritize disadvantaged communities in its climate change regulations, and to evaluate the cost-effectiveness of measures it considers. AB 197 requires the CARB to “protect the State’s most impacted and disadvantaged communities [and] consider the social costs of the emissions of greenhouse gases” when developing climate change programs. The bill also adds two new legislatively appointed non-voting members to the CARB, increasing the Legislature’s role in the CARB’s decisions.

⁵ California Air Resources Board (CARB). 2017. California’s 2017 Climate Change Scoping Plan. Available: <<https://ww3.arb.ca.gov/cc/scopingplan/scopingplan.htm>>. Accessed July 13, 2020.

SENATE BILL 350, CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015

In October 2015, SB 350 was signed into law, establishing new clean energy, clean air, and GHG reduction goals for 2030 and beyond. SB 350 codifies Governor Jerry Brown's aggressive clean energy goals and establishes California's 2030 GHG reduction target of 40 percent below 1990 levels. To achieve this goal, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 (legislation originally enacted in 2002) to 50 percent by 2030. Renewable resources include wind, solar, geothermal, wave, and small hydroelectric power. In addition, SB 350 requires the State to double Statewide energy efficiency savings in electricity and natural gas end-uses (i.e., residential and commercial) by 2030 from a base year of 2015.

SENATE BILL 100, THE 100% CLEAN ENERGY ACT OF 2018

In September 2018, Governor Brown signed SB 100, requiring that the State's load serving entities (including energy utilities and community choice energy programs) must procure energy generated 100 percent from Renewables Portfolio Standard (RPS) for eligible renewable resources by 2045.

CALIFORNIA ENERGY EFFICIENCY STRATEGIC PLAN OF 2008

In September 2008, the California Public Utilities Commission (CPUC) adopted California's first Long Term Energy Efficiency Strategic Plan, presenting a single roadmap to achieve maximum energy savings across all major groups and sectors in California. The Strategic Plan was subsequently updated in January 2011 to include a lighting chapter. The Strategic Plan sets goals of all new residential construction and all new commercial construction in California to be zero net energy (ZNE) by 2020 and 2030, respectively. In 2018, the California Energy Commission voted to adopt a policy requiring all new homes in California to incorporate rooftop solar. This change will go into effect in January 2020 with the adoption of the 2019 Title 24 Code and is a step towards the State achieving its goal of all residential new construction being ZNE by 2020. Additionally, the Strategic Plan sets goals of 50 percent of existing commercial building to be retrofitted to ZNE by 2030 and all new State buildings and major renovations to be ZNE by 2025.

SENATE BILL 1275, CHARGE AHEAD INITIATIVE

In September 2014, Senate Bill 1275 was signed into law, establishing a State goal of one million zero-emissions and near-zero-emissions vehicles in service by 2020 and directing the Air Resources Board to develop a long-term funding plan to meet this goal. SB 1275 also established the Charge Ahead California Initiative requiring planning and reporting on vehicle incentive programs and increasing access to and benefits from zero-emissions vehicles for disadvantaged, low-income, and moderate-income communities and consumers.

ASSEMBLY BILL 1493, THE PAVLEY BILL

In 2002, the California State Legislature enacted Assembly Bill 1493 (aka "the Pavley Bill"), which directs the CARB to adopt standards that will achieve "the maximum feasible and cost-effective reduction of greenhouse gas emissions from motor vehicles," taking into account environmental, social, technological, and economic factors. In September 2009, the CARB adopted amendments to the "Pavley" regulations to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The Pavley Bill is considered to be the national model for vehicle emissions standards. In January of 2012, the CARB approved a new emissions control program for vehicle model years 2017 through 2025. The program combines the control of smog, soot, and greenhouse gases and the

requirement for greater numbers of zero emission vehicles into a single package of standards called Advanced Clean Cars.

ASSEMBLY BILL 117, COMMUNITY CHOICE AGGREGATION

Assembly Bill 117 establishes the creation of Community Choice Aggregation (CCA) that fosters clean and renewable energy markets. CCA allows cities and counties to aggregate the buying power of individual jurisdictions. The California CCA markets were created as an answer to the brownouts and energy shortages of the early 2000's. AB 117 was passed in 2002 as an answer to California's increased energy independency by incorporating more alternative and renewable energy sources into its energy portfolio. With AB 117, municipalities can provide alternative energy choices to their local carrier (e.g. the Pacific Gas and Electric Company, PG&E). Marin Clean Energy was the first CCA in the State of California to go online with a 50 percent to 100 percent clean energy portfolio in 2010.

SENATE BILL 97, CEQA GUIDELINES FOR ADDRESSING GHG EMISSIONS

The California Environmental Quality Act (CEQA) requires public agencies to review the environmental impacts of proposed projects, including General Plans, Specific Plans, and specific kinds of development projects. In February 2010, the California Office of Administrative Law approved the recommended amendments to the State CEQA Guidelines for addressing GHG emissions. The amendments were developed to provide guidance to public agencies regarding the analysis, mitigation, and effects of GHG emissions in draft CEQA documents.

5. General Plan Designation and Zoning

The CAP would be implemented throughout the City and would occur in all South Pasadena General Plan designations and zoning designations. The plan would not alter any existing designations.

6. Description of Plan

The 2020 CAP incorporates the many climate protection programs noted above that the City has in place and will continue to reduce GHG emissions. While the City has implemented GHG emission-reduction policies and programs, the 2020 CAP is the first official climate action plan for the City. The City, in partnership with SCAG, has developed the 2020 CAP in order to achieve a number of objectives, including a demonstration of environmental leadership, saving money and promoting green jobs, showing compliance with State environmental initiatives, and promoting sustainable development.

In 2020, the City is actively engaged in addressing climate change, sustainability, and reductions in GHG emissions. The 2020 CAP addresses municipal and communitywide GHG emissions and includes a goal of reducing communitywide GHG emissions output to 75,161 metric tons of carbon dioxide equivalent (MT CO₂e) by 2030 (consistent with California Senate Bill 32 target for 2030). The 2020 CAP assessed herein is based upon the 2016 baseline GHG emissions inventory and formulates a list of measures and actions or "Plays and Moves" to achieve the City's sustainability goals.

The State of California uses 1990 as a reference year to remain consistent with Assembly Bill (AB) 32, which codified the State's 2020 GHG emissions target by directing CARB to reduce Statewide emissions to 1990 levels by 2020. However, cities and counties throughout California typically elect to use years later than 1990 as baseline years because of the increased reliability of recordkeeping

from those years and the large amount of growth that has occurred since 1990. The year 2016 was selected as the baseline year for South Pasadena’s GHG inventory due to the availability of reliable data. Additionally, it is important to note that California achieved its 2020 goal of reaching the 1990 emissions level in 2016,⁶ and it is assumed that South Pasadena likewise is currently at 1990 levels.⁷ Therefore, the 2016 baseline emissions were reduced by 40 percent to establish a 2030 target for the City.

The 2016 GHG emissions inventory provides an important foundation for the CAP, providing 2016 as the baseline year against which progress toward the City goal of reducing GHG emissions of 40 percent by 2030 can be measured. In 2016, approximately 126,268 MT CO₂e were emitted in South Pasadena from the energy, transportation, solid waste, water, and municipal sectors. The municipal sector is a subset of the community emission sectors, which consist of energy, transportation, solid waste, and water, and is developed to establish metrics that allow the City to lead by example and reduce emissions at the municipal level. The energy sector represents emissions that result from electricity and natural gas used in both private and public sector buildings and facilities. The transportation sector includes emissions from private, commercial, and fleet vehicles driven within the City as well as the emissions from transit vehicles, the City-owned fleet, and off-road equipment such as lawnmowers/ garden equipment and construction equipment. Emissions generated from water usage and wastewater generation are due to the indirect electricity use to distribute water and collect and treat wastewater. Burning fossil fuels associated with vehicle use (transportation) and buildings/facility energy use are the largest contributors of South Pasadena GHG emissions. Table 1 includes total South Pasadena (i.e., community and municipal) GHG emissions in 2016 by sector as well as percentage of total City emissions.

Table 1 South Pasadena 2016 Communitywide GHG Emissions by Sector

Sector	(MT of CO₂e)	Percentage of GHG Emissions
Energy	49,301	39
Electricity	23,987	19
Natural Gas	24,287	19
Electricity Transmission and Distribution Losses	1,027	1
Transportation	67,228	54
On-road Transportation	65,351	52
Off-road Equipment	829	1
Transit ²	1,048	1
Water	1,026	1
Water transport, distribution and treatment	700	1
Wastewater collection and treatment	326	<1

6 CARB. 2018. Climate pollutants fall below 1990 levels for the first time. Available: <<https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levels-first-time>>. Accessed September 28, 2020.

7 Although there may have been GHG emission reductions between 2016 and 2017 at the state and local level, the most recent state inventory that is available was completed in 2016; therefore, 2017 emissions are conservatively assumed to be the same as they were in 2016 as this methodology is the most conservative pathway to calculate South Pasadena’s 1990 baseline.

Sector	(MT of CO ₂ e)	Percentage of GHG Emissions
Solid Waste	7,713	6
Waste Sent to Landfills	7,509	6
Process Emissions	203	<1
<i>Transportation & Collection Emissions³</i>	<i>465</i>	<i>0</i>
Combustion Emissions	1	<1
Total	125,268	100 %

Notes:

MT: Metric tons

1. Emissions have been rounded and therefore sums may not match.

2. Transit in South Pasadena is provided by Los Angeles Metro.

3. Waste transportation and collection emissions are accounted for in the on-road transportation sector of the inventory and are included here only for informational purposes.

Source: Emissions were calculated following ICLEI LGOP and using data provided and approved by the City.

As shown in Table 1, the largest sectors of GHG emissions are related to energy and transportation, followed by solid waste and water. The City is preparing the 2020 CAP to include Plays and Moves (i.e., measures and actions) addressing communitywide and municipal GHG emissions. Per the 2020 CAP, South Pasadena is committed to an emissions reduction target of 40 percent below 2016 levels by 2030 and reaching a longer-term goal of carbon neutrality by 2045. This 2030 GHG emissions goal is selected to be consistent with SB 32 State emissions targets and CEQA Guidelines § 15183.5 for a qualified GHG emissions reduction strategy as well as to be achievable by City-supported Plays identified in the 2020 CAP. The CAP includes a business-as-usual (BAU) forecast of GHG emissions that will enable the City to estimate the amount of emissions reductions needed to meet its goal.

The 2020 CAP includes Plays to educate the community regarding ways to live a sustainable lifestyle, increase use of renewable power, electrify buildings, and reduce use of natural gas. It also includes Plays to increase use of zero-emission vehicles; increase use of public, active, and shared transportation; reduce water consumption and waste generation; increase recycling and composting; and increase tree planting and green space. Finally, it includes Plays that will continue to allow the City to lead by example. Table 2 includes a complete list of 2020 CAP Plays and descriptions of respective supporting Moves.

Table 2 South Pasadena 2020 CAP Plays and Moves by Sector

ID #	Plays and Respective Supportive Moves
Cornerstone (i.e., Education) Sector	
Play C.1	Engage South Pasadena youth in climate change action and provide education on ways to live a sustainable lifestyle.
Move C.1.a	Support South Pasadena Unified School District by providing students with information on climate change and the beneficial role of trees.
Move C.1.b	Utilize South Pasadena's historic neighborhoods to demonstrate to students the importance of mature urban trees in providing shade and reducing the urban heat island effect.
Move C.1.c	Identify grant funding opportunities and engage with local nurseries to identify appropriate and cost-effective California native plants/trees that can be both planted in the ground or remain potted for students living in rental/multi-family homes.

ID #	Plays and Respective Supportive Moves
Energy Sector	
Play E.1	Maximize the usage of renewable power within the community, by continuing to achieve an opt-out rate lower than 4% for the CPA 100% renewable power.
Move E.1.a	<p>Monitor progress and perform public outreach and education campaigns highlighting the benefits of 100% renewable energy, including:</p> <ul style="list-style-type: none"> ▪ Monitoring opt-out rates on an annual basis ▪ Tabling at community events ▪ Establishing an informational resource page on the City website ▪ Regular social media posts ▪ Energy bill inserts
Play E.2	
Electrify of 100% of newly constructed buildings.	
Move E.2.a	Develop a webpage and materials for display at City Hall promoting the benefits of electrification and resources that can assist with the fuel-switching process.
Move E.2.b	Provide financial and technical resources, including hosting workforce development trainings for installers and building owners/operators to discuss benefits and technical requirements of electrification.
Move E.2.c	Perform regular internal trainings with planners and building officials on current state decarbonization goals and incentives available for electric homes.
Move E.2.d	Provide education around cooking with electric appliances, including demonstrations from chefs and/or local restaurants, as available.
Move E.2.e	<p>Adopt an Electrification Readiness Reach Code per California Energy Commission (CEC) reach code requirements for all new buildings and accessory dwelling units which eliminates the piping of natural gas. In doing so the City will:</p> <ul style="list-style-type: none"> ▪ Engage with stakeholders, both internal stakeholders, such as City staff and officials, and external stakeholders, such as local developers regarding the purpose and impact of the reach code ▪ Conduct a cost effectiveness study ▪ Develop and draft an ordinance ▪ Conduct public hearings, public notices, and formally adopt the ordinance ▪ Submit the adopted ordinance to the California Energy Commission (CEC)
Move E.2.f	Adopt an ordinance that allows granting of minor allowances for certain site development standards when there is no practical ways to design a project to be all electric.
Play E.3	
Electrify 5% of existing buildings by 2030 and 80% by 2045.	
Move E.3.a	Develop an existing building electrification permit tracking program to track progress in achieving the targeted electrification goal.
Move E.3.b	Keep an updated list of rebates and incentives available to residents who would like to convert their buildings to electric power.
Move E.3.c	Provide education on the potential energy savings and benefits of electric heat pumps for water heating and space heating when permits for replacement are obtained.
Move E.3.d	Work with Southern California Edison (SCE) and/or the Clean Power Alliance to provide rebates for residential replacement of natural gas-powered air and water heating appliances with electric-powered.
Move E.3.e	Promote water heater, space heating, and appliance (electric stoves/dryers) replacement programs and incentives (residential) at time of construction permit.
Move E.3.f	Perform an existing buildings analysis in order to understand the potential for electrification retrofitting in South Pasadena and establish a roadmap for eliminating natural gas from existing buildings.

ID #	Plays and Respective Supportive Moves
Move E.3.g	Establish a comprehensive, coordinated education campaign focused towards property owners, landlords, property management companies, and occupants for reducing the use of natural gas in homes and businesses. Establish a shared understanding of existing incentives for electric appliances and upgrades, and how to access them, including SCE incentive programs and rebates.
Move E.3.h	Perform a cost-effectiveness study for electrification retrofitting, including requirements for newly permitted HVAC/hot water heaters and other appliances to be electric.
Move E.3.i	Develop a best practices model based on the progress electrifying existing buildings in South Pasadena and outside of South Pasadena to significantly increase electrification post-2030.
Play E.4	Develop and promote reduced reliance on natural gas through increased clean energy systems that build off of renewable energy development, production, and storage.
Move E.4.a	Conduct a Feasibility Study to assess cost and applicable locations for installation of battery back-up systems or generators throughout the City in support of the General Plan.
Move E.4.b	Promote installation of storage technology in concert with renewable energy infrastructure through educational programs, outreach, and information provided via City platforms.
Move E.4.c	Conduct "micro-grid" Feasibility/Pilot Study in support of the General Plan.
Move E.4.d	In support of the General Plan, develop and implement a Solar Action Plan with a goal of meeting 50% of South Pasadena's power demand through solar by 2040.
Move E.4.e	In support of the 2018-2019 City Strategic Plan, develop a strategy and implementation schedule for the Renewable Energy Plan, after feasibility study.
Move E.4.f	Adopt a PV (Solar) Ordinance requiring newly constructed and majorly renovated multi-family and commercial buildings to install PV systems with an annual output greater or equal to 25% of buildings' electricity demand. Ensure consistency of ordinance with the City General Plan.
Move E.4.g	Require all new structures or major retrofits to be pre-wired for solar panels, consistent with the General Plan.
Move E.4.h	Work with various City departments to establish and streamline battery storage requirements to allow for easier implementation of these technologies throughout the City.
Move E.4.i	Work with home and business owners, including those in the historic districts, to identify and promote renewable energy demonstration projects to showcase the benefits.
Move E.4.j	Work with SCE and the CPA to develop a program and timeline for increasing resilience to power losses, including Public Safety Power Shutoffs (PSPS), and climate-driven extreme weather events for low-income, medically dependent, and elderly populations through installation of renewable energy and onsite energy storage with islanding capabilities, following appropriate project-level environmental review.

ID #	Plays and Respective Supportive Moves
Transportation Sector	
Play T.1	Increase use of zero-emission vehicle and equipment 13% by 2030 and 25% by 2045.
Move T.1.a	Develop an EV Readiness Plan to establish a path forward to increase EV infrastructure within the City and promote mode shift to EVs that is consistent with the City General Plan. In conjunction with an EV Readiness Plan, conduct a community EV Feasibility Study to assess infrastructure needs and challenges.
Move T.1.b	Adopt an EV Charging Retrofits in Existing Commercial and Multifamily Buildings reach code requiring major retrofits, with either a permit value over \$200,000 or including modification of parking surfaces or electric panels, to meet CalGreen requirements for "EV Ready" charging spaces and infrastructure.
Move T.1.c	Streamline permit processes (city, county, state, utility) for electric vehicle charging infrastructure and alternative fuel stations.
Move T.1.d	Enhance promotion of public and private conversion to zero-emission vehicles through implementation of the City General Plan; including use of City events, social media, and the City website to educate on benefits of zero-emission vehicles and available incentives.
Move T.1.e	Establish an ordinance that restricts use of gas-powered lawn equipment, including leaf blowers, and provide information on the City website outlining available incentives.
Move T.1.f	Adopt an EV Readiness Reach Code requiring new commercial construction to provide the minimum number of EV capable spaces to meet Tier 2 requirements (20% of total). In doing so the City will: <ul style="list-style-type: none"> ▪ Engage with stakeholders, both internal stakeholders, such as local government staff and officials, and external stakeholders, such as local developers regarding the purpose and impact of the reach code ▪ Conduct a cost effectiveness study ▪ Develop and draft an ordinance ▪ Conduct public hearings, public notices, and formally adopt the ordinance ▪ Submit the adopted ordinance to the California Energy Commission (CEC)
Move T.1.g	Earmark and identify additional funding for implementation of the EV Readiness Plan to include public charging infrastructure in key locations.
Play T.2	Implement programs for public and shared transit that decrease passenger car vehicle miles traveled 2% by 2030 and 4% by 2045.
Move T.2.a	Conduct a Feasibility and Community Interest Study on the four transit improvement options of the City's General Plan.
Move T.2.b	Pursue a community car, bike, or e-scooter "micro-transit" share pilot consistent with the City General Plan.
Move T.2.c	Conduct local transportation surveys to better understand the community's needs and motivation for traveling by car versus other alternatives such as bus or Metro Gold Line light rail. Use survey results to inform transit expansion and improvement projects.
Move T.2.d	Adopt a Transportation Demand Management (TDM) Plan for the City that includes a transit system focus. Provide incentives for implementation of TDM measures at local businesses and new developments.
Move T.2.e	Facilitate transportation equity through targeted provision of programs that encourage minority, low-income, disabled, and senior populations to take transit, walk, bike, use rideshare or car share.

ID #	Plays and Respective Supportive Moves
Play T.3	Develop and implement an Active Transportation Plan to shift 3% of passenger car vehicle miles traveled to active transportation by 2030, and 6% by 2045.
Move T.3.a	Develop and adopt an Active Transportation Plan consistent with Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) that will identify funding strategies and policies for development of pedestrian, bicycle, and other alternative modes of transportation projects. Establish citywide events, outreach, educational programs, and platforms to promote active transportation in the community in support of the General Plan.
Move T.3.b	In conjunction with the City's Complete Streets Policy, conduct a Street/Intersection Study to identify streets and intersections that can be improved for pedestrians and bicyclists through traffic calming measures and/or where multi-use pathway opportunities exist to increase active transportation.
Move T.3.c	Periodically review and update the City's Bicycle and Pedestrian Network Map and post throughout City.
Move T.3.d	Work with the South Pasadena Active, Active San Gabriel Valley (ActiveSGV), and/or Metro to develop programs and classes to teach and promote bicycle riding education and safety to residents of all ages and skill levels, as well as educate drivers.
Move T.3.e	Conduct a nexus study and develop an ordinance requiring payment of fees from development projects to implement safe active transportation routes and infrastructure citywide.
Move T.3.f	Amend zoning code to require installation of bike stalls or lockers at new developments, "mobility hubs", and during change of use of existing buildings, consistent with the General Plan.
Move T.3.g	Adopt a Trip Reduction Ordinance that includes requirements in the Zoning Code to require end-of-trip facilities for cyclists (e.g., showers, bike repair kiosks, and lockers) in new, non-residential building projects of a specified size.
Water Sector	
Play W.1	Reduce per capita water consumption by 10% by 2030 and 35% by 2045.
Move W.1.a	Continue to enforce the Model Water Efficient Landscapes Ordinance.
Move W.1.b	Work with the Los Angeles County Sanitation District (LACSD) and/or the Upper San Gabriel Valley Municipal Water District to bring recycled water lines and infrastructure to the City.
Move W.1.c	In conjunction with the Downtown Specific Plan and City General Plan actions, adopt an ordinance restricting the use of potable water for non-potable uses and requiring greywater capture for land uses that are excess water users (e.g. golf courses, car washes, large fields, etc.).
Move W.1.d	Implement Plays 1 through 4 under Goal II of the Green Action Plan on the provided implementation timeline, aiming to provide education and promotion of greywater systems. (See the City's Green Action Plan for more information).
Move W.1.e	In conjunction with Move II.1.1 of the City Green Action Plan, develop a Recycled Water Use Master Plan that identifies access to recycled water and quantity of recycled water available to the City, as well as establishes an implementation plan. The implementation plan shall identify land use types (i.e., landscaping, gold courses, fields) and specific projects that will switch from potable to recycled water use allowing for a goal of 20% of City's potable water use to be replaced with recycled water.
Move W.1.f	Implement 100% renewable power for all pumping and treatment of water.

ID #	Plays and Respective Supportive Moves
Solid Waste Sector	
Play SW.1	Implement and enforce SB 1383 organics and recycling requirements to reduce landfilled organics waste emissions 50% by 2022 and 75% by 2025.
Move SW.1.a	Adopt procurement policies to comply with SB 1383 requirements for jurisdictions to purchase recovered organic waste products.
Move SW.1.b	Adopt an ordinance requiring compliance with SB 1383. Ensure ordinances established through the City General Plan are consistent with SB 1383 requirements; and revise ordinances if necessary.
Move SW.1.c	Adopt an Edible Food Recovery Ordinance for edible food generators, food recovery services, or organization that are required to comply with SB 1383.
Move SW.1.d	Partner with the City's waste hauler, to provide organic waste collection and recycling services to all commercial and residential generators of organic waste.
Move SW.1.e	Adopt an ordinance requiring all residential and commercial customers to subscribe to an organic waste collection program and/or report self-hauling or backhauling of organics.
Move SW.1.f	Conduct a Feasibility Study and prepare an action plan to ensure edible food reuse infrastructure is sufficient to accept capacity needed to recover 20% of edible food disposed or identify proposed new or expanded food recovery capacity.
Move SW.1.g	Establish an education and outreach program for school children and adults around food waste prevention, nutrition education, and the importance of edible food recovery. Support City Green Action Plan Play III identified educational goals (Move III.1.3., Move III.1.4., Move III.1.6., Move III.2.1, Move III. 3.3, and Move III.4.2) through an established educational program.
Move SW.1.h	Establish an edible food recovery program supporting the City General Plan and the City Green Action Plan Move III.1.2 to minimize food waste.
Move SW.1.i	Adopt an ordinance or enforceable mechanism to regulate haulers collecting organic waste, including collection program requirements and identification of organic waste receiving facilities.
Move SW.1.j	Partner with City waste services to: <ul style="list-style-type: none"> ▪ Ensure organic waste collection from mixed waste containers are transported to a high diversion organic waste processing facility. ▪ Provide quarterly route reviews to identify prohibited contaminants potentially found in containers that are collected along route. ▪ Clearly label all new containers indicating which materials are accepted in each container, and by January 1, 2025, place or replace labels on all containers.
Play SW.2	Reduce residential and commercial waste sent to landfills by 50% by 2030 and 100% by 2045.
Move SW.2.a	Develop and implement a Zero Waste Plan, consistent with the General Plan, in order to reach South Pasadena's goal of zero waste by 2040.
Move SW.2.b	Provide ongoing education to residents, business owners, and South Pasadena School District regarding waste reduction, composting, and recycling.
Move SW.2.c	Increase reuse, recycling, and composting at temporary public events by mandating the installation of public recycling and composting containers and collection service; and encouraging reusable food ware, when relevant, according to the California State Retail Food Code.
Move SW.2.d	Develop a waste department or working group to enhance recycling and composting outreach and provide technical assistance or information in support of City Green Action Plan Move III. Additionally, implement and share a Recycle and Reuse Directory through City platforms, in support of Green Action Plan Move I.2.5.
Move SW.2.e	Adopt an ordinance requiring compliance with Sections 4.410.2, 5.410.1, 4.408.1, and 5.408.1 of the California Green Building Standards Code related to construction of buildings with adequate space for recycling containers and construction and demolition (C&D) recycling.
Move SW.2.f	Implement the City General Plan, requiring construction sites to separate waste for proper diversion and reuse or recycling.

ID #	Plays and Respective Supportive Moves
Move SW.2.g	Develop and implement a Waste Stream Education Program targeting property managers of multi-family residences and the commercial sector, in support of Goal III of the City Green Action Plan.
Move SW.2.h	Develop policies to mandate/encourage reduction of waste and reuse in the food industry (e.g. facilities serving prepared food and prepackaged food; home meal delivery services), hospitality industry, and other commercial industries. Efforts may include developing ordinances for food service ware and a ban on single-use individual toiletry bottles in hotels/motels, grant/discount programs for switching to reusables, fast food champion pilot project, and working with home meal delivery services (e.g., Blue Apron), etc. to explore opportunities to reduce single-use packaging and encourage reuse.
Move SW.2.i	Encourage reusable foodware; or if reusable foodware is not a feasible option, explore opportunities to mandate/encourage a switch to more environmentally friendly alternatives for various products in the commercial industry, when relevant.
Carbon Sequestration Sector	
Play CS.1 Increase carbon sequestration through increased tree planting and green space.	
Move CS.1.a	Identify and map public spaces that can be converted to green space, including public parking that can be converted to parklets, freeway airspace that can be made into green space, vertical walls that can be planted with vines, and rooftops of public buildings that can be developed into gardens.
Move CS.1.ab	Adopt a Greenscaping Ordinance that has a street tree requirement for all zoning districts, has a shade tree requirement for new development, requires greening of parking lots, and increases permeable surfaces in new development.
Move CS.1.c	Prepare and adopt an Urban Forest Management Plan for the City that includes an inventory of existing trees, identifies future tree planting opportunities, and a climate-ready tree palette, as well as ongoing operations and maintenance needs.
Move CS.1.d	Adopt a standard policy and set of practices for expanding urban tree canopy and placing vegetative barriers between busy roadways and developments to reduce exposure to air pollutants from traffic.
Municipal Sector	
Play M.1 Reduce carbon intensity of City operations.	
Move M.1.a	As recommended in the 2016 Renewable Energy Council Report, complete energy audits for all City facilities and implement all feasible recommendations for decarbonization and efficiency upgrades.
Move M.1.b	As recommended in the 2016 Renewable Energy Council Report, purchase renewable natural gas (RNG) for applicable City fleet vehicles.
Move M.1.c	Establish an employee rideshare program.
Move M.1.d	As recommended in the 2016 Renewable Energy Council Report, install PV solar systems at the City Hall and at Wilson Reservoir.
Move M.1.e	Adopt retrofitting policy for City owned buildings such that energy efficient and electrification retrofits are incorporated into City buildings as they become available.
Move M.1.f	Develop a policy for the City which would require all new building RFP's to include life cycle costing over 30 years and tie this directly to energy consumption and building electrification. This would include the buildings operational and maintenance costs and ensure that the City has the most cost effective (and sustainable) building possible.
Move M.1.g	As recommended in the 2016 Renewable Energy Council Report, invest all savings from City energy efficiency projects into a new revolving green fund that can be used to fund additional energy efficiency and GHG reduction projects.
Play M.2 Electrify the municipal vehicle fleet and mobile equipment.	
Move M.2.a	Develop a suite of transportation demand management tools to incentivize alternative transportation methods for employees, including telecommute options.
Move M.2.b	Provide bicycles and bicycle storage for employees to use during work hours for short business or personal trips.
Move M.2.c	Develop and adopt a policy to apply lifecycle assessment to all new vehicle and equipment purchases.

ID #	Plays and Respective Supportive Moves
Move M.2.d	Implement the City Fleet Alternative Fuel Conversion Policy developed under the City General Plan, electrifying the City vehicle fleet and using it to encourage residents to convert as well.
Move M.2.e	Install EV charging stations at municipal buildings.
Play M.3	Increase City's renewable energy production and energy resilience.
Move M.3.a	Conduct a Feasibility Study to determine which City buildings would serve as ideal resilience centers including solar and battery installations.
Move M.3.b	Convert all streetlights to light emitting diode (LED) bulbs.
Move M.3.c	Work with the CPA to identify and develop local solar projects to connect to the grid.
Move M.3.d	Install solar arrays at facilities that currently do not have solar arrays and work with emergency services to add solar and battery storage at priority locations. Review options for potential to combine multiple buildings into micro-grid systems.
Move M.3.e	Explore opportunities and partnerships to develop renewable-powered fuel cell micro-grids to provide back-up or primary power for critical facilities such as facilities providing essential services (e.g. water pumping facilities) and schools as a clean alternative to diesel generators.

Source: South Pasadena, City of. 2020. South Pasadena Draft Climate Action Plan.

The CAP Plays combined with Statewide legislation and initiatives and regional transportation programs will enable the City to meet its emissions reduction target of 40 percent below 1990 levels by 2030. Table 3 shows the contribution of the Statewide initiatives along with the CAP measures. The City needs to achieve a 18,578 MT CO₂e of GHG emissions reduction by 2030 to meet its goal. The total estimated GHG reductions accounted for in the CAP total 23,386 MT CO₂e by 2030.

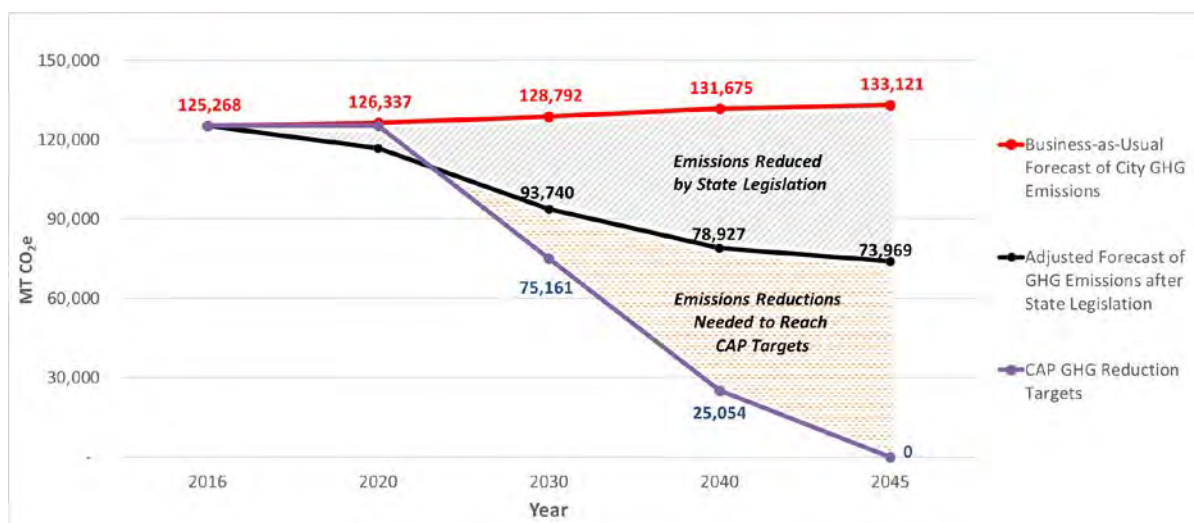
Table 3 South Pasadena 2030 GHG Reduction Target by Sector

State Initiative	Sector	2030 Reduction in City Emissions (MTCO ₂ e)
Advanced Clean Cars Program, Paveley Standards, Zero Emissions Vehicles Program, Clean Transit)	On-road Transportation	22,671
SB 100 and Renewable Portfolio Standard	Electricity	12,035
Title 24	Residential/Nonresidential Electricity and Natural Gas	346
A. Total State Initiative Emissions Reductions		35,052
B. Total City CAP Emissions Reductions		23,386
C. Total Expected Emissions Reductions (A+B)		58,438
D South Pasadena Emissions Reduction Requirement		53,625
E. Meets/exceeds State Goals? (C > D)		Yes

Source: South Pasadena, City of. 2020. Draft Climate Action Plan.

Figure 3 and Table 4 illustrate how the BAU emissions are estimated to increase, thus widening the emissions reductions needed by 2030. Figure 3 also shows emissions reductions expected from State level actions as well as the reductions needed to reach the South Pasadena emissions target.

Figure 3 South Pasadena Future GHG Emissions Projection and CAP Reduction Target



Source: South Pasadena, City of. 2020. Draft Climate Action Plan.

Table 4 South Pasadena Future GHG Emissions Projection and Reduction Target

Description	Emissions (MTCO ₂ e)
2016 Base Year Emissions	125,268
2030 BAU Emissions	128,792
2030 Target Emissions at 40% below 2016	75,161
2030 Required Reduction	53,631

Source: South Pasadena, City of. 2020. Draft Climate Action Plan

Implementation of the 2020 CAP Plays (listed in Table 2) could result in physical changes to the environment that could potentially have a significant impact. While individual projects resulting from these measures have not been identified for the purposes of this document, the types of actions that could result from realization of the CAP measures are taken into account in considering potential environmental impacts that could occur through implementation of the 2020 CAP. For example, projects or actions requiring ministerial approval, such as installation of electric vehicle charging stations and supporting infrastructure, as well as new bicycle or pedestrian facilities, would introduce physical changes related to the temporary presence and operation of construction vehicles and equipment during installation of required facilities and the long-term presence of new facilities such as bike and pedestrian facilities, solar arrays, and electric vehicle charging stations, which could alter pedestrian and vehicular traffic patterns.

Additionally, electrification retrofits may change the physical environment through the need for upgraded service and electrical panels, branch circuit upgrades, and installation of condensate drains to facilitate the installation of electric heat pumps for water and space heating. The physical changes these upgrades and additions would entail are dependent on the year of building construction and location of electrical and service panels and plumbing for connection of condensate drains; which in some cases may include modifications to the interior and/or exterior of buildings for wiring and panel replacement, and minor excavation for connection of drainage to

sewer systems. Future plans or projects requiring discretionary approval would be subject to environmental review under CEQA, and individual impact analyses will identify required plan- or project-specific mitigation measures where applicable.

7. Cumulative Projects Scenario

For purposes of CEQA cumulative impacts analysis of the South Pasadena 2020 CAP, the cumulative projects scenario is the total projected population growth, and the anticipated cumulative development to accommodate that growth, for South Pasadena in 2030. The South Pasadena General Plan Housing Element only projects City population through 2021,⁸ and thus SCAG-projected total South Pasadena population of 26,649 persons in 2030⁹ is utilized in this CEQA document.

8. Required Approvals

City of South Pasadena

Required approvals include:

- Adoption of the 2020 CAP Initial Study-Negative Declaration; and
- Adoption of the 2020 CAP.

Although individual plans or projects may be implemented later under the umbrella of the CAP, each individual plan or project would be subject to separate environmental review under CEQA.

Other Public Agencies

The City of South Pasadena has sole approval authority over the CAP. There are no other public agencies whose approval is required.

⁸ South Pasadena, City of. 2014. South Pasadena General Plan Housing Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 17, 2020.

⁹ SCAG. 2014. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. Demographics and Growth Forecast Appendix. Available: <http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf>. Accessed September 17, 2020.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

Determination

Based on this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Printed Name

Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Except as provided in Public Resources Code Section 21099, would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a. Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

a. *Would the project have a substantial adverse effect on a scenic vista?*

or

b. *Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

Within the City of South Pasadena, State Route 110 is a designated Federal Byway according to the California Scenic Highway System.¹⁰ The portion of State Route 110 with this designation connects East Colorado Boulevard on the northern end within adjacent City of Pasadena to the State Route 110/U.S. Highway 101 interchange on the southern end within adjacent City of Los Angeles. While the City of South Pasadena General Plan has not identified scenic vistas or scenic roadways, it states that the hillsides and ridgelines provide a scenic backdrop for the entire community and that viewsheds to and from these hillsides should be protected. In addition, General Plan Open Space and Resource Conservation Element Policies 5 and 6 as well as the Hillside Ordinance require scenic

¹⁰ California Department of Transportation (Caltrans). 2020. California State Scenic Highway System Map. Available: <<https://www.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983>>. Accessed September 27, 2020.

resource and landform preservation and regulate new development proposed within the hillside areas.¹¹ The CAP would promote infrastructure development and redevelopment that is complimentary to existing development, natural features, and land uses. The South Pasadena Municipal Code Chapter 34 (Trees and Shrubs) as well as General Plan Goals 16 and 17 require preservation and protection of trees and other natural constraints, including ridgelines geologic features, and open space, from unnecessary encroachment or destruction.¹² Furthermore, City Ordinance 2315 (Cultural Heritage Commission to Protect the City's Cultural Resources) and General Plan Open Space and Resource Conservation Element Policy 11 require the preservation of the natural landscape and historic character of districts, neighborhoods, and landmarks.

As a policy document, the CAP would not result in impacts related to scenic vistas and scenic highways. However, implementation of the following CAP Plays may promote infrastructure development and redevelopment through policies and programs. CAP Plays E.2 and E.3 promote electrification of newly constructed and existing buildings, and CAP Play E.4 promotes installation of battery back-up systems or generators and solar panels to facilitate the switching of building fuel away from natural gas within the City. CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, Play M.2 requires electrification of the municipal fleet and mobile equipment. Additionally, CAP Play CS.1, promotes the increased planting of trees and provision of green space. The physical changes these installations and enhancements would entail are dependent on the location of construction for the electric vehicle charging connections, active transportation pathways, and trees/green spaces.

However, it is anticipated that CAP projects would avoid alterations to historic buildings, mature trees, and other distinguishing scenic characteristics; adhere to City development zoning and regulations that require retention of City character and minimization of environmental and community setting impacts; and, if warranted, be reviewed by the City's Design Review Board. As such, the CAP would not result in adverse impacts related to scenic vistas, viewing corridors, or scenic roadways within the City. Furthermore, due to intervening development typical of an urban setting, proposed CAP projects would not likely be visible from the designated Federal Byway (State Route 110). Thus, scenic resources such as trees, rock outcroppings, and historic buildings would not be damaged within a State scenic highway. Therefore, the CAP would result in a less-than-significant impact related to scenic vistas and related to scenic resources within scenic highways.

LESS THAN SIGNIFICANT IMPACT

11 South Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 23, 2020.

12 South Pasadena, City of. 2020. Municipal Code Chapter 34 (Trees and Shrubs). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 23, 2020.

- c. *Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The City of South Pasadena is an urbanized area with visual character/quality goals and policies from the City General Plan Open Space and Resource Conservation Element to preserve and protect the scenic and visual quality of the community. The CAP would not involve land use or zoning changes, but would instead promote infrastructure development and redevelopment through policies and programs. Implementation of the following CAP Plays may promote infrastructure development and redevelopment that may impact visual character, as described below.

CAP Play E.4 promotes installation of battery back-up systems or generators and solar panels. CAP Play T.1 encourages installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, Play M.2 requires electrification of the municipal fleet and mobile equipment. Furthermore, CAP Play CS.1, promotes increased planting of trees and provision of green space. Planting trees, implementation of solar panels and electric vehicle charging stations, and introduction of active transportation infrastructure may slightly change visual character in the City. However, CAP projects would be located and designed to be complimentary to existing development and land uses in a manner consistent with applicable zoning and other regulations governing visual character and quality within the City of South Pasadena. In addition, CAP projects would be reviewed for consistency with the General Plan and other applicable regulatory land use actions prior to approval. Therefore, the CAP would result in a less-than-significant impact related to regulations of visual character and quality.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

The CAP would not involve land use or zoning changes. Rather the CAP would promote infrastructure development and redevelopment that is complimentary to existing development and land uses. As a policy document, the CAP would not directly result in impacts related to light and glare. However, implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Play E.4 promotes installation of solar panels to facilitate the switching of building fuel away from natural gas within the City. CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space.

CAP projects would be reviewed for consistency with the City Municipal Code to minimize environmental impacts related to light and glare through limitations of materials and shielding light structures. Presumably design and location of proposed solar infrastructure would be complimentary to existing development in the City. In addition, CAP projects would be reviewed for consistency with the General Plan and other applicable land use regulations prior to approval. Thus, the CAP would result in a less-than-significant impact related to light and glare.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Cumulative impacts related to scenic resources, visual character, and increased light and glare would generally be site-specific, and cumulative projects are not anticipated to contribute to cumulative aesthetic impacts with adherence to General Plan policies and the Municipal Code. Because of the developed nature of South Pasadena, future infrastructure projects under the CAP, in combination with other cumulative projects, would not adversely impact the visual character of the City. In addition, future development in the City would be required to comply with the City's Design Review process and be reviewed against applicable General Plan policies and City's design standards for design quality and compatibility with adjacent land uses. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to aesthetics.

LESS THAN SIGNIFICANT IMPACT

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Conflict with existing zoning for agricultural use or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

or

b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract*

The City of South Pasadena does not contain farmland or lands used for agricultural purposes.¹³ The CAP does not involve projects that would result in impacts related to conversion or loss of farmland. Therefore, the CAP would result in no impact related to degradation of agricultural resources or

¹³ South Pasadena, City of. 1998. General Plan Land Use Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 24, 2020.

conversion of agricultural land to non-agriculture uses, nor would there be a conflict with existing zoning or general plan land use designations.

NO IMPACT

c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

or

d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

The City does not contain forest or timberland resources. The South Pasadena Municipal Code Chapter 34 (Trees and Shrubs), establishes policies, regulations and standards necessary to ensure tree protection and manage an urban forestry program. And CAP Play CS.1 facilitates increased tree planting and green space. As such, the CAP would increase planting of trees as part of new development within the City and be consistent with the tree protection and urban forestry program requirements of the City Municipal Code. Therefore, the CAP would result in no impact related to degradation of forestry resources or conversion of forest land to non-forest uses, nor would there be a conflict with existing zoning or general plan land use designations.

NO IMPACT

e. *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

See impact discussions above under Topics 2a through 2d. The CAP would not result in other changes to the existing environment which, due to their location or nature, would result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. The City does not contain farmland or lands used for agricultural purposes. Additionally, the City does not contain forest or timberland resources. Cumulative projects are not anticipated to contribute to cumulative forestry impacts with adherence to General Plan policies. In addition, the CAP would not involve land use or zoning changes that could result in cumulative impacts related to conversion or loss of farmland or forest land. Therefore, implementation of the CAP would result in no cumulative impact related to agricultural and forestry resources.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

South Pasadena is located within the South Coast Air Basin (the Air Basin), which includes all of Orange County and the non-desert regions of Los Angeles County, Riverside County, and San Bernardino County. The Air Basin is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As the local air quality management agency, SCAQMD is required to monitor air pollutant levels to ensure that State and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether or not the standards are met or exceeded, the South Coast Air Basin is classified as being in “attainment” or “nonattainment.” Under State law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-attainment. SCAQMD is in non-attainment for the State and federal ozone standards, the State and federal PM_{2.5} (particulate matter up to 2.5 microns in size) standards, and the State PM₁₀ (particulate matter up to 10 microns in size) standards, and the federal lead standards and is required to prepare a plan for improvement.¹⁴ The sources, health effects, and typical controls associated with criteria pollutants are described in Appendix A.

The SCAQMD Clean Air Plan (Air Quality Management Plan [AQMP]) provides a plan to improve South Coast Air Basin air quality and protect public health as well as the climate. The most recent (2016) AQMP complies with State air quality planning requirements as codified in the California Health and Safety Code. The 2016 AQMP seeks to achieve multiple goals promoting reductions in criteria pollutant, greenhouse gases, and toxic risk, as well as efficiencies in energy use,

¹⁴ South Coast Quality Management District (SCAQMD). 2018. National and California Ambient Air Quality Standards Attainment Status for South Coast Air Basin. Available: <<http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=14>>. Accessed September 28, 2020.

transportation, and goods movement. The most effective way to reduce air pollution impacts on the health of the approximately 17 million residents in the South Coast Air Basin, including those in disproportionately impacted and environmental justice communities that are concentrated along our transportation corridors and goods movement facilities, is to reduce emissions from mobile sources, the principal contributor to our air quality challenges. Thus, AQMD worked closely with California Air Resources Board (CARB) and the United States Environmental Protection Agency (U.S. EPA) who have primary responsibility for these sources. The 2016 AQMP also includes transportation control measures developed by the Southern California Association of Governments (SCAG) from the 2016 Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS).¹⁵

The Federal Clean Air Act Amendments (CAAA) mandate that states submit and implement a State Implementation Plan (SIP) for areas not meeting air quality standards. The SIP includes pollution control measures to demonstrate how the standards will be met through those measures. The SIP is established by incorporating measures established during the preparation of Air Quality Management Plans (AQMP) and adopted rules and regulations by each local APCD and AQMD, which are submitted for approval to CARB and the U.S. EPA.¹⁶ The goal of an AQMP is to reduce pollutant concentrations below the National Ambient Air Quality Standards (NAAQS) through the implementation of air pollutant emissions controls.

The CAP would not involve land use or zoning changes, but would rather promote infrastructure development and redevelopment. Implementation of proposed measures would be beneficial by helping South Pasadena meet applicable air quality plan goals and generally reducing sensitive receptor exposure to pollutant concentrations. Although the purpose and intended effect of the CAP is to reduce GHG emissions generated in the City to help reduce the effects of climate change, many of its Plays and supporting Moves would also reduce criteria pollutant (i.e., air quality) emissions. CAP Plays E.1 through E.4 propose revisions to and new City ordinances requiring electrification of 100 percent new buildings and incremental portion of existing buildings as well as maximum usage of renewable energy and installation of solar systems, battery storage, and potential microgrids within the City to help meet community energy demand. In addition, CAP Plays M.1 through M.3 require reduced carbon intensity of municipal operations, electrification of the municipal fleet and mobile equipment, and increased municipal renewable energy production. This would decrease the use of non-renewable fuel sources for residential and non-residential land use operations. Additionally, CAP Plays T.2, T.3, and M.2 facilitate and incentivize bike lanes, bike parking, and public and shared transit, which would increase active transportation and decrease the vehicle miles traveled in South Pasadena. Furthermore, CAP Move W.1.f requires use of 100-percent renewable power for all pumping and treatment of water. These energy- and transportation-related measures would reduce air quality emissions as well as GHG emissions. Therefore, the CAP is consistent with the 2016 AQMP and would have no impact related to a conflict with or obstruction of the applicable air quality plan.

NO IMPACT

15 SCAQMD. 2016. Final SCAQMC Air Quality Management Plan. Available: <<http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp>>. Accessed September 28, 2020.

16 CARB. 2016. State Strategy for the State Implementation Plan for Federal Ozone and PM2.5 Standards. Available: <<https://ww3.arb.ca.gov/planning/sip/2016sip/2016sip.htm>>. Accessed September 28, 2020.

- b. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

City Municipal Code Chapter 4 (Air Pollution) identifies discharge of certain air pollutants as illegal within the City.¹⁷ The CAP would not involve land use or zoning changes but would instead promote infrastructure development and redevelopment. As a policy document, the CAP would not result in impacts related to criteria pollutants. However, implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Play E.4 promotes installation of solar PV systems and battery storage to provide greener renewable electricity within the City. CAP Play T.1 encourage the installation of electric vehicle charging stations and infrastructure, and CAP Plays T.2 and T.2 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment. Furthermore, CAP Play CS.1, facilitates increased trees and open space. Construction-related air quality impacts are generally associated with fugitive dust (PM₁₀ and PM_{2.5}) and exhaust emissions from heavy construction vehicles and soil-hauling trucks, in addition to Reactive Organic Gas (ROG) that would be released during architectural coatings drying. However, CAP projects would not entail large-scale construction and, thus, would result in low-level criteria pollutant emissions and negligible impacts to air quality. CAP projects would also be reviewed for consistency with SCAQMD air quality regulations and other applicable local, State, and federal regulations once project details and locations are known. Thus, construction associated with CAP implementation would result in a less-than-significant impact related to net increase of criteria pollutants. With respect to operational emissions, many CAP Plays would have the secondary benefit of reducing criteria pollutant emissions. CAP Plays aim to increase building renewable energy use, promote electric vehicles, reduce building natural gas use, reduce on-road gasoline fuel use, and reduce vehicle miles traveled. Implementation of such CAP Plays would be beneficial by helping South Pasadena meet applicable air quality plan goals. In addition, future CAP projects would be required to comply with local, regional, and State air quality regulations. Therefore, the CAP would result in a less-than-significant impact related to criteria pollutant emissions.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Plays E.2 and E.3 promote electrification of newly constructed and existing buildings, and CAP Play E.4 promotes installation of battery back-up systems or generators and solar panels to facilitate the switching of building fuel away from natural gas. Such electrification and renewable energy retrofits may change the physical environment through the need for upgraded service and electrical panels, branch circuit upgrades, solar panels, and installation of condensate drains to facilitate the installation of electric heat pumps for water and space heating. Additionally, CAP Play T.1 encourages the installation of electric vehicle charging stations and infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. CAP Play M.2 requires electrification of the municipal fleet and mobile equipment and incentivizes alternative transportation methods for municipal employees. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space, and CAP Play W.1 aims to bring recycled water lines and infrastructure to the City. Construction-related air quality impacts

¹⁷ South Pasadena, City of. 2020. Municipal Code Chapter 4 (Air Pollution). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 28, 2020.

are generally associated with fugitive dust (PM10 and PM2.5) and exhaust emissions from heavy construction vehicles and soil hauling trucks, in addition to ROG that would be released during the drying phase upon application of architectural coatings. However, implementation of proposed CAP measures would not include large-scale construction within South Pasadena. As such, it would result in low-level toxic air contaminant emissions. While the CAP could result in construction-related impacts related to toxic air contaminants and exposure to sensitive receptors, CAP projects would be reviewed for consistency to comply with SCAQMD air quality regulations and other applicable local, State, and federal regulations once project details and locations are known. Thus, the construction associated with implementation of the CAP would not result in substantial emissions of toxic air contaminants and exposure to sensitive receptors. No operational toxic air contaminant emissions are anticipated with implementation of the CAP. Therefore, the CAP would have a less-than-significant impact related to exposure of sensitive receptors to toxic air contaminants.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The CARB 2005 Air Quality Land Use Handbook: A Community Health Perspective identifies land uses associated with odor complaints which include: sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, auto body shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations. CAP Plays SW.1 and SW.2 promote participation in recycling and organic waste programs and reducing such waste going to landfills to achieve 75 percent reduction in waste-related GHG emissions by 2025. And CAP Play SW.2 encourages use of reusable foodware, reduction of waste in the food industry, and food waste being compostable. Also, CAP Plays SW.1 and SW.2 requires all new buildings to subscribe to recycling and organic waste collection services and provide adequate space for recycling and compost containers, in accordance with SB 1383 and AB 1826. As such, the CAP could result in minor odors related to compost. However, green waste collection bins and compost application are not identified on the list of “Sources of Odor Complaints” (Table 1-4) as provided in the CARB Air Quality Land Use Handbook and would not be anticipated to result in other emissions, such as those leading to odors, adversely affecting a substantial number of people. Therefore, the CAP would not facilitate development that could create adverse odors, and there would be a less-than-significant impact related to odors exposure.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. The cumulative projects could exceed applicable SCAQMD thresholds or be inconsistent with the Clean Air Plan. However, implementation of the CAP would have a less-than-significant contribution related to potential cumulative air quality impacts within the air basin and on sensitive receptors within the City of South Pasadena, given that the CAP would result in Citywide reduction of GHG emissions, energy use, single-occupancy vehicle travel, water use, and waste generation. As such, implementation of the CAP would not result in adverse impacts related to contribution of criteria pollutants to the air basin and exposure of sensitive receptors to toxic air contaminants. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to air quality.

LESS THAN SIGNIFICANT IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

South Pasadena is a primarily urbanized community with parks and recreational and open spaces incorporated throughout the City. The City's Municipal Code Chapter 34 (Trees and Shrubs), as well as the General Open Space and Resource Conservation Element incorporate goals and policies to protect biological resources, such as trees and other plant habitats, wildlife habitats, and connecting wildlife corridors in the City.

The CAP would not involve land use or zoning changes, but would instead promote infrastructure development and redevelopment. As a policy document, the CAP would not directly result in impacts related to wildlife species identified as candidate, sensitive, or special status. However, implementation of the following CAP Plays may promote infrastructure development and redevelopment and may result in impacts to species through habitat modification for purposes of infrastructure installation.

CAP Play E.4 promotes installation of solar panels to facilitate the switching of building fuel away from natural gas within the City. CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space. Planting new trees may slightly increase the City urban forestry canopy for use by migratory and nesting birds.

These CAP Plays would not conflict with the Municipal Code or goals/policies of the General Plan Open Space and Resource Conservation Element but would rather be consistent with and promote those plans. The CAP Plays would generally apply to the urbanized areas of the City, with little application to open space area or other locations where sensitive habitat and related species may be present. As such, the CAP itself would not have a substantial adverse effect on special-status wildlife species either directly through individual take or indirectly through species habitat modification. Therefore, the CAP would result in a less-than-significant impact related to special-status wildlife species.

LESS THAN SIGNIFICANT IMPACT

b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

or

c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The CAP would not involve land use or zoning changes, but would instead promote infrastructure development and redevelopment. As a policy document, the CAP could result in impacts related to habitat whether riparian, wetland, or other sensitive natural community. According to the General Plan Open Space and Resource Conservation Element, opportunities for wildlife (e.g., birds and mammals) habitat protection in South Pasadena include the following undeveloped or primarily undisturbed opens space areas:

- The canyons, hillsides and steep topography in the Monterey Hills, and the primarily City-owned vacant, undeveloped lands in the southwest corner of the Monterey Hills;
- The Arroyo Seco and adjacent areas;
- Lot 117 in the Altos de Monterey residential tract;
- The drainage wash east of Garfield;
- The vacated railway easement (between Marengo and Fair Oaks); and
- Upper slopes in the Monterey Road/Pasadena Avenue/Kolle Avenue/Brunswick Avenue/Oak Hill Avenue residential areas.¹⁸

CAP Play CS.1 promotes the increased planting of trees and provision of green space, which may slightly change the City's urban forestry program. As such, the CAP would be required to adhere to City development regulations and General Plan policies, including the City of South Pasadena Tree Preservation Ordinance, to retain urban forestry and minimize environmental impacts. CAP Play E.4 promotes installation of solar panels to facilitate the switching of building fuel away from natural gas within the City. CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Installation of new active transportation and electrical and renewable energy infrastructure may result in disturbance of habitat areas.

However, the CAP Plays and supporting Moves would generally apply to the urbanized areas of the City, with little application to parks, open spaces area, or other locations where sensitive habitat and related species may be present. CAP projects would be reviewed for consistency with applicable local, regional, and State regulations, once project details and locations are known. These CAP Plays and Moves would not conflict with the Municipal Code or objectives and policies of the General Plan or Conservation Guidelines but would rather be consistent with and promote those plans. As such, the CAP would not have a substantial adverse effect on riparian habitat or sensitive natural

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outh Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 23, 2020.

community, such as wetlands. Therefore, the CAP would have a less-than-significant impact related to sensitive natural plant communities.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The CAP would not involve land use or zoning changes, but would instead promote infrastructure development and redevelopment. As a policy document, the CAP would not result in impacts related to interference with species movement. However, implementation of the following CAP Plays may promote infrastructure development and redevelopment. According to the General Plan Open Space and Resource Conservation Element, the primary wildlife corridors in South Pasadena include the Arroyo Seco riparian corridor on the northeast and east sides of the City and the undeveloped or primarily undisturbed opens space areas listed above under Topic c that contain natural resources, such as steep slopes, canyons, hillside vegetation (both native and introduced), drainage courses, and vegetation associated with rainfall runoff.¹⁹

CAP Play E.4 promotes installation of solar panels to facilitate the switching of building fuel away from natural gas within the City. CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space. As such, the CAP would be required to adhere to City development regulations and General Plan policies, including the City of South Pasadena Tree Preservation Ordinance, to retain urban forestry and minimize environmental and community setting impacts. Installation of new active transportation and renewable energy infrastructure may result in disturbance of habitat areas. However, the CAP Plays would generally apply to the urbanized areas of the City with little application to parks, open spaces area, or other locations where wildlife corridors or native wildlife nursery sites may be present.

Furthermore, CAP projects would be reviewed for consistency with applicable local, regional, and State regulations, once project details and locations are known. The CAP Plays and supporting Moves would not conflict with the Municipal Code or objectives and policies of the General Plan but would rather be consistent with and promote those plans. Therefore, the CAP would result in a less-than-significant impact related to interference with species movement.

LESS THAN SIGNIFICANT IMPACT

¹⁹ South Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 23, 2020.

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

South Pasadena is a primarily urbanized community with neighborhood parks, community parks, and recreational spaces throughout the City.²⁰ The South Pasadena Municipal Code Chapter 34 (Trees and Shrubs) as well as the General Plan Open Space and Resource Conservation Element incorporate goals and policies related to natural resources protection in the City. Additionally, the South Pasadena Tree Preservation Ordinance was established to preserve the trees and plantings on City property and enhance the ecological benefit to the community by providing for the regulation of planting, management, maintenance, preservation and, where necessary, the removal of public trees. The City is not located within the jurisdiction of an adopted habitat conservation plan, natural community plan, or other approved local, regional, or State habitat conservation plan.

The CAP would not involve land use or zoning changes but would rather promote infrastructure development and redevelopment. The purpose and intended effect of the CAP is to reduce GHG emissions generated within the South Pasadena community, including related to City municipal operations, to help reduce the effects of climate change. Implementation of proposed CAP Plays and supporting Moves would be beneficial by helping South Pasadena meet applicable local policies and ordinances for protecting natural and biological resources. The CAP would not conflict with or obstruct implementation of the applicable policies for preserving biological resources and would not affect the City's ability to attain goals and policies that protect biological resources. Therefore, the CAP would result in no impact related to consistency with local biological resources protection policies.

NO IMPACT

- f. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The South Pasadena General Plan Open Space and Resource Conservation Element includes an inventory of open space resources as well as goals and policies to preserve natural resources, such as plant and wildlife habitats in the City. However, the City is not located within the jurisdiction of an adopted habitat conservation plan, natural community plan, or other approved local, regional, or State habitat conservation plan. As such, the CAP would not facilitate specific development projects, nor would it add or enable new development that would conflict with the adopted Municipal Code, General Plan, or other approved local, regional, or State habitat conservation plan. Therefore, the CAP would have no impact related to consistency with an adopted habitat or natural community conservation plan.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Implementation of cumulative projects could result in impacts to biological resources during infrastructure and building construction. The CAP would promote infrastructure development and redevelopment that is already accounted for in the General Plan. However, infrastructure development or redevelopment resulting from implementation of the CAP would be

²⁰ South Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 23, 2020.

required to comply with applicable General Plan policies and State and federal regulatory requirements regarding avoidance of special wildlife species and habitat. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to biological resources.

LESS THAN SIGNIFICANT IMPACT

5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

The City of South Pasadena has identified 2,718 properties that are both individually eligible resources and contributors to historic districts within its City limits.^{21 22} The CAP would not involve land use or zoning changes but would promote building energy retrofits as well as infrastructure development and redevelopment that would be complimentary to existing development. CAP projects in South Pasadena would be required to comply with City Ordinance 2315 (Cultural Heritage Ordinance) and General Plan Open Space and Resource Conservation Element purpose that require the identification and preservation of sites and structures of architectural, historical, archaeological, and cultural significance. This includes sites, structures, and areas that are associated with a historic event, activity, or persons that contribute to the historic character of districts, neighborhoods, landmarks, historic structures, and artifacts. CAP projects within the City would also be required to comply with General Plan Historic Preservation Element Policies 9.2 (promote historic districts and landmark designations), 9.4 (encourage and promote the adaptive reuse of historic resources), 2.5 (apply Secretary of Interior’s Standards and alternative buildings codes, such as the Uniform Code for Building Conservation and/or the State Historic Building Code, to qualified historic properties), and 3.1 (maintain landscape elements that contribute to the attractiveness and historic character of designated historic districts and landmarks).²³

Implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Plays E.2 and E.3 promote electrification of newly constructed and existing buildings and CAP Play E.4 promotes installation of battery back-up systems or generators and solar panels to facilitate the switching of building fuel away from natural gas within the City.

21 South Pasadena, City of. 2020. Historic Resources Survey Overview. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/historic-resources-survey>>. Accessed September 24, 2020.

22 South Pasadena, City of. 2017. Historic Resources Survey prepared by HRG Consultants.

23 South Pasadena, City of. 1998. General Plan Historic Preservation Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 25, 2020.

Electrification retrofits may change the physical environment through the need for upgraded service and electrical panels, branch circuit upgrades, and installation of condensate drains to facilitate the installation of electric heat pumps for water and space heating. The physical changes these upgrades and additions would entail are dependent on the year of building construction and location of electrical and service panels and plumbing for connection of condensate drains, which in some cases may include modifications to the interior and/or exterior of buildings for wiring and panel replacement and minor excavation for connection of drainage to sewer systems. However, it is anticipated that retrofit activities would avoid alterations to the historic materials and distinguishing character (e.g., overall shape of the building, its materials, craftsmanship, decorative details, interior spaces and features, and aspects of its site and environment) of identified historic resources and, if warranted, be reviewed by the City's Cultural Heritage Commission.

CAP projects would be reviewed for consistency with applicable local, regional, and State regulations, including City Ordinance 2315 and General Plan Open Space and Resource Conservation Element purpose that require the identification and protection of sites and structures of, architectural and historical significance, in order to avoid impacts related to unknown historical resources. As such, implementation of the CAP would not conflict with or obstruct the City's ability to comply with applicable historical resources preservation policies. Therefore, the CAP would result in a less-than-significant impact related to historical resources.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The City of South Pasadena has not identified known archeological sites within its City limits.^{24,25} However, as-yet to be discovered or unknown sites or resources may exist. The CAP would not involve land use or zoning changes but would promote building energy retrofits as well as infrastructure development and redevelopment. For example, CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space, and CAP Play W.1 aims to bring recycled water lines and infrastructure to the City. The physical changes these installations and enhancements would entail are dependent on the location of construction for the electric vehicle charging connections, active transportation pathways, and trees/green spaces, which in some cases may include minor temporary excavation.

These CAP Plays and supporting Moves would result in ground disturbance that could result in an impact on unknown archeological resources during construction. CAP projects would be reviewed for consistency with applicable local, regional, and State regulations, including City Ordinance 2315 that requires the identification and protection of sites and structures of, archaeological and cultural significance, in order to avoid impacts related to unknown archaeological resources. Therefore, the CAP would result in a less-than-significant impact related to unknown archaeological resources.

²⁴ South Pasadena, City of. 1998. General Plan Land Use Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 24, 2020.

²⁵ South Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 23, 2020.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

There are no known burial points or burial sensitivity areas within the City.^{26,27} However, there is the possibility of encountering unknown buried archaeological deposits and human remains throughout South Pasadena. Impacts to historic and archaeological resources are generally site-specific. The CAP would not involve land use or zoning changes but would promote building energy retrofits as well as infrastructure development and redevelopment. For example, CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space, and CAP Play W.1 aims to bring recycled water lines and infrastructure to the City. The physical changes these installations and enhancements would entail are dependent on the location of construction for the electric vehicle charging connections, active transportation pathways, and trees/green spaces, which in some cases may include minor temporary excavation.

These CAP Plays would result in ground disturbance that could result in an impact on unknown human remains during construction. However, implementation of CAP projects would be required to comply with City Ordinance 2315 and General Plan Open Space and Resource Conservation Element purpose that require the identification and protection of sites of archaeological and cultural significance, in order to avoid impacts related to unknown human remains. In addition, CAP projects would be required to comply with State coroner requirements related to burial findings, including assessment and mitigation incorporation once project details and locations are known. Therefore, the CAP would result in a less-than-significant impact related to unknown human remains.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. There is the possibility of encountering buried archaeological deposits and human remains throughout South Pasadena. Implementation of the cumulative projects would include infrastructure and building development that could have an impact on cultural resources during construction. Impacts to historic and archaeological resources are generally site-specific. Accordingly, as required under applicable laws and regulations, potential impacts associated with cumulative developments would be addressed on a case-by-case basis. No known cultural resources would be removed, modified, or otherwise affected by the implementation of the CAP. In addition, future projects in South Pasadena, including those associated with implementation of the CAP, would be required to comply with City Ordinance 2315 that requires the identification and protection of sites and structures of architectural, historical, archaeological and cultural significance,

26 South Pasadena, City of. 1998. General Plan Land Use Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 24, 2020.

27 South Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 23, 2020.

in order to avoid impacts related to unknown cultural resources. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to cultural resources.

LESS THAN SIGNIFICANT IMPACT

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

California is one of the lowest per-capita energy users in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate.²⁸ California consumed 292,039 gigawatt-hours (GWh) of electricity and 2,110,829 cubic feet of natural gas in 2017.^{29,30} The single largest end-use sector for energy consumption in California is transportation (39.8 percent), followed by industry (23.7 percent), commercial (18.9 percent), and residential (17.7 percent).³¹ Adopted in 2018, SB 100 accelerates the State’s Renewable Portfolio Standards Program, codified in the Public Utilities Act, by requiring electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

The City of South Pasadena has demonstrated its commitment to energy efficiency and renewable energy, as described in the Sustainability and GHG Reduction Efforts Setting section above. And City Municipal Code Chapter 9 (Buildings) specifies electrical code details by land use type within the City.³² As part of CAP Move E.2e and per the California Green Building Standards Code, the City will adopt an Electrification Readiness reach code for all new buildings and accessory dwelling units that bans the piping of natural gas to support fuel -switching and ultimate decarbonization purposes.³³ The City has also completed a total (i.e., community and municipal) GHG emissions inventory for

28 United States Energy Information Administration (USEIA). 2018. California Profile Overview. Available: <<https://www.eia.gov/state/?sid=CA>>. Accessed September 28, 2020.

29 California Energy Commission (CEC). 2019. Environmental Health and Equity Impacts from Climate Change and Mitigation Policies in California: A Review of the Literature. Accessed July 24, 2020.

30 USEIA. 2018. Natural Gas Consumption by End Use. Available: <https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm>. Accessed September 28, 2020.

31 USEIA. 2018. California Profile Overview. Available: <<https://www.eia.gov/state/?sid=CA>>. Accessed September 28, 2020.

32 South Pasadena, City of. 2020. Municipal Code Chapter 9 (Buildings). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 28, 2020.

33 A reach code is a local building energy code that “reaches” beyond State minimum requirements for energy use in building design and construction, creating opportunities for local governments to lead the way on clean air, climate solutions, and the renewable energy economy.

2016, which is summarized in Table 1. The largest sectors of GHG emissions are related to energy and transportation, followed by solid waste and water. According to the California Energy Commission (CEC), Los Angeles County consumed approximately 69,448.67 GWh in 2016.³⁴

The CAP is a policy document containing climate action Plays and supporting Moves to reduce South Pasadena GHG emissions. The CAP would not involve land use or zoning changes, but would promote infrastructure development and redevelopment. Furthermore, the purpose and intended effect of the CAP is to reduce GHG emissions generated in the City to help reduce the effects of climate change, including those emissions generated by energy demand and supply. The CAP encourages electrification, use of renewable energy, and energy efficiency in existing residential and commercial building stock as well as proposed new residential and commercial buildings. CAP Plays E.1 through E.4 propose revisions to and new City ordinances requiring electrification of 100 percent new buildings and incremental portion of existing buildings as well as maximum usage of renewable energy and installation of solar systems, battery storage, and potential microgrids within the City to help meet community energy demand. In addition, CAP Plays M.1 through M.3 require reduced carbon intensity of municipal operations, electrification of the municipal fleet and mobile equipment, and increased municipal renewable energy production. As such, the CAP would not result in the use of non-renewable resources in a wasteful or inefficient manner. Therefore, the CAP would result in a less-than-significant impact related to the wasteful, inefficient, or unnecessary consumption of energy. Rather, the CAP would assist in reducing use of non-renewable energy resources.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

As part of CAP Move E.2e and per the California Green Building Standards Code, the City would adopt an Electrification Readiness reach code for all new buildings and accessory dwelling units construction that bans the piping of natural gas. Therefore, construction and operation associated with infrastructure projects stemming from the CAP would be designed to comply with the energy source standards of the California Green Building Standard Code. Likewise, CAP projects would be reviewed for consistency with the energy efficiency standards in the 2016 California Energy Code, Part 6 of the California Building Standards Code (Title 24). And CAP Plays E.1 through E.4 propose revisions to and new City ordinances requiring electrification of 100 percent new buildings and incremental portion of existing buildings as well as maximum usage of renewable energy and installation of solar systems, battery storage, and potential microgrids in a manner involving ongoing adoption of the latest standards of the California Green Building Standards Code. In addition, CAP Plays M.1 through M.3 require reduced carbon intensity of municipal operations, electrification of the municipal fleet and mobile equipment, and increased municipal renewable energy production.

Thus, the CAP would revise but would not conflict with adopted renewable energy or energy conservation plans. Therefore, the CAP would result in a less-than-significant impact related to consistency with State and local renewable energy and energy efficiency plans. Rather, the CAP would be consistent with State and local plans for renewable energy and energy efficiency.

LESS THAN SIGNIFICANT IMPACT

³⁴ California Energy Commission. 2016. Electricity Consumption by County. Available: <<http://ecdms.energy.ca.gov/elecbycounty.aspx>>. Accessed September 28, 2020.

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Implementation of the CAP would result in reducing use of non-renewable energy resources across the community and in particular with remodels and new construction. And implementation of solar infrastructure and implementation of active transportation infrastructure would require small-scale construction. As such, construction of the cumulative projects within the City could result in temporary energy consumption impacts. Therefore, implementation of the CAP would result a less-than-significant cumulative impact related to energy.

LESS THAN SIGNIFICANT IMPACT

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7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
▪ Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- *rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;*
- *strong seismic ground shaking;*
- *seismic-related ground failure, including liquefaction; or*
- *landslides?*

South Pasadena is located in a seismically active region in an area of potential fault rupture, strong ground shaking, and slope instability. These geologic and seismic hazards can affect the structural integrity of structures and utilities, and in turn can cause severe property damage and potential loss of life. Primary seismic faults located near the City are the Sierra Madre Fault system, the Whittier Fault, and the San Andreas Fault. An earthquake anywhere along these faults could trigger secondary seismic hazard impacts within South Pasadena. Three other faults influence the City of South Pasadena: the Raymond Hill Fault, the York Boulevard Fault, and the Elysian Park Fault. Between these three faults, much of the City is subject to earthquake seismic hazards but is at low risk for liquefaction. Landslide areas exist in the Repetto Hills just inside the western City boundary, and there is the Monterey Road Landslide area in the southwest portion of the City that is extremely unstable in certain portions. The City General Plan Safety and Noise Element establishes policies and standards (see Policies 1 and 3) related to minimizing personal and property damage resulting from seismic hazards, including earthquakes and landslides.³⁵ Projects are required to conform to applicable provisions of the current California Building Code. The CAP is a policy document containing climate Plays and supporting Moves to reduce GHG emissions and is consistent with the South Pasadena General Plan and other regional regulations. The CAP does not propose habitable development that could result in exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides. Therefore, the CAP would result in no impact related to seismic- and landslide-related hazards.

NO IMPACT

b. *Would the project result in substantial soil erosion or the loss of topsoil?*

The CAP would not involve land use or zoning changes, but it would promote infrastructure development and redevelopment. As a policy document, the CAP would not directly require ground-disturbing activities. However, implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Additionally, CAP Play CS.1, promotes the increased planting of trees and provision of green space, and CAP Play W.1 aims to bring recycled water lines and infrastructure to the City. The physical changes these installations and enhancements would entail are dependent on the location of construction for the electric vehicle charging connections, active transportation pathways, and trees/green spaces, which in some cases

³⁵ South Pasadena, City of. 1998. General Plan Safety and Noise Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 28, 2020.

may include minor temporary excavation. As such, the CAP could result in construction-related soil erosion and topsoil loss impacts associated with such installations and plantings. However, CAP projects would be reviewed for consistency with South Pasadena General Plan policies and other local and State geology and soils regulations prior to final siting and construction. Therefore, the CAP would result in a less-than-significant impact related to soil erosion, loss of topsoil, and the presence of unstable soils.

LESS THAN SIGNIFICANT IMPACT

c. *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

or

d. *Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

Most of the steeper developed and undeveloped land in the western and southwestern portions of South Pasadena have been identified as susceptible to landslides. Therefore, the General Plan Safety and Noise Element regulates development and structures in terms of hazards minimization.³⁶ The CAP is a policy document containing programs that are consistent with the General Plan. Some of the proposed CAP Play and supporting Moves promote small-scale construction projects, such as electric vehicle charging station construction. However, CAP projects would be reviewed for consistency with local and State geotechnical regulations prior to final siting and construction. Therefore, the CAP would result in a less-than-significant impact related to risks associated with location on unstable geologic unit or soil or on expansive soils.

LESS THAN SIGNIFICANT IMPACT

e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The CAP would not involve the development of habitable structures and, thus, no use of septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur related to soil capability support of alternative wastewater disposal systems.

NO IMPACT

f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The City of South Pasadena has not identified unique paleontological resources or sites within City limits.^{37 38} The City lies within the northeastern block of the Los Angeles Basin, part of the Transverse Range Geomorphic Province. The northeast block is a deep synclinal basin of mostly marine Cenozoic rocks. The City is underlain by six mapped geologic units: middle to late Holocene

36 South Pasadena, City of. 1998. General Plan Safety and Noise Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 28, 2020.

37 South Pasadena, City of. 1998. General Plan Land Use Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 24, 2020.

38 South Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 23, 2020.

alluvium (Qa); middle to late Holocene alluvial clay and sand (Qg); Pleistocene to early Holocene alluvial fan deposits (Qof); Pliocene Fernando Formation (Tfsc); Miocene Monterey Formation (Tmsl); and Miocene Topanga Formation (Ttqdc).^{39,40} The Fernando, Monterey, and Topanga formations are comprised of marine sediment with an abundant and diverse marine invertebrate and vertebrate fossil record. Early Holocene and Pleistocene alluvial units throughout the Los Angeles Basin have a robust and diverse terrestrial vertebrate fossil record. The Society of Vertebrate Paleontology (SVP) has established standards for classifying paleontological sensitivity of geologic units based on the known or inferred fossil records of each geologic unit,⁴¹ and classifies paleontological sensitivity as one of four classes: No; Low; Moderate; and High. Early Holocene and Pleistocene alluvium, the Fernando Formation, the Monterey Formation and the Topanga Formation are all classified as having a High Paleontological Sensitivity. Middle to Late Holocene alluvium is classified as having Low Paleontological Sensitivity.

As a policy document, the CAP would not directly result in impacts related to paleontological resources or unique geologic features. However, implementation of the following CAP Plays and supporting Moves may promote infrastructure development and redevelopment. For example, CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space, and CAP Play W.1 aims to bring recycled water lines and infrastructure to the City. The physical changes these installations and enhancements would entail are dependent on the location of construction for the electric vehicle charging connections, active transportation pathways, and trees/green spaces, which in some cases may include minor temporary excavation. These small-scale construction projects may expose paleontological resources during ground disturbing activities. However, CAP projects would be reviewed for consistency with geotechnical and paleontological regulations prior to final siting and construction. In addition, CAP projects would be located and designed strategically to reduce ground disturbance to the maximum extent possible. Therefore, the CAP would result in a less-than-significant impact related to paleontological resources or unique geologic features.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Cumulative projects could expose additional people and property to seismic and geologic hazards that are present in the region. The magnitude of geologic hazards for individual projects, including those associated with implementation of the CAP, would depend upon the location, type, and size of development and the specific hazards associated with individual sites. Specific geologic hazards associated with individual project sites would be limited to those sites without affecting other areas. Similarly, potential impacts to paleontological resources associated with each individual site would be limited to that site without affecting other areas, and impacts

39 Dibblee, T.W., and Ehrenspeck, H.E., ed. 1989. Geologic map of the Los Angeles quadrangle, Los Angeles County, California. Dibblee Geological Foundation, Dibblee Foundation Map DF-22, Map Scale:1:24,000.

40 Dibblee, T.W., and Ehrenspeck, H.E., ed. 1989. Geologic map of the Pasadena quadrangle, Los Angeles County, California. Dibblee Geological Foundation, Dibblee Foundation Map DF-23, Map Scale:1:24,000.

41 Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Unpublished technical guidelines.

related to these resources would be minimized on a case-by-case basis. Compliance with existing regulations, including California Building Code requirements, City-issued permit requirements, and construction general permit requirements, would minimize potential cumulative seismic and geologic impacts. Seismic and geologic hazards would be addressed on a case-by-case basis and would not result in cumulative impacts. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to geology and soils.

LESS THAN SIGNIFICANT IMPACT

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8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

The greenhouse effect is a natural occurrence that helps regulate the temperature of the Earth. The majority of radiation from the Sun hits Earth’s surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions. This process is essential to support life on Earth, because it warms the planet by approximately 60°F. Emissions from human activities since the beginning of the industrial revolution (approximately 270 years ago) have been adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat and contribute to an average increase in Earth’s temperature. Global warming is the observed increase in the average temperature of the Earth’s surface, and climate change is the resultant change in wind patterns, precipitation, and storms over an extended period.

GHGs produced by human activities include CO₂, methane (CH₄), nitrous oxide (N₂O), hydroflourocarcons (HFCs), perfluorinated compound (PFC), and sulfur hexafluoride (SF₆) (see Appendix B for more details related to these GHG gases).⁴² Combustion of fossil fuels (gasoline, natural gas, and coal), deforestation, and decomposition of waste release carbon into the atmosphere that had been locked underground and stored in oil, gas, and other hydrocarbon deposits or in the biomass of surface vegetation. Since 1750, estimated concentrations of CO₂, CH₄, and N₂O in the atmosphere have increased by over 36 percent, 148 percent, and 18 percent respectively, primarily due to human activity. Emissions of GHGs affect the atmosphere directly by changing its chemical composition.

Changes to the land surface also indirectly affect the atmosphere by changing the way in which Earth absorbs gases from the atmosphere. Potential impacts in California due to climate change

⁴² The proposed CAP only considers emissions of CO₂, CH₄, and N₂O because these are the GHGs most relevant to local government policymaking. These gases comprise a large majority of GHG emissions at the community level. The remaining gases (HFCs, PFC, and SF₆) are emitted primarily in private sector manufacturing and electricity transmission and are the subject of regulation at the state level. Therefore, these gases were omitted from the CAP.

include sea level rise, more extreme-heat days and high-ozone days, larger and more frequent forest fires, and more drought years.⁴³ Although GHG emissions do not typically cause direct health impacts at a local level, GHG emissions can result in indirect health impacts by contributing to climate change, which can have public health implications. The primary public health impacts of climate change include the following:⁴⁴

- Increased incidences of hospitalization and deaths due to increased incidences of extreme heat events;
- Increased incidences of health impacts related to ground-level ozone pollution due to increased average temperatures that facilitate ozone formation;
- Increased incidences of respiratory illnesses from wildfire smoke due to increased incidences of wildfires;
- Increased vector-borne diseases due to the growing extent of warm climates; and
- Increased stress and mental trauma due to extreme events and disasters, economic disruptions, and residential displacement.

The City of South Pasadena has completed a total South Pasadena (i.e., community and municipal) GHG emissions inventory for the year 2016, which is summarized in Table 1. The largest sectors of GHG emissions are related to energy and transportation, followed by solid waste and water. The CAP Plays and Moves (i.e., measures and actions) address municipal and communitywide GHG emissions. As part of the CAP, South Pasadena is committed to an emissions reduction target of 40 percent below 2016 levels by 2030 and reaching a longer-term goal of carbon neutrality by 2045. This 2030 GHG emissions goal is selected to be consistent with SB 32 State emissions targets and CEQA Guidelines § 15183.5 for a qualified GHG emissions reduction strategy as well as to be achievable by City-supported Plays identified in the 2020 CAP. The CAP includes a business-as-usual (BAU) forecast of GHG emissions that will enable the City to estimate the amount of emissions reductions needed to meet its goal.

The 2020 CAP includes Play C.1 to educate the community regarding ways to live a sustainable lifestyle, increase use of renewable power, electrify buildings, and reduce use of natural gas. It also includes Plays to increase use of zero-emission vehicles; increase use of public, active, and shared transportation; reduce water consumption and waste generation; increase recycling and composting; and increase tree planting and green space. Finally, it includes Plays M.1 through M.3 related to reduced carbon intensity of municipal operations, electrification of the municipal fleet and mobile equipment, and increased municipal renewable energy production that will continue to allow the City to lead by example. Table 2 includes a complete list of 2020 CAP Plays and descriptions of respective supporting Moves. The Plays included in the CAP combined with Statewide legislation and initiatives and regional transportation programs will enable the City to meet its emissions reduction target of 40 percent below 1990 levels by 2030. Table 3 shows the contribution of the Statewide initiatives along with the CAP Plays and Moves. The City needs to achieve a 18,578 MT CO₂e of GHG emissions reduction by 2030 to meet its goal. The total estimated GHG reductions accounted for in the CAP total 23,386 MT CO₂e by 2030.

Figure 3 and Table 4 illustrate how the BAU emissions are estimated to increase, thus widening the emissions reductions needed by 2030. Figure 3 also shows emissions reductions expected from State level actions as well as the reductions needed to reach the South Pasadena emissions target.

43 California Energy Commission (CEC). 2009. Environmental Health and Equity Impacts from Climate Change and Mitigation Policies in California: A Review of the Literature. Accessed July 24, 2020.

44 California Natural Resources Energy. 2018. California's Fourth Climate Change Assessment Statewide Summary Report. Available: <<http://www.climateassessment.ca.gov/state/>>. Accessed July 24, 2020.

The CAP Plays and Supporting Moves combined with Statewide legislation and initiatives and Countywide transportation programs will enable the City of South Pasadena to meet its 2030 emissions reduction target.

The CAP includes a list of 15 Plays intended to reduce South Pasadena GHG emissions. Implementation of the CAP would result in the reduction of community and municipal operational GHG emissions, with only generating temporary GHG emissions during construction of infrastructure development and redevelopment such as electric vehicle charging stations, bicycle paths, etc. Additionally, the CAP would serve as a pathway to reduce GHG emissions and introduce other beneficial environmental and sustainability effects. These benefits include reduction in building energy consumption and vehicle miles traveled (and thus air pollution), water consumption, and solid waste generation. Therefore, the CAP would result in a less-than-significant impact related to generation of GHG emissions.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The CAP is a policy-level document that sets strategies to reduce GHG emissions within the City in an effort to also comply with State regulations. As discussed under Topic 8a above, the CAP includes Plays and Moves to reduce City GHG emissions from forecasted business-as-usual levels by approximately 23,386 MT CO₂e by 2030. The purpose of the CAP is to meet South Pasadena's proportionate fair share of the Statewide GHG emissions reduction target set by AB 32 and SB 32 and work toward the State's longer-term target of carbon neutrality identified in Executive Order B-55-18.

The CAP would not conflict with any applicable GHG reduction plans, including the California Climate Change Scoping Plan and the California Climate Change Scoping Plan Updates. The CAP identifies how the City would achieve consistency with the Statewide GHG emissions limit. The CAP would serve as a pathway to reduce GHG emissions and introduce other beneficial environmental and sustainability effects. These benefits include reduction in building energy consumption and vehicle miles traveled (and thus air pollution), water consumption, and solid waste generation. Therefore, the CAP would result in a less-than-significant impact related to consistency with applicable GHG emissions reduction plans, policies, and regulations.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Analyses of GHG emissions and climate change are cumulative in nature, as they affect the accumulation of GHG emissions in the atmosphere. Cumulative projects that exceed the thresholds discussed above would have a significant impact related to GHG emissions and climate change, both individually and cumulatively. The CAP creates a GHG emissions reduction strategy (consistent with Section 15183.5 of the CEQA Guidelines) for the City of South Pasadena. The CAP also includes a series of Plays and Moves that are intended to reduce community and municipal GHG emissions by approximately 40 percent below 2016 levels by 2030, which provides substantial progress toward the City meeting State goals. As such, the CAP would result in the reduction of GHG emissions rather than generating GHG emissions. However, some GHG emissions would occur

during construction of CAP-specific infrastructure projects. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to GHG emissions.

LESS THAN SIGNIFICANT IMPACT

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Hazardous materials are utilized by a number of businesses in South Pasadena, and several facilities are actual hazardous waste generators. Any number of common household products - motor oil, old paints, cleaners, aerosols, and pesticides - contain hazardous materials, potentially destined for disposal in landfills where they could leach through the soil and contaminate groundwater. Current truck routes pass over streets on which are located schools, hospitals and residential areas, perhaps not the most suitable routes for the transport of hazardous materials. The City of South Pasadena has hazardous waste storage and hazardous materials transport goals and policies in the City General Plan Safety and Noise Element. Specifically, Policy 4 aims to protect citizens and property from use, transport, and disposal of hazardous materials. Furthermore, South Pasadena has adopted the Los Angeles County Hazardous Waste Management Plan into its plans and processes by reference.⁴⁵

The CAP is a policy document containing Plays and Moves to reduce GHG emissions. The proposed CAP does not involve identified site-specific development, nor would it facilitate new development. Implementation of the CAP would not involve the routine transport, use, or disposal of hazardous materials and would not create reasonably foreseeable upset and/or accidental conditions involving the release of hazardous materials into the environment.

Implementation of some of the CAP Plays and supporting Moves, such as the installation of bicycle lanes, energy retrofits, and electric vehicle charging stations, may involve the use and transport of fuels, lubricating fluids, and solvents, among other activities. These types of materials are not considered acutely hazardous, and all storage, handling, and disposal of these materials are regulated by the California Department of Toxic Substances Control (CDTSC), United States Environmental Protection Agency (USEPA), Occupational Safety & Health Administration (OSHA). Additionally, CAP projects would be reviewed for consistency with the General Plan and Municipal Code and applicable local, State, and federal regulations. Therefore, the CAP would result in a less-than-significant impact related to creating a significant hazard.

LESS THAN SIGNIFICANT IMPACT

45 South Pasadena, City of. 1998. General Plan Safety and Noise Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 28, 2020.

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The CAP is a policy document containing Plays and Moves to reduce GHG emissions. The proposed CAP does not include site-specific proposals and development, nor would it emit or handle hazardous materials. Implementing some CAP Plays and Moves may require future development or improvements, such as bike paths, solar panels, electric vehicle charging stations, or building improvements related to electrification. However, CAP projects would be reviewed for consistency with the General Plan and Municipal Code and applicable local, State, and federal regulations. Therefore, the CAP would result in a less-than-significant impact related to handling of hazardous materials in proximity to an existing or proposed school.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The CAP is a policy document containing Plays and supporting Moves to reduce GHG emissions. The CAP does not include site-specific proposals and development, but the CAP Plays and Moves could result in projects that could be located on listed hazardous materials site. However, CAP projects would be reviewed for consistency with the General Plan and Municipal Code and would be required to comply with applicable local, State, and federal regulations. Therefore, the CAP would result in a less-than-significant impact related to location on a listed hazardous materials site.

LESS THAN SIGNIFICANT IMPACT

- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

There are no airports or private airstrips within South Pasadena. The Hollywood Burbank and San Gabriel Airports are located approximately 13 miles northwest and eight miles east of the City, respectively. The CAP is a policy document that would not increase airport activity or result in additional habitable development that could increase potential exposure of persons to aircraft-related hazards. CAP projects would also be reviewed for consistency with the City General Plan Safety and Noise Element and other applicable local and State regulations. Therefore, the CAP would result in no impact related to risks associated with location proximate to a public airport.

NO IMPACT

- f. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The South Pasadena emergency management program works in coordination with all the City Departments to strengthen the City's ability to prepare for, mitigate, respond to, and recover from any type of disaster. The South Pasadena Fire Department is the lead department to coordinate all emergency management activities for the City. The City has an Emergency Management Program that includes the following elements necessary to respond quickly and effectively to major emergencies: an Emergency Operations Plan, Emergency Operations Center (EOC), Emergency Response Program, Public Education Program, and trained Community Emergency Response Team (CERT). In addition, a variety of activities, programs, and projects designed to enhance the City's

preparedness are conducted regularly such as training, drills, and disaster exercises. Furthermore, the City of South Pasadena is a member of Disaster Management Area C, a partnership between Los Angeles County and ten cities to promote the coordination of disaster management, planning and preparedness efforts.⁴⁶ The CAP is a policy document intended to reduce GHG emissions generated within South Pasadena. The proposed CAP does not involve site-specific development, nor would it facilitate new development that would interfere with adopted emergency plans. Therefore, the CAP would result in no impact related to impairment or interference with implementation of an emergency response or evacuation plan.

NO IMPACT

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

The major potential sources of wildland fire in South Pasadena are the Monterey and Repetto Hills and natural brushlands of the Arroyo Seco. The steeper slopes of the San Gabriel Mountains located further north and the vegetated Puente Hills slopes located further south pose a secondary threat to the City in that windborne embers may travel long distances in the wind and ignite rooftops and/or areas of dry grasses. According to California Department of Forestry and Fire Protection (CalFIRE), South Pasadena is not located in designated California Fire Hazard Severity Zones,⁴⁷ or in a State Responsibility Area.⁴⁸ However, California Fire Hazard Severity Zones are located immediately west of South Pasadena in Los Angeles City limits.⁴⁹ Per the South Pasadena General Plan Safety Element, the threat of wildland fire to the City is generally low.⁵⁰ A small portion of the southwestern corner of the City is identified in the Los Angeles County General Plan as having a high wildland fire hazard potential.⁵¹ Furthermore, City Municipal Code Chapter 14 (Fire Prevention) provides regulations related to fire prevention within the City.⁵² The CAP is a policy-level document that does not propose specific or other physical changes such as habitable development that could be put at risk in the case of a wildfire, nor does it grant entitlements for development that would have the potential to directly cause wildfire. Rather, the CAP would aim to reduce natural gas infrastructure that poses wildfire risk if damaged during seismic events and to underground new or restructured electric power lines that pose wildfire risk if damaged during high-wind events. Thus, the CAP would result in no impact related to wildfire.

NO IMPACT

46 South Pasadena, City of. 2020. Disaster Preparedness Overview. Available: <<https://www.southpasadenaca.gov/residents/disaster-preparedness>>. Accessed September 28, 2020.

47 California Department of Forestry and Fire Protection (CalFIRE). 2020. Fire Hazard Severity Zone Viewer. Available: <<https://egis.fire.ca.gov/FHSZ/>>. Accessed September 25, 2020.

48 California Department of Forestry and Fire Protection (CalFIRE). 2020. California State Responsibility Areas. Available: <<https://www.arcgis.com/home/webmap/viewer.html?layers=5ac1dae3cb2544629a845d9a19e83991>>. Accessed September 25, 2020.

49 California Department of Forestry and Fire Protection (CalFIRE). 2020. Fire Hazard Severity Zone Viewer. Available: <<https://egis.fire.ca.gov/FHSZ/>>. Accessed September 25, 2020.

50 South Pasadena, City of. 1998. General Plan Safety and Noise Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 28, 2020.

51 Los Angeles, County of. 2015. General Plan 2035 Safety Element. Available: <<http://planning.lacounty.gov/generalplan/generalplan>>. Accessed September 25, 2020.

52 South Pasadena, City of. 2020. Municipal Code Chapter 14 (Fire Prevention). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 25, 2020.

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Hazards and hazardous materials impacts are typically site specific in nature. Cumulative projects, including the CAP, are not anticipated to contribute to cumulative hazards and hazardous materials impacts with adherence to applicable General Plan policies, applicable regional and County regulations (e.g., Los Angeles County Hazardous Waste Management Plan), and applicable State and federal regulatory requirements. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to hazards and hazardous materials.

LESS THAN SIGNIFICANT IMPACT

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10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

The CAP is a policy document containing Plays and Moves intended to reduce GHG emissions in the City. CAP projects would be reviewed for consistency with local and State regulations, including the implementation of stormwater pollution prevention plans (SWPPPs). As such, the CAP's related infrastructure changes would not utilize or alter water supply or result in new or different wastewater discharge. Additionally, proposed infrastructure would be small in scale and not result in substantial, adverse impacts related to surface or groundwater quality. Therefore, the CAP would result in no impact related to surface or groundwater water quality in South Pasadena.

NO IMPACT

- b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The CAP is a policy document containing Plays and supporting Moves that are consistent with the City's General Plan. CAP Play W.1 would continue enforce the State Model Water Efficient Landscape Ordinance, promote use of recycled water, and promote reduced consumption of potable water. In addition, implementation of the CAP Plays and supporting Moves related to infrastructure development and redevelopment would not substantially degrade groundwater quality or groundwater recharge. As a result, no adverse impacts related to groundwater water quality or resources would occur.

CAP Play CS.1 facilitates increased trees and open space. Encouragement of tree planting and open space areas and, thus provision of pervious areas in the City would increase groundwater recharge. As such, implementing the CAP would have a beneficial effect related to local groundwater recharge as well as support groundwater management in South Pasadena. Therefore, the CAP would result in no impact related to impedance of sustainable groundwater management in the Main San Gabriel Groundwater Basin.

NO IMPACT

- c. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
- i. *result in substantial erosion or siltation on- or off-site;*
 - ii. *substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;*
 - iii. *create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*
 - iv. *impede or redirect flood flows?*

Implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Play T.1 promotes public and shared transit as well as active transportation via provision of bike facilities and parking to encourage walking and biking, and CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. CAP Play CS.1 also facilitates increase trees and open space. Providing new active transportation infrastructure and planting new trees and providing additional open space may slightly change the City's existing drainage pattern and amount of impervious surface. Construction of infrastructure development and redevelopment could also result in erosion and potential redirect of flood flows or drainage patterns; however, implementation of CAP projects would not include large-scale construction within South Pasadena.

Additionally, CAP projects would be reviewed for consistency with applicable local and State regulations, including the implementation of a SWPPP, once project details and locations are known. And given the associated small footprints, the CAP-related infrastructure changes would not result in substantial additional erosion or runoff or impede/redirect flood flows. Therefore, the CAP would result in a less-than-significant impact related to drainage flows and polluted runoff.

LESS THAN SIGNIFICANT IMPACT

- d. *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The City is not located within designated seiche or tsunami zones. The entirety of the City is located within Flood Zone C (areas of minimal flooding) defined by Federal Emergency Management Agency (FEMA).⁵³ Devils Gate Dam is located approximately five miles north of the northwesterly City boundary and is part of the Los Angeles County Flood Control District with a capacity of 2,709 acres feet and representing potential risk of dam inundation in the Arroyo Seco Valley in the event of dam failure. In addition, homes below should the City's water tower and reservoirs could be damaged by flood waters in a seismic event. In South Pasadena, construction, including infrastructure projects associated with implementation of the CAP, must comply with City General Plan Safety and Noise Element goals/policies related to hazards, including flooding hazards.

Elevation in South Pasadena averages 659 feet above mean sea level. The areas below the Devils Gate Dam and City water tower and reservoirs are at potential risk for flood inundation hazards related to infrastructure failure that could occur during a seismic event. However, the CAP does not propose habitable development and, thus, would not increase flooding or inundation risks to

⁵³ Federal Emergency Management Agency (FEMA).2020. FEMA Flood Map Service Center. Available: <<https://msc.fema.gov/portal/search?AddressQuery>>. Accessed September 28, 2020.

persons and habitable structures related to sea level rise. Therefore, the CAP would result in a less-than-significant impact related to flooding and inundation resulting in release of pollutants.

LESS THAN SIGNIFICANT IMPACT

- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The CAP Plays would not include direct extraction of groundwater and rather encourages water savings through conservation. The CAP would not interfere with or obstruct implementation of water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Therefore, the CAP would result in no impact related to consistency with a water quality control plan or sustainable groundwater management plan.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Cumulative projects, including the CAP, are not anticipated to contribute to cumulative hydrology and water quality impacts with adherence to applicable General Plan policies and applicable State and federal regulatory requirements. Implementation of the CAP would not contribute to an increase in growth and development in South Pasadena but could result in infrastructure development or redevelopment projects, including renewable energy facilities and alternative transportation thoroughfares. As such, implementation of the CAP and other cumulative projects could have incremental impacts related to hydrology and water quality, with potential minor alterations to existing drainage patterns in the City. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to hydrology and water quality.

LESS THAN SIGNIFICANT IMPACT

11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Would the project physically divide an established community?

The CAP is a policy document containing Plays and Moves that are consistent with the South Pasadena General Plan and does not include specific development projects that would divide an established community. CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. These Plays are aimed at increasing active transportation and decreasing vehicle miles traveled within the City. Such Plays and supporting Moves would help to increase connectivity within the South Pasadena community. Therefore, the CAP would result in no impact related to division of an established community.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The CAP is a policy document containing Plays and Moves that are consistent with the South Pasadena General Plan and that are designed to reduce adverse environmental impacts associated with climate change. Nonetheless, implementing the CAP would require some modification of existing policies, including developing and implementing new programs, and projects, or modifying existing ones. For example, CAP Plays E.2, E.4, M.2, M.3, T.1, SW.1, SW.2, and CS.1 call for the adoption of new codes/ordinances related to building electrification, solar and electric vehicle charging infrastructure installation, natural gas ban, organic waste collection and recovery, and recycling containers, shade trees, and open space provision. In addition, CAP Play T.3 calls for the amendment of the zoning code to require installation of bike stalls and lockers at new developments.

Implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Plays E.2 and E.3 promote electrification of newly constructed and existing buildings and CAP Play E.4 promotes installation of battery back-up systems or generators and solar panels to facilitate the switching of building fuel away from natural gas within the City. Electrification retrofits may change the physical environment through the need for upgraded service

and electrical panels, branch circuit upgrades, and installation of condensate drains to facilitate the installation of electric heat pumps for water and space heating. The physical changes these upgrades and additions would entail are dependent on the year of building construction and location of electrical and service panels and plumbing for connection of condensate drains, which in some cases may include modifications to the interior and/or exterior of buildings for wiring and panel replacement and minor excavation for connection of drainage to sewer systems.

CAP Play T.1 encourage the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space, and CAP Play W.1 aims to bring recycled water lines and infrastructure to the City. The physical changes these installations and enhancements would entail are dependent on the location of construction for the electric vehicle charging connections, active transportation pathways, and trees/green spaces, which in some cases may include minor temporary excavation. In order to implement these Plays and supporting Moves, the City Municipal Code, General Plan, and other applicable documents may need to be amended to reflect new or modified requirements.

However, where modifications of existing policies are needed, such as updates to policies related to energy and active transportation, the CAP Plays would result in greater avoidance or reduction of environmental effects. Therefore, the CAP would result in no impact related to consistency with current land use plans or policies.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. The CAP is a policy document containing Plays and Moves that are consistent with the City's General Plan. Nonetheless, implementing the CAP would require some modification of existing policies and ordinances, including developing and implementing new programs, and projects, or modifying existing ones. The proposed policy changes are consistent with the intent of the goals and policies established within the City General Plan and Zoning Regulations and would not cumulatively contribute to population growth or the loss of housing. Cumulative projects, including the CAP, would be required to adhere to City development regulations and General Plan policies to retain land use character and minimize environmental impacts. And CAP projects would be reviewed for consistency with the General Plan and other applicable regulatory land use actions prior to approval. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to land use.

LESS THAN SIGNIFICANT IMPACT

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

The City of South Pasadena General Plan does not identify any mineral resources or mineral resources recovery sites within the City.⁵⁴ The CAP would not facilitate infrastructure development projects within the City that could result in the loss of availability of known mineral resources. Therefore, the CAP would result in no impact related to mineral resource.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. The City of South Pasadena General Plan does not identify any mineral resources or mineral resources recovery sites within the City limits. As such, no cumulative impact related to mineral resources could occur. Therefore, implementation of the CAP would result in no cumulative impact related to mineral resources.

NO IMPACT

⁵⁴ South Pasadena, City of. 1998. General Plan Open Space and Conservation Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 24, 2020.

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Noise is unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). Because of the way the human ear works, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources (such as construction equipment). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance; while noise from a point source typically attenuates at about 6 dBA per doubling of distance. Noise levels may also be reduced by the introduction of intervening structures. For example, a single row of buildings between the receptor

and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm that breaks the line-of-sight reduces noise levels by 5 to 10 dBA.

The Safety and Noise Element of the South Pasadena General Plan aims to ensure appropriate noise levels considered compatible for community noise environments. Noise in South Pasadena is primarily generated by vehicular traffic. Traffic noise comes from traffic on surface streets, from truck traffic on truck routes through town and from the Pasadena Freeway. Land uses adjacent to these roadways in the City are affected by motor vehicle generated noise. Secondary sources of noise in the City are generated by construction and maintenance activities associated with both public and private works and development projects. The “ambient environment” includes noise emanating from the Pasadena Freeway (SR-110) and the local roadway network. Existing ambient noise levels range from 63.4 dBA to 70.6 dBA. Noise levels exceed 65 dBA, a typical standard for “sensitive locations,” in some locations throughout the City. The City’s normally acceptable exterior noise exposure standard is 65 dBA community noise equivalent level (CNEL) or less for residential and other sensitive land uses.

The CAP is a policy document containing programs that are consistent with the General Plan. Some of the CAP Plays and Moves would support small scale construction projects, such as electric vehicle charging station construction that may result in a temporary increase in noise levels. However, CAP projects would be reviewed for consistency with the General Plan Safety and Noise Element and Municipal Code Chapter 19a (Noise Regulation) and would be required to comply with applicable local, State, and federal regulations.⁵⁵

The South Pasadena General Plan identifies noise-sensitive land uses and noise sources and policies to provide for the protection of the community from the adverse effects of excessive noise. The CAP encompasses a suite of GHG-reduction opportunities that affect the transportation sector. For example, CAP Plays T.2 and T.3 facilitate bike facilities and parking and increased transit use and active transportation. These Plays would not only reduce vehicle miles traveled but also reduce traffic-related noise in South Pasadena. Therefore, the CAP would not generate excessive noise levels and, therefore, would result in a less-than-significant impact related to noise exposure.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise.⁵⁶ Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or Root Mean Square (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second

⁵⁵ South Pasadena, City of. 2020. Municipal Code Chapter 19a (Noise Regulation). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 28, 2020.

⁵⁶ California Department of Transportation (Caltrans). 2013. Transportation and Construction Vibration Guidance Manual (CT-HWANP-RT-13-069.25.3). Available: <http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf>. Accessed September 28, 2020.

(in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings.⁵⁷ Vibration significance ranges from approximately 50 vibration decibels (VdB), which is the typical background vibration-velocity level, to 100 VdB, the general threshold where minor damage can occur in fragile buildings.⁵⁸ The general human response to different levels of groundborne vibration velocity levels is described in Table 6.

Table 5 Human Response to Different Levels of Groundborne Vibration

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day

VdB = vibration decibels
Source: Federal Transit Administration. Transit Noise and Vibration Impact Assessment Manual. 2018.⁵⁹

The CAP is a policy document containing Plays that are consistent with the General Plan. Some of the CAP Play and Moves would support small-scale construction projects, such as electric vehicle charging station construction that may result in a temporary increase in groundborne vibration. However, CAP projects would be reviewed for consistency with the General Plan and Municipal Code and would be required to comply with applicable local, State, and federal regulations. Therefore, the CAP would result in a less-than-significant impact related to groundbourne vibration.

LESS THAN SIGNIFICANT IMPACT

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

There are no airports or private airstrips within the South Pasadena City limits. As such, there are no City noise goals and policies associated with airport noise.⁶⁰ The CAP does not propose land use or zoning changes related to airports, airstrips, or heliports, nor does it include new habitable development that could increase exposure of persons to excessive noise levels associated with operation of airports, airstrips, or heliports. Therefore, the CAP would result in no impact related to aviation-related noise exposure.

NO IMPACT

57 Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook. (FHWAHEP-06-015; DOT-VNTSC-FHWA-06-02). Available: <http://www.fhwa.dot.gov/environment/construction_noise/handbook>. Accessed September 28, 2020.
58 Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. Available: <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf>. Accessed September 28, 2020.
59 Federal Transit Administration. 2018. Transit Noise and Vibration Impact Assessment Manual. <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf>. Accessed September 2020.
60 South Pasadena, City of. 1998. General Plan Safety and Noise Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 28, 2020.

Cumulative Impacts

The cumulative projects scenario is total projected population growth South Pasadena (26,649 persons) in 2030. The CAP is a policy document containing Plays and Moves that are consistent with the City of South Pasadena General Plan. Some of the CAP Plays and Moves would support small-scale construction projects, such as electric vehicle charging station construction, which may result in a temporary increase in groundborne vibration or noise levels. However, cumulative projects, including the CAP, would be subject to review by the City for compliance with the General Plan and Municipal Code and would be required to comply with applicable State and federal regulations. Additionally, the CAP encompasses a suite of GHG-reduction opportunities that would decrease traffic and traffic-related noise. As such, implementation of the CAP would not generate excessive groundborne vibration or noise levels. Therefore, the CAP would result in a less-than-significant cumulative impact related to noise.

LESS THAN SIGNIFICANT IMPACT

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

or

b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The CAP does not include Plays and Moves that would increase the population or induce additional population growth that would displace people or housing. Therefore, the CAP would result in **no impact** related to population and housing.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Cumulative projects, including the CAP, are not anticipated to displace people or housing nor induce substantial unplanned population growth in the City. Specifically, the CAP would not contribute to person or housing displacement in the City of South Pasadena nor result in population growth beyond that already assumed and planned for in the General Plan. Therefore, the CAP would result in no cumulative impact related to population and housing.

NO IMPACT

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15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

▪ Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered facilities, or the need for new or physically altered facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for:*

- *Fire protection;*
- *Police protection;*
- *Schools;*
- *Parks; or*
- *Other public facilities?*

The CAP is a policy document containing Plays and Moves that are consistent with the South Pasadena General Plan. Implementation of the CAP would not result in increases in population or induce additional population growth. As such, the CAP would not require the construction of new or physically altered governmental facilities to serve additional population, the construction of which could cause significant environmental impacts. Furthermore, CAP projects would be reviewed for consistency with the South Pasadena General Plan and other applicable local and State regulations.

Nonetheless, implementing the CAP would require some modification of existing policies, including developing and implementing new programs and projects, or modifying existing ones. The CAP is designed to reduce adverse environmental impacts associated with climate change. While modifications of existing policies are needed, the CAP Plays and Moves would not result in increases in population or induce additional population growth that would result in the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities. Therefore, the CAP would result in no impact related to public services in terms of need for the construction of new or altered governmental facilities.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Implementation of cumulative projects, including the CAP, would not result in increases in population or induce additional population growth beyond that assumed under the South Pasadena General Plan. Therefore, implementation of the CAP would not result in substantial cumulative need to expand public services facilities. Therefore, the CAP would result in a less-than-significant cumulative impact related to public services.

LESS THAN SIGNIFICANT IMPACT

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

or

b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

South Pasadena is a primarily urbanized community with 92.2 total acres of parks and recreational spaces incorporated throughout the City, including 73.9 acres of the Arroyo Seco Park within the western portion of the City and five City parks (Garfield Park, Eddie Park, Library Park, Orange Grove Park, and War Memorial Park) encompassing 18.1 acres.⁶¹ The General Plan Open Space and Conservation Element and Municipal Code Parks Chapter incorporate goals and policies to protect open space and recreational resources in the City, including prohibiting the removal of trees within parks.^{62, 63} And City Municipal Code Chapter 21 (Parks) regulates park provision, services, and maintenance within the City.

61 South Pasadena, City of. 2020. Parks and Facilities Overview., Available: <<https://www.southpasadenaca.gov/government/departments/community-services/administration/parks-and-facilities/>>. Accessed September 24, 2020.

62 South Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan/>>. Accessed September 23, 2020.

63 South Pasadena, City of. 2020. Municipal Code Chapter 21 (Parks). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 23, 2020.

The CAP is a policy document containing programs that are consistent with the South Pasadena General Plan. Additionally, the CAP would not result in substantial population growth or direct land use changes. As such, implementation of the CAP would not result in a substantial physical deterioration of parks or other recreational facilities or result in the need to expand recreational facilities. Therefore, the CAP would result in no impact related to the need for construction of new or altered recreational facilities.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Implementation of cumulative projects, including the CAP, would not result in increases in population or induce additional population growth beyond that assumed under the General Plan. In addition, the CAP would not result in population growth or direct land use change. Therefore, implementation of the CAP would not result in substantial cumulative physical deterioration of parks or other recreational facilities or result in the cumulative need to expand recreational facilities. Therefore, implementation of the CAP would result in no cumulative impact related to recreation.

NO IMPACT

17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*
- or*
- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The City embraces a policy direction to make South Pasadena a place where bicycling and walking are encouraged and fostered, and where safety, education and facilities are provided as an ongoing part of transportation and recreational planning and programs. While allowing people to circulate without cars is an emphasis of the Circulation & Accessibility Element, another emphasis is getting people to share rides and reduce the number of vehicular trips. In order to accomplish this, the City aims to take specific actions that will assist people in finding ways to share a ride, give priority to vehicles with more than a single occupant, or even eliminate the need for the trip totally.⁶⁴

The City of South Pasadena General Plan Circulation and Accessibility Element includes the following applicable active transportation and transit with goal of reducing vehicle miles traveled policies:

- 1.5: Develop circulation system standards for roadway classifications, right-of-way width, design speed, capacity, maximum grades and associated features such as medians and bicycle lanes.
- 2.1: Develop efficient city-wide local public transportation servicing all segments of the population.

⁶⁴ South Pasadena, City of. 2001. General Plan Circulation and Accessibility Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 22, 2020.

- 2.2: Develop and promote increased use of alternative modes of transportation, including but not limited to: walking, bicycling, ridesharing, transit, telecommuting, paratransit, and shuttles.
- 2.3: Promote the reduction of drive-alone trips and vehicular trips generally.
- 2.4: Support the development of additional regional public (mass) transportation facilities and services.
- 2.5: Encourage the provision of preferential parking for high occupancy vehicles (HOV's).
- 2.6: Develop and promote community-based public transit.
- 3.1: Coordinate with applicable regional, state and federal agencies in the development of transportation improvements.
- 4.2: Require developers to maximize the potential for transit use and other alternative modes of transportation by residents, employees and visitors.
- 4.3: Allow mixed-use zoning which includes housing, residential and commercial to encourage living, working, and shopping in the same area and the associated reduction of trips.
- 4.4: Encourage convenient access between affordable housing and affordable transportation.
- 4.7: Maintain existing pedestrian facilities and encourage new development to provide pedestrian walkways between developments.

In addition, the City Bicycle Master Plan and Municipal Code Chapter 7 (Bicycles) regulate the development and implementation of a bicycle and pedestrian network in order to provide a viable transportation alternative to the automobile, improves safety for bicyclists and pedestrians, and provides residents with access and good connections to parks, open space, trails and other recreational opportunities.⁶⁵ Furthermore, the SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) identifies how the southern California region would meet its GHG emission reduction targets.⁶⁶ The SCAG 2016 RTP/SCS is supported by a combination of transportation and land use strategies that help the region achieve State GHG emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, support the vital goods movement industry, and utilize resources more efficiently.

The CAP is a policy document containing Plays and Moves that are consistent with the City General Plan Circulation and Accessibility, City Bicycle Master Plan, Municipal Code Chapter 7 (Bicycles), and the SCAG 2016 RTP/SCS with many that are aimed at facilitating the implementation of the local transportation programs and improvements. For example, CAP Plays T.2 and T.3 facilitate bike facilities and parking and public and shared transit to increase active transportation and decrease vehicle miles traveled within the City.

⁶⁵ South Pasadena, City of. 2020. Municipal Code Chapter 7 (Bicycles). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 22, 2020.

⁶⁶ Southern California Association of Governments (SCAG). 2016. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. Available: <<http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx#toc>>. Accessed September 17, 2020.

The CAP Plays and supporting Moves would be consistent with and promote the General Plan Circulation and Accessibility Element, including the Bicycle Master Plan, and the Municipal Code Chapter 7 (Bicycles). Implementation of some of the CAP transportation Plays and Moves may require future infrastructure development or improvements, such as bike paths and lockers. However, CAP projects would be reviewed for consistency with the General Plan and Municipal Code and be required to comply with applicable local, State, and federal regulations. Therefore, the CAP would result in no impact related to consistency with plans addressing the transportation circulation system.

NO IMPACT

c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

or

d. *Would the project result in inadequate emergency access?*

The CAP is a policy document containing Plays and supporting Moves that are consistent with the City General Plan and would not facilitate development beyond that allowed under the General Plan. As such, it would not create transportation hazards or result in inadequate emergency access. For example, CAP Plays T.2 and T.3 facilitate bike lanes and bike parking to increase active transportation and decrease vehicle miles traveled within the City. These CAP Plays and supporting Moves would promote active transportation, ridership, and sustainable transportation practices within the community to enhance bicycle, pedestrian, and transit connectivity, which in turn would reduce potential transportation hazards and would provide adequate emergency access.

The CAP does not include Plays and Moves that would substantially increase transportation hazards due to a design feature or incompatible land uses. Furthermore, CAP projects would be reviewed for consistency with the South Pasadena General Plan and other applicable local and State regulations. Therefore, the CAP would result in a less-than-significant impact related to transportation hazards and emergency access.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. The CAP is a policy document containing Plays and Moves that are consistent with the City's General Plan, and, similar to the other cumulative projects, the CAP does not propose development beyond that anticipated under the General Plan that would require transportation facilities. The CAP Plays and Moves included promote alternative modes of transportation and reduction of the amount of vehicle miles traveled throughout the City. In addition, the CAP Plays and Moves would not conflict with the objectives and policies of the General Plan or Bicycle Master Plan but would rather be consistent with and promote those plans. Therefore, the CAP would result in a less-than-significant cumulative impact related to transportation.

LESS THAN SIGNIFICANT IMPACT

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18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <p>a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*

or

b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

On September 17, 2020, the six following Native American Heritage Commission (NAHC)-identified local Native American tribal groups were formally notified that the City initiated environmental review of the CAP and were invited to provide consultation:

- Gabrieleno Band of Mission Indians – Kizh Nation;
- Gabrieleno/Tongva San Gabriel Banc of Mission Indians;
- Gabrieleno/Tongva Nation;
- Gabrieleno Tongva Indians of California Tribal Council;

- Gabrieleno-Tongva Tribe; and
- San Fernando Band of Mission Indians.

On September 22, 2020, the NAHC was also notified that the City initiated environmental review of the CAP and were invited to provide consultation. As of the time of this writing and document publication, no responses have been received, and no formal consultation has been requested.

The CAP would not involve land use or zoning changes but would instead promote infrastructure development and redevelopment. As a policy document, the CAP would also not directly entail ground disturbing activities. Implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Plays E.2 and E.3 promote electrification of newly constructed and existing buildings, and CAP Play E.4 promotes installation of battery back-up systems or generators and solar panels to facilitate the switching of building fuel away from natural gas within the City. Electrification retrofits may change the physical environment through the need for upgraded service and electrical panels, branch circuit upgrades, and installation of condensate drains to facilitate the installation of electric heat pumps for water and space heating. The physical changes these upgrades and additions would entail are dependent on the year of building construction and location of electrical and service panels and plumbing connection of condensate drains, which sometimes may include modifications to the interior and/or exterior of buildings for wiring and panel replacement and minor excavation for connection of drainage to sewer systems.

CAP Play T.1 encourage the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Furthermore CAP Play CS.1, promotes the increased planting of trees and provision of green space, and CAP Play W.1 aims to bring recycled water lines and infrastructure to the City. The physical changes these installations and enhancements would entail are dependent on the location of construction for the electric vehicle charging connections, active transportation pathways, and trees/green spaces, which in some cases may include minor temporary excavation.

Implementation of these CAP Plays could impact unknown tribal cultural resources during construction that involves below-grade activities. However, CAP projects would be required to comply with City Ordinance 2315 (Cultural Heritage Ordinance) and General Plan Open Space and Resource Conservation Element purpose that require the identification and preservation of sites and structures of architectural, historical, archaeological, and cultural significance. This includes sites, structures, and areas that are associated with tribal cultural activities or persons that contribute to the cultural character of artifacts. As such, tribal cultural resources would be protected upon discovery and, thus, impacts would be reduced to a minimal level. Therefore, the CAP would result in a less-than-significant impact related to tribal cultural resources.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Cumulative projects could increase the potential for adverse effects to unknown tribal cultural resources in the City. Impacts to tribal cultural resources are site-specific; accordingly, as required under applicable laws and regulations, potential impacts associated with cumulative developments would be addressed on a case-by-case basis as cumulative project details and locations become known. Therefore, the CAP would result in a less-than-significant cumulative impact related to tribal cultural resources.

LESS THAN SIGNIFICANT IMPACT

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19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

The CAP is a policy document aimed at reducing water and energy consumption and related GHG emissions throughout the City of South Pasadena and does not include site-specific infrastructure designs or project proposals. Implementing the CAP would not result in an increase in population and housing nor would it facilitate growth beyond that anticipated by the General Plan. As such, implementing the CAP would not create new demand related to water, wastewater, stormwater drainage, electric power, natural gas power, or telecommunications utilities.

However, projects resulting from CAP implementation could include redevelopment and/or restructuring of electricity and natural gas power facilities and infrastructure. For example, CAP Plays E.2 and E.3 require electrification of 100 percent of new buildings and incremental amount of existing buildings, and CAP Play E.4 promotes installation of solar panels to provide greener renewable electricity within the City, In addition, CAP Plays T.1 and M.2 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. Additionally, CAP Play CS.1 facilitates increasing trees and open space.

Water Supply Facilities/Infrastructure

City Municipal Code Chapter 35 (Water) regulates water use, service, and installation within the City.⁶⁷ The City obtains water for use in municipal and irrigation operations through City operated groundwater wells. Likewise, nearly all of the potable water (99.26% in 2016) is delivered to the South Pasadena community from well production in the San Gabriel Basin and the remainder is purchased from Pasadena Water and Power (PWP) and Metropolitan Water District (0.47 and 0.07 percent, respectively).

The City of South Pasadena addresses issues of water supply in its Urban Water Management Plan (UWMP).⁶⁸ The 2015 UWMP is a long-range planning document used to assess current and projected water usage, water supply planning and conservation and recycling efforts. According to the UWMP, the City of South Pasadena has analyzed three different hydrological conditions to determine the reliability of water supplies: average/normal water year, single dry water year, and multiple, dry water year periods. In addition, the 2015 UWMP includes a Water Shortage Contingency Plan (WSCP).

CAP Play W.1 promotes water consumption reduction through continued implementation of the Model Water Efficient Landscapes Ordinance, working with regional water districts to bring recycled water lines and infrastructure to the City and adopting an ordinance to restrict use of potable water for excess water users (golf course, car washes, park fields, etc.). This CAP Play and supporting Moves may slightly change the amount or characteristics of the water supply compared to existing conditions. However, the CAP would not result in new land uses that would contribute to an increase in water use, compared to existing conditions, or require relocation or construction of new water infrastructure. Therefore, a less-than-significant impact related to need for construction or expansion of water supply facilities and infrastructure would occur.

Wastewater Treatment Facilities/Infrastructure

The City of South Pasadena does not operate a wastewater facility nor is there one within the city boundaries. Instead, wastewater generated by the City is treated by the Sanitation Districts of Los Angeles County (LACSD). According to the City of South Pasadena 2015 UWMP, generated wastewater entering the sewer system is conveyed to the Whittier Narrows Water Reclamation Plant (WNWRP) where primary, secondary, and tertiary treatment is provided. WNWRP treats an average flow of 7.4 million gallons of wastewater per day; which is primarily discharged to the San Gabriel and Rio Hondo rivers for groundwater recharge purposes. Primary and secondary biosolids

67 South Pasadena, City of. 2020. Municipal Code Chapter 35 (Water). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 28, 2020.

68 South Pasadena, City of. 2015. Urban Water Management Plan. Available: <<https://www.southpasadenaca.gov/home/showdocument?id=2905>>. Accessed September 28, 2020.

generated from processing at WNWPR are returned to the LACSD outfall system and are pumped to anaerobic digestors at the Joint Waters Pollution Control Plant (JWPCP).^{69,70}

The CAP would not result in new land uses that would generate sanitary wastewater or otherwise contribute to an increase in wastewater treatment requirements. The amount or characteristics of wastewater treated would not change compared to existing conditions with implementation of the proposed plan. The CAP would not require relocation or construction of new wastewater treatment infrastructure. Therefore, no impact related to need for construction or expansion of wastewater treatment facilities and infrastructure would occur.

Stormwater Drainage Facilities/Infrastructure

City Municipal Code Chapter 23 (Stormwater and Urban Runoff Pollution Control) regulates stormwater collection within the City.⁷¹ As discussed in Section 10, *Hydrology and Water Quality*, implementation of the following CAP Plays and supporting Moves may promote infrastructure development and redevelopment. CAP Plays promote installation of solar PV systems and pairing battery storage, installation of electric vehicle charging stations and supporting infrastructure, installation of bicycle facilities and parking, and increased active transportation, ridership, and sustainability practices within the transit system. Construction of infrastructure development and redevelopment could result in erosion and potential redirect of flood flows or drainage patterns. However, implementation of CAP projects would not include large scale construction within South Pasadena, and the CAP-related infrastructure changes would not result in additional sources of runoff. As a result, the CAP would not result in new land uses that would generate an increased amount of stormwater that requires modified drainage or storm drain systems. Therefore, implementing the CAP would have no effect on runoff amount. Therefore, no impact related to need for construction or expansion of stormwater drainage facilities and infrastructure would occur.

Electric Power Facilities/Infrastructure

CAP Plays E.2 through E.3 propose revisions to existing ordinances and adoption of new ordinances to incorporate electrification of all new buildings and five percent of existing buildings within the City by 2030. Also, CAP Play E.3 promotes the replacement of appliances with electric versions. Furthermore, new electric vehicle charging station installation as part of CAP Plays T.1 and M.2 would involve the construction of new electric power facilities and infrastructure and could also involve the relocation of existing electric power infrastructure and transmission lines. The CAP would serve as a pathway to reduce GHG emissions and other beneficial environmental and sustainability effects. These benefits include reduction in energy consumption. In addition, the environmental impacts of providing updated and additional electrical power facilities and infrastructure has been analyzed throughout this IS-ND and determined to be less than significant. Therefore, the CAP would result in a less-than-significant impact related to construction, expansion, or relocation of electric power facilities and infrastructure.

69 El Monte, City of. 2017. Whittier Narrows average treatment: El Monte Downtown Main Street TOD Specific Plan Final EIR. Available: <<http://www.elmonteca.gov/DocumentCenter/View/1420/Final-EIR-and-Responses-to-Comments-March-2017?bidId=>>. Accessed September 28, 2020.

70 Sanitation District of Los Angeles. 2012. Joint Outfall Systems 2010 Master Facilities Plan Final EIR/EIS. Available: <<https://www.lacsd.org/civicax/filebank/blobdload.aspx?blobid=3258>>. Accessed September 28, 2020.

71 South Pasadena, City of. 2020. Municipal Code Chapter 23 (Stormwater and Urban Runoff Pollution Control). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 28, 2020.

Natural Gas Power Facilities/Infrastructure

The CAP would not involve new land uses that require new or additional natural gas service. However, implementation of CAP Play E.3 would involve the removal of existing natural gas facilities and infrastructure. The CAP would serve as a pathway to reduce GHG emissions and other beneficial environmental and sustainability effects. These benefits include reduction in energy consumption. In addition, the environmental impacts of removing natural gas power facilities and infrastructure has been analyzed throughout this IS-ND and determined to be less than significant. Therefore, the CAP would result in a less-than-significant impact related to removal of natural gas power facilities and infrastructure.

Telecommunications Facilities/Infrastructure

The proposal plan would not involve new land uses that would require telecommunications infrastructure and is not anticipated to involve the relocation of existing telecommunications facilities. Therefore, the CAP would result in no impact related to need for construction or expansion of telecommunication facilities and infrastructure.

LESS THAN SIGNIFICANT IMPACT

b. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

or

c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

The CAP is a policy-level document that does not include site-specific infrastructure designs or project proposals, nor does it grant entitlements for development that would have the potential to increase demand for water supply or other utility services. Implementing the CAP would include no new residential construction and would have no effect on water demand and wastewater treatment demand. Thus, the CAP would result in no impact related to water supply and wastewater treatment.

NO IMPACT

d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

or

e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Athens Services is the waste hauler for the City of South Pasadena. South Pasadena's solid waste is transferred to a variety of landfills, including: Chiquita Canyon Sanitary Landfill, Antelope Valley Public Landfill, Azusa Land Reclamation Co. Landfill, Chiquita Canyon Sanitary Landfill, El Sobrante Landfill, Frank R. Bowerman Sanitary LF, Lancaster Landfill and Recycling Center, Mid-Valley Sanitary Landfill, Olinda Alpha Landfill, San Timoteo Sanitary Landfill, Scholl Canyon Landfill, Simi Valley Landfill & Recycling Center, Simi Valley Landfill & Recycling Center, Southeast Resource Recovery Facility, Sunshine Canyon City/County Landfill, and Victorville Sanitary Landfill. Although the City waste haulers could use multiple landfills, the majority (91% or 19,552 tons) of the waste is transferred to Mid-Valley Sanitary Landfill, San Timoteo Sanitary Landfill, and Scholl Canyon Landfill. CalRecycle reports that in 2019 a total of 21,482 tons of solid waste from South Pasadena was disposed at 14 different landfills. Additionally, the City of South Pasadena has a landfill within City jurisdictional boundaries, the South Pasadena City Dump; however, this facility has been closed since 1958.

The CAP would not involve new land uses that require new or additional solid waste collection service. Rather CAP Plays SW.1 and SW.2 promote waste reduction via participation in recycling and organic waste programs and reducing such waste going to landfills to achieve 75 percent reduction in waste-related GHG emissions by 2025. CAP Play SW.2 also encourages use of reusable foodware, reduction of waste in the food industry, and food waste being compostable. Furthermore, CAP Plays SW.1 and SW.2 require all new buildings to subscribe to recycling and organic waste collection services and provide adequate space for recycling and compost containers, in accordance with SB 1383 and AB 1826. The CAP would not facilitate habitable development and, thus, would not affect solid waste collection and disposal demand. Additionally, because the CAP is a policy document that would not facilitate growth beyond that anticipated by the General Plan, it would not generate solid waste in excess of State or local standards. Therefore, the CAP would result in no impact related to solid waste.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth South Pasadena (26,649 persons) in 2030. Cumulative projects within the City could result in increases in population and additional use of or need for utilities and service systems. While implementation of the CAP and related infrastructure projects would not result in increases in population or induce additional population growth that would require additional use of existing City utilities or service systems, implementation of new or replacement energy or transportation infrastructure under the CAP could result in less-than-significant cumulative utility construction impacts. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to utilities and service systems.

LESS THAN SIGNIFICANT IMPACT

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20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Substantially impair an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- or
- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- or
- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

or

- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The major potential sources of wildland fire in South Pasadena are the Monterey and Repetto Hills and natural brushlands of the Arroyo Seco. The steeper slopes of the San Gabriel Mountains located further north and the vegetated Puente Hills slopes located further south pose a secondary threat to the City in that windborne embers may travel long distances in the wind and ignite rooftops and/or areas of dry grasses. According to California Department of Forestry and Fire Protection (CalFIRE), South Pasadena is not located in designated California Fire Hazard Severity Zones,⁷² or in a State Responsibility Area.⁷³ However, California Fire Hazard Severity Zones are located immediately west of South Pasadena in Los Angeles City limits.⁷⁴ Per the South Pasadena General Plan Safety Element, the threat of wildland fire to the City is generally low.⁷⁵ A small portion of the southwestern corner of the City is identified in the Los Angeles County General Plan as having a high wildland fire hazard potential.⁷⁶ The CAP is a policy-level document that does not propose new habitable development that could be at risk from wildfire, nor does it grant entitlements for development that would have the potential to directly cause wildfire. Rather, the CAP would aim to reduce natural gas infrastructure that poses wildfire risk if damaged during seismic events and to underground new or restructured electric power lines that pose wildfire risk if damaged during high-wind events. Thus, the CAP would result in no impact related to wildfire.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Cumulative projects that include new habitable development would not be located in areas designated as high wildland fire hazard zones, given that such designation only exists in the southwestern corner of the City within the Arroyo Seco where housing is not a permitted land use. In addition, the CAP does not include new habitable development that could be at risk from wildfire, nor does it grant entitlements for development that would have the potential to cause wildfire. Therefore, the CAP would result in no cumulative impact related to wildfire.

NO IMPACT

72 California Department of Forestry and Fire Protection (CalFIRE). 2020. Fire Hazard Severity Zone Viewer. Available: <<https://egis.fire.ca.gov/FHSZ/>>. Accessed September 25, 2020.

73 California Department of Forestry and Fire Protection (CalFIRE). 2020. California State Responsibility Areas. Available: <<https://www.arcgis.com/home/webmap/viewer.html?layers=5ac1dae3cb2544629a845d9a19e83991>>. Accessed September 25, 2020.

74 California Department of Forestry and Fire Protection (CalFIRE). 2020. Fire Hazard Severity Zone Viewer. Available: <<https://egis.fire.ca.gov/FHSZ/>>. Accessed September 25, 2020.

75 South Pasadena, City of. 1998. General Plan Safety and Noise Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 28, 2020.

76 Los Angeles, County of. 2015. General Plan 2035 Safety Element. Available: <<http://planning.lacounty.gov/generalplan/generalplan>>. Accessed September 25, 2020.

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Does the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <p>a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

The intent of the CAP is to reduce GHG emissions from South Pasadena community and municipal operations through implementation of Plays and corresponding Moves. The CAP Plays and Moves are consistent with the South Pasadena General Plan and encourage residents, businesses, and the City to reduce energy, fuel use, water use, VMT, and solid waste generation and the associated GHG emissions. The CAP would not facilitate development that would eliminate or threaten wildlife habitats or eliminate important examples of the major periods of California history or prehistory.

Therefore, as discussed in more detail in Sections 4, *Biological Resources*, and 5, *Cultural Resources*, the CAP would result in a less-than-significant impact related to biological and cultural resources.

LESS THAN SIGNIFICANT IMPACT

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Implementation of the CAP would result in a cumulatively beneficial reduction of GHG emissions across the City. In addition, as discussed throughout the respective cumulative impacts discussions within this document, the CAP would not result in significant cumulative impacts. Rather, implementation of the CAP would be consistent with General Plan policies aimed at reducing emissions of GHGs and air pollutants, reducing VMT, reducing energy and water supply demands on utilities, and decreasing solid waste generation. Therefore, the CAP would result in an overall less-than-significant cumulative impact related to all CEQA topics addressed within this document.

LESS THAN SIGNIFICANT IMPACT

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

The CAP would not result in adverse effects on human beings. Rather, as discussed throughout this document, the CAP would serve as a pathway to reduce GHG emissions and other positive environmental and sustainability effects. These benefits include reduction in non-renewable building energy consumption and VMT (and thus air pollution), in transportation-related GHG emissions, energy and water consumption, and solid waste generation. However, as discussed in more detail in Sections 3, *Air Quality*, 13, *Noise*, and 17, *Transportation*, the CAP could cause temporary construction impacts related to transportation, air quality, and noise that could, in turn, affect human beings but would not result in a substantial adverse environmental effect. Therefore, the CAP would result in a less-than-significant impact related to potential for adverse effects on human beings.

LESS THAN SIGNIFICANT IMPACT

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Appendix A

Sources, Health Effects, and Typical Controls Associated with Criteria Pollutants

Sources, Health Effects, and Typical Controls Associated with Criteria Pollutants

Pollutant	Sources	Health Effects	Typical Controls
Ozone (O ₃)	Formed when reactive organic gases (ROG) and nitrogen oxides react in the presence of sunlight. ROG sources include any source that burns fuels (e.g., gasoline, natural gas, wood, oil); solvents; petroleum processing and storage.	Breathing difficulties, lung tissue damage, vegetation damage, damage to rubber and some plastics.	Reduce motor vehicle reactive organic gas (ROG) and nitrogen oxide (NO _x) emissions through emission standards, reformulated fuels, inspections programs, and reduced vehicle use. Limit ROG emissions from commercial operations, gasoline refueling facilities, and consumer products. Limit ROG and NO _x emissions from industrial sources such as power plants and manufacturing facilities.
Carbon monoxide (CO)	Any source that burns fuel such as automobiles, trucks, heavy construction and farming equipment, residential heating.	Chest pain in heart patients, headaches, reduced mental alertness.	Control motor vehicle and industrial emissions. Use oxygenated gasoline during winter months. Conserve energy.
Nitrogen dioxide (NO ₂)	See Carbon Monoxide.	Lung irritation and damage. Reacts in the atmosphere to form ozone and acid rain.	Control motor vehicle and industrial combustion emissions. Conserve energy.
Sulfur dioxide (SO ₂)	Coal or oil burning power plants and industries, refineries, diesel engines.	Increases lung disease and breathing problems for asthmatics. Reacts in the atmosphere to form acid rain.	Reduce use of high sulfur fuels (e.g., use low sulfur reformulated diesel or natural gas). Conserve energy.
Respirable particulate matter (PM ₁₀)	Road dust, windblown dust, agriculture and construction, fireplaces. Also formed from other pollutants (NO _x , SO _x , organics).	Increased respiratory disease, lung damage, cancer, premature death, reduced visibility, surface soiling.	Control dust sources, industrial particulate emissions, woodburning stoves and fireplaces. Reduce secondary pollutants which react to form PM ₁₀ . Conserve energy.
Fine particulate matter (PM _{2.5})	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning. Also formed from reaction of other pollutants (NO _x , SO _x , organics, and NH ₃).	Increases respiratory disease, lung damage, cancer, and premature death, reduced visibility, surface soiling. Particles can aggravate heart diseases such as congestive heart failure and coronary artery disease.	Reduce combustion emissions from motor vehicles, equipment, industries, and agricultural and residential burning. Precursor controls, like those for ozone, reduce fine particle formation in the atmosphere.
Lead	Metal smelters, resource recovery, leaded gasoline, deterioration of lead paint.	Learning disabilities, brain and kidney damage. Control metal smelters.	No lead in gasoline or paint.
Sulfur Dioxide (SO ₂)	Coal or oil burning power plants and industries, refineries, diesel engines.	Increases lung disease and breathing problems for asthmatics. Reacts in the atmosphere to form acid rain.	Reduce use of high sulfur fuels (e.g., use low sulfur reformulated diesel or natural gas). Conserve energy.
Sulfates	Produced by reaction in the air of SO ₂ , (see SO ₂ sources), a component of acid rain.	Breathing difficulties, aggravates asthma, reduced visibility.	See SO ₂

Pollutant	Sources	Health Effects	Typical Controls
Hydrogen Sulfide	Geothermal power plants, petroleum production and refining, sewer gas.	Nuisance odor (rotten egg smell), headache and breathing difficulties (higher concentrations).	Control emissions from geothermal power plants, petroleum production and refining, sewers, and sewage treatment plants.
Visibility Reducing Particulates	See PM _{2.5}	Reduced visibility (e.g., obscures mountains and other scenery), reduced airport safety.	See PM _{2.5}
Vinyl Chloride	Exhaust gases from factories that manufacture or process vinyl chloride (construction, packaging, and transportation industries).	Central nervous system effects (e.g., dizziness, drowsiness, headaches), kidney irritation, liver damage, liver cancer.	Control emissions from plants that manufacture or process vinyl chloride, installation of monitoring systems.
Toxic Air Contaminant (TAC)	Combustion engines (stationary and mobile), diesel combustion, storage and use of TAC-containing substances (i.e., gasoline, lead smelting, etc.)	Depends on TAC, but may include cancer, mutagenic and/or teratogenic effects, other acute or chronic health effects.	Toxic Best Available Control Technologies (T-BACT), limit emissions from known sources.

Source: Compiled by Rincon Consultants, Inc. in September 2020

Appendix B

Description of Greenhouse Gases of California Concern

Description of Greenhouse Gases of California Concern

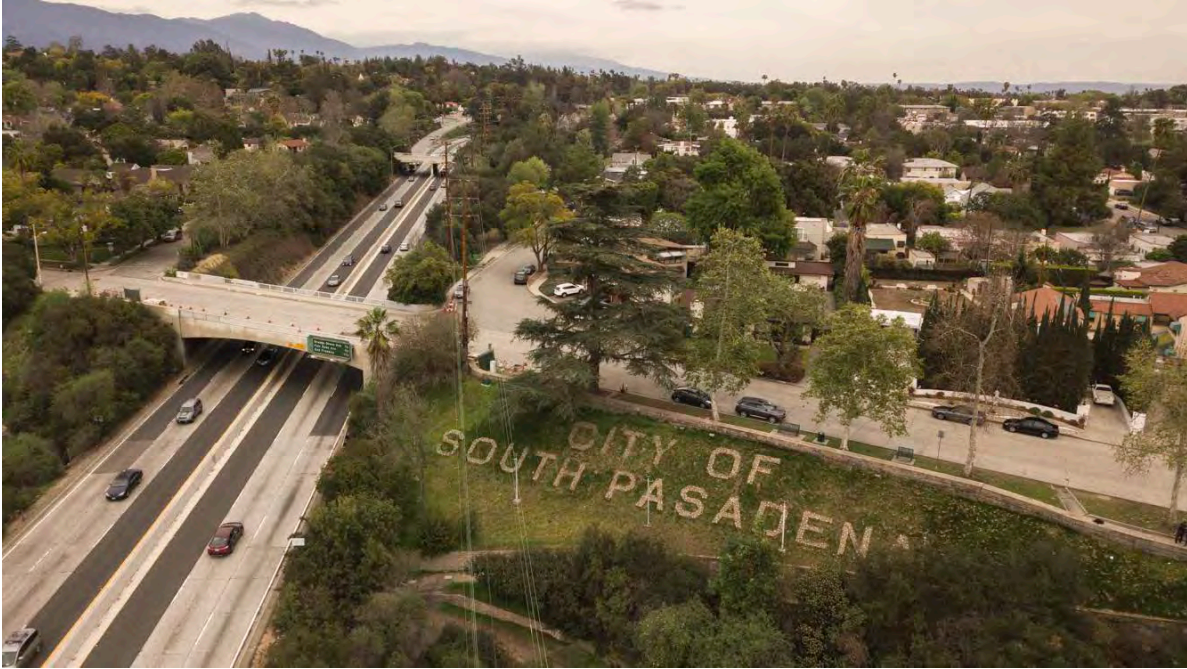
Greenhouse Gas	Physical Description and Properties	Global Warming Potential (100 years)	Atmospheric Residence Lifetime (years)	Sources
Carbon dioxide (CO ₂)	Odorless, colorless, natural gas.	1	50–200	Burning coal, oil, natural gas, and wood; decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; oceanic evaporation; volcanic outgassing; cement production; land use changes
Methane (CH ₄)	Flammable gas and is the main component of natural gas.	28 ⁷⁷	12	Geological deposits (natural gas fields) extraction; landfills; fermentation of manure; and decay of organic matter
Nitrous oxide (N ₂ O)	Nitrous oxide (laughing gas) is a colorless GHG.	298	114	Microbial processes in soil and water; fuel combustion; industrial processes
Chloro-fluoro-carbons (CFCs)	Nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (level of air at the Earth's surface); formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms.	3,800–8,100	45–640	Refrigerants aerosol propellants; cleaning solvents
Hydro-fluoro-carbons (HFCs)	Synthetic human-made chemicals used as a substitute for CFCs and contain carbon, chlorine, and at least one hydrogen atom.	140 to 11,700	1–50,000	Automobile air conditioners; refrigerants
Per-fluoro-carbons (PFCs)	Stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface.	6,500 to 9,200	10,000–50,000	Primary aluminum production; semiconductor manufacturing
Sulfur hexafluoride (SF ₆)	Human-made, inorganic, odorless, colorless, and nontoxic, nonflammable gas.	22,800	3,200	Electrical power transmission equipment insulation; magnesium industry, semiconductor manufacturing; a tracer gas

⁷⁷ The City of South Pasadena used a 20-year Global Warming Potential for methane.

Greenhouse Gas	Physical Description and Properties	Global Warming Potential (100 years)	Atmospheric Residence Lifetime (years)	Sources
Nitrogen trifluoride (NF ₃)	Inorganic, is used as a replacement for PFCs, and is a powerful oxidizing agent.	17,200	740	Electronics manufacture for semiconductors and liquid crystal displays

Source: Compiled by Rincon Consultants, Inc. in September 2020

ATTACHMENT 2
Initial Study and Negative Declaration
for Climate Action Plan



2020 Climate Action Plan

Final Initial Study – Negative Declaration

prepared for

City of South Pasadena

1414 Mission Street

South Pasadena, California 91030

Contact: Shahid Abbas, Public Works Director

prepared by

Rincon Consultants, Inc.

706 South Hill Street, Suite 1200

Los Angeles, California 90014

November 10, 2020



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

rinconconsultants.com

23-371

2020 Climate Action Plan

Final Initial Study – Negative Declaration

prepared by

City of South Pasadena

1414 Mission Street

South Pasadena, California 91030

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Appendix B	Description of Greenhouse Gases of California Concern
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Initial Study

1. Proposed Plan Title

South Pasadena 2020 Climate Action Plan (CAP)

2. Lead Agency / Plan Sponsor Contact

Lead Agency/Plan Sponsor

City of South Pasadena
1414 Mission Street
South Pasadena, CA 91030

Contact Person

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3. Plan Location and Physical Setting

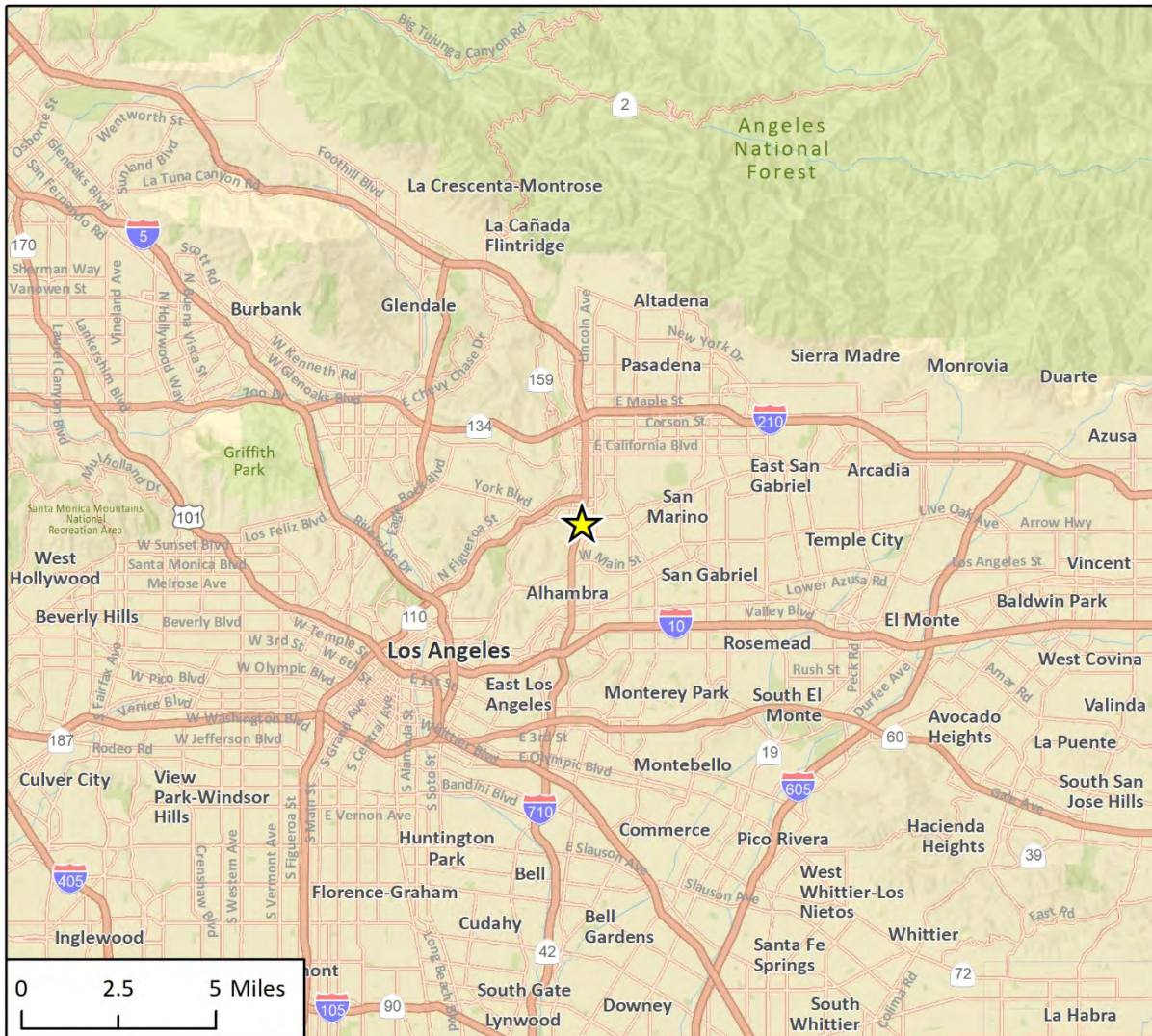
The City of South Pasadena 2020 CAP applies to all areas and plans/projects within the City of South Pasadena limits. Figure 1 shows the regional location, and Figure 2 shows the plan location. The plan location includes all of South Pasadena's incorporated lands.

Regional Location and Setting



The City of South Pasadena is located within Los Angeles County, approximately nine miles northeast of downtown Los Angeles. South Pasadena is part of the greater Los Angeles metropolitan area (see Figure 1) and occupies 3.44 square miles of central Los Angeles County (see Figure 2). South Pasadena is located in the West San Gabriel Valley, with the San Gabriel Mountains to the north, San Rafael Hills to the south, and Arroyo Seco River to the west. Surrounding communities include the Cities of Los Angeles and Alhambra to the south; Cities of San Marino and San Gabriel to the east; the City of Pasadena to the north; and the City of Los Angeles to the west.

Principal regional transportation facilities serving South Pasadena are State Route 110, State Route 710, Interstate Highway 210, Interstate Highway 10, the Los Angeles County Metropolitan Authority (Metro), and the Hollywood Burbank Airport. The Los Angeles County Metropolitan Transportation Authority (LA Metro) provides bus services in South Pasadena via six bus lines (79, 176, 256, 258, 260, and 762) and rail service in South Pasadena via the Metro L Line (formerly the Gold Line) with primary station location at the corner of Mission and Meridian Streets. The Hollywood Burbank Airport is located approximately 13 miles northwest of the City.

Figure 1 Regional Location



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 City of South Pasadena (Plan Location)
 

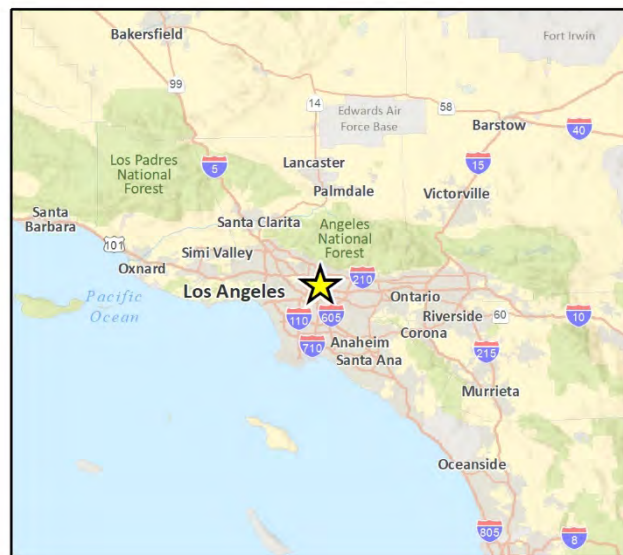
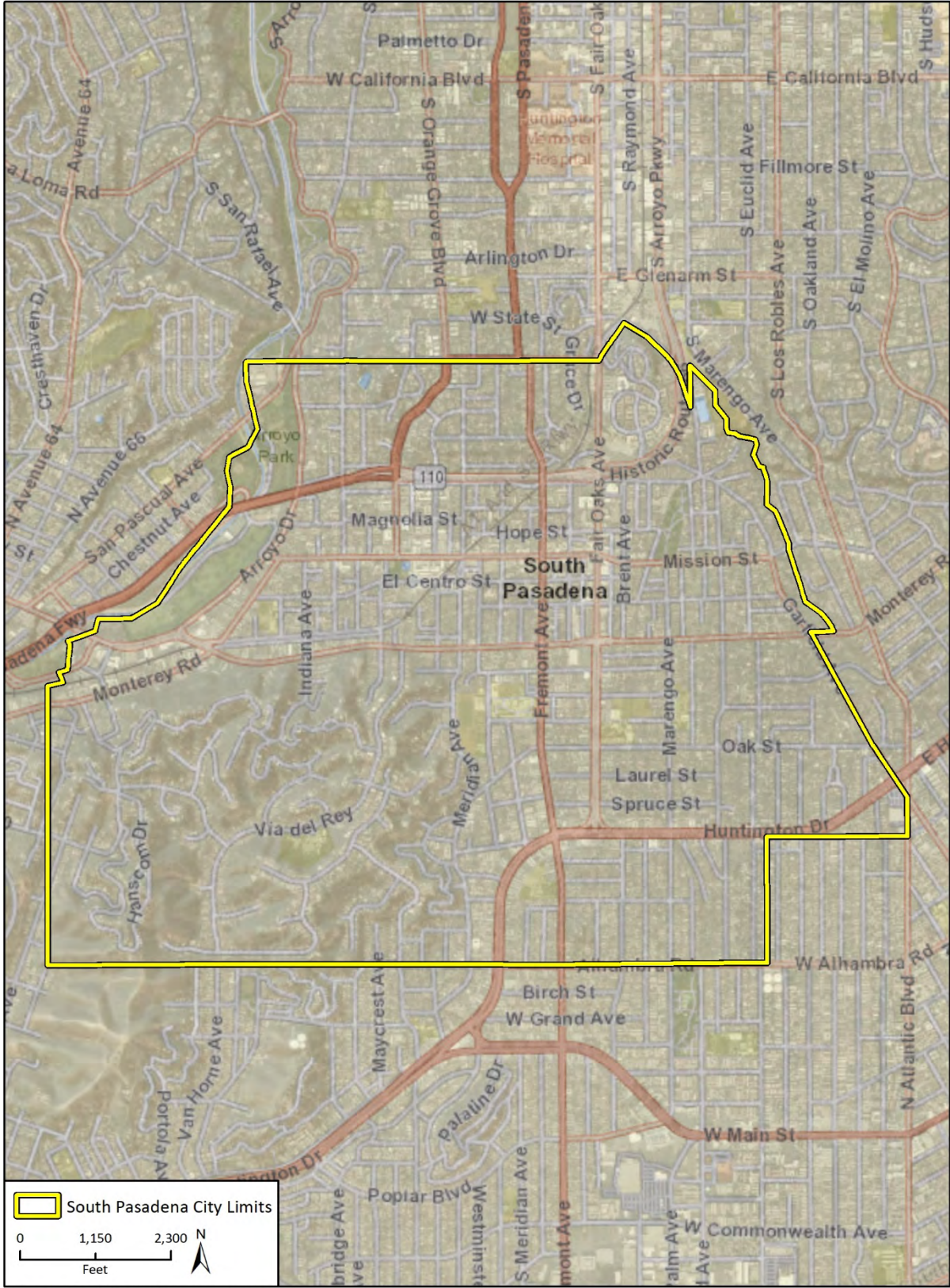


Fig. 1 Regional Location

Figure 2 Plan Location



Imagery provided by Microsoft Bing and its licensors © 2020.

Fig 2 Project Location

Local Setting

The City is characterized as a suburban residential community with many mature trees as well as historic landmarks and districts. The City has a focus on continuity of its natural landscape, historic character, scale, and small-town atmosphere. Most of South Pasadena's land is occupied with residential uses, a mixture of single-family and multi-family. Commercial and office uses are primarily located along major transportation corridors such as Fair Oaks Avenue, Huntington Drive, Mission Street, and Monterey Road. The remaining portions of City land are occupied by community facilities, open space, parks, streets, highways, and transit lines.¹

South Pasadena's topography ranges from flatlands in the northern and eastern parts of the City to hills and watershed lands and hills in the southwestern and western portions of the City. The City has an average elevation of 659 feet above mean sea level. The Arroyo Seco Watershed stretches from the Angeles National Forest in the San Gabriel Mountains to the downtown Los Angeles area and is channelized through urban areas such as the City of South Pasadena and ultimately ends at the confluence with the Los Angeles River north of Dodger Stadium. South Pasadena's climate is characterized by hot, arid summers with mostly clear skies and cool, wet winters with partly cloudy skies. The Köppen-Geiger climate classification is Csa, which is a typical Mediterranean climate. As such, the average temperature ranges from 46 to 88 degrees Fahrenheit. Similar to the rest of the Los Angeles Air Basin, a temperature inversion, where warm dry air overrides cool marine air and traps air pollutants close to the ground, often occurs during late summer and autumn.

4. Existing Setting

Sustainability and (Greenhouse Gas) GHG Reduction Efforts Setting

City of South Pasadena Sustainability and GHG Reduction Efforts

The City of South Pasadena has established actions related to increasing sustainability and reducing GHG emissions and the potential impacts of climate change. These actions are outlined in the City's Green Action Plan, Draft 2020 General Plan, and Draft Downtown Specific Plan.

2019 SOUTH PASADENA GREEN ACTION PLAN

In November 2019, the City of South Pasadena adopted the South Pasadena Green Action Plan (Green Plan), which includes five main goals: work towards making South Pasadena a plastic-free City; enhance water conservation projects and programs; increase organics diversion from landfills; mitigate impacts of the urban heat island effect; and prepare for the consideration of future sustainability initiatives. The Green Plan was a collaborative effort that encompassed the values, ideas, and efforts from all City Department Staff, City Council, the City's Natural Resources and Environmental Commission, and the passionate residents of South Pasadena. This short-term plan aimed to implement essential and attainable sustainability initiatives that would set the foundation of the City's first Climate Action Plan.

2020 GENERAL PLAN UPDATE

The City's General Plan is currently being updated and a draft version was released to the public in November 2019. The General Plan is a blueprint for how the City should develop over time, and

¹ South Pasadena, City of. 2020. Land Use Policy Map. Available: <<https://www.southpasadenaca.gov/home/showdocument?id=211>>. Accessed September 18, 2020.

consists of several mandated topics called “Elements.” In general, these Elements include broad policies that identify the overall pattern of future development, determining when, where, and what type of new growth and investment may occur. The “Our Natural Community” Element of the Draft General Plan includes policies that promote alternative transportation and use of energy-efficient vehicles, and work to minimize the adverse impacts of growth and development on air quality and climate.

2020 DOWNTOWN SPECIFIC PLAN UPDATE

The 2020 Downtown Specific Plan Draft was also released in November 2019 and has policies related to energy efficiency and climate resilience. The primary goals of the Downtown Specific Plan are to leverage public transit and multimodality, focusing on responsible infill development, and preserving and rehabilitating historic buildings.

Regional Sustainability and GHG Reduction Efforts

In coordination with Los Angeles County, the Southern California Association of Governments (SCAG) the State of California, and the federal government, the City of South Pasadena has committed to implementing regional and State policies related to GHG emissions reduction. As follows is a summary of the regional GHG emissions reduction efforts, which the City of South Pasadena CAP is intended to be consistent with or exceed.

SCAG 2016-2040 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

SCAG adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which identified how the southern California region would meet its GHG emission reduction targets.² The SCAG 2016 RTP/SCS is supported by a combination of transportation and land use strategies that help the region achieve State greenhouse gas emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry and utilize resources more efficiently.³

OUR NEXT LA: DRAFT 2020 LONG RANGE TRANSPORTATION PLAN

The Los Angeles County Metropolitan Transportation Authority has prepared the Draft 2020 Long Range Transportation Plan to provide Los Angeles County (88 cities and unincorporated County) with a long-range, comprehensive transportation plan for identifying and resolving transportation issues.⁴ Transportation planning objectives and policies include improving mobility options through an equitable and sustainable approach, and reducing Los Angeles County roadway congestion.

State Sustainability and GHG Reduction Efforts

As follows is a summary of the State GHG emissions reduction efforts, which the City of South Pasadena CAP is intended to be consistent with or exceed.

² Southern California Association of Governments (SCAG). 2016. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. Available: <<http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx#toc>>. Accessed September 17, 2020.

³ SCAG. 2016. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. What is the 2016 RTP/SCS? <<http://scagrtpscs.net/Pages/2016RTPSCS.aspx>>. Accessed September 17, 2020.

⁴ Los Angeles County Metropolitan Transportation Authority (LA Metro). 2020. Draft 2020 Long Range Transportation Plan. Available: <<https://media.metro.net/2020/LRTP-Draft-Doc-Web.pdf>>. Accessed September 17, 2020.

CALIFORNIA SENATE BILL 375

In 2008, Senate Bill 375 (SB 375) enhanced the State’s ability to reach Assembly Bill (AB) 32 targets by directing CARB to develop regional GHG emissions reduction targets to be achieved from passenger vehicles for 2020 and 2035. In addition, SB 375 directs each of the State’s 18 major Metropolitan Planning Organizations (MPO) to prepare a sustainable community’s strategy (SCS) that contains a growth strategy to meet such regional GHG emissions reduction targets for inclusion in the respective regional transportation plan (RTP).

CALIFORNIA EXECUTIVE ORDER S-3-05

In 2005, the California governor issued Executive Order (EO) S-3-05, which identifies Statewide GHG emissions reduction targets to achieve long-term climate stabilization as follows:

Reduce GHG emissions to 1990 levels by 2020

Reduce GHG emissions to 80 percent below 1990 levels by 2050

In response to EO S-3-05, California Environmental Protection Agency (CalEPA) created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the “2006 CAT Report”). The *2006 CAT Report* identified a recommended list of strategies that the State could pursue to reduce GHG emissions. These are strategies that could be implemented by various State agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the State agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture, among others.

CALIFORNIA ASSEMBLY BILL 32

In 2006, the California legislature signed AB 32 – the Global Warming Solutions Act – into law, requiring a reduction in Statewide GHG emissions to 1990 levels by 2020 and California Air Resources Board (CARB) preparation of a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 required CARB to adopt regulations to require reporting and verification of Statewide GHG emissions. Based on this guidance, CARB approved a 1990 Statewide GHG level and 2020 limit of 427 metric tons of carbon dioxide equivalent (MTCO₂e).

CALIFORNIA CLIMATE CHANGE SCOPING PLAN

In 2008, CARB approved the original California Climate Change Scoping Plan, which included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted and implemented since approval of the Scoping Plan.

CALIFORNIA CLIMATE CHANGE SCOPING PLAN UPDATE (2013)

In 2013, CARB approved the first update to the California Climate Change Scoping Plan. The 2013 Scoping Plan Update defined CARB climate change priorities for the next five years and set the groundwork to reach post-2020 Statewide GHG emissions reduction goals. The 2013 Scoping Plan Update highlighted California’s progress toward meeting the “near-term” 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State’s

longer-term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use.

CALIFORNIA EXECUTIVE ORDER B-30-15

In 2015, the California governor issued Executive Order B-30-15, which established a Statewide mid-term GHG reduction target of 40 percent below 1990 levels by 2030.

CALIFORNIA SENATE BILL 32

In 2016, the California legislature signed Senate Bill 32 (SB 32) into law, extending AB 32 by requiring further reduction in Statewide GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies, such as SB 350 and SB 1383 (see below).

CALIFORNIA CLIMATE CHANGE SCOPING PLAN UPDATE (2017)

In 2017, CARB approved the second update to the California Climate Change Scoping Plan. The 2017 Scoping Plan put an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan Update does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally-appropriate quantitative thresholds consistent with Statewide per-capita goals of 6 MTCO₂e by 2030 and 2 MTCO₂e by 2050.⁵ As stated in the 2017 Scoping Plan Update, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects, because they include all GHG emissions sectors in the State.

CALIFORNIA EXECUTIVE ORDER B-55-18

In 2018, the California governor issued Executive Order B-55-18, which established a new Statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing Statewide GHG reduction targets established by SB 32.

For more information on the Senate and Assembly Bills, Executive Orders, and Scoping Plans discussed above, and to view reports and research referenced above, please refer to the following websites: www.climatechange.ca.gov and www.arb.ca.gov/cc/cc.htm.

ASSEMBLY BILL 197, STATE AIR RESOURCES BOARD GREENHOUSE GASES REGULATIONS

In 2016, the California legislature approved AB 197, a bill linked to SB 32, which increases legislature oversight over the California Air Resources Board and directs the California Air Resources Board to prioritize disadvantaged communities in its climate change regulations, and to evaluate the cost-effectiveness of measures it considers. AB 197 requires the CARB to “protect the State’s most impacted and disadvantaged communities [and] consider the social costs of the emissions of greenhouse gases” when developing climate change programs. The bill also adds two new legislatively appointed non-voting members to the CARB, increasing the Legislature’s role in the CARB’s decisions.

⁵ California Air Resources Board (CARB). 2017. California’s 2017 Climate Change Scoping Plan. Available: <<https://ww3.arb.ca.gov/cc/scopingplan/scopingplan.htm>>. Accessed July 13, 2020.

SENATE BILL 350, CLEAN ENERGY AND POLLUTION REDUCTION ACT OF 2015

In October 2015, SB 350 was signed into law, establishing new clean energy, clean air, and GHG reduction goals for 2030 and beyond. SB 350 codifies Governor Jerry Brown's aggressive clean energy goals and establishes California's 2030 GHG reduction target of 40 percent below 1990 levels. To achieve this goal, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 (legislation originally enacted in 2002) to 50 percent by 2030. Renewable resources include wind, solar, geothermal, wave, and small hydroelectric power. In addition, SB 350 requires the State to double Statewide energy efficiency savings in electricity and natural gas end-uses (i.e., residential and commercial) by 2030 from a base year of 2015.

SENATE BILL 100, THE 100% CLEAN ENERGY ACT OF 2018

In September 2018, Governor Brown signed SB 100, requiring that the State's load serving entities (including energy utilities and community choice energy programs) must procure energy generated 100 percent from Renewables Portfolio Standard (RPS) for eligible renewable resources by 2045.

CALIFORNIA ENERGY EFFICIENCY STRATEGIC PLAN OF 2008

In September 2008, the California Public Utilities Commission (CPUC) adopted California's first Long Term Energy Efficiency Strategic Plan, presenting a single roadmap to achieve maximum energy savings across all major groups and sectors in California. The Strategic Plan was subsequently updated in January 2011 to include a lighting chapter. The Strategic Plan sets goals of all new residential construction and all new commercial construction in California to be zero net energy (ZNE) by 2020 and 2030, respectively. In 2018, the California Energy Commission voted to adopt a policy requiring all new homes in California to incorporate rooftop solar. This change will go into effect in January 2020 with the adoption of the 2019 Title 24 Code and is a step towards the State achieving its goal of all residential new construction being ZNE by 2020. Additionally, the Strategic Plan sets goals of 50 percent of existing commercial building to be retrofitted to ZNE by 2030 and all new State buildings and major renovations to be ZNE by 2025.

SENATE BILL 1275, CHARGE AHEAD INITIATIVE

In September 2014, Senate Bill 1275 was signed into law, establishing a State goal of one million zero-emissions and near-zero-emissions vehicles in service by 2020 and directing the Air Resources Board to develop a long-term funding plan to meet this goal. SB 1275 also established the Charge Ahead California Initiative requiring planning and reporting on vehicle incentive programs and increasing access to and benefits from zero-emissions vehicles for disadvantaged, low-income, and moderate-income communities and consumers.

ASSEMBLY BILL 1493, THE PAVLEY BILL

In 2002, the California State Legislature enacted Assembly Bill 1493 (aka "the Pavley Bill"), which directs the CARB to adopt standards that will achieve "the maximum feasible and cost-effective reduction of greenhouse gas emissions from motor vehicles," taking into account environmental, social, technological, and economic factors. In September 2009, the CARB adopted amendments to the "Pavley" regulations to reduce GHG emissions in new passenger vehicles from 2009 through 2016. The Pavley Bill is considered to be the national model for vehicle emissions standards. In January of 2012, the CARB approved a new emissions control program for vehicle model years 2017 through 2025. The program combines the control of smog, soot, and greenhouse gases and the

requirement for greater numbers of zero emission vehicles into a single package of standards called Advanced Clean Cars.

ASSEMBLY BILL 117, COMMUNITY CHOICE AGGREGATION

Assembly Bill 117 establishes the creation of Community Choice Aggregation (CCA) that fosters clean and renewable energy markets. CCA allows cities and counties to aggregate the buying power of individual jurisdictions. The California CCA markets were created as an answer to the brownouts and energy shortages of the early 2000's. AB 117 was passed in 2002 as an answer to California's increased energy independency by incorporating more alternative and renewable energy sources into its energy portfolio. With AB 117, municipalities can provide alternative energy choices to their local carrier (e.g. the Pacific Gas and Electric Company, PG&E). Marin Clean Energy was the first CCA in the State of California to go online with a 50 percent to 100 percent clean energy portfolio in 2010.

SENATE BILL 97, CEQA GUIDELINES FOR ADDRESSING GHG EMISSIONS

The California Environmental Quality Act (CEQA) requires public agencies to review the environmental impacts of proposed projects, including General Plans, Specific Plans, and specific kinds of development projects. In February 2010, the California Office of Administrative Law approved the recommended amendments to the State CEQA Guidelines for addressing GHG emissions. The amendments were developed to provide guidance to public agencies regarding the analysis, mitigation, and effects of GHG emissions in draft CEQA documents.

5. General Plan Designation and Zoning

The CAP would be implemented throughout the City and would occur in all South Pasadena General Plan designations and zoning designations. The plan would not alter any existing designations.

6. Description of Plan

The 2020 CAP incorporates the many climate protection programs noted above that the City has in place and will continue to reduce GHG emissions. While the City has implemented GHG emission-reduction policies and programs, the 2020 CAP is the first official climate action plan for the City. The City, in partnership with SCAG, has developed the 2020 CAP in order to achieve a number of objectives, including a demonstration of environmental leadership, saving money and promoting green jobs, showing compliance with State environmental initiatives, and promoting sustainable development.

In 2020, the City is actively engaged in addressing climate change, sustainability, and reductions in GHG emissions. The 2020 CAP addresses municipal and communitywide GHG emissions and includes a goal of reducing communitywide GHG emissions output to 75,161 metric tons of carbon dioxide equivalent (MT CO₂e) by 2030 (consistent with California Senate Bill 32 target for 2030). The 2020 CAP assessed herein is based upon the 2016 baseline GHG emissions inventory and formulates a list of measures and actions or "Plays and Moves" to achieve the City's sustainability goals.

The State of California uses 1990 as a reference year to remain consistent with Assembly Bill (AB) 32, which codified the State's 2020 GHG emissions target by directing CARB to reduce Statewide emissions to 1990 levels by 2020. However, cities and counties throughout California typically elect to use years later than 1990 as baseline years because of the increased reliability of recordkeeping

from those years and the large amount of growth that has occurred since 1990. The year 2016 was selected as the baseline year for South Pasadena’s GHG inventory due to the availability of reliable data. Additionally, it is important to note that California achieved its 2020 goal of reaching the 1990 emissions level in 2016,⁶ and it is assumed that South Pasadena likewise is currently at 1990 levels.⁷ Therefore, the 2016 baseline emissions were reduced by 40 percent to establish a 2030 target for the City.

The 2016 GHG emissions inventory provides an important foundation for the CAP, providing 2016 as the baseline year against which progress toward the City goal of reducing GHG emissions of 40 percent by 2030 can be measured. In 2016, approximately 126,268 MT CO₂e were emitted in South Pasadena from the energy, transportation, solid waste, water, and municipal sectors. The municipal sector is a subset of the community emission sectors, which consist of energy, transportation, solid waste, and water, and is developed to establish metrics that allow the City to lead by example and reduce emissions at the municipal level. The energy sector represents emissions that result from electricity and natural gas used in both private and public sector buildings and facilities. The transportation sector includes emissions from private, commercial, and fleet vehicles driven within the City as well as the emissions from transit vehicles, the City-owned fleet, and off-road equipment such as lawnmowers/ garden equipment and construction equipment. Emissions generated from water usage and wastewater generation are due to the indirect electricity use to distribute water and collect and treat wastewater. Burning fossil fuels associated with vehicle use (transportation) and buildings/facility energy use are the largest contributors of South Pasadena GHG emissions. Table 1 includes total South Pasadena (i.e., community and municipal) GHG emissions in 2016 by sector as well as percentage of total City emissions.

Table 1 South Pasadena 2016 Communitywide GHG Emissions by Sector

Sector	(MT of CO₂e)	Percentage of GHG Emissions
Energy	49,301	39
Electricity	23,987	19
Natural Gas	24,287	19
Electricity Transmission and Distribution Losses	1,027	1
Transportation	67,228	54
On-road Transportation	65,351	52
Off-road Equipment	829	1
Transit ²	1,048	1
Water	1,026	1
Water transport, distribution and treatment	700	1
Wastewater collection and treatment	326	<1

6 CARB. 2018. Climate pollutants fall below 1990 levels for the first time. Available: <<https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levels-first-time>>. Accessed September 28, 2020.

7 Although there may have been GHG emission reductions between 2016 and 2017 at the state and local level, the most recent state inventory that is available was completed in 2016; therefore, 2017 emissions are conservatively assumed to be the same as they were in 2016 as this methodology is the most conservative pathway to calculate South Pasadena’s 1990 baseline.

Sector	(MT of CO ₂ e)	Percentage of GHG Emissions
Solid Waste	7,713	6
Waste Sent to Landfills	7,509	6
Process Emissions	203	<1
<i>Transportation & Collection Emissions³</i>	<i>465</i>	<i>0</i>
Combustion Emissions	1	<1
Total	125,268	100 %

Notes:

MT: Metric tons

1. Emissions have been rounded and therefore sums may not match.

2. Transit in South Pasadena is provided by Los Angeles Metro.

3. Waste transportation and collection emissions are accounted for in the on-road transportation sector of the inventory and are included here only for informational purposes.

Source: Emissions were calculated following ICLEI LGOP and using data provided and approved by the City.

As shown in Table 1, the largest sectors of GHG emissions are related to energy and transportation, followed by solid waste and water. The City is preparing the 2020 CAP to include Plays and Moves (i.e., measures and actions) addressing communitywide and municipal GHG emissions. Per the 2020 CAP, South Pasadena is committed to an emissions reduction target of 40 percent below 2016 levels by 2030 and reaching a longer-term goal of carbon neutrality by 2045. This 2030 GHG emissions goal is selected to be consistent with SB 32 State emissions targets and CEQA Guidelines § 15183.5 for a qualified GHG emissions reduction strategy as well as to be achievable by City-supported Plays identified in the 2020 CAP. The CAP includes a business-as-usual (BAU) forecast of GHG emissions that will enable the City to estimate the amount of emissions reductions needed to meet its goal.

The 2020 CAP includes Plays to educate the community regarding ways to live a sustainable lifestyle, increase use of renewable power, electrify buildings, and reduce use of natural gas. It also includes Plays to increase use of zero-emission vehicles; increase use of public, active, and shared transportation; reduce water consumption and waste generation; increase recycling and composting; and increase tree planting and green space. Finally, it includes Plays that will continue to allow the City to lead by example. Table 2 includes a complete list of 2020 CAP Plays and descriptions of respective supporting Moves.

Table 2 South Pasadena 2020 CAP Plays and Moves by Sector

ID #	Plays and Respective Supportive Moves
Cornerstone (i.e., Education) Sector	
Play C.1	Engage South Pasadena youth in climate change action and provide education on ways to live a sustainable lifestyle.
Move C.1.a	Support South Pasadena Unified School District by providing students with information on climate change and the beneficial role of trees.
Move C.1.b	Utilize South Pasadena's historic neighborhoods to demonstrate to students the importance of mature urban trees in providing shade and reducing the urban heat island effect.
Move C.1.c	Identify grant funding opportunities and engage with local nurseries to identify appropriate and cost-effective California native plants/trees that can be both planted in the ground or remain potted for students living in rental/multi-family homes.

ID #	Plays and Respective Supportive Moves
Energy Sector	
Play E.1	Maximize the usage of renewable power within the community, by continuing to achieve an opt-out rate lower than 4% for the CPA 100% renewable power.
Move E.1.a	<p>Monitor progress and perform public outreach and education campaigns highlighting the benefits of 100% renewable energy, including:</p> <ul style="list-style-type: none"> ▪ Monitoring opt-out rates on an annual basis ▪ Tabling at community events ▪ Establishing an informational resource page on the City website ▪ Regular social media posts ▪ Energy bill inserts
Play E.2	
Electrify of 100% of newly constructed buildings.	
Move E.2.a	Develop a webpage and materials for display at City Hall promoting the benefits of electrification and resources that can assist with the fuel-switching process.
Move E.2.b	Provide financial and technical resources, including hosting workforce development trainings for installers and building owners/operators to discuss benefits and technical requirements of electrification.
Move E.2.c	Perform regular internal trainings with planners and building officials on current state decarbonization goals and incentives available for electric homes.
Move E.2.d	Provide education around cooking with electric appliances, including demonstrations from chefs and/or local restaurants, as available.
Move E.2.e	<p>Adopt an Electrification Readiness Reach Code per California Energy Commission (CEC) reach code requirements for all new buildings and accessory dwelling units which eliminates the piping of natural gas. In doing so the City will:</p> <ul style="list-style-type: none"> ▪ Engage with stakeholders, both internal stakeholders, such as City staff and officials, and external stakeholders, such as local developers regarding the purpose and impact of the reach code ▪ Conduct a cost effectiveness study ▪ Develop and draft an ordinance ▪ Conduct public hearings, public notices, and formally adopt the ordinance ▪ Submit the adopted ordinance to the California Energy Commission (CEC)
Move E.2.f	Adopt an ordinance that allows granting of minor allowances for certain site development standards when there is no practical ways to design a project to be all electric.
Play E.3	
Electrify 5% of existing buildings by 2030 and 80% by 2045.	
Move E.3.a	Develop an existing building electrification permit tracking program to track progress in achieving the targeted electrification goal.
Move E.3.b	Keep an updated list of rebates and incentives available to residents who would like to convert their buildings to electric power.
Move E.3.c	Provide education on the potential energy savings and benefits of electric heat pumps for water heating and space heating when permits for replacement are obtained.
Move E.3.d	Work with Southern California Edison (SCE) and/or the Clean Power Alliance to provide rebates for residential replacement of natural gas-powered air and water heating appliances with electric-powered.
Move E.3.e	Promote water heater, space heating, and appliance (electric stoves/dryers) replacement programs and incentives (residential) at time of construction permit.
Move E.3.f	Perform an existing buildings analysis in order to understand the potential for electrification retrofitting in South Pasadena and establish a roadmap for eliminating natural gas from existing buildings.

ID #	Plays and Respective Supportive Moves
Move E.3.g	Establish a comprehensive, coordinated education campaign focused towards property owners, landlords, property management companies, and occupants for reducing the use of natural gas in homes and businesses. Establish a shared understanding of existing incentives for electric appliances and upgrades, and how to access them, including SCE incentive programs and rebates.
Move E.3.h	Perform a cost-effectiveness study for electrification retrofitting, including requirements for newly permitted HVAC/hot water heaters and other appliances to be electric.
Move E.3.i	Develop a best practices model based on the progress electrifying existing buildings in South Pasadena and outside of South Pasadena to significantly increase electrification post-2030.
Play E.4	Develop and promote reduced reliance on natural gas through increased clean energy systems that build off of renewable energy development, production, and storage.
Move E.4.a	Conduct a Feasibility Study to assess cost and applicable locations for installation of battery back-up systems or generators throughout the City in support of the General Plan.
Move E.4.b	Promote installation of storage technology in concert with renewable energy infrastructure through educational programs, outreach, and information provided via City platforms.
Move E.4.c	Conduct "micro-grid" Feasibility/Pilot Study in support of the General Plan.
Move E.4.d	In support of the General Plan, develop and implement a Solar Action Plan with a goal of meeting 50% of South Pasadena's power demand through solar by 2040.
Move E.4.e	In support of the 2018-2019 City Strategic Plan, develop a strategy and implementation schedule for the Renewable Energy Plan, after feasibility study.
Move E.4.f	Adopt a PV (Solar) Ordinance requiring newly constructed and majorly renovated multi-family and commercial buildings to install PV systems with an annual output greater or equal to 25% of buildings' electricity demand. Ensure consistency of ordinance with the City General Plan.
Move E.4.g	Require all new structures or major retrofits to be pre-wired for solar panels, consistent with the General Plan.
Move E.4.h	Work with various City departments to establish and streamline battery storage requirements to allow for easier implementation of these technologies throughout the City.
Move E.4.i	Work with home and business owners, including those in the historic districts, to identify and promote renewable energy demonstration projects to showcase the benefits.
Move E.4.j	Work with SCE and the CPA to develop a program and timeline for increasing resilience to power losses, including Public Safety Power Shutoffs (PSPS), and climate-driven extreme weather events for low-income, medically dependent, and elderly populations through installation of renewable energy and onsite energy storage with islanding capabilities, following appropriate project-level environmental review.

ID #	Plays and Respective Supportive Moves
Transportation Sector	
Play T.1 Increase use of zero-emission vehicle and equipment 13% by 2030 and 25% by 2045.	
Move T.1.a	Develop an EV Readiness Plan to establish a path forward to increase EV infrastructure within the City and promote mode shift to EVs that is consistent with the City General Plan. In conjunction with an EV Readiness Plan, conduct a community EV Feasibility Study to assess infrastructure needs and challenges.
Move T.1.b	Adopt an EV Charging Retrofits in Existing Commercial and Multifamily Buildings reach code requiring major retrofits, with either a permit value over \$200,000 or including modification of parking surfaces or electric panels, to meet CalGreen requirements for “EV Ready” charging spaces and infrastructure.
Move T.1.c	Streamline permit processes (city, county, state, utility) for electric vehicle charging infrastructure and alternative fuel stations.
Move T.1.d	Enhance promotion of public and private conversion to zero-emission vehicles through implementation of the City General Plan; including use of City events, social media, and the City website to educate on benefits of zero-emission vehicles and available incentives.
Move T.1.e	Establish an ordinance that restricts use of gas-powered lawn equipment, including leaf blowers, and provide information on the City website outlining available incentives.
Move T.1.f	Adopt an EV Readiness Reach Code requiring new commercial construction to provide the minimum number of EV capable spaces to meet Tier 2 requirements (20% of total). In doing so the City will: <ul style="list-style-type: none"> ▪ Engage with stakeholders, both internal stakeholders, such as local government staff and officials, and external stakeholders, such as local developers regarding the purpose and impact of the reach code ▪ Conduct a cost effectiveness study ▪ Develop and draft an ordinance ▪ Conduct public hearings, public notices, and formally adopt the ordinance ▪ Submit the adopted ordinance to the California Energy Commission (CEC)
Move T.1.g	Earmark and identify additional funding for implementation of the EV Readiness Plan to include public charging infrastructure in key locations.
Play T.2 Implement programs for public and shared transit that decrease passenger car vehicle miles traveled 2% by 2030 and 4% by 2045.	
Move T.2.a	Conduct a Feasibility and Community Interest Study on the four transit improvement options of the City's General Plan.
Move T.2.b	Pursue a community car, bike, or e-scooter "micro-transit" share pilot consistent with the City General Plan.
Move T.2.c	Conduct local transportation surveys to better understand the community's needs and motivation for traveling by car versus other alternatives such as bus or Metro Gold Line light rail. Use survey results to inform transit expansion and improvement projects.
Move T.2.d	Adopt a Transportation Demand Management (TDM) Plan for the City that includes a transit system focus. Provide incentives for implementation of TDM measures at local businesses and new developments.
Move T.2.e	Facilitate transportation equity through targeted provision of programs that encourage minority, low-income, disabled, and senior populations to take transit, walk, bike, use rideshare or car share.

ID #	Plays and Respective Supportive Moves
Play T.3	Develop and implement an Active Transportation Plan to shift 3% of passenger car vehicle miles traveled to active transportation by 2030, and 6% by 2045.
Move T.3.a	Develop and adopt an Active Transportation Plan consistent with Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) that will identify funding strategies and policies for development of pedestrian, bicycle, and other alternative modes of transportation projects. Establish citywide events, outreach, educational programs, and platforms to promote active transportation in the community in support of the General Plan.
Move T.3.b	In conjunction with the City's Complete Streets Policy, conduct a Street/Intersection Study to identify streets and intersections that can be improved for pedestrians and bicyclists through traffic calming measures and/or where multi-use pathway opportunities exist to increase active transportation.
Move T.3.c	Periodically review and update the City's Bicycle and Pedestrian Network Map and post throughout City.
Move T.3.d	Work with the South Pasadena Active, Active San Gabriel Valley (ActiveSGV), and/or Metro to develop programs and classes to teach and promote bicycle riding education and safety to residents of all ages and skill levels, as well as educate drivers.
Move T.3.e	Conduct a nexus study and develop an ordinance requiring payment of fees from development projects to implement safe active transportation routes and infrastructure citywide.
Move T.3.f	Amend zoning code to require installation of bike stalls or lockers at new developments, "mobility hubs", and during change of use of existing buildings, consistent with the General Plan.
Move T.3.g	Adopt a Trip Reduction Ordinance that includes requirements in the Zoning Code to require end-of-trip facilities for cyclists (e.g., showers, bike repair kiosks, and lockers) in new, non-residential building projects of a specified size.
Water Sector	
Play W.1	Reduce per capita water consumption by 10% by 2030 and 35% by 2045.
Move W.1.a	Continue to enforce the Model Water Efficient Landscapes Ordinance.
Move W.1.b	Work with the Los Angeles County Sanitation District (LACSD) and/or the Upper San Gabriel Valley Municipal Water District to bring recycled water lines and infrastructure to the City.
Move W.1.c	In conjunction with the Downtown Specific Plan and City General Plan actions, adopt an ordinance restricting the use of potable water for non-potable uses and requiring greywater capture for land uses that are excess water users (e.g. golf courses, car washes, large fields, etc.).
Move W.1.d	Implement Plays 1 through 4 under Goal II of the Green Action Plan on the provided implementation timeline, aiming to provide education and promotion of greywater systems. (See the City's Green Action Plan for more information).
Move W.1.e	In conjunction with Move II.1.1 of the City Green Action Plan, develop a Recycled Water Use Master Plan that identifies access to recycled water and quantity of recycled water available to the City, as well as establishes an implementation plan. The implementation plan shall identify land use types (i.e., landscaping, gold courses, fields) and specific projects that will switch from potable to recycled water use allowing for a goal of 20% of City's potable water use to be replaced with recycled water.
Move W.1.f	Implement 100% renewable power for all pumping and treatment of water.

ID #	Plays and Respective Supportive Moves
Solid Waste Sector	
Play SW.1	Implement and enforce SB 1383 organics and recycling requirements to reduce landfilled organics waste emissions 50% by 2022 and 75% by 2025.
Move SW.1.a	Adopt procurement policies to comply with SB 1383 requirements for jurisdictions to purchase recovered organic waste products.
Move SW.1.b	Adopt an ordinance requiring compliance with SB 1383. Ensure ordinances established through the City General Plan are consistent with SB 1383 requirements; and revise ordinances if necessary.
Move SW.1.c	Adopt an Edible Food Recovery Ordinance for edible food generators, food recovery services, or organization that are required to comply with SB 1383.
Move SW.1.d	Partner with the City's waste hauler, to provide organic waste collection and recycling services to all commercial and residential generators of organic waste.
Move SW.1.e	Adopt an ordinance requiring all residential and commercial customers to subscribe to an organic waste collection program and/or report self-hauling or backhauling of organics.
Move SW.1.f	Conduct a Feasibility Study and prepare an action plan to ensure edible food reuse infrastructure is sufficient to accept capacity needed to recover 20% of edible food disposed or identify proposed new or expanded food recovery capacity.
Move SW.1.g	Establish an education and outreach program for school children and adults around food waste prevention, nutrition education, and the importance of edible food recovery. Support City Green Action Plan Play III identified educational goals (Move III.1.3., Move III.1.4., Move III.1.6., Move III.2.1, Move III. 3.3, and Move III.4.2) through an established educational program.
Move SW.1.h	Establish an edible food recovery program supporting the City General Plan and the City Green Action Plan Move III.1.2 to minimize food waste.
Move SW.1.i	Adopt an ordinance or enforceable mechanism to regulate haulers collecting organic waste, including collection program requirements and identification of organic waste receiving facilities.
Move SW.1.j	Partner with City waste services to: <ul style="list-style-type: none"> ▪ Ensure organic waste collection from mixed waste containers are transported to a high diversion organic waste processing facility. ▪ Provide quarterly route reviews to identify prohibited contaminants potentially found in containers that are collected along route. ▪ Clearly label all new containers indicating which materials are accepted in each container, and by January 1, 2025, place or replace labels on all containers.
Play SW.2	Reduce residential and commercial waste sent to landfills by 50% by 2030 and 100% by 2045.
Move SW.2.a	Develop and implement a Zero Waste Plan, consistent with the General Plan, in order to reach South Pasadena's goal of zero waste by 2040.
Move SW.2.b	Provide ongoing education to residents, business owners, and South Pasadena School District regarding waste reduction, composting, and recycling.
Move SW.2.c	Increase reuse, recycling, and composting at temporary public events by mandating the installation of public recycling and composting containers and collection service; and encouraging reusable food ware, when relevant, according to the California State Retail Food Code.
Move SW.2.d	Develop a waste department or working group to enhance recycling and composting outreach and provide technical assistance or information in support of City Green Action Plan Move III. Additionally, implement and share a Recycle and Reuse Directory through City platforms, in support of Green Action Plan Move I.2.5.
Move SW.2.e	Adopt an ordinance requiring compliance with Sections 4.410.2, 5.410.1, 4.408.1, and 5.408.1 of the California Green Building Standards Code related to construction of buildings with adequate space for recycling containers and construction and demolition (C&D) recycling.
Move SW.2.f	Implement the City General Plan, requiring construction sites to separate waste for proper diversion and reuse or recycling.

ID #	Plays and Respective Supportive Moves
Move SW.2.g	Develop and implement a Waste Stream Education Program targeting property managers of multi-family residences and the commercial sector, in support of Goal III of the City Green Action Plan.
Move SW.2.h	Develop policies to mandate/encourage reduction of waste and reuse in the food industry (e.g. facilities serving prepared food and prepackaged food; home meal delivery services), hospitality industry, and other commercial industries. Efforts may include developing ordinances for food service ware and a ban on single-use individual toiletry bottles in hotels/motels, grant/discount programs for switching to reusables, fast food champion pilot project, and working with home meal delivery services (e.g., Blue Apron), etc. to explore opportunities to reduce single-use packaging and encourage reuse.
Move SW.2.i	Encourage reusable foodware; or if reusable foodware is not a feasible option, explore opportunities to mandate/encourage a switch to more environmentally friendly alternatives for various products in the commercial industry, when relevant.
Carbon Sequestration Sector	
Play CS.1 Increase carbon sequestration through increased tree planting and green space.	
Move CS.1.a	Identify and map public spaces that can be converted to green space, including public parking that can be converted to parklets, freeway airspace that can be made into green space, vertical walls that can be planted with vines, and rooftops of public buildings that can be developed into gardens.
Move CS.1.ab	Adopt a Greenscaping Ordinance that has a street tree requirement for all zoning districts, has a shade tree requirement for new development, requires greening of parking lots, and increases permeable surfaces in new development.
Move CS.1.c	Prepare and adopt an Urban Forest Management Plan for the City that includes an inventory of existing trees, identifies future tree planting opportunities, and a climate-ready tree palette, as well as ongoing operations and maintenance needs.
Move CS.1.d	Adopt a standard policy and set of practices for expanding urban tree canopy and placing vegetative barriers between busy roadways and developments to reduce exposure to air pollutants from traffic.
Municipal Sector	
Play M.1 Reduce carbon intensity of City operations.	
Move M.1.a	As recommended in the 2016 Renewable Energy Council Report, complete energy audits for all City facilities and implement all feasible recommendations for decarbonization and efficiency upgrades.
Move M.1.b	As recommended in the 2016 Renewable Energy Council Report, purchase renewable natural gas (RNG) for applicable City fleet vehicles.
Move M.1.c	Establish an employee rideshare program.
Move M.1.d	As recommended in the 2016 Renewable Energy Council Report, install PV solar systems at the City Hall and at Wilson Reservoir.
Move M.1.e	Adopt retrofitting policy for City owned buildings such that energy efficient and electrification retrofits are incorporated into City buildings as they become available.
Move M.1.f	Develop a policy for the City which would require all new building RFP's to include life cycle costing over 30 years and tie this directly to energy consumption and building electrification. This would include the buildings operational and maintenance costs and ensure that the City has the most cost effective (and sustainable) building possible.
Move M.1.g	As recommended in the 2016 Renewable Energy Council Report, invest all savings from City energy efficiency projects into a new revolving green fund that can be used to fund additional energy efficiency and GHG reduction projects.
Play M.2 Electrify the municipal vehicle fleet and mobile equipment.	
Move M.2.a	Develop a suite of transportation demand management tools to incentivize alternative transportation methods for employees, including telecommute options.
Move M.2.b	Provide bicycles and bicycle storage for employees to use during work hours for short business or personal trips.
Move M.2.c	Develop and adopt a policy to apply lifecycle assessment to all new vehicle and equipment purchases.

ID #	Plays and Respective Supportive Moves
Move M.2.d	Implement the City Fleet Alternative Fuel Conversion Policy developed under the City General Plan, electrifying the City vehicle fleet and using it to encourage residents to convert as well.
Move M.2.e	Install EV charging stations at municipal buildings.
Play M.3	Increase City's renewable energy production and energy resilience.
Move M.3.a	Conduct a Feasibility Study to determine which City buildings would serve as ideal resilience centers including solar and battery installations.
Move M.3.b	Convert all streetlights to light emitting diode (LED) bulbs.
Move M.3.c	Work with the CPA to identify and develop local solar projects to connect to the grid.
Move M.3.d	Install solar arrays at facilities that currently do not have solar arrays and work with emergency services to add solar and battery storage at priority locations. Review options for potential to combine multiple buildings into micro-grid systems.
Move M.3.e	Explore opportunities and partnerships to develop renewable-powered fuel cell micro-grids to provide back-up or primary power for critical facilities such as facilities providing essential services (e.g. water pumping facilities) and schools as a clean alternative to diesel generators.

Source: South Pasadena, City of. 2020. South Pasadena Final Climate Action Plan.

The CAP Plays combined with Statewide legislation and initiatives and regional transportation programs will enable the City to meet its emissions reduction target of 40 percent below 1990 levels by 2030. Table 3 shows the contribution of the Statewide initiatives along with the CAP measures. The City needs to achieve a 18,578 MT CO₂e of GHG emissions reduction by 2030 to meet its goal. The total estimated GHG reductions accounted for in the CAP total 23,386 MT CO₂e by 2030.

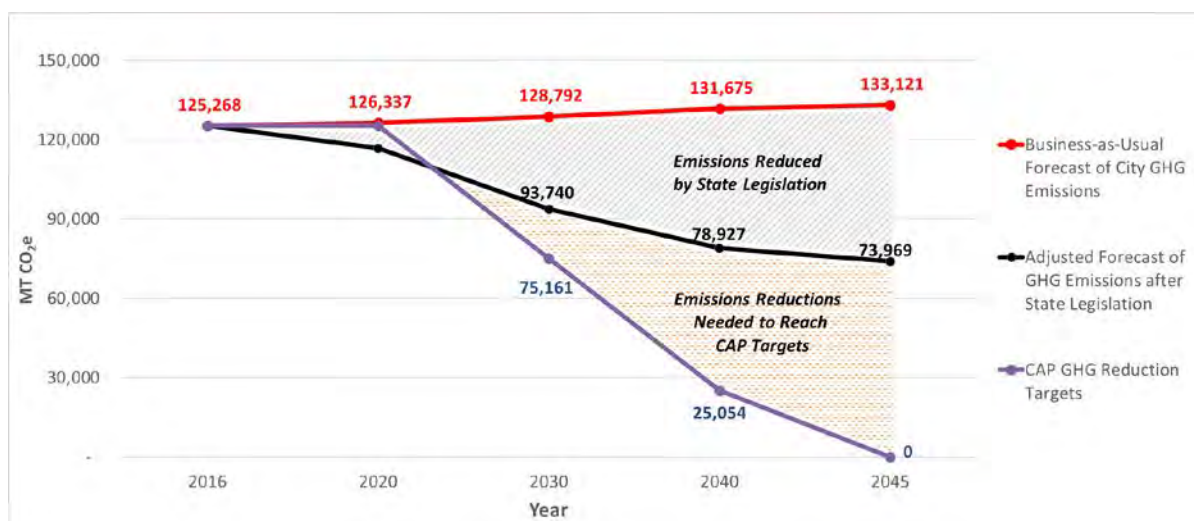
Table 3 South Pasadena 2030 GHG Reduction Target by Sector

State Initiative	Sector	2030 Reduction in City Emissions (MTCO ₂ e)
Advanced Clean Cars Program, Paveley Standards, Zero Emissions Vehicles Program, Clean Transit)	On-road Transportation	22,671
SB 100 and Renewable Portfolio Standard	Electricity	12,035
Title 24	Residential/Nonresidential Electricity and Natural Gas	346
A. Total State Initiative Emissions Reductions		35,052
B. Total City CAP Emissions Reductions		23,386
C. Total Expected Emissions Reductions (A+B)		58,438
D South Pasadena Emissions Reduction Requirement		53,625
E. Meets/exceeds State Goals? (C > D)		Yes

Source: South Pasadena, City of. 2020. Final Climate Action Plan.

Figure 3 and Table 4 illustrate how the BAU emissions are estimated to increase, thus widening the emissions reductions needed by 2030. Figure 3 also shows emissions reductions expected from State level actions as well as the reductions needed to reach the South Pasadena emissions target.

Figure 3 South Pasadena Future GHG Emissions Projection and CAP Reduction Target



Source: South Pasadena, City of. 2020. Final Climate Action Plan.

Table 4 South Pasadena Future GHG Emissions Projection and Reduction Target

Description	Emissions (MTCO ₂ e)
2016 Base Year Emissions	125,268
2030 BAU Emissions	128,792
2030 Target Emissions at 40% below 2016	75,161
2030 Required Reduction	53,631

Source: South Pasadena, City of. 2020. Final Climate Action Plan

Implementation of the 2020 CAP Plays (listed in Table 2) could result in physical changes to the environment that could potentially have a significant impact. While individual projects resulting from these measures have not been identified for the purposes of this document, the types of actions that could result from realization of the CAP measures are taken into account in considering potential environmental impacts that could occur through implementation of the 2020 CAP. For example, projects or actions requiring ministerial approval, such as installation of electric vehicle charging stations and supporting infrastructure, as well as new bicycle or pedestrian facilities, would introduce physical changes related to the temporary presence and operation of construction vehicles and equipment during installation of required facilities and the long-term presence of new facilities such as bike and pedestrian facilities, solar arrays, and electric vehicle charging stations, which could alter pedestrian and vehicular traffic patterns.

Additionally, electrification retrofits may change the physical environment through the need for upgraded service and electrical panels, branch circuit upgrades, and installation of condensate drains to facilitate the installation of electric heat pumps for water and space heating. The physical changes these upgrades and additions would entail are dependent on the year of building construction and location of electrical and service panels and plumbing for connection of condensate drains; which in some cases may include modifications to the interior and/or exterior of buildings for wiring and panel replacement, and minor excavation for connection of drainage to

sewer systems. Future plans or projects requiring discretionary approval would be subject to environmental review under CEQA, and individual impact analyses will identify required plan- or project-specific mitigation measures where applicable.

7. Cumulative Projects Scenario

For purposes of CEQA cumulative impacts analysis of the South Pasadena 2020 CAP, the cumulative projects scenario is the total projected population growth, and the anticipated cumulative development to accommodate that growth, for South Pasadena in 2030. The South Pasadena General Plan Housing Element only projects City population through 2021,⁸ and thus SCAG-projected total South Pasadena population of 26,649 persons in 2030⁹ is utilized in this CEQA document.

8. Required Approvals

City of South Pasadena

Required approvals include:

- Adoption of the 2020 CAP Initial Study-Negative Declaration; and
- Adoption of the 2020 CAP.

Although individual plans or projects may be implemented later under the umbrella of the CAP, each individual plan or project would be subject to separate environmental review under CEQA.

Other Public Agencies

The City of South Pasadena has sole approval authority over the CAP. There are no other public agencies whose approval is required.

⁸ South Pasadena, City of. 2014. South Pasadena General Plan Housing Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 17, 2020.

⁹ SCAG. 2014. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. Demographics and Growth Forecast Appendix. Available: <http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf>. Accessed September 17, 2020.

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

Determination

Based on this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Printed Name

Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Except as provided in Public Resources Code Section 21099, would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a. Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

a. *Would the project have a substantial adverse effect on a scenic vista?*

or

b. *Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

Within the City of South Pasadena, State Route 110 is a designated Federal Byway according to the California Scenic Highway System.¹⁰ The portion of State Route 110 with this designation connects East Colorado Boulevard on the northern end within adjacent City of Pasadena to the State Route 110/U.S. Highway 101 interchange on the southern end within adjacent City of Los Angeles. While the City of South Pasadena General Plan has not identified scenic vistas or scenic roadways, it states that the hillsides and ridgelines provide a scenic backdrop for the entire community and that viewsheds to and from these hillsides should be protected. In addition, General Plan Open Space and Resource Conservation Element Policies 5 and 6 as well as the Hillside Ordinance require scenic

¹⁰ California Department of Transportation (Caltrans). 2020. California State Scenic Highway System Map. Available: <<https://www.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983>>. Accessed September 27, 2020.

resource and landform preservation and regulate new development proposed within the hillside areas.¹¹ The CAP would promote infrastructure development and redevelopment that is complimentary to existing development, natural features, and land uses. The South Pasadena Municipal Code Chapter 34 (Trees and Shrubs) as well as General Plan Goals 16 and 17 require preservation and protection of trees and other natural constraints, including ridgelines geologic features, and open space, from unnecessary encroachment or destruction.¹² Furthermore, City Ordinance 2315 (Cultural Heritage Commission to Protect the City's Cultural Resources) and General Plan Open Space and Resource Conservation Element Policy 11 require the preservation of the natural landscape and historic character of districts, neighborhoods, and landmarks.

As a policy document, the CAP would not result in impacts related to scenic vistas and scenic highways. However, implementation of the following CAP Plays may promote infrastructure development and redevelopment through policies and programs. CAP Plays E.2 and E.3 promote electrification of newly constructed and existing buildings, and CAP Play E.4 promotes installation of battery back-up systems or generators and solar panels to facilitate the switching of building fuel away from natural gas within the City. CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, Play M.2 requires electrification of the municipal fleet and mobile equipment. Additionally, CAP Play CS.1, promotes the increased planting of trees and provision of green space. The physical changes these installations and enhancements would entail are dependent on the location of construction for the electric vehicle charging connections, active transportation pathways, and trees/green spaces.

However, it is anticipated that CAP projects would avoid alterations to historic buildings, mature trees, and other distinguishing scenic characteristics; adhere to City development zoning and regulations that require retention of City character and minimization of environmental and community setting impacts; and, if warranted, be reviewed by the City's Design Review Board. As such, the CAP would not result in adverse impacts related to scenic vistas, viewing corridors, or scenic roadways within the City. Furthermore, due to intervening development typical of an urban setting, proposed CAP projects would not likely be visible from the designated Federal Byway (State Route 110). Thus, scenic resources such as trees, rock outcroppings, and historic buildings would not be damaged within a State scenic highway. Therefore, the CAP would result in a less-than-significant impact related to scenic vistas and related to scenic resources within scenic highways.

LESS THAN SIGNIFICANT IMPACT

11 South Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 23, 2020.

12 South Pasadena, City of. 2020. Municipal Code Chapter 34 (Trees and Shrubs). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 23, 2020.

- c. *Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The City of South Pasadena is an urbanized area with visual character/quality goals and policies from the City General Plan Open Space and Resource Conservation Element to preserve and protect the scenic and visual quality of the community. The CAP would not involve land use or zoning changes, but would instead promote infrastructure development and redevelopment through policies and programs. Implementation of the following CAP Plays may promote infrastructure development and redevelopment that may impact visual character, as described below.

CAP Play E.4 promotes installation of battery back-up systems or generators and solar panels. CAP Play T.1 encourages installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, Play M.2 requires electrification of the municipal fleet and mobile equipment. Furthermore, CAP Play CS.1, promotes increased planting of trees and provision of green space. Planting trees, implementation of solar panels and electric vehicle charging stations, and introduction of active transportation infrastructure may slightly change visual character in the City. However, CAP projects would be located and designed to be complimentary to existing development and land uses in a manner consistent with applicable zoning and other regulations governing visual character and quality within the City of South Pasadena. In addition, CAP projects would be reviewed for consistency with the General Plan and other applicable regulatory land use actions prior to approval. Therefore, the CAP would result in a less-than-significant impact related to regulations of visual character and quality.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

The CAP would not involve land use or zoning changes. Rather the CAP would promote infrastructure development and redevelopment that is complimentary to existing development and land uses. As a policy document, the CAP would not directly result in impacts related to light and glare. However, implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Play E.4 promotes installation of solar panels to facilitate the switching of building fuel away from natural gas within the City. CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space.

CAP projects would be reviewed for consistency with the City Municipal Code to minimize environmental impacts related to light and glare through limitations of materials and shielding light structures. Presumably design and location of proposed solar infrastructure would be complimentary to existing development in the City. In addition, CAP projects would be reviewed for consistency with the General Plan and other applicable land use regulations prior to approval. Thus, the CAP would result in a less-than-significant impact related to light and glare.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Cumulative impacts related to scenic resources, visual character, and increased light and glare would generally be site-specific, and cumulative projects are not anticipated to contribute to cumulative aesthetic impacts with adherence to General Plan policies and the Municipal Code. Because of the developed nature of South Pasadena, future infrastructure projects under the CAP, in combination with other cumulative projects, would not adversely impact the visual character of the City. In addition, future development in the City would be required to comply with the City's Design Review process and be reviewed against applicable General Plan policies and City's design standards for design quality and compatibility with adjacent land uses. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to aesthetics.

LESS THAN SIGNIFICANT IMPACT

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Conflict with existing zoning for agricultural use or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

or

b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract*

The City of South Pasadena does not contain farmland or lands used for agricultural purposes.¹³ The CAP does not involve projects that would result in impacts related to conversion or loss of farmland. Therefore, the CAP would result in no impact related to degradation of agricultural resources or

¹³ South Pasadena, City of. 1998. General Plan Land Use Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 24, 2020.

conversion of agricultural land to non-agriculture uses, nor would there be a conflict with existing zoning or general plan land use designations.

NO IMPACT

c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*

or

d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

The City does not contain forest or timberland resources. The South Pasadena Municipal Code Chapter 34 (Trees and Shrubs), establishes policies, regulations and standards necessary to ensure tree protection and manage an urban forestry program. And CAP Play CS.1 facilitates increased tree planting and green space. As such, the CAP would increase planting of trees as part of new development within the City and be consistent with the tree protection and urban forestry program requirements of the City Municipal Code. Therefore, the CAP would result in no impact related to degradation of forestry resources or conversion of forest land to non-forest uses, nor would there be a conflict with existing zoning or general plan land use designations.

NO IMPACT

e. *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

See impact discussions above under Topics 2a through 2d. The CAP would not result in other changes to the existing environment which, due to their location or nature, would result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. The City does not contain farmland or lands used for agricultural purposes. Additionally, the City does not contain forest or timberland resources. Cumulative projects are not anticipated to contribute to cumulative forestry impacts with adherence to General Plan policies. In addition, the CAP would not involve land use or zoning changes that could result in cumulative impacts related to conversion or loss of farmland or forest land. Therefore, implementation of the CAP would result in no cumulative impact related to agricultural and forestry resources.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

South Pasadena is located within the South Coast Air Basin (the Air Basin), which includes all of Orange County and the non-desert regions of Los Angeles County, Riverside County, and San Bernardino County. The Air Basin is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As the local air quality management agency, SCAQMD is required to monitor air pollutant levels to ensure that State and federal air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether or not the standards are met or exceeded, the South Coast Air Basin is classified as being in “attainment” or “nonattainment.” Under State law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-attainment. SCAQMD is in non-attainment for the State and federal ozone standards, the State and federal PM_{2.5} (particulate matter up to 2.5 microns in size) standards, and the State PM₁₀ (particulate matter up to 10 microns in size) standards, and the federal lead standards and is required to prepare a plan for improvement.¹⁴ The sources, health effects, and typical controls associated with criteria pollutants are described in Appendix A.

The SCAQMD Clean Air Plan (Air Quality Management Plan [AQMP]) provides a plan to improve South Coast Air Basin air quality and protect public health as well as the climate. The most recent (2016) AQMP complies with State air quality planning requirements as codified in the California Health and Safety Code. The 2016 AQMP seeks to achieve multiple goals promoting reductions in criteria pollutant, greenhouse gases, and toxic risk, as well as efficiencies in energy use,

¹⁴ South Coast Quality Management District (SCAQMD). 2018. National and California Ambient Air Quality Standards Attainment Status for South Coast Air Basin. Available: <<http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=14>>. Accessed September 28, 2020.

transportation, and goods movement. The most effective way to reduce air pollution impacts on the health of the approximately 17 million residents in the South Coast Air Basin, including those in disproportionately impacted and environmental justice communities that are concentrated along our transportation corridors and goods movement facilities, is to reduce emissions from mobile sources, the principal contributor to our air quality challenges. Thus, AQMD worked closely with California Air Resources Board (CARB) and the United States Environmental Protection Agency (U.S. EPA) who have primary responsibility for these sources. The 2016 AQMP also includes transportation control measures developed by the Southern California Association of Governments (SCAG) from the 2016 Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS).¹⁵

The Federal Clean Air Act Amendments (CAAA) mandate that states submit and implement a State Implementation Plan (SIP) for areas not meeting air quality standards. The SIP includes pollution control measures to demonstrate how the standards will be met through those measures. The SIP is established by incorporating measures established during the preparation of Air Quality Management Plans (AQMP) and adopted rules and regulations by each local APCD and AQMD, which are submitted for approval to CARB and the U.S. EPA.¹⁶ The goal of an AQMP is to reduce pollutant concentrations below the National Ambient Air Quality Standards (NAAQS) through the implementation of air pollutant emissions controls.

The CAP would not involve land use or zoning changes, but would rather promote infrastructure development and redevelopment. Implementation of proposed measures would be beneficial by helping South Pasadena meet applicable air quality plan goals and generally reducing sensitive receptor exposure to pollutant concentrations. Although the purpose and intended effect of the CAP is to reduce GHG emissions generated in the City to help reduce the effects of climate change, many of its Plays and supporting Moves would also reduce criteria pollutant (i.e., air quality) emissions. CAP Plays E.1 through E.4 propose revisions to and new City ordinances requiring electrification of 100 percent new buildings and incremental portion of existing buildings as well as maximum usage of renewable energy and installation of solar systems, battery storage, and potential microgrids within the City to help meet community energy demand. In addition, CAP Plays M.1 through M.3 require reduced carbon intensity of municipal operations, electrification of the municipal fleet and mobile equipment, and increased municipal renewable energy production. This would decrease the use of non-renewable fuel sources for residential and non-residential land use operations. Additionally, CAP Plays T.2, T.3, and M.2 facilitate and incentivize bike lanes, bike parking, and public and shared transit, which would increase active transportation and decrease the vehicle miles traveled in South Pasadena. Furthermore, CAP Move W.1.f requires use of 100-percent renewable power for all pumping and treatment of water. These energy- and transportation-related measures would reduce air quality emissions as well as GHG emissions. Therefore, the CAP is consistent with the 2016 AQMP and would have no impact related to a conflict with or obstruction of the applicable air quality plan.

NO IMPACT

¹⁵ SCAQMD. 2016. Final SCAQMC Air Quality Management Plan. Available: <<http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp>>. Accessed September 28, 2020.

¹⁶ CARB. 2016. State Strategy for the State Implementation Plan for Federal Ozone and PM2.5 Standards. Available: <<https://ww3.arb.ca.gov/planning/sip/2016sip/2016sip.htm>>. Accessed September 28, 2020.

- b. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

City Municipal Code Chapter 4 (Air Pollution) identifies discharge of certain air pollutants as illegal within the City.¹⁷ The CAP would not involve land use or zoning changes but would instead promote infrastructure development and redevelopment. As a policy document, the CAP would not result in impacts related to criteria pollutants. However, implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Play E.4 promotes installation of solar PV systems and battery storage to provide greener renewable electricity within the City. CAP Play T.1 encourage the installation of electric vehicle charging stations and infrastructure, and CAP Plays T.2 and T.2 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment. Furthermore, CAP Play CS.1, facilitates increased trees and open space. Construction-related air quality impacts are generally associated with fugitive dust (PM₁₀ and PM_{2.5}) and exhaust emissions from heavy construction vehicles and soil-hauling trucks, in addition to Reactive Organic Gas (ROG) that would be released during architectural coatings drying. However, CAP projects would not entail large-scale construction and, thus, would result in low-level criteria pollutant emissions and negligible impacts to air quality. CAP projects would also be reviewed for consistency with SCAQMD air quality regulations and other applicable local, State, and federal regulations once project details and locations are known. Thus, construction associated with CAP implementation would result in a less-than-significant impact related to net increase of criteria pollutants. With respect to operational emissions, many CAP Plays would have the secondary benefit of reducing criteria pollutant emissions. CAP Plays aim to increase building renewable energy use, promote electric vehicles, reduce building natural gas use, reduce on-road gasoline fuel use, and reduce vehicle miles traveled. Implementation of such CAP Plays would be beneficial by helping South Pasadena meet applicable air quality plan goals. In addition, future CAP projects would be required to comply with local, regional, and State air quality regulations. Therefore, the CAP would result in a less-than-significant impact related to criteria pollutant emissions.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Plays E.2 and E.3 promote electrification of newly constructed and existing buildings, and CAP Play E.4 promotes installation of battery back-up systems or generators and solar panels to facilitate the switching of building fuel away from natural gas. Such electrification and renewable energy retrofits may change the physical environment through the need for upgraded service and electrical panels, branch circuit upgrades, solar panels, and installation of condensate drains to facilitate the installation of electric heat pumps for water and space heating. Additionally, CAP Play T.1 encourages the installation of electric vehicle charging stations and infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. CAP Play M.2 requires electrification of the municipal fleet and mobile equipment and incentivizes alternative transportation methods for municipal employees. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space, and CAP Play W.1 aims to bring recycled water lines and infrastructure to the City. Construction-related air quality impacts

¹⁷ South Pasadena, City of. 2020. Municipal Code Chapter 4 (Air Pollution). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 28, 2020.

are generally associated with fugitive dust (PM10 and PM2.5) and exhaust emissions from heavy construction vehicles and soil hauling trucks, in addition to ROG that would be released during the drying phase upon application of architectural coatings. However, implementation of proposed CAP measures would not include large-scale construction within South Pasadena. As such, it would result in low-level toxic air contaminant emissions. While the CAP could result in construction-related impacts related to toxic air contaminants and exposure to sensitive receptors, CAP projects would be reviewed for consistency to comply with SCAQMD air quality regulations and other applicable local, State, and federal regulations once project details and locations are known. Thus, the construction associated with implementation of the CAP would not result in substantial emissions of toxic air contaminants and exposure to sensitive receptors. No operational toxic air contaminant emissions are anticipated with implementation of the CAP. Therefore, the CAP would have a less-than-significant impact related to exposure of sensitive receptors to toxic air contaminants.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The CARB 2005 Air Quality Land Use Handbook: A Community Health Perspective identifies land uses associated with odor complaints which include: sewage treatment plants, landfills, recycling facilities, waste transfer stations, petroleum refineries, biomass operations, auto body shops, coating operations, fiberglass manufacturing, foundries, rendering plants, and livestock operations. CAP Plays SW.1 and SW.2 promote participation in recycling and organic waste programs and reducing such waste going to landfills to achieve 75 percent reduction in waste-related GHG emissions by 2025. And CAP Play SW.2 encourages use of reusable foodware, reduction of waste in the food industry, and food waste being compostable. Also, CAP Plays SW.1 and SW.2 requires all new buildings to subscribe to recycling and organic waste collection services and provide adequate space for recycling and compost containers, in accordance with SB 1383 and AB 1826. As such, the CAP could result in minor odors related to compost. However, green waste collection bins and compost application are not identified on the list of “Sources of Odor Complaints” (Table 1-4) as provided in the CARB Air Quality Land Use Handbook and would not be anticipated to result in other emissions, such as those leading to odors, adversely affecting a substantial number of people. Therefore, the CAP would not facilitate development that could create adverse odors, and there would be a less-than-significant impact related to odors exposure.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. The cumulative projects could exceed applicable SCAQMD thresholds or be inconsistent with the Clean Air Plan. However, implementation of the CAP would have a less-than-significant contribution related to potential cumulative air quality impacts within the air basin and on sensitive receptors within the City of South Pasadena, given that the CAP would result in Citywide reduction of GHG emissions, energy use, single-occupancy vehicle travel, water use, and waste generation. As such, implementation of the CAP would not result in adverse impacts related to contribution of criteria pollutants to the air basin and exposure of sensitive receptors to toxic air contaminants. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to air quality.

LESS THAN SIGNIFICANT IMPACT

4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

South Pasadena is a primarily urbanized community with parks and recreational and open spaces incorporated throughout the City. The City's Municipal Code Chapter 34 (Trees and Shrubs), as well as the General Open Space and Resource Conservation Element incorporate goals and policies to protect biological resources, such as trees and other plant habitats, wildlife habitats, and connecting wildlife corridors in the City.

The CAP would not involve land use or zoning changes, but would instead promote infrastructure development and redevelopment. As a policy document, the CAP would not directly result in impacts related to wildlife species identified as candidate, sensitive, or special status. However, implementation of the following CAP Plays may promote infrastructure development and redevelopment and may result in impacts to species through habitat modification for purposes of infrastructure installation.

CAP Play E.4 promotes installation of solar panels to facilitate the switching of building fuel away from natural gas within the City. CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space. Planting new trees may slightly increase the City urban forestry canopy for use by migratory and nesting birds.

These CAP Plays would not conflict with the Municipal Code or goals/policies of the General Plan Open Space and Resource Conservation Element but would rather be consistent with and promote those plans. The CAP Plays would generally apply to the urbanized areas of the City, with little application to open space area or other locations where sensitive habitat and related species may be present. As such, the CAP itself would not have a substantial adverse effect on special-status wildlife species either directly through individual take or indirectly through species habitat modification. Therefore, the CAP would result in a less-than-significant impact related to special-status wildlife species.

LESS THAN SIGNIFICANT IMPACT

b. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

or

c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The CAP would not involve land use or zoning changes, but would instead promote infrastructure development and redevelopment. As a policy document, the CAP could result in impacts related to habitat whether riparian, wetland, or other sensitive natural community. According to the General Plan Open Space and Resource Conservation Element, opportunities for wildlife (e.g., birds and mammals) habitat protection in South Pasadena include the following undeveloped or primarily undisturbed opens space areas:

- The canyons, hillsides and steep topography in the Monterey Hills, and the primarily City-owned vacant, undeveloped lands in the southwest corner of the Monterey Hills;
- The Arroyo Seco and adjacent areas;
- Lot 117 in the Altos de Monterey residential tract;
- The drainage wash east of Garfield;
- The vacated railway easement (between Marengo and Fair Oaks); and
- Upper slopes in the Monterey Road/Pasadena Avenue/Kolle Avenue/Brunswick Avenue/Oak Hill Avenue residential areas.¹⁸

CAP Play CS.1 promotes the increased planting of trees and provision of green space, which may slightly change the City's urban forestry program. As such, the CAP would be required to adhere to City development regulations and General Plan policies, including the City of South Pasadena Tree Preservation Ordinance, to retain urban forestry and minimize environmental impacts. CAP Play E.4 promotes installation of solar panels to facilitate the switching of building fuel away from natural gas within the City. CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Installation of new active transportation and electrical and renewable energy infrastructure may result in disturbance of habitat areas.

However, the CAP Plays and supporting Moves would generally apply to the urbanized areas of the City, with little application to parks, open spaces area, or other locations where sensitive habitat and related species may be present. CAP projects would be reviewed for consistency with applicable local, regional, and State regulations, once project details and locations are known. These CAP Plays and Moves would not conflict with the Municipal Code or objectives and policies of the General Plan or Conservation Guidelines but would rather be consistent with and promote those plans. As such, the CAP would not have a substantial adverse effect on riparian habitat or sensitive natural

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outh Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 23, 2020.

community, such as wetlands. Therefore, the CAP would have a less-than-significant impact related to sensitive natural plant communities.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The CAP would not involve land use or zoning changes, but would instead promote infrastructure development and redevelopment. As a policy document, the CAP would not result in impacts related to interference with species movement. However, implementation of the following CAP Plays may promote infrastructure development and redevelopment. According to the General Plan Open Space and Resource Conservation Element, the primary wildlife corridors in South Pasadena include the Arroyo Seco riparian corridor on the northeast and east sides of the City and the undeveloped or primarily undisturbed opens space areas listed above under Topic c that contain natural resources, such as steep slopes, canyons, hillside vegetation (both native and introduced), drainage courses, and vegetation associated with rainfall runoff.¹⁹

CAP Play E.4 promotes installation of solar panels to facilitate the switching of building fuel away from natural gas within the City. CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space. As such, the CAP would be required to adhere to City development regulations and General Plan policies, including the City of South Pasadena Tree Preservation Ordinance, to retain urban forestry and minimize environmental and community setting impacts. Installation of new active transportation and renewable energy infrastructure may result in disturbance of habitat areas. However, the CAP Plays would generally apply to the urbanized areas of the City with little application to parks, open spaces area, or other locations where wildlife corridors or native wildlife nursery sites may be present.

Furthermore, CAP projects would be reviewed for consistency with applicable local, regional, and State regulations, once project details and locations are known. The CAP Plays and supporting Moves would not conflict with the Municipal Code or objectives and policies of the General Plan but would rather be consistent with and promote those plans. Therefore, the CAP would result in a less-than-significant impact related to interference with species movement.

LESS THAN SIGNIFICANT IMPACT

¹⁹ South Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 23, 2020.

- e. *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

South Pasadena is a primarily urbanized community with neighborhood parks, community parks, and recreational spaces throughout the City.²⁰ The South Pasadena Municipal Code Chapter 34 (Trees and Shrubs) as well as the General Plan Open Space and Resource Conservation Element incorporate goals and policies related to natural resources protection in the City. Additionally, the South Pasadena Tree Preservation Ordinance was established to preserve the trees and plantings on City property and enhance the ecological benefit to the community by providing for the regulation of planting, management, maintenance, preservation and, where necessary, the removal of public trees. The City is not located within the jurisdiction of an adopted habitat conservation plan, natural community plan, or other approved local, regional, or State habitat conservation plan.

The CAP would not involve land use or zoning changes but would rather promote infrastructure development and redevelopment. The purpose and intended effect of the CAP is to reduce GHG emissions generated within the South Pasadena community, including related to City municipal operations, to help reduce the effects of climate change. Implementation of proposed CAP Plays and supporting Moves would be beneficial by helping South Pasadena meet applicable local policies and ordinances for protecting natural and biological resources. The CAP would not conflict with or obstruct implementation of the applicable policies for preserving biological resources and would not affect the City's ability to attain goals and policies that protect biological resources. Therefore, the CAP would result in no impact related to consistency with local biological resources protection policies.

NO IMPACT

- f. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The South Pasadena General Plan Open Space and Resource Conservation Element includes an inventory of open space resources as well as goals and policies to preserve natural resources, such as plant and wildlife habitats in the City. However, the City is not located within the jurisdiction of an adopted habitat conservation plan, natural community plan, or other approved local, regional, or State habitat conservation plan. As such, the CAP would not facilitate specific development projects, nor would it add or enable new development that would conflict with the adopted Municipal Code, General Plan, or other approved local, regional, or State habitat conservation plan. Therefore, the CAP would have no impact related to consistency with an adopted habitat or natural community conservation plan.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Implementation of cumulative projects could result in impacts to biological resources during infrastructure and building construction. The CAP would promote infrastructure development and redevelopment that is already accounted for in the General Plan. However, infrastructure development or redevelopment resulting from implementation of the CAP would be

²⁰ South Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 23, 2020.

required to comply with applicable General Plan policies and State and federal regulatory requirements regarding avoidance of special wildlife species and habitat. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to biological resources.

LESS THAN SIGNIFICANT IMPACT

5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

The City of South Pasadena has identified 2,718 properties that are both individually eligible resources and contributors to historic districts within its City limits.^{21 22} The CAP would not involve land use or zoning changes but would promote building energy retrofits as well as infrastructure development and redevelopment that would be complimentary to existing development. CAP projects in South Pasadena would be required to comply with City Ordinance 2315 (Cultural Heritage Ordinance) and General Plan Open Space and Resource Conservation Element purpose that require the identification and preservation of sites and structures of architectural, historical, archaeological, and cultural significance. This includes sites, structures, and areas that are associated with a historic event, activity, or persons that contribute to the historic character of districts, neighborhoods, landmarks, historic structures, and artifacts. CAP projects within the City would also be required to comply with General Plan Historic Preservation Element Policies 9.2 (promote historic districts and landmark designations), 9.4 (encourage and promote the adaptive reuse of historic resources), 2.5 (apply Secretary of Interior’s Standards and alternative buildings codes, such as the Uniform Code for Building Conservation and/or the State Historic Building Code, to qualified historic properties), and 3.1 (maintain landscape elements that contribute to the attractiveness and historic character of designated historic districts and landmarks).²³

Implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Plays E.2 and E.3 promote electrification of newly constructed and existing buildings and CAP Play E.4 promotes installation of battery back-up systems or generators and solar panels to facilitate the switching of building fuel away from natural gas within the City.

21 South Pasadena, City of. 2020. Historic Resources Survey Overview. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/historic-resources-survey>>. Accessed September 24, 2020.

22 South Pasadena, City of. 2017. Historic Resources Survey prepared by HRG Consultants.

23 South Pasadena, City of. 1998. General Plan Historic Preservation Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 25, 2020.

Electrification retrofits may change the physical environment through the need for upgraded service and electrical panels, branch circuit upgrades, and installation of condensate drains to facilitate the installation of electric heat pumps for water and space heating. The physical changes these upgrades and additions would entail are dependent on the year of building construction and location of electrical and service panels and plumbing for connection of condensate drains, which in some cases may include modifications to the interior and/or exterior of buildings for wiring and panel replacement and minor excavation for connection of drainage to sewer systems. However, it is anticipated that retrofit activities would avoid alterations to the historic materials and distinguishing character (e.g., overall shape of the building, its materials, craftsmanship, decorative details, interior spaces and features, and aspects of its site and environment) of identified historic resources and, if warranted, be reviewed by the City's Cultural Heritage Commission.

CAP projects would be reviewed for consistency with applicable local, regional, and State regulations, including City Ordinance 2315 and General Plan Open Space and Resource Conservation Element purpose that require the identification and protection of sites and structures of, architectural and historical significance, in order to avoid impacts related to unknown historical resources. As such, implementation of the CAP would not conflict with or obstruct the City's ability to comply with applicable historical resources preservation policies. Therefore, the CAP would result in a less-than-significant impact related to historical resources.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The City of South Pasadena has not identified known archeological sites within its City limits.^{24,25} However, as-yet to be discovered or unknown sites or resources may exist. The CAP would not involve land use or zoning changes but would promote building energy retrofits as well as infrastructure development and redevelopment. For example, CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space, and CAP Play W.1 aims to bring recycled water lines and infrastructure to the City. The physical changes these installations and enhancements would entail are dependent on the location of construction for the electric vehicle charging connections, active transportation pathways, and trees/green spaces, which in some cases may include minor temporary excavation.

These CAP Plays and supporting Moves would result in ground disturbance that could result in an impact on unknown archeological resources during construction. CAP projects would be reviewed for consistency with applicable local, regional, and State regulations, including City Ordinance 2315 that requires the identification and protection of sites and structures of, archaeological and cultural significance, in order to avoid impacts related to unknown archaeological resources. Therefore, the CAP would result in a less-than-significant impact related to unknown archaeological resources.

²⁴ South Pasadena, City of. 1998. General Plan Land Use Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 24, 2020.

²⁵ South Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 23, 2020.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project disturb any human remains, including those interred outside of formal cemeteries?*

There are no known burial points or burial sensitivity areas within the City.^{26,27} However, there is the possibility of encountering unknown buried archaeological deposits and human remains throughout South Pasadena. Impacts to historic and archaeological resources are generally site-specific. The CAP would not involve land use or zoning changes but would promote building energy retrofits as well as infrastructure development and redevelopment. For example, CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space, and CAP Play W.1 aims to bring recycled water lines and infrastructure to the City. The physical changes these installations and enhancements would entail are dependent on the location of construction for the electric vehicle charging connections, active transportation pathways, and trees/green spaces, which in some cases may include minor temporary excavation.

These CAP Plays would result in ground disturbance that could result in an impact on unknown human remains during construction. However, implementation of CAP projects would be required to comply with City Ordinance 2315 and General Plan Open Space and Resource Conservation Element purpose that require the identification and protection of sites of archaeological and cultural significance, in order to avoid impacts related to unknown human remains. In addition, CAP projects would be required to comply with State coroner requirements related to burial findings, including assessment and mitigation incorporation once project details and locations are known. Therefore, the CAP would result in a less-than-significant impact related to unknown human remains.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. There is the possibility of encountering buried archaeological deposits and human remains throughout South Pasadena. Implementation of the cumulative projects would include infrastructure and building development that could have an impact on cultural resources during construction. Impacts to historic and archaeological resources are generally site-specific. Accordingly, as required under applicable laws and regulations, potential impacts associated with cumulative developments would be addressed on a case-by-case basis. No known cultural resources would be removed, modified, or otherwise affected by the implementation of the CAP. In addition, future projects in South Pasadena, including those associated with implementation of the CAP, would be required to comply with City Ordinance 2315 that requires the identification and protection of sites and structures of architectural, historical, archaeological and cultural significance,

26 South Pasadena, City of. 1998. General Plan Land Use Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 24, 2020.

27 South Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available:

<<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 23, 2020.

in order to avoid impacts related to unknown cultural resources. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to cultural resources.

LESS THAN SIGNIFICANT IMPACT

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

California is one of the lowest per-capita energy users in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate.²⁸ California consumed 292,039 gigawatt-hours (GWh) of electricity and 2,110,829 cubic feet of natural gas in 2017.^{29,30} The single largest end-use sector for energy consumption in California is transportation (39.8 percent), followed by industry (23.7 percent), commercial (18.9 percent), and residential (17.7 percent).³¹ Adopted in 2018, SB 100 accelerates the State’s Renewable Portfolio Standards Program, codified in the Public Utilities Act, by requiring electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

The City of South Pasadena has demonstrated its commitment to energy efficiency and renewable energy, as described in the Sustainability and GHG Reduction Efforts Setting section above. And City Municipal Code Chapter 9 (Buildings) specifies electrical code details by land use type within the City.³² As part of CAP Move E.2e and per the California Green Building Standards Code, the City will adopt an Electrification Readiness reach code for all new buildings and accessory dwelling units that bans the piping of natural gas to support fuel -switching and ultimate decarbonization purposes.³³ The City has also completed a total (i.e., community and municipal) GHG emissions inventory for

28 United States Energy Information Administration (USEIA). 2018. California Profile Overview. Available: <<https://www.eia.gov/state/?sid=CA>>. Accessed September 28, 2020.

29 California Energy Commission (CEC). 2019. Environmental Health and Equity Impacts from Climate Change and Mitigation Policies in California: A Review of the Literature. Accessed July 24, 2020.

30 USEIA. 2018. Natural Gas Consumption by End Use. Available: <https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm>. Accessed September 28, 2020.

31 USEIA. 2018. California Profile Overview. Available: <<https://www.eia.gov/state/?sid=CA>>. Accessed September 28, 2020.

32 South Pasadena, City of. 2020. Municipal Code Chapter 9 (Buildings). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 28, 2020.

33 A reach code is a local building energy code that “reaches” beyond State minimum requirements for energy use in building design and construction, creating opportunities for local governments to lead the way on clean air, climate solutions, and the renewable energy economy.

2016, which is summarized in Table 1. The largest sectors of GHG emissions are related to energy and transportation, followed by solid waste and water. According to the California Energy Commission (CEC), Los Angeles County consumed approximately 69,448.67 GWh in 2016.³⁴

The CAP is a policy document containing climate action Plays and supporting Moves to reduce South Pasadena GHG emissions. The CAP would not involve land use or zoning changes, but would promote infrastructure development and redevelopment. Furthermore, the purpose and intended effect of the CAP is to reduce GHG emissions generated in the City to help reduce the effects of climate change, including those emissions generated by energy demand and supply. The CAP encourages electrification, use of renewable energy, and energy efficiency in existing residential and commercial building stock as well as proposed new residential and commercial buildings. CAP Plays E.1 through E.4 propose revisions to and new City ordinances requiring electrification of 100 percent new buildings and incremental portion of existing buildings as well as maximum usage of renewable energy and installation of solar systems, battery storage, and potential microgrids within the City to help meet community energy demand. In addition, CAP Plays M.1 through M.3 require reduced carbon intensity of municipal operations, electrification of the municipal fleet and mobile equipment, and increased municipal renewable energy production. As such, the CAP would not result in the use of non-renewable resources in a wasteful or inefficient manner. Therefore, the CAP would result in a less-than-significant impact related to the wasteful, inefficient, or unnecessary consumption of energy. Rather, the CAP would assist in reducing use of non-renewable energy resources.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

As part of CAP Move E.2e and per the California Green Building Standards Code, the City would adopt an Electrification Readiness reach code for all new buildings and accessory dwelling units construction that bans the piping of natural gas. Therefore, construction and operation associated with infrastructure projects stemming from the CAP would be designed to comply with the energy source standards of the California Green Building Standard Code. Likewise, CAP projects would be reviewed for consistency with the energy efficiency standards in the 2016 California Energy Code, Part 6 of the California Building Standards Code (Title 24). And CAP Plays E.1 through E.4 propose revisions to and new City ordinances requiring electrification of 100 percent new buildings and incremental portion of existing buildings as well as maximum usage of renewable energy and installation of solar systems, battery storage, and potential microgrids in a manner involving ongoing adoption of the latest standards of the California Green Building Standards Code. In addition, CAP Plays M.1 through M.3 require reduced carbon intensity of municipal operations, electrification of the municipal fleet and mobile equipment, and increased municipal renewable energy production.

Thus, the CAP would revise but would not conflict with adopted renewable energy or energy conservation plans. Therefore, the CAP would result in a less-than-significant impact related to consistency with State and local renewable energy and energy efficiency plans. Rather, the CAP would be consistent with State and local plans for renewable energy and energy efficiency.

LESS THAN SIGNIFICANT IMPACT

³⁴ California Energy Commission. 2016. Electricity Consumption by County. Available: <<http://ecdms.energy.ca.gov/elecbycounty.aspx>>. Accessed September 28, 2020.

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Implementation of the CAP would result in reducing use of non-renewable energy resources across the community and in particular with remodels and new construction. And implementation of solar infrastructure and implementation of active transportation infrastructure would require small-scale construction. As such, construction of the cumulative projects within the City could result in temporary energy consumption impacts. Therefore, implementation of the CAP would result a less-than-significant cumulative impact related to energy.

LESS THAN SIGNIFICANT IMPACT

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7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
▪ Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- *rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;*
- *strong seismic ground shaking;*
- *seismic-related ground failure, including liquefaction; or*
- *landslides?*

South Pasadena is located in a seismically active region in an area of potential fault rupture, strong ground shaking, and slope instability. These geologic and seismic hazards can affect the structural integrity of structures and utilities, and in turn can cause severe property damage and potential loss of life. Primary seismic faults located near the City are the Sierra Madre Fault system, the Whittier Fault, and the San Andreas Fault. An earthquake anywhere along these faults could trigger secondary seismic hazard impacts within South Pasadena. Three other faults influence the City of South Pasadena: the Raymond Hill Fault, the York Boulevard Fault, and the Elysian Park Fault. Between these three faults, much of the City is subject to earthquake seismic hazards but is at low risk for liquefaction. Landslide areas exist in the Repetto Hills just inside the western City boundary, and there is the Monterey Road Landslide area in the southwest portion of the City that is extremely unstable in certain portions. The City General Plan Safety and Noise Element establishes policies and standards (see Policies 1 and 3) related to minimizing personal and property damage resulting from seismic hazards, including earthquakes and landslides.³⁵ Projects are required to conform to applicable provisions of the current California Building Code. The CAP is a policy document containing climate Plays and supporting Moves to reduce GHG emissions and is consistent with the South Pasadena General Plan and other regional regulations. The CAP does not propose habitable development that could result in exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides. Therefore, the CAP would result in no impact related to seismic- and landslide-related hazards.

NO IMPACT

b. *Would the project result in substantial soil erosion or the loss of topsoil?*

The CAP would not involve land use or zoning changes, but it would promote infrastructure development and redevelopment. As a policy document, the CAP would not directly require ground-disturbing activities. However, implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Additionally, CAP Play CS.1, promotes the increased planting of trees and provision of green space, and CAP Play W.1 aims to bring recycled water lines and infrastructure to the City. The physical changes these installations and enhancements would entail are dependent on the location of construction for the electric vehicle charging connections, active transportation pathways, and trees/green spaces, which in some cases

³⁵ South Pasadena, City of. 1998. General Plan Safety and Noise Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 28, 2020.

may include minor temporary excavation. As such, the CAP could result in construction-related soil erosion and topsoil loss impacts associated with such installations and plantings. However, CAP projects would be reviewed for consistency with South Pasadena General Plan policies and other local and State geology and soils regulations prior to final siting and construction. Therefore, the CAP would result in a less-than-significant impact related to soil erosion, loss of topsoil, and the presence of unstable soils.

LESS THAN SIGNIFICANT IMPACT

c. *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

or

d. *Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

Most of the steeper developed and undeveloped land in the western and southwestern portions of South Pasadena have been identified as susceptible to landslides. Therefore, the General Plan Safety and Noise Element regulates development and structures in terms of hazards minimization.³⁶ The CAP is a policy document containing programs that are consistent with the General Plan. Some of the proposed CAP Play and supporting Moves promote small-scale construction projects, such as electric vehicle charging station construction. However, CAP projects would be reviewed for consistency with local and State geotechnical regulations prior to final siting and construction. Therefore, the CAP would result in a less-than-significant impact related to risks associated with location on unstable geologic unit or soil or on expansive soils.

LESS THAN SIGNIFICANT IMPACT

e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The CAP would not involve the development of habitable structures and, thus, no use of septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur related to soil capability support of alternative wastewater disposal systems.

NO IMPACT

f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The City of South Pasadena has not identified unique paleontological resources or sites within City limits.^{37 38} The City lies within the northeastern block of the Los Angeles Basin, part of the Transverse Range Geomorphic Province. The northeast block is a deep synclinal basin of mostly marine Cenozoic rocks. The City is underlain by six mapped geologic units: middle to late Holocene

36 South Pasadena, City of. 1998. General Plan Safety and Noise Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 28, 2020.

37 South Pasadena, City of. 1998. General Plan Land Use Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 24, 2020.

38 South Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 23, 2020.

alluvium (Qa); middle to late Holocene alluvial clay and sand (Qg); Pleistocene to early Holocene alluvial fan deposits (Qof); Pliocene Fernando Formation (Tfsc); Miocene Monterey Formation (Tmsl); and Miocene Topanga Formation (Ttqdc).^{39,40} The Fernando, Monterey, and Topanga formations are comprised of marine sediment with an abundant and diverse marine invertebrate and vertebrate fossil record. Early Holocene and Pleistocene alluvial units throughout the Los Angeles Basin have a robust and diverse terrestrial vertebrate fossil record. The Society of Vertebrate Paleontology (SVP) has established standards for classifying paleontological sensitivity of geologic units based on the known or inferred fossil records of each geologic unit,⁴¹ and classifies paleontological sensitivity as one of four classes: No; Low; Moderate; and High. Early Holocene and Pleistocene alluvium, the Fernando Formation, the Monterey Formation and the Topanga Formation are all classified as having a High Paleontological Sensitivity. Middle to Late Holocene alluvium is classified as having Low Paleontological Sensitivity.

As a policy document, the CAP would not directly result in impacts related to paleontological resources or unique geologic features. However, implementation of the following CAP Plays and supporting Moves may promote infrastructure development and redevelopment. For example, CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space, and CAP Play W.1 aims to bring recycled water lines and infrastructure to the City. The physical changes these installations and enhancements would entail are dependent on the location of construction for the electric vehicle charging connections, active transportation pathways, and trees/green spaces, which in some cases may include minor temporary excavation. These small-scale construction projects may expose paleontological resources during ground disturbing activities. However, CAP projects would be reviewed for consistency with geotechnical and paleontological regulations prior to final siting and construction. In addition, CAP projects would be located and designed strategically to reduce ground disturbance to the maximum extent possible. Therefore, the CAP would result in a less-than-significant impact related to paleontological resources or unique geologic features.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Cumulative projects could expose additional people and property to seismic and geologic hazards that are present in the region. The magnitude of geologic hazards for individual projects, including those associated with implementation of the CAP, would depend upon the location, type, and size of development and the specific hazards associated with individual sites. Specific geologic hazards associated with individual project sites would be limited to those sites without affecting other areas. Similarly, potential impacts to paleontological resources associated with each individual site would be limited to that site without affecting other areas, and impacts

39 Dibblee, T.W., and Ehrenspeck, H.E., ed. 1989. Geologic map of the Los Angeles quadrangle, Los Angeles County, California. Dibblee Geological Foundation, Dibblee Foundation Map DF-22, Map Scale:1:24,000.

40 Dibblee, T.W., and Ehrenspeck, H.E., ed. 1989. Geologic map of the Pasadena quadrangle, Los Angeles County, California. Dibblee Geological Foundation, Dibblee Foundation Map DF-23, Map Scale:1:24,000.

41 Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Unpublished technical guidelines.

related to these resources would be minimized on a case-by-case basis. Compliance with existing regulations, including California Building Code requirements, City-issued permit requirements, and construction general permit requirements, would minimize potential cumulative seismic and geologic impacts. Seismic and geologic hazards would be addressed on a case-by-case basis and would not result in cumulative impacts. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to geology and soils.

LESS THAN SIGNIFICANT IMPACT

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8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

The greenhouse effect is a natural occurrence that helps regulate the temperature of the Earth. The majority of radiation from the Sun hits Earth’s surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions. This process is essential to support life on Earth, because it warms the planet by approximately 60°F. Emissions from human activities since the beginning of the industrial revolution (approximately 270 years ago) have been adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat and contribute to an average increase in Earth’s temperature. Global warming is the observed increase in the average temperature of the Earth’s surface, and climate change is the resultant change in wind patterns, precipitation, and storms over an extended period.

GHGs produced by human activities include CO₂, methane (CH₄), nitrous oxide (N₂O), hydroflourocarcons (HFCs), perfluorinated compound (PFC), and sulfur hexafluoride (SF₆) (see Appendix B for more details related to these GHG gases).⁴² Combustion of fossil fuels (gasoline, natural gas, and coal), deforestation, and decomposition of waste release carbon into the atmosphere that had been locked underground and stored in oil, gas, and other hydrocarbon deposits or in the biomass of surface vegetation. Since 1750, estimated concentrations of CO₂, CH₄, and N₂O in the atmosphere have increased by over 36 percent, 148 percent, and 18 percent respectively, primarily due to human activity. Emissions of GHGs affect the atmosphere directly by changing its chemical composition.

Changes to the land surface also indirectly affect the atmosphere by changing the way in which Earth absorbs gases from the atmosphere. Potential impacts in California due to climate change

⁴² The proposed CAP only considers emissions of CO₂, CH₄, and N₂O because these are the GHGs most relevant to local government policymaking. These gases comprise a large majority of GHG emissions at the community level. The remaining gases (HFCs, PFC, and SF₆) are emitted primarily in private sector manufacturing and electricity transmission and are the subject of regulation at the state level. Therefore, these gases were omitted from the CAP.

include sea level rise, more extreme-heat days and high-ozone days, larger and more frequent forest fires, and more drought years.⁴³ Although GHG emissions do not typically cause direct health impacts at a local level, GHG emissions can result in indirect health impacts by contributing to climate change, which can have public health implications. The primary public health impacts of climate change include the following:⁴⁴

- Increased incidences of hospitalization and deaths due to increased incidences of extreme heat events;
- Increased incidences of health impacts related to ground-level ozone pollution due to increased average temperatures that facilitate ozone formation;
- Increased incidences of respiratory illnesses from wildfire smoke due to increased incidences of wildfires;
- Increased vector-borne diseases due to the growing extent of warm climates; and
- Increased stress and mental trauma due to extreme events and disasters, economic disruptions, and residential displacement.

The City of South Pasadena has completed a total South Pasadena (i.e., community and municipal) GHG emissions inventory for the year 2016, which is summarized in Table 1. The largest sectors of GHG emissions are related to energy and transportation, followed by solid waste and water. The CAP Plays and Moves (i.e., measures and actions) address municipal and communitywide GHG emissions. As part of the CAP, South Pasadena is committed to an emissions reduction target of 40 percent below 2016 levels by 2030 and reaching a longer-term goal of carbon neutrality by 2045. This 2030 GHG emissions goal is selected to be consistent with SB 32 State emissions targets and CEQA Guidelines § 15183.5 for a qualified GHG emissions reduction strategy as well as to be achievable by City-supported Plays identified in the 2020 CAP. The CAP includes a business-as-usual (BAU) forecast of GHG emissions that will enable the City to estimate the amount of emissions reductions needed to meet its goal.

The 2020 CAP includes Play C.1 to educate the community regarding ways to live a sustainable lifestyle, increase use of renewable power, electrify buildings, and reduce use of natural gas. It also includes Plays to increase use of zero-emission vehicles; increase use of public, active, and shared transportation; reduce water consumption and waste generation; increase recycling and composting; and increase tree planting and green space. Finally, it includes Plays M.1 through M.3 related to reduced carbon intensity of municipal operations, electrification of the municipal fleet and mobile equipment, and increased municipal renewable energy production that will continue to allow the City to lead by example. Table 2 includes a complete list of 2020 CAP Plays and descriptions of respective supporting Moves. The Plays included in the CAP combined with Statewide legislation and initiatives and regional transportation programs will enable the City to meet its emissions reduction target of 40 percent below 1990 levels by 2030. Table 3 shows the contribution of the Statewide initiatives along with the CAP Plays and Moves. The City needs to achieve a 18,578 MT CO₂e of GHG emissions reduction by 2030 to meet its goal. The total estimated GHG reductions accounted for in the CAP total 23,386 MT CO₂e by 2030.

Figure 3 and Table 4 illustrate how the BAU emissions are estimated to increase, thus widening the emissions reductions needed by 2030. Figure 3 also shows emissions reductions expected from State level actions as well as the reductions needed to reach the South Pasadena emissions target.

43 California Energy Commission (CEC). 2009. Environmental Health and Equity Impacts from Climate Change and Mitigation Policies in California: A Review of the Literature. Accessed July 24, 2020.

44 California Natural Resources Energy. 2018. California's Fourth Climate Change Assessment Statewide Summary Report. Available: <<http://www.climateassessment.ca.gov/state/>>. Accessed July 24, 2020.

The CAP Plays and Supporting Moves combined with Statewide legislation and initiatives and Countywide transportation programs will enable the City of South Pasadena to meet its 2030 emissions reduction target.

The CAP includes a list of 15 Plays intended to reduce South Pasadena GHG emissions. Implementation of the CAP would result in the reduction of community and municipal operational GHG emissions, with only generating temporary GHG emissions during construction of infrastructure development and redevelopment such as electric vehicle charging stations, bicycle paths, etc. Additionally, the CAP would serve as a pathway to reduce GHG emissions and introduce other beneficial environmental and sustainability effects. These benefits include reduction in building energy consumption and vehicle miles traveled (and thus air pollution), water consumption, and solid waste generation. Therefore, the CAP would result in a less-than-significant impact related to generation of GHG emissions.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The CAP is a policy-level document that sets strategies to reduce GHG emissions within the City in an effort to also comply with State regulations. As discussed under Topic 8a above, the CAP includes Plays and Moves to reduce City GHG emissions from forecasted business-as-usual levels by approximately 23,386 MT CO₂e by 2030. The purpose of the CAP is to meet South Pasadena's proportionate fair share of the Statewide GHG emissions reduction target set by AB 32 and SB 32 and work toward the State's longer-term target of carbon neutrality identified in Executive Order B-55-18.

The CAP would not conflict with any applicable GHG reduction plans, including the California Climate Change Scoping Plan and the California Climate Change Scoping Plan Updates. The CAP identifies how the City would achieve consistency with the Statewide GHG emissions limit. The CAP would serve as a pathway to reduce GHG emissions and introduce other beneficial environmental and sustainability effects. These benefits include reduction in building energy consumption and vehicle miles traveled (and thus air pollution), water consumption, and solid waste generation. Therefore, the CAP would result in a less-than-significant impact related to consistency with applicable GHG emissions reduction plans, policies, and regulations.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Analyses of GHG emissions and climate change are cumulative in nature, as they affect the accumulation of GHG emissions in the atmosphere. Cumulative projects that exceed the thresholds discussed above would have a significant impact related to GHG emissions and climate change, both individually and cumulatively. The CAP creates a GHG emissions reduction strategy (consistent with Section 15183.5 of the CEQA Guidelines) for the City of South Pasadena. The CAP also includes a series of Plays and Moves that are intended to reduce community and municipal GHG emissions by approximately 40 percent below 2016 levels by 2030, which provides substantial progress toward the City meeting State goals. As such, the CAP would result in the reduction of GHG emissions rather than generating GHG emissions. However, some GHG emissions would occur

during construction of CAP-specific infrastructure projects. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to GHG emissions.

LESS THAN SIGNIFICANT IMPACT

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Hazardous materials are utilized by a number of businesses in South Pasadena, and several facilities are actual hazardous waste generators. Any number of common household products - motor oil, old paints, cleaners, aerosols, and pesticides - contain hazardous materials, potentially destined for disposal in landfills where they could leach through the soil and contaminate groundwater. Current truck routes pass over streets on which are located schools, hospitals and residential areas, perhaps not the most suitable routes for the transport of hazardous materials. The City of South Pasadena has hazardous waste storage and hazardous materials transport goals and policies in the City General Plan Safety and Noise Element. Specifically, Policy 4 aims to protect citizens and property from use, transport, and disposal of hazardous materials. Furthermore, South Pasadena has adopted the Los Angeles County Hazardous Waste Management Plan into its plans and processes by reference.⁴⁵

The CAP is a policy document containing Plays and Moves to reduce GHG emissions. The proposed CAP does not involve identified site-specific development, nor would it facilitate new development. Implementation of the CAP would not involve the routine transport, use, or disposal of hazardous materials and would not create reasonably foreseeable upset and/or accidental conditions involving the release of hazardous materials into the environment.

Implementation of some of the CAP Plays and supporting Moves, such as the installation of bicycle lanes, energy retrofits, and electric vehicle charging stations, may involve the use and transport of fuels, lubricating fluids, and solvents, among other activities. These types of materials are not considered acutely hazardous, and all storage, handling, and disposal of these materials are regulated by the California Department of Toxic Substances Control (CDTSC), United States Environmental Protection Agency (USEPA), Occupational Safety & Health Administration (OSHA). Additionally, CAP projects would be reviewed for consistency with the General Plan and Municipal Code and applicable local, State, and federal regulations. Therefore, the CAP would result in a less-than-significant impact related to creating a significant hazard.

LESS THAN SIGNIFICANT IMPACT

45 South Pasadena, City of. 1998. General Plan Safety and Noise Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan> >. Accessed September 28, 2020.

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The CAP is a policy document containing Plays and Moves to reduce GHG emissions. The proposed CAP does not include site-specific proposals and development, nor would it emit or handle hazardous materials. Implementing some CAP Plays and Moves may require future development or improvements, such as bike paths, solar panels, electric vehicle charging stations, or building improvements related to electrification. However, CAP projects would be reviewed for consistency with the General Plan and Municipal Code and applicable local, State, and federal regulations. Therefore, the CAP would result in a less-than-significant impact related to handling of hazardous materials in proximity to an existing or proposed school.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The CAP is a policy document containing Plays and supporting Moves to reduce GHG emissions. The CAP does not include site-specific proposals and development, but the CAP Plays and Moves could result in projects that could be located on listed hazardous materials site. However, CAP projects would be reviewed for consistency with the General Plan and Municipal Code and would be required to comply with applicable local, State, and federal regulations. Therefore, the CAP would result in a less-than-significant impact related to location on a listed hazardous materials site.

LESS THAN SIGNIFICANT IMPACT

- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

There are no airports or private airstrips within South Pasadena. The Hollywood Burbank and San Gabriel Airports are located approximately 13 miles northwest and eight miles east of the City, respectively. The CAP is a policy document that would not increase airport activity or result in additional habitable development that could increase potential exposure of persons to aircraft-related hazards. CAP projects would also be reviewed for consistency with the City General Plan Safety and Noise Element and other applicable local and State regulations. Therefore, the CAP would result in no impact related to risks associated with location proximate to a public airport.

NO IMPACT

- f. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The South Pasadena emergency management program works in coordination with all the City Departments to strengthen the City's ability to prepare for, mitigate, respond to, and recover from any type of disaster. The South Pasadena Fire Department is the lead department to coordinate all emergency management activities for the City. The City has an Emergency Management Program that includes the following elements necessary to respond quickly and effectively to major emergencies: an Emergency Operations Plan, Emergency Operations Center (EOC), Emergency Response Program, Public Education Program, and trained Community Emergency Response Team (CERT). In addition, a variety of activities, programs, and projects designed to enhance the City's

preparedness are conducted regularly such as training, drills, and disaster exercises. Furthermore, the City of South Pasadena is a member of Disaster Management Area C, a partnership between Los Angeles County and ten cities to promote the coordination of disaster management, planning and preparedness efforts.⁴⁶ The CAP is a policy document intended to reduce GHG emissions generated within South Pasadena. The proposed CAP does not involve site-specific development, nor would it facilitate new development that would interfere with adopted emergency plans. Therefore, the CAP would result in no impact related to impairment or interference with implementation of an emergency response or evacuation plan.

NO IMPACT

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

The major potential sources of wildland fire in South Pasadena are the Monterey and Repetto Hills and natural brushlands of the Arroyo Seco. The steeper slopes of the San Gabriel Mountains located further north and the vegetated Puente Hills slopes located further south pose a secondary threat to the City in that windborne embers may travel long distances in the wind and ignite rooftops and/or areas of dry grasses. According to California Department of Forestry and Fire Protection (CalFIRE), South Pasadena is not located in designated California Fire Hazard Severity Zones,⁴⁷ or in a State Responsibility Area.⁴⁸ However, California Fire Hazard Severity Zones are located immediately west of South Pasadena in Los Angeles City limits.⁴⁹ Per the South Pasadena General Plan Safety Element, the threat of wildland fire to the City is generally low.⁵⁰ A small portion of the southwestern corner of the City is identified in the Los Angeles County General Plan as having a high wildland fire hazard potential.⁵¹ Furthermore, City Municipal Code Chapter 14 (Fire Prevention) provides regulations related to fire prevention within the City.⁵² The CAP is a policy-level document that does not propose specific or other physical changes such as habitable development that could be put at risk in the case of a wildfire, nor does it grant entitlements for development that would have the potential to directly cause wildfire. Rather, the CAP would aim to reduce natural gas infrastructure that poses wildfire risk if damaged during seismic events and to underground new or restructured electric power lines that pose wildfire risk if damaged during high-wind events. Thus, the CAP would result in no impact related to wildfire.

NO IMPACT

46 South Pasadena, City of. 2020. Disaster Preparedness Overview. Available: <<https://www.southpasadenaca.gov/residents/disaster-preparedness>>. Accessed September 28, 2020.

47 California Department of Forestry and Fire Protection (CalFIRE). 2020. Fire Hazard Severity Zone Viewer. Available: <<https://egis.fire.ca.gov/FHSZ/>>. Accessed September 25, 2020.

48 California Department of Forestry and Fire Protection (CalFIRE). 2020. California State Responsibility Areas. Available: <<https://www.arcgis.com/home/webmap/viewer.html?layers=5ac1dae3cb2544629a845d9a19e83991>>. Accessed September 25, 2020.

49 California Department of Forestry and Fire Protection (CalFIRE). 2020. Fire Hazard Severity Zone Viewer. Available: <<https://egis.fire.ca.gov/FHSZ/>>. Accessed September 25, 2020.

50 South Pasadena, City of. 1998. General Plan Safety and Noise Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 28, 2020.

51 Los Angeles, County of. 2015. General Plan 2035 Safety Element. Available: <<http://planning.lacounty.gov/generalplan/generalplan>>. Accessed September 25, 2020.

52 South Pasadena, City of. 2020. Municipal Code Chapter 14 (Fire Prevention). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 25, 2020.

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Hazards and hazardous materials impacts are typically site specific in nature. Cumulative projects, including the CAP, are not anticipated to contribute to cumulative hazards and hazardous materials impacts with adherence to applicable General Plan policies, applicable regional and County regulations (e.g., Los Angeles County Hazardous Waste Management Plan), and applicable State and federal regulatory requirements. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to hazards and hazardous materials.

LESS THAN SIGNIFICANT IMPACT

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10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

The CAP is a policy document containing Plays and Moves intended to reduce GHG emissions in the City. CAP projects would be reviewed for consistency with local and State regulations, including the implementation of stormwater pollution prevention plans (SWPPPs). As such, the CAP's related infrastructure changes would not utilize or alter water supply or result in new or different wastewater discharge. Additionally, proposed infrastructure would be small in scale and not result in substantial, adverse impacts related to surface or groundwater quality. Therefore, the CAP would result in no impact related to surface or groundwater water quality in South Pasadena.

NO IMPACT

- b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The CAP is a policy document containing Plays and supporting Moves that are consistent with the City's General Plan. CAP Play W.1 would continue enforce the State Model Water Efficient Landscape Ordinance, promote use of recycled water, and promote reduced consumption of potable water. In addition, implementation of the CAP Plays and supporting Moves related to infrastructure development and redevelopment would not substantially degrade groundwater quality or groundwater recharge. As a result, no adverse impacts related to groundwater water quality or resources would occur.

CAP Play CS.1 facilitates increased trees and open space. Encouragement of tree planting and open space areas and, thus provision of pervious areas in the City would increase groundwater recharge. As such, implementing the CAP would have a beneficial effect related to local groundwater recharge as well as support groundwater management in South Pasadena. Therefore, the CAP would result in no impact related to impedance of sustainable groundwater management in the Main San Gabriel Groundwater Basin.

NO IMPACT

- c. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*
- i. *result in substantial erosion or siltation on- or off-site;*
 - ii. *substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;*
 - iii. *create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*
 - iv. *impede or redirect flood flows?*

Implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Play T.1 promotes public and shared transit as well as active transportation via provision of bike facilities and parking to encourage walking and biking, and CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. CAP Play CS.1 also facilitates increase trees and open space. Providing new active transportation infrastructure and planting new trees and providing additional open space may slightly change the City's existing drainage pattern and amount of impervious surface. Construction of infrastructure development and redevelopment could also result in erosion and potential redirect of flood flows or drainage patterns; however, implementation of CAP projects would not include large-scale construction within South Pasadena.

Additionally, CAP projects would be reviewed for consistency with applicable local and State regulations, including the implementation of a SWPPP, once project details and locations are known. And given the associated small footprints, the CAP-related infrastructure changes would not result in substantial additional erosion or runoff or impede/redirect flood flows. Therefore, the CAP would result in a less-than-significant impact related to drainage flows and polluted runoff.

LESS THAN SIGNIFICANT IMPACT

- d. *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The City is not located within designated seiche or tsunami zones. The entirety of the City is located within Flood Zone C (areas of minimal flooding) defined by Federal Emergency Management Agency (FEMA).⁵³ Devils Gate Dam is located approximately five miles north of the northwesterly City boundary and is part of the Los Angeles County Flood Control District with a capacity of 2,709 acres feet and representing potential risk of dam inundation in the Arroyo Seco Valley in the event of dam failure. In addition, homes below should the City's water tower and reservoirs could be damaged by flood waters in a seismic event. In South Pasadena, construction, including infrastructure projects associated with implementation of the CAP, must comply with City General Plan Safety and Noise Element goals/policies related to hazards, including flooding hazards.

Elevation in South Pasadena averages 659 feet above mean sea level. The areas below the Devils Gate Dam and City water tower and reservoirs are at potential risk for flood inundation hazards related to infrastructure failure that could occur during a seismic event. However, the CAP does not propose habitable development and, thus, would not increase flooding or inundation risks to

⁵³ Federal Emergency Management Agency (FEMA).2020. FEMA Flood Map Service Center. Available: <<https://msc.fema.gov/portal/search?AddressQuery>>. Accessed September 28, 2020.

persons and habitable structures related to sea level rise. Therefore, the CAP would result in a less-than-significant impact related to flooding and inundation resulting in release of pollutants.

LESS THAN SIGNIFICANT IMPACT

- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The CAP Plays would not include direct extraction of groundwater and rather encourages water savings through conservation. The CAP would not interfere with or obstruct implementation of water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Therefore, the CAP would result in no impact related to consistency with a water quality control plan or sustainable groundwater management plan.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Cumulative projects, including the CAP, are not anticipated to contribute to cumulative hydrology and water quality impacts with adherence to applicable General Plan policies and applicable State and federal regulatory requirements. Implementation of the CAP would not contribute to an increase in growth and development in South Pasadena but could result in infrastructure development or redevelopment projects, including renewable energy facilities and alternative transportation thoroughfares. As such, implementation of the CAP and other cumulative projects could have incremental impacts related to hydrology and water quality, with potential minor alterations to existing drainage patterns in the City. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to hydrology and water quality.

LESS THAN SIGNIFICANT IMPACT

11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Would the project physically divide an established community?

The CAP is a policy document containing Plays and Moves that are consistent with the South Pasadena General Plan and does not include specific development projects that would divide an established community. CAP Play T.1 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. These Plays are aimed at increasing active transportation and decreasing vehicle miles traveled within the City. Such Plays and supporting Moves would help to increase connectivity within the South Pasadena community. Therefore, the CAP would result in no impact related to division of an established community.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The CAP is a policy document containing Plays and Moves that are consistent with the South Pasadena General Plan and that are designed to reduce adverse environmental impacts associated with climate change. Nonetheless, implementing the CAP would require some modification of existing policies, including developing and implementing new programs, and projects, or modifying existing ones. For example, CAP Plays E.2, E.4, M.2, M.3, T.1, SW.1, SW.2, and CS.1 call for the adoption of new codes/ordinances related to building electrification, solar and electric vehicle charging infrastructure installation, natural gas ban, organic waste collection and recovery, and recycling containers, shade trees, and open space provision. In addition, CAP Play T.3 calls for the amendment of the zoning code to require installation of bike stalls and lockers at new developments.

Implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Plays E.2 and E.3 promote electrification of newly constructed and existing buildings and CAP Play E.4 promotes installation of battery back-up systems or generators and solar panels to facilitate the switching of building fuel away from natural gas within the City. Electrification retrofits may change the physical environment through the need for upgraded service

and electrical panels, branch circuit upgrades, and installation of condensate drains to facilitate the installation of electric heat pumps for water and space heating. The physical changes these upgrades and additions would entail are dependent on the year of building construction and location of electrical and service panels and plumbing for connection of condensate drains, which in some cases may include modifications to the interior and/or exterior of buildings for wiring and panel replacement and minor excavation for connection of drainage to sewer systems.

CAP Play T.1 encourage the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Furthermore, CAP Play CS.1, promotes the increased planting of trees and provision of green space, and CAP Play W.1 aims to bring recycled water lines and infrastructure to the City. The physical changes these installations and enhancements would entail are dependent on the location of construction for the electric vehicle charging connections, active transportation pathways, and trees/green spaces, which in some cases may include minor temporary excavation. In order to implement these Plays and supporting Moves, the City Municipal Code, General Plan, and other applicable documents may need to be amended to reflect new or modified requirements.

However, where modifications of existing policies are needed, such as updates to policies related to energy and active transportation, the CAP Plays would result in greater avoidance or reduction of environmental effects. Therefore, the CAP would result in no impact related to consistency with current land use plans or policies.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. The CAP is a policy document containing Plays and Moves that are consistent with the City's General Plan. Nonetheless, implementing the CAP would require some modification of existing policies and ordinances, including developing and implementing new programs, and projects, or modifying existing ones. The proposed policy changes are consistent with the intent of the goals and policies established within the City General Plan and Zoning Regulations and would not cumulatively contribute to population growth or the loss of housing. Cumulative projects, including the CAP, would be required to adhere to City development regulations and General Plan policies to retain land use character and minimize environmental impacts. And CAP projects would be reviewed for consistency with the General Plan and other applicable regulatory land use actions prior to approval. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to land use.

LESS THAN SIGNIFICANT IMPACT

12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

The City of South Pasadena General Plan does not identify any mineral resources or mineral resources recovery sites within the City.⁵⁴ The CAP would not facilitate infrastructure development projects within the City that could result in the loss of availability of known mineral resources. Therefore, the CAP would result in no impact related to mineral resource.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. The City of South Pasadena General Plan does not identify any mineral resources or mineral resources recovery sites within the City limits. As such, no cumulative impact related to mineral resources could occur. Therefore, implementation of the CAP would result in no cumulative impact related to mineral resources.

NO IMPACT

⁵⁴ South Pasadena, City of. 1998. General Plan Open Space and Conservation Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 24, 2020.

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Noise is unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). Because of the way the human ear works, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1-2 dBA changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of 6 dBA per doubling of distance from point sources (such as construction equipment). Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Noise from heavily traveled roads typically attenuates at about 3 dBA per doubling of distance; while noise from a point source typically attenuates at about 6 dBA per doubling of distance. Noise levels may also be reduced by the introduction of intervening structures. For example, a single row of buildings between the receptor

and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm that breaks the line-of-sight reduces noise levels by 5 to 10 dBA.

The Safety and Noise Element of the South Pasadena General Plan aims to ensure appropriate noise levels considered compatible for community noise environments. Noise in South Pasadena is primarily generated by vehicular traffic. Traffic noise comes from traffic on surface streets, from truck traffic on truck routes through town and from the Pasadena Freeway. Land uses adjacent to these roadways in the City are affected by motor vehicle generated noise. Secondary sources of noise in the City are generated by construction and maintenance activities associated with both public and private works and development projects. The “ambient environment” includes noise emanating from the Pasadena Freeway (SR-110) and the local roadway network. Existing ambient noise levels range from 63.4 dBA to 70.6 dBA. Noise levels exceed 65 dBA, a typical standard for “sensitive locations,” in some locations throughout the City. The City’s normally acceptable exterior noise exposure standard is 65 dBA community noise equivalent level (CNEL) or less for residential and other sensitive land uses.

The CAP is a policy document containing programs that are consistent with the General Plan. Some of the CAP Plays and Moves would support small scale construction projects, such as electric vehicle charging station construction that may result in a temporary increase in noise levels. However, CAP projects would be reviewed for consistency with the General Plan Safety and Noise Element and Municipal Code Chapter 19a (Noise Regulation) and would be required to comply with applicable local, State, and federal regulations.⁵⁵

The South Pasadena General Plan identifies noise-sensitive land uses and noise sources and policies to provide for the protection of the community from the adverse effects of excessive noise. The CAP encompasses a suite of GHG-reduction opportunities that affect the transportation sector. For example, CAP Plays T.2 and T.3 facilitate bike facilities and parking and increased transit use and active transportation. These Plays would not only reduce vehicle miles traveled but also reduce traffic-related noise in South Pasadena. Therefore, the CAP would not generate excessive noise levels and, therefore, would result in a less-than-significant impact related to noise exposure.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise.⁵⁶ Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or Root Mean Square (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second

⁵⁵ South Pasadena, City of. 2020. Municipal Code Chapter 19a (Noise Regulation). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 28, 2020.

⁵⁶ California Department of Transportation (Caltrans). 2013. Transportation and Construction Vibration Guidance Manual (CT-HWANP-RT-13-069.25.3). Available: <http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf>. Accessed September 28, 2020.

(in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings.⁵⁷ Vibration significance ranges from approximately 50 vibration decibels (VdB), which is the typical background vibration-velocity level, to 100 VdB, the general threshold where minor damage can occur in fragile buildings.⁵⁸ The general human response to different levels of groundborne vibration velocity levels is described in Table 6.

Table 5 Human Response to Different Levels of Groundborne Vibration

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day

VdB = vibration decibels
Source: Federal Transit Administration. Transit Noise and Vibration Impact Assessment Manual. 2018.⁵⁹

The CAP is a policy document containing Plays that are consistent with the General Plan. Some of the CAP Play and Moves would support small-scale construction projects, such as electric vehicle charging station construction that may result in a temporary increase in groundborne vibration. However, CAP projects would be reviewed for consistency with the General Plan and Municipal Code and would be required to comply with applicable local, State, and federal regulations. Therefore, the CAP would result in a less-than-significant impact related to groundbourne vibration.

LESS THAN SIGNIFICANT IMPACT

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

There are no airports or private airstrips within the South Pasadena City limits. As such, there are no City noise goals and policies associated with airport noise.⁶⁰ The CAP does not propose land use or zoning changes related to airports, airstrips, or heliports, nor does it include new habitable development that could increase exposure of persons to excessive noise levels associated with operation of airports, airstrips, or heliports. Therefore, the CAP would result in no impact related to aviation-related noise exposure.

NO IMPACT

57 Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook. (FHWAHEP-06-015; DOT-VNTSC-FHWA-06-02). Available: <http://www.fhwa.dot.gov/environment/construction_noise/handbook>. Accessed September 28, 2020.
58 Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. Available: <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf>. Accessed September 28, 2020.
59 Federal Transit Administration. 2018. Transit Noise and Vibration Impact Assessment Manual. <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf>. Accessed September 2020.
60 South Pasadena, City of. 1998. General Plan Safety and Noise Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 28, 2020.

Cumulative Impacts

The cumulative projects scenario is total projected population growth South Pasadena (26,649 persons) in 2030. The CAP is a policy document containing Plays and Moves that are consistent with the City of South Pasadena General Plan. Some of the CAP Plays and Moves would support small-scale construction projects, such as electric vehicle charging station construction, which may result in a temporary increase in groundborne vibration or noise levels. However, cumulative projects, including the CAP, would be subject to review by the City for compliance with the General Plan and Municipal Code and would be required to comply with applicable State and federal regulations. Additionally, the CAP encompasses a suite of GHG-reduction opportunities that would decrease traffic and traffic-related noise. As such, implementation of the CAP would not generate excessive groundborne vibration or noise levels. Therefore, the CAP would result in a less-than-significant cumulative impact related to noise.

LESS THAN SIGNIFICANT IMPACT

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

or

b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The CAP does not include Plays and Moves that would increase the population or induce additional population growth that would displace people or housing. Therefore, the CAP would result in **no impact** related to population and housing.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Cumulative projects, including the CAP, are not anticipated to displace people or housing nor induce substantial unplanned population growth in the City. Specifically, the CAP would not contribute to person or housing displacement in the City of South Pasadena nor result in population growth beyond that already assumed and planned for in the General Plan. Therefore, the CAP would result in no cumulative impact related to population and housing.

NO IMPACT

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15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

▪ Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
▪ Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered facilities, or the need for new or physically altered facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for:*

- *Fire protection;*
- *Police protection;*
- *Schools;*
- *Parks; or*
- *Other public facilities?*

The CAP is a policy document containing Plays and Moves that are consistent with the South Pasadena General Plan. Implementation of the CAP would not result in increases in population or induce additional population growth. As such, the CAP would not require the construction of new or physically altered governmental facilities to serve additional population, the construction of which could cause significant environmental impacts. Furthermore, CAP projects would be reviewed for consistency with the South Pasadena General Plan and other applicable local and State regulations.

Nonetheless, implementing the CAP would require some modification of existing policies, including developing and implementing new programs and projects, or modifying existing ones. The CAP is designed to reduce adverse environmental impacts associated with climate change. While modifications of existing policies are needed, the CAP Plays and Moves would not result in increases in population or induce additional population growth that would result in the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities. Therefore, the CAP would result in no impact related to public services in terms of need for the construction of new or altered governmental facilities.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Implementation of cumulative projects, including the CAP, would not result in increases in population or induce additional population growth beyond that assumed under the South Pasadena General Plan. Therefore, implementation of the CAP would not result in substantial cumulative need to expand public services facilities. Therefore, the CAP would result in a less-than-significant cumulative impact related to public services.

LESS THAN SIGNIFICANT IMPACT

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

or

b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

South Pasadena is a primarily urbanized community with 92.2 total acres of parks and recreational spaces incorporated throughout the City, including 73.9 acres of the Arroyo Seco Park within the western portion of the City and five City parks (Garfield Park, Eddie Park, Library Park, Orange Grove Park, and War Memorial Park) encompassing 18.1 acres.⁶¹ The General Plan Open Space and Conservation Element and Municipal Code Parks Chapter incorporate goals and policies to protect open space and recreational resources in the City, including prohibiting the removal of trees within parks.^{62, 63} And City Municipal Code Chapter 21 (Parks) regulates park provision, services, and maintenance within the City.

61 South Pasadena, City of. 2020. Parks and Facilities Overview., Available: <<https://www.southpasadenaca.gov/government/departments/community-services/administration/parks-and-facilities/>>. Accessed September 24, 2020.

62 South Pasadena, City of. 1998. General Plan Open Space and Resource Conservation Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan/>>. Accessed September 23, 2020.

63 South Pasadena, City of. 2020. Municipal Code Chapter 21 (Parks). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 23, 2020.

The CAP is a policy document containing programs that are consistent with the South Pasadena General Plan. Additionally, the CAP would not result in substantial population growth or direct land use changes. As such, implementation of the CAP would not result in a substantial physical deterioration of parks or other recreational facilities or result in the need to expand recreational facilities. Therefore, the CAP would result in no impact related to the need for construction of new or altered recreational facilities.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Implementation of cumulative projects, including the CAP, would not result in increases in population or induce additional population growth beyond that assumed under the General Plan. In addition, the CAP would not result in population growth or direct land use change. Therefore, implementation of the CAP would not result in substantial cumulative physical deterioration of parks or other recreational facilities or result in the cumulative need to expand recreational facilities. Therefore, implementation of the CAP would result in no cumulative impact related to recreation.

NO IMPACT

17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*
- or
- b. *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The City embraces a policy direction to make South Pasadena a place where bicycling and walking are encouraged and fostered, and where safety, education and facilities are provided as an ongoing part of transportation and recreational planning and programs. While allowing people to circulate without cars is an emphasis of the Circulation & Accessibility Element, another emphasis is getting people to share rides and reduce the number of vehicular trips. In order to accomplish this, the City aims to take specific actions that will assist people in finding ways to share a ride, give priority to vehicles with more than a single occupant, or even eliminate the need for the trip totally.⁶⁴

The City of South Pasadena General Plan Circulation and Accessibility Element includes the following applicable active transportation and transit with goal of reducing vehicle miles traveled policies:

- 1.5: Develop circulation system standards for roadway classifications, right-of-way width, design speed, capacity, maximum grades and associated features such as medians and bicycle lanes.
- 2.1: Develop efficient city-wide local public transportation servicing all segments of the population.

⁶⁴ South Pasadena, City of. 2001. General Plan Circulation and Accessibility Element. Available: <<https://www.southpasadenaca.gov/government/departments/planning-and-building/general-plan>>. Accessed September 22, 2020.

- 2.2: Develop and promote increased use of alternative modes of transportation, including but not limited to: walking, bicycling, ridesharing, transit, telecommuting, paratransit, and shuttles.
- 2.3: Promote the reduction of drive-alone trips and vehicular trips generally.
- 2.4: Support the development of additional regional public (mass) transportation facilities and services.
- 2.5: Encourage the provision of preferential parking for high occupancy vehicles (HOV's).
- 2.6: Develop and promote community-based public transit.
- 3.1: Coordinate with applicable regional, state and federal agencies in the development of transportation improvements.
- 4.2: Require developers to maximize the potential for transit use and other alternative modes of transportation by residents, employees and visitors.
- 4.3: Allow mixed-use zoning which includes housing, residential and commercial to encourage living, working, and shopping in the same area and the associated reduction of trips.
- 4.4: Encourage convenient access between affordable housing and affordable transportation.
- 4.7: Maintain existing pedestrian facilities and encourage new development to provide pedestrian walkways between developments.

In addition, the City Bicycle Master Plan and Municipal Code Chapter 7 (Bicycles) regulate the development and implementation of a bicycle and pedestrian network in order to provide a viable transportation alternative to the automobile, improves safety for bicyclists and pedestrians, and provides residents with access and good connections to parks, open space, trails and other recreational opportunities.⁶⁵ Furthermore, the SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) identifies how the southern California region would meet its GHG emission reduction targets.⁶⁶ The SCAG 2016 RTP/SCS is supported by a combination of transportation and land use strategies that help the region achieve State GHG emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, support the vital goods movement industry, and utilize resources more efficiently.

The CAP is a policy document containing Plays and Moves that are consistent with the City General Plan Circulation and Accessibility, City Bicycle Master Plan, Municipal Code Chapter 7 (Bicycles), and the SCAG 2016 RTP/SCS with many that are aimed at facilitating the implementation of the local transportation programs and improvements. For example, CAP Plays T.2 and T.3 facilitate bike facilities and parking and public and shared transit to increase active transportation and decrease vehicle miles traveled within the City.

⁶⁵ South Pasadena, City of. 2020. Municipal Code Chapter 7 (Bicycles). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 22, 2020.

⁶⁶ Southern California Association of Governments (SCAG). 2016. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. Available: <<http://scagrtpscscs.net/Pages/FINAL2016RTPSCS.aspx#toc>>. Accessed September 17, 2020.

The CAP Plays and supporting Moves would be consistent with and promote the General Plan Circulation and Accessibility Element, including the Bicycle Master Plan, and the Municipal Code Chapter 7 (Bicycles). Implementation of some of the CAP transportation Plays and Moves may require future infrastructure development or improvements, such as bike paths and lockers. However, CAP projects would be reviewed for consistency with the General Plan and Municipal Code and be required to comply with applicable local, State, and federal regulations. Therefore, the CAP would result in no impact related to consistency with plans addressing the transportation circulation system.

NO IMPACT

c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

or

d. *Would the project result in inadequate emergency access?*

The CAP is a policy document containing Plays and supporting Moves that are consistent with the City General Plan and would not facilitate development beyond that allowed under the General Plan. As such, it would not create transportation hazards or result in inadequate emergency access. For example, CAP Plays T.2 and T.3 facilitate bike lanes and bike parking to increase active transportation and decrease vehicle miles traveled within the City. These CAP Plays and supporting Moves would promote active transportation, ridership, and sustainable transportation practices within the community to enhance bicycle, pedestrian, and transit connectivity, which in turn would reduce potential transportation hazards and would provide adequate emergency access.

The CAP does not include Plays and Moves that would substantially increase transportation hazards due to a design feature or incompatible land uses. Furthermore, CAP projects would be reviewed for consistency with the South Pasadena General Plan and other applicable local and State regulations. Therefore, the CAP would result in a less-than-significant impact related to transportation hazards and emergency access.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. The CAP is a policy document containing Plays and Moves that are consistent with the City's General Plan, and, similar to the other cumulative projects, the CAP does not propose development beyond that anticipated under the General Plan that would require transportation facilities. The CAP Plays and Moves included promote alternative modes of transportation and reduction of the amount of vehicle miles traveled throughout the City. In addition, the CAP Plays and Moves would not conflict with the objectives and policies of the General Plan or Bicycle Master Plan but would rather be consistent with and promote those plans. Therefore, the CAP would result in a less-than-significant cumulative impact related to transportation.

LESS THAN SIGNIFICANT IMPACT

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18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <p>a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*

or

b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

On September 17, 2020, the six following Native American Heritage Commission (NAHC)-identified local Native American tribal groups were formally notified that the City initiated environmental review of the CAP and were invited to provide consultation:

- Gabrieleno Band of Mission Indians – Kizh Nation;
- Gabrieleno/Tongva San Gabriel Banc of Mission Indians;
- Gabrieleno/Tongva Nation;
- Gabrieleno Tongva Indians of California Tribal Council;

- Gabrieleno-Tongva Tribe; and
- San Fernando Band of Mission Indians.

On September 22, 2020, the NAHC was also notified that the City initiated environmental review of the CAP and were invited to provide consultation. As of the time of this writing and document publication, no responses have been received, and no formal consultation has been requested.

The CAP would not involve land use or zoning changes but would instead promote infrastructure development and redevelopment. As a policy document, the CAP would also not directly entail ground disturbing activities. Implementation of the following CAP Plays may promote infrastructure development and redevelopment. CAP Plays E.2 and E.3 promote electrification of newly constructed and existing buildings, and CAP Play E.4 promotes installation of battery back-up systems or generators and solar panels to facilitate the switching of building fuel away from natural gas within the City. Electrification retrofits may change the physical environment through the need for upgraded service and electrical panels, branch circuit upgrades, and installation of condensate drains to facilitate the installation of electric heat pumps for water and space heating. The physical changes these upgrades and additions would entail are dependent on the year of building construction and location of electrical and service panels and plumbing connection of condensate drains, which sometimes may include modifications to the interior and/or exterior of buildings for wiring and panel replacement and minor excavation for connection of drainage to sewer systems.

CAP Play T.1 encourage the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. In addition, CAP Play M.2 requires electrification of the municipal fleet and mobile equipment, requiring installation of electric vehicle charging stations at municipal buildings. Furthermore CAP Play CS.1, promotes the increased planting of trees and provision of green space, and CAP Play W.1 aims to bring recycled water lines and infrastructure to the City. The physical changes these installations and enhancements would entail are dependent on the location of construction for the electric vehicle charging connections, active transportation pathways, and trees/green spaces, which in some cases may include minor temporary excavation.

Implementation of these CAP Plays could impact unknown tribal cultural resources during construction that involves below-grade activities. However, CAP projects would be required to comply with City Ordinance 2315 (Cultural Heritage Ordinance) and General Plan Open Space and Resource Conservation Element purpose that require the identification and preservation of sites and structures of architectural, historical, archaeological, and cultural significance. This includes sites, structures, and areas that are associated with tribal cultural activities or persons that contribute to the cultural character of artifacts. As such, tribal cultural resources would be protected upon discovery and, thus, impacts would be reduced to a minimal level. Therefore, the CAP would result in a less-than-significant impact related to tribal cultural resources.

LESS THAN SIGNIFICANT IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Cumulative projects could increase the potential for adverse effects to unknown tribal cultural resources in the City. Impacts to tribal cultural resources are site-specific; accordingly, as required under applicable laws and regulations, potential impacts associated with cumulative developments would be addressed on a case-by-case basis as cumulative project details and locations become known. Therefore, the CAP would result in a less-than-significant cumulative impact related to tribal cultural resources.

LESS THAN SIGNIFICANT IMPACT

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19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

The CAP is a policy document aimed at reducing water and energy consumption and related GHG emissions throughout the City of South Pasadena and does not include site-specific infrastructure designs or project proposals. Implementing the CAP would not result in an increase in population and housing nor would it facilitate growth beyond that anticipated by the General Plan. As such, implementing the CAP would not create new demand related to water, wastewater, stormwater drainage, electric power, natural gas power, or telecommunications utilities.

However, projects resulting from CAP implementation could include redevelopment and/or restructuring of electricity and natural gas power facilities and infrastructure. For example, CAP Plays E.2 and E.3 require electrification of 100 percent of new buildings and incremental amount of existing buildings, and CAP Play E.4 promotes installation of solar panels to provide greener renewable electricity within the City, In addition, CAP Plays T.1 and M.2 encourages the installation of electric vehicle charging stations and supporting infrastructure, and CAP Plays T.2 and T.3 involve the installation of new bicycle, electric bicycle/scooter, and pedestrian facilities. Additionally, CAP Play CS.1 facilitates increasing trees and open space.

Water Supply Facilities/Infrastructure

City Municipal Code Chapter 35 (Water) regulates water use, service, and installation within the City.⁶⁷ The City obtains water for use in municipal and irrigation operations through City operated groundwater wells. Likewise, nearly all of the potable water (99.26% in 2016) is delivered to the South Pasadena community from well production in the San Gabriel Basin and the remainder is purchased from Pasadena Water and Power (PWP) and Metropolitan Water District (0.47 and 0.07 percent, respectively).

The City of South Pasadena addresses issues of water supply in its Urban Water Management Plan (UWMP).⁶⁸ The 2015 UWMP is a long-range planning document used to assess current and projected water usage, water supply planning and conservation and recycling efforts. According to the UWMP, the City of South Pasadena has analyzed three different hydrological conditions to determine the reliability of water supplies: average/normal water year, single dry water year, and multiple, dry water year periods. In addition, the 2015 UWMP includes a Water Shortage Contingency Plan (WSCP).

CAP Play W.1 promotes water consumption reduction through continued implementation of the Model Water Efficient Landscapes Ordinance, working with regional water districts to bring recycled water lines and infrastructure to the City and adopting an ordinance to restrict use of potable water for excess water users (golf course, car washes, park fields, etc.). This CAP Play and supporting Moves may slightly change the amount or characteristics of the water supply compared to existing conditions. However, the CAP would not result in new land uses that would contribute to an increase in water use, compared to existing conditions, or require relocation or construction of new water infrastructure. Therefore, a less-than-significant impact related to need for construction or expansion of water supply facilities and infrastructure would occur.

Wastewater Treatment Facilities/Infrastructure

The City of South Pasadena does not operate a wastewater facility nor is there one within the city boundaries. Instead, wastewater generated by the City is treated by the Sanitation Districts of Los Angeles County (LACSD). According to the City of South Pasadena 2015 UWMP, generated wastewater entering the sewer system is conveyed to the Whittier Narrows Water Reclamation Plant (WNWRP) where primary, secondary, and tertiary treatment is provided. WNWRP treats an average flow of 7.4 million gallons of wastewater per day; which is primarily discharged to the San Gabriel and Rio Hondo rivers for groundwater recharge purposes. Primary and secondary biosolids

67 South Pasadena, City of. 2020. Municipal Code Chapter 35 (Water). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 28, 2020.

68 South Pasadena, City of. 2015. Urban Water Management Plan. Available: <<https://www.southpasadenaca.gov/home/showdocument?id=2905>>. Accessed September 28, 2020.

generated from processing at WNWPR are returned to the LACSD outfall system and are pumped to anaerobic digestors at the Joint Waters Pollution Control Plant (JWPCP).^{69,70}

The CAP would not result in new land uses that would generate sanitary wastewater or otherwise contribute to an increase in wastewater treatment requirements. The amount or characteristics of wastewater treated would not change compared to existing conditions with implementation of the proposed plan. The CAP would not require relocation or construction of new wastewater treatment infrastructure. Therefore, no impact related to need for construction or expansion of wastewater treatment facilities and infrastructure would occur.

Stormwater Drainage Facilities/Infrastructure

City Municipal Code Chapter 23 (Stormwater and Urban Runoff Pollution Control) regulates stormwater collection within the City.⁷¹ As discussed in Section 10, *Hydrology and Water Quality*, implementation of the following CAP Plays and supporting Moves may promote infrastructure development and redevelopment. CAP Plays promote installation of solar PV systems and pairing battery storage, installation of electric vehicle charging stations and supporting infrastructure, installation of bicycle facilities and parking, and increased active transportation, ridership, and sustainability practices within the transit system. Construction of infrastructure development and redevelopment could result in erosion and potential redirect of flood flows or drainage patterns. However, implementation of CAP projects would not include large scale construction within South Pasadena, and the CAP-related infrastructure changes would not result in additional sources of runoff. As a result, the CAP would not result in new land uses that would generate an increased amount of stormwater that requires modified drainage or storm drain systems. Therefore, implementing the CAP would have no effect on runoff amount. Therefore, no impact related to need for construction or expansion of stormwater drainage facilities and infrastructure would occur.

Electric Power Facilities/Infrastructure

CAP Plays E.2 through E.3 propose revisions to existing ordinances and adoption of new ordinances to incorporate electrification of all new buildings and five percent of existing buildings within the City by 2030. Also, CAP Play E.3 promotes the replacement of appliances with electric versions. Furthermore, new electric vehicle charging station installation as part of CAP Plays T.1 and M.2 would involve the construction of new electric power facilities and infrastructure and could also involve the relocation of existing electric power infrastructure and transmission lines. The CAP would serve as a pathway to reduce GHG emissions and other beneficial environmental and sustainability effects. These benefits include reduction in energy consumption. In addition, the environmental impacts of providing updated and additional electrical power facilities and infrastructure has been analyzed throughout this IS-ND and determined to be less than significant. Therefore, the CAP would result in a less-than-significant impact related to construction, expansion, or relocation of electric power facilities and infrastructure.

69 El Monte, City of. 2017. Whittier Narrows average treatment: El Monte Downtown Main Street TOD Specific Plan Final EIR. Available: <<http://www.elmonteca.gov/DocumentCenter/View/1420/Final-EIR-and-Responses-to-Comments-March-2017?bidId=>>. Accessed September 28, 2020.

70 Sanitation District of Los Angeles. 2012. Joint Outfall Systems 2010 Master Facilities Plan Final EIR/EIS. Available: <<https://www.lacsd.org/civicax/filebank/blobdload.aspx?blobid=3258>>. Accessed September 28, 2020.

71 South Pasadena, City of. 2020. Municipal Code Chapter 23 (Stormwater and Urban Runoff Pollution Control). Available: <<https://www.codepublishing.com/CA/SouthPasadena/>>. Accessed September 28, 2020.

Natural Gas Power Facilities/Infrastructure

The CAP would not involve new land uses that require new or additional natural gas service. However, implementation of CAP Play E.3 would involve the removal of existing natural gas facilities and infrastructure. The CAP would serve as a pathway to reduce GHG emissions and other beneficial environmental and sustainability effects. These benefits include reduction in energy consumption. In addition, the environmental impacts of removing natural gas power facilities and infrastructure has been analyzed throughout this IS-ND and determined to be less than significant. Therefore, the CAP would result in a less-than-significant impact related to removal of natural gas power facilities and infrastructure.

Telecommunications Facilities/Infrastructure

The proposal plan would not involve new land uses that would require telecommunications infrastructure and is not anticipated to involve the relocation of existing telecommunications facilities. Therefore, the CAP would result in no impact related to need for construction or expansion of telecommunication facilities and infrastructure.

LESS THAN SIGNIFICANT IMPACT

b. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

or

c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

The CAP is a policy-level document that does not include site-specific infrastructure designs or project proposals, nor does it grant entitlements for development that would have the potential to increase demand for water supply or other utility services. Implementing the CAP would include no new residential construction and would have no effect on water demand and wastewater treatment demand. Thus, the CAP would result in no impact related to water supply and wastewater treatment.

NO IMPACT

- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- or
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Athens Services is the waste hauler for the City of South Pasadena. South Pasadena's solid waste is transferred to a variety of landfills, including: Chiquita Canyon Sanitary Landfill, Antelope Valley Public Landfill, Azusa Land Reclamation Co. Landfill, Chiquita Canyon Sanitary Landfill, El Sobrante Landfill, Frank R. Bowerman Sanitary LF, Lancaster Landfill and Recycling Center, Mid-Valley Sanitary Landfill, Olinda Alpha Landfill, San Timoteo Sanitary Landfill, Scholl Canyon Landfill, Simi Valley Landfill & Recycling Center, Simi Valley Landfill & Recycling Center, Southeast Resource Recovery Facility, Sunshine Canyon City/County Landfill, and Victorville Sanitary Landfill. Although the City waste haulers could use multiple landfills, the majority (91% or 19,552 tons) of the waste is transferred to Mid-Valley Sanitary Landfill, San Timoteo Sanitary Landfill, and Scholl Canyon Landfill. CalRecycle reports that in 2019 a total of 21,482 tons of solid waste from South Pasadena was disposed at 14 different landfills. Additionally, the City of South Pasadena has a landfill within City jurisdictional boundaries, the South Pasadena City Dump; however, this facility has been closed since 1958.

The CAP would not involve new land uses that require new or additional solid waste collection service. Rather CAP Plays SW.1 and SW.2 promote waste reduction via participation in recycling and organic waste programs and reducing such waste going to landfills to achieve 75 percent reduction in waste-related GHG emissions by 2025. CAP Play SW.2 also encourages use of reusable foodware, reduction of waste in the food industry, and food waste being compostable. Furthermore, CAP Plays SW.1 and SW.2 require all new buildings to subscribe to recycling and organic waste collection services and provide adequate space for recycling and compost containers, in accordance with SB 1383 and AB 1826. The CAP would not facilitate habitable development and, thus, would not affect solid waste collection and disposal demand. Additionally, because the CAP is a policy document that would not facilitate growth beyond that anticipated by the General Plan, it would not generate solid waste in excess of State or local standards. Therefore, the CAP would result in no impact related to solid waste.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth South Pasadena (26,649 persons) in 2030. Cumulative projects within the City could result in increases in population and additional use of or need for utilities and service systems. While implementation of the CAP and related infrastructure projects would not result in increases in population or induce additional population growth that would require additional use of existing City utilities or service systems, implementation of new or replacement energy or transportation infrastructure under the CAP could result in less-than-significant cumulative utility construction impacts. Therefore, implementation of the CAP would result in a less-than-significant cumulative impact related to utilities and service systems.

LESS THAN SIGNIFICANT IMPACT

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20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- or*
- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- or*
- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

or

- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The major potential sources of wildland fire in South Pasadena are the Monterey and Repetto Hills and natural brushlands of the Arroyo Seco. The steeper slopes of the San Gabriel Mountains located further north and the vegetated Puente Hills slopes located further south pose a secondary threat to the City in that windborne embers may travel long distances in the wind and ignite rooftops and/or areas of dry grasses. According to California Department of Forestry and Fire Protection (CalFIRE), South Pasadena is not located in designated California Fire Hazard Severity Zones,⁷² or in a State Responsibility Area.⁷³ However, California Fire Hazard Severity Zones are located immediately west of South Pasadena in Los Angeles City limits.⁷⁴ Per the South Pasadena General Plan Safety Element, the threat of wildland fire to the City is generally low.⁷⁵ A small portion of the southwestern corner of the City is identified in the Los Angeles County General Plan as having a high wildland fire hazard potential.⁷⁶ The CAP is a policy-level document that does not propose new habitable development that could be at risk from wildfire, nor does it grant entitlements for development that would have the potential to directly cause wildfire. Rather, the CAP would aim to reduce natural gas infrastructure that poses wildfire risk if damaged during seismic events and to underground new or restructured electric power lines that pose wildfire risk if damaged during high-wind events. Thus, the CAP would result in no impact related to wildfire.

NO IMPACT

Cumulative Impacts

The cumulative projects scenario is total projected population growth for South Pasadena (26,649 persons) in 2030. Cumulative projects that include new habitable development would not be located in areas designated as high wildland fire hazard zones, given that such designation only exists in the southwestern corner of the City within the Arroyo Seco where housing is not a permitted land use. In addition, the CAP does not include new habitable development that could be at risk from wildfire, nor does it grant entitlements for development that would have the potential to cause wildfire. Therefore, the CAP would result in no cumulative impact related to wildfire.

NO IMPACT

72 California Department of Forestry and Fire Protection (CalFIRE). 2020. Fire Hazard Severity Zone Viewer. Available: <<https://egis.fire.ca.gov/FHSZ/>>. Accessed September 25, 2020.

73 California Department of Forestry and Fire Protection (CalFIRE). 2020. California State Responsibility Areas. Available: <<https://www.arcgis.com/home/webmap/viewer.html?layers=5ac1dae3cb2544629a845d9a19e83991>>. Accessed September 25, 2020.

74 California Department of Forestry and Fire Protection (CalFIRE). 2020. Fire Hazard Severity Zone Viewer. Available: <<https://egis.fire.ca.gov/FHSZ/>>. Accessed September 25, 2020.

75 South Pasadena, City of. 1998. General Plan Safety and Noise Element. Available:

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21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Does the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <p>a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

The intent of the CAP is to reduce GHG emissions from South Pasadena community and municipal operations through implementation of Plays and corresponding Moves. The CAP Plays and Moves are consistent with the South Pasadena General Plan and encourage residents, businesses, and the City to reduce energy, fuel use, water use, VMT, and solid waste generation and the associated GHG emissions. The CAP would not facilitate development that would eliminate or threaten wildlife habitats or eliminate important examples of the major periods of California history or prehistory.

Therefore, as discussed in more detail in Sections 4, *Biological Resources*, and 5, *Cultural Resources*, the CAP would result in a less-than-significant impact related to biological and cultural resources.

LESS THAN SIGNIFICANT IMPACT

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Implementation of the CAP would result in a cumulatively beneficial reduction of GHG emissions across the City. In addition, as discussed throughout the respective cumulative impacts discussions within this document, the CAP would not result in significant cumulative impacts. Rather, implementation of the CAP would be consistent with General Plan policies aimed at reducing emissions of GHGs and air pollutants, reducing VMT, reducing energy and water supply demands on utilities, and decreasing solid waste generation. Therefore, the CAP would result in an overall less-than-significant cumulative impact related to all CEQA topics addressed within this document.

LESS THAN SIGNIFICANT IMPACT

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

The CAP would not result in adverse effects on human beings. Rather, as discussed throughout this document, the CAP would serve as a pathway to reduce GHG emissions and other positive environmental and sustainability effects. These benefits include reduction in non-renewable building energy consumption and VMT (and thus air pollution), in transportation-related GHG emissions, energy and water consumption, and solid waste generation. However, as discussed in more detail in Sections 3, *Air Quality*, 13, *Noise*, and 17, *Transportation*, the CAP could cause temporary construction impacts related to transportation, air quality, and noise that could, in turn, affect human beings but would not result in a substantial adverse environmental effect. Therefore, the CAP would result in a less-than-significant impact related to potential for adverse effects on human beings.

LESS THAN SIGNIFICANT IMPACT

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Appendix A

Sources, Health Effects, and Typical Controls Associated with Criteria Pollutants

Sources, Health Effects, and Typical Controls Associated with Criteria Pollutants

Pollutant	Sources	Health Effects	Typical Controls
Ozone (O ₃)	Formed when reactive organic gases (ROG) and nitrogen oxides react in the presence of sunlight. ROG sources include any source that burns fuels (e.g., gasoline, natural gas, wood, oil); solvents; petroleum processing and storage.	Breathing difficulties, lung tissue damage, vegetation damage, damage to rubber and some plastics.	Reduce motor vehicle reactive organic gas (ROG) and nitrogen oxide (NO _x) emissions through emission standards, reformulated fuels, inspections programs, and reduced vehicle use. Limit ROG emissions from commercial operations, gasoline refueling facilities, and consumer products. Limit ROG and NO _x emissions from industrial sources such as power plants and manufacturing facilities.
Carbon monoxide (CO)	Any source that burns fuel such as automobiles, trucks, heavy construction and farming equipment, residential heating.	Chest pain in heart patients, headaches, reduced mental alertness.	Control motor vehicle and industrial emissions. Use oxygenated gasoline during winter months. Conserve energy.
Nitrogen dioxide (NO ₂)	See Carbon Monoxide.	Lung irritation and damage. Reacts in the atmosphere to form ozone and acid rain.	Control motor vehicle and industrial combustion emissions. Conserve energy.
Sulfur dioxide (SO ₂)	Coal or oil burning power plants and industries, refineries, diesel engines.	Increases lung disease and breathing problems for asthmatics. Reacts in the atmosphere to form acid rain.	Reduce use of high sulfur fuels (e.g., use low sulfur reformulated diesel or natural gas). Conserve energy.
Respirable particulate matter (PM ₁₀)	Road dust, windblown dust, agriculture and construction, fireplaces. Also formed from other pollutants (NO _x , SO _x , organics).	Increased respiratory disease, lung damage, cancer, premature death, reduced visibility, surface soiling.	Control dust sources, industrial particulate emissions, woodburning stoves and fireplaces. Reduce secondary pollutants which react to form PM ₁₀ . Conserve energy.
Fine particulate matter (PM _{2.5})	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning. Also formed from reaction of other pollutants (NO _x , SO _x , organics, and NH ₃).	Increases respiratory disease, lung damage, cancer, and premature death, reduced visibility, surface soiling. Particles can aggravate heart diseases such as congestive heart failure and coronary artery disease.	Reduce combustion emissions from motor vehicles, equipment, industries, and agricultural and residential burning. Precursor controls, like those for ozone, reduce fine particle formation in the atmosphere.
Lead	Metal smelters, resource recovery, leaded gasoline, deterioration of lead paint.	Learning disabilities, brain and kidney damage. Control metal smelters.	No lead in gasoline or paint.
Sulfur Dioxide (SO ₂)	Coal or oil burning power plants and industries, refineries, diesel engines.	Increases lung disease and breathing problems for asthmatics. Reacts in the atmosphere to form acid rain.	Reduce use of high sulfur fuels (e.g., use low sulfur reformulated diesel or natural gas). Conserve energy.
Sulfates	Produced by reaction in the air of SO ₂ , (see SO ₂ sources), a component of acid rain.	Breathing difficulties, aggravates asthma, reduced visibility.	See SO ₂

Pollutant	Sources	Health Effects	Typical Controls
Hydrogen Sulfide	Geothermal power plants, petroleum production and refining, sewer gas.	Nuisance odor (rotten egg smell), headache and breathing difficulties (higher concentrations).	Control emissions from geothermal power plants, petroleum production and refining, sewers, and sewage treatment plants.
Visibility Reducing Particulates	See PM _{2.5}	Reduced visibility (e.g., obscures mountains and other scenery), reduced airport safety.	See PM _{2.5}
Vinyl Chloride	Exhaust gases from factories that manufacture or process vinyl chloride (construction, packaging, and transportation industries).	Central nervous system effects (e.g., dizziness, drowsiness, headaches), kidney irritation, liver damage, liver cancer.	Control emissions from plants that manufacture or process vinyl chloride, installation of monitoring systems.
Toxic Air Contaminant (TAC)	Combustion engines (stationary and mobile), diesel combustion, storage and use of TAC-containing substances (i.e., gasoline, lead smelting, etc.)	Depends on TAC, but may include cancer, mutagenic and/or teratogenic effects, other acute or chronic health effects.	Toxic Best Available Control Technologies (T-BACT), limit emissions from known sources.

Source: Compiled by Rincon Consultants, Inc. in September 2020

Appendix B

Description of Greenhouse Gases of California Concern

Description of Greenhouse Gases of California Concern

Greenhouse Gas	Physical Description and Properties	Global Warming Potential (100 years)	Atmospheric Residence Lifetime (years)	Sources
Carbon dioxide (CO ₂)	Odorless, colorless, natural gas.	1	50–200	Burning coal, oil, natural gas, and wood; decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; oceanic evaporation; volcanic outgassing; cement production; land use changes
Methane (CH ₄)	Flammable gas and is the main component of natural gas.	28 ⁷⁷	12	Geological deposits (natural gas fields) extraction; landfills; fermentation of manure; and decay of organic matter
Nitrous oxide (N ₂ O)	Nitrous oxide (laughing gas) is a colorless GHG.	298	114	Microbial processes in soil and water; fuel combustion; industrial processes
Chloro-fluoro-carbons (CFCs)	Nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (level of air at the Earth's surface); formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms.	3,800–8,100	45–640	Refrigerants aerosol propellants; cleaning solvents
Hydro-fluoro-carbons (HFCs)	Synthetic human-made chemicals used as a substitute for CFCs and contain carbon, chlorine, and at least one hydrogen atom.	140 to 11,700	1–50,000	Automobile air conditioners; refrigerants
Per-fluoro-carbons (PFCs)	Stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface.	6,500 to 9,200	10,000–50,000	Primary aluminum production; semiconductor manufacturing
Sulfur hexafluoride (SF ₆)	Human-made, inorganic, odorless, colorless, and nontoxic, nonflammable gas.	22,800	3,200	Electrical power transmission equipment insulation; magnesium industry, semiconductor manufacturing; a tracer gas

⁷⁷ The City of South Pasadena used a 20-year Global Warming Potential for methane.

Greenhouse Gas	Physical Description and Properties	Global Warming Potential (100 years)	Atmospheric Residence Lifetime (years)	Sources
Nitrogen trifluoride (NF ₃)	Inorganic, is used as a replacement for PFCs, and is a powerful oxidizing agent.	17,200	740	Electronics manufacture for semiconductors and liquid crystal displays

Source: Compiled by Rincon Consultants, Inc. in September 2020

Appendix C

Public Comments Received on Draft Initial Study-Negative Declaration and Responses to Comments

Responses to Comments Received on the South Pasadena CAP Draft IS-ND

Comment #	Response to Comment
<p>Miya Edmonson, IGR/CEQA Branch Chief, California Department of Transportation (Caltrans) District 7 letter received November 4, 2020</p>	
<p>1</p>	<p>It is noted that Caltrans recognizes that the City of South Pasadena 2020 Climate Action Plan (CAP) identifies municipal and communitywide greenhouse gas (GHG) emissions reduction Plays (measures) and a 2030 target of 40 percent below 2016 emissions level in order 1) to be consistent with State climate targets by reducing GHG emissions across various sectors and 2) to be considered a qualified GHG emissions reduction strategy per the California Environmental Quality Act (CEQA) and CEQA Guidelines. Specifically, the City intends to utilize the CAP programmatic CEQA document (the Initial Study-Negative Declaration [IS-ND]) for purposes of CEQA tiering with regard to project- and plan-level CEQA GHG emissions impact assessments. This approach is consistent with CEQA Guidelines Section 15183.5. No changes to the IS-ND were made as a result of this comment.</p>
<p>2</p>	<p>As this comment does not address the content or adequacy of the CEQA analysis, no changes to the IS-ND were made as a result. For informational purposes, the Final CAP (on page 65) provides a discussion of how the CAP Plays and Moves (strategies and measures) relate to climate adaptation. Specifically, the Plays and Moves included in the CAP aim to help the City adapt and increase its resilience to climate change by reducing the impacts from increased average temperatures and extreme heat; reductions in fresh water; and air pollution and are supported by the vulnerability assessment in CAP Appendix B. In addition, the City of South Pasadena currently addresses climate adaptation impacts as applicable in the utilities/service systems, hydrology/water quality, hazard/hazardous materials, and biological resources assessments in CEQA documents prepared for projects/plans within the City. Thus, the City would consult relevant CAP climate adaptation strategies and measures as well as the relevant Caltrans climate changed vulnerability assessments when considering implementation of transportation and other types of projects and plans within the City.</p>
<p>3</p>	<p>As this comment does not address the content or adequacy of the CEQA analysis, no changes to the IS-ND were made as a result. For informational purposes, the Final CAP (on page 51) includes Play T.3 (Develop and Implement an Active Transportation Plan) to shift 3 percent of passenger car vehicle miles traveled to active transportation by 2030, and 6 percent by 2045. The Final CAP (on page 51) also includes Move T.3.b that states “in conjunction with the City’s Complete Streets Policy, conduct a Street/Intersection Study to identify streets and intersections that can be improved for pedestrians and bicyclists through traffic calming measures and/or where multi-use pathway opportunities exist to increase active transportation.” In addition, the Final CAP (on page 49) includes Play T.1 focused on increasing use of zero-emission vehicles and an additional measure that focuses on transit by developing an Electric Vehicle (EV)</p>

	Readiness Plan, adopting an EV Charging Retrofit in Existing Commercial and Multifamily Buildings Reach Code, streamlining permit processes for EV infrastructure and alternative fuel stations, and establishing an ordinance that restricts the use of gas-powered lawn equipment.
4	As this comment does not address the content or adequacy of the CEQA analysis, no changes to the IS-ND were made as a result. For informational purposes, the Final CAP (on page 51) includes Play T.3 (Develop and implement an Active Transportation Plan). The City would consult such relevant CAP strategies and measures as well as the relevant National Association of Transportation Officials’ (NACTO) and Federal Highway Administration (FHWA) bicycle-lane design resources when considering implementation of bicycle infrastructure.
5	As this comment does not address the content or adequacy of the CEQA analysis, no changes to the IS-ND were made as a result. For informational purposes, the City of South Pasadena adopted CEQA vehicle miles traveled (VMT) thresholds on May 20, 2020. The City currently utilizes these City of South Pasadena CEQA VMT thresholds as well as the California Governor’s Office of Planning and Research technical advisory resources for purposes of transportation analyses when preparing CEQA documents for projects/plans within the City.
6	As this comment does not address the content or adequacy of the CEQA analysis, no changes to the IS-ND were made as a result. For informational purposes, the Final CAP (on page 51) promotes increased public transit and reduced vehicle miles traveled and parking via inclusion of Move T.2.d (Adopt a Transportation Demand Management [TDM] Plan for the City that includes a transit system focus) that provides incentives for implementation of TDM measures by local businesses and new developments.
7	As this comment does not address the content or adequacy of the CEQA analysis, no changes to the IS-ND were made as a result. For informational purposes, the Final CAP (on page 54) includes Plays W.1 that directly refer to increasing water conservation and reducing stormwater runoff by implementing Plays 1 through 4 under Goal II of the Green Action Plan. Additionally, the City is currently preparing a separate Integrated Water and Wastewater Management Resources Plan that is anticipated to be available by July 2021.

DEPARTMENT OF TRANSPORTATION

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Making Conservation
 a California Way of Life.

November 4, 2020

Julia Lee,
 Deputy Public Works Director
 City of South Pasadena
 1414 Mission Street
 South Pasadena, CA 91030

RE: City of South Pasadena 2020 Climate Action
 Plan – Draft Initial Study - Negative
 Declaration (DIS-ND)
 SCH # 2020100107
 GTS # 07-LA-2020-03390
 Vic. South Pasadena

Dear Julia Lee:

1

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The City is preparing the 2020 CAP to include measures addressing municipal and communitywide GHG emissions. Using the 2016 GHG emissions as a baseline, the City is committed to a GHG emissions reduction target of 40 percent below 2016 levels by 2030. This 2030 GHG emissions goal is selected to be consistent with Senate Bill 32 State emissions targets and CEQA Guidelines for a qualified GHG emissions reduction strategy, and to be achievable by City-supported measures identified in the 2020 CAP. To achieve the South Pasadena 2030 GHG emissions target, the City has developed 15 CAP Plays (measures) related to energy, transportation, water, waste, and carbon sequestration.

2

Based on the information received in the Draft Initial Study - Negative Declaration for the City of South Pasadena 2020 Climate Action Plan, Caltrans has the following comments:

Caltrans supports South Pasadena's plans to reduce GHG emissions and adapt to changing climate conditions. If applicable in the project area, please refer to Caltrans' Climate Change Vulnerability Assessments when completing the CAP and future CEQA documents. <https://dot.ca.gov/programs/transportation-planning/2019-climate-change-vulnerability-assessments>

Further information provided for your consideration:

3

Caltrans supports the implementation of complete streets and active transportation safety improvements, especially those represented in the Transportation section of the Draft IS-ND. Some of Caltrans' recommended improvements include, but are not limited to, measures such as road diets, bike lanes, and other traffic calming elements to promote sustainable transportation. The Federal Highway Administration (FHWA) recognizes the road diet treatment as a proven safety countermeasure, and the cost of a road diet can be significantly reduced if implemented in tandem with routine street resurfacing.

4

When considering implementation of innovative bicycle infrastructure, the City may consult resources such as the National Association of Transportation Officials' (NACTO) Urban Bikeway Design Guide, or FHWA

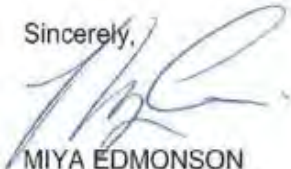
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 to enhance California's economy and livability"*

Julia Lee
November 4, 2020
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- 4 cont. Separated Bike Lane Planning and Design Guide, to assist in the design process. Caltrans formally endorsed the NACTO Guide in 2014 and the FHWA released its guide in 2015. Also, the State's Highway Design Manual now contains provisions for protected bike lanes under "Design Information Bulletin Number 89: Class [V Bikeway Guidance (Separated Bikeways/ Cycle Tracks)."
- 5 Effective July 2020, Caltrans replaced Level of Service (LOS) with Vehicle Miles Traveled (VMT) when evaluating traffic impact. Per SB 743 requirements, Caltrans supports the City's efforts towards developing these metrics and any development that may reduce VMT. As a reminder, Senate Bill 743 (2013) mandates that VMT be used as the primary metric in identifying transportation impacts of all future development projects under CEQA, starting July 1, 2020. For information on determining transportation impacts in terms of VMT on the State Highway System, see the Technical Advisory on Evaluating Transportation Impacts in CEQA by the California Governor's Office of Planning and Research.
- 6 With regards to parking, Caltrans supports reducing the amount of parking whenever possible. Research on parking suggests that abundant car parking enables and encourages driving. Research looking at the relationship between land-use, parking, and transportation indicates that the amount of car parking supplied can undermine a project's ability to encourage public transit and active modes of transportation. For any future project to better promote public transit and reduce vehicle miles traveled, we recommend the implementation of Transportation Demand Management (TDM) strategies as an alternative to building excessive parking.
- 7 Storm water run-off is a sensitive issue for Los Angeles county. For any future projects Caltrans supports designs that discharge clean run-off water and/or incorporate green design elements that can capture storm water. Incorporating measures such as, but not limited to, permeable pavement, landscaping, and trees reduce urban water run-off and encourage a healthy, sustainable environment.

If you have any questions or concerns regarding these comments, please contact project coordinator, Reece Allen at reece.allen@dot.ca.gov and refer to 07-LA-2020-03390.

Sincerely,



MIYA EDMONSON

IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

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