



# Mobility and Transportation Infrastructure Commission Agenda Report

ITEM NO. 3

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**DATE:** November 15, 2022  
**FROM:** H. Ted Gerber, Director of Public Works  
**SUBJECT:** **Recommendations on the North-South Corridor Intelligent Transportation System Deployment Project**

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## Recommendation

Staff propose that the Mobility and Transportation Infrastructure Commission (MTIC) receive public feedback on City staff's implementation of the North-South Corridor Intelligent Transportation System (ITS) Deployment Project, and provide recommendations and advisement related to City staff's current course.

## Background

This item is intended to reintroduce the existing North-South Corridor Intelligent Transportation System (ITS) Deployment Project to the community, and conduct an early project discussion with MTIC regarding the prioritization of project elements, as the design work gets underway. More public outreach meetings/engagements will be held as the project progresses, at venues such as a South Pasadena Unified School District campus (to be determined), and the South Pasadena's Farmer's Market. There will also be an opportunity for comments on the project at future MTIC meetings.

In 2020, the City Council authorized the redirection of U. S. Department of Transportation (DOT) Federal Highway Administration (FHWA) Rogan Funds (H.R. 5394) from the proposed Fair Oaks/SR-110 on-ramp project to the North-South Corridor ITS Deployment Project. Attachment 1 includes the October 21, 2022 presentation to City Council on the reauthorization of funding. The North-South Corridor ITS Deployment Project scope of work includes: upgrading traffic signals along Fair Oaks Avenue and installing an Advanced Adaptive Traffic Management System (AATMS); upgrading curb ramps, sidewalks, and crosswalks for Americans with Disabilities Act (ADA) compliance and to increase pedestrian safety; modifying median noses to improve visibility; and installation of changeable message signs (CMS) to provide real time information, wayfinding, and alternative route directions for drivers.

Traffic signal system upgrades would include new mast arms and poles to meet current design standards, new signal heads, pedestrian push buttons, illuminated LED street name signs, new traffic signal timing/synchronization plans, and new upgraded cabinet and controllers, where necessary. Pedestrian push buttons would be upgraded to the Accessible Pedestrian Signal (APS) system, which includes devices that communicate information about pedestrian walk/stop intervals in non-visual formats to pedestrians who are blind or who have low vision. The ITS and AATMS components to be

implemented include travel time and delay monitoring, queue detection, infrared bike, pedestrian and vehicle detection, adaptive pedestrian warning, dilemma zone detection, emergency vehicle detection, transportation system priority, and controller upgrades.

### **Analysis & Discussion**

The major components of the project are fixed by the federal funding, and City staff and the City's design consultant, KOA Corporation, have begun work on this project in order to prevent the risk of funds lapsing once again.

As the early design work gets underway, there is an opportunity to capture additional improvements that are closely related to the scoped items, specifically those improvements that have already been identified in the existing list of SR-710 alternative projects. The City Council's December 14, 2017 letter to the Metro Board, related to transportation project alternatives utilizing remaining State Route 710 (SR-710) North Extension Project Measure R funds, provided an Early Action Projects (EAPs) List that summarized needed improvements in the City's transportation corridors.

The letter and EAPs List are included as Attachment 2. A partial list of the items on the EAPs List that are closely related to the scope of the Rogan funds include:

- Implementing an Adaptive Traffic Control System (ATCS) and synchronizing signals throughout the corridor. Include leading pedestrian intervals in all signal cycles. These signals would run on Fair Oaks Avenue from the City of South Pasadena into and through the City of Pasadena.
- Increasing the visibility of all crosswalks using continental or ladder (perpendicular) striping.
- Extending the northbound Fair Oaks Avenue left-turn pocket at Monterey Road.
- Removing bulbouts and replacing with right-turn pockets on Fair Oaks Avenue at:
  - The northwest and northeast corners at Monterey Road (extending to the Vons shopping center driveway);
  - The northwest, southwest and southeast corners at El Centro Street;
  - The northwest, southwest and southeast corners at Mission Street; and
  - The northwest, southwest and southeast corners at Hope Street.
- Reconstructing the remaining bulbouts on Fair Oaks Avenue to prevent auto intrusions on the sidewalk. (Note that as previously mentioned, measures to improve pedestrian safety should be implemented at these intersections including high-visibility crosswalk enhancements, leading pedestrian intervals, and corner radii that are no larger than necessary given the desired design and control vehicles.)

- On northbound Fair Oaks Avenue between Hope Street and Grevelia Street, removing the existing bulbout in order to provide a shared through and right-turn lane, and replace the left-turn lane with a through lane.
- Removing the bulbout on northbound Fair Oaks Avenue prior to the Orchard Supply Hardware shopping center driveway. The current bus stop would be moved to far side of intersection.

The summarized goals of the City Council supported EAPs List is to implement an ITS system, improve pedestrian access along Fair Oaks Avenue, and take action to address issues with the bulb-outs along Fair Oaks Avenue.

In addition to the elements already listed in the North-South Corridor ITS Deployment Project scope of work (i.e. traffic signal mast arm and cabinet/controller upgrades, ITS, AATMS, and ADA upgrades and compliance), staff recommend prioritizing related elements in the design work, specifically bulb-out modifications, median nose modifications, and extending fiber optic connectivity. The scope of work also includes implementing closed-circuit television (CCTV) cameras to allow staff to view traffic incidents and sources of congestion. Staff are recommended limiting the installation of CCTV cameras to key intersections for visual coverage of the corridor, rather than each intersection. As a note, video recording is not being implemented as part of this project. Attachment 3 includes the presentation being provided to the commission related to these prioritization recommendations. Furthermore, City staff are recommending the prioritization of bulb-out modifications, median nose modifications, and extending fiber optic connectivity over the implementation of Changeable Message Signs (CMS).

As a clarification, the August 18, 2021 City Council staff report related to the award of a professional services agreement to KOA Corporation, mentioned the project to include ornamental poles and mast arms. This is an increased expense on the federally funded project, are not included in the funding description submitted to the FHWA and California Department of Transportation (CalTrans), and will not be included in the project design work.

### **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. In addition, Attachment 4 includes a flyer that was posted on the City's social media accounts to make community members aware of this meeting.

### **Attachment**

1. October 21, 2020 Presentation to City Council on the Rogan Funded Project
2. City Council's December 14, 2017 letter to the Metro Board and Early Action Projects (EAPs) List
3. Presentation
4. Community Notification Flyer

**Item 3 Attachment 1**  
October 21, 2020 Presentation to City Council on the  
Rogan Funded Project



AGENDA ITEM NO. 15

# ROGAN FUNDED PROJECT

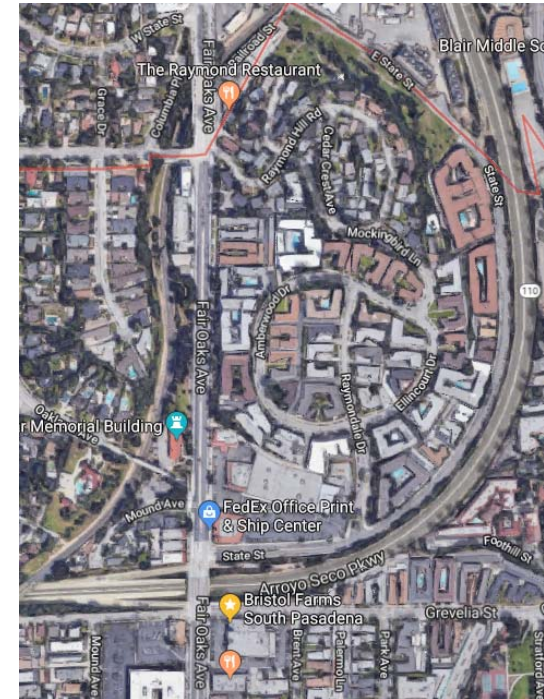
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City Council  
October 21, 2020



# Rogan Fund Project Summary (2004)

- Awarded for construction of SR-110 hook ramp (shelf ready) on August 12, 2004
- Funding:
  - \$2.5M Right-of-way (ROW)
  - \$6.8M Construction
  - Total = \$9.3M
- Items that prohibited City from proceeding with Project as originally scoped:
  - Right of Way Constraints
  - Lack of Technical Study and Data
  - Project not shelf ready





# Efforts to Save Rogan Funds from Lapsing

- In November 2019, FHWA and Caltrans informed staff Rogan funds will lapse at the end of 2019 unless City starts construction immediately.
- Staff proposed a concept of an alternate viable project.
- Staff prepared a proposed project scope of work.
- Proposed project scope presented to Caltrans and FHWA in December 2019 and approved in January 2020.
- FHWA performed special upgrades to its financial system to transfer Rogan Funds to the City from 15+ years ago.



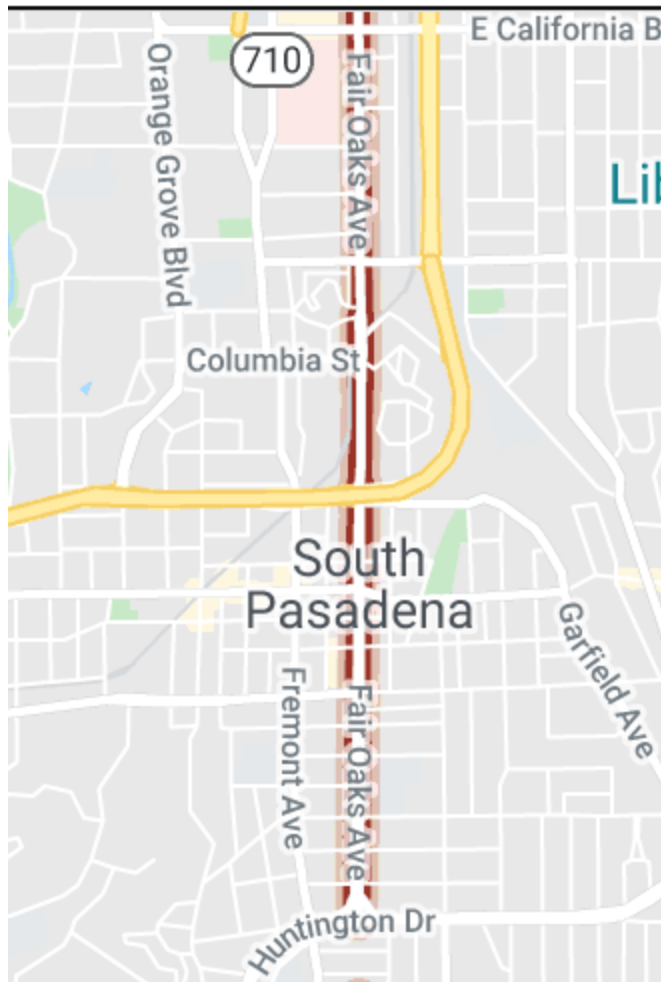
# Efforts to Save Rogan Funds from Lapsing

- Fund transfer required in FY 2019-20 (by September 31, 2020).
- Staff completed a complex technical package for obligation of funds.
- City, Caltrans, and FHWA meet weekly to keep process on track.
- Initially, FHWA agreed to transfer \$6.8M construction funding only.
- New funding available: \$9.3M for all project phases (P&E, construction and construction management).





# North / South Corridor Intelligent Transportation System (ITS) Deployment



- Description: Update the traffic signals to deploy advance adaptive traffic management system along north south Fair Oaks Avenue from the north City limits to Huntington Drive.
- Estimated Cost: \$11.2M



# North South Corridor ITS Deployment Scope of Work

- The project will include the following advanced technologies:

Advance adaptive traffic management system	Real travel time and delay monitoring system
Queue detection system	Infrared bike, pedestrian, and vehicle detection
Adaptive pedestrian warning system	Dilemma zone detection system
Emergency vehicle detection	Transit system priority

- ADA, sidewalk, curb and ramp upgrades along corridor.
- Changeable Message Sign (CMS) to provide real travel time information to motorists along Fair Oaks and Fremont corridors.



# Rogan Fund Summary

- Rogan Funds Available = \$9.34M
- Additional Funds Required (20%) = \$1.86M
- Total Project Costs = \$11.2M
- Matching Fund Source – Must be determined by December 2020.



## Recommendation

It is recommended that the City Council:

1. Direct staff to aggressively pursue Metro approval of grant funds of \$1.86M to secure the City's matching obligation associated with the Rogan Grant
2. In the event staff is unsuccessful in this effort, appropriate Measure M Multi Sub-regional Program (MSP) funds in the amount of \$1.72M and \$160,000 from the City's Capital Growth Fund to supplement Measure M MSP dollars to make up the required match. (The appropriation of Measure M funds, could involve the obligation of future year Measure M revenues)



# Questions

**Item 3 Attachment 2**  
City Council's December 14, 2017 letter to the Metro  
Board and Early Action Projects (EAPs) List



## CITY OF SOUTH PASADENA

OFFICE OF THE CITY COUNCIL

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December 14, 2017

Metro Board  
One Gateway Plaza  
Los Angeles, CA 90012

Dear Chair Garcetti and Board Directors,

On behalf of the City of South Pasadena (City), we commend the Los Angeles Metropolitan Transportation Authority (Metro) Board's decision on May 25, 2017, to select the Transportation System Management/Transportation Demand Management (TSM/TDM) Alternative as the Locally Preferred Alternative and to allocate the remaining State Route 710 (SR-710) North Extension Project Measure R funds to new mobility improvement projects in the San Gabriel Valley.

In accordance with Metro staff's direction, the City is pleased to submit the following Early Action Projects (EAPs) List to improve mobility in the region. The proposed projects will improve cross jurisdictional traffic flows while minimizing cut-through traffic impacts on residential neighborhoods and improve safety for pedestrians and bicyclists. In addition, the City of South Pasadena has coordinated its efforts with the City of Pasadena through our mutual consultant Nelson/Nygaard Consulting Associates, Inc. (Nelson/Nygaard). Additional details regarding these individual projects and the nexus they provide towards mitigating the impacts of the SR-710 are available in the attached report provided by Nelson/Nygaard.

Priority	Project	Description	Cost	Category	Nexus
1	State Route 110 (SR-110) / Fair Oaks Avenue Interchange Modifications	Includes modifications to the SR-110 on- and off-ramps at Fair Oaks Avenue and additional street improvements on Fair Oaks Avenue	\$35-38 million	Category 1 Projects	The current configuration is a key bottleneck that impedes north/south traffic flow in the region

Priority	Project	Description	Cost	Category	Nexus
	Fremont Avenue/Huntington Drive/Fair Oaks Regional Traffic Corridor Improvements	Package of road upgrades, including implementation of key projects from the City's 2011 Bicycle Master Plan, that will increase vehicular throughput and person capacity while maintaining or improving pedestrian and bicyclist safety and reducing impacts on adjacent neighborhoods	\$15-20 million	Category 1 Projects	Provides increased north/south capacity connecting to the Cities of Pasadena and Alhambra
2	Operational Improvements	Safety improvement projects	\$10 million	Category 1 Projects	Improved safety along the main cut-through traffic corridors (i.e. Fremont Avenue, and Meridian Avenue)
	Traffic Calming/Speed Management	Traffic safety study that will focus on speed management and safety improvements along specified corridors	\$5 million	Category 1 Projects	Improves safety along the main cut-through traffic corridors
3	Local and Regional Transportation Improvements	Package of projects to improve local and regional transportation conditions including consideration of a Bus Rapid Transit system connecting neighboring jurisdictions	TBD	Category 2 Projects	Projects will be developed with consensus with neighboring jurisdictions


After decades of working at cross purposes the City is pleased to be working collaboratively with the City of Alhambra to develop consensus on a proposed list of projects for the corridor. All three cities (Alhambra, Pasadena, and South Pasadena) have come together and submitted a joint letter to the Metro Board documenting this on-going effort and requesting assistance with funding for the evaluation of the EAPs. As the three cities continue to work together to identify




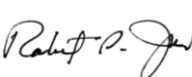
additional joint projects the City would like to reserve the right to modify the City's individual project list as appropriate.


We look forward to working closely with you to mitigate the regional traffic concerns within the SR-710 corridor and to implement these essential projects in a timely fashion. If you have any questions or comments, please feel free to contact Stephanie DeWolfe, City Manager, at [Sdewolfe@southpasadenaca.gov](mailto:Sdewolfe@southpasadenaca.gov) or (626) 403-7210.

Sincerely,

  
Michael A. Cacciotti  
Mayor

  
Richard D. Schneider, M.D.  
Mayor Pro Tem

  
Robert S. Joe  
Councilmember

  
Marina Khubesrian, M.D.  
Councilmember

  
Diana Mahmud  
Councilmember

cc: Phillip A. Washington, Metro CEO

Attachments

1. Nelson\Nygaard Final Report
2. Tri-City Letter to Metro Board - Projects List Evaluation





## MEMORANDUM

To: Margaret Lin, Principal Management Analyst

From: Paul Moore and Steve Boland

Date: December 4, 2017

Subject: City Priorities for Metro Funding Request

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As requested by the City of South Pasadena (City), we have identified projects for inclusion in the City's Early Action Projects (EAPs) funding request to Metro. This is based on our understanding of the direction we received during the October 17, 2017 joint meeting of the Freeway and Transportation Commission (FTC) and Public Works Commission (PWC); and the City Council's special meeting on November 21, 2017.

The general direction we were provided by the FTC and PWC is as follows:

- For the initial \$105 million (Category 1 Projects) in funding set aside for TSM/TDM projects, the City will prioritize projects to improve throughput (without widening the roadway or removing substantial parking, and while maintaining or improving pedestrian safety) on Fremont south of Huntington, Huntington between Fremont and Fair Oaks, and Fair Oaks. (The City will take the position with Metro that regional traffic should be diverted from Fremont north of Huntington to Huntington and Fair Oaks.) This will include the SR-110/Fair Oaks interchange "hook ramp," as well as modifications to/removal of bulbouts along Fair Oaks.
- As part of the TSM/TDM package (Category 1 Projects), the City will also request funding for improvements to intersection operations on other streets as well as traffic calming mitigations to "cut-through" traffic impacts on neighborhoods. As part of this request, the City will also ask for funding for speed management improvements (reducing speeding, but not throughput) to Fremont to be identified through a future study.
- The City will request that remaining funding (Category 2 Projects) be allocated to select proposed and adopted projects (not including Bicycle Master Plan projects) as well as a proposed "microtransit" pilot project and a study of potential Gold Line grade separations including Monterey Road/Pasadena Avenue.

The City Council provided the subsequent direction:

- Include key projects from the City's 2011 Bicycle Master Plan
- Request funding for an update to the City's 2011 Bicycle Master Plan
- Request that Metro proceed with further study of a Bus Rapid Transit (BRT) system in the corridor

The following language incorporates the feedback and direction provided by the FTC, PWC, and City Council.

## **INTRODUCTION**

We have identified the following list of priority projects that the City would like to propose for Metro funding. While many of these projects are in advanced stages of project development, some remain conceptual and would require further project development. Project costs are estimated based on the best available information.

We have identified projects that we believe are candidates for Transportation System Management and Transportation Demand Management (TSM/TDM) or Category 1 Projects funding, with the understanding that some of them may be funded under the remaining allocation or Category 2 Projects funding.

The packages of projects described below were developed through a community-based process involving local residents, business representatives, and elected officials. Through this process, the City of South Pasadena has collaborated with its neighboring Cities of Pasadena and Alhambra to better understand north-south regional traffic in the corridor and the future goals of the cities in regards to overall mobility. The projects we are proposing for funding include:

- **Priority 1 for TSM/TDM funding (Category 1 Projects):** Projects to improve vehicular throughput, while maintaining or improving pedestrian safety in the regional traffic corridor consisting of Fremont Avenue south of Huntington Drive, Huntington Drive between Fremont Avenue and Fair Oaks Avenue, and Fair Oaks. We see steps that can be taken to improve traffic flow in the corridor that will not require street widening or extensive parking impacts. These measures may also serve to shift regional traffic away from Fremont Avenue north of Huntington Drive, which is a narrow residential street<sup>1</sup>. The City has been in discussions with the cities of both Alhambra and Pasadena regarding accompanying improvements to their segments of these corridors. As part of this package of projects, we are also proposing improvements to the interchange of State Route 110 (SR-110)/Arroyo Parkway and Fair Oaks Avenue, based on a refined concept developed by members of the PWC that would require further analysis and project development by Metro and Caltrans. (Please note that the concept may be revised based on future discussions with Metro and Caltrans.)
- **Priority 2 for TSM/TDM or remaining funding (Category 1 Projects):** This package consists of operational improvements at intersections on other City streets used by regional traffic. In recognition of the fact that some regional traffic will continue to use neighborhood streets, we are also requesting funding for traffic calming and speed management improvements to reduce negative impacts on neighborhoods that bear a disproportionate burden and to protect the residential nature of those streets. This package also includes key projects from the City's 2011 Bicycle Master Plan, which would serve to reduce traffic demand. We believe these projects can be implemented in such a way that they will not reduce regional mobility, but will improve safety and quality-of-life for residents and visitors.

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<sup>1</sup> Simultaneously, the City plans to remove Fremont south of Huntington from its truck route network, and will be reaching out to Alhambra regarding measures to shift truck traffic to Atlantic Boulevard.

- **Priority 3 for remaining funding (Category 2 Projects):** We have identified a number of additional projects that would improve mobility, safety, sustainability and quality-of-life for both residents and visitors. We are also requesting that Metro in partnership with the City and other neighboring corridor cities conduct to consider/study the implementation of: 1) grade separations of at-grade intersections along the Metro Rail Gold Line; 2) a microtransit pilot program to improve first/last mile access and connectivity to current and future Gold Line stations; and 3) a BRT line connecting with neighboring cities in the Fair Oaks Avenue/Atlantic Boulevard (Route 762) corridor.

Following are detailed descriptions of each package.

## **PRIORITY 1: TSM/TDM FUNDING**

### **SR-110/Fair Oaks Avenue Interchange Modifications**

One of the key bottlenecks that impedes the flow of north-south traffic in the region is at the current SR-110 “on” and “off” ramps that connect to Fair Oaks Avenue. The current configuration impacts the multiple traffic signals on Fair Oaks Avenue and causes back-ups both north- and southbound impacting not only South Pasadena, but Pasadena. The City of South Pasadena would like to see developed a new “hook ramp” interchange that would streamline the freeway “on” and “off” access, while also smoothing the traffic back-ups on Fair Oaks Avenue.

This “hook ramp” project would modernize the 1930s-era interchange at SR-110 and Fair Oaks Avenue. Currently, access to the southbound SR-110 on-ramp from northbound Fair Oaks Avenue is via dual left-turn lanes, and the off-ramp from northbound SR-110 to Fair Oaks Avenue is constrained by adjacent Grevelia Street, resulting in severe congestion at this intersection during both the weekday AM and PM peak periods. The City’s SR-710 Design Advisory Group identified this project as a priority in 2002, and Caltrans has previously approved a conceptual design. The refined concept recently developed by the PWC may be briefly described as follows:

- Construct a new southbound SR-110 “hook” on-ramp accessible via eastbound State Street, east of Fair Oaks Avenue.
- Restripe northbound Fair Oaks Avenue between Grevelia Street and State Street to replace northbound left-turn lanes with a right-turn lane continuing onto a new right-turn lane to be built on the south side of State Street.
- Remove the existing traffic island at the current SR-110 on-ramp.
- On northbound Fair Oaks Avenue between Hope Street and Grevelia Street, remove the existing bulbout in order to provide a shared through and right-turn lane, and replace the left-turn lane with a through lane.
- On southbound Fair Oaks Avenue north of the existing southbound on-ramp, extend the existing right-turn lane to north of Oaklawn Street (requires removal of the bulbout north of Mound Street).
- Truncate Grevelia Street between Fair Oaks Avenue and Mound Avenue (access to the adjacent Shakers Restaurant parking lot would be retained via Fair Oaks Avenue).
- Widen northbound SR-110 off-ramp and restripe for two left-turn lanes, one through lane, and one right-turn lane.
- Add second right-turn lane on westbound Grevelia Street at Fair Oaks Avenue.

- Remove bulbout on northbound Fair Oaks Avenue prior to the Orchard Supply Hardware shopping center driveway. The current bus stop would be moved to far side of intersection.

Caltrans has provided an estimated capital cost for the previous version of for this project of \$38 million. We believe that the project cost may ultimately be lower. We also believe this project is critical to ensuring efficient movement of regional traffic on Fair Oaks Avenue, and would both leverage and support the improvements described below.

## **Fremont Avenue/Huntington Drive/Fair Oaks Avenue Regional Traffic Corridor Improvements**

This is a proposed package of improvements designed to increase vehicular throughput and person capacity on north-south arterials connecting to the cities of Pasadena and Alhambra, while simultaneously maintaining or improving safety for pedestrians and cyclists and minimizing impacts on adjacent neighborhoods. It incorporates elements of the SR-710 North Environmental Impact Report/Environmental Impact Statement (EIR/EIS) Transportation System Management/Transportation Demand Management (TSM/TDM) Alternative. After reviewing a number of the alternatives, we are not proposing the reversible lanes concept from the EIR/EIS, as we believe that it would represent a safety risk.

The traffic flow improvements we propose include:

- Implement an Adaptive Traffic Control System (ATCS) and synchronize signals throughout the corridor. Include leading pedestrian intervals in all signal cycles. These signals would run on Fair Oaks Avenue from the City of South Pasadena into and through the City of Pasadena.
- Increase the visibility of all crosswalks using continental or ladder (perpendicular) striping.
- Extend the existing merging lane on northbound Fremont Avenue just north of the Fremont Avenue/Alhambra Road intersection.
- Restripe Fremont Avenue south of Huntington Drive to clearly delineate eight-foot parking lanes (marked using continuous edge striping), 11-foot travel lanes, and a 10-foot left-turn lane.
- On Fremont Avenue between Huntington Lane and Huntington Drive, remove some existing parking (six spaces), add a southbound merging lane and re-designate the northbound through lane as shared through/right-turn. Prohibit right turns on red.
- Add signage on Fremont Avenue approaching Huntington Drive northbound directing Pasadena-bound motorists to turn right at Huntington Drive and directing the traffic to continue north on Fair Oaks Avenue.
- On Huntington Drive between Fremont Avenue and Fair Oaks Avenue, add a second northbound left-turn lane and adjust signal timing accordingly.
- Widen the median on Huntington Drive east of Fremont Avenue to six feet and realign the crosswalk in order to provide a median refuge with a “nose.” Accommodate by narrowing eastbound general-purpose lanes as necessary or by narrowing the median between the westbound right-turn and through lanes.
- Restripe Huntington Drive between Alhambra Road and Garfield Avenue to accommodate Class II bicycle lanes. This can be accomplished without removing existing

general-purpose or parking lanes or narrowing existing raised medians, by narrowing the general-purpose lanes to 10 to 11 feet. (Note that this project can be found in the City's 2011 Bicycle Master Plan.)

- Add flashing beacons or other enhanced safety measures at the crosswalk on the right-turn lanes from westbound Huntington Drive to northbound Fair Oaks Avenue.
- Restripe Fair Oaks Avenue between Huntington Drive and Grevelia Street to accommodate Class II bicycle lanes. This can be accomplished without removing existing general-purpose or parking lanes or narrowing existing raised medians, by narrowing the general-purpose lanes to 10 to 11 feet. (Note that this project can be found in the City's 2011 Bicycle Master Plan.)
- Add HAWK pedestrian-actuated signals or other enhanced safety measures at the unsignalized crosswalk at Spruce Street (Note that when actuated, this would disrupt signal progression.)
- Extend the northbound Fair Oaks Avenue left-turn pocket at Monterey Road.
- Remove bulbouts and replace with right-turn pockets on Fair Oaks Avenue at:
  - the northwest and northeast corners at Monterey Road (extending to the Vons shopping center driveway);
  - the northwest, southwest and southeast corners at El Centro Street;
  - the northwest, southwest and southeast corners at Mission Street; and
  - the northwest, southwest and southeast corners at Hope Street.
- Reconstruct the remaining bulbouts on Fair Oaks Avenue to prevent auto intrusions on the sidewalk. (Note that as previously mentioned, measures to improve pedestrian safety should be implemented at these intersections including high-visibility crosswalk enhancements, leading pedestrian intervals, and corner radii that are no larger than necessary given the desired design and control vehicles.)
- At the SR-110 ramp intersections, implement the changes previously described.

Given that the recommended changes would largely consist of restriping and signal upgrades, with relatively few curb line modifications required, we believe that the total cost of this package should not exceed \$15 to 20 million.

## **PRIORITY 2: TSM/TDM OR REMAINING FUNDING**

### **Additional Operational Improvements**

The changes described below would improve throughput and safety, and would largely consist of restriping, signal upgrades and new signals, with relatively few curb line modifications required. In addition, these projects would provide greater mobility options and provide transportation demand management opportunities. For these reasons, we believe that the total cost of this package should not exceed \$10 million. These improvements would be designed subject to a more detailed determination of feasibility.

- On Huntington Drive at Garfield Avenue, convert the existing eastbound shared through and right-turn lane to a right-turn only lane, and study the addition of an eastbound left-turn lane.
- On Columbia Street at Pasadena Avenue, stripe eastbound left-turn and shared through/right-turn lanes.

- On westbound Columbia Street at Orange Grove Avenue, restripe for one left-turn lane and one combined right-turn/through lane. Adjust signal cycle to provide protected left and actuated or short-duration through.
- On Garfield Avenue at Mission Street, provide a longer green phase for Garfield Avenue.
- At Garfield Avenue and Monterey Road, replace the existing all-way stop with a signal.
- At Garfield Avenue and Oak Street, add a signal. (Note that the distance between this intersection and the signalized intersection of Garfield Avenue and Huntington Drive is approximately 600 feet, so queueing analysis may need to occur. Alternately, traffic might be diverted from Garfield Avenue at Huntington Drive to Fair Oaks Avenue or Los Robles Avenue)
- Implement key projects from the City’s 2011 Bicycle Master Plan that will provide greater connection to the existing bicycle infrastructure, including:
  - Class II bicycle lanes on Fair Oaks between Huntington and Monterey
  - Class II bicycle lanes on Huntington

(Additionally, the City is currently studying implementation of buffered bicycle lanes on Mission Street west of Fair Oaks Avenue, and pending upcoming traffic analysis may wish to add this project to future revisions of the EAPs list.)

## **Traffic Calming/Speed Management**

Pending additional study of the potential improvements to increase safety and reduce other impacts from regional “cut-through” traffic on local streets, we are proposing measures to manage speeds and improve safety where necessary on high-volume streets as well as neighborhood traffic management and calming measures to protect local and low-volume residential streets which are currently and/or are projected to be impacted by the intrusion of commuter and cut-through traffic in the corridor, including but not limited to:

- Fremont Avenue north of Huntington Drive
- Columbia Street, Hermosa Street, and Grand Avenue west and south of Orange Grove Avenue
- Arroyo Drive from Columbia Street to Pasadena Avenue
- Meridian Avenue south of Monterey Road

Because these projects have not yet been fully defined, their cost is not yet known. However, we are requesting a grant of \$5 million, sufficient for the City to establish a neighborhood traffic safety program and make initial improvements in the corridor.

(Note that the City has previously studied traffic calming improvements on Fremont Avenue, but has not yet proceeded with these improvements, in part because they were believed by some to be more appropriate to lower-volume local streets. While the City’s position is that regional traffic should be diverted to Fair Oaks Avenue, Fremont Avenue is likely to remain a relatively high-volume street for the foreseeable future, and the City would like to study speed management options in that context.)

## **PRIORITY 3: REMAINING FUNDING**

This category of proposed projects consists of other projects that would improve local and regional transportation conditions in a variety of ways. They include:

**SR-710 Early Action Projects Funding Request to Metro**  
[City of South Pasadena]

- Adopted projects in our Capital Improvement Program that have not been fully funded, including:
  - Flashing crosswalks on Mission Street (which has a capital cost of less than \$1 million).
  - Upgrades to the existing signal at Monterey Road and Via Del Rey (which, along with the new signal below, have costs of more than \$1 million).
  - A new signal at Monterey Road and Orange Grove Avenue.
- Reduction of the curb radius on the northwest corner of El Centro Avenue and Orange Grove Avenue, and restriping to eliminate the buffer on the southbound approach between the through/left and right-turn lanes. (This and the following two projects should be relatively inexpensive, well less than \$1 million each.)
- A new sidewalk on the north side of El Centro Street between Edison Lane and Mound Avenue (and accompanying reconfiguration of the adjacent City-owned parking lot).
- A new unsignalized crosswalk with accompanying enhanced safety measures on Mission Street at Prospect Avenue.
- Funding for an update of the City’s 2011 Bicycle Master Plan.
- A Metro-funded study of potential grade separations of at-grade intersections along the Metro Rail Gold Line, including Monterey Road and Pasadena Avenue.
- Another Metro-funded study of a potential microtransit pilot program to improve first/last mile access and connectivity to Gold Line stations. (Note: this could leverage recommendations of the countywide microtransit study Metro is currently pursuing).
- A Metro-funded study of BRT in the Fair Oaks Avenue/Atlantic Boulevard (Route 762) corridor, including potential business access and transit lanes on Huntington Drive between Fair Oaks Avenue and Atlantic Boulevard, which could be used by existing local services in addition to BRT.





November 2, 2017

Los Angeles County Metropolitan Transportation Authority  
One Gateway Plaza  
Los Angeles, CA 90012-2952

Dear Chair Garcetti and Metro Board of Directors,


The May 25, 2017, Metro Board Decision significantly altered the conversation around the State Route 710 (SR-710) North Extension. By allocating funds to the projects identified in the Transportation System Management and Transportation Demand Management (TSM/TDM) Alternative and new mobility improvement projects within the San Gabriel Valley subregion, the impacted cities have begun to shift focus towards transportation projects that can improve the efficiency of our existing system and minimize demand. The Cities of Alhambra, Pasadena, and South Pasadena are eager to move forward with the implementation of these projects and have individually contracted with transportation professionals to assist in the evaluation of our project lists.


With the understanding that traffic and air quality problems do not stop at jurisdictional borders the staff from all three cities have come together to start identifying additional projects in the corridor that can help mitigate the effects of the SR-710. This collaboration was conducted as a good faith effort to address the existing transportation challenges that our residents and streets are facing today. The three cities are committed to working together in a collaborative process to identify the appropriate projects in our individual jurisdictions as well as cross-jurisdictionally. In order to provide a more comprehensive project list the three cities would like to jointly request that Metro assist with the funding to allow our transportation consultants to work together and conduct the necessary modeling for these projects. Without this level of evaluation it will be difficult to provide Metro with a substantial project list that addresses the regional mitigation of the SR-710.

We look forward to working with you to “identify corrective measures to contain the regional traffic on the freeway system and minimize impacts on the local street network” and to quickly mitigate the impacts of the SR-710 on our communities with the available funding.

If you have any questions or comments please feel free to contact Margaret Lin, Principal Management Analyst, at [MLin@southpasadenaca.gov](mailto:MLin@southpasadenaca.gov) or (626) 403-7236.

Sincerely,

  
Alhambra Mayor  
Stephen K. Sham

  
Pasadena Mayor  
Terry Tornek

  
South Pasadena Mayor  
Michael A. Cacciotti

CC: Alhambra City Council  
Pasadena City Council  
South Pasadena City Council

**Item 3 Attachment 3**  
**Presentation**



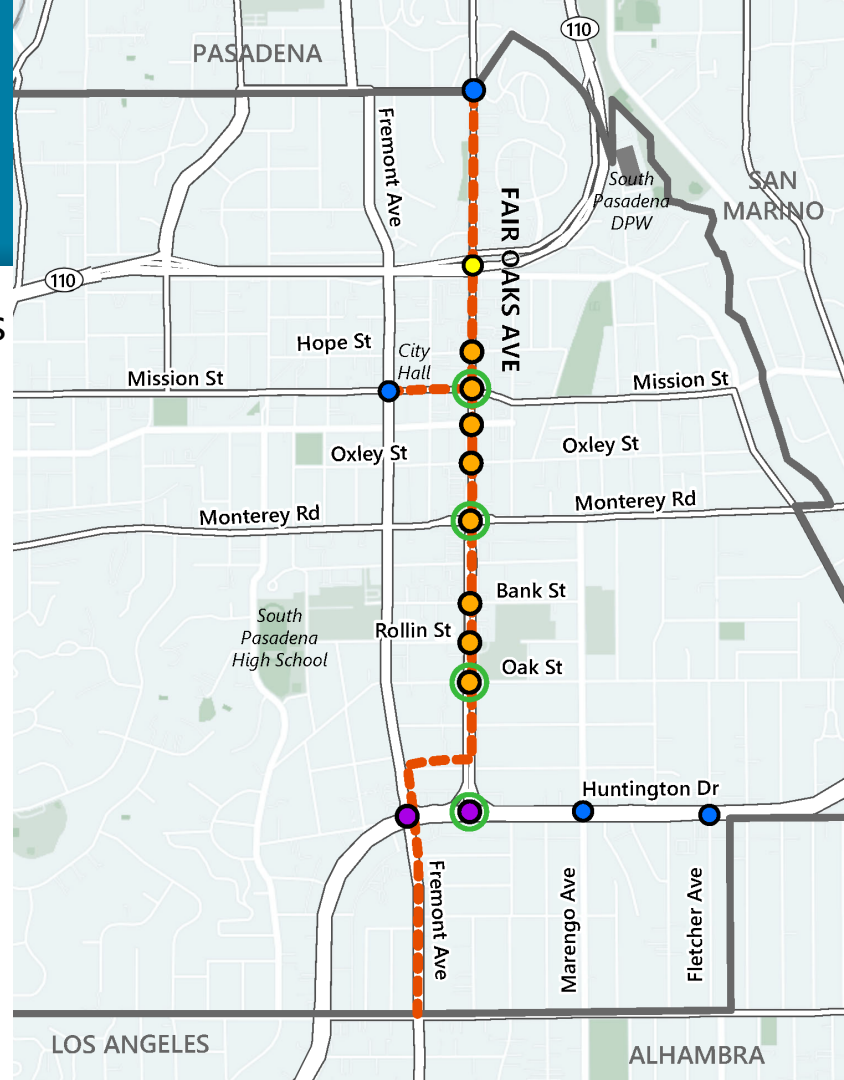
# North-South Corridor Intelligent Transportation System Deployment Project

SOUTH PASADENA | Nov. 15, 2022

# PROJECT BACKGROUND

A Metro-funded traffic signal improvement project was recently completed on Fair Oaks Avenue for:

- Controller replacement, radar, & thermal detectors (8)
- Controller replacement (1)
- Connection to new fiber (3)
- Connection to new twisted pair (3)
- Emergency Vehicle Preemption (4)
- New fiber line



# FEDERAL-FUNDED SIGNAL UPGRADES

**Under ROGAN fund, FHWA approved the following items for traffic signal upgrades along Fair Oaks Avenue:**

- New mast arm poles
- New signal heads
- Accessible pedestrian push button signals
- Illuminated LED street name signs
- Upgraded cabinets and controllers
- ADA Upgrades
- Changeable Message Signs



# FEDERAL-FUNDED PEDESTRIAN IMPROVEMENTS

Intersections along Fair Oaks Avenue will receive curb ramp upgrades and median nose reconstruction to satisfy ADA compliance requirements.

In addition to upgraded curb ramps, **sidewalk and crosswalk improvements** may be needed to increase pedestrian safety at the interchange.



# FEDERAL-FUNDED CHANGEABLE MESSAGE SIGNS

**Installing changeable message signs with the installation of Bluetooth travel time and delay monitoring system along the Fair Oaks Avenue and Fremont Avenue corridors.**

Two trailblazer assembly signs may also be needed at intersection of Orange Grove Avenue & Mission Street (to direct traffic to Orange Grove Avenue)



*Example CMS*

# ADDITIONAL SUGGESTED IMPROVEMENTS



## Additional improvements for consideration:

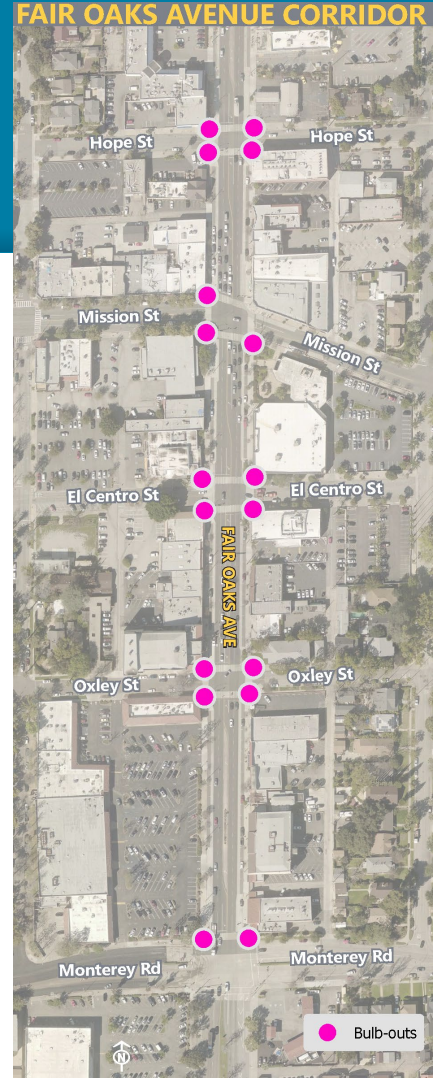
- Bulb-out modification
- Median improvements
- Fiber optic connection between South Pasadena Public Works and City Hall
- Closed-circuit television at key intersections



# BULB-OUT MODIFICATION

**Bulb-outs exist at 17 corners on Fair Oaks Avenue. Possible improvements to these bulb-outs may include:**

- Smoothing the curb angles to accommodate street sweeping
- Trimming the approaches to allow right turn-on-red movements
- Complete removal of the bulb-outs



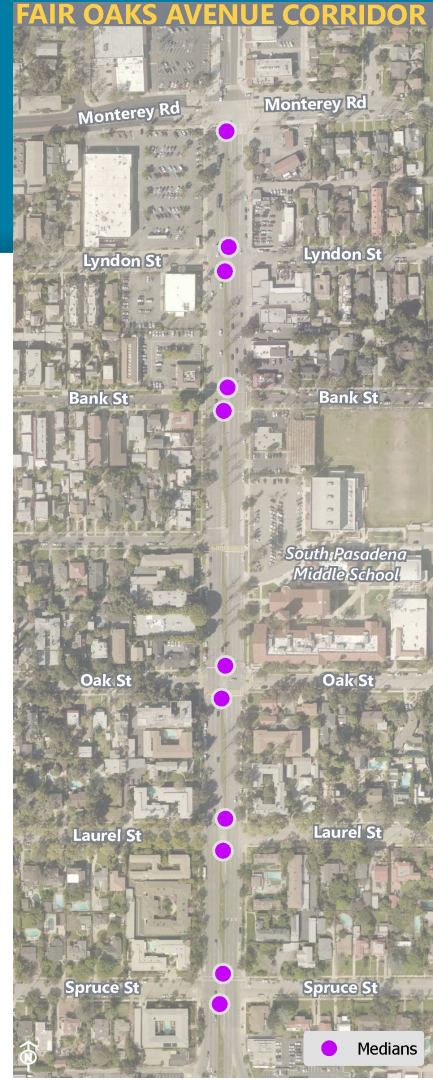
# MEDIAN NOSE MODIFICATION



**Median noses at 6 intersections along Fair Oaks Avenue lie to the left side of the left turn lanes, which impacts motorists' sight lines of oncoming traffic.**

Removing these median noses will reduce the lane offset and improve safety.

*Median noses at Fair Oaks Avenue & Bank Street*



# FIBER OPTIC CONNECTION

A new fiber line connecting South Pasadena City Hall to South Pasadena Dept. of Public Works

*This new connection would allow Public Works staff to better utilize the Traffic Management system installed at City Hall*

*(the fiber alignment shown is tentative)*



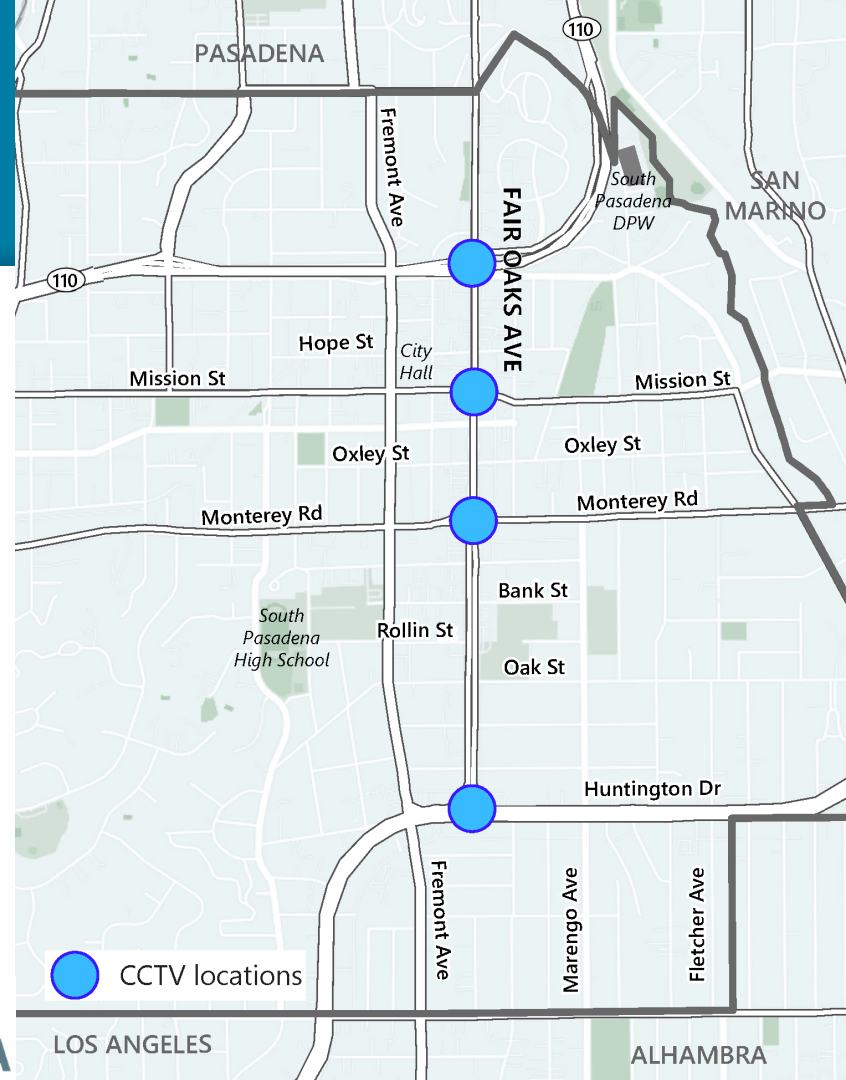
# CLOSED-CIRCUIT TELEVISION (CCTV) CAMERAS

Closed-circuit television (CCTV) cameras will allow staff to view traffic incidents and sources of congestion.

Proposed CCTV locations:

- Fair Oaks Avenue & Grevelia Street
- Fair Oaks Avenue & Mission Street
- Fair Oaks Avenue & Monterey Road
- Fair Oaks Avenue & Huntington Drive

*(Cameras are intended for traffic management purposes. Video recording is not being implemented as part of this project.)*



# PUBLIC OUTREACH

Public outreach will be conducted at 2 locations:

- South Pasadena Farmers Market
- An SPUSD campus



# Questions?



**Item 3 Attachment 4**  
**Community Notification Flyer**

# Traffic Operations Improvements for the Federally Funded Fair Oaks Avenue Project

A federal grant is providing the opportunity to upgrade traffic signals on Fair Oaks Avenue between Columbia Street and Huntington Drive. Concurrent with traffic signal improvements will be opportunities to improve curb ramps, sidewalks, and crosswalks to provide ADA compliance and improve pedestrian safety, median nose reconstruction where needed, and pedestrian detection devices along Fair Oaks Avenue.

Improvements for consideration are described in greater detail below:

## Possible Improvements on Fair Oaks Avenue:

### 1 Bulb-out modifications

Bulb-outs exist at 17 corners on Fair Oaks Avenue. Possible improvements include smoothing the curb angles to accommodate street sweeping, trimming the approaches to allow right turn-on-red movements, or potentially the complete removal of the bulb-outs.



Example of proposed bulb-out trimming locations on the northwest and southwest corners of Fair Oaks Avenue & Hope Street

### 2 Median nose modifications

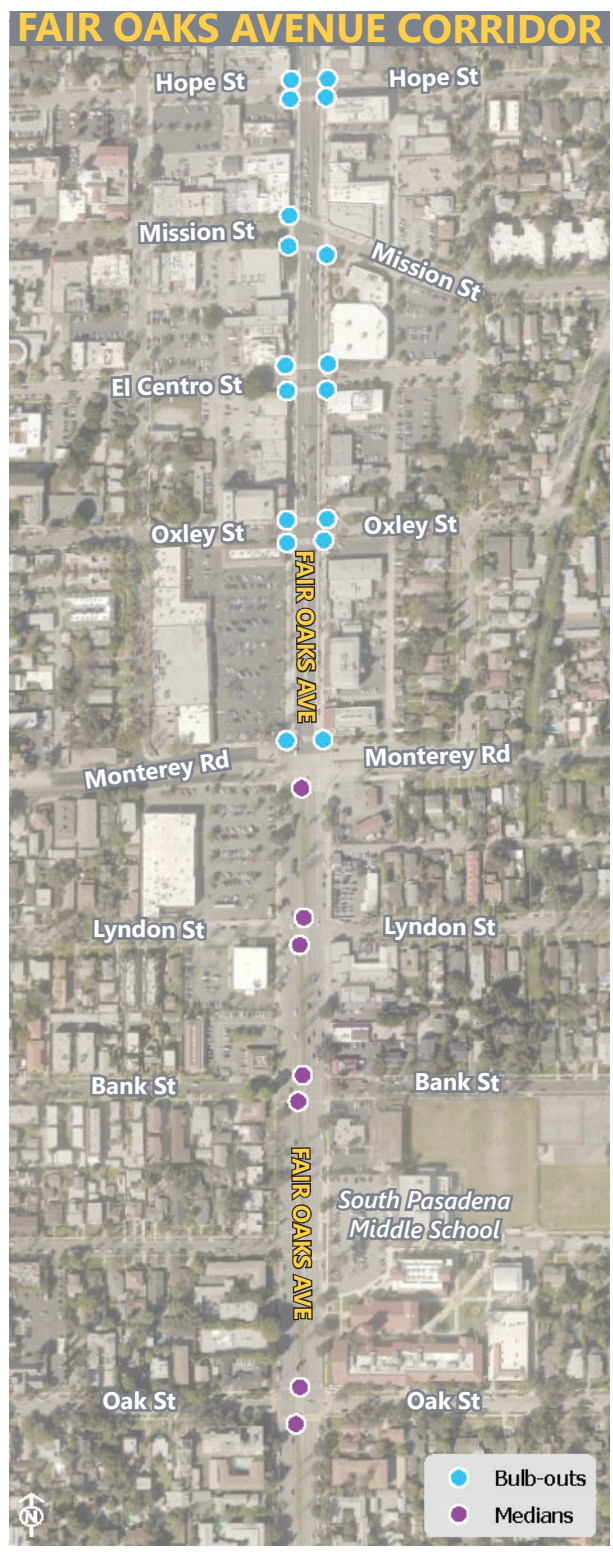
South of Monterey Road, the Fair Oaks Avenue median noses lie on the left side of the left turn lanes, offsetting the sight alignment of motorists in those lanes. Removing the median noses adjacent to 7 left turn lanes will reduce the lane offset and improve sight distance.



Example of proposed median trimming location at intersection of Fair Oaks Avenue & Banks Street

### 3 Fiber Optic Connection to the Public Works Office

A fiber optic line will connect the relocated Public Works Department on Garfield Avenue to City Hall, enabling Public Works Staff to fully utilize City Hall's traffic management system.



## Do you want to provide feedback on these Fair Oaks Avenue improvements?

Please attend the Mobility and Transportation Infrastructure Commission (MTIC) Meeting on **Nov. 15, 2022 at 6:30pm.**

Meeting will be held at South Pasadena Council Chambers -- 1424 Mission St, South Pasadena, CA 91030.

See MTIC webpage for additional outreach meetings and surveys:

We would like to hear your feedback!

