



**CITY OF SOUTH PASADENA
MOBILITY AND TRANSPORTATION INFRASTRUCTURE COMMISSION
REGULAR MEETING AGENDA**

**Council Chamber
1424 Mission Street, South Pasadena, CA 91030
June 15, 2021, at 6:30 p.m.**

South Pasadena Mobility and Transportation Infrastructure Commission 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 Mobility and Transportation Infrastructure Commission (MTIC) for June 15, 2021, will be conducted remotely and held by Zoom video conference.

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. Commission Members will be participating remotely and will not be physically present in the Council Chambers.

To maximize public safety while still maintaining transparency and public access, members of the public can observe the meeting via Zoom in one of the three methods below.

Mobility and Transportation Infrastructure Commission
Zoom Meeting Information
Meeting ID: 874 6031 0147
Passcode: 852530

1. Go to the Zoom website, <https://zoom.us/join> and enter the Zoom Meeting information accordingly;
or
2. Click on the following unique Zoom meeting link:
<https://us02web.zoom.us/j/87460310147?pwd=aHpMMkp1ZTdVakhQNjJGU3RwTEEx6QT09>
or
3. You may listen to the meeting by calling: +1-669-900-6833 and entering the Zoom Meeting ID and Passcode when prompted to do so.

For additional Zoom assistance with telephone audio, you may find your local number at:
<https://us02web.zoom.us/j/ky9n7bhtz>

IMPORTANT NOTE: Members of the public may access the meeting to observe the meeting's proceedings; however, at this time, there is no live, real-time participation by members of the

PUBLIC COMMENT

If you would like to comment on an agenda item, members of the public may submit their comments in writing for consideration, by emailing comments or questions to: mticpubliccomments@southpasadenaca.gov. **Public Comments must be received by 12:00 p.m., June 15, 2021** to ensure adequate time to compile and post. Public Comment portion of the email is limited to 250 words. Please make sure to indicate: 1) your name; 2) what agenda item you are submitting public comment on, or if it is a general public comment; and/or 3) clearly state if you wish for your comment to be read during the meeting.

- CALL TO ORDER:** Chair Abelson
- ROLL CALL:** Commissioners: Lawrence Abelson, Eric Dunlap, John Fisher, Kimberley Hughes, and Donson Liu
- CITY COUNCIL LIAISON:** Councilmember Jon Primuth
- STAFF PRESENT:** Garrett Crawford, Acting Deputy Director of Public Works, and Leaonna DeWitt, Public Works Assistant
- PLEDGE OF ALLEGIANCE:** Commissioner Dunlap

PUBLIC COMMENT AND SUGGESTIONS

1. Public Comment – General

ACTION ITEMS

- 2. Minutes of the Regular Mobility and Transportation Infrastructure Commission on May 18, 2021**
- 3. Review and Recommend that the City Council Approve Senate Bill (SB1) Resolution**
- 4. Proposed Revisions to the Neighborhood Traffic Management Program**

COMMISSION LED DISCUSSION

- 5. AVCJPA Metro Short Range Transportation Plan**
- 6. SR 710 Mobility Improvement Projects Ad Hoc Committee**
- 7. Ramona Avenue Neighborhood Traffic Management Ad Hoc Committee**

8. Discussion of Local Return Measure M Projects for FY 2022

9. COVID-19 Ad Hoc Committee

10. Preferential Parking Policy Ad Hoc Committee

COMMUNICATIONS

11. City Council Liaison Communications

12. Commissioner Communications

13. Staff Liaison Communications

ADJOURNMENT

FUTURE MOBILITY AND TRANSPORTATION INFRASTRUCTURE COMMISSION MEETINGS

July 20, 2021	TBD	6:30 p.m.
August 17, 2021	TBD	6:30 p.m.

PUBLIC ACCESS TO AGENDA DOCUMENTS AND BROADCASTING OF MEETINGS

Commission Meeting agenda packets are available online at the City website: <https://www.southpasadenaca.gov/government/boards-commissions/mobility-and-transportation-infrastructure-commission>

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. 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.

6/10/21

Date

/s/

Leonna DeWitt

Public Works Assistant

ITEM 2

**Minutes of the Regular Mobility and Transportation
Infrastructure Commission – May 18, 2021**

TUESDAY, MAY 18, 2021
MINUTES OF THE CITY OF SOUTH PASADENA
MOBILITY AND TRANSPORTATION INFRASTRUCTURE COMMISSION
REGULAR MEETING

CALL TO ORDER

The Regular Meeting of the Mobility and Transportation Infrastructure Commission was called to order by Vice Chair Fisher on April 20, 2021, at 6:31 p.m. The meeting was held in a virtual setting, via Zoom. Chair Abelson joined the meeting a bit later.

ROLL CALL: Leonna DeWitt, Public Works Assistant

Present via

Zoom: Commissioner Dunlap, Commissioner Fisher, Commissioner Hughes and Commissioner Liu. Chair Abelson arrived later.

Council Liaison: Councilmember Jon Prmuth

Absent:

Staff Present: Shahid Abbas, Public Works Director, Garrett Crawford, Acting Deputy Public Works Director and Leonna DeWitt, Public Works Assistant

PLEDGE OF ALLEGIANCE

Commissioner Hughes led the pledge of allegiance.

Vice Chair Fisher proposed to consider reordering the agenda items as follows:

- Agenda Item No. 3
- Agenda Item No. 12
- Agenda Item No. 10
- Agenda Item No. 11
- Agenda Item No. 1
- Agenda Item No. 4
- Agenda Item No. 2

ACTION ITEM

3. Minutes of the Regular Mobility and Transportation Infrastructure Commission on April 20, 2021 - Minutes approved as amended. (Liu, Hughes; 4-0)

COMMUNICATIONS

12. Staff Liaison Communications

PWD Abbas gave a brief update on water conservation programs. City is aggressively pursuing conservation programs and have made significant contributions with a reduction of 30% of water usage.

It was reported that in regards to the Rogan Funds and the Fair Oaks projects, a consultant has been selected. The city is working in concert with Metro on the signal synchronization. The upgrade will be for hardware and then later, software. The phases of the project were discussed with the project scheduled to be completed by the end of 2023.

- Phase 1-fiber options and controllers
- Phase 2-all hardware and software
- Phase 3-ramp and bottlenecks, ramp

10. City Council Liaison Communication

Councilmember Primuth announced the hiring of the new City Manager Arminé Chaparyan, who will start on June 1, 2021 and Brian Solinsky appointed as the new Police Chief.

11. Commissioner Communications

Commissioner Dunlap inquired if the City is working with the city of Alhambra on their development of Fremont Avenue ramp, Atlantic Avenue and Garfield Avenue.

PWD Abbas responded that the City is in communication with Alhambra and has raised some concerns about the way the study was done. The city of Alhambra has promised to look into those concerns and will follow up with us.

Commissioner Hughes inquired regarding informational signage and if the corridor would have continuous signage.

PWD Abbas responded that the City has shared our program and Pasadena has agreed to continue the informational signage.

PUBLIC COMMENT

1. Public Comment

1. Will Hoyman expressed concern regarding the traffic at the intersection of Orange Grove Blvd. and Columbia St. There is concern about the 2 lanes merging down to one.

Chair Abelson arrived on the zoom meeting.

ACTION ITEMS

4. Proposed Stop Signs on Meridian Avenue at Oak Street, Pine Street and Maple Street

PWD Abbas gave a brief overview on this item and presented the results of the studies to the Commission.

Public Comment received after the deadline 6:51p.m.

1. Allan Ehrlich – expressed disagreement with the report by Zimmerman and stated the report was flawed.

Discussion ensued regarding the analyses, traffic and pedestrian volumes, sight distance issues, other alternatives or options such as rapid flashing beacons.

A motion was made by Chair Abelson to recommend to City Council to proceed with the installation of an all-way stop at the intersection of Meridian Avenue and Oak Street, and seconded by Commissioner Hughes. (Abelson, Hughes; 2-3 motion fails)

Council Liaison Primuth requested the Commission agree on a recommendation if the City Council elects not to proceed with an all-way stop.

A motion was made by Commissioner Fisher supports the installation of edgeline striping, curb warning sign, advisory speed plates, rectangular rapid flashing beacons on Meridian Avenue at Oak Street, in addition to advance rectangular flashing beacons to warn of the active crossing, and seconded by Commissioner Dunlap. (Fisher, Dunlap; 4-1 motion passes)

DISCUSSION ITEMS

2. Update on Implementation of Citywide Neighborhood Traffic Management Plan

It was recommended to bring this item back at a future meeting.

ACTION ITEMS

5. Formation of Citywide Preferential Parking District Ad Hoc Committee

Chair Abelson requested this item to be agendaized in order to formalize the creation of the Preferential Parking District Ad Hoc Committee, so the work of Commissioner Dunlap and Lui will be reported monthly.

A motion was made by Commissioner Dunlap to formally create the Citywide Preferential Parking District Ad Hoc Committee. The motion was approved, (Dunlap; Liu; 5-0)

COMMISSION LED DISCUSSIONS

6. SR 710 Mobility Improvement Projects Ad Hoc Committee

Commissioner Fisher reported the status the projects on Fair Oaks Avenue and the loop ramp. There are 3 projects that will affect interchange. 1) Rogan Funds \$9 million and scheduled to take 9 months; 2) The next phase is estimated to cost \$4-\$5 million for installation of fiber optic cable to for synchronized signals to communicate with each other on Fair Oaksvenue; 3-6 months; 3) There is also the phase for the loop ramp study – the Rogan fund project is on a tight timeline. The study for the project, will proceed within the next few weeks. Commissioner Fisher will report back on the scope of work loop ramp study.

7. Ramona Avenue Neighborhood Traffic Management Ad Hoc Committee

Commissioner Fisher gave a brief overview of this item.

Public Comment

1. Renee Rubin – expressed concern regarding the traffic and safety issues caused by the traffic caused by student drop offs at Holy Family School.

2. Joanne Nuckols – requested to agendaize an action item for the June meeting to recommend appropriate traffic and safety improvements in regards to Ramona Avenue. She also suggested staggering school start times.

Chair Abelson and Commissioner Fisher visited the site during peak drop off times at Fremont and noticed in the front of the high school which is all red zone. There is drop off activity on Rollin St., Fremont Avenue and Diamond Avenue that conflicts with traffic with Holy Family School. The goal is exploring ideas in creating a more efficient use of loading/unloading processes to separate the traffic going through the church property.

8. Discussion of Local Return Measure M projects for FY 2022

ADD Crawford gave a brief update on the item. He is still working on the master list of projects and anticipate to have the list by next meeting. It was reported that the City has been in dialogue with the City of San Marino regarding the suggested signal at Oak Avenue and Garfield Avenue.

9. COVID-19 Ad Hoc Committee

Metro Open Streets Grant

Commissioner Dunlap reported that dialogue continues with Active San Gabriel Valley, as well as and the community t regarding the configuration and finalize the scope of work before submitting the plan to staff or City Council.

ADD Crawford gave a brief update on this item.

ADJOURNMENT: Meeting adjourned at 9:46 p.m.

I HEREBY CERTIFY that the foregoing minutes were adopted by the Mobility and Transportation Infrastructure Commission of the City of South Pasadena at a meeting held on June 15, 2021.

Larry Abelson, Chair

ITEM 3

**Review and Recommend that the City Council
Approve Senate Bill (SB1) Resolution**



Mobility & Transportation Infrastructure Commission Agenda Report

ITEM NO. 3

DATE: June 15, 2021

FROM: Ghassan Shelleh, P.E., Deputy Public Works Director

SUBJECT: **Recommend Street Improvement Project List in a Resolution to the California Transportation Commission to be funded through the Senate Bill 1: Road Maintenance and Rehabilitation Account Program**

Recommendation

Recommend the FY 2020-21 Street Improvement Project list in a resolution to the California Transportation Commission (CTC) to be funded through the Senate Bill 1 (SB1): Road Maintenance and Rehabilitation Account (RMRA) Program.

Discussion/Analysis

SB1 (Beall, Chapter 5, Statutes of 2017) provides the first significant, stable, and ongoing increase in state transportation funding in more than two decades. SB1 provides additional funding for transportation infrastructure, increased the role of the CTC for a number of existing programs, and created new transportation funding programs for the CTC to oversee.

Prior to receiving an apportionment of SB1 funds from the State Controller (Controller) in a fiscal year (FY), a city must submit to the CTC a resolution identifying the proposed projects to be funded with these funds. All projects proposed to receive funding must be included in a city budget that is adopted by the applicable city council at a regular public meeting. The proposed resolution must include a project list with a description and the location of each proposed project, a proposed schedule for the project’s completion, and the estimated useful life of the improvement. The Controller, upon receipt of the report from the CTC, shall apportion RMRA funds to eligible cities.

In order to receive SB1 funds for these street segments, they need to be included in a resolution to the CTC. Below is a list of the 2020-2021 FY Street Improvement Project list that has selected from the City updated Pavement Management Program based on PCI and other pavement calculations.

Name	From	To	PCI	Total \$
ARROYO DR	PASADENA AVE	MISSION ST	26	\$52,640
ARROYO DR	MISSION ST	ARROYO VISTA PL	30	\$28,112
ARROYO DR	ARROYO VISTA PL	HERMOSA ST	46	\$39,620
ARROYO DR	HERMOSA ST	N CITY LIMITS	41	\$19,292
BRUNSWICK AVE	MONTEREY AVE	KOLLE AVE	36	\$67,132
BRUNSWICK AVE	KOLLE AVE	SAINT ALBANS AVE	34	\$35,511
FAIR OAKS AVE	OAK ST	PCC BEGIN	39	\$236,954
FAIR OAKS AVE	OAK ST	MONTEREY RD	43	\$338,590

2020-21 FY Senate Bill 1 Proposed Project List

June 15, 2021

Page 2 of 4

HUNTINGTON DR	S CITY LIMITS	MAPLE WY	47	\$208,007
HUNTINGTON DR	MAPLE WY	S CITY LIMITS	53	\$202,616
HUNTINGTON DR	MAPLE WY	END OF AC	44	\$246,167
HUNTINGTON DR	FREMONT AVE	MAPLE WY	58	\$299,664
BEACON AVE	OLIVER ST	DEAD END	57	\$7,224
BEECH ST	MERIDIAN AVE	HUNTINGTON DR	32	\$31,697
BUENA VISTA ST	PROSPECT AVE	FREMONT AVE	69	\$19,308
FAIRVIEW AVE	GREVELIA ST	END	73	\$6,260
FAIRVIEW AVE	MISSION ST	END	64	\$33,995
FAIRVIEW AVE	BUENA VISTA ST	DEAD END	49	\$63,639
FREMONT LN	FREMONT AVE	OAKLAWN AVE	32	\$10,265
GREVELIA ST	ORANGE GROVE AVE	MERIDIAN AVE	21	\$60,584
GREVELIA ST	MERIDIAN AVE	FREMONT AVE	23	\$72,974
GREVELIA ST	FREMONT AVE	FAIR OAKS AVE	12	\$141,494
HIGHLAND ST	MERIDIAN AVE	FAIRVIEW AVE	94	\$4,690
HOPE CT	HOPE ST	MAGNOLIA ST	42	\$5,107
HOPE ST	MERIDIAN AVE	FREMONT AVE	62	\$91,417
HOPE ST	FREMONT AVE	FAIR OAKS AVE	41	\$62,750
HOPEWELL LN	HOPE ST	MAGNOLIA ST	28	\$14,923
LYNDON ST	MERIDIAN AVE	DEAD END	11	\$118,680
LYNDON ST	EL CERRITO CIR	FREMONT AVE	31	\$56,375
LYNDON ST	FREMONT AVE	FAIR OAKS AVE	33	\$49,380
LYNDON ST	FAIR OAKS AVE	MARENGO AVE	34	\$81,132
MONTROSE LN	PICO ALLEY	OXLEY ST	3	\$38,735
HARRIMAN AVE	HILL AVE	CDS	15	\$44,475
CAMDEN PKWY	CAMDEN AVE	COURT AVE	17	\$61,775
AVON PL	OXLEY ST	MISSION ST	19	\$116,406
AVON PL	OXLEY ST	SOUTH END	28	\$17,618
PACIFIC ALLEY	FAIR OAKS AVE	MARENGO AVE	29	\$52,320
MONTROSE LN	NORTH ALLEY	SOUTH ALLEY	30	\$7,877
OAK CREST AVE	ALTA VISTA AVE	CDS	30	\$36,832
MARTOS DR	INDIANA AVE	END	33	\$17,787
OAK HILL LN	OAK HILL AVE	CDS	33	\$6,679
MAGNOLIA LN	HOPE ST	MAGNOLIA ST	39	\$18,240
MAGNOLIA LN	MAGNOLIA ST	GREVELIA ST	22	\$12,859

MAGNOLIA ST	ORANGE GROVE AVE	MERIDIAN AVE	57	\$80,438
MILAN AVE	MONTEREY RD	MISSION ST	33	\$86,667
MOUND AVE	FAIR OAKS AVE	CDS	43	\$42,055
MOUND AVE	BEGIN PCC	END PCC	90	\$2,010
MOUND AVE	MISSION ST	PCC	81	\$1,341
OAKLAWN AVE	FREMONT LN	END	52	\$15,957
OAKLAWN AVE	COLUMBIA ST	FREMONT LN	48	\$37,613
OLIVER ST	MERIDIAN AVE	FAIRVIEW AVE	49	\$43,489
OZMUN CT	FREMONT AVE	STRATTON LN	84	\$2,996
PROSPECT AVE	MISSION ST	GREVELIA ST	51	\$77,155
PROSPECT LN	MAGNOLIA ST	GREVELIA ST	16	\$65,990
STRATTON LN	FREMONT LN	OZMUN CT	36	\$5,563

Next Steps

1. The Street Improvement Project list will be incorporated into a Resolution for City Council to approve at the July 7, 2021 City Council Meeting.
2. The City must submit an adopt a resolution and project list each fiscal year in order to receive the upcoming fiscal year's apportionment of Road Maintenance and Rehabilitation Account funds.
3. The SB1 funds from the State will be distributed to the City in the Fall 2021.

Background

On April 28, 2017, Governor Brown signed SB1, a landmark transportation funding package that is the culmination of more than two years of hard work by Senate Transportation and Housing Committee Chair Jim Beall, Assembly Transportation Committee Chair Jim Frazier, and the Governor's Administration. The final package required a 2/3-vote in the Legislature and passed by a vote of 27-11 in the Senate and 54-26 in the Assembly.

The \$5.24 billion/year funding package generates new revenues from various taxes and fees and is designed to repair and maintain our State highways and local roads, improve our trade corridors, and support public transit & active transportation.

Beginning November 1, 2017, the Controller will deposit various portions of this new funding into the newly created RMRA. A percentage of this new RMRA funding will be apportioned by formula to eligible cities and counties pursuant to Streets and Highways Code (SHC) Section 2032(h) for basic road maintenance, rehabilitation, and critical safety projects on the local streets and roads system. SB1 emphasizes the importance of accountability and transparency in the delivery of California's transportation programs. Therefore, in order to be eligible for RMRA funding, statute requires cities and counties to provide basic annual RMRA project reporting to the CTC.

Fiscal Impact

The funds from SB1 increase the amount of funding dedicated to improving transportation infrastructure in South Pasadena. Local governments track SB1 dollars and report to the

Legislature and public how they are being used to ensure they are improving our existing infrastructure with a focus on the community's priorities. SB1 will provide investments to make significant improvements to the State's highway system throughout California, including several in our region.

For the City of South Pasadena (City), historically SB1 has provided approximately \$460,000 in local funds annually. The amount of SB1 funding provided to local agencies is a function of the gas sales in the area. As a result of COVID-19 pandemic, there has been a reduction in gas sales. The Controller has not issued proposed revenue forecasts of the SB1 for the next fiscal year, however it is anticipated to decrease in 2020-21 FY.

A city receiving an apportionment of RMRA funds is required to sustain a maintenance of effort (MOE) by spending at least the annual average of its General Fund expenditures during the Fiscal Year 2009-10, 2010-11, and 2011-12 fiscal years for street, road, and highway purposes. The state established MOE for the City is \$1.4M annually in order to maintain eligibility for the funds. As a result of COVID-19, the City is facing budget significant General Fund budget shortfalls in the future. Budget shortfalls may impact the City's ability to meet the State required MOE which could result in the City forfeiting SB1 funding. The City has requested that the State waive the MOE requirements while agencies recover from the COVID-19 budget shortfalls however, there has been no final decision regarding the SB1 MOE from the State.

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*.

ITEM 4
**Proposed Revisions to the Neighborhood Traffic
Management Program**



Mobility and Transportation Infrastructure Commission Agenda Report

ITEM NO. 4

DATE: June 15, 2021
FROM: Ghassan Shelleh, P.E., Deputy Director of Public Works
SUBJECT: Neighborhood Traffic Management Program Volume Threshold

Recommendation

Staff recommends that the Commission approved the proposed revisions increasing the volume threshold to 1500 vehicles per day for local roadways and removing the collector roadways from the eligibility criteria.

Discussion/Analysis

The City of South Pasadena’s Neighborhood Traffic Calming Program (NTMP) is a city-wide effort to provide an equitable, systematic and easily accessible approach to addressing neighborhood traffic calming requests. Interwest Consulting Group prepared the initial document that was presented to the MTIC on September 15th and October 20th, 2020.

Staff revised the document per the comments received during the commission meetings; however, had concerns with the traffic volume threshold recommended by the commissioners. During the October 20th, 2020 meeting, the commissioners suggested to lower the average weekday daily traffic threshold to 500 vehicles per day for local roadways, and 1,500 vehicles per day for collector roadways to be eligible for traffic calming.

After further consideration, staff determined that the recommended volume thresholds are too low and will generate an unmanageable number of requests for street segments eligible for traffic calming study. Due to limited funds and resources, staff recommends to increase the volume threshold to 1500 vehicles per day for local roadways and remove collector roadways from the eligibility criteria. The proposed volume thresholds will allow staff to identify local street segments with problematic traffic patterns, such as traffic congestion and cut-through concerns. Should the commissioners recommend including the collector roadways into the program, staff recommends the use of the peak hour volume-to-capacity (V/C) ratio of 0.8 when assessing the requests. The V/C ratio measures the level of congestion on a roadway by dividing the peak hour volume of vehicles by the capacity of the roadway. Staff suggests using V/C ratio, as the geometry of collector roads and the average daily traffic varies throughout the City.

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: Neighborhood Traffic Management Program



NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM (NTMP)

NOVEMBER 2020

Table of Contents

Introduction..... 1

 1. Goals 1

 2. Objective 1

 3. What is Traffic Calming?..... 1

 4. Purpose..... 1

 5. What are Traffic Calming Measures? 1

STEP 1 Petition Request – Report the Problem 1

STEP 2 Petition Screening & Neighborhood Consensus 1

STEP 3 Data Collection 1

STEP 4 Stage 1 Non-Physical Traffic Calming 1

STEP 5 Post Data Evaluation..... 1

STEP 6 Stage 2 Traffic Calming Study..... 1

STEP 7 City Council Approval 1

STEP 8 Funding & Implementation..... 1

Table of Figures

Figure 1 Traffic Calming Flow Chart..... 14

Figure 2 South Pasadena Roadway Classification Map 15

Appendices

Appendix 1 Traffic Calming Request Form 16

Appendix 2 Traffic Calming Signature Petition Form 17

Appendix 3 Traffic Calming Toolbox..... 18

Appendix 4 Frequently Asked Questions..... 36

Appendix 5 Traffic Calming Checklist.....37

Introduction

The City of South Pasadena Neighborhood Traffic Management Program (NTMP) is a city-wide initiative to empower citizens to address traffic calming concerns. The need for the program stemmed from the City's desire for an equitable, systematic, and easily accessible approach to handling neighborhood traffic calming requests.

This document provides a framework for the selection, application, and implementation of traffic calming improvement measures, contingent upon available funding, in the City of South Pasadena. Annually the City Council will need to allocate \$100,000 for the NTMP program to allow for data collection, traffic studies, and implementation of traffic calming features.

This document shall be considered a "living document" to ensure the most current industry-wide information and tools are available to the City. This document may be updated at any time by the City Engineer/Public Works Director, as new devices, techniques, or policies are developed, tested, implemented and available for City use.



1. Goals

Goals of the Program are:

- Reduce the speed of vehicles on local or collector streets and in neighborhoods, with demonstrated speeding problems, to levels consistent with speeds on more typical South Pasadena neighborhood streets.
- Increase safety by reducing demonstrated accident patterns on impacted neighborhood streets to levels consistent with those of typical South Pasadena local streets.
- Develop and emphasize focused neighborhood educational programs which address local traffic problems.
- Implement selective enforcement actions in neighborhoods with demonstrated, or perceived, traffic-related problems.
- Eliminate, or discourage, non-local, cut-through traffic on neighborhood streets.
- Encourage citizen participation throughout the Program by seeking the input of affected residents and non-resident property owners through neighborhood meetings, written communication, and open forum opportunities with Public Works Commission, Public Safety Commission and with City Council.

- Minimize impacts on emergency vehicle response times caused by implementation of neighborhood traffic calming measures.
- Limit the potential for shifting traffic problems from one local neighborhood to another when implementing traffic calming measures.
- Provide initial response to program inquiries within three business days of receipt and follow-up with an estimated time of completion.



2. Objective

The overall objective of the City's Neighborhood Traffic Management Program is utilize where applicable, traffic calming measures to improve the livability of our neighborhoods, encourage multi-modal use of our traveled ways, promote walkability of our streets, and to minimize adverse impacts of vehicular traffic in our neighborhoods through a system of education, enforcement, engineering, evaluation and encouragement.



3. What is Traffic Calming?

South Pasadena residents have expressed concern about speeding and cut-through traffic in local neighborhoods. In response to public interest the City has developed a Neighborhood Traffic Management Program.

The Institute of Transportation Engineers defines "Traffic Calming" as the following:

"Traffic Calming is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users."

The City of South Pasadena expands this definition to include non-physical measures such as educational programs and directed enforcement.



4. Purpose

It is the concern with overall public safety and mobility that has led the City to develop a program which addresses the needs of:

- Local Neighborhoods
- Collector Roadways

The program recognizes “functional classification” differences of streets within the community and addresses them specifically and individually. With respect to the school zone traffic calming – school zones are often located on Arterial/Collector streets, which are “functionally classified” to provide for the safe and efficient movement of large volumes of vehicular traffic. The appropriate measures for school zone traffic calming must recognize a broader spectrum of solutions, applying specific measures appropriate for use on local streets and/or collector streets.

Local Streets

Local streets are planned and designed to provide access to and from our residential neighborhoods. These facilities are neither designed nor intended for the use of non-local traffic.

However, when congested conditions occur on collector and arterial roadways, these local streets will often provide an attractive alternative route, or “cut-through”; the geometrics of the neighborhood street system can lead to increased speeds as well. These problems individually or collectively result in a reduction in neighborhood safety for homeowners, pedestrians, and bicyclists.

It is the intent of this program to identify traffic calming measures, which can alter travel behavior to the betterment of the neighborhoods being affected. The intent here is to improve safety, encourage bicycle and pedestrian travel, and to positively affect a resident’s quality of life.

Therefore, the objectives of the local residential streets program are:

- Reduce vehicular speed where appropriate
- Reduce cut-through traffic
- Promote conditions that encourage bicycle and pedestrian travel
- Enhance the neighborhood environment

Collector Streets

Collector Streets are planned and designed to carry significant traffic flows, at a high rate of speed on both a daily and peak hour basis. These neighborhoods often experience undesirable travel speeds, and/or congestion, incompatible with the characteristics of the adjoining activities.

It is the intent of this program to identify measures which can alter travel behavior to the betterment of the community at large. The objectives of the Collector traffic calming program are to:

- *Enhance safety*
- *Control traffic speeds*
- *Reduce congestion*
- *Promote conditions that encourage bicycle and pedestrian travel*
- *Enhance the street environment*



5. What are Traffic Calming Measures?

Neighborhood traffic calming measures are an attempt to enhance traffic and pedestrian safety and preserve neighborhood character and livability. These tools will be used to address South Pasadena's local neighborhood traffic concerns. There are several traffic calming devices that are available to achieve this effect. Traffic calming measures are chosen from a toolbox and will be implemented after a careful analysis and review of traffic concerns, consideration of roadway characteristics, and availability of funding. Specific traffic calming measures can be used to address problems with speeding, cut-through traffic, increased volume, and safety.

Traffic calming measures are not solutions for all speeding, cut-through, congestion or traffic safety concerns. Under this program, staff will work with residents and businesses to identify traffic issues in their neighborhoods. Each neighborhood will have its own unique set of problems that will require a comprehensive traffic engineering evaluation to identify appropriate traffic calming options.

The basic goal of this Traffic Management Program is to evaluate measures that will affect driver behavior in such a way that public safety and the quality of life for residents and/or businesses, pedestrians, bicyclists and motorists are improved.

There are several traffic calming devices that are available to achieve this effect.

Stage 1: Non-physical features include increased enforcement and traffic signing and striping

Stage 2: Physical features that may include speed reduction, volume reduction, and congestion relief measures*

*Note: Installation of Physical traffic control devices must be justified by an engineering traffic study and funded by City Council.



STEP 1 Petition Request – Report the Problem

The NTMP process begins with a petitioner request. If a resident feels as though there is speeding or traffic concerns on a local street, the first step is to report the problem to the City of South Pasadena. City Staff will note your complaint and provide resident with a Traffic Calming Petition Form. When the form is completed and submitted, City Staff will evaluate the complaint to determine the nature of the problem and ensure that the location first meets the following criteria:

- Street must be classified as a local or collector roadway in a residential neighborhood.

To qualify for NTMP consideration, the roadway segment(s) must be a local or collector street in a residential neighborhood. Please see Figure 2 for the City’s “Roadway Classification Map.”

If a location does not qualify for traffic calming, the City may opt to deploy the speed feed-back trailer or utilize directed enforcement for a predetermined amount of time or discuss other options.



STEP 2 Petition Screening & Neighborhood Consensus

City Staff will complete the screening process on a “first come -first serve” basis. However, the City will endeavor to incorporate/coordinate traffic calming projects with scheduled Capital Improvement Program (CIP) projects as applicable and feasible.

The NTMP process will begin with a resident request by submitting a petition. The petition must indicate that 51% of the property owners/residents along the roadway street segment(s) is in support of the request for traffic calming. Considering COVID-19 and social distancing protocols, petition signatures may be secured through city-supplied post-card ballots or electronic ballots via email or Internet.

City Staff will screen the petition, verify petition support, and confirm if the location meets the minimum criteria. If the roadway segment meets criteria and the minimum 51% proof of support from property owners/residents along the roadway street segment (s) of concern have been verified, then the process continues. Depending on the nature of the request, the area of impact may require additional signatures. The area of impact, which are streets within 100 feet of the affected area that may be impacted by the proposed traffic calming solution, will be determined by City staff and will be communicated to the petitioner, as needed. If signatures are required from the area of impact, 67% of the residents within the area of impact must submit signatures of support.



STEP 3 Data Collection

If the 51% signatures are secured and City Staff deems the application complete, then City Staff will proceed with collecting traffic data (traffic volumes, speed data and collision history) for the street roadway segment of concern, if funding for data collection is available. Traffic data should be collected when school is in session so that traffic patterns represent a typical traffic day.

To qualify for traffic calming consideration at least one of the following criteria should be satisfied:

Criteria #1 - Speeding Thresholds

If the 85th percentile speed is 7 miles per hour above the posted speed limit, then the street would be a candidate for Traffic Calming.

Criteria #2 - Traffic Volume Threshold

If the average weekday daily traffic is at least 1500 vehicles per day for a local roadway and 0.8 peak hour volume-to-capacity (V/C) ratio for collector roadways, the street would be eligible for Traffic Calming.

Criteria #3 - Collision

Within the study area, there are at least three preventable or property damage related collisions in the past five years.



STEP 4 Stage 1 Non-Physical Traffic Calming

If the roadway street segment(s) identified in the petition are ineligible for NTMP consideration based on criteria outlined in Step 3, then the request is denied, and the matter is closed.

If the resulting data collection satisfies the thresholds identified in Step 3, City Staff will first suggest a Stage I approach which may include the following:

- Radar Speed Trailer Deployment
 - This is a temporary and mobile electronic device that displays the posted speed limit sign above the real-time travel speed of passing vehicle. The purpose of this tool is to alert motorists that may be exceeding the posted speed limit.
- Directed Enforcement Actions
 - This is traditional enforcement activity on the part of the Police Department's traffic enforcement officers. The intent is to deter unsafe behaviors at specific times and locations in local areas.
- Traffic Signing and Pavement Markers
 - Public Works Staff will review all the existing traffic signing and pavement markings in the area. If necessary and if funding is available, Staff will install additional signing and/or striping. When appropriate, changes and additions will be reviewed with interested neighbors.



STEP 5 Post Data Evaluation

Post traffic data will be collected four months after the Stage 1 Traffic Calming measures is implemented if funding is available. City Staff will analyze traffic data (i.e. speeds, volume and collisions) to determine if the Traffic Calming measures were successful. If the post data collected reduces conditions to below the thresholds limits in Step 3, traffic calming is achieved, and the petition will be closed out. If post data continues to range above Stage I minimum criteria, then City Staff will recommend possible Stage 2 Traffic Calming methods.



STEP 6 Stage 2 Traffic Calming Study

Once post data is evaluated and City Staff determines the study area (boundaries of the impacted area), the application will advance to Stage 2 if funding is available. A formal Traffic Calming Study will be conducted by the City's Traffic Engineer to identify the appropriate improvement measure to address the traffic concerns. City Staff will coordinate and communicate with the petition lead to inform the residents and property owners of the traffic calming process and the recommended Stage 2 improvements. Stage 2 traffic calming methods may include the following:

SPEED REDUCTION MEASURES

- Speed Humps:
 - Speed humps are raised traffic calming devices installed across the roadway to slow vehicles by elevating the wheelbase of the vehicle. Speed humps are approximately 12 feet in width and vary from 2.5 to 3.5 inches in height and should be placed near street/safety lighting. Speed hump consideration must follow the City's Speed Hump Policy.
- Speed Tables:
 - Speed tables are raised long flat-topped devices generally used at crosswalk locations. Both speed humps and speed tables included signing, roadway pavement markings and appropriate lighting to make their presence known to motorists.
- Traffic Circles:
 - Traffic circles are raised circular islands located in the center of an intersection. This device forces traffic to meander around the traffic circle and prevents straight-through movements and forcing vehicles to yield. Yield signs may be installed to alert motorists to slow down when entering the intersection.
- Curb Extensions, Chokers, Chicanes:
 - These devices are raised additions of the sidewalk that extend into the roadway, typically no further than the width of the parking lane. These can be done at street entries and exits as well as mid-block locations. These various methods narrow the roadway resulting in reduced vehicle speed and provide pedestrians with shorter crossing distances at intersections.

- Median Entry/Exit Islands:
 - Center island narrowing features are raised islands locations along the centerline of a street which narrows the travel lanes to limit traffic volumes. These are traffic islands used to create narrower roadway passages at entry and exit points.
- Median Barriers:
 - Median barriers are raised island located along the center of a roadway and continue through an intersection as to block through movement at a cross street.
- Raised Crosswalks:
 - Raised crosswalks are speed tables striped with a crosswalk on a top flat section. Raised crosswalks are accompanied by appropriate pedestrian signage and lighting to provide pedestrians with an enhanced more visible, level street crossing.

VOLUME REDUCTION MEASURES

- Forced Turn Islands, Barriers, Channelization:
 - Forced-turn islands are raised that prohibit specific movements at an intersection.
- Diagonal Diverters:
 - Diagonal diverters are barriers placed diagonally across an intersection to restrict through movements. These barriers may be staggered throughout a neighborhood to create a more circuitous road network.
- One-Way Streets:
 - This is when traffic on a street is regulated to only allow traffic to flow in one direction. Usually this is accomplished through sign placement.
- Partial/Half-Street Closure:
 - Partial or half street closures, are barriers that block entry to a street in one direction on otherwise two-way streets.
- Street Closures and Cul-de-sacs:
 - A full closure restricts vehicles access to a street, thus reducing overall traffic and cut-through traffic.

CONGESTION RELIEF MEASURES

- Delay Reduction
- Accident Reduction
- Reduced Queuing

Prior to considering installation of any Stage 2 traffic calming device, the following criteria should be met:

1. Installation must not result in traffic diversion to other neighborhood streets.
2. At least 51% of the impacted residents and 67% of the residents within 100 feet of the proposed device shall support the installation.
3. Devices shall be located a minimum of 25 feet from driveways, manholes, drain inlets, water valves, street monuments, and other appurtenances.
4. Devices shall be located a minimum of 25 feet from fire hydrants.
5. Devices shall be installed only where a minimum safe stopping distance can be provided.
6. South Pasadena Police and Fire Departments must approve the plan to assure that emergency response times or access are not negatively affected.

Stage 2 - Community Approval Process

The City's consulting traffic engineer will develop a conceptual plan with appropriate traffic calming improvements to address existing and potential issues within the neighborhood. A voting survey with a conceptual plan will be mailed to affected residents/property owners. Voting is required to ensure the community accepts the Stage II traffic calming improvements.

The following general criteria must be met to proceed to final design and implementation phase for any Stage 2 traffic calming measure:

1. The City will develop a concept plan, host a meeting to discuss the plan and then petitioner to obtain signatures/approval of the plan. At least 51% minimum approval of the affected residents must vote "YES". 67% "YES" vote from the residents immediately adjacent (within 100 feet) to the proposed measure. The above criteria must be met, and funding must be secured to proceed to the final design and implementation phase.
2. If funding is not available, then the process stops, and the petition will be closed out.

Residents, property managers, and property owners can all participate in the survey.

If the 51% approval rate and 67% of the immediately adjacent residents/property owners are not met, then the process stops, and the petition will be closed out.



STEP 7 City Council Approval

Once the survey is complete with the required approval rating, then the solution will be presented to City Council for authorization and funding to begin design drawings. Once final design plans are completed, they will be presented to the City Council for final approval and construction funding. This process will include a formal Public Hearing.



STEP 8 Funding & Implementation

After the formal Public Hearings and City Council approval, implementation of the project will be scheduled and added to the Capital Improvement Program for funding prioritization. If the Project remains unfunded for three years and if funding does not become available within the five years, then the Project will be closed out and the neighborhood will need to be re-evaluated.

Traffic Calming Plan Development

When selecting items for traffic calming improvement projects City Staff will take into consideration a range of factors including:

- Impacts to all users including emergency vehicles, pedestrians, and cyclist
- Prevent spill over issues to adjacent streets
- Recommend most cost-effective traffic calming measures to increase overall effectiveness
- Characteristics of each roadway
- Placement of traffic calming measure to achieve desired results

Figure 1 - Traffic Calming Flow Chart

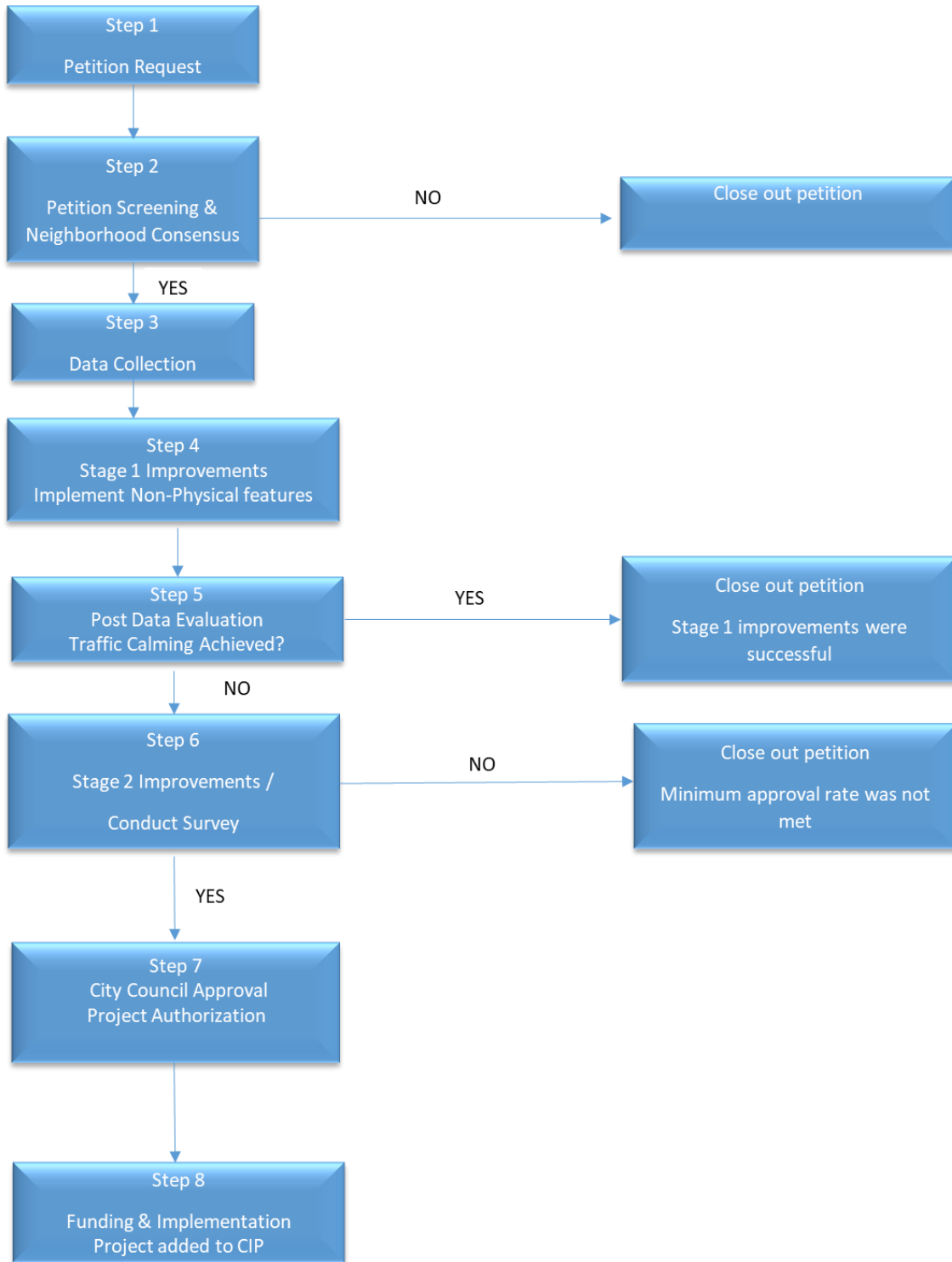
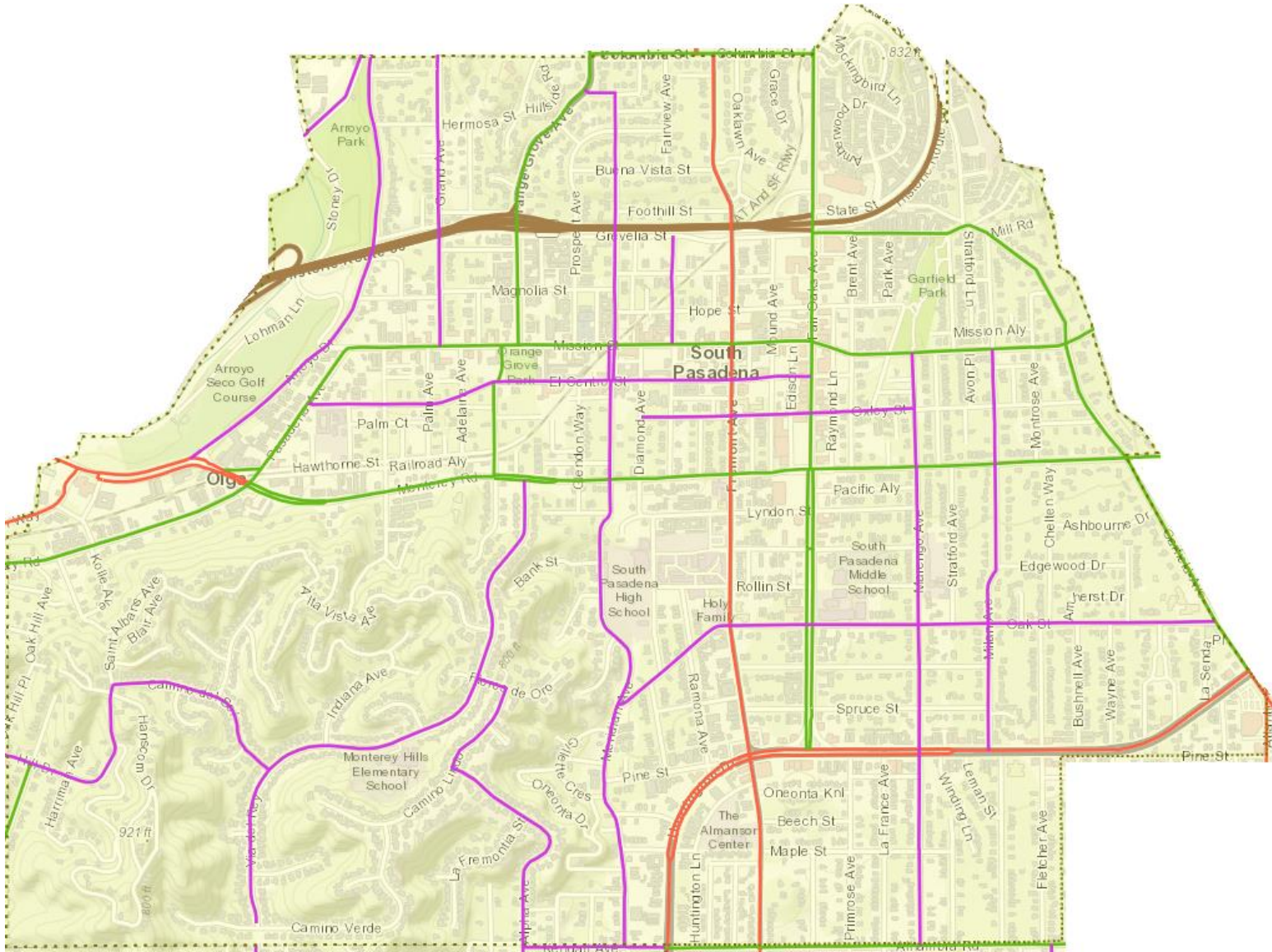


Figure 2 - South Pasadena Roadway Classification Map



- Interstate
- Other Fwy or Expwy
- Other Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- Local

Appendix 1 Traffic Calming Request Form

Neighborhood Traffic Calming Request Form

This purpose of this form is to initiate a possible traffic calming study within a neighborhood in accordance with the City of South Pasadena Neighborhood Traffic Management Program. The form must be filled out in its entirety and submitted to:

Department of Public Works

City Hall - Public Works and Engineering

1414 Mission Street, 1st Floor

South Pasadena, CA 91030

Phone: (626) 403-7240; Fax: (626) 403-7241

1. Petitioner Lead Contact Information:

Name:

Address:

Phone Number:

Email:

2. Please describe the location of the traffic concern. Attach a map or picture if necessary:

3. Please describe the nature of the traffic calming issue (attach additional sheets if necessary):

Appendix 2 Error! Bookmark not defined. **Traffic Calming Petition Signature Form**

Petitioner Lead Name:

The petition must be signed by at least 51% of the residents/property owners on affected street to continue with the traffic calming procedures.

THE UNDERSIGNED AGREE TO THE FOLLOWING:

1. All persons signing this petition do hereby certify they reside within the impacted area, which is hereby defined as the street segment of:

Street Name/Location

2. All persons signing this petition do hereby agree of the following traffic concerns at the following location:

Street Name/Location

Neighborhood Petition Form				
	Name	Address	Phone #	Signature
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Appendix 3 Traffic Calming Toolbox

TRAFFIC CALMING TOOLBOX

The purpose of the Traffic Calming Toolbox is to provide City traffic engineers with a guide on implementing the best traffic measures for developing neighborhood traffic management plans. The devices vary in their ability to treat various traffic-related concerns. This Appendix provides guidance on selecting the most appropriate devices given the type of specific traffic-related concern and streets being treated.

NEIGHBORHOOD TRAFFIC MANAGEMENT DEVICES

The toolbox is divided into different sections based on whether each tool is applicable to Stage I and Stage II.



Stage I: NON-PHYSICAL DEVICES TRAFFIC CALMING DEVICES

Stage I improvements are non-physical devices that does not require physical changes to the roadway. Stage I improvements are intended to increase driver's awareness of surroundings, assign right-of-way, improve safety, and influence driver behavior without physical devices. This category includes the following devices:

- Targeted Speed Enforcement
- Speed Feedback Trailer
- Signage
- Centerline/Edge line stripe
- Striping Improvements
- Speed Legends
- Stop Signs

TARGETED SPEED ENFORCEMENT

City Staff will identify locations for temporary targeted enforcement, based on personal observations and survey comments. A request can be submitted to the City of South Pasadena Police Department for the desired enforcement. Depending on Police Department resources, the targeted enforcement may be limited in duration. Targeted enforcement may also be used in conjunction with new neighborhood traffic management devices to help drivers become aware of the new restrictions.



Advantages

- Inexpensive if used temporarily
- Does not physically slow emergency vehicles or buses
- Quick implementation
- Can be applied on roadways that are non-qualifying for NTMP

Disadvantages

- The Police Department may have limited resources for traffic calming concerns
- Effectiveness is temporary

Cost

No Cost Anticipated, Depends on Available Police Resources

SPEED FEEDBACK TRAILER

Speed feedback signs measure approaching vehicle’s real-time speeds which is displayed to drivers on an electronic sign that flashes when vehicles speeds exceed the posted speed limit. Speed feedback signs are typically mounted on or with speed limit signs and are most common in school zones.



Advantages

- Real-Time speed feedback
- Does not physically slow emergency vehicles or buses
- Permanent installation

Disadvantages

- May require power source
- Only effective for one direction of travel
- Long-term effectiveness uncertain
- Subject to vandalism
- Requires specialized maintenance

Cost

No Cost Anticipated, Depends on Available Police Resources

SIGNAGE

Signage may help increase motorist’s awareness of restrictions and help to deter unsafe behavior:

- Truck Restriction Signs
- “Cross Traffic Does Not Stop” Signs



Advantages

- Inexpensive and easy to install
- Restrictions can reduce cut-through traffic
- Does not impact emergency response or buses

Disadvantages

- May become ineffective over time
- Effectiveness may be limited by motorist’s acceptance of regulations

Cost

\$100 - \$250

CENTERLINE/EDGE LINE LANE STRIPING

Lane striping can be used to delineate the edge of bicycle lanes, parking lanes, parking pavement markings, or edge lines. Edge line striping is reserved for locations to mark shoulders less than 5-feet. If there is more than a 5-foot shoulder, hatch striping shall be included. Striping can serve to visibly narrow the travel lanes for vehicles and encourage drivers to lower their speeds.



Advantages

- Inexpensive
- Does not physically slow emergency vehicles or buses
- May reduce vehicle speed

Disadvantages

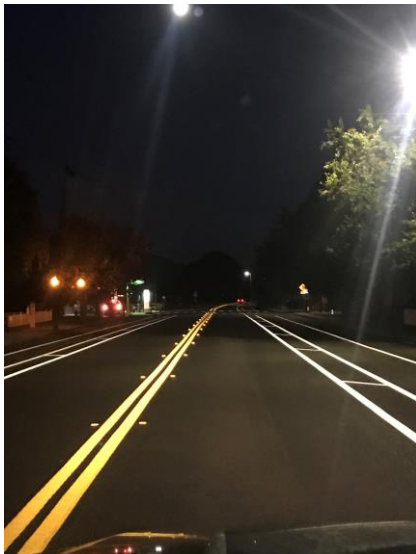
- Requires regular maintenance
- Reduce on-street parking

Cost

\$1,000 - \$5,000

STRIPING IMPROVEMENTS

There are numerous striping alternatives that can be used for traffic calming. The basic concept of traffic calming striping is to reduce the driver's perceived width of the roadway. By doing this, the drivers tend to reduce speed and may also be diverted from a particular route because of the reduced speed.



Advantages

- Inexpensive
- Does not physically slow emergency vehicles or buses
- May reduce vehicle speed

Disadvantages

- Requires regular maintenance
- Reduce on-street parking

Cost

\$1,000 - \$5,000

SPEED LEGEND

Pavement legends are numbers painted on the roadway indicating posted speed limit. They are typically placed in conjunction with posted speed limit sign to act as a reminder of posted speed limit. Pavement legends can be useful in reinforcing a reduction in speed limit between one segment of a roadway and another segment. They may also be placed at major entry points into a local area and school zones.



Advantages

- Inexpensive
- Helps to reinforce speed limit or a changed condition
- Does not impact emergency response or buses

Disadvantages

- Requires regular maintenance

Cost

\$500

HIGH VISIBILITY CROSSWALKS

High visibility crosswalks incorporate striped patterns, pavement lights, improved signing, or advance flashing beacons to improve the visibility of the crosswalk. This measure is most applicable on local and collector streets where speed-control and pedestrian crossing designation is desired. It can also be used to discourage cut-through traffic.



CURB MARKINGS

Curb markings are special colored curb paintings that restrict or limit parking along the curb to enhance safety and/or increase visibility of pedestrians and bicyclists.



STOP SIGNS

Stop signs are not speed control devices. They assign right-of-way and are safety improvement measures that can be installed at intersections where warranted. The California Manual on Uniform Traffic Control Devices (CAMUTCD) establishes guidelines that must be met by preparation of an engineering study before stop signs can be installed.



Advantages

- Inexpensive
- Assigns Right-of-Way
- Improves Safety
- Does not impact emergency response or buses

Disadvantages

- Requires regular maintenance

Cost

\$1,000 - \$1,500



STAGE II – PHYSICAL TRAFFIC CALMING DEVICES

Stage II Calming devices are physical traffic calming measures that use variations in pavement height and alternative paving materials to physically reduce travel speeds. Stage II devices in the toolbox could include:

- Speed Tables/Raised Crosswalks
- Speed lumps/humps
- Traffic Circles
- Roundabouts
- Neckdown/Choker/Chicanes
- Center Island narrowing
- Two-lane Choker
- Partial Closure
- Diagonal Diverter
- Forced Turn Island
- Turn Restriction Signage

The above listed Stage II devices are examples and should only be considered after justified by an engineering study and engineering judgment. Funding for these devices must be secured and authorized by City Council prior to design and implementation.

SPEED TABLES

Speed tables are flat-topped speed traffic calming devices that lift the wheelbase of vehicles. They are approximately 22 feet long and 3 to 3.5 inches high. The long flat fields, plus ramps that are more gently sloped than speed lumps, give speed tables higher design speeds than lumps and thus may be more appropriate for streets with higher ambient speeds. Brick or other textured materials improve the appearance of speed tables, draw attention to them, and may enhance safety and speed reduction.

The magnitude of reduction in speed is dependent of the spacing of speed tables between points that require drivers to slow. On average speed tables achieve an 18% reduction in speeds.

Advantages

- Effective at reducing speeds
- Aesthetics can be improved through alternative materials

Disadvantages

- Increased noise
- Delayed Emergency Response
- Textured treatment could be costly

Cost

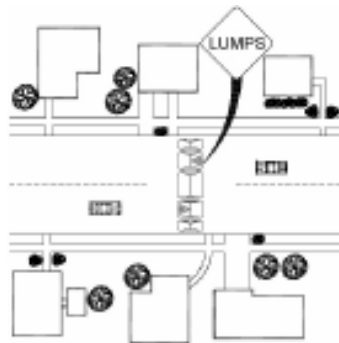
\$2,500



SPEED LUMPS/HUMPS



Speed lumps are rounded raised traffic calming devices installed across the roadway to slow vehicles by elevating the wheelbase. Speed lumps also feature a two-wheel cut-out designed to allow emergency vehicles to pass with minimal slowing. The spacing of cutouts does not allow standard vehicles to bypass the lumps but requires travelling over the lump. They are slightly less than four inches high, typically parabolic in shape, and have a design speed of 15 to 20 MPH. They are usually constructed with a taper on each side to allow unimpeded drainage between the lumps and curb. When placed on a street with rolled curbs or no curbs, bollards are placed at the ends of the speed lump to discourage vehicles from veering outside of the travel lane to avoid the device.



Advantages

- Effective in reducing speeds
- Does not impact emergency response or buses
- Bicycle friendly

Disadvantages

- Wide wheel-based vehicles can pass through wheel cut-outs
- Increased noise
- Delayed Emergency Response
- Aesthetics

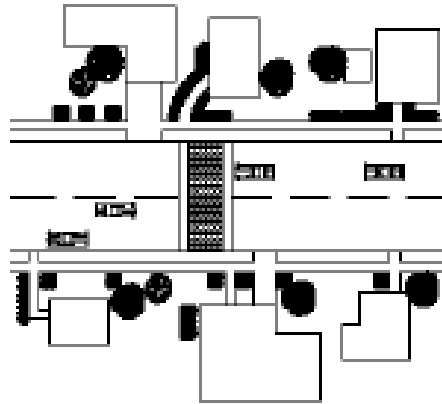
Cost

\$2,500

RAISED CROSSWALK

Raised Crosswalks are speed tables striped with crosswalk markings and signage to channelize pedestrian crossings, providing pedestrians with a level street crossing. Also, by raising the level of the crossing, pedestrians are more visible to approaching motorists.

The magnitude of reduction in speed is dependent of the spacing of raised crosswalks between points that require drivers to slow. On average raised crosswalks achieve an 18% reduction in speeds.



Advantages

- Improves safety
- Aesthetic opportunities
- Effective at reducing speeds

Disadvantages

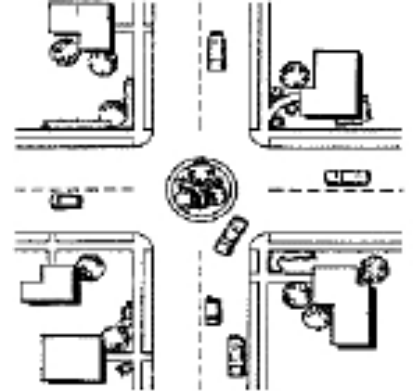
- Crosswalk treatment can be expensive
- Potential impacts to drainage
- Delayed Emergency Response
- Textured treatment could increase noise

Cost

\$2,500 - \$5,000

TRAFFIC CIRCLE

Traffic circles are raised islands located in the center of an intersections which force traffic circulate around them. Traffic circles prevent drivers from speeding through intersections by impeding the straight-through movement and forcing drivers to slow down to yield. Depending upon the size of the intersection and circle, trucks may be permitted to turn left in front of the circle. Traffic circles may be installed with yield signs to further manage traffic.



ROUNDAABOUTS (SINGLE-LANE)

similar to traffic circles, roundabouts require traffic to circulate counterclockwise around a center island. But unlike traffic circles, roundabouts are used on higher volume streets to allocate right-of-way among competing movements. They are found primarily on collector streets, often substituting for traffic signals. They are larger than neighborhood traffic circles, have raised splitter islands to channel approaching traffic to the right, and do not have stop signs. Due to large amount of required right-of-way and construction costs, roundabouts may be most appropriate for new developments or redevelopment areas. Roundabouts have an insignificant affect in reducing traffic speeds, but serve to allocate right-of-way at an intersection similar to a traffic signal.



Advantages

- Forces vehicles to slow down while navigating through roundabout
- Vehicles must yield at approach
- Less expensive than traffic signal to maintain
- Can have positive aesthetic value

Disadvantages

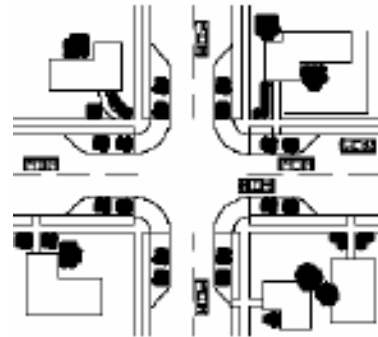
- May require major reconstruction
- Loss of parking
- May present obstacles to visually impaired
- Loss of on-street parking

Cost

\$150,000 - \$250,000

NECKDOWN/BULBOUT

Neckdowns/bulbouts are raised curb extensions to the sidewalk that extend into the roadway, typically no further than parking lane. Neckdowns/bulbouts “pedestrianize” intersections by shortening the crossing distance and decreasing the curb radii, thus reducing turning vehicle speeds. Both effects increase pedestrian comfort and safety at the intersection.



Advantages

- Reduced pedestrian crossing distance & exposure to vehicles
- Improve turning radii for large vehicles/trucks
- Minimal impact to emergency vehicles
- Can be used in combination with landscaping for improved aesthetics

Disadvantages

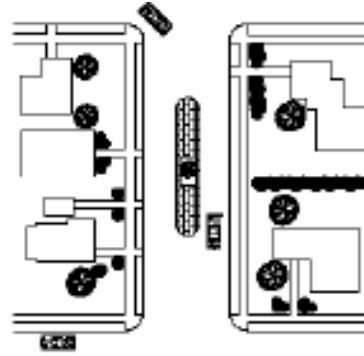
- May slow right-turning emergency vehicles
- Potential loss of some on-street parking spaces
- May require vehicles and bike to share the road

Cost

\$20,000 - \$30,000

CENTER ISLAND NARROWING/ENTRY FEATURE

Center island narrowing devices are raised islands located along the centerline of a street that narrow the travel lanes at that location. Placed at the entrance to a neighborhood, and often combined with textured pavement, they are referred to as “Entry Features.” Fitted with a gap to allow pedestrians to walk through at a crosswalk, they are often called “pedestrian refuges.” They can also be landscaped to increase visual aesthetics.



Advantages

- Can increase pedestrian safety
- Can have positive aesthetic value
- Reduces traffic volumes if alternate routes are available

Disadvantages

- Potential loss of on-street parking

Cost

\$50,000 – \$60,000

TWO-LANE CHOKER

Chokers are curb extensions at midblock that narrow a street. Chokers typically maintain the number of travel lanes but narrow the travel lane widths to encourage slower vehicle speeds. Implementing two-lane chokers may result in potential loss of parking.

Advantages

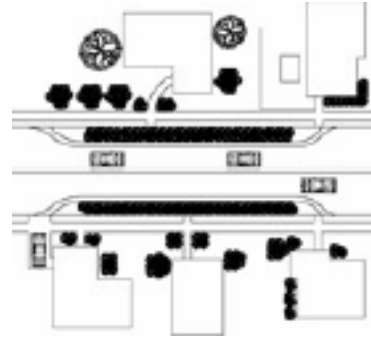
- Easily negotiable by emergency vehicles and buses
- Can have positive aesthetic value
- Reduces both speeds and traffic volumes

Disadvantages

- Loss of on-street parking
- Cyclist & vehicles must share the road
- Build-up of debris in the gutter

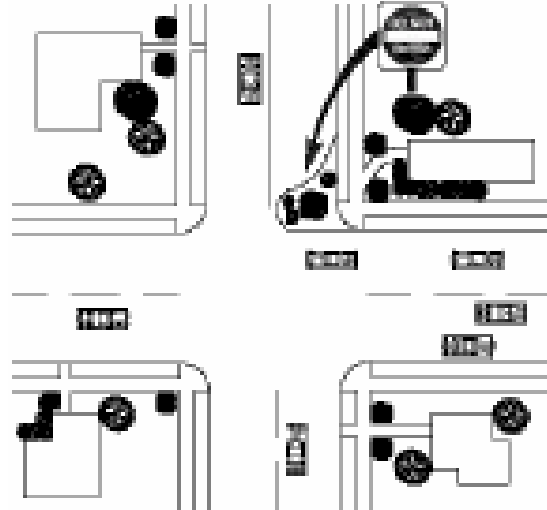
Cost

\$20,000 - \$30,000



PARTIAL CLOSURE

Partial closures (or half street closures) are barriers that block entry to a street in one direction on otherwise two-way streets. Partial closures are among the most common volume control measure after full street closures. Partial closures are often used in sets to make travel through neighborhoods with “gridded” streets circuitous rather than direct.



Advantages

- Effective in reducing cut through traffic
- Maintain pedestrian and bicycle access

Disadvantages

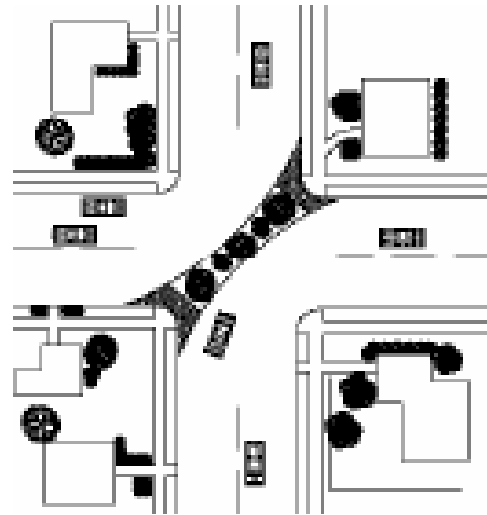
- May limit access to businesses
- Drivers can bypass the barrier

Cost

\$10,000 - \$30,000

DIVERTER

Diagonal diverters are barriers placed diagonally at an intersection restricting through movements. Like half closures, diagonal diverters may be staggered throughout a neighborhood to create more circuitous road network.



Advantages

- Able to maintain full pedestrian and bicycle access
- Effective at reducing traffic volumes

Disadvantages

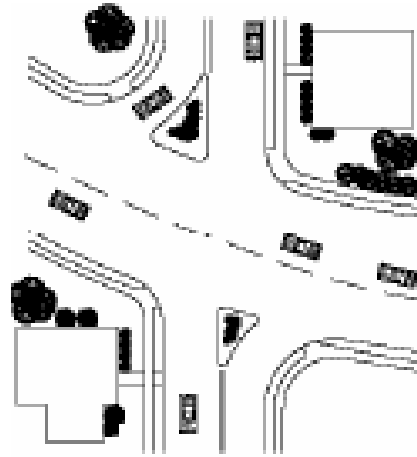
- Create circuitous routes for residents
- Delays for emergency services
- May be expensive
- May require reconstruction of corner curbs

Cost

\$10,000 - \$30,000

FORCED TURN ISLAND

Forced-turn islands are raised islands that prohibit vehicle movements at the approach of an intersection, typically allowing only a single movement. This helps to reduce cut-through traffic on local streets.



Advantages

- Can improve safety at intersection by prohibiting critical turning movements
- Effective at reducing traffic volumes

Disadvantages

- Drivers may maneuver
- May divert traffic to a different street

Cost

\$5,000 - \$25,000

TURN MOVEMENT RESTRICTIONS

Turn-movement restrictions utilize signs to prevent undesired turning movements without the use of physical devices. The restrictions may generally apply to turning movements in or out of a local street to a larger street. The turn-movement restrictions may be permanent or only during peak commute hours.



Advantages

- Can reduce cut-through traffic at specific time-of-day
- Can increase safety at an intersection by prohibiting certain turning movements
- Inexpensive and easy to install

Disadvantages

- Restrictions apply to residents and non-residents
- Requires enforcement to be effective
- May divert traffic problem to another street

Cost

\$250 - \$1,000

Appendix 4 Frequently Asked Questions

What is the South Pasadena Neighborhood Traffic Management Program?

The Neighborhood Traffic Management Program (NTMP) is a city-wide effort to improve safety and traffic concerns within and around local neighborhoods. This program provides residents the opportunity to voice their concerns about traffic related issues such as speeding, collisions and cut-through traffic in their neighborhood.

How do I know if my street qualifies for the NTMP?

For a roadway to qualify for the NTMP it must be considered an eligible roadway. Only local and collector roadways in neighborhoods as identified in the City's General Plan are eligible for traffic calming (refer to South Pasadena Roadway Classification Map). Eligible roadways will need to demonstrate issues of speeding, collisions and increased volumes per the thresholds established in the plan.

What type of improvements may be included as part of the NTMP?

The City will use tools to meet the South Pasadena's local neighborhood traffic concerns. The traffic calming improvements tools will include items from Stage I which include increased enforcement and traffic signing and striping and Stage II which includes speed humps, bulb outs and diverters. The data collection, traffic studies and physical improvements under the NTMP program are subject to funding approval by the City Council which may vary each fiscal year.

Can a stop sign or traffic signal be installed as a traffic calming solution?

Stop signs and traffic signals are considered a traffic control device and not a traffic calming measure. They are intended to control the flow of traffic and assign right-of-way. Standard engineering thresholds, established by the State of California, Department of Transportation are applied to determine if a stop sign or traffic signal is "warranted", thus they are not considered traffic calming devices. Consideration of stop signs and/or traffic signals must be evaluated and recommended with an engineering study in accordance with the State of California Manual of Uniform Traffic Control Devices (MUTCD).

How do I begin the petition process for NTMP?

To request a petition or further information, please contact the City via phone or in person.

- NTMP Petition Form provided for download:
<https://www.southpasadenaca.gov/government/departments/public-works>
- Speak with the City at 626-403-7240
- Return a completed physical copy of the petition form to City Hall - Public Works Department at 1414 Mission Street, 1st Floor, South Pasadena CA 91030

Appendix 5 Traffic Calming Checklist

The following items shall be reviewed to identify if roadway segment qualifies for traffic calming consideration

I. Petition Request

A. Petition Screening

Roadway segment local or collector roadway? Yes No

B. Neighborhood Consensus

Required 51% support obtained? Yes No

II. Data Collection: At least one of the following criteria must be met to continue with traffic calming process

A. Speeding Threshold

85th percentile speed is 7 MPH above the posted speed limit? Yes No

B. Traffic Volumes Threshold

ADT is at least 1500 vehicle per day (Local Road) Yes No

Peak hour volume-to-capacity (V/C) ratio is at least 0.8 (Collector Road)? Yes No

C. Collision Threshold

At least 3 preventable collisions in the last 5-years? Yes No

III. Stage I: Non-Physical Traffic Calming Measures

Non- Physical feature implemented: _____

Date Installed: _____

IV. Post Data Evaluation

Post data collected on: _____

A. Speeding Threshold

85th percentile speed is 7 MPH above the posted speed limit? Yes No

B. Traffic Volumes Threshold

ADT is at least 1500 vehicle per day (Local Road) Yes No

Peak hour volume-to-capacity (V/C) ratio is at least 0.8 (Collector Road)? Yes No

C. Collision Threshold

At least 3 preventable collisions in the last 5-years Yes No

Data meets above criteria: Yes - Continue with Stage II No - Close out Petition

V. Stage II- Physical Traffic Calming Measures

A. Response Provided to Petitioner Lead:

B. Surveys mailed on:

C. 51% neighborhood approval rate met: Yes No

D. 67% "YES" vote from residents immediate adjacent: Yes No

Survey passed? (Both C and D must be "Yes" to continue to City Council approval)

Yes - Continue with City Council Approval

No - Close out Petition

VI. City Council Approval

A. City Council Meeting date:

City Council Approved: Yes No

Yes - Continue with Stage II Implementation

No - Close out Petition