CITY OF SOUTH PASADENA

1414 Mission Street • South Pasadena, California 91030
Tel. (626) 403-7240 • Facsimile (626) 403-7241

AGENDA

Public Works Commission

Wednesday, February 11, 2015 at 7:00 pm

Amedee O. "Dick" Richards City Council Chambers
1424 Mission Street, South Pasadena, CA 91030

Commissioners: Lawrence A. Abelson, John E. Fisher, Gayle Glauz, Clinton L. Granath, Mathew M. Pendo
City Council Liaison: Councilmember Dr. Richard D. Schneider, M.D.
Staff Liaison: Leaonna DeWitt, Public Works Assistant

1. Call to Order/Roll Call
2. Pledge of Allegiance
3. Approval of Minutes – Meeting of January 14, 2015
4. Public Comment (Items not on the agenda)
5. Council Liaison Comments
6. Staff Comments
7. Discussion/Action Items:
    A. Monterey Rd. Road Diet Traffic Study
    B. Designation of Commission Secretary
    C. Capital Improvement Project Update
8. Commissioner Comments
9. Adjournment
   (Next Meeting Date: March 11, 2015 at 7:00pm)

STATE OF CALIFORNIA, CITY OF SOUTH PASADENA, COUNTY OF LOS ANGELES

I declare under penalty of perjury that I posted this agenda on the bulletin board in the courtyard of City Hall at 1414 Mission Street, South Pasadena as required by State Law.

Date: 2/5/15

Signature Leaonna DeWitt
Leaonna Dewitt

ITEM 3

Approval of Minutes – January 14, 2015

MINUTES OF THE
PUBLIC WORKS COMMISSION
14TH DAY OF JANUARY, 2015 AT 7:00 P.M. AT THE
AMEDEE O. "DICK" RICHARDS, JR., COUNCIL CHAMBERS
1424 MISSION STREET

1. CALL TO ORDER/ROLL CALL
The meeting was called to order at 7:00p.m. by Vice Chair Granath. Present were Commissioner Abelson, Commissioner Fisher, Commissioner Glauz and Council Liaison Mahmud. Commissioner Pendo had an excused absence. Staff present: Deputy Public Works Director Shin Furukawa. Leaonna DeWitt was absent.

2. PLEDGE OF ALLEGIANCE
Commissioner Abelson led the pledge of allegiance.

3. APPROVAL OF MINUTES – Meeting of December 10, 2014.
Minutes approved as amended. (Fisher, Abelson 4-0)

Discussion ensued regarding the preparation of the minutes.

4. PUBLIC COMMENTS – Items not on the agenda
No public comment.

5. COUNCIL LIAISON COMMENTS
Council Liaison Mahmud informed the Commission this will be her last meeting and Councilmember Schneider will be her replacement. She recognized members from the Natural Resources and Environmental Commission (NREC) and requested to reorder the agenda to allow the Commission to address the Synthetic Turf item first.

6. STAFF COMMENTS
Deputy Public Works Director Furukawa gave an update on the Engineering and Traffic Survey (E&TS) and reported that the City Council approved the E&TS as recommended by the Commission.

7. DISCUSSION/ACTION ITEMS:
The agenda was reordered to allow for the Synthetic Turf presentation.

A. Synthetic Turf

Debby Figoni, Senior Management Analyst gave an overview on the Parkway Ordinance which included a proposal to allow synthetic turf in 30% of the parkway. She provided a handout with pictures and samples of synthetic turf.

Kim Hughes, Chair of the NREC, stated the NREC initially reviewed the parkway ordinance for two reasons: 1) inconsistent parkways in the City; and 2) the ordinance was last updated in 1983. Ms. Hughes discussed the aspects of the proposal to allow synthetic turf in only 30% of the parkway. She stated manufacturers are continually improving the quality of synthetic turf products. She expressed concerns of another drought season and looking at ways to conserve water. In conclusion, she stated the NREC is recommending the Parkway Ordinance allow for synthetic turf in only 30% of the parkway with specific guidelines and restrictions, which were detailed in the NREC's guidelines.

Al Benzoni – 1617 Monterey Road. Mr. Benzoni is a member of the NREC and wanted to address some of the concerns of the Commission, including crumb fill and the heat island effect.

He stated crumb fill is mostly used on sports fields and does not have to be applied in a parkway. Mr. Benzoni discussed other materials that absorb heat in greater temperatures such as asphalt and concrete, so the heat island effect is not necessarily an issue.

Kay Findley is a member of the NREC and wanted to clarify the purpose of the Parkway Ordinance, which presently allows 30% of non-living materials in the parkway, such as rocks, stepping stones, or bricks. Synthetic turf, if approved by City Council would be another hardscape option. She stated the Parkway Ordinance, will provide guidance to the residents to make sure quality materials are used.

Discussion ensued regarding the Parkway Ordinance, the aspects of synthetic turf and water conservation.

A motion was made to approve the NREC's recommendation to allow synthetic turf as one of the materials that can be used as the 30% artificial material that can be installed in the parkway with the following recommendations: 1) surface leveling agent will be sand or rock material, prohibiting crumb fill; 2) foam backing be prohibited; 3) installation would respect the minimum distance from any existing trees; 4) sunset provision for 5 years; and 5) an appropriate fee to be charged in association with the installation. (Abelson, Fisher 3-1) No: Granath.

B. Commission Reorganization

Deputy Public Works Director Furukawa briefly introduced the item.

A nomination was made to appoint Commissioner Granath as Chair. (Fisher, Abelson 4-0).
A nomination was made to appoint Commissioner Fisher as Vice Chair. (Abelson, Glauz 4-0).

This item will be brought back to the Commission to appoint a secretary pending clarification from the City Attorney about the duties of the secretary.

C. Identification of City Council Strategic Planning Priorities

Deputy Public Works Director Furukawa briefly provided background information on this item.

A motion was made to adopt the following three strategic goals: 1) improve traffic safety; 2) investigate opportunities for recycled water use at public facilities; and 3) improve traffic flow on arterial streets and limit traffic congestion on residential streets.

It was agreed by the Commission to designate Chair Clint Granath as the Commission representative at the Citizen's Seminar on February 7, 2015.

D. Capital Improvement Project Update

Deputy Public Works Director Furukawa gave a brief update on the current Capital Improvement Projects.

Council Liaison Mahmud requested for specifications on future street improvement projects to limit work to one street at a time to minimize the inconvenience to the residents.

8. COMMISSIONER COMMENTS

No Commissioner comments.

9. ADJOURNMENT

Vice Chair Granath declared the meeting adjourned at 9:09p.m.

I HEREBY CERTIFY that the foregoing minutes were adopted by the Public Works Commission of the City of South Pasadena at a meeting held on February 11, 2015.

AYES:
NOES:
ABSENT:
ABSTAIN:

_____

Clinton Granath, Chair

ITEM 7A

Monterey Road Diet Traffic Study

City of South Pasadena
Public Works Commission
Agenda Report

COMMISSION AGENDA:	February 11, 2015
TO:	Public Works Commission
FROM:	Shin Furukawa, P.E., Deputy Public Works Director
SUBJECT:	**Presentation of Monterey Rd. Road Diet Traffic Study**

Recommendation
It is recommended that the Commission review the road diet traffic study and provide a recommendation to the City Council on next steps.

Fiscal Impact
There is no fiscal impact associated with the discussion of this report.

Background
Monterey Road is a 2.3-mile-long asphalt paved minor arterial street running the entire length of the City. With many utility cuts, alligator cracking and potholes, the pavement is in need of repair, with pavement condition index (PCI) scores averaging 45 west of the Gold Line crossing at Pasadena Avenue, and 57 east of the Gold Line crossing.

The award of the design of the Monterey Road Street Improvement Project was considered at the December 1, 2010 City Council meeting. At that meeting, the City Council directed staff to develop design alternatives to reconstruct the curb and sidewalk to create sufficient Americans with Disabilities Act (ADA) clearance on the roadway, for the length of Monterey Road from Pasadena Avenue to just east of Fair Oaks Avenue. These obstructions were created when Monterey Road was widened in 1972 by Los Angeles County, who at the time owned and maintained the roadway. In widening the road, interferences were created with obstructions in the sidewalk such as light poles, traffic signal poles, air vents and fire hydrants.

At the November 2, 2011 City Council meeting, the City Council expressed desire to seek input from stakeholders prior to initiating the design of the proposed Monterey Road Street Improvement Project. The City Council created and appointed eleven members to serve on the Monterey Road Citizens Advisory Committee (Citizens Committee). The background and expertise of the members included such areas as traffic engineering, civil engineering, bicyclists, legal, businesses, residents, Americans with Disability Act, and architecture. Under the guidance of a facilitator from the transportation planning firm of Fehr & Peers, the Committee held three public meetings during the summer of 2012 to develop the report (attachment 2).

The report generated by the Citizens Committee was first presented to the Freeway & Transportation

Commission at its December 18, 2012 meeting. The Commission unanimously recommended to receive the Citizens Committee report and forward it to the City Council, with a request that a microsimulation study of a road diet (reducing the number of travel lanes) be performed before a final design is selected.

The Citizens Committee report was then discussed by the Public Works Commission at its June 12, 2013 meeting. The Commission recommended funding a microsimulation study to look at the potential changes in level of service and queue lengths at the intersections through the corridor before a decision on a road diet is made.

The Citizens Committee report was presented to the City Council on September 4, 2013. The City Council did not fund a microsimulation to study a road diet, but directed staff to investigate ADA requirements, as well as to develop a cost estimate for the relocation of existing sidewalk obstructions.

On June 18, 2014, the City Council was provided various budgetary cost estimates for relocating the sidewalk obstructions. The City Council did not make a final decision but voted to proceed with a road diet study and requested that it be brought back to the City Council once completed.

Analysis

The traffic study (attachment 1) was conducted by Minagar & Associates for a cost of $2,900. It analyzed the feasibility of implementing a road diet on Monterey Road. The study did not take into consideration the effects of spillover traffic or changed traffic patterns on the adjacent streets. In an effort to not spend funds unnecessarily to study these factors if a road diet was not feasible, the intent was to look at these considerations (as well as others) separately in a follow-up studies if the initial study deemed that a road diet on Monterey Road is feasible.

To summarize the findings of the road diet study, the simulation determined that the arterial performance of Monterey Road would substantially worsen. However, on the other hand, a road diet would improve safety of turning movements, provide better options for multi-modal travel including bike lanes, and would address the sidewalk obstructions that currently do not meet ADA guidelines. Ultimately, the Commission and the City Council need to weigh the trade-offs and determine what the ultimate vision for the Monterey Road corridor should look like. Minagar & Associates suggests a trial road diet project to better assess the actual effects of a road diet, and to measure before and after traffic conditions.

In addition to the traffic study prepared by Minager & Associates, there is supplementary information received from the consultant (attachment 2) after the issuance of the report in response to a question raised by Commissioner Fisher.

It is recommended that the Commission discuss the traffic study and determine if additional studies or information is needed, and whether to recommend to the City Council next steps.

Legal Review
The City Attorney has not been asked to review this item.

Public Notification of Agenda Item
The public was made aware that this item was to be considered this evening by virtue of its inclusion on the legally publicly noticed agenda and posting of the same agenda on the City's website. Members of the Monterey Road Citizens Advisory Committee as well as the Freeway and Transportation Commission were notified of this item being on tonight's agenda. Public comments received ahead of the preparation of the agenda packet are attached to this report (attachment 3).

Attachments:
1. Road Diet Traffic Study
2. Supplementary Information
3. Citizens Subcommittee Report
4. Public Comments

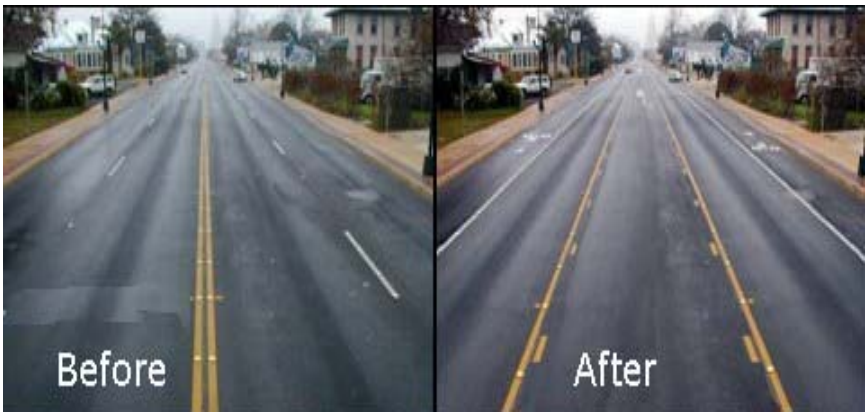
ATTACHMENT 1
Traffic Study

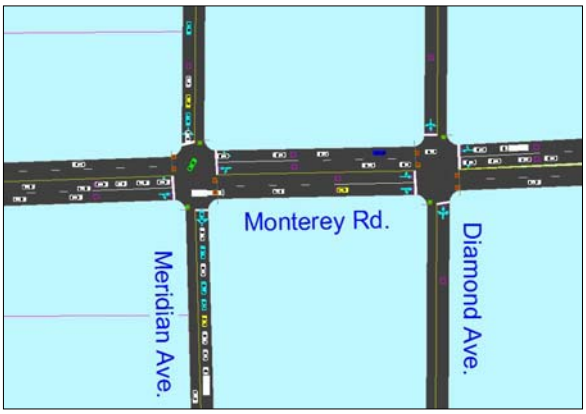
Revised Traffic Study

for the

Feasibility of Road Diet Traffic Calming Improvements on Monterey Road between Pasadena Avenue and Fair Oaks Avenue

City of South Pasadena, CA





PRESENTED TO:

City of South Pasadena
Public Works Department
1414 Mission Street
South Pasadena, CA 91030-3298

PRESENTED TO:

MINAGAR & ASSOCIATES, INC.
Traffic Engineering – Transportation Planning – ITS Consultants
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Irvine, CA 92612
Tel: (949)727-3399 • Fax: (949)727-4418
Web: www.minagarinc.com • Email: minagarf@minagarinc.com

22 Years of Excellence

February 4, 2015

Executive Summary

The City of South Pasadena has expressed its desire to redesign Monterey Road between the Metro Gold Line LRT Crossing and Fair Oaks Avenue as a "Complete Street"; that is, one which is less auto-centric and more characteristic of a livable, walkable, and safer roadway that accommodates all modes of transportation. In 2012, a citizen committee commissioned by the South Pasadena City Council, in cooperation with an independent traffic consultant, conducted a study of Monterey Road to identify alternatives for a feasible future design of this segment. The "Monterey Road Committee Recommendations Report" introduced several possible improvements to Monterey Road with mixed unanimity on which measures should be implemented, including adding bicycle lanes, widening the sidewalks, relocating utilities obstructing walkways, implementing traffic calming measures, coordinating traffic signal, and installing higher visibility crosswalks.

Other considerations in the Monterey Road Committee Recommendations Report included adding exclusive left- and right-turn lanes to selected intersections; restricting on-street parking in certain areas; and/or implementing a "road diet" on Monterey Road. Road diets are essentially a reduction in the number of existing travel lanes, and a reassignment/redesign of the remaining roadway space for other safety features such as bicycle lanes, pedestrian crossing enhancements, traffic calming features and/or protected parking lanes/bays. These additional measures, however, were beyond the budget and scope of the Committee's study to analyze thoroughly.

The South Pasadena City Council subsequently approved the go-ahead for a study on the feasibility of a road diet on Monterey Road between Pasadena Avenue and Fair Oaks Avenue. Minagar & Associates, Inc. collected existing traffic data in the field, built a computerized traffic model and tested the effects of two alternative road diet concepts for this segment. The road diet concept would re-stripe the existing street cross-section from two lanes per direction to one lane per direction, and add a center two-way left turn lane, Class-II bikeways (marked bike lanes) and a striped parking lane on both sides of the street.

The results of the traffic model and microsimulation analysis showed that while a road diet on Monterey Road between Pasadena Avenue and Fair Oaks Avenue is geometrically feasible and would provide safety benefits to vehicles, bicyclists and pedestrians, corridor travel times, delay and arterial speeds would worsen during the weekday AM and PM peak hours. Alternative #1, which would implement a three-lane configuration across the full length of the corridor, would result in an average increase in delays by 65% and a 4-MPH decrease in travel speeds.

Alternative #2 would implement the same geometrics as Alternative #1, only on limited areas of Monterey Road west of Orange Grove Avenue and east of Meridian Avenue, while maintaining a four-lane cross-section with bike lanes at mid-segment. While the latter alternative minimizes the potential for peak hour traffic spillovers between adjacent intersections and increases traffic delays by only about 44%, it would also require the prohibition of on-street parking along a major portion of the segment in order to keep a continuous bicycle lane alongside the travel lanes.

Ultimately, while both of the road diet alternatives would negatively impact the travel performance of the corridor for autos during the peak hours, it would nevertheless provide certain offsetting benefits which may be preferred by the City and road users. For motorists accessing the adjacent abutting residential properties, a center two-way left turn lane would provide a refuge area for vehicles to enter or exit the traffic stream on Monterey Road, and reduce the likelihood of certain types of crashes.

For pedestrians and bicyclists, the slower and more consistent speeds of the road diet conversion would be more desirable given that the three-lane roadway would allow for fewer conflict points between vehicles and other, non-motorized users. In addition, providing a dedicated bicycle lane along this segment would serve to meet the goals and policies of the City's General Plan and Bicycle Master Plan by providing a continuous bikeway connection between the west and east segments of Monterey Road.

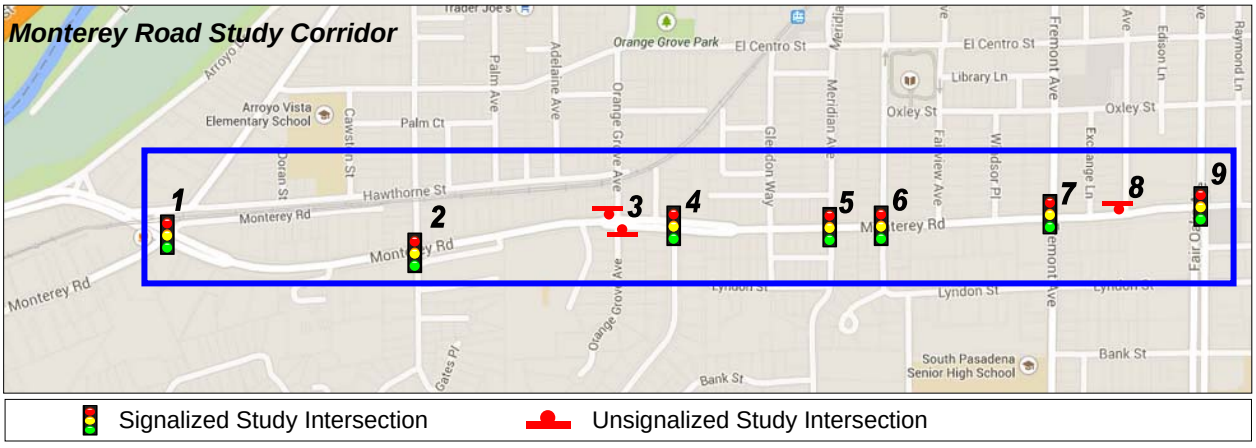
In light of the findings of the traffic study, Minagar & Associates, Inc. recommends that a trial road diet be considered before considering a complete redesign of the street. A basic "test project" of the road diet could be implemented through minimal re-striping of specific, shortened portions of Monterey Road. The project would serve to observe and validate the impacts on peak hour vehicular traffic with the reduced lane configuration, and include a "before and after" study of vehicle speeds, queue lengths, and observations of left-turn and bicycle interactions to determine the level of scalability of the road diet for the remaining portions on Monterey Road.

Introduction

This report summarizes the findings of a traffic study conducted by Minagar & Associates, Inc. which evaluates the feasibility of a "road diet" concept and other traffic calming measures on Monterey Road between Pasadena Avenue and Fair Oaks Avenue. The City of South Pasadena has requested that Minagar identify the potential impacts of re-striping this existing undivided four-lane portion of Monterey Road with a three-lane cross section consisting of a through travel lane in each direction plus a two-way left turn center lane. The study included the development of a representative, computer traffic model and microsimulation to analyze and compare the existing peak hour traffic conditions on Monterey Road with those after the implementation of the road diet configuration. The traffic simulation model was programmed on the basis of both field-collected and city-provided traffic data and measurements. The traffic simulation was then used to identify impacts to travel times, delays, and arterial speeds, and evaluate the possible trade-offs of implementing this type of road diet concept in relation to the mobility, access and safety of road users on Monterey Road.

Study Area

The study area is assumed to consist of the mile-long portion of Monterey Road extending from the intersection at the Metro Gold Line railroad crossing, on the west end, to the intersection with Fair Oaks Avenue, on the east end. The segment connects the adjacent westerly two-lane portion of Monterey Road leading into the City of Los Angeles with the easterly two-lane portion of Monterey Road leading into the neighboring City of San Marino.



Existing Conditions

This section provides a summary of the existing corridor conditions on Monterey Road within the context of the surrounding transportation system. Prior to evaluating potential options for an alternative conceptual cross-section/lane configuration, Minagar & Associates, Inc. staff conducted a field inventory of the existing roadway, roadside and traffic environment across the

study corridor. Traffic volume data collection consisted of 8-hour turning movement counts at nine (9) major intersections on Monterey Road.

Monterey Road is a 2.22-mile long Minor Arterial in the City of South Pasadena, stretching from the neighboring City of Los Angeles at the west city limit to the City of San Marino at the east city limits. Monterey Road is a primary east/west route through the City of South Pasadena connecting with Pasadena Avenue and nearby 110 Freeway to the west, and serving as an alternate route to Huntington Drive and Mission Street. The central 1.1-mile long portion of Monterey Road in the City that spans between Pasadena Avenue and Fair Oaks Avenue is a four-lane undivided roadway that carries an average daily traffic volume of about 15,700 vehicles per day. The street is characterized by a paved roadway width of between 60 and 84 feet, with four undivided travel lanes (two per direction), a striped centerline, and several intermittent raised medians along the wider sections near Fair Oaks Avenue, Via Del Rey, and the Gold Line Crossing.

The current posted speed limit on Monterey Road is 35 miles per hour. Surrounding land uses consists predominantly of mixed density residential properties with abutting driveway access onto Monterey Road, and some commercial uses at the east end of the segment near Fair Oaks Avenue. In determining the feasibility of Monterey for a road diet conversion, several parameters were considered and assessed, including: roadway function and environment; traffic volumes and corridor mobility/performance (e.g., travel time, delay and arterial speed); access points; turning volumes and patterns; frequency of stop and slow-moving vehicles; and pedestrian and bicycle activity.

Passenger Vehicle Traffic Conditions

Minagar & Associates, Inc. collected intersection turning movement traffic counts of passenger cars/autos and trucks at each of the nine study intersections. Several of the study intersections were surveyed by Minagar & Associates, Inc. in 2012 and 2013; consequently, this traffic count data was adjusted upwardly to reflect the current Year 2014 by considering local ambient traffic growth in the City of South Pasadena as well as the latest regional forecasts developed in the Southern California Association of Governments' (SCAG) Regional Transportation Plan.

From the field visits it was observed that auto conditions were generally free-flow along the Monterey Road corridor during the weekday off-peak hours. During the morning and afternoon peak hours, however, traffic conditions become gradually more congested, particularly at the intersections on the easterly end of Monterey Road at Meridian Avenue and Fremont Avenue. The highest time-of-day peak hour occurs during the afternoon, where eastbound/westbound traffic volumes average about 3,000 vehicles.

Table 1 summarizes the general characteristics of Monterey Road from the Metro Gold Line LRT crossing to Fair Oaks Avenue, and provides an estimate of peak hour traffic volumes for each intermediate roadway segment based on the intersection turning movement counts.

Pedestrian Conditions

Pedestrian facilities on Monterey Road are generally adequate, with paved sidewalks provided along both sides of the street, and marked crosswalks provided at signalized intersections and across most unsignalized side streets. There are two uncontrolled marked crosswalks at Orange Grove Avenue directing pedestrians north/south across Monterey Road which do not provide ideal refuge for pedestrians. This intersection, however, is planned for future signalization and will include protected signal phases for pedestrian movements over Monterey Road. A summary of pedestrian crossing volumes through the corridor is shown in ***Table 2***.

Pedestrian crossing volumes at intersections along Monterey Road are moderate during the peak hours. Most of the pedestrian volumes along the corridor are concentrated at intersections with access to major pedestrian destinations such as schools (e.g. South Pasadena High, Arroyo Vista Elementary) and downtown/commercial centers near the east end of the corridor. However, Monterey Road itself does not appear to be not an overwhelmingly bicyclist or pedestrian friendly area due to the number of vehicle lanes that must be crossed, vehicular speeds, the absence of bike lanes, and fewer pedestrian crossing options on the westerly portion of the corridor. The intersections on Monterey Road at Fair Oaks Avenue, Via Del Rey, and the Gold Line Crossing have curb-to-curb crossing distances in excess of 80 feet which require longer walks and signal phases for pedestrians of 20 seconds or more.

Bicycle Conditions

Monterey Road serves primarily as a cross-town regional bicycle route connecting with the existing Class-II striped bike lanes in Los Angeles on Monterey Road and Pasadena Avenue. While Monterey Road is a designated bikeway in the City's Bicycle Master Plan, there are no existing bicycle facilities in place between the Gold Line rail crossing and Fair Oaks Avenue. Bicyclists currently ride in the mixed-flow shoulder lanes due to the lack of a dedicated bike lane on-street and limited options to traverse the city east/west on nearby parallel routes.

In recent years the City has installed marked bicycle lanes on Mission Street and El Centro Street which provide some alternate parallel access routes north of Monterey Road. South of Monterey Road, however, there generally are no parallel bikeway alternatives due to the surrounding topography and alignment of the street network.

Transit Conditions

The Los Angeles County Metropolitan Transportation Authority (Metro) provides bus transit services in the City of South Pasadena. Several Metro bus lines traverse the City, including one Metro Rapid line, a Metro Express line, and other local service routes. Currently, there are no designated local bus routes or stops on this segment of Monterey Road. The nearest Metro Bus Route, Line 176, traverses east/west through the City along Pasadena Avenue and Mission Street and connecting the neighboring Cities of Los Angeles/Highland Park and San Marino.

(continued on page 7)

Table 1
Summary of Roadway Segment Characteristics and Vehicle Volumes

Street segment: Monterey Road from Metro Gold Line Rail Crossing (west end) to Fair Oaks Avenue (east end)
Length: 5,900 feet (1.12 miles)
General Plan Roadway Classification: Minor Arterial
Average Daily Traffic (ADT) volume: 15,700 vehicles per day
Posted Speed Limit: 35 MPH

Study segments:	Length	Paved Roadway Width	Peak Hour Volume* (PHV, in vehicles per hour)								
			AM Hour			Mid-day Hour			PM Hour		
			EB	WB	Total	EB	WB	Total	EB	WB	Total
1. Gold Line LRT Xing to Indiana Ave.	1,450’	82' to 60'	1,259	1,185	2,444	1,116	966	2,082	1,818	1,596	3,414
2. Indiana Ave. to Orange Grove Ave.	1,150’	60' to 64’	1,317	1,185	2,502	1,036	898	1,934	1,601	1,466	3,067
3. Orange Grove Ave. to Via Del Rey	320’	64' to 80'	1,538	1,434	2,972	845	852	1,697	1,678	1,422	3,100
4. Via Del Rey to Meridian Ave.	890’	80' to 60'	1,629	1,378	3,007	1,075	1,070	2,145	1,802	1,478	3,280
5. Meridian Ave. to Diamond Ave.	300’	60'	1,387	1,281	2,668	1,175	991	2,166	1,620	1,524	3,144
6. Diamond Ave. to Fremont Ave.	960’	60'	1,596	1,461	3,057	1,127	926	2,053	1,836	1,595	3,431
7. Fremont Ave. to Mound Ave.	410’	60'	1,284	1,258	2,542	821	900	1,721	1,506	943	2,449
8. Mound Ave. to Fair Oaks Ave.	420’	64 to 84'	1,013	1,144	2,157	690	851	1,541	1,247	1,022	2,269

Study Intersections	Control	Peak Hour		
		AM Hour	Mid-day Hour	PM Hour
1. Monterey Rd. at Metro Gold Line Xing	Signalized	7:30am - 8:30am	11:45am - 12:45pm	4:45pm - 5:45pm
2. Monterey Rd. at Indiana Ave.	Signalized	8:00am - 9:00am	12:00pm - 1:00pm	4:45pm - 5:45pm
3. Monterey Rd. at Orange Grove Ave.	Two-way Stop	7:30am - 8:30am	11:45am - 12:45pm	4:30pm - 5:30pm
4. Monterey Rd. at Via Del Rey	Signalized	7:30am - 8:30am	12:30pm - 1:30pm	4:45pm - 5:45pm
5. Monterey Rd. at Meridian Ave.	Signalized	7:30am - 8:30am	12:45pm - 1:45pm	4:45pm - 5:45pm
6. Monterey Rd. at Diamond Ave.	Signalized	7:30am - 8:30am	11:45am - 12:45pm	5:00pm - 6:00pm
7. Monterey Rd. at Fremont Ave.	Signalized	7:30am - 8:30am	11:45am - 12:45pm	4:45pm - 5:45pm
8. Monterey Rd. at Mound Ave.	Two-way Stop	7:45am - 8:45am	11:45am - 12:45pm	5:00pm - 6:00pm
9. Monterey Rd. at Fair Oaks Ave.	Signalized	7:45am - 8:45am	11:15am - 12:15pm	4:45pm - 5:45pm

* PHV based on the combination of bi-directional turning movements at major intersections along the corridor during the peak hours

Table 2
Pedestrian Crossing Volumes

Study segments	AM Peak Hour					Mid-day Peak Hour					PM Peak Hour					Total	
	WL	EL	SL	NL	All	WL	EL	SL	NL	All	WL	EL	SL	NL	All	Peds	Count Period
1. Monterey Rd. at Metro Gold Line Xing	-	48	13	17	**78**	-	24	16	2	**42**	-	14	6	0	**20**	385	7 hrs
2. Monterey Rd. at Indiana Ave.	5	9	3	8	**25**	6	7	10	21	**44**	0	17	3	17	**37**	185	6 hrs
3. Monterey Rd. at Orange Grove Ave.	0	0	28	21	**49**	1	6	15	13	**35**	1	0	10	11	**22**	297	8 hrs
4. Monterey Rd. at Via Del Rey	0	11	35	-	**46**	2	0	15	-	**17**	2	9	32	-	**43**	168	6 hrs
5. Monterey Rd. at Meridian Ave.	7	5	29	21	**62**	4	3	6	15	**28**	13	11	19	25	**68**	377	7 hrs
6. Monterey Rd. at Diamond Ave.	103	54	45	84	**286**	12	12	8	27	**59**	15	43	12	3	**73**	622	6 hrs
7. Monterey Rd. at Fremont Ave.	46	42	18	20	**126**	11	22	17	10	**60**	22	34	14	31	**101**	608	7 hrs
8. Monterey Rd. at Mound Ave.	3	1	30	11	**45**	0	2	12	9	**23**	3	0	21	39	**63**	244	6 hrs
9. Monterey Rd. at Fair Oaks Ave.	21	40	23	23	**107**	39	19	16	17	**91**	32	51	26	26	**135**	629	7 hrs

(continued from page 5)

Metro Local Line 260 and Rapid Line 762 cross Monterey Road in the north/south direction on Fair Oaks Avenue. Express Line 485 also crosses Monterey Road north/south along Fremont Avenue. The Metro Gold Line is a light rail service that runs parallel to Monterey Road (approximately 200 to 300 feet to the north) between the west city limit and Orange Grove Avenue, where the train alignment turns northeastward toward the Metro station at Mission Street and Meridian Avenue.

There is an existing grade crossing and railway signal where the Gold Line crosses between Monterey Road and Pasadena Avenue. The Gold Line runs on 5-minute headways in both directions throughout most of the day and peak hours, and 10-minute headways during the off-peak hours.

Related Plans and Studies

This section includes a summary of key findings from related plans and studies that formed the context for the proposed road diet strategy and other elements of this traffic study.

City of South Pasadena General Plan: *Circulation & Accessibility Element* (Amended February 2001)

- Principal Goals/Vision:
  - Provide for convenient and efficient mobility within the City, while reducing reliance on the automobile as the principal mode of travel.
  - City's policy direction will be to make South Pasadena a place where bicycling and walking are encouraged and fostered.

- Alternative Transportation Modes:
  - The City has identified a need to meet growing demands for safe places to ride bicycles.
  - Bicycle travel in the City of South Pasadena is increasing in popularity as a mode of travel for commuter and recreational purposes.
  - There is also an increasing awareness and desire for travelers to utilize clean-air travel methods, and the acceptance of the bicycle for personal health, exercise, and increased mobility.
  - The City reduce auto conflicts with pedestrians and bicyclists on public street by separating these modes to the extent possible

- Recommended Traffic Congestion Mitigation Strategies:
  - Prioritize the existing street network and promote a multi-mode/low-build concept.
  - Implement traffic calming in residential areas.

- Master Planning of City Streets:
  - Monitor and study existing arterials to determine how capacity can be increased, and how congestion and delay can be reduced.
  - Capacity and operational improvements could include, but are not limited to, signal timing and system upgrades, revised lane configurations, minor intersection improvements such as new turn lanes, traffic calming techniques, and elimination of conflicts such as multiple driveways.
  - The City's adopted street capacity standard should be used when evaluating the impact of roadway capacity modifications as a street improvement measure, and with respect to vehicle interactions with pedestrian, bicycle and transit services.

- Issues:
  - Bottlenecks at key locations in the City.
  - Principal transportation corridors within the City will carry transit vehicles, bicycles, pedestrians and auto traffic, rather than being principal streets for autos only.
  - "Pass through" trips in the City of South Pasadena should be managed and controlled so that they travel on designated routes and do not infiltrate residential neighborhoods
  - Local bike lanes are largely non-existent.
  - Need to coordinate improvements to the existing street network with transit, bike and pedestrian needs.

(cont.'d)

City of South Pasadena General Plan: *Circulation & Accessibility Element* (Amended February 2001)

- Goals and Policies:
  - City's policy direction will be to make South Pasadena a place where bicycling and walking are encouraged and fostered.
  - Manage traffic flow into designated corridors.
  - Establish and maintain a citywide traffic count program to assure availability of data needed to monitor other policies and improvements.
  - City's policy direction will be to make South Pasadena a place where bicycling and walking are encouraged and fostered.
  - Manage traffic flow into designated corridors.
  - Establish and maintain a citywide traffic count program to assure availability of data needed to monitor other policies and improvements.
  - Promote traffic signal coordination where feasible to lessen congestion, delay, and to enhance safety.
  - Support the development of additional circulation routes through the City.
  - Develop and maintain a road system that is based upon and balanced with the Land Use Element of the General Plan.
  - Maintain existing pedestrian facilities.
  - Implement the Master Plan of Bikeways over a multi-year timeframe.
  - Provide bicycle connections in the street network system to transit-oriented development, commercial areas and transit stops.
  - Consider and evaluate various Transportation System Management (TSM) techniques and implement as appropriate, such as: Auxiliary (accel/decel) lanes; Intersection improvements such as turn lanes, channelization, and signal coordination; Restriction of peak hour parking; Commuter Information Systems (ITS related strategies).

City of South Pasadena Bicycle Master Plan Update (Adopted August 17, 2011)

- Purpose of the BMP:
  - Make bicycling a viable transportation options and reinforce the City's/region's commitment to multi-modal transportation solutions.
  - Updates the City's previous 2005 Bicycle Master Plan
  - Ensure multi-modal integration by connecting the bicycle network to the Gold Line through bicycle facilities such as lanes and routes.

- Proposed Tier I (short-term) Bikeway Project #8 – Monterey Road
  - Destinations include: Arroyo Seco Stables; Fair Oaks Commercial Corridor; and other areas serving the east/west regional and crosstown bikeway connection.
  - Class II bikeway (striped bike lanes) from the west city limit to Monterey Road/Gold Line.
  - Class III bikeway (shared use lane/bike route) from Fair Oaks Avenue to the east city limit
  - Monterey Road/Gold Line to Fair Oaks Avenue: To be determined; however, the City is committed to establishing a continuous and integrated bikeway facility along the entire Monterey Road corridor within the City. Potential options include CL-2 bike lanes, CL-3 bike routes, protected bike lanes, or a CL-1 cycle track on one side of the roadway.

(cont.'d)

California Complete Streets Act (CCSA), per Assembly Bill 1358 (Last updated March 2010)

- State of California Requirements:
  - Local jurisdictions must establish a comprehensive program to reduce greenhouse gas emissions through the implementation of non-motorized transportation plans and developing a more balanced transportation network.

Traffic Signal Warrant Assessment for Monterey Road at Orange Grove Avenue (June 2014)

- Purpose:
  - Determine if the existing unsignalized (two-way stop controlled) intersection of Monterey Road at Orange Grove is warranted and recommended for signalization.
- Findings and Recommendations:
  - The subject intersection is both warranted and recommended for signalization based on California MUTCD warrants considering the prevailing weekday and weekend traffic conditions, pedestrian characteristics and physical characteristics of the location.

Monterey Road Intersection Capacity and Level of Service (LOS) Assessment at Pasadena Avenue, Meridian Avenue, Fremont Avenue and Fair Oaks Avenue (May 2012)

- Purpose:
  - Conduct a traffic assessment to determine the current weekday peak hour levels of service at four major signalized intersections on Monterey Road at Pasadena Ave., Meridian Ave., Fremont Ave., and Fair Oaks Ave.
- Findings:
  - All four (4) study intersections were found to be operating at deficient level of service (LOS) standards "E" or worse during the weekday AM and PM peak hours.

Citywide Engineering and Traffic Survey (E&TS) for the City of South Pasadena (November 2014)

- Purpose:
  - Field validate and update posted prima facie speed limits on City of South Pasadena streets.
- Findings:
  - The 85th percentile speed on Monterey Road between Pasadena Avenue and Fair Oaks Avenue is 40 miles per hour.
  - The 50th percentile speed on the segment is 36 miles per hour.
  - Due to numerous prevailing factors such as the uncontrolled pedestrian crosswalks, adjacent residential land use and frequency of signalized intersections, the .

(cont.'d)

Monterey Road Committee Recommendations (August 2012)

- Purpose:
  - Present the recommendations of a South Pasadena citizen's committee for the future design of Monterey Road between Pasadena Road and Fair Oaks Avenue.
- Findings:

  Committee's Top Priorities for future use of Monterey Road:
  - Relatively wide (4-6') sidewalk, free of obstructions
  - ADA-compliant curb ramps
  - On-street bike lanes
  - Coordinated traffic signals

  Recommendations:
  - 1. Provide continuous 4' min. unobstructed sidewalk space, and construct bulb-outs where appropriate to relocate utility obstructions (e.g., vaults, vents, poles, risers) in the pedestrian walkway.
  - 2. Add a bicycle lane on Monterey Road, and restrict parking (or retain on one side only) where appropriate to facilitate bike lanes.
  - 3. Deploy traffic calming measures (e.g., speed feedback signs, textured crosswalks, "pinch" points, signal coordination, etc.) to reduce auto speeds along the corridor.
  - 4. Synchronize traffic signals on Monterey Road
  - 5. Install higher visibility crosswalk
  - 6. Consider additional turn left/right-turn lanes at selected locations (EB Right at Fremont, Indiana, Meridian and Diamond; EB/WB Lefts at Orange Grove, Glendon, Meridian, and Diamond.
  - 7. Consider parking restrictions on Glendon and Lyndon near Monterey Road to discourage Metro-related parking on those streets.
  - 8. Consider a new traffic signal at Orange Grove Avenue.

Analysis Scenarios

At the request of the City of South Pasadena, Minagar & Associates, Inc. has studied the viability to which a "road diet" would work on this portion of Monterey Road. Road diets are essentially a reduction in the number of travel lanes and reassignment of the remaining roadway space for other purposes. Road diets generally provide new opportunities for bike lanes, protected on-street parking bays, increased median refuge space, and pedestrian crossing enhancements at signalized intersections. Common benefits documented by numerous public agencies include improvement in traffic safety, reduction in rear-end and side-swipe crashes, improvement in speed limit compliance, decreasing crash severity when crashes do occur, improved accommodation of mid-block left-turning turning movements, enhanced multi-modal use of the street, and in many cases a reduction in vehicle throughput volumes.

Typical Road Diet Reconfiguration

(source: Federal Highway Administration, http://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_013.cfm)

Monterey Road has the potential to be a complete street that accommodates motorists, bicycles and pedestrians, with a lane configuration that could be redesigned within the existing right-of-way to meet the City's goals of establishing a continuous and integrated bikeway facility along the entire Monterey Road corridor within the City. The paved traveled way along Monterey Road ranges from 60' to 84' between the Metro Gold Line LRT Crossing to Fair Oaks Avenue. Dimensionally, the roadway geometry is viable for considering a road diet cross section concept. A typical configuration would call for a reduction in the existing four-lane cross-section to a three-lane cross-section, resulting in one travel lane per direction plus a two-way left-turn lane (TWLTL) along the center. The remaining roadway space would be allocated for on-street parking lane along the shoulder, coupled with a dedicated Class-II bike lane on each side of the street. At signalized intersections, the center two-way left turn lane would gradually transition into a dedicated left-turn pocket for the eastbound and westbound approaches.

The analysis scenarios developed by Minagar & Associates, Inc. for the Monterey road diet evaluation are described below. Each analysis alternative was developed in consideration of current known plans to modify or improve the roadway conditions on this portion of Monterey Road, including a future traffic signal at Orange Grove Avenue, and the City's goal to implement appropriate class of bikeway on Monterey Road throughout the project limits as identified in the City's Bicycle Master Plan.

1. Scenario 1 – Existing Year 2014 Conditions. Reflects the current four-lane undivided cross-section conditions and traffic controls along Monterey Road.

2. Scenario 2 – Existing Plus Planned Improvements (No Build scenario). Considers the future installation of a traffic signal at the intersection of Monterey Road at Orange Grove Avenue, along with the existing four-lane section on Monterey Road (i.e., two travel lanes per direction). It is assumed that the traffic signal installation improvements would be completed on a two-year time frame by the Year 2016.

3. Scenario 3 – Existing Plus Road Diet Option #1. Under the Year 2016 conditions, reduce Monterey Road from four lanes to three lanes (one per direction plus a two-way left turn center lane) and install Class-II bike lanes with protected on-street parking bays from the Metro Gold Line crossing to Fair Oaks Avenue. Due the sufficient roadway width on Monterey Road at the west and east ends of the corridor, a four-lane cross-section would be maintained across the east leg at the Metro Gold Line crossing, and across the west leg at Fair Oaks Avenue.

4. Scenario 4 – Existing Plus Road Diet Option #2. Under the Year 2016 conditions, reduce Monterey Road from four lanes to three lanes (one per direction plus a two-way left turn center lane) and install Class-II bike lanes with protected on-street parking bays from the Metro Gold Line crossing to Fair Oaks Avenue. Maintain a four-lane undivided cross-section from just west of Orange Grove Avenue to just east of Meridian Avenue (remove the on-street parking and keep dedicated CL-2 bicycle lanes). The purpose of Option #2 is to provide a road diet that incorporates the three-lane concepts on Option #1, but also provides traffic congestion relief at the corridor midpoint where the simulation shows significant peak hour queuing between the closely-spaced intersections from Orange Grove Avenue to Diamond Avenue.

Existing Road Diet Configuration on Monterey Road in the City of Los Angeles

Several variations of the traffic model were developed to analyze the above alternative scenarios for the weekday AM, mid-day and PM peak hours. Intersection traffic volume and lane geometries data collected by Minagar were used to build the base traffic model network in Synchro 8.0. Lane utilization behaviors were coded into the model based on field observations from traffic data collection staff. De-facto right-turn lane movements at intersections were generally excluded from the traffic operations model unless a significant portion of turning vehicles were observed to use the shoulder as an unmarked turning lane; for example, eastbound right-turns from Monterey Road onto Fair Oaks Avenue. In all other cases, the shoulder lane was coded with the appropriate lane width depending on the alternative considered. The number 2 lane will generally be narrower (10' to 11', rather than the existing 13' to 18' width) with the addition of on-street parking bays and bicycle lanes.

The City of South Pasadena also provided Minagar & Associates, Inc. with the existing peak hour traffic signal timing plans for input into the simulation model. From a review of this data and discussions with the City, Minagar & Associates, Inc. determined that the existing traffic signals on this portion of Monterey Road are not synchronized, and that most operate on designated time-of-day timing plans during the weekday AM peak, PM peak and off-peak hours of the day. In order to minimize the impact of reducing the number of travel lanes dedicated to motorist travel (i.e., from 4 to 2) and optimize the remaining roadway capacity, careful attention was given proposing traffic signal timing and phasing adjustments at each intersection along the corridor as necessary to accommodate each road diet concept.

Due to the proximity of the Metro Gold Line LRT north of Monterey Road across Orange Grove Avenue, traffic simulation model was also programmed with an extra "dummy" node and relevant information to simulate the train and its effect on the future traffic signal at Monterey Road and Orange Grove Avenue. It is important to note that the Synchro/SimTraffic software in its present state is not designed to model rail interactions or traffic signal pre-emption. However, in order to better understand how vehicular and pedestrian traffic might be affected by the frequent railroad gate activations near the intersection, and to best replicate this interaction with the proposed signal operation, a simplistic version of the LRT signal was coded into the traffic simulation.

For these purposes, the simulation assumed a three-minute minimum headway between successive rail crossings, and a pre-timed signal with a long pre-timed cycle. The traffic simulation model was calibrated to ensure a 60-second gate down period, at which time the railroad activation signal goes "red", the Gold Line is "green", southbound traffic south of the rail is cleared of the track area along with pedestrians crossing north/south on Monterey Road, and southbound traffic north of the tracks is held until the train departs and the gates are up.

Analysis Method and Findings

Existing Conditions. Using the field collected data, Minagar & Associates, Inc. built the Synchro/SimTraffic traffic model and fine-tuned the simulation to reflect actual operations of the existing four-lane, undivided cross-section of Monterey Road for the weekday AM, mid-day and PM peak hours based on staff's field observations. The results of the travel time and delay

simulation runs indicate that Monterey Road corridor currently does not have good traffic progression. Since the traffic signals are independently timed and do not operate together, from the Gold Line Crossing to Fair Oaks Avenue. This is in part due to the lack of a synchronized timing plans, but is also the result of the signalized light rail at-grade crossings at the west end of the corridor near at Pasadena Avenue, Indiana Avenue and Orange Grove Avenue which activate frequently throughout the day and cause disruptions in progressive traffic flow on Monterey Road.

Observations of the traffic model also found that some congestion and spillback would occur in the Year 2016, prior to the implementation of any road diet lane modifications. Peak hour vehicle queues—which include both slow-moving (7 miles per hour or less) and stopped vehicles—were observed to extend significant distances upstream at a few locations in the traffic model simulation, including:

AM Peak Hour "Before" Queues:

- Orange Grove Avenue—Westbound 95th percentile queue (Q95) observed to reach the westerly side of the intersection at Monterey Road and Via Del Rey.
- Diamond Avenue—Eastbound Q95 observed to reach the easterly side of the intersection at Monterey Road and Meridian Avenue.
- Meridian Avenue—Westbound Q95 observed to reach the westerly side of the intersection at Monterey Road and Diamond Avenue.

Mid-day Peak Hour "Before" Queues:

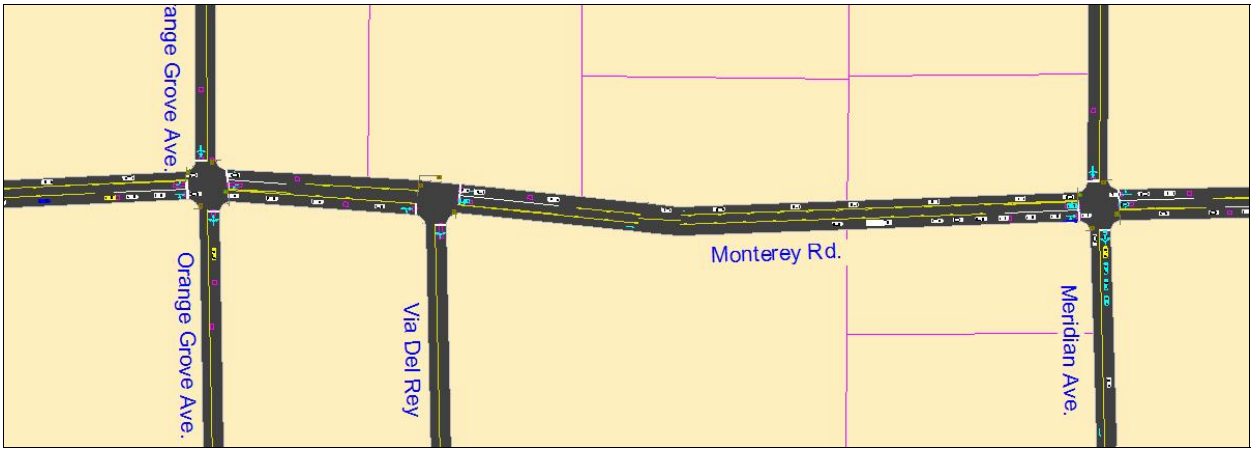
- Diamond Avenue—Eastbound Q95 observed to reach the easterly side of the intersection at Monterey Road and Meridian Avenue.

PM Peak Hour "Before" Queues:

- Monterey Road (two-lane portion, west of the study segment) turning northeast onto the primary four-lane portion Monterey Road.
- Fremont Avenue northbound approach
- Fair Oaks Avenue northbound-left movements, turning west onto Monterey Road
- Diamond Avenue—Eastbound Q95 observed to reach the easterly side of the intersection at Monterey Road and Meridian Avenue.

Proposed Road Diet Conditions. Using a combination of geometric and traffic signal timing adjustments, Minagar & Associates, Inc. modified the existing baseline traffic model to evaluate the peak hour conditions reflecting the road diet concepts. For the majority of the corridor, this required removing one through travel lane from the traffic model in each direction on Monterey Road. Exclusive left-turn lanes were also added where needed at each signalized intersection. Based on the volume of left-turning traffic on Monterey Road at these intersections, none of the proposed left-turns were justified for a protected left-turn signal turn phase and were maintained as running on the existing permissive signal phase system.

Synchro/SimTraffic Simulation Model (Existing 4-Lane Cross-section, AM peak hour)



Synchro/SimTraffic Simulation Model (Road Diet Option #1, MD peak hour)

The results of the traffic simulations showed that corridor travel times and delays would be substantially increased due to the loss of the two eastbound and westbound travel lanes. The traffic model simulation showed that the Q95 reached upstream signalized intersections at several few locations shown below due to the road diet modifications during the peak hours:

Peak Hour "After" Queues – Alternative 1:

- <u>AM Peak Hour</u>
  - Orange Grove Avenue: EB spillback to the intersection of Monterey/Indiana; WB spillback to the intersection of Monterey/Via Del Rey
  - Via Del Rey: EB spillback to the intersection of Monterey/Orange Grove
  - Meridian Avenue: WB spillback to the intersection of Monterey/Diamond
  - Diamond Avenue: EB spillback to the intersection of Monterey/Meridian
- <u>Mid-day Peak Hour</u>
  - Orange Grove Avenue: EB spillback to the intersection of Monterey/Indiana; WB spillback to the intersection of Monterey/Via Del Rey
  - Meridian Avenue: WB spillback to the intersection of Monterey/Diamond

- Diamond Avenue: EB spillback to the intersection of Monterey/Meridian

- PM Peak Hour
  - Indiana Avenue—WB spillback in Lane #1 reaches the east side of the intersection at Monterey Road at the Metro Gold Line Crossing
  - Orange Grove Avenue: EB spillback to the intersection of Monterey/Indiana; WB spillback to the intersection of Monterey/Via Del Rey
  - Via Del Rey: EB spillback to the intersection of Monterey/Orange Grove
  - Meridian Avenue: WB spillback to the intersection of Monterey/Diamond. Significant queuing would also occur on the northbound approach. This is partly attributable to the narrow lane width of the northbound approach, but also due to the proposed traffic signal cycle length adjustment from 40 seconds to 120 seconds to accommodate east/west traffic volumes on Monterey Road.
  - Diamond Avenue: EB spillback to the intersection of Monterey/Meridian

Peak Hour "After" Queues – Alternative 2:

- AM Peak Hour
  - Orange Grove Avenue: WB spillback to the intersection of Monterey/Via Del Rey
  - Via Del Rey: EB spillback to the intersection of Monterey/Orange Grove
  - Meridian Avenue: WB spillback to the intersection of Monterey/Diamond
  - Diamond Avenue: EB spillback to the intersection of Monterey/Meridian
  - Fremont Avenue: EB spillback to the intersection of Monterey/Diamond
- Mid-day Peak Hour
  - Orange Grove Avenue: WB spillback to the intersection of Monterey/Via Del Rey
  - Diamond Avenue: EB spillback to the intersection of Monterey/Meridian
- PM Peak Hour
  - Indiana Avenue—WB spillback in Lane #1 reaches the east side of the intersection at Monterey Road at the Metro Gold Line Crossing
  - Orange Grove Avenue: WB spillback to the intersection of Monterey/Via Del Rey
  - Via Del Rey: EB spillback to the intersection of Monterey/Orange Grove
  - Diamond Avenue: EB spillback to the intersection of Monterey/Meridian
  - Fremont Avenue: EB spillback to the intersection of Monterey/Diamond

It is important to note that the Q95 spillbacks listed at the locations above represent a theoretical queue length (rather than one that is observed in the simulation), calculated by SimTraffic as the average queue plus 1.65 standard deviations. This queue in theory has only a 5% probability of being exceeded during the peak analysis period. None of the *average queues* observed in the traffic model simulation exceeded the available lane capacity; in other words, on average, more vehicles were discharged from queues than entered. The performance results of the traffic model simulation are summarized in the table below. The "Before and After" evaluation is based on the metrics of the simulation program (i.e., travel time, delay, speed) rather than traditional intersection level of service (LOS). This is because LOS is intended to describe traffic operations at isolated intersections, and would not yield very meaningful results for a traffic signal system or corridor like Monterey Road which has mid- block pedestrian

Interactions, closely-spaced signalized intersections, variable lane widths and median types, turning pocket conditions, and other features which are tied to the overall performance of the corridor. Based on a comparison of Year 2016 ("before") conditions with the two alternative road diet scenarios, it was found that the implementation of a road diet lane configuration would increase corridor-wide travel times, delays and average speeds to varying degrees, depending on the alternative considered. As shown in ***Table 3,*** Option #2 would result in a lesser negative impact on arterial mobility than Option #1.

Table 3. Simulation Results Summary

EASTBOUND MONTEREY ROAD									
Analysis Scenario	AM Peak Hour			Mid-day Peak Hour			PM Peak Hour		
	Travel Time (mm:ss)	Delay (s/veh)	Avg. Speed (mph)	Travel Time (mm:ss)	Delay (s/veh)	Avg. Speed (mph)	Travel Time (mm:ss)	Delay (s/veh)	Avg. Speed (mph)
Existing Year 2014	6:39	284	12	4:57	178	15	8:28	347	10
Before — Year 2016 (4-lane)	6:34	250	13	5:42	227	13	10:12	469	8
After — Option #1 (3-lane)	16:26	587	7	8:27	344	10	14:43	634	6
Difference	9:52	337	-6	2:45	117	-3	4:31	165	-2
Percent Change	**+150%**	**+135%**	**-46%**	**+48%**	**+52%**	**-23%**	**+44%**	**+35%**	**-25%**
After — Option #2 (3-lane mod)	10:55	422	9	12:29	515	7	12:09	515	7
Difference	4:21	172	-4	6:47	288	-6	1:57	46	-1
Percent Change	**+66%**	**+69%**	**-31%**	**+119%**	**+127%**	**-46%**	**+19%**	**+10%**	**-13%**

WESTBOUND MONTEREY ROAD									
Analysis Scenario	AM Peak Hour			Mid-day Peak Hour			PM Peak Hour		
	Travel Time (mm:ss)	Delay (s/veh)	Avg. Speed (mph)	Travel Time (mm:ss)	Delay (s/veh)	Avg. Speed (mph)	Travel Time (mm:ss)	Delay (s/veh)	Avg. Speed (mph)
Existing Year 2014	3:01	284	15	3:43	122	19	6:00	231	13
Before — Year 2016 (4-lane)	3:30	210	14	4:35	163	16	6:36	202	14
After — Option #1 (3-lane)	8:25	249	12	7:38	329	10	10:37	303	11
Difference	4:55	39	-2	3:03	166	-6	4:01	101	-3
Percent Change	**+140%**	**19%**	**-14%**	**+67%**	**+102%**	**-38%**	**+61%**	**+50%**	**-21%**
After — Option #2 (3-lane mod)	6:55	238	12	5:27	212	14	7:58	227	13
Difference	3:25	28	-2	0:52	49	-2	1:22	25	-1
Percent Change	**+98%**	**+13%**	**-14%**	**+19%**	**+30%**	**-13%**	**+21%**	**+12%**	**-7%**

Conclusions and Recommendations

Based on the results of a comprehensive data collection effort and traffic model simulation analysis of the Monterey Road corridor, Minagar & Associates, Inc. concludes that a three-lane cross-section road diet concept could function properly on this portion of Monterey Road, if implemented properly. While the arterial performance of the corridor (i.e., travel time, delay, speed) would be substantially diminished in the peak hour with the removal of a through lane in each direction, the average observed queue lengths of additional vehicles stacking at each signalized intersections were not shown to reach upstream intersections or exceed the available lane capacity.

Whether a road diet configuration on Monterey Road is acceptable to the City of South Pasadena would be dependent on several factors, two of the most important being: (1) that if a road diet is implemented, then peak period traffic signal timing plans at each signalized intersections affected by changes in traffic patterns and demands should also be revised and optimized; and (2) that the resulting increases in peak hour travel time and delays, and decreases in arterial travel speeds are found to be an acceptable tradeoff by the City in light of the converse benefits provided by the road diet (e.g., increased safety, improved bicycle access, protected on-street parking lanes, reduction in left turn gaps at mid-block locations, etc.).

Several factors were considered in the analysis, including: the residential character of the street; the driveway density along Monterey Road; the City of South Pasadena's vision and current plans for a dedicated bicycle connection between the west and east ends of Monterey Road within the city; the need for improved pedestrian facilities; the available paved roadway width along Monterey Road; the location and operational characteristics of intersections; and a comprehensive analysis of field-collected traffic and roadway data. On one hand, many of these baseline traffic and roadway characteristics appear to support the conversion. Numerous residential driveways with access to both single-family homes and apartment complexes abut the north and south sides of Monterey Road throughout the segment. And in several cases, field staff noted that the inside lane often served as a de-facto turning lane for motorists accessing these properties, which resulted in temporary traffic back-ups when peak hour through traffic volumes were large and less maneuverable.

In addition, Monterey Road is neither a designated truck route nor transit route, and is therefore not as susceptible to the frequent stopping and queue building of large, slow-moving vehicles on similar types of three-lane streets. Past research and case studies documented by the Federal Highway Administration (FHWA) also show that roadways with an ADT of less than 20,000 are likely to be good candidates for a road diet, and that road diets implemented on streets with 15,000 ADT or less have demonstrated very good results in the areas of safety, operations, and livability. The current average daily traffic (ADT) on Monterey Road is about 15,700 vehicles per day, which may indicate that the road diet concept could work from a traffic volume perspective.

Other studies, however, have suggested that urban streets with high bi-directional traffic volumes (i.e., in excess of 1,750 vehicles during the peak hour) are likely to experience a reduction in arterial level of service with the implementation of a road diet, and should be

analyzed in closer detail to determine if such a four-lane undivided to three-lane conversion is appropriate. Minagar & Associates, Inc.'s estimate of bi-directional peak hour volumes (PHV) on Monterey Road shows that the AM, mid-day and PM PHV ranges between 1,500 and 3,400 vehicles in both directions, which would suggest a probable decrease in arterial performance. The results of the traffic model and microsimulation analysis runs support this peak hour principle, in that the corridor travel times, delays and speeds on Monterey Road are all expected to worsen with the removal of an eastbound and westbound lane. Considering both lines of reasoning, the City should weigh the advantages and disadvantages of all alternatives, including the option to not construct any type of road diet improvement, and/or to explore other minor improvements or traffic calming measures at specific locations along the corridor. A summary of advantages and disadvantages of each scenario is provided below.

Summary of Advantages and Disadvantages of Alternatives

- **"No Build" Conditions (Year 2016 without Road Diet)**

  Advantages:
  - Shorter travel times, less delay and faster arterial speeds with a four-lane cross-section

  Disadvantages:
  - No designated/marked roadway space for bicyclists
  - No protected lanes for on-street parking
  - Lack of a center refuge area for left-turning vehicles at mid-block

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- **Road Diet Concept #1 (*3-Lane configuration across full length*)**

  Advantages:
  - Protected on-street parking lanes all throughout the corridor
  - Striped bike lanes all throughout the corridor
  - Bike lanes provide buffer for on-street parking
  - Dedicated left-turning lanes at intersections and mid-block locations would improve the safety and operation to and from side streets on Monterey Road

  Disadvantages:
  - 44-150% increase in travel time, 19-135% increase in delays, 2-6 mph decrease in speed compared to "No Build"

- **Road Diet Concept #2 (*3-Lane Configuration with 4-Lane Section at Mid-Segment*)**

  Advantages:
  - Protected on-street parking lanes along major portions of the corridor
  - Striped bike lanes all throughout the corridor
  - Bike lanes provide buffer for on-street parking
  - Dedicated left-turning lanes at intersections and mid-block locations would improve the safety and operation to and from side streets on Monterey Road
  - Maintains a four-lane section and bicycle lanes at closely spaced intersections from Orange Grove Avenue to Meridian Avenue

- Less impact to travel times, delays and corridor speeds compared to Concept #1

Disadvantages:

- 19-119% increase in travel time, 12-102% increase in delays, 1-6 mph decrease in speed compared to "No Build"
- Removes on-street parking from mid-block areas from west of Orange Grove Avenue to east of Meridian Avenue

As described above, while the arterial performance of Monterey Road would substantially worsen, a road diet would also improve the safety and efficiency of mid-block turning movements, as well as provide dedicated areas for bicyclists, on-street parking and better options for multi-modal travel, as contemplated in the City of South Pasadena's General Plan and Bicycle Master Plan. In light of this, Minagar & Associates, Inc. recommends that the City consider a trial installation of one of the proposed road diet concepts by temporarily re-striping the pavement markings along select portions of the Monterey Road corridor. A "before and after study" would be conducted to verify corridor travel times, signal delay, vehicle stops, speeds and traffic queues in the vicinity of the road diet area by using a test car and GPS equipment (i.e., a "floating car study") to track the actual conditions prior to and following the implementation of the road diet test striping plan.

Depending on the City's position on this type of road diet trial project, and the timeframe for its implementation, a follow-up study would likely require re-collecting one or more of the intersection turning counts while schools are in session for a more accurate evaluation of its real effects on corridor traffic volumes. A comparative analysis would reveal if the City's desired outcomes are being achieved (e.g., reduction in left turn gaps from side streets at mid-block locations, observation that left-turners are utilizing the center lane for refuge and stacking without blocking the travel lanes on Monterey Road, an overall measured reduction in through traffic volumes, positive support and public perception from bicyclists, pedestrians and other road users on Monterey Road, etc.), and would validate if the road diet re-striping concept could be implemented permanently, as well as on a larger scale across the full length of the segment from the Gold Line LRT Crossing to Fair Oaks Avenue.

If the before-and-after study results are both positive and accepted by the City, then the final road diet design could be programmed into the capital improvements budget and later implemented as a part of the City's periodic repaving program the following year.

ATTACHMENT 2
Supplementary Information

COMMENTS FROM COMMISSIONER FISHER RECEIVED 1/28/15:

1. Table 3 and related text refer to the increased travel times (reduced speeds) with the different scenarios. However, the differences are miscalculated. For example, in the first column there is a travel time difference of 9:52 over the Before Year 2016 time of 6:34. The percent change is 9:52/6:34 = 150%, not the 60% shown. Percent change is always referenced to the before condition, not the after condition. This is an embarrassing mistake by the consultant, that is repeated numerous times in the table and the text and should be corrected prior to the meeting.

2. Near the bottom of page 18 the report states a rationale why LOS should not be used. However ,there should be a capacity analysis. That is pretty basic. There is no clear analysis nor statement regarding whether there is adequate capacity to handle the traffic at the various signalized intersections. Without a clear statement, the Commissioners and elected officials cannot know how to proceed. Is there sufficient capacity or not?: That is why I suggested the simulation study in the first place. If there is not adequate capacity then it can be reasonably projected that there would be some diversion of traffic to escape the delay. The lack of a capacity analysis leads one to suspect that something is being hidden.

3. In that same paragraph, where it states "...in other words, on the average, more vehicles were discharged from queues than entered." Does this mean that there is spare capacity or is there a fine nuance where the true meaning is hidden? If there is spare capacity, why do the travel times increase so much (by 1:22 to 9:52), as shown in Table 3?

RESPONSES FROM CONSULTANT RECEIVED 2/4/15:

1. John is right about the miscalculations on the table. The values on Table 3 and references throughout the report have been corrected. Fortunately, the results—while changed—are relative between Alternatives 1 and 2 and do not impact our conclusions or recommendations.

2. Below are the Existing Year 2014 Level of Service outputs. To be clear, looking at the LOS results you can see that there is generally no reserve capacity from an LOS perspective to add traffic or reduce the capacity at any of the signals on Monterey during the AM and PM peak hours without worsening the already failing LOS.

   Monterey Rd. at Pasadena Ave.
   AM = F (129.6 s/v); MD = D (43.1 s/v); PM = F (168.0 s/v)

   Monterey Rd. at Indiana Ave.
   AM = C (22.9 s/v); MD = D (40.9 s/v); PM = F (208.2 s/v)

   Monterey Rd. at Orange Grove Ave. (two-way stop)
   AM = A (4.0 s/v); MD = A (2.2 s/v); PM = F (95.4 s/v)

Monterey Rd. at Via Del Rey
AM = F (85.1 s/v); MD = B (15.4 s/v); PM = F (179.8 s/v)

Monterey Rd. at Meridian Ave.
AM = F (170.8 s/v); MD = F (115.5 s/v); PM = F (225.3 s/v)

Monterey Rd. at Diamond Ave.
AM = F (292.8 s/v); MD = E (69.9 s/v); PM = F (368.7 s/v)

Monterey Rd. at Fremont Ave.
AM = F (240.9 s/v); MD = F (169.9 s/v); PM = F (420.9 s/v)

Monterey Rd. at Mound Ave. (two-way stop)
AM = A (5.6 s/v); MD = A (5.2 s/v); PM = B (15.0 s/v)

Monterey Rd. at Fair Oaks Ave.
AM = F (167.1 s/v); MD = D (43.9 s/v); PM = F (193.1 s/v)

We had mentioned in the report why we did not include a comparative LOS table for this simulation study. Travel time runs and simulations that we have done for other agencies in the past have shown us that the individual intersection LOS, while a good basic indicator of intersection capacity, assumes isolated intersection operation and generally does not say anything about how a corridor would be impacted or benefit from a corridor-wide project like this.

Since traffic queues can become long at saturated intersections like these and block driveways or other side streets, LOS might not reflect reality and could underestimate the severity of queuing, bottlenecks, intersection blockages, etc.. Prime example is how HCM LOS does not provide accurate estimates or take account the effects of queue spillback between nearby adjacent signals, such as Via Del Rey and the (proposed) Orange Grove Avenue signal, or between Meridian and Diamond. This is something only a simulation model would pick up. That is why we focused on running and reporting on the simulation results rather than LOS--they are two completely separate methodologies.

3. The narrative at the bottom of Page 18 refers to our simulation results. SimTraffic estimated that a few of the intersections would see a maximum traffic queue that spilled into it from the adjacent downstream intersections. However, on average, the program reported that queues mostly stayed within the available lane storage and did not block the upstream intersections during the simulation period.

ATTACHMENT 3
Citizens' Subcommittee Report

MONTEREY ROAD
COMMITTEE RECOMMENDATIONS



FEHR & PEERS

August 2012

MONTEREY ROAD
COMMITTEE RECOMMENDATIONS

August 2012

Prepared for:

CITY OF SOUTH PASADENA

Prepared by:

FEHR & PEERS
201 Santa Monica Boulevard, Suite 500
Santa Monica, California 90401
(310) 458-9916

Ref: 2527

PURPOSE

This report represents the recommendations of a citizen's committee commissioned by the South Pasadena City Council for the purpose of developing recommendations for the future design of Monterey Road between Pasadena Road and Fair Oaks Avenue (Exhibit 1). The committee, as listed below, met on three occasions in Summer 2012 to review information and develop consensus recommendations to the Freeway & Transportation Commission.

- Sofronio Abrera, CE
- Tom Afschar
- Andy Au
- Judy Bergstresser
- Glen Eddy
- Dan Evans
- William Glauz
- David Margrave
- Walter Okitsu, TE
- Jim Tavarres
- Patricia Wright

This report offers the committee's collective opinion on the optimum use of Monterey Road based on their discussions, recent data (e.g., speed, traffic volume, collisions), input from the public, and the opinion survey completed by the committee.

In the initial committee meeting, staff explained that the City's financial resources are limited, and while no specific budget has been identified for changes to Monterey Road, the committee should consider cost implications in developing their recommendations. Cost estimates were not developed for this effort (insufficient time and resources), but the committee was mindful of cost as one factor in not recommending significant physical changes in the corridor and instead focused on better use of the available space.

CONTEXT

Physical

Exhibit 2 shows the nature of Monterey Road in the study area. The street is generally 64' from the face-of-curb to face-of-curb, within an 80' right-of-way. Within the study area, Monterey Road is two lanes in each direction, with left-turn lanes at some of the major cross-streets. Parking is generally allowed throughout the corridor, and no bike lanes are provided. The sidewalk is generally 4' wide, but many obstructions (utility poles and vents) create an effective space that is less than 4', and as little as 1.5' in some areas.

Immediately beyond the existing sidewalk (in the direction away from the street) is an area of City-owned right-of-way that is generally 4.5' wide in most of the corridor. This area contains some public utilities (mostly vaults) and City-planted trees, but it has largely been viewed and used by the adjacent property owner as part of their "yard". Exhibit 3 shows examples of how this space is currently being used.

Signal System

The seven signalized intersections in this corridor are not coordinated (i.e., they do not function as a system). The signal at Pasadena Avenue is greatly influenced by the operations of the Gold Line light rail. Every time a train approaches, this signal reverts to an "all red" phase until the train passes. This condition serves to meter traffic approaching the study area from the west.

Traffic Volumes

Traffic volumes in the study area, just west of Fremont, are approximately 20,300 vehicles per day during a non-school period (July 2012). This compares to a November 2007 count of 20,700 vehicles per day. This level of traffic is very similar to Fremont Avenue near Monterey Road. The pattern of traffic over the course of the day is also very similar to Fremont Avenue, as illustrated on Exhibit 4. The hourly results of the two counts taken on Monterey Road (2007 and 2012) are included in Appendix A.

Traffic Speeds

The corridor is currently posted as 35 MPH. A speed study conducted by the City in 2007 (midway between Orange Grove and Indiana) showed that traffic speeds averaged 37 mph, with an 85th percentile speed of 40 mph. The 85th percentile speed is the value at which 85 percent of the vehicles are going at that speed or slower. The California Vehicle Code requires that speed limits be set in recognition of the measured 85th percentile speed if they are to be enforced with radar[1].

Road Diets

One of the central questions that was considered by the committee is whether the number of through lanes on Monterey Road can/should be reduced from two to one in each direction. This is commonly

[1] As of January 1, 2012, California Vehicle Code Section 21400 specifies that a local authority may round the measured 85th percentile speed to a 5 MPH increment. This rounding may be "up" or "down" from the measured value.

referred to as a "road diet". The most typical type of road diet is converting a 4-lane roadway into a 3-lane roadway (one lane in each direction plus a left-turn lane). The professional literature on this subject suggests that road diets can be accommodated on roadways with daily traffic volumes of up to 20,000 to 25,000 vehicles (depending on details such as cross-street spacing and percentage of turning movements). Exhibit 5 presents a list of local and national examples of road diets. This list is not a comment on the merits of these road diets, but rather a point of reference.

Collision History

Exhibit 6 shows all reported vehicle collisions from January 2007 through April 2011. These collisions are typically recorded by City Police, but some could be from Highway Patrol. All reported collisions are inventoried in a central database maintained by the State, known as the Statewide Integrated Traffic Reporting System (SWITRS). The collisions tended to cluster around the major intersections: Fair Oaks, Fremont, Meridian, Orange Grove, and Indiana.

Exhibit 7 presents the bicycle and pedestrian-involved collisions for the same period (January 2007 to April 2011). Only seven of these types of collisions occurred on Monterey Road (plus six nearby) over more than five years. This may be a consequence of the relative unattractiveness of Monterey Road for both bicyclists and pedestrians, reducing the sheer number of users, thereby reducing the exposure to potential collisions.

COMMITTEE SURVEY

The committee members completed a survey for the purpose of identifying their top concerns and priorities. The survey and the complete results are contained in Appendix B. According to this survey, the top priorities for future use of Monterey Road should be:

- A relatively wide (4-6') sidewalk free of obstructions (e.g., poles, utility vents)
- ADA-compliant curb ramps
- On-street bicycle lanes
- Coordinated traffic signals

COMMITTEE RECOMMENDATIONS

The committee reached a consensus on many elements and was split on a few. On perhaps the most fundamental item, whether to recommend a road diet (removing one through lane in each direction), the committee was evenly split and could not reach a common opinion. Those who favored a road diet thought it would accomplish several things: reduce speeds, reduce "through" traffic, and provide space for bicycle lanes and wider sidewalks. Those who did not favor a road diet thought the degree of resulting congestion would be too great and it would create spill-over to other streets with corresponding impacts.

Recommendation #1 – Create a sidewalk space that provides a continuous 4' (minimum) of unobstructed walking area

In accomplishing this recommendation, the committee suggests minimizing new intrusions into the 4.5 feet of public right-of-way behind the existing sidewalk. While this area already contains some utility vaults and other public service facilities, most property owners have an historic expectation that this space is privately controlled/owned. The committee believes these impacts can be minimized if the sidewalk were extended into the street in the form of a "bulb-out" (Exhibit 8) where such a treatment would only extend into the parking area and not impact a proposed bicycle lane or travel lane. If the space behind the sidewalk must be used to accomplish the broader goals, then each circumstance should be examined to determine if it would be less impactful to either extend the sidewalk or relocate poles/vents to the area behind the existing sidewalk.

Recommendation #2 – Add a bicycle lane along Monterey Road

While not a unanimous opinion, most committee members felt that adding a bicycle lane on Monterey Road would be beneficial and appropriate. Some felt that using El Centro bike lane (and perhaps extending further west) would be a better choice for an east/west facility. Adding a bicycle lane on Monterey Road would compete for the space currently used as parking in some portions of the corridor. For much of the corridor, where current parking demand is very light, parking can be prohibited to create the space for bicycle lanes. For the handful of areas with high on-street parking demand (typically adjacent to multi-family housing), the committee recommends that parking be retained on the side of the street with the high demand.

Recommendation #3 – Reduce auto speeds

The committee favors reducing auto speeds but not auto capacity in the corridor. Reducing speeds in the corridor (traffic calming) is desired but not easily accomplished on an arterial street. Potential treatments include speed feedback signs, textured crosswalks, and/or selected "pinch" points. The coordination of signals (see below) can also reduce speeds if the coordination is set for the desired speed and publicized accordingly.

Recommendation #4 – Coordinate the signals (from Fair Oaks to Pasadena)

Coordinated (or "synchronized") traffic signals are typically a very cost-effective measure to increase capacity without increasing lanes. If properly managed and communicated, coordinated signals can also moderate traffic speeds by benefiting drivers who respect the speed limit. This corridor has a challenge in dealing with the signal pre-emption needed for the Gold Line train impacts, but that is not a fatal problem for coordination.

Recommendation #5 – Install higher visibility crosswalks

The committee favored the implementation of crosswalks of greater visibility. The intent would be to make them more visible to motorists. In the case of unsignalized intersections, the crosswalks can be accompanied by high-visibility signage and related treatments. Exhibit 9 provides examples of higher visibility crosswalks.

OTHER CONSIDERATIONS

Several committee members wanted consideration of additional turn lanes at selected locations. Sufficient space exists within the existing 64' paved area for either a right-turn or left-turn lane at the intersection, while also having room for an on-street bike lane in each direction. Two turn lanes can be installed if no bike lanes are provided. The committee members mentioned the following possibilities for turn lanes:

- Eastbound right-turn lanes at Fremont, Indiana, Meridian, and Diamond
- Left-turn lanes at Orange Grove, Glendon, Meridian, and Diamond

The committee identified a parking problem in residential neighborhoods near the Gold Line Station, despite the available and free parking at the station lot located at Mission Meridian Village. The committee asked that parking restrictions be added on Glendon and Lyndon to discourage Metro-related parking on those streets and any other residential streets in the area.

Some committee members and some public comments were in favor of a new traffic signal at Orange Grove Avenue but others were opposed.

While a continuous or a substantial landscape median would be visual appealing, the committee did not think it was possible to accomplish this while achieving the other goals. Creating a continuous landscape strip (between the street and sidewalk) is highly desirable, but would necessitate moving the sidewalk into the currently unused public right-of-way through the entire corridor, which the committee does not feel is practical or appropriate.

ILLUSTRATION OF COMMITTEE RECOMMENDATIONS

The consultant prepared two types of illustrations to show how the committee's ideas would be realized in actual application. The example cross-sections (Exhibit 10) show a typical condition along the corridor. Exhibit 11 illustrates how transitions would occur throughout the corridor to accommodate parking (where needed), bicycle lanes, turn lanes, etc. The application of the committee's preferences would result in bike lanes throughout and turn lanes and parking areas at locations where warranted and needed. Only the following areas would require widening of the street section:

- The eastbound and westbound approaches at Fremont Avenue
- The eastbound and westbound approaches at Meridian Avenue

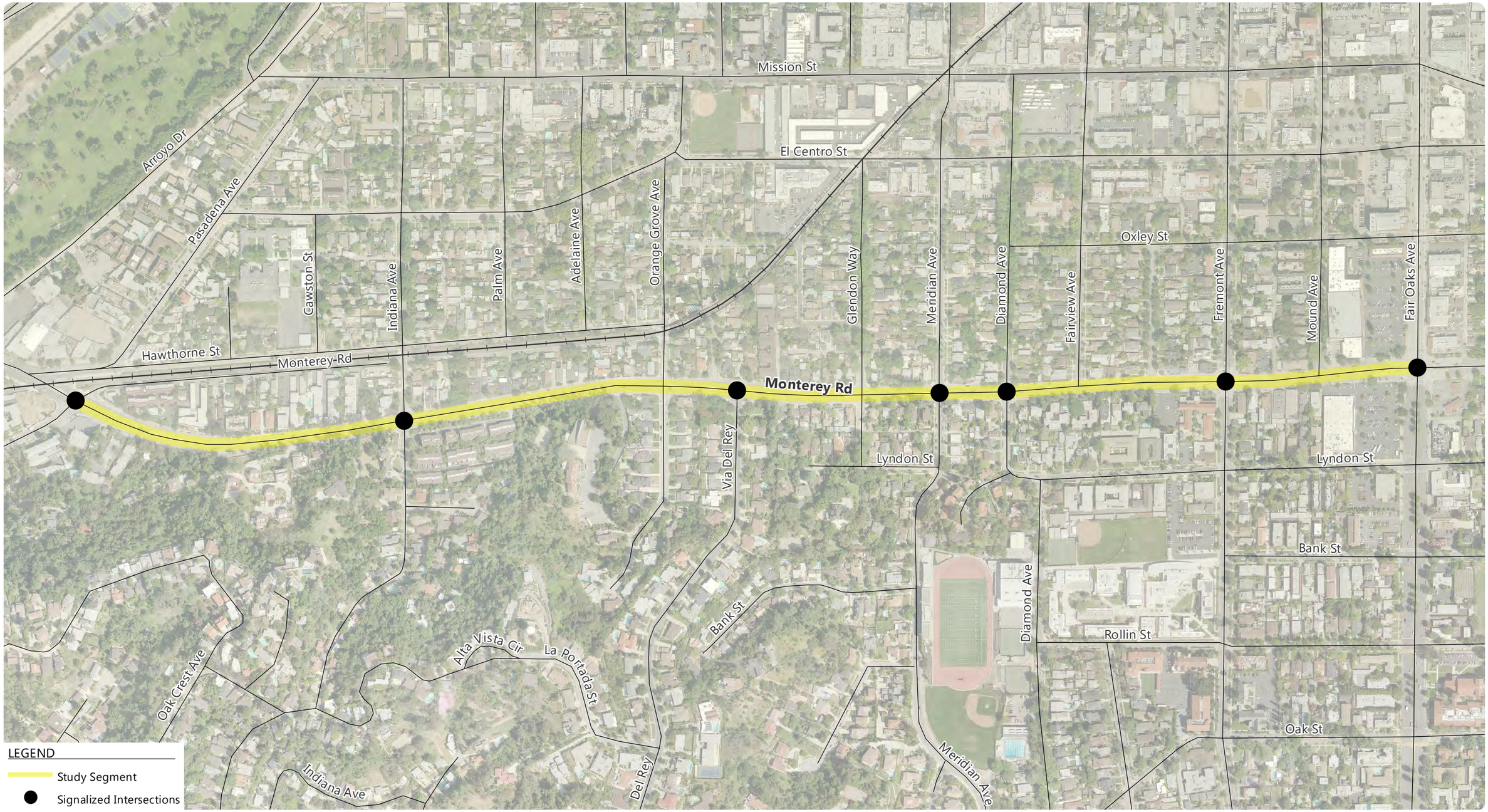
Exhibit 11 includes most, but not all, of the potential turn lanes mentioned by the committee as described in the "other considerations" section of this report. Further technical analysis should be conducted to determine the merits of more turn lanes than illustrated in Exhibit 11.

STAFF & CONSULTANT COMMENTS

If the Council elects to consider a road diet (reducing the number of through lanes), then staff recommends a more formal and thorough traffic study to evaluate the degree of congestion that would be expected and magnitude/location of any diverted traffic.

In considering the installation of bicycle lanes, the Council may want to revisit the east/west bicycle system as defined in the City's Bicycle Master Plan to determine if El Centro Street or Mission Street are better alternatives. Both of these streets have more on-street parking, which is a challenge for bicycle safety, but they both have lower auto volumes and speeds.

If the Council is interested in pursuing a signal on Monterey Road at Orange Grove Avenue, then the staff can collect data and prepare a "warrant" analysis to see if the conditions meet the applicable standards as established in the California Manual of Traffic Control Devices.



Not to Scale

FEHR PEERS

Project SM12-2527/Graphics/GIS

STUDY AREA

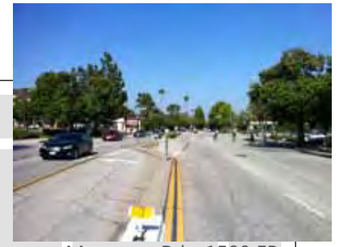
EXHIBIT 1

Monterey Rd - 300 WB

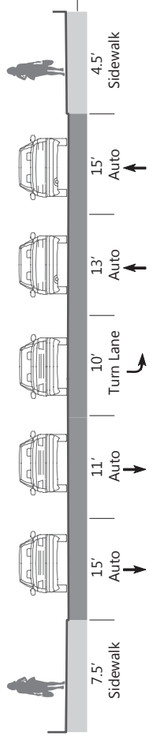
Monterey Rd - 710 EB

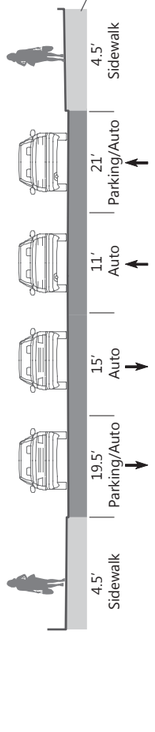
Monterey Rd - 800 EB

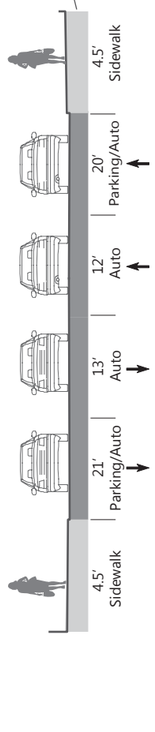
Monterey Rd - 1300 EB

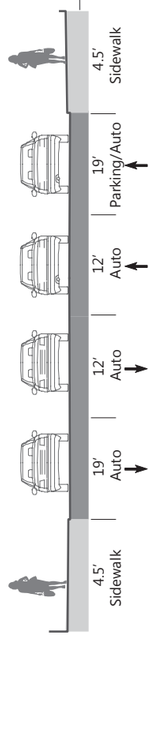


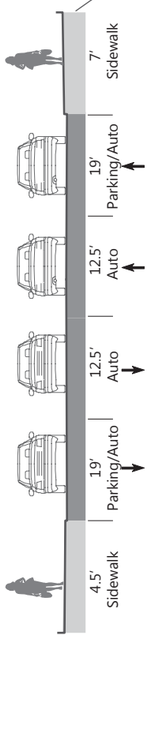
Monterey Rd - 1500 EB

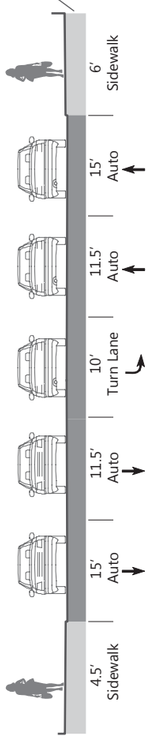


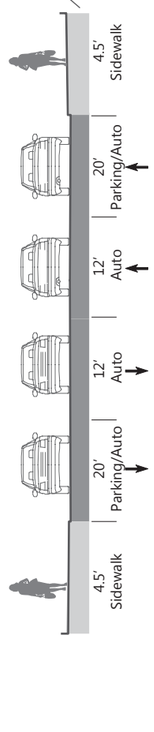












LEGEND

Study Segment

Not to Scale

FEHR PEERS

EXISTING CROSS-SECTIONS

EXHIBIT 2

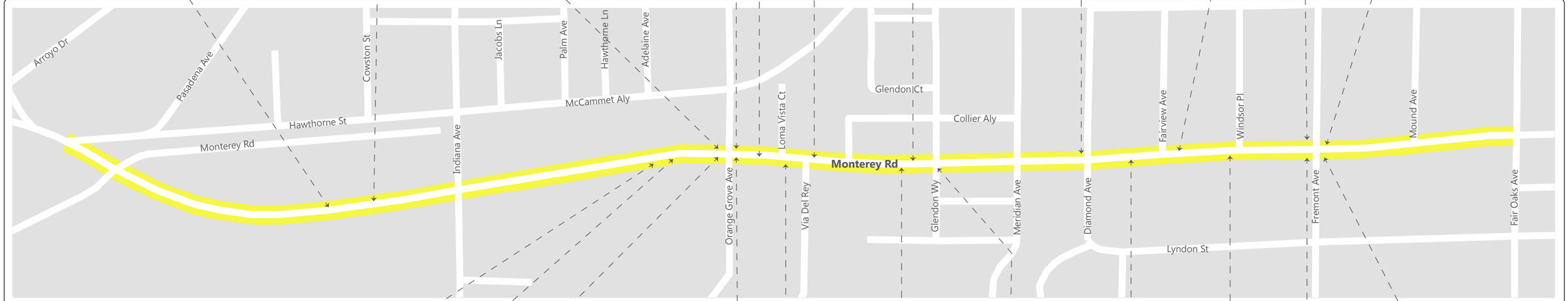




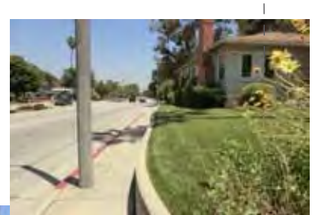
















LEGEND

Study Segment

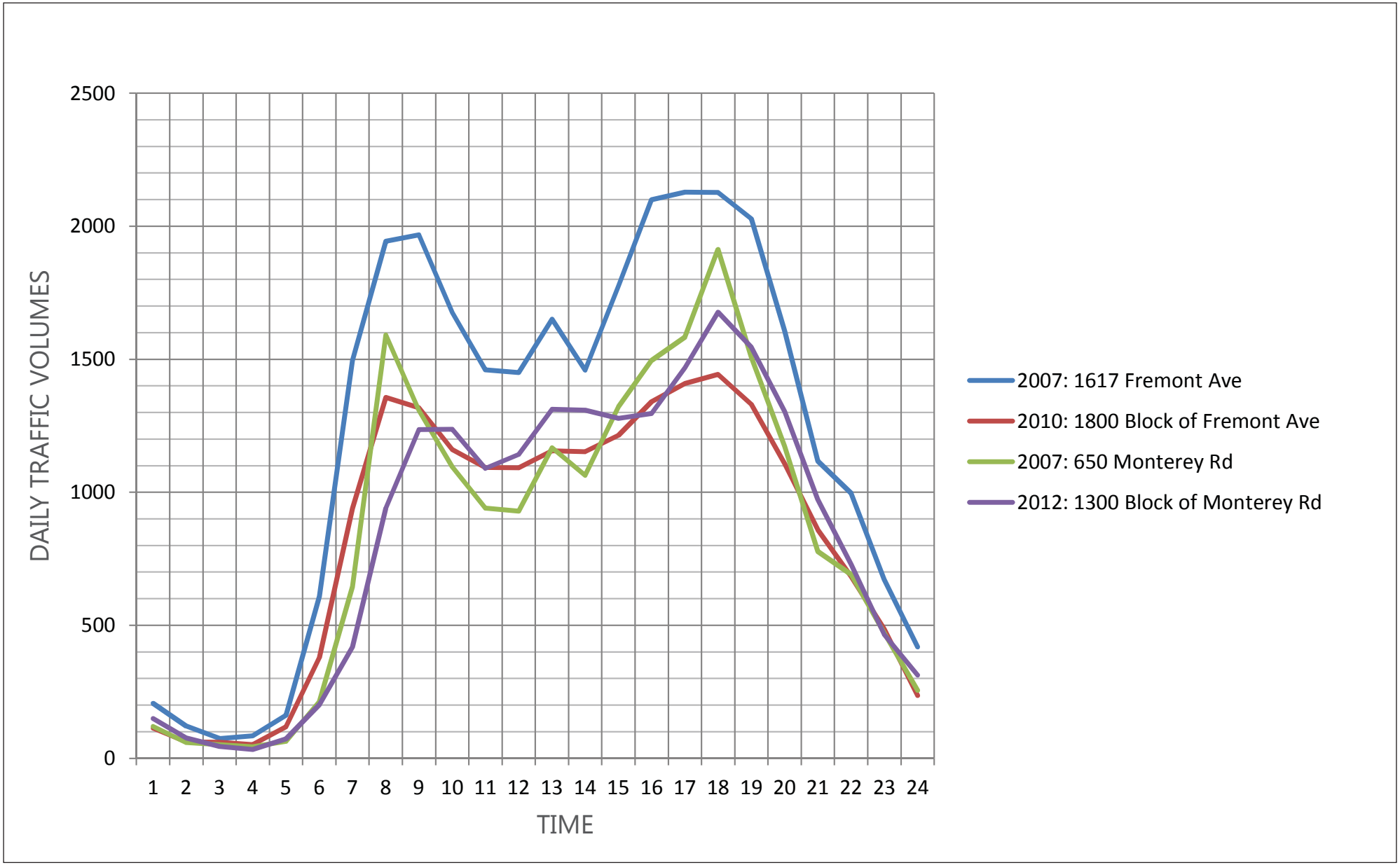
N

Not to Scale

FEHR PEERS

EXAMPLES OF SIDEWALK AREA

EXHIBIT 3


DAILY TRAFFIC VOLUMES
2500
2000
1500
1000
500
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
TIME
2007: 1617 Fremont Ave
2010: 1800 Block of Fremont Ave
2007: 650 Monterey Rd
2012: 1300 Block of Monterey Rd

National Road Diet Inventory					
		Lane Change		ADT	
Location	Roadway Section	From	To	Before	After
Kirkland, Washington	Lake Washington Boulevard	4 lanes	2 lanes with bike lanes and TWLTL[1]	23,000	25,913
Kirkland, Washington	Lake Washington Boulevard (Downtown)	4 lanes	2 lanes with bike lanes and TWLTL[1]	11,000	12,610
Lewistown Pennsylvania	Electric Avenue	4 lanes	2 lanes with bike lanes and TWLTL	13,000	14,500
East Lansing, Michigan	Burcham Road	4 lanes	2 lanes with bike lanes and TWLTL[1]	14,000	14,000
East Lansing, Michigan	Grand River Boulevard	4 lanes	2 lanes with bike lanes and TWLTL[1]	23,000	23,000
Toronto, Ontario, Canada	St. George Street	4 lanes	2 lanes with bike lanes	15,000	15,000
Bellevue, Washington	120th Avenue	4 lanes	2 lanes with TWLTL[1]	16,900	16,900
Bellevue, Washington	Montana Street	4 lanes	2 lanes with bike lanes and TWLTL[1]	18,500	18,500
Toronto, Ontario, Canada	Danforth	4 lanes	2 lanes with bike lanes	22,000	22,000

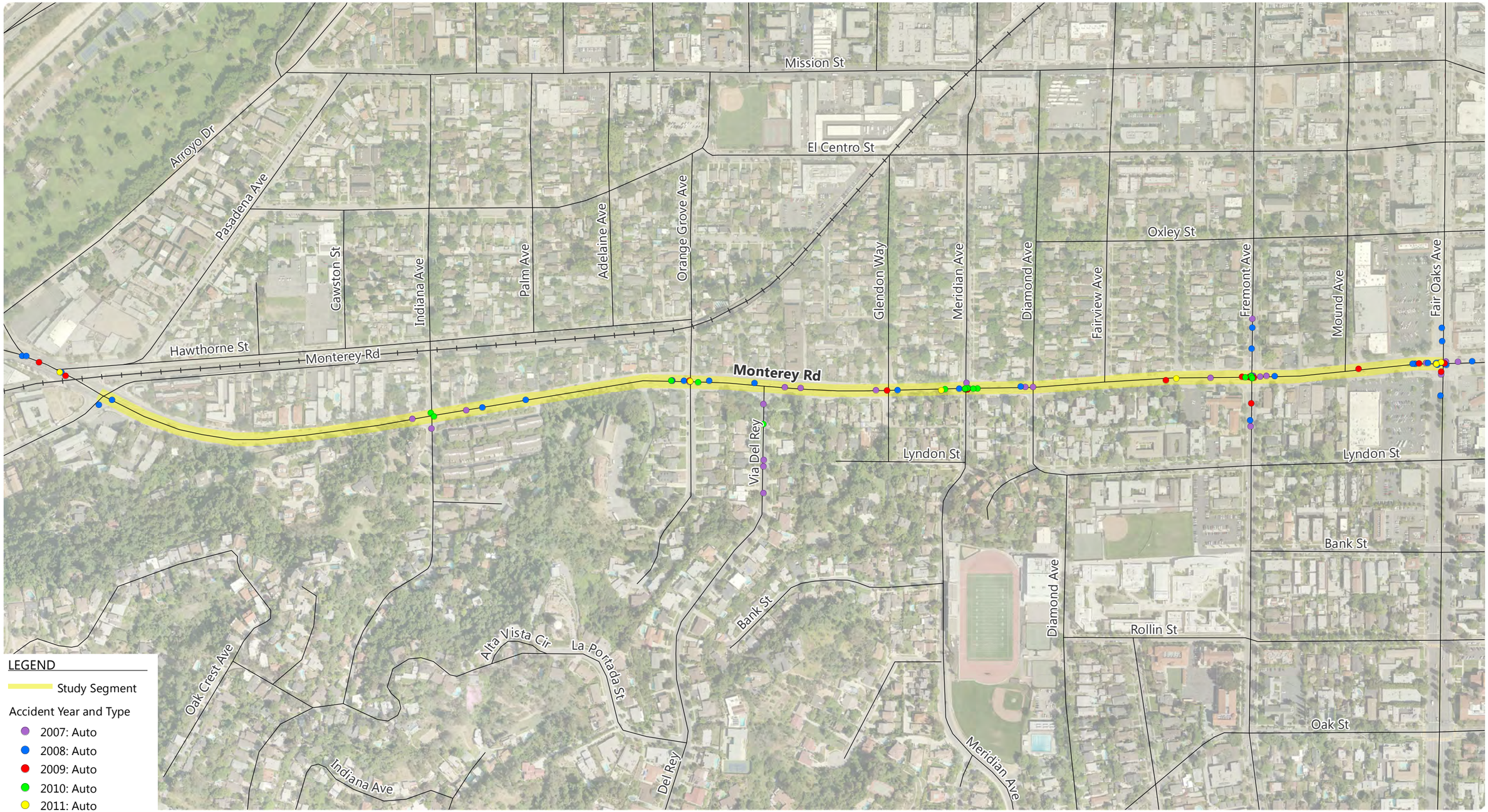
1. Two Way Left Turn Lane

Source: "Road Diets Fixing the Big Roads" by Dan Burden and Peter Lagerwey (Walkable Communities, Inc. March 1999)

Southern California Road Diet Inventory					
		Lane Change		ADT	
Location	Roadway Section	From	To	Before	After
Boyle Heights	1st Street	4 lanes	2 lanes with bike lanes and TWLTL[1]	>20,000	<20,000
Burbank	Riverside Drive	4 lanes	2 lanes with bike lanes and TWLTL[1]	-	-
Highland Park	York Boulevard from Eagle Roack Boulevard to Avenue 56	4 lanes	2 lanes with bike lanes and TWLTL[1]	23,000	<20,000
Los Angeles	7th Street from Norton to Figueroa	4 lanes	2 lanes with bike lanes and TWLTL[1]	-	-
Los Angeles	Main Street from Rose to Windward	4 lanes	2 lanes with bike lanes and TWLTL[1]	-	-
Los Angeles	Myra Avenue from Santa Monica Boulevard to Fountain Avenue	4 lanes	2 lanes with bike lanes and TWLTL[1]	-	-
Santa Monica	Main Street	4 lanes	2 lanes with bike lanes and TWLTL[1]	20,000	18,000
Santa Monica	Ocean Avenue	4 lanes	2 lanes with bike lanes	18,000	18,000

1. Two Way Left Turn Lane

Source: Fehr and Peers



Source: SWITRS 1/1/2007 - 4/29/2011

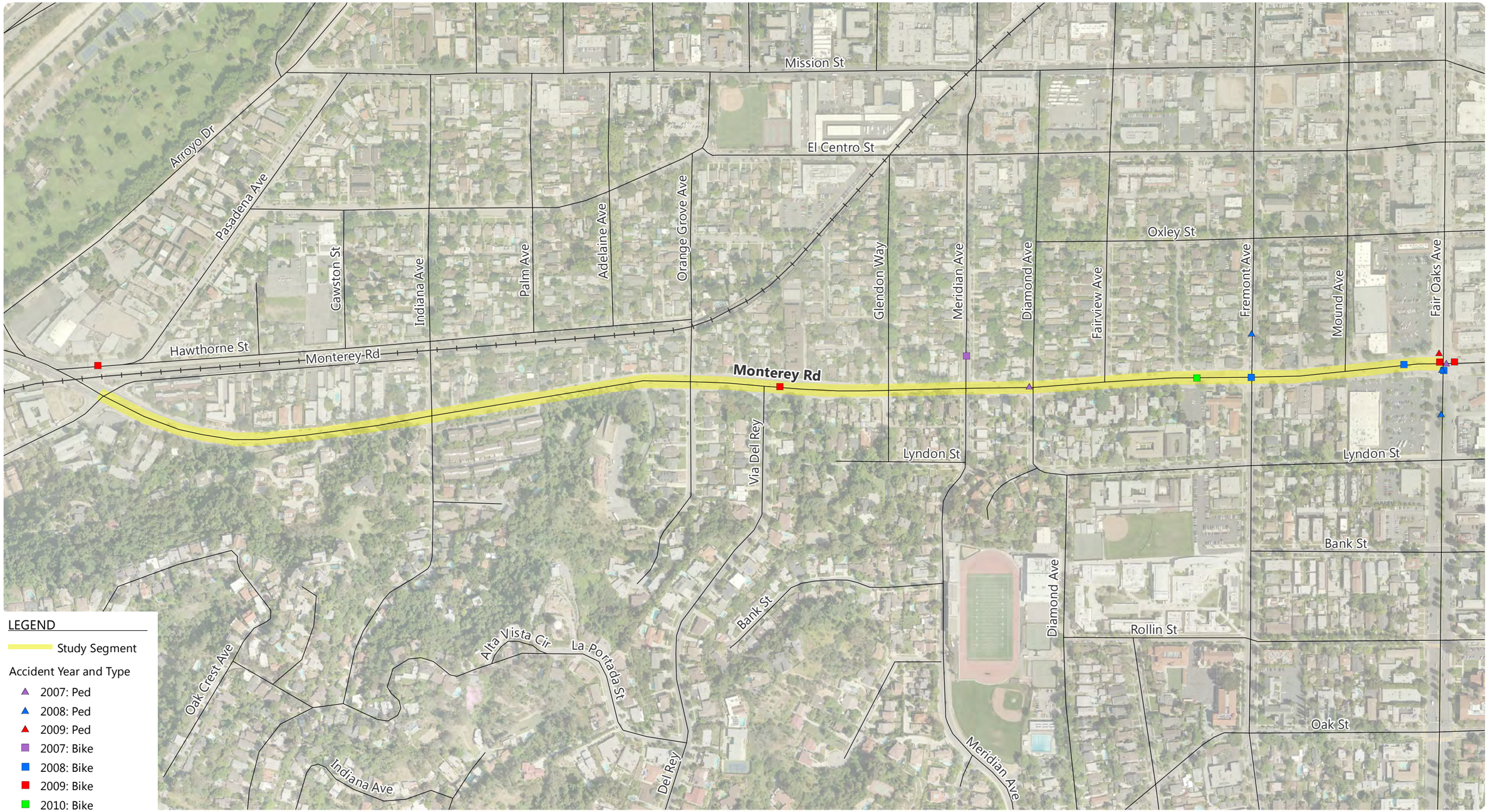
Not to Scale

FEHR PEERS

Project SM12-2527/Graphics/GIS

VEHICLE COLLISIONS (JANUARY 1, 2007 - APRIL 29, 2011)

EXHIBIT 6



Source: SWITRS 1/1/2007 - 4/29/2011

N

Not to Scale

FEHR PEERS

Project SM12-2527/Graphics/GIS

BICYCLE COLLISIONS (JANUARY 1, 2007 - APRIL 29, 2011)

EXHIBIT 7

Exhibit 8.1

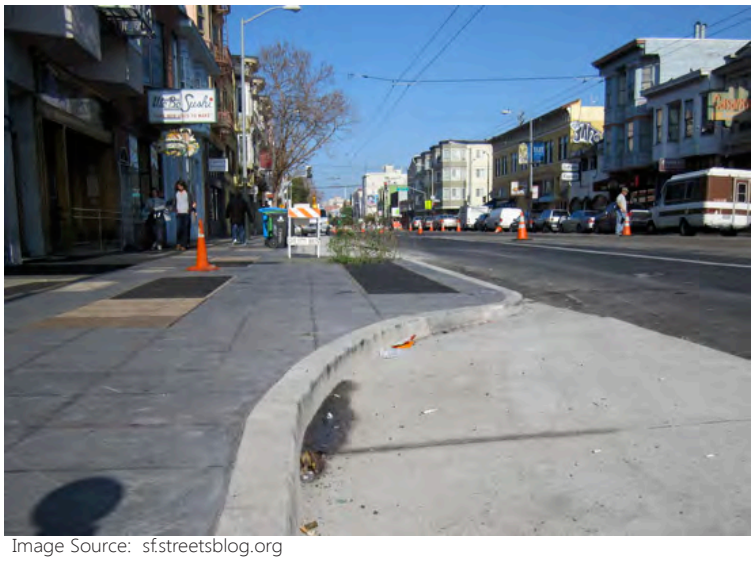


Image Source: sf.streetsblog.org

Exhibit 8.2

Image Source: Fehr & Peers

Landscaping will not be as prevalent and no crosswalk will be included

Exhibit 8.3

Image Source: US Traffic Calming Manual

Exhibit 8.4

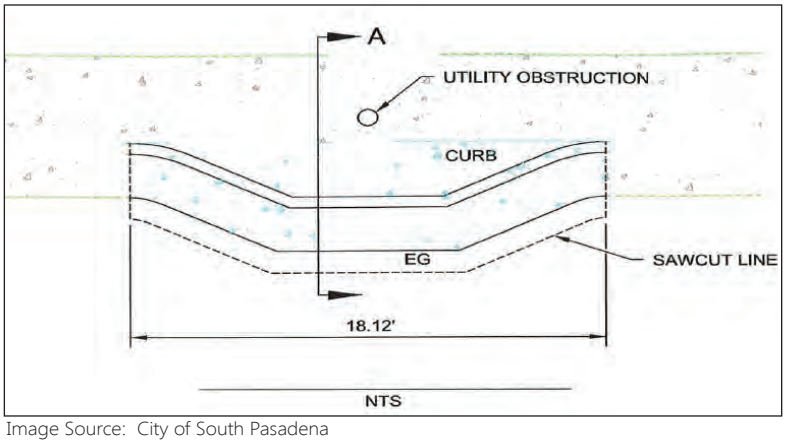


Image Source: City of South Pasadena

Exhibit 9.1: Advanced Limit Line

Image Source: Fehr & Peers

Exhibit 9.2: High Visibility Signs

Image Source: Fehr & Peers

Exhibit 9.3: Median Refuge Island

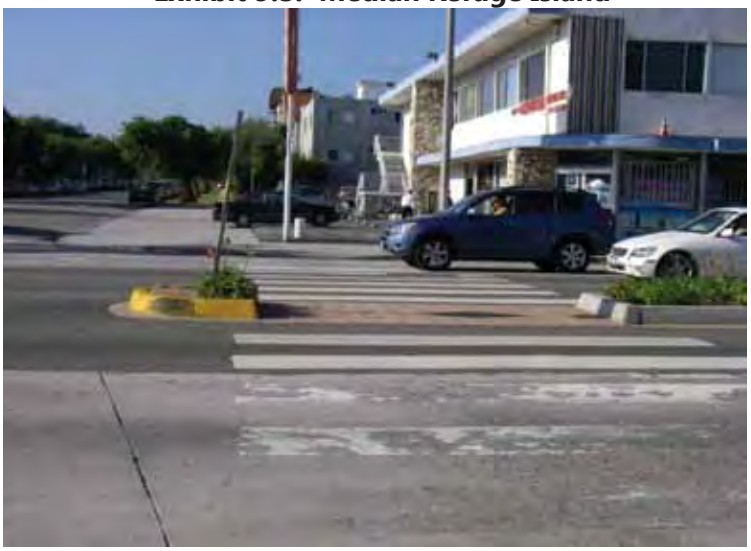


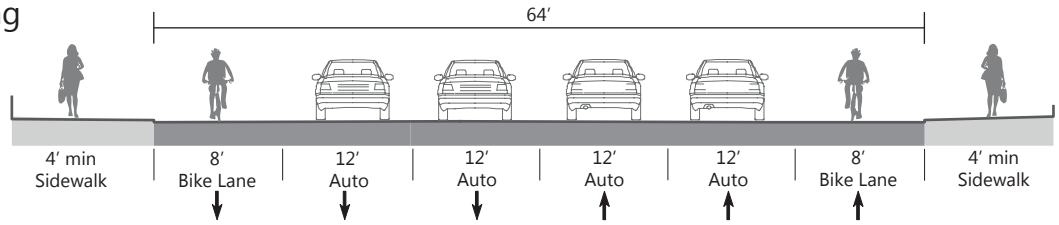
Image Source: Fehr & Peers

Exhibit 9.4: Flashing Beacons

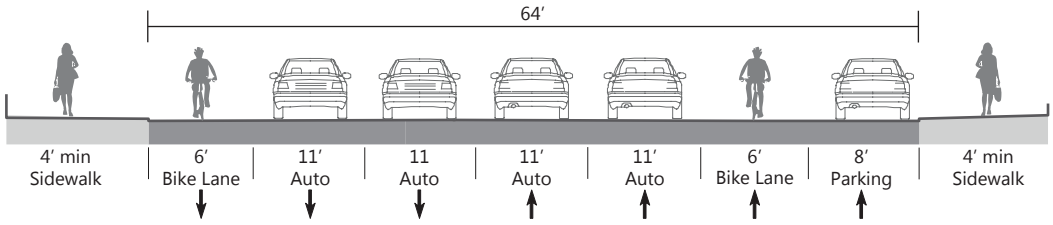
Image Source: tti.tamu.edu

TYPICAL MID BLOCK

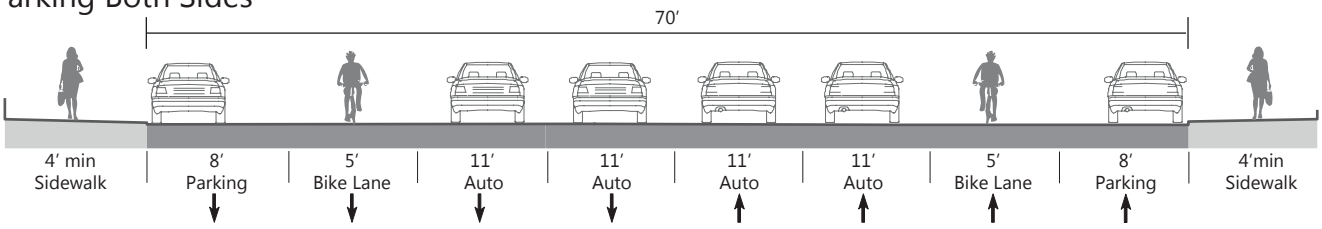
A No Parking



B Parking One Side

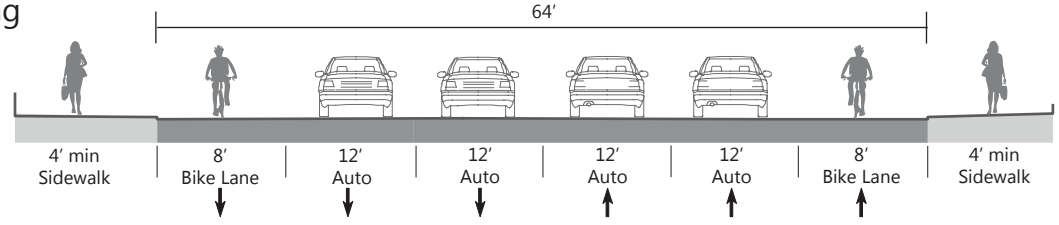


C Parking Both Sides



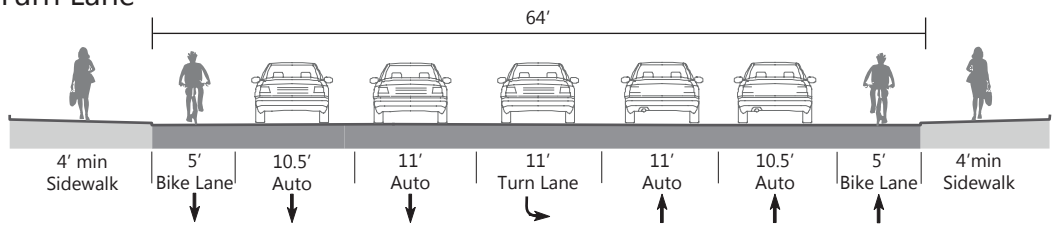
MINOR INTERSECTIONS

D No Parking

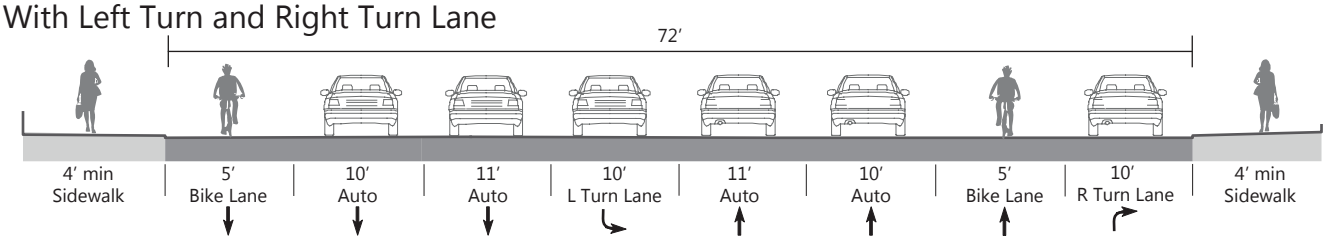


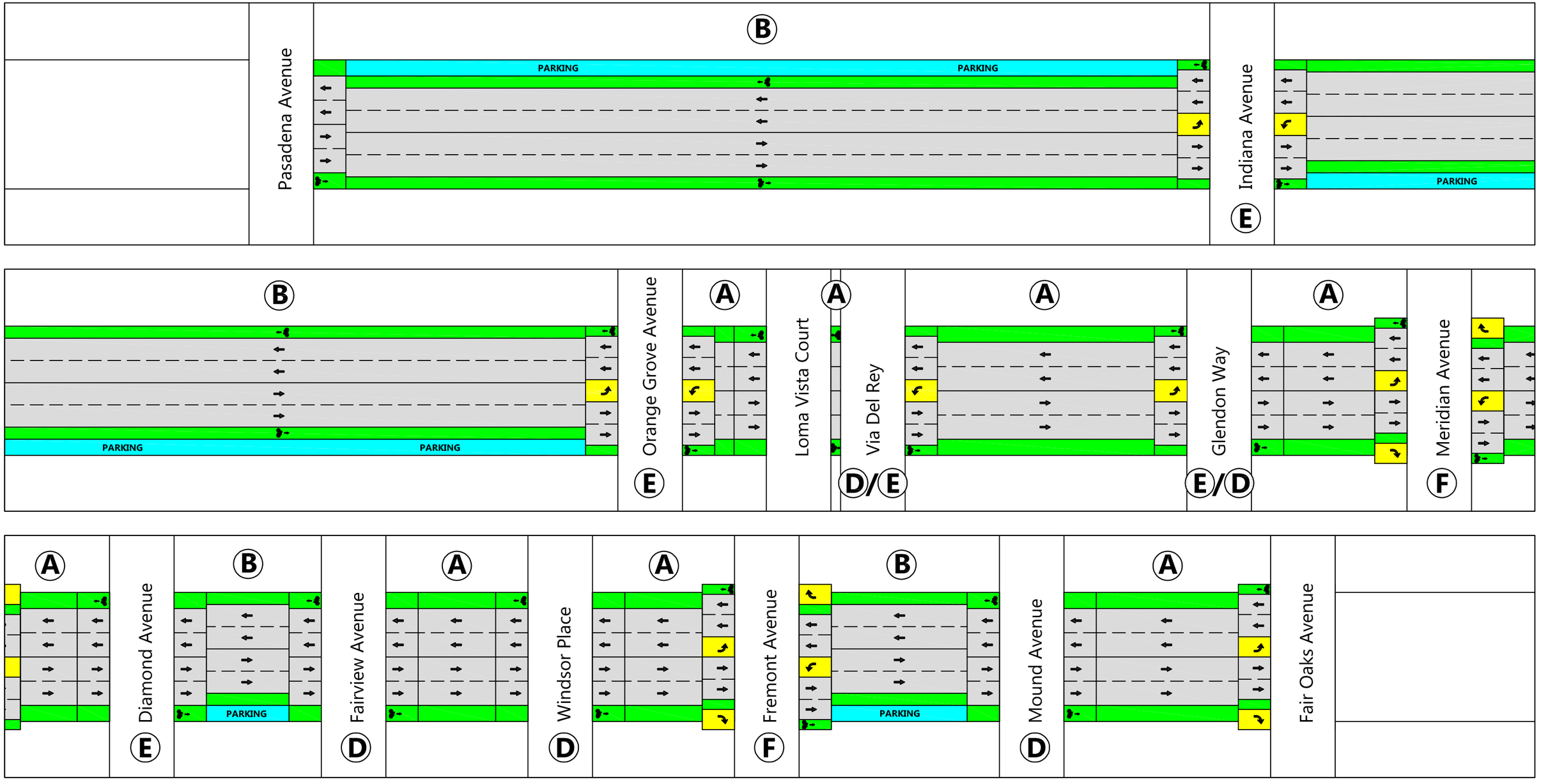
MAJOR INTERSECTIONS

E With Left Turn Lane



F With Left Turn and Right Turn Lane





N
NOT TO SCALE

FEHR & PEERS

MONTEREY ROAD CORRIDOR LAYOUT
EXHIBIT 11

Aug 27, 2012 SR
N:\Jobs\Active\2500s\2527 – Monterey Road\Graphics\ACAD\Roadway.dwg

APPENDIX A

TRAFFIC COUNTS

Prepared by NDS/ATD

VOLUME

Monterey Rd W/o Fremont Ave

Day: Thursday
Date: 7/12/2012

City: South Pasadena
Project #: CA12_5298_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,641	10,671	20,312

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			29		18		47		12:00			147		223		370	
00:15			16		18		34		12:15			139		135		274	
00:30			13		21		34		12:30			128		177		305	
00:45			24	82	11	68	35	150	12:45			153	567	210	745	363	1312
01:00			8		4		12		13:00			147		200		347	
01:15			13		11		24		13:15			147		162		309	
01:30			19		10		29		13:30			175		164		339	
01:45			6	46	6	31	12	77	13:45			142	611	172	698	314	1309
02:00			11		4		15		14:00			163		152		315	
02:15			8		7		15		14:15			155		155		310	
02:30			7		2		9		14:30			184		160		344	
02:45			1	27	5	18	6	45	14:45			152	654	157	624	309	1278
03:00			4		6		10		15:00			139		164		303	
03:15			6		4		10		15:15			146		162		308	
03:30			2		4		6		15:30			159		167		326	
03:45			3	15	4	18	7	33	15:45			177	621	182	675	359	1296
04:00			5		8		13		16:00			162		168		330	
04:15			8		11		19		16:15			172		169		341	
04:30			8		9		17		16:30			179		215		394	
04:45			8	29	16	44	24	73	16:45			195	708	208	760	403	1468
05:00			13		16		29		17:00			210		236		446	
05:15			10		26		36		17:15			205		221		426	
05:30			36		37		73		17:30			188		210		398	
05:45			23	82	41	120	64	202	17:45			183	786	224	891	407	1677
06:00			32		36		68		18:00			174		221		395	
06:15			45		50		95		18:15			200		206		406	
06:30			40		67		107		18:30			173		207		380	
06:45			59	176	90	243	149	419	18:45			155	702	209	843	364	1545
07:00			76		100		176		19:00			189		187		376	
07:15			70		122		192		19:15			154		160		314	
07:30			99		141		240		19:30			168		166		334	
07:45			134	379	198	561	332	940	19:45			148	659	131	644	279	1303
08:00			153		183		336		20:00			142		128		270	
08:15			146		180		326		20:15			141		116		257	
08:30			112		146		258		20:30			135		109		244	
08:45			135	546	181	690	316	1236	20:45			121	539	82	435	203	974
09:00			162		228		390		21:00			117		95		212	
09:15			135		175		310		21:15			114		89		203	
09:30			124		142		266		21:30			84		67		151	
09:45			133	554	138	683	271	1237	21:45			97	412	66	317	163	729
10:00			124		127		251		22:00			83		67		150	
10:15			112		166		278		22:15			67		58		125	
10:30			113		165		278		22:30			71		48		119	
10:45			126	475	157	615	283	1090	22:45			37	258	34	207	71	465
11:00			115		160		275		23:00			56		30		86	
11:15			123		131		254		23:15			40		42		82	
11:30			144		155		299		23:30			44		42		86	
11:45			158	540	156	602	314	1142	23:45			33	173	25	139	58	312
TOTALS				2951		3693		**6644**	**TOTALS**				6690		6978		**13668**
SPLIT %				44.4%		55.6%		**32.7%**	**SPLIT %**				48.9%		51.1%		**67.3%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,641	10,671	20,312

AM Peak Hour			11:30	08:15	**08:15**	**PM Peak Hour**			16:45	17:00	**17:00**
AM Pk Volume			588	735	**1290**	**PM Pk Volume**			798	891	**1677**
Pk Hr Factor			0.930	0.806	**0.827**	**Pk Hr Factor**			0.950	0.944	**0.940**
7 - 9 Volume	0	0	925	1251	**2176**	**4 - 6 Volume**	0	0	1494	1651	**3145**
7 - 9 Peak Hour			08:00	07:45	**07:45**	**4 - 6 Peak Hour**			16:45	17:00	**17:00**
7 - 9 Pk Volume	0	0	546	707	**1252**	**4 - 6 Pk Volume**	0	0	798	891	**1677**
Pk Hr Factor	0.000	0.000	0.892	0.893	**0.932**	**Pk Hr Factor**	0.000	0.000	0.950	0.944	**0.940**

APPENDIX B

SURVEY RESULTS

Monterey Road Survey Results		
Desired Outcomes		
	Description	**Average Result**
A	Improved Pedestrian-Safety and Comfort	3.0
D	No worsening of Congestion	4.5
B	Improved Handicapped-Accessibility	4.5
G	Enhanced Bicycle-Safety and Comfort	4.7
F	Reduced Auto Speeds	4.9
C	Reduced Auto Congestion	5.6
H	Improved Aesthetics	5.6
E	Ability to Drive the Corridor with Fewer Stops at Signals	6.5
K	Less "through" Auto Traffic (trips both starting and ending outside South Pasadena)	6.5
I	Retain Existing On-Street Parking Supply	8.1
J	Increase On-Street Parking Supply	9.7
Facility Preferences		
	Description	**Average Result**
A	Wider Sidewalks	2.2
C	ADA-compliant Curb Ramps	3.0
B	On-street Bicycle Lanes	3.6
G	Coordinated Signals	3.7
F	Enhanced Pedestrian Lighting	5.7
E	Decorative Treatments (e.g. stamped crosswalks, seasonal banner mounts)	5.9
D	Landscaped Median	6.3
H	More Street Trees	6.5

ATTACHMENT 4
Public Comments

Shin Furukawa

From: Kathleen Green <kegreen1@sbcglobal.net>
Sent: Tuesday, January 27, 2015 6:01 PM
To: Shin Furukawa
Subject: Re: Monterey Road Diet Study

Shin,
Thank you for this. One thing I don't understand is that the report suggests that there is currently no problem with the sidewalks. That's not true, of course, as the ADA issues with the sidewalks were the reason we started thinking of the redesign of the street to begin with. Where would the sidewalk obstructions get moved to in Option 1 and 2?

Another factor: while I think the temporary restriping to study the road diet is a good idea, it might not give a complete picture. I would imagine that it will take some time (and some educational programs and possibly even a bike giveaway akin to the low-flow toilet giveaways) to get students to bike to school. So if the time period of the temporary restriping didn't allow enough time for that to happen and a cultural shift to happen, then we wouldn't really know the full possibilities of the plan. Once the kids start biking to school, it should reduce the number of cars at peak times somewhat--probably significantly.

Finally, did they not consider the protected bike lanes at all? The ones like on Rosemead where they are physically separated from the cars? Or is that something that could be designed into it later? I was sad to see that wasn't really part of their vision, as I think that totally separate bike lanes would be key to getting the kids to use them and the parents to allow it.

Thanks again for keeping me posted on this issue.

Kathy Green

Shin Furukawa

From: Walter Okitsu KOA <wokitsu@koacorp.com>
Sent: Wednesday, January 28, 2015 12:39 AM
To: Shin Furukawa
Cc: Andy Au; plumbbusy@aol.com; dm-evans@pacbell.net; Glen Eddy; Jim Tavares; Judy Bergstresser; Patricia Wright; Sofronio Jack Abrera; Tom Afschar; Walter Okitsu KOA; Wes Reutimann; William Glauz; S.Brown@fehrandpeers.com
Subject: Re: Monterey Road Diet Study

The traffic study shows that the traffic flow would be extremely poor with a road diet. For example:

- Page 18: PM Peak Hour "After" Alternative #1 spillback queues for the eastbound direction stretch from Via del Rey across Orange Grove and across Indiana Avenue back to the Metro Gold Line crossing at Pasadena Avenue. A queue into the Metro Gold Line crossing is a deal-breaker. These queues have only a 5% probability of occurring, which sounds low, but that's a 1-in-20 chance of occurring. It would happen about once a month.
- Page 19: Currently it takes 6 minutes to drive eastbound from one end to the other in the morning. Under Option 1, it would take 16 minutes. Walking could be faster.

If despite these predicted results you proceed with a temporary road diet test, the test segment should stay well clear of the Metro Gold Line crossings at Pasadena Avenue, Indiana Avenue, and Orange Grove Avenue. No traffic queues should be allowed to extend through the railroad crossings. A road diet at Orange Grove Avenue could result in less gaps in traffic, making southbound left turns more difficult at this currently unsignalized intersection and increasng the chance of a queue backup to the tracks. A test road diet, if tried at all, should start at Glendon and extend eastward to Fremont.

Walter Okitsu
KOA Corporation
1100 Corporate Center Dr., Suite 201
Monterey Park, CA 91754
t: 323.859-3121
wokitsu@koacorp.com

Shin Furukawa

From: Andy Au <andyau8@gmail.com>
Sent: Friday, January 30, 2015 3:11 AM
To: Walter Okitsu KOA
Cc: Shin Furukawa; plumbbusy@aol.com; dm-evans@pacbell.net; Glen Eddy; Jim Tavares; Judy Bergstresser; Patricia Wright; Sofronio Jack Abrera; Tom Afschar; Walter Okitsu KOA; Wes Reutimann; William Glauz; S.Brown@fehrandpeers.com
Subject: STRIPE it and SYNCHRONIZE It ! South Pasadena Residents are the ones who matter. RE:Monterey Road Diet Study

South Pasadena Residents and Monterey Road end users,

I think the one thing that the commission agreed upon was that Monterey Road should benefit the residents of South Pasadena and what South Pasadena Residents would want in commuting traffic and neighborhood quality and small town feel.

As we all know and is indicated in the report, traffic during peak times is difficult. It would also be "difficult" with the option #1 road diet.

However, once the road diet is put in place, the Non-Residents of South Pasadena will have the choice and make a choice to find another way to traverse the City of South Pasadena, the choice might be Mission St. where the buses travel to traverse or to get over to Huntington Drive and avoid Monterey Road, freeing up space for South Pasadena residents.

Monterey Road, which is not intended as a major thoroughfare, but a minor arterial would then be a known quantity to non South Pasadena Residents as the "slow" street. Based on that, those commuter motorists who run through the City and make it "difficult" for the residents will find another way and go somewhere else. They have a choice.

South Pasadena Residents on the other hand, who do not have a choice, because we live within the city will continue to use Monterey Road because we have to, to get where we need and want to go: Schools and Work during the peak hours.

With the synchronization of the traffic lights, the traffic flow perspective will still be "slow and difficult" for the non South Pasadena commuting through motorists and they will find another way.

When they go away, it will no longer be "difficult" for South Pasadena residents, but actually complementary to the relaxed, leisurely feel, albeit 3 miles per hour slower that we all experience in other parts of the city and at off peak times.

It's important to remember that with the current configuration with 2 lanes each way, but no dedicated left turn lanes or right turn lanes at most intersections, as soon as someone decides to make a left turn or a right turn, we have a De Facto Option 1 Road Diet already.

Therefore there really aren't 2 lanes of free flowing traffic each way, but merely 1 that one can count on that moves from left to right in the void of anyone else making either a right or left turn in your way.

With the road diet, there is clearly and visibly one lane, but there will be left turn and right turn lanes that exit

from that one lane to keep that 1 lane moving and moves everyone else out of that one lane.

STRIPE IT and **SYNCHRONIZE** It !

The TRIAL Re-**Stripe** to one lane of Free Flowing Traffic and Left and Right Turn Lanes. **Synchronize** the signals so that the one free lane flows freely and efficiently.

Let the non South Pasadena residents who have a choice in figuring out how they will go from East to West and West to East decide hopefully that they don't like it and will go another way to get around Monterey Road, because it is not a "freeway" option anymore, but rather another "calming" pleasant residential neighborhood street in South Pasadena for South Pasadena residents to use and enjoy.

Let's Do this Thing !

Just make sure the Trial Re-striping and evaluation is during the School Year and not during any break periods, which are anomalies of the 365 days a year.

I believe there are 170 days of instruction in the SPUSD based on California state education requirements.

Be sure to evaluate the road conditions on those days, the ones that matter to the South Pasadena Residents. The school district can provide the calendar to the next consultants.

Other Input and Comments are welcome.

Thank you,

Andy Au

GLyndonyate Neighborhood Council @ the Cross Streets of and affected by Monterey Road and Meridian road use.

****
****

Some highlights I found in the Report:

average increase in delays by 36% and a **4-MPH decrease in travel speeds**

The nearest **Metro Bus**
Route, Line 176, traverses east/west through the City along **Pasadena Avenue and Mission Street** and connecting the neighboring Cities of Los Angeles/Highland Park and San Marino.

De-facto right-turn lane movements at intersections were
generally excluded from the traffic operations model unless a significant portion of turning vehicles were observed to use the shoulder as an unmarked turning lane; for example,

eastbound right-turns from Monterey Road onto Fair Oaks Avenue.

Conclusions and Recommendations

Based on the results of a comprehensive data collection effort and traffic model simulation analysis of the Monterey Road corridor, Minagar & Associates, Inc. concludes that a three-lane cross-section road diet concept could function properly on this portion of Monterey Road, if implemented properly. While the arterial performance of the corridor (i.e., travel time, delay, speed) would be substantially diminished in the peak hour with the removal of a through lane in each direction, the average observed queue lengths of additional vehicles stacking at each signalized intersections were not shown to reach upstream intersections or exceed the available lane capacity.

Whether a road diet configuration on Monterey Road is acceptable to the City of South Pasadena would be dependent on several factors, two of the most important being: (1) that if a road diet is implemented, then peak period traffic signal timing plans at each **signalized intersections** affected by changes in traffic patterns and demands should also be **revised and optimized**; and (2) that the resulting increases in peak hour travel time and delays, and decreases in arterial travel speeds are found to be an acceptable tradeoff by the City in light of the converse benefits provided by the road diet (e.g., **increased safety, improved bicycle access, protected on-street parking lanes, reduction in left turn gaps at mid-block locations,** etc.).

Several factors were considered in the analysis, including: the **residential character of the street;** the driveway density along Monterey Road; the City of South Pasadena's vision and current plans for a dedicated bicycle connection between the west and east ends of Monterey Road within the city; the need for improved pedestrian facilities; the available paved roadway width along Monterey Road; the location and operational characteristics of intersections; and a comprehensive analysis of field-collected traffic and roadway data. On one hand, many of these baseline traffic and roadway characteristics appear to support the conversion. **Numerous residential driveways with access to both single-family homes and apartment complexes abut the north and south sides of Monterey Road throughout the segment.** And in several cases, field staff noted that the inside lane often served as a **de-facto turning lane** for motorists accessing these properties, which resulted in **temporary traffic back-ups** when peak hour through traffic volumes were large and less maneuverable.

In addition, Monterey Road is **neither a designated truck route nor transit route**, and is therefore not as susceptible to the frequent stopping and queue building of large, slow-moving vehicles on similar types of three-lane streets. Past research and case studies documented by the Federal Highway Administration (FHWA) also show that roadways with an ADT of less than 20,000 are likely to be good candidates for a road diet, and that road diets implemented on streets with 15,000 ADT or less have demonstrated very good results in the areas of safety, operations, and livability. The current average daily traffic (ADT) on Monterey Road is about 15,700 vehicles per day, which may indicate that the road diet concept could work from a traffic volume perspective. Other studies, however, have suggested that urban streets with high bi-directional traffic volumes (i.e., in excess of 1,750 vehicles during the peak hour) are likely to experience a reduction in arterial level of service with the implementation of a road diet, and should be

analyzed in closer detail to determine if such a four-lane undivided to three-lane conversion is appropriate. Minagar & Associates, Inc.'s estimate of bi-directional peak hour volumes (PHV) on Monterey Road shows that the AM, mid-day and PM PHV ranges between 1,500 and 3,400

vehicles in both directions, which would suggest a probable decrease in arterial performance. The results of the traffic model and microsimulation analysis runs support this peak hour principle, in that the corridor travel times, delays and speeds on Monterey Road are all expected to worsen with the removal of an eastbound and westbound lane. Considering both lines of reasoning, the City should weigh the advantages and disadvantages of all alternatives, including the option to not construct any type of road diet improvement, and/or to explore other minor improvements or traffic calming measures at specific locations along the corridor. A summary of advantages and disadvantages of each scenario is provided below.

Comments on Monterey Road Diet Study

The study concludes that traffic would be significantly slowed by the removal of one lane in each direction. It now becomes clear that the decision here is a trade-off between the smooth flow of traffic during peak hours and the ability to make the street more friendly to bike riders and pedestrians, and reduce accidents (although how many accidents are we talking about?) As far as I'm concerned, the decision should fall on the side of the smooth flow of traffic. Should thousands of drivers each day be significantly inconvenienced to benefit a few bike riders and pedestrians? I don't think so.

Part of the City's General Plan is to reduce traffic congestion. The City also favors a multi-mode/low-build concept in lieu of the 710 freeway. Reducing the flow of traffic on Monterey would increase congestion, which seems counter to what the City needs and what the General Plan envisions. How can we seriously oppose the freeway if we're doing things that make the City more difficult to navigate? At a time when stress and road rage are on the rise, why would we want to do something that will contribute to them for many drivers? Another part of the General Plan is to manage "pass through" trips so that the travel is on designated routes and does not infiltrate residential neighborhoods. Making Monterey more congested will do the opposite: it will send people to alternative routes through residential neighborhoods.

The City needs to weigh the benefits and burdens of the road-diet proposals. I believe the burdens clearly outweigh the benefits for most of the citizens. Most people I talk to about the road-diet plan are dumbfounded that it would even be proposed. The burden should be on the city to prove that this is a good idea that will benefit most of the population. Because the City cannot meet that burden, the road-diet proposals should be abandoned.

Clearly, reducing the number of lanes of traffic on Monterey would increase trafficon other street. You don't need a study to tell you that it would affect Fair Oaks and Fremont, and all the other streets that feed in and out of Monterey. It can't help but affect El Centro and Mission streets. That should be obvious.

It is one of the City's goals to "reduce reliance on the automobile." I question whether that is a realistic goal. In any case, removing lanes from Monterey will not accomplish that goal. People who need to get to and from the shopping areas of South Pasadena will not switch to walking, biking, or taking the bus. They will simply take other routes, increasing congestion on other streets. I live in the southern part of town. If it becomes too difficult for me to reach Vons or Pavilions, let alone Bristol Farms, I may shop more in Alhambra. People who need to get to and from Highland Park or the 110 will be seriously inconvenienced. A few more people may take the Gold Line, but not many. It seems that the way to promote alternative modes of transportation is to promote their benefit. But creating traffic jams and increasing driver frustration is not an appropriate way to try to get people to drive less. We already have enough traffic jams on Monterey, Fair Oaks, and Mission.

I'm not sure how a dedicated left-turn lane would change much for those of us who make left turns from Monterey, unless there was a traffic light with a left-turn arrow. To a driver turning left, it doesn't matter whether he waits in the left lane or a dedicated lane. But with a dedicated lane, and the removal of a traffic lane, everyone will be slowed down. Under the present situation, once a driver turns left, the left lane is open for through traffic. If there were a dedicated turn lane, there would only be one through-traffic lane at all times.

I oppose doing a "trial run," because trial runs have a way of turning into permanent changes through inertia, apathy, and other factors. These road-diet proposals are bad ideas and they should go no further.

A few specific comments about the study:

I'm concerned about some of the language used, which appears biased. From the beginning, the study says that the "City has expressed its desire to redesign Monterey Road." This is a controversial issue. The "City" should not be expressing any "desire," but should simply be seeking information. Words like making the street "less auto-centric" and "livable" are loaded terms about which people disagree. My life and the lives of most citizens are "livable" with Monterey Road just as it is. I question whether such language should appear in a study like this, and I wonder who is responsible for putting such language in the report.

Regarding the "Monterey Road Committee," the study seems to gloss over my understanding that 50% of the committee voted to make no changes to Monterey Road. The report refers to "mixed unanimity," a term that I've never heard before. The fact is there was a 50/50 split in the committee. The committee was selected mostly from people who live or own businesses on Monterey, or live nearby. Many members of the committee had specific concerns and agendas that did not take into account the impact on the whole town. In short, the committee was not a cross-section of the population. I believe a city-wide poll would reveal far greater than 50% opposition to making any changes that would slow traffic further. On page 12, the study refers to eight recommendations of the Monterey Road Committee, but that appears to be a distortion if you consider that 50% of the committee recommended no changes. It's not clear what percentage of the committee members supported these "recommendations."

It should be clear that the study is merely providing information, and is not making recommendations one way or the other. On page 3 of the study, the consultant states that it recommends that a trial road diet be considered before considering a complete redesign of the street, but it does not conclude that the street should be redesigned. On page 20, the report raises the question whether a road diet configuration is acceptable to the City at all. Whether it's acceptable at all is the heart of the question.

The study notes at page 6 that Mission Street and El Centro Street are alternative bike routes to Monterey. Bikes have these ways of getting across town already. Monterey is not essential for bicycles.

Gold line. I understand that once the Gold Line is completed to Claremont, train traffic will increase. Did the study account for the Gold Line putting greater pressure on traffic than there is now?

These are my initial reactions to the road-diet study.

Ron Rosen
901 Wolford Lane
ronsopas@earthlink.net

Questions for the Monterey Road Consultant

1. Is there any doubt that in addition to traffic being slowed on Monterey, a road diet would increase traffic surrounding streets, including Fremont and Fair Oaks.

2. Did the study factor in increases in Gold Line frequency that are expected.

3. Do you really think people will drive automobiles less if there is a road diet on Monterey, or will they simply take alternative routes.

4. What is really the point of Alternative 2? Will it really change things much for bike riders and pedestrians?

5. In your experience, how often, once a trial run is undertaken, is a proposal abandoned?

ITEM 7B
Designation of Commission Secretary

City of South Pasadena
Public Works Commission
Agenda Report

COMMISSION AGENDA: February 11, 2015

TO: Public Works Commission

FROM: Shin Furukawa, P.E., Deputy Public Works Director

SUBJECT: **Designation of Commission Secretary**

Recommendation
Staff recommends the Commission designate a secretary for 2015.

Fiscal Impact
There is no fiscal impact associated with this item.

Background
Section 2.31 of the South Pasadena Municipal Code requires that all boards and commissions shall select their officers at their first regular meeting after January 1st of each year to serve one year terms coinciding with the calendar year.

At the January 11, 2015 Public Works Commission meeting, Clint Granath was elected chair of the Commission and John Fisher was elected vice-chair. The Commission did not select a secretary, as there were questions on the duties and purview of the position. Currently, staff liaison Leaonna Dewitt serves as the secretary.

One possibility raised during the January 11, 2015 meeting was whether one of the Commissioners could serve as secretary and still continue to have the staff liaison prepare the minutes. The question was raised whether the secretary could review the draft minutes and distribute them with comments to the rest of the Commission before the next meeting, or whether that would violate the Brown Act by constituting a serial meeting. Staff was requested to consult the City Attorney.

Analysis
The City Attorney has opined that the distribution of comments on draft minutes amongst the Commission outside of a meeting would indeed be a violation of the Brown Act. However, the City Attorney indicated the draft minutes could be reviewed by the secretary, and those comments could be incorporated into the agenda packet that is sent out to the entire Commission prior to the meeting.

Legal Review
The City Attorney has reviewed this matter.

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 on the City's website.

ITEM 7C
Capital Improvement Project Update

MONTHLY CONSTRUCTION PROGRESS REPORT February 2015
CITY OF SOUTH PASADENA
PUBLIC WORKS DEPARTMENT

Foothill St., Mission St., & San Pasqual Ave. Street Improvement Project

Scope:
The work consists of cold milling of existing pavement, placement of AC leveling course and cap, installation of Petromat, removal and replacement of curb and gutter, reconnection of curb drains, open trench spot repairs of sewer, water improvements, removal of and replacement of damaged sidewalk and driveways, removal and replacement of water services, water line fittings, and fire hydrants.

Details:

Bid Amount:	$ 786,272
Amended Amount:	$ 321,130
Extra Work to Date:	$ 2,459
% Change to Contract:	0.22%
Total Contract Amount:	$1,107,402
Construction Start:	Sept. 29, 2014
Duration:	150 Cal. Days
Orig. Completion Date:	Dec. 28, 2014
Est. Completion Date:	April 14, 2015
Est. Percent Complete:	40%

Status:
This week, the contractor will complete all concrete work on Foothill Street, Mission Street, and San Pasqual Avenue. Currently, the contractor is working on additional water improvements on Mission Street from Marengo Avenue to Montrose Avenue that was approved on January 7, 2015 City Council meeting. In March 2015, the contractor will begin grinding and paving the streets.

MONTHLY CONSTRUCTION PROGRESS REPORT February 2015
CITY OF SOUTH PASADENA
PUBLIC WORKS DEPARTMENT

Sewer Rehabilitation and Replacement Project, Phase 1

Scope:

This project involves 64,000 LF of sewer line repairs citywide, primarily by CIPP lining. The project will address 230 sewer segments rated as highest priority repair. The project website can be found at www.southpasdenaca.gov/sewerproject. This project is being constructed by Sancon Engineering and inspection and construction management is being provided by Valley Construction Management.

Details:

Bid Amount:	$3,147,209
Extra Work to Date:	$0
% Change to Contract:	0%
Total Contract Amount:	$3,147,209
Construction Start:	Oct. 27, 2014
Duration:	300 Cal. Days
Orig. Completion Date:	Aug. 23, 2015
Est. Completion Date:	Aug. 23, 2015
Est. Percent Complete:	20%

Status:

Contracts for the various consultants were awarded at the October 1, 2014 City Council meeting. A community meeting was held on October 7, 2014, and a pre-construction meeting was conducted on October 14th. Construction commenced on October 27, 2014 with sewer cleaning and videoing operations in the northwest quadrant of the City. The sewer cleaning and videoing of the northwest, northeast and southeast quadrants are substantially complete and the sewer cleaning and videoing is currently being performed in the southwest quadrant. CIPP lining work is substantially complete in the northwest quadrant and lining work is currently taking place in the northeast quadrant. Open trench work is currently occurring primarily in the southwest quadrant.

December 30, 2014

Department of Public Works
1414 Mission St
South Pasadena, CA 91030

To Whom It May Concern:

On December 11, 2014, our street (the 1000 block of Indiana Ave) had sewer lining installed. Although it was a minor inconvenience to not use our drains for part of the day, we are very glad that the city is maintaining our infrastructure.

The job seemed to go smoothly and our service was back to normal in a reasonable amount of time. We would especially like to comment on the work crew. Their behavior was professional. They politely answered our questions about cured-in-place pipe lining.

The inspector Chris Marquardt was helpful in answering more of our questions and even provided us with a photo of the lateral outlet in front of our house.

This company was a positive contrast from past contractors. We hope that future contractors serve our city as professionally and politely as this company.

Sincerely,

Karen & Alan Weinberger

Karen & Alan Weinberger
1020 Indiana Ave
South Pasadena, CA 91030

To : **City of So. Pasadena**

From : **Toby / 62 year resident / 1636 Meridian Ave.**

Date : **January 30, 2015**

Re : **Recent repairs to sewer on Meridian Ave.**

Dear City of South Pasadena,

Recently you have replaced the sewer on Meridian Ave starting at Breawood Ct. and continuing south to Oak St. and beyond. Thank you for the repair. During times of heavy rain years past I have personally witnesses the sewer backing up and gushing out raw sewage and bugs from the man hole covers.

This was a much needed task and it's great to see my tax dollars at work. I just wanted to complement you on a great job. And that construction co. I don't know where you found them but don't loose them, they are the Best. That is one construction co. that has their act together.

Thank you.

Toby

Toby

P. O. Box 3393
So. Pasadena
CA, 91031

818 - 398 - 4914 cell
323 - 255 - 8782 land line

MONTHLY CONSTRUCTION PROGRESS REPORT February 2015
CITY OF SOUTH PASADENA
PUBLIC WORKS DEPARTMENT

FY 2014-15 CDBG Sidewalk Project

Scope:
This project involves localized repair of 12,100 SF of damaged sidewalks on Fair Oaks Ave. (Maple St. to Alhambra Rd.), Primrose Ave. (Maple St. to Alhambra Rd.) and La Fremontia (entire length). This project is funded primarily by CDBG funds.

Details:

Bid Amount:	$124,285
Extra Work to Date:	$0
% Change to Contract:	0%
Total Contract Amount:	$124,285
Construction Start:	Feb. 4, 2015
Duration:	45 Cal. Days
Orig. Completion Date:	Mar. 18, 2015
Est. Completion Date:	Feb. 27, 2015
Est. Percent Complete:	5%

Status:
The project was awarded on January 21, 2015 and began construction on February 4, 2015. Work started on La Fremontia and is moving eastward.

MONTHLY CONSTRUCTION PROGRESS REPORT February 2015
CITY OF SOUTH PASADENA
PUBLIC WORKS DEPARTMENT

Wilson Reservoir Replacement Project

Scope:

When completed the Wilson Reservoir Replacement Project will consist of the following improvements:

1. A new 1.3 million gallon tank constructed with cast in place concrete.
2. A concrete clearwell.
3. Upgraded groundwater extraction well facilities using state of the art pumps.
4. A hypochlorite generation system to replace the existing chlorination system.
5. A new booster pumping station along with a new operations building for staff, and a new building to house all the control systems for the project.
6. Inclusion of drought tolerant landscaping, irrigation and site improvements.

Details:

Original Contract Amount:	$7,869,900.00
Amendment #1 (SCADA)	$112,366.00
Extra Work to Date:	$185,706.76
Total Contract Amount:	$8,167,972.70
Construction Start:	12/03/2012
Duration:	720 Cal. Days
Orig. Completion Date:	11/23/2014
Est. Completion Date:	2/18/15
Est. Percent Complete:	99.8%

Status:

On January 21st, 2015, a final walkthrough of the project was conducted. Of the 83 punch list items, only 6 remained uncompleted to the satisfaction of the City. As such, the City deemed that the project was substantially complete and the contractor agreed to complete the last remaining items, all of which were very minor in scope within the next 10 days. Once the items have been completed, the project will be scheduled for the City Council meeting on February 18th for approval of the Notice of Completion.