

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

RTIP ID# LAS14C011									
TCWG Consideration Date October 27, 2016									
Project Description <i>(clearly describe project)</i> This Safe Routes to School project will provide neighborhood friendly pedestrian and bicycle linkages along several streets serving Menlo Elementary and West Vernon Elementary School in the South Los Angeles community within the City of Los Angeles (see Project Site Maps). This analysis was initiated as result of a scope change to upgrade two rectangular rapid flashing beacons (RRFBs) to full signals. The signal at 43 rd St and Figueroa St was part of the original scope of work and had received environmental clearance. We included it in this analysis to provide an overall Level of Service of all signals that are within the project limits.									
Type of Project <i>(use Table 1 on instruction sheet)</i> Intersection Signalization									
County Los Angeles	Narrative Location/Route & Postmiles: 41 st St at Hoover St, 41 st Dr at Vermont Av, 43 rd St at Figueroa St Caltrans Projects – EA# LAS14C011 ATPL-5006(799)								
Lead Agency: City of Los Angeles Department of Transportation									
Contact Person Garland Seto	Phone# (213) 972-4961	Fax# Garland.Seto@lacity.org	Email						
Hot Spot Pollutant of Concern <i>(check one or both)</i> PM2.5 <input checked="" type="checkbox"/> PM10 <input checked="" type="checkbox"/>									
Federal Action for which Project-Level PM Conformity is Needed <i>(check appropriate box)</i>									
<input checked="" type="checkbox"/>	Categorical Exclusion (NEPA)	<input type="checkbox"/>	EA or Draft EIS	<input type="checkbox"/>	FONSI or Final EIS	<input type="checkbox"/>	PS&E or Construction	<input type="checkbox"/>	Other
Scheduled Date of Federal Action:									
NEPA Assignment – Project Type <i>(check appropriate box)</i>									
<input type="checkbox"/>		<input checked="" type="checkbox"/>		<input type="checkbox"/>					
Exempt		Section 326 –Categorical Exemption		Section 327 – Non-Categorical Exemption					
Current Programming Dates <i>(as appropriate)</i>									
	PE/Environmental	ENG	ROW	CON					
Start	2015	2016	N/A	2018					
End	2016	2017	N/A	2019					

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*

The purpose of this Safe Routes to School project is to provide neighborhood friendly pedestrian and bicycle linkages along several streets serving Menlo Elementary School and West Vernon Elementary School in the South Los Angeles community within the City of Los Angeles (see Project Site Maps). The original project had obtained environmental clearance for project elements which included a traffic signal (43rd St and Figueroa St), rectangular rapid flashing beacons (RRFBs), curb extensions, speed humps, sidewalk and curb-ramp upgrades and repairs, bicycle lanes and edge line striping treatments. This analysis was initiated as result of a scope change to upgrade two previously approved (RRFBs) to full signals.

Upon the design of the RRFB's, it was determined that due to the proximity of the locations of these RRFB's to the neighboring schools, and after satisfying the appropriate MUTCD Warrants, a full traffic signal was a more appropriate and safer traffic control measure.

We anticipate a reduction in vehicle speeds and the number of severe collisions with the installation of the traffic signals. The traffic signals will be part of the City of Los Angeles Automated Traffic Signal and Control System (ATSAC). Inductive loop detectors embedded in the roadways will be able to report vehicle presence and real time vehicle volume data to the ATSAC system. The system can make adjustments to the signal timing based on the traffic demands to improve the traffic flow.

We hope an added benefit of the improved bicycle network and school route will be an increase in outdoor physical activities that will improve the health and enjoyment of the community for the residents in the area. We anticipate that there will be an increase in walking and bicycling and positive benefits due to the upgrade traffic measures.

We do not anticipate a significant increase in vehicle trips or start/stop traffic. Level Of Service (LOS) analysis for the opening year 2018 No Build vs Build scenarios indicate improved LOS at all three of the proposed locations. 2040 RTP Horizon year Build and No Build scenarios also indicate improved LOS at all three of the proposed locations.

We do not believe these to be significant traffic or environmental impacts.

(See attached Traffic Volume Data Summary Table)

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

The project is located in a predominately residential neighborhood with some retail components near the major intersections. We do not anticipate additional vehicle trips to be generated.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

(See attached Traffic Volume Data Summary Table)

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

(See attached Traffic Volume Data Summary Table)

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

(See attached Traffic Volume Data Summary Table)

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

(See attached Traffic Volume Data Summary Table)

Describe potential traffic redistribution effects of congestion relief (*impact on other facilities*)

We do not anticipate a significant redistribution effect due to the propose traffic signals. The proposed signal locations are along the primary arterials in the area. Vehicles that are currently using these routes would most like continue to do so. The traffic signal would help the side street vehicles find gaps to cross or enter the arterial. There might be a redistribution of pedestrians or bicyclist to use the signalized locations versus any unmarked crosswalks or unsignalized intersections. This should not create any significant traffic or environmental impacts.

Comments/Explanation/Details (*attach additional sheets as necessary*)

This is a Safe Routes to School project to provide pedestrian and bicycle friendly routes serving the elementary schools in this area. The project elements include rectangular rapid flashing beacons (RRFBs) which were previously approved. During the design phase, it was determined that due to the proximity of the locations of these RRFB's to the neighboring schools, and after satisfying the appropriate MUTCD Warrants, a full traffic signal was a more appropriate and safer traffic control measure.

The proposed signal locations are located in a predominately residential neighborhood with some retail and commercial uses at the major intersections. We do not anticipate a significant increase in vehicle trips or start/stop traffic. Level Of Service (LOS) analysis for year 2018 No Build vs Build scenarios indicate improved LOS at all three of the proposed locations. 2040 RTP Horizon year Build and No Build scenarios also indicate improved LOS at all three of the proposed locations.

We believe this project will improve the safety at the intersections. It will provide traffic control to the intersection and assign right of way based on vehicle demand. We do not believe this project will have a significant impact on traffic or to the environment.

**PM Conformity Hot Spot Analysis
Menlo ES and West Vernon ES
Traffic Volume Data and LOS Summary Table**

Opening Year 2018 NO Build	Eastbound					Westbound					Northbound					Southbound					Intersection Totals			Intersection	
	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	Total Intersection AADT	Total Intersection Truck AADT	Total Intersection % Trucks	LOS (AM)	LOS (PM)
Intersection																									
W. 41st St at S. Hoover St	150	0	375	0.0%	0	246	0	615	0.0%	0	3157	1	7893	0.0%	1	2071	0	5178	0.0%	0	14060	1	0.0%	A	A
W. 41st Dr at Vermont Av	n/a	n/a	n/a	n/a	n/a	168	0	420	0.0%	0	4884	135	12210	2.8%	169	5414	127	13535	2.3%	159	26165	328	1.3%	A	B
W. 43rd St at S. Figueroa St	234	1	585	0.4%	1	337	0	843	0.0%	0	6913	41	17283	0.6%	51	5103	81	12758	1.6%	101	31468	154	0.5%	B	A

Opening Year 2018 Build	Eastbound					Westbound					Northbound					Southbound					Intersection Totals			Intersection	
	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	Total Intersection AADT	Total Intersection Truck AADT	Total Intersection % Trucks	LOS (AM)	LOS (PM)
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RTP Year 2040 NO Build	Eastbound					Westbound					Northbound					Southbound					Intersection Totals			Intersection	
	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	Total Intersection AADT	Total Intersection Truck AADT	Total Intersection % Trucks	LOS (AM)	LOS (PM)
Intersection																									
W. 41st St at S. Hoover St	187	0	468	0.0%	0	307	0	768	0.0%	0	3930	1	9825	0.0%	1	2578	0	6445	0.0%	0	17505	1	0.0%	B	A
W. 41st Dr at Vermont Av	n/a	n/a	n/a	n/a	n/a	210	0	525	0.0%	0	6080	167	15200	2.7%	209	6739	158	16848	2.3%	198	32573	406	1.2%	A	C
W. 43rd St at S. Figueroa St	292	1	730	0.3%	1	420	0	1050	0.0%	0	8604	51	21510	0.6%	64	6351	101	15878	1.6%	126	39168	191	0.5%	C	A

RTP Year 2040 Build	Eastbound					Westbound					Northbound					Southbound					Intersection Totals			Intersection	
	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	6 hour vehicle count	Trucks in 6 hours	AAADT	% Trucks	Truck AADT	Total Intersection AADT	Total Intersection Truck AADT	Total Intersection % Trucks	LOS (AM)	LOS (PM)
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A 1% ambient growth rate typical for this area was applied to project 2018 and 2040 vehicle and truck volumes.
6 hour vehicle volumes were multiplied by a factor of 2.5 to project vehicle AADT
6 hour truck volumes were multiplied by a factor of 1.25 to project truck AADT

Project Site Maps



LEGEND

- 

Target Schools

1 - Menlo Elementary School

2 - West Vernon Elementary School
- 

Regional Park

1 - Exposition Park

2 - Vermont Square Park
- 

Major Attractions

1 - University of Southern California
- 

Metro Rail

Crenshaw Line (Future)
- 

Expo Line
- 

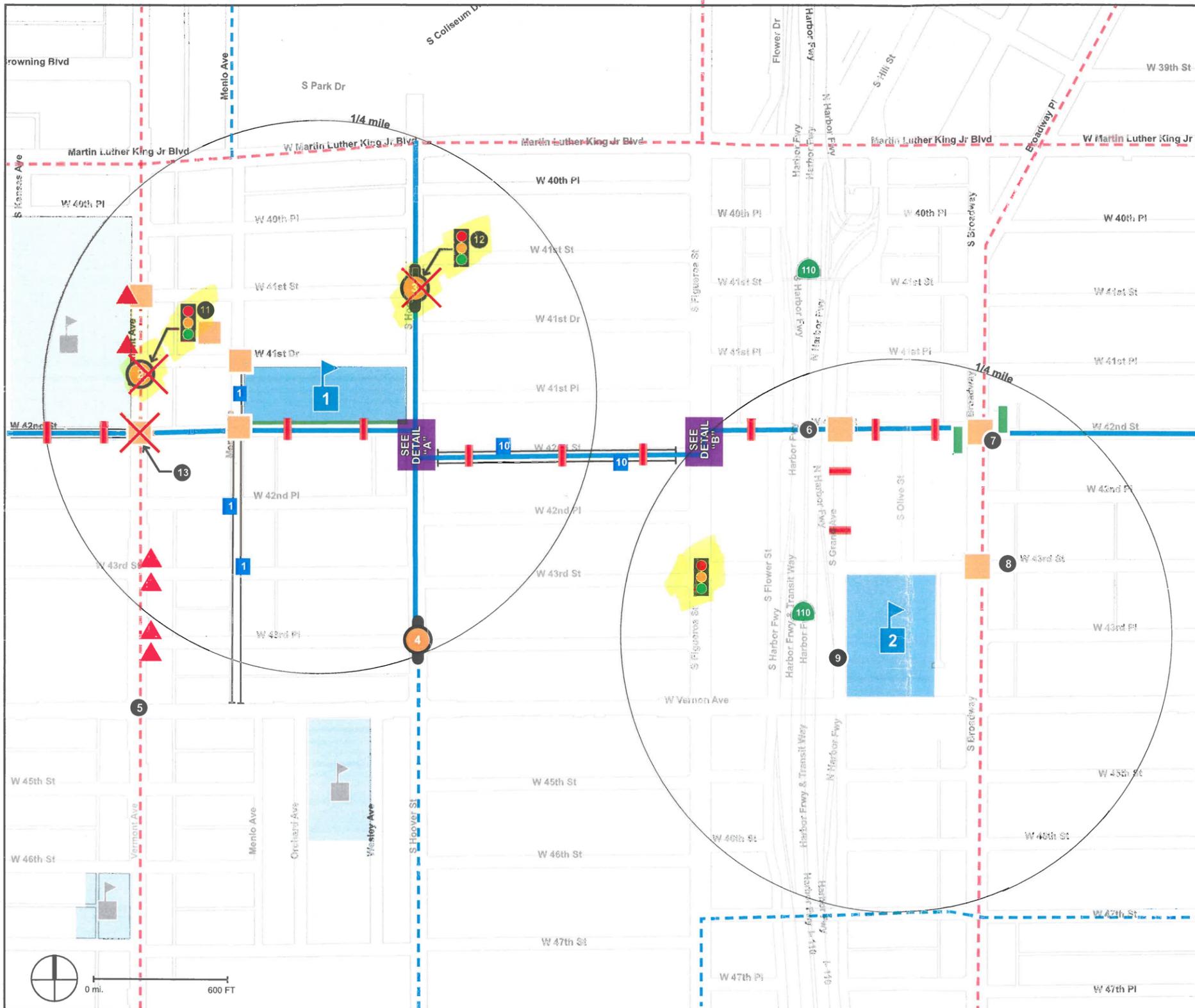
Blue Line
- 

Highway

MENLO AVENUE ES &
WEST VERNON ES
South Los Angeles

**2014 ATP SRTS
Infrastructure Improvements
Exhibit A: Project Location**





- ### COUNTERMEASURES
- Curb Extensions (see attached photos)
 - Speed Humps
 - Street Trees
 - Curb Ramp Repair/Installation
 - RRFB
 - RRFB w/ Raised Median Noses
 - New Signal (access ramp upgrade required)
 - Bike Boxes
 - Edgeline Treatment
 - See Detail

STANDARD TREATMENTS for PROJECT AREA

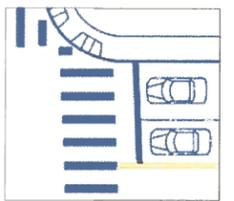
(Not shown on map. Refer to detailed cost estimate.)

Continental Crosswalk w/ Limit Line

- upgrade all crosswalks designated as "school" crossings per MUTCD to new city standard



- upgrade all existing marked crosswalks along the Project Focus BFS to new city std



11 7 OTHER NOTES

- 1 - Edgeline Treatment
- 2 - RRFB with curb extensions
- 3 - RRFB with curb extensions
- 4 - RRFB with curb extensions
- 5 - Add Left Turn Phasing
- 6 - Stripe bike lanes w/ buffer and add center line (over bridge only)
- 7 - Add opposed phasing
- 8 - Relocate ex. crossing guard to here (school administration suggestion)
- 9 - Add lane striping and paint 110 FWY symbol onto pavement to differentiate between NB through lane and 110 FWY access
- 10 - Edgeline Treatment
- 11 - New signal w/ curb extensions
- 12 - New signal w/ curb extensions and median islands
- 13 - 2 curb extensions relocated to 41st Dr. & Vermont Ave.

Sharrows

- install sharrow markings per city standard along lengths of Bicycle Friendly Street network within project area and connecting to nearest existing or planned bicycle facility



Embedded Bicycle Loop Detectors

- install where Project Focus BFS intersects with arterial



ATP PROJECT FOCUS

- Project Focus Bicycle Friendly Street (BFS)
- Target Schools
 - 1 - Menlo ES
 - 2 - West Vern ES

FOR REFERENCE ONLY

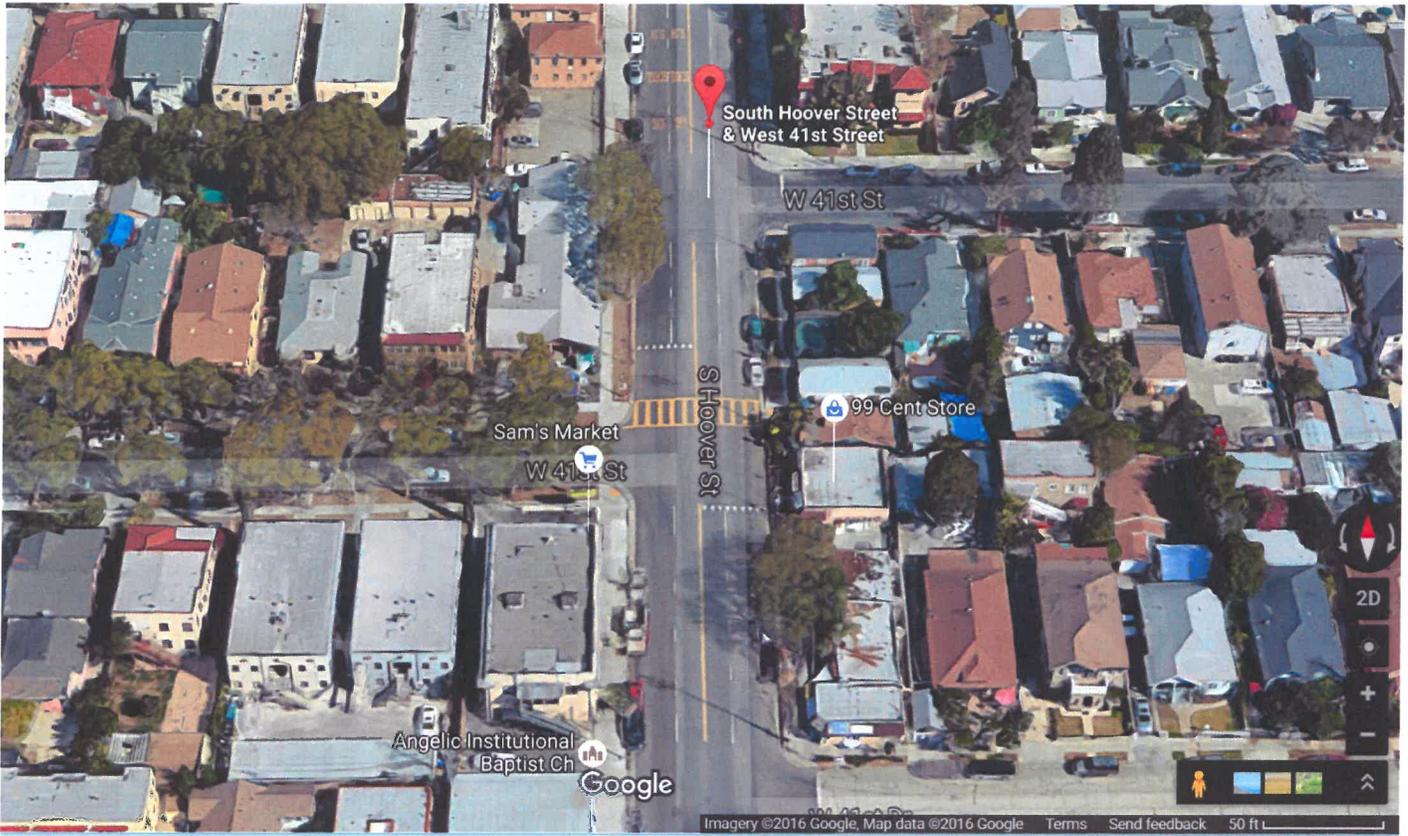
- Other Area Schools
- Public Park or Open Space
- Freeways
- 2010 Bicycle Plan
 - Existing Bicycle Friendly Street
 - Proposed Bicycle Friendly Street
 - Existing Class II (Lanes)
 - Proposed Class II (Lanes)

MENLO ES &
WEST VERNON ES
South Los Angeles

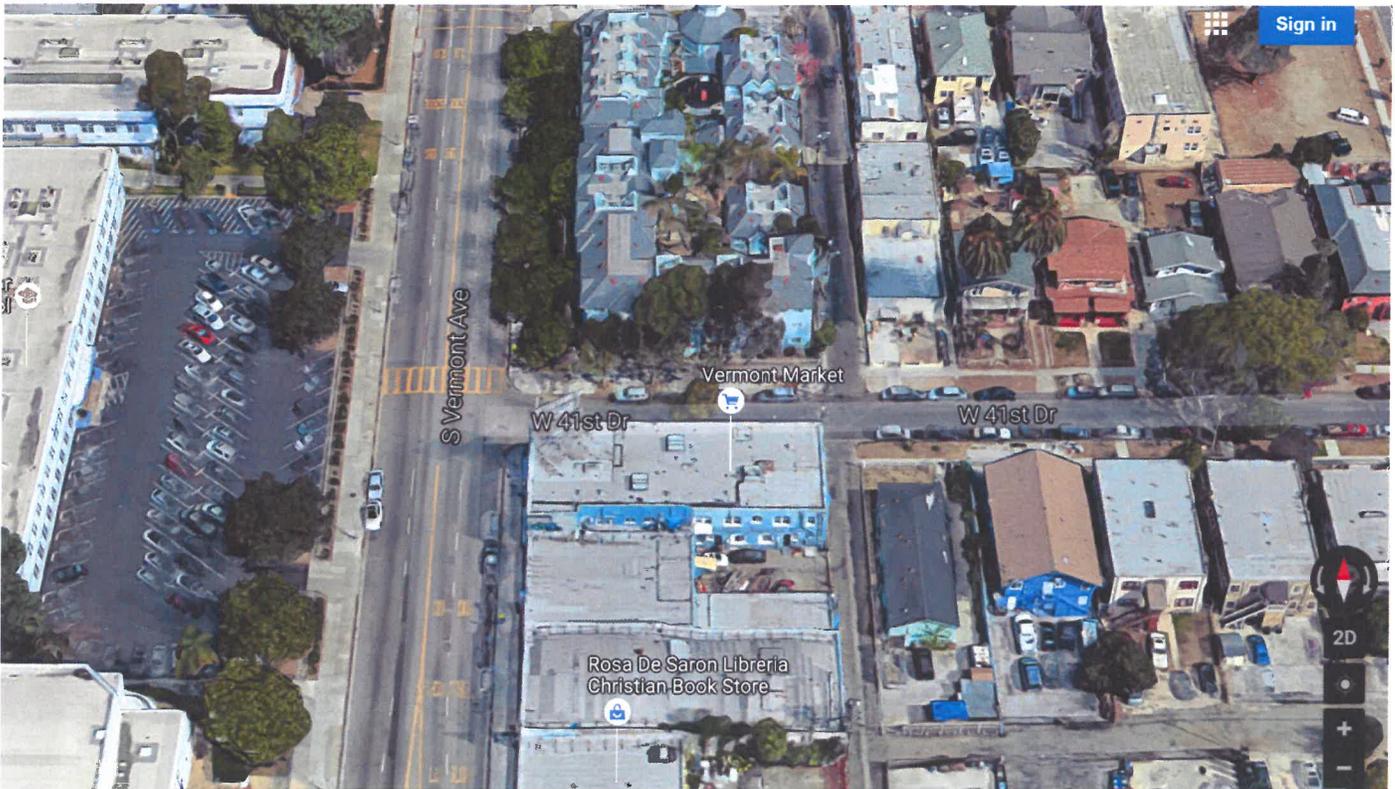
2014 ATP SRTS
Infrastructure Improvements
Exhibit D: Countermeasures Map

Revised 09/15/2016



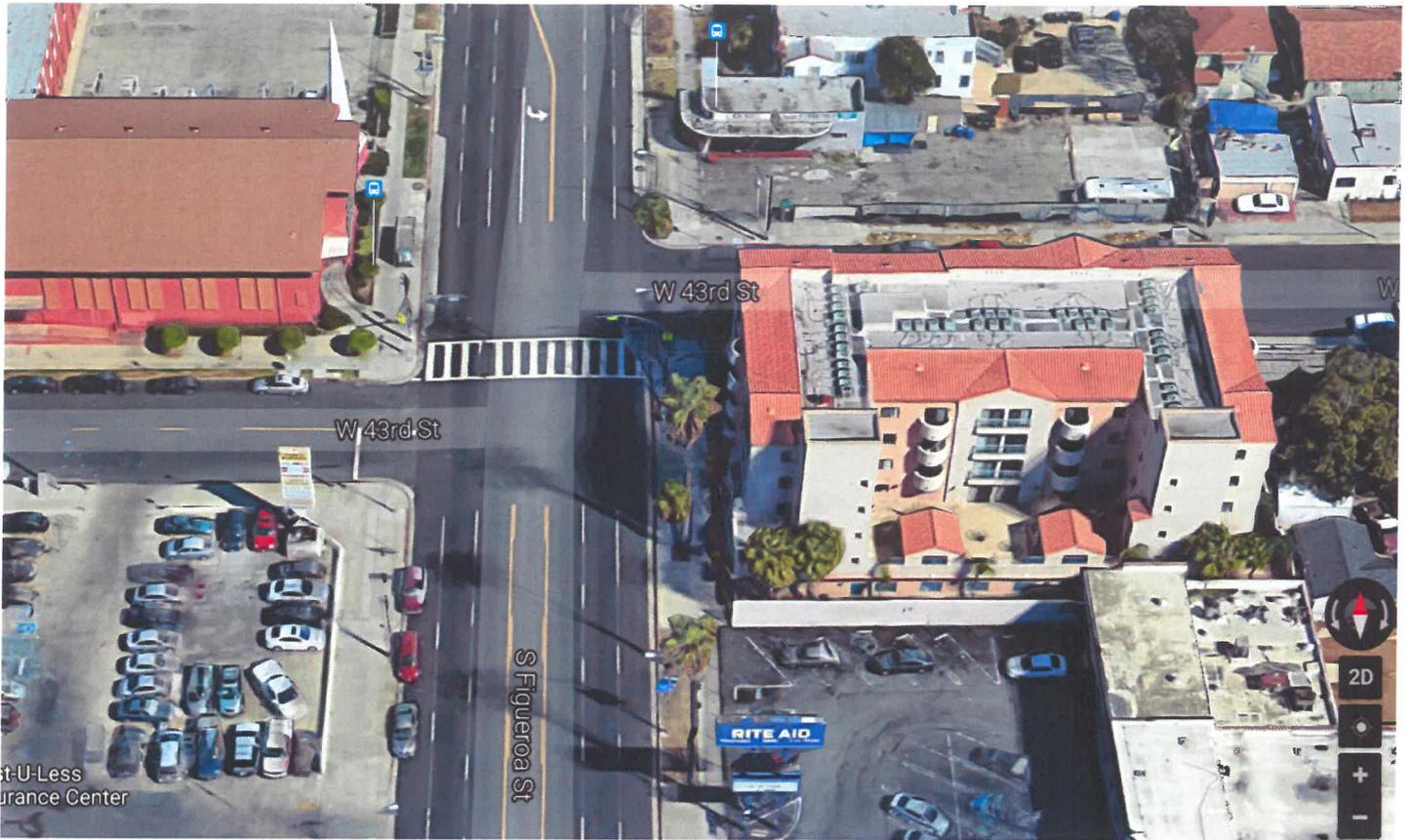


41st St and Hoover St



41st Dr and Vermont Av

Menlo ES and West Vernon ES



43rd St and Figueroa St

Menlo ES and West Vernon ES