

Spring Street

Traffic Safety Improvement Options

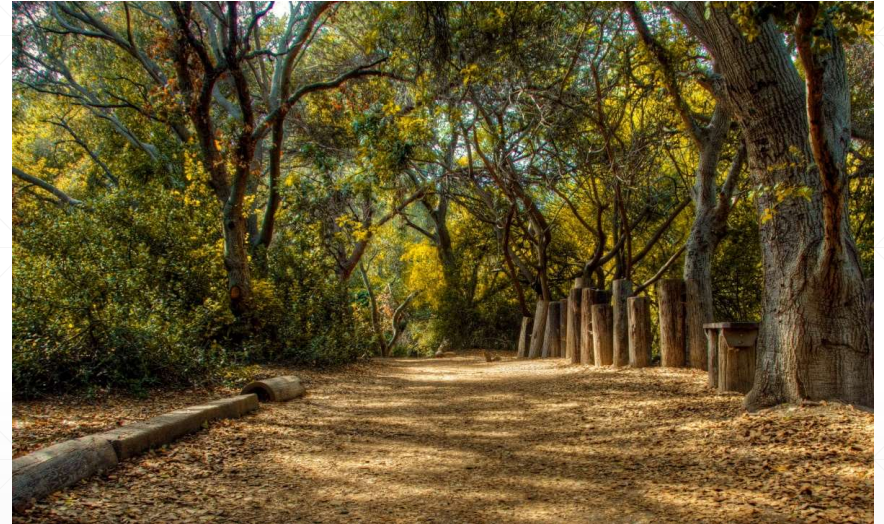
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Agenda & Housekeeping

- Welcome & Introductions
- Community Requested Traffic Improvement Goals
- Spring Street Community Outreach Timeline
- Methods to Reduce Excessive Speeding
- Traffic Analysis & Existing Conditions
- Corridor Options & Potential Solutions
- Regional Requirements & Evaluations
- Questions & Answers

Community Requested Traffic Improvement Goals

- Reduce amount of drivers traveling at excessive speed (5+ mph over speed limit)
- Ensure negligible impacts to responsible drivers travelling the speed limit
- Add “complete streets” elements requested by the community
- Improve safety and efficiency of El Dorado Park entrance/exit



El Dorado Park Nature Center

Spring Street Targeted Outreach

Public Works

- Millikan PTA
- Farmers Market
- Outreach in other Council Districts
- Beach Streets

Responses

- 150 points of feedback
- 64% Moderate to Strong support
- 18% Moderate to Strong opposition

Council District 5

- Traffic safety meetings held at Eldo Bar & Grill following Sept 2014 Spring Street fatal collision
- Further community meetings held at Eldo Bar & Grill in following years
- Community traffic safety meetings held throughout district in adjacent neighborhoods

Responses

- Strong community support for improved safety along corridor

Methods for Reducing Speeds on Arterials

Current methods

- Enforcement (temporary)
- Dynamic feedback signs
- Signal coordination
- Lane restructuring and/or narrowing
- Roundabouts

Common misconceptions

- Reduce Speed Limits
 - Determined by state guidelines, require traffic studies to change posted speeds
 - Not currently feasible as street won't meet regulations with current vehicle speeds
- Speed Bumps/Humps
 - Appropriate for local roads only, designed for speeds of 25mph or less

Existing Conditions – Collisions

Total Fatal collisions:

- Above State Average

Fatal Collisions:

- **November 2018**

Bicycle crash near San Gabriel River

- **April 2016**

Rear-end at El Dorado Park entrance

- **March 2015**

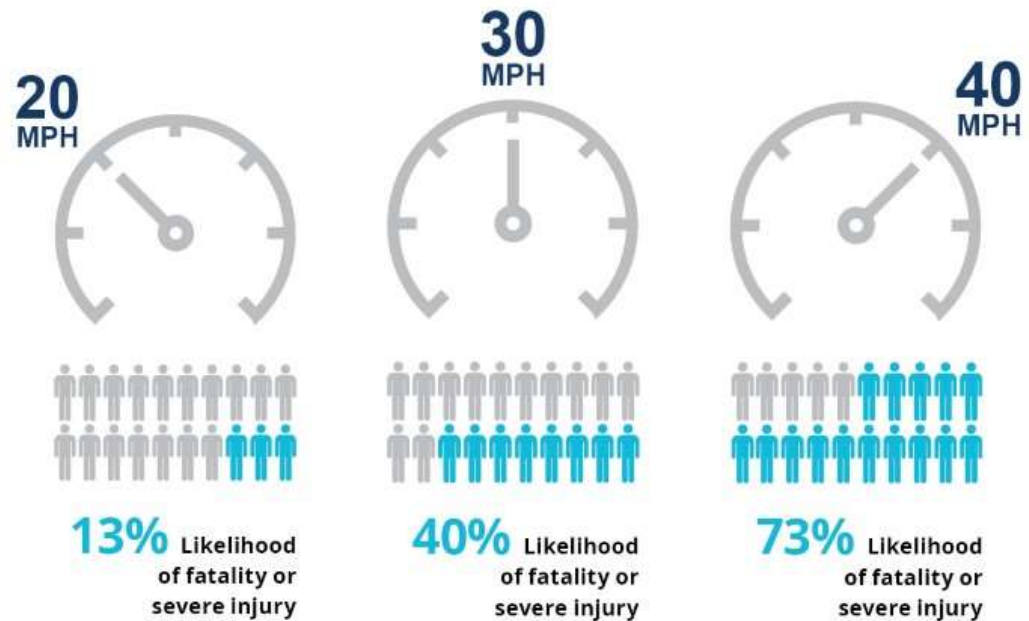
Pedestrian crash at Claremore Ave

- **September 2014**

Pedestrian crash at Karen Ave

- **June 2012**

Pedestrian crash at Stevely Ave



Source: Tefft, Brian C. Impact speed and a pedestrian's risk of severe injury or death. Accident Analysis & Prevention. 50. 2013.

Existing Conditions – Traffic Patterns



- 20,000 vehicles per day
- 45 mph Speed Limit
- Free-flow ramp from I-605
- Over 50% of vehicles travelling faster than 50 mph
- Limited cross-traffic

Existing Conditions – I-605 SB Off-ramp



- Mid-Century CalTrans Designs
 - Free-right turn: High street speeds
- Modern CalTrans Designs
 - Right turn at intersection: Lower speeds
- “Tee it Up” Policy

Traffic Analysis

- Traffic signal models based on Spring Street modification city-wide
 - Based on peak hour (worst case)
 - Travel Time Claremore to Airport:
 - 3.5 miles
 - 0-3 minutes additional time
- Travel Time Claremore to Studebaker:
 - 1 mile
 - 0-1 minute of additional time
- Current proposal is only 1/3rd of model

257: Redondo & Spring 02/08/2018

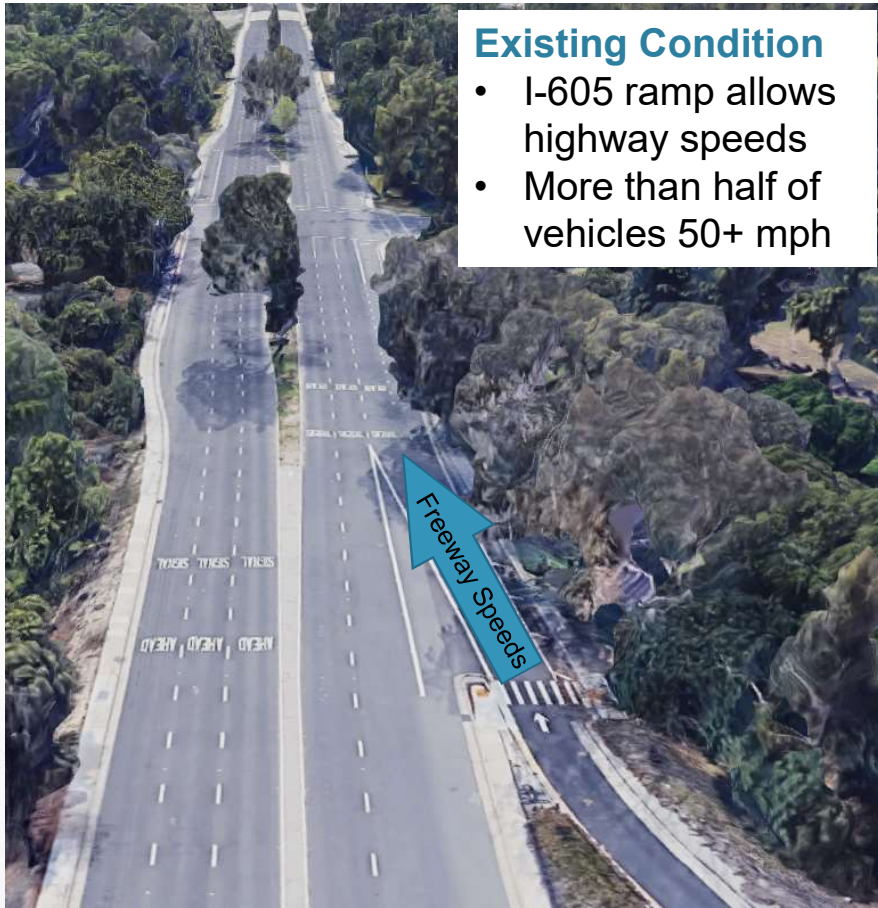
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SNL	SBT
Lane Configurations	30	1350	150	650	350	20	200	75
Traffic Volume (vph)	30	1350	150	650	350	20	200	75
Future Volume (vph)	30	1350	150	650	350	20	200	75
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	NA

	SPRING	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	SIG DEL	ICU
PM	DEL	ICU	DEL	ICU	DEL	ICU	DEL	ICU	DEL	ICU	DEL	ICU	DEL	ICU	ICU
Atlantic	12	B	27	C	4.4	A	7.1	A	15	B	1.3	A	31	C	16
Temple	50	D	29	C			63	E	36	D			40	D	70
405			8.6	A			13	B					17	B	
Walnut	3.6	A	3.6	A	0.6	A	2.1	A	1.5	A	0.1	A	51	D	47
Orange	3.7	A	3.2	A	0.7	A	15	B	12	B	4	A	###	F	37
California	2.6	A	2.1	A	1.1	A	2.9	A	2.5	A	0.8	A	40	D	48
Cherry	75	E	30	C			59	E	47	D	13	B	34	C	21
Redondo	73	E	5.3	A			58	E	14	B			54	E	16
Kilroy	73	E	5.3	A			58	E	14	B			54	E	16
Lakewood	48	D	47	D			55	D	4.6	A			56	E	
Airport Plaza			2.4	A			64	E	3.8	A			60	E	
Clark	39	D	28	C			58	E	16	B	0.8	A	60	E	31
Bellflower	80	F	32	C			99	F	33	C	12	B	48	D	50
Los Altos			7.5	A			50	D	3.7	A					
LCD	85	F	13	B			95	F	13	B			26	C	39
Woodruff	77	E	8.5	A			58	E	23	C			16	B	29
Snowden	2.4	A	2.5	A			41	D	4.5	A			54	D	
Palo Verde	79	E	9	A			53	D	16	B			35	D	51
Studebaker	82	F	6.7	A			61	E	17	B			8.8	A	30

City of Long Beach - Transportation Mobility Bureau

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Synchro 9 Report

Potential Corridor Solution



Existing Condition

- I-605 ramp allows highway speeds
- More than half of vehicles 50+ mph



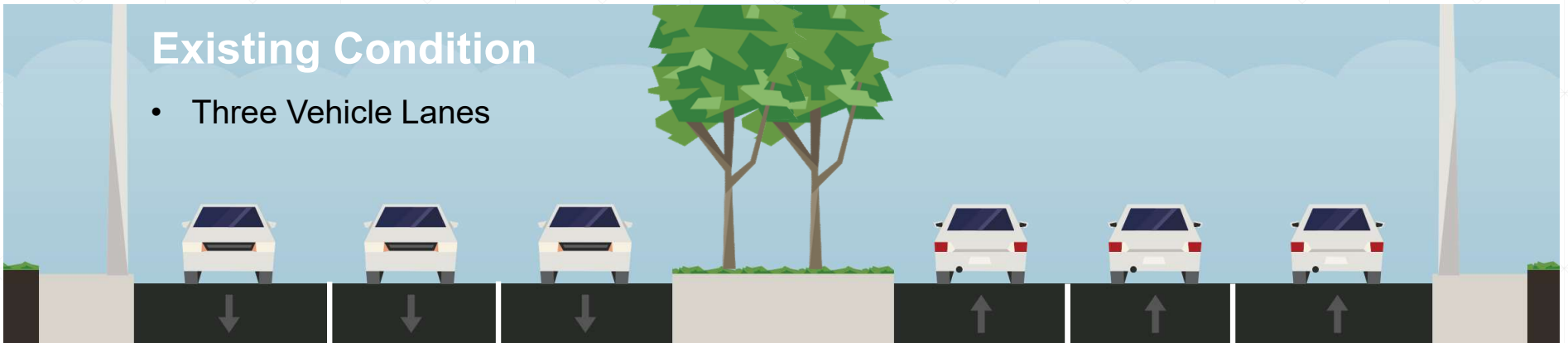
Potential Solution

- Elimination of fast-moving off-ramp
- Curb-protected Bikeway (no bollards)
- Lane Reduction
- Up to 80% drop in excessive speeders
- Improved access to El Dorado Park and Nature Center

Potential Corridor Solution

Existing Condition

- Three Vehicle Lanes



Proposed Condition

- Two Vehicle lanes
- One buffered bike lane



Regional Requirements & Evaluations

CITY OF
LONG BEACH

Department of Public Works
4711 W. Ocean Blvd. Long Beach, CA 90803
(562) 570-6331 FAX (562) 570-7161

Intersection Control Evaluation I-605 South Ramp 2B (Spring Street) September 2019

Introduction

In response to five fatal crashes on Spring Street east of Studebaker Road, the City's Public Works Department will be constructing traffic-calming measures on Spring St. The current cross-section of three or more vehicle lanes in each direction will be modified to a cross-section of two narrowed vehicle lanes and a Class IV bikeway in each direction. The new geometric design requires a modification of offramp 2B of I-605 at Spring Street because there will not be an additional lane to receive traffic exiting the ramp westbound.

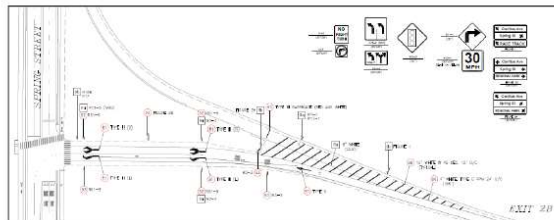
Design Alternatives

Two designs were considered to modify the Spring Street off ramp. Alternative 1 involves a partial off ramp closure and Alternative 2 installs a yield condition at the end of the westbound lane.

Alternative 1 would restripe the off ramp to guide all exiting traffic to the signal at Spring Street. The existing free right lane that currently sweeps toward westbound Spring Street would be closed off with signs, barricades, striping and hatch marks.

Signs and pavement legends would be replaced to permit southbound right turns from the right lane at the existing signal at Spring Street. This new configuration would require vehicles to either stop at the signal, or slow to 15mph when turning onto Spring Street. The proposed change in geometry would have an added traffic-calming benefit of re-setting motorists' expectations from highway conditions (super-elevated curves, higher speeds) to local street conditions (stopping at a crosswalk, performing a ninety-degree turn).

This alternative would increase demand for vehicle storage capacity on the off ramp and may increase delays for exiting vehicles that may have previously avoided the traffic signal. Existing volumes at the intersection are shown in Figure 1.



Alternative 1 (excerpt from Figure 3)



Coordination with Caltrans:
Ongoing

Communication support from
representatives in Sacramento

Questions & Answers



Pre-Submitted Questions

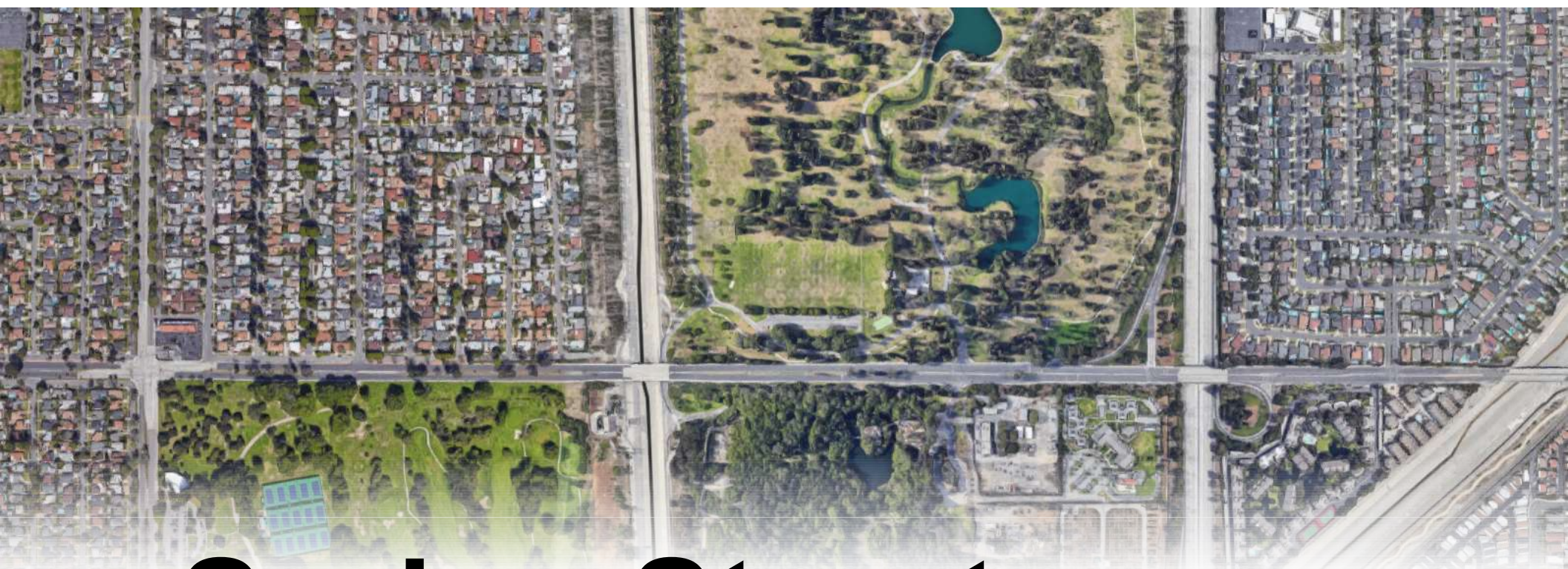
- 1. Who will pay for the total project and with what funds? Please elaborate on any costs associated with other jurisdictions.
- 2. Why don't we just lower the speed in the area if speeding is the problem?
- 3. How do you determine the impacts to the neighboring streets? Won't this just encourage drivers to cut through residential roads to get through the signal?
- 4. How many of the five accidents cited involved human error other than, or in addition to, speeding?
- 5. How will the bike traffic be controlled at the intersections and the entrances to the residential areas?
- 6. How will the weekend back-ups near the entrances of El Dorado Park and The Nature Center be addressed if the third lane is removed?

Pre-Submitted Questions

- 7. Is there an opportunity to:
 - Include a crosswalk and traffic light at Karen connected to El Dorado Park as part of the proposed plan?
 - Create parking as a buffer between bikers and pedestrians along El Dorado Park?
 - Extend and/or widen the sidewalks on Spring Street so that there is a safer walking path going into the park?
 - Add street lights into the project so that night time visibility can be improved for pedestrians and bicyclists?
 - Improve the median on the Spring St frontage road (from Stevely to The Eldo) as part of this proposed capital improvement?

Questions & Answers





Spring Street

Traffic Safety Improvement Options

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