# Caltrans US-101 PSR-PDS Project Study for VCTC

Presented by:

**Aziz Elattar** 

Deputy District Director Planning, Public Transportation and Local Assistance
January 10, 2014



# **US-101 Project Limits**





101

## Excerpts from October Presentation

- What is a PSR-PDS?
- 2. Caltrans PSR-PDS efforts on US-101
- 3. Level of Service



# Project Highlights (since October)

- PSR-PDS was approved on 12/23/13
- Consists of four Alternatives (construction costs \$575 - \$2,000 million)
- PA&ED Support Cost Estimate \$14 million
- Anticipated Environmental Determination
  - 1. Initial Study with proposed Mitigated Negative Declaration (CEQA)
  - 2. Routine Environmental Assessment with proposed Finding of No Significant Impact (NEPA)





# Purpose and Need

#### Purpose:

The purpose of this project is to alleviate traffic congestion, improve traffic operations, and accommodate future traffic volumes in this area.

#### Need:

Currently, traffic is operating at capacity with the Level of Service (LOS) F in many sections within the project limit during peak hours and conditions are expected to worsen over time.



## US-101 PSR-PDS

#### 4 – Alternatives

- Alternative 1 No build
- Alternative 2 Adds a nonstandard width HOV lane
- Alternative 3 Adds a standard width HOV lane
- Alternative 4 Adds two standard width HOV lanes

#### Other Alternatives Studied

- HOT Lanes
- Auxiliary Lanes





- Minimum build alternative, adds one nonstandard width HOV lane in each direction (see next slide)
- Proposes new nonstandard features including narrow lane widths and narrow shoulders
- Least Right of Way impact amongst all alternatives:
   ± \$15 million
- 18 structures would be impacted
- ± 120 on and off ramps will be impacted
- Total Construction Estimate (in millions):
   \$575 \$690

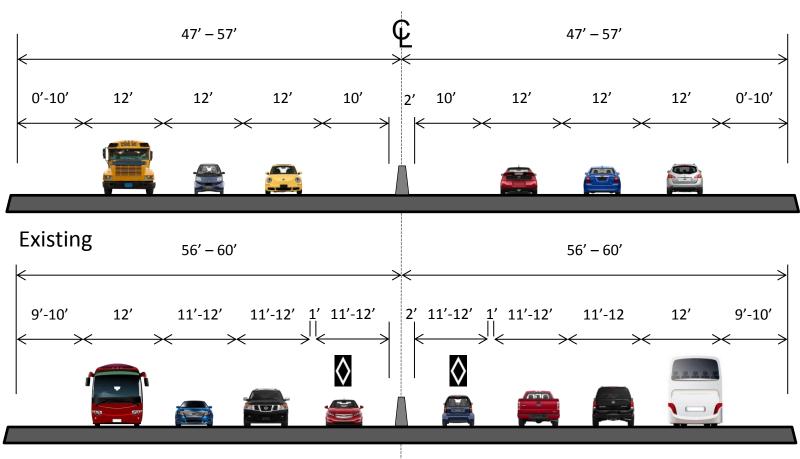




Moorpark Rd to Carmen Dr. (PM 4.1 to PM 14.8)	Carmen Dr. to SR-33 (PM 14.8 to PM 30.9)
1' wide left shoulders	1' min. wide left shoulders
11' wide HOV lanes	12' wide HOV lanes
1' wide buffer between HOV and MFLs	1' wide buffer between HOV and MFLs
11' wide #1 and #2 lanes	12' wide #1 and #2 lanes
12' wide #3 lanes	12' wide #3 lanes
9'-10' wide right shoulders	9'-10' wide right shoulders



# Typical Cross-Sections



Proposed



Alternative 2 No Scale

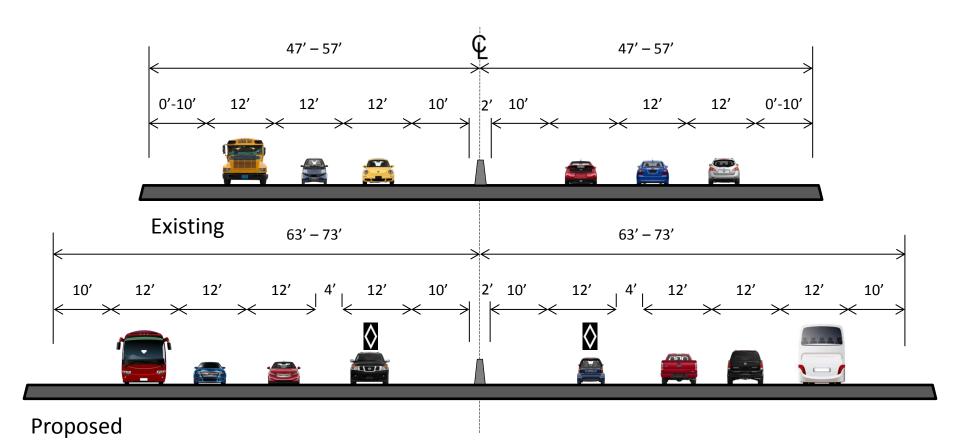


- This alternative adds one standard width HOV lane in each direction
- New nonstandard features are not expected along the mainline
- 2<sup>nd</sup> most Right of Way impact amongst all alternatives:
   \$100 million
- 37 structures would be impacted
- ± 120 on and off ramps would be impacted
- Total Construction Estimate (in millions):
   \$1,375 \$1,650





# Typical Cross-Sections





Alternative 3 No Scale

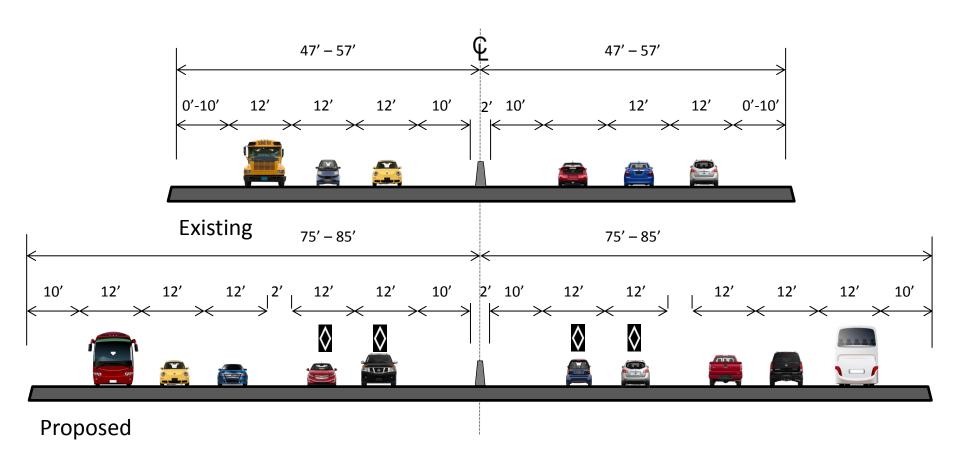


- This alternative adds two standard width HOV lanes in each direction
- New nonstandard features are not expected along the mainline
- Most Right of Way impact amongst all alternatives:
   > \$100 million
- 39 structures would be impacted
- ± 120 on and off ramps would be impacted
- Construction Estimate (in millions):
   \$1,630 \$2,000





# **Typical Cross-Sections**





Alternative 4
No Scale



## Other Alternatives Studied

#### **HOT Lanes**

 A cursory analysis was conducted; \$60 - \$70 million (in 2013) estimated to convert the HOV lanes proposed in Alternative 4 into HOT lanes.

#### Auxiliary Lanes

- Operational benefits could be achieved
- Detailed traffic studies would be required
- Construction costs estimated at:
   \$120 \$130 million (in 2013)



# Level of Service (LOS)

LOS	Flow Conditions	Description	
Α		Highest quality of service. Traffic flows freely with little or no restrictions on speed or maneuverability.  No Delays	
В		Traffic is stable and flows freely The ability to maneuver in traffic is only slightly restricted.  No Delays	
С		Few restrictions on speed. Freedom to maneuver is restricted. Drivers must be more careful making lane changes.  Minimal Delays	
D		Speeds decline slightly and density increases. Freedom to maneuver is noticeably limited.  Minimal Delays	
E		Vehicles are closely spaced, with little room to maneuver. Driver comfort is poor. Significant Delays	
F		Very congested traffic with traffic jams, especially in areas where vehicles have to merge.  Significant Delays	



# Level of Service (LOS)

Current	Alternative	Alternative	Alternative	Alternative	Auxiliary
LOS	1	2	3	4	Lanes
(2012)	(2035)	(2035)	(2035)	(2035)	(2035)
F0-F4	F4 or worse	E-F1	D-E	C-D	





# Capital Outlay Support & Schedule

 Capital outlay support estimate for programming PA&ED in the 2014 STIP is \$14 million.

Project Milestones	Scheduled Delivery Date (Month-Year)	
Program Project	M015	Spring 2014
Begin Environmental	M020	July 2017
PA&ED	M200	June 2020

Construction could start in November 2023





## Next Steps

- Program funds for environmental phase (VCTC has nominated to California Transportation Commission).
- During PA&ED phase, evaluate and select alternatives, considering possible phasing based on funding.

