

# Caltrans Freeway Project Studies for VCTC

Presented by:

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# Project Study Report – Project Development Support (PSR-PDS)

## 1. Purpose:

*Gain approval to move into Project Approval and Environmental Document (PA & ED) phase.*

## Outcome:

*Support Cost Estimate for PA & ED.*

2. Establishes the purpose and need statement, project scope, and schedule.
3. Identifies project risks at an early stage.
4. Provides order of magnitude capital cost estimate.

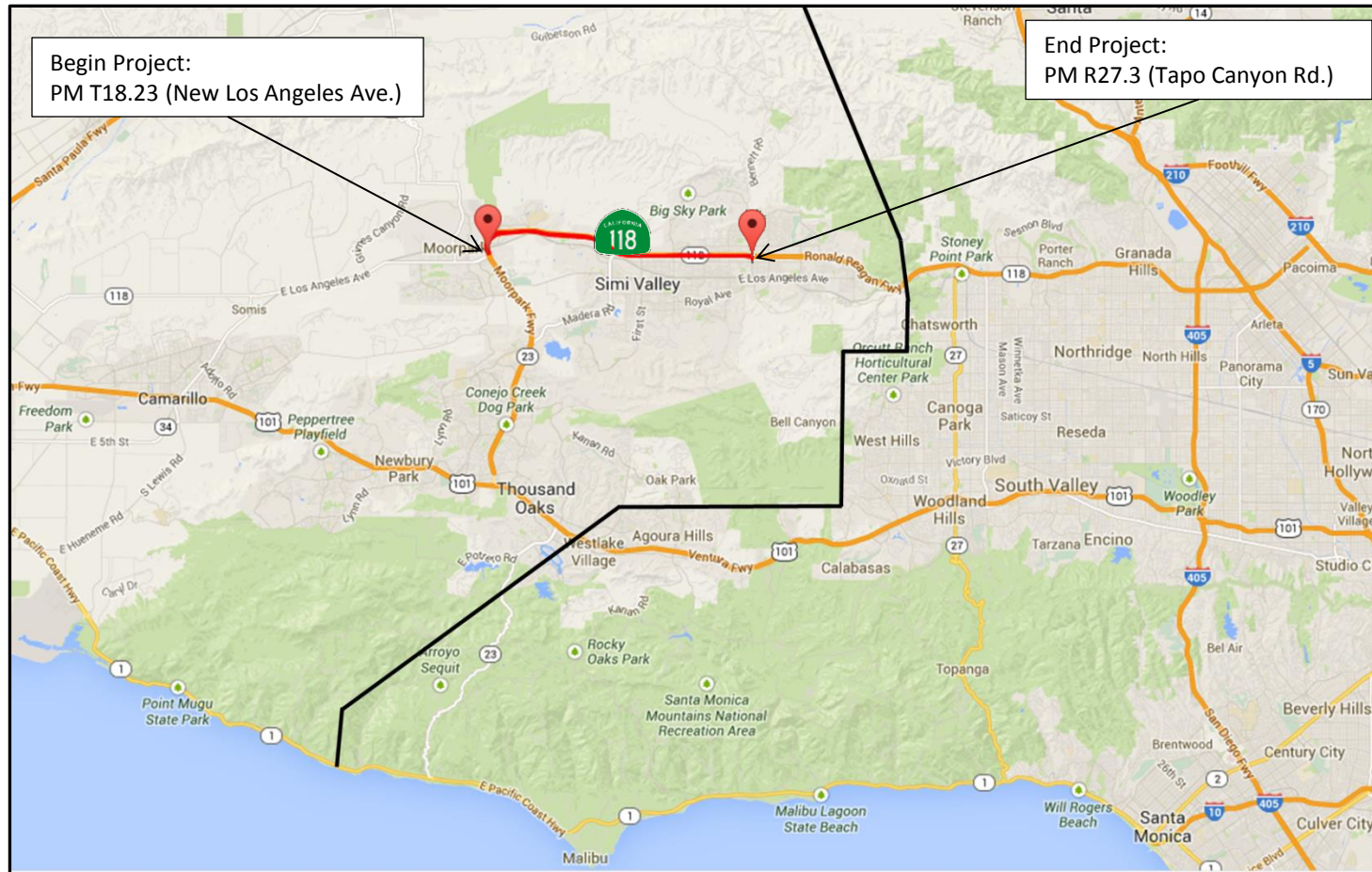
# Caltrans Efforts for VCTC

1. Prepared and approved a PSR-PDS for SR-118.
2. Currently developing a PSR-PDS for US-101.  
(Due December 2013)

# SR-118 Background

- Caltrans approved original project on 6/28/1991
- Two phases:
  1. Phase I: add a mixed flow lane in each direction from County Line to Tapo Canyon Rd., construction was completed in 2011.
  2. Phase II: add one to two mixed flow lanes in each direction from New Los Angeles Ave. to Tapo Canyon Rd. Caltrans completed the PSR-PDS on 6/18/2013.
- The VCTC Comprehensive Transportation Plan (CTP) identified this corridor as a priority.

# SR-118 Project Limits



# Level of Service (LOS)

| From              | To                 | Current LOS<br>(2011) |      | Future LOS<br>(2035) |                           |                        |
|-------------------|--------------------|-----------------------|------|----------------------|---------------------------|------------------------|
|                   |                    | ADT                   | LOS* | ADT                  | LOS*<br>(without project) | LOS*<br>(with project) |
| Los Angeles Ave.  | Princeton Ave. UC  | 77,000                | D    | 92,300               | F                         | C/D                    |
| Princeton Ave. UC | Collins Dr. OC     | 81,000                | E    | 97,100               | F                         | D                      |
| Collins Dr. OC    | Madera Rd. UC      | 77,000                | E    | 92,400               | F                         | C/D                    |
| Madera Rd. UC     | First St. OC       | 94,000                | D    | 112,700              | E                         | D                      |
| First St. OC      | Erringer Rd. UC    | 104,000               | D    | 124,700              | F                         | D                      |
| Erringer Rd. UC   | Sycamore Dr. UC    | 113,000               | E    | 135,500              | F                         | D                      |
| Sycamore Dr. UC   | Tapo Canyon Rd. UC | 114,000               | E    | 136,700              | F                         | D                      |

\* LOS is used as worst scenario in each direction during AM/PM peak hour volumes.

# Level of Service (LOS)

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

# SR-118 PSR-PDS

Environmental Phase (PA & ED) Support Cost Estimate:  
\$3 million

## 3 – Alternatives

1. No build
2. Full standard alternative
3. Minimum build alternative

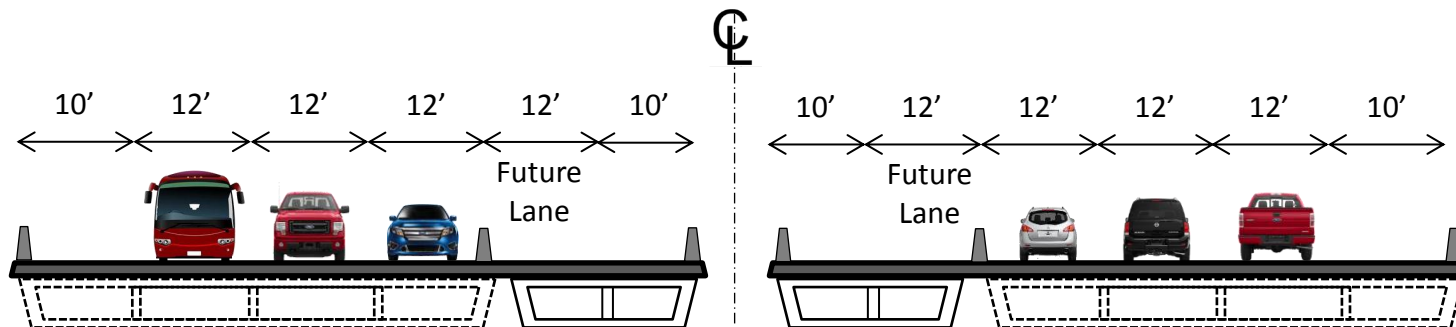


# Alternative 2

- Full Standard Widening: widens from two to three lanes between New Los Angeles Avenue and Princeton Avenue, from two to four lanes between Princeton Avenue and Madera Road; and from three to four lanes between Madera Road and Tapo Canyon Road.
- Construction Estimate: \$125 - \$150 million  
Right of Way Estimate: \$1 - \$5 million

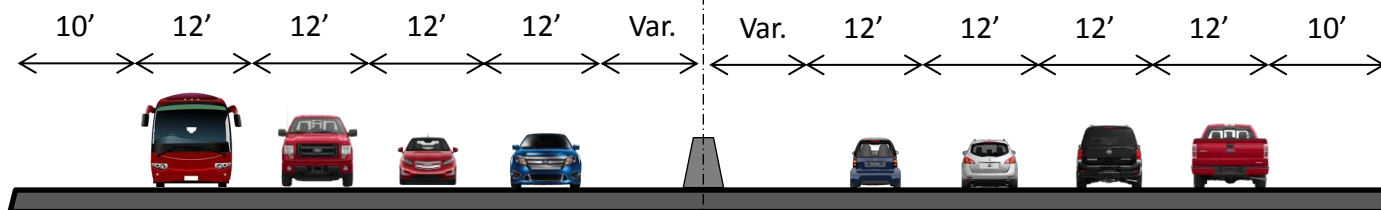
No Scale

# Cross-Sections



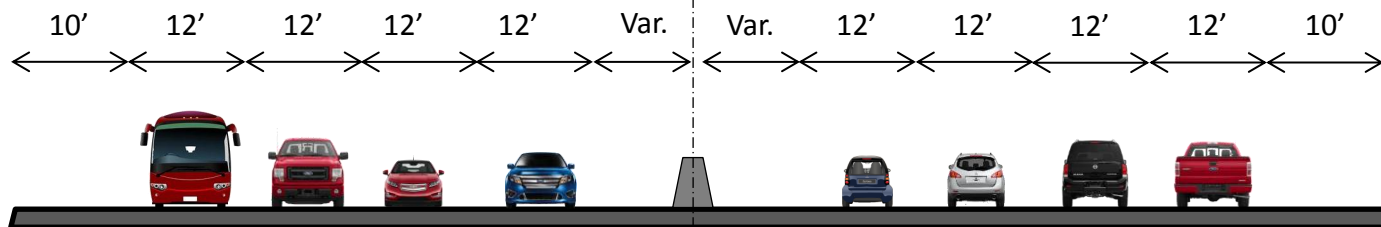
From Los Angeles Ave. to Princeton Ave.

(Adding one lane in each direction)



From Princeton Ave. to Madera Road

(Adding two lanes in each direction)



From Madera Road to Tapo Canyon Road

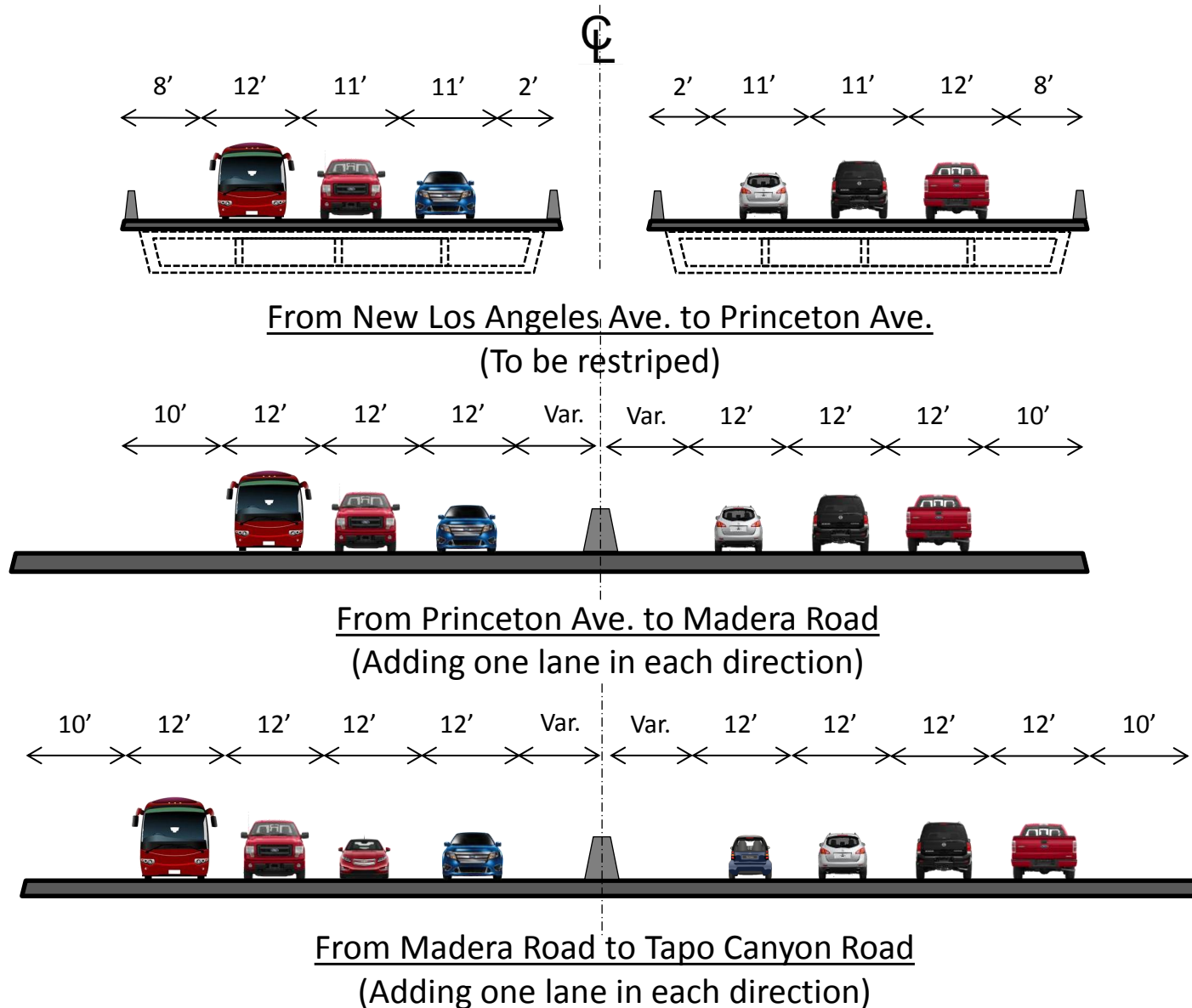
(Adding one lane in each direction)

# Alternative 3

- Minimum Build Alternative, adds one lane from Tapo Canyon Road to New Los Angeles Avenue, utilizing nonstandard restriping to add the lane over the Arroyo Simi Bridge in Moorpark to avoid structure widening.
- Construction Estimate: \$90 - \$115 million  
Right of Way Estimate: \$1 - \$5 million

Significant issue: Can we obtain permission to create additional lane through nonstandard restriping over this bridge?

# Cross-Sections



# US-101 Background

- The VCTC Comprehensive Transportation Plan (CTP) identified this corridor as a priority.
- VCTC requested Caltrans to prepare a PSR-PDS to study the addition of one to two High Occupancy Vehicle (HOV) lanes.
- The new lanes could also be High Occupancy Toll (HOT) lanes depending on the findings of a separate VCTC study.

# US-101 Project Limits



# Level of Service (LOS)

| Current LOS<br>(2012) | Alternative 1 -<br>No build<br>(2035) | Alternative 2<br>(2035) | Alternative 3<br>(2035) | Alternative 4<br>(2035) |
|-----------------------|---------------------------------------|-------------------------|-------------------------|-------------------------|
| F0-F4                 | F4 or worse                           | E-F1                    | D-E                     | C-D                     |

# US-101 PSR-PDS

Environmental Phase (PA & ED) Support Cost Estimate:  
\$14 million

## 4 – Alternatives

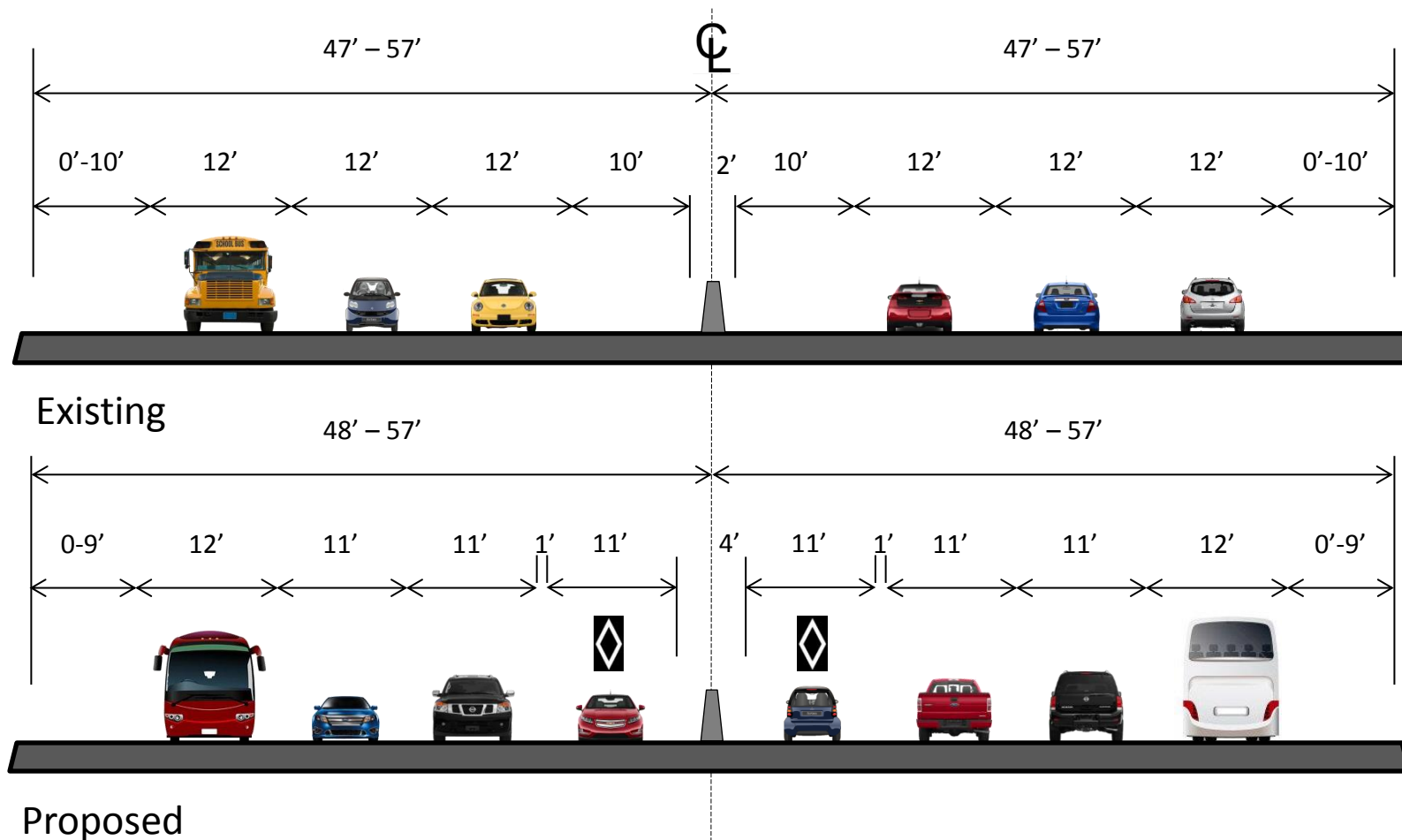
1. No build
2. Add a nonstandard width HOV lane in each direction
3. Add a standard width HOV lane in each direction
4. Add two standard width HOV lanes in each direction



# Alternative 2

- Minimum build alternative, adds one nonstandard width HOV lane in each direction.
- Proposes new nonstandard features including narrow lane widths and narrow shoulders.
- Least Right of Way impact amongst all alternatives.
- $\pm 20$  structures will be impacted
- $\pm 120$  on and off ramps will be impacted
- Construction Estimate (in millions):  
 $\pm \$500$ -  $\pm \$700$  plus Right of Way (\$ TBD)

# Typical Cross-Sections

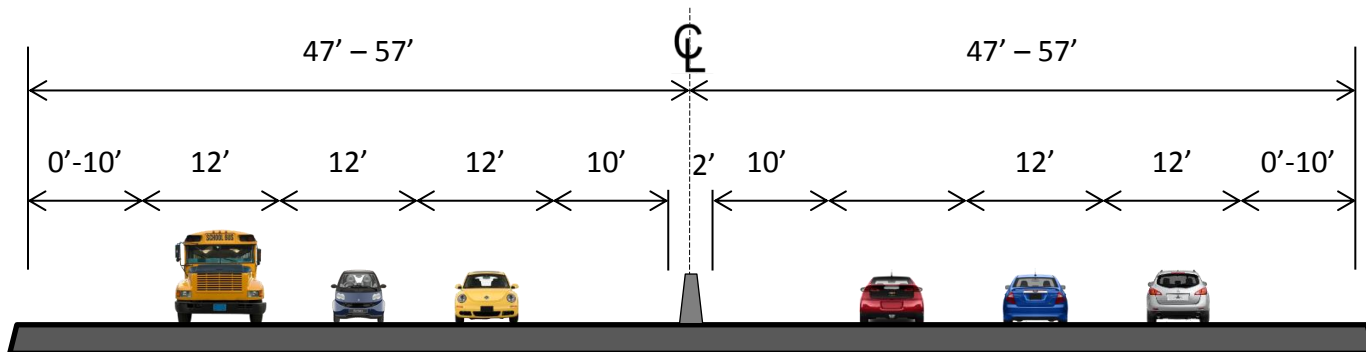


Alternative 2  
No Scale

# Alternative 3

- 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 (R/W constraints in downtown Ventura are a risk).
- ± 40 structures will be impacted
- ± 120 on and off ramps will be impacted
- Construction Estimate (in millions):  
± \$1,000 - ± \$1,600 plus Right of Way (\$ TBD)

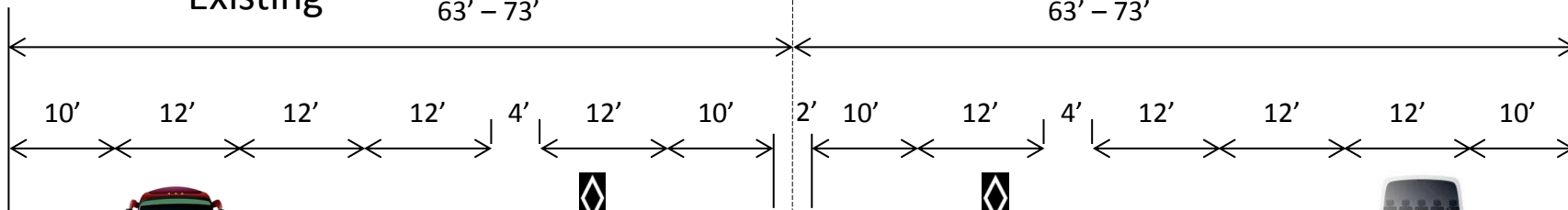
# Typical Cross-Sections



Existing

63' - 73'

63' - 73'

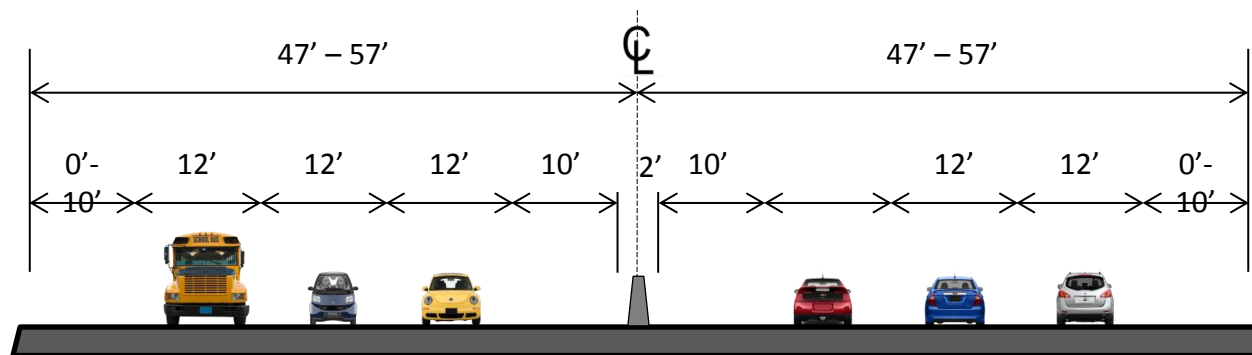


Proposed

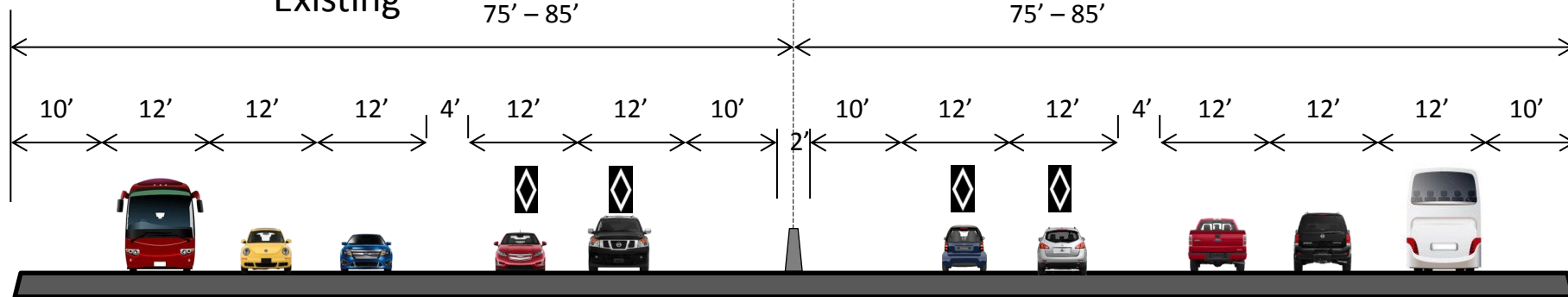
# Alternative 4

- 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 (R/W constraints in downtown Ventura are a risk).
- $\pm 40$  structures will be impacted
- $\pm 120$  on and off ramps will be impacted
- Construction Estimate (in millions):  
 $\pm \$1,200 - \pm \$1,900$  plus Right of Way (\$ TBD)

# Typical Cross-Sections



Existing



Proposed

Alternative 4  
No Scale

# Conclusion

## Construction Costs

- SR-118: \$90 - \$150 million
- US-101: \$500 - \$1,900 million (not including Right of Way)

## Next Steps

- HOT Lane Study
- Program funds for environmental documents
- During PA & ED phase, evaluate and select alternatives, considering possible phasing based on funding.