




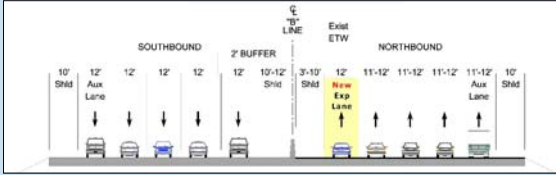
## I-680 Northbound Express Lane Project Overview and Update

A presentation for the  
I-680 Sunol Smart Carpool Lane Joint Powers Authority (SSCLJPA)  
September 12, 2016





## I-680 Northbound Express Lane Project from SR 237 to SR 84

- ❖ 15 miles of HOV/HOT
- ❖ Environmental July 2015
- ❖ Project capital cost estimate:
  - ☑ Full build - \$380 million
  - ☑ Phase 1 - \$260 million

Section at Washington on-ramp to SR 238 (Mission) off-ramp

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## Purpose

- ❖ Implement I-680 Express Lane per Metropolitan Transportation Commission (MTC) Transportation 2035 Plan to:
  - ❑ Increase efficiency on northbound I-680 between SR 237 and SR 84 to accommodate current and future traffic demand
  - ❑ Improve travel time and travel reliability for all users
  - ❑ Optimize freeway system management and traffic operations
  - ❑ Maintain consistency with the provisions in California State Assembly Bill (AB) 2032 and AB 574 to implement an HOV/express lanes system in Alameda County

## Need

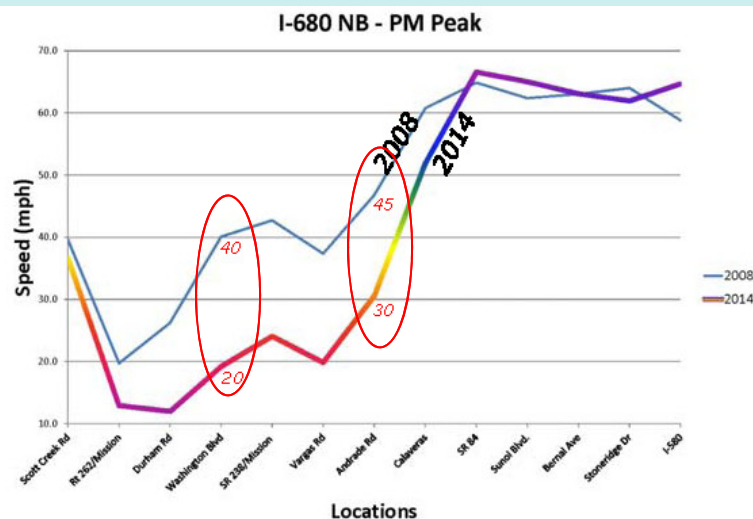
- ❖ Capacity and Transportation Demand
- ❖ Travel Time Delay for all Users
- ❖ Traffic Diversion and Unused Capacity
- ❖ Legislation



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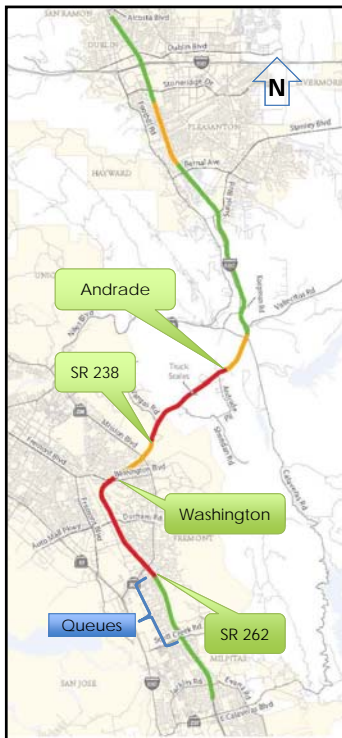
## Historical Traffic Speed Trends



Corridor traffic volume increase resulted in lower PM peak average speed from north of Scott Creek Road through SR-84 in 2014 compared to 2008.

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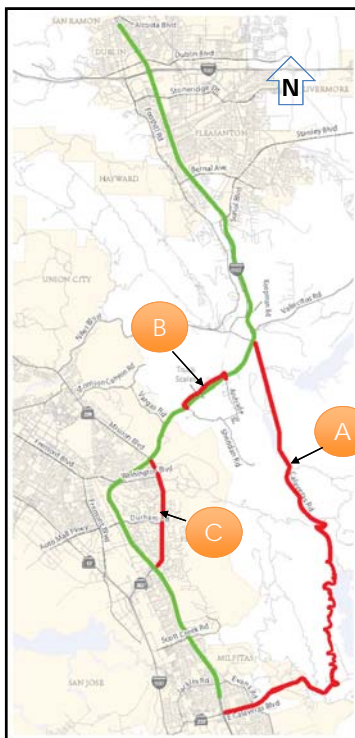
## Northbound I-680 Existing Bottleneck Locations

- ❖ Bottlenecks occur during PM peak
  - 📍 SR 262 to Washington
  - 📍 SR 238 to Andrade
- ❖ Queues begin to form around 2:00 p.m. on weekdays and extend past Scott Creek Road by height of the commute
- ❖ Traffic diversions

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## Traffic Diversions

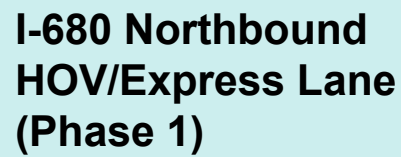
- A** Calaveras Boulevard (17 miles)
  - ✓ 17 mile diversion
  - ✓ 14 mile freeway
- B** Mission Road (1.5 miles)
  - ✓ 1.5 mile diversion
  - ✓ Up to 600 vph during PM peak
  - ✓ 1.5 mile freeway
- C** Mission Boulevard (3 miles)
  - ✓ 3 mile diversion
  - ✓ 4 mile freeway

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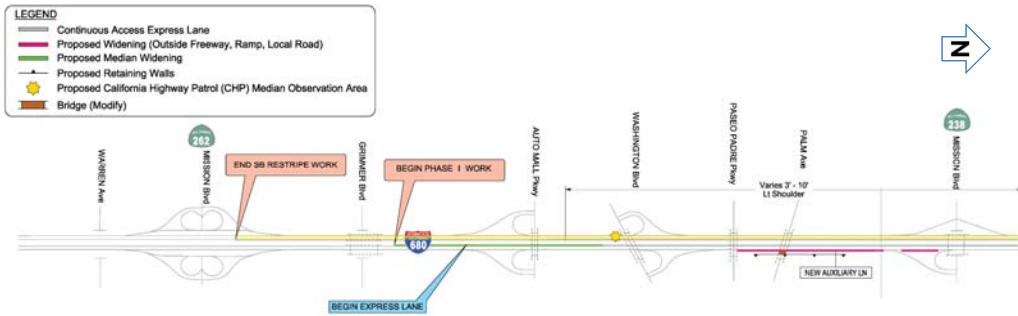


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## I-680 NB HOV/Express Lane – Phase 1

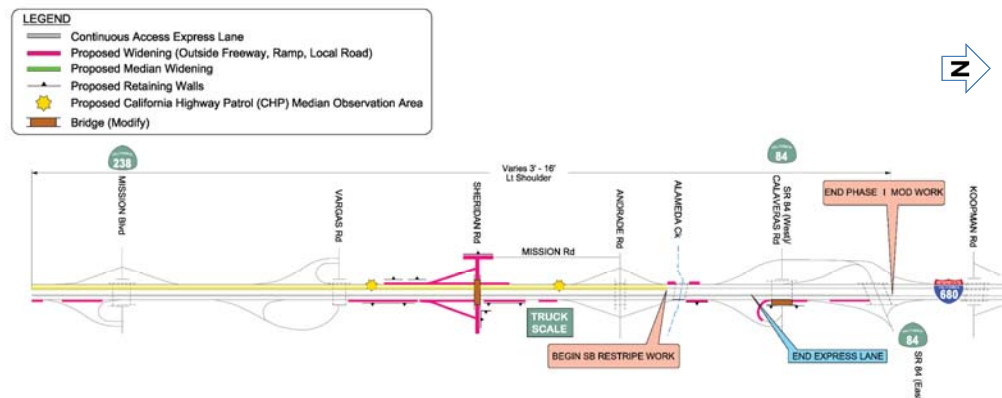


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## I-680 NB HOV/Express Lane – Phase 1



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## I-680 Southbound Sunol Express Lane Conversion Project


- ❖ Convert SB express lane to continuous access from SR262 (Mission) to SR84
- ❖ Integrate the converted express lane system with existing SB toll system, south of SR262
- ❖ Create a single toll operation for NB & SB


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## I-680 Southbound Sunol Express Lane Conversion









▲ I-580 Express Lanes  
*Open Access*

▲ I-680 Southbound Express Lanes  
*Limited Access*

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## I-680 Rehabilitation Project

- ❖ Grimmer to Koopman
- ❖ \$32.6 million







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## I-680 Sunol Express Lane Project Components

### Southbound Conversion

- ❖ Southbound Conversion to continuous access from SR262 (Mission) to SR84
- ❖ Integrate the converted express lane system with existing SB toll system, south of SR262
- ❖ Create a single toll operation for NB and SB




### Northbound Phase 1



- ❖ South of Auto Mall to SR 84
- ❖ 8.2 miles of HOV/HOT lane

### Caltrans Rehab

- ❖ Grimmer to Koopman



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## Partnership = Cost Savings

- ❖ Reduced lane and shoulder widths
- ❖ Reduced number of bridge modifications and retaining walls
- ❖ No impacts to creeks or riparian areas
- ❖ Minor right-of-way acquisition
- ❖ No utility relocation
- ❖ Incorporation of Caltrans rehab work



## Construction Staging Strategy

### “Safety + Minimize Public Inconvenience”

#### Daytime Work (7 AM to 5 PM- typical)

- ❖ Maintain existing lane configurations
- ❖ Shoulder closures
- ❖ Work behind k-rail

#### Nighttime Work (11 PM to 5 AM)

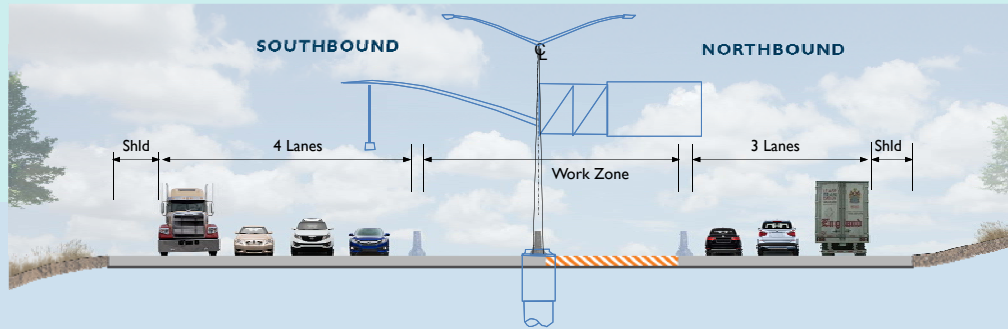
- ❖ Mainline lane closures
- ❖ Ramp closures
- ❖ Full Freeway Closure-one direction only
  - ❑ Sheridan Road Overcrossing

- ✓ Traffic use detours for ramp and full closures
- ✓ Restrictions on closures for holidays and special events



## Stage Construction Median Widening

[ Daytime Work ]



- ❖ Pavement widening (Grimmer to Washington)
- ❖ Overhead signs, lighting and toll equipment

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## Median Barrier Improvements

Foundation 4

Foundation 3

Foundation 2

Foundation 1



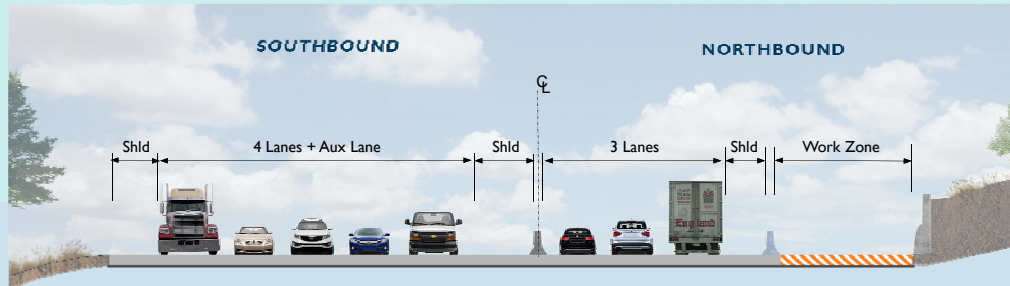
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## Stage Construction Outside Widening

[ Daytime Work ]



- ❖ Pavement widening
- ❖ Retaining walls

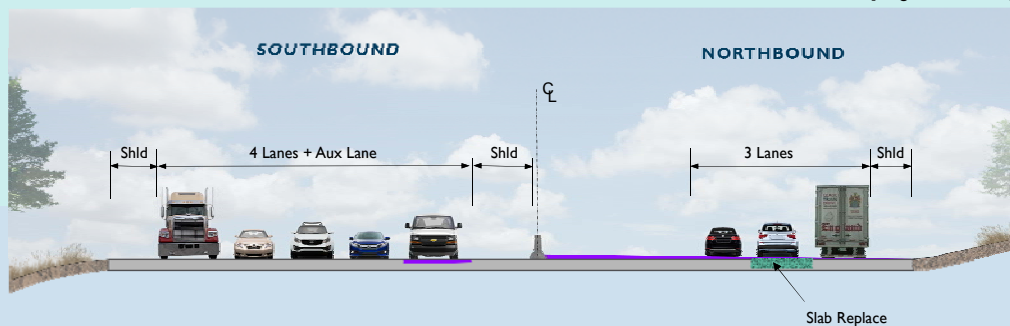
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## Stage Construction Pavement Rehab

[ Nighttime work ]



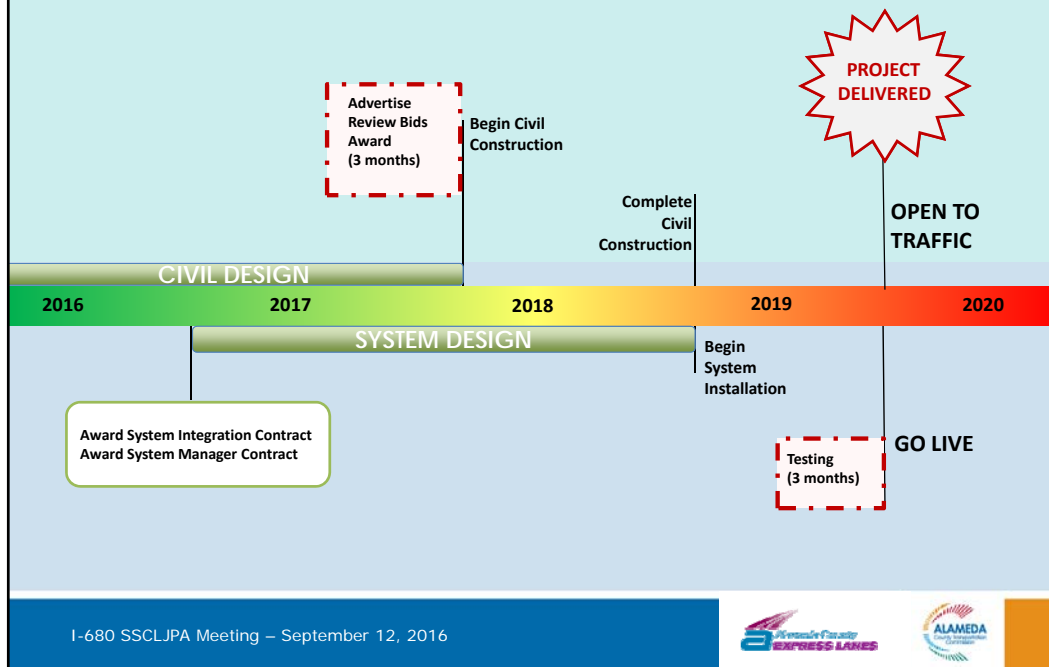
- ❖ Slab replacement
- ❖ Pavement overlay
- ❖ Loop detectors

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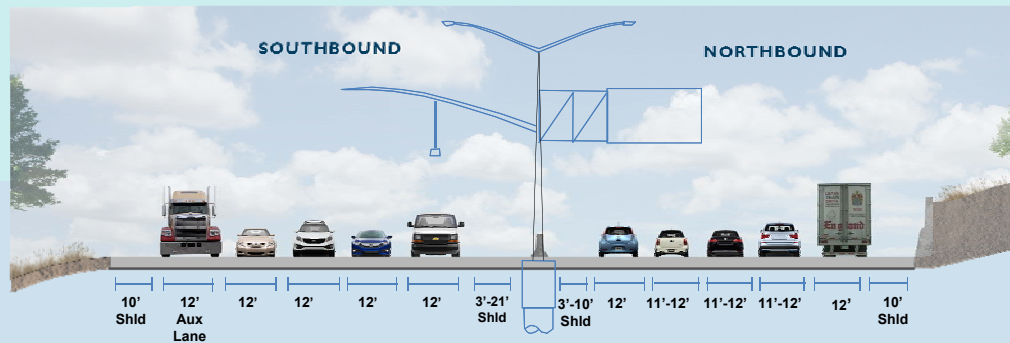


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## Expedited Delivery Schedule



## The Final Product



I-680 Sunol Express Lanes