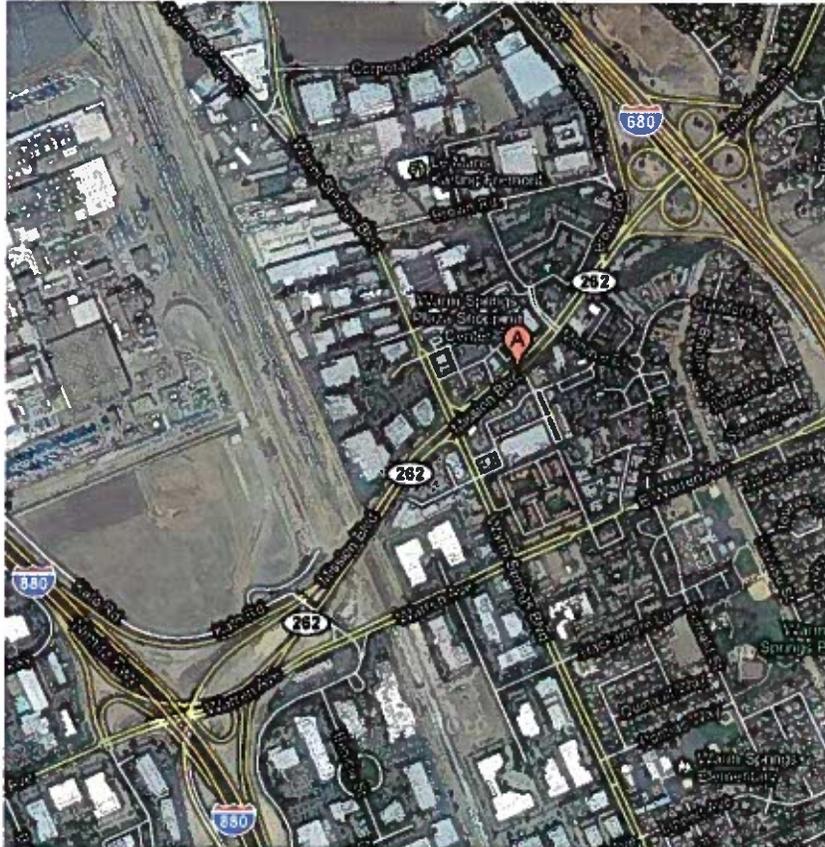




# STATE ROUTE 262 TRANSPORTATION CONCEPT REPORT



The Transportation Concept Report (TCR) is a Caltrans long range planning document that informs the regional transportation planning process. The TCR provides information regarding route segments, including high priority projects for the highway through 2035, and existing and forecasted traffic data. Projects identified in the TCR will require environmental and engineering studies before final approval and are subject to change.

### Approvals:

Lee Taubeneck 2/25/11

LEE TAUBENECK  
District 4 Deputy Director  
Planning and Local Assistance

Date

Bijan Sartipi 3-10-11

BIJAN SARTIPI  
District 4 Director

Date

## Stakeholder Acknowledgement

District 4 is pleased to acknowledge the time and contributions of stakeholders and partner agencies to this TCR. Development of system planning documents such as this one is dependent upon the participation and cooperation of key stakeholders. This TCR represents a cooperative planning effort for SR-262. Representatives of the Alameda County Transportation Commission and the City of Fremont provided essential information, advice and feedback for the preparation of this document.

This TCR will be posted on the Caltrans District 4 System Planning website at:  
<http://www.dot.ca.gov/dist4/systemplanning/>

## Document Preparation

This SR-262 Transportation Concept Report was prepared by:

ROBERT ROSEVEAR  
Associate Transportation Planner  
Office of System Planning  
System Planning East Branch

ERIK ALM, AICP  
District Branch Chief  
Office of System Planning  
System Planning East Branch

KATIE BENOVAR  
District Office Chief  
Office of System Planning

**Please contact below for any questions about this TCR:**

Caltrans District 4  
Division of Transportation Planning and Local Assistance  
P.O. Box 23660, Oakland, CA 94623-0660  
<http://www.dot.ca.gov/dist4/systemplanning/>



Mission Boulevard (SR-262) and Mojave Drive

## Transportation Concept Report Contents

The following pages provide an overall route description and summary information on each route segment. Each segment summary includes a segment map, a segment overview and data tables. A list of future projects for each segment is also included. These projects are separated into three categories:

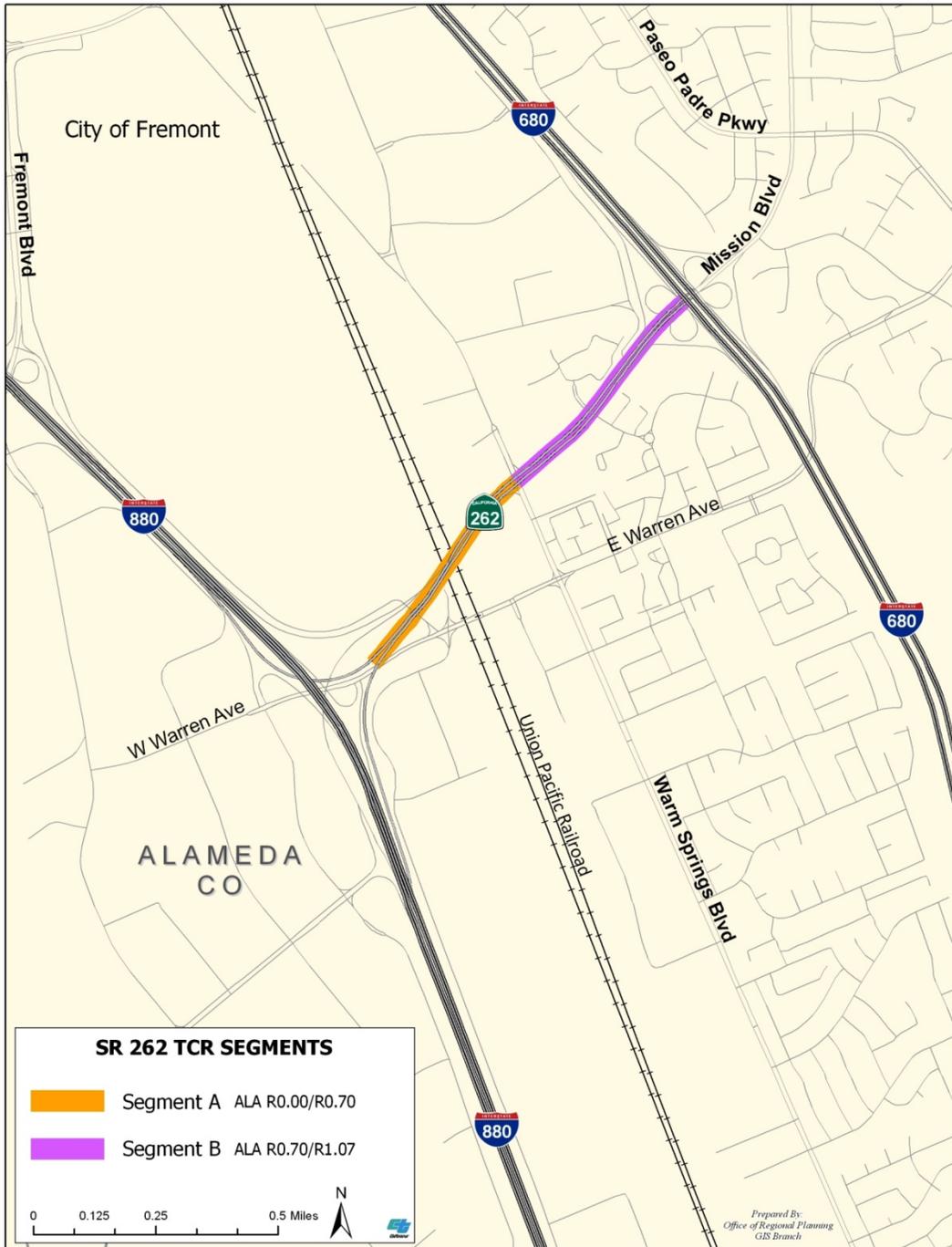
1. **Programmed**—projects included in the State Transportation Improvement Program, State Highway Operations and Protection Plan, or California Federal Transportation Improvement Program;
2. **Planned**—projects included in an approved Regional Transportation Plan;
3. **Conceptual**—projects not yet included in a planning or programming document, but are recommended to maintain mobility and access along the segment.

Project listings include a brief description and estimated construction completion year.

## State and Local Responsibility

Improvements to the State Highway System are the responsibility of both Caltrans and local agencies, collaboratively planned, developed and implemented through the regional transportation planning and project development process. Such improvements will provide for the safe and effective management and operation of new and existing transportation facilities through the use of demand reduction and operational management strategies. Developments affecting this route and the regional State Highway System may necessitate that local jurisdictions provide nexus-based, proportional fair-share funding for future highway improvements.

# State Route 262 Segment Map



## State Route 262 Summary

State Route (SR) 262 is a 1.1 mile long four to six-lane conventional highway and the primary route connecting I-680 and I-880. The route is in an urbanized area and begins at I-880 and proceeds northeasterly to I-680. Located in the Warm Springs District of Fremont, it is the south end of Mission Boulevard and consists of two segments:

**Segment A:** I-880 to Warm Springs Boulevard, ALA R0.00 to R0.70

**Segment B:** Warm Springs Boulevard to I-680, ALA R0.70 to R1.07

There are no erected route markers along the highway. However, new exit and express lane signs on I-680 refer to this portion of Mission Boulevard as SR-262. The current legislative route designation reads: “Route 262 shall cease to be a state highway when Route 237 is constructed between Route 880 and Route 680.”

SR-262 is characterized on both sides by commercial and retail development, strip malls, hotels, apartments, and small office complexes. This is an important trucking route and is the shortest distance between the two major interstate highways. Some 6.6% of the traffic on SR-262 is truck movements. In 2007 the mode split in the City of Fremont is 76.1% SOV, 11.3% HOV, 6.3% Transit and 2.9% bike/ped.

The route is served by two AC Transit local bus lines (217 and 239) and two VTA regional express bus lines (120 and 140). Each originate at Fremont BART and traverse Mission Boulevard (Segment B only) and Warm Springs Boulevard as part of their routes. There are no Park and Ride lots within one quarter mile of the SR-262 corridor. Warm Springs Boulevard is designated by the City of Fremont as a recommended bicycle route (higher traffic street) where it crosses Mission Boulevard. Areas west of I-880 can be accessed by car, sidewalk and a designated bikeway via Warren Avenue. However, this area has been designated by the City of Fremont as a “difficult connection” for bike/pedestrian access.<sup>1</sup>

### SR-262 Intersection Data

| Intersection                | Signalized<br>Y/N | Pedestrian<br>Countdown<br>Y/N | Raised Median<br>Y/N | Number of Lanes<br>Crossed | Number of Marked<br>Crossings |
|-----------------------------|-------------------|--------------------------------|----------------------|----------------------------|-------------------------------|
| SR-262 / Warm Springs Blvd. | Y                 | N                              | Y                    | 9                          | 4                             |
| SR-262 / Mojave Drive       | Y                 | N                              | Y                    | 8                          | 3                             |

Caltrans traffic signal coordination is in place at the two intersections, along with red light enforcement cameras operated by the City of Fremont.

Between 2009 and 2035 traffic on the corridor is expected to increase by 24%. Short term improvements include completion of widening and grade separation projects, and activation of metering lights at the southbound I-680 on-ramp. Other projects/strategies recommended but not yet programmed include I-680/Mission interchange improvements and bicycle/pedestrian facility improvements.

<sup>1</sup> City of Fremont Bikeway Map ([www.fremont.gov/sitemap.aspx](http://www.fremont.gov/sitemap.aspx))

## State Route 262 Segment A Summary

Segment A is a four lane conventional facility between the SR-262 / I-880 interchange and Warm Springs Boulevard and is approximately .7 of a mile long. It is the connector to and from the onramps and off ramps for I-880. There are no commercial or retail developments on either side except at the Warm Springs intersection. There is no transit service, bicycle lanes or paths or sidewalks on this segment of SR-262. At the Warm Springs Boulevard intersection, there are two left, and one right, turn pockets in both directions located on Mission Boulevard. The Union Pacific railroad (UPRR) operates two grade-separated rail lines that run perpendicular to Route 262 west of Warm Springs Boulevard that serve industries in the area and access the national UPRR network.

Residential, industrial and commercial areas west of I-880 can be accessed via nearby Warren Avenue, which has been improved to include sidewalks on the south side of the street. Warren Avenue is a designated Class 3 bicycle route and has a narrow striped shoulder between Lakeview Boulevard and Kato Road. The shoulder on this segment of Warren Avenue is four feet wide, including the gutter, but there is a standard five foot wide bicycle lane in the westbound direction of the bridge deck.



Segment A—looking west from the Warm Springs Blvd. intersection

## State Route 262 Segment B Summary

Segment B is a six lane conventional facility between Warm Springs Boulevard and the SR-262/I-680 interchange and is approximately .4 miles long. Cross streets are Mojave Drive and Warm Springs Boulevard, where City of Fremont red light enforcement cameras are in place. There is one left, and one right, turn pockets in both directions of Mission Boulevard at the Mojave Drive intersection. The segment is located along several hotel, apartment, commercial and retail establishments and passes near the Warm Springs residential area. Areas east of I-680 can be accessed by Mission Boulevard, where it continues as a local arterial roadway for 3.1 miles before rejoining the State Highway System as SR-238.

Both AC Transit and VTA provide service on four lines in Segment B. They share a bus stop on each side of Mission Boulevard west of the Mojave Drive intersection. The bus stops consist of only a pole-mounted sign. No seating, shelter or electronic bus arrival information signage is provided. The northwest side of Mission Boulevard has a bus pullout.

There are sidewalks on both sides of the street. They are 10 feet wide on both sides of the street between Warm Springs Boulevard and Mojave Drive. Between Mojave Drive and Brown Road, the sidewalk on the northwest side of Mission remains 10 feet wide, but is only 5 feet wide on the southeast side. A planter strip provides a buffer between pedestrians and traffic on the northwest side of Mission between I-680 and Mojave Drive and most of the way between Mojave and Warm Springs Boulevard. Given that the sidewalk is 10 feet wide at the bus stops, 8 feet of clear width is provided between the bus poles and opposite edge of the sidewalk. Between Brown Road and the I-680 interchange, the sidewalk on both sides of Mission Boulevard is only 5 feet wide and no crosswalk markings are provided at the I-680 ramp entrances and exits.

There are also bicycle lanes between Warm Springs Boulevard and the northbound entrances/exits to/from I-680, as well as bicycle pockets between the right-turn only lane and through lanes at the Mojave Drive intersection. However, no bicycle pockets are provided for through-cyclists at the I-680 ramp entrances and exits.



Segment B--just east of Mojave Drive

### State Route 262 TCR Segment Traffic Data

| Location |                             |        |                |              | Forecasted LOS and Facility Type |                    |                     |                   |                       |
|----------|-----------------------------|--------|----------------|--------------|----------------------------------|--------------------|---------------------|-------------------|-----------------------|
| Segment  | Description                 | County | Post Mile From | Post Mile To | 2010 LOS*                        | 25-Year Future LOS | 25-Year Concept LOS | Existing Facility | Concept Facility 2035 |
| A        | I-880 to Warm Springs Blvd. | ALA    | R0.00          | R0.70        | C (WB-PM)                        | F                  | E                   | 4C                | 6C                    |
| B        | Warm Springs Blvd. to I-680 | ALA    | R0.70          | R1.07        | C (EB-AM)                        | F                  | E                   | 6C                | 6C                    |

\*Source: Alameda CTC 2010 LOS Monitoring Report

| Current Traffic Data--2009 |             |                   |                   |                       |                      | Prior Three Years | Future Traffic Data--2035 |                   |                       |                      |
|----------------------------|-------------|-------------------|-------------------|-----------------------|----------------------|-------------------|---------------------------|-------------------|-----------------------|----------------------|
| Segment                    | % of Trucks | Directional Split | Peak Hour Traffic | Average Daily Traffic | Volume Over Capacity | Safety Index*     | Directional Split         | Peak Hour Traffic | Average Daily Traffic | Volume Over Capacity |
| A                          | 7.2%        | 51%               | 9,932             | 76,000                | 1.13                 | -80%              | 51%                       | 10,920            | 98,000                | 1.21                 |
| B                          | 5.6%        | 52%               | 8,977             | 71,000                | 1.10                 | -89%              | 52%                       | 10,200            | 84,000                | 1.18                 |

\*Collision Rate Index: The percentage by which each segment's reported collisions rate (fatal, injury and property damage only) is above or below the statewide average reported collisions rate on comparable facilities. Source: 3-year Caltrans Traffic Accident Surveillance and Analysis System data.

## SR-262 Environmental Factors Map



### Environmental Factors

The map above depicts environmental issues in the vicinity of SR-262. There are two historic bridges that cross over the corridor which carry Union Pacific Railroad trains. Just east of I-680 there is an area where a species of concern, the red legged frog, is located. Two species of concern, the California Seablite and the Salt Marsh Harvest Mouse, exist west of the corridor. There are no Priority Conservation Areas (PCA) or Priority Development Areas (PDA) within the route's area of influence.

## SR-262 Corridor Issues

- The current legislative description of SR-262 reads: “Route 262 shall cease to be a state highway when Route 237 is constructed between Route 880 and Route 680.”
- The 2005 I-680/I-880 Cross Connector Study analyzed traffic movement between I-680 and I-880 in the Fremont / Milpitas area. The study recommended projects from among the various corridor improvement alternatives analyzed. The construction alternatives considered for each of the corridors studied were: (A) Widen existing alignment. (B) Elevate the roadway, and (C) Depress the roadway (cut and cover tunnel). The projects suggested in that study for SR-262 were to: Complete the planned Phase 1A and 1B improvements for the Mission Boulevard/I-880 interchange, construct the grade separation of Warren Avenue with the UPRR, and modify the I-680/Mission Boulevard interchange to operate as a partial cloverleaf. Each of these suggestions have either been programmed, planned, or are in construction.
- The planned Warm Springs BART station will be located on Warm Springs Boulevard approximately one mile north of Route 262. The station will feature 34 acres of bus intermodal, automobile and bicycle parking plus pedestrian and bicycle pathways. This should be considered when new or upgraded connecting road, bicycle and pedestrian facilities are planned. The Warm Springs station is expected to be in service by June 2014.
- The Warm Springs BART extension will connect to the planned BART Silicon Valley extension to Milpitas, Santa Jose and Santa Clara. This 16-mile route will travel along the existing Union Pacific Railroad alignment south of the future Warm Springs station, and then tunnel underneath downtown San Jose, rising to street level in Santa Clara.
- The conversion of the NUMMI plant to Tesla-Toyota operations should be monitored to determine how it will impact SR-262 and related transportation facilities. The Union Pacific railroad recently purchased 160 acres at the NUMMI plant for future use as a rail facility.
- Deficiencies in bicycle and pedestrian access along SR-262 and to destinations west of the 262/880 interchange warrant investigation of potential improvements.

## Highway Improvement Projects

### Programmed:

- Widen Mission Blvd (SR 262) from Warm Springs Blvd to the I-880 connector ramps from 4 to 6 lanes, complete the reconstruction of the Kato on and off-ramps connecting Kato Road to Mission Blvd, and construct a new replacement railroad underpass structure to carry UPRR freight traffic. Completion: Fall 2014
- Activation of Ramp Metering at Mission Boulevard/Southbound I-680 (May 2011)

### Planned:

- I-680/SR-262 interchange reconfiguration, SR-262 roadway widening and SR-262/Warm Springs Blvd intersection improvement.

Conceptual: Per the Caltrans Complete Streets Policy (Deputy Directive 64-R1), study the following potential access improvements to SR-262:

- Install pedestrian countdown signals at the SR-262/Warm Springs Boulevard and SR-262/Mojave Drive intersections. These have a proven safety benefit.<sup>2</sup>
- Convert the SR-262/Mojave Drive intersection into a complete intersection by adding a marked crosswalk and pedestrian crossing phase on the northeast leg of the intersection and re-timing the signal to optimize performance for all modes of transportation.
- Work with AC Transit and VTA to provide seating and shelter, and to assess whether demand warrants provision of electronic bus arrival information signage, at the bus stops on SR-262.<sup>3</sup>
- Investigate opportunities to widen the sidewalk between Mojave Drive and I-680 on the southeast side through right-of-way acquisition or reallocation of space.<sup>4</sup>
- Mark crosswalks at the I-680 ramp entrances and exits and to provide bicycle pockets for through-cyclists between the I-680 entries/exits and SR-262 through-lanes. This may necessitate squaring up the intersections between the I-680 ramps and SR-262.
- At the SR-262/I-680 interchange, investigate widening sidewalks in order to provide more of a buffer between pedestrians and fast-moving traffic and to allow two pedestrians to walk comfortably side-by-side or two wheelchair users to pass each other.
- Work with the City of Fremont to encourage the development of continuous bicycle lanes and sidewalks on both sides of Mission Boulevard where Mission becomes a local street northeast of I-680.
- Work with the City of Fremont to provide a bicycle lane in both directions on Warren Avenue where it approaches and passes over I-880. This may necessitate narrowing the raised median, which could impact the length of, and storage in, the left turn lane on westbound Warren.

---

<sup>2</sup> Pedestrian Countdown Signals: Experience with an Extensive Pilot Installation, Markowitz, Frank et al, ITE Journal, January 2006.

<sup>3</sup> According to AC Transit, the 10 foot sidewalk width at these stops provides the minimum amount of space needed to accommodate a shelter while leaving enough passing space for pedestrians.

<sup>4</sup> A wider sidewalk would provide more of a buffer between pedestrians and traffic and allow two pedestrians to walk comfortably side-by-side or two wheelchair users to pass each other.

## SR-262 Concept Rationale

The Corridor concept conveys Caltrans' vision for a route with respect to corridor capacity and operations for a 25-year planning horizon.

Historically SR-262 has served as an important commuter and goods movement route and continues to do so. It passes through an area of significant commercial, retail and residential activity and is a critical link between I-880 and I-680. In the mid-1980s it was suggested that this route be converted to a six lane freeway—a recommendation that never came to fruition because it proved to be too costly, with insufficient operational benefits.

The future route concept for Segment A is to widen the facility to a six-lane conventional highway as currently planned. For Segment B the future concept is to maintain the existing six-lane conventional highway facility. Near term projects include completion of widening and grade separation projects, and activation of metering lights at the southbound I-680 on-ramp. The study of I-680/Mission Boulevard interchange improvements is underway. Additional projects/strategies recommended for further study are a variety of bicycle/pedestrian facility improvements within the SR-262 area.