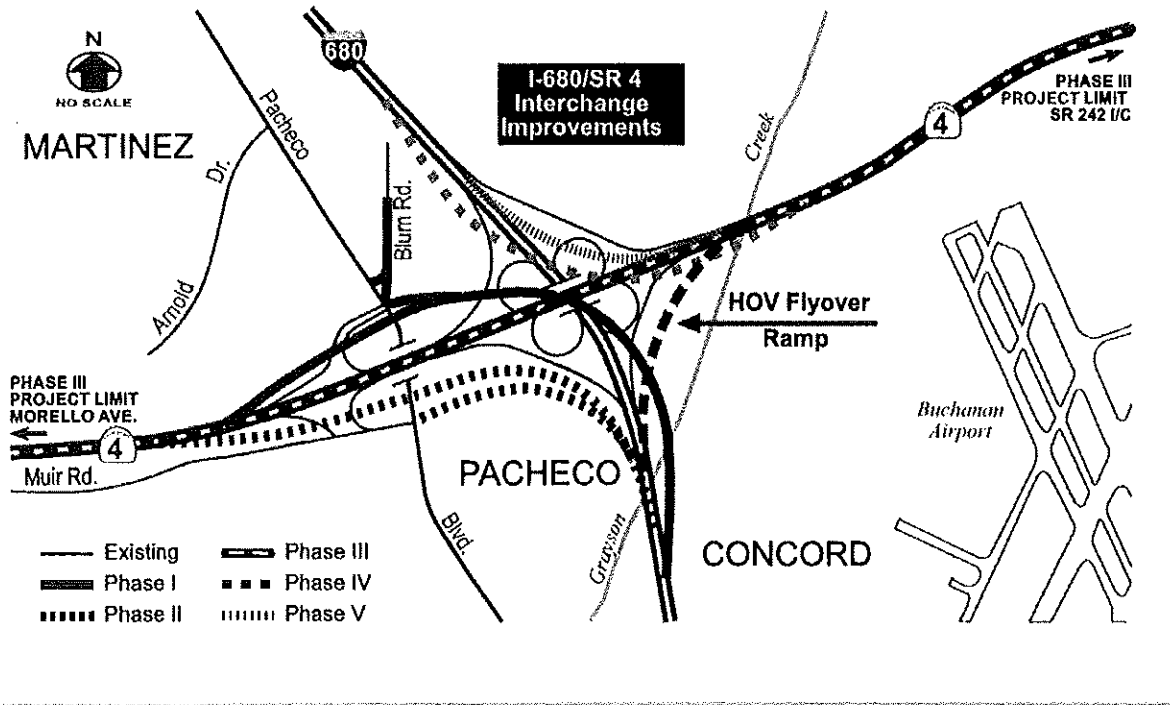


Interstate 680 / State Route 4 Interchange Improvements - Phase 1



Project Number


6001

Project Sponsor

Contra Costa Transportation Authority

Project Type

Transit

 Highway

Local Streets

Major Arterial

Bike/Pedestrian

Other

Project Scope

Construct a three-level interchange with two-lane direct connector ramps for the high-demand Northbound to Westbound (Phase 1) and Southbound to Eastbound (Phase 2) movements. Retain loop ramp configuration for the Westbound to Southbound and Eastbound to Northbound movements. Provide all other ramp movements by diagonal ramps. Widen State Route 4 from four to six lanes, eliminating the current Eastbound lane drop on State Route 4, west of the Pacheco Boulevard interchange; and construct auxiliary lanes to the adjacent interchange ramps at Morello Avenue and Solano Way on State Route 4, and Pacheco Boulevard and Concord Avenue on Interstate 680.

Funding Sources (\$ in million) - Phase 1 Only

Total	76.2
Measure J Transportation Sales Tax ¹	36.0
State Transportation Improvement Program - Regional (STIP-RIP)	1.3
Other (TBD)	38.9

¹Measure J funds shown in escalated dollars. Actual commitment is in 2004 dollars as shown in Appendix A.

I-680 / State Route 4 Interchange Improvements - Phase 1 (cont.)

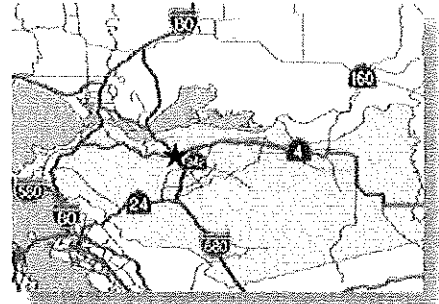
Need/Purpose

The purpose of this project is to increase the capacity and safety of the Interstate 680/State Route 4 Interchange. The State Route 4 East corridor serves as the only major east-west transportation link joining the communities of Antioch, Bay Point, Pittsburg and Brentwood with Central County and the Bay Area. This corridor provides access to major industrial facilities (including refineries) in both northern and western Contra Costa County.

By the year 2025, travel time through the corridor is projected to increase tenfold, if no improvements are constructed.

The Interstate 680 corridor serves as the main artery through central Contra Costa County connecting it with Solano County to the north and Alameda and Santa Clara Counties to the south. The proposed project provides congestion relief and improves the level of service within the interchange area.

Project Location



Possible Segmentation

Construction phasing is anticipated, dependent upon available funding, as follows:

- Phase 1- northbound Interstate 680 to westbound State Route 4 connector
- Phase 2- eastbound State Route 4 to southbound Interstate 680 connector
- Phase 3- State Route 4 widening between Morello Avenue and State Route 242
- Phase 4- southbound Interstate 680 to eastbound State Route 4 connector
- Phase 5- westbound State Route 4 to northbound Interstate 680 connector

Each phase of the project is designed as an independent segment.

Issues

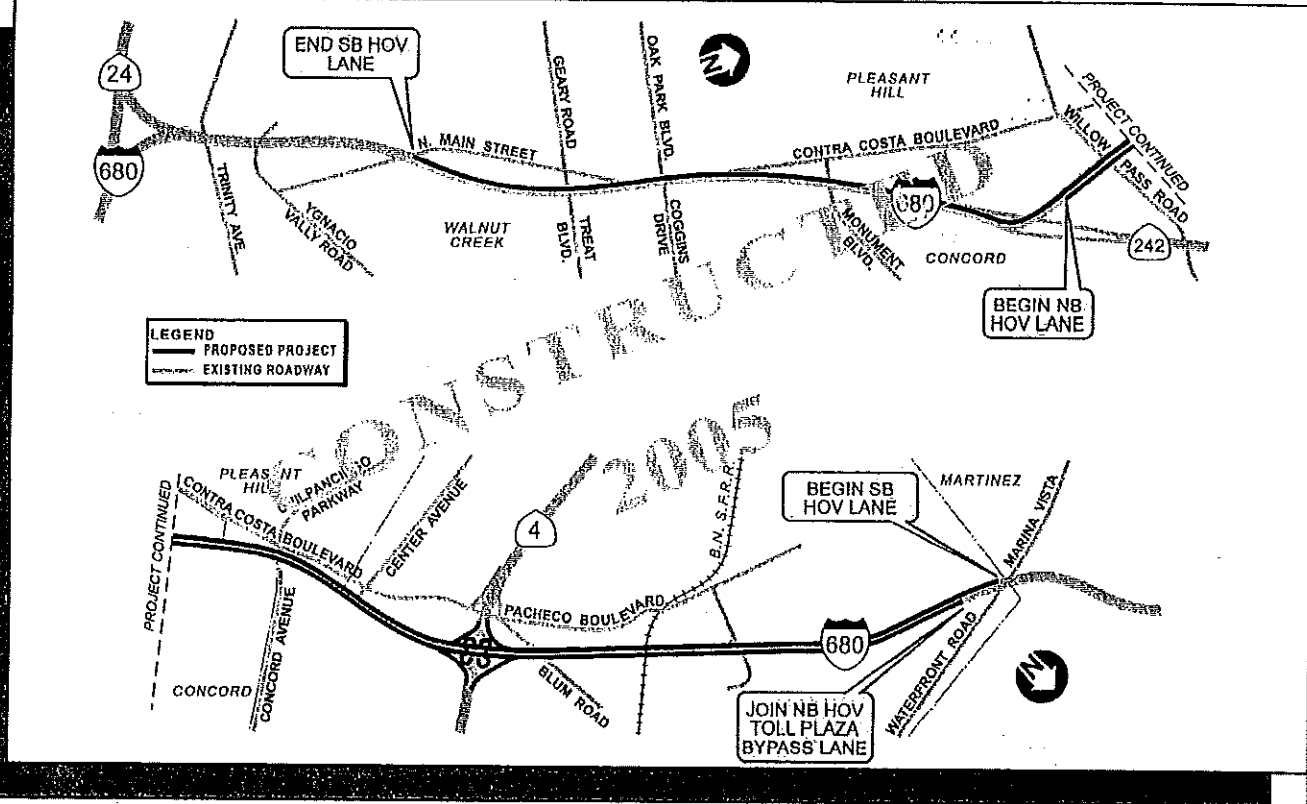
Project has a substantial funding shortfall.

Current Status

Project is in environmental clearance stage.

Project Schedule





**I-680 HOV LANES
(NORTH MAIN STREET TO
MARINA VISTA)**

**PROPONENT:
CALTRANS**

**PROJECT NO:
1116C**

DESCRIPTION:

This project provided new HOV lanes on I-680 in the northbound direction from State Route (SR) 242 in Concord to the Marina Vista Interchange in Martinez and in the southbound direction from the Marina Vista Interchange in Martinez to North Main Street in Walnut Creek. The project also provided a collector-distributor road system on I-680 for movements to and from SR 4 at the I-680/SR 4 Interchange.

This project was accomplished by minor widening of the right hand shoulders and re-striping of the existing I-680 lanes to a combination of 11-foot and 12-foot wide lanes. Several structures required widening.

STATUS:

The CEQA/NEPA environmental clearance was obtained in December 1999. Final design by Caltrans was completed March 2003. Construction started March 2003 and was substantially completed in April 2005.

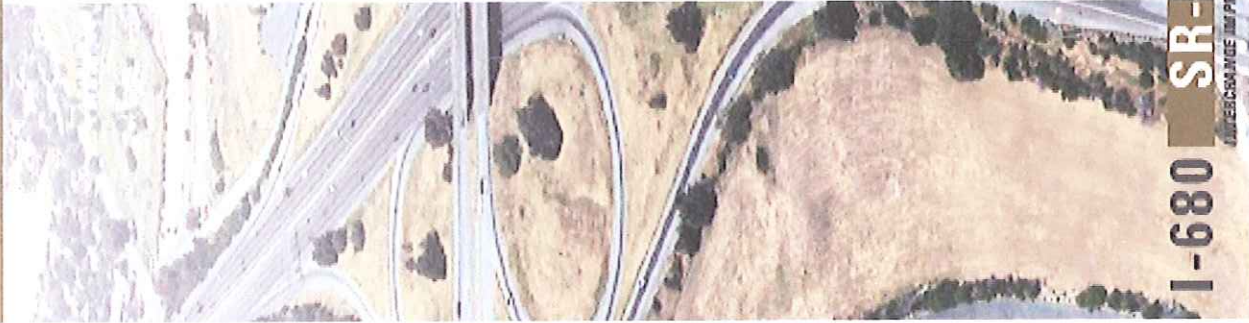
FUNDING SOURCES (\$ X 1000):

Federal	4,390.8
STIP	42,277.0
SHOPP	8,301.5
Measure C (Esc.\$) ¹	<u>2,152.0</u>

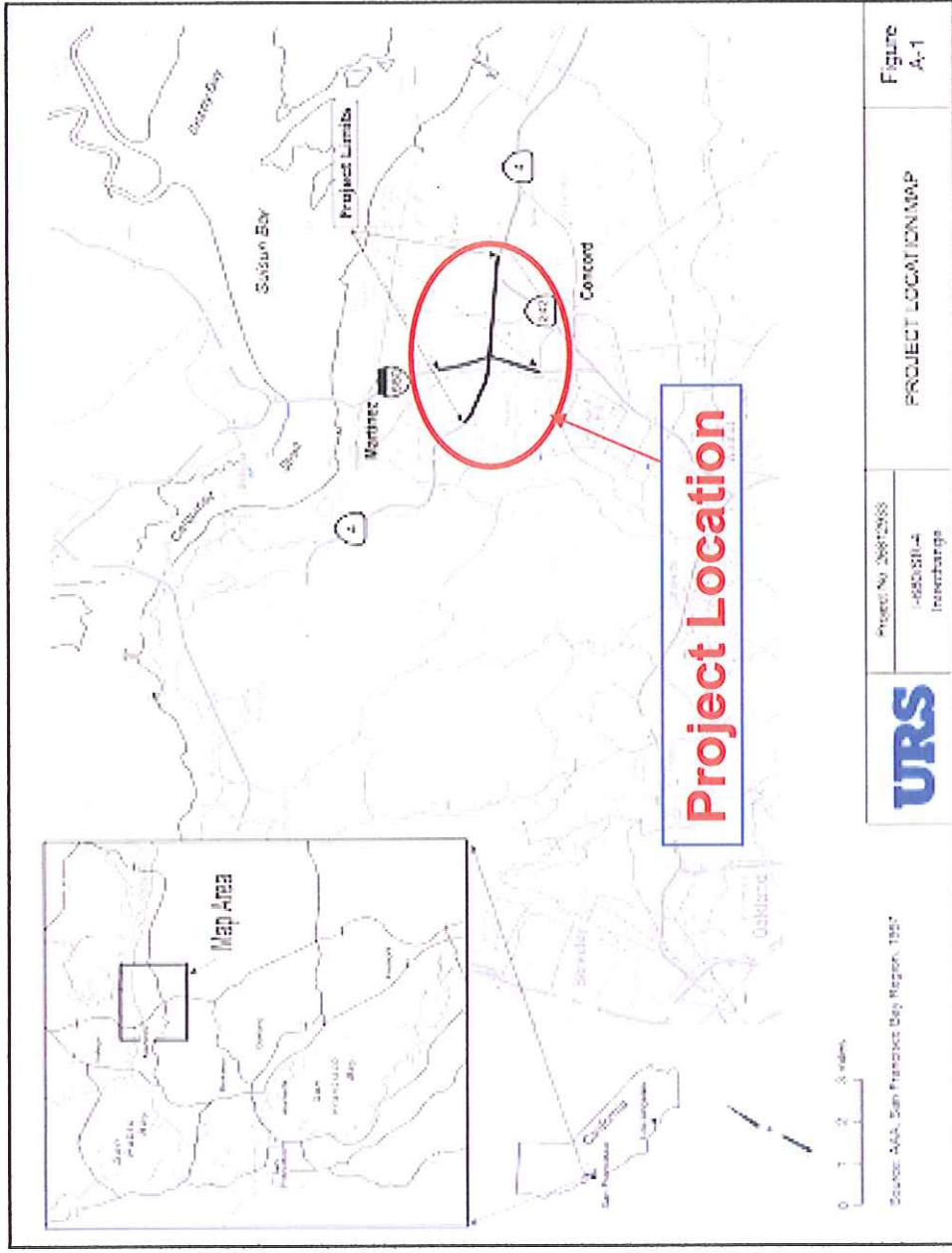
TOTAL **\$ 57,121.3**

¹ Measure C funds shown in escalated dollars. Actual commitment is in 1988 dollars as shown in Appendix A.

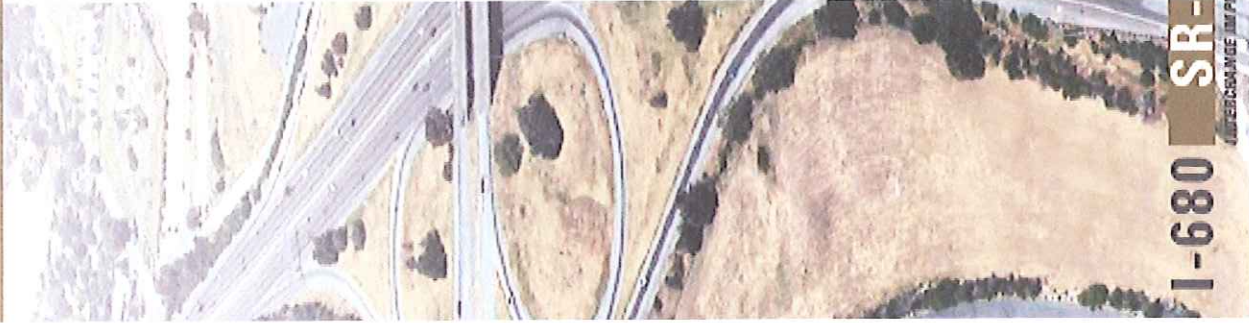
Interstate 680/State Route 4 Interchange Project Interim Phase III Improvements



The Project Map



Interstate 680/State Route 4 Interchange Project Interim Phase III Improvements



Overall Project Phases and Cost Estimate:



Phase I: \$68.8M



Phase II: \$42.9M

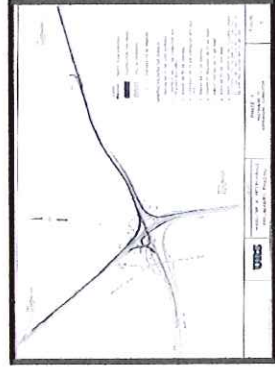


Phase III: \$35.7M

**Interim Phase III:
\$15.2M ~ \$22.6**



Phase IV: \$41.2M



Phase V: \$32.2M

**Total Project
Cost: \$278M**

Cost Estimate in 2007 dollars



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authority

I-680 SR-4
INTERCHANGE IMPROVEMENT P1

TRANSPAC

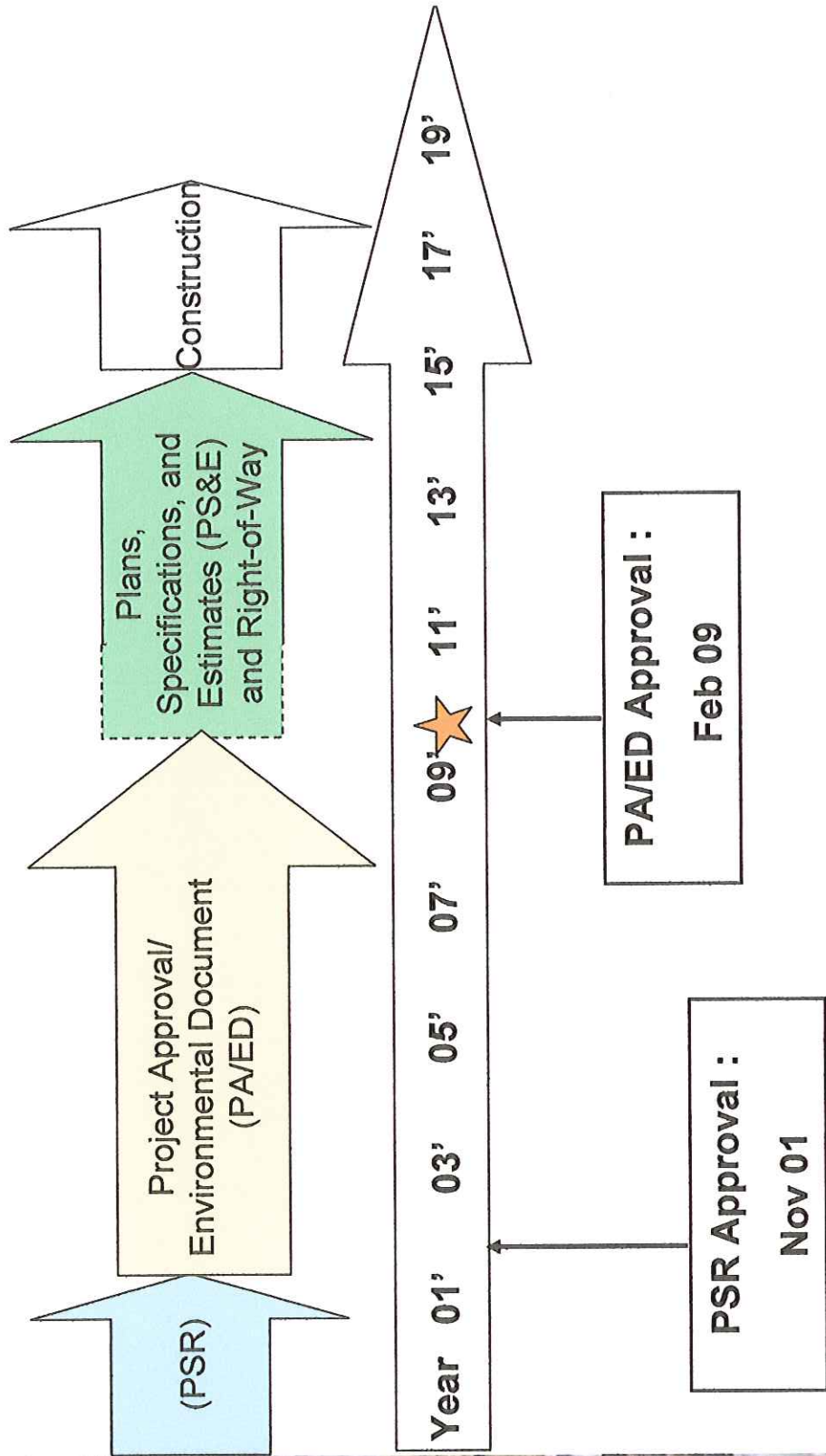
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Interstate 680/State Route 4 Interchange Project

Interim Phase III Improvements

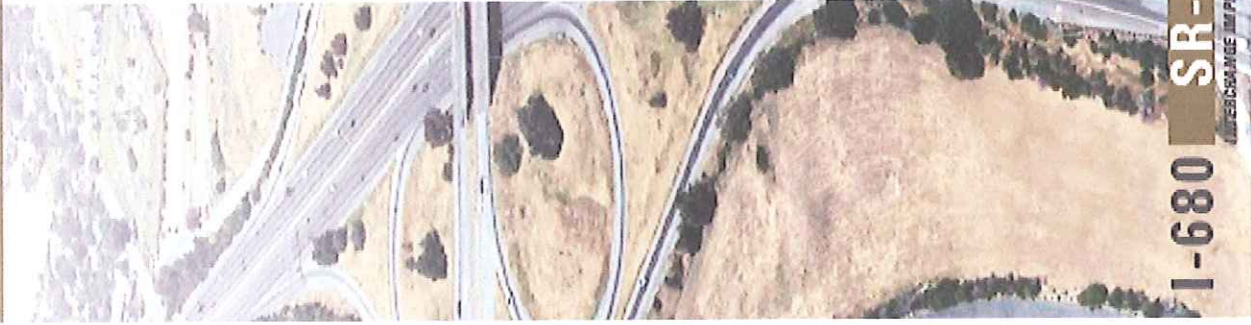
Project Schedule and Status:



Interstate 680/State Route 4 Interchange Project Interim Phase III Improvements

Phase III Improvements

- Add two lanes in SR 4 Median
- Widen six bridges
- Construct Sound Wall



I-680 SR-4
INTERCHANGE IMPROVEMENT P.I



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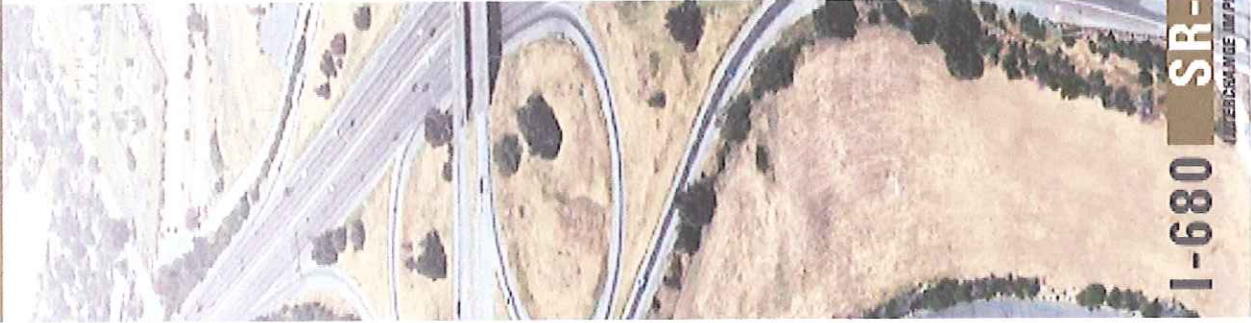
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Interstate 680/State Route 4 Interchange Project Interim Phase III Improvements

SR4 Traffic & Accident Data

- AADT : 86,000 vehicles (both direction)
- SR4 Accident Rate exceed State Average (1.02 vs. 0.94)
- SR4 Eastbound Accident rate exceed Westbound Accident Rate (250 vs. 142)
- Rear-end collision was the most
- Weave & Lane Drop (non-standard)



I-680 SR-4
INTERCHANGE IMPROVEMENTS



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Interstate 680/State Route 4 Interchange Project

Interim Phase III Improvements

Interim Phase III Project Approach:

- Conformity with the overall project need and purpose
- Minimize/Eliminate throw-away costs
- Flexible Design → Design Tailored to available funding
- Four options developed as part of Phase III
- Provision for cost reduction



I-680 SR-4
PERFORMANCE IMPROVEMENT P1



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Interstate 680/State Route 4 Interchange Project

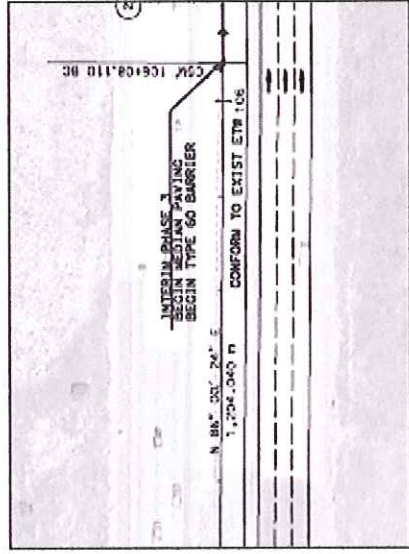
Interim Phase III Improvements



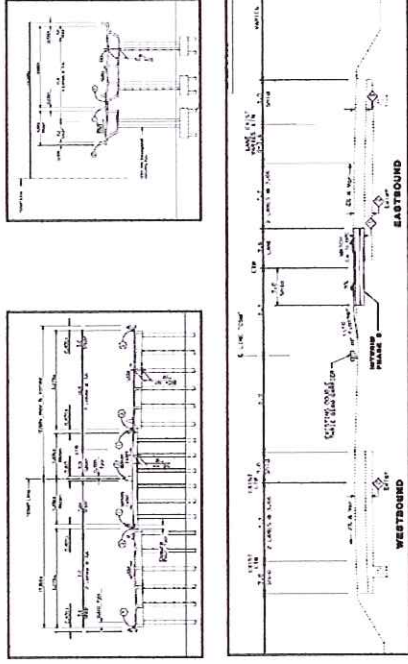
1-680 SR-4
INTERCHANGE IMPROVEMENT PROJECT

Interim Phase III Scope:

- Add an inside travel lane on eastbound SR 4
- Widen Bridges as required
- Seismically retrofit Bridges as required
- Construct sound walls



Sample Plan



Sample Sections

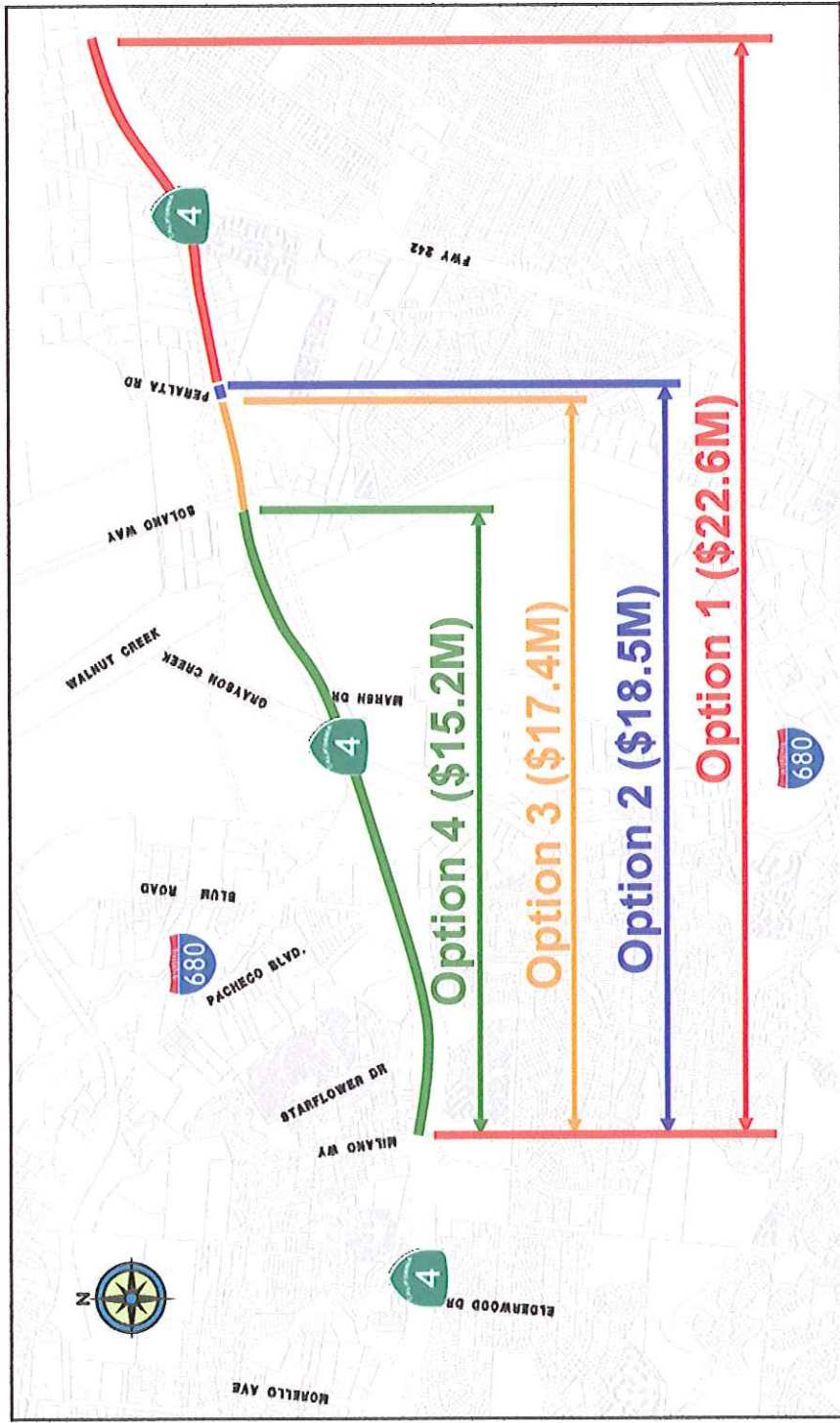


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Interstate 680/State Route 4 Interchange Project Interim Phase III Improvements

Interim Phase III – Overview and Options



I-680 SR-4
INTERCHANGE IMPROVEMENT P.I.



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Interstate 680/State Route 4 Interchange Project

Interim Phase III Improvements

Interim Phase III Key Benefits:

- Improve Traffic Operations
- Eliminate Existing Lane Drop in Eastbound Direction
- Improve Traffic Safety by Reducing Accidents
- Improve Traffic Handling for Future Outside Roadway and Bridge Widening
- Safer Weaving and Merging movement at I680/SR4 Interchange
- Proposed Improvements are within existing Right of Way
- Flexibility in Design Alternatives



I-680 SR-4
INTERCHANGE IMPROVEMENTS



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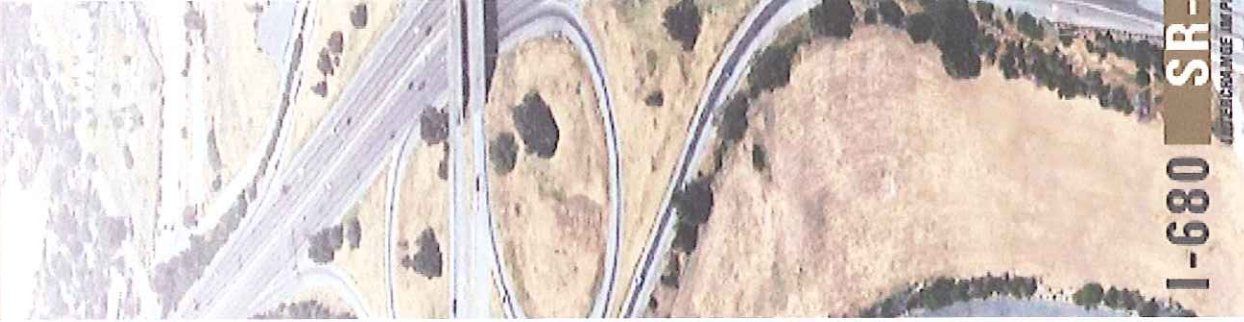


Interstate 680/State Route 4 Interchange Project

Interim Phase III Improvements

Interim Phase III Assumptions:

- Potential Additional Cost Savings subject to approval of design exceptions from Caltrans.
- Cost varies linearly among options.
- Cost estimate based on 2007 cost data.
- Seismic retrofit cost are based on the preliminary qualitative analysis and subject to change.



I-680 SR-4
INTERCHANGE IMPROVEMENT P.I.



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