

STAFF REPORT



MEETING DATE:	12/19/11
SUBJECT:	Interstate 5 Redding to Anderson Project Value Analysis Report
AGENDA ITEM:	7
STAFF CONTACT:	Dan Little

STAFF RECOMMENDATION:

It is recommended that the board receive a presentation regarding the Redding to Anderson Six Lane Project Value Analysis Report and provide any comments or suggestions prior to finalizing the report.

DISCUSSION:

The Redding to Anderson Six Lane Project (formerly called the "gap project") would widen Interstate 5 to six lanes between the Deschutes Road Interchange and the Smith Road over crossing. This project would result in a contiguous six lane freeway from the south Shasta County line to the State Route 44 Central Interchange by closing the gap between the South Redding Six Lane Project and the Cottonwood Hills Truck Climbing Lanes Project. Depending on available funding, the Redding to Anderson Six Lane Project could be built all at once or in phases. Total construction cost is estimated at \$71.4 million.

The value analysis is an early scoping document intended to weigh the cost and benefits for different design alternatives. The process also helps to refine cost estimates and identify logical project segments for phasing.

The value analysis team consisted of Caltrans staff for various disciplines, and other agencies including the RTPA. The final report will be completed in January just prior to commencing the environmental review process.

A handwritten signature in black ink, appearing to read 'D. Little', written over a horizontal line.

Daniel S. Little, AICP, Executive Director

Attachment: Value Analysis Summary Sheet
Project Location Map

I-5 Redding to Anderson 6-Lane

December 7, 2011

02-SHA-5-PM-2.0/R12.0 Overall

02-SHA-5-PM-R4.1/R11.2 New Lanes Only

EA 02-4C402K

PPNO 3445

Value Analysis Summary

Project Purpose and Benefits:

The project proposes to widen I-5 to three lanes in each direction from Deschutes Road to Bonnyview Road, closing the 7-mile gap between existing 6-lane sections of I-5. Once completed, I-5 will have over 15-miles of continuous 6-lane freeway from Cottonwood to Redding. Efficient traffic operations on Interstate 5 between Anderson and Redding are diminished by 5 existing interchanges that are in close proximity to each other, a rolling mainline profile (which limits sight distance at the ramps), and 13% truck traffic. In addition, a major truck stop is adjacent to the sixth interchange in the corridor with significant amounts of merging big rig trucks that are longer and slower than other vehicles. The area adjacent to the corridor has significant development potential that will only add to the existing traffic inefficiencies. Level of Service (LOS) is projected to drop below route concept of C/D by 2030 for the entire 7-mile gap between existing 6-lane freeway segments.

Value Analysis (VA) Team Summary:

- A multi-discipline team consisting of expertise in the areas of : structures, construction, environmental, design, and advance planning were convened to recommend strategies to maximize value for the section of Interstate 5 under consideration to be widened.
- The VA team members evaluated 11 value increasing alternatives. The VA team assessed the cost and user benefits associated with widening away from the median versus widening towards the median and replacing the structures versus widening the existing structures.

The VA Team Findings:

Best Value – widen I-5 towards the median and widen the structures towards the median without replacement.

Capital Cost: \$65 million (2011 value)

SCOPE: 6-lanes for 6.9 miles, median widening only, deck the gap between the bridges, final median width of 36 feet and 60 feet. A traffic analysis will be conducted to determine whether an auxiliary lane extending from Deschutes Road to Balls Ferry Road is a viable alternative, in lieu of widening I-5.

Project Funding:

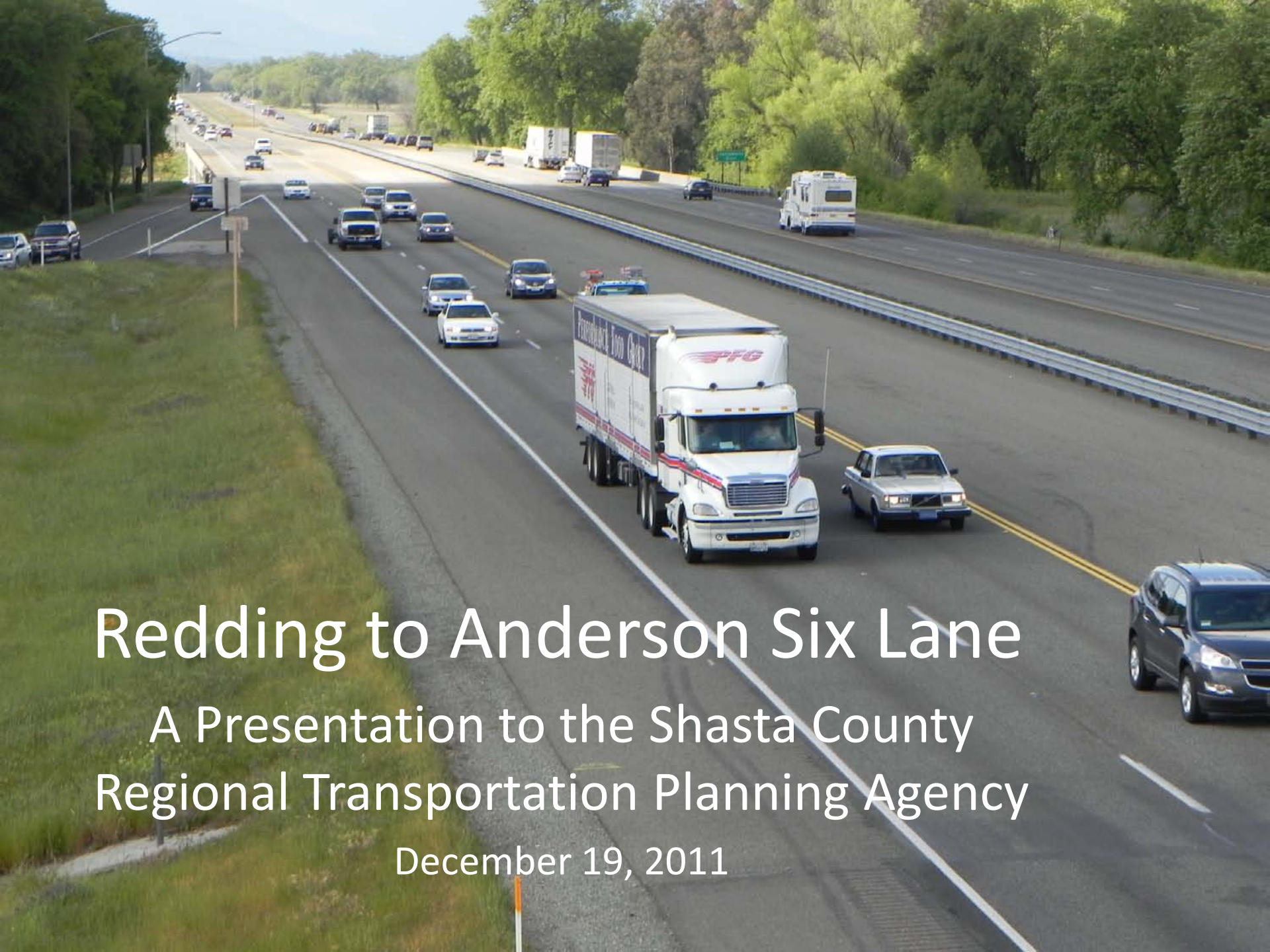
- The environmental phase of the project will commence January 2012, and will include a traffic analysis to properly evaluate the auxiliary lane alternative.
- The SCRTPA will program the design and right-of way components in the 2012 STIP, with design and right-of way work scheduled for completion in August 2014.
- It is anticipated that having a project ready for advertisement will position this project for high prioritization of available capital funding.

Capital Cost Flexibility:

The VA team recommendation provides flexibility based on the availability of capital construction funding. The northerly portion of the project is less expensive on a per lane-mile basis as compared to the southerly portion of the project, due to the magnitude of structure widening work included in the southerly section of the project.



REDDING TO ANDERSON 6-LANE PROJECT LOCATION

An aerial photograph of a multi-lane highway, likely a six-lane divided highway, showing traffic flow. A large white semi-truck with 'PFG' branding is prominent in the center lane. Other vehicles, including cars and smaller trucks, are visible in the adjacent lanes. The highway is flanked by green grass and trees, with a clear sky in the background.

Redding to Anderson Six Lane

A Presentation to the Shasta County
Regional Transportation Planning Agency

December 19, 2011

Ongoing Work

- Existing Interstate 5 Projects
 - Recently completed Cottonwood Hills
 - South Redding Six Lane – completion in 2012
 - 5/44 Interchange – completion in 2012
- Next steps
 - Ultimate Six lanes from Red Bluff to Shasta Lake City
 - Redding to Anderson Six Lane Project

Redding to Anderson Six Lane

- Value Analysis study
- Scope of Work
- Project Cost
- Schedule
- Questions and Answers

Value Analysis Study

- A multi disciplinary team aimed at determining best value.
- The meetings included input from the SCRTPA, City of Anderson and Shasta County.
- VA Team Recommendation Highlights:
 - Widen the highway towards the median
 - Do not replace any of the existing structures.
 - A traffic analysis will be performed to evaluate the effectiveness of an auxiliary lane between Deschutes and Balls Ferry Road.

Scope of Work

- Widen I-5 from Deschutes Road to Bonnyview Road.
- Utilization of existing median and R/W.
- Widening of six sets of structures.
- Yields a continuous 15 mile segment of six lane freeway.



Project Cost

- Construction capital: \$65 million
- Support costs: \$10.5 million
- The environmental phase will be programmed via a cooperative agreement between Caltrans and the SCRTPA in the amount of 340K.
- The design and R/W components will be programmed with STIP/RIP shares.
- Having a “shovel ready” project positions Caltrans and the SCRTPA to lobby for additional sources of funding for the construction phase of the project.
- The ultimate limits of the advertised construction contract can flex to fit the amount of available construction capital.

Project Schedule

- Environmental studies will start in Jan 2012.
- Environmental clearance will be issued in Dec 2012.
- Design efforts will start as soon as the design phase programming is secured.
 - ✓ Best case scenario for start of design: Jan 2013
 - ✓ Best case scenario for completion of design: Aug 2014
- Construction will start as soon as capital funding is secured.
 - ✓ Best case scenario for start of const: Apr 2015
 - ✓ Best case scenario for completion of const: Nov 2016

Questions and Answers