U.S.Department of Transportation
Federal Highway Administration

Accelerated Construction Technology Transfer (ACTT)

December 2003, Ontario, California

Caltrans

Accelerated Construction Technology Transfer (ACTT) is a strategic process that uses various techniques and technologies to reduce construction time on major highway projects while enhancing safety and improving quality. The process is implemented by conducting 2-day workshops for State Departments of Transportation (DOTs). The American Association of State Highway and Transportation Officials (AASHTO) and the Federal Highway Administration (FHWA) jointly fund ACTT workshops.

In December 2003, the California Department of Transportation (Caltrans) hosted a workshop that brought together almost 70 transportation experts from 16 states. The primary objective of the workshop was to draw on the expertise of participants to help Caltrans achieve its goal of minimizing construction time for its French Valley project located on I-15 between the cities of Temecula and Murrietta, Ca. The $75 million project is to add capacity and improve conditions at this location in order to mitigate congestion. The proposed improvements include construction of a new interchange between the I-15/I-215 and I-15/SR-79 junctions.

On December 9, Jim Sorenson, C&SP team leader at FHWA, opened the workshop with the question, “Why ACTT? Why Now?,” before bringing on several Caltrans and City of Temecula representatives to give an overview of the project. These officials were the Caltrans District 8 Acting Design Deputy, the city’s Deputy Director of Public Works, and the city’s Principal Engineer of Capital Projects.

Following the opening remarks and a project tour, the participants spent a day and a half brainstorming, looking for methods and measures that would help achieve project goals, namely easing traffic congestion, reducing traffic accident rates, and providing additional access to local communities. In recent years, this region has experienced population growth exceeding 30 percent, with 68 percent of the adults commuting away from the area for employment.

The skill sets, which attended Caltrans’ workshop were: Environment/Roadway/ Geometrics; Geotechnical/Materials/Pavements; Structures; Right-of-Way/ Utilities/Railroad; Innovative Financing/Contracting; Traffic Engineering/Safety/ ITS; and Construction. Each group focused on how the ACTT process applied to the specific concerns of their Skill Set. The teams presented numerous ideas and recommendations, many of which were deemed viable and will be pursued, according to Caltrans. Among these recommendations were:

- Modify the design in order to eliminate two bridge structures and braided ramps.

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- Pave the median to use as a detour during construction and provide for future HOV lanes.
- Prefabricate the entire bridge span on site and roll, launch, or lift it into final position to drastically reduce construction time and minimize traffic disruptions.
- Make the contractor responsible for the traffic control and management, but have Caltrans be responsible for quality control/quality assurance. This should be incorporated into the contract specifications.
- Explore alternative revenue streams such as tax increment financing, a city or regional transportation tax, truck toll lanes, and special assessments.
- Include utility design and utility coordination in the design/construction contracts.
- Dedicate a Caltrans Utility/Right-of-Way expert to guide and assist the design and construction teams.
- Solicit contractor input during design or preconstruction through AGC review, mandatory pre-bid meetings, and constructability reviews.
- Employ demand management techniques such as transit incentives during the construction.
- Provide dedicated freeway service patrols (FSPs) and incident response teams.
- Clearly define incident management roles and responsibilities during project planning and design based on types of incidents.

With the workshop now completed, it remains for Caltrans to sift through the reports produced by the Skill Set teams and decide which ideas should be implemented in future planning, design, and construction phases of the French Valley Parkway Interchange.

To find out more about the project and the implementation of recommendations, contact:

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