

Memorandum

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To: JOHN BARNA
Executive Director
California Transportation Commissioner

Date: March 25, 2008


From: MICHAEL A. PEROVICH
District Director

Subject: Review of RCTC Public Partnership Application

Riverside County Transportation Commission (RCTC) submitted a Public Partnership Application for High Occupancy Toll (HOT) Lanes along Interstate 15 (I-15 Corridor and HOT Lane Project) in Riverside County to the California Transportation Commission (CTC) on February 5, 2008.

Caltrans Headquarters Programming staff and CTC staff have requested that Caltrans District 8 provide a technical assessment of the proposed project. This memorandum is intended to provide technical background on the project and Caltrans District 8 staff conclusions.

- **Project Eligibility**—Compliance with Streets and Highway Code Sections 149 through 149.7

RCTC's project application for the I-15 Corridor and HOT Lane Project is not entirely consistent with established standards, requirements, and limitations that apply to those facilities in Sections 149, 149.1, 149.3, 149.4, 149.5, 149.6, and 149.7. The code sections cite "Unrestricted access to the lanes by high-occupancy vehicles shall be available at all times." The I-15 Corridor and HOT Lane Project policy for HOV2 and HOV3 would require flexibility in order to be consistent with the adjoining SR-91 Express Lanes. The SR-91 Express Lanes currently allow HOV3 to travel for free at all times with the exception of the eastbound rush hour, when HOV3 is charged half price. HOV2 must pay the same toll as all other vehicles.

Sections 149-149.7 specify transit and HOV lanes as exclusive uses of remaining toll revenue. Transit and HOV facilities are not part of RCTC's current I-15 Corridor and HOT Lane Project proposal. RCTC is requesting flexibility in this area as well. It should be noted that RCTC has jointly submitted with the Riverside Transit Agency an application to the USDOT for the I-15 Corridor and HOT Lane Project. This application,

submitted in December 2007 under the Congestion-Reduction Demonstration Initiative program, requests tolling authority for the corridor and funding to conduct an FTA Alternatives Analysis for a Bus Rapid Transit system utilizing the I-15 HOT Lanes.

- **Cooperation and Consistency with State Highway System Requirements**

Caltrans District 8 supports the submittal of and finds that the RCTC proposal for the I-15 Corridor and HOT Lane Project is consistent with state highway system requirements.

District 8 staff has worked closely with RCTC staff since 2003 performing alternatives analyses and discussing the feasibility of developing HOV or HOT lanes on SR-91 and I-15. District staff provided RCTC with preliminary engineering layouts for proposed SR-91/I-15 Interchange improvements and for HOV or managed lanes on SR-91 and I-15.

RCTC staff provided formal presentations to their board in December 13, 2006 and July 11, 2007 regarding possible development of HOT Lanes and toll facilities, and evaluating the feasibility of public/private partnerships to build additional transportation capacity. The focus of these presentations was on the SR-91 and I-15 corridors. At the December 2006 meeting, RCTC took action to seek legislative approval for toll facilities on SR-91 and I-15. Mike Perovich, District 8 Director, attended the board meetings noted above and is an ex-officio member of the RCTC board representing Will Kempton.

- **Maintenance and Operation Agreements**

No agreement has been drafted for maintenance and operations of the proposed toll facility at this time. However, RCTC has indicated that a proposed maintenance agreement would be similar to the existing SR-91 Maintenance Service Agreement (MSA) for the Orange County/SR-91 Toll Facility. Using language from that agreement, RCTC would maintain the facility in accordance with Caltrans' then-applicable published maintenance schedules and standards, and would be entitled—but not obligated—to engage Caltrans to maintain the non-toll collection components of the Initial Facility.

The Department and RCTC will need to negotiate an MOU for Operations and Maintenance. RCTC has indicated that they intend to follow the SR-91 Franchise Agreement.

A draft cooperative agreement between Caltrans and RCTC for the Project Approval/Environmental Document phase of this proposed project has been initiated.

Technical Feasibility

- **State Highway System Compatibility and Hot Lane Viability**

The route concept for this portion of I-15 is for the Interstate to operate at a minimum Level of Service (LOS) E. With the HOT lanes operating at LOS C, the general-purpose lanes are expected to operate at an acceptable LOS C to D. Without HOT lanes the Interstate is projected to operate at LOS F.

A study of operating conditions on the SR-91 shows that HOT lanes are beneficial and sustainable. During peak hours, the eastbound SR-91 Toll lanes currently carry 4,000 people in 2,800 vehicles. This benefits SR-91 by reducing congestion in the general-purpose lanes. It is anticipated that extending the Toll lanes on SR-91 and building toll lanes on I-15 will expand these benefits.

- **Project Proposal**

Segment A: The first segment of the proposed I-15 Corridor and HOT Lane Project (from San Bernardino County Line to I-215) is to be constructed by 2019. This segment consists of: Two HOT lanes in each direction from the San Bernardino County line to SR-74; One HOV lane in each direction from SR-74 to I-215; and one general purpose lane in each direction from the San Bernardino County line to SR-74; Merging lanes at each point of ingress or egress to the I-15 HOT lanes; HOT lane direct connector from the I-15 corridor north of SR-91 to the 91 Express Lanes west of I-15 (HOT lane direct connector consists of a one-lane ramp for southbound to westbound traffic and a one-lane ramp for eastbound to northbound traffic). Also included is the installation of electronic toll collection equipment, video enforcement equipment, and electronic occupancy detection systems.

Segment B: The second segment of the I-15 Corridor and HOT Lane Project (SR-74 to the San Diego County Line) would be constructed in the future as the San Diego County facilities along I-15 are extended north to the Riverside County line.

- **Network of Toll Facilities**

The I-15 Corridor and HOT Lane Project proposal has been developed to be compatible with and provide connectivity to existing and proposed toll facilities in Southern California such as I-15 managed lanes, SR-91 Express Lanes and the Orange County Toll Roads (SR-73/133/241/261). Note: Los Angeles and San Bernardino Counties are investigating toll options as well.

- **Regional Transportation Plan (RTP) Listing**

The draft 2008 RTP includes provisions for:

- Building HOV/HOT lanes (2 HOV 3+ lanes or HOT lanes in each direction) from SR-74 to San Bernardino County Line. Estimated cost for this project is: \$873 million.
- Building/Extending 4 HOT lanes (2 in each direction) from Orange County Line to I-15 and including construction of Connector Lanes from EB SR-91 to SB I-15 and from NB I-15 to WB SR-91. Estimated cost for this project is: \$751 million.

- **Riverside County Measure A**

Riverside County Measure A includes wording: I-15 add one lane in each direction from route 60 to San Diego County Line \$359 M. RCTC is proposing funding for the general-purpose lane using Measure funds.

Funding for the I-15 Corridor and HOT Lanes Project is based on revenue bonds issued on projected toll revenue. No additional funding is identified beyond the Measure.

- **Caltrans PSR**

The PSR did not include a HOT lane alternative but it did acknowledge RCTC's 2009 Delivery Plan and proposed RTP amendment both of which detail an I-15 corridor with HOT Lanes from the San Bernardino County line to SR-74. The PSR proposed to widen from six to eight mixed flow lanes and two HOV lanes from I-15/I-215 (City of Murrieta) Junction to the Riverside/San Bernardino County Line.

The HOT lane alternative was not officially defined at the time of completion of the PSR, as the PSR alternatives were established prior to RCTC adopting HOT lane corridors in their 2009 Delivery Plan. The HOT lane alternative will be fully developed during the Project Approval and Environmental Document (PA/ED) phase.

- **Geometrics**

Within the project limits, I-15 is predominantly a six-lane divided urban freeway with three 12-foot lanes in each direction, with the exception of the segment between Railroad Canyon Road and Temescal Canyon Road for approximately 13 miles, where a fourth lane exists in each direction, that presently function as the outside shoulders. The inside and outside shoulders are 8 feet and 10 feet wide, respectively. The existing median is 70 feet wide and is unpaved beyond the shoulders. The structural section of the existing pavement consists of asphalt concrete pavement. The horizontal alignment is general

tangential and the vertical alignment is in general gentle rolling profiles. There are 41 bridge structures, including twenty-five local street interchanges, three railroad overheads and thirteen drainage facilities within the project limits.

- **Engineering Challenges**

From a horizontal and vertical alignment perspective, the existing interstate alignment does not present any geometric restriction, as the facility was originally designed and constructed to freeway standards. Limitations may exist with regards to the right of way, as the existing median is approximately 70 feet wide, and does not provide the required width to construct the additional mixed flow, HOV lane, buffer, and standard inside shoulder called for in the TCR for the Ultimate Concept Facility. In addition, the split profile configuration of the roadbed at some locations may require the construction of extensive retaining walls. Use of the existing right of way, which varies between 230 and 450 feet beyond the outside shoulders would be restrictive as well, given the topography of the terrain abutting the facility, as well as the closeness of local development.

- **Riverside County 2009 Delivery Plan**

Language reads add 2 HOT lanes in each direction from SB County to SR-74.

- **Public Benefits**

Currently there are insufficient public funds to make these improvements. RCTC's proposal would use anticipated revenues from a toll facility—user fees—to finance these improvements.

Without these improvements, conditions on SR-91 and I-15 will deteriorate beyond their current critically congested level. The increased congestion will negatively affect air quality, commercial development, quality of life, and mobility in western Riverside County, Orange County, and southern Los Angeles County.

- **Route Classification**

I-15 is a National Highway System (NHS) High Priority Corridor – Economic Lifeline Corridor, as well as part of the Strategic Highway Corridor Network of National Defense. I-15 is considered a major interstate goods-movement corridor, which links to the Los Angeles area, High Desert and beyond. I-15 is classified as a “High Emphasis” and “Gateway” route in the Interregional Road System (IRRS).

Conclusion: RCTC's Public Partnership Application is consistent with Caltrans District 8 and other regional priorities. RCTC has noted the need for additional legislation to implement this project. While District 8 staff has identified a number of challenges in developing this project, none of these issues constitute a fatal flaw. Therefore, Caltrans finds that the I-15 Corridor and HOT Lane Project application is consistent, in concept, with state highway system requirements, and is in compliance with applicable state and federal laws and regulations except as described in this letter. Also, Caltrans is committed to working with RCTC to ensure that that I-15 Corridor and HOT Lane Project is technically consistent with state highway system requirements, and will coordinate with RCTC to ensure that the I-15 HOT Lanes are maintained and operated consistent with the requirements set forth in the Streets and Highways Code.