



**I-5 North Stockton HOT Lanes Traffic and Revenue Study
Technical Working Group Meeting #1
Minutes of Meeting
August 19, 2009**

The *I-5 North Stockton HOT Lanes Traffic and Revenue Study* Technical Working Group (TWG) meeting #1 was held on Tuesday, August 18, 2009 from 3 PM to 5 PM at the offices of the San Joaquin Council of Governments (SJCOG). In attendance were:

Attendees: Steve Dial and Wil Ridder from SJCOG; Pat Robledo and Jose Mujica from Caltrans; Dana Sampson and Doug Carraway from the California Highway Patrol (CHP); Eddie Barrios from Fehr & Peers Associates; and Tad Widby and Jeff Damon from HNTB Corporation.

Handouts: Several handouts were provided: 1) An Agenda; 2) "Purpose of a HOT Lane" memo; 3) Printout of a PPT presentation; 4) "Summary (Matrix) of Existing HOT and Tolled Lanes"; 5) (Draft) I-5 HOT Lanes Transportation Analysis Data Needs (matrix); and 6). I-5 HOV Volumes Charts. *(These materials will be provided on the SJCOG website for participant access).*

The following transpired:

1. Wil Ridder welcomed everyone, ran through introductions and provided an overall view of the purpose of the *I-5 North Stockton HOT Lanes Traffic and Revenue Study*. Mr. Ridder noted that this was a partnership with Caltrans, the CHP and the City of Stockton. He also noted that the intent of this study build upon the I-5 North Stockton HOV Widening project development effort; this is a higher level study and will not be looking at the detailed design for implementing HOT in this corridor; rather, the focus of the study is to assess the feasibility of the HOT in terms of revenues and implementation issues and determine next steps.
2. Steve Dial affirmed the concepts Wil articulated and noted that due to funding issues at the state level, the I5 Widening project is presently looking at an \$80M shortfall in funds.
3. Tad Widby of HNTB began the consultant team presentation. He noted that the goal was to get a common understanding of the topics, where and how HOT Lanes were performing elsewhere and what the key topics of the SJCOG were to be addressed.
4. Mr. Widby reviewed Handout #2 – *Purposes of a HOT Lane*. He noted that different purposes would result in different volumes of traffic (HOV and SOV) and thus pricing structures and net revenues generated. He noted that the original "intent" of SR91 was to "maximize revenue" and that this changed over time and as OCTA acquired the PPP/ The purpose now on SR91, and most HOT Lanes, is to assist in some form of traffic congestion relief and/or provide the maximum advantages of network reliability.

Steve Dial noted that the goal is to have a public-private partnership (3P) and to be able to demonstrate to concessionaires that sufficient revenue can be generated.

It was discussed that HOT Lane Studies typically have to look at (at some point): 1) The tradeoffs of maximizing revenues versus maximizing throughput; 2) Look at the various "uses" of net revenues (if any); and 3) Address and refine the costs (capital and O&M).

Question? Will you be able to compare existing HOT Lane facilities in CA in terms of costs, revenues and what effect, if any, the economic downturn has had? (Potentially within the context of the approved scope of services).

5. Mr. Widby then presented Handout #3 a PowerPoint presentation of HOT project examples from across the United States and Handout #4, *Summary (Matrix) of Existing HOT and Tolled Lanes* and discussed the general characteristics of each HOT Lane project.

The CHP representatives raised a point of information regarding the SR91 project. Officer Sampson noted that the SR91 has an “enforcement area” for “enforcement contacts” in the “center median” (as the CHP refers to it/Caltrans would refer to this as the “inside shoulder”). This is problematic in that pulling vehicles into the center median is technically in violation of the California Vehicle Code which designates the far right-hand shoulder as the location to provide the enforcement contact and if there is an incident resulting from being pulled over into the center median, the CHP could potentially be held liable. Officer Sampson noted also that in the case of SR91, to pull a vehicle over to the right would entail the CHP (and the vehicle in question) to cross the cones by pulling through the cones. He suggested that the CHP would not support a similar design concept elsewhere.

Action: It was noted by SJCOG that the right-side “enforcement contact” area will need to be looked at further in a potential redesign of the I-5 North Stockton HOV lane for HOT lanes at a later stage of project development.

Mr. Widby discussed a number of different projects around the nation and this generated several questions.

Question? Where is the tag located on the vehicle for the I-15 (SLC) project?

Question? Did the FTA participate financially in the I-15 (San Diego) project that originally developed with Bus Rapid Transit (BRT) in mind?

Question? Why was the I-394 HOV Corridor (MN) underutilized and thus resulted in a conversion to HOT? (It was noted that this conversion cost approximately \$500K per mile to complete as the improvements were limited to overhead signing and tags.)

Question? Is the I-680 (Bay Area) calling the lanes HOT? Express? Smart? And why are there signs along the corridor stating each term? (Probable function of when the lanes were built and by which agency responsible for each segment.)

It was noted that the LA Area was looking at a number of conversions (The 10 Freeway plus one other) and was having public perception issues (“Lexus Lanes” syndrome) and agencies should include design options in the initial design if future conversions are likely.

It was noted that the Bay Area Toll Authority (BATA) was assuming a maximum toll on I-680 to be \$10 in the peak.

Mr. Widby noted that experience has shown that conversion of an HOV at 2+ to 3+ (because of demand) should occur 1 to 3 years before the conversion to HOT if possible, so that the “HOT Conversion” isn’t seen by the public as the reason for going to 3+.

The SJCOG noted that the assumption is that the HOV lanes would be 2+ and would open traffic in 2015. As demand increases and it is warranted, a conversion to 3+ could occur.

6. Mr. Widby reviewed a number of slides from the MTC regional HOT lane study. He presented slides showing potential costs and revenues and their changes over time. He noted that while a range of costs and revenues were generated in the initial planning stages, a conscious effort was made to have the costs reported at the higher end of the range and the revenues reported at the lower end of the range to be conservative. A similar approach would be likely for the *I-5 North Stockton HOT Lanes Traffic and Revenue Study*,
7. Operating & Maintenance (O&M) costs were noted from the MTC study consisting of \$70K per lane per year including \$22K per lane per year for enforcement.

Question? Where was the \$70K per year per lane number derived from?

8. Mr. Widby then reviewed the “Key Topics” identified by SJCOG in the meeting notice handout. These topics were:
- Where are HOT lanes being operated now?
 - What are their design characteristics – number of lanes, separated on adjacent, tolled at entry or tolled along the route, etc?
 - What are the operational policies – which HOVs are free, what are the hours of operation, what fees are being changed, are the fees a function of congestion, etc.?
 - How much revenue has been generated by other HOT lanes?
 - What are the results from the Bay Area feasibility analysis? Are there any Bay Area examples that are similar to opportunities in San Joaquin County?
 - Typical planning level costs and revenue estimates for HOT lanes
 - Eligibility for free or discounted use of the HOT lane
 - HOT lane design principles endorsed by Caltrans and others nationally
 - Enforcement requirements and considerations/needs
 - Operational requirements and considerations/needs
 - Maintenance requirements and considerations/needs
 - HOV and HOT facilities and planning efforts in adjoining regions and coordination needs
 - Public acceptance and outreach needs, generally within the region as evidenced by stated positions of elected officials

The SJCOG confirmed that these had been generally addressed and that the goal was for the TWG to have a collective working foundation of HOT Lanes purpose, assumptions, and what is being done elsewhere.

Question? How far into redesign and costing will this study go for the HOT lanes? (The assumption is that the HOT lanes will fit within the existing cross-section as presented in the PSR and PA/ED effort.)

9. Mr. Eddie Barrios of Fehr & Peers Associates provided two handouts (1) (Draft) I-5 HOT Lanes Transportation Analysis Data Needs (matrix); and 2). I-5 HOV Volumes Charts) and provided an overview of the travel patterns in the corridor. He noted that the same assumptions would be used as in the PA/ED phase and the SJCOG noted this was the intent of this effort and to not re-visit the travel forecasts. Mr. Barrios noted that the traffic results suggests that there is available capacity in the HOV that could be used for HOT volumes. A side discussion noted that the carpools were counted by Fehr & Peers from the median-side of the facility and that in the peak, carpools comprised 16% to 24% of the traffic volumes on I-5 in this area. Mr. Barrios noted that the HOV growth was assumed to be consistent with general traffic volume growth in the corridor.

Question? Who approved the I-5 travel forecasts? (Caltrans District 10 Traffic Operations approved the forecasts as they were included in the PSR and/or PA/ED phases of work and approved.)

10. Mr. Widby then reviewed the POET (Policy Options Evaluation Tool) model assumptions in general and noted that TWG #2 would be focused on these assumptions and what to use.
11. A few “final items” were discussed in general and/or noted:
- a. Caltrans noted that 500 feet per lane change was generally required/desired for ingress/egress to the HOT Lane;



- b. The CHP noted that they were generally pushing for “slip ramps” (as opposed to “weave sections”) for ingress/egress to the HOT Lane;
 - c. CHP noted that HOT Lanes with a “24/7” designation (as opposed to a peak period only designation) was generally preferable as it reduces driver confusion;
 - d. CHP noted that the 14-foot median lane (discussed previously) was not need for enforcement, but CHP does need sufficient space for placing enforcement vehicles safely;
 - e. CHP noted that multiple examples of HOT Lanes in both Northern and Southern California were in various stages of project development and that in a few years they will come on-line and thus the examples and knowledge base in CA will be much greater of what the “best practices” are.
12. Following closing comments from the SJCOG, the TWG#1 ended at 5 PM. The next meeting day and time was not set but will beset soon and will occur in approximately 2-3 weeks.