



DATE: January 29, 2009
TO: STA Board
FROM: Daryl K. Halls, Executive Director
Janet Adams, Deputy Executive Director/Director of Projects
RE: Metropolitan Transportation Commission (MTC) Proposal for
Establishment of a Regional High Occupancy Vehicle/High Occupancy
Toll (HOV/HOT) Lanes Network

Background:

A High-Occupancy Toll (HOT) is a toll enacted on single-occupant vehicles that wish to use lanes or entire roads that are designated for the use of High-Occupancy Vehicles (HOVs, also known as carpools). Tolls are collected either by staffed toll booths, automatic number plate recognition, or electronic toll collection systems.

HOT lanes require single-occupant vehicles to pay a toll that varies based on demand, called congestion pricing. The tolls change throughout the day according to real-time traffic conditions to manage the number of cars in the lanes and keep them free of congestion, even during rush hour.

The concept proposed by the Metropolitan Transportation Commission (MTC) is an expansion of HOV lanes and an attempt to maximize their efficiency in moving vehicles throughout the Bay Area. HOV lanes are designed to promote vehicle sharing and use of public transport by creating areas of lower road use as an incentive, but they have been criticized because some are underused and increase congestion. The HOT lanes provide a mobility option for single occupant vehicles to provide reliable travel at a variable price.

HOT lanes are often constructed within the existing road space and benefit drivers by providing the ability to pay to get through traffic quickly; e.g., a family seeking to catch a flight or a plumber wanting to get to his customer quickly may come out ahead financially from using the HOT lane. Funds raised from HOT lane tolls would be used to pay for the maintenance and operations of the lane(s), payment of debt for the initial construction of the lane(s) and to build out the HOT network in the Bay Area. By policy, additional funds can also be used for supporting transit service in the corridors.

Drivers who do not utilize the lane can also benefit from having it fully utilized, thus taking more traffic out of the mixed flow lanes, in contrast to the sometimes underutilized HOV lanes. By linking together disconnected HOV networks, the regional HOT lanes can allow public transportation vehicles (such as buses) more reliability to get to destinations on time.

The regional HOT Lanes Network concept involves converting existing HOV lanes to HOT and using the revenue generated to finance completion of the HOV/HOT system as well as other improvements within the HOT corridors. Benefits of a HOT network include:

- Reductions in congestion and emissions, including carbon dioxide, by making more efficient use of the freeway system;
- Providing a reliable travel option for express bus and carpools via the HOV network and use of the HOT lanes for those who choose to pay the toll;
- Completing the HOV/HOT network ten to forty years sooner than if relying upon traditional state and local funding mechanisms.

Attachment A is Frequently Asked Questions (FAQs) on HOT lanes prepared by MTC. Attachment B provides an identification of HOT lanes currently in operation throughout the country. Attachment C is the Bay Area Council prepared HOT Lane Network fact sheet.

Discussion:

As part of the Metropolitan Transportation Commission (MTC) Transportation 2035 Plan: Change in Motion, it includes a vision for a Bay Area HOT Lane Network. In July 2008, MTC approved a set of HOT Network Principles to mark the region's commitment to pursuing a regional network of HOT lanes in conjunction with the long-range transportation plan update. The MTC HOT lane principles (Attachment D) reflect a commitment by MTC to work with Caltrans, the California Highway Patrol (CHP) and the county Congestion Management Agencies to collaboratively deliver a regional HOT network.

At the same time, MTC and Caltrans have been undertaking a series of technical studies of a regional network of HOT lanes. The Phase 1 and Phase 2 effort, completed fall 2007, found a regional HOT network is feasible financially and operationally. It estimated network costs and revenues and outlined a series of technical and policy issues for further exploration. Further analysis by MTC suggested there may be ways to accelerate delivery of some portions of the HOT network and reduce costs through a "Rapid Delivery Design" approach that seeks to fit HOT lanes within existing right-of-way. Phase 3 of the study, starting summer 2008, will further explore HOT lane design trade-offs, in particular where a Rapid Delivery approach might be acceptable, and refine system cost estimates. Attachment E is the MTC report titled "Bay Area High Occupancy Toll (HOT) Network Study"

Solano County has two corridors identified by MTC in the proposed Bay Area HOT Lanes Network, I-80 and I-680. I-80 represents to the east, the gateway to the Sacramento and Lake Tahoe regions. To the west, it serves as the gateway to the Bay Area. The I-680 corridor is part of a four county system that is the backbone between Solano and Santa Clara counties. Caltrans and STA is partnering on the I-80 corridor with a HOV lanes project under construction between Red Top Road and Air Base Parkway. These lanes are scheduled to open by fall 2009. These new HOV lanes are identified by MTC as candidates for conversion to HOT lanes. New HOV/HOT lanes would have to be constructed on the remaining segments of I-80 and on I-680. Constructing HOV/HOT lanes in Solano County provides an opportunity for the construction of segments of these lanes within 5 to 10 years. Without the availability of the financing that is provided by the Bay Area HOT Lanes Network approach, these improvements will be long range, so long range they are not part of the region's 2035 transportation plan due to state and federal funding limitations. Attachment F is the STA staff's recommended Solano County priority approach to constructing HOV/HOT lanes on I-80 and I-680.

A Bay Area Network versus individual HOV/HOT lanes segments provides the benefits of seamless system to the user, operational efficiency, greater financing options, maximize technology advancement knowledge, and regional coordination with the CHP for enforcement and Caltrans for standards. Although the project delivery and construction of HOT/HOV projects will occur at the County and corridor level by CMAs and Caltrans on a segment by segment basis.

To operate HOV/HOT lanes, legislation is required. MTC has indicated their intent to be the regional operator of the Bay Area HOT Network through an expansion of the Bay Area Toll Authority (BATA). MTC staff has been collaborating with the Congestion Management Agencies (CMAs) to develop a governance model that ensures counties have the option to participate and have are part of the governance system. STA staff recommends that two policy issues be addressed and included in any enabling legislation on regional HOT/HOV approach as a condition of STA support for MTC/BATA sponsored authorizing legislation and implementation of a regional HOT/HOV Network that includes I-80 and I-680 in Solano County. Specifically, funding from each corridor in the HOV/HOT system remain within the corridor generating the funds. Funds generated would provide first for the operating and maintenance of the corridor HOV/HOT lanes and build out of the corridor network. Second, representation from each county that seeks to construct and operate a HOV/HOT lanes project as part of the regional network be specified in the enabling legislation.

With the benefit of providing travel mobility options and financing of a HOV/HOT Lane system in Solano County, staff recommends support for a Bay Area HOV/HOT Lane Network with these caveats.

At the January 28, 2009 Technical Advisory Committee (TAC), this proposed action received unanimous support to send a recommendation to the STA Board to approve all the HOT/HOV Lanes related recommendations.

Fiscal Impact:

The support of a HOV/HOT Lane Network would not impact the STA budget. Should the STA be successful in gaining financial resources from MTC/BATA for the funding of the HOV/HOT projects within Solano County, a budget amendment would be required.

Recommendation:

Approve the following:

1. Support in concept a Bay Area Regional HOV/HOT Lane Network;
2. Support MTC/BATA as the lead agency for operating a Bay Area Regional HOV/HOT Network;
3. Approve Attachment F as the Solano County HOV/HOT lanes priorities;
4. Support specifying in the enabling legislation STA representation in the governance on the I-80 and I-680 corridors and Steering Committee for the Regional HOT/HOV Lanes Network; and
5. Support specifying in the enabling legislation funding derived from Bay Area Regional HOV/HOT lanes network remain in the corridor where the funds are generated by the corridor.

Attachments:

- A. MTC HOV/HOT FAQs
- B. Current HOT Lanes in Operation
- C. Bay Area Council HOT Lane Network Fact Sheet
- D. MTC HOT Lane Principles
- E. MTC report titled “Bay Area High Occupancy Toll (HOT) Network Study”,
December 2008
- F. Solano County HOV/HOT Corridor Priorities