



DATE: July 6, 2020

TO: I-680 Sunol Express Lane Joint Powers Authority

FROM: Liz Rutman, Director of Express Lanes Implementation and Operations

SUBJECT: Adoption of Toll Policies for the I-680 Sunol Express Lanes

Recommendation

It is recommended that the Authority adopt toll policies necessary to implement and operate the new I-680 Sunol Express Lanes toll system.

Summary

Section 149.5 of California Streets and Highway Code authorizes the Authority, the administrative agency of I-680 Sunol Express Lanes, to conduct, administer, and operate a value pricing high-occupancy vehicle (HOV) program on I-680. The Authority approved a set of tolling policies in June/July 2010 for the I-680 Sunol Southbound Express Lane (EL). The I-680 Sunol Express Lanes (Phase 1) Project, under construction, will construct new parallel northbound HOV/EL and modify the existing southbound HOV/EL. See Attachment A for the completed I-680 Sunol Express Lanes operating limits. Express Lanes have been implemented throughout the Bay Area, either as conversions of existing high occupancy vehicle (HOV) lanes or by creation of new lanes, for the purpose of:

- Providing travel time savings and travel reliability to express lane users;
- Expanding the regional freeway network for HOVs and buses; and
- Optimizing the corridor capacity by allowing single occupancy vehicles (SOVs) to choose to pay a toll and travel in the express lanes.

Prior to the opening of the original I-680 Sunol Southbound Express Lane in 2010, the Authority adopted several toll policies to guide the operation of the express lane. The new I-680 Sunol Express Lanes will differ from that original express lane in numerous ways, necessitating adoption of a new set of toll policies and business rules prior to opening the new toll system. These provide guidance for the facility operations and toll system design and encompass the following major concepts:

Toll Policies

- Access control
- Hours of operations
- User requirements
- Pricing strategy
- Enforcement
- Performance goals

Business Rules

- Zone tolling
- Fare assignment
- Usage rules

These policies and business rules are consistent with those adopted by Alameda CTC for the I-580 Express Lanes and are generally consistent with other regional express lane operators.

Background

The existing I-680 Sunol Southbound Express Lane spans approximately 14 miles from State Route (SR) 84 near Pleasanton to SR 237 in the City of Milpitas and was opened to traffic in September 2010 as a limited access High Occupancy Vehicle (HOV)/EL. The I-680 Sunol Express Lanes (Phase 1) Project is under construction and will result in a new 9-mile northbound EL from south of Auto Mall Parkway to SR 84. In addition, the existing southbound controlled-access tolling configuration will be converted to a continuous access facility between SR 84 and SR 262 with all new tolling infrastructure. The new I-680 Sunol Express Lanes will use an All Electronic Toll (AET) collection method to collect tolls. Toll pricing is displayed on dynamic message signs (DMS) throughout the corridor; and equipment installed on toll gantries, which are spaced approximately every three-quarters of a mile, detect vehicles in the express lane by FasTrak® toll tags (also known as transponders) and/or license plate capture cameras. Toll policies and associated business rules inform the design and operation of the express lanes.

Caltrans retains its authority to set freeway operations policy, but the Authority has the authority to establish toll policy. Table 1 lists the current I-680 Sunol Express Lanes freeway operational policies adopted by the Authority and Caltrans via the environmental approval process.

Table 1: Freeway Operations Policies

Item	Policy
Access Control	Continuous access
Hours of Operation	5 am – 8 pm, Monday - Friday
Occupancy Requirement (for toll-free travel)	2 or more persons (HOV 2+)

Toll Policies provide the guidelines for operations. Table 2 provides a summary of proposed I-680 Sunol Express Lanes toll policies.

Table 2: Proposed Toll Policies

Item	Proposed Policy
Pricing Strategy	Dynamic pricing based on real-time congestion in the corridor updated as frequently as every 3 minutes.
Minimum Toll Rate	\$0.50 (operational minimum unless the Express Lanes are opened for use to all motorists in conjunction with incident management).
Maximum Toll Rate	No policy maximum. The Executive Director is authorized to establish operational maximum toll rates and adjust as needed to optimize corridor throughput, with incremental increases no greater than \$5, and report back to the Authority when toll rates are revised within the approved parameters.
Toll-Free Users	Carpools, motorcycles, and transit vehicles may travel toll-free in the I-680 Sunol Express Lanes.
Clean Air Vehicle Discount	Eligible single-occupant clean air vehicles may receive a 50% toll discount in the I-680 Sunol Express Lanes.
User Requirements	<ol style="list-style-type: none"> 1. Every motorist traveling in the I-680 Sunol Express Lanes shall have a properly mounted toll tag (FasTrak or FasTrak Flex®) or a properly-mounted license plate associated with a valid FasTrak Account having a balance sufficient to pay the Toll. 2. To be eligible for HOV toll discounts, HOV customers must have a properly mounted FasTrak Flex toll tag set to either “2” or “3+” in accordance with the actual occupancy of the vehicle. 3. To be eligible for toll-free travel, motorcycles and transit vehicles must be equipped with a properly mounted FasTrak Flex toll tag set to the “3+” position. 4. To be eligible for toll discounts, SOV vehicles displaying a valid DMV-issued CAV decal for HOV lane usage must carry a FasTrak CAV toll tag set to match the number of people in the vehicle. 5. All vehicles traveling in the Express Lanes without toll tags are subject to being charged the Single Occupant Vehicle (SOV) toll and violation penalties, if applicable.
Enforcement	Under the Toll Ordinance currently being considered to enact toll violation processing/penalties, motorists who incur a toll and do not have a valid FasTrak account eligible for posting the Trip Transaction at the time of travel would be issued a Violation Notice.

Item	Proposed Policy
Performance Goals	<p>Federal Requirement: During morning and evening commute hours, or both, maintain 45 MPH or higher in HOV lane for 90% of the time.</p> <p>State requirement: maintain Level of Service C or better at all times, though D is permitted for short periods of time.</p> <p>If goals are not being met even with increases in pricing, express lanes users may be limited to only HOV and HOV-eligible vehicles. When "HOV Only" is displayed on a dynamic message sign it means that solo drivers shall not enter the Express Lane unless they are a motorcycle or clean air vehicles allowed in the HOV lane, as "HOV Eligible Vehicles" per current State laws.</p>

Business Rules inform the specific design of the toll system. Table 3 lists proposed business rules under which the I-680 Sunol Express Lanes would operate.

Table 3: Proposed Business Rules

Item	Proposed Business Rule
Zone tolling	<p>Flat rate for travel within a single zone.</p> <p>Two northbound zones:</p> <ul style="list-style-type: none"> • Auto Mall to SR 238 • SR 238 to SR 84 <p>Three southbound zones:</p> <ul style="list-style-type: none"> • SR 84 to SR 238 • SR 238 to SR 262 • SR 262 to SR 237 <p>See Attachment B for the toll zone map.</p>
Locked-in Rates	<p>Customers are locked-in to pay the lesser of the toll rate displayed on the Dynamic Message Sign (DMS) that is directly prior to the customer's first read point <u>or</u> the toll rate previously determined for that DMS within the toll rate safeguard time parameter. The toll rate safeguard provides a defined interval within which the customer has ample opportunity to view the toll rate on the DMS before entering the Express Lanes.</p> <p>The locked-in toll rates will not change if the price goes up or down while the customer is still driving in the Express Lane.</p>
Trip Building	<p>A customer's "Trip" is created from all of the associated toll tag reads and/or license plate images captured at toll gantries.</p>

Item	Proposed Business Rule
Rate Assignment	<p>The locked-in toll rate will apply from entry into the Express Lane and include travel through each successive toll zone for that Trip.</p> <p>If a customer exits the Express Lane and decides to get back in after the allowable travel time passes (currently 10 minutes), two separate trips are constructed and the guaranteed price from the initial entry is considered expired.</p> <p>Trips with different FasTrak Flex occupancy switch settings within a single Trip will be assigned the lowest occupancy setting that is detected during that Trip.</p>
Toll Rate during "HOV ONLY" Operation	<p>An SOV that enters the express lane during HOV-Only mode is subject to a \$30 toll and may also be cited by CHP.</p>
Non-Tolling Hours	<p>During non-tolling hours the Express Lanes are available for all vehicles to use toll-free as general purpose lanes and without any occupancy restrictions.</p>
Toll Waiver/Reduction	<p>Executive Director is authorized to plan and execute a toll waiver/reduction plan.</p>

Staff recommends the Authority adopt all of these policies to further the achievement of the project goals and ensure consistency across regional express lanes.

Fiscal Impact: There is no fiscal impact associated with this action.

Attachments:

- A. I-680 Sunol Express Lanes Location Map
- B. I-680 Sunol Express Lanes Proposed Toll Zones

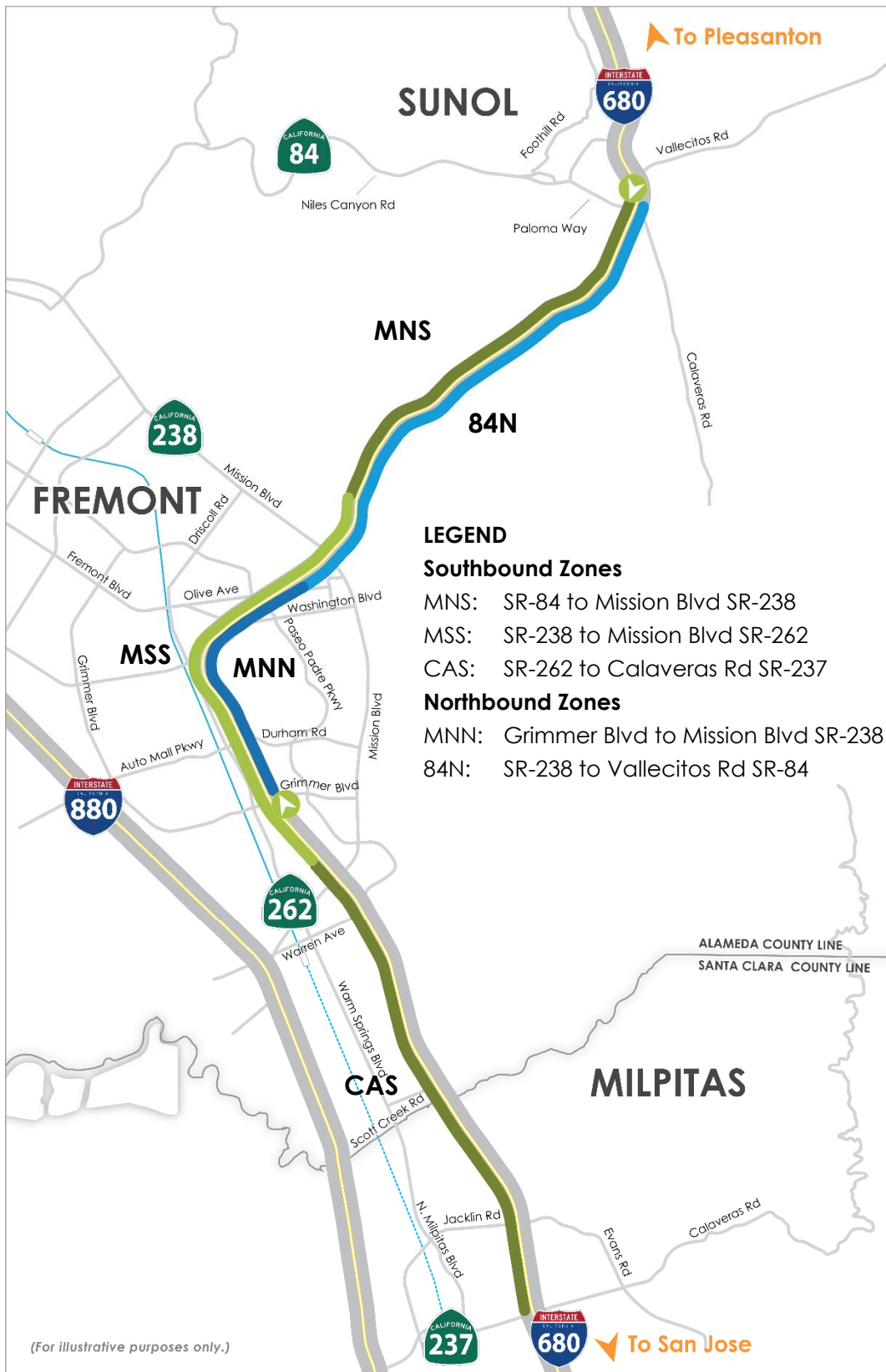
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I-680 Sunol Express Lanes Location Map



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I-680 Sunol Express Lanes Proposed Toll Zones



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