

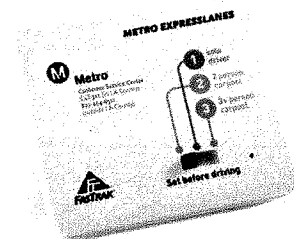
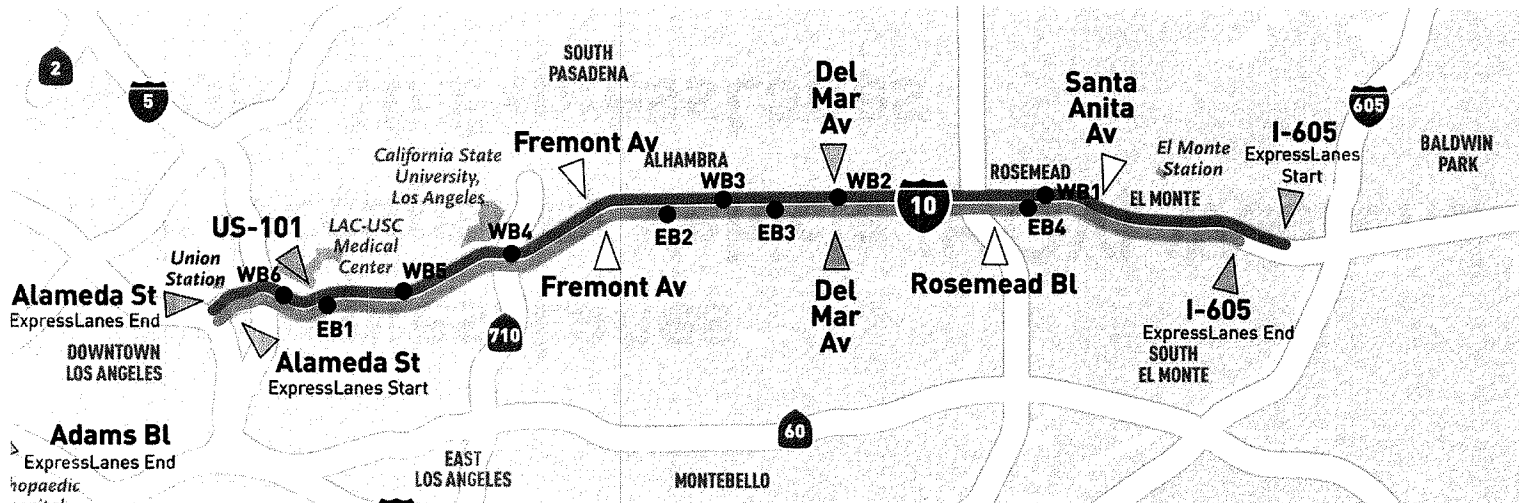
**Metro ExpressLanes  
High Occupancy Vehicle (HOV) Weekend  
Use on I-10 ExpressLanes  
November 18, 2015**



**Metro**

# Background

- Assessment of the impacts of removing the ExpressLanes transponder requirement during weekends on the I-10 to allow access to the ExpressLanes for HOV users



# I-10 ExpressLanes HOV Requirements

	<b>Monday – Friday (Peak Hours)</b>	<b>Monday – Friday (Off Peak)</b>	<b>Weekend</b>
<b>Hours</b>	<b>5am-9am; 4pm-7pm</b>	<b>Non-Peak Hours</b>	<b>All day</b>
<b>Toll Free</b>	<b>3+ Occupants</b>	<b>2+ Occupants</b>	<b>2+ Occupants</b>

- **Current business rules:**
  - **All vehicles including HOV have a properly mounted FasTrak transponder to use the ExpressLanes**
  - **Switchable transponder allows declaration of occupancy to travel toll-free on the ExpressLanes**
  - **Transponder requirement enhances customer confidence by catching people “cheating” the system**
  - **24/7 automated enforcement identifies violators without a transponder**
  - **CHP enforces transponder & occupancy requirement during weekday AM/PM peak**
  - **Transponder technology allows the implementation of Carpool Loyalty Program**



# Similar Express Lanes Programs

	<b>Metro I-10</b>	<b>FDOT I-95</b>	<b>SRTA I-85</b>
<b>Location</b>	Los Angeles County	Miami-Dade County	Atlanta
<b>Transponder</b>	FasTrak (Switchable)	SunPass (HOV Application)	Peach Pass (Switchable via Website or App)
<b>HOV Requirement</b>	3+ Peak, 2+ Offpeak	3+	3+
<b>Pricing</b>	Dynamic	Dynamic	Dynamic
<b>Operation</b>	24/7	24/7	24/7
<b>Enforcement</b>	Highway Patrol, VES	Highway Patrol, VES	Highway Patrol, VES, Invisible Barrier
<b>Origins</b>	Adopted Existing HOV Hours	Adopted Existing HOV Hours	Adopted Existing HOV Hours



## **I-10 ExpressLanes and General Purpose (GP) Lane Weekend Conditions**

- **I-10 GP Lane Weekend Conditions**
  - Heavily utilized but minimal stop and go traffic
  - Data from same period in 2012 prior to implementation of the ExpressLanes show similar pattern of utilization and speeds
- **ExpressLanes Weekend Conditions**
  - Free-flow traffic
  - Project constructed an additional lane when converted to ExpressLanes

# Potential Operating Scenarios

- **Scenario 1:** Allow all HOV users on the I-10 to utilize the ExpressLanes without a transponder during the weekends, while continuing to allow SOV customers with a transponder to use the lanes.
- **Scenario 2:** Allow all HOV users on the I-10 to utilize the ExpressLanes without a transponder during the weekends and exclude SOV customers from using the ExpressLanes.



# I-10 ExpressLanes – Traffic Management

Weekend Scenario	Traffic Management Impact
<b>Scenario 1: Open ExpressLanes to HOVs without a Transponder (SOVs with a Transponder)</b>	<ul style="list-style-type: none"> <li>• 70% increase in ExpressLanes traffic.</li> <li>• Inability to manage ExpressLanes traffic without an enforcement program.</li> </ul>
<b>Scenario 2: Operate ExpressLanes as HOV Only Lanes</b>	<ul style="list-style-type: none"> <li>• 45% increase in ExpressLanes traffic.</li> <li>• Inability to manage ExpressLanes traffic without Dynamic Pricing and an enforcement program.</li> </ul>

- Weekend I-10 usage on the ExpressLanes has grown steadily by 33% from September 2013 to September 2015
- Anticipate increase by 15% over the next year in weekend usage as the program continues to mature
- Analysis indicates that allowing HOVs to use the I-10 ExpressLanes system without a transponder could yield a marginal increase of up to 5 MPH in travel speeds in the GP lanes.

# I-10 ExpressLanes – Enforcement

Weekend Scenario	Traffic Management Impact
<b>Scenario 1: Open ExpressLanes to HOVs without a Transponder (SOVs with a Transponder)</b>	<ul style="list-style-type: none"><li>• Increased burden of enforcement on CHP due to suspension of automated enforcement.</li><li>• Reduced compliance by SOVs due to suspension of automated enforcement.</li><li>• Confusion during weekday operations, increasing the rate of violators and degrading weekday traffic conditions.</li></ul>
<b>Scenario 2: Operate ExpressLanes as HOV Only Lanes</b>	<ul style="list-style-type: none"><li>• Increased workload for CHP due to increased vehicle traffic in the ExpressLanes.</li><li>• Confusion during weekday operations, degrading weekday operations and increasing the rate of violators.</li></ul>



# I-10 ExpressLanes – Toll Revenue Collection

- **I-10 - \$4.6M in Annual Weekend Revenue**
- **Required Changes**
  - **On Road Signage**
  - **Toll System Software,**
  - **Customer Service Representative Training**
  - **Customer Materials and website update**
  - **Public Outreach**
- **Potential material change to existing toll vendor contract**
- **Additional staff and consultant resources to manage changes**

# I-10 ExpressLanes – Toll Revenue Collection

	Scenario 1	Scenario 2
Initial (One-Time) Cost	\$1.4M to \$2.0M	\$1.4M to \$2.0M
Annual Toll Revenue Loss	\$0.4M to \$0.6M	\$2.2M
Annual Violation Revenue Loss	\$2.4M	\$2.4M
Increased Annual CHP Enforcement Costs	\$600,000	\$600,000
First Year Cost (sum of above)	\$4.8M to \$5.6M	\$6.6M to \$7.2M
Annual Revenue Loss (toll/violation)	\$2.8M to \$3.0M	\$4.6M

# Conclusions

- Operations on I-110 may require a policy shift to ensure consistency & equity
- Marginal increase in GP lane speeds of up to 5 MPH
- Inhibits management of lanes as originally adopted
- Increased driver confusion and violations
- Increased Capital & Operating Costs/ Loss of Revenue
- I-10 ExpressLanes continue to see greater weekend utilization and expect a 15% growth over the next year

