

ALAMEDA COUNTY TRANSPORTATION COMMISSION

# I-680 Express Lane Authority



**Annual  
Report**  
FY2010-2011



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## MESSAGE FROM THE CHAIR

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Since opening on September 20, 2010, more than half a million drivers have chosen to pay a toll (via FasTrak) on the I-680 express lanes in Alameda County for the opportunity to drive in a lane when there is excess capacity that moves more quickly than the other freeway lanes.

The HOV (high-occupancy vehicle, or carpool) southbound lanes along a 14-mile corridor from Pleasanton to Milpitas in Alameda and Santa Clara Counties were converted to HOT (high-occupancy toll) express lanes to give drivers more reliability in their travel time. In the first year of operation, speeds averaged 10 miles per hour faster in the express lane during the morning commute. As a result, more drivers each month are choosing to use the express lane to avoid congestion and save time.

I would like to thank everyone who has contributed to the successful opening of the I-680 express lane — the first in Northern California. As we embark on creating a regional express lane network, we'll remember 2010 as the beginning of a new era in transportation in the Bay Area.

**Scott Haggerty**, *Chair*

I-680 Express Lane Authority



“Hundreds of commuters use this facility every day. It provides a reliable option for those who need dependability in their travel times through this corridor.”

— Scott Haggerty, *Chair*



## ORIGIN OF THE EXPRESSWAY

The I-680 Corridor between Pleasanton and Milpitas, known as the “Sunol Grade,” is a major commute route connecting the Tri-Valley Area in Alameda County with South Bay cities in Santa Clara County. In the late 1990s, the booming economy in Silicon Valley – and the growth of affordable housing in Tracy, Manteca, and Stockton – brought more commuters onto I-680, and propelled the Sunol Grade to the top of the Bay Area's list of most congested commute corridors.

In 1998, a group of elected officials, agencies, and businesses formed the Solutions on Sunol (SOS) Coalition to address these congestion issues. They identified the need for operational improvements in both directions of I-680 along the Sunol Grade.

Within three years, the partnership celebrated the opening of a much-needed southbound auxiliary lane on I-680 between Auto Mall Parkway and State Route 238 (Mission Boulevard) in Fremont, as well as the ground-breaking for the southbound HOV (High Occupancy Vehicle) lane. By the end of 2002, fourteen miles of southbound HOV lane opened along I-680 between State Route 84 in Sunol and State Route 237 in Milpitas.



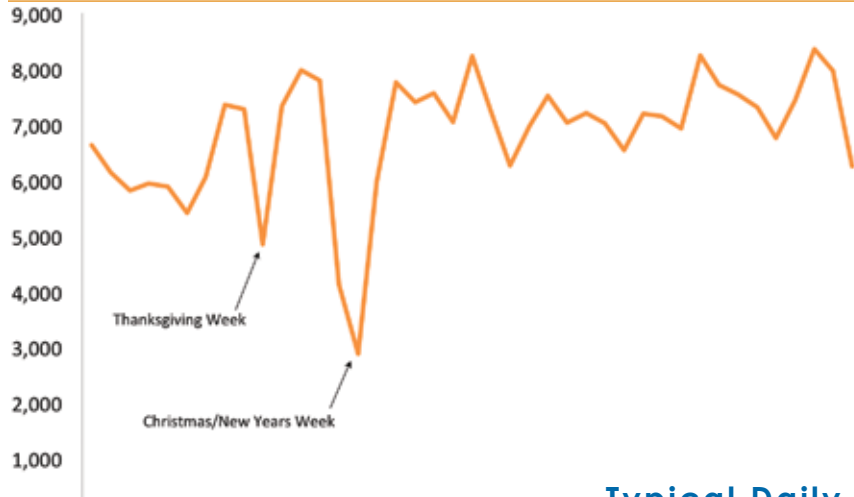
Passage of the voter-approved transportation sales tax in Alameda County, known as Measure B, provided essential funding to both the Altamont Commuter Express Rail and the I-680 Express Lanes.

The partnership also invested in the Altamont Commuter Express (ACE), which started providing passenger rail service between Stockton and San Jose in October 1998. The service started with two daily commute round-trips. As ridership increased, additional trips were added in March 2001 and August 2006.

Meanwhile, studies were conducted to see whether the southbound HOV lane could be converted to a high-occupancy toll (HOT) express lane. Express lanes offer the ability to optimize existing freeway capacity, as most freeways are “built out” in the Bay Area, making the addition of more lanes difficult and expensive. After the success of express lanes in Southern California, the State Legislature passed legislation in 2004 that authorized two pilot express lanes in Northern California, starting with I-680.

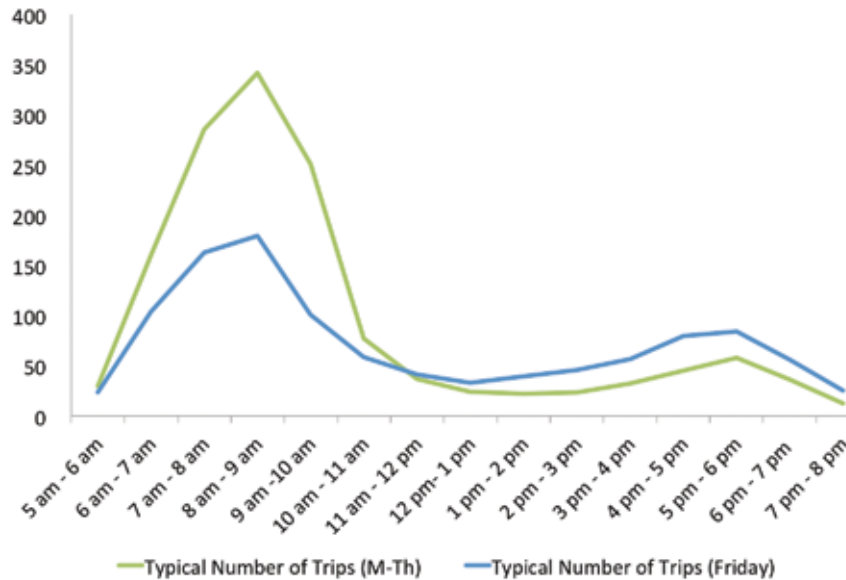


**Total Trips from Sept 20, 2011 – June 30, 2011\***  
*(almost 280,000 trips)*



The highest period of HOT lane use is during the southbound morning commute.

**Typical Daily Trips by Hour\***



“The I-680 express lane project launched a new era of congestion relief for drivers in Northern California. For the first time, solo drivers have a choice, and existing carpool lane users continue to enjoy the benefits of ride-sharing.”

— Union City Mayor Mark Green, Alameda CTC Chair

\*for express lanes only





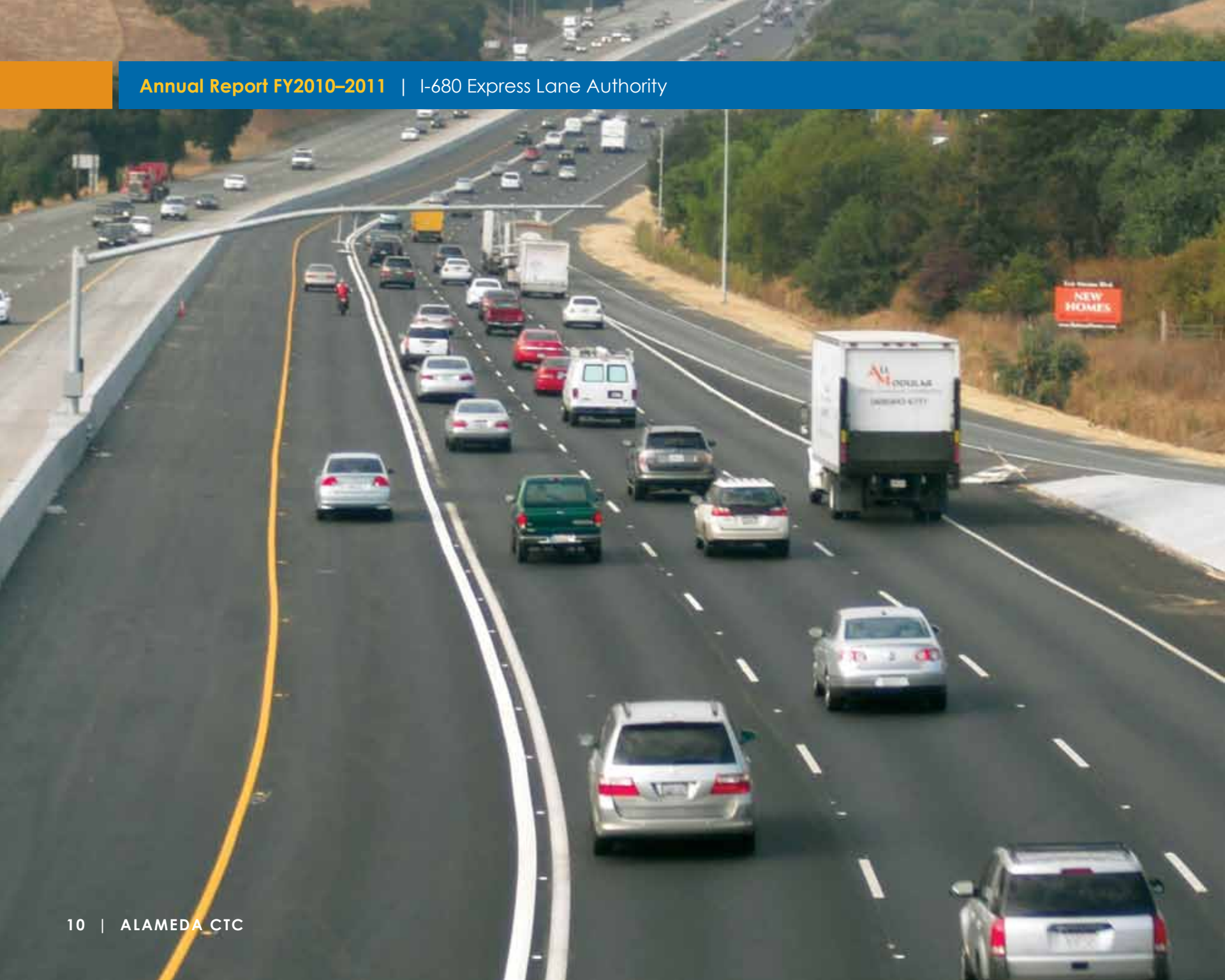
## EXPRESS LANE CONSTRUCTION

Conversion of the southbound I-680 HOV lane into an express lane began in 2008. Construction included widening the roadway to accommodate a new two-foot buffer, separating the lane from the general-purpose lanes, installing electronic toll-collection equipment, re-paving the entire roadway, and adding soundwalls. The entire project cost \$195 million, including \$37 million for the express lane itself, and was funded with federal, state, and local funds, including the voter-approved transportation sales tax measure in Alameda County. The I-680 southbound express lane opened on September 20, 2010.

Because express lanes were a new concept in Northern California, an extensive public outreach campaign was conducted to make commuters aware of the changes that were coming to the corridor, how the lanes would operate, and what commuters could expect. Coordinated outreach efforts included:

- Public opinion research using focus groups and polls
- Interactive project website ([www.680expresslane.org](http://www.680expresslane.org))
- Promotional campaign to encourage new FasTrak accounts, including a spot-the-car contest and toll credits
- Direct mail, radio ads, print ads, and internet videos
- Media outreach including press briefings and facility tours

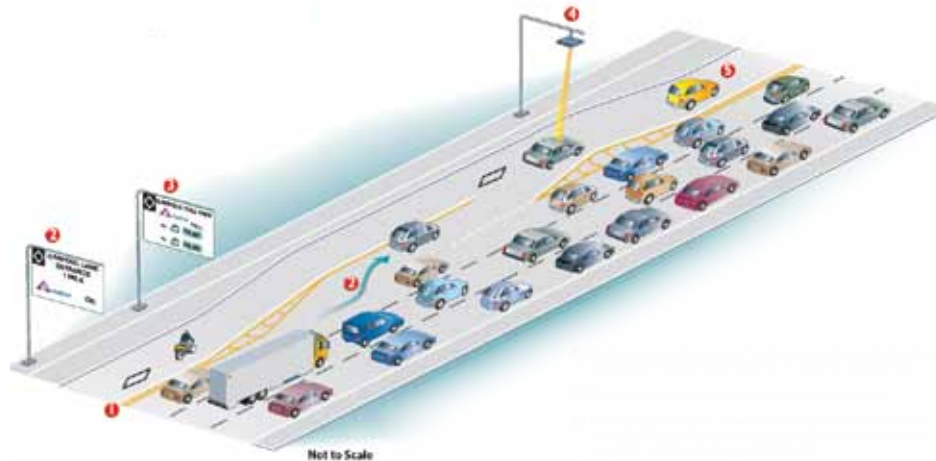




## EXPRESS LANES IN USE

The I-680 express lane offers solo drivers a new choice – to avoid congestion, they can pay a toll and use the “excess capacity” in the HOV lane. The express lane has limited access that is designated by double solid lines, providing a buffer from the general-purpose lanes.

There are three entry points (the beginning and two intermediate entrances) into the express lane, and three exit points (two intermediate exits and the end). These access points were selected to provide a safe, reliable trip for the largest number of drivers, based on detailed traffic studies and projections of traffic patterns over the next 20 years. Signs indicate entry and exit points one-half mile in advance, so drivers have sufficient time to decide their route.



The I-680 High Occupancy Toll lanes are the first authorized in Northern California, offering greater efficiency and use of capacity in this freeway corridor.

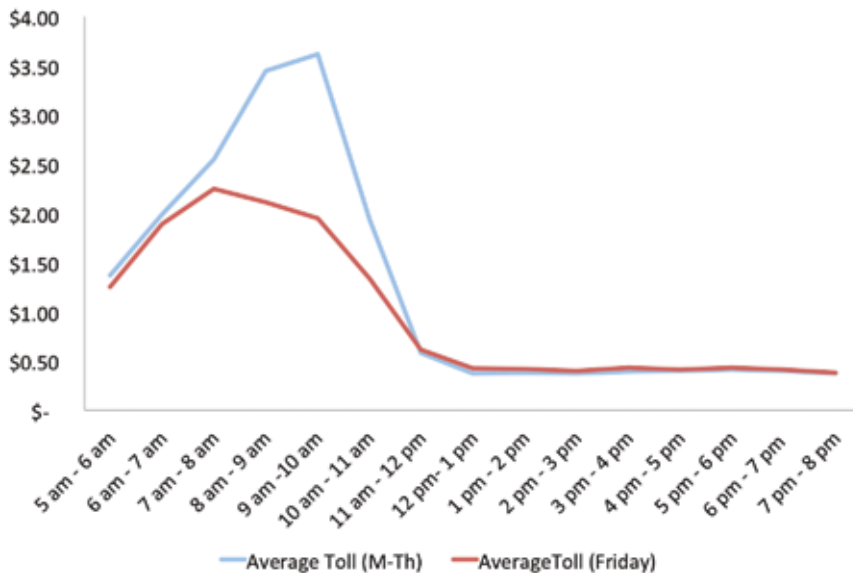


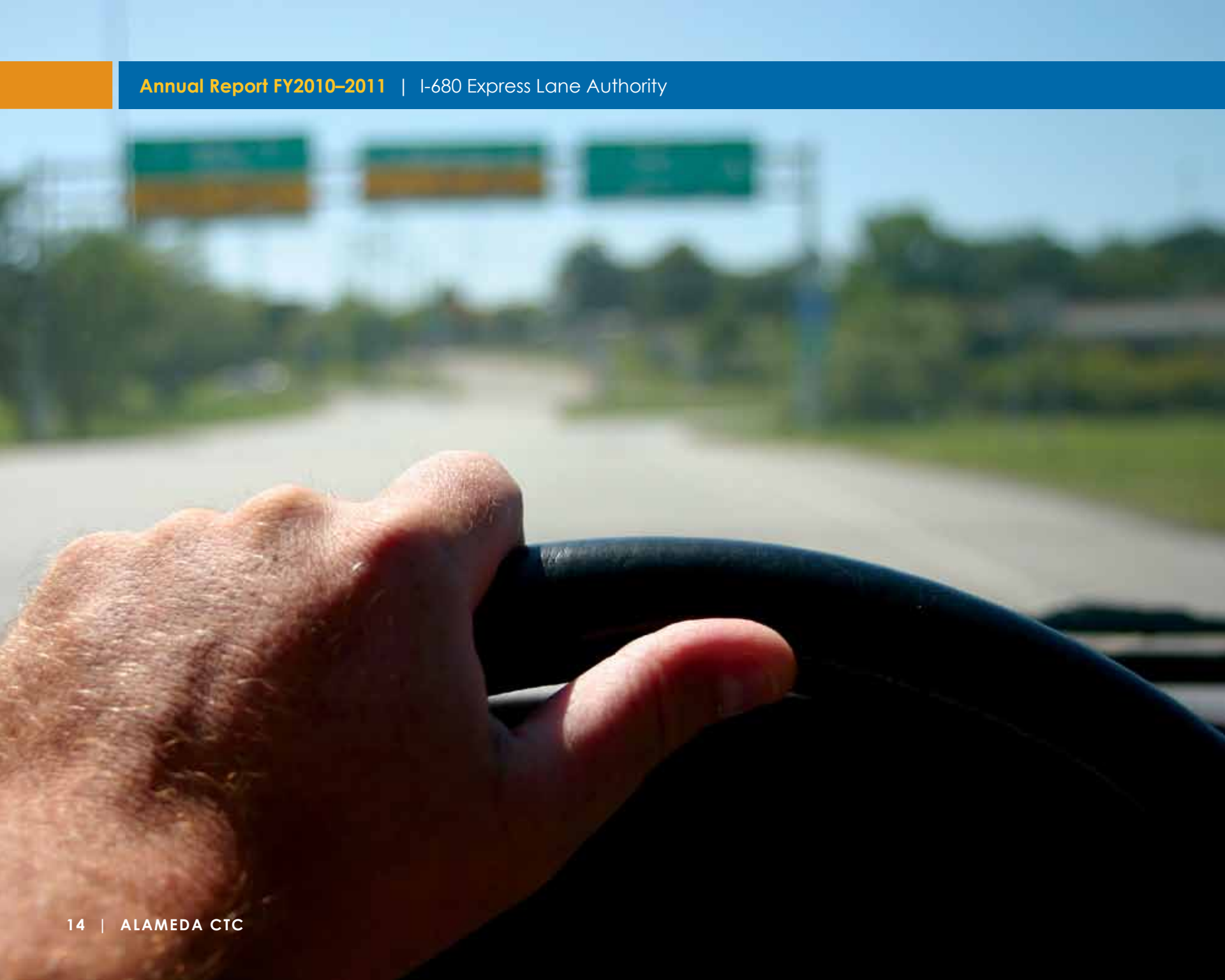
Tolls are collected using the region's FasTrak electronic toll collection system. The operation is fully electronic, without tollbooths or traffic gates, so that drivers do not need to slow down or stop to pay a toll. Carpools with two or more people, motorcycles, and transit buses can continue to use the lanes for free. To avoid being charged a toll, carpool drivers place their FasTrak transponders in a mylar bag that is provided to them when they receive their transponder.



The tolls are set using a dynamic pricing policy, so that the toll amount increases as traffic congestion increases, to ensure that traffic flows with maximum efficiency in the lane. The goal is to keep the express lane operating at a dependable level of service, including at least a 45-mph speed. The HOT lane toll is calculated every three minutes based upon traffic conditions in the lane.

**Average Toll Rate by Hour**





## TOLL PAYMENT ENFORCEMENT

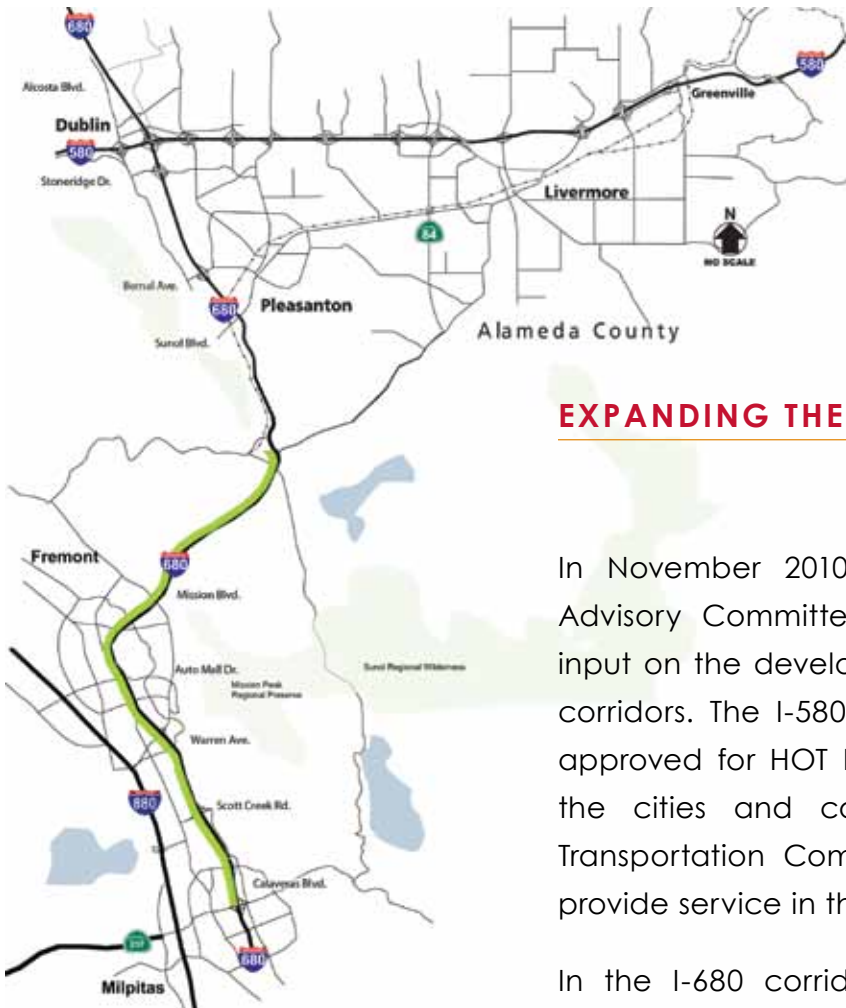
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The California Highway Patrol (CHP) provides enforcement on the I-680 express lane. CHP officers rely primarily on visual monitoring, and can issue citations to solo drivers who don't have a FasTrak account, or to drivers who cross the double white solid lines that separate the express lane from the other lanes.



Roadway cameras monitor the I-680 HOT Lanes

The I-680 Express Lane Authority is investigating other enforcement methods to ensure the lanes are being used as designed, such as vehicle violation enforcement systems that will use camera images (photos of license plates) to automate and detect toll violations.



## EXPANDING THE EXPRESS LANE NETWORK

In November 2010, the I-680 Express Lane Authority and the I-580 Policy Advisory Committee established a technical advisory committee to provide input on the development and operation of express lanes in the I-680 and I-580 corridors. The I-580 corridor is the second (pilot) corridor that was legislatively approved for HOT Lanes in Alameda County. The committee includes staff from the cities and counties along the corridors, Caltrans, CHP, Metropolitan Transportation Commission, Bay Area Toll Authority, and transit agencies that provide service in the corridors.

In the I-680 corridor, the environmental process is underway to develop a northbound express lane from State Route 237 in Milpitas to State Route 84 in Sunol, a distance of about 14 miles. In the I-580 corridor, early construction contracts are expected to start by the end of 2012 and an eastbound express lane from Pleasanton to Livermore is expected to open in 2015. A similar schedule is also planned for the westbound express lane; however, at this time, project construction costs are only partially funded.





## ABOUT THE I-680 EXPRESS LANE AUTHORITY

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As originally enacted, Streets and Highways Code Section 149.5 permitted the Alameda County Transportation Improvement Authority (ACTIA), the Alameda County Congestion Management Agency (ACCMA), and the Santa Clara Valley Transportation Authority (VTA) to form a Joint Powers Authority (JPA) to plan, design, construct, and administer high-occupancy toll lanes on I-680 in the Sunol Grade area.

In 2010, ACTIA and ACCMA merged to form a new agency, the Alameda County Transportation Commission (Alameda CTC). The statute was subsequently revised to name Alameda CTC in place of ACTIA and ACCMA. In addition, a clause requiring the statute and project to sunset after four years of operation was removed, and a section was added that allows the JPA to issue bonds to finance construction and construction-related expenditures.

**I-680 Express Lane Authority**

**Chair**

District 1 Supervisor  
Scott Haggerty  
Alameda CTC

**Vice Chair**

Fremont Councilmember  
Bill Harrison, Alameda CTC

**Members**

Union City Mayor Mark  
Green, Alameda CTC  
Pleasanton Mayor Jennifer  
Hosterman, Alameda CTC  
Milpitas Vice-Mayor Pete  
McHugh, Santa Clara VTA

**Executive Director**

Arthur L. Dao  
Alameda CTC

**Staff Liaison**

Stewart D. Ng  
Deputy Director of Projects  
and Programming  
Alameda CTC

**Secretary**

Christina Ramos  
Alameda CTC

While the official name of the JPA is the Sunol Smart Carpool Lane Joint Powers Authority, it is commonly called the “I-680 Express Lane Authority.” The I-680 Express Lane Authority comprises five elected officials. Four voting members are from Alameda County, based on approximately four-fifths of corridor miles being within Alameda County, and one voting member is from Santa Clara County, based on the remainder of corridor miles being within Santa Clara County.

The Authority meets monthly and meetings are open to the public. Meeting agendas and minutes are posted on the Alameda CTC website ([www.alamedactc.org](http://www.alamedactc.org)). Alameda CTC staff provide support in the designated positions of Executive Director, Board Secretary, Treasurer, and Auditor/Controller, as well as other services.

For toll collection, the Authority has an agreement with the Bay Area Toll Authority (BATA) to use its FasTrak electronic toll-collection system. BATA was reimbursed for costs associated with implementation of the express lanes, and is reimbursed for transaction costs and direct costs associated with using the FasTrak system.

The I-680 Express Lane Authority also has an agreement with the California Department of Transportation (Caltrans) to operate the express lane within the state right of way, as well as to maintain and operate the express lane.

## FINANCIAL STATEMENT, FISCAL YEAR 2010

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The I-680 Express Lane Authority receives revenue from tolls. The average peak time toll is \$3.00, reaching a high of \$7.50 so far, and the average non-peak toll is 50 cents.

The Authority determines the investments and expenditures for the revenue generated from the lane. The highest priority for the toll revenues is to pay to maintain and operate the express lane. Additional revenue can then be applied toward other improvements on the I-680 corridor, including transit service and a northbound express lane.

During the first fiscal year of operation, there were 279,890 total trips in the express lane. By the end of the fiscal year, the number of trips averaged 1,560 per day, with a daily revenue of approximately \$3,640.

Highlights from the independent auditor's report, which covers the period September 20, 2012 (inception of operations) through June 30, 2011, include the following:

- Total net assets increased by \$3,474,676 as of June 30, 2011 compared to September 20, 2010. Capital assets comprised \$2,846,109 or 2 percent of the total net assets on June 30, 2011.
- Total toll revenue was \$628,961 during fiscal year 2011.
- Total operating expenses were \$238,999 during fiscal year 2011, mostly comprising \$238,605 in depreciation expense on capital assets.
- Toll revenue equipment with a value of \$3,084,714 was contributed by Alameda CTC during fiscal year 2011.



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