I-680 Sunol Smart Carpool Lane Joint Powers Authority

Monday, September 14, 2015, 9:30 a.m.
1111 Broadway, Suite 800
Oakland, CA 94607

Mission Statement
The mission of the Alameda County Transportation Commission (Alameda CTC) is to plan, fund, and deliver transportation programs and projects that expand access and improve mobility to foster a vibrant and livable Alameda County.

Public Comments
Public comments are limited to 3 minutes. Items not on the agenda are covered during the Public Comment section of the meeting, and items specific to an agenda item are covered during that agenda item discussion. If you wish to make a comment, fill out a speaker card, hand it to the clerk of the Commission, and wait until the chair calls your name. When you are summoned, come to the microphone and give your name and comment.

Recording of Public Meetings
The executive director or designee may designate one or more locations from which members of the public may broadcast, photograph, video record, or tape record open and public meetings without causing a distraction. If the Commission or any committee reasonably finds that noise, illumination, or obstruction of view related to these activities would persistently disrupt the proceedings, these activities must be discontinued or restricted as determined by the Commission or such committee (CA Government Code Sections 54953.5-54953.6).

Reminder
Please turn off your cell phones during the meeting. Please do not wear scented products so individuals with environmental sensitivities may attend the meeting.

Glossary of Acronyms
A glossary that includes frequently used acronyms is available on the Alameda CTC website at www.AlamedaCTC.org/app_pages/view/8081.
Alameda CTC is accessible by multiple transportation modes. The office is conveniently located near the 12th Street/City Center BART station and many AC Transit bus lines. Bicycle parking is available on the street and in the BART station as well as in electronic lockers at 14th Street and Broadway near Frank Ogawa Plaza (requires purchase of key card from bikelink.org).

Garage parking is located beneath City Center, accessible via entrances on 14th Street between 1300 Clay Street and 505 14th Street buildings, or via 11th Street just past Clay Street. To plan your trip to Alameda CTC visit www.511.org.

Accessibility
Public meetings at Alameda CTC are wheelchair accessible under the Americans with Disabilities Act. Guide and assistance dogs are welcome. Call 510-893-3347 (Voice) or 510-834-6754 (TTD) five days in advance to request a sign-language interpreter.

Meeting Schedule
The Alameda CTC meeting calendar lists all public meetings and is available at www.AlamedaCTC.org/events/upcoming/now.

Paperless Policy
On March 28, 2013, the Alameda CTC Commission approved the implementation of paperless meeting packet distribution. Hard copies are available by request only. Agendas and all accompanying staff reports are available electronically on the Alameda CTC website at www.AlamedaCTC.org/events/month/now.

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I-680 Sunol Smart Carpool Lane
Joint Powers Authority Meeting Agenda
Monday, September 14, 2015, 9:30 a.m.

Chair: Mayor Jerry Thorne, City of Pleasanton
Vice Chair: Mayor David Haubert, City of Dublin
Commissioners/Members: Scott Haggerty, Bill Harrison, Jason Baker (Santa Clara Valley Transportation Authority),
Staff Liaison: Kanda Raj
Executive Director: Arthur L. Dao
Clerk: Vanessa Lee

1. Pledge of Allegiance

2. Roll Call

3. Public Comment

4. Consent Calendar

   4.1. Approval of the I-680 Sunol Smart Carpool Lane Joint Powers Authority July 13, 2015 Meeting Minutes

5. Regular Matters

   5.1. I-680 Southbound Express Lane (PN 710.5); Monthly Operations Update

6. Committee Member Reports (Verbal)

7. Staff Reports (Verbal)

8. Adjournment

Next Meeting: October 12, 2015

All items on the agenda are subject to action and/or change by the Commission.
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1. **Pledge of Allegiance**

2. **Roll Call**
   A roll call was conducted. All members were present with the exception of Commissioner Harrison and Commissioner Baker.

   Commissioner Biddle was present as an alternate for Commissioner Haubert.

3. **Public Comment**
   There were no public comments.

4. **Consent Calendar**

   4.1. **May 11, 2015 I-680 Sunol Smart Carpool Lane JPA Meeting Minutes**
   
   Commissioner Haggerty moved to approve the Consent Calendar. Commissioner Biddle seconded the motion. The motion passed unanimously (Harrison and Baker absent).

5. **Regular Matters**

   5.1. **I-680 Southbound Express Lane Operations (PN 950.0): Approval of Amendment No. 1 to Cooperative Agreement with Bay Area Toll Authority for Regional Customer Service Center Services**
   
   Kanda Raj recommended that the Authority approve Amendment No. 1 to Cooperative Agreement with Bay Area Toll Authority (BATA) for Regional Customer Service Center Services. He stated that the current agreement will expire on September 19, 2015. The extension is required to continue services and will extend the agreement to December 2016. Staff negotiated with BATA to lower the unit toll transaction cost.

   Commissioner Haggerty asked if there has been any discussion on converting this lane to continuous access. Kanda stated that the I-680 Northbound Express Lane facility will be continuous access facility. Staff recommends to convert the I-680 Southbound Express Lane to continuous or near continuous access facility at the same time when the northbound improvements are implemented. The Requests for Proposal for the I-680 Northbound Express Lane project include optional task for this conversion.

   Commissioner Biddle asked if all the operation contracts will be consolidated into one contract. Kanda stated that the goal is to have seamless customer experience, therefore, it makes sense to have a single operation contract in the future.

   Commissioner Biddle moved to approve this item. Commissioner Haggerty seconded the motion. The motion passed unanimously (Harrison and Baker absent).
5.2. I-680 Southbound Express Lane (PN 710.5): Monthly Operations Update
Arun Goel presented the I-680 Southbound Express lane operations update for the month of May 2015. He covered the corridor throughput, year over year comparison by month, average travel speed, and speed curves during peak commute period. Arun also covered average daily toll trips and estimated and forecasted revenue. He concluded by providing information on incident management and enforcement.

Commissioner Haggerty wanted more information on the average revenue for the lane. Arun stated that the average revenue is $10,000-$12,000 per day and the total current fiscal year revenue is approximately $1.7 million.

This item was for information only.

6. Committee Member Reports
There were no committee member reports.

7. Staff Reports
Kanda provided information on the I-680 Northbound Express Lane Project, stating that the environmental phase of the project is complete, with Caltrans signing off on final environmental document and project report in late July 2015. With that the Project has moved into final design phase. To expedite the project delivery, staff has selected a firm to complete the final construction contract documents. He informed the Authority that there will be an item at the PPC meeting later in the day, seeking authorization to execute an agreement with the consulting firm.

8. Adjournment/ Next Meeting
The next meeting is:

Date/Time: Monday, September 14, 2015 @ 9:30 a.m.
Location: Alameda CTC Offices, 1111 Broadway, Suite 800, Oakland, CA 94607

Attested by:

Vanessá Lee,
Clerk of the Commission
Memorandum

DATE: September 8, 2015
SUBJECT: I-680 Southbound Express Lane (PN 710.5): Monthly Operations Update
RECOMMENDATION: Receive a status update on the operation of the I-680 Southbound Express Lane.

Summary

The purpose of this item is to provide the I-680 Sunol Smart Carpool Lane Joint Powers Authority ("Sunol JPA") with Monthly Operation Update of the express lane facility for the months of June and July 2015, included as Attachments A & B.

Review of June and July 2015 operation reports indicates that the express lane facility continued to provide travel reliability (speed and travel time savings) in the lane, and improved traffic operations within the corridor.

Year over year performance metrics demonstrate that the average daily number of toll paying trips has increased. This is an indication that solo drivers continue to choose to utilize the express lane to experience travel reliability and time savings. The average travel speed in the express lane continues to remain steady on average; maintaining at or above the posted speed limit.

Background

The I-680 Southbound Express Lane facility spans over 14 miles from SR 84 near Pleasanton to SR 237 in the City of Milpitas. The facility was opened in September 2010 and is the first operational express lane facility in Northern California; it is one of a few in the nation to have a shared toll and non-toll facility. In addition to carpoolers who use the lane at no cost, it allows toll-paying solo drivers to benefit from optimized capacity, reduced congestion and increased travel time reliability. Constructed within the restricted right-of-way, the facility has no physical barrier between the general purpose lanes and the express lane, but is separated by a double white stripe. The Alameda CTC, acting as the managing agency for the Sunol JPA, has been operating the express lane facility since it opened to traffic in September 2010.

All Electronic Toll (AET) collection method has been employed to collect tolls, i.e., no need to stop to pay tolls. Tolls are collected via FasTrak® transponders, issued by Bay
Area Toll Authority that are automatically read by readers mounted on overhead gantries. Currently, the I-680 Express Lane includes five FasTrak® readers: one at each toll zone (at Andrade, Washington and Mission), and two at stand-alone enforcement zones (south of Vargas and south of Scott Creek). The accounts of vehicles passing through with valid FasTrak® transponders are charged the appropriate toll for the length of their trip, based on the toll rates published via dynamic message signs. Toll rates are calculated based on real-time traffic conditions (speed and volume) in HOV/express and general purposes lanes, utilizing a dynamic pricing model/algorithm. California Highway Patrol officers continued to provide enforcement services while Caltrans provides roadway maintenance services, through reimbursable service agreements.

**June 2015 Operation Update:** See Attachment A. During the peak commute hour, the motorist in express lane, including the carpool users travelled with speeds approximately 10-15 mph faster than the motorists travelled in the general purpose lanes. Vehicle speeds observed in HOV/Express Lane during the commute hours indicate that the use of lane by solo drivers did not degrade the level of service in the lane and/or impede the benefits of carpooling.

Year over year comparison indicates a 1% increase in corridor traffic during the peak commute hour. The comparison also indicates a 13% increase in daily toll trips. The average daily and monthly toll trips were approximately 3,400 and 74,600, respectively; and fiscal year 2014/15 ended on a high note with gross revenue exceeding $1.9 million.

**July 2015 Operation Update:** See Attachment B. During the peak commute hour, the motorist in express lane, including the carpool users travelled with speeds approximately 10-15 mph faster than the motorists travelled in the general purpose lanes. The reduced speed differential is in line with the observation that the July 2015 traffic congestion is slightly lower than the congestion observed during the previous month (of June 2015). Vehicle speeds observed in HOV/Express Lane during the commute hours indicate that the lane use by solo drivers did not degrade the level of service in the lane or impede the benefits of carpooling.

**Fiscal Impact:** There is no fiscal impact.

**Attachments**

A. I-680 Southbound Express Lane June 2015 Operation Update

B. I-680 Southbound Express Lane July 2015 Operation Update

**Staff Contact**

Kanda Raj, Express Lanes Program Manager

Taylor Rutsch, Express Lane Operation Staff
I-680 SB Express Lane
Monthly Operations
June 2015 Update

A Presentation for the
I-680 Sunol Smart Carpool Lane Joint Powers Authority (SSCLJPA)
September 14, 2015
Express Lane
June 2015 Highlights

• Average Express Lane Speed: \( >70 \text{ MPH} \)

• Max Speed Differential: \( 10-15 \text{ MPH} \)

• Average Daily Toll Paying Users: \( 3,389 \)

77% Repeat Customer \( \rightarrow \) 92% Revenue
## Corridor Throughput
### Year Over Year Comparison by Month

<table>
<thead>
<tr>
<th></th>
<th>June 2014</th>
<th>June 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throughput in Ave. Peak Hour Volume</td>
<td>7,308 vph</td>
<td>7,409 vph</td>
</tr>
<tr>
<td>Throughput in % Capacity</td>
<td>96% 1%</td>
<td>97%</td>
</tr>
</tbody>
</table>

I-680 Sunol SMART Carpool Lane Joint Powers Authority
Average Daily Toll Trips - June Year over Year Comparison

June 2014: 2500
June 2015: 3300
Monthly Toll Trips
Year over Year Comparison

Trip Totals

Number of Trips

FY 13/14
FY 14/15

I-680 Sunol SMART Carpool Lane Joint Powers Authority
June 2015
Average Travel Speed
(Within 14-mile Express Lane Facility)

Express Lane Average 71 MPH

General Purpose Lane Average 60 MPH
Average Daily Speed Curves During Peak Commute Period

North Segment (Andrade to Washington)

Express Lane Operates 10+ MPH Faster during Peak Commute

Speed Differential

Time

June 2015 - Tuesday to Thursday Averages

Express Lane (MPH)

General Purpose (MPH)
Average Daily Speed Curves During Peak Commute Period

Central Segment (Washington to Mission)

Express Lane Operates 15+ MPH Faster during Peak Commute

Time

June 2015 - Tuesday to Thursday Averages
Average Daily Speed Curves During Peak Commute Period

South Segment (Mission to Calaveras)

Express Lane Operates 10+ MPH Faster during Peak Commute

June 2015 - Tuesday to Thursday Averages
Average Daily Toll Trips
June 2015
(Tuesday through Thursday from 5 AM to 8 PM)
Revenue (Estimated Gross vs. Forecasted)

Revenue in FY 2014/15
(June 2015)

Estimated Gross Revenue
$1,910,402
32%

Forecasted*
$1,449,000

* Forecasted revenue for the full FY 14/15 is $1,449,000
I-680 SB Express Lane
Monthly Operations
July 2015 Update

A Presentation for the
I-680 Sunol Smart Carpool Lane Joint Powers Authority (SSCLJPA)

September 14, 2015
Express Lane
July 2015 Highlights

- Average Express Lane Speed: \textbf{>70 MPH}

- Max Speed Differential: \textbf{10-15 MPH}

- Average Daily Toll Paying Users: \textbf{3,167}
  
  \begin{itemize}
  \item 75\% Repeat Customers \rightarrow 91\% Revenue
  \item 25\% New Customers \rightarrow 9\% Revenue
  \end{itemize}
### Corridor Throughput
**Year Over Year Comparison by Month**

<table>
<thead>
<tr>
<th>Month</th>
<th>2014 Throughput</th>
<th>2015 Throughput</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>Throughput in Ave. Peak Hour Volume: 6,697 vph</td>
<td>Throughput in Ave. Peak Hour Volume: 7,269 vph</td>
</tr>
<tr>
<td>July</td>
<td>Throughput in % Capacity: 88%</td>
<td>Throughput in % Capacity: 7%</td>
</tr>
</tbody>
</table>

I-680 Sunol SMART Carpool Lane Joint Powers Authority
Average Daily Toll Trips - July Year over Year Comparison
July 2015
Average Travel Speed
(Within 14-mile Express Lane Facility)

Express Lane Average 71 MPH

General Purpose Lane Average 60 MPH
Average Daily Speed Curves During Peak Commute Period

North Segment (Andrade to Washington)

Express Lane Operates 10+ MPH Faster during Peak Commute

Time
July 2015 - Tuesday to Thursday Averages
Average Daily Speed Curves During Peak Commute Period

Central Segment (Washington to Mission)

Express Lane Operates 15+ MPH Faster during Peak Commute

July 2015 - Tuesday to Thursday Averages
Average Daily Speed Curves During Peak Commute Period

South Segment (Mission to Calaveras)

**Express Lane Operates 10+ MPH Faster during Peak Commute**

- **Time**: July 2015 - Tuesday to Thursday Averages
- **Graph Details**: Express Lane vs. General Purpose Speed Curves from 7:00 AM to 10:00 AM, showing a speed differential of 10+ MPH during peak commute periods.
Revenue (Estimated Gross vs. Forecasted)

Revenue in FY 2015/16
(July 2015)

Estimated Gross Revenue $140,285

Forecasted* $113,377

* Forecasted revenue for the full FY 15/16 is $1,700,000