



Meeting Notice

1111 Broadway, Suite 800, Oakland, CA 94607

PH: (510) 208-7400

• www.AlamedaCTC.org

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Executive Director
Arthur L. Dao

I-680 Sunol Smart Carpool Lane Joint Powers Authority

Monday, October 14, 2013, 9:30-10:30 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.

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.

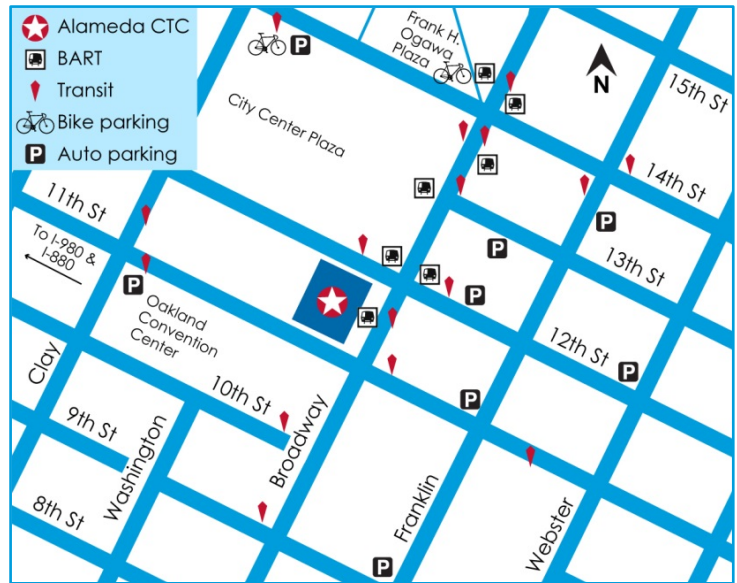
Glossary of Acronyms

A glossary that includes frequently used acronyms is available on the Alameda CTC website at www.AlamedaCTC.org/app_pages/view/8081.

Location Map

★ Alameda CTC
1111 Broadway, Suite 800
Oakland, CA 94607

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, October 14, 2013, 9:30 a.m.

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1. Pledge of Allegiance

2. Roll Call

3. Public Comment

Chair: Bill Harrison, Alameda CTC

Vice Chair: Mayor Jerry Thorne, City of Pleasanton

Commissioners/Members: Scott Haggerty, Gail Price (Santa Clara Valley Transportation Authority), Tim Sbranti

Staff Liaison: Stewart D. Ng

Executive Director: Arthur L. Dao

Clerk: Vanessa Lee

4. Consent Calendar

Page A/I

4.1. [September 9, 2013 I-680 Sunol SMART Carpool Lane JPA Meeting Minutes](#)

1 A

Recommendation: Approve the September 9, 2013 meeting minutes.

4.2. [I-680 Southbound Express Lane \(PN 710.5\): Monthly Operations Update](#)

3 I

4.3. [I-680 Northbound Express Lane \(PN 721.0\): Monthly Status Update](#)

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5. Committee Member Reports (Verbal)

6. Staff Reports (Verbal)

A. Joint Meeting with I-580 Express Lane Policy Committee

A.1 Convene meeting with I-580 Express Lane Policy Committee

A.2 Roll Call to Confirm Quorum

A.3 [I-580 Express Lane Projects Workshop: Concept of Operations Review](#)

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A.5 Recess Joint Meeting

7. Adjournment

Next Meeting: November 4, 2013

All items on the agenda are subject to action and/or change by the Commission.

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I-680 Sunol SMART Carpool Lane Joint Powers Authority Meeting Minutes Monday, September 09, 2013, 9:30 a.m.

4.1

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1. Pledge of Allegiance

2. Roll Call

A roll call was conducted and a quorum was confirmed.

3. Public Comment

There were no public comments. During this time, Art Dao welcomed the Commission to the new office location and provided a brief overview of the office logistics.

4. Consent Calendar

4.1. July 8, 2013 I-680 Sunol SMART Carpool Lane JPA Meeting Minutes

4.2. I-680 Southbound Express Lane (PN 710.5): Monthly Operations Update

4.3. I-680 Northbound Express Lane (PN 721.0): Monthly Status Update

Commissioner Haggerty motioned to approve the consent calendar. Commissioner Thorne seconded the motion. The motion passed unanimously.

5. Committee Member Reports (Verbal)

There were no committee member reports.

6. Staff Reports (Verbal)

There were no staff reports.

A. Joint Meeting with I-580 Express Lane Policy Committee

A.1 Convene meeting with I-580 Express Lane Policy Committee

A.2 Roll Call to Confirm Quorum

A.3 I-580 Express Lane Projects Workshop: Concept of Operations Review

Kanda Raj introduced the I-580 Express Lane Projects Workshop. Chris Wuestefeld, the System Manager from CDM Smith covered the automated toll violation and manual occupancy violation enforcement, and system operation monitoring via CCTV cameras and dashboard. Kris explained the components of the system and how the automated toll system enforcement would work, and elaborated on a requirement for the HOV users to carry switchable transponders.

Tess Lengyel covered policy and legislation specifically toll ordinances to enact toll violation enforcement, legislation needs, for requiring the HOV users to carry switchable transponders, upcoming public education/outreach efforts and marketing strategies.

Kanda provided an overview of agency coordination and collaboration to effectively implement near continuous access, zone-based tolling, automated toll violation enforcement, etc. He also covered the overall schedule of I-580 corridor projects. Ramsey Hissen provided traffic forecast information and explained the operational requirements

to the Commissioners when responding to their previous inquiry about the effect of converting the second express lane in to a general purposes lane in the vicinity of Vasco Road.

Commissioner Miley questioned how out of state drivers will access the express lane and if the outreach will strictly focus on local jurisdictions? Tess stated that this lane will have new technology that should assist out of state drivers with using the lane and staff plans to do extensive education throughout the Bay region as well as using the 511 system. Adequate signage will also be provided throughout the corridor to inform the drivers how the lane would work. Commissioner Miley requested that staff also reach out to potential customers through DMV registration process.

Commissioner Haggerty questioned how the truck climbing lanes interact with the express lane. Ramsey stated there will be a new 5th lane going up the hill, east of Grenville Road, which will provide better access for the trucks to climb up the hill without impeding the traffic operations in other lanes.

Commissioner Sbranti wanted to know what policy decisions the commission has to make regarding the lane. Art stated that several policy issues will be brought to Commission's attention in the upcoming months, and at that time staff will seek Commission input and/or adoption. Just to mention a few, Art indicated that the Commission will weigh in on HOV occupancy requirement, hours of operation, toll rates (minimum/maximum), toll ordinance and net toll revenue reinvestment.

Commissioner Thorne wanted to know what involvement the local city councils will have in the express lanes coordination. Tess stated that staff plans to present each City Council in the tri-valley with in depth information about the project to begin the educational process for the express lane.

This Item was for information only.

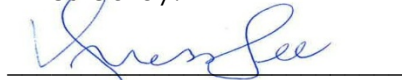
8. Adjournment/ Next Meeting

The meeting adjourned at 10:29 a.m. The next meeting is:

Date/Time: Monday, October 14, 2013 @10:30 a.m.

Location: Alameda CTC Offices, 1111 Broadway, Suite 800, Oakland, CA 94607

Attested by:



Vanessa Lee,
Clerk of the Commission



Memorandum

4.2

1111 Broadway, Suite 800, Oakland, CA 94607

• PH: (510) 208-7400

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DATE: October 7, 2013

SUBJECT: I-680 Southbound Express Lane (PN 710.5): Monthly Operations Update

RECOMMENDATION: Receive a monthly operations update on the I-680 Southbound Express Lane.

Summary

The purpose of this item is to provide the JPA Board with the August 2013 Monthly Operations Update of the express lane facility. This item is for information only.

Our review of daily trip and revenue reports indicates that the express lane facility had a strong performance during the month of August 2013 when compared to similar time period in 2012 (data indicates there was an increase in trips, although with a lower average peak toll rate). While comparing the performance matrices, it is noted that the average daily number of toll paying trips has increased by 25 percent. This indicates that more and more solo drivers have chosen to leave the general purposes lanes and use the express lane to experience the travel reliability and time savings. While it appears that traffic congestion has returned to the corridor with upward economic activities noted in Silicon Valley, the average travel speed in the express lane continues to remain at or above the posted speed limit.

Background

The I-680 Southbound Express Lane opened to traffic 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. The express lane facility spans over 14 miles from SR 84, near Pleasanton, to SR 237 in the City of Milpitas, and admits toll-paying solo drivers in addition to carpoolers (who use the lane at no cost). The express lane optimizes capacity, reduces congestion and increases travel time reliability within the 14 mile corridor.

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 JPA has been operating the express lane facility since it has opened to traffic in September 2010.

Since the opening, over 1,423,400 solo drivers have reached their destinations by traveling at speeds that are typically 6-8 miles per hour faster (several segments within the 14 mile corridor experience speeds over 15 miles per hour faster) than which motorists experience in the general purpose lanes, during peak commute hour.

Tolls are collected via FasTrak® transponders 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). Readers at the toll zones are linked to the Toll Data Center (TDC). 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 by a computerized real-time dynamic pricing model. The enforcement zone readers are not linked to the TDC and are used to aid CHP enforcement by determining if a vehicle has a valid FasTrak® transponder.

The August 2013 operational update (daily/monthly trip, travel time and revenue information) is included as Attachment A.

Fiscal Impact: There is no fiscal impact.

Attachments

A. I-680 Southbound Express Lane August 2013 Operations Update

Staff Contact

[Stewart Ng](#), Deputy Director of Programming and Projects

[Arun Goel](#), Express Lane Operations

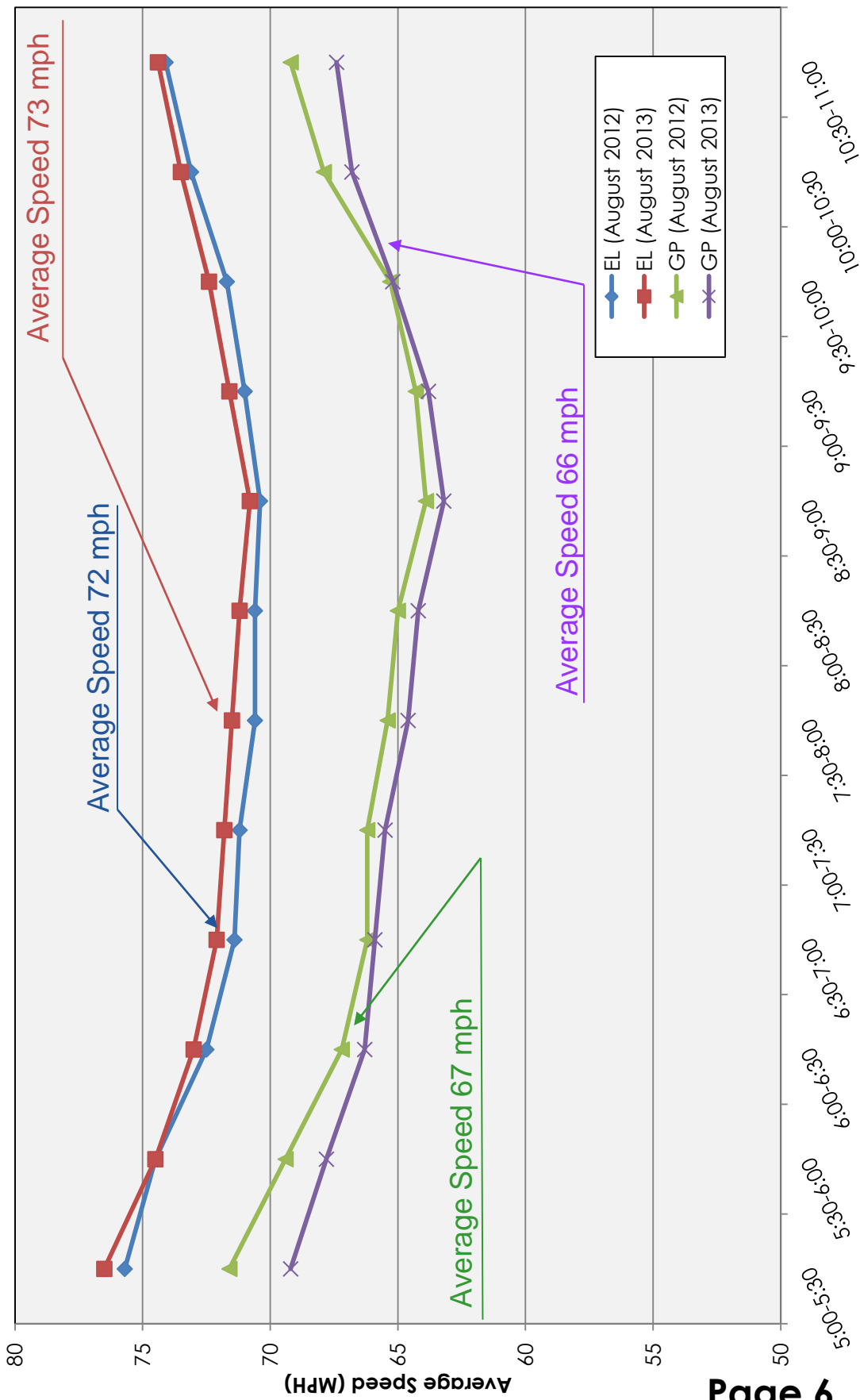
Year Over Year Comparison by Month



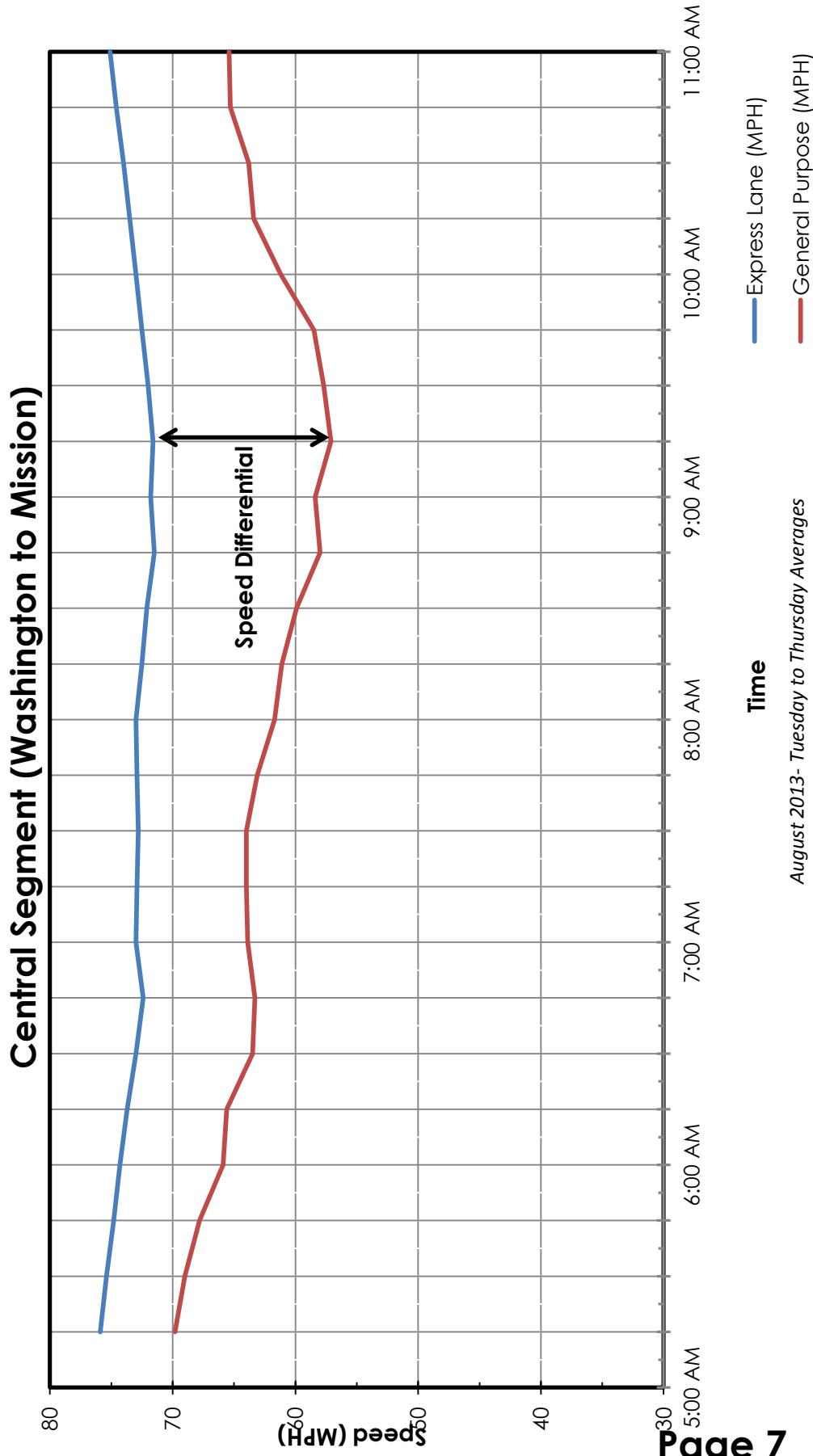
	August 2012	August 2013
Average Daily Toll Paying Trips	2,042 vehicles	2,547 vehicles
Average Daily Toll Revenue	\$4,190	\$4,585
Average Toll Rate	\$2.05	\$1.80
Average Peak Period Toll Rate		
M-F 5AM to 11AM	\$2.55	\$2.31
Average Peak Period Toll Rate		
M-Th 5AM to 9AM	\$2.56	\$2.39

Average Travel Speed During Morning Commute Hours

(Within 14-mile Express Lane Facility)

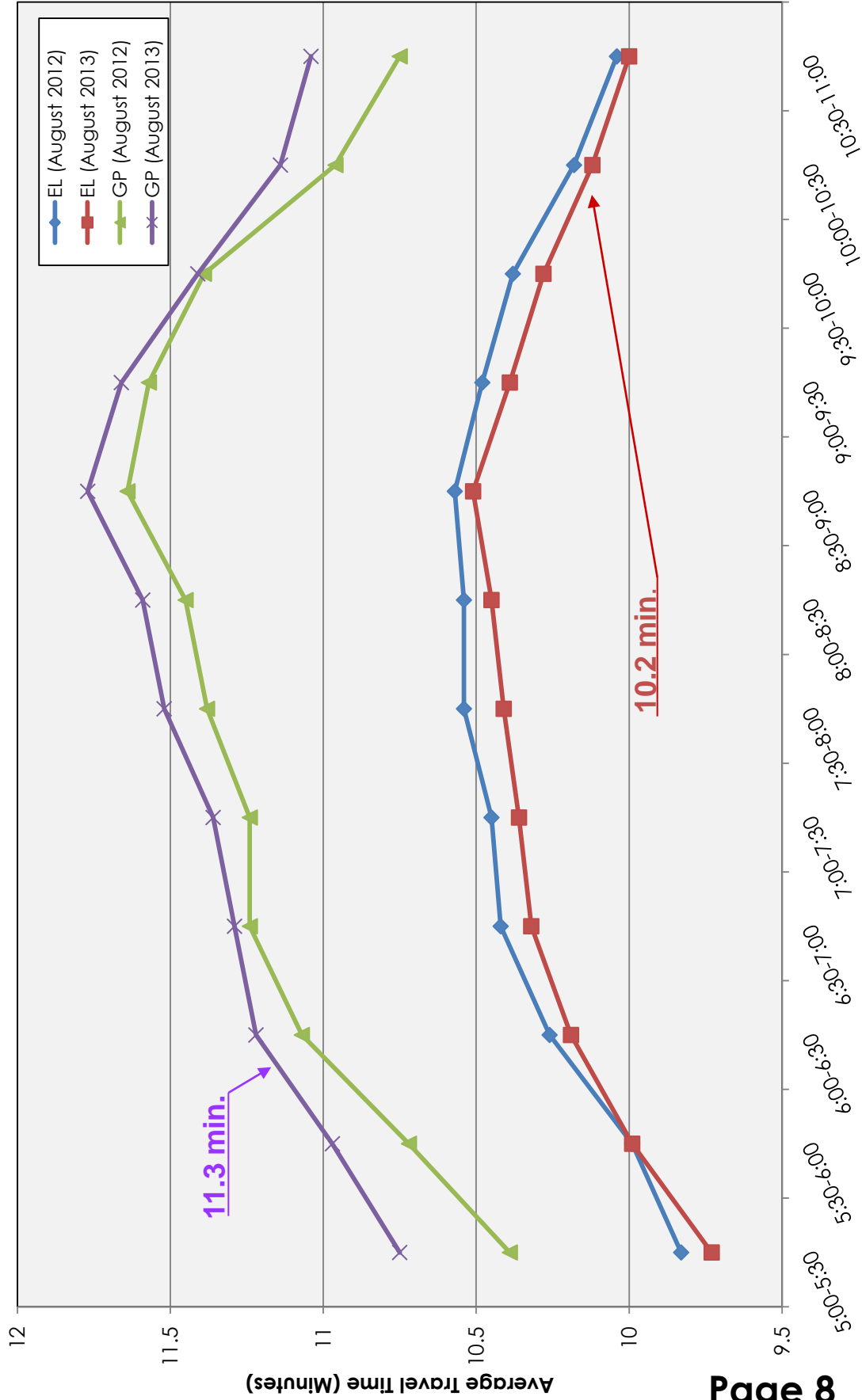


Average Daily Speed Curves During Peak Commute Period (August 2013)



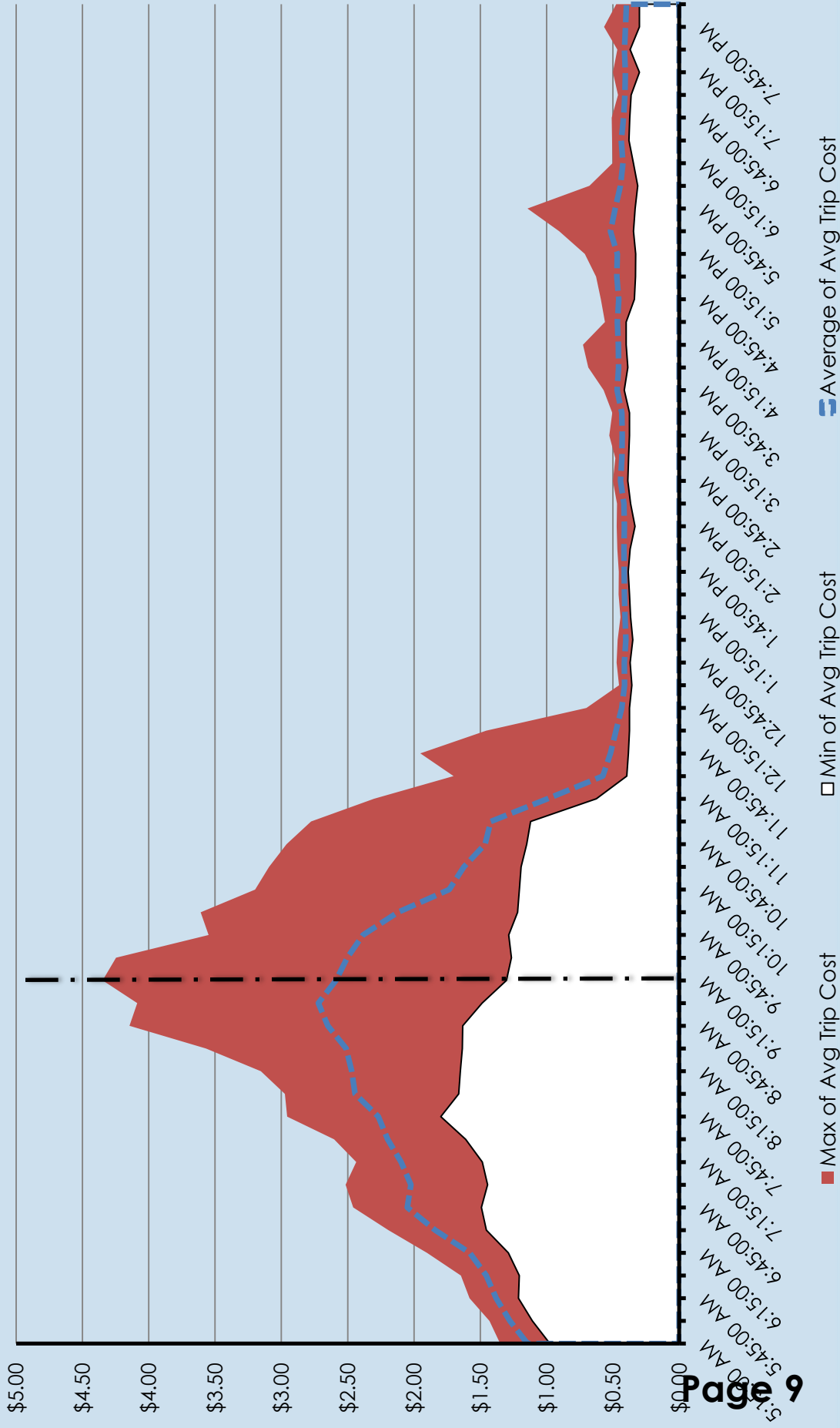
Average Travel Time During Morning Commute Hours

(Within 14-mile Express Lane Facility)



Average Toll Range

August 2013
(5 AM to 8 PM)



Revenue (Estimated Gross vs. Forecasted)

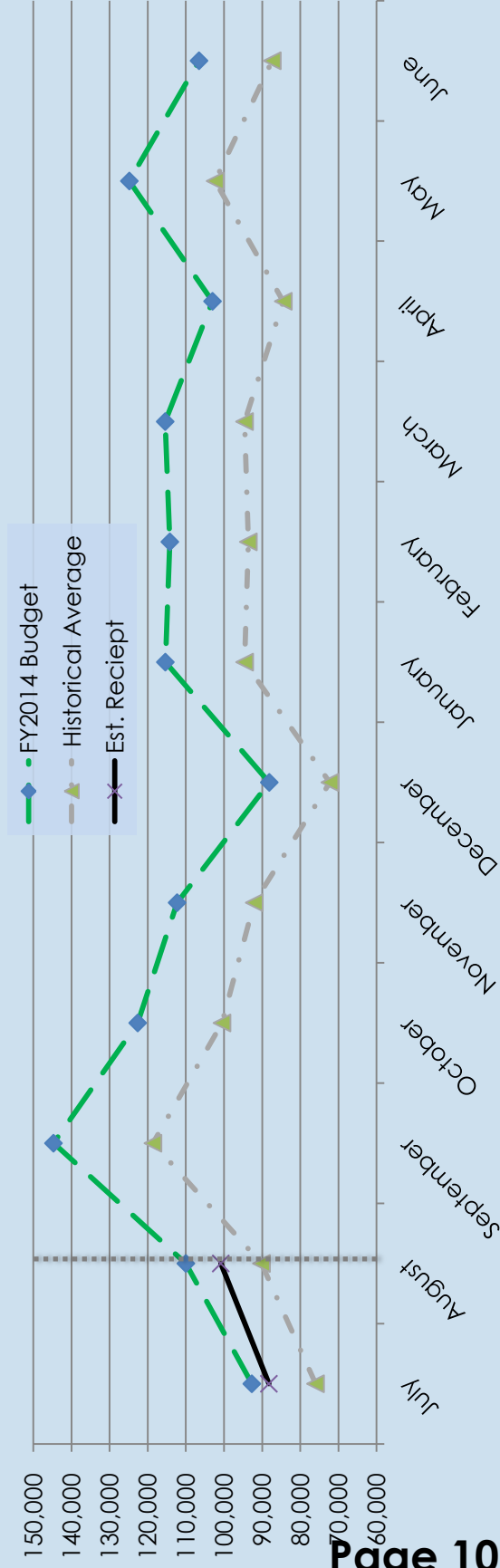
Revenue in FY 2013/14
(July to August 2013)

Estimated Gross Revenue	\$189,100
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Forecasted*

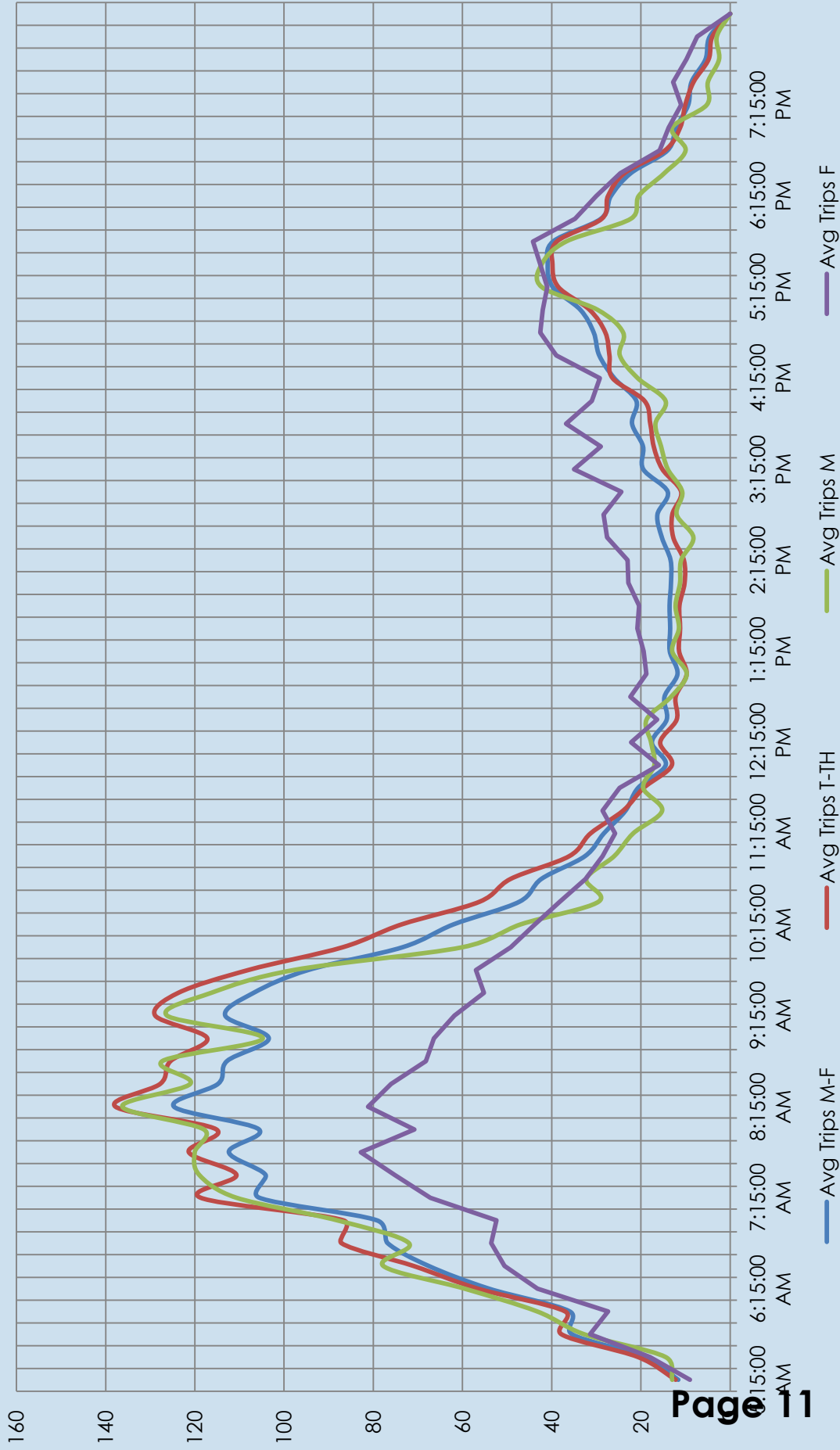
\$202,700

* Forecasted revenue for the full FY 13/14 is \$1,350,000

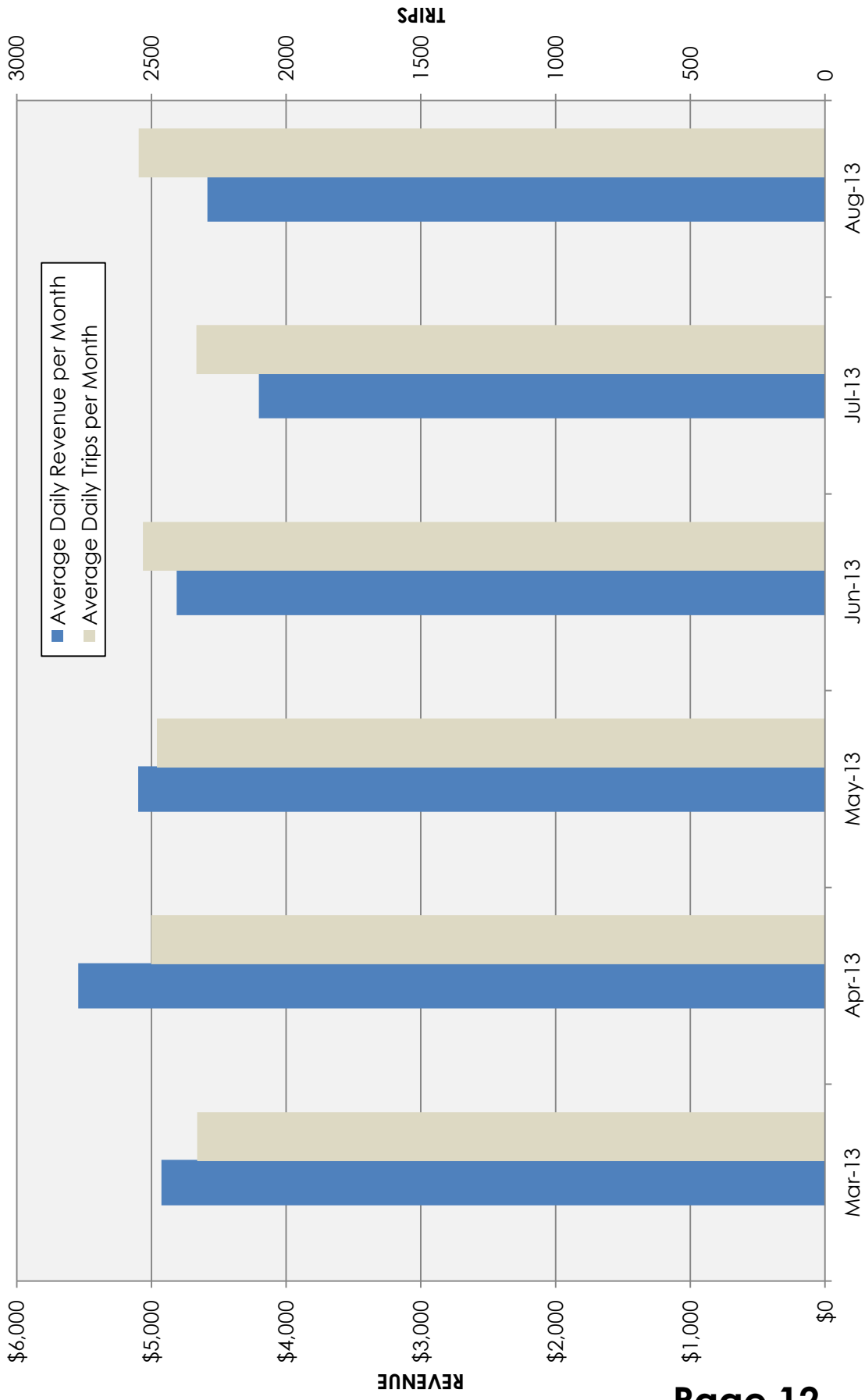


Average Daily Toll Trips

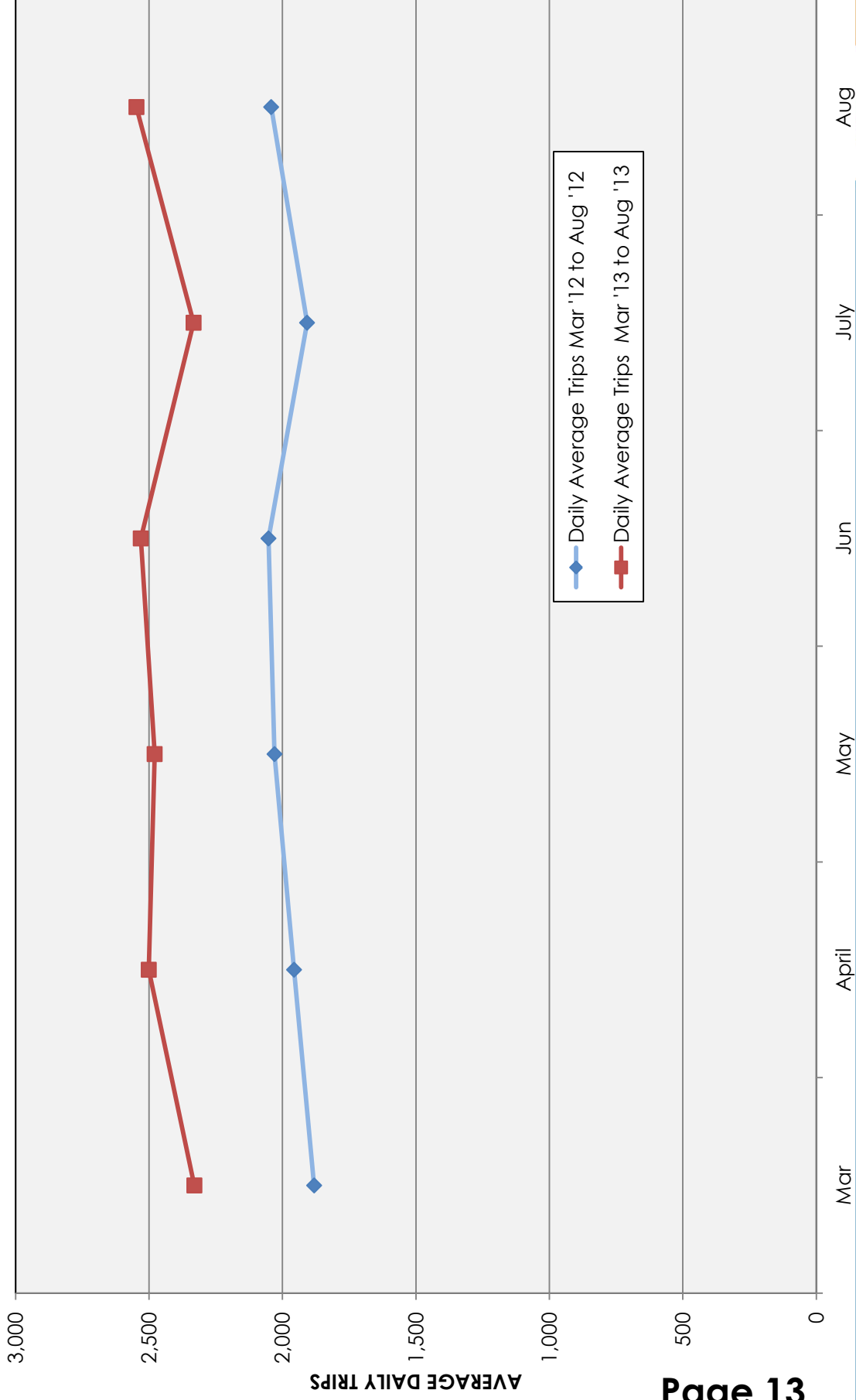
August 2013
(5 AM to 8 PM)



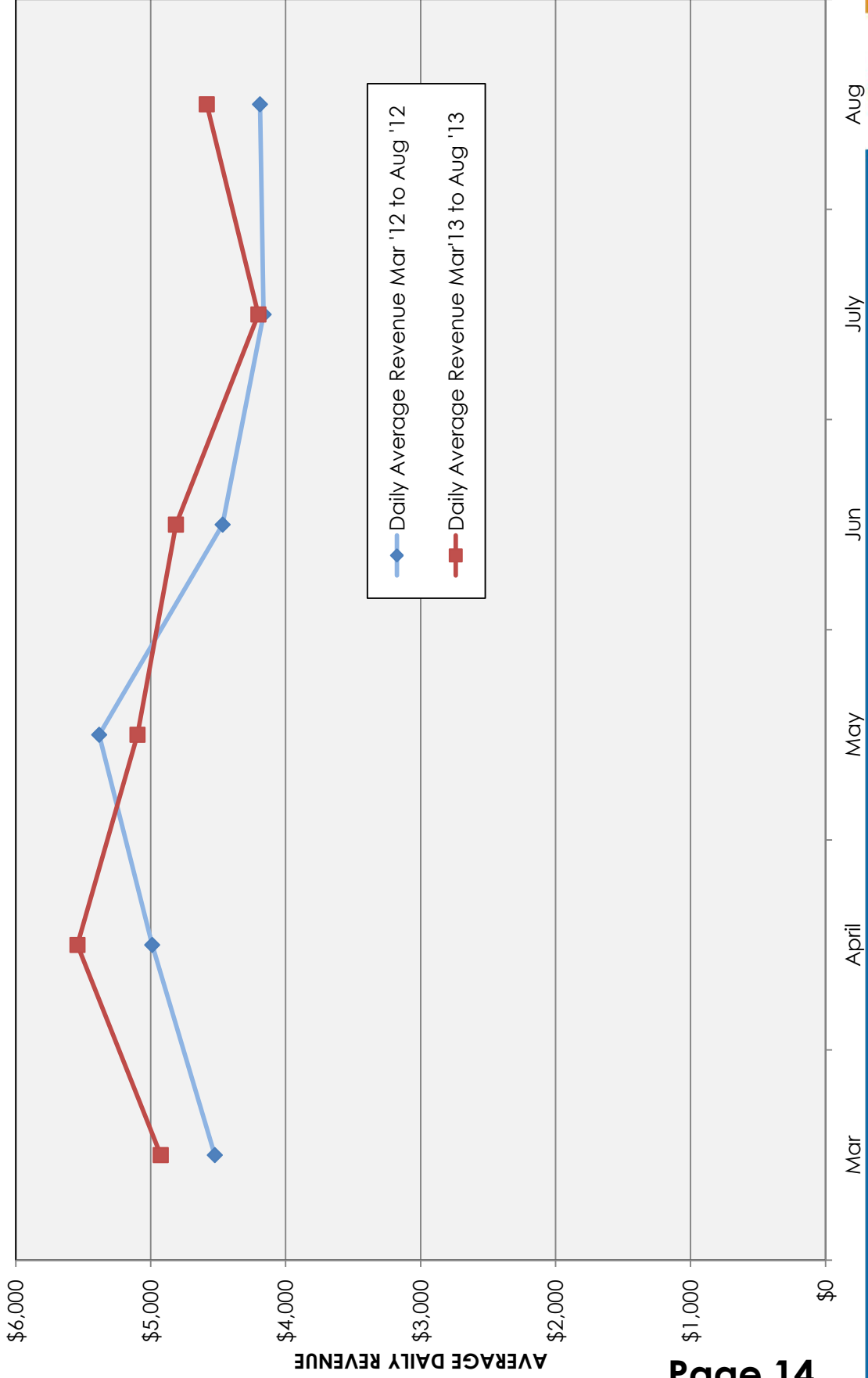
Average Daily Express Lane Revenue & Toll Trip Comparison



Average Daily Express Lane Toll Trips Comparison (Past 6 months)



Average Daily Express Lane Revenue Comparison (Past 6 months)





Memorandum

4.3

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DATE: October 7, 2013

SUBJECT: I-680 Northbound Express Lane (PN 721.0): Monthly Status Update

RECOMMENDATION: Receive a monthly status update the I-680 Northbound Express Lane Project.

Summary

The I-680 Northbound Express Lane Project will widen I-680 from SR 237 in Santa Clara County to SR 84 in Alameda County and construct a northbound HOV/Express Lane in the corridor. The purpose of this item is to provide the Board with a monthly status update of project development activities which are either completed or planned for the project. This staff report will briefly review the critical path scope and schedule activities. This item is for information only.

Background

The I-680 Northbound Express Lane Project will widen I-680 from SR 237 in Santa Clara County to SR 84 in Alameda County and construct a northbound HOV/Express Lane in the corridor. The project is intended to provide a number of benefits including: 1) enhanced mobility by reducing traffic congestion; 2) reduced travel time and improved travel reliability; 3) reduced congestion related accidents; thereby enhancing safety. The Express Lane facility will utilize unused HOV lane capacity by offering solo drivers the choice to pay a toll electronically to access the lane, while regular carpool users continue to use the lane at no cost.

In mid-2011, the Alameda CTC embarked on the program to convert an already approved I-680 Northbound High Occupancy Vehicle (HOV) Lane project to a combined I-680 Northbound HOV/Express Lane facility. However, in August 2011, in response to a writ filed by a local city, the Alameda County Superior Court directed Caltrans to vacate the environmental document prepared for the I-680 Northbound HOV Lane Project in its entirety. Given the Court's direction, it was determined by Caltrans and Alameda CTC in late 2011, that a Project Initiation Document and a completely new and higher level of environmental document involving expanded preliminary engineering, traffic analysis, and technical studies, was needed to obtain environmental clearance for the project.

The Project Team continues to make progress toward completing a final environmental document by March 2015. The following is a detailed discussion of major tasks planned for the project in Calendar Year 2013.

Traffic Studies

A Draft Traffic Operational Analysis Report (TOAR) documenting existing traffic conditions analysis, traffic forecasts, and the highway operations analysis has been completed. The team will be using traffic operational analysis to determine project implementation phases, access type and perceived effects on local arterials. This report documents the existing, Year 2020 and Year 2040 traffic conditions for both the "Build" and the "No Build" alternatives. Based on Caltrans and local agency reviews, the final approval of the TOAR is anticipated in October 2013.

Environmental Technical Studies

All environmental technical field surveys are complete. A list of required technical studies is included in Attachment A of this report. Draft technical reports for all of the environmental studies are complete. Several reports have already been approved by Caltrans; those remaining are currently under review. All final reports approvals are expected in October 2013.

Environmental Document

Based on input that the design team received, during the environmental scoping process, traffic studies, geometric design and environmental technical studies, the project team plans to complete an administrative draft environmental document (Admin DED) for review by Alameda CTC and Caltrans staff in October 2013. Alameda CTC will work with Caltrans to complete this task concurrent to completing the environmental technical studies in order to gain time in completing a final project approval. Various cycles of internal agency reviews are expected prior to publishing the DED for public review and comment. Public circulation of the DED and completion of a final document are expected in April 2014 and March 2015, respectively.

Project Approval

The Project Report (PR) process is underway. The Draft PR will document the need for the project and summarize the studies, cost, scope, and overall impact of project alternatives; and its approval is required prior to releasing a DED for public circulation and agency reviews. A Draft PR is planned for completion in April 2014. After the public and agency review process is complete and a preferred alternative is selected by the project development team, the Draft PR will be updated to become the Final PR. Completion of a Final PR indicates Caltrans, FHWA and Alameda CTC approval of the project. Final PR approval for this project is anticipated in March 2015.

Project Implementation Approach

The Project Report and Environmental Document will include studies and analysis for both the full project limits (SR 237 to SR 84) and an initial phase of construction (Auto Mall Parkway to SR 84). The limits for the initial phase of construction are based on preliminary traffic operational analysis results and projected funding availability.

Fiscal Impact: There is no fiscal impact.

Attachments

A. List of Planned Project Tasks/Technical Studies

Staff Contact

[Stewart Ng](#), Deputy Director of Programming and Projects

[Gary Sidhu](#), Project Controls Team

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Attachment A

LIST OF PLANNED PROJECT TASKS/TECHNICAL STUDIES

ID	DELIVERABLE	STATUS
PRELIMINARY ENGINEERING		
1	PSR-PDS	Approved
TRAFFIC STUDIES		
2	Traffic Data Collection	Complete
3	Existing Conditions Assessment	Approved
4	Model Validation	Approved
5	Traffic Forecasts	Approved
6	Preliminary Traffic Operations Sensitivity Analysis	Complete
7	Traffic Operations Analysis	Complete
8	Traffic Operations Analysis Report (TOAR)	Awaiting Approval
9	Traffic & Revenue Study	Complete
ENVIRONMENTAL STUDIES		
10	Public Scoping Report	Approved
11	Biological Field Surveys	Complete
12	Bat Species Study	Approved
13	Jurisdictional Wetlands Report	Approved
14	California Red Legged Frog Study	Approved
15	Special Status Plant Species Study	Approved
16	Natural Environment Study (NES)	Awaiting Approval
17	Biological Assessment	Underway
18	Biological Opinion	
19	Water Quality Assessment	Approved
20	Location Hydraulic Study	Approved
21	Initial Site Assessment	Approved
22	Air Quality PM 2.5 Assessment	Complete
23	Air Quality and Greenhouse Gas Analysis Report	Awaiting Approval
24	Noise Surveys	Complete
25	Noise Impact Report	Awaiting Approval
26	<i>Noise Abatement Decision Report (NADR)</i>	Final Draft Complete
27	Visual Impact Assessment	Awaiting Approval
28	Community Impact Assessment	Awaiting Approval
29	APE Mapping	Approved
30	Archaeological Survey Report (ASR)	Awaiting Approval

ID	DELIVERABLE	STATUS
31	Historic Architectural History/Built Resources Report (HRER)	Awaiting Approval
32	Historic Property Survey Report (HPSR)	Awaiting Approval
33	Paleontological Identification and Evaluation Report	Approved
34	Preliminary Geological Assessment	Approved
ENVIRONMENTAL DOCUMENT		
35	Project Description	Complete
36	1 st Admin DEIR/EA	Complete
37	2 nd Admin DEIR/EA	
38	3 rd Admin DEIR/EA	
39	DEIR/EA	
40	1 st Draft FEIR/EA	
41	2 nd Draft FEIR/EA	
42	3 rd Draft FEIR/EA	
43	FEIR/EA	
PROJECT APPROVAL		
44	Geometric Design	Complete
45	Roadway Plans	Complete
46	Traffic Safety Assessment	Complete
47	Fact Sheets (Mandatory and Advisory)	Draft Complete
48	Value Analysis Study	Complete
49	Storm Water Data Report	Awaiting Approval
50	Pavement Life Cycle Cost Analysis	Awaiting Approval
51	Hydromodification Assessment Report (included in Item 19)	Approved
52	Utility Coordination	Ongoing
53	R/W Engineering	Ongoing
54	Advance Planning Study - Bridges	Draft Complete
55	Advance Planning Study - Special Retaining Walls	Draft Complete
56	Preliminary Foundation Report	Draft Complete
57	Preliminary Geotechnical Report	Draft Complete
58	Encroachment Policy Variance Request (Utilities)	Draft Complete
59	Structures Aesthetics Guidelines	Draft Complete
60	Conceptual Landscape Plan	Draft Complete
61	Cost Estimate	Draft Complete
62	1 st Administrative Draft Project Report	Draft Complete
63	2 nd Administrative Draft Project Report	
64	3 rd Administrative Draft Project Report	
65	DPR	
66	Final Project Report	



Memorandum

A.3

1111 Broadway, Suite 800, Oakland, CA 94607

• PH: (510) 208-7400

• www.AlamedaCTC.org

DATE: October 7, 2013

SUBJECT: I-580 Express Lane Projects Workshop: Concept of Operations Review

RECOMMENDATION: Provide input on key concepts that define the development of the I-580 Express Lanes.

Summary

Development and implementation of the I-580 Express Lanes ("Project") is underway from Hacienda Drive to Greenville Road in the eastbound direction, and from Greenville Road to San Ramon Road/Foothill Road in the westbound direction. The Project will expand commuter choices and maximize efficiency of this highly congested corridor by employing emerging technologies, such as congestion value pricing and automated violation enforcement. The Project is ahead of most other regional express lanes under development in the Bay Area (in the I-80, I-680, I-880, SR 237 and US 101/SR 85 corridors), as part of an overall 550-mile express lane network.

Several design, operations, enforcement and educational decisions must be made to ensure consistency with other Bay Area express lanes. This would facilitate the Public's understanding, acceptance, and utilization of express lanes within the regional network. Staff is implementing a series of workshops with the Commissioners to provide updates on design and operational decisions and seek input on key policy issues. In the July 8th and September 9th workshops, staff provided an overview of overarching design and policy issues, and detailed information about automated violation enforcement and associated policy (toll ordinance) and legislation needs. The October workshop will focus on the following:

- A brief overview of prior meeting discussion topics, and
- An outline of implementing toll policies and business rules and an implementation timeline.

This memo is an informational item.

Background

The I-580 corridor has consistently been rated as one of the top three congested freeway segments within the San Francisco Bay Area region. As the next step in strategic investments in this corridor, the Alameda CTC is implementing express lanes in both the east and westbound directions. The express lanes will include the implementation of an

Electronic Toll System (ETS) to collect revenue generated by single-occupant users of the express lanes.

The express lane concept is an innovative transportation solution that utilizes technology to optimize the existing corridor capacity to provide traffic congestion relief, and is expected to provide the following benefits:

- Expand travel choices by allowing solo drivers to use the underutilized capacity in the High Occupancy Vehicle (HOV) lane for a fee when time saving is of value,
- Optimize the existing corridor capacity and improves efficiency of the corridor,
- Provide travel reliability, and
- Create a revenue source to pay for future corridor improvements, including closing gaps in the HOV network, transit investments and other improvements to increase connectivity.

The draft Concept of Operations plan developed for the Project is consistent with industry protocols and describes implementation of new and improved technologies to address congestion relief. Because the express lane implementation is still a relatively new concept, staff began providing periodic updates to the I-580 Policy Committee about the key concepts beginning in November 2012.

At the July 2013 Workshop, staff discussed the overarching concepts of Project implementation including:

- Express lane access design (near continuous access)
- Toll pricing strategies (zone tolling)
- System design, including automated toll violation enforcement
- Associated toll ordinance and legislation needs (for requiring HOV users to carry switchable transponders)
- Operating organizational structure
- Agency coordination
- Planned public education and outreach strategies

At the September 2013 Workshop, staff discussed the following:

- System design associated with toll and occupancy violation enforcement, and system-operations monitoring through cameras and dashboard
- Policy decisions and customer service center operations associated with employing automated toll violation enforcement
- Switchable transponders that define vehicle occupancy (i.e. a driver can select 1,2 or 3 on the transponder to self-declare number of occupants)
- Legislation needs, requiring HOV users to carry transponders

- Other policy issues such as HOV Degradation (requirement to maintain minimum speed in HOV lanes), National Interoperability (system capabilities to read any transponder issued by other national toll operator), and Caltrans Deputy Directive No. 43 (a draft policy directive, issued for the design and operations of managed lanes)
- Continued collaboration on planning outreach strategies for region-wide implementation

Through the end of this calendar year, staff will continue to provide detailed information on a series of topics and will request feedback from the Commissioners on policy issues to keep project development moving forward. Attachment A includes the list of recently completed and planned focused topics for discussion at upcoming meetings.

At the October 2013 meeting, staff will provide a brief overview of past meeting discussion topics, and include focused discussions on toll policies and business rules that require approval prior to Project implementation. This staff memorandum includes the following topics:

- Design and Infrastructure
- Operations and Enforcement
- Policy and Legislation
- Public Education and Outreach
- Agency Coordination

1. Design and Infrastructure

Design of express lanes: In the July Workshop staff described why a near continuous (aka more open) access configuration is suitable for implementation on I-580, highlighting that within the Project limits, the interchange densities are high, entrance ramps are closely spaced and the majority of those ramps are carrying large volumes of express lane eligible vehicles. Project design is moving forward with this new access type in order to stay on schedule and deliver the first construction project in fall 2014. See Attachment B for the Project limits and access configuration.

Design of tolling equipment: Project design included several travel zones within the corridor, where a flat fee will be charged for travel within a zone (zone tolling), based on real-time value pricing. Within each zone, overhead toll gantries will be placed at approximately $\frac{3}{4}$ mile intervals, which will be essential to effectively read FasTrak® transponders.

2. Operations and Enforcement

Based upon industry research and discussions with express lane experts/operators, an automated toll violation enforcement system was selected to minimize revenue leakage.

This system includes a violation enforcement system (VES) that employs license plate recognition (LPR) capabilities, (i.e. cameras which are capable of capturing the license plate images when vehicles fail to carry valid transponders). HOV users also will have to carry a switchable transponder as discussed in previous workshops.

3. Policy and Legislation

At the September 2013 Workshop, staff discussed the following policy issues:

- HOV degradation
- FHWA MAP-21 interoperability
- Toll ordinance (for enacting toll violation enforcement/collecting penalties)
- Legislation needs (for requiring HOV users to carry switchable transponders)
- Caltrans deputy directive 43

As discussed during the September workshop, current law allows the Commission to adopt a toll ordinance to enact the toll violation penalties. Staff continues to explore options for addressing how the Alameda CTC will issue violation notices. Staff is also discussing this item with other toll operators to collectively seek legislation for requiring all users to carry transponders while travelling in express lanes.

Several toll policies, business rules and best practices will have to be developed by the project team and adopted by the Commission, or approved by other entities that have jurisdiction over the express lanes, and incorporated by the design team for completing the toll system design, toll implementation and customer service operations.

Toll policies include, but are not limited to:

- Minimum/maximum toll rates
- Hours of operation
- HOV occupancy requirements (2 or 3+)
- Reinvestment of net revenue
- Toll rate adjustments
- Toll violation penalty/delinquent fees
- Dispute resolution and hearing processes, etc.

Business rules include but are not limited to:

- Zone toll implementation
- Toll waivers/ reductions
- Customer service center operations
- Toll violation noticing and processing, etc.

Staff has begun to discuss these items with the project system integrator and other toll operators, and is planning on bringing them to Commission's attention as are developed.

A list of identified toll policies/business rules and the timeline for implementation are included as Attachment C. A detailed presentation will be provided at the October 14, 2013 Workshop.

4. *Public Education and Outreach*

As described in the past workshops, staff is working toward completing a public education and marketing plan by the end of this calendar year.

Goals of the plan are:

- Advance education about the Project benefits
- Provide information on how to use or access the new facility
- On-going public education to support the use and understanding of this new commute choice

Targeted audiences will include:

- HOV users, current FasTrak® users and other potential express lane users
- Communities and businesses along the corridor
- Elected officials and stakeholders in both Alameda and San Joaquin Counties

In the September 2013 Workshop, staff gathered input from the Commissioners regarding the targeted audience and strategies for reaching out to them. Staff is working with the Project team and will provide additional updates in the November 2013 Workshop.

Staff continues to collaborate with other regional partners to jointly brand the facility and effectively market this new transportation solution to the customer as a congestion management tool. Implementation of the public education and marketing strategies are expected to commence in July 2014, well in advance of the planned opening of the facility in the fall of 2015, and extend at minimum six months beyond the opening date.

5. *Agency Coordination*

Staff has been coordinating the project development efforts with other congestion management agencies such as the Santa Clara Valley Transportation Authority (VTA), Contra Costa Transportation Authority (CCTA) and the Solano Transportation Authority (STA), MTC/BATA, California Toll Operators Committee (CTOC), California Department of Transportation (Caltrans), and FHWA. In addition, staff routinely communicates with other toll operators such as the LA Metro, Orange County Transportation Authority (OCTA) and the Minnesota Department of Transportation to share information and validate concepts developed for the project.

Fiscal Impact: There is no fiscal impact.

Attachments

- A: Express Lane Workshop Discussion Items
- B: I-580 Project limits and access configuration
- C: List of Toll Policies and Business Rules

Staff Contact

[Stewart Ng](#), Deputy Director of Programming and Projects

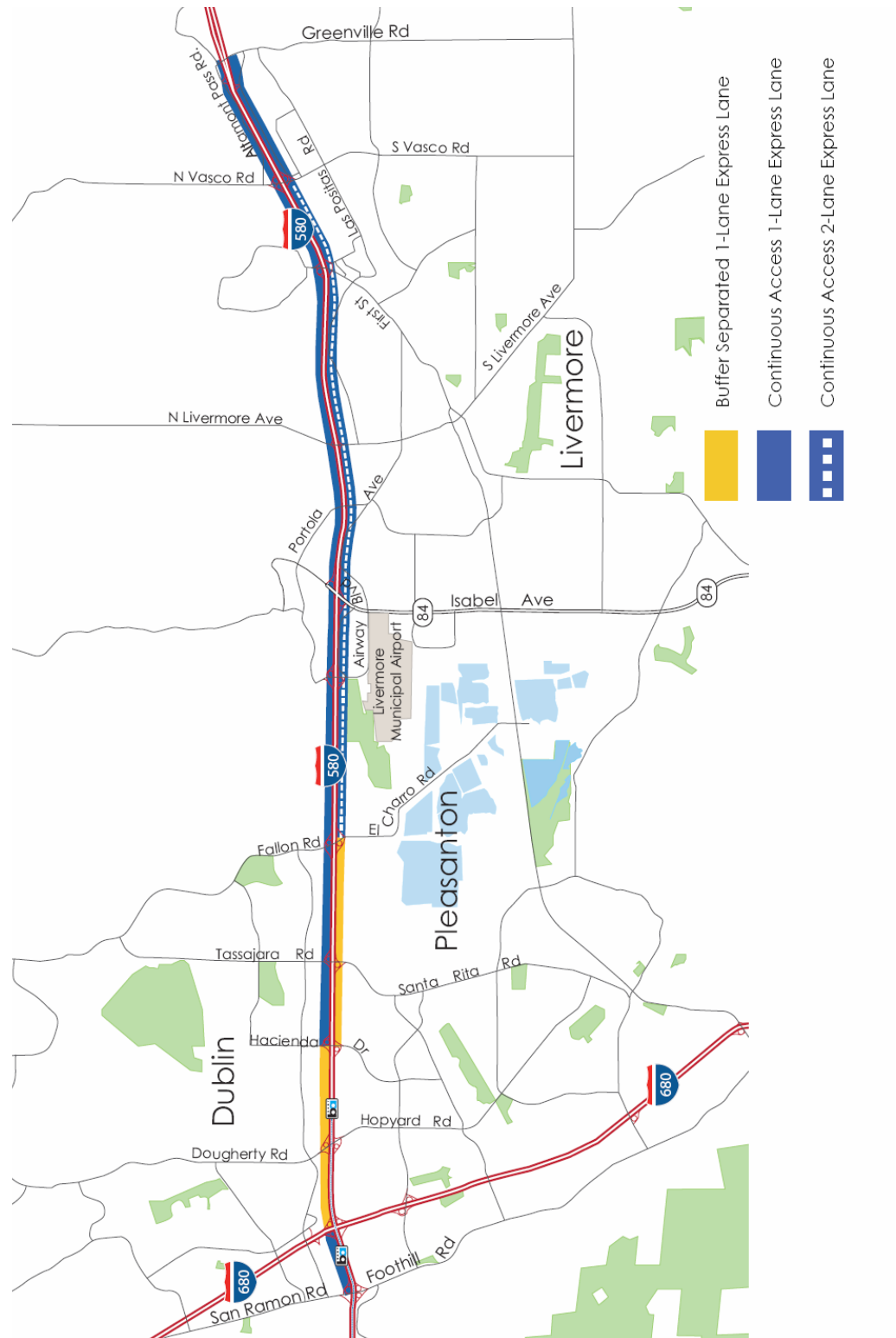
[Kanda Raj](#), Project Controls Team

A: Express Lane Workshop Discussion Items

I580 PC/I680 Sunol JPA Meeting Date	List of Items
July 8, 2013 (Completed)	<ol style="list-style-type: none"> 1. Design and Infrastructure <ol style="list-style-type: none"> a. Lane Design for Access b. Equipment and lane design to support pricing strategies and messaging 2. Operations and Enforcement: Concept of Operations, including Enforcement 3. Policy Overview: Legislation and Ordinance 4. Public Education and Marketing Strategies 5. Agency Coordination
September 9, 2013 (Completed)	<ol style="list-style-type: none"> 1. Design and Infrastructure (Responses to inquiries) 2. Operations and Enforcement (Focused discussion on enforcement) 3. Policy and Legislation <ol style="list-style-type: none"> a. HOV Degradation b. FHWA MAP-21 Interoperability c. Toll Ordinance d. Legislation {clean up Vehicle Code 149.5(b)} e. Caltrans Deputy Directive-43 4. Public Education and Marketing Strategies 5. Agency Coordination
October 14, 2013	<ol style="list-style-type: none"> 1. Brief Overview of Past Discussions on <ol style="list-style-type: none"> a. Design and Infrastructure b. Operations and Enforcement c. Policy and Legislation d. Public Education and Marketing Strategies

	<ul style="list-style-type: none"> e. Agency Coordination <p>2. Focused Discussion on</p> <ul style="list-style-type: none"> a. Toll Policies b. Business Rules
November 4, 2013	<p>Updates on</p> <ul style="list-style-type: none"> a. Toll Ordinance and Legislation b. Public Education and Marketing Strategies
2014	<ul style="list-style-type: none"> 1. Operations <ul style="list-style-type: none"> a. Revenue Study Results b. Hours of Operations c. HOV Occupancy Requirements d. Financial Breakeven Analysis 2. Policies <ul style="list-style-type: none"> a. Toll ordinance b. Legislation c. Toll Policies and Business Rules d. Caltrans Deputy Directive No. 43 3. Public Education and marketing Strategies 4. Agency Coordination

B: I-580 Project Limits and Access Configuration



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C: List of Toll Policies and Business Rules

No.	Description	Approved By			Schedule	Remarks
		Board	Others	Design Decision Only		
Toll Policies						
1	Types of vehicles allowed in HOV/Express Lane		X		N/A	Types of vehicles allowed in HOV/Express Lane, per California Vehicle Code (CVC) requirements
2	Transponder requirements		X		Summer 2014	Commission's input has been sought. Pending legislative action to revise CVC, requiring all users, including HOV users to carry transponders when utilizing the lane. (Legacy transponder for SOV, switchable transponder for HOV/motorbikes/commercial bus users.)
3	Toll rates	X			Summer/fall 2014	Set Min/Max rates. (Requires iterative runs on a revenue/toll platform, to be completed by the system integrator as part of systems design.)
4	Toll rate adjustment	X			Summer/fall 2014	Schedule a timeline for periodically revisiting toll rates
5	Revenue reinvestment	X			Summer 2015	Policy decision/process for revenue reinvestment, per AB 2032 guidelines
6	Toll Ordinance	X			Summer 2014	Commission's input has been sought. Establish administrative procedures and penalties to enact toll violation enforcement process.
7	Toll rate plans			X	Fall 2014	Optimize facility operations within approved min/max rate parameters
8	Hours of Operation		X		Spring 2014	Commission's input will be sought. Hours of operations shall be as same as HOV hours. Procedure: Caltrans-led HOV Lane Committee will review request from the tolling agency and decide whether to change the hours. Discuss a potential for afterhours/weekend operations.
9	HOV occupancy requirement (2 or 3+)		X		Spring 2014	Commission's input will be sought. Procedure: Caltrans-led HOV Lane Committee will review request from the tolling agency and decide whether to change the HOV occupancy requirements.
Business Rules/Agreements						

No.	Description	Approved By			Schedule	Remarks
		Board	Others	Design Decision Only		
1	Toll collection method			X	Included in system design scope	All electronic toll (AET) collection through Title 21 compliant transponders. (No toll plaza and/or need to slow down at toll zones.)
2	Access type			X	Included in system design scope	Near continuous access (open for most part to enhance access opportunities)
3	Pricing strategy			X	Included in system design scope	Dynamic pricing. Frequency of rate recalculation and allowed rate changes (up or down) in each cycle will be incorporated. Employ zone-based tolling that will employ a flat rate for travel within a zone. Will publish rates via dynamic message signs (DMS). Lock-in the rate, as published while customer entered the lane. Publish historic rate, when communication with the DMSs is interrupted.
4	Charging practices			X	Included in system design scope	Charge a rate only within the hours of operation, based on vehicle occupancy (identify and charge only the SOV users and toll violators.)
5	Toll waivers/reductions			X	Summer/fall 2014	After consultations with the Commission, develop circumstances or scenarios where toll charges will be waived/reduced
6	Loss of revenue during incidents/events			X	Summer/fall 2014	After consultations with the Commission, develop circumstances or incident scenarios where revenue loss will be permitted
7	Trip building			X	Included in system design scope	Specify information to be included in a trip record (transponder ID, time of travel, first/last reads, etc) to be transferred to customer service center for processing tolls. Single-trip to be formed, unless the users got off and got back in between zones and gaps exist between toll read points.

No.	Description	Approved By			Schedule	Remarks
		Board	Others	Design Decision Only		
						Specify how license plate images will be utilized to form trips, when a transponder is not detected. If a transponder account is found for the license plate read, a trip will be formed and processed. If no account information is found, a trip will be formed and processed as toll violation, utilizing information from DMV records (only made available to MTC/BATA).
8	Modes of operation			X	Included in system design scope	AB 2032 requires that LOS C or higher is maintained in express lane, if not the lane operational mode shall be switched to "HOV Only." Modes of operation may have to be manually changed to respond to incident management.
9	Roles and responsibilities			X	Winter 2014	Define roles and responsibilities of local/regional/state partners and project consultants
10	Routine maintenance and operations	X			Summer 2014	Commission's approval will be sought to memorialize Caltrans role in providing routine roadway maintenance and/or facilitating incident responses in an agreement
11	Enforcement (occupancy violation)	X			Spring 2015	Commission's approval will be sought to memorialize CHP's role in employing manual occupancy violation enforcement in an agreement
12	Enforcement (toll violation)			X	Included in system design scope	Manual toll violation will be curtailed by employing automated violation enforcement. Commission will adopt a toll ordinance and likely enter into an agreement that could delegate processing responsibilities to BATA. (See Toll Policy Item No. 6 and Business Rule Item No. 13 for additional information.)
13	Toll collection and customer services	X			Spring 2014	Commission's approval will be sought on a potential agreement with BATA in providing 1) toll collection services, and 2) M-F customer service center operations. The agreement would stipulate BATA as the processing agency for 3) issuing toll violation/delinquent notices and collecting fees 4) providing dispute resolution and hearing processes.

No.	Description	Approved By			Schedule	Remarks
		Board	Others	Design Decision Only		
14	Method of payment			X	Spring 2014	The customer services agreement stipulated above will also define 1) forms of customer payment, 2) account balance and method of replenishment, 3)refund policy, 4)non-revenue accounts, and 5)other account information, etc.