



**I-680 SUNOL SMART CARPOOL LANE
JOINT POWERS AUTHORITY**

MEETING NOTICE

Monday, January 14, 2013, 9:30 AM

1333 Broadway, Suite 300, Oakland, California 94612

(see map on last page of agenda)

Chair: Scott Haggerty -- Alameda CTC
Vice Chair: Bill Harrison -- Alameda CTC
Members: Gail Price -- Santa Clara VTA
Jerry Thorne -- Alameda CTC
Vacant -- Alameda CTC

Staff Liaison: Stewart D. Ng
Executive Director: Arthur L. Dao
Clerk of the Commission: Vanessa Lee

Commission Chair
TBD

Commission Vice Chair
Scott Haggerty, Supervisor – District 1

AC Transit
Greg Harper, Director

Alameda County
Supervisors
Richard Valle – District 2
Wilma Chan – District 3
Nate Miley – District 4
Keith Carson – District 5

BART
Thomas Blalock, Director

City of Alameda
Vacant

City of Albany
Peggy Thomsen, Mayor

City of Berkeley
Laurie Capitelli, Councilmember

City of Dublin
Tim Sbranti, Mayor

City of Emeryville
Ruth Atkin, Councilmember

City of Fremont
Suzanne Chan, Councilmember

City of Hayward
Marvin Peixoto, Councilmember

City of Livermore
John Marchand, Mayor

City of Newark
Luis Freitas, Councilmember

City of Oakland
Councilmembers
Larry Reid
Rebecca Kaplan

City of Piedmont
John Chiang, Mayor

City of Pleasanton
Jerry Thorne, Mayor

City of San Leandro
Michael Gregory, Vice Mayor

City of Union City
Carol Dutra-Vernaci, Mayor

Executive Director
Arthur L. Dao

AGENDA

*Copies of Individual Agenda Items are Available on the:
Alameda CTC Website -- www.AlamedaCTC.org*

1 PLEDGE OF ALLEGIANCE

2 ROLL CALL

3 PUBLIC COMMENT

Members of the public may address the Board during “Public Comment” on any item not on the agenda. Public comment on an agenda item will be heard when that item is before the Board. Only matters within the Board’s jurisdictions may be addressed. Anyone wishing to comment should make their desire known by filling out a speaker card and handing it to the Secretary. Please wait until the Chair calls your name. Walk to the microphone when called; give your name, and your comments. Please be brief and limit comments to the specific subject under discussion. Please limit your comment to three minutes.

4 CONSENT CALENDAR

4A. Approval of the Minutes of November 19, 2012 – **Page 1** **A**

5 REGULAR MATTERS

5A. I-680 Southbound Express Lane (ACTIA No. 8A) – Approval of Contract Amendment No. 1 for the Southbound I-680 Express Lane Evaluation “After” Study” – **Page 3** **A**

5B. I-680 Southbound Express Lane (ACTIA No. 8A) -- Monthly Operations Update – **Page 9** **I**

5C. I-680 Northbound Express Lane (ACTIA No. 8B) -- Monthly Status Update – **Page 21** **I**

6 COMMITTEE MEMBER REPORTS (Verbal)

7 STAFF REPORTS (Verbal)

8 ADJOURNMENT/NEXT MEETING: February 11, 2013

Key: A- Action Item; I – Information Item

- (*) Materials will be distributed at the meeting.
- (#) All items on the agenda are subject to action and/or change by the Board.

*PLEASE DO NOT WEAR SCENTED PRODUCTS SO INDIVIDUALS WITH
ENVIRONMENTAL SENSITIVITIES MAY ATTEND*

*Alameda County Transportation Commission
1333 Broadway, Suites 220 & 300, Oakland, CA 94612
(510) 208-7400 (New Phone Number)
(510) 836-2185 Fax (Suite 220)
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Glossary of Acronyms

ABAG	Association of Bay Area Governments	MTC	Metropolitan Transportation Commission
ACCMA	Alameda County Congestion Management Agency	MTS	Metropolitan Transportation System
ACE	Altamont Commuter Express	NEPA	National Environmental Policy Act
ACTA	Alameda County Transportation Authority (1986 Measure B authority)	NOP	Notice of Preparation
ACTAC	Alameda County Technical Advisory Committee	PCI	Pavement Condition Index
ACTC	Alameda County Transportation Commission	PSR	Project Study Report
ACTIA	Alameda County Transportation Improvement Authority (2000 Measure B authority)	RM 2	Regional Measure 2 (Bridge toll)
ADA	Americans with Disabilities Act	RTIP	Regional Transportation Improvement Program
BAAQMD	Bay Area Air Quality Management District	RTP	Regional Transportation Plan (MTC's Transportation 2035)
BART	Bay Area Rapid Transit District	SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act
BRT	Bus Rapid Transit	SCS	Sustainable Community Strategy
Caltrans	California Department of Transportation	SR	State Route
CEQA	California Environmental Quality Act	SRS	Safe Routes to Schools
CIP	Capital Investment Program	STA	State Transit Assistance
CMAQ	Federal Congestion Mitigation and Air Quality	STIP	State Transportation Improvement Program
CMP	Congestion Management Program	STP	Federal Surface Transportation Program
CTC	California Transportation Commission	TCM	Transportation Control Measures
CWTP	Countywide Transportation Plan	TCRP	Transportation Congestion Relief Program
EIR	Environmental Impact Report	TDA	Transportation Development Act
FHWA	Federal Highway Administration	TDM	Travel-Demand Management
FTA	Federal Transit Administration	TEP	Transportation Expenditure Plan
GHG	Greenhouse Gas	TFCA	Transportation Fund for Clean Air
HOT	High occupancy toll	TIP	Federal Transportation Improvement Program
HOV	High occupancy vehicle	TLC	Transportation for Livable Communities
ITIP	State Interregional Transportation Improvement Program	TMP	Traffic Management Plan
LATIP	Local Area Transportation Improvement Program	TMS	Transportation Management System
LAVTA	Livermore-Amador Valley Transportation Authority	TOD	Transit-Oriented Development
LOS	Level of service	TOS	Transportation Operations Systems
		TVTC	Tri Valley Transportation Committee
		VHD	Vehicle Hours of Delay
		VMT	Vehicle miles traveled

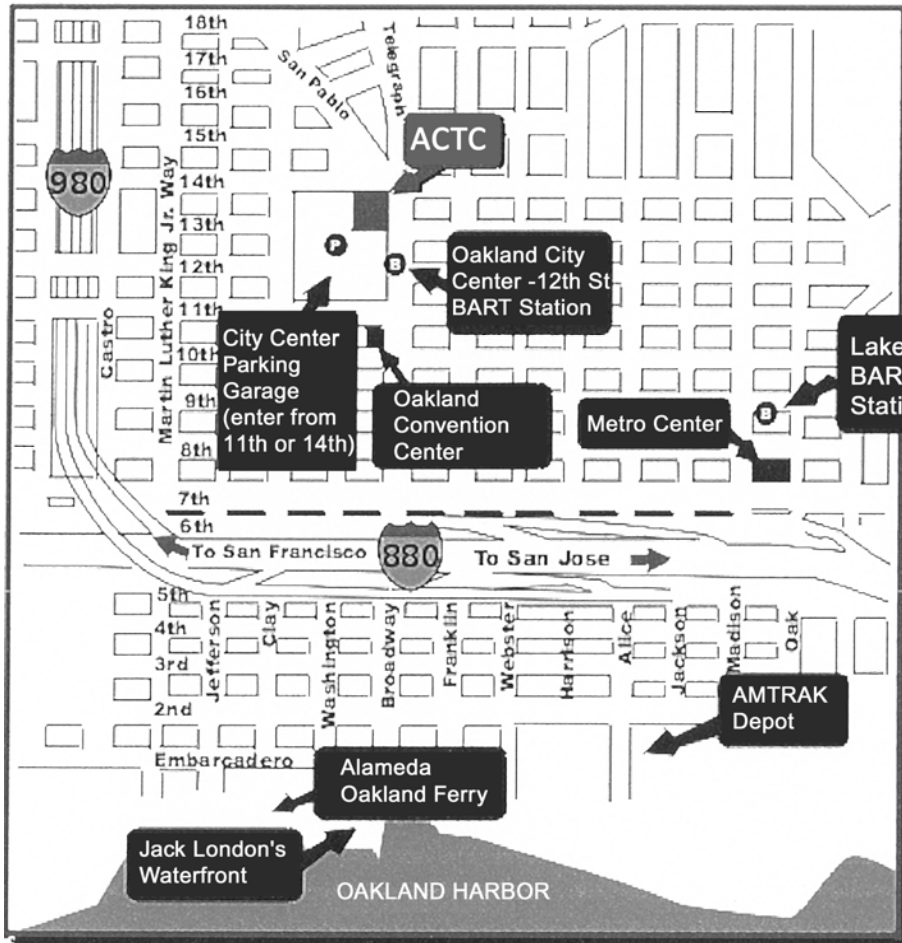


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Directions to the Offices of the Alameda County Transportation Commission:

**1333 Broadway, Suite 220
Oakland, CA 94612**

Public Transportation Access:

BART: City Center / 12th Street Station

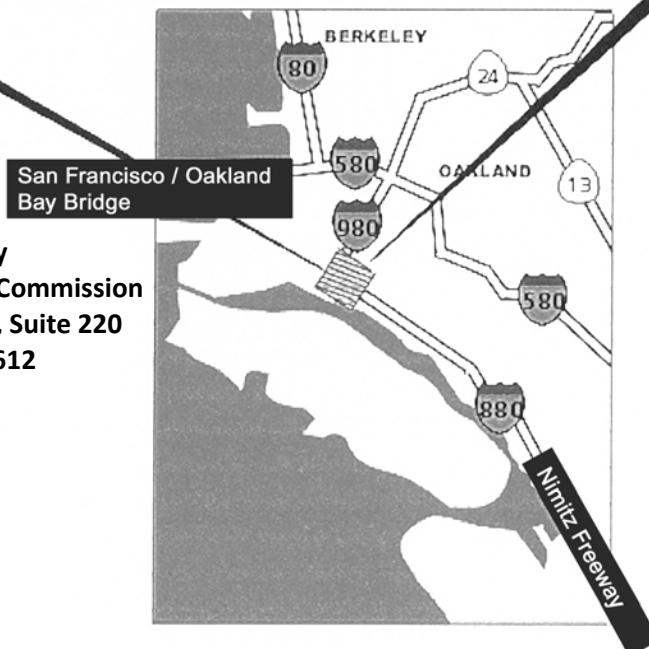
AC Transit:

Lines 1, 1R, 11, 12, 13, 14, 15, 18, 40, 51, 63, 72, 72M, 72R, 314, 800, 801, 802, 805, 840

Auto Access:

- Traveling South: Take 11th Street exit from I-980 to 11th Street
- Traveling North: Take 11th Street/Convention Center Exit from I-980 to 11th Street
- Parking: City Center Garage – Underground Parking, (Parking entrances located on 11th or 14th Street)

**Alameda County Transportation Commission
1333 Broadway, Suite 220
Oakland, CA 94612**



I-680 Sunol Smart Carpool Lane JPA Meeting
MINUTES OF NOVEMBER 19, 2012
OAKLAND, CALIFORNIA

The meeting was convened by the Chair, Supervisor Haggerty, at 10:06am

1 PLEDGE OF ALLEGIANCE

Art Dao led the pledge of allegiance.

2 ROLL CALL

A quorum was confirmed.

3 PUBLIC COMMENT

There were no public comments.

4 CONSENT CALENDAR

4A. Approval of the Minutes of September 10, 2012

Mayor Green motioned to approve this Item. Mayor Hosterman seconded the motion.
The motion passed 3-0.

5 REGULAR MATTERS

5A. Acceptance of the JPA's FY2011-2012 Draft Basic Audited Financial Statements

Patricia Reavey, Director of Finance recommended that the authority approve and enter into the record the JPA's Draft Basic Financial Statements for fiscal year 2011-2012. Ahmad Gharaibeh, certified public accounting firm of Vavrinek, Trine, Day & Co. LLP, provided an overview of the audited statements. Mr. Gharaibeh highlighted total net assets, cash and cash equivalents, toll revenue and total operating expenses. He concluded, that the independent audit found no in the Sunol JPA financials and they are found to be acceptable by industry standards.

Mayor Green motioned to accept this Item. Mayor Hosterman seconded the request. The motioned passed 3-0.

5B. Acceptance of the Sunol Smart Carpool Lane Year-to-Date Operating Statement of Revenues and Expenses as of September 30, 2012

Patricia Reavey recommended that the authority accept the Year-to-Date operating statement of revenues and expenses of the Sunol Smart Carpool Lane for the period ending September 30, 2012. Mrs. Reavey stated that the report summarized expenditures related to the Sunol Smart Carpool Lane operations from the beginning of the fiscal year and provided a review of the toll revenue, ACCMA's I-680 Southbound Express (HOT) Lane Project grant funding and total operational costs.

Mayor Hosterman motioned to approve this Item. Mayor Green seconded the motion. The motion passed 3-0.

5C. I-680 Southbound Express Lane (ACTIA No. 8A) Monthly Operations Update

Kanda Raj presented an update on the I-680 Southbound Express Lane monthly operations. Mr. Raj reviewed the October year over year statistical comparison, average travel speed during morning commute hours, actual gross versus forecasted revenue, average daily express lane revenue & toll trip comparison, average daily express lane toll trips and average daily express lane revenue comparison for the past 6 months.

Supervisor Haggerty requested an update that included additional statistical comparisons along with the monthly revenue comparison.

Arun Goel, presented a brief update on the copper theft deterrent action plan stating that staff is working with Caltrans, Fremont Law Enforcement and the Dublin CHP to develop a proactive action plan that could deter vandalism.

Mayor Green wanted to know the amount of theft claims that were filed with the insurance provider. Mr. Goel stated that one claim had been filed to date.

Neal Parish, Legal Counsel, provided an update on state and federal laws regarding copper theft.

Supervisor Haggerty requested more in depth information on this item at a later time.

This Item was for information only.

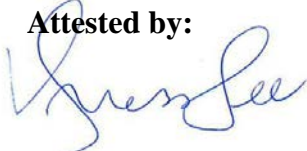
6 STAFF REPORTS (Verbal)

There were no staff reports.

7 ADJOURNMENT/NEXT MEETING: January 14, 2013

The meeting was adjourned at 10:45am. The next meeting is scheduled for January 14, 2013.

Attested by:



Vanessa Lee
Clerk of the Commission



Memorandum

DATE: January 7, 2013

TO: I-680 Sunol Smart Carpool Joint Powers Authority

FROM: Beth Walukas, Deputy Director of Planning
Saravana Suthanthira, Senior Transportation Planner

SUBJECT: **I-680 Southbound Express Lane (ACTIA No. 8A) - Approval of Contract Amendment No. 1 for the Southbound I-680 Express Lane Evaluation “After” Study**

Recommendation

It is recommended that the JPA approve Amendment No. 1 to the current professional services agreement (A12-0026) with Kittelson & Associates, Inc., to increase the contract amount by an amount not to exceed \$21,000. The amendment is needed to add tasks to the Southbound I-680 Express Lane Evaluation “After” Study scope of work to provide analysis to estimate corridor performance benefits resulting from any alternative corridor geometric improvements.

This item is also being acted on by the Planning, Policy and Legislation Committee at its January 14, 2013 meeting following the I-680 Sunol Smart Carpool Joint Powers Authority’s meeting.

Summary

The Alameda CTC is required to comply with statutory project evaluation requirements as part of administration and operations of the southbound I-680 Express Lane, which opened to traffic in September 2010. The Alameda CTC collected the “Before” Study transportation data in the I-680 corridor during the Fall of 2008, before the construction and implementation of the southbound I-680 Express Lane occurred, and finalized the results in a report entitled: *Alameda I-680 Express Carpool Lane Project – Before Study and Existing Conditions*, dated April 2009. In order to meet the three-year requirement for an evaluation of operations and to report back to the Legislature on the demonstration project by June 30, 2013, “After” Study work on the Express Lane corridor began in Fall 2012. Based on the selection process, Kittelson Associates Inc. was awarded the contract to perform the “After” Study for an amount of \$178,966. The “After” Study work began in September 2012, and a study report is scheduled to be presented to the Commission and JPA in early 2013. The scope of work in the contract includes a task for a geometric operational improvement analysis. An enhancement to this task is needed to provide additional quantitative analysis to estimate corridor performance benefits resulting from alternative corridor geometric improvements. The cost for this additional work is estimated to be an amount not to exceed \$21,000.

Discussion

The Alameda I-680 Express Carpool Lane Project – “Before” Study and Existing Conditions Report, dated April 2009, presents the goals, objectives and evaluation results for the I-680 Express Carpool

Lane project pre-construction and operation (“Before” Study) and establishes procedures for an “After” Study to be completed no later than three years after the southbound I-680 Express Lane is open to traffic as required by AB 574 (Torrico). The southbound I-680 study corridor for the “Before” Study is from SR 84 in Alameda County to SR 237 in Santa Clara County and for the “After” Study the northern study limit is extended to cover from Stoneridge Drive to SR 237.

The goals of the before and after evaluation are to optimize the HOV/HOT lane usage to improve traffic throughput in the corridor, maintain a level of service C or better for all Express Lane users and improve highway and transit in the corridor with revenues generated. The Evaluation Plan identified in the “Before” Study describes data needed, performance measures and evaluation methods that were applied to the “Before” evaluation and will be applied to the “After” evaluation to determine how well the goals are met. A control corridor, northbound I-680 between Alcosta Boulevard in San Ramon to Livorna Road in Alamo, was also defined in addition to the study corridor to help determine if any changes in travel behavior are due to the Express Lane or to other travel trends in the San Francisco Bay Area.

The current scope of work for the “After” Study includes a task to perform a Geometric Operational Improvement Analysis. Under this task, the consultants will evaluate the Express Lane ingress/egress locations and whether they led to any localized decrease in performance of the study corridor. If the evaluation indicates that the Express Lane ingress and egress locations are resulting in unintended localized bottlenecks and/or illegal maneuvers, recommendations will be made for the geometric and operational improvements that would minimize those bottlenecks and illegal maneuvers. The potential effects of the recommended improvements will be qualitatively presented in the study report. An added task is proposed to develop a micro simulation model (CORSIM) that can respond to what-if scenarios and to quantify the benefits of any alternative geometric improvements. Two alternative ingress/egress scenarios will be analyzed under this added task. The additional deliverable from this task will be quantitative measures of effectiveness for the I-680 corridor without and with recommended geometric improvements. The cost for this added task is estimated to be an amount not to exceed \$21,000.

Work for the “After” Study began in September 2012. Field data collection was completed in October and data analysis is currently in progress. The evaluation will be completed by January 31, 2013. An Evaluation Report will be presented to this Committee in February or March 2013 for approval of the Commission and JPA so that a report can be prepared and sent to the Legislature by June 30, 2013.

Fiscal Impacts

The budget of \$21,000 for the additional scope is included in the I-680 Southbound Express Lane Operating Budget for FY 2012-13.

Attachment(s)

Attachment A: Scope of work and estimate for the additional task



MEMORANDUM

Date: December 14, 2012 Project #: 12797

To: Ms. Saravana Suthanthira
Alameda County Transportation Commission
1333 Broadway, Suite 220
Oakland, CA 94612

From: Allen Huang, Mike Aronson, Pratyush Bhatia,
Project: Overall Evaluation Services for I-680 Express Lane Project
Subject: Scope of Work for Optional Task

This memorandum provides the scope of work for one optional task to support the work for Overall Evaluation Services for the I-680 Express Lane project. This task includes additional quantitative evaluation to support the Geometric Operational Improvement Evaluation (Task 7) of the scope of work dated September 27, 2012 that has been approved by Alameda CTC.

The scope for optional tasks dated October 15, 2012 has been revised to include only one optional task, the quantitative analysis of recommended geometric improvements. The scope for that task has been modified to provide quantitative analysis of two alternative improvement recommendations rather than one.

OPTIONAL TASK O1: QUANTITATIVE ANALYSIS OF RECOMMENDED GEOMETRIC IMPROVEMENTS

Task 7: Geometric Operational Improvement Analysis in the Kittelson and Associates scope of work dated September 27, 2012 includes the following subtasks:

- 7.1: Meet to assess issues and concerns related to the express lane ingress/egress locations and localized decreases in performance.
- 7.2: Evaluate existing ingress/egress operations and violations, and recommend geometric and operational improvements that would minimize bottlenecks and illegal maneuvers. The potential effects of the recommended improvements will be discussed qualitatively.
- 7.3: Technical memorandum on observations and recommendations.
- 7.4: Meeting and final memorandum.

Optional Task 1 would supplement Task 7 in the September 27, 2012 scope of work. This optional task will include additional quantitative analysis to evaluate and document the potential benefits of the recommended geometric improvements or modifications to ingress/egress locations, if improvements are warranted based on the evaluation. The additional deliverable from this task will be quantitative measures of effectiveness for the I-680 corridor without and with recommended geometric improvements.

If a need for Express Lane revisions is identified by the evaluation of existing operations, KAI will use a combination of the CORSIM and FREQ software tools to help quantify the effects of recommended revisions. The FREQ model used for the I-680 Before and After corridor operations analysis is a macroscopic (vehicles and lanes are evaluated as groups) simulation model that does not specifically evaluate traffic operations based on individual driver behavior or individual freeway lanes. In FREQ, freeway segment capacities are specified by the user as assumed inputs. If a need for modifications to the ingress and egress locations is identified, these modifications would be expected to improve freeway operations by reducing the capacity impacts of weaving and merging operations. However, the FREQ model will not be able to independently determine the potential change in capacity associated with those ingress and egress modifications. Therefore, we propose to develop focused CORSIM microsimulation models to quantify the changes in capacity in selected critical freeway segments. The FREQ model can then use the modified segment capacities from the CORSIM simulations as input to provide measures of effectiveness for the entire corridor.

Since the peak commute in the southbound direction is in the AM peak, we propose to conduct this optional task for the AM peak period only. During the PM peak period, this corridor is mostly in free flow conditions, therefore, modifying capacity would not result in significant changes in traffic operations.

Task O1.1 CORSIM Simulation of Existing Conditions

KAI will develop focused CORSIM simulation models on two selected segments of southbound I-680:

1. I-680 southbound from a logical location north of the SR 84 merge to south of the Andrade off-ramp, to evaluate the effects of potential ingress modifications at the north end of the Express Lane.
2. I-680 southbound from a logical location north of the Auto Mall/Durham off-ramp to south of SR 262/Mission, to evaluate potential ingress/egress modifications.

Based on discussions with stakeholders, the analysis of these two segments should capture the critical locations for potential ingress/egress modifications. The information derived from these two segments can be used to provide modifications to the FREQ model of the full corridor and provide performance measures for the entire corridor.

This scope assumes that KAI will not conduct a comprehensive model calibration and validation. KAI will conduct a reasonableness check of the CORSIM model output in comparison with observed conditions and FREQ performance output for the existing ingress and egress configuration in terms of bottleneck locations, queues and throughput. The CORSIM model assumptions will be adjusted for up to 10 runs to improve the comparison of simulated to observed conditions. Up to 16 person-hours have been allocated for the reasonableness checking and adjustment.

Task O1.2 CORSIM Simulation of Recommended Improvements

KAI will modify the CORSIM model for recommended changes to ingress and egress configurations. We will compare model differences in terms of volume throughput, speed and density. We will compute the potential changes in corresponding freeway segment capacities based on CORSIM simulated results.

This scope includes CORSIM evaluation of two alternative configurations. These may include revised or additional controlled ingress/egress locations, and/or continuous access to the Express Lane.

The capacity adjustments will be reviewed by Alameda CTC and KAI will adjust the analysis assumptions once based on comments provided by Alameda CTC.

Task O1.3: FREQ Corridor Evaluation of Recommended Improvements

The FREQ corridor model will be modified to match the corresponding ingress and egress configurations. The modifications may include an extension of the FREQ model north of SR 84 to include the full effects of operational improvements at the north end of the Express Lane. The changes in capacity from the CORSIM analysis will be input into the FREQ model to evaluate corridor operational effects with modified ingress and egress locations. Performance measures (MOEs) will be extracted and reported from FREQ simulated results. These performance measures can be compared directly to the corridor performance measures used for the Before and After evaluation of the Express Lane. The FREQ analysis will be completed for two alternative configurations.

Task O1.4: Documentation of Quantitative Evaluation of Geometric Improvements

KAI will document the methodology and findings of the additional quantitative analysis in the Draft and Final technical memorandum that will be prepared under Task 7.3 of the overall scope of work. Additional data and FREQ and CORSIM input and output files will be provided to Alameda CTC in electronic format.

BUDGET

Table 1 shows the breakdown of hours and cost for the optional tasks. Optional Task 1 would require 148 person-hours and \$20,736.

Table 1: Optional Tasks Hours and Cost

Prime Consultant: Kittelson & Associates/Dowling																	Project Summary						
	Job Classifications (Individuals' names are optional)	DATA ENTRY SECTION						CALCULATION SECTION					CALCULATION SECTION										
		Technical Advisor/QA	Project Principal	Project Manager	Associate Engineer	Transportation Analyst	Hours	Escalated Direct Labor or NBR \$	Direct Expenses	TOTAL COST	Hours	Escalated Direct Labor or NBR \$	Direct Expenses	Total Cost	Cost + Profit	% of Total Non-Contingency Labor Costs							
		Mark Bowman	Mike Aronson	Allen Huang	Kevin Chen	Jorge Barrios																	
	Direct Salary Rate (Average, Actual, Max) for Current Year	\$220.97	\$197.51	\$160.20	\$154.26	\$100.26																	
	Annualized Direct Salary Rate (or enter Negotiated Billing Rate)	\$220.97	\$197.51	\$160.20	\$154.26	\$100.26																	
Task #	Fully Burdened Billing Rate	\$220.97	\$197.51	\$160.20	\$154.26	\$100.26																	
NON-CONTINGENCY TASKS/DELIVERABLES																							
1	Analysis and Evaluation of Recommended Geometric Improvements	6	2	20	70	50	148	\$20,736	\$0	\$20,736	148	\$20,736	\$ -	\$20,736	\$20,736	100.0%							
1.1	CORSIM Model of Existing Accesses/Ingress			4	28		32	\$4,960	\$0	\$4,960	32	\$4,960	\$ -	\$4,960	\$4,960	23.9%							
1.2	CORSIM Model of Recommended Improvements	4		8	30	30	72	\$9,801	\$0	\$9,801	72	\$9,801	\$ -	\$9,801	\$9,801	47.3%							
1.3	Run FREQ with revised capacity			4	8	16	28	\$3,479	\$0	\$3,479	28	\$3,479	\$ -	\$3,479	\$3,479	16.8%							
1.4	Document Analysis Results	2	2	4	4	4	16	\$2,496	\$0	\$2,496	16	\$2,496	\$ -	\$2,496	\$2,496	12.0%							
	TOTAL Non-Contingency Tasks/Deliverables	6	2	20	70	50	148	\$20,736	\$0	\$20,736	148	\$20,736	\$ -	\$20,736	\$20,736	100%							
CONTINGENCY TASKS/DELIVERABLES																							
TOTAL Contingency Tasks/Deliverables																							
	TOTAL Non-Contingency + Contingency Tasks/Deliverables	6	2	20	70	50	148	\$20,736	\$0	\$20,736	148	\$20,736	\$ -	\$20,736	\$20,736								



Memorandum

DATE: January 7, 2013

TO: I-680 Sunol Smart Carpool Lane Joint Powers Authority

FROM: Stewart D. Ng, Deputy Director for Programming and Projects
Kanda Raj, Project Controls Team

SUBJECT: **I-680 Southbound Express Lane (ACTIA No. 8A) Monthly Operations Update**

Recommendation

This item is for information only. No action is requested.

Summary

The purpose of this item is to provide the JPA Board with a monthly operations update of the express lane facility. The November 2012 operations data can be found in Attachment A of the staff report. A brief presentation will be provided at the January 14, 2013 JPA Board meeting.

Discussion

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 State Highway 84, near Pleasanton, to State Highway 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. Since the opening of the express lane facility, over 900,000 solo drivers have reached their destinations by traveling at speeds that are typically 10-15 miles per hour faster than that which motorists experience in the general purpose lanes, during peak commute hour.

Tolls are collected via FasTrak® transponders, read at automated vehicle identification readers mounted on overhead gantries. Currently, the I-680 Express Lane includes five FasTrak® readers: Three at each toll zones (at Andrade, Washington and Mission) and two at stand-alone enforcement zones (south of Vargas and south of Scott Creek). Readers at the toll zone are linked to the Toll Data Center (TDC) and the accounts of vehicles passing through with valid FasTrak® transponders. Appropriate tolls are being charged based on the toll rates published via dynamic message signs for the length of their trip, calculated by a computerized real-time

dynamic pricing model. The enforcement zone readers are not linked to the TDC and are used only as an aid to CHP enforcement, by determining if a vehicle has a valid FasTrak® transponder.

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, accepted the final system from the System Integrator on April 30, 2012. The express lane has since moved into the full operation and maintenance phase.

In September 2012, the Alameda CTC selected Kittleson & Associates, Inc. to perform a legislatively mandated post-implementation traffic study to analyze the operational and safety benefits of the express lane, and to compare the study results against a set performance matrix and pre-implementation traffic study, which was completed in April 2009. The consultants have completed the field traffic data gathering, and are now in the process of analyzing the data collected. In March/April of 2013, a draft report of the “After” study results will be presented to the Committee.

Our review of daily trip and revenue reports indicates that the express lane facility had a strong performance during the month of November 2012 when compared to similar time period in 2011. While comparing the performance matrices, it is noted that the daily express lane usage has increased by 23%, an indication that more and more solo drivers have chosen to leave the general purposes lanes and use the express lane, instead to experience the travel reliability and time savings. While it appears that traffic congestion has return 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. Please see Attachment A for more details.

Fiscal Impacts

This is an informational item only, and there is no fiscal impact.

Attachment (s)

Attachment A: I-680 SB Express Lane: November 2012 Operations Update

Year Over Year Comparison by Month

November 2011 November 2012

Ave. Daily HOV/Express Lane Volume 14,200 vehicles 17,120 vehicles

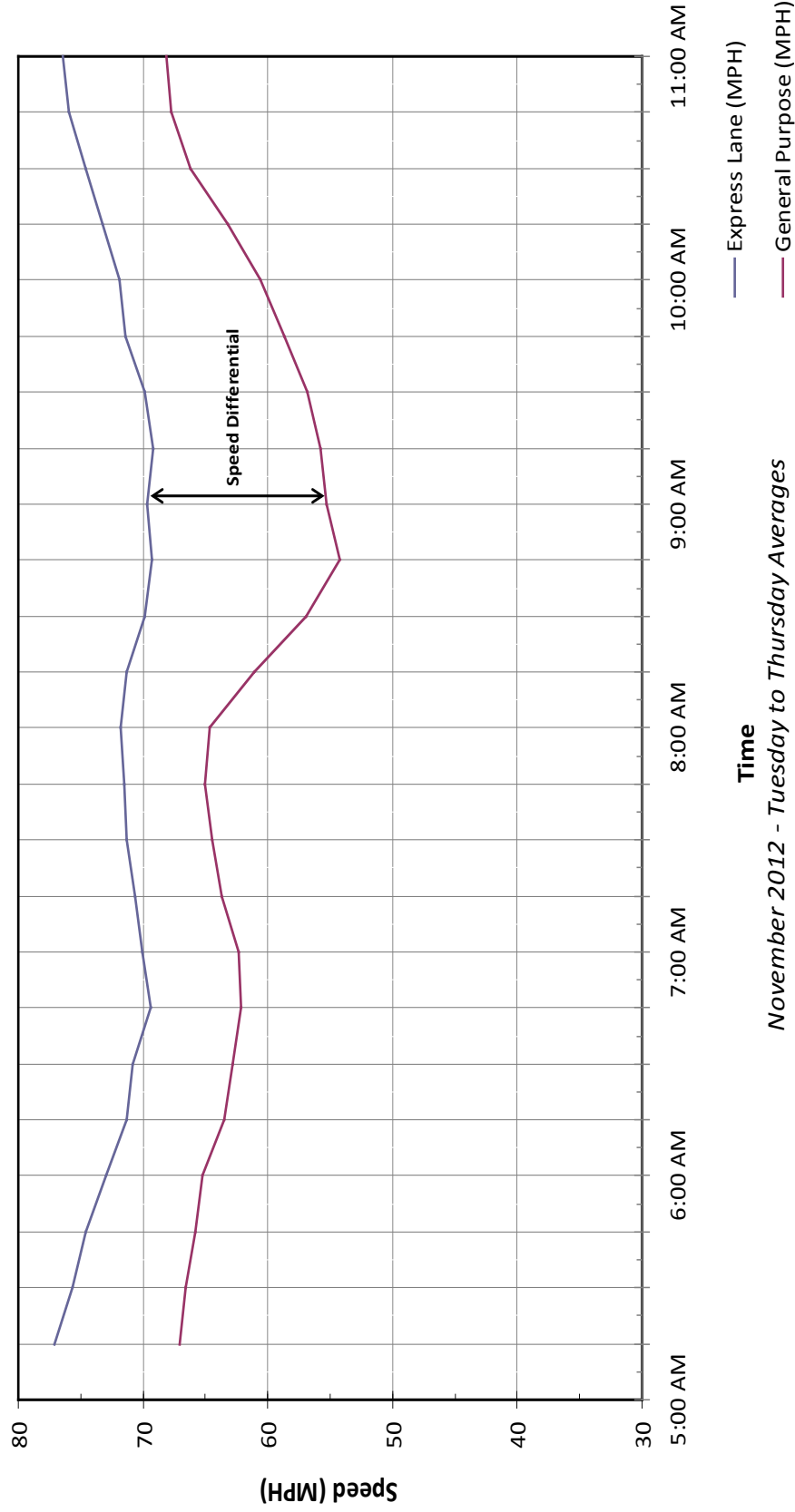
Average Daily Toll Paying Trips 1,700 vehicles 2,100 vehicles

Average Daily Toll Revenue \$4,080 \$5,790

Average Peak Period Toll Rate \$3.00 \$3.00

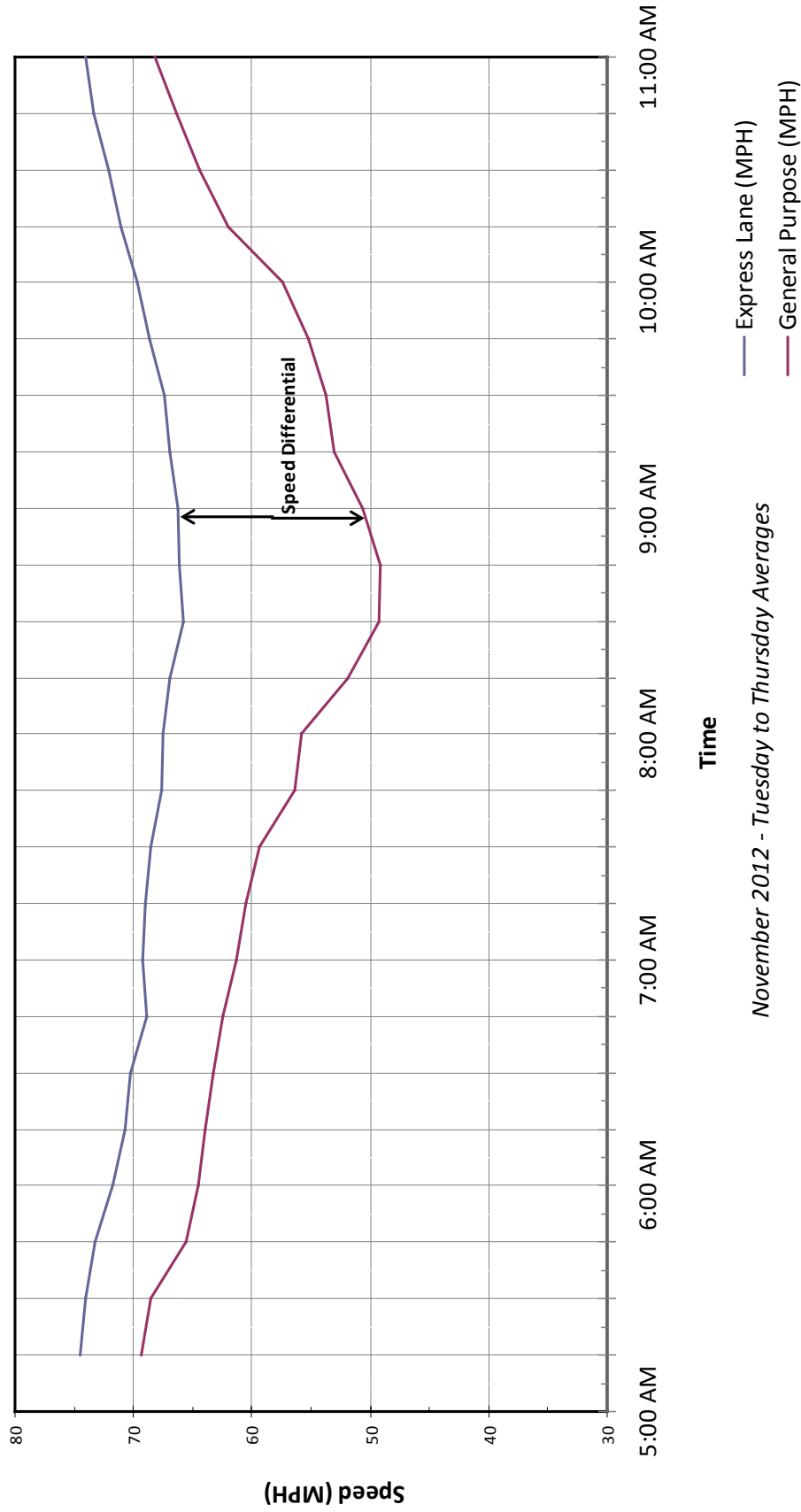
Average Daily Speed Curves During Peak Commute Period (November 2012)

North Segment (Andrade to Washington)



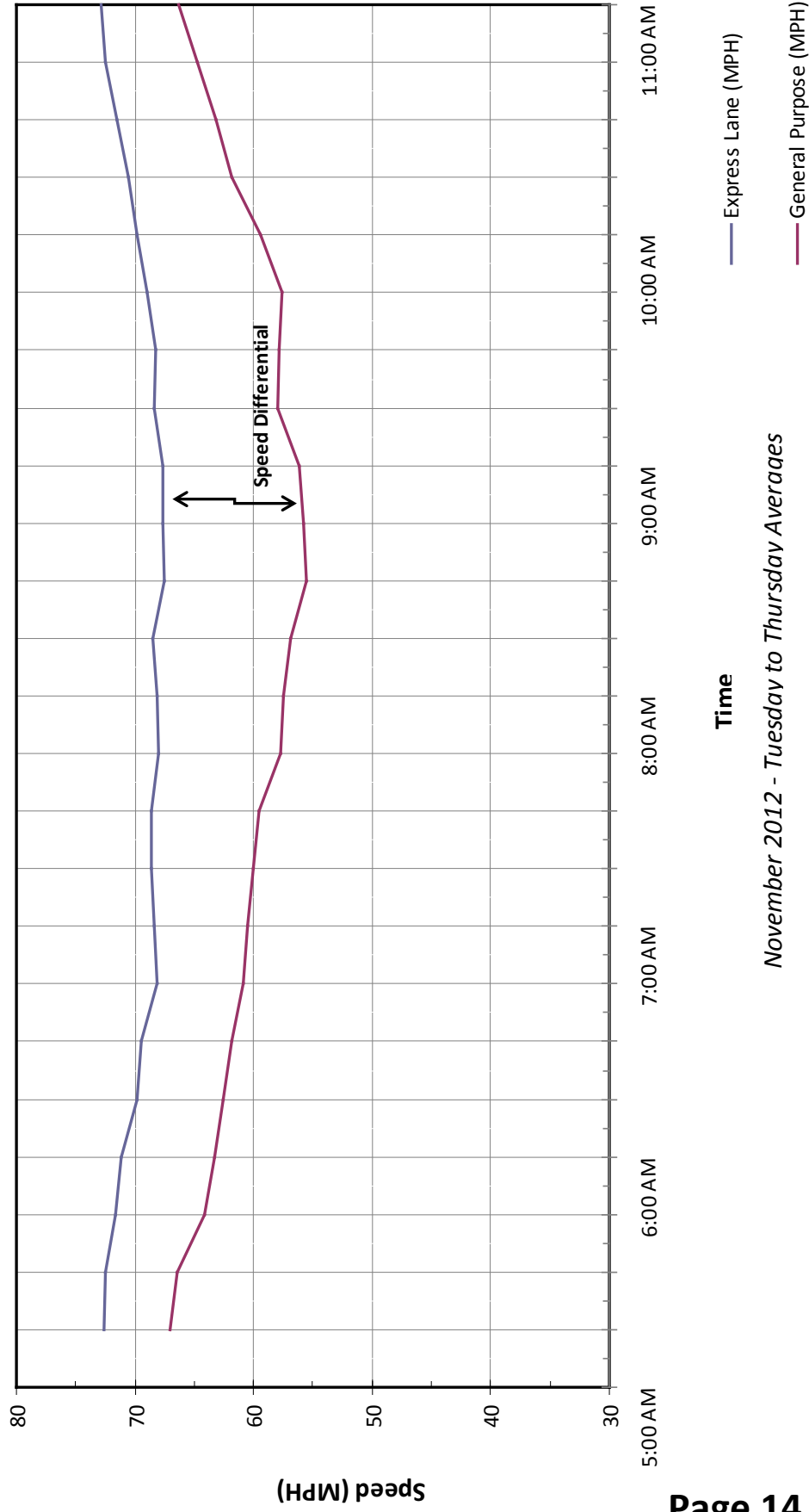
Average Daily Speed Curves During Peak Commute Period (November 2012)

Central Segment (Washington to Mission)

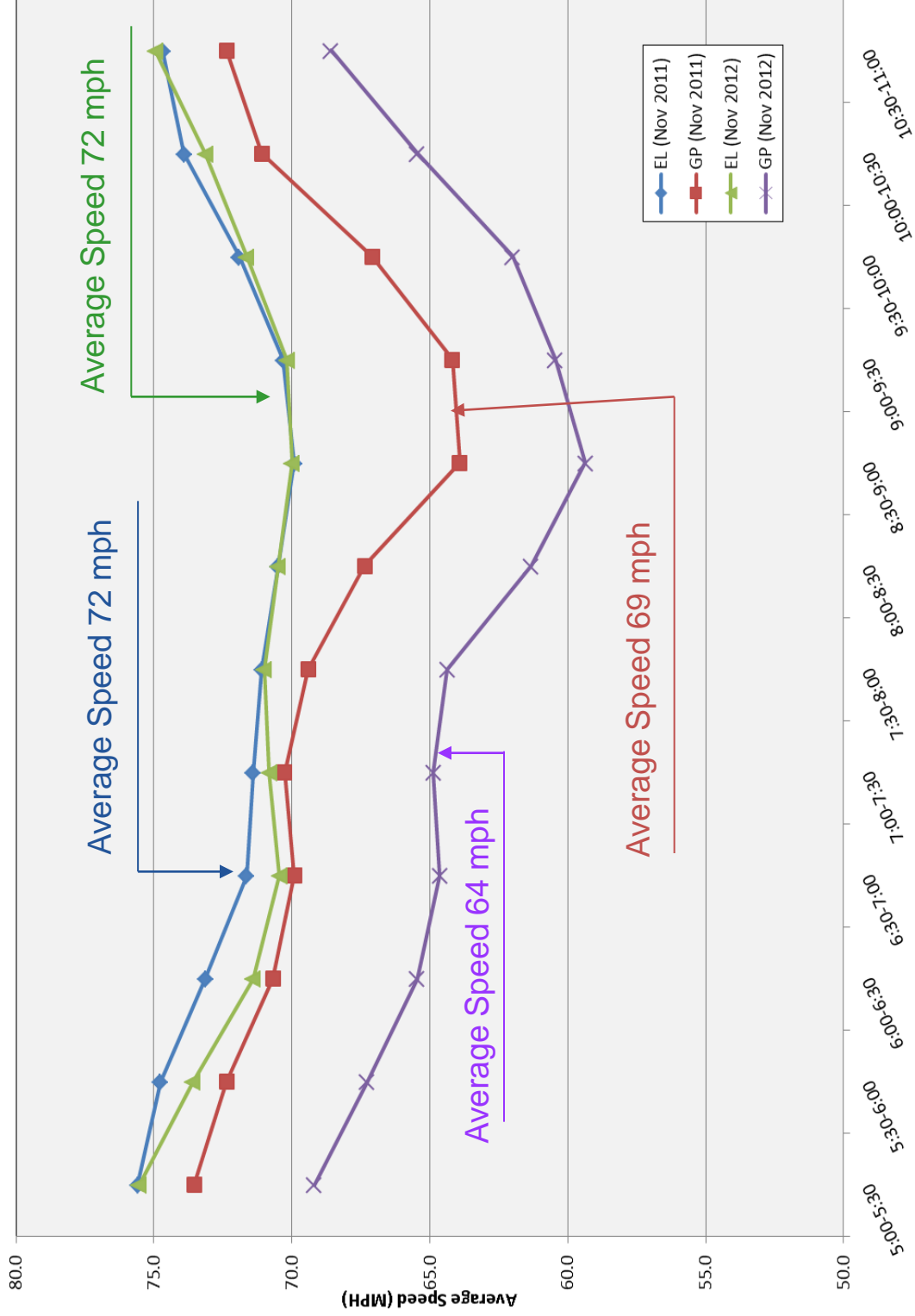


Average Daily Speed Curves During Peak Commute Period (November 2012)

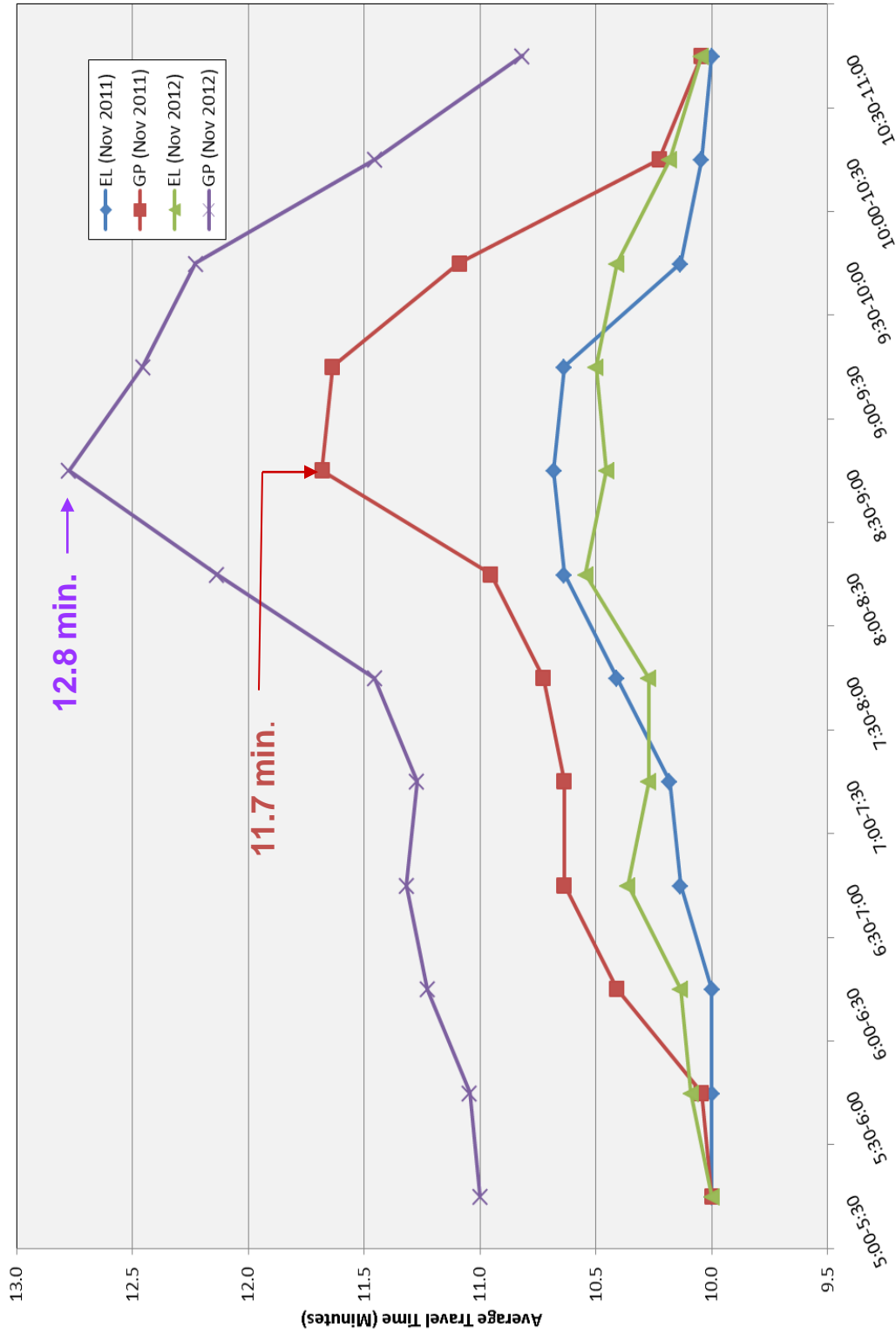
South Segment (Mission to Calaveras)



Average Travel Speed During Morning Commute Hours (Within 14-mile Express Lane Facility)



Average Travel Time During Morning Commute Hours (Within 14-mile Express Lane Facility)



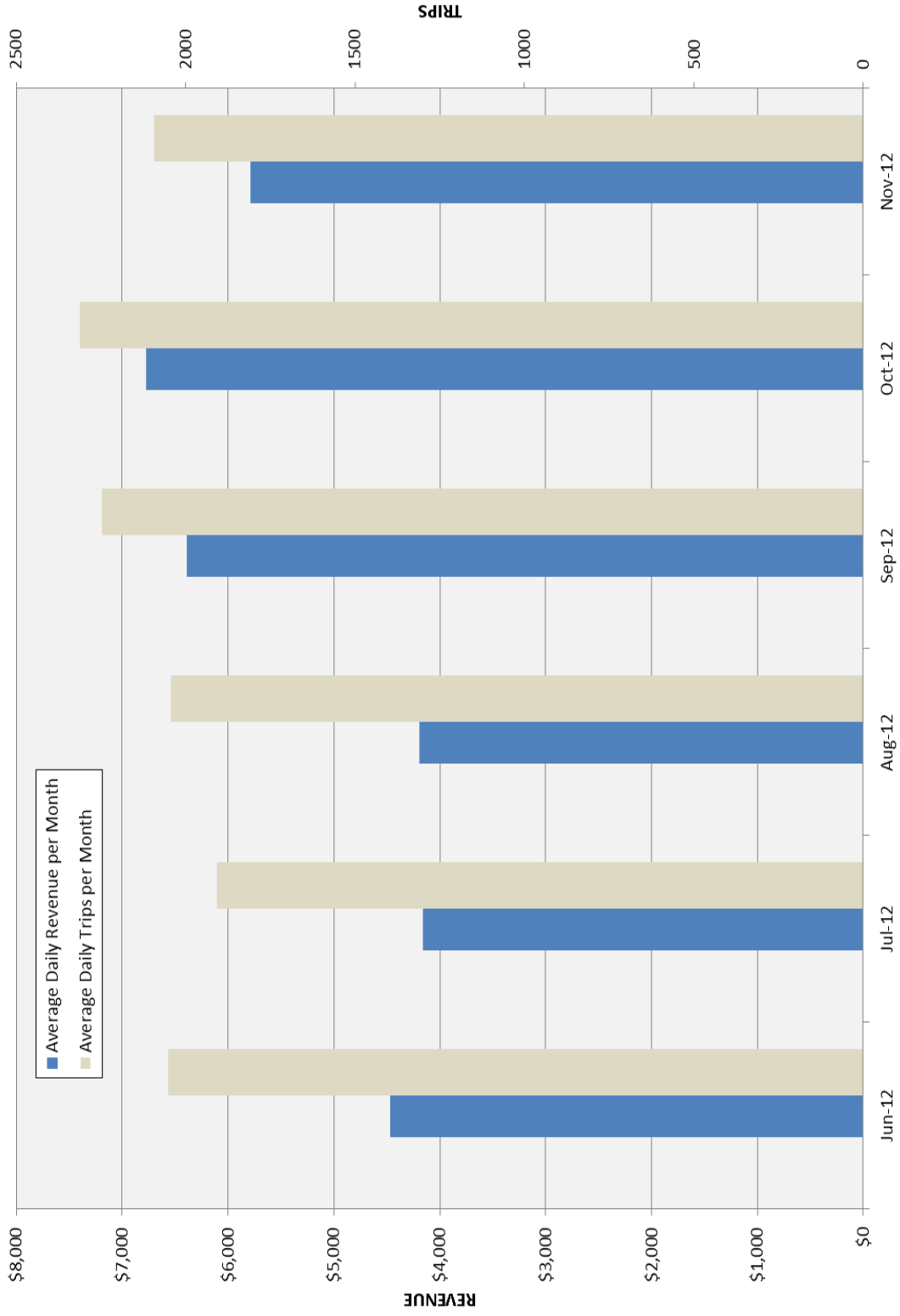
Revenue (Actual Gross vs. Forecasted)

Revenue in FY 2012/13
(July 2012 – November 2012)

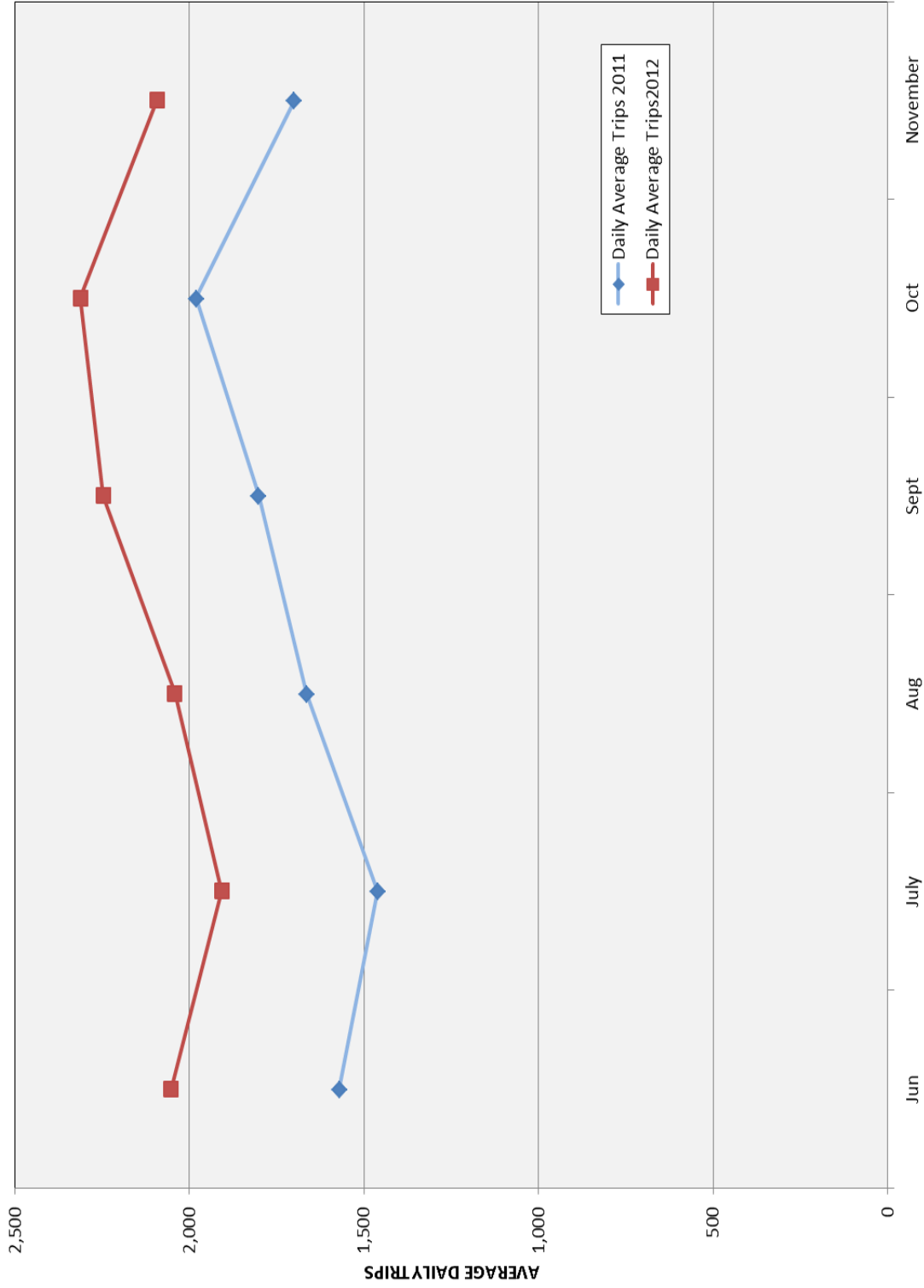
Actual Gross	\$578,800
Forecasted*	\$437,500

* Forecasted revenue for the full FY 13
is \$1,050,000

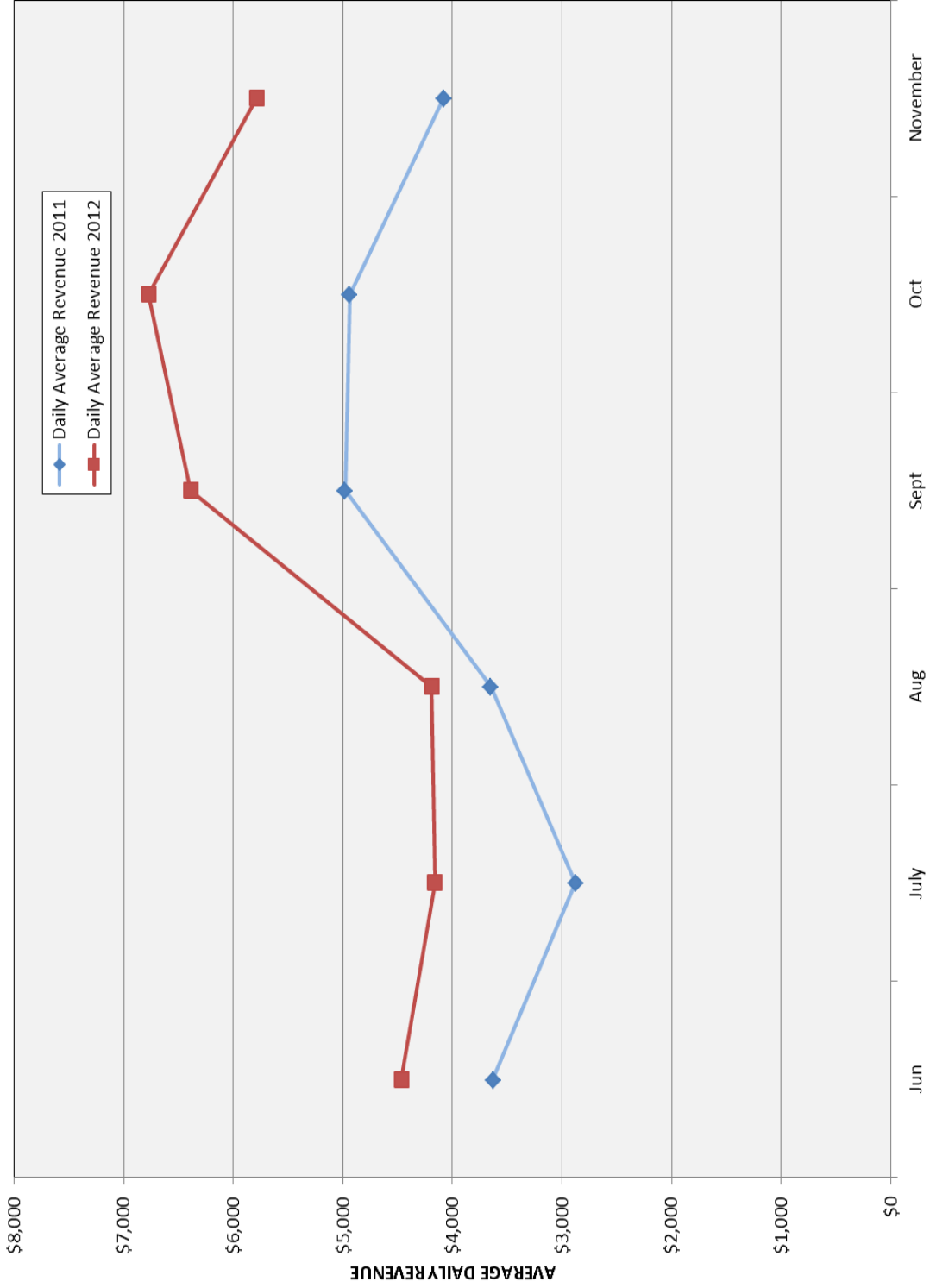
Average Daily Express Lane Revenue & Toll Trip Comparison



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



Average Daily Express Lane Revenue Comparison (Past 6 months)





Memorandum

DATE: January 7, 2013

TO: I-680 Sunol Smart Carpool Lane Joint Powers Authority

FROM: Stewart D. Ng, Deputy Director for Programming and Projects
Kanda Raj, Project Controls Team

SUBJECT: **I-680 Northbound Express Lane Project (ACTIA No. 8B) -- Monthly Status Update**

Recommendation

This item is for information only. No action is requested.

Summary

The purpose of this item is to provide the JPA Board with a status update of project development activities that are either planned or have been completed for the project. This staff report and presentation will briefly review the critical path scope and schedule activities.

Discussion

The I-680 Northbound Express Lane Project will widen I-680 and construct a northbound HOV/Express Lane from State Route 237 in Santa Clara County to State Route 84 in Alameda County. The project is intended to provide a number of benefits for the traveling public: 1) reduce traffic congestion and thereby enhance mobility along this corridor; 2) reduce travel time and improve travel reliability; and 3) reduce congestion related accidents, and thereby enhance safety. The express lane facility will allow solo drivers to access unused capacity in the HOV lane for a fee while allowing carpool users to travel 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 the Department (Caltrans) to vacate the environmental document prepared for the I-680 Northbound HOV Lane project in its entirety. Given the Court's direction, in late 2011 Caltrans and the Alameda CTC determined that a Project Initiation Document (PID) and a completely new and higher level of environmental document would be needed to obtain environmental clearance for the project; which will involve expanded preliminary engineering, traffic analysis, and technical studies.

The following is a list of major activities completed since the last update which staff provided at the last I-680 Sunol JPA Meeting in November 2012:

- ✓ Completed preliminary traffic forecasts memorandum and addressed Caltrans initial review comments
- ✓ Completed preliminary traffic analyses for various geometric alternatives (build scenarios)
- ✓ Reviewed preliminary results of the Build vs. No Build scenarios
- ✓ Conducted preliminary geometry and non-standard design feature review with Caltrans Headquarters Design Geometrician
- ✓ Reviewed preliminary structures widening and special retaining wall design with Caltrans Division of Engineering Services-Office of Structures
- ✓ Coordinated preliminary traffic safety assessment with Caltrans
- ✓ Completed preliminary hazards material investigation
- ✓ Completed scoping report that documented comments received from agencies and general public during the environmental scoping review period
- ✓ Completed preliminary right of way requirements map
- ✓ Initiated coordination with the affected utility companies to obtain their utility records
- ✓ Completed initial field survey activities to take field measurements and determine ground elevations to continue analyzing potential noise impacts

The project team continues to make progress towards completing the final environmental document by March 2015. The following is a detailed discussion of major tasks planned for the project and which will be undertaken during 2013:

Traffic Studies

Based on the initial findings of the sensitivity testing of the design scenarios and the follow on iterative process to refine the range of geometric design options, in February 2013 a formal documentation of the existing conditions analysis, traffic forecasts, and the highway operations analysis will be consolidated under a Traffic Operations Analysis Report (TOAR). The traffic operation analysis will also evaluate the begin/end locations of the express lane, type of access to the express lane, and perceived effects on local arterials. It will document the existing; Year 2020 and Year 2040 traffic conditions for both Build and No Build alternatives. Based on Caltrans and local agency reviews, the final approval of TOAR is anticipated in July 2013.

Environmental Technical Studies

Various environmental technical studies are either completed or underway. A list of required technical studies is included in Attachment A. Draft technical reports for all of the environmental studies are planned for completion in March 2013 and approval of the final reports are anticipated in July 2013.

Environmental Document

The design team plans to complete an administrative draft environmental document (Admin DED) for Alameda CTC and Caltrans staff for review by mid-July 2013; based on input that the design team has already received during the environmental scoping, traffic studies, geometric design, and environmental technical studies process. Alameda CTC will work with Caltrans to

complete this task concurrent with the environmental technical studies to gain time during the final project approval process. 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) documents Caltrans, FHWA and Alameda CTC approval of the project. A draft PR will document the need for the project and summarizes the studies, cost, scope, and overall impact of project alternatives; and its approval is required prior to releasing a DED for public and agency reviews. 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. A draft PR is planned for completion in July 2013; with final PR approval anticipated in March 2014.

Fiscal Impacts

This is an informational item only and there is no fiscal impact.

Attachment (s)

Attachment A: List of Planned Project Tasks/Technical Studies

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Attachment A

LIST OF PLANNED PROJECT TASKS/TECHNICAL STUDIES

ID	DELIVERABLE	STATUS
PRELIMINARY ENGINEERING		
1	PSR-PDS	Complete
TRAFFIC STUDIES		
2	Traffic Data Collection	Complete
3	Existing Conditions Assessment	Complete
4	Model Validation	Complete
5	Traffic Forecasts	Complete
6	Traffic Operations Analysis	Underway
7	TOAR	Underway
8	Traffic & Revenue Study	Underway
ENVIRONMENTAL STUDIES		
	Public Scoping	Complete
	Biological Field Surveys	Complete
	Bat Species	Complete
	Jurisdictional Wetlands Report	Complete
	California Red Legged Frog Assessment	Complete
	Special Status Plant Species	Complete
	Natural Environment Study (NES)	Underway
	Biological Assessment	
	Biological Opinion	
	Water Quality Impact	Underway
	Location Hydraulic Study	Underway
	Initial Site Assessment	Underway
	Air Quality PM 2.5 Assessment	Complete
	Air Quality and Greenhouse Gas Analysis Report	Underway
	Noise Surveys	Complete
	Noise Impact Report	Underway
	<i>Noise Abatement Decision Report (NADR)</i>	
	Visual Impact Assessment	Underway
	Community Impact Assessment	Underway
	APE Mapping	Underway
	Archaeological Survey Report (ASR)	Underway
	Historic Architectural History/Built Resources Report (HRER)	
	Historic Property Survey Report (HPSR)	
	Paleontological Inventory Report (PIR)	Underway
	Geotechnical Hazards Assessment	Underway
ENVIRONMENTAL DOCUMENT		
	1 st Admin DEIR/EA	
	2 nd Admin DEIR/EA	
	3 rd Admin DEIR/EA	

ID	DELIVERABLE	STATUS
	DEIR/EA	
	1 st Draft FEIR/EA	
	2 nd Draft FEIR/EA	
	3 rd Draft FEIR/EA	
	FEIR/EA	
PROJECT APPROVAL		
	Geometric Design	Underway
	Roadway Plans	Underway
	Safety Assessment	Underway
	Fact Sheets (Mandatory and Advisory)	
	Storm Water Data Report	
	Hydromodification Assessment Report	Underway
	Utility Coordination	Underway
	R/W Engineering	Underway
	Advance Planning Study - Bridges	Underway
	Advance Planning Study – Special Retaining Walls	Underway
	Preliminary Foundation Report	Underway
	Structures Aesthetics Guidelines	
	Conceptual Landscape Plan	
	Cost Estimate	
	Draft Project Report	
	Project Report	