# **Metro**

Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA



Agenda - Final

Wednesday, June 17, 2015

3:30 PM

One Gateway Plaza, Los Angeles, CA 90012, 3rd Floor, Metro Board Room

# **Ad-Hoc Congestion Reduction Committee**

Mark Ridley-Thomas, Chair John Fasana, Vice Chair Mike Bonin Jacquelyn Dupont-Walker Hilda Solis Carrie Bowen, non-voting member

#### METROPOLITAN TRANSPORTATION AUTHORITY BOARD RULES (ALSO APPLIES TO BOARD COMMITTEES)

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The public may also address the Board on non-agenda items within the subject matter jurisdiction of the Board during the public comment period, which will be held at the beginning and/or end of each meeting. Each person will be allowed to speak for up to three (3) minutes per meeting and may speak no more than once during the Public Comment period. Speakers will be called according to the order in which the speaker request forms are received. Elected officials, not their staff or deputies, may be called out of order and prior to the Board's consideration of the relevant item.

In accordance with State Law (Brown Act), all matters to be acted on by the MTA Board must be posted at least 72 hours prior to the Board meeting. In case of emergency, or when a subject matter arises subsequent to the posting of the agenda, upon making certain findings, the Board may act on an item that is not on the posted agenda.

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- Disorderly behavior toward the Board or any member of the staff thereof, tending to interrupt the due and orderly course
  of said meeting.
- A breach of the peace, boisterous conduct or violent disturbance, tending to interrupt the due and orderly course of said meeting.
- c. Disobedience of any lawful order of the Chair, which shall include an order to be seated or to refrain from addressing the Board; and
- d. Any other unlawful interference with the due and orderly course of said meeting.

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without a FasTrak transponder.

### **CALL TO ORDER**

# **ROLL CALL**

25.	AWARD AND EXECUTE a Firm Fixed Labor-Hour Contract No. AE275020011497 to Parsons Brinckerhoff (PB) for a three-year period for <b>ExpressLanes Program Management Support Services</b> for a total contract value not-to-exceed \$7,700,000.	
	Attachments: ATTACHMENT A Procurement summary	
26.	RECEIVE AND FILE status report on the Los Angeles County Express Lanes Strategic Plan.	2015-0691
27.	RECEIVE AND FILE status report on the assessment of the impact of allowing HOVs to use the I-10 Metro ExpressLanes on the weekends	2015-0709

Consideration of items not on the posted agenda, including: items to be presented and (if requested) referred to staff; items to be placed on the agenda for action at a future meeting of the Committee or Board; and/or items requiring immediate action because of an emergency situation or where the need to take immediate action came to the attention of the Committee subsequent to the posting of the agenda.

# **Adjournment**



# **Board Report**

Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

Agenda Number:25.

AD-HOC CONGESTION REDUCTION COMMITTEE
JUNE 17, 2015

SUBJECT: METRO EXPRESSLANES PROGRAM MANAGEMENT SUPPORT

**ACTION: APPROVE RECOMMENDATION** 

File #:2015-0690, File Type:Contract

### RECOMMENDATION

AWARD AND EXECUTE a Firm Fixed Labor-Hour Contract No. AE275020011497 to Parsons Brinckerhoff (PB) for a three-year period for **ExpressLanes Program Management Support Services** for a total contract value not-to-exceed \$7,700,000.

### **ISSUE**

The Metro Board has directed staff to begin the planning process to convert the I-105 High Occupancy Vehicle (HOV) Lanes to High Occupancy Toll (HOT) Lanes, and extend the I-110 ExpressLanes south to the I-405/LAX , through to the development of a Project Study Report/Project Development Support (PSR/PDS) and Project Approval/Environmental Document (PA/ED) for each corridor.

To complete the planning efforts required for the I-105 conversion and the I-110 South extension, staff requires professional services to support or lead the phases of ExpressLanes project planning and development. In addition to the PSR/PDS and PA/ED, other supportive analyses and activities will need to be completed including traffic and revenue studies, concept of operations reports, environmental justice assessments, public outreach, and market research.

The preparation of these additional studies and reports requires diverse specialized technical expertise and knowledge rendering the program manager approach the most efficient and effective path forward. The Metro ExpressLanes Program Management Support Services contract will provide the necessary resources to complete a potentially large and varied number of tasks and enable staff to quickly respond to Metro's needs and Board direction.

### DISCUSSION

Due to the success of the I-10 and I-110 ExpressLanes, the Metro Board has directed staff to begin studying potential new ExpressLanes corridors in Los Angeles County. At its July 2014 meeting, the Metro Board directed staff to begin the development of a:

1. PA/ED study for conversion of I-105 HOV Lanes to HOT lanes between the I-605 to the I-405/LAX segment;

2. PA/ED study to expand the I-110 ExpressLanes south to the I-405/I-110 interchange.

Caltrans is currently in the process of preparing the PSR/PDS for the I-105 between I-605 and LAX. It is anticipated that Caltrans will lead the preparation of the I-105 PA/ED and Metro will provide support to Caltrans through the Program Management Support Services contract. In addition, Metro expects to utilize the Program Management Support Services contract to assist staff in preparing the I-110 extension PSR/PDS and PA/ED.

In addition to assisting with the preparation of the PSR/PDS and PA/ED on the I-105 and I-110 corridors, the Program Management Support Services contract will be utilized to prepare other supporting studies that are needed before any new ExpressLanes can be implemented. These studies include concept of operations reports, which analyze facility design, infrastructure to be installed and business rules that would be implemented for toll collection; traffic and revenue studies, which analyze the potential traffic volumes on the new facility and the potential revenue generated; and environmental justice analyses to determine the potential impact of a new ExpressLanes facility on lower income communities in the area. Furthermore, public education, stakeholder/community outreach, and market research will be needed to gather public input to better inform the implementation of any ExpressLanes project. Metro expects that the majority of the Program Management Support Services contract will be used to support the study of potential ExpressLanes on the I-105 and I-110 corridors. Tasks related to tolling operations, maintenance, and construction are not included in this procurement.

Staff estimates the cost of preparing the I-110 PSR and PA/ED, assisting Caltrans on the I-105 PA/ED, preparing supporting studies, and public outreach for the PA/ED will be \$7,700,000. This amount does not include preparation of financial plans, grant documentation, economic analyses, traffic operations analyses, or planning for any other potential ExpressLanes projects. Should the Board request staff to prepare planning studies or supporting work for other ExpressLanes corridors, staff will need to return to the Board to request additional funding.

# **DETERMINATION OF SAFETY IMPACT**

The Board action will not have an impact on the safety of Metro's patrons or employees.

### FINANCIAL IMPACT

Funding for this contract will come from a combination of toll revenues and Proposition C funds. The funds required for FY16 are included in the FY 16 budget in Cost Center 2220, project number 307001, task 01.01. The FY16 budget currently includes \$2 million for this contract.

Since this is a multi-year contract, the cost center manager and Executive Officer of Congestion Reduction will be responsible for budgeting the cost in future years.

### **ALTERNATIVES CONSIDERED**

Two alternatives were considered:

1. Utilizing current Metro staff to perform the work. This alternative is not recommended because

existing staff does not have the required expertise or the time available that would be required to perform the work.

2. Hiring of full-time personnel. This alternative is not recommended as an on-call contract is better suited to meet temporary staffing requirements for the specialized work required, and to cover temporary peaks in workload.

### **NEXT STEPS**

Upon Board approval, staff will execute the contract to commence work.

# **ATTACHMENTS**

Attachment A - Procurement Summary

Prepared by: Philbert Wong, Transportation Planning Manager, (213) 922-2642

Reviewed by: Shahrzad Amiri, Executive Officer, Congestion Reduction (213) 922-3061

Ivan Page, Interim Executive Director, Vendor/Contract Management (213) 922-6383

Phillip A. Washington Chief Executive Officer

### PROCUREMENT SUMMARY

#### METRO EXPRESSLANES PROGRAM MANAGEMENT SUPPORT

1.	Contract Number: AE275020011497		
2.	Recommended Vendor: Parsons Brinckerhoff, Inc.		
3.	Type of Procurement (check one): ☐ IFB ☐ RFP ☒ RFP-A&E		
	Non-Competitive Modification	☐ Task Order	
4.	Procurement Dates:		
	A. Issued: February 13, 2015		
	B. Advertised/Publicized: February 13	, 2015	
	C. Pre-proposal/Pre-Bid Conference: F	ebruary 26, 2015	
	D. Proposals/Bids Due: March 13, 2015		
	E. Pre-Qualification Completed: May 15, 2015		
	F. Conflict of Interest Form Submitted to Ethics: April 7, 2015		
	G. Protest Period End Date: June 23, 2015		
5.	Solicitations Picked	Bids/Proposals Received:	
	up/Downloaded:		
	138	1	
6.	Contract Administrator:	Telephone Number:	
	Aielyn Dumaua	213-922-7320	
7.	Project Manager:	Telephone Number:	
	Philbert Wong	213-922-2642	

# A. <u>Procurement Background</u>

This Board Action is to approve Contract No. AE275020011497 to provide program management support for the development of the Los Angeles County ExpressLanes network, including the preparation of planning, engineering and market research studies and reports per Metro Board direction. Potential tasks under this contract are classified into three categories:

- A. Project initiation, planning and preliminary engineering;
- B. Project and program management oversight; and
- C. Public education, community relations, and market research.

Tasks related to tolling operations, maintenance, and construction are not included in this scope of work.

This is an Architect and Engineer (A&E) qualifications based procurement. Price cannot be used as an evaluation factor pursuant to state and federal law. Small Business Enterprise preference is not applicable to A&E procurements.

The Request for Proposal (RFP) was issued as a standard A&E competitive procurement in accordance with Metro's Acquisition Policy and Procedure Manual and the contract type is Firm Fixed Labor-Hour. This solicitation is exempt from the Small Business Set-Aside Program guidelines; therefore, the contract may be awarded to a non-SBE firm.

Two amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on February 17, 2015, clarified the schedule of the Preproposal Conference.
- Amendment No. 2, issued on March 3, 2015, provided changes to the submittal requirements for key personnel, provided electronic copies of the Plan-Holders' List and sign-in sheets for the pre-proposal conference, and provided responses to proposer questions.

The RFP was included in Metro's website listing for Future Contract Opportunities for the months of January and February, 2015 prior to RFP issue date. The RFP was released on February 13, 2015, as a full and open public competition for Architectural & Engineering (A&E) services. The solicitation was available for download from Metro's website. Advertisements were placed in four leading publications within Los Angeles County (Los Angeles Daily News, L.A. Watts Times, La Opinion and Asian Week) and in two popular tolling websites (tollroadsnews.com and ibtta.org) to notify potential proposers of this solicitation. Further, Metro notified potential prime contractors identified by the Project Office and other potential proposers from Metro's vendor database based on applicable North American Industry Classification System (NAICS) codes.

A pre-proposal conference was held on February 26, 2015, and attended by 31 participants representing 26 firms.

The solicitation period was for 31 days. One hundred thirty-eight firms downloaded the RFP and were included on Metro's planholders' list. Four questions were received regarding the solicitation and responses were released prior to the proposal due date. Firms did not request for any extension of the proposal due date. One proposal was received on March 13, 2015.

Since only one proposal was received, Metro staff canvassed the potential proposers to determine why there were no other proposers. The following is a summary of the market survey:

- 1. Potential proposer has experience nationally on the operations and maintenance of the express lanes. However, this is not the business strategy of its local office.
- 2. Potential proposer has sufficient resources to prime the project but it could not identify a local based Project Manager with sufficient availability to manage the project. Timeframe provided to submit a proposal is sufficient.

- 3. Potential proposer does not want to be conflicted in pursuing future express lanes/toll road implementation projects.
- 4. Potential proposer was looking for subcontracting opportunities only but could not find a prime contractor that would be willing to team up.
- 5. Potential proposer was not properly positioned to pursue this project.
- 6. Potential proposer does not have the technical capabilities to pursue this project as a prime contractor.
- 7. Potential proposer indicated that timeframe given to submit a proposal was insufficient. Further, the statement of work seemed specially focused on express lane experience, which the firm does not have qualifications for such a narrow focus.

Metro staff determined that the solicitation was not restrictive and, based on the market survey, the decisions not to propose were based on individual business considerations. All but one of the firms surveyed indicated that sufficient time was made available for firms to respond. Adequate competition existed as the solicitation was performed in an environment where all proposers believed that competition was available. Therefore, this solicitation can be awarded as a competitive award.

# **B.** Evaluation of Proposals/Bids

A Proposal Evaluation Team (PET) consisting of staff from Congestion Reduction and California Department of Transportation (Caltrans) was convened and conducted a comprehensive technical evaluation of the proposal received.

The proposal was evaluated based on the following evaluation criteria and weights:

•	Experience and Capabilities of the Firms on the Contractor's Team	40%
•	Management Plan and Controls	30%
•	Degree of Skills and Experience of Personnel on the Team	30%

The evaluation criteria are appropriate and consistent with criteria developed for similar procurements for on-call express lanes program management support. Several factors were considered when developing these weights, giving the greatest importance to the experience and capabilities of the firms on the contractor's team. The PET evaluated the proposal according to the pre-established evaluation criteria and reasonableness of the technical proposal.

Parsons Brinckerhoff, Inc. (PB) was the only proposer that responded to this solicitation. Between April 2 and April 9, 2015, PB's proposal was distributed to the PET. From April 10 to April 24, 2015, the PET scored the proposal received. On April 27, 2015, an oral presentation was held. PB's project manager and key team members had an opportunity to present each team member's qualifications and respond to the evaluation committee's questions. In general, PB's presentation addressed the requirements of the RFP, experience with all aspects of the required tasks, and stressed the team members' commitment to the success of the project.

Based on a thorough evaluation of the proposal, the PET determined PB to be technically qualified to perform the work.

# **Qualifications Summary of Recommended Firm:**

# Parsons Brinckerhoff, Inc.

The recommended firm, PB, has been in business for 81 years. PB has a history of managed lanes experience in the region and across the state. PB has provided advisory services to Metro on planning, developing, implementing and monitoring the performance of the managed lanes network in Los Angeles County for almost 20 years. It provides program management expertise, lessons learned and best practices gained from its various roles on multiple express lane projects.

The PB team has a readily accessible pool of personnel resources that have expertise in a variety of disciplines covering the full the range of services necessary for the implementation of additional ExpressLanes projects in the Los Angeles County. PB's strengths were in their depth of expertise and experience in delivering express lanes projects, proposed management plan, strong key personnel, project delivery techniques, and clear understanding of the scope of work.

PB's performance on Metro projects has been satisfactory.

The following is a summary of the PET scores:

1	FIRM	Average Score	Factor Weight	Weighted Average Score	Rank
2	Parsons Brinckerhoff, Inc.				
	Experience and Capabilities of the				
3	Firms on the Contractor's Team	85.98	40.00%	34.39	
4	Management and Controls	84.00	30.00%	25.20	
	Degree of Skills and Experience of				
5	Personnel on the Team	88.89	30.00%	26.67	
6	Total		100.00%	86.26	1

# C. Cost/Price Analysis

The final firm fixed negotiated fully burdened rates will comply with all requirements of the Metro Acquisition Policy and Procedures Manual, including MASD audit, fact-finding, clarifications, negotiations, and cost analysis to determine a fair and reasonable price before contract execution.

Work for this contract will be authorized through the issuance of task orders. Metro will issue a solicitation request inclusive of a Statement of Work. Upon receipt of an acceptable response and upon completion of applicable negotiation, Metro will issue a task order accordingly.

# D. <u>Background on Recommended Contractor</u>

PB is a leading engineering professional services consulting firms worldwide. PB is headquartered in New York, NY. PB's expertise ranges from environmental remediation to urban planning, from engineering iconic buildings to designing sustainable transport networks and from developing the energy sources of the future to enabling new ways of extracting essential resources.

The PB Team has played major roles in the planning of Southern California's commuter and transit systems, freeways, High Occupancy Vehicle (HOV) lanes and ExpressLanes. The PB Team is composed of 23 subcontractors, 15 of which are Metro SBE certified firms. The proposed team has expertise in key areas such as traffic and revenue forecasting, concept of operations development, highway engineering, environmental resources, and market research/public outreach. The team has a successful history working together on various express lanes projects in different capacities.

The Project Manager (PM) has 14 years of experience working with Southern California stakeholders to successfully implement managed lanes in the region. PM previously led the Congestion Reduction Demonstration Program for Los Angeles County that established the Concept of Operations, preliminary design and project deliver mechanism for implementing express lanes on I-10 and I-110, served as strategic advisor during the design, construction and testing of facilities, and led performance evaluation efforts during the initial operation of the facilities.

# E. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established a 25% Small Business Enterprise (SBE) goal for this task order contract. SBE attainment is based on the aggregate value of all task orders issued. Parsons Brinckerhoff listed 15 SBE subcontractors and made an overall goal commitment of 25% SBE.

Small Business Enterprise	25% SBE	Small Business Enterprise	25% DBE
Goal		Commitment	

	SBE Subcontractors	% SBE Committed
1.	AFSHA Consulting, Inc.	TBD
2.	Arellano Associates, LLC	TBD
3.	Diaz Yourman & Associates	TBD
4.	Epic Land solutions	TBD

	SBE Subcontractors	% SBE Committed
5.	FPL and Associates, Inc.	TBD
6.	Galvin Preservation (GPA)	TBD
7.	Intueor Consulting	TBD
8.	Kal Krishnan Consulting	TBD
9.	Noble Insight, Inc.	TBD
10.	Redhill Group, Inc	TBD
11.	System Metrics Group, Inc.	TBD
12.	Terry Hayes & Associates	TBD
13.	VCS Environmental	TBD
14.	Value Management Strategies, Inc.	TBD
15.	WKE, Inc.	TBD
	Total SBE Commitment	25%

# F. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy is not applicable to this contract.

# G. All Subcontractors Included with Recommended Contractor's Proposal

	Subcontractor	Services Provided
1.	HNTB Corporation	Tolling/Engineering
2.	AFSHA Consulting, Inc.	Modeling Support
3.	Arellano Associates, LLC	Outreach
4.	Argabright Consulting, LLC	Procurement Specifications
5.	Chuck Fuhs, LLC	Managed Lanes Operations
6.	Diaz Yourman & Associates	Geotechnical
7.	ECONorthwest	Traffic and Revenue Forecasting
8.	Epic Land Solutions, Inc.	Right-of-way
9.	FAST – Fixing Angelenos Stuck in	Outreach
	Traffic	
10.	FPL and Associates, Inc.	Traffic Engineering
11.	GPA Consulting	Environmental
12.	Intueor Consulting, Inc.	Operational Analysis
13.	Iteris, Inc.	Analytics/Performance
14.	Kal Krishnan Consulting Services, Inc.	Document Control
15.	Nobel Insight, Inc.	Outreach
16.	PRR, Inc.	Outreach
17.	Redhill Group, Inc.	Market Research
18.	System Metrics Group, Inc.	Operational Analysis
19.	Terry Hayes & Associates, Inc.	Environmental
20.	Transportation Solutions	Governance

	Subcontractor	Services Provided
21.	VCS Environmental	Environmental
22.	VCM Management Strategies, Inc.	Value Engineering
23.	WKE, Inc.	Civil/Structural Engineering



# **Board Report**

Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

File #:2015-0691, File Type:Informational Report

Agenda Number:26.

AD HOC CONGESTION REDUCTION COMMITTEE
JUNE 17, 2015

SUBJECT: LOS ANGELES COUNTY EXPRESS LANES STRATEGIC PLAN

**ACTION: RECEIVE AND FILE** 

# RECOMMENDATION

RECEIVE AND FILE status report on the Los Angeles County Express Lanes Strategic Plan.

### **ISSUE**

In November 2014 the Metro Board directed staff to prepare an ExpressLanes Strategic Plan and provide the first update of the plan no later than June 2015. The motion requested that the Strategic Plan is to include the following three items:

- 1. Identify and recommend potential corridors that can benefit from ExpressLanes conversion;
- 2. Development and execution of a Master Cooperative Agreement with Caltrans to jointly execute Project Study Report/Project Development Support (PSR/PDS), Project Approval/Environmental Document (PA/ED) and/or other technical studies for future ExpressLanes corridors.
- 3. Development of a 10-year and 30-year resource plan for existing and future ExpressLanes corridors.

This report is the first update to the Board on the ExpressLanes Strategic Plan.

# **DISCUSSION**

The Los Angeles County ExpressLanes Strategic Plan is being prepared as an extension of SCAG's (Southern California Association of Governments) Regional ExpressLanes Strategic Plan, which has been in progress since March 2013. The Los Angeles County Strategic Plan uses the same analysis methodology as the Regional Strategic Plan to estimate the potential mobility benefits and revenue generated by HOT (High Occupancy Toll) lane projects. In addition, the plan will also include a prioritized list of projects for the County, financial analysis of potential net revenue that could be generated, and the funding requirements for new ExpressLane projects. This approach ensures that the Los Angeles County Strategic Plan is consistent with the Regional Strategic Plan, minimizes duplication of effort, and reduces the cost and time needed to prepare the plan.

There are two components of the strategic plan analysis - corridor screening and financial feasibility.

The corridor analysis utilizes both the SCAG Regional Travel Demand Model and RapidTOM (Toll Optimization Model) model to analyze freeway corridors in the county. In doing so, the SCAG model is first used to forecast traffic volume in 2035. RapidTOM then uses SCAG model output and identifies the number of vehicles willing to pay to use a HOT lane under different tolling and mobility scenarios.

For this study, only freeways with existing, in construction, or planned HOV (High Occupancy Vehicle) lanes were considered for conversion into HOT lanes. The corridor screening analysis also assumes the minimum Level of Service (LOS) will be 45 miles per hour in the HOT lane, and that vehicles with three or more occupants will be allowed free use of the HOT lane. However, it should be noted that any decisions related to conversion of HOT2+ or HOT3+ will be made by the Board in conjunction with Caltrans input.

Five mobility criteria were used to evaluate the corridors based on output from the SCAG regional model and RapidTOM. Those criteria are: 1) value of travel time savings; 2) HOT lane person throughput; 3) average peak period vehicle speeds in the general purpose lanes; 4) transit benefits; and 5) connectivity to HOV lanes and existing ExpressLanes. Metro presented these criteria to the Task Development Team (TDT), which is comprised of Metro, Caltrans, and SCAG staff and the TDT concurred with these criteria.

The second component in the screening is a financial feasibility calculation. This calculation estimates net revenue for various ExpressLane corridors and the constructability/capital cost of converting the corridor from HOV to HOT operation. Net revenue assumes operation and maintenance costs based on actual costs incurred for the operation and maintenance of the I-110 and I-10 ExpressLanes. Construction costs were estimated at a rough order of magnitude level. The resulting revenue/cost ratio will provide a general indication of the positive or negative revenue benefit of HOV to HOT conversion.

The results of the mobility and financial feasibility analysis will be used to place freeway corridors into three categories: projects recommended to be pursued in the first ten years of the plan, projects that could be pursued in the next ten to twenty years, and projects that could be pursued in the next twenty to thirty years. In addition, a ten and thirty year resource plan will be included that will estimate the financial requirements for potential new ExpressLane projects including construction, operation, and maintenance costs.

Concurrently, staff is working with Caltrans to develop the appropriate agreements per Board direction.

# **NEXT STEPS**

Staff will present the draft Strategic Plan to the Ad Hoc Congestion Reduction Committee in September 2015.

Prepared by: Philbert Wong, Transportation Planning Manager, (213)922-2642

Reviewed by: Kathleen McCune, Director, Congestion Reduction (213)922-7241

Shahrzad Amiri, Executive Officer, Congestion Reduction (213)922-3061

Phillip A. Washington Chief Executive Officer



# **Board Report**

Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
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Los Angeles, CA

File #:2015-0709, File Type:Informational Report

Agenda Number:27.

AD HOC CONGESTION REDUCTION COMMITTEE
JUNE 17, 2015

SUBJECT: ASSESSMENT OF THE IMPACT OF ALLOWING HIGH OCCUPANCY VEHICLES

(HOVS) TO USE I-10 EXPRESSLANES ON THE WEEKENDS WITHOUT A

**FASTRAK® TRANSPONDER** 

ACTION: RECEIVE AND FILE

# RECOMMENDATION

RECEIVE AND FILE status report on the assessment of the impact of allowing HOVs to use the I -10 Metro ExpressLanes on the weekends without a FasTrak transponder.

# **ISSUE**

At the February 26, 2015 Board of Directors meeting, Director Solis requested staff to assess the impacts of removing the ExpressLanes transponder requirement during weekends on the I-10 to allow access to the ExpressLanes for occasional HOV users. This report provides the results of that assessment.

### DISCUSSION

### **Current Business Rules**

The current business rules require that all vehicles have a properly mounted FasTrak transponder to use the Metro ExpressLanes. HOV users must have a switchable transponder that allows them to declare their occupancy and travel toll-free on the ExpressLanes. Enforcement of the ExpressLanes transponder and occupancy requirements is done through a combination of California Highway Patrol (CHP) enforcement and an automated Video Enforcement System (VES). CHP enforcement occurs during the AM and PM peak periods Monday through Friday while the VES operates 24 hours a day, seven (7) days a week.

To inform the motoring public of the transponder requirement for use of the ExpressLanes, there are 38 signs on the I-10 ExpressLanes in both directions. These signs are mounted in the center median and identify the minimum occupancy requirements during certain times of the day. The mandatory FasTrak transponder requirement was put in place for the following reasons:

- Enables the enforcement of the ExpressLanes per Board adopted business rules. Because all
  vehicles are required to have a transponder, we are able to implement an automated VES to
  assist in identifying toll violators by taking a picture of the vehicle license plate for the purpose
  of issuing a violation notice to those without transponders. This provides significantly
  enhanced deterrence to toll violators (vehicles without transponders) as the enforcement
  presence is available across the lanes for 24 hours a day, even when CHP is not present.
- Enhances customer confidence as users of the toll system that obey the rules understand people "cheating" in the lanes without a transponder will be caught, and will be caught at a much higher rate than would be possible without a VES in place. In March 2009, more than 60% of participants in a survey of current carpoolers indicated that they would continue to carpool if a transponder is required. This data shows that it is unlikely that the transponder requirement is a disincentive to HOV users. Further, HOV users indicate that one of their highest concerns is addressing "cheaters" in the carpool lanes and ExpressLanes.
- The automated VES generates additional revenue by identifying toll violators at a much greater rate than is possible with field law enforcement personnel. This revenue is a funding source that augments the toll revenue and contributes to maintenance of the lanes, operation of the toll system, and has provided additional revenue for community reinvestment grants and funding for capital and operational improvements needed on the ExpressLanes.
- Assists in identifying valid customers with a problem or a failed transponder for follow-up contact as the requirement of a transponder allows the system to separate valid customers from violators.
- Transponder technology allows the ability to provide, first of its kind, Carpool Loyalty Program.

The transponder requirement is essential if the ExpressLanes are to be successful and effectively manage traffic through the use of the Dynamic Pricing Algorithm.

### **Enforcement**

The current ExpressLanes enforcement strategy is reliable, visible and promotes fairness. The automated VES captures images of license plates on vehicles without a transponder and without a valid ExpressLanes account. The license plate information is sent to the Department of Motor Vehicles (DMV) to obtain the registered owner's information and then a violation notice is mailed to the registered owner of the vehicle.

When CHP is patrolling and the VES is in operation it is possible for a motorist to receive a violation from the VES and a citation from CHP. If this were to happen, the violation would be dismissed to prevent a double penalty situation. Violation notices encourage violators to open an account to pay the appropriate toll, and if an account is opened the violation penalty is waived.

## Operations of Other Similar ExpressLanes

When examining other ExpressLanes across the country that were converted from HOV to HOT lanes (I-95 Atlanta, I-85 in Miami) that have similar transponder requirements and business rules for HOVs, we find the following:

The I-95 Express Lanes in Miami is a 24/7 operation that adopted the original HOV hours and requires HOVs to have a transponder to utilize the lanes. They also have a VES and dedicated highway patrol to actively monitor and enforce the lanes. To qualify as a toll-free carpool they must have three or more people in the vehicle and must register their carpool status by completing a carpool application.

The I-85 Express Lanes in Atlanta is another 24/7 Express Lane operation which requires three or more people per vehicle to qualify for toll-free carpool status. Both SOV and HOV users require the use of a switchable transponder. Enforcement is a combination of highway patrol, VES, invisible barriers and other technology in lanes to ensure legal use of the lanes at all times. Their program adopted existing HOV hours and continues to maintain 24/7 hour operation to avoid customer confusion and potential operating costs.

# I-10 ExpressLanes and General Purpose (GP) Lane Speeds on the Weekends

Caltrans data from October and November of 2014 show that the westbound I-10 GP lanes near Garfield Ave are heavily utilized throughout the weekend but are operationally stable with free flow speeds ranging from 60 to 65 Miles per hour (MPH). For some weekend hours, the speeds decline to 45 to 60 MPH but do not breakdown to stop and go traffic unless there is an incident or abrupt change in demand in the lanes. Data from the same period in 2012 prior to opening of the ExpressLanes show a similar pattern of utilization and speeds. The two figures below illustrate the speeds for Saturday, October 4th and Sunday, October 5th and is representative of a typical weekend on the I-10.



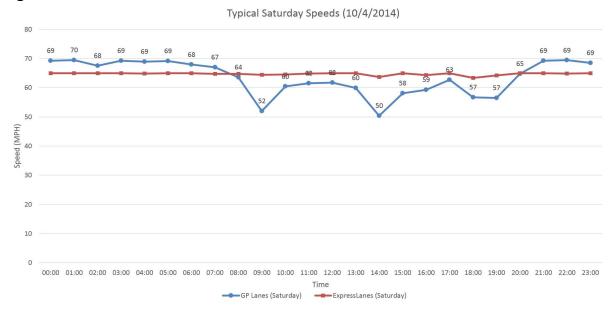
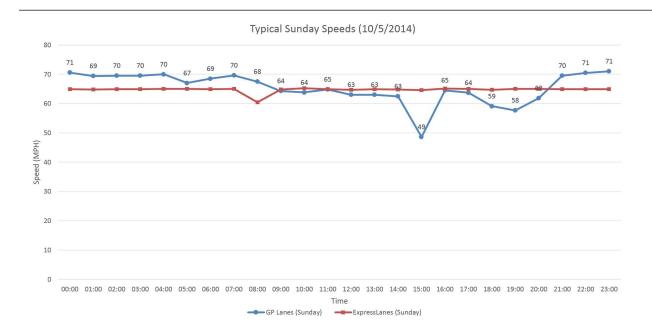


Figure 2



While GP lane speeds can range from 45 to 60+ MPH, ExpressLanes maintain free-flow traffic with average speeds above 60 MPH. Generally, with the exception of two hours on Saturday and one on Sunday, the ExpressLanes speeds are not significantly higher than the speeds in the GP lanes. Data from February 2013 when the I-10 ExpressLanes opened, to February 2015, show that the weekend usage on the ExpressLanes has increased by 34%. Based on the experience of other Express Lanes operators it is anticipated that this trend on the I-10 will continue as the program matures.

To estimate the impact of allowing HOV users without transponders on the ExpressLanes, a preliminary analysis was conducted which considered diverting 10% of the GP lane vehicles into the ExpressLanes. This would add an average of 500 vehicles per hour of HOV users at the peak hours into the ExpressLanes from the GP lanes. The analysis showed that the GP lane speeds would increase between 1 to 5 MPH and the ExpressLanes would experience slower speeds. Additionally, while the GP lanes would experience a marginal increase in speed, motorists in the ExpressLanes would encounter more restricted maneuverability when changing lanes.

# Operating Options Considered

In consideration of the request to forego the transponder requirement for HOVs on the weekends on the I-10, staff came up with two (2) possible operating scenarios:

**Option 1:** Allow all HOV users on the I-10 to utilize the ExpressLanes without a transponder during the weekends while continuing to allow SOV customers with a transponder to use the lanes.

For Option 1 to be implemented effectively, the following changes would be required, for the weekends only:

 a) Business Rule modification that no longer requires HOV users to have a transponder (weekends only)

- b) System software modification to charge SOV customers, but not process violations for vehicles without a transponder
- c) Signage modification on the corridor to indicate HOV users no longer require FasTrak on weekends but SOV users will need FasTrak to use the lanes
- d) Operations and Call Center staff training regarding changes in the rules for the weekends only
- e) Dedicated CHP services on weekends to enforce new rules
- f) Public outreach to educate potential users of the new rules

# **Option 1** Potential Benefits:

- a) Potential increased usage of ExpressLanes
- b) Potential decrease in traffic volumes and increase in speeds on GP lanes

# **Option 1** Potential Costs/Impacts:

- a) Increase in violations, as it is likely we would have to turn off the VES since there is no way to distinguish a violator from a customer
- b) Increased costs for CHP lane enforcement to provide weekend coverage
- c) Some signage on the I-10 would need to change in order to inform the public of the new rules
- d) Increased confusion for customers and non-customers due to the rule change for weekdays vs weekends which could generate more calls and emails to customer service reps and degrade performance of the call center
- e) Pricing may increase for SOV customers due to potential increase in traffic volumes which could shift SOV users back to GP lanes, thus increasing the volumes in the GP lanes
- f) Re-printing of all customer collateral materials and update of the website to reflect new business rules
- g) Total Cost/ Revenue Loss: \$4.5 to \$5.1 Million
  - 1. Total Capital Costs: \$1.23 to \$1.84 Million
    - System Software Development and Implementation: \$1 to \$1.5 Million
    - Signage Modification: \$30,000 to \$40,000
    - Re-printing of materials and updating the website: \$200,000 to \$300,000
  - 2. Total Operating Costs: \$3.3 Million
    - Additional CHP Enforcement: \$600,000 per year
    - Approximately \$2.7 Million per year in lost revenue (Estimated based on data from January to April 2015)

**Option 2:** Eliminate the need for transponders on weekends for all users of the I-10 ExpressLanes, including SOVs.

For Option 2 to be implemented effectively, the following changes would be required, for the weekends only:

- a) Business Rule modification that no longer requires vehicles to have a transponder (weekends only)
- b) System software modification to turn off the toll system and the VES so no vehicle would get charged a toll and violations would not be processed
- c) Signage modification on the corridor to indicate FasTrak not required on weekends but

required on weekdays

- d) Operations and Call Center staff training regarding changes in the rules on the weekends only
- e) Public outreach to educate potential users of the new rules

# **Option 2** Potential Benefits:

- a) Potential increased usage of ExpressLanes
- b) Potential decrease in traffic volumes and increase in speeds on GP lanes

# **Option 2** Potential Costs/Impacts:

- a) Increase in violations and loss of revenue, as it is likely we would have to turn off the VES and the toll system since there is no requirement for the use of a transponder
- b) Some signage on the I-10 would need to change in order to inform public of the new rules
- c) Increased confusion for customers and non-customers due to the rule change for weekdays vs weekends which will generate more calls and emails to customer service reps and degrade performance of the call center
- Re-printing of all customer collateral materials and update of the website to reflect new business rules
- e) Total Cost/ Revenue Loss: \$6.1 to \$6.7 Million
  - 1. Total Capital Costs: \$1.23 to 1.84 Million
    - System Software Development and Implementation: \$1 to \$1.5 Million
    - Signage Modification: \$30,000 to \$40,000
    - Re-printing of materials and updating the website: \$200,000 to \$300,000
  - 2. Total Operating Costs: \$4.9 Million
    - Approximately \$4.9 Million per year in lost revenue (Estimated based on data from January to April 2015)

### Conclusions

While this analysis focuses on the I-10, we anticipate that the new weekend business rules would eventually have to apply to the I-110 to ensure consistency and equity among the ExpressLane users in both corridors.

Our initial analysis for the I-10 indicates that allowing HOVs to use the system without a transponder could yield a marginal increase of 1 to 5 MPH in travel speeds in the GP lanes. However, the analysis reveals that this could severely inhibit our ability to effectively manage and enforce the lanes, confuse drivers, and require additional resources resulting in a combined cost and revenue loss of \$4.5 to \$6.7 Million in the first year, depending on the option selected. Additionally there will be a projected on-going operating cost and revenue loss of \$3.3 to \$4.9 Million per year. Finally, a review of ExpressLanes operations across the US with similar HOV requirements and business rules as the Metro ExpressLanes indicate they continue to have 24/7 operation as an Express Lane and do not anticipate any changes to their HOV requirements to avoid customer confusion and a potential increase in their operating costs.

### **NEXT STEPS**

Weekend usage on the I-10 ExpressLanes continues to increase. Staff will continue to monitor the needs of the corridor and will address weekend usage as part of a larger ExpressLane policy review.

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