



**PLANNING AND PROGRAMMING COMMITTEE
APRIL 20, 2005**

**SUBJECT: PS-4360-1580, COUNTYWIDE METRO RAPID SIGNAL PRIORITY
EXPANSION**

ACTION: APPROVE RECOMMENDATION

RECOMMENDATION

Authorize the Chief Executive Officer to:

- A. award a three-year firm fixed price non-competitive contract to PB Farradyne for the Countywide Metro Rapid Signal Priority Expansion Project in the amount of \$6,700,000 and;
- B. execute planned contract options for procurement of hardware, software, equipment and services in the amount not to exceed \$800,000 for a total contract value of \$7,500,000.

RATIONALE

This effort will implement bus signal priority technologies on Los Angeles County Metropolitan Transportation Authority (Metro) Rapid corridors in areas outside of the City of Los Angeles. Targeted corridors include Florence Avenue, Soto Street, Hawthorne Boulevard, and Long Beach Boulevard. As the agency moves forward with the deployment of the Metro Rapid implementation plan, it is critical that existing signal priority gaps are filled and future signal priority needs are accommodated.

In FY99, PB Farradyne was selected through a competitive bid process to serve as the Prime Consultant for the Countywide Bus Signal Priority (BSP) Pilot Project. The intent of this project was to design, develop, implement, and evaluate a multi-jurisdictional bus signal priority system as well as develop countywide signal priority guidelines for Los Angeles County. In February 2004, the system deployed as part of this effort debuted with the opening of Metro Rapid Line 710 on Crenshaw Boulevard. This event marked the first successful demonstration of signal priority operations across multiple jurisdictional boundaries in Los Angeles County.

In accordance with the agency's Short Range Transportation Plan for Los Angeles County, an increasing number of existing and planned Metro Rapid corridors are being added to Metro operations that traverse outside of the City of Los Angeles. Staff has identified four existing and/or planned Metro Rapid lines that warrant the deployment of signal priority

treatments similar to those provided on Crenshaw Boulevard. Historically there has not been a strategic signal priority solution available to accommodate the needs of Metro Rapid operations at signalized intersections outside of the jurisdiction of the City of Los Angeles Department of Transportation. With the successful debut of the Countywide Signal Priority System on Crenshaw Boulevard, this signal priority void is no longer an impediment to the continued expansion of the Metro Rapid program.

JUSTIFICATION

A key element of the Metro Rapid program is the deployment of transit signal priority elements to decrease red light delay and ultimately reduce passenger travel times. It has been estimated that Metro Rapid express bus service can reduce passenger travel times by as much as twenty-nine percent, approximately one-third of which can be directly attributed to the provision of signal priority.

As the Metro Rapid Program continues to expand in accordance with the strategic action outlined in the agency's adopted 2003 Short Range Transportation Plan, by 2009, nine Metro Rapid corridors traversing through twenty-eight different jurisdictions will be implemented without end-to-end signal priority if the Metro Rapid Countywide Signal Priority Expansion Project does not move forward. Within the next two fiscal years, four of these routes are slated to open, calling out for an immediate need to initiate signal priority design, equipment procurement and implementation, if the superior level of transit service associated with Metro Rapid operations is to benefit these new corridors.

In September 2002, the Board adopted the Metro Rapid Five-Year Implementation Plan, which approved \$92.3 million of regional funds to implement twenty-four lines on an accelerated schedule by 2008. A construction and implementation critical path was developed for the Board-approved Metro Rapid expansion program. Ultimately, signal priority was identified as the critical element driving the Metro Rapid expansion schedule. As such, the Countywide Metro Rapid Signal Priority Expansion Project is a key element of the overall Board requested effort to accelerate the deployment of the Metro Rapid expansion program.

At the present moment, the agency has the opportunity to further benefit from the existing countywide bus signal priority effort to enhance Metro Rapid services. The BSP Pilot Project, which will serve as the design reference for the Metro Rapid Countywide Signal Priority Project, was a collaborative effort bringing together multiple jurisdictions and transit operators to develop consensus towards a signal priority approach with countywide applicability.

Exclusive Capabilities

Due to the highly specialized nature of the Countywide Metro Rapid Signal Priority Expansion Project, award of this contract to another source would result in substantial duplication of costs to the agency. These costs would not be recovered through competition and would result in unacceptable delays in fulfilling the agency's requirements.

PB Farradyne served as the Prime Consultant to deliver the BSP Pilot Project and has developed a high level of technical expertise in the areas of signal priority design and implementation. PB Farradyne and its subcontractors designed, developed, and implemented a countywide signal priority solution comprised of complex software and hardware elements.

In recent months, staff has initiated efforts to seek out additional vendors capable of deploying similar systems based upon the countywide signal priority specifications. After a thorough review, staff recommends procuring PB Farradyne to deliver the Countywide Metro Rapid Signal Priority Expansion Project based on the following reasons:

- Delaying the award of this contract will significantly dilute the quality of Metro Rapid services provided by the agency.
- The original Bus Signal Priority Pilot Project contract was awarded through a competitive bid process, which deemed PB Farradyne as the most technically competent candidate.
- PB Farradyne successfully designed, developed, and implemented the base signal priority system that will serve as the deployment model for the four-targeted multi-jurisdictional Metro Rapid lines.
- As the incumbent, PB Farradyne has an insurmountable competitive advantage over all others due to the six years of experience gained during the pilot demonstration project.
- PB Farradyne's existing familiarity with the countywide signal priority system will translate into the critical timesaving that is needed to meet the aggressive Metro Rapid deployment plan.
- Retaining PB Farradyne as Metro's multi-jurisdictional signal priority supplier will result in cost savings due to the operations and maintenance savings that can be achieved by duplicating the existing signal priority system.
- For any new consultant, there will be a significant learning curve tied to all tasks associated with the deployment of the countywide signal priority system for the planned Metro Rapid lines. PB Farradyne has already gone through this learning curve, which will result in additional time and cost savings to the agency and the Los Angeles County taxpayer.
- The time loss associated with educating another consultant, the re-engineering of software elements, and the fabrication of new hardware may result in years of delay, which will negatively impact the agency's accelerated Metro Rapid deployment plan.
- PB Farradyne is currently working with other agencies in the county to deploy "same type" signal priority systems based upon a standardized set of signal priority guidelines developed by the agency, which will allow for the seamless integration of signal priority systems across jurisdictional boundaries and through an extended number of corridors.

As indicated above, Metro has made a major investment in PB Farradyne in terms of both financial resources and time to deliver the Bus Signal Priority Pilot Project. The project management experience, system design expertise, hardware procurement and installation

familiarity, and other BSP specific skills acquired by PB Farradyne during the course of the six-year demonstration project are all costs that the agency has already incurred and should not be duplicated.

After a thorough evaluation of Metro's signal priority needs and the specialized technical capabilities required, staff determined that PB Farradyne is uniquely capable of performing the tasks required to successfully deliver the Countywide Metro Rapid Signal Priority Expansion Project. As the technical intricacies associated with migrating the demonstration system to additional corridors are resolved during the course of this project, it is anticipated that future deployments will become less complicated. Staff will work with PB Farradyne to simplify the signal priority system's design requirements to ensure that Metro can conduct open-solicitations for future work.

FINANCIAL IMPACT

This contract is funded with Board approved Prop C 25% funds set aside to complete the Metro Rapid Five-Year Implementation Plan. Funding of \$1,000,000 for this professional services contract is included in the FY05 budget in cost center 4360, San Gabriel Valley Area, under 405598/03.01, Metro Rapid Bus/Signal Priority Installation. Since this is a multi-year contract, the cost center manager and Chief Planning Officer will be accountable for budgeting the cost in future years, including any options exercised.

ALTERNATIVES CONSIDERED

Several alternatives were considered prior to making this recommendation to the Board.

1. Staff considered not implementing signal priority on Metro Rapid corridors traversing outside of the City of Los Angeles. However, this would significantly degrade the quality of Metro Rapid services on the four targeted lines. It is projected that signal priority will reduce red light signal delay experienced by Metro Rapid coaches by up to 23%, resulting in running time savings of up to 9%.
2. Staff considered conducting an open solicitation to retain the professional services required to meet Metro's signal priority needs. Due to the aggressive implementation schedule and significant cost considerations, the agency would not be able to implement signal priority in a timeframe consistent with the Metro Rapid Five-Year Implementation Plan and within the Metro Rapid Program budget.
3. Staff considered utilizing existing in-house resources and personnel to design, procure, and install the various signal priority elements instead of retaining outside contract services. Due to the highly specialized technical nature of the work to be performed under this effort, the agency does not have the in house staff resources to deliver this project in a timely and cost-efficient manner.

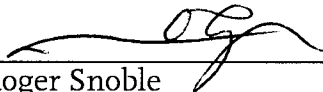
ATTACHMENT(S)

- A. Procurement Summary
- A-1. Procurement History
- A-2. List of Subcontractors

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James L. de la Loza
Chief Planning Officer
Countywide Planning and Development



Roger Snoble
Chief Executive Officer

PROCUREMENT SUMMARY
Metro Rapid Bus Signal Priority System

1.	Contract Number: PS-4360-1580		
2.	Recommended Vendor: PB Farradyne		
3.	Cost/Price Analysis Information:		
	A. Bid/Proposed Price: \$7,209,714	Recommended Price: \$6,700,000 Basic, \$800,000 NTE Option	
	B. Details of Significant Variances are in Attachment A-1.D		
4.	Contract Type: Firm Fixed Price		
5.	Procurement Dates:		
	A. Issued: 11/2/2004		
	B. Advertised: N/A		
	C. Pre-proposal Conference: N/A		
	D. Proposals Due: N/A		
	E. Pre-Qualification Completed: 1/25/2005		
	F. Conflict of Interest Form Submitted to Ethics: Cleared 29 November 2004		
6.	Small Business Participation:		
	A. Bid/Proposal Goal: 20% SBE	Date Small Business Evaluation Completed: February 22, 2005	
	B. Small Business Commitment: 20.65% Details are in Attachment A-2		
7.	Invitation for Bid/Request for Proposal Data:		
	Notifications Sent: N/A	Bids/Proposals Picked up: N/A	Bids/Proposals Received: N/A
8.	Evaluation Information:		
	A. Bidders/Proposers Names: PB Farradyne	<u>Bid/Proposal Amount:</u> \$7,209,714	<u>Best and Final Offer Amount:</u> \$6,700,000
	B. Evaluation Methodology: Price Evaluation Details are in Attachment A-1.C		
9.	Protest Information:		
	A. Protest Period End Date: May 5, 2005		
	B. Protest Receipt Date: N/A		
	C. Disposition of Protest Date: N/A		
10.	Contract Administrator: T. Carey	Telephone Number: 922-2040	
11.	Project Manager: Steve Gota	Telephone Number: 922-3043	

PROCUREMENT HISTORY
Metro Rapid Bus Signal Priority System

A. Background on Contractor

The contractor selected is PB Farradyne, a division of Parsons Brinckerhoff Quade and Douglas, and is located here in Los Angeles, CA. The parent company has been in business since 1885, and is known for providing design and consulting services for the transportation industry. Prior contracts include Corridor studies on the 710 and 101 freeways, the Downtown Regional Connector studies, and the Trip Distribution Model Improvement study. Performance in all contracts has been acceptable. They also have held many contracts nationwide including studies in San Diego, Texas, and Portland. PB Farradyne successfully completed the Bus Signal Priority Pilot Project (BSP), the predecessor to this effort.

B. Procurement Background

This procurement is a negotiated non-competitive action for a new contract in support of the County-wide Metro Rapid Signal Priority Expansion Project.

As discussed in the Rationale, at the October 1998 Board meeting a contract was approved for PB Farradyne to provide consultant services for the BSP.

Based upon economies achieved in negotiation, options restoring previously deleted systems will be negotiated by contract modifications. The target negotiation date will be within 90 days of this award. This planned option is not to exceed \$800,000 for procurement of hardware, software, equipment and devices, and will be funded by negotiated savings from this procurement action.

The Diversity & Economic Opportunity Department (DEOD) established a 20% Small Business Enterprise (SBE) goal for this contract.

C. Evaluation of Proposals

In accordance with the Procurement Policy Manual, the Source Selection Committee (SSC) conducted a comprehensive technical evaluation of the proposal. PB Farradyne's proposal is considered responsive to the project and submittal requirements. The basis for award is due to the high level of technical expertise developed in the areas of signal process design and implementation while serving as the prime contractor on the BSP project.

D. Cost/Price Analysis Explanation of Variances

The recommended price has been determined to be fair and reasonable based upon cost analysis, independent cost estimates, negotiations with PB Faradyne, and the MASD audit of the contractor's proposal.

LIST OF SUBCONTRACTORS
Metro Rapid Bus Signal Priority System

PRIME CONTRACTOR –

PB Farradyne

Small Business Enterprise (SBE) Commitment

Other Subcontractors

Global Wireless Communications	12.82%
Lin Consulting	2.20%
Sarakki & Associates	1.03%
Scantek Interactive Communication	4.59%
Total Commitment	20.48%

