#### PROCUREMENT SUMMARY

# REGIONAL INTEGRATION OF INTELLIGENT TRANSPORTATION SYSTEMS (RIITS) MODERNIZATION/PS520450021002

1.	Contract Number: PS520450021002		
2.	Recommended Vendor: Parsons Transportation Group, Inc.		
3.	Type of Procurement (check one): IFB RFP RFP-A&E		
	☐ Non-Competitive ☐ Modification ☐ Task Order		
4.	Procurement Dates:		
	A. Issued: October 21, 2015		
	B. Advertised/Publicized: October 21, 2015		
	C. Pre-Proposal/Pre-Bid Conference: November 3, 2015		
	D. Proposals/Bids Due: January 25, 2016		
	E. Pre-Qualification Completed: March 24, 2016		
	F. Conflict of Interest Form Submitted to Ethics: May 12, 2016		
	G. Protest Period End Date: August 24, 2016		
5.	Solicitations Picked up/Downloaded:	Bids/Proposals Received:	
	124	6	
6.	Contract Administrator:	Telephone Number:	
	David Chia	(213) 922-1064	
7.	Project Manager:	Telephone Number:	
	Kali Fogel	(213) 922-2665	

#### A. Procurement Background

The Board Action is to approve Contract No. PS520450021002 issued in support of the procurement of hardware, software and related services for the modernization of the Regional Integration of Intelligent Transportation Systems (RIITS). The procurement seeks a technology-based solution that upgrades the data processing system's collection, management, and exchange of transportation data obtained from different public agencies.

The Request for Proposal (RFP) was issued in accordance with Metro's Acquisition Policy and the contract type is firm fixed price. The RFP was issued with a Small Business Enterprise (SBE) goal of 20% (SBE 17% and DVBE 3%).

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

- Amendment No. 1, issued on November 6, 2015, removed Good Faith Effort (GFE) requirements, revised SBE/DVBE instructions, updated the list of SBE-certified firms, and provided the pre-proposal conference agenda, PowerPoint presentation slides, sign-in sheets, and the planholders' list.
- Amendment No. 2, issued on November 10, 2015, extended the proposal due date and date for submitting questions.

- Amendment No. 3, issued on December 10, 2015, updated the submittal requirements to clarify what is included in the proposal page limit, updated the evaluation criteria to notify proposers that scores may be adjusted based on their oral presentations, revised the statement of work to increase the time for setting up the Solution and initial data, provided responses to the first set of proposer questions, provided a list of estimated data sources, and extended the proposal due date.
- Amendment No. 4, issued on December 30, 2015, updated the statement
  of work to include liquidated damages, increase the time for populating
  the Solution and apply industry terms to describe scope requirements,
  updated responses to the first set of proposer questions, and provided
  responses to the second set of proposer questions.
- Amendment No. 5, issued on January 6, 2016, extended the proposal due date.
- Amendment No. 6, issued on January 11, 2016, provided responses to the third set of proposer questions and updated the evaluation criteria to notify proposers that scores may be adjusted based on their product demonstrations at oral presentation.

A pre-proposal conference was held on November 3, 2015, and attended by 58 participants representing 45 companies. There were 338 questions asked and responses were released prior to the proposal due date. A total of 124 firms downloaded the RFP and were included in the planholders' list. A total of six proposals were received on January 25, 2016.

#### B. Evaluation of Proposals

The Proposal Evaluation Team (PET), consisting of staff from Congestion Reduction, Metro Highway Programs, Information Technology Services, City of Montebello Information Technology Division, and Caltrans Intelligent Transportation Systems Operations Division, was convened and conducted a comprehensive evaluation of the proposals received.

The proposals were evaluated by the PET in accordance with the following evaluation criteria and associated weights:

•	Understanding of the Work and Approach	70%
•	Degree of Team Skills, Experience & Past Performance	5%
•	Price Proposal	25%

The evaluation criteria are appropriate and consistent with criteria developed for similar procurements for professional services. Several factors were considered when developing these weights, giving the greatest importance to understanding of the work and approach.

Of the six proposals received, one proposal, Compuline International, Inc., was deemed non-responsive to the RFP submittal requirements and eliminated from evaluation.

On January 27, 2016, the remaining five proposals were distributed to the PET. During January 27, 2016, through April 1, 2016, the PET completed its independent evaluation of the proposals. Two firms, Applications Software Technology Corporation (AST) and Axiom xCell, Inc. (Axiom), were determined to be outside the competitive range. These firms were not included for further consideration.

AST's proposal did not demonstrate an adequate understanding of the work, and the proposal presented a cloud-based solution, which did not meet the RFP's hybrid-cloud requirement. Additionally, AST's proposal did not meet the SBE requirement.

Axiom's proposal recommended a cloud-based solution, which did not meet the RFP's hybrid-cloud requirement. The proposal did not explain how massive complex data sets from varied sources (i.e., "Big Data") would be processed or how analytics would be incorporated. The proposal did not provide a plan for modernizing the communications network.

The three firms determined to be within the competitive range are listed below in alphabetical order:

- 1. International Business Machines Corporation (IBM)
- 2. Kimley-Horn and Associates, Inc. (Kimley-Horn)
- 3. Parsons Transportation Group, Inc. (Parsons)

On April 1, 2016, the PET interviewed the three firms within the competitive range. The project manager and key team members from each firm were invited to present their firm's understanding and approach to the contract, their respective qualifications, and respond to the PET's questions. Generally, all three firms elaborated on their vision for the modernized RIITS system and described each team member's role in performing the work. In addition, the firms conducted a demonstration of their proposed systems, tools and products.

The project manager and key personnel from each firm responded to the PET's inquiries regarding how public agency participation can be increased, how many data integrations can be completed annually, and how the communications architecture can be modernized using the existing communications network.

#### **Qualifications Summary of Firms Within the Competitive Range**

**IBM** is a multinational technology and consulting company that specializes in analytics, cloud computing, IT infrastructure, mobile applications, IT security, and

other related industries. With a spectrum of technology solutions, IBM's proposal presented a large catalog of products and tools.

IBM's proposal did not provide a transportation architecture. Although the proposal presented an impressive catalog of products and tools, it did not specify which and how those products and tools would be used. The oral presentation did not detail how different products and tools would be integrated. In addition, the products and tools require expert knowledge to implement and use. Users who do not have a computer programming background would find the products and tools difficult to use.

The proposal also did not present an institutional architecture. The proposal and the oral presentation did not present a plan for obtaining new data from current data sources and acquiring new data sources. No discussion was made as to the acquisition of new data from current sources or the acquisition of new data sources. Significantly, the proposal and oral presentation did not explain how training programs would be implemented to teach users how to operate the proposed products and tools.

**Kimley-Horn** is an engineering, planning, and environmental consulting firm that possess significant experience in the transportation industry. Kimley-Horn's proposal identified several products and tools that are intuitive, user-friendly, and effective.

Kimley-Horn's proposal did not present a communications architecture. The proposal did not describe how the communications network would operate, explain how products and tools would be integrated, and provide detailed illustrations of different components of the communications network. In addition, Kimley-Horn's oral presentation did not explain how Big Data would be processed and how data would be integrated from proprietary applications.

Kimley-Horn's proposal and oral presentation did not provide details as to how it intended to proactively obtain new data. Though the proposal suggested networking activities and presentations, it did not set forth a plan for active outreach. The proposal did not detail how the firm would extract new data from current users or target new data sources.

**Parsons** is an engineering and consulting firm that specializes in engineering design, public transportation, and intelligent transportation systems (ITS). Parsons' proposal demonstrated a comprehensive understanding of the work and presented a detailed approach to providing a technology-based solution for modernizing the RIITS system.

The proposal provided a communications and transportation architecture that identified products, explained their importance, described the technical approach, and provided illustrations of different components of the communications network. The oral presentation addressed alternative connections that may be utilized to reduce equipment failures, system interruptions, and network downtime.

In addition, the oral presentation addressed the number and the type of data integrations the firm could complete annually. The oral presentation also explained how data could be integrated from proprietary applications.

The proposal provided an institutional architecture that targets business users, not computer programmers. No coding or programming is required by the end user. The proposal set forth a plan to transition current users and acquire new data sources and identified different stages of outreach. The oral presentation explained how workshops, forums, and training programs would be utilized.

Moreover, the proposal provided the required hybrid-cloud solution. The proposal provided Big Data analytics tools that can be used by a non-technical end user and provided performance monitoring and measurement tools that provide data visualizations and reporting. The proposal provided social media connections to receive tweets and notifications, which the PET found useful for RIITS users, data source providers, and other stakeholders. The proposal provided an open solution that allows new or different tools to be introduced at any time. The proposal eliminated the dependence on a systems integrator, which is used by RIITS currently.

The final scoring determined that Parsons is the top ranked firm. A summary of the PET's scores is provided as follows:

	FIRM	Average Score	Factor Weight	Weighted Average Score	Rank
	Parsons Transportation Group,				
2	Inc. Understanding of the Work & Approach	88.00	70.00%	61.60	
3	Degree of Team Skills, Experience & Past Performance	82.00	5.00%	4.10	
4	Price Proposal	100.00	25.00%	25.00	
5	Total		100.00%	90.70	1
6	Kimley-Horn and Associates, Inc.				
7	Understanding of the Work & Approach	74.00	70.00%	51.80	
8	Degree of Team Skills, Experience & Past Performance	76.00	5.00%	3.80	
9	Price Proposal	74.00	25.00%	18.50	
10	Total		100.00%	74.10	2
11	International Business Machines Corporation				
12	Understanding of the Work & Approach	68.00	70.00%	47.60	
13	Degree of Team Skills, Experience & Past Performance	62.00	5.00%	3.10	
14	Price Proposal	28.40	25.00%	7.10	
15	Total		100.00%	57.80	3

### C. Cost Analysis

The recommended price has been determined to be fair and reasonable based upon Metro's Management and Audit Services Department (MASD) audit findings, an independent cost estimate (ICE), cost analysis, technical evaluation, fact finding, and negotiations.

The negotiated amount includes the integration of current data sources and a select range of new data sources to be added progressively at intervals. In contrast, the ICE takes a broad and inclusive approach that includes the full suite of potential upgrades and partners as well as the immediate integration of all potential and possible data sources.

Moreover, the ICE includes the deployment of advanced video systems, modernization of the entire communications network, and extensive outreach and

training support services (including outreach and training support services relating to the integration of all potential and possible data sources and the deployment of advanced video systems).

	Proposer Name	Proposal Amount	Metro ICE	Negotiated Amount
1.	Parsons Transportation Group	\$4,725,228	\$7,174,749	\$4,725,226
2.	Kimley-Horn and Associates, Inc.	\$6,395,995	\$7,174,749	N/A
3.	International Business Machines Corporation	\$16,640,586	\$7,174,749	N/A

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

The recommended firm, Parsons, headquartered in Pasadena, California, has been in business for over 70 years in engineering design, public transportation, and intelligent transportation systems (ITS). The firm has completed over 30 ITS systems integration projects, which have involved data integration, software development, agency interface development, cloud computing, data analytics, multimodal transportation operations, and TMS operations. Parsons was responsible for the design of the San Diego Integrated Corridor Management (ICM) System, Gateway TIS (GTIS) for the Gary-Chicago-Milwaukee (GM) Corridor, and the Caltrans District 7 Advanced Transportation Management System (ATMS).

The proposed team is composed of Parsons and four subcontractors (two SBE firms, one DVBE firm, and one non-SBE/DVBE subcontractor). The proposed project manager has 26 years of experience in the ITS industry, the majority of which has been focused on the design, development and deployment of ITS software and technology systems. The proposed project manager led the development of the San Diego I-15 Integrated Corridor Management and Caltrans District 7 South Bay Dynamic Corridor Congestion Management (DCCM) Project.

In addition, key staff have more than 40 years of experience in software development, cloud computing, data analytics, database design, systems engineering, project management, IT security, communications design, data integration, LAN/WAN design and troubleshooting, server/desktop configuration, installation and repair, switch, router, and firewall configuration, backup/disaster recovery, and infrastructure cabling. Overall, staff have well over 100 combined years of experience in multimodal information systems, technology systems, and systems engineering in the ITS industry.

The proposed project team has worked with a diverse range of public agencies across the nation in developing, operating, or integrating RIITS-like systems. Local

agencies include Metro, Caltrans, Los Angeles County Department of Public Works, and cities across the County of Los Angeles.

With its extensive knowledge in ITS solutions and experience with stakeholders, Parsons demonstrates a thorough understanding of the requirements necessary for modernizing the RIITS system.