



Metro

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

Board Report

File #: 2017-0623, **File Type:** Contract

Agenda Number: 29.

**SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE
AD HOC CUSTOMER EXPERIENCE COMMITTEE
NOVEMBER 16, 2017**

**SUBJECT: SYSTEMWIDE BUS NETWORK RESTRUCTURING
PLAN**

ACTION: AWARD TASK ORDER

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to award an 18-month, firm fixed price Task Order No. PS878320003041 under Countywide Planning Services Bench Contract No. PS4010-3041-F-XX with Cambridge Systematics, Inc., for an amount of \$1,295,762, to develop a Systemwide Bus Network Restructuring Plan, subject to resolution of protest(s), if any.

ISSUE

In May 2017, staff briefed the Board of Directors on the need to conduct the Metro Service Study (Systemwide Bus Network Restructuring Study). In August 2017, staff presented a status report to the Board, indicating that a task order Request for Proposals (RFP) was issued to the Countywide Planning Bench contractors to assist in this effort. Board approval of the Contract is needed to proceed with development of the Plan.

DISCUSSION

Background

Metro provides over 1.3 million customer trips per weekday with a fleet of over 2,200 buses, 219 light rail, and 104 heavy rail cars. Service is distributed along an extensive network of 136 bus lines and 102 one way track miles of rail service that span 1,433 square miles of Los Angeles County. In addition, Metro funds local bus services operated by sixteen (16) municipal bus operators and several other community services providing almost 335K trips per day. Together, the municipal operators account for roughly 30% of transit service within the County while Metro provides the remaining 70%. Therefore, coordination of services, fare payment, signage and information is critical to providing seamless services throughout the region.

The Metro bus and rail system will continue to expand with the passage of the County's Measure R in 2008 and Measure M in 2016, both one-half cent sales taxes for transportation improvements. Currently, three mega transit projects are being constructed, including Crenshaw/LAX, Regional Connector, and the Purple Line Extension. Several others, including the Gold Line Foothill Extension to Claremont, East San Fernando Valley Transit Corridor, West Santa Ana Transit Corridor, Sepulveda Pass, and Bus Rapid Transit (BRT) between North Hollywood and Pasadena, and along Vermont Avenue, are planned to be in construction within the next 10 years.

Despite being the second most heavily used bus and seventh most heavily used rail systems in the country, and voter endorsement for continued growth, Metro's sytemwide transit ridership continues to decline, consistent with national trends. A recent survey of past riders found that 19% of respondents stopped using Metro services primarily because their travel patterns changed, and another 12% stated that it is too hard to get to and from transit. Eighteen percent and 11%, respectively, mentioned slow speeds and service reliability were their main reasons for leaving transit. Ridership declines can also be attributed to shifts in customer demographics and lifestyles, changing workforce travel patterns, safety and security concerns, new technology and opportunities for other travel options such as shared mobility on-demand.

Systemwide Bus Network Restructuring Study

Given the transforming landscape of transportation and travel demand within Los Angeles County, Metro is embarking on an effort to restructure the entire bus network into a comprehensive and intuitive system of high quality and integrated transit services that are relevant, reflective of, and attractive to the diverse customer needs within Los Angeles County. More specifically, the service restructuring aims to increase transit use within the County over the next decade by attracting customers to ride more by retaining current customers, reclaiming past customers, and recruiting new customers. In addition, the re-baselined bus network will set the foundation for future growth from transportation investments provided through Measures R and M.

With the diversity and complexity of Metro's governing boards, key stakeholders, customers, and operating environment, the following principles are critical to the success of this project:

- Extensive public input and outreach throughout the project (early buy-in and understanding of tradeoffs from Board and key stakeholders, and inclusive of LA County's diverse communities).
- Integration/coordination with Metro's Strategic Plan and Long Range Transportation Plan (LRTP) update, as well as municipal operator system restructure plans.
- Collaborative process with local jurisdictions and other key stakeholders (implement service

improvements in conjunction with transit supportive infrastructure and programs).

- Openness to creativity and innovation.

To prepare the Plan, the Contractor shall successfully complete the following tasks, inclusive of gathering data to answer the questions noted below, leading up to the implementation of a systemwide bus network restructure.

- **Market Research, Market Segmentation Analysis and Travel Demand** - A comprehensive understanding of who our past, current and potential customers are. For what trip purposes are they willing to use transit? When do they want to travel? What are the service attributes most important to them? Where are they coming from and going to?
- **Existing Service Evaluation** - What are the strengths, deficiencies, gaps and opportunities of the existing Metro bus network? How are customers using the system, and how well do we meet their needs? Where are the gaps and deficiencies in service and service attributes? Where are the opportunities for ridership growth, and how much can ridership grow if we address our gaps and deficiencies?
- **Establish Service Concepts** - Develop a series of preferred service concepts to consider that best match with the travel demand and service attributes most important to each customer group. How do these service concepts address the gaps and deficiencies identified in the Existing Service Evaluation? How will these service concepts create opportunities for ridership growth? What are the tradeoffs between service concepts and how will the benefits outweigh the negatives?
- **Service Design Guidelines** - The service concepts will be translated into a set of service design guidelines and criteria to ensure that any future adjustments to service are consistent with the preferred service concept.
- **Capital Infrastructure Needs** - Transit preferential infrastructure will be identified that will enhance speed and reliability of bus service along key regional corridors, as well as infrastructure to support new service delivery methods, and customer service infrastructure for major transfer points and activity centers.
- **Service Restructuring Plan** - The Contractor and Metro service planning and scheduling staff will work hand in hand to develop a transit network based on the preferred Service Concept and design guidelines that are anticipated to maximize ridership and improve customer experience within: 1) existing resources, 2) 10% fewer resources, and 3) 10% greater resources.

DETERMINATION OF SAFETY IMPACT

Conducting this study will not have any impacts on the safety of our customers and/or employees.

FINANCIAL IMPACT

The FY18 budget includes \$1,000,000 in Cost Center 3151, project 306004 to conduct the Systemwide Bus Network Restructuring Study. Since this is a multi-year contract, the Cost Center Manager and Chief Operations Officer will be responsible for budgeting future years for the balance of the remaining project budget.

Impact to Budget

The source of funds for this project will come from regional administration funds earned on Proposition A sales tax. These funds are not eligible for operating or capital functions.

ALTERNATIVES CONSIDERED

The Board could consider not conducting this study and/or completing the study using in-house resources. Neither of these options is recommended as the bus system continues to be misaligned with current day travel demand and travel options and there are insufficient in-house resources to conduct the study and develop a Plan of this magnitude.

NEXT STEPS

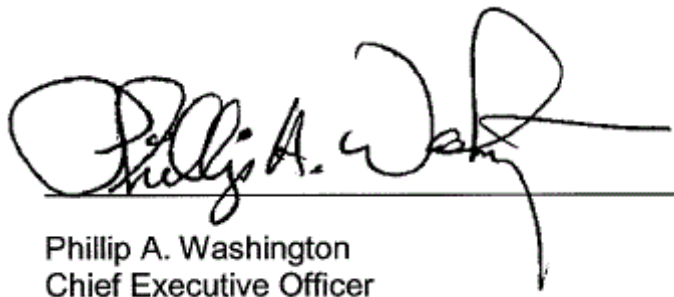
Upon Board approval, staff will execute Task Order No. PS878320003041 with Cambridge Systematics, Inc. to develop a Systemwide Bus Network Restructuring Plan.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - Task Order Log
Attachment C - DEOD Summary

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Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

SYSTEMWIDE BUS NETWORK RESTRUCTURING PLAN/PS4010-3041-F-XX

1.	Contract Number: PS4010-3041-F-XX Task Order No. PS878320003041	
2.	Recommended Vendor: Cambridge Systematics, Inc.	
3.	Type of Procurement (check one): <input type="checkbox"/> IFB <input type="checkbox"/> RFP <input type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input checked="" type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: 6/23/2017 to Discipline 1 (Transportation Planning) of the Countywide Planning Bench	
	B. Advertised/Publicized: N/A	
	C. Pre-Proposal Conference: 7/7/2017	
	D. Proposals Due: 7/24/2017	
	E. Pre-Qualification Completed: 9/5/2017	
	F. Conflict of Interest Form Submitted to Ethics: 9/1/2017	
	G. Protest Period End Date: 11/20/2017	
5.	Solicitations Picked up/Downloaded: 17	Bids/Proposals Received: 2
6.	Contract Administrator: Ana Rodriguez	Telephone Number: (213) 922-1076
7.	Project Manager: Conan Cheung	Telephone Number: (213) 418-3034

A. Procurement Background

This Board Action is to approve Task Order No. PS878320003041 issued under the Countywide Planning Bench Contract No. PS4010-3041-F-XX in support of restructuring Metro's existing bus network to meet the needs of existing and future patrons and increasing transit ridership. Board approval of contract awards are subject to resolution of any properly submitted protest.

In September 2013, Metro's Board of Directors approved the award of 63 contracts under the Countywide Planning Bench (Bench) comprised of 17 disciplines for a period of three years with two one-year options for professional services not-to-exceed a cumulative amount of \$30,000,000.

Task Order RFP No. PS43739-3041 was issued on June 23, 2017, in accordance with Metro's Acquisition Policy, to all members of Discipline 1 – Transportation Planning of the Bench and the contract type is a firm fixed price.

One amendment was issued during the solicitation phase of this Task Order RFP:

- Amendment No. 1, issued on June 27, 2017, clarified the pre-proposal conference date.

A pre-proposal conference was held on July 7, 2017 and was attended by ten participants representing nine firms. There were five questions submitted and responses were released prior to the proposal due date.

A total of two proposals were received on July 24, 2017.

B. Evaluation of Proposals

A Proposal Evaluation Team (PET) consisting of staff from Metro departments including the Service Development, Scheduling and Analysis Department, Countywide Planning and Development Department, the Office of Extraordinary Innovation, the Community Relations Department, the Transportation Planning Department, and the Service Operations Department was convened and conducted a comprehensive technical evaluation of the proposals received.

The proposals were evaluated based on the following evaluation criteria and weights:

- | | |
|---|------------|
| • Work Plan/Project Approach | 35 percent |
| • Experience and Qualifications of the Proposed Personnel | 20 percent |
| • Experience and Qualifications of the Consulting Team | 20 percent |
| • Cost/Price Effectiveness | 15 percent |
| • Small Business Preference | 10 percent |

The evaluation criteria are appropriate and consistent with criteria developed for other, similar Task Order RFPs for professional services. Several factors were considered when developing these weights, giving the greatest importance to the Work Plan/Project Approach.

Both proposals received were determined to be within the competitive range and are listed below in alphabetical order:

1. Cambridge Systematics, Inc.
2. Fehr and Peers, Inc.

From July 25, 2017 through August 9, 2017, the PET conducted its independent evaluation of the proposals received. On August 9, 2017, the PET conducted interviews with both firms. The firms' project managers and key team members had an opportunity to present each team's qualifications and respond to the evaluation committee's questions. In general, each team's presentation addressed the requirements of the RFP, specifically their work plan, project approach, and their experience. The teams responded to the questions from the PET that pertained to their market research methodology, their information transference to key stakeholders and other consultants, and their proposed approach to determining service concepts from the market segmentation analysis.

Qualifications Summary of Firms within the Competitive Range:

Cambridge Systematics, Inc.

Cambridge Systematics is an established transportation consulting firm that has extensive public sector experience having worked with a vast number of federal, state, and local agencies throughout the country and internationally. Services provided include modeling and analytics, policy, planning and implementation and technology solutions in the form of software to specifically address issues of transit, planning, modeling, asset management, and mobility.

Cambridge Systematics provided a detailed and thorough response to the Task Order RFP that demonstrated their significant understanding of travel patterns, market segmentation analysis, route planning, service evaluation, forecasting and operations efficiencies. The market segmentation methodology was described in great detail and presented a balanced emphasis on understanding the general service characteristics needed for the core network as well as allowing for specific niche market needs for demand based service planning. Cambridge Systematics also put together a team that has experience completing other similar comprehensive operations analyses for large metropolitan areas across the United States. Cambridge Systematics has four subconsultants, Transportation Management & Design Inc. (TMD), HDR Engineering, Inc., Here Design Studio, and Conifer Research LLC, that will lead or supplement tasks according to their discipline expertise.

During their interview, Cambridge Systematics further exhibited their team's knowledge of transit market research, multimodal system evaluation and forecasting as well as expanded on their approach. The proposed existing service evaluation is robust and TMD will use their proprietary Service Analysis System (SAS) program for analysis of ridership and operating performance at various geographic and temporal levels that will be of great value in the restructuring effort. Cambridge and their team also specifically addressed micro-transit and alternative service concepts in their presentation expanding on the information provided in their proposal and demonstrated some potential interactions between the traditional and emerging public transportation possibilities.

Fehr and Peers, Inc.

Based out of Walnut Creek, CA, Fehr and Peers is a transportation consulting firm which specializes in providing transportation planning and engineering services. Fehr and Peers' services include land use and transportation studies, travel behavior and forecasting, bicycle and pedestrian planning and many others. Fehr and Peers' proposal demonstrated an understanding of the importance of public engagement; however, their proposed service evaluation did not go into sufficient depth to gain an understanding of the different factors affecting ridership. Also, their market research approach seemed to heavily rely on work being conducted through a different study,

namely the Ridership Growth Action Plan and there was not a significant identifiable link between the findings of the market segmentation analysis and the development of the service concepts and design guidelines. Furthermore, their service concept methodology seemed to assume a single concept solution which does not account for alternative service delivery methods named in the RFP such as micro-transit and flex route alternatives. Fehr and Peers was given the opportunity to address this issue at the interview; however, their responses seemed to indicate that other service concepts would not be prominently considered in their restructuring plans.

Following is a summary of the PET evaluation scores:

1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	Cambridge Systematics, Inc.				
3	Work Plan/Project Approach	77.73	35.00%	27.21	
4	Experience and Qualifications of the Proposed Personnel	83.62	20.00%	16.72	
5	Experience and Qualifications of the Consulting Team	80.81	20.00%	16.16	
6	Cost/Price Effectiveness	100.00	15.00%	15.00	
7	Small Business Preference	50.00	10.00%	5.00	
8	Total		100.00%	80.09	1
9	Fehr and Peers, Inc.				
10	Work Plan/Project Approach	68.34	35.00%	23.92	
11	Experience and Qualifications of the Proposed Personnel	76.68	20.00%	15.34	
12	Experience and Qualifications of the Consulting Team	73.03	20.00%	14.61	
13	Cost/Price Effectiveness	78.07	15.00%	11.71	
14	Small Business Preference	50.00	10.00%	5.00	
15	Total		100.00%	70.58	2

C. Price Analysis

The recommended price has been determined to be fair and reasonable based upon adequate price competition, an independent cost estimate, price analysis, technical analysis, fact finding, and negotiations.

	Proposer Name	Proposal Amount	Metro ICE	Negotiated Amount
1.	Cambridge Systematics, Inc.	\$1,398,085	\$1,262,427	\$1,295,762
2.	Fehr and Peers, Inc.	\$1,798,852		

D. Background on Recommended Contractor

The recommended firm, Cambridge Systematics, Inc., was founded in 1972 in Massachusetts and specializes in applying systematic analysis to problems of transportation, the environment, urban development, and regional planning. Cambridge has locations in nine different states, including two locations in California, and has expanded to service international clients as well. Similar past projects for Cambridge and their team include the Chicago Regional Transportation Authority Market Analysis Study, the Santa Clara Valley Transportation Authority Metropolitan Comprehensive Operational Analysis, and the Nashville Metropolitan Transit Authority Comprehensive Operations Analysis. Cambridge has a history of working with Metro, on projects such as the Long Range Transportation Plan, and the Metro Mobility Matrix assessments for the San Gabriel Valley, North County, and South Bay Cities.

TASK ORDER LOG

COUNTYWIDE PLANNING BENCH/CONTRACT NO. PS4010-3041
TASK ORDER LOG VALUE ISSUED TO DATE

Discipline No./ Description	Contract No.	Contractor	Value of Task Orders Issued to Date
1/Transportation Planning	PS4010-3041-O-XX	David Evans & Associates, Inc.	\$459,587.68
	PS4010-3041-BB-XX	IBI Group	\$343,471.02
	PS4010-3041-F-XX	Cambridge Systematics, Inc.	\$2,870,664.74
		<i>This Pending Action</i>	<i>+\$1,295,762.00</i>
	PS4010-3041-U-XX	Fehr & Peers	\$1,978,617.34
	PS4010-3041-YY-XX	STV Corporation	\$490,954.00
	PS4010-3041-I-XX	CH2M Hill, Inc.	\$286,865.00
	PS4010-3041-DD-XX	Iteris, Inc.	\$1,911,605.06
	PS4010-3041-Y1-XX	HDR Engineering, Inc.	\$1,641,541.24
	PS4010-3041-Y1-XX	KOA Corporation	\$298,142.85
	PS4010-3041-RR-XX	Parsons Transportation Group	\$1,832,178.00
	PS4010-3041-EE-XX	Kimley Horn & Associates, Inc.	\$291,005.46
	PS4010-3041-A-XX	AECOM Technical Services, Inc.	\$1,954,168.96
	PS4010-3041-QQ-XX	Parsons Brinckerhoff, Inc.	\$920,819.00
		Subtotal	\$16,575,382.35
2/Environmental Planning	PS4010-3041-FF-XX	Kleinfelder, Inc.	\$839,361.71
		Subtotal	\$839,361.71

ATTACHMENT B

6/Architecture	PS4010-3041-RR-XX	Parsons Transportation Group	\$115,817.00
	PS4010-3041-W-XX	Gensler	\$269,041.34
		Subtotal	\$384,858.34
7/Urban Design	PS4010-3041-W-XX	Gensler	\$406,905.18
		Subtotal	\$406,905.18
9/Environmental Graphic Design	PS4010-3041-WW-09	Selbert Perkins Design	\$248,361.00
		Subtotal	\$248,361.00
11/Financial Analysis	PS4010-3041-I-XX	CH2M Hill, Inc.	\$587,011.00
		Subtotal	\$587,011.00
12/Land Use and Regulatory Planning	PS4010-3041-BB-XX	IBI Group	\$299,986.00
		Subtotal	\$299,986.00
13/Sustainability/Active Transportation	PS4010-3041-U-XX	Fehr & Peers	\$1,950,067.67
	PS4010-3041-XX-13	Stantec Consulting Services, Inc.	\$618,390.76
		Subtotal	\$2,568,458.43
14/Database Technical Services	PS4010-3041-PP-14	Novanis	\$1,310,664.93
	PS4010-3041-KKK-14	Accenture LLP	\$101,000.00
		Subtotal	\$1,411,664.93
17/Community Outreach/ Public Education & Research Services	PS4010-3041-EEE-17	The Robert Group	\$771,839.00
	PS4010-3041-D-17	Arellano Associates	\$564,877.00
		Subtotal	\$1,336,716.00
		Total Task Orders Awarded to Date	\$24,658,704.94
		Board Authorized Not-To-Exceed (NTE) Cumulative Total Value	\$30,000,000.00
		Remaining Board Authorized NTE Cumulative Total Value	\$5,341,295.06

DEOD SUMMARY**SYSTEMWIDE BUS NETWORK RESTRUCTURING PLAN/PS4010-3041-F-XX****A. Small Business Participation**

The Diversity and Economic Opportunity Department (DEOD) established a 30% Small Business Enterprise (SBE) goal for this solicitation. Cambridge Systematics, Inc. exceeded the goal by making a 60.43% SBE commitment.

Small Business Goal	30% SBE	Small Business Commitment	60.43% SBE
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	SBE Subcontractors	% Committed
1.	Transportation Management & Design	56.57%
2.	Here Design Studio	3.86%
	Total Commitment	60.43%

B. Living Wage and Service Contract Worker Retention Policy Applicability

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

C. Prevailing Wage Applicability

Prevailing wages are not applicable to this Contract.

D. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract.