

MOTION NO. M2018-164
Systems Integration Contract for Passenger Information Management System

MEETING:	DATE:	TYPE OF ACTION:	STAFF CONTACT:
Capital Committee	12/13/2018	Recommend to Board	Jason Weiss, Chief Information Officer David Ginsberg, Senior Program Manager, Passenger Information Systems
Board of Directors	12/20/2018	Final Action	

PROPOSED ACTION

Authorizes the chief executive officer to execute a contract with ARINC to provide system integration services for the Passenger Information Management System program in the amount of \$30,777,995 with a 10% contingency of \$3,077,800 for a total authorized contract amount not to exceed \$33,855,795 plus applicable taxes.

KEY FEATURES SUMMARY

- This contract is for a Systems Integrator to deliver a Passenger Information Management System (PIMS) for Link, Sounder and Tacoma Link with future support for Bus Rapid Transit (BRT) and Parking.
- The PIMS will be designed and implemented using an open architecture approach to provide flexibility as technology and needs change.
- The primary customer benefits of PIMS include improved arrival predictions, improved digital signage with enhanced readability, and unified operations across transit modes.
- ARINC was selected via a competitive bid procurement, including a thorough proposal and negotiations process with all shortlisted vendors.
- Scope of work for the contract with ARINC includes the following system integration services: project management; requirements definition; solution design, implementation, integration, testing and verification; configuration management; safety assurance; training of Sound Transit employees and partners; provision of operations and maintenance manuals; and systems support through the warranty period.
- Implementation of the PIMS for Link is expected to be delivered prior to revenue service for East Link, and the entire system is to be delivered by the end of 2025. The contract includes options for the following additional services:
 - Downtown Seattle Transit Tunnel Retrofit
 - New Data Sources
 - Support for Link Extension to Northgate, Lynnwood and Redmond
 - Legacy System Decommissioning
 - BRT Support
 - Parking Support
 - Lifecycle Replacement
 - Sounder Signage
 - Tacoma Link Signage
- The requested amount covers the key PIMS features plus all optional additional features and services above.

- PIMS systems integrator must not create schedule impacts to other agency priorities, especially ST2 and ST3 capital expansion projects. Timing for implementation across transit modes has been adjusted to allow focus on Link first, and the high-level plan agreed to includes milestones tied to capital expansion project milestones as well as liquidated damages for missing those milestones, especially the opening of East Link.
- The contract term includes substantial completion of work on Link by April 2022, substantial completion of work on Tacoma Link by July 2022 and substantial completion of work on Sounder by February 2023, with options for lifecycle replacement, BRT and Parking support at dates determined by those projects.
- Applicable taxes are currently estimated to be \$2,582,930.

BACKGROUND

Sound Transit must replace the Public Address/Variable Message Sign (PA/VMS) solutions for its Link and Sounder services, and seeks to add similar PA/VMS capability to Tacoma Link. In preparation for the opening of East Link Sound Transit will need to replace existing amber dot matrix signs with signs capable of displaying color, which will be done during normal lifecycle replacement of the existing signs which went into service in 2008. As BRT and parking are developed, those services will also require PA/VMS capability. In addition to replacing existing, basic signage functions, Sound Transit seeks to increase the accuracy of its arrival predictions and be able to provide additional information to customers to enhance their rider experience.

In addition to enhanced arrival predictions, Sound Transit needs the ability to differentiate between routes using color. Additional information related to the customer journey is also desired, including train size, passenger load, and an out-of-service indicator. In some cases, new data sources might require creation to replace manual processes. In the same way that this information is desired on signage, it is similarly desired on the Sound Transit website, on OneBusAway, in the public transit data feeds and third-party services such as Google Transit. Over time, as additional data is deemed valuable, PIMS should allow that data to be easily integrated with and consumed by PIMS.

This action executes the systems integrator contract to build out the core functionality of the new Passenger Information Management System, including a new centralized management system and new digital signage to provide an enhanced and consistent rider experience across transit modes.

PROCUREMENT INFORMATION

A request for proposals (RFP) was issued and publicly advertised on April 13, 2018. The RFP method of procurement was used as the work was (1) highly technical, (2) there were a variety of possible solutions, and (3) basis of award was to select on factors other than cost alone and providing best value to the agency.

The Procurement and Contracts Division received proposal submittals from four potential firms on July 13, 2018. Each proposal was evaluated on a series of criteria, which are detailed below in their relative order of importance:

- Technical Proposal
- Methodology and Approach to Implementation
- Knowledge and Recent Experience of Key Individuals

- Firm Experience and History
- Price
- Value-Added Features and Capabilities
- Commitment and Compliance to Equal Employment Opportunity Law

The Procurement and Contracts Division conducted a series of consensus evaluation meetings July 24 through July 26, 2018 which resulted in three firms being within the competitive range. Sound Transit provided weaknesses and deficiencies to each shortlisted firm in the competitive range and they were each given the opportunity to submit revised proposals, including revised price proposals.

Revised proposals were received from all three firms on September 10, 2018 and evaluation of revised proposals occurred on September 17, 2018. All three firms remained in the competitive range and a second request for revised proposals was requested by the Procurement and Contracts Division.

A second round of revised proposals was received by all three firms on October 15, 2018, and a consensus evaluation meeting was held. After conclusion of the evaluation, it was determined that ARINC was the top-ranked firm providing the best value solution for Sound Transit.

FISCAL INFORMATION

The authorized project allocation to date for the Passenger Information Management System project is \$49,575,852. Within that amount, \$41,895,537 has been allocated to the construction phase. The proposed action would commit \$33,855,795 and leave an uncommitted budget balance of \$15,326,257.

This action is within the adopted budget and sufficient funds remain after approval of the action to fund the remaining work in the construction phase as contained in the current cost estimates of this project.

Passenger information Management System

(in thousands)

	Total Project Allocation	Board Approvals	This Action	Board Approved Plus Action	Uncommitted / (Shortfall)
Administration	\$4,605	\$274	\$	\$274	\$4,330
Preliminary Engineering	169	120		120	49
Final Design	2,907				2,907
Third Party					
Right-of-way					
Construction	41,896		33,856	33,856	8,040
Construction Services					
Vehicles					
Project Contingency					
Total Current Budget	\$49,576	\$394	\$33,856	\$34,250	\$15,326
Phase Detail					
Construction					
System Integrator - Phase 1	\$35,000	\$	\$33,856	\$33,856	\$1,144
Other Integration	6,896				6,896
Total Phase	\$41,896	\$	\$33,856	\$33,856	\$8,040
Contract Detail					
Hoffman Construction					
	Board Approvals to Date	Current Approved Contract Status	Proposed Action	Proposed Total for Board Approval	
Contract Amount	\$	\$	\$30,778	\$30,778	
Contingency			3,078	3,078	
Total	\$	\$	\$33,856	\$33,856	
Estimated Taxes	\$	\$	\$2,583	\$2,583	
Percent Contingency	0%	0%	10%	10%	

Notes:

Amounts are expressed in Year of Expenditure.

Board Approvals = Committed To-Date + Contingency as of Oct 2018 and includes pending Board actions.

For detailed project information, see page 109 of the Adopted 2018 Transit Improvement Plan (TIP).

SMALL BUSINESS/DBE PARTICIPATION AND APPRENTICESHIP UTILIZATION

Sound Transit promotes and encourages small business participation, which also includes Disadvantaged Business Enterprises (DBEs). Small Business and DBE goals are based upon an examination of subcontracting opportunities contained in the work of this contract and the number of Small Businesses/DBEs available to perform such subcontracting work.

Sound Transit determined that there were few Small Business and DBE subcontracting opportunities based upon the work described in this contract, so Small Business/DBE goals were not established.

PUBLIC INVOLVEMENT

Not applicable to this action.

TIME CONSTRAINTS

The current Link public announcement system is unable to support the multiple light rail lines that will be in service with the opening of East Link. If PIMS isn't completed in time for the opening of East Link, Sound Transit would not be able to display train arrival information or send messages via the public address system. There is no float in the PIMS schedule, so a one month delay would result in a delay in PIMS elements needed for East Link.

ENVIRONMENTAL REVIEW

KH 11/19/18

LEGAL REVIEW

AJP 12/7/18

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MOTION:

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to execute a contract with ARINC to provide system integration services for the Passenger Information Management System program in the amount of \$30,777,995 with a 10% contingency of \$3,077,800 for a total authorized contract amount not to exceed \$33,855,795 plus applicable taxes.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on December 20, 2018.



Dave Somers
Board Chair

ATTEST:



Kathryn Flores
Board Administrator