

MOTION NO. M2016-65
Contract for Software Development, System Integration and Support Services

MEETING:	DATE:	TYPE OF ACTION:	STAFF CONTACT:
Operations and Administration Committee Board	07/07/2016	Cancelled	Brian McCartan, Executive Director of Finance and Information Technology Jason Weiss, Chief Information Officer Michael Berman, Research & Technology Program Manager
	07/28/2016	Final Action	

PROPOSED ACTION

Authorizes the chief executive officer to execute a five year initial term contract with ten one year options with Cambridge Systematics, Inc. to provide software development, system integration, and support services for the Open Transit Data program within the Research and Technology Program in the amount of \$2,500,000.

KEY FEATURES SUMMARY

- Sound Transit’s Research and Technology program includes an overarching program to collect, process, and distribute regional transit data. This program, the Open Transit Data (OTD) program, expands and automates collection and publication of regional transit data by compiling accurate and reliable data from Sound Transit’s partner agencies and internal Sound Transit sources.
- Data compiled by the OTD program is used for Sound Transit website applications, including the One Bus Away application, an improved Trip Planner, and real-time information at stations through digital signage. The data is also provided to third-party developers who provide mobile applications and other tools to benefit transit riders.
- Cambridge Systematics was Sound Transit’s vendor for the first phase of the OTD program, and built the original system, streamlined the data import and validation process, and worked with Sound Transit staff to troubleshoot issues with data quality and availability.
- Under this contract, Cambridge Systematics will work on the following projects within the OTD program in partnership with Sound Transit’s internal software development team:
 - Link Rail Time Data.
 - Sounder Real Time.
 - Developer Portal.
 - Development and ongoing operations, maintenance, and support of the Open Transit Data Engine.
 - Development and incorporation of existing data sources.
 - New reporting and analytics tools to enable partner transit agencies to examine and improve the data they provide to OTD.
 - Pilot tests as needed for innovative data solutions.
 - Other tasks and subprojects as identified based on stakeholder and rider needs.

BACKGROUND

The Research and Technology Program was created to assess and implement new transit technologies to improve Sound Transit’s operational effectiveness and efficiency. This program focuses on systemwide security and safety technology, real-time service information and passenger communications, and deployment of applications to better manage operations. In 2012 the Board approved an \$8.8 million Phase 1 of the program, focusing on initial deployment of

improved information systems for transit riders. Phase 2 was added to the Research and Technology program's lifetime budget during the 2015 budget cycle, for \$5.3 million.

The Open Transit Data program (previously the Regional Data Services project) is part of the Research and Technology Program. The OTD work was planned in phases, and divided in sub projects (like the ones mentioned in the previous section), with the overall goal of providing better, more accurate, more comprehensive data to the public through application development and agency resources. Phase 1 of the OTD program was completed March 2016 and included the underlying data processing tools and support for real-time information at transit facilities.

Phase 2 of the Open Transit Data Program laid the groundwork for new data sources and improved the performance of the underlying systems. In Phase 3, we will complete the integration of new data sources; improve reporting and data analytics to allow partner agencies to understand issues and problems with their data; test new types of data (possibly including transit vehicle capacity, bicycle rack availability, wheelchair space, etc.); and perform additional work to improve the functionality of the system, based on rider needs.

Cambridge Systematics was Sound Transit's vendor for the first phase of the OTD program, and built the original system, streamlined the data import and validation process, and worked with Sound Transit staff to troubleshoot issues with data quality and availability. Under this contract, Cambridge Systematics, Inc. will work on all of these efforts in partnership with Sound Transit's internal software development team.

FISCAL INFORMATION

The lifetime budget in the 2016 Transportation Improvement Plan (TIP) for the Research and Technology program is \$20 million. Within that amount \$8,800,000 and \$5,343,740 has been set aside under Phase 1 projects and Phase 2 respectively.

The proposed action would commit \$2,500,000 into the four separate subprojects as follows: -
Under Phase 1;

- (a) The current budget in the Link Real Time Data subproject is \$675,000, of which, \$345,000 is committed with this contract leaving a remaining balance of \$117,723.
- (b) The current budget in the Sounder Real Time Data subproject is \$535,000, of which \$410,000 is committed with this contract leaving a remaining balance of \$125,000.

Under Future Projects;

- (c) The current budget in the Open Transit Data Phase 2 subproject is \$400,000, of which \$213,000 is committed with this contract leaving a remaining balance of \$187,000.
- (d) The remaining contract amount of \$1,532,000 is committed within the Future Projects group, leaving a remaining balance of \$3,412,000.

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

Research & Technology Budget

CONTRACT DETAIL	Board Approvals to Date	Current Approved Contract Status	Proposed Action	Proposed Total for Board Approval
Cambridge Systematics				
Contract Amount			2,500	2,500
Contingency Amount				
Total Not to Exceed Value			2,500	2,500
Percent Contingency	0%	0%	0%	0%

	2016 TIP	Board Approvals	This Action	Board Approved Plus Action	Uncommitted / (Shortfall)
Program Admin	1,173	1,081		1,081	92
Current Projects	4,683	1,570		1,570	3,113
Phase 1 Projects	8,800	5,458	755	6,213	2,587
Future Projects	5,344		1,745	1,745	3,599
TOTAL BUDGET	20,000	8,110	2,500	10,610	9,390

SUB PROJECT DETAIL

Phase 1 Projects

Link Real Time Data	675	212	345	557	118
Sounder Real Time data	535		410	410	125
Other Phase 1 Projects	7,590	5,246		5,246	2,344
Total Phase 1 Project Budget	8,800	212	755	967	7,833

Future Projects

Open Transit Data Phase 2	400		213	213	187
Other Future Projects	4,944		1,532	1,532	3,412
Total Future Project Budget	5,344		1,745	1,745	3,599

Notes:

Amounts are expressed in Year of Expenditure \$000s.

Board Approvals = Expenditures up to Mar 16.

Project budget located on page 66 of 140 of the Adopted 2016 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

TIME CONSTRAINTS

A one-month delay would create a significant impact to the project schedule.

ENVIRONMENTAL REVIEW

JI 5/9/2016

LEGAL REVIEW

LA 1 July 2016

MOTION NO. M2016-65

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to execute a five year initial term contract with ten one year options with Cambridge Systematics, Inc. to provide software development, system integration, and support services for the Open Transit Data program within the Research and Technology Program in the amount of \$2,500,000.

BACKGROUND:

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MOTION:

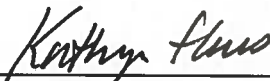
It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to execute a five year initial term contract with ten one year options with Cambridge Systematics, Inc. to provide software development, system integration, and support services for the Open Transit Data program within the Research and Technology Program in the amount of \$2,500,000.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on July 28, 2016.



Pat McCarthy
Board Chair Pro Tem

ATTEST:



Kathryn Flores
Board Administrator