#### MOTION NO. M2014-29 Contract for Quality Assurance for Transit Rider Technologies

MEETING:	DATE:	TYPE OF ACTION:	STAFF CONTACT:
Board	05/22/2014	Final Action	Brian McCartan, Executive Director, FIT Michael Berman, Research & Technology Supervisor

# **PROPOSED ACTION**

Authorizes the chief executive officer to execute a one-year contract with a one-year extension with Hansell Tierney, Inc., to provide quality assurance and testing services for regional data service and web platform development work within the Research and Technology Program for a total authorized contract amount not to exceed \$553,460.

# **KEY FEATURES SUMMARY**

- Under this contract, Hansell Tierney, Inc., will provide quality assurance and testing for specific areas identified in the Research and Technology (R&T) Program including Data Repository / Data Integrity (being worked on collectively as Regional Data Service project); and OneBusAway Capabilities, Real Time Integrated in Maps, and Improved Trip Planner (being worked on collectively as the Web Platform Development project).
- The consultant will also assist and support in-house and vendor-supplied software development efforts.
- The R&T Program relies heavily on software-intensive systems developed by internal staff and by other vendors. Quality assurance services are needed to allow Sound Transit to assess whether the software that is being developed meets the established requirements for the work.
- The consultant will help Sound Transit set an overall testing strategy, and will develop featurespecific test plans for each program area identified above.
- The requested amount is sufficient to cover the one-year contract and the one-year extension.

# BACKGROUND

The R&T program was created to assess and implement new transit technologies to improve the Agency's operational effectiveness and efficiency. This Program focuses on system wide security and safety technology, real-time service information and passenger communications, and applications to better manage operations. The ST2 R&T Program Phase 1 (2012-2015) focuses on developing and deploying Transit Rider Technologies to improve the customer experience. In 2012, the Board approved a \$9 million Phase 1 of the Program.

This contract will support two R&T projects that will improve how riders use the region's transit systems. The first project is the Regional Data Service (RDS) project that includes data repository and data integrity work. This project will enable Sound Transit to collect accurate, reliable data from Sound Transit and the region's other transit agencies. Sound Transit will then use the data internally and provide it to 3rd-party developers for their use in applications. Part of the work will include developing a set of test protocols to enable Sound Transit to support our Regional Data Service program, which feeds OneBusAway (a mobile application managed by Sound Transit that provides riders with real-time bus arrival information) and other mobile applications and websites.

The second project is the web platform development, which includes OneBusAway capabilities, real time integrated in maps, and an improved trip planner. This project will provide better trip

planner information to riders and dramatically improve Sound Transit's mobile website. This project will be the public face of the data collected and processed in the RDS project.

Both of these projects rely on significant software development, some of which will be performed by Sound Transit staff and some of which will be performed by contractors. A central element of software development is quality assurance (QA). Sound Transit currently does not have sufficient QA resources to perform this work internally. The vendor selected for this work will provide an overall QA and testing strategy, and will test software delivered by Sound Transit and vendor software developers and report on results of tests.

# **FISCAL INFORMATION**

This action is within the Adopted Budget and sufficient funds remain after approval of this action to fund the remaining work in the R&T Phase as contained in the current cost estimates.

	Commitment to			Approved Plus	Uncommitted
Research & Technology Project	2014 TIP	Date	This Action	Action	(Shortfall)
Operation & Maintenance	276	276	0	276	
Agency Administration	2,295	508	0	508	1,7
Preliminary Engineering	882	968	0	968	
Research & Technology	11,203	3,460	553	4,014	7,1
Total Current Budget	14,656	5,212	553	5,766	8,8
Research & Technology Implementations	7,650	1,912	553	2,466	5,
Phase Detail - Research & Technology					
Other Phase Work	3,553	1,548	0	1,548	2,0
Total Phase	11,203	3,460	553	4,014	7
Total Fliase	11,205	3,400	555	4,014	7,
Hansell Tierney Inc. Contract Detail	Board	Current		Proposed Total	<u> </u>
Hansell Tierney Inc.	Board Approvals to	Current Approved	Proposed	Proposed Total for Board	,
Hansell Tierney Inc.	Board	Current		Proposed Total	7,
Hansell Tierney Inc.	Board Approvals to	Current Approved	Proposed	Proposed Total for Board	<i>,</i>
Hansell Tierney Inc. Contract Detail	Board Approvals to Date	Current Approved Contract Status	Proposed Action	Proposed Total for Board Approval	<i>,</i>
Hansell Tierney Inc. Contract Detail Contract Amount	Board Approvals to Date	Current Approved Contract Status	Proposed Action 553	Proposed Total for Board Approval	7,*

#### Notes:

Amounts are expressed in Year of Expenditure \$000.

Board Approvals to Date includes amounts through March 31st, 2014, plus any pending Board Actions. Project Budget is located on page 152 of the 2014 Transit Improvement Plan (TIP). Board Approvals = Committed to-date + Contingency

# SMALL BUSINESS/DBE PARTICIPATION AND APPRENTICESHIP UTILIZATION

#### Participation by Small Businesses and Disadvantaged Business Enterprises (DBEs)

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 Small Business and DBE subcontracting opportunities are infeasible or improbable based upon the work described in this contract, so Small Business/DBE goals were not established or required.

Board

# PUBLIC INVOLVEMENT

Not applicable to this action.

# TIME CONSTRAINTS

The RDS project is a linchpin to other critical R&T Program components. Testing plans and expected results must be in place for the program to be completed for public use. A one month delay could impact the scheduled completion of the RDS project and other projects relying on the completion of RDS.

# **PRIOR BOARD/COMMITTEE ACTIONS**

None.

#### **ENVIRONMENTAL REVIEW**

JI 4/14/2014

# LEGAL REVIEW

JW 4/24/2014



#### **MOTION NO. M2014-29**

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to execute a one-year contract with a one-year extension with Hansell Tierney, Inc., to provide quality assurance and testing services for regional data service and web platform development work within the Research and Technology Program for a total authorized contract amount not to exceed \$553,460.

#### **BACKGROUND:**

The R&T program was created to assess and implement new transit technologies to improve the Agency's operational effectiveness and efficiency. This Program focuses on system wide security and safety technology, real-time service information and passenger communications, and applications to better manage operations. The ST2 R&T Program Phase 1 (2012-2015) focuses on developing and deploying Transit Rider Technologies to improve the customer experience. In 2012, the Board approved a \$9 million Phase 1 of the Program.

This contract will support two R&T projects that will improve how riders use the region's transit systems. The first project is the Regional Data Service (RDS) project that includes data repository and data integrity work. This project will enable Sound Transit to collect accurate, reliable data from Sound Transit and the region's other transit agencies. Sound Transit will then use the data internally and provide it to 3rd-party developers for their use in applications. Part of the work will include developing a set of test protocols to enable Sound Transit to support our Regional Data Service program, which feeds OneBusAway (a mobile application managed by Sound Transit that provides riders with real-time bus arrival information) and other mobile applications and websites.

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Both of these projects rely on significant software development, some of which will be performed by Sound Transit staff and some of which will be performed by contractors. A central element of software development is quality assurance (QA). Sound Transit currently does not have sufficient QA resources to perform this work internally. The vendor selected for this work will provide an overall QA and testing strategy, and will test software delivered by Sound Transit and vendor software developers and report on results of tests.

Under this contract, Hansell Tierney, Inc., will provide quality assurance and testing for specific areas identified in the Research and Technology (R&T) Program including Data Repository / Data Integrity (being worked on collectively as Regional Data Service project); and OneBusAway Capabilities, Real Time Integrated in Maps, and Improved Trip Planner (being worked on collectively as the Web Platform Development project). The consultant will help Sound Transit set an overall testing strategy, and will develop feature-specific test plans for each work area identified above. The consultant will also assist and support in-house and vendor-supplied software development efforts.

The requested amount is sufficient to cover the one-year contract and the one-year extension.

#### **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 one-year contract with a one-year extension with Hansell Tierney, Inc., to provide quality assurance and testing services for regional data service and web platform development work within the Research and Technology Program for a total authorized contract amount not to exceed \$553,460.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on May 22, 2014.

Paul Roberts

Board Vice Chair

ATTEST:

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Board Administrator