

**SOUND TRANSIT
STAFF REPORT**

MOTION NO. M2005-87

Contract for Automatic Passenger Counting and Vehicle Location Systems

Meeting:	Date:	Type of Action:	Staff Contact:	Phone:
Finance Committee	7/21/05	Discussion/Possible Action	Sheila Dezarn, Program Manager, Office of Policy & Planning Nick Marquardt, Project Manager, Office of Policy & Planning	(206) 398-5071 (206) 689-4903

Contract/Agreement Type:	✓	Requested Action:	✓
Competitive Procurement	✓	Execute New Contract/Agreement	✓
Sole Source		Amend Existing Contract/Agreement	
Agreement with Other Jurisdiction(s)		Budget Amendment	

✓ *Applicable to proposed transaction.*

PROPOSED ACTION

Authorizes the Chief Executive Officer to execute a contract with Dilax Systems, Inc. to design, furnish, install, and test an Automatic Passenger Counting and Vehicle Location System for a portion of the ST Express bus fleet in the amount of \$558,843, with a 6% contingency of \$33,531, for a total authorized contract amount not to exceed \$592,374.

KEY FEATURES of PROPOSED ACTION

- This contract is for the design, installation and testing of an advanced Automatic Passenger Counting System (APC) and Automatic Vehicle Location (AVL) for up to 19 ST Express buses operated by Community Transit and Pierce Transit. King County Metro has such systems in operation for ST Express buses.
- This system will allow Sound Transit to automatically collect passenger load and vehicle location information from a sample of the ST Express bus fleet. This information will then be used to report the Federal Transit Administration required National Transit Database (NTD) data at year-end.
- The system responds to the recommendations prepared by the Performance Audit Committee to improve system wide performance by improving data collection and reporting practices, including updating the NTD and auditing operating data provided by partners.
- This system replaces the need for Sound Transit to employ temporary staff to physically ride and sample the ST Express Bus fleet, which will save the agency operating costs over the long term.
- There is also a contract option to furnish and install an additional 27 on-board automatic vehicle location units on Community Transit operated coaches.

- This data will be used as part of the future Research and Technology project for deploying a real-time 'next arriving' vehicle system at select Sound Transit park and rides and transit centers.
- Sound Transit used an invitation for bid procurement process (IFB) for this contract. Two contractors submitted proposals in response to Sound Transit's IFB issued in April 2005. The selected contractor was within the engineer's estimate.
- Staff is recommending a 6% contingency for this contract as an allowance for changes encountered during performance of this work.

BUDGET IMPACT SUMMARY

Project Name: APC and VLS systems for Regional Express
 Current Project Phase: Project Development
 Projected Completion Date: Project Development

Action Outside of Adopted Budget:	✓	Comments on Checked Items
This Project		
This Phase		
This Task		
Budget Amendment Required		

Key Financial Indicators:	✓	Comments on Checked Items
Contingency Funds Required		
Funding required from other parties (other than what is assumed in financial plan)		

Not checked = action is assumed in current Board-adopted budget. No budget action or adjustment to financial plan required.

BUDGET and FINANCIAL PLAN DISCUSSION

The Research & Technology project's Adopted 2005 Budget includes a current year capital budget of \$889,000 and a lifetime capital budget of \$10.1 million. Within this capital budget, the current year budget for the Corridor Tech Initiative component is \$389,000 of which, \$280,000 was included as an amendment for automatic passenger counters. The budget of \$280,000 is anticipated to be sufficient to cover the proposed contract's current year expenditures. The lifetime budget associated with the Corridor Tech Initiative is \$6.9 million and is sufficient to cover the remaining \$312,000 in expenditures that will be incurred in future years. This action, together with previous expenditures, would bring the total costs and commitments for the Corridor Tech Initiative to approximately \$840,000.

BUDGET TABLE

Summary for Board Action (Year of Expenditure \$000)

Action Item: Execute contract with Dilax Systems Inc. for an Automatic Passenger Counting and Vehicle Location System for 19 Regional Express buses operated by Community Transit and Pierce Transit (Project #410), \$s in thousands.

	2005 Adopted Budget (A)	Committed To Date (B)	This Action (C)	Total Committed & Action (D)	Uncommitted (Shortfall) (E)
Agency Administration	6	\$ 6	\$ -	\$ 6	\$ -
Preliminary Engineering	14	14	-	14	-
R&T (phase 26 - capital)	10,105	2,942	592	3,535	6,570
Total Current Budget	10,125	\$ 2,963	592	\$ 3,555	\$ 6,570

Phase Budget Detail - R&T (phase 26)

Corridor Technology Initiative	\$ 6,898	\$ 247	592	\$ 840	\$ 6,059
Other technology Initiatives	3,207	2,695	-	2,695	512
Total Phase	\$ 10,105	\$ 2,942	\$ 592	\$ 3,535	\$ 6,570

Contract Budget	Approved Contract Value	Spent to Date	Proposed Action	Proposed Total Contract Value
Dilax Systems, Inc.	\$ -	\$ -	\$ 559	\$ 559
ST Contingency (6%)	-	-	\$ 34	34
Total	\$ -	\$ -	\$ 592	\$ 592

Budget Shortfall

Level	Shortfall Amt	Potential Funds	Funding Source
N/A	\$ -	\$ -	N/A

Notes:

- (A) Project budget shown on page 35 of the Adopted 2005 Budget book.
- (B) Committed to-date amount includes actual outlays and commitments through April 30, 2005.

M/W/DBE – SMALL BUSINESS PARTICIPATION

Due to the nature of the work to be performed for this contract, subcontracting was determined to be infeasible. Dilax Systems, Inc. did not propose to use subcontractors for any of the work for this contract. Dilax Systems, Inc. will perform 100% of the work.

EEO Commitment

Dilax Systems Inc. is a foreign small business with 30 employees. Dilax Systems Inc.'s current workforce demographics include 22% women.

PROJECT DESCRIPTION and BACKGROUND for PROPOSED ACTION

In 2001, the Board directed staff to develop a Research and Technology Transit Technology Plan that would provide an assessment and then identify an array of technological advancements to existing rail and bus transit services. The primary objective was to narrow the focus of the program and identify proper funding levels for initiatives that can be implemented within Sound Move.

The Plan is comprised of two sets of technology initiatives, which contain a subset of projects that are designed to improve customer service, customer safety and security, and operations. This particular project is a component to one of the Sound Transit initiatives, the Corridor Transit Technology Initiative, which includes a set of related ITS (Intelligent Transportation Systems) projects to provide advanced transit technology applications for bus and commuter rail operations in select corridors. The types of applications within this initiative include:

- Automated passenger counting
- Real-time passenger information at select transit centers and Sounder stations
- Expansion of transit signal priority in specific corridors
- Automated next stop displays for passengers on ST buses
- Automated next stop annunciation for passengers on ST buses

Prior Board or Committee Actions and Relevant Board Policies

Motion or Resolution Number	Summary of Action	Date of Action
M2003-114	Executed a contract with Parsons Brinckerhoff Farradyne for a preliminary system design for ST Express and Sound Transit facility technologies.	11/06/03
M2002-101	Adopted the Sound Transit Technology Plan for funding the development and implementation of advanced transit technologies and authorizing the Executive Director to take necessary steps to implement the plan.	9/5/02
M2001-116	Executed a contract with Parsons Brinckerhoff Faradyne for the development of a five-year, agency-wide and regional transit technology plan.	9/12/02

LEGAL REVIEW

JW 7/15/05

SOUND TRANSIT

MOTION NO. M2005-87

A motion of the Finance Committee of the Central Puget Sound Regional Transit Authority authorizing the Chief Executive Officer to execute a contract with Dilax Systems, Inc. to design, furnish, install, and test an Automatic Passenger Counting and Vehicle Location System for a portion of the ST Express bus fleet in the amount of \$558,843, with a 6% contingency of \$33,531, for a total authorized contract amount not to exceed \$592,374

Background:

In 2001, the Board directed staff to develop a Research and Technology Transit Technology Plan that would provide an assessment and then identify an array of technological advancements to existing rail and bus transit services. The primary objective was to narrow the focus of the program and identify proper funding levels for initiatives that can be implemented within Sound Move.

The Plan is comprised of two sets of technology initiatives, which contain a subset of projects that are designed to improve customer service, customer safety and security, and operations. This particular project is a component to one of the Sound Transit initiatives, the Corridor Transit Technology Initiative (CTTI), which includes a set of related ITS (Intelligent Transportation Systems) projects to provide advanced transit technology applications for bus and commuter rail operations in select corridors. The types of applications within this initiative include:

- Automated passenger counting
- Real-time passenger information at select transit centers and Sounder stations
- Expansion of transit signal priority in specific corridors
- Automated next stop displays for passengers on ST buses
- Automated next stop annunciation for passengers on ST buses

This contract will procure vendor services for the design and installation of an advanced Automatic Passenger Counting (APC) System and Automatic Vehicle Location for up to 19 ST Express buses operated by Community Transit and Pierce Transit. In addition, an option is included to procure 27 future Automatic Vehicle Location units to achieve the functionality planned in the CTTI. The data acquired with these units will be used as part of the future project for deploying a real-time 'next arriving' vehicle system at select Sound Transit park and rides and transit centers.

Motion:

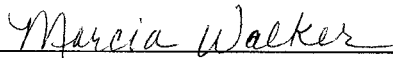
It is hereby moved by the Finance Committee of the Central Puget Sound Regional Transit Authority that the Chief Executive Officer is authorized to execute a contract with Dilax Systems, Inc. to design, furnish, install, and test an Automatic Passenger Counting and Vehicle Location System for a portion of the ST Express bus fleet in the amount of \$558,843, with a 6% contingency of \$33,531, for a total authorized contract amount not to exceed \$592,374.

APPROVED by the Finance Committee of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on July 21, 2005.



Jack Crawford
Finance Committee Vice Chair

ATTEST:



Marcia Walker
Board Administrator