

**SOUND TRANSIT
STAFF REPORT**

MOTION NO. M2007-115

**Contract Amendment to Upgrade Sounder Ticket Vending Machines, Central Data
Collection System & Ticket Office Machines**

Meeting:	Date:	Type of Action:	Staff Contact:	Phone:
Finance Committee	11/1/07	Discussion/Possible Action to Recommend Board Approval Action	Agnes Govern, Transportation Services Executive Director	(206) 398-5037
Board	11/8/07		Ahmad Fazel, Link Executive Director Donald R. Fowler, Senior Systems Engineer	(206) 398-5389 (206) 398-5125

Contract/Agreement Type:	<input checked="" type="checkbox"/>	Requested Action:	<input checked="" type="checkbox"/>
Competitive Procurement	<input checked="" type="checkbox"/>	Execute New Contract/Agreement	<input type="checkbox"/>
Sole Source	<input type="checkbox"/>	Amend Existing Contract/Agreement	<input checked="" type="checkbox"/>
Agreement with Other Jurisdiction(s)	<input type="checkbox"/>	Budget Amendment	<input type="checkbox"/>
Real Estate	<input type="checkbox"/>	Property Acquisition	<input type="checkbox"/>

PROJECT NAME

Sound Transit Fare Collection Equipment Upgrade

PROPOSED ACTION

Authorizes the chief executive officer to execute a contract amendment with Scheidt and Bachmann USA, Inc. to upgrade Sounder ticket vending machines, the Central Data Collection System, and ticket office machines in the amount of \$1,742,453, with a 5% contingency of \$87,123 totaling \$1,829,576, for a new total authorized contract amount not to exceed \$15,494,787.

KEY FEATURES of PROPOSED ACTION

- Scheidt and Bachmann USA, Inc. will upgrade the Sounder TVM, Central Data Collection System, and ticket operating machine equipment to the latest operating system and make them compatible with Link TVMs.
- **Sounder Ticket Vending Machine (TVM) Upgrade**
 - The contractor will update, retrofit, refurbish and test TVM hardware and software at its Burlington, Massachusetts facility.
 - The contractor will remove TVMs from their currently installed locations and then re-install and place them into revenue service upon completion of their upgrade.
 - The contractor will install and place into revenue service three TVMs at the new Mukilteo station.

- The contractor will relocate the TVMs at Edmonds and Tukwila stations so they are up against the shelter walls.
- The contractor will upgrade and provide affected spare parts.
- Smart card functionality will not be implemented under this change order. It will be done under a future change order, addressing Regional Fare Coordination project requirements.
- **Central Data Collection System (CDCS) Upgrade**
 - The contractor shall deliver, install and configure its current revisions of CDCS application and database software to support increased banking data security requirements.
 - Development Platform CDCS: The contractor shall deliver, install and configure its current revisions of CDCS application and database software.
- **Ticket Operating Machine (TOM) Upgrade**
 - The contractor will update, retrofit, refurbish and test the software and hardware for two TOMs.
- **Warranty**

The warranty conditions defined in the technical specification RTA CR-28-98 section 14.7 will apply to all new parts, software and workmanship on the TVMs and CDCS for a period of one year. Pre-existing parts are not covered under the warranty period. Parts and software purchased and installations performed by Sound Transit are not covered under the warranty period.
- **Management**

The contractor will provide a project manager to oversee the work.

BUDGET IMPACT SUMMARY

There is no action outside of the Board-adopted budget; there are no contingency funds required, no subarea impacts, or funding required from other parties other than what is already assumed in the financial plan.

BUDGET and FINANCIAL PLAN DISCUSSION

The proposed action would authorize execution of a contract amendment with Scheidt and Bachmann USA, Inc. in the amount of \$1,829,576 to upgrade the Sounder TVM, CDCS and TOM equipment to the latest operating system and to be compatible with Link TVMs. The amendment would authorize the expenditure of \$1,829,576 (\$1,742,453 contract amount plus a 5% contingency of \$87,123) for a new total authorized expenditure amount not to exceed \$15,494,787.

The proposed action would be funded by contributions from four different budget sources based on the scope of work in the change order.

The scope related to the Sounder TVM upgrade as well as the Sounder share of the CDCS upgrade totals \$1,487,000 and is funded by the Sounder Ticket Vending Machines project (#212). The lifetime budget for this project is \$7,678,000 and commitments to date total \$6,153,000, leaving \$1,525,000 to fund this project and all remaining scope. The remaining scope relates to installation of the upgraded TVM machines at stations yet to be completed and the budget is sufficient to complete this project.

A portion of the CDCS upgrade will be funded by the Link capital budget, in the construction phase of the initial segment, in proportion to the number of TVMs that will be operated on behalf of Link. The total amount related to this portion of the work is approximately \$227,000. The Link initial segment has a lifetime capital budget of \$2,070,000,000, of which \$1,174,572,000 is in the construction phase. After this action, the remaining uncommitted amount in the construction phase would be \$46,108,000.

A portion of the scope of work relates to reorienting TVMs at the Edmonds and Tukwila Sounder stations. The total amount related to this portion of the work is approximately \$27,000. This work would be funded by the Transportation Services Small Works project (#740). This project has an Adopted 2007 Lifetime Budget of \$2,630,000, of which \$15,000 has been spent to date. After this action, the remaining uncommitted amount would be \$2,588,000.

The Ticket Office Machine upgrade is to be funded by the Fare Integration Project (#405). The total amount related to this portion of the work is approximately \$90,000. This project has a 2007 contingency amount of \$121,000. After this action, the remaining uncommitted contingency for 2007 will be \$31,000.

BUDGET TABLE

The impact of the proposed action on the budgets is illustrated below:

Action Item: Scheidt and Bachmann USA, Inc. (Upgrade Sounder Ticket Vending Machines (TVMs), Central Data Collection System (CDCS) and Ticket Operating Machine (TOMs))

(Year of Expenditure \$000)

	Adopted 2007 Budget (A)	Committed To Date (B)	This Action (C)	Total Committed & Action (D)	Uncommitted (Shortfall) (E)
Sounder TVMs (212)					
1 Agency Administration	171	171		171	-
2 Preliminary Engineering	150	150		150	-
5 Construction	7,357	5,832	1,487	7,319	38
9 Total Current Budget	7,678	6,153	1,487	7,640	38
Construction Phase Detail					
10 Fare Collection/TVM Upgrade	1,550	-	1,487	1,549	1
11 TVM Acquisition	5,687	5,687	-	5,687	-
12 TVM Installation	120	100	-	100	20
13 Total Phase	7,357	5,787	1,487	7,336	21
TSD Small Works (740)					
14 Construction	2,630	15	27	42	2,588
15 Total Current Budget	2,630	15	27	42	2,588
Fare Integration Project					
16 Contingency	121	-	90	90	31
17 Total Current Budget	121	-	90	90	31
Link Initial Segment (300)					
18 Agency Administration	214,780	140,711		140,711	74,069
19 Preliminary Engineering	33,357	33,310		33,310	46
20 Final Design	147,167	146,498		146,498	669
21 Right of Way	217,516	203,200		203,200	14,316
22 Construction	1,174,572	1,128,238	227	1,128,464	46,108
23 Construction Services	90,037	92,403		92,403	(2,366)
24 Third Party Agreements	60,264	62,543		62,543	(2,279)
25 Vehicles	132,307	131,799		131,799	508
26 Total Current Budget	2,070,000	1,938,702	227	1,938,929	131,071
Construction Phase Detail					
27 Fare Collection C809	5,229	4,525	227	4,752	477
28 Other Construction	1,169,343	1,123,713	-	1,123,713	45,631
29 Total Phase	1,174,572	1,128,238	227	1,128,464	46,108
Contract Amount					
	Board Approvals to Date (F)	Current Approved Contract Value (G)	Proposed Action (H)	Proposed Total for Board Approval (I)	Proposed Contract Value (J)
30 Contract Amount - Sounder	8,000	7,909	1,416	9,416	9,325
31 Contract Amount - TSD Small Works	-	-	25	25	25
32 Contract Amount - Fare Integration	-	-	86	86	86
33 Contract Amount - Initial Segment	4,232	4,111	216	4,448	4,327
34 Contract Amount - Airport Link	318	310	-	318	310
35 Contract Amount TOTAL	12,550	12,330	1,742	14,293	14,073
36 Contingency - Sounder	800	891	71	871	962
37 Contingency - TSD Small Works	-	-	1	1	1
38 Contingency - Fare Integration	-	-	4	4	4
39 Contingency - Initial Segment	293	414	11	304	425
40 Contingency - Airport Link	22	30	-	22	30
41 Contingency TOTAL	1,115	1,335	87	1,202	1,422
42 TOTAL Contract	13,665	13,665	1,830	15,495	15,495
43 Percent Contingency	10%	11%	5%	9%	10%

(B) COMMITTED TO DATE amounts are from Agency WBS Report as of August 2007 + approved and pending board actions not recorded as of 8/31/07, or submitted after that date.

SMALL BUSINESS PARTICIPATION

Prime Consultant/Contractor

On the original Phase I portion of this contract, Scheidt & Bachman involved M/W/DBE and other small businesses on 5.7% of the contract, amounting to \$256,227. The subcontracted tasks included installation of the TVM's, freight forwarding services, sheet metal manufacturing, and supply of the electronic components and sub assemblies.

For Phase II, Scheidt & Bachman has committed to utilize M/W/DBE and other small businesses for 5.22% amounting to \$237,511 of this portion of the contract. The firms will perform the tasks of installation of the TVM's, freight forwarding services, and sheet metal manufacturing. To date their participation has been 3.69% amounting to \$167,725.35.

For the Sounder TVM Upgrade, Scheidt & Bachman has committed to utilize M/W/DBE and other small businesses for 6.34% amounting to \$82,468 of this portion of the contract. The firms will perform the tasks of installation and relocation of the TVM's, freight forwarding services, and sheet metal manufacturing.

Utilization Breakdown Table

Subconsultant	Business Type	% of Work	Dollar Value
S H J Electric Co.	WBE	2.36%	\$30,650
Davis Freight Management, Inc.	WBE	3.04%	\$39,568
MJM Manufacturing	Minority-Owned Small Business	0.94%	\$12,250
Total		6.34%	\$82,468

EEO Commitment

Scheidt & Bachmann USA, Inc. employs 36.49% people of color and 11.49% women.

Apprentice Utilization Commitment

Not applicable to this action.

PROJECT DESCRIPTION and BACKGROUND for PROPOSED ACTION

In 1998, Scheidt & Bachmann USA, Inc. was awarded a contract to provide the fare vending and validation equipment for both Sounder commuter rail and Link light rail. The Fare Vending and Validation Equipment contract RTA/CR 28-98 provided for a separate Notice to Proceed to procure fare collection equipment for Link light rail stations based on anticipated Link light rail revenue service dates.

Significant contract cost savings were realized by utilizing the existing contract to procure the Link light rail TVMs from Scheidt & Bachmann USA, Inc. Overall operating costs will be reduced because Link and Sounder will share a common TVM, spare parts inventory, special tools and diagnostic test equipment suite. Procurement and design review costs were reduced because of the product availability and reduced engineering costs. Scheidt & Bachmann USA, Inc. has also agreed to waive the contract's economic price adjustment clause.

The Sounder TVM upgrade will modernize the TVM operating system with the capability to support smart card technology, essentially making them identical to those being procured for Link light rail. Issues and/or problems will be easier to address and solve because both Link Sounder will share a common technical support team. Customers will benefit from a standardized customer interface/appearance.

The Sounder CDCS upgrade will improve reporting capabilities by allowing Link and Sounder to share a common data collection system. Operating capabilities will improve because common technical and financial reports can be generated without purchasing additional equipment and technology to integrate the data.

The TOM upgrade will allow Sounder and Link paper tickets to be printed within the office environment (all TVMs are located in stations). The operating system and software will be upgraded to insure compatibility with the new CDCS.

Prior Board/Committee Actions

Motion/ Resolution Number & Date	Summary of Action
M2006-26 3/23/06	Authorized the chief executive officer to execute a contract amendment with Scheidt and Bachmann USA, Inc. to implement Phase II of the fare vending and validation equipment contract to deliver, install and test fare collection equipment for the Central Link Light Rail Initial Segment and Airport Link in the amount of \$4,550,211, with a contingency of \$315,000, for a new total authorized contract amount not to exceed \$13,665,211.
M98-92 12/17/98	Authorized the Executive Director to award a contract between Sound Transit and Scheidt & Bachmann U.S.A. for the automatic fare vending equipment for the Sounder service in an amount not to exceed \$8,800,000, with options to provide additional equipment for LLR service. The contract price includes a 10% contingency.

CONSEQUENCES of DELAY

A delay beyond November 2007 in executing the contract amendment could impact Sounder’s ability to keep the schedule in accommodating the implementation of the Smart Card program.

PUBLIC INVOLVEMENT

Not applicable to this action.

LEGAL REVIEW

JW 10/26/07

SOUND TRANSIT

MOTION NO. M2007-115

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to execute a contract amendment with Scheidt and Bachmann USA, Inc. to upgrade Sounder ticket vending machines, the Central Data Collection System, and ticket office machines in the amount of \$1,742,453, with a 5% contingency of \$87,123 totaling \$1,829,576, for a new total authorized contract amount not to exceed \$15,494,787.

Background:

In 1998, Scheidt & Bachmann USA, Inc. was awarded a contract to provide the fare vending and validation equipment for both Sounder commuter rail and Link light rail. The Fare Vending and Validation Equipment contract RTA/CR 28-98 provided for a separate Notice to Proceed to procure fare collection equipment for Link light rail stations based on anticipated Link light rail revenue service dates.

Significant contract cost savings were realized by utilizing the existing contract to procure the Link light rail TVMs from Scheidt & Bachmann USA, Inc. Overall operating costs will be reduced because Link and Sounder will share a common TVM, spare parts inventory, special tools and diagnostic test equipment suite. Procurement and design review costs were reduced because of the product availability and reduced engineering costs. Scheidt & Bachmann USA, Inc. has also agreed to waive the contract's economic price adjustment clause.

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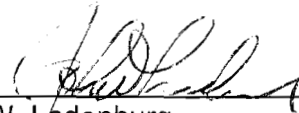
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The TOM upgrade will allow Sounder and Link paper tickets to be printed within the office environment (all TVMs are located in stations). The operating system and software will be upgraded to insure compatibility with the new CDCS.

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 amendment with Scheidt and Bachmann USA, Inc. to upgrade Sounder ticket vending machines, the Central Data Collection System, and ticket office machines in the amount of \$1,742,453, with a 5% contingency of \$87,123 totaling \$1,829,576, for a new total authorized contract amount not to exceed \$15,494,787.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on November 8, 2007.



John W. Ladenburg
Board Chair

ATTEST:



Marcia Walker
Board Administrator