SOUND TRANSIT STAFF REPORT

MOTION NO. M2006-26

Link Light Rail Fare Collection Equipment

Meeting:	Date:	Type of Action:	Staff Contact:	Phone:
Finance Committee	3/16/06	Discussion/Possible Action to Recommend	Ahmad Fazel, Link Director Steve Procter, Link	(206) 398-5387
Board	3/23/06	Board Approval Discussion/Possible	Systems Engineering Manager	(206) 370-5509
		Action	Don Fowler, Senior Systems Engineer	(206) 398-5125

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

PROJECT NAME

Central Link Light Rail Initial Segment and Airport Link

PROPOSED ACTION

Authorizes 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.

KEY FEATURES of PROPOSED ACTION

- This proposed amendment would authorize the contractor to deliver, install, test and place
 into service Ticket Vending Machines (TVMs) in Central Link Light Rail Initial Segment and
 Airport Link light rail stations for the purpose of selling tickets and Smart Cards to Sound
 Transit customers. Additionally, the contractor would deliver spare parts, special tools,
 diagnostic test equipment training and service manuals to support the maintenance and
 repair of the TVMs.
- The TVMs would be ADA compliant and have the ability to accept credit and debit cards, to issue paper tickets, receipts, monthly passes, Smart Cards and added products to Smart Cards.
- Scheidt & Bachmann USA, Inc. initially provided the fare collection equipment for Sounder Commuter Rail under this contract. Significant contract cost savings can be realized by utilizing the "Phase II" Notice to Proceed (NTP) provisions in the contract to procure TVMs for Link light rail stations.

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 \$4,865,211 to implement "Phase II" of the contract to deliver, install and test fare collection equipment for the Initial Segment and Airport Link LLR stations. The amendment would authorize the expenditure of \$4,525,060 (\$4,232,080 contract amount plus a 7% contingency of \$292,980) for the Initial Segment plus \$340,151 (\$318,131 contract amount plus a 7% contingency of \$22,020) for Airport Link, for a new total authorized expenditure amount not to exceed \$13,665,211.

The total adopted capital budget for the Initial Segment is \$2.07 billion, which includes \$6,729,000 for Fare Collection (C809) within the construction phase. Approval of this action would result in a remaining balance of \$2,203,940 for this budget line item.

The total adopted capital budget for the Airport Link is \$243.6 million. Within this amount, \$36.68 million has been set aside for negotiated procurements within the construction phase for fare collection and other system wide procurement contracts. Should the proposed action be approved, a balance of \$36.34 million would remain for these procurements.

The proposed action is consistent with the current board-adopted budget, and is affordable given the agency's current long-term financial plan and sub area financial capacity. The action will have no new revenue impact on Sound Transit.

BUDGET TABLE

Action Item: Scheidt and Bachmann USA, Inc. (Deliver, install and test fare collection equipment for the Link Initial Segment and Airport Link stations, and provide ticket vending for the Link Light Rail system)

Initial Segment	(Year of Expenditure \$000)	_				
Agency Administration 216,780 114,238 107		Adopted 2006			Total Committed &	Uncommited
Agency Administration 216,780 114,238	Initial Segment	Budget	Committed To Date	This Action	Action	(Shortfall)
Preliminary Engineering		(A)	(B)	(C)	(D)	(E)
Simple Design 145,523 140,754 140,754 140,754	1 Agency Administration	216,780	114,238		114,238	102,542
A Right of Way 223,516 190,459 190,459 3.3	2 Preliminary Engineering	34,000	33,357		33,357	643
South	3 Final Design	145,523	140,754		140,754	4,769
Construction Services 88.875 84.093 84.093 7 Third Party Agreements 59.560 56.769 56.769 8 Vehicles 133.307 131.799 131.799 131.799 26 Vehicles 133.307 131.799 131.799 26 Vehicles 133.307 131.799 26 Vehicles 130.000 1,796.473 4,525 1,800.998 26 Vehicles 10 Vehicles 1	4 Right of Way	223,516	190,459		190,459	33,057
Construction Services 86,875 84,093 84,093 84,093 7 Third Party Agreements 59,560 56,769 56,769 8 Vehicles 133,307 131,799 131,799 131,799 26 131,799 27 101,700 1,796,473 4,525 1,800,988 26 26 26 26 26 26 26	5 Construction	1,170,439	1,045,004	4,525	1,049,529	120,910
Third Party Agreements 59,560 56,769 56,769 56,769 50				<u> </u>		2,782
	7 Third Party Agreements					2,791
Total Current Budget 2,070,000 1,796,473 4,525 1,800,998 268						1,508
10 Fare Collection C809	9 Total Current Budget			4,525		269,002
10 Fare Collection C809	Construction Phase Datail					
1 Other Systemwide		6 729	-	4 525	4 525	2,204
12				.,020		11,111
Airport Link		, -				107.594
Adopted 2006 Budget Committed To Date This Action (Shortfall (Shortfall (F) (G) (H) (I) (J) (J) (J) 14				4 525		120,910
Airport Link 2006 Budget (F) Committed To Date (G) This Action (H) & Action (U) (Shortfall (U) 14 Agency Administration 5,000 1,997 1,997 1,997 1 15 Preliminary Engineering 6,095 6,268 6,268 6,268 16 Final Design 15,405 9,602 9,602 9,602 17 Right of Way 23,000 3,005 3,005 11 18 Construction 158,000 459 340 799 15 19 Construction Services 10,500 2 2 11 1,367 1,367 1,367 1 1,367 1 1,367 1 1,367 1 1,4587 1 2 1 1,4587 1 2 2 1 1 1,367 1 3 1 3 3 3 3,7,627 2 1 1 4 4 3 3 3 3 3 3 3 3 3 3 3 3 3	10 Total Tidoo	1,170,100	1,040,004	1,020	1,010,020	120,010
Airport Link 2006 Budget (F) Committed To Date (G) This Action (H) & Action (U) (Shortfall (U) 14 Agency Administration 5,000 1,997 1,997 1,997 1 15 Preliminary Engineering 6,095 6,268 6,268 6,268 16 Final Design 15,405 9,602 9,602 9,602 17 Right of Way 23,000 3,005 3,005 11 18 Construction 158,000 459 340 799 15 19 Construction Services 10,500 2 2 11 1,367 1,367 1,367 1 1,367 1 1,367 1 1,367 1 1,4587 1 2 1 1,4587 1 2 2 1 1 1,367 1 3 1 3 3 3 3,7,627 2 1 1 4 4 3 3 3 3 3 3 3 3 3 3 3 3 3		Adonted			Total Committed	Uncommited
Contract Amount - Initial Segment South Age Sout	Airnort Link		Committed To Date	This Action		
14 Agency Administration 5,000 1,997	All port Link	•				,
15 Preliminary Engineering 6,095 6,268 6,268 6,268 16 Final Design 15,405 9,602 9,602 9,602 17 Right of Way 23,000 3,005 33,005 11 18 Construction 158,000 459 340 799 15 19 Construction Services 10,500 2 2 2 11 20 Third Party Agreements 2,600 1,367 1,367 21 Vehicles 17,000 14,587 14,587 2 22 Contingency 6,000 - - - 0 23 Total Current Budget 243,600 37,287 340 37,627 20 24 Negotiated Procurements 36,680 - 340 340 37,627 20 25 Contract Amount Airport Link 8,000 7,909 - 8,000 31 Contract Amount - Airport Link 8,000 7,909 - 8,000 32 Contragency - Initial Segment 293 293 33 Contragency - Initial Segment 293 293 34 Contragency - Initial Segment 293 293 35 Contragency - Initial Segment 293 293 36 Contingency - Initial Segment 293 293 37 Contragency - Airport Link 8,000 891 - 8,000 38 Contingency - Total 8,000 891 - 8,000 38 Contingency - Total 8,000 891 - 8,000 39 Contingency - Total 8,000 891 - 8,000 30 Contingency - Total 8,000 891 - 8,000 30 Contingency - Total 8,000 891 - 8,000 30 Contingency - Total 8,000 8,91 - 8,000 31 Contract Amount - NON Link 8,000 8,91 - 8,000 32 Contingency - Total 8,000 8,91 - 8,000 34 Contingency - Total 8,000 8,91 - 8,000 35 Contingency - Total 8,000 8,91 - 8,000 36 Contingency - Total 8,000 8,91 - 8,000 37 Contract Amount - NON Link 8,000 8,91 - 8,000 38 Contingency - Total 8,000 8,91 - 8,000 39 Contract Amount - NON Link 8,000 8,91 - 8,000 30 Contract Amount - NON Link 8,000 8,91	44 4 41 11 11	\ /	(-)	(H)	()	
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18						5,802
19 Construction Services 10,500 2 2 10						19,995
20 Third Party Agreements 2,600 1,367 1,367 1,367 21 Vehicles 17,000 14,587 14,587 22 Contingency 6,000 -				340		157,201
21 Vehicles						10,498
Construction Phase Detail	20 Third Party Agreements					1,233
Construction Phase Detail	21 Vehicles		14,587		14,587	2,413
Construction Phase Detail	22 Contingency					6,000
Construction Phase Detail	23 Total Current Budget	243,600	37,287	340	37,627	205,973
24 Negotiated Procurements 36,680 - 340 34						
25 Other Construction 121,320 459 340 799 150		22.222		2.12	2.42	00.040
Total Phase 158,000 459 340 799 157			-	340		36,340
Board Approvals to Date Contract Value Proposed Action Proposed Total for Board Approval Value (K) (L) (M) (N) (N) (O) (O)						120,861
Contract Amount Date (K) Contract Value (L) Proposed Action (M) Board Approval (N) Value (O) → 31 Contract Amount - Initial Segment 4,232 4,232 4 → 32 Contract Amount - Airport Link 318 318 318 33 Contract Amount - NON Link 8,000 7,909 - 8,000 34 Contract Amount - Total 8,000 7,909 4,550 12,550 12 35 Contingency - Initial Segment 293 293 293 36 Contingency - Airport Link 22 22 22 37 Contract Amount - NON Link 800 891 - 800 38 Contingency - Total 800 891 - 800	1 Total Phase	158,000	459	340	799	157,201
Contract Amount Date (K) Contract Value (L) Proposed Action (M) Board Approval (N) Value (O) → 31 Contract Amount - Initial Segment 4,232 4,232 4 → 32 Contract Amount - Airport Link 318 318 318 33 Contract Amount - NON Link 8,000 7,909 - 8,000 34 Contract Amount - Total 8,000 7,909 4,550 12,550 12 35 Contingency - Initial Segment 293 293 293 36 Contingency - Airport Link 22 22 22 37 Contract Amount - NON Link 800 891 - 800 38 Contingency - Total 800 891 - 800						
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33 Contract Amount - NON Link 8,000 7,909 - 8,000 34 Contract Amount - Total 8,000 7,909 4,550 12,550 12 35 Contingency - Initial Segment 293 293 36 Contingency - Airport Link 22 22 37 Contract Amount - NON Link 800 891 - 800 38 Contingency - Total 800 891 315 1,115						4,232
34 Contract Amount - Total 8,000 7,909 4,550 12,550 11 35 Contingency - Initial Segment 293 293 36 Contingency - Airport Link 22 22 37 Contract Amount - NON Link 800 891 - 800 38 Contingency - Total 800 891 315 1,115						318
35 Contingency - Initial Segment 293 293 36 Contingency - Airport Link 22 22 37 Contract Amount - NON Link 800 891 - 800 38 Contingency - Total 800 891 315 1,115	33 Contract Amount - NON Link	8,000	7,909	-	8,000	7,909
36 Contingency - Airport Link 22 22 37 Contract Amount - NON Link 800 891 - 800 38 Contingency - Total 800 891 315 1,115	34 Contract Amount - Total	8,000	7,909	4,550	12,550	12,459
37 Contract Amount - NON Link 800 891 - 800 38 Contingency - Total 800 891 315 1,115	35 Contingency - Initial Segment			293	293	293
38 Contingency - Total 800 891 315 1,115	36 Contingency - Airport Link			22	22	22
38 Contingency - Total 800 891 315 1,115	37 Contract Amount - NON Link	800	891	-	800	891
		800	891	315	1,115	1,206
	39 Total	8,800	8,800	4,865	13,665	13,665
40 Percent Contingency 10% 11% 7% 9%						10%

M/W/DBE - 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 assembly.

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.

<u>Utilization Breakdown Table</u>

Subconsultant	Business Type	% of Work	Dollar Value
S H J Electric Co.	WBE	1.37%	\$62,408
Davis Freight Management	Woman-Owned	0.41%	\$18,456
	Small Business		
MJM Manufacturing	Minority-Owned	3.44%	\$156,647
	Small Business		
Total		5.22%	\$237,511

EEO Commitment

Scheidt & Bachmann USA, Inc. employs 37% people of color and 14% women.

Apprentice Utilization Commitment

Not applicable to this action.

PROJECT DESCRIPTION and BACKGROUND for PROPOSED ACTION

In 1998, Scheidt & Bachmann USA, Inc. was the successful bidder 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 20-98 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 can be realized by utilizing this existing contract to procure the Link light rail TVMs from Scheidt & Bachmann USA, Inc. Overall operating costs would be reduced because Link and Sounder would share a common TVM, spare parts inventory, special tools and diagnostic test equipment suite. The Link light rail procurement and design review costs would be reduced because of the product availability and reduced engineering costs. Scheidt & Bachmann USA. Inc. has agreed to waive the contract's Economic Price Adjustment clause.

Reporting capabilities would be greatly improved by having Link light rail and Sounder commuter rail share one common Central Data Collection System (CDCS). Link light rail would benefit from the reduced CDCS upgrade costs of the existing Sounder commuter rail CDCS. A separate CDCS system of equipment for Link light rail would no longer be required. Operating capabilities would be greatly improved because common technical and financial reports could be generated without purchasing additional equipment and technology to integrate the data. Customers would benefit from standardized customer interface and appearance.

The Link light rail equipment can be installed and tested in approximately nine to twelve months from Notice to Proceed (NTP). This process typically takes 18 to 24 months. The cost for installation, implementation, integration and testing for Link would be significantly reduced because a known, proven product would be installed.

Environmental Review under the State Environmental Policy Act (SEPA) and National Environmental Policy Act (NEPA) for the Initial Segment and Airport Link has been completed.

Ticket Vending Machine Operational Roadmap:

2006

- ❖ Relocate the Central Data Collection System (CDCS) into Sound Transit (ST) facilities and upgrade to the latest operating system with the capability to support Smart Card technology. The Back Office duties will become the responsibility of the ST Information Technology division.
- Renegotiate the current Fare Vending Maintenance contract with Scheidt & Bachmann USA, Inc. Significant savings will be realized by relocating the CDCS to ST's facilities and assuming the Back Office duties. Further savings will be realized by the closure of the S&B SeaTac maintenance facility and relocating it into ST's facility and ST providing storage space for all spare parts, special tools and diagnostic test equipment.

2006

❖ Evaluate the feasibility of transferring the TVM field and shop maintenance duties from S&B to ST or remain with an outside source. The timing of the transfer would be phased in to be fully functional when Link light rail revenue service begins. When Link light rail revenue service begins, the TVM maintenance coverage will increase significantly to support the service hours. Savings and benefits could be realized because ST personnel will be in a position to perform field maintenance, shop maintenance and certain revenue duties.

2007

❖ Upgrade Sounder TVMs to the latest operating system with the capability to support Smart Card technology. The upgraded Sounder TVMs would then be the same TVMs being procured for Link light rail. Link light rail and Sounder Commuter Rail will now share a common TVM, spare parts inventory and special tools and diagnostic test equipment suite. Issues and/or problems can be more easily addressed and solved because the Agency's Light Rail and Commuter Rail lines will share a common technical support team. By using a single product and single customer interface/appearance, customers will benefit.

Prior Board/Committee Actions on this Project and Relevant Board Policies

Motion or Resolution Number	Summary of Action	Date of Action
M98-92	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 <i>Sounder</i> 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.	12/17/98

CONSEQUENCES of DELAY

A delay beyond June 2006 in executing the contract amendment could impact the agency's ability to sell fare media at Link light rail revenue service start-up in 2009.

PUBLIC INVOLVEMENT

Not applicable to this action.

ENVIRONMENTAL COMPLIANCE

JDI 2/8/06

LEGAL REVIEW

JW 2/8/06

SOUND TRANSIT

MOTION NO. M2006-26

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 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.

Background:

In 1998, Scheidt & Bachmann USA, Inc. was the successful bidder 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 20-98 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.

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Environmental Review under the State Environmental Policy Act (SEPA) and National Environmental Policy Act (NEPA) for the Initial Segment and Airport Link has been completed.

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 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.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on March 23, 2006.

Connie Marshall
Board Vice Chair

ATTEST:

Marcia Walker Board Administrator