

**SOUND TRANSIT
STAFF REPORT**

MOTION NO. M2002-28

**Sounder Fare Collection Consultant Support
Booz-Allen & Hamilton, Inc. (RTA/CR 104-98) Contract Amendment**

Meeting:	Date:	Type of Action:	Staff Contact:	Phone:
Finance Committee	4/18/02	Discussion/Possible Action	Lee Bullock, Director David Beal, Program Manager Project Development	(206) 398-5111 (206) 398-5124

OBJECTIVE OF ACTION

- Approve a contract amendment with Booz-Allen & Hamilton, Inc. (BAH) to extend the date of the contract from August 16, 2002 to December 31, 2003 and increase their contract maximum for continuation of Sounder Commuter Rail (Sounder) Fare Collection Consultant Support.
- Assure continued on-call support to Sounder by BAH in the installation, testing, and implementation of the ticket vending machines and related systems throughout period of construction.

ACTION

- Authorizes the Executive Director to execute a contract amendment with BAH to extend the date of the contract from August 16, 2002 to December 31, 2003 for continuation of Sounder Fare Collection Consultant Support and to increase the contract amount of \$199,632 for a new total authorized contract amount not to exceed \$607,159.

KEY FEATURES

- Authorizes the Executive Director to execute a contract amendment with BAH to provide continuation of Sounder Fare Collection consultant support services in the amount of \$199,632 for a new total authorized contract amount not to exceed \$607,159.
- The contract amendment proposal has been renegotiated to lower the overall cost proposal and eliminated two tasks within the scope of work. The previous contract amendment proposal was \$624,325 (\$567,568 plus 10% contingency of \$56,757), however, Sounder staff renegotiated it down to \$199,631.56.
- BAH will provide on-call technical fare collection support through December 2003 and will not necessarily expend the entire \$199,632 cost proposal.
- The original contract was approved in February 1999 for completion of the scope of work within a 3-1/2 year timeframe (an 18-month contract plus two 1-year contract extensions), a period designed to coincide with the original Sounder Everett-to-Lakewood corridor implementation schedule. Due to construction delays on the Tacoma-to-Seattle segment and other project delays relating to the Everett-to-Seattle and Tacoma-to-Lakewood segments, staff is requesting to extend the contract beyond the original approved timeframe.

- BAH will continue to provide technical expertise and quality assurance/quality control made necessary due to the extension of Sounder station construction and service implementation beyond the timeframe anticipated when the contract was originally executed.
- For stations along the Tacoma-to-Seattle segment, this funding was made available through the August 9, 2001, Sounder Cost-to-Complete budget amendment (Resolution No. R2001-10). For other stations, this funding is consistent with and included in the 2002 Adopted Budget, such that the portion of budget attributable to the Tacoma-to-Seattle segment was included in the Cost-to-Complete.

This proposed action extends the timeframe for project completion, but does not add new scope. The extension is necessary due to the delays in Sounder station construction and the service-start-up schedule that have occurred since the original BAH contract was approved.

BAH provides Sound Transit's day-to-day project management and quality control for the manufacturing, testing, and installation of the Sounder ticket vending machines (TVMs). To date, BAH has managed the implementation of 22 TVMs on the Tacoma-to-Seattle commuter rail corridor. Through this proposed contract amendment, they will manage the implementation of 18 additional TVMs through 2003. They will also provide project management for the relocation of five TVMs from temporary to permanent locations.

Along with the general technical support and project management activities, concrete examples of the work BAH performs for Sounder are included in the following list.

- Ensuring compliance by Schiedt & Bachmann with the technical specifications of the TVMs. Sheet steel is checked for proper thickness, wiring is checked for proper material and gauge, central processing units are checked for processing speed, touch screens are checked for proper luminosity in various lighting conditions, ticket printing is checked under variations of temperature and humidity.
- S&B is not paid as the machines are manufactured or delivered, but as supporting documentation (e.g., training manuals) is produced. BAH verifies that these materials are complete and provide proper value to Sounder.
- When machines have been installed in the past (under start-up conditions) it has been the BAH team that took responsibility for guaranteeing the machines would work when Sounder's first passengers arrived. (Because Sounder's construction contractors had the platforms ready for TVM installation only a few days before start-up, S&B could/would have missed this critical milestone and still been in contract compliance.) This activity may be drawn upon again, on an on-call basis.
- The BAH team took the lead in solving communication problems between the TVM system and the clearing-houses for credit and debit cards. (These problems had persisted for a few weeks when BAH took over; they were resolved promptly under their management.)
- BAH created a solution that allowed TVMs to communicate with the clearing-houses via a single fiber-optic connection. This saves Sounder several thousand dollars each month over previous phone line bills.
- BAH reviews the Schiedt & Bachman invoices for payment approval; they are in a better position than staff to verify the technical achievements on which the progress payments are based.

~~BAH's activities do not duplicate the operations/maintenance activities provided by Scheidt & Bachmann. Instead, BAH provides the project management and oversight that Sounder would perform if it had the requisite technical expertise on staff.~~

The following is an outline of the proposed scope of work through December 31, 2003:

- Continue technical management services to support the implementation of fare collection systems at Sounder stations (including electrical, computer/software, and other systems engineering);
- Continue telecommunications service support (including troubleshooting for various ST departments); and
- Continue project management and quality control support.

SUMMARY OF BUDGET IMPACT OF THIS ACTION

Project Description: Sounder Fare Collection Consultant Support
Current Status: Contractor on hold until amendment approved
Projected Completion Date: December 31, 2003

Action Outside of Adopted Budget:	Y/N	Y	Requires Comment
This Department/LOB	N		
This Project	N		
This Phase	N		
This Task	N		
Budget amendment required	N		
Key Financial Indicators:	Y/N	Y	Requires Comment
Contingency funds required	N		
Subarea impacts	N		
Funding required from other parties other than what is already assumed in financial plan	N		

N = Action is assumed in current Board-adopted budget. Requires no budget action or adjustment to financial plan.

On February 18, 1999, the Finance Committee approved the original BAH contract with a maximum value of \$415,562.

BUDGET DISCUSSION

Table 1 - Impact of Action on Booz-Allen & Hamilton, Inc. Contract

Description	Current Contract Value Not to Exceed ¹ (A)	Proposed Action Cost for Amendment (B)	Proposed Total Contract Value - Not to Exceed (C) = (A+B)
Total	\$407,527	\$199,631.56	\$607,159
Base	\$374,654	\$199,631.56	\$574,286
Contingency	\$32,873	\$0	\$32,873
Percentage ²	8.8%	0.00%	5.7%

¹ See Motion No. M99-13 from 2/18/99 (Board authorization for \$415,562 of which \$407,527 has been committed).

² Contingency is calculated as a percentage of the base (total less contingency).

The existing budget for the Sounder projects, found on pages 80-92 of the 2002 Adopted Budget, includes the amount of \$199,632 authorized by this action. Committing these funds does not endanger any other project elements that are to be funded out of the respective projects. The following table displays the associated budget, obligations, and the corresponding impact of this action to those figures.

Table 2 – Everett-Lakewood Construction Budget, Obligations and Impact of Action

Project Name / No.	Budget for Construction Phase ¹ (A)	Obligations to Date ² (B)	This Action ³ (D)	Shortfall* or Surplus (A-B-C-D)
Everett Station #201	\$13,273,000	\$1,048,096	\$19,963	\$12,204,941
Mukilteo Sta. #205	\$5,011,000	\$250,665	\$9,982	\$4,750,353
Edmonds Sta. #207	\$3,590,000	\$340,916	\$9,982	\$3,239,102
King Street Sta. #231	\$9,000,000	\$7,980,040	\$24,954	\$995,006
Boeing A.R. Sta.³#233	\$211,133	\$198,127	\$0	\$13,006
Tukwila #235	\$7,500,000	\$2,398,400	\$14,972	\$5,086,628
Kent Station #237	\$22,855,000	\$16,868,757	\$19,963	\$5,966,280
Auburn Station #239	\$19,081,000	\$16,008,550	\$19,963	\$3,052,487
Sumner Station #241	\$7,610,000	\$6,135,862	\$9,982	\$1,464,156
Puyallup Station #243	\$8,432,000	\$7,000,889	\$14,972	\$1,416,139
Tacoma Dome #245	\$10,789,000	\$2,000,841	\$24,954	\$8,763,205
S. Tac. Sta. #251	\$6,123,000	\$498,408	\$9,982	\$5,614,610
Lakewood Sta. #253	\$6,637,000	\$747,921	\$19,963	\$5,869,116
Total All Projects	\$120,112,133	\$61,477,472	\$199,632⁴	\$58,435,029
Amount of Shortfall	<u>Potential Revenue</u>			
\$0	N/A			

¹ Adopted 2002 Budget (Resolution No. R2001-17 of 11/30/01, pages 80-92) and Cost-to-Complete Budget Amendment for the Seattle-to-Tacoma Stations (Resolution No. R2001-10 of 8/9/01)

² Obligations (expenditures plus commitments) are through 11/30/01.

³ Boeing Access Road Station has been removed per Resolution No. R2001-10; Balance of budget and construction phase commitments have been redistributed to the Tukwila, Kent, and Auburn projects, also in the South King County subarea.

⁴ The cost per machine is \$4,991.

REVENUE, SUBAREA, AND FINANCIAL PLAN IMPACTS

- Each subarea involved with this action has the required budget.
- For King Street, Tukwila and Puyallup stations this action will require a budget transfer of unexpended funds from year 2001 budget. This transfer is within the authority of the Executive Director, per Resolution No. 98-4, and is in the agency's budget policy Section 4.5e.
- This action has no impact on Sounder's Cost-to-Complete as the proposed 2002 budget anticipated this work scope.
- Designated number of ticket vending machines for the following Sounder segments:

- 26 units = Tacoma-to-Seattle corridor
 - 8 units = Everett-to-Seattle corridor
 - 6 units = Tacoma-to-Lakewood corridor
 - 2 units = Option to purchase spare units from the Link light rail department
- ☐ (originally ordered for Tacoma Link)

Of the 26 machines within Tacoma-to-Seattle, 15 are currently installed in their final (permanent) location.

M/W/DBE AND/OR SMALL BUSINESS PARTICIPATION

The M/W/DBE participation for the proposed contract amendment is 18%. The sub-consultant to this contract amendment is Infrastructure Consulting Corporation (ICON).

Their responsibility is to

provide on-site technical support to BAH and Sound Transit. The continuation of their sub-contract will have ICON providing on-site assistance during TVM installation, testing, and acceptance. In addition, ICON will provide on-call technical support for short-term, short turn around tasking from Sound Transit. ICON is a local consultant that has the capability of providing staff for the tasks and helps to minimize associated travel costs incurred to Sound Transit.

HISTORY OF PROJECT

The BAH contract was originally procured and authorized in February 1999. The original assumed schedule to complete the project coincided with the Everett-to-Lakewood commuter rail implementation schedule. The schedule has changed because of construction delays in the Tacoma-to-Seattle segment and project delays relating to start-up of the Everett-to-Seattle and Tacoma-to-Lakewood segments. Given those delays, Sounder requires the assistance of this consultant over a longer period of time than originally anticipated.

Sound Transit initiated Tacoma-to-Seattle commuter rail service on September 18, 2000. Due to construction delays, station openings were phased in or were partially open for service. BAH was requested to oversee the installation of several ticket vending machines at temporary locations near the platforms while the rest of the stations were being constructed (e.g. Sumner and Puyallup Stations). In addition, seven TVMs were installed at the temporary Tacoma Dome and Tukwila Stations. Those TVMs will need to be relocated to their permanent locations when construction of the stations is complete. These construction delays and relocation of ticket vending machines from temporary to permanent locations impact the project budget.

Prior Board or Committee Actions and Relevant Board Policies

Motion or Resolution Number	Summary of Action	Date of Action
Resolution No. R2001-10	Board approval of the Sounder Cost-to-Complete for Tacoma-to-Seattle Corridor	8/9/01
Motion No. M99-13	Finance Committee awarded Consulting Services for Fare Collection Equipment Engineering & Procurement Support contract \$415,562	2/18/99

CONSEQUENCES OF DELAY

The BAH contract amendment was first presented to the Finance Committee on September 9, 2001, for discussion and approval. The Committee deferred action on the contract amendment requesting further clarification of Sounder's capital investment for fare collection.

At that point, BAH stopped work and since that time BAH and staff have renegotiated the contract amendment proposal. The previous contract amendment proposal was \$624,325 (\$567,568 plus 10% contingency \$56,757), however, Sounder staff renegotiated it down to \$199,632.

Sound Transit requests the Finance Committee approve the revised contract amendment for BAH to resume their work to complete the installation of the TVMs at the stations in the Tacoma-to-Seattle corridor; to make changes to the TVMs in preparation for the Sounder 2002 Mariner Homerun Train Service; and to continue their support to Sounder through project implementation.

~~Sounder requests the Finance Committee approve the revised contract amendment for Booz-Allen & Hamilton to resume their work to complete the installation of the TVMs at the stations in the Tacoma-to-Seattle corridor; to make changes to the ticket vending machines in preparation for the 2002 Mariner Homerun Train Service; and to continue their support to Sounder through project implementation.~~

LEGAL REVIEW

JW 04/09/02

SOUND TRANSIT

MOTION NO. M2002-28

A motion of the Finance Committee of the Central Puget Sound Regional Transit Authority authorizing the Executive Director to execute a contract amendment with Booz-Allen & Hamilton, Inc. to extend the date of the contract from August 16, 2002 to December 31, 2003 for continuation of Sounder Fare Collection consultant support and authorizing an increased contract amount of \$199,632 for a new total authorized contract amount not to exceed \$607,159.

Background:

Work under this Booz-Allen & Hamilton, Inc. (BAH) fare collection support contract is to provide for support Sounder Commuter Rail in the installation, testing and implementation of the ticket vending machines (TVMs) and related systems throughout the period of station construction. To date, BAH has managed the implementation of 22 TVMs on the Tacoma-to-Seattle commuter rail corridor. Through this proposed contract amendment, BAH will manage the implementation of 18 additional TVMs along the Everett-to-Lakewood corridor through 2003. BAH will also provide project management for the relocation of several TVMs from temporary to permanent locations. Work under this contract amendment includes:

- Continued technical management services to support the implementation of fare collection systems at Sounder stations (including electrical, computer/software, and other systems engineering);
- Continued telecommunications service support (including troubleshooting for various Sound Transit departments); and
- Continued project management and quality control support.

Motion:

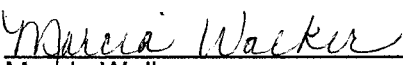
It is hereby moved by the Finance Committee of the Central Puget Sound Regional Transit Authority that the Executive Director is authorized to execute an amendment to the contract with Booz-Allen & Hamilton, Inc. to extend the date of the contract from August 16, 2002 to December 31, 2003 for continuation of Sounder Fare Collection Consultant Support and to increase the contract amount by \$199,632 for a new total authorized amount not to exceed \$607,159.

APPROVED by the Finance Committee of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on April 18, 2002.



Kevin Phelps
Finance Committee Chair

ATTEST:



Marcia Walker
Board Administrator