

**SOUND TRANSIT
STAFF REPORT**

MOTION NO. M2004-28

Bus Fleet Procurement Plan

Meeting:	Date:	Type of Action:	Staff Contact:	Phone:
Executive Committee	4/1/04	Discussion/Possible Action	Gloria Overgaard, Interim Director- Regional Express Mike Bergman, Program Manager, Regional Express	(206) 689-4909 (206) 398-5358

OBJECTIVE OF ACTION

Executive Committee approval of the bus fleet procurement plan.

ACTION

Authorize the Chief Executive Officer to begin the procurement process for new buses needed to implement the 2003 ST Express Service Implementation Plan.

KEY FEATURES

- Approves staff-recommended bus fleet procurement plan calling for the purchase of 13 long-haul transit buses, 16 low-floor articulated buses, and 2 standard-floor 40-foot buses for delivery in late 2005.
- Introduces a new type of high-capacity transit bus to the region – the single-door, 45-foot, long-haul transit bus.
- Assumes that \$4.3 million is transferred from the Small Cities Transit Access project to the East King County subarea's bus project (Resolution No. R2004-03).
- The articulated buses and standard 40-foot buses would be acquired by "piggybacking" on existing purchase contracts between manufacturers and Sound Transit's transit partners; procurement of the long-haul transit buses would be through an RFP issued by Sound Transit.
- Bus purchase contracts will be brought to the Finance Committee and Board for review and possible action.

BACKGROUND AND RECOMMENDATIONS

The 2003 Service Implementation Plan (SIP), approved by the Board in December 2003, called for ST Express bus service improvements in 2005-2006 that require an expanded bus fleet. The SIP allocated approximately \$11.4 million for fleet expansion, but did not specify the type, size, and configuration of the buses needed and expressly left these issues to be resolved following consultation with Sound Transit's transit partners and the Board. New buses must be

ordered soon in order to meet the SIP timeline of service improvements beginning in September 2005. Staff has developed the following two fleet alternatives for consideration by the Executive Committee:

Fleet Alternative A (Recommended)

- Thirteen 45-foot Long-Haul transit buses
- Sixteen 60-foot Low-Floor articulated buses
- Two 40-foot standard transit buses

Estimated Cost: \$14,581,000

East King County Subarea

Since the 2003 SIP was adopted, staff has worked closely with the transit partners and local jurisdictions to discuss fleet alternatives and have re-checked planning assumptions on ridership growth and required fleet capacity. In the East King County subarea, Sound Transit has experienced a steady increase in passengers, with standees on many peak period buses. Some trips require “double heading” (two 40-foot buses operating together) in order to accommodate peak period demand. Staff believes that existing and future ridership in the East King County subarea could be more efficiently accommodated with larger buses. Fleet Alternative A assumes that \$4,252,000 from East King County’s Small Cities Transit Access project is transferred to the bus capital program, allowing twelve 60-foot articulated buses to be purchased instead of twelve 40-foot buses. In addition, four 60-foot buses would be purchased to provide maintenance spares and a small reserve fleet for future ridership growth in the East King County subarea. The proposed transfer of the Small Cities Transit Access funds is discussed in Resolution No. R2004-03.

Staff evaluated several high-capacity bus configurations and concluded that low-floor articulated buses were most appropriate for East King County subarea routes. These routes are relatively short and have a number of stops where there is high passenger turnover, conditions under which the benefits of low-floor, multi-door operation can be fully realized. Operating and maintenance costs for the latest low-floor articulated bus models are comparable to standard articulated buses. Because of ride quality complaints Sound Transit received after delivery of the first low-floor bus order, staff conducted a focus group road test comparing the ride quality of a Sound Transit low-floor articulated bus with a King County Metro standard articulated bus. The results of the test showed that there was no significant difference in the ride quality between the two bus types and that both had acceptable ride quality on most pavement surfaces. The articulated buses would be acquired under a “piggyback” agreement with King County Metro, which holds purchase options for similar buses.

Pierce County Subarea

In the Pierce County subarea, there is a need to provide a high-capacity, comfortable bus for the long distance services between DuPont, Lakewood, Tacoma, and Seattle. Peak period passengers using these services are on the bus for 45 to 75 minutes. Following considerable study and research, staff proposes to purchase 13 long-haul transit buses for these services as a pilot program. Long-haul transit buses are based on intercity highway coaches and are 45-foot long – 15 feet shorter than an articulated bus. The seating capacity of 58 is comparable to a low-floor articulated bus and the buses feature a smooth, quiet ride as a result of a long

wheelbase and extensive sound insulation. Initial purchase costs and O&M costs are expected to be lower for long-haul transit buses compared with articulated buses.

The key difference between current transit buses and the long-haul transit bus is a single front door for both entrance and exit, resulting in longer dwell time at stops. This is a concern in downtown Seattle where Sound Transit's Pierce County service shares bus stops with numerous other routes. Single-door operation might delay both Sound Transit service and other services using the same downtown stops. Following considerable research and discussion, there was consensus among staff from Sound Transit, King County Metro, and the City of Seattle that the limited volume of high-capacity buses proposed would not affect downtown transit operations, but larger volumes would have an impact if existing downtown stops and service patterns were left unchanged. As a result, staff proposes the long-haul bus purchase as a pilot project, with a follow-up impact study that will involve Community Transit, King County Metro, Pierce Transit, and the City of Seattle's Transportation Department. The study will help to evaluate whether Sound Transit should acquire additional long-haul transit buses as part of the long-term fleet mix.

The long-haul transit buses would be acquired through a Request for Proposals and Sound Transit's regular procurement process.

South King County Subarea

Nine existing Sound Transit articulated buses currently assigned to the Pierce County subarea would be moved to the South King County subarea in order to initiate express service at the Federal Way Transit Center. To account for this move and maintain subarea equity, \$1.9 million would be transferred from the South King County subarea fleet budget to the Pierce County fleet budget. The South King County fleet budget was approved as part of the 2003 SIP.

Snohomish County Subarea

Staff proposes to acquire two 40-foot, 42-seat standard transit buses for the Snohomish County subarea, similar to Sound Transit buses currently in service. These buses would be acquired under a "piggyback" agreement with Community Transit, which currently has purchase options for 40-foot standard buses.

Fleet Alternative B

- Fourteen 40-foot standard transit buses
- Thirteen Long-Haul transit buses

Estimated Cost: \$10,421,000

Alternative B is identical to Alternative A except that no Small Cities funding is assumed in the East King County subarea; thus, the plan includes no new articulated buses and only twelve 40-foot standard buses would be acquired for East King County service improvements. Because of steady growth in peak period ridership over the past two years, this does not provide enough buses to implement the SIP service improvements and maintain an adequate spare ratio for maintenance. Unless a decision was made to forgo some of the planned service improvements, the likely result would be cancelled trips or situations where King County Metro buses are routinely substituted for Sound Transit buses. If upward ridership trends continue, there would

be little or no capacity for growth during peak periods. For these reasons, staff does not recommend Alternative B.

BUDGET DISCUSSION

The 2004 Adopted Budget included a lifetime budget of \$101,489,000 for bus systemwide fleet purchases (project #290), including \$98,084,000 for vehicle purchases and \$3,405,000 for agency administration costs. In addition, under the proposal outlined in Resolution No. R2004-03, \$4,252,000 would be transferred from the Small Cities Transit Access project (#378) to the fleet purchase project, for a total of \$105,741,000. Spending to date on this project has been \$59,116,118, including \$58,135,811 for vehicles. The estimated cost for the new buses proposed in this motion ranges from \$14,581,000 (Alternative A) to \$10,421,000 (Alternative B).

The proposed alternatives are consistent with the current Board-adopted budget and are affordable within Sound Transit’s current long-term financial plan and subarea financial capacity.

The following table summarizes the alternatives in conjunction with concurrent Board action regarding the Small Cities project:

\$000s	Alternative A, \$4.2 million Budget Transfer from Small Cities Project #378	Alternative B, No Budget Transfer
2004 Approved Budget	\$101,489	\$101,489
Budget Transfer from Small Cities Project #378	\$4,252	\$0
Revised Lifetime Budget	\$105,741	\$101,489
Spent to Date	\$59,116	\$59,116
Cost of Alternative	\$14,581	\$10,421
Remaining Lifetime Budget	\$32,044	\$31,952

M/W/DBE – SMALL BUSINESS PARTICIPATION

Not applicable for this action.

HISTORY OF PROJECT

Prior Board or Committee Actions and Relevant Board Policies

Motion or Resolution Number	Summary of Action	Date of Action
R2003-18	Board approval of the 2003 Regional Express Bus SIP.	12/11/03

CONSEQUENCES OF DELAY

The 2003 SIP targeted the September 2005 service change for several service improvements requiring additional buses. Construction and delivery of buses requires at least one year. If the procurement process is delayed, these service improvements would not occur until February 2006, the next available service change date.

PUBLIC INVOLVEMENT

During the outreach process for the 2003 SIP, staff noted that implementation of many of the planned service improvements depended on the delivery of new buses. During the summer of 2003, Sound Transit arranged to borrow a long-haul transit bus demonstrator from Motor Coach Industries and operated it on the Pierce County-Seattle services. Customers were asked to fill out a short questionnaire describing their reaction to this new type of bus. In January 2004, a focus group of 20 people was organized to compare the ride quality of a low-floor articulated bus with a standard-floor articulated bus. This information, together with comparative data on capital and maintenance costs, was used to help develop the staff recommendation.

LEGAL REVIEW

DB 3/15/04

SOUND TRANSIT

MOTION NO. M2004-28

A motion of the Executive Committee of the Central Puget Sound Regional Transit Authority authorizing the Chief Executive Officer to begin the procurement process for new buses needed to implement the 2003 ST Express Service Implementation Plan.

Background:

ST Express service improvements approved by the Board in the 2003 Service Implementation Plan (SIP) require the purchase of additional buses. The SIP did not specify the type, size, and configuration of the buses needed, and expressly left these issues to be resolved following consultation with Sound Transit's transit agency partners and the Board. New buses must be ordered soon to meet the SIP timeline of service improvements beginning in September 2005.

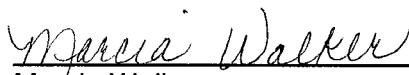
Since the 2003 SIP was adopted, staff has worked closely with transit partners and local jurisdictions to discuss fleet alternatives, and have re-checked planning assumptions on ridership growth and required fleet capacity. Staff recommends that a total of 31 vehicles be purchased consisting of 16 low-floor articulated buses, 13 long-haul transit buses, and two 40-foot standard transit buses. The articulated buses would be assigned to the East King Subarea and would be partially funded with \$4.3M transferred from the Small Cities Transit Access project, as proposed in Resolution No. R2004-03. The long-haul transit buses, which would be assigned to the Pierce Subarea, have longer dwell times at downtown Seattle bus stops due to their single-door design, but the small number of vehicles proposed will not significantly impact downtown transit operations. A follow-up study will help to evaluate whether Sound Transit should acquire additional buses of this type as part of the long-term fleet mix. Finally, two standard 40-foot transit buses similar to Sound Transit buses currently in service would be acquired for service in the Snohomish Subarea. The articulated buses and 40-foot buses would be acquired under "piggyback" agreements with the transit partners, while the long-haul transit buses would be purchased through an RFP and Sound Transit's regular procurement process.

Motion:

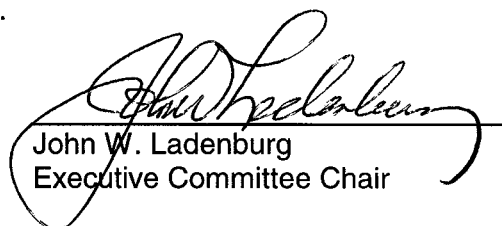
It is hereby moved by the Executive Committee of the Central Puget Sound Regional Transit Authority that the Chief Executive Officer is authorized to begin the procurement process for new buses needed for the 2003 ST Express Service Implementation Plan.

APPROVED by the Executive Committee of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on April 1, 2004.

ATTEST:



Marcia Walker
Board Administrator


John W. Ladenburg
Executive Committee Chair