

**SOUND TRANSIT  
STAFF REPORT**

**MOTION NO. M2007-56**

**ST Express Fleet Replacement – MCI Procurement**

| <b>Meeting:</b>   | <b>Date:</b> | <b>Type of Action:</b>                                 | <b>Staff Contact:</b>   | <b>Phone:</b>  |
|-------------------|--------------|--|---|----------------|
| Finance Committee | 6/7/07       | Discussion/Possible Action to Recommend Board Approval | Ellen Gustafson,<br>Acting Director,<br>Transportation Services | (206) 398-5094 |
| Board             | 6/14/07      | Action   | <b>Timothy Dunn,<br/>ST Express Operations<br/>Manager</b>      | (206) 398-5016 |

| <b>Contract/Agreement Type:</b>      | ✓ | <b>Requested Action:</b>          | ✓ |
|--------------------------------------|---|-----------------------------------|---|
| 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**

ST Express Fleet Replacement Program

**PROPOSED ACTION**

Authorizes the chief executive officer to execute a contract amendment with Motor Coach Industries, Inc. to purchase seven 45-foot long haul diesel coaches in the amount of \$3,794,000, for a new total authorized contract amount not to exceed \$10,381,000.

**KEY FEATURES of PROPOSED ACTION**

- The purpose of this action is to replace the 1994 Orion Fleet operated by Pierce Transit allowing additional seating capacity for future growth.
- The fleet is aging and is experiencing increasing maintenance issues affecting performance.
- This replacement plan meets the FTA requirement of a minimum of twelve years and 500,000 miles per bus.
- The contract with Motor Coach Industries, Inc. (MCI) is for 50 buses. Thirteen buses were purchased by Sound Transit and ten buses from the contract were purchased by another agency. Twenty-seven purchase options remain. This action exercises seven of those 27 remaining options.
- These seven purchased buses are part of the 27 planned for replacing the Orion fleet. The procurement for the remaining twenty will be presented in a future staff report.

## **BUDGET IMPACT SUMMARY**

Current Project Phase: Procurement  
Projected Completion Date: Q4 2007

| <b>Action Outside of Adopted Budget:</b> | <b>✓</b> | <b>Comments on Checked Items</b>  |
|--|----------|---|
| This Project                             |          |   |
| This Phase                               |          |   |
| This Task                                |          |   |
| Budget Amendment Required                | ✓        | Funding for the South King County portion of this procurement would be transferred from the ST Express Fleet Program budget in a concurrent action. |

| <b>Key Financial Indicators:</b>   | <b>✓</b> | <b>Comments on Checked Items</b> |
|--|----------|----------------------------------|
| Contingency Funds Required   |          |                                  |
| Funding required from other parties (other than what is 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 Adopted 2007 Budget included a total of \$63.1 million that has been set aside for the replacement of the fleet through the period ending 2011 (project #701, ST Express Fleet Replacement Program). No money has been spent against that budget. In addition, Resolution No. R2007-10 is being taken to the Board concurrent with this motion to amend the budget, adding \$2.0 million to the ST Express Fleet Replacement program in South King County.

The proposed action would exercise seven existing options in an agreement with Motor Coach Industries, Inc. for a total amount of \$3.8 million. These buses will be operated by Pierce Transit. In keeping with agency practice, the procurement would be funded by subarea in proportion to the amount of service provided by the operator of the bus. For Pierce Transit, the service share is divided between South King County (11.7%) and Pierce County (88.3%). At the existing subarea split for Pierce Transit operated service, approximately \$3.4 million would be funded by the Pierce County subarea and the remaining \$0.4 million would be funded by the South King County subarea. After the adoption of the proposed budget amendment and this proposed action, a total of \$61.3 million would remain in the project budget to fund fleet replacement through 2011.

## BUDGET TABLE

The ST Express Fleet Replacement Program (project #701) was included in the Adopted 2007 Budget in the amount of \$63.1 million. This program budget is included on Page 69 of the Adopted 2007 Budget book. The proposed budget amendment would add \$2.0 million to this project budget. The impacts of the budget amendment and the proposed action on this program budget are illustrated below:

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

Project: 701 - ST Express Fleet Replacement Program

|                           | Adopted 2007<br>Budget <sup>1</sup><br>(A) | Pending Budget<br>Amendment <sup>2</sup><br>(B) | Revised 2007<br>Budget<br>(C) | Committed To<br>Date <sup>3</sup><br>(D) | This Action<br>(E) | Total<br>Committed &<br>Action<br>(F) | Uncommitted<br>(Shortfall)<br>(G) |
|---------------------------|--|---|-------------------------------|--|--------------------|---------------------------------------|-----------------------------------|
| 1 Agency Administration   | \$ -                                       | \$ -  | \$ -                          | \$ -                                     | \$ -               | \$ -                                  | \$ -                              |
| 2 Preliminary Engineering | \$ -                                       | \$ -  | \$ -                          | \$ -                                     | \$ -               | \$ -                                  | \$ -                              |
| 3 Final Design            | \$ -                                       | \$ -  | \$ -                          | \$ -                                     | \$ -               | \$ -                                  | \$ -                              |
| 4 Right of Way            | \$ -                                       | \$ -  | \$ -                          | \$ -                                     | \$ -               | \$ -                                  | \$ -                              |
| 5 Construction            | \$ -                                       | \$ -  | \$ -                          | \$ -                                     | \$ -               | \$ -                                  | \$ -                              |
| 6 Vehicles                | \$ 63,090                                  | \$ 2,000  | \$ 65,090                     | \$ -                                     | \$ 3,794           | \$ 3,794                              | \$ 61,296                         |
| 7 Contingency             | \$ -                                       | \$ -  | \$ -                          | \$ -                                     | \$ -               | \$ -                                  | \$ -                              |
| 8 Total Current Budget    | \$ 63,090                                  | \$ 2,000  | \$ 65,090                     | \$ -                                     | \$ 3,794           | \$ 3,794                              | \$ 61,296                         |

### Phase Budget Detail

|                     |           |          |           |      |          |          |           |
|---------------------|-----------|----------|-----------|------|----------|----------|-----------|
| 9 Orion Replacement | \$ 13,500 | \$ 2,000 | \$ 15,500 | \$ - | \$ 3,794 | \$ 3,794 | \$ 11,706 |
| 10 Misc. Activity   | \$ 49,590 | \$ -     | \$ 49,590 | \$ - | \$ -     | \$ -     | \$ 49,590 |
| 11 Total Phase      | \$ 63,090 | \$ 2,000 | \$ 65,090 | \$ - | \$ 3,794 | \$ 3,794 | \$ 61,296 |

| Contract Budget                 | Current<br>Approved<br>Contract Value<br>(H) | Spent to Date<br>(I) | Proposed<br>Action<br>(J) | Proposed Total<br>Contract Value<br>(K) |
|---------------------------------|--|----------------------|---------------------------|---|
| 12 Motor Coach Industries, Inc. | \$ 6,587                                     | \$ 6,412             | \$ 3,794                  | \$ 10,381                               |
| 12 Contingency                  | \$ -   | \$ -                 | \$ -                      | \$ -                                    |
| 13 Total                        | \$ 6,587                                     | \$ 6,412             | \$ 3,794                  | \$ 10,381                               |
| 14 Percent Contingency          | 0%   |                      | 0%                        | 0%                                      |

| Subareas to Be Charged | Revised<br>Budget<br>(L) | Committed to<br>Date<br>(M) | Proposed<br>Action<br>(N) | Total Committed<br>& Action<br>(O) | Uncommitted<br>(Shortfall)<br>(P) |
|------------------------|--------------------------|-----------------------------|---------------------------|------------------------------------|-----------------------------------|
| 15 Snohomish County    | \$ 16,703                | \$ -                        | \$ -                      | \$ -                               | \$ 16,703                         |
| 16 South King County   | \$ 2,000                 | \$ -                        | \$ 444                    | \$ 444                             | \$ 1,556                          |
| 17 East King County    | \$ 24,377                | \$ -                        | \$ -                      | \$ -                               | \$ 24,377                         |
| 18 Pierce County       | \$ 22,009                | \$ -                        | \$ 3,350                  | \$ 3,350                           | \$ 18,659                         |
| 19 Total Budget        | \$ 65,090                | \$ -                        | \$ 3,794                  | \$ 3,794                           | \$ 61,296                         |

### Notes:

<sup>1</sup> Project budget is located on page 69 of the Adopted 2007 Budget book. The Adopted 2007 Budget was approved by the Board on December 14, 2006.

<sup>2</sup> Resolution #R2007-10 has proposed a budget amendment to transfer \$2 million from the ST Express Fleet Program (project #290) to the ST Express Fleet Replacement Program (project #701) increasing the project budget from \$63.1 million to \$65.1 million.

<sup>3</sup> Committed to date amount includes actual outlays and commitments through April 30, 2007.

## SMALL BUSINESS PARTICIPATION

As a transit vehicle manufacturer, MCI must submit its own diversity business enterprise (DBE) program and goal to the FTA. According to FTA's transit vehicle procurement rules, transit vehicle manufacturers must certify to transit agencies that they have a DBE program in place. MCI has complied with FTA rules for this procurement for DBE participation with a 10% goal.

## EEO Commitment

The employees of MCI will perform the construction and assembly of the buses. MCI's workforce demographics are 28% women and 3.2% minorities.

## **PROJECT DESCRIPTION and BACKGROUND for PROPOSED ACTION**

Current assumptions include the replacement of 27 compressed natural gas (CNG) buses in Pierce County. These buses were originally purchased in 1999 from Pierce Transit. Pierce Transit purchased the buses in 1994. This contract amendment with Motor Coach Industries, Inc. will would exercise seven of the remaining 27 options. Replacing seven 40-foot buses with seven 45-foot coaches would respond to current overcrowded issues and provide room for growth without adding service and increasing the fleet size providing savings in operations and maintenance.

In August 2005 the Sound Transit Board authorized the chief executive officer to execute a contract with Motor Coach Industries, Inc. for the manufacture and delivery of thirteen 45-foot long haul transit buses. On this contract, 50 options were negotiated for future procurements.

In April 2004 the Sound Transit Board approved the fleet procurement plan that included the purchase of thirteen 45-foot long haul transit buses through a competitive process conducted in June. Two proposals were received and MCI was selected by a committee comprised of Sound Transit and Pierce Transit staff.

In selecting the MCI long haul diesel coaches, staff considered CNG, diesel, and hybrid technology. The MCI long haul diesel coaches were superior in terms of fuel type and engine maintenance, emissions, rider capacity, and cost.

### **Fuel Type and Engine Maintenance**

Pierce Transit currently operates and maintains a Sound Transit diesel powered fleet (30 of 77 buses) and would be able to operate and maintain the new MCI coaches.

Currently, 47 of the 77 Sound Transit buses operated by Pierce Transit are powered by CNG. Twenty-seven of those buses are thirteen years old and ready to be replaced. Since purchase of the CNG buses, the CNG market has experienced a decline in demand and availability. For example, in 2002 1,006 CNG buses were sold whereas in 2004 only 675 were sold. CNG fuel supply systems require comprehensive and expensive fuel delivery systems; when a fuel system fails, an alternative system must be utilized, causing potential disruptions to service.

Pierce Transit is not equipped to operate and maintain hybrid buses.

### **Emissions**

The MCI coaches will run on ultra-low sulfur diesel in accordance with new regulations adopted by the Environmental Protection Agency (EPA) earlier this year. The EPA reports that the new 2007 regulations make buses run cleaner and harmful pollution will be reduced by more than 90%. Sulfur in diesel is lowered with the new EPA regulations requiring a 97% reduction in the sulfur content of diesel fuel from 500ppm to 15ppm. Also, Pierce Transit is converting to bio-

diesel 20 (B20) for the Sound Transit fleet, which means the MCI coaches will be fueled with 20% bio-diesel and 80% ultra-low sulfur diesel.

At this time, no CNG engines are 2007 EPA certified unlike diesel engines. In terms of emissions, it is a trade-off between CNG and ultra-low sulfur diesel as each produces more or less of certain pollutants. The new 2007 EPA standards for diesel engines provide a 90% cleaner engine than produced prior to 2007.

In general, hybrid buses use less fuel, are more efficient, produce fewer emissions, and are much quieter than conventional buses. The Sound Transit Express bus system, however, is mainly highway operation, and the advantages of current hybrid technology are best realized with stop and go operation.

### **Rider Capacity**

An MCI diesel bus has additional seating capacity of 20 more seats than a CNG or hybrid bus. Sound Transit can maximize ridership per bus.

### **Cost**

The costs for CNG and hybrid buses are much higher than diesel buses. CNGs are about \$50,000 more per bus and hybrids are about \$175,000 more per bus.

### **Prior Board/Committee Actions on this Project**

| <b>Motion/Resolution Number and Date</b> | <b>Summary of Action</b>   |
|--|--|
| M2004-75<br>9/9/04                       | Execute an agreement with Motor Coach Industries to manufacture and deliver thirteen, 45-foot long haul transit buses            |
| M2004-70<br>7/22/04                      | Execute new five-year interagency agreements with Pierce Transit for the operations and maintenance of Regional Express service. |

### **CONSEQUENCES of DELAY**

A delay beyond November 2007 would interfere with Pierce Transit's planned projects for first quarter 2008. Also, the additional capacity is needed to respond to overcrowding as well as replacing an aging fleet of buses with diminishing reliability.

### **PUBLIC INVOLVEMENT**

In 2003, a 45-foot long haul transit bus was tested on Seattle Express routes to evaluate a high-capacity, long haul transit bus for long distance services between DuPont, Lakewood, Tacoma and Seattle. During the month long test, customer surveys showed overwhelmingly positive responses for its smooth, quiet and comfortable ride. In addition, bus tests were performed for downtown Seattle stop dwell-time evaluations. Following the evaluation, a consensus among staff from Sound Transit, King County Metro, and the City of Seattle was reached to proceed with the procurement.

### **ENVIRONMENTAL COMPLIANCE**

PW 6/1/07

**LEGAL REVIEW**

JW 5/31/07

## **SOUND TRANSIT**

### **MOTION NO. M2007-56**

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to execute a contract amendment with Motor Coach Industries, Inc. to purchase seven 45-foot long haul diesel coaches in the amount of \$3,794,000, for a new total authorized contract amount not to exceed \$10,381,000.

#### **Background:**

Current assumptions include the replacement of 27 compressed natural gas (CNG) buses in Pierce County. These buses were originally purchased in 1999 from Pierce Transit. Pierce Transit purchased the buses in 1994. This contract amendment with Motor Coach Industries, Inc. will would exercise seven of the remaining 27 options. Replacing seven 40-foot buses with seven 45-foot coaches would respond to current overcrowded issues and provide room for growth without adding service and increasing the fleet size providing savings in operations and maintenance.

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**Motion:**

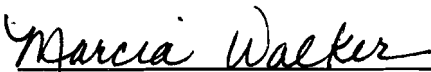
It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to execute a contract amendment with Motor Coach Industries, Inc. to purchase seven 45-foot long haul diesel coaches in the amount of \$3,794,000, for a new total authorized contract amount not to exceed \$10,381,000.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on June 14 2007.



Mark Olson  
Board Vice Chair

ATTEST:



Marcia Walker  
Board Administrator