

**SOUND TRANSIT  
STAFF REPORT**

**MOTION NO. M2007-64**

**Contract for ST Express Fleet Replacement**

<b>Meeting:</b>	<b>Date:</b>	<b>Type of Action:</b>	<b>Staff Contact:</b>	<b>Phone:</b>
Finance Committee	6/21/07	Discussion/Possible Action to Recommend Board Approval	Ellen Gustafson, Acting Director, Transportation Services	(206) 398-5094
Board	6/28/07	Action	<b>Timothy Dunn,</b> <b>ST Express Operations 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 with Gillig Corporation to purchase twenty Gillig Phantom 40-foot model diesel buses in the amount of \$8,220,000 with a 10% contingency of \$822,000, for a total authorized contract amount not to exceed \$9,042,000.

**KEY FEATURES of PROPOSED ACTION**

- The purpose of this action is to replace the 1994 Orion Fleet operated by Pierce Transit. The fleet is aging and is experiencing increasing maintenance issues affecting performance.
- This action authorizes procurement of twenty buses by piggy-backing on a purchasing agreement that Florida Consortium has with Gillig Corporation. These buses are anticipated to arrive by 2<sup>nd</sup> Quarter 2008.
- These buses comprise twenty of the twenty-seven buses that are planned for replacing the Orion fleet. Procurement for seven other buses was approved by the Board through Motion No. M2007-56 on June 14, 2007.
- This replacement plan meets the FTA requirement of a minimum of 12 years and 500,000 miles per bus.

## **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 Sound Transit to acquire 20 buses from the Gillig Corporation. Sound Transit plans to piggy-back on 20 available options from the Florida Consortium. The procurement will be used to complete the replacement of the aging Orion fleet operated by Pierce Transit. The Board authorized seven other buses in a prior action.

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%). This portion of the procurement will be funded by the ST Express Fleet Replacement Program (project #701).

The Adopted 2007 Budget included a total Transportation Service Capital Budget of \$216.7 million. Of this amount, a total of \$63.1 million has been set aside for the replacement of the fleet through the period ending 2011 (project #701, ST Express Fleet Replacement Program).

A concurrent budget amendment, Resolution No. R2007-10, is being taken to the Board to increase the South King County subarea budget by \$2.0 million, moving it from the ST Express Fleet Program (#290) to the ST Express Fleet Replacement Program (#701). The Board adopted Motion No. M2007-56, which authorized the acquisition of seven MCI coaches at a total cost of \$3,794,000, pending adoption of Resolution No. R2007-10. After that transaction, a project budget of \$61.3 million remains.

## **BUDGET TABLE**

The ST Express Fleet Replacement Program (project #701) was included in the Adopted 2007 Budget in the amount of \$63.1 million and amended by Resolution No. R2007-10 to add \$2 million to the project budget, pending Board adoption. This program budget is included on Page 69 of the Adopted 2007 Budget book. The impacts of the proposed action on this amended program budget are illustrated below:

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

Project: 701 - ST Express Fleet Replacement Program

	Revised Adopted Lifetime Budget <sup>1</sup> (A)	Committed To Date <sup>2</sup> (D)	This Action (E)	Total Committed & Action (F)	Uncommitted (Shortfall) (G)
1 Agency Administration	\$ -	\$ -	\$ -	\$ -	\$ -
2 Vehicles	\$ 65,090	\$ 3,794	\$ 9,042	\$ 12,836	\$ 52,254
3 Contingency	\$ -	\$ -	\$ -	\$ -	\$ -
4 Total Current Budget	\$ 65,090	\$ 3,794	\$ 9,042	\$ 12,836	\$ 52,254

Phase Budget Detail

5 Orion Replacement	\$ 13,500	\$ 3,794	\$ 9,042	\$ 12,836	\$ 664
6 Misc. Activity	\$ 51,590	\$ -	\$ -	\$ -	\$ 51,590
7 Total Phase	\$ 65,090	\$ 3,794	\$ 9,042	\$ 12,836	\$ 52,254

Subareas to Be Charged	Revised Adopted Lifetime Budget <sup>1</sup> (H)	Committed To Date <sup>2</sup> (I)	Proposed Action (J)	Total Committed & Action (K)	Uncommitted (Shortfall) (L)
8 Snohomish County	\$ 16,703	\$ -	\$ -	\$ -	\$ 16,703
9 South King County	\$ 2,000	\$ 444	\$ 1,058	\$ 1,502	\$ 498
10 East King County	\$ 24,377	\$ -	\$ -	\$ -	\$ 24,377
11 Pierce County	\$ 22,009	\$ 3,350	\$ 7,984	\$ 11,334	\$ 10,675
12 Total Budget	\$ 65,090	\$ 3,794	\$ 9,042	\$ 12,836	\$ 52,254

<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 and revised by Resolution R2007-10, pending Board approval.

<sup>2</sup> Committed to date amount includes actual outlays and commitments through June 14, 2007.

Contract Budget	Current Approved Contract Value (H)	Spent to Date (I)	Proposed Action (J)	Proposed Total Contract Value (K)
13 Gillig Corp. <sup>1</sup>	\$ -	\$ -	\$ 8,220	\$ 8,220
14 Contingency	\$ -	\$ -	\$ 822	\$ 822
15 Total	\$ -	\$ -	\$ 9,042	\$ 9,042
16 Percent Contingency	0%		10%	10%

## **SMALL BUSINESS PARTICIPATION**

As a transit vehicle manufacturer, Gillig Corporation must submit its own DBE program and goal to the FTA, and according to FTA's transit vehicle procurement rules, transit vehicle manufacturers must certify to transit agencies that they have a DBE program in place. Gillig Corporation has complied with FTA rules for this procurement with a DBE participation goal of 10%.

## EEO Commitment

The employees of Gillig Corporation will perform the construction and assembly of the buses. Gillig Corporation's workforce demographics are 10% women and 61% minorities.

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

This contract with Gillig Corporation is for the procurement of twenty Gillig Phantom diesel-powered buses. These buses comprise twenty of the twenty-seven buses that will replace the 1994 Orion buses Sound Transit purchased from Pierce Transit in 1999. They will be procured by piggy-backing on a purchasing agreement between the Florida Consortium and Gillig. The other seven replacement buses are being procured through a separate Board action (Motion No. M2007-56), which was adopted on June 14, 2007.

The twenty-seven Orion buses slated for replacement are currently operated by Pierce Transit and are powered using compressed natural gas (CNG). The fleet is aging and is experiencing increased maintenance issues that are affecting its performance.

In selecting the Gillig Phantom diesel bus, staff considered CNG, diesel, and hybrid technology. The Gillig Phantom diesel buses were found to be of better quality in terms of fuel type, engine maintenance, emissions, rider capacity, and cost. In addition, the performance of the Gillig Phantom bus since 1999 has been of superior quality.

## Fuel Type and Engine Maintenance

Pierce Transit currently operates and maintains a Sound Transit diesel powered fleet (30 of 77 buses) while their local fleet is CNG powered. Pierce Transit is fully equipped to operate and maintain the new Gillig Phantom buses since they currently operate this model bus for Sound Transit.

Currently, 47 out of 77 Sound Transit buses operated by Pierce Transit are powered by CNG. Twenty-seven of those buses are 13 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 Gillig Phantom buses will run on ultra-low sulfur diesel in accordance with new regulations adopted by the Environmental Protection Agency 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 Pierce Transit operated Gillig Phantom buses 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

A Gillig Phantom diesel bus has more seating capacity (42 vs. 37 seats) than a CNG or hybrid bus. Sound Transit can maximize ridership per bus and not reduce seating capacity by purchasing buses with like capacity to the 1994 Orion fleet.

Cost

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

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

Motion/Resolution Number and Date	Summary of Action
R2007-10 Pending	Amending the 2007 Budget for the South King County portion of the ST Express Fleet Program.
M2007-56 6/14/07	Authorized 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.

**CONSEQUENCES of DELAY**

- The 1994 Orion fleet is aging and experiencing diminishing reliability and increasing maintenance costs.
- Given the current manufacturing climate, bus procurement has a lead-time of twelve months from contract award and notice to proceed. A delay in approving the procurement beyond June 2007 might prevent Sound Transit from exercising existing options under the Florida Consortium’s purchasing agreement. This would create the necessity for an RFP, contract award and notice to proceed process, pushing the delivery date out to 4<sup>th</sup> Quarter 2008 or 1<sup>st</sup> Quarter 2009.
- A delay would also interfere with Pierce Transit’s Mobile Communications project. If the replacement buses do not arrive by June 2008, additional costs would be incurred because the new communication systems would have to be installed on the 1994 Orion fleet in the interim.

**LEGAL REVIEW**

JW 6/13/07

## SOUND TRANSIT

### MOTION NO. M2007-64

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to execute a contract with Gillig Corporation to purchase twenty Gillig Phantom 40-foot model diesel buses in the amount of \$8,220,000 with a 10% contingency of \$822,000, for a total authorized contract amount not to exceed \$9,042,000.

#### **Background:**

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#### Cost

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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 with Gillig Corporation to purchase twenty Gillig Phantom 40-foot model diesel buses in the amount of \$8,220,000 with a 10% contingency of \$822,000, for a total authorized contract amount not to exceed \$9,042,000.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on June 28, 2007.

  
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John W. Ladenburg  
Board Chair

ATTEST:

  
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Marcia Walker  
Board Administrator