

**SOUND TRANSIT
STAFF REPORT**

MOTION NO. M2003-96

Contract Award for 60-Foot Diesel/Electric Hybrid Buses

Meeting:	Date:	Type of Action:	Staff Contact:	Phone:
Finance Committee	10/2/03	Discussion/Possible Action to Recommend Board Approval Action	Agnes Govern, Director, Regional Express	(206) 398-5037
Board	10/9/03		Mike Bergman, Program Manager, Regional Express Bus	(206) 398-5358
			Frederick Chun, Project Manager, Regional Express Bus	(206) 398-5044

Contract/Agreement Type:	3	Requested Action:	3
Competitive Procurement	3	Execute New Contract/Agreement	3
Sole Source		Amend Existing Contract/Agreement	
Interlocal Agreement		Contingency Funds Required	
Purchase/Sale Agreement		Budget Amendment Required	

³Applicable to proposed transaction.

OBJECTIVE OF ACTION

Execute a contract with New Flyer of America for twenty-two, 60-foot diesel/electric hybrid buses to replace the Breda buses used in the Downtown Seattle Transit Tunnel (DSTT).

ACTION

Authorizes the Chief Executive Officer to execute a contract with New Flyer of America for the manufacture and delivery of twenty-two, 60-foot diesel/electric low floor hybrid buses for an amount not to exceed \$17,000,000 including tax, spare parts, training and contingency.

KEY FEATURES

- Replaces out-moded dual-mode Breda buses with fuel efficient, electric drive parallel hybrid buses that integrate tunnel engineered operation.
- Provides for bus manufacture and delivery time targeted for the fourth quarter of 2004. Buses will be put into service as they are delivered to Seattle.
- Sound Transit's contract with New Flyer is for 22 buses to replace the 20 Breda buses used on Route 550. The additional two buses are needed to supplement the future growth of the Route 550 service. The costs for this contract will be assigned exclusively to the East King County subarea as the buses will be used for replacement purposes on Route 550 (Bellevue to Seattle).

Features of the Hybrid Bus

- Twenty to forty percent more fuel-efficient than comparable conventional diesel buses, and equipped with low emission engines with particulate exhaust filters.
- Run on both diesel and electricity to maximize efficiency and performance based on the same concept as the hybrid Toyota and Honda cars. Some electricity for the hybrid buses comes from the on-board generator while some electricity is produced through braking and deceleration, which is then stored in onboard batteries. The stored electricity is then re-used for cleaner, smoother propulsion.
- Engineered with a tunnel mode, where power largely comes from batteries with the engine idling only when needed to keep the batteries charged. The onboard diesel engines are equipped with a low emission fuel management system, which includes exhaust particulate filters to virtually eliminate particulate matter, carbon monoxide, and hydrocarbon.
- Equipped with ST Express bus amenities including recliner seats, air-conditioning, and parcel racks with integrated reading lamps. The contract also includes spare parts and training.
- King County Metro Transit maintenance staff will perform the inspections of the buses during bus construction as well as acceptance inspections upon delivery to Seattle. These buses will be operated and maintained by King County Metro Transit staff at the East Base facilities.

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 DISCUSSION

Budget for the contract with New Flyer of America is included in the capital budget of the Regional Bus Program transit operations subarea program budget. The program budget through 2006 has sufficient budget as identified in the Adopted 2003 Budget to cover this contract.

REVENUE, SUBAREA, AND FINANCIAL PLAN IMPACTS

The proposed action is consistent with the current Board-adopted budget and is affordable within Sound Transit's current long-term financial plan and the subarea financial capacity. The costs for this contract will be assigned exclusively to the East King County subarea as the buses will be used for replacement purposes on Route 550 (Bellevue to Seattle).

BUDGET TABLE

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

Action Item: contract with New Flyer of America for construction and delivery of twenty-two, 60 foot low floor diesel-electric hybrid buses.

Bus Program	2003 Adopted	Committed To		Total	Uncommitted
Capital Budget Detail	Budget	Date	This Action	Committed & This Action	(Shortfall)
Bus System Wide	\$ 87,039	\$ 59,114	\$ 17,000	\$ 76,114	\$ 10,925
Maintenance Base	26,407	-	-	-	26,407
Total	\$ 113,446	\$ 59,114	\$ 17,000	\$ 76,114	\$ 37,332

Phase Budget Detail

Agency Administration	\$ 3,405	\$ 980	\$ -	\$ 980	\$ 2,425
Vehicles	83,634	58,134	17,000	75,134	8,501
Total Phase	\$ 87,039	\$ 59,114	\$ 17,000	\$ 76,114	\$ 10,925

Contract Budget	Current Approved Contract Value	Spent to Date	Proposed Action	Proposed Total Contract Value
New Flyer of America	\$ -	\$ -	\$ 16,431	\$ 16,431
ST Contingency	-	-	569	569
Total	\$ -	\$ -	\$ 17,000	\$ 17,000
Percent Contingency	0%	0%	3%	3%

Reference pages 135 & 228 of the Adopted 2003 Budget.

The chart below describes the cost breakout.

ITEMS	UNIT COST	QUANTITY	TOTAL
Buses	\$673,002	22	\$14,806,044
Parts/training 2%	13,460	22	296,121
Subtotal	686,462	22	15,102,165
Tax 8.8%	60,409	22	1,328,991
Subtotal	746,871		16,431,155
Contingency			568,845
Total			\$17,000,000

M/W/DBE – SMALL BUSINESS PARTICIPATION

As a Transit Vehicle Manufacturer (TVM), New Flyer of America must submit its own DBE program and goal to the Federal Transit Administration, and by FTA's transit vehicle procurement rules, TVMs must certify to transit agencies that they have a DBE program in place. New Flyer of America has complied with FTA rules for this procurement and has indicated that DBE participation is 10% for this contract.

EEO Commitment

The employees of New Flyer of America, whose EEO profile is 18% women and 22% minorities, will perform the construction and assembly of the buses.

HISTORY OF PROJECT

Prior Board or Committee Actions and Relevant Board Policies

Motion or Resolution Number	Summary of Action	Date of Action
R2002-17	2003 Budget adoption – the agency’s capital outlays for the year 2003.	12/12/02
M2002-65	Agreement with King County and the City of Seattle specifying the terms and conditions for joint rail and bus operations in the Downtown Seattle Transit Tunnel.	6/12/02
R2002-07	2002 Service Implementation Plan that identified additional funding for the hybrid bus fleet.	5/9/02
M2002-16	Execution of contract to purchase a 40’ hybrid demonstration bus from New Flyer of America.	3/21/02
R99-30	Operations and maintenance of ST Express bus service with King County Metro.	8/26/99
M98-3	Approval of the bus procurement strategies.	2/12/98

Sound Transit’s agreement with King County Metro Transit to operate Route 550 in the DSTT includes the use of the dual-mode Breda buses. The Breda buses were custom built for the tunnel application in 1990 and 1991 and reached their twelve-year transit bus life cycle in 2003. King County Metro Transit made the decision to replace the Breda buses with hybrid buses.

In 2002, King County Metro Transit acquired a 60-foot New Flyer hybrid bus to test the hybrid systems feasibility in transit duty cycles and to test the tunnel-mode operations for the planned joint operations with LINK vehicles in the DSTT. After a successful three-month test, Sound Transit and King County developed and issued a joint Request-for-Proposals (RFP) to procure a combined total of 272 hybrid buses. The single proposal by New Flyer of America was evaluated by both agencies for specification adherence and cost analysis to ensure fair and reasonable pricing. Subsequently, King County Metro Transit has contracted with New Flyer of America for 213 hybrid buses.

The three-month test performed by King County Metro Transit last year indicated lower maintenance cost when compared to the 60-foot diesel buses. Sound Transit’s 40-foot hybrid demonstration bus equipped with a smaller hybrid system has been performing reliably since July of this year. Including Sound Transit and King County Metro Transit, there are 23 hybrid buses currently used by 11 major transit agencies in the country.

CONSEQUENCES OF DELAY

Postponing this action significantly may result in increased costs to reflect the inflation or cancellation of the proposal.

REGIONAL PARTNERSHIP AND COOPERATION

- Worked with King County Metro Transit to develop and issue joint RFP.
- King County Metro Transit maintenance staff will perform the quality assurance inspections for bus construction at the factory and provide the acceptance inspections upon delivery of the buses.
- The Sound Transit 40-foot hybrid bus is currently being demonstrated by five regional transit agencies.

PUBLIC INVOLVEMENT

Not applicable to this action.

LEGAL REVIEW

MB 9-8-03

SOUND TRANSIT

MOTION NO. M2003-96

A motion of the Board of the Central Puget Sound Regional Transit Authority authorizing the Chief Executive Officer to execute a contract with New Flyer of America for the manufacture and delivery of twenty-two, 60-foot low floor diesel-electric hybrid buses in an amount not to exceed \$17,000,000.

Background:

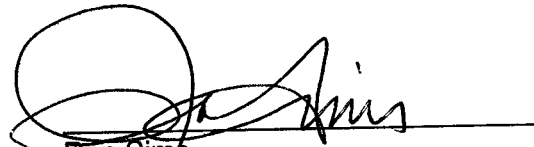
The Breda buses, which are operated by King County Metro Transit on ST Express Route 550 (Bellevue to Seattle), were custom built for the Downtown Seattle Transit Tunnel (DSTT) in the early 1990's and are reaching their 12-year life cycle in 2003. In 2002, King County Metro acquired a 60-foot New Flyer hybrid bus to test the hybrid systems feasibility in transit duty cycles and to test the tunnel-mode operations for the planned joint operations with Link Light Rail vehicles in the DSTT. After a successful three-month test, Sound Transit and King County Metro developed and issued a joint Request-for-Proposals (RFP) to procure a combined total of 272 hybrid buses. The single proposal by New Flyer of America was evaluated by both agencies for specification adherence and cost analysis to ensure fair and reasonable pricing. Subsequently, King County Metro Transit has contracted with New Flyer of America for 213 hybrid buses.

The term of the contract is November 1, 2003, through December 31, 2005, for an amount not to exceed \$17,000,000 including parts, training, tax, and contingency.

Motion:

It is hereby moved by the Board of the Central Puget Sound Regional Transit Authority to authorize the Chief Executive Officer to execute a contract with New Flyer of America for the manufacture and delivery of twenty-two, 60-foot low floor diesel-electric hybrid buses in an amount not to exceed \$17,000,000.

APPROVED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on October 9, 2003.



Ron Sims
Board Chair

ATTEST:



Marcia Walker
Board Administrator