

OPERATIONS COMITTEE SEPTEMBER 20, 2007

SUBJECT:

45' COMPOSITE BUS PROPOSAL SOLICITATION

ACTION:

**AUTHORIZE PROPOSAL SOLICIATION FOR 45' COMPOSITE BUSES** 

#### **RECOMMENDATION**

- A. The Board finds that the procurement of 45' lightweight composite buses under Public Utilities Code § 130232 does not constitute a procurement method adequate for Metro's needs and authorize procurement of these 45' lightweight composite buses pursuant to Public Contracts Code (PCC) §20217 for procurement by competitive negotiation; and Requires Two-Thirds Vote.
- B. Authorize the Chief Executive Officer to solicit a proposal for a two-year contract for up to two-hundred sixty lightweight transit buses as a competitive negotiation pursuant to PCC § 20217 and Metro's Procurement Policies and Procedures.

#### **ISSUE**

It is in the public's interest to utilize competitive negotiation rather than a sealed bid process to consider factors other than price in the award of contracts for the 45' buses as described in PCC §20217. The competitive negotiation process provides for consideration of such factors as "broadest possible range of competing products and materials available, fitness of purpose, manufacturer's warranty, vendor financing, performance reliability, standardization, life cycle costs, delivery timetables, support logistics, and other similar factors in addition to price in the award of these contracts." Utilization of this process for this procurement will permit discussions with the proposers to evaluate the performance and reliability of the proposed components, warranty factors, cost data and delivery time tables to determine the bus most suited for the Metro's needs.

#### POLICY IMPLICATIONS

Due to the technical nature of advanced composite vehicle construction, staff does not recommend using a conventional low-bid procurement approach. Using a low bid procurement would not be suitable for considering design, engineering and manufacturing requirements associated with producing composite vehicles.

#### **OPTIONS**

The first option considered is to not proceed with purchase of these buses. This option is not recommended as deferring the purchase of these new vehicles would violate orders made by the Special Master as part of the Consent Decree and raise Metro's average fleet age resulting in corresponding increases to operating and maintenance costs.

A second option considered by staff was to use a "low-bid" procurement approach rather than procuring these vehicles using a negotiated procurement. A low-bid procurement approach is not recommended due to the technically sophisticated nature of these vehicles, and particularly the composite construction techniques that may be used to build these vehicles.

Staff also considered purchasing additional 60' buses. At this time, staff is projecting that Metro's bus fleet has enough articulated buses to effectively cover Metro's highest ridership lines that require this size vehicle.

Staff considered purchasing 40' buses. This alternative is not recommended as 40' buses would not improve the operating efficiency on high ridership lines that sustain ridership at higher levels than can be effectively accommodated with 40' buses.

Lastly, staff considered purchasing conventional steel framed vehicles. This alternative is not recommended because there are no steel framed bus designs that have a 2-axle, 45' configuration. Most urban transit buses designs are limited to 40' vehicles. While there are existing steel-framed 45' bus designs, all of these use a three axle configuration that creates additional operating and maintenance costs. Finally, there are a number of advantages to using composite construction, including enhanced aesthetics, improved durability, better fuel economy, and imperviousness to corrosion.

#### FINANCIAL IMPACT

No funds are required for this procurement during FY08. Staff will return to the Board to authorize the contract award and establish a life-of-project budget prior to expending any funds.

While funding for these buses has not yet been programmed, capital requirements for buses are included in Metro's adopted Long Range Plan and Ten-Year Financial Forecasts. The final decision and commitment to buy the buses will be made after the solicitation is complete and the total cost of the buses is known. If this action is approved, funding for this procurement would then be identified and committed as part of the annual update of the FY09 and FY10 Capital Program and Ten-Year Forecast.

#### **DISCUSSION**

Forty-five foot lightweight composite buses are part of Metro's scheduled vehicle replacement plans and will replace those vehicles that have passed their recommended design life. These buses are also needed to fulfill commitments made in Metro's "New

Service Plan" that was submitted to the Special Master as part of the Consent Decree. The New Service Plan was approved by the Special Master on November 30, 2005, and remains in effect for five years from that date.

Metro purchased one-hundred 45' composite buses from North American Bus Industries (NABI) in 2004. To date, these vehicles have proven very strong, durable, and overall have held up as well as conventional steel frame buses. In the few cases where accident damage has been sustained to the 45' composite buses, damage has been relatively minor. Metro expects these vehicles to outlast conventional steel-framed buses thus reducing future vehicle replacement expenses.

Based on the success of the composite buses, Metro issued a new procurement for one-hundred 45' vehicles in February 2006. Unfortunately, no proposals were received. Based on discussions with industry manufacturers, staff determined that prospective proposers required a larger guaranteed order quantity and production period to justify the engineering costs associated with producing a composite vehicle structure. This new proposed procurement contains a guaranteed quantity of 130 vehicles per year for a two-year period. The procurement will also contain additional option buses for the future (after FY10), and would allow Metro to obtain additional 45' buses without the cost of a new procurement process.

Over the last few years, Metro has moved aggressively to acquire high-capacity vehicles, and has purchased nearly 400 articulated 60' buses. Currently 20% of Metro's bus fleet uses higher capacity buses (more than 40 passenger seats). Metro staff estimates that over half of Metro's bus service could be operated more efficiently with high capacity vehicles that can carry more than 40 passengers.

Metro has procured the majority of the articulated 60' buses it needs for the immediate future; however, staff projects that there remains a long-term need for up to one-thousand 45' high-capacity buses in Metro's fleet. While two-hundred ten (210) of these vehicles would be Compressed Natural Gas (CNG) fueled and virtually identical to Metro's existing 45' buses, staff recommends that fifty (50) of these vehicles be purchased with a gasoline-hybrid propulsion system. The majority of Metro's facilities have already been modified to accommodate CNG fueled vehicles; however Division 6 in Venice is not suitable for supporting CNG fueled vehicles. In addition to having limited space available for CNG compressors at this location, Division 6 is a significant distance from suitable natural gas transmission lines. Gasoline-hybrid buses are fully compatible with existing infrastructure at Division 6, and would replace many of Metro's oldest diesel buses that still operate from this location. Finally, gasoline hybrid busses are likely to be far less noisy than non-hybrid vehicles, and will be better suited to operation in this largely residential location.

#### **NEXT STEPS**

If this action is approved, staff would proceed with a new solicitation for 45' composite buses.

### **ATTACHMENTS**

Attachment 1: Remaining Buses required to fulfill Consent Decree Obligations

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# ATTACHMENT 1 REMAINING BUSES REQUIRED TO FULFILL CONSENT DECREE OBLIGATIONS

A. Buses in "New Service Plan" (as submitted to Special Master November 30, 2005):

Bus Replacement Plans:	FY08	FY09	FY10	Total
40 CNG Buses	0	0	0	0
45' Composite Buses	0	0	0	0
Articulated Buses	100	100	100	300
Total New Buses	100	100	100	300
Total Seats	5,700	5,700	5,700	17,100

## B. Revised Bus Replacement Plans (using 45' Buses instead of Artics in FY09 and FY10):

Revised Bus Replacement Plans	FY08	FY09	FY10	Total
45' Gas-Hybrid Buses		25	25	50
45' Composite Buses		105	105	210
Articulated Buses	100	100	100	100
Total New Buses	100	130	130	360
Total Seats	5,700	5,980	5,980	17,660