

**Electric Bus Pilot Program**



**Action:** Approve a Contract with BYD Motors, Inc., for the purchase of:

- Two 35', All Electric/Zero Emission, Low Floor Buses
- Two Depot Charging Stations
- One Fast Charging On-Route Charging Station
- Options to Purchase Up To 20 Additional Buses/Associated Charging Stations in Future Years Subject to the Availability of funding.
- Total Not to Exceed Cost (two Buses & Charging Equipment) \$2,200,000.

**Staff Resource:** Henry Lukasik, Director of Maintenance  
 Lou Emma Cromity, Dir. of Procurement



Background:

- After significant analysis and discussion in June 2016, the PSTA Board approved a pilot program to purchase two electric battery-powered, zero-emission buses, if Pinellas County provided the funding for charging station infrastructure through its BP Settlement funds. The County approved this support in December 2016.
- In addition to this pilot of two electric buses, PSTA has already placed an order under its existing Gillig, Inc., contract for three hybrid-electric buses per the Board's June 2016 decision.

Procurement:

- After a high level review of electric bus specifications by PSTA staff, a Request for Proposal (RFP) was issued in November 2016 for the purchase of two all-electric buses with the option to purchase up to 20 additional electric buses available in 35' and/or 40' lengths in future years as funding was approved.
- Necessary charging equipment was also included in the procurement.
- The RFP was posted on PSTA's website, DemandStar, Passenger Transport, Transit Talent, and sent to every transit electric bus manufacturer in the United States.
- PSTA received three proposals from interested and capable manufacturers to supply the buses:

BYD Motors, Inc.	Los Angeles, CA
New Flyer, Inc.	Winnipeg, Canada
Proterra, Inc.	Burlingame, CA

- It is noted that each of these companies presented their electric bus model at PSTA’s headquarters over the past year.
- After a careful review of all proposals, along with in-person presentations by each of the Proposers, the Selection Team recommends award of the contract to the highest ranked, lowest cost contractor, BYD Motors, Inc.
- The purchase order for the buses and charging equipment will be issued in March pending approval of award and the buses are expected to be delivered in early 2018.
- All buses ordered by PSTA would be purchased “Turn-Key” meaning all onboard peripheral devices (i.e. passenger counters, camera systems, radio systems, and smart bus technology systems), along with the graphics, at BYD’s assembly plant located in Lancaster, CA.

Pilot Project Costs

No.	Unit Price	Unit Price	Total Cost
BYD North America, Inc. Contract			
1	Two 2017 35’ All-Electric Buses	\$840,353	\$1,680,706
2	Tools & Delivery Costs		\$46,919
3	Training & Tech Support		\$0
4	On-Route Charging Station Equipment		\$400,000
Total BYD North America, Inc. Contract			\$2,127,625
5	Installation of On-Route Charging Station In St. Petersburg	Est. \$200-\$500K	\$200K-\$500K
6	Upgrades to PSTA Facility Utilities	Est. \$200K	\$200K
Total Pilot Project Year One Costs		\$2,600,000 - \$2,900,000	

- The total cost for two buses, charging equipment, technical training, and tooling is \$2,127,625.

Fiscal Impact: \$2,200,000 for this Contract. Installation Contracts will Require Future PSTA Board Approval.

No.	Funding Source	Total Cost
1	PSTA’s Federal Transit Administration Grant Funds	\$2,011,000 - \$2,311,000
2	Pinellas County BP Settlement Funds	\$589,000
Total Pilot Project Funding		\$2.600,000 - \$2,900,000

- Additionally, PSTA is working with Duke Energy to provide funding support for additional infrastructure costs
- Additionally, Mayor Kriseman and the City of St. Petersburg have indicated a willingness of the City to consider budgeting funds to support the ongoing operational costs of these buses in an enhanced downtown St. Petersburg circulator service.

Recommendation:

- Approve a contract with BYD Motors, Inc., for the purchase of:
  - Two 35', all electric/zero emission, low floor buses
  - Two depot charging stations
  - One fast charging on-route charging station
  - Option to purchase up to 20 additional buses/associated charging stations in future years subject to the availability of funding.
  - Total not to exceed cost (two buses & charging equipment) \$2,200,000.
- The Transit Riders Advisory Committee (TRAC) reviewed this item and is recommending approval.