

Award the Purchase of Zero-Emission Buses

Background

- 2018 California Air Resources Board - Innovative Clean Transit Rule
- 2020 Orange County Transportation Authority (OCTA) submitted the Board of Directors-approved Zero-Emission (ZEB) Rollout plan
- 2020 Initiated the ZEB Pilot Program
 - 10 fuel-cell electric buses (FCEB)
 - 10 battery-electric buses (BEB)
- 2024 Expand the ZEB fleet
 - 40 FCEBs
 - 10 BEBs

Zero-Emission Buses



Equipment and Support

- OCTA standard equipment
- Operator protection barrier
- Three-position bike rack
- ADA/accessibility equipment
- USB chargers and Wi-Fi
- On-board video surveillance system
- 360-degree cameras
- Awareness monitors/displays
- Fire and hydrogen detection systems
- Radio communication system wiring
- Extended warranties
- Technician training
- Preventive maintenance and procedure manuals
- Operator manuals
- Parts manuals

ZEB Improvements

- BEB - Larger battery capacity 650 kWh
 - *Increases operating range*
- FCEB - Larger fuel-cell 100 kWh
 - *Improves route deployment*

*ADA – Americans with Disabilities Act

USB – Universal Serial Bus

kWh – Kilowatt hour

Cost Analysis

Procurement Year FCEB	Price	Procurement Year CNG	Price	FCEB Cost Over CNG
2018 FCEB	\$1,296,262	2019 CNG	\$608,312	113%
2024 FCEB	\$1,589,863	2024 CNG (Est)	\$966,500	64%

Procurement Year BEB	Price	Procurement Year CNG	Price	BEB Cost Over CNG
2020 BEB	\$1,037,000	2019 CNG	\$608,312	71%
2024 BEB	\$1,387,039	2024 CNG (Est)	\$966,500	44%

Bus Type	Original Proposal (May 2024)	Negotiated Final Price	Savings
40 FCEBs	\$69,764,991	\$63,594,512	-\$6,170,479
10 BEBs	\$14,624,938	\$13,870,388	-\$754,550
			-\$6,925,029

*CNG – Compressed Natural Gas

*Est – Estimate

Recommendations

- A. Approve the selection of New Flyer of America Inc. as the firm to provide 40 fuel-cell electric buses intended to replace 40 buses that have exceeded their useful life.
- B. Authorize the Chief Executive Officer to negotiate and execute Purchase Order No. C-3-3021 between the Orange County Transportation Authority and New Flyer of America Inc., in the amount of \$63,594,512 for the purchase of up to 40, 40-foot fuel-cell electric buses.
- C. Approve the selection of New Flyer of America Inc. as the firm to provide ten battery-electric buses intended to replace ten buses that have exceeded their useful life.
- D. Authorize the Chief Executive Officer to negotiate and execute Purchase Order No. C-3-3022 between the Orange County Transportation Authority and New Flyer of America Inc., in the amount of \$13,870,388, for the purchase of up to ten, 40-foot battery-electric buses.