

Gold Coast Transit District Zero Emission Bus (ZEB) Transition Center of Transportation and the Environment (CTE) Scope Overview



Our Mission

GCTD's mission is to provide safe, responsive, convenient, efficient, and *environmentally responsible* public transportation that serves the diverse needs of our community.



GCTD's ZERO EMISSION BUS TRANSITION PLAN

Current Fleet



Standard Buses

- Fixed-route service
- 40-ft (44) & 35-ft (17)
- CNG
- Total of 61 active
- 9.9 years avg age



Cutaways

- Demand response
- 23-ft
- CNG
- 8 total
- 4 years avg age



MV-1 Vans

- Demand response
- Unleaded gasoline and CNG
- 18 total
- 4.3 years avg age



CARB's "ICT" RULE & WHAT IT MEANS?



**In 2018, California Air Resources Board (CARB)
"Innovative Clean Transit" Rule**

GOAL: Transition to Zero Emissions by 2040

TRANSITION PLAN DUE BY 2023



Fuel Technology Comparison

Best Overall Fit for Gold Coast Transit Fleet

BEB



HFCB



300-340 miles

Proven range (300 to 340 miles, with advanced fueling technology that can extend this range by almost double)



Significant reduction in vehicle weight and vehicle axle weight to maximize passenger loads



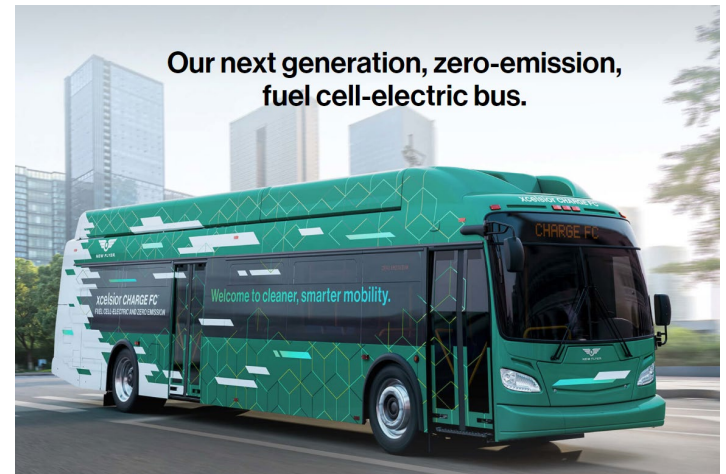
Fast refueling speeds comparable to conventional diesel and CNG buses



1:1 replacement of conventional buses enabling full flexibility for route planning and operations

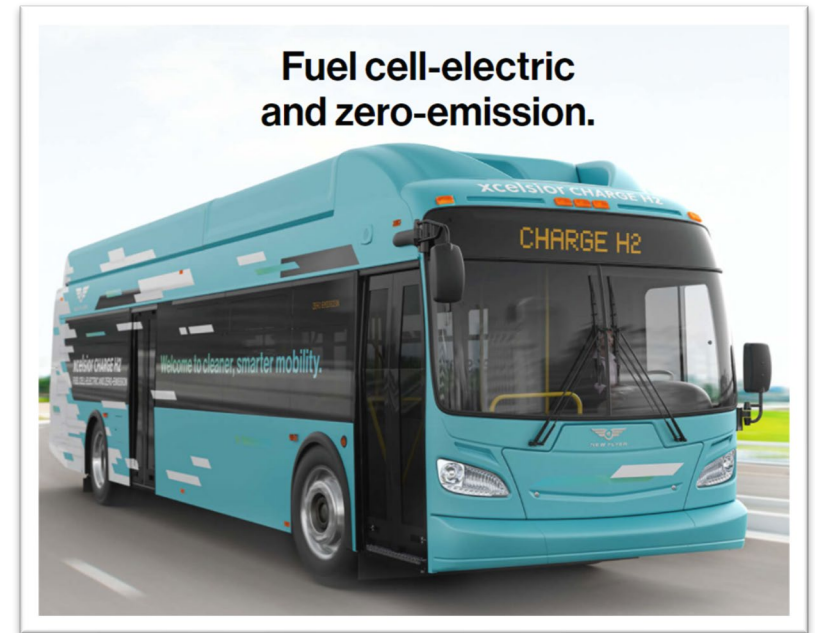


In July of 2022 GCTD partnered with the Center of Transportation and the Environment and Bus Manufacturer New Flyer on an \$12.1 million FTA Lo-No grant. GCTD plans to leverage other funding for a total project of over \$16 million.



GCTD 2022 FTA Grant Award includes:

- Hydrogen Fueling Station
- 5 Hydrogen Fuel Cell Buses
- Workforce Training
- Facility Upgrades



The Center of Transportation and the Environment

- The Center for Transportation and the Environment (CTE) is a member-supported 501 (c) (3) nonprofit organization that develops, promotes, and implements advanced transportation technologies, vehicles, and fuels that reduce environmental pollution and fossil fuel dependency.



The Center of Transportation and the Environment



Los Angeles County Metropolitan Transportation Authority Zero-Emission Bus Master Plan Project



City of Santa Monica Battery Electric Bus Deployment



Fuel Cell Electric Bus Commercialization Consortium



AC Transit Electric Bus Program



SunLine Center of Excellence



Project Timeline (Please be as specific as possible)

Timeline Item Description	Timeline Item Date
FTA Award & Project Partner Contracts	12/30/2022
Project Planning & Initiation	01/31/2023
Requirements Analysis	02/28/2023
Bus Procurement & Build	01/31/2025
Infrastructure Procurement & Build	01/31/2025
Bus & Infrastructure Deployment	01/31/2025
Deployment Validation	03/31/2026
Project Close-Out	06/30/2026
Project Management & Reporting	06/30/2026



CTE Scope of Work:

- Analysis & Planning
- Bus Procurement & Build
- Hydrogen Station Design & Build
- Bus and Station Deployment
- Deployment Validation
- Project Closeout
- Project Management & Control



CTE's quote is as follows:

Task	Description	Total
1	Project Planning	\$34,000
2	Bus Procurement & Build	\$32,000
3	Infrastructure Procurement, Design & Build	\$135,000
4	Bus & Infrastructure Deployment	\$35,000
5	Deployment Validation & KPI	\$95,000
6	Project Closeout	\$11,000
7	Project Management, Administration, Reporting & Control	\$222,000
TOTAL		\$564,000

