Gold Coast Transit District
Final ZEB Transition and Rollout Plan
Presentation for GCTD Board of Directors

GOLDCOAST TRANSIT

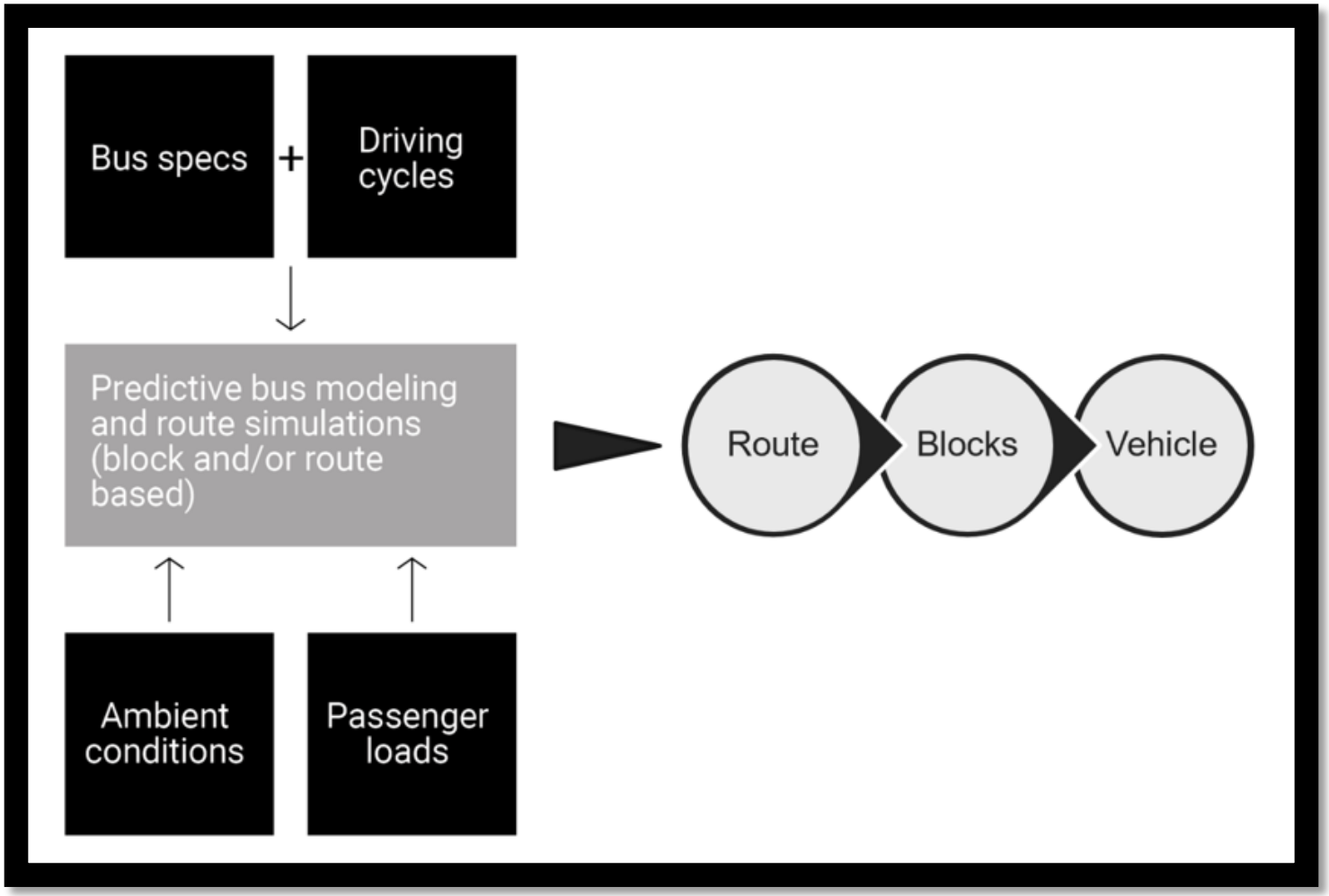
Our Mission

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

Zero-Emission Bus Rollout Plan

- To comply with the C.A.R.B. Innovative Clean Transit (ICT) Rule to transition to zero-emissions by 2040.
- GCTD has been working with Stantec in constructing this plan since August of 2021 with action items taken to the GCTD Board.
- GCTD Board accepted staff's recommendation and approved hydrogen fuel cell as the technology to power our buses in the future.
- GCTD Board was presented with draft report in November.
- The plan must be submitted to C.A.R.B. by June 30, 2023.
- GCTD is filing jointly with the City of Ojai.
- GCTD is bringing this action item to the Board for approval today.

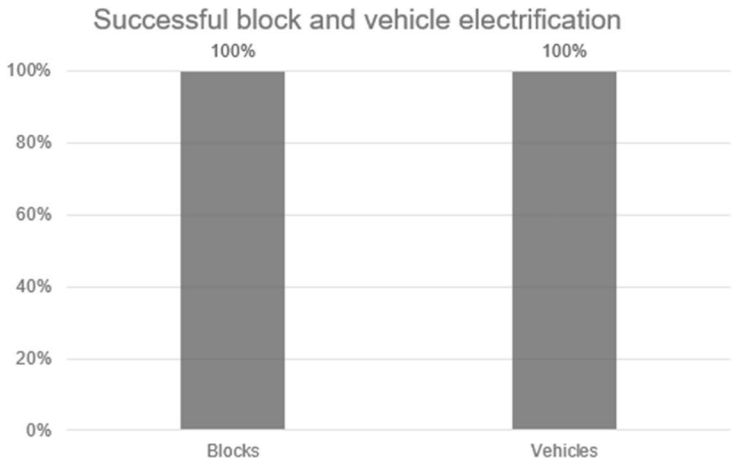
GCTD's ZERO EMISSION BUS TRANSITION PLAN



GCTD's ZERO EMISSION BUS TRANSITION PLAN

Modeling results – Fixed Route

Hydrogen



- All blocks successful
- All vehicle assignments successful

Vehicle type	Average fuel efficiency (mi/kg)
40-ft bus	7.20 mi/kg
35-ft bus	7.29 mi/kg
Overall	7.22 mi/kg

Fuel Technology Comparison Summary for Gold Coast Transit Fleet

Trade-Off	Fleet Concept A (BEB concept)	Fleet Concept B (FCEB concept)
Scheduling and planning	★★☆	★★★
Operations and dispatching	★★☆	★★☆
Training and agencywide adoption	★★☆	★★★
Technology availability/ OEMs/ procurement	★★☆	★★☆
Depot infrastructure	★★☆	★★☆
Other infrastructure	★☆☆	★★★
Other	★★☆	★★★
Overall best fit	★★☆	★★★

Fuel Technology Comparison
Best Overall Fit for Gold Coast Transit Fleet

BEB

HFCE

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

GOLDCOAST TRANSIT

GCTD is receiving real time data from these transit agencies that are leading the U.S. in Hydrogen Fuel Cell bus roll-outs. Lessons learned from these deployments will help ensure that GCTD's roll-out will be successful.

AC TRANSIT

OCTA

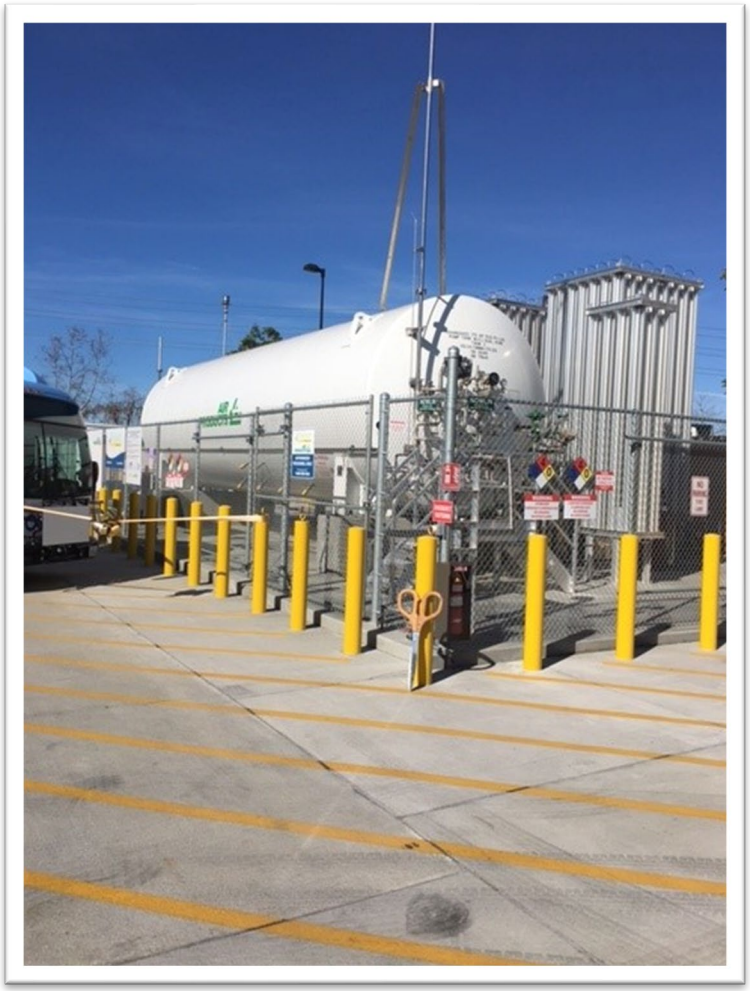
SunLine TRANSIT AGENCY

Foothill Transit

GET bus GOLDEN EMPIRE TRANSIT DISTRICT

GO GOLDCOAST TRANSIT

Hydrogen Fueling Station Model



- GCTD used OCTA's current pilot model.
- ***Trucked in hydrogen with the capability to service 50 buses and scalable to 100 buses***.
- Allows GCTD to pivot regarding hydrogen supply and availability.

GOLDCOAST TRANSIT

We want our service planned around the needs of our community…, not around the needs of our fleet.

QUESTIONS?

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