

# **JOINT INTERIM STANDING COMMITTEE ON GROWTH AND INFRASTRUCTURE**

**RTC Washoe**

**May 29, 2024**

## > RTC OVERVIEW

- RTC RIDE (fixed-route service)
  - 20 routes (2 BRT), 68 Buses
  - 15,000 trips a day
- RTC ACCESS (paratransit)
  - ADA service for people whose disability prevents them from using fixed-route transit service
- RTC FlexRIDE
  - Curbside-to-curbside transit service available in select areas of Sparks/Spanish Springs, Somersett/Verdi, North Valleys, and South Meadows
- Fuels Used
  - Battery Electric, Hybrid (biodiesel-battery), CNG, Hydrogen Fuel Cell

## > FACILITY OVERVIEW

### **Villanova Facility**

- 42 Hybrid Buses
- 23 Electric Proterra Transit Buses

### **Sutro Facility**

- 46 CNG Cutaways
- 10 gasoline minivans
- Hydrogen Fueling Station
- 2 Hydrogen buses, 6 more in 2024

### **Transit Centers**

- **4<sup>th</sup> Street Station**
  - Overhead Fast Chargers
- **Centennial Plaza**
  - Overhead fast charger
- **Meadowood Mall**
  - Future Charging in Design

# > PUBLIC TRANSPORTATION: REBUILD PUBLIC TRANSPORTATION

## Culture of Innovation

- Vehicles, software, services

## Early Adopter of BEB buses

- Four – 2013 Proterra
- 17 – 2018 Proterra
- Two – 2020 Proterra

## > BATTERY ELECTRIC BUS BENEFITS (PROS)

- Lower power costs
- Lower expected maintenance costs
- Zero emissions
- Health benefits
- Quiet

## > BATTERY ELECTRIC BUS CONS

- Electrical infrastructure upgrades
- Demand charges and energy management
- Supply chain issues
- Limited range/range anxiety
- Limited areas for application

## > WHY HYDROGEN?

- **Vehicle Range**
  - Electric: 90 miles (125-150 miles, newer generation)
  - Hydrogen: 300 miles
- **Scalability**
  - Generally, HFCE buses have more upfront cost and less incremental costs than BEB
- **Fueling time**
  - 7-10 minutes vs. overnight charging (4-5 hours)

## > RTC PLAN - FUNDING

- **2021 Federal Low-No Grant**
  - Two buses
  - Fueling infrastructure for up to 10 vehicles (5 per hour)
  - \$6.8 million
- **2023 Federal Low-No Grant**
  - Six buses
  - Fueling expansion for up to 50 vehicles (10 per hour)
  - VR training platform
  - \$8.8 million
- **Facility to be located at our current ACCESS Facility/ Maintenance Sutro Facility**



## > RTC PLAN - PARTNERS

- New Flyer (Vehicle Manufacturer)
- Ballard Power Systems (Fuel Cell)
- Krueger Transport (Consultant)
- Air Products (Fuel Provider)
- Marathon (Facility Construction)

## > CURRENT AND NEXT STEPS

- First vehicles arrived in December
- Fueling facility finished later this year
- Long term - combined facility
- Mixed fleet of hydrogen and electric moving forward

# THANK YOU

**Jim Gee**

**Director of Public Transportation and Operations**

**jgee@rtcwashoe.com**

**(775) 335-0020**

**Building A Better Community  
Through Quality Transportation**

**[rtcwashoe.com](http://rtcwashoe.com)**