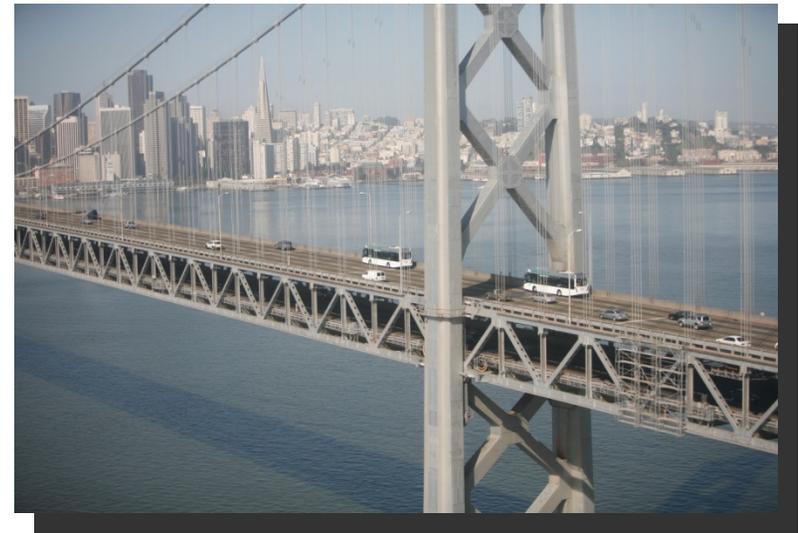




# The Future of Public Transport – In Pursuit of Zero Emissions

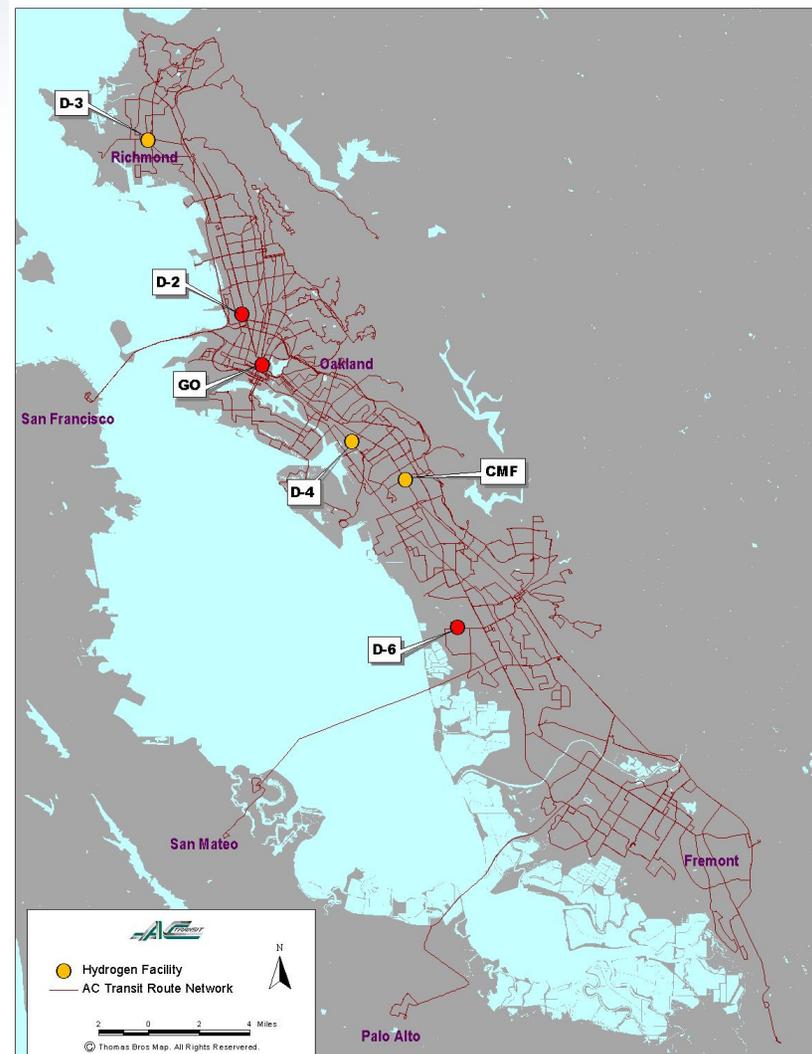
H. E. Christian Peeples





# AC Transit

- **Serving 1.5 million people in 13 cities**
- **67 million passengers**
- **650 buses**
- 2,190 employees
- \$309 million budget
- 105 lines (27 transbay)





# Getting Started with Hydrogen

- Under Development Since November 1999
- Member of ***California Fuel Cell Partnership***
- Member of ***Fuel Cell and Hydrogen Energy Assn***
- Member of ***The Climate Registry***





# 1<sup>st</sup> Generation Bus

- >267,000 Miles
- >700,000 Passengers
- 1.6 to 2.0 Times Better Fuel Economy
- 43% GHG Reductions  
(Reforming Natural Gas;  
100% reduction with solar or wind hydrogen)





## 3<sup>rd</sup> Generation Design

- 5,000 lbs. Lighter
- Better Batteries
- 130,630 miles (since Aug 2010)
- > 10,000 Fuel Cell Hours
- > 650,000 Miles – UTC Fuel Cell Fleet
- Over 1 million passengers in the Bay Area
- Passengers, Mechanics, and Drivers Love Them



**“Like Disneyland in The Real World!”**



# ACT Solar Power – 1.3 Megawatts

AC Transit solar system will provide renewable power to Emeryville station

**\$6.4 Million FTA  
TIGGER I Grant for  
new 700 kW solar  
system**





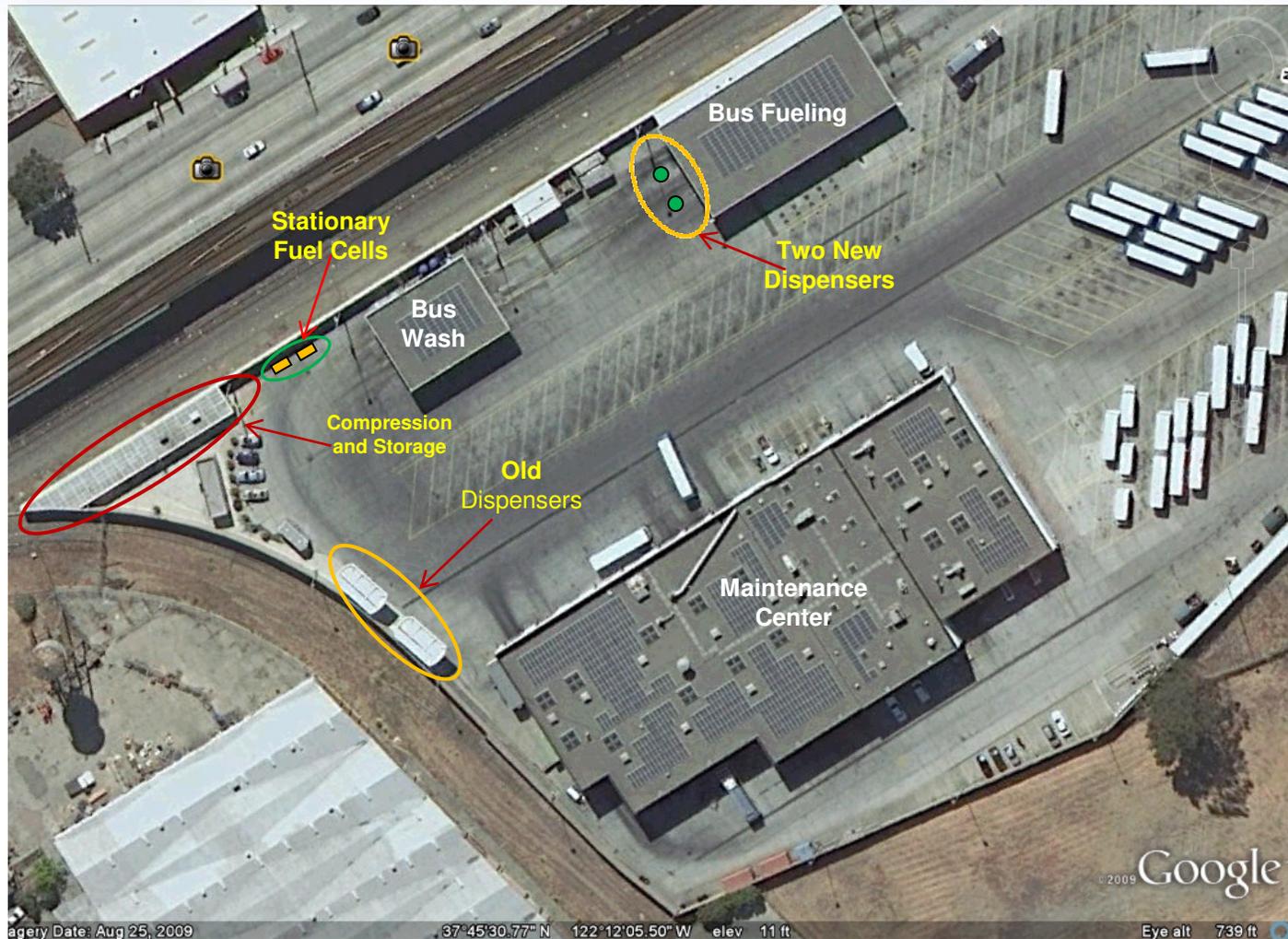
# Emeryville Energy Station

- **Solar Electrolysis**
- **Liquid Hydrogen**
- **Fast Fueling (5-6 kg/minute)**
- **Buses and Cars**
- **August Startup**





# Seminary Station – 400 kW Fuel Cell TIGGER II





# New Station Objectives

- **Steps toward Commercialization**

1. Fast Fueling
2. Energy Efficient
3. Green Footprint
4. Scalable



5. Integration with Existing Inline Diesel Fueling



## Contact Information

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