

# THE GROWING US ELECTRIC BUS MARKET

International Zero Emission Bus Conference

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 **Air Resources Board**

# US transits currently adopting ZEBs

- Over 300 ZEBs at almost 60 agencies
- Buses are an ideal application for zero-emission
  - Consistent mileage, central fueling
- Health benefits to communities
- Pave the way for all HD vocations
  - Technology transfer
  - Policy groundwork
  - Zero-emission components



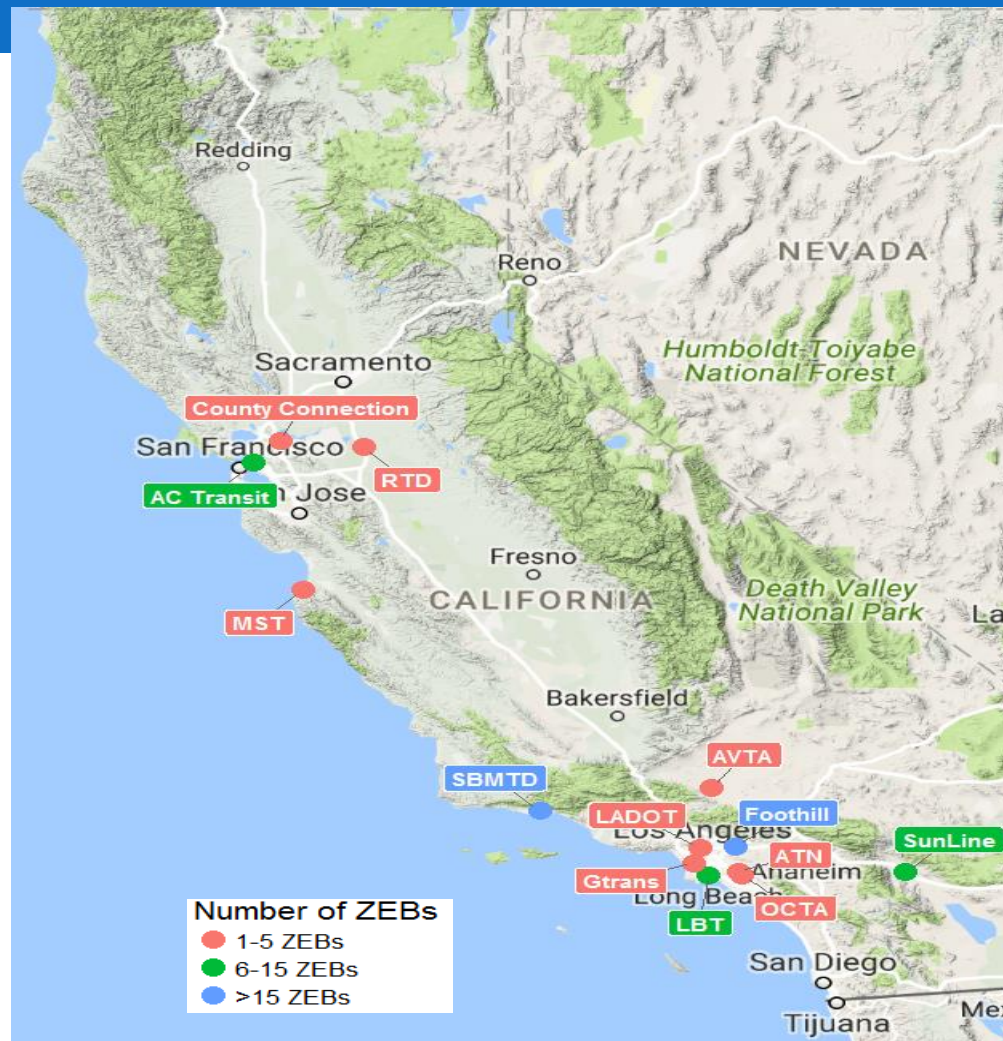
# American Technology Incubation

- Partnerships in development, testing, and infrastructure
  - DOE, FTA
  - NFCBP, AFCB
- Technology demonstration
  - SunLine, Santa Barbara, Chattanooga, Georgetown
- Training program development
  - AC Transit, SunLine
- California has shaped a policy path for technology advancement, with air quality and climate change goals

# 108 Zero Emission Buses Currently Operating in CA



# 230 More Buses On Order or Awarded Funding



# Major Funding Programs in California

Provider	Program
Federal Transit Administration	National LoNo – over \$100M since 2014
Air Resources Board (cap and trade proceeds)	<ul style="list-style-type: none"><li>• Zero-Emission Bus Pilot Commercial Deployment Project<ul style="list-style-type: none"><li>• 50 ZEBs plus infrastructure to date</li></ul></li><li>• Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project<ul style="list-style-type: none"><li>• 77 ZEBs and 177 hybrids in 2016</li></ul></li></ul>
Air Resources Board	Low carbon fuel regulation <ul style="list-style-type: none"><li>• Estimated &gt;\$100,000 over life of the bus for low carbon fuel</li></ul>
California State Transportation Agency (CalSTA)	Transit and Intercity Rail Capital Program (TIRCP) <ul style="list-style-type: none"><li>• Funded 74 ZEBs to date</li></ul>
Caltrans	Low Carbon Transit Operations Program (LCTOP) <ul style="list-style-type: none"><li>• Funded 22 ZEBs &amp; 72 charging stations to date</li></ul>

# Buses Moving Forward

- Shared public policy goals – increased ridership with environmental stewardship
- Fleets adopting ZEBs at a growing rate
  - Technology awareness
  - Decreased operational costs
- More work to be done
- Are zero emission buses ready for a significant expansion – YES!

