

REVOLUTIONIZING URBAN TRANSIT



PROTERRA

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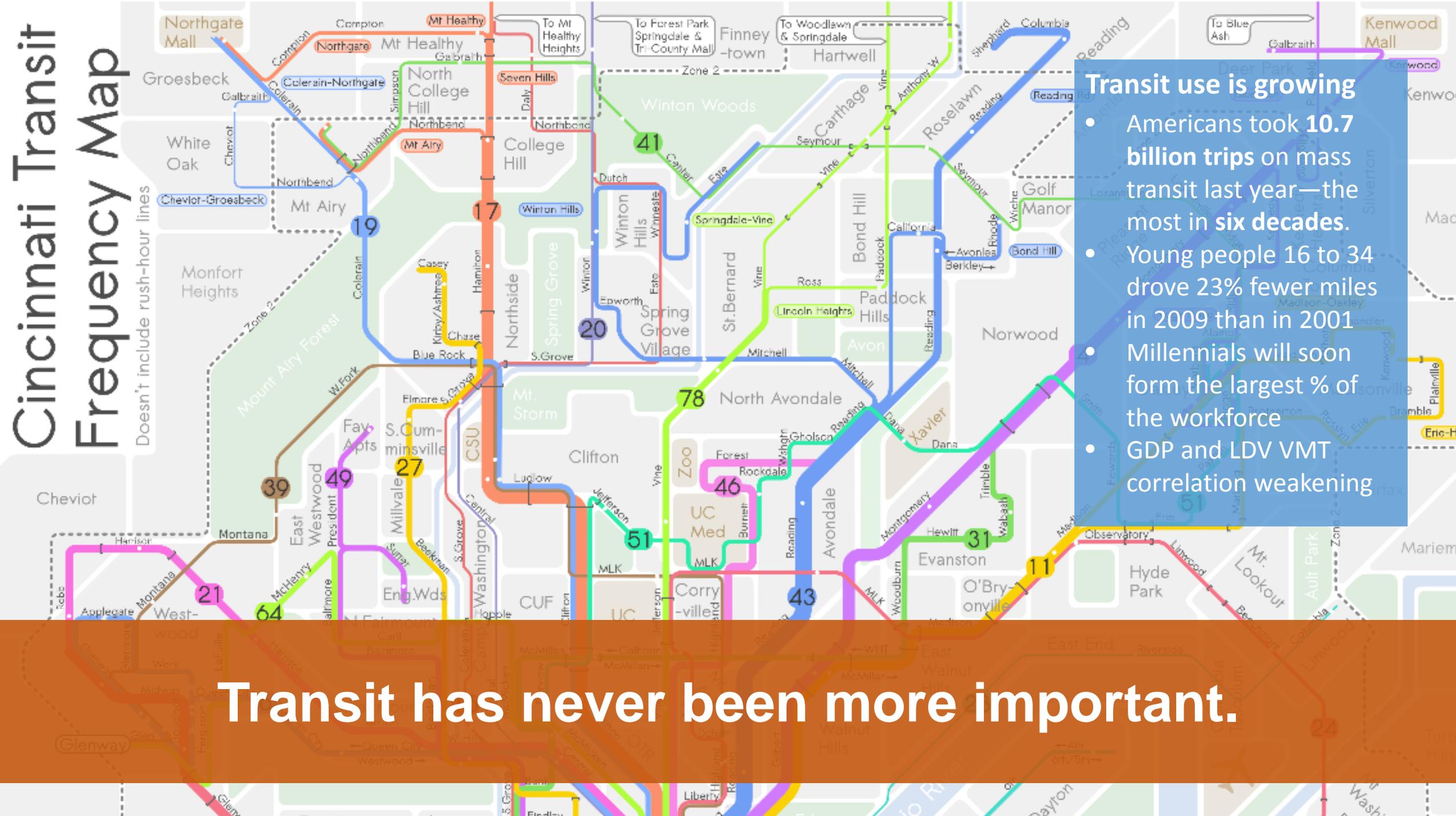
Innovations in Transportation

California Transportation
Commission

October 21, 2015

Cincinnati Transit Frequency Map

Doesn't include rush-hour lines



- Transit use is growing
- Americans took **10.7 billion trips** on mass transit last year—the most in **six decades**.
- Young people 16 to 34 drove 23% fewer miles in 2009 than in 2001
- Millennials will soon form the largest % of the workforce
- GDP and LDV VMT correlation weakening

Transit has never been more important.



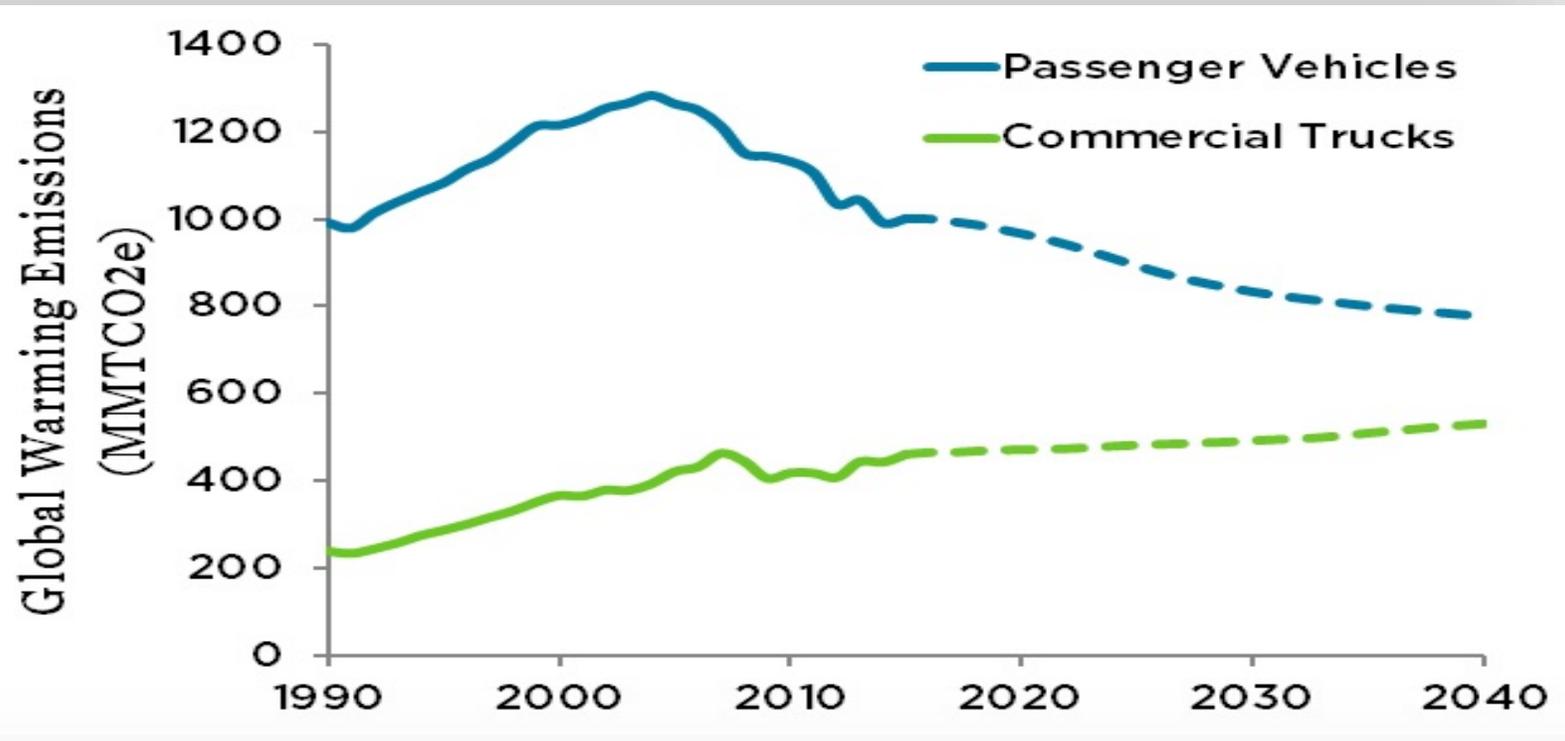
Total fuel consumed
by buses per year:

- Diesel fuel:
389,600,000 gallons
- CNG fuel:
150,000,000 gallons

Total GHG per year:

- From diesel buses:
12,500,000,000 lbs
- From CNG buses:
4,600,000,000 lbs
- From hybrid buses:
832,600,000 lbs

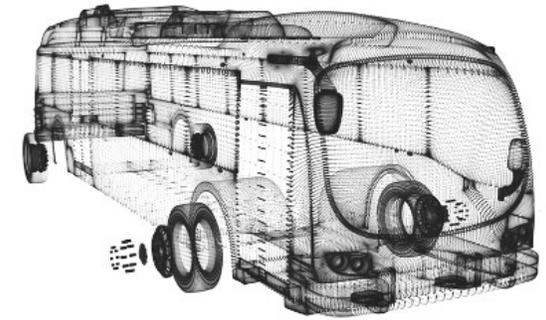
**More urbanization = more transit.
More transit = more pollution?**



“The biggest reason for the continued increase in emissions from the Heavy-Duty Sector is the simple fact that efficiency has remained stuck in the 1970s at about **6 miles per gallon”**

TIME TO REIMAGINE

BUS TRANSIT



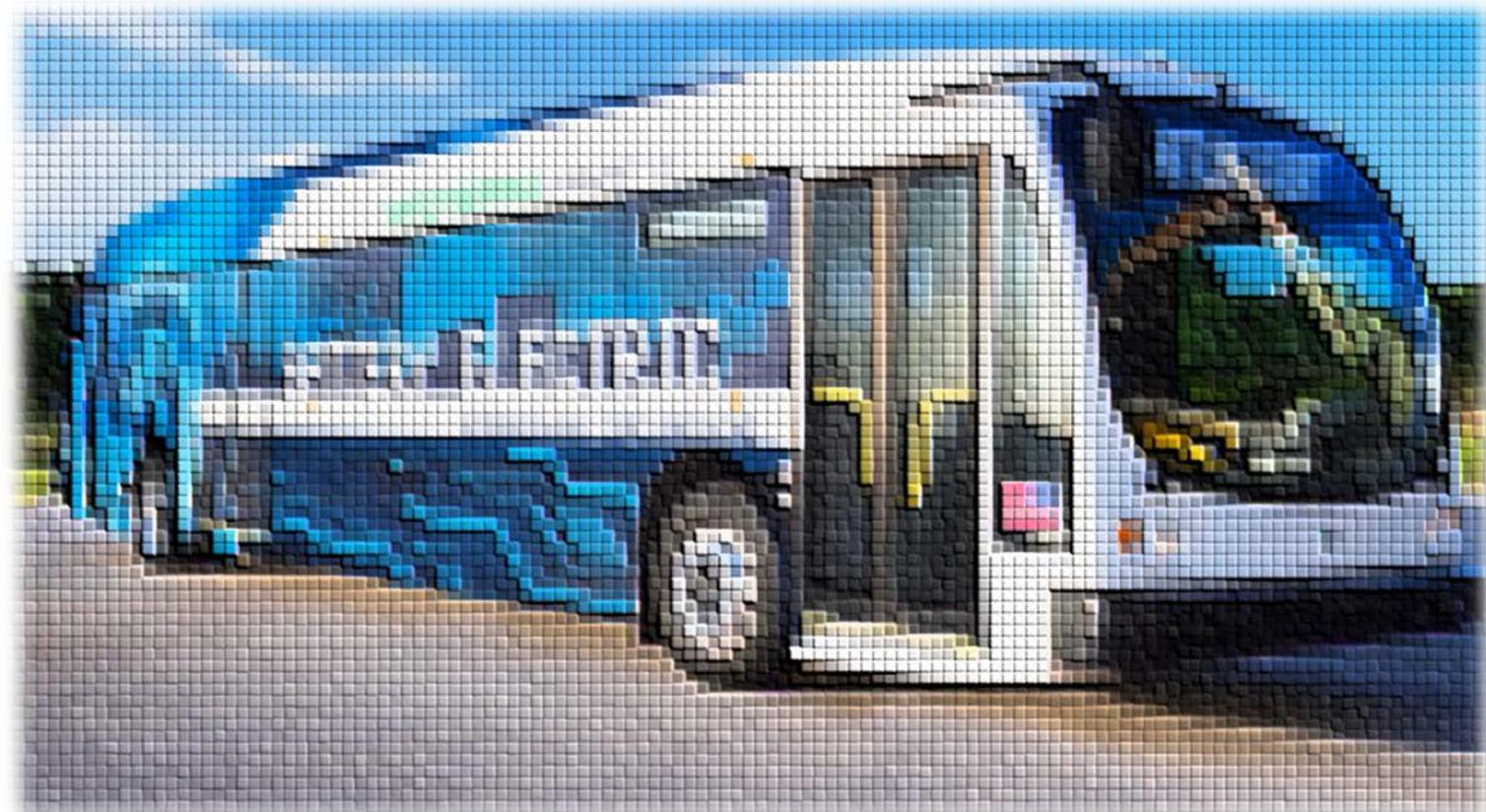
INNOVATE TO ZERO

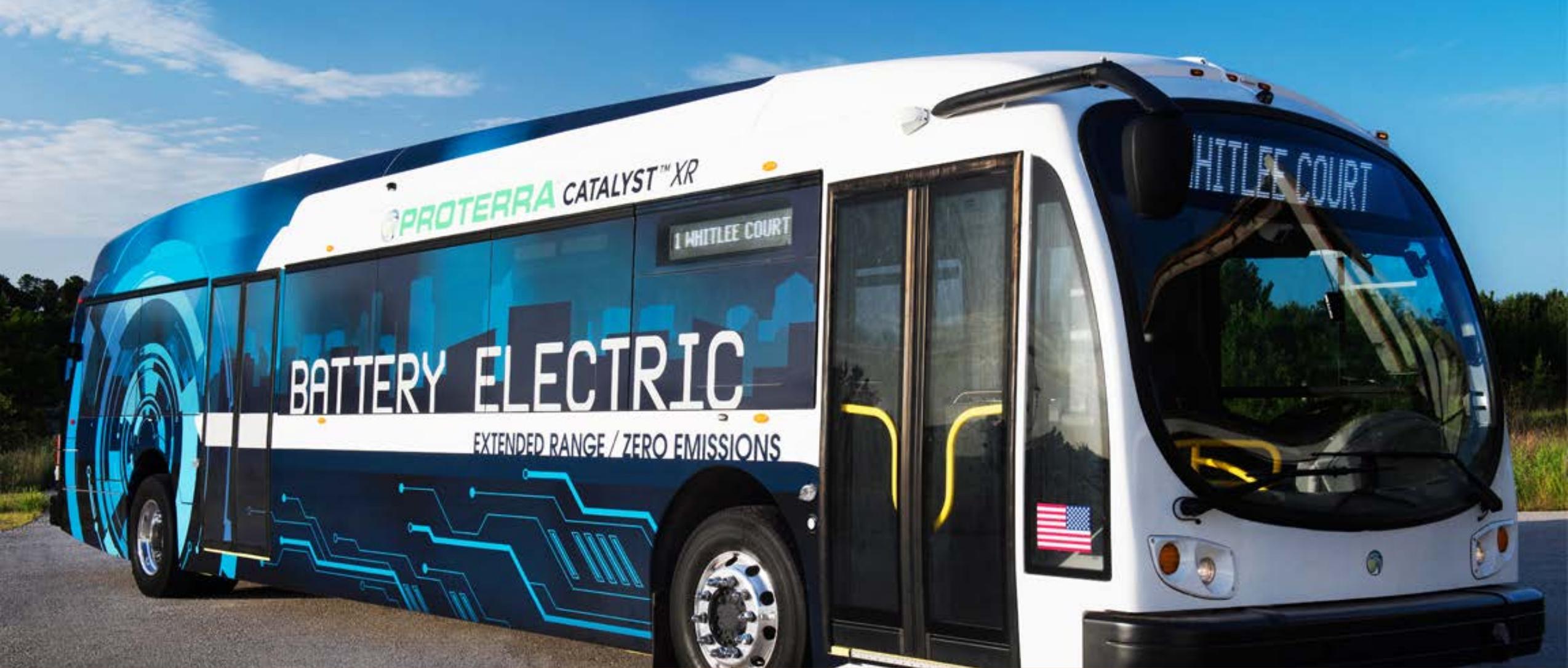
QUIET

LIGHT WEIGHT

DIGITAL RELIABILITY

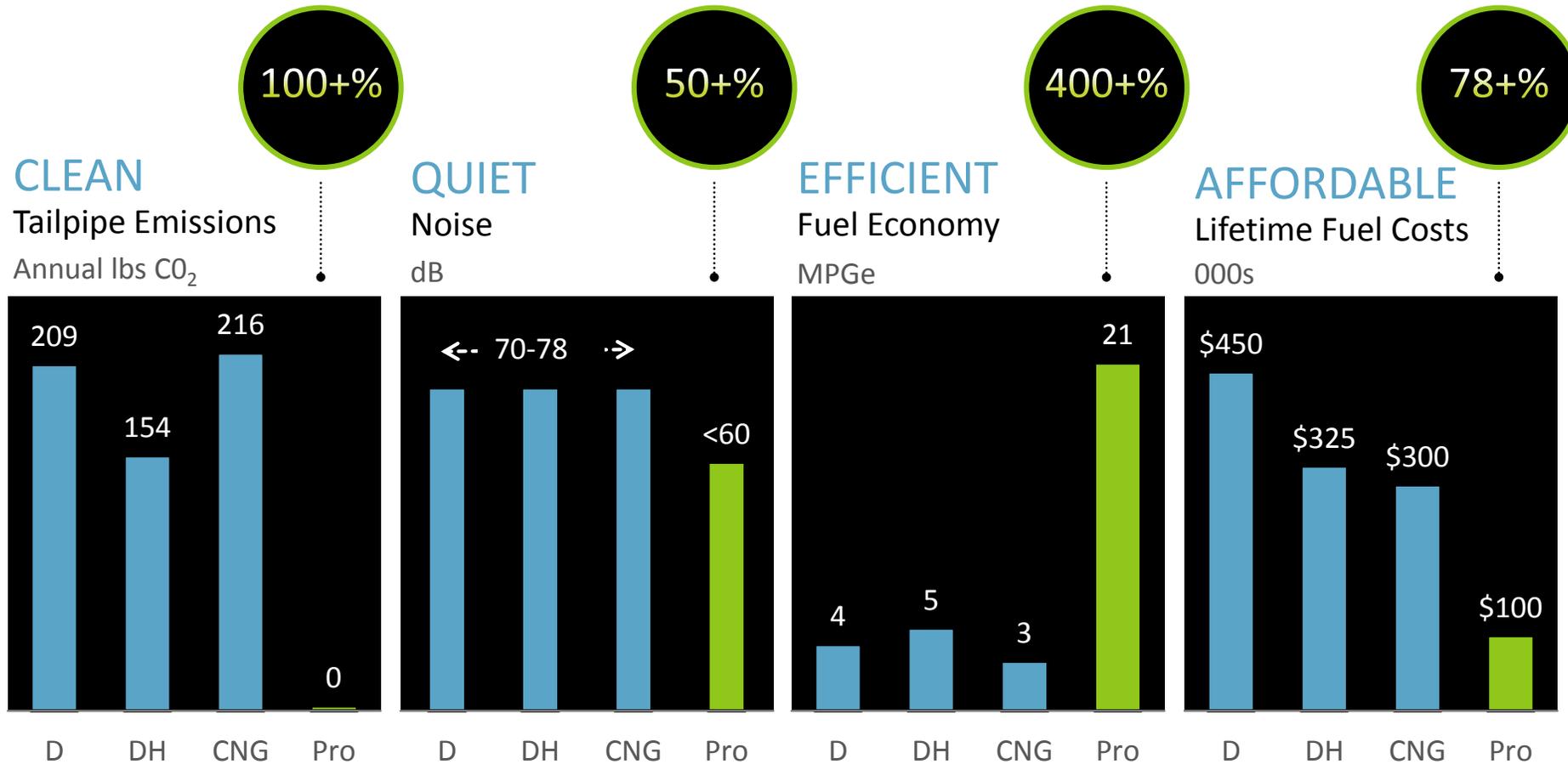
HIGH PERFORMANCE





**Proterra® EV Transit Bus
Record Breaking (Accel, Climb, Efficiency, Weight)**

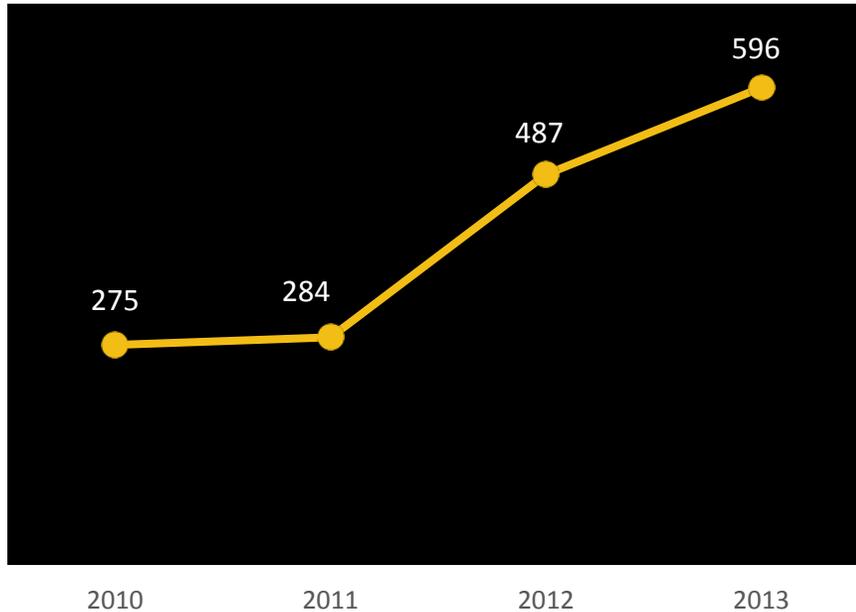
THIS IS ABOUT PERFORMANCE



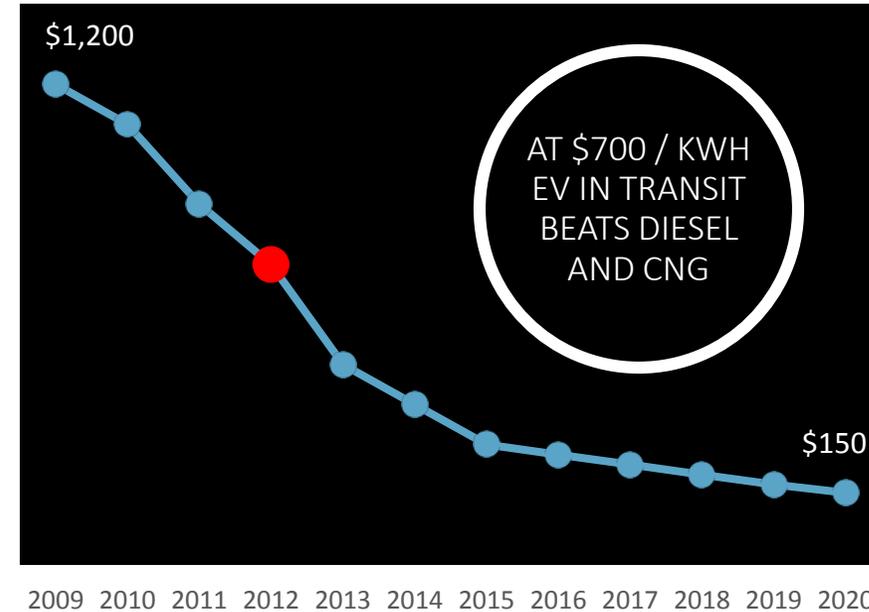
EV MARKET PROVIDED THE COST REDUCTIONS



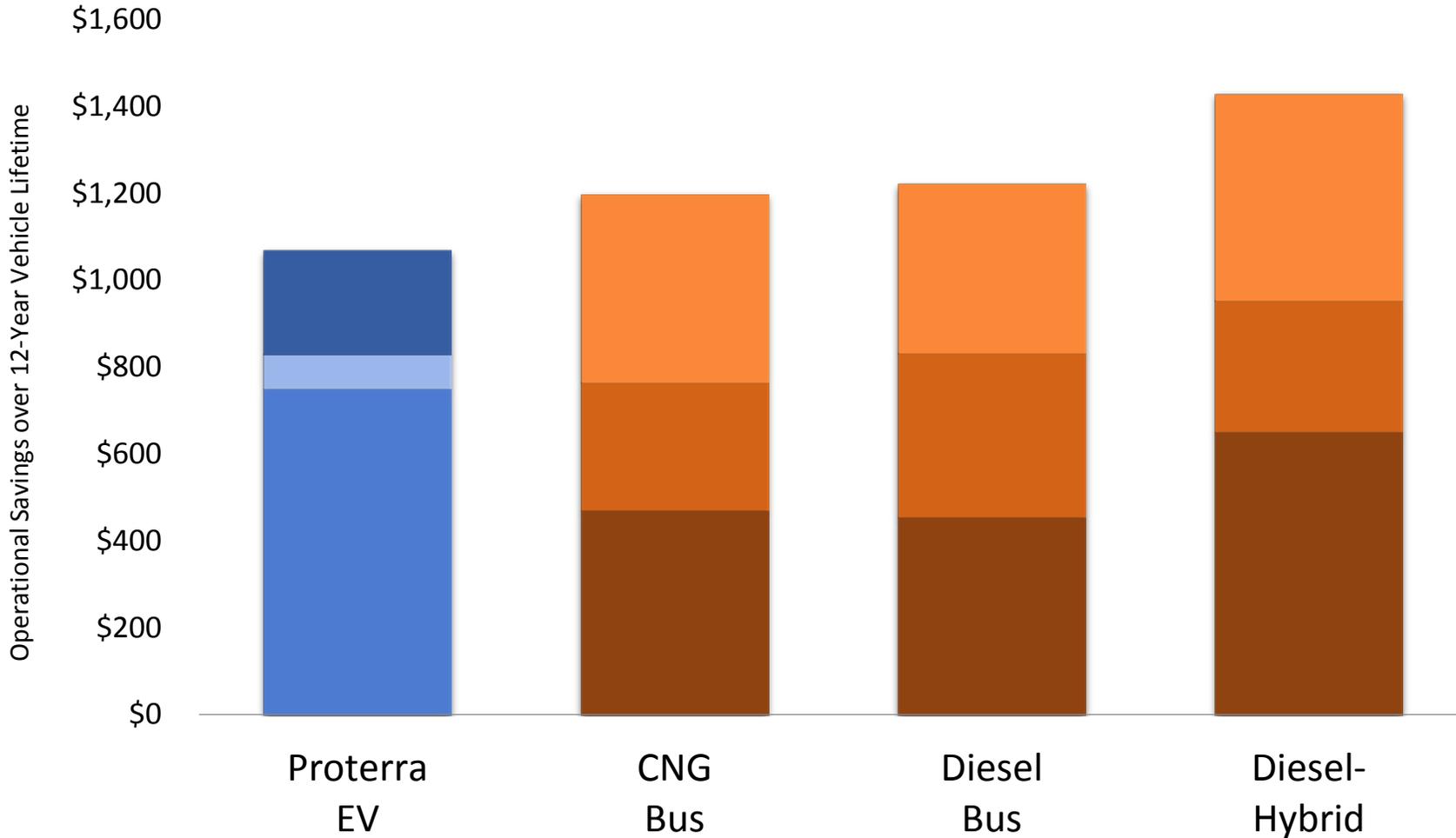
U.S. HYBRID & EV SALES (000s Units)



BATTERY PACK COST (\$/kWh)



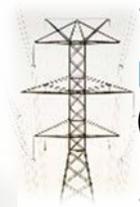
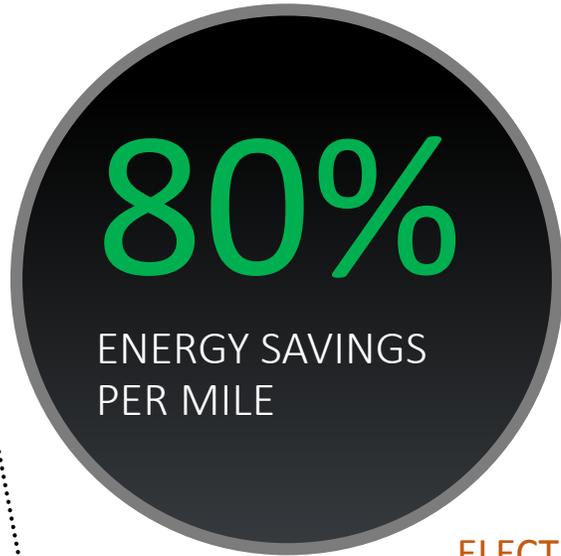
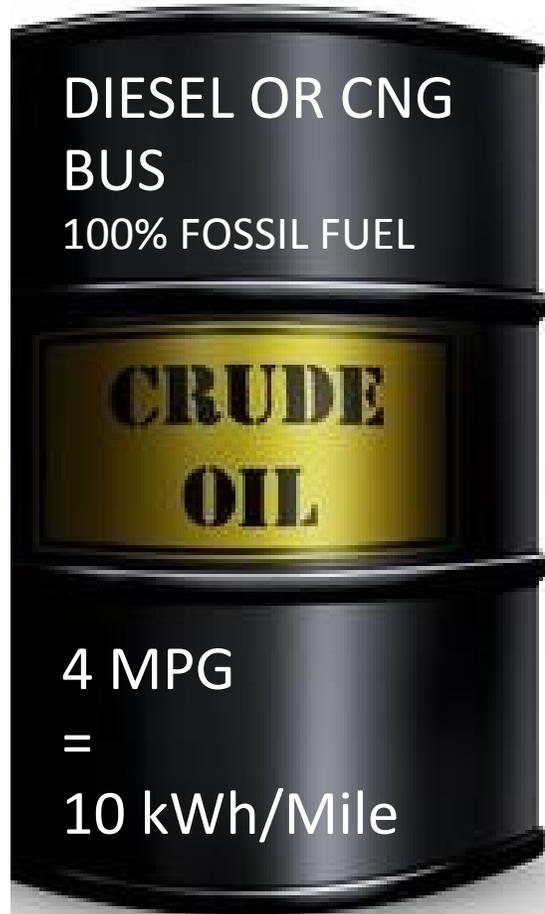
.....> **ADVANCED BATTERY TECHNOLOGY HAS DECLINED IN COST TO THE POINT OF DISRUPTION IN THE TRANSIT MARKET**



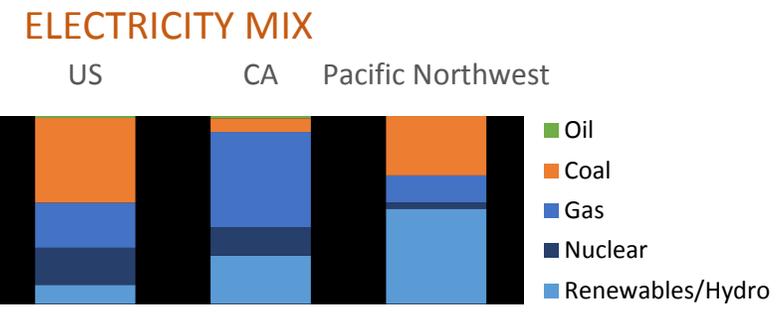
12-yr Operational Savings per Bus:
 \$448k vs. Diesel
 \$459k vs. Hybrid
 \$408k vs. CNG

Proterra vehicles can save customers \$450,000 over a 12-year lifetime.

ENERGY EFFICIENCY GAINS AND CLIMATE BENEFITS

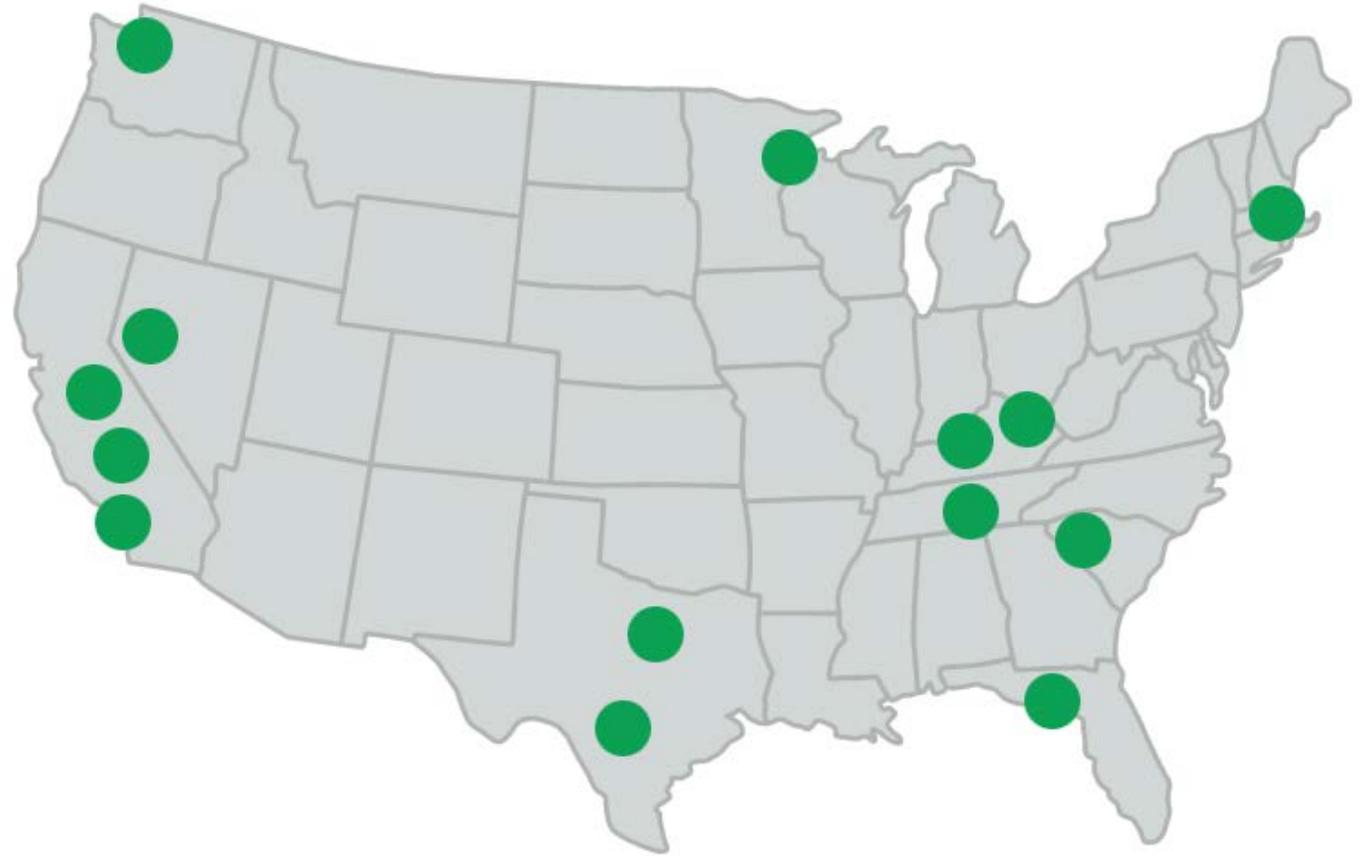


ELECTRIC BUS
(2 kWh/Mile)



Net Fossil Fuel Reduction

Our Customers Today



**This is
Happening.**

- 14 customers | 108 orders | 316 contracted options
- 60 vehicles delivered | > 1,500,000 service miles
- >5,000,000 pounds of CO2 emissions avoided