



NET TRANS

Service area includes 3 cities,
8 counties and spans 2,800 square miles.





- 110 wheelchair vans
 - 50 converted to bi-fuel/ propane autogas
- 6 electric vehicles
- 3,300,000 miles annually
- 175,000 demand response trips

Factors to consider when choosing an alternative fuel

- What is your application?
 - Fleet vehicles for public transit
- What are your goals?
 - Reduce operating cost, emissions reductions
- How will you fund the project?
 - TDOT, FTA, FHWA, DOE, local
- What does your organization need to implement the project?
 - Information/Planning
 - Training & Resources- Clean Fuels Coalition
 - Support- Public/Private Partnerships

Evaluating Options

- What vehicles will meet our needs?
 - Mileage ranges, garage location, seating capacity
- What type of infrastructure is needed?
 - Fueling stations, electric chargers
- What is the total cost of ownership?
 - Cost of vehicle/infrastructure
 - What are the potential fuel savings?
 - Are there tax credits or rebates?
- What does the maintenance look like?
 - Do I need special tools?
 - Will mechanics and operators require additional training?

Comparing alternative fuel types

Propane Autogas

- More cost-effective than gasoline
 - Save an average of \$2.00+ per gallon
- Minimal upfront cost for tank and pumping system
- Burns cleaner, reducing maintenance costs and vehicle downtime
- Ability to utilize at bi-fuel
- Does not impact vehicle warranty

Electric

- More cost-effective than gasoline
 - Less than \$.03 per mile
 - More stable pricing
- Reduced maintenance costs:
 - Fewer moving parts,
 - No oil changes, and
 - Less wear on components such as brakes due to regenerative braking
- Less parts inventory for the maintenance shop
- Upfront cost to install EV chargers

Getting Started



- Tank was delivered and set by Alliance AutoGas



Elizabethton Maintenance Facility



Training

- Installation (mechanics) 60 hours
- Maintenance training 10 hours
- Driver training 1 hour



Projected savings over 5 years

Fuel Type	Fuel Price	Fuel Economy Expectation	Anticipated Useful Life	Fuel Cost per Mile	Total Consumption Expected	Lifetime Fuel Cost
Gasoline	\$3.98	7.50	250,000	0.53	33,333	\$132,666.67
Propane	\$1.45	6.25	250,000	0.23	40,000	\$58,000.00
Gasoline to Propane Fuel Savings:						\$74,666.67
Cost of Conversion Kit:						\$5,100
Net Lifetime Savings per vehicle:						\$69,566.67

Chargepoint Level 2 chargers



Fleet of Ford Mach E Mustangs



Your Ride, Electrified

Projected savings over 5 years

Total Cost of Ownership Comparison (5 Years)

	Gasoline Vehicle	Electric Vehicle
Purchase Price	\$32,000	\$38,000
Fuel/Electricity	\$62,490	\$21,000
Maintenance	\$6,000	\$2,000
Charging Infrastructure (allocated per vehicle)	\$0	\$1,000
Total Cost Before Incentives	\$100,490	\$62,000

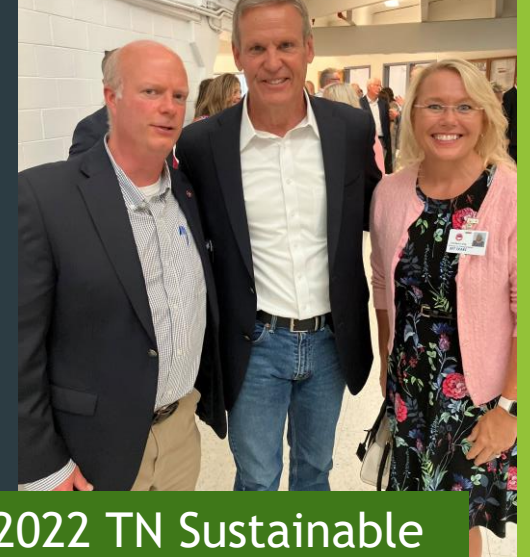
5 Year Savings

\$38,490

2018 TN Certified Green Fleets Award



2020 Governor's Stewardship Award



2017 Propane Education and Research Award



2016 Gordon Acuff Award



2022 TN Sustainable Transportation Award



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