ELECTRIC VEHICLE PILOT
TXDOT FLEET OPERATIONS DIVISION

TxDOT’s alternative fuels program
The Fleet Operations Division’s alternative fuels program helps TxDOT meet state goals in lowering emissions and decreasing dependence on conventional fuels. TxDOT has been using a variety of alternative fuel vehicles in its fleet for years, including CNG, propane and gas/electric hybrids.

Electric vehicle technology is developing rapidly, and there are now new types of plug-in vehicles on the market. Charging stations are popping up all over larger cities. TxDOT is now introducing some of these vehicles into its fleet.

Plug-in electric vehicle pilot
The Fleet Operations Division will pilot several plug-in electric vehicles in selected locations to test their performance. The project will evaluate driver feedback, costs, maintenance needs, charging station availability and other data. When the pilot concludes, staff will determine whether these vehicles are feasible for TxDOT’s pool fleet and make recommendations on any future use.

What types of vehicles are being tested?
TxDOT is piloting six different plug-in electric vehicles. The Houston District will test the following compact cars (ranges listed are approximate):
- Nissan Leaf — All-electric; 90-mile range.
- Chevrolet Bolt — All-electric; 200-mile range.
- Ford C Max Energi — Plug-in hybrid; 20-mile battery range; 600-mile total range.
- Toyota Prius Prime — Plug-in hybrid; 25-mile battery range; 600-mile total range.

Two electric sedans will be tested in the Austin headquarters pool:
- Chevrolet Volt — Plug-in hybrid; 50-mile battery range; 400-mile total range.
- Ford Fusion Energi — Plug-in hybrid; 20-mile battery range; 600-mile total range.

What are the benefits of electric vehicles?
Electric vehicles have low or zero emissions. They also have lower fuel and maintenance costs and are much quieter than conventional vehicles.

How are plug-in electric vehicles different from gas/electric hybrids?
A traditional gas/electric hybrid regenerates its battery during braking and gets its best fuel economy in stop-and-go traffic. It does not plug in and must be fueled at the pump. The two types of plug-in electric vehicles are somewhat different:

1. All-electric: This vehicle runs on only electricity and must be plugged in to charge. It has a limited range and is best suited for short trips.
2. Plug-in hybrid: This vehicle runs on a battery and conventional fuel and is suitable for short and long trips. It must be plugged in to charge the battery and fueled at the pump. It has a longer electric range than traditional hybrids.

Has TxDOT installed charging stations?
Two dual charging stations that can charge four vehicles at once have been installed in the pool vehicle parking area in the Houston District garage. Look for the parking spaces outlined in green.
Dual charging stations that can charge two vehicles at once have been installed at Riverside and Camp Hubbard near the pool vehicle parking areas.

The TxDOT charging stations are Class 2 chargers, which will charge a vehicle in 4-6 hours. Most commercial stations have rapid chargers, which will charge a vehicle’s battery to 80 percent in about 30 minutes.

Each electric vehicle is also equipped with a 110 volt AC power cord, which can plug into a standard outlet and charge the vehicle in 8-12 hours.

Where can I charge the battery when I am away from the office?

New charging stations are being added in cities frequently. You can find a list of stations at https://www.afdc.energy.gov/locator/stations/ by typing in your ZIP code. Each electric vehicle will have a card that will be accepted at most commercial charging stations.

Can I charge my personal vehicle at TxDOT’s charging stations?

No, the charging stations are exclusively for TxDOT vehicles.

What do I need to know about operating an electric vehicle?

Driving an electric vehicle is about the same as driving a conventional vehicle, but you should keep the following in mind:

- It is safe to drive in the rain or through puddles.
- Monitor the vehicle’s charge and gasoline level (if applicable).
- If you are driving an all-electric vehicle, keep the vehicle’s range in mind.
- Extreme heat and cold, speed and running the air conditioner can slightly reduce the electric range.
- Be sure to return the vehicle to one of the designated parking spaces and connect it to the charger. Please check to make sure it is charging for the next driver.

Questions?
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PLUG IN!