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YOUR NEW ELECTRIC (EV) FLEET VEHICLE

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You may have noticed something different about the new city fleet sedans rolling in as Fiscal Year 17 comes to an end. Almost all of them are now electric cars. City fleet operators at 19 agencies will be on the forefront of this exciting and critical transition. In this fleet newsletter for drivers, we will review the basics about these new electric vehicles.

Electric vehicles use large batteries to power the vehicle. The City operates two types of electric vehicle. Battery electric vehicles (BEVs) are powered only by electricity with no gas engine and no tailpipe emissions. With BEVs, drivers should be mindful of the charge left on the battery as they drive and should know the full range for each model vehicle. For example, the full range of the Nissan Leaf is 107 miles and the new Chevy Bolt is 238 miles. Please keep in mind, however, that use of the radio, heat, AC, GPS unit, and idle time can all reduce total range. Plan your trips so that you have extra battery life between charging.



The City also employs plug-in hybrid vehicles (PHEVs). These vehicles use electric batteries and also have backup gas engines and tanks. The electric range of the Chevy Volt is 53 miles on a full charge, 21 miles for the Ford Fusion Energi, and 25 miles for the new Prius Prime. The gas engine is an important backup for long trips or emergencies, but it's very important that we use the electric battery for the majority of vehicle miles to achieve the environmental benefits that come from EV use. Gas engines use only about 30% of the power from fuel combustion. Most of it is wasted as heat and emissions. Batteries achieve nearly 90% efficiency.



There is a myth about electric vehicles that they don't have much pick up or power. In fact, the exact opposite is true. Electric vehicles have what is referred to as "instant torque" with the electric current providing immediate power when you hit the accelerator. EVs will accelerate much more quickly than gas vehicles. Go slowly until you get used to the change.

Another benefit from EVs, especially BEVs, is reduced maintenance and fewer trips to the garage. The battery system is simpler and has fewer components to maintain than a gas engine. Our current BEVs cost less than 50% to maintain than gas sedans.

Of course, the biggest change with an EV is charging the vehicle. NYC fleet agencies currently operate 385 charging stations citywide with 232 more to come before the end of the year. This will include 32 new solar carports like the one shown here. Currently, NYC employs what are called Level 2 chargers. In general, a full charge with a Level 2 charger takes 6 to 8 hours.

If you charge up over-night and during the weekend, your EV should be ready to go for work hours and the range will cover most daily usage in the City's non-emergency fleet. To find an available charging location, please contact your agency fleet manager. If you need to locate additional options, feel free to reach out to us at DCAS for assistance.

Many of our newest EVs including the Prius Prime and the Chevy Bolt will also come with advanced safety systems including automatic braking. Fleet will post websites for each of our new EV models where you can learn more about the electric system, charging, and the safety outfitting.

NYC is on the forefront of electric vehicle adoption with one of the largest EV fleets in the world. It's our fleet drivers and garage professionals who will keep this effort on pace and successful. Many thanks.

Wishing everyone a happy and safe Fourth of July week!

