



## Electric Avenue

*The move away from gas-powered cars* // **BY GEOFFREY MORRIS**

» PURRING in from over the horizon is a silent but powerful brigade of vehicles that will transform the American car culture. For decades, electric cars have been a sideshow, a novelty act, a blip on the automotive sales chart. But over the next five years, electric vehicles—EVs—will make up 25 percent to 30 percent of vehicle sales, and the consequences are, well, shocking.

Right now EVs make up less than one percent of all vehicle sales. This includes all-electric, hybrids, and plug-in hybrids. In 2018, there were 350,000 EV sales in the United States—compared to 55 million gas-powered-car sales—and 140,000 of those were the Tesla Model 3. And currently there are about 40 EV models available. By 2025, there will be close to 100 models available in the United States—from compact to luxury to SUV. In fact, the Ford F-150 pickup truck—the best-selling vehicle in the United States—will be available as an EV.

One factor driving the greater available is price parity, and one thing driving price parity is battery cost. And the magic number of \$100/kw (currently around \$175 and dropping 20 percent per year) is just a couple years away. Which means a certain model car with a gas engine and with all-electric power will be comparable in price.

For those who have not experienced driving an electric vehicle, think Jetson spaceship and not puttery golf cart. The speed and power are explosive. A recent drag race conducted between the Tesla Model 3 and a Porsche 911 Carrera 4S left the fiery

German sports car lengths behind.

The switch from ICE (internal-combustion engine) to EV is dramatic, not just in car performance, but in fuel cost as well. A driver who might spend \$150 per month in gas for his 30-mpg car would spend about \$30 in home electric charges to fuel his EV. Public charging stations—particularly fast chargers—include an additional cost.

at least 30 minutes—and often more than a day with slow chargers—to power up.

Supply is ramping up with demand. The interstates are placing high-speed charging stations alongside gas stations at rest stops, allowing EVs to fill up in 30 minutes or so at a premium cost. But in other places, EV chargers are popping up in public parking lots, in downtown areas, and parking garages. Because EV

mission is researching how many charging stations the town needs to install where and how much to charge for their use. It's an "if we build it they will come" scenario, says ECDC chair John Devine. "People will come to dinner or a show in Ridgefield rather than another town knowing they can plug in their car for the three hours they are here," he says. The town would need to increase the number of public EV chargers from the current six to at least 20 in the next few years.

The environmental considerations are another factor—both good and bad. EVs will at the very least require significantly less fossil fuel and can benefit from clean-energy options, such as wind and solar. However the consequences of the disposal of used batteries has not been fully explored.

It's change all around. EVs are not only faster but require much less maintenance and perform differently. For example, when a driver takes his foot off the accelerator, the car slows itself, as it regenerates the decelerating power back into the battery. But the need for charging stations and the change in fueling behavior will have effects for years to come.



**THE PERKS** // EVs are faster, environmentally friendly, and require less maintenance.

Fueling behavior will become quite different. Now an average ICE gets 400 miles on a tank of gas. When it runs low, filling stations are plentiful, and the process takes a few minutes. It's rare to become anxious about running out of fuel in an ICE. Even with super-fast chargers, EVs require

fueling will mostly occur when the car is not being used—at night while the owner sleeps, during the day while the owner works, or for shorter periods while the owner shops or dines.

Seeing this trend, the Ridgefield Economic & Community Development Com-

## Take 5

How do you recycle books or a handful of crayons? Here are some fun ideas for putting hard-to-recycle items to good use.

**>> FRAMES** Turn old picture frames into an art project. A coat of paint will transform random frames into a cohesive set. Hang them on a wall to add flare to any room.

**>> CRAYONS** Upcycle old crayons into unique shapes. Preheat oven to 150 degrees; chop crayons and place in a silicone mold or muffin tin; bake 15 minutes. Let the shapes cool before removing them.

**>> BUTTONS** Use leftover buttons to embellish cards. With a bit of glue or a needle and thread, you can attach buttons to postcards, greeting cards, and gift tags to add pizzazz.

**>> BOOKS** Ever wonder where your books go after you donate them? BookCrossing, a social networking site that lets you track your book as it passes from reader to reader, solves the mystery. [bookcrossing.com](http://bookcrossing.com)

**>> MISCELLANEOUS** If you're holding onto furniture, toys, electronics, or other items that are in good condition but are just taking up space, consider listing them on Freecycle to donate them to others in your community. [freecycle.org](http://freecycle.org)

—Honorah Creagh



## And That Dress—It's Lovely!

The Isabella MacTavish Fraser wedding gown is a vibrant tartan gown worn by Isabella MacTavish in a small town in the Scottish Highlands in 1785. The gown survives to this day, has been worn by a succession of brides, and is still owned by Isabella's direct descendants. It is the only known pre-1800 extant example of such a gown. Rebecca Olds, independent researcher and designer of 18th-century reconstructed clothing for film and reenactments, will be at Keeler Tavern to discuss it, with a 2019 recreation, March 3. [keelertavernmuseum.org](http://keelertavernmuseum.org)

