

FLORENCE GOING GREEN

THE CITY OF FLORENCE'S TRANSITION TO HYBRID AND ELECTRIC VEHICLES

The City of Florence has been actively updating its fleet with hybrid and electric vehicles, redefining the way our community drives—one vehicle at a time. Every new vehicle we purchase replaces an aging one that is either over 20 years old or has reached the end of its useful life.

When selecting new fleet vehicles, we consider how they will be used, as well as their short- and longterm operational and maintenance needs. With rising fuel and oil prices, and the daily mileage and idle time our fleet experiences, choosing hybrid or fully electric vehicles whenever feasible just makes sense. Replacing a 20-year-old truck that gets 8–9 miles per gallon (MPG) with a vehicle that achieves 35–45 MPG is a straightforward decision.

For example, our Facilities Division previously operated a 2012 Ford E-250 Econoline van, which cost an average of \$91.79 per month in fuel. Its electric replacement now costs approximately \$5 per month in electricity—assuming the battery is fully drained and recharged each week. Given our short travel distances between job sites, actual usage is even less. This swap alone is expected to save the City more than \$1,000 annually in fuel costs.

Nationwide, city fleets are significant contributors to carbon emissions—accounting for 29% of the U.S. total, and even more in states like California (41%) and Washington (47%). The bulk of these emissions come from burning gasoline in vehicles. As a regional leader, the City of Florence is taking meaningful steps to move away from fossil fuels where practical.



Hybrid vehicles not only reduce emissions and improve air quality, but they also help keep our streets cleaner. This, in turn, results in fewer contaminants entering local waterways via stormwater runoff. On average, a hybrid vehicle emits up to 46% less greenhouse gas than its traditional gas-powered counterpart.

We're also planning to expand our electric vehicle infrastructure. The City is in the early stages of installing Level 2 "destination" chargers at select municipal properties. We're working in partnership with Central Lincoln PUD to develop a strategy that supports both our fleet's electrification and the installation of public charging stations, helping to ensure an adequate and reliable electricity supply. Through this collaboration, we also hope to explore opportunities for Level 3 "fast" charging stations in the future.

These are just a few of the many ways the City of Florence is working toward a greener, more sustainable future.

Keep an eye out for our new electric and hybrid vehicles during the 2025 Rhododendron Festival Parade!







Meet our Greener Fleet

Hybrid Vehicles

2009 Ford Escape – Public Works Utility Crew 2021 Ford Explorer Interceptor – Police 2022 Ford Explorer Interceptor – Police, School Resource Car 2023 Ford Maverick – Public Works Facilities 2023 Ford Maverick – Public Works Utilities 2023 Ford F150 – Public Works Wastewater 2024 Ford F150 – Public Works Street 2024 Ford F150 – Public Works Parks 2024 Ford F150 – Police 2024 Ford F150 – Police 2024 Ford F150 – Police

Plug in Hybrid

2013 C Max – Airport Loner 2016 Ford Fusion – Police Admin 2022 Ford Escape – Public Works Admin

All Electric

2022 Ford Transit Van – Public Works Facilities 2023 Ford Transit Van – Florence Event Center 2024 Ford F150 Lightning – Public Works Admin 2024 John Deere Gator TE – Public Works Wastewater







What is the difference between Hybrid and Electric vehicles?

As the City of Florence continues to transition to a greener fleet, it's helpful to understand the key differences between the types of eco-friendly vehicles we're adopting:

Hybrid Electric Vehicles (HEVs)

Hybrid vehicles combine a traditional internal combustion engine with one or more electric motors powered by a battery. Unlike plug-in vehicles, hybrids cannot be plugged in to recharge. Instead, the battery is charged through regenerative braking and the engine itself.

- The electric motor provides additional power, allowing for a smaller, more efficient engine.
- The battery also powers accessories and helps reduce engine idling.
- Result: Improved fuel economy and reduced emissions without sacrificing performance.

Plug-In Hybrid Electric Vehicles (PHEVs)

Plug-in hybrids are similar to regular hybrids but feature larger batteries that can be charged via a standard outlet or charging station.

- They run primarily on electric power until the battery is depleted.
- When needed, the vehicle automatically switches to the internal combustion engine.
- Regenerative braking and the engine can also help recharge the battery.
- Result: Greater electric-only range and fuel savings—ideal for short commutes and flexible for longer trips.

Battery Electric Vehicles (BEVs)

Fully electric vehicles run entirely on electricity-no gas required.

- They charge by plugging into the electric grid and store power in large batteries.
- The electric motor powers the wheels directly, offering quick acceleration and a quiet, smooth ride.
- Since there's no engine, there are no tailpipe emissions and fewer moving parts to maintain.

