Metro strives to integrate environmental considerations into procurement decisions and evaluate the environmental consequences of a product throughout its lifecycle. To this end, Metro consistently evaluates new products and technologies that advance resource efficiency, pollution reduction, and air quality improvement efforts.

In addition to the bus, rail, and vanpool fleet vehicles that provide revenue services, Metro owns a fleet of non-revenue sedans, trucks, and SUVs. Metro’s non-revenue fleet is comprised of vehicles that do not carry fare-paying passengers and do not have any revenue associated with their operation but still play a critical role in ensuring excellence in service and support. In 2017 through the Environmental Management System, Metro’s Non-Revenue Department evaluated the viability of purchasing battery electric vehicles (BEVs) for the non-revenue fleet.

Metro calculated the total cost of ownership (TCO) for eight commercially available BEVs and concluded that the all-electric Chevy Bolt could meet Metro’s needs while offering a lower TCO at year ten than a Toyota Camry hybrid.

Based on the findings and recommendations of the BEV assessment report, Metro’s Non-Revenue Department initiated a pilot project to purchase and deploy ten all-electric Chevy Bolts in 2017. The Bolt has a range of 238 miles on a single charge and fully recharges in about 9 hours. The current fleet is expected to drive about 37,000 miles per year and avoid consuming about 1,000 gallons of gasoline during the same period when compared to Toyota Camry hybrids.

To support implementation, Metro installed 18 charging stations in 2017 with the support of Facilities Maintenance and General Services to provide local fueling capacity to the BEV fleet. Additionally, Non-Revenue partnered with the Environmental Compliance and Sustainability Department (ECSD) and the Talent Development department to produce a BEV driver training program to familiarize Metro employees with the specifics of BEV operation and the Chevy Bolt.

Based on the initial success of the pilot project, Metro is planning to expand the BEV fleet with an additional 20 Chevy Bolts in 2018-2019. New vehicles will be deployed to bus and rail divisions to support driver relief operations and to replace retiring Toyota Camry hybrids.

“One of the key benefits of the Chevy Bolts is that they have no tailpipe emissions, which reduces the emission of pollutants into the air in the Los Angeles metropolitan area, thereby improving overall air quality.”

Andrew Quinn
Sr. Environmental Specialist, Metro ECSD

“The BEV pilot project provides an opportunity to see how new vehicle technology works in Metro’s operating environment while working towards agency and state emission reduction goals.”

Dan Ramirez
Sr. Director, Metro Non-Revenue Fleet Maintenance

Projected Cumulative Avoided GHG Emissions of Expanded BEV Fleet

By 2019, over 15% of Metro’s non-revenue sedan fleet will be BEVs.

Cumulative Avoided Emissions