

About Urban Electric Vehicle

Urban electric vehicles (UEVs) are regular passenger vehicles with top speeds of about 60 mph and a per-charge range of about 50 miles. Unique benefits of UEVs include easier parking and driving characteristics. UEVs usually have two doors and a hatchback, and are designed to carry two or four passengers. They typically have airbags and seat belts, disc/drum brake systems, heat and air conditioning systems, and windshield defrosters. In other words, they are the same as traditional full-size passenger vehicles but in a smaller package and ideal for urban applications. UEVs are classified by the United States National Highway Traffic Safety Administration (NHTSA) as regular passenger vehicles, subject to the same Federal Motor Vehicle Safety Standards (FMVSS) as full-size electric and gasoline-powered passenger vehicles.



Because UEVs have limited top speeds, they cannot be tested using some of the EVAmerica test procedures. Specifically, UEVs cannot attain the preferred 65 mph top speed required for dynamometer testing.

A new set of EVAmerica performance goals were developed for UEVs. These have been developed as an acknowledgement that UEVs have limited top speeds that require a somewhat different set of performance characteristics. Some of the UEV performance goals include acceleration times of 0 to 30 mph within 8.5 seconds, a minimum top speed of 45 mph within 1 mile, and a minimum range of 30 miles when Urban Drive Cycle tested on a dynamometer.

The Advanced Vehicle Testing Activity has started Baseline Performance, Accelerated Reliability, and Fleet testing of UEVs and the results are available.

