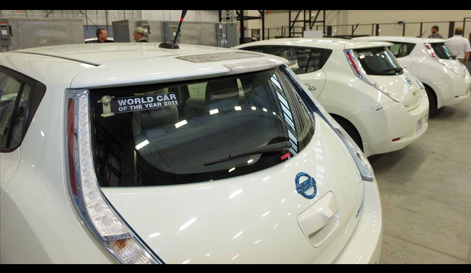
INL Advanced Vehicle Research Timeline



Idaho's national laboratory has been conducting research on advanced vehicles for nearly as long as the nation has experimented with them. This snapshot of INL's history in this area shows some of the highlights.

1980

1983: Energy Storage Testing (EST) Laboratory established for testing full-size electric vehicle batteries in support of the U.S. Department of Energy (DOE) Electric and Hybrid Vehicle Program.

1984: DOE Electric Vehicle Center dedicated for electric vehicle dynamometer and road testing.

1987: Idaho team initiates management of the DOE Site Operator Program, which includes 13 electric industry, government and university partners conducting on-road and track testing of electric drive vehicles.

1990

1994: First test on a Big Three vehicle (Dodge Caravan) powered by five nickel-iron batteries.

2002: Initial testing activities on Neighborhood Electric Vehicles (NEVs), four-wheeled vehicles defined by the National Highway Traffic Safety Administration as subject to Federal Motor Vehicle Safety Standard No. 500.

2000

2003: Partnership with Arizona Public Service creates the first hydrogen production and dispensing station in the U.S. to support testing of internal combustion vehicles that operate on 100% hydrogen and blends of hydrogen and compressed national gas.

2005: End-of-life fuel efficiency and battery testing on two 2001 Honda Insight hybrid electric vehicles (HEVs), two 2003 Honda Civic HEVs, and two 2002 Toyota Prius HEVs.

2010

2012: Energy Systems Laboratory, a 91,000–square-foot testing and demonstration facility, includes space for vehicle and battery testing.

2011-2015: INL collects and analyzes data from 124 million miles of driving and 6 million charging events over three years, providing the most comprehensive view of light-duty, plug-in electric vehicle (PEV) and charging usage to date.

2015: Electric Vehicle Infrastructure Laboratory in INL's Energy Systems Laboratory offers industry-leading testing of wireless charging systems on vehicles.

2014-2016: INL researchers work with six companies to conduct bench testing for wireless charging systems. Results support SAE International wireless charging guidelines published in 2016.

2020