

University of Central Florida's Electric Vehicle Transportation Center

As interest in electric vehicles continues to keep the automotive industry charged, the nation is strategizing how to best integrate plug-in vehicles with its electrical grid and highways. Now, with the creation of the first electric vehicle-focused transportation center funded by the U.S. Department of Transportation, the University of Central Florida will help chart that course.

The Electric Vehicle Transportation Center, operated by the University of Central Florida's FSEC, is a four-year, \$9 million research effort to help create the nation's electric vehicle transportation network. UCF's EVTC is among 33 universities funded to address critical transportation challenges facing the nation.

Research conducted by the center will help transportation planners prepare our nation's highways for the influx of plug-in electric vehicles (PEV), while developing "smart grid" applications that will strengthen the ability of our electric system to accommodate the power demands of electric vehicles.

PEVs need a reliable, predictable network of charging stations to allow them to travel long distances without the fear of "range anxiety." The center and its partners will plan and optimize both a "smart grid" and a "smart transportation network," where PEVs can both use and supply power to the grid (V2G). Transforming the U.S. transportation system into one that uses electricity in conjunction with the modernization of the electric grid system will result in a sustainable highway and energy network.

In its first year, the EVTC will form partnerships, create an advisory board, assess electric vehicle (EV) barriers and issues, model EVs, process data from existing charging stations, design charging station hardware to allow V2G, and educate students.

For More Information

David Block
 FSEC/UCF
block@fsec.ucf.edu
 321-638-1001

Partners

- ◆ University of Central Florida
 - Civil, Environmental and Construction Engineering
 - Electrical and Computer Engineering
 - FSEC
- ◆ University of Hawaii, Hawaii Natural Energy Institute
- ◆ Tuskegee University



*DOT's Strategic Plan
 "re-imagines America's
 transportation system as the
 means by which we connect
 with one another, grow our
 economy, and protect the
 environment."*