



UNIVERSITY OF
CENTRAL FLORIDA

Safety and Technology Grant Fact Sheet

How much is the grant and why is this good for Central Florida?

Our region received **\$11.9 million** from the Federal Highway Administration to advance several intelligent transportation system technologies aimed at improving safety and easing congestion. While most of the initial testing will be done near the UCF main campus, a goal is to make the projects “scaleable and portable,” meaning they can adapt for other places. Another goal for the study team is to develop recommendations for implementing the technology, which could lead to state or even national models. This means the research done by the regional collaboration will eventually be available to support the entire region. This work will further position Central Florida as an innovative region with a deep understanding of the role technology can play in improving life for its residents and visitors.

What does the project involve?

The grant includes four major parts:

- **PedSafe** will digitally connect vehicles, people and traffic lights to develop a pedestrian and bicycle collision avoidance system. Drivers of vehicles will be alerted when there is a pedestrian or cyclist in the area. Traffic signals will be aware of pedestrians crossing the road and ensure they have enough time to cross.
- **GreenWay** will use sensors and new traffic signal technology to help the transportation system quickly adapt to real-time traffic conditions. This will make travel times more consistent and help reduce congestion. Projects in this program include: adaptive traffic signal control which adjusts the timing of red, yellow and green lights to respond to changing traffic patterns; activating advanced traffic light timing plans to clear intersections near railroad tracks before trains arrive; and providing parking availability to drivers in a garage to reduce the amount of time it takes to find a spot.
- **SmartCommunity** will combine information from many different transportation options into one place so people have a one-stop shop to plan their trips. This includes travel time information for driving, riding the bus, taking the train, using rideshare or car share.
- **SunStore** will be the Florida Department of Transportation’s central data storage for all of the transportation system management and operations information. Having a wide range of technology out on the roads means that there will be an endless stream of data to manage. SunStore will connect and integrate many data sources, so FDOT can make the information available to universities, research institutions, and businesses to encourage innovation.



Where will these technologies be tested?

These technologies will be deployed in and around **the University of Central Florida’s main campus**. The PedSafe program will also be deployed in **Pine Hills**, which has experienced significant pedestrian safety challenges. Ultimately, the goal is to take lessons learned and expand these technologies to the entire Central Florida region. One of the first

steps in this direction will be to take the initial research and apply it to the developing Creative Village area in Downtown Orlando. After that, it is expected the research can be deployed to other Central Florida locations.

Who is leading this project?

Partnership is the key to success. The Florida Department of Transportation (FDOT) is taking the lead on this project, with support from MetroPlan Orlando and the University of Central Florida (UCF). Each will lend different expertise:

- **FDOT** – Will serve as project manager and coordinate between state and federal governments. FDOT will also ensure the project can be scaled appropriately for other locations and applications and will contribute software development, operations, and data management expertise.
- **MetroPlan Orlando** – Will ensure projects meet their intended purposes and will facilitate collaboration among agencies and local governments.
- **UCF** – Will use its research capabilities and existing Smart Cities initiative to advance the project, while leading data collection and analysis efforts

When will the project begin?

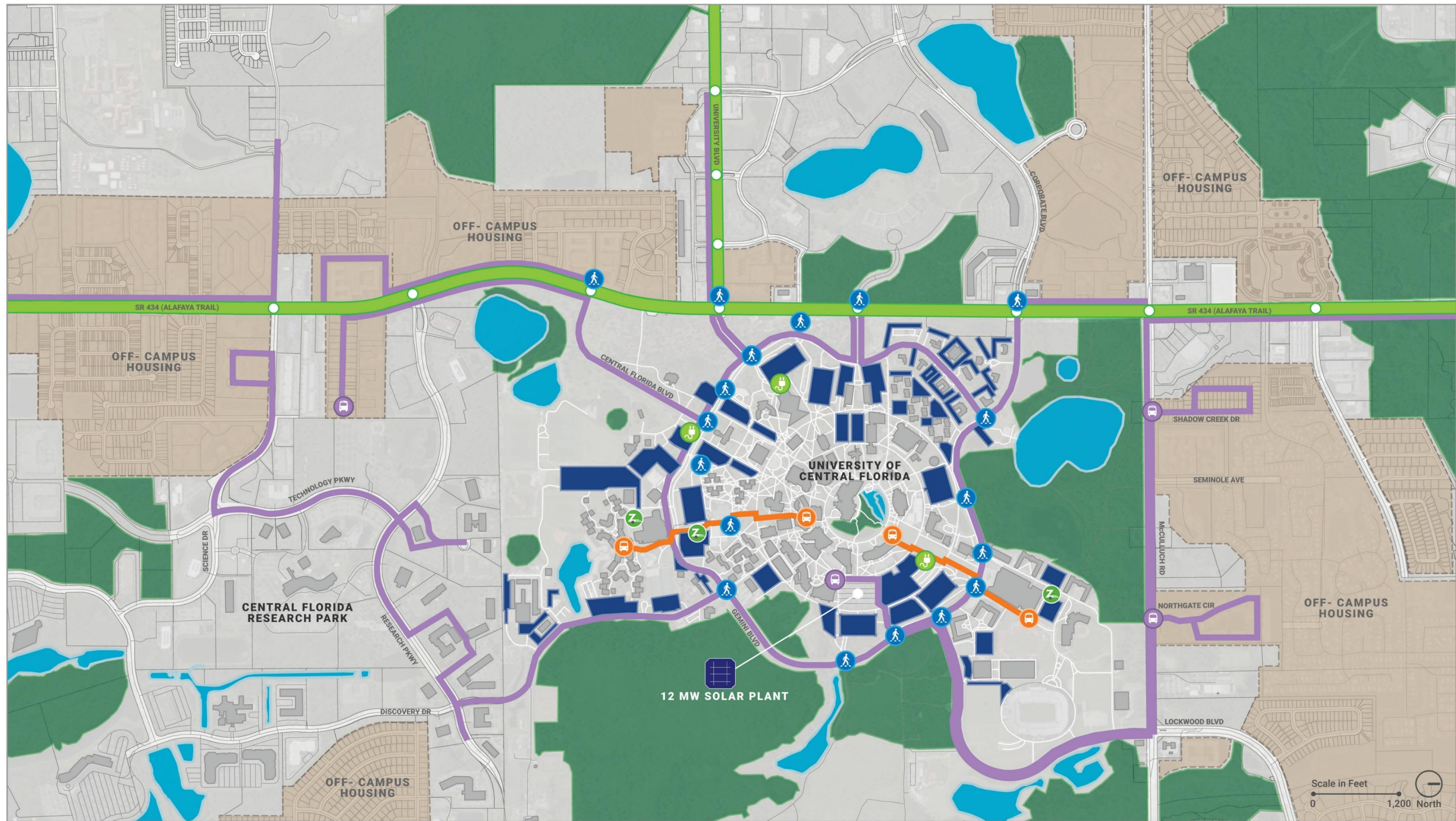
This project will last approximately five years. The planning and design of various parts is under way. Design will continue, with the programs being built and deployed at throughout 2018 and 2019. Operations and maintenance of the project is expected to continue through 2021.

Where did the grant come from?

The grant came from the Federal Highway Administration's Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant program, which funds cutting-edge technologies that are ready to be deployed to enhance existing traffic capacity for commuters and businesses. Things to know about the grant program:

- This year, the program funded 10 projects valued at nearly \$54 million.
- The FHWA received 68 applications from 52 localities requesting more than \$362 million.
- **Central Florida received the largest grant award from this very competitive program, and was the only recipient in Florida.**
- The ATCMTD program was established under the federal Fixing America's Surface Transportation (FAST) Act. State departments of transportation, local governments, transit agencies, metropolitan planning organizations and other eligible entities were invited to apply.

Map of deployment area on next page



East Orlando Deployment Area



PedSafe



 PedSafe Intersections

GreenWay

 GreenWay Corridor & Intersections

SmartCommunity

 Advanced Parking Management
 Autonomous Shuttles

 EV Charging Stations
 Zipcar Carsharing

 Existing Shuttle Routes