

Florida has been at the forefront of implementing innovative vehicle-to-infrastructure technology, and Siemens Mobility has been working hand-in-hand with Florida in this effort, implementing the infrastructure for the Tampa-Hillsborough Expressway Authority (THEA) and their Connected Vehicle (CV) pilot.

Siemens has been supplying traffic-related products and services to FDOT, as well as local municipalities in Florida for over 40 years. Most recently, as the primary CV technology partner in the high-profile (THEA) USDOT Connected Vehicle Pilot Project, it has supplied over 40 Roadside Units (RSUs) helping to drive the development of more than a dozen Vehicle-to-Infrastructure (V2I) and Vehicle-to-Vehicle (V2V) applications.

The THEA USDOT CV pilot is proving to be one of the most successful pilots of its kind in the country. It was launched in 2015 and is currently equipping buses, streetcars and hundreds of privately-owned vehicles with CV technology that helps manage day-to-day commuting issues. Siemens Mobility's technology allows the vehicles to communicate with the infrastructure and provide warnings or prioritize traffic signaling to manage against problems such as Backups, Congestions, Wrong-way Driving as well as conflicts with public street transportation. There are obvious benefits for pedestrian safety as well. Most recently, THEA reached a major milestone, passing important interoperability tests, demonstrating that the equipment was able to work successfully between other test sites – something never tested before at this scale.

Recognition has been widespread. Not only was the THEA USDOT CV pilot named "this year's (2019) Best Intelligent Transportation System (ITS) Award" from the Intelligent Transportation Society of America, it was also inducted into the ITS World Congress Hall of Fame this year – an honor saved for the most outstanding, ambitious and innovative ITS deployments in the world.

But the benefits of CV technology are not only being experienced around Tampa. Drivers in Gainesville, and those who drive around the "Trapezium" that surrounds the University of Florida campus, are also benefitting from a partnership with Siemens Mobility. Currently, it is providing CV infrastructure equipment, onboard units, applications and central management software for use along the 27 intersections surrounding the University of Florida –an environment with a rich mix of automobile, transit, bicycle and pedestrian activity and currently a real hotbed for leading technologies in connected and autonomous vehicle deployment.

Siemens' history with CV applications in the USA extends back to 2007 with its involvement with the USDOT Connected Vehicle Test Bed in Michigan. This was a testing environment intended to advance the state of ITS practice by providing a cutting-edge model operating environment for CV and DSRC. The company was one of the first controller manufacturers to output SPaT data at the testbed. It is currently working with other cities, including New York, Las Vegas, Anaheim, Columbus, Ann Arbor, Madison, Austin and Montreal to design and deploy these types of intelligent systems.

As Marcus Welz, president of Siemens Mobility's ITS business in North America, noted, "We are excited to be leading the momentum for CV deployment in cities around the country. The inevitable safety and mobility benefits provided by utilizing CV technology is becoming more mainstream, thanks in large part to the efforts and political will we are seeing in Florida, which is really turning into a spotlight for this disruptive new force in mobility."