



# Walk. Ride. Drive. *Smarter.*



## THEA CONNECTED VEHICLE PILOT — FACT SHEET

Tampa, Florida, is one of the first cities in the nation to deploy connected vehicle technology on real city streets. Tampa's deployment is uniquely multimodal, encompassing pedestrians, buses, streetcars and privately owned automobiles.

### GOALS

The Tampa Hillsborough Expressway Authority (THEA) Connected Vehicle Pilot aims to transform the experience of drivers, transit riders and pedestrians in downtown Tampa by preventing crashes, enhancing traffic flow, improving transit trip times and reducing emissions of greenhouse gases.

### BACKGROUND

The THEA Connected Vehicle Pilot began in 2015, when the U.S. Department of Transportation (USDOT) awarded THEA a contract as part of its Connected Vehicle Pilot Deployment Program. In 2016, USDOT authorized THEA and its partners to proceed with design, testing and deployment. The final phase of the \$21-million project, which began in 2018, involves the full-scale operation of connected vehicle technology throughout downtown Tampa.

### PARTNERS

THEA has assembled an implementation team that includes HNTB, Siemens, the University of South Florida Center for Urban Transportation Research, Brandmotion and Global-5 Communications. Other key partners include the Florida Department of Transportation, the City of Tampa, the Hillsborough Area Regional Transit Authority (HART) and Hillsborough Community College.

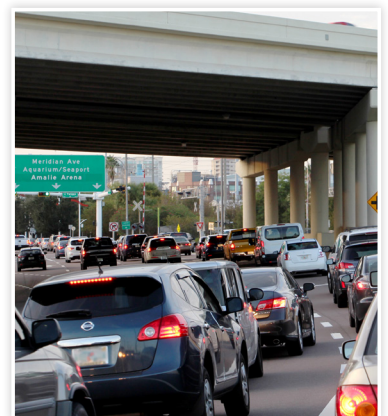
### COMMUNITY

Pedestrians, transit riders and automobile drivers in downtown Tampa experience transportation challenges on a daily basis. For example, inbound commuters on the Lee Roy Selmon Expressway's Reversible Express Lanes encounter significant delays and, too often, rear-end crashes during morning peak periods. Vehicle/pedestrian conflicts are commonplace, especially at a busy mid-block crosswalk near the Hillsborough County Courthouse. Drivers and pedestrians also conflict with buses and streetcars that traverse the central business district. The combination of pedestrians, bicyclists, automobiles, streetcars, buses and even a cruise ship terminal makes downtown Tampa an environment ripe for new transportation solutions.

### APPROACH

The THEA Connected Vehicle Pilot has equipped buses, streetcars and hundreds of privately owned vehicles with technology that enables them to communicate with each other and with elements of the transportation infrastructure.

Bus and streetcar operators receive information on a dedicated display, while individual drivers get safety alerts in their vehicle's rearview mirror.





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## APPLICATIONS

- Emergency Electronic Brake Light Warning** – Alerts the driver to hard braking ahead.
- End of Ramp Deceleration Warning** – Warns the driver to slow down to a recommended speed as the vehicle approaches the end of a queue.
- Forward Collision Warning** – Warns the driver when a forward collision is imminent.
- Intelligent Signal System** – Optimizes traffic signal timing based on connected vehicle data.
- Intersection Movement Assist** – Warns the driver when it is not safe to enter an intersection.
- Pedestrian Collision Warning** – Warns the driver when a pedestrian is using a crosswalk in the vehicle's projected path.
- Pedestrian in a Crosswalk Vehicle Warning** – Identifies potential conflicts between pedestrians in a crosswalk and approaching vehicles.
- Probe Data Enabled Traffic Monitoring** – Gathers traffic data from connected vehicles to optimize transportation management.
- Transit Signal Priority** – Gives buses priority at traffic signals to keep them running on schedule.
- Vehicle Turning Right in Front of Transit Vehicle** – Warns the streetcar operator when a vehicle is turning right at an intersection as the streetcar is approaching.
- Wrong Way Entry** – Warns the driver of a vehicle that is entering the reversible express lanes in the wrong direction and warns other equipped vehicles that a wrong-way driver is approaching.

## THE NUMBERS

-  More than **1,000** privately owned vehicles equipped with onboard units
-  **10** buses equipped with onboard units
-  **8** streetcars equipped with onboard units
-  **46** roadside units

## GET INVOLVED

- Website: [www.TampaCVPilot.com](http://www.TampaCVPilot.com)
- Facebook: [www.facebook.com/TampaCVPilot](https://www.facebook.com/TampaCVPilot)
- Twitter: [@Tampa\\_CV](https://twitter.com/Tampa_CV)
- Instagram: [@TampaCV](https://www.instagram.com/TampaCV)

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