



Project Information Sheet

FDOT District 6 Connected Vehicle Project



US 1 from Key West to Monroe County/Miami-Dade County Line

The Florida Keys Connecting Overseas to Advance Safe Travel (Keys COAST) will be the first of its kind connected and automated vehicle (CAV) project being led by FDOT District 6. This planned project will be located on the US 1 segment in Monroe County from MM 0.0 to MM 112.5. US 1 is the sole highway connection between the mainland and much of the Florida Keys for residents, visitors, and businesses, and as such is a major evacuation route and an economic contributor. This project will be a multi-modal corridor management project promoting safety and mobility for all road users.

The project will establish connectivity between various modes (cars, trucks, buses, pedestrians, bicyclists, and emergency vehicles) and a connected vehicle traffic signal system (CVTSS) along with other systems such as mid-block pedestrian crossings, weigh-in-motion (WIM), drawbridge, and emergency signals. The goal is to use emerging technologies to develop a safer and more efficient corridor that is future-ready to serve this evacuation route to/from the Florida Keys. The project concept includes roadside units (RSUs) capable of Dedicated Short-Range Communications (DSRC) and cellular communications, a cloud-based information dissemination platform, customized software applications, a real-time traffic signal performance monitoring system, on-board units (OBUs), smartphone on-board units, and bike-ped safety application. These project features will allow FDOT arterial traffic management staff to perform real-time active arterial management on US 1. These tools will also allow for more efficient flow of transit and freight along the corridor, along with enhanced emergency service response. Automated Traffic Signal Performance Measures (ATSPM) will be established to determine the effectiveness of the project and to allow for real-time performance monitoring.

The project map is shown below.



Note: The project is developed based on CAV applications used and available in the industry today. The project before and after analysis with a university partner is proposed to validate the benefits promised by these applications.