Intelligent Transportation Systems — Technology to Help Your Commute

Traffic information is widely available to help drivers make better choices about their daily commutes and other trips. Driving apps, websites, and TV and radio traffic reports give information about congestion, construction and crashes creating delays on the roadway.

The Florida Department of Transportation’s (FDOT) Regional Transportation Management Center (RTMC) is the original source for much of that information. And one of the center’s most important tools is the state’s smart data network.

FDOT’s Intelligent Transportation Systems (ITS) program helps the department manage traffic through collecting and analyzing data, then analyzing it at the RTMC and sharing information with drivers to help them safely and efficiently reach their destination.

In Florida, ITS comprises:

- Roadside technology, including video cameras and vehicle detectors used to monitor the speed and volume of traffic; and detect incidents, crashes and congestion.

- Software that gathers the data and enables operators to understand what’s happening on the roadways, then act to solve problems.

- Communication tools, including Florida 511, overhead message boards, connected vehicle applications and truck parking availability systems, which allow operators to let drivers know about roadway conditions and encourage them to seek alternatives.

- Smart traffic control systems, such as intelligent traffic signals, ramp meters, variable toll systems, and transit priority systems, help operators manage traffic flow.

- The RTMCs that serve as the operations centers, housing the people and technology.

- ITS network of fiber-optic and wireless connections that keep ITS data flowing from the roadside to the RTMC and back out to the drivers.

- People, including engineers, operators, Road Rangers, and other first responders, whose expertise contributes to keeping Florida roadways moving efficiently and safely.