

# FACT SHEET

## ADVANCED TRAFFIC MANAGEMENT SYSTEM (ATMS)



Updated: June 2025

### BUILDING THE INFRASTRUCTURE FOR BETTER MOBILITY



### ABOUT THE PROJECT

The Traffic Signals and Signs (TSS) Division of the Miami-Dade County Department of Transportation and Public Works (DTPW) is installing a new, state-of-the-art Advanced Traffic Management System (ATMS).

This project includes the upgrade of the County's ATMS Central Software, replacement of approximately 3,000 controllers with Advanced Transportation Controllers (ATC), and installation of additional detection systems at selected county signalized intersections.

The upgraded system will serve as a platform that will allow the County to support the implementation of mobility strategies for all roadway users including motorized, transit and emergency vehicles, pedestrians, and bicyclists thereby optimizing overall transportation efficiency.

### EXPECTED PROJECT BENEFITS

#### OPTIMIZED OPERATION

The ATMS project upgrades will lay the foundation for a more versatile operation by enabling support for complex signal functions and streamlining the configuration of traffic signal controllers. The upgrade to the ATC controller provides a significant boost in computing processing power, memory capacity, and a more intuitive interface at signalized intersections enabling more efficient and sophisticated traffic management.

#### IMPROVED NETWORK PERFORMANCE

ATC controllers will enhance detection capabilities, including detection of motorists, public transit users, bicyclists, and pedestrians, improving overall mobility and safety. ATC systems will allow the collection and management of real-time high resolution traffic data, providing valuable information for proactive traffic management and decision-making.

#### RESOURCE INTEGRATION

ATC controllers provide an open architecture hardware and software platform that can support a wide variety of Intelligent Transportation Systems (ITS) applications including traffic management and other applications. ATC controllers can facilitate the sharing of traffic data with other systems, enabling more integrated and coordinated traffic management approaches. Furthermore, the new ATC Controller fully integrates into the county's existing signal cabinet infrastructure, leveraging existing resources.

#### SAFETY

The ATMS project will contribute to Miami-Dade's Vision Zero goal of eliminating traffic-related fatalities and serious injuries by 2040. The project scope includes recalculation of traffic safety parameters such as yellow clearances, red clearances, pedestrian clearances and railroad track clearances ensuring that values meet or exceed current standards.

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## PROJECT IMPORTANCE

- This project is part of the county's wider initiatives which build the foundation for mobility improvements in the near and long-term future.
- The project replaces outdated technology by updating the traffic signal infrastructure, including new traffic signal controllers and detection devices.
- The County's new traffic management system will comply with industry-wide standard data communications protocols, allowing the County to support smart city initiatives at intersections that could benefit from it, such as two-way communication between vehicles and traffic signals and adaptive traffic control systems.
- The new enhanced capability to collect high-resolution data will position the County for future use of Automated Traffic Signal Performance Measures (ATSPM). ATSPMs will facilitate the County's effort to move away from reactive management that responds to problems as they are reported, and toward proactive management that takes action based on direct measurement of performance.

**THE DTPW IS COMMITTED TO DELIVERING RELIABLE, FORWARD-LOOKING SOLUTIONS THAT ALIGN WITH MIAMI-DADE'S LONG-TERM TRANSPORTATION GOALS.**

## NEXT STEPS

We are currently conducting testing and certifications of the technologies and solutions planned for deployment under the ATMS project. This preparatory phase is essential to ensure system reliability and long-term performance. Full-scale implementation is scheduled to begin in mid-2026\*. The project scope of work includes the following tasks and their total duration:

- Installation of an upgraded central software system at the County's Traffic Management Center (1 year).
- Controller Upgrades: Replacement of obsolete controllers with new traffic signal controllers at all signalized intersections while maintaining current system operations (5 years).
- Detection Systems Installation: Design and construction of detection systems for up to 600 signalized intersections (7 years).

These tasks will occur on a parallel path. Project completion is expected within ten years.

*\*The anticipated mid-2026 start date is preliminary and dependent on testing completion and overall project readiness. To maintain efficiency and stay within budget, sequencing and start timing may be adjusted, including shifts between zones that may not follow the original yearly plan.*

## PROJECT AREA MAP



**SCAN TO OPEN  
INTERACTIVE MAP**



For information about the project, please visit: [miamidade.gov/TrafficSignalsUpgrade](https://miamidade.gov/TrafficSignalsUpgrade) or email us at: [InfoTrafficSignals@miamidade.gov](mailto:InfoTrafficSignals@miamidade.gov).