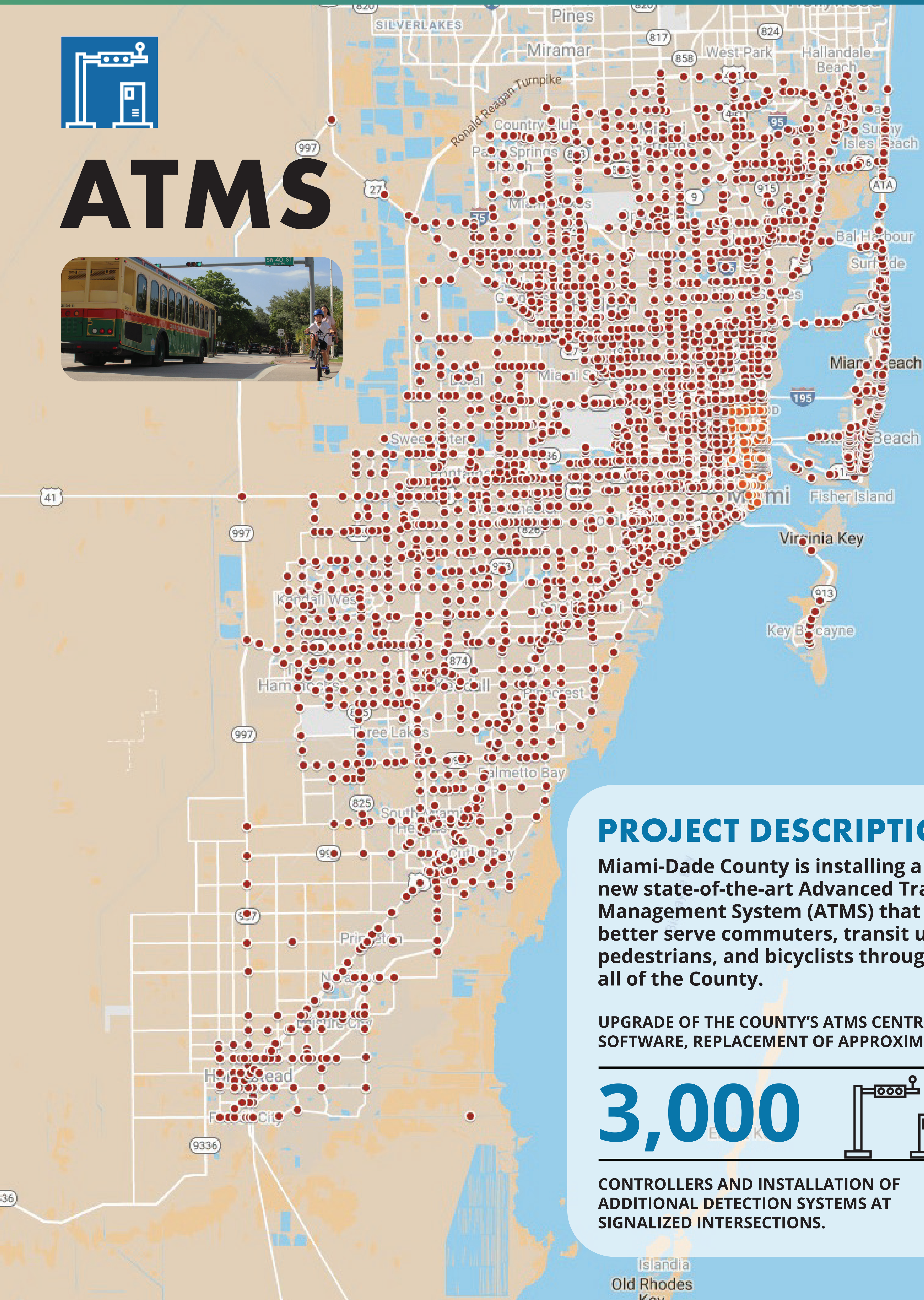




# ATMS

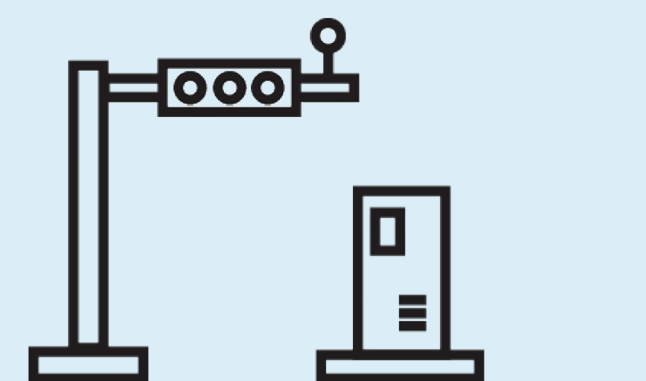


## PROJECT DESCRIPTION

Miami-Dade County is installing a new state-of-the-art Advanced Traffic Management System (ATMS) that will better serve commuters, transit users, pedestrians, and bicyclists throughout all of the County.

UPGRADE OF THE COUNTY'S ATMS CENTRAL SOFTWARE, REPLACEMENT OF APPROXIMATELY

**3,000**



CONTROLLERS AND INSTALLATION OF ADDITIONAL DETECTION SYSTEMS AT SIGNALIZED INTERSECTIONS.



# ATMS

The Miami-Dade County traffic signal system is the third largest centralized system in the country. To date, the ATMS project is the largest known effort to deploy advanced traffic engineering tools such as Adaptive Traffic Signal Control (ATSC).

It is part of the County's wider initiatives which build the foundation for mobility improvements for the next years to come.



## PROJECT TASKS

	<p><b>NEW CENTRAL SOFTWARE &amp; DEPLOYMENT OF NEW CONTROLLERS</b> Installation of new central software system at the County's Traffic Management Center and deployment of new traffic signal controllers at signalized intersections.</p>
	<p><b>DETECTION SYSTEMS</b> Design and construction of systems that detect the presence of vehicles, pedestrians, buses and bicyclists at signalized intersections.</p>
	<p><b>ADVANCED TRAFFIC ENGINEERING SOLUTIONS</b> Deployment of advanced traffic engineering solutions that assess the demands of all modes of transportation to achieve optimum traffic signal performance.</p>

## DEPLOYMENT APPROACH

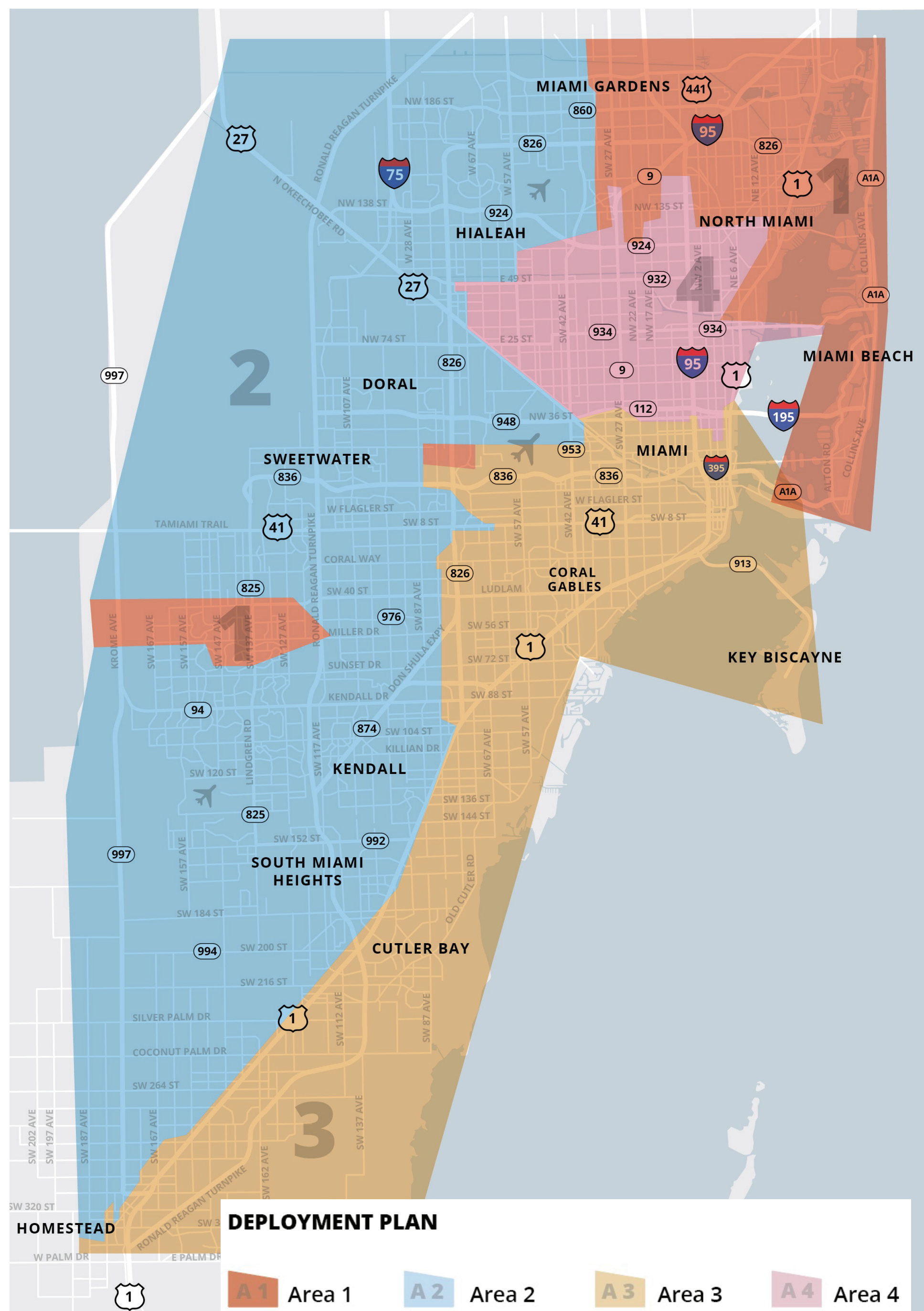
The **initial area** selected is in unincorporated Miami-Dade County with no FDOT roads or municipal permitting agencies which **minimizes the number of involved agencies**. This allows the team to refine the deployment process and mitigate risks in a less complex environment.

The area, also in unincorporated Miami-Dade County, in close vicinity to the TMC, the CEI and the Contractors Offices, was selected to be completed in year one to **facilitate communication and establish a baseline** for further implementation.

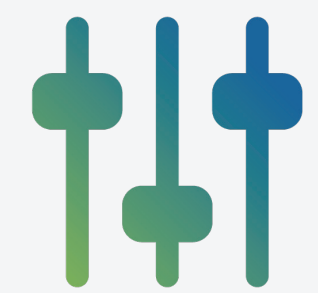
The contractor's experience with large scale projects has shown that a clear circular (spiral) approach to the deployment is **beneficial to the efficiency of deployment, maintenance, and operation of a new system**.

An inwards spiral has been selected for the project since it will:

- **Support** peripheral areas and allow project to mature
- **Reduce traffic disruptions**
- **Optimize** ingress and egress traffic
- **Reduce** initial deployment risks



## PROJECT BENEFITS



### OPTIMIZED OPERATION

High resolution data will capture the location, speed, and turn movement of every vehicle as it approaches and departs an intersection. This data will enable County Engineers to make better informed decisions necessary for system maintenance and operations.



### IMPROVED NETWORK PERFORMANCE

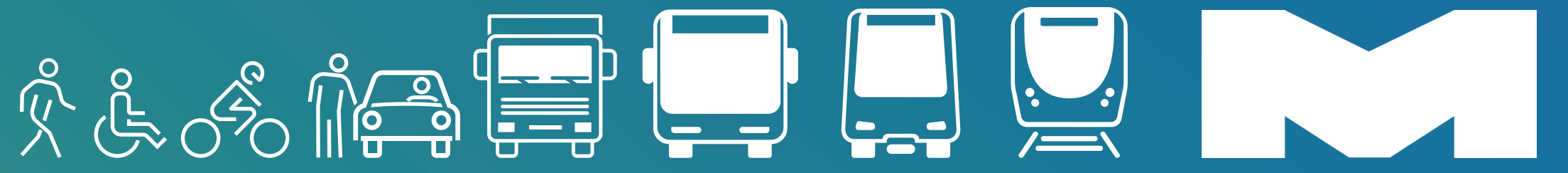
The new system analyzes the network of signalized intersections and the demand of all modes of transportation to achieve optimum traffic signal performance.



### RESOURCES INTEGRATION

The integration of multiple transportation data sources into a single platform will optimize mobility for all transportation system users. This capability of the ATMS project will support the development of non-auto modes of transportation which is a key strategic objective of DTPW.

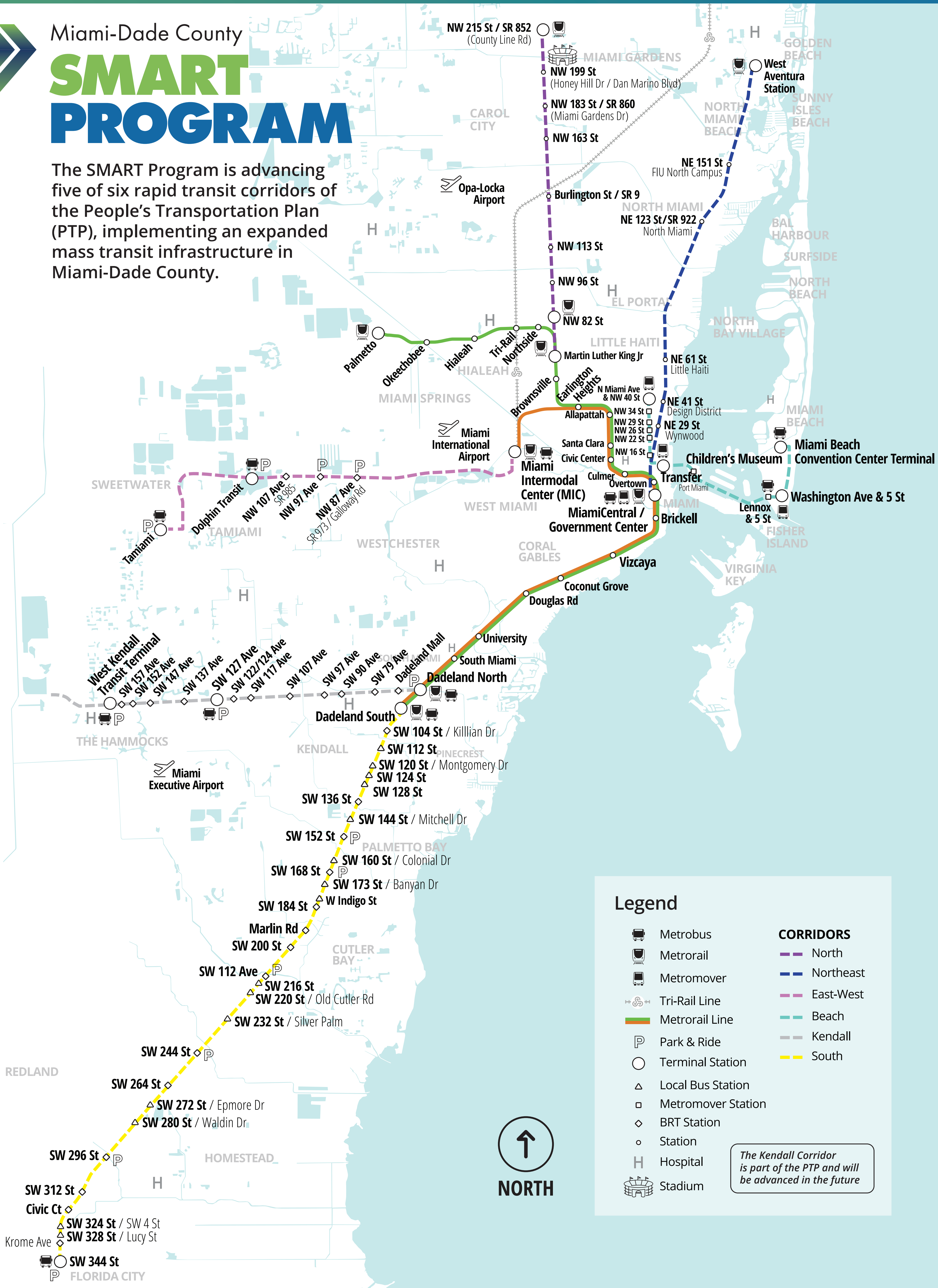




Miami-Dade County

# SMART PROGRAM

The SMART Program is advancing five of six rapid transit corridors of the People's Transportation Plan (PTP), implementing an expanded mass transit infrastructure in Miami-Dade County.



## Legend

- |  |                    |                  |
|--|--------------------|------------------|
|  | Metrobus           | <b>CORRIDORS</b> |
|  | Metrorail          | North            |
|  | Metromover         | Northeast        |
|  | Tri-Rail Line      | East-West        |
|  | Metrorail Line     | Beach            |
|  | Park & Ride        | Kendall          |
|  | Terminal Station   | South            |
|  | Local Bus Station  |                  |
|  | Metromover Station |                  |
|  | BRT Station        |                  |
|  | Station            |                  |
|  | Hospital           |                  |
|  | Stadium            |                  |

*The Kendall Corridor is part of the PTP and will be advanced in the future*





# SMART PROGRAM IMPLEMENTATION

The SMART Program is advancing five of six rapid transit corridors of the People's Transportation Plan (PTP), implementing an expanded mass transit infrastructure in Miami-Dade County. It is the implementation of a vision for our region that is both strategic and far-reaching, creating a system of multiple transportation options by leveraging existing infrastructure, and integrating technology at the highest levels.

# SHIFT 305

The way we approach  
**mobility** is changing

## SHIFT 305 FOR THE YEAR 2025

<b>South Corridor</b>	<ul style="list-style-type: none"> <li>- Completion is scheduled for 2024.</li> </ul>
<b>North Corridor</b>	<ul style="list-style-type: none"> <li>- In November 2022, Miami-Dade County adopted a resolution to accelerate and expedite the delivery of the North Corridor.</li> </ul>
<b>Northeast Corridor</b>	<ul style="list-style-type: none"> <li>- FDOT has confirmed programming of state funds up to \$103.5 million during fiscal years 2025 through 2027.</li> <li>- In partnership with Brightline, the West Aventura Station opened - will serve as the endpoint of a commuter rail service on this corridor.</li> </ul>
<b>East-West Corridor</b>	<ul style="list-style-type: none"> <li>- Completion of NEPA is expected in 2023.</li> <li>- Projection of design and construction services, and funding to be identified by 2025.</li> </ul>
<b>Beach Corridor</b>	<ul style="list-style-type: none"> <li>- In November 2022, Miami-Dade County announced plans to pursue a one-seat ride solution for the Miami Beach transit corridor or Baylink which would extend the Metromover system from Downtown Miami to South Beach.</li> <li>- Estimated project cost: \$1 Billion.</li> <li>- The project is anticipated to advertise for construction in 2023.</li> </ul>

## VISION

Connecting our communities through the enhancement of a rapid transit network that is accessible, integrated, efficient and sustainable.

## MISSION

Deliver a high-quality transit network throughout Miami-Dade County through an innovative, coordinated, and cost-effective approach that reflects community needs.

## PURPOSE

The SMART Program must provide enhanced affordable modal options that reduce congestion and help manage growth while effectively and appropriately aligning funding for capital, operating and infrastructure improvements with a defined, implementable strategy.

The SMART Program is funded through a 40-year pro-forma, which is pivotal for allowing the bold program of projects to move forward in parallel. Once completed, the SMART Program will:

- Reduce transportation-related emissions
- Significantly increase transit ridership
- Improve travel time and reliability

# NO SMALL PLANS

The Strategic Miami Area Rapid Transit (SMART) Program projects to improve transportation mobility in Miami-Dade County and the South Florida region through:

- The expansion of rapid transit options in Miami-Dade County along five of six corridors.
- The network of Express Buses on limited access facilities (Bus Express Rapid Transit).
- The creation of a system of multiple transportation options and integrating technology.

## AN INITIATIVE TO REVITALIZE MIAMI-DADE'S TRANSPORTATION SYSTEM BY 2025 WHICH ENCOMPASES FOUR OBJECTIVES:

