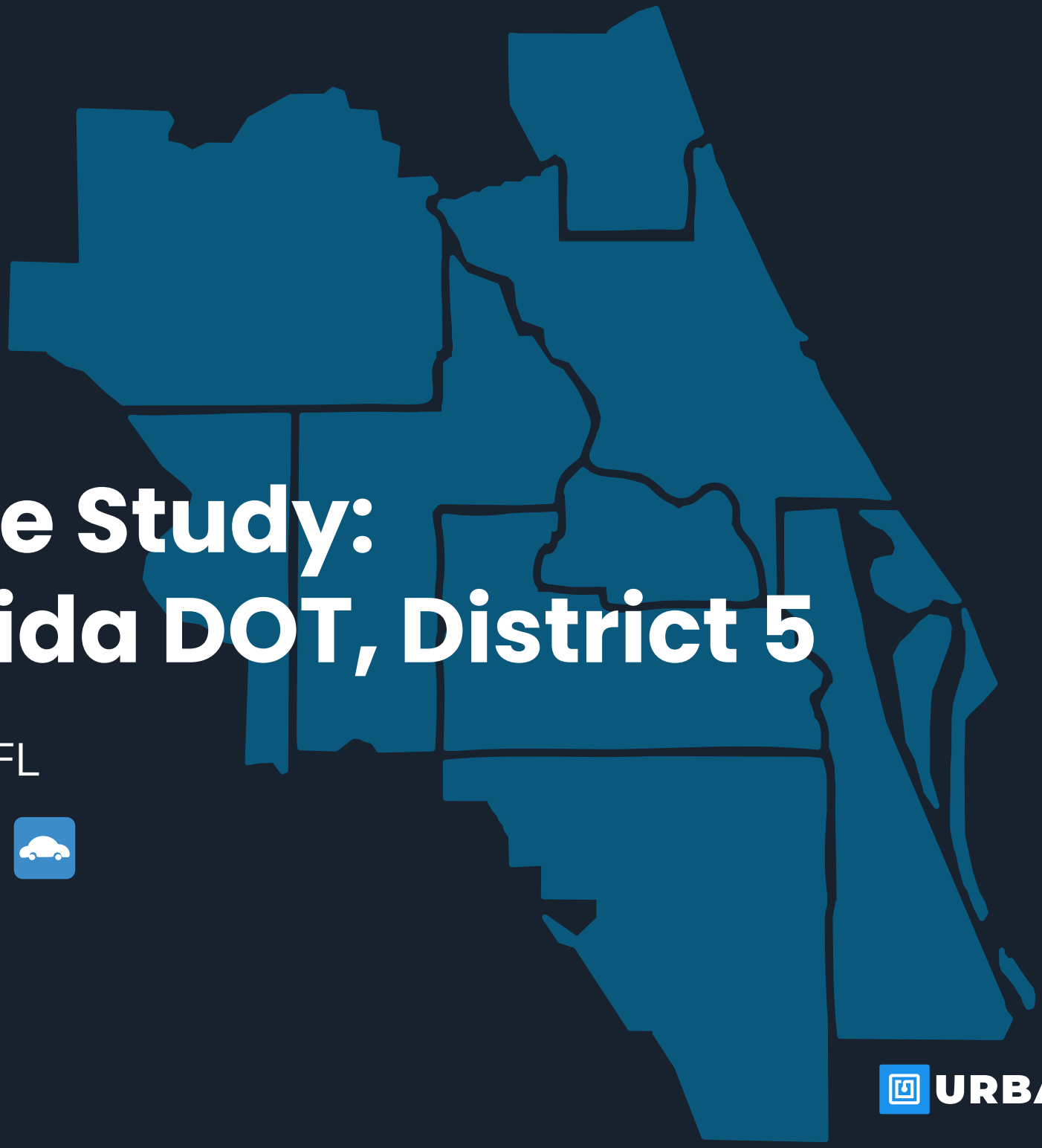


Case Study: Florida DOT, District 5

Deland, FL

URBANSDK

The Challenge

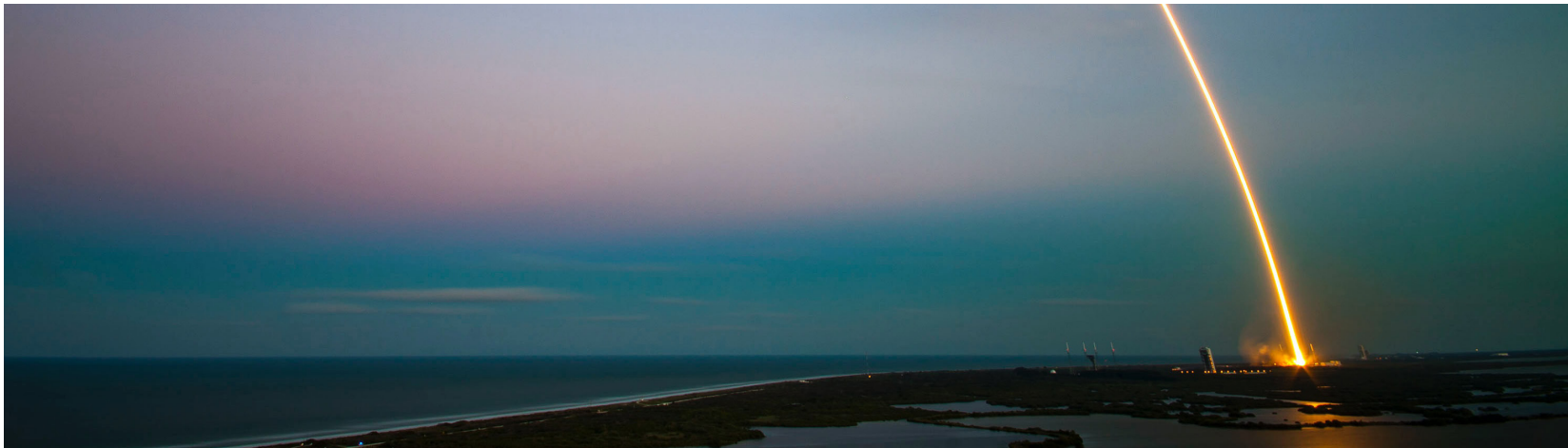
Florida Department of Transportation's District 5 (FDOT D5) is located in Central Florida, and oversees five of the state's metropolitan planning organizations (MPOs) — roughly 20% of the state's planning organizations.

It is FDOT's most diverse district, encompassing the tourist meccas of Orlando and Daytona Beach, the sprawling horse farms of Ocala, the birthplace of American space travel, Cape Canaveral, and a large volume of bedroom communities each has birthed. According to the organization, "It covers nine counties, covers nearly 9,000 square miles, and is home to nearly 4,000,000 residents who log more than 55.6 million (estimated) vehicle miles traveled daily."

As such, FDOT officials are responsible for monitoring roads flooded by farmers, tourists, workday commuters, weekend warriors, and visitors from across the state.

With such regional diversity, FDOT needed a throughline to unite regional partners. It sought a way to standardize performance reporting routes of significance across all MPOs. Moreover, officials wanted a clearer way to understand travel patterns across the district.

With its largest MPO, MetroPlan Orlando, already using Urban SDK, district officials decided to investigate a regional coalition.



Why Urban SDK

As an Urban SDK customer, MetroPlan Orlando used the platform to conduct more thorough studies of the Greater Orlando Area — including speed and reliability reporting, and crash analysis. It also utilized Urban SDK to publish dynamic maps and dashboards to public-facing sites — a feature that helped officials tell their story to constituents and showcase travel patterns throughout Central Florida.

The MPO's increased efficiency, accuracy, and reporting capabilities — due to a larger collection and presentation of data — drew attention. Fellow MPOs within D5 inquired about the platform, and discussion of a regional coalition took place in earnest.

After providing use cases, proving a need for the platform, and recognizing its partner MPOs' desires, FDOT agreed to purchase Urban SDK for the entirety of District 5. Aiding in its decision was Urban SDK's demonstrated experience with such an agreement, having united all the MPOs and FDOT's District 7 under a similar arrangement. Urban SDK was also designed to explicitly eliminate data silos, doing so for the North Florida TPO and FDOT District 2 early in the company's inception. District 5, thus, was following a playbook that had been proven successful by its peers.

For the agreement, Urban SDK was to provide the region with an annual performance measure software license and development services. This included a web-based service that analyzes traffic data, provides tools that measure roadway performance, and produces reports that provide actionable information for roadway network management. District 5 also received a cloud-hosted analytics and visualization tool to process data from various sources, including data from third-party traffic data providers and aid the District with decisions for performance reporting.

The Result

District 5 has harmoniously brought all its partner MPOs under license to use single source of reporting.

As part of its regional agreement, District 5 also assumed responsibility for contract management and change requests. As such, the District was able to designate all admin users (or a number of admin users) for each partner MPO and allow them to choose their own admins. This ensured MPO admins could invite new users, create reports, and deliver corridor studies; however, they would not have access to billing or change requests without D5 approval.

The regional enterprise license has provided multi-county (9) data and unlimited analysis types for all members of the agreement.

Enhanced performance reporting includes the following areas: safety and incidents; speed and reliability; quantity and quality of travel.

Urban SDK has enabled the entire region to better understand the activities on its roads and make data-driven plans for a region seeing some of the largest growth in the nation.

Safety and Incidents

Officials now have consistent data for all safety and incidents in the region. Some of the safety measures include: total crashes, fatalities, serious injuries, severity of crashes, crash rates, Work Zone crashes, and intersection crashes.

For incident monitoring, officials now index data on not just total incidents, but also roadway clearance times, clearance durations, and top incident types.

Speed and Reliability

Regional stakeholders can now consistently track speed and reliability measures across the district. This helps plan for more cohesive traffic patterns for Central Florida commuters.

Performance measures reported include average speed (and AM/PM peaks), average travel times, planning time index, vehicles per hour (and AM/PM peaks), travel time reliability, and traffic volumes (totals and AM/PM peaks).

Quantity and Quality of Travel

With such a diverse range of travel within the region, stakeholders now have a common designation to monitor vehicle miles traveled (as well as person and truck miles traveled) across its nine counties. Quality measures include: miles meeting LOS criteria, daily delay, and congestion measures (severe congestion and cost of congestion).

For an interconnected region that has bedroom communities in one MPO traveling daily to their jobs in another, and cross-county tourism events such as Bike Week and Spring Break that spike the economy district-wide, Urban SDK's implementation has proved invaluable to stakeholders and citizens alike.

URBANSDK

Thank you.

Urban SDK is a next-generation smart mobility platform. It connects city and transportation planners to the reliable data sources they need to accelerate mobility intelligence, improve decision quality and unlock a higher quality of life for communities.

Learn more: urbansdk.com