

SWARCO McCain

DISTRICT OF COLUMBIA

FEATURED
DEPLOYMENT

WASHINGTON, D.C.

Washington, D.C. Enhances Urban Mobility with SWARCO McCain's Cutting-Edge Traffic Management Systems

OVERVIEW

To address growing traffic complexity, the District Department of Transportation (DDOT) partnered with SWARCO McCain to deploy the MyCity Traffic Management System (TMS), an intelligent platform that enhances safety and efficiency.

LOCATION

Washington D.C., the U.S. Capital, is located on the East Coast along the Potomac River and is bordered by Maryland and Virginia. The city is home to roughly 700,000 residents and attracts 20 to 25 million visitors annually. Major routes like I-395, I-295, and the George Washington Parkway often face congestion and bottlenecks. Washington, D.C.'s unique combination of grid patterns and diagonal avenues contributes to irregular intersections and frequent traffic conflict zones.

THE CHALLENGE

Washington, D.C. manages over 1,600 signalized intersections using the legacy SWARCO McCain QuicNet Traffic Signal Management Software. Faced with aging traffic infrastructure, DDOT recognized the need to modernize its systems to support growing mobility demands. The challenge of accommodating pedestrians, cyclists, buses, and cars placed significant strain on signal timing and intersection design. DDOT was looking to invest in a new traffic management system that would pave the way for a more sustainable, efficient, and safer transportation network across the district.

SOLUTION

To overcome the challenges of managing over 1,600 intersections with outdated traffic technology, DDOT partnered with SWARCO McCain to deliver a modern, comprehensive solution. The project included a phased migration from QuicNet to MyCity TMS, with both systems temporarily operating in parallel to ensure a smooth transition. DDOT also modernized its central traffic system infrastructure by replacing legacy 170 Controllers with advanced McCain ATC Flex® Controllers running the latest Omni eX® Intersection Control Software.

THE RESULTS

This solution modernized Washington, D.C.'s traffic infrastructure with a robust, future-ready management platform that improved safety, efficiency, and reliability across complex intersections. It established a strong foundation for smart city initiatives and supported the city's commitment to sustainable urban mobility. The new system also delivered potential cost savings by reducing downtime and streamlining diagnostics. As part of the MyCity TMS transition, SWARCO McCain provided comprehensive training for DDOT staff and consultants, along with ongoing maintenance and support throughout the implementation process.

BENEFITS OF OMNI eX INTERSECTION CONTROL SOFTWARE

- Provides a single solution for any controller/cabinet configuration
- Configures inputs, outputs, logic, and NEMA D connectors without external wiring or relays
- Ensures data accuracy and consistency with built-in data validation
- Advanced data collection with MOE and detector logging, stored via USB or central system

BENEFITS OF MYCITY TMS

- Real-time data provisioning
- System monitoring and control
- Robust analytics and in-depth data insights
- Informed decision-making for management