



Goal: Make parking easier and reduce congestion downtown.

The District Department of Transportation's ParkDC pilot successfully implemented a cost-effective, data-driven approach to managing on-street parking in two of the District's busiest neighborhoods.

The deployment of Fybr's parking sensors was successfully combined with a range of data sources, including transactions, historical occupancy, and citations to produce real-time availability information and inform pricing algorithms.

Due to the success of the pilot, DDOT is currently working to expand demand-based parking pricing to other District neighborhoods.



Challenges

The growing number of residents, commuters, and visitors circling to find parking and parking illegally was creating congestion and stress in the District. There was limited information on parking availability, and illegally parked vehicles were impacting public safety by blocking critical routes for emergency responders.

Solutions

Conduent currently operates the Fybr Platform (powered by AWS) in Washington D.C.. Parking sensors, air quality sensors, gateways, and weather stations have been operating successfully since the program launched in 2015 with a near flawless record in terms of accuracy, latency, and battery life. Fybr is the turnkey provider of parking sensor hardware, maintenance, and data delivery for the ParkDC program. Fybr designed, manufactured, installed and maintains all of the sensor-supporting hardware being used on the project in addition to all of the parking sensors monitoring motorist arrival and departure information for each space. Fybr installed the system with about eight personnel and maintains the system with two part-time local employees. The data collected by Fybr is transmitted electronically to the Conduent database.

Outcomes

- Better information, viable occupancy detection, and demand-based pricing has helped to reduce parking congestion downtown.
- Parking availability increased in high demand areas and empty spaces were more utilized. At the beginning of the pilot, 62% of block spaces had the desired level of usage which increased to 72%.
- Collected data continues to prove that parking pricing plays an important role in addressing parking demand. By increasing time limits and lowering prices in low-demand areas, occupancy increased by 12% and length of stay increased by 14 minutes.
- Parking customers reported a 7-minute decline in the time it took to find parking.
- The connection has been made between roadway congestion and curbside management. As the supply of parking spaces opened up, circling, illegal parking, and double parking decreased.