

Kapsch TrafficCom

Smart Columbus Roadside Unit System Integrator.

Columbus, Ohio (USA).

Kapsch is the prime contractor overseeing the infrastructure integration of the city's Smart Columbus Connected Vehicle Environment (CVE). By deploying CV infrastructure on the roadside and CV equipment in vehicles, the CVE enhances safety and mobility for vehicle operators.

The CVE enhances safety and mobility for vehicle operators with the goals of:

- > Reducing emergency response times in the study corridor
- > Improving driver awareness of [traffic] signal status
- > Increasing driver awareness of speed limits within school zones
- > Demonstrating dedicated short-range communication for use in a transit signal priority application
- > Reducing truck wait (delay) time at signalized intersections

Technical Features.

- > RIS-9160 DSRC RSU
- > CMCC corridor management

Key Benefits.

- > Improves corridor mobility
- > Improves journeys of first responder incidents, making lifesaving services more efficient
- > Emergency vehicle alerts increases awareness
- > Corridor management simplifies operations and maintenance
- > Freight mobility optimized

Kapsch has supplied 67 RIS-9160 DSRC roadside units (RSU) and integrated 43 RSUs from multiple vendors. The main deliverables include

installation and test plan development, RSU location site survey, installation training and support, and operations and maintenance support. Kapsch works closely with ISS to ensure SCMS integration.

Kapsch and its partners have supplied over 100 RSUs at Columbus intersections to support vehicle-to-infrastructure (V2I) safety and mobility applications. The Kapsch RIS-9160 RSU technology is scalable to allow for easy upgrades to device capabilities. In addition, the Kapsch Connected Mobility Control Center (CMCC) is used to configure, monitor, and gather live data from the entire environment. This data is integrated into the Smart Columbus network with the ultimate goal of improving mobility for local residents while improving the safety and efficiency of the transportation network.

The CVE project integrates connected vehicles into the city's transportation environment by installing in-vehicle and roadside technology, and by deploying CV applications that will enable enhanced safety and mobility features. The CVE generates the transportation-related data that is needed by the connected vehicle applications. The RSU installation will be complete during 2020, and Kapsch will monitor the status of the RSU network through the end of the demonstration period in March 2021. Partner subcontractors are Econolite, Path Master, and Danlaw.

Customer	City of Columbus, OH
Project Manager	Vivian Raines Senior Project Manager vivian.raines@kapsch.net
URL	https://smart.columbus.gov/projects/connected-vehicle-environment

Product Highlights.

RIS-9160 Roadside Unit (RSU)

OmniAir® certified RSU enables interoperable V2X services

Connected Mobility Control Center (CMCC)

Enables efficient operations and maintenance, data collection, and multi-agency data sharing via a cloud-based platform

Connected Services

Operational connected services promote infrastructure use and service scalability

The Connected Vehicle Environment (CVE) project is one of multiple transportation-related projects in the Smart Columbus program. Smart Columbus began in 2016 when the City of Columbus won the Smart City Challenge led by the United States Department of Transportation (USDOT). It serves as a model for other cities wishing to incorporate new technologies into their transportation networks. Through the program, Columbus shares lessons learned and best practices from integrating intelligent transportation systems (ITS) in order to increase transportation mobility, safety, and efficiency for its residents.

Kapsch TrafficCom

Kapsch TrafficCom is a globally renowned provider of transportation solutions for sustainable mobility. Our innovative solutions in the application fields of Tolling, Traffic Management, Demand Management and Mobility Services contribute to a healthy world without congestion. We have brought projects to successful fruition in more than 50 countries around the globe.

With our one-stop solutions, we cover the entire value chain of our customers, from components and design to the implementation and operation of systems. As part of the Kapsch Group and headquartered in Vienna, Kapsch TrafficCom has subsidiaries and branches in more than 30 countries. It has been listed in the Prime Market of the Vienna Stock Exchange since 2007 (ticker symbol: KTCG). Kapsch TrafficCom's about 5,100 employees generated revenues of EUR 731 million in fiscal year 2019/20.

>>> www.kapsch.net