



Congratulations ITE 2021 Award Recipient

TRANSPORTATION SYSTEMS MANAGEMENT & OPERATIONS COUNCIL ORGANIZATION AWARD – CITY OF MADISON LOCAL TSMO PROGRAM



CITY OF
MADISON

The City of Madison, WI, has received the 2021 TSMO Council Organization Award for its Local TSMO Program. This award recognizes organizations that demonstrate the successful use of Intelligent Transportation System (ITS) technologies to improve the efficiency of surface transportation facilities with significant societal mobility. Madison's Local TSMO Engineering Team includes **Yang Tao, Ph.D., P.E.**, City Traffic Engineer; **Tom Mohr**, Traffic Engineer 1; and **Graham Heitz**, Traffic Engineer 4.

Madison's Local TSMO Program combines robust communication networks with innovative software applications to manage traffic operation via physical and virtual user interfaces. These tools allow for remote monitoring and response to traffic conditions in real time. Recently, the program played a critical role in response to changing travel demands resulting from COVID-19. The program brands many ITS components under one umbrella and promotes a TSMO culture at the local level. Not only does it provide solutions to today's issues such as COVID-19 response, but also positions Madison for upcoming technologies such as Connected and Automated Vehicles (CAV).

The greater Madison area has a population of over 500,000 and was ranked the State of Wisconsin's fastest growing region in 2019. Although fast-growing, significant portions of its transportation system have limited ability for expansion due to geography or land use. Leadership identified needed resources to assist with daily transportation needs, including surveillance, remote monitoring, traffic signal timing control, and response technologies. The city recently initiated a TSMO program, which provides the capability for traffic engineers to access state-of-the-art tools and technologies used to reduce congestion and delay, enhance safety and improve the overall utility of Madison's transportation network to support continued rapid economic growth in the region in a cost-effective manner.

Components that comprise the TSMO Program include:

- Low-cost Physical and Virtual Traffic Management Center
- Robust Fiber Network Communication
- Traffic Surveillance
- Traffic Signal Advanced Traffic Management Software
- Asset and Workflow Management
- Traveler Information

The program is improving transportation safety, mobility, and equity, providing a platform for the development of advanced CAV technologies and maintaining a reliable transportation network to support the rapid economic growth of the region.