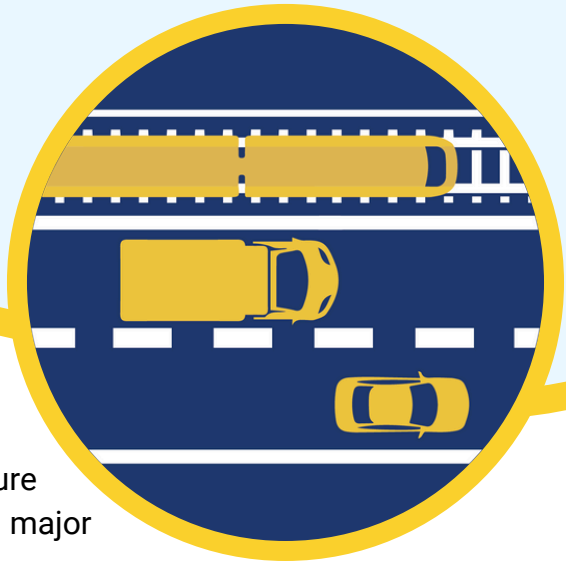
U.S. Department of Transportation

Integrated Corridor Management



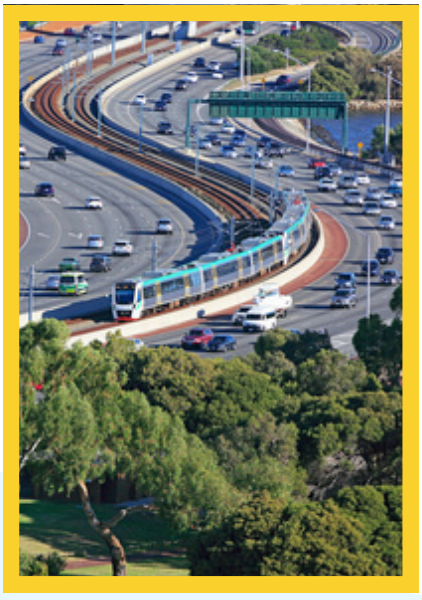
Integrated corridor management (ICM) aims to enhance transportation efficiency by integrating existing infrastructure and coordinating multimodal transportation systems along major corridors (ITS-JPO).

HOW IT WORKS

ICM integrates Intelligent Transportation Systems (ITS) technologies deployed on freeway and arterial roadways and by transit agencies to manage corridor performance. ICM may include ramp metering for optimized freeway throughput, traffic signal coordination for smoother traffic flow on arterial roadways, robust data collection for traveler information and incident response, advanced decision support systems for traffic forecasting, and proactive inter-agency agreements for multimodal strategies, enhancing overall corridor performance (SANDAG).

BENEFITS

The benefits of ICM include reduced congestion, improved travel time reliability, and enhanced efficiency in moving people and goods through integrated multimodal transportation systems (ITS-JPO).



Source: iStock

- In North Carolina, the deployment of ICM, wrong-way driver detection, dynamic curve warning systems, and additional fiber-optic trunk line resulted in estimated long-term benefits yielding a benefit-cost ratio of 2.95. As part of this estimate, ICM was estimated to result in approximately 4 percent savings in travel time reliability based on pilot studies in San Diego, Dallas, and Minneapolis (2023-B01754).
- In California, a study showed that coordination of freeway ramp metering with arterial traffic signal control as part of ICM reduced total travel time and delay by roughly 6 percent and 12 percent, respectively (2022-B01629).