

Rural TSMO Planning in Western States

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BACKGROUND

Rural areas are typically susceptible to congestion on a non-recurring basis

Work zones, crashes, and large weather events are common non-recurring events that can cause congestion in rural areas

Although high levels of congestion in rural areas may be less frequent compared to urban areas, they can create the potential for lengthy delays, long detours, and severe crashes

This can be detrimental to freight and rural communities that rely on vehicles for travel



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What is TSMO?

TSMO is a term used to describe an integrated program of operational strategies that actively manage the transportation system using real-time data, analysis, and communication technologies

TSMO uses these strategies to optimize the safe, efficient, and reliable use of existing transportation infrastructure

TSMO strategies can be initiated from a systemwide perspective that often spans multiple jurisdictions, agencies, and transportation modes

These strategies can involve influencing travel demand, managing traffic congestion, responding to planned and unplanned events, and providing traveler information



What are TSMO Strategies?

Traditional strategies - work zone management, road weather management, intelligent transportation systems (ITS), traveler information systems, and incident management

Newer strategies - Integrated Corridor Management (ICM) and Active Traffic Management (ATM) combine technologies such as traffic signal coordination, driverless vehicles, ITS, and more sophisticated data processing and analytics

A TSMO program can integrate all of these strategies under one program to optimize the safety, efficiency, and reliability of the existing transportation system



WHY SHOULD WE IMPLEMENT TSMO IN RURAL AREAS?

The objective is to develop an innovative TSMO program to increase highway safety and reduce congestion simply by improving the day-to-day operations of the roads we've already built

TSMO allows us to get the most out of our investments by optimizing the use of our resources, personnel, equipment, and assets

It can reduce congestion from special events, work zones, and weather conditions

It can provide travelers real-time information and manage demand in major seasonal destinations



WHY IS TSMO IMPORTANT IN RURAL AREAS?

The overall transportation needs are the same for both urban and rural, such as safety, reliability, traveler information, incident response, etc., but the magnitude of the impacts vary greatly

Crashes in rural areas tend to be more severe, associated with higher speeds

Response time is increased due to distance to get to the scene

Long delays due to road closures or congestion

Detour routes are nonexistent or many miles out of direction as compared to urban areas

Impacts to individuals much greater than in urban areas



WHY IS TSMO IMPORTANT IN RURAL AREAS?

In rural areas a higher percentage of travel is related to freight and tourism where disruptions to those industries can have an economic impact

Most of the population lives in urban areas but rely on rural areas for agricultural and manufactured products

Rural transportation facilities provide a critical link into and between urban areas

Rural roads provide the only link to some visitor destinations



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WHAT ARE THE BENEFITS OF TSMO IN RURAL AREAS?

The benefits of implementing TSMO in rural areas include improved traveler safety and improved reliability (i.e., reduce unexpected delays)

TSMO strategies also build on longtime services (such as clearing crashes and plowing snow) with new technologies that strengthen services as a whole

TSMO strategies can address transportation issues in the near term with relatively low-cost solutions



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Examples of rural TSMO efforts

Making the case for rural TSMO

How TSMO improves mobility and safety

Developing a TSMO plan for a rural district

Development of a Statewide TSMO Program Plan



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