



Planning for management and operations

This factsheet is intended to assist cities and counties in the region in updating their local transportation system plans to align with the Regional Transportation Plan.



Making the most of transportation investments

Transportation System Management and Operations (TSMO) is a way for transportation professionals to be good stewards of the transportation system by managing and operating the system as efficiently and effectively as possible. TSMO strategies are often lower-cost alternatives to adding roadway capacity such as building more lanes, miles of roadways and larger intersections. Instead, TSMO aims to get the most out of the existing system by managing demand, improving business practices and collaboration across jurisdictional boundaries, and using technology and data to manage and monitor transportation operations and track progress towards regional goals.

Regional TSMO and local planning

In 2021, the concept for TSMO was refined by regional partners to establish updated policies, objectives, performance measures and actions. The actions in RTP table 3.12 connect TSMO implementation to achieving outcomes aligned with the RTP (pages 3-162). Cities and counties can align planning work by making connections to the [TSMO Strategy](#), [Toolbox of TDM and TSMO Strategies](#) and 2023 RTP TSMO policies listed in this factsheet.

Regional Transportation Plan (RTP) TSMO policies RTP section 3.3.10.3

- Policy 1** Manage the transportation system for the effective and efficient use of publicly funded transportation assets while supporting mobility, multi-modal reliability, racial equity, safety and reductions in carbon emissions.
- Policy 2** Take actions from the regional TSMO Strategy by supporting a program that conducts planning for operations, develops new operational concepts, assesses future needs for capabilities, identifies gaps in data and establishes a process for listening and accountability.
- Policy 3** Optimize operations for reliability and mobility by coordinating and advancing operator capabilities with shared tools and interoperable technologies.
- Policy 4** Provide real-time traveler information data across devices and at physical locations that is comprehensive in serving the needs of people, businesses and freight movement.

Listening and accountability

TSMO policies are rooted in equity to better evaluate community needs and were developed by applying an equity decision tree as part of the planning process. The first step is to ask questions at the root of transportation equity: what disparities exist, what transportation choices are needed and is everyone able to voice their needs and priorities? The [TSMO equity tree](#) is a starting place to develop TSMO priorities that are working for and with Black, Indigenous and people of color.

How can we track the success of TSMO within the RTP performance targets?

The following table includes examples from [RTP Table 2.1](#) (left column) with TSMO connection (right column).

Mobility: Mode share	
The RTP aims to triple transit, bike and pedestrian mode shares relative to the performance targets base year of 2010 (7.7% for transit, 3.7% for walk, 2.3% for bike).	<ul style="list-style-type: none"> Mode share across bike, pedestrian and transit trips will increase as the system is managed and operated for safer and prioritized movement.
Mobility: Throughway reliability	
The RTP aims to have no more than four hours in a day when average travel speeds fall below 35 miles per hour on the region's limited-access throughways (freeways) so that the region's throughways are reliable.	<ul style="list-style-type: none"> Throughway reliability can be maintained with ramp meters, advisory speed signs, managed lanes (e.g., carpool, bus on shoulder), incident response and agency interactions with connected vehicle technology.
Safety: Serious crashes	
The RTP aims to eliminate transportation related fatalities and serious injuries for all users of the region's transportation system by 2035 with a 16% reduction by 2020 (compared to 2015) and a 50% reduction by 2025.	<ul style="list-style-type: none"> Crash trends since Vision Zero policy have gotten worse. Planning for a safe system involves speed management and safer intersections. Intelligent Transportation Systems (ITS) sensors can detect speeding vehicles and hold all signals red to reduce speeding and crashes. Post-crash care such as incident response reduces secondary crashes.
Equity: Safe system completion and equity	
The RTP prioritizes completing the bicycle and pedestrian system in equity focus areas (relative to other communities) to provide safe streets for the most vulnerable travelers.	<ul style="list-style-type: none"> TSMO uses a system of data communication with sensors and operations centers. Prioritizing investments in digital infrastructure in equity focus areas will enable safer systems for vulnerable road users including modern bike sensors and pedestrian head starts at signals.

Planning performance measures

As city and county planning conducts public outreach, guide listening and learning through TSMO-focused conversations. For example, if transit delay is a community concern, discuss a range of potential projects that include Intelligent Transportation Systems infrastructure to improve transit speeds and reliability.

The 2021 [TSMO Strategy](#) Performance Measures and Targets (Chapter 4) connects regional measures like vehicle-miles traveled (VMT) per capita to key metrics that connect to TSMO. Consider the seven (7) performance measures with their various metrics, drawing connections to how the future system, with a collection of projects, will be operated.

Overview of local plan requirements

Cities and counties are required to include a TSMO element in their transportation system plans that includes:

- An inventory and evaluation of existing local and regional TSMO infrastructure, strategies and programs
- Identifies needs, (i.e. gaps and opportunities) to expand existing TSMO infrastructure, strategies and programs
- A list of projects and strategies that address identified TSMO needs consistent with the regional TSMO

For complete language, refer to the [Regional Transportation Functional Plan](#) sections 3.08.160 TSMO and 3.08.220 Transportation Solutions.