

Getting the Most from Your Transportation System Investments: *Operating for Peak Performance*



U.S. Department of Transportation
Federal Highway Administration
Federal Transit Administration

A safe, efficient, and reliable regional transportation system requires planning for and investing in strategies to manage and operate the existing multimodal transportation infrastructure. Although management and operations strategies address the causes of at least 60 percent of roadway congestion, they are often overlooked and underfunded. Their benefits are not widely recognized. However, these strategies can help to provide attractive travel options for the public - by improving transit system performance, for example. Strategies such as traffic incident management, traffic signal coordination, and real-time transit information can provide powerful, cost-effective ways to improve multimodal system performance, helping agencies and travelers get the most of out of the region's infrastructure investments.

By using an objectives-driven, performance-based approach to integrate management and operations into transportation planning, your region can ensure that the most effective strategies for maximizing transportation system performance are planned and funded.



"Operational improvements are one way we get the most out of the transportation system we have."

– **B. Glen Whitley**

Tarrant County Judge and Chair, Regional Transportation Council, North Central Texas Council of Governments



"We cannot afford to make all of the investments needed to serve the existing population and the growth we're expecting. . . I expect that [operations] investments which increase transportation choices and improve the system's efficiency, such as smarter traffic signals, advanced freeway traffic systems. . . will naturally float to the top of our investment plans."

– **Julia Patterson**

King County Council member and Chair of the Puget Sound Regional Council's Transportation Policy Board



"[We use] specific objectives for the performance of our regional transportation system to guide our planning and investment decisions. By focusing on specific performance improvements, we have made progress on things that our constituents care about like improved safety, accessibility, and mobility and reduced congestion."

– **Barbara Wysocki**

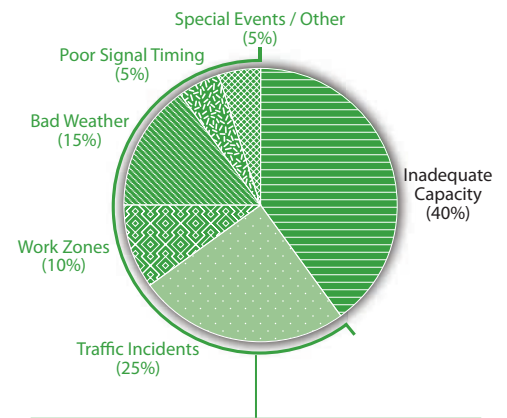
Champaign County Board Chair, District 9, Illinois, Champaign Urbana Urbanized Area Transportation Study



"...one of the best ways to get everyone thinking and working from the same page is to set measurable goals and work together to reach them."

– **Sam Olens**

Cobb County Commission Chair and former Atlanta Regional Commission Chair

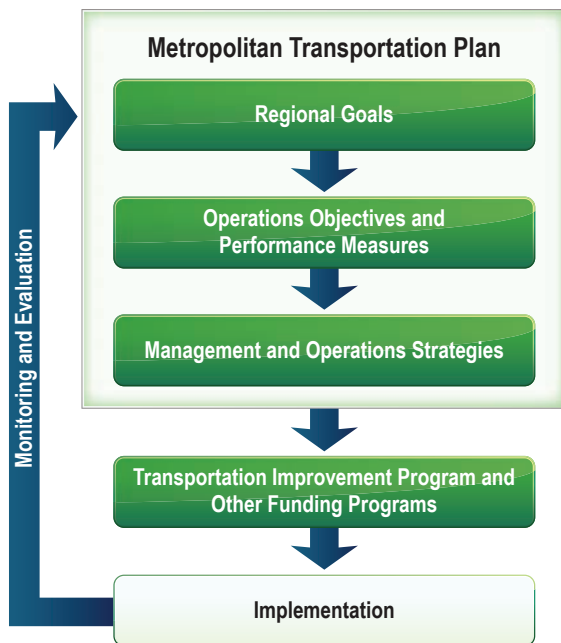


Source: FHWA, *Traffic Congestion and Reliability: Trends and Advanced Strategies for Congestion Mitigation*, 2005. Available at http://www.ops.fhwa.dot.gov/congestion_report/.

Management and operations strategies address the causes of at least 60% of congestion. Traditionally, planning has addressed the source for less than half of congestion on our Nation's roadways.



The Objectives-Driven, Performance-Based Approach



Use the questions on the back of this brochure to guide your region in using this approach.

Advantages of Using an Objectives-Driven, Performance-Based Approach:

- Leads to investments in management and operations strategies that are relatively low-cost and “make sense” to constituents.
- Helps identify multimodal strategies that deliver measurable improvements.
- Aligns resources and regional activities with operations objectives for a greater impact.
- Strengthens system performance through collaborative involvement of transportation operations managers in the planning process.

Management and Operations Strategies Deliver...

Safer travel:

Freeway ramp metering reduces crashes by 15 - 50%.

More free time:

Traffic signal retiming decreases delay on roads by 13 - 94%.

Transit signal priority reduces transit delay by 30 - 40%.

Cleaner air and less wasted fuel:

Georgia's traffic incident management program reduced annual fuel consumption by 6.83 million gallons/year.

Cost-effective solutions:

Typical benefit-cost ratios for traffic signal retiming/optimization are 17:1 to 62:1, for work zone management systems are 2:1 to 42:1, and for bus rapid transit are 2:1 to 10:1.

Improved Livability:

Management and operations strategies such as enhanced transit service, traveler information, and traffic incident management promote safe, reliable, economical, and balanced transportation choices while addressing regional mobility needs.

Management and operations strategies combined with construction projects provide immediate benefits in congestion management and work zone safety.

Examples of Management and Operations Strategies Include:

- Traffic incident management
- Traffic signal coordination
- Traveler information
- Transit signal priority
- Freight management
- Work zone management
- Special event management
- Road weather management
- Congestion pricing
- Travel demand management

Getting started: How to mobilize your region to use an objectives-driven, performance-based approach

Does our metropolitan transportation plan have regional objectives that define measurable operational performance outcomes?

Have we agreed to performance measures that will assess the attainment of our operations objectives?

Do our operations objectives and performance measures influence the selection and funding of operations programs and projects?

Does our region collect system performance data to track progress against operations objectives?

Does our MPO involve managers from transportation operating agencies in integrating operations into our plans and programs?

For more information:

The U.S. Department of Transportation's Federal Highway Administration and Federal Transit Administration have developed guidebooks, workshops, and training materials to help regions adopt an objectives-driven, performance-based approach to integrate transportation management and operations into the planning process. Visit <http://www.plan4operations.dot.gov> for more information.

Federal Highway Administration's Office of Operations

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Federal Highway Administration's Office of Planning,
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Federal Transit Administration's Office of Planning and Environment

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<http://www.plan4operations.dot.gov>