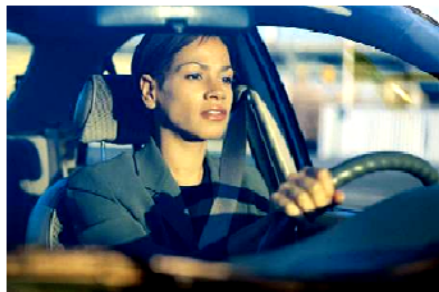




Gauging Progress toward Operations Objectives: The Role of Monitoring and Evaluation

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Expanding our roads and rails takes time and significant funding.



How can we make a difference in the way people and goods move in the region now?

Motivation for Advancing Management & Operations in the Planning Process

- Limited funding for large-scale capacity projects
- Long-time to plan, assess, and build new infrastructure
- Potential adverse impacts on communities, land use, air quality, etc.
- Need to Think Beyond Traditional Capacity Projects

There is a more immediate need to address traveler concerns through better planning for transportation system management and operations

Management & Operations Strategies Include...

- Traffic incident management
- Traffic signal coordination
- Transit signal priority
- Freight management
- Work zone management
- Special event management
- Road weather management
 - Congestion pricing
 - Managed lanes
- Ridesharing programs
- Parking management
- Electronic toll collection
 - Traveler information

Rationale For Working to Outcomes

- Operations Objectives in the Transportation Plan Can Drive Better Investments in Management and Operations,
- Increases Accountability and Measurement of System Performance,
- Engages the Operations Community in a Substantive Manner.

“What Gets Measured Gets Managed”

The Philosophy Behind Planning for Operations

- Focus on specific outcomes and regional objectives
- Planning and investment decisions based on performance measures and data
- High levels of multi-modal collaboration between agencies and jurisdictions

**Moving Beyond Just a List of M & O Projects
in the Transportation Plan**

The Approach

An Objectives-Driven, Performance-Based Approach to Planning for Operations



Advantages

- Prioritizes investments for improved performance
 - Leads to investments in M&O strategies that are relatively low-cost and “make sense” to constituents
- Measurable results
 - Helps identify strategies that deliver measurable improvements
- Focused on outcomes
 - Aligns resources and regional activities with operations objectives for greater impact
- Increases accountability
- Advances regional consensus and collaboration

Operations Objectives

- Objectives are specific, measurable statements of outcomes relating to attainment of goals
- They should be “SMART”:

Specific. Sufficient to guide approaches

Measurable. Quantitative Measurement

Agreed. Consensus among partners

Realistic. Can be accomplished

Time-bound. Identified time-frame for accomplishment

Developing Operations Objectives

Operations objectives included in an MPO plan are developed through ***collaboration with a broad range of stakeholders*** to reflect regional values.

- May involve
 - Convening operators and planners in a region
 - Collecting and analyzing data on the current and planned transportation system to determine operational problems (e.g., congestion issues)
 - Revisiting needs brought out during the regional ITS architecture development

The Approach

An Objectives-Driven, Performance-Based Approach to Planning for Operations



Monitoring and Evaluation

- **Monitoring** performance includes collecting data to track system performance outcomes
- **Evaluation** includes analyzing the effectiveness of implemented strategies
- An important use of this information is to **assess and refine operations objectives**

Gauging Progress toward Meeting Objectives

Sample Operations Objective	Sample Measure
<p>By 2015, at least 90 percent of transit buses will arrive within no more than 5 minutes of scheduled time.</p>	<p>Percent of buses arriving within schedule window</p>
<p>Reduce vehicle miles traveled per capita by 5 percent by 2020.</p>	<p>VMT per capita</p>
<p>By 2020, reduce the clearance time of traffic incidents on freeways in the region from a current average of X minutes to Y minutes.</p>	<p>Incident clearance time</p>

Reasons to Monitor and Evaluate Performance

- Measures success in reaching operations objectives
 - Increases understanding of system performance
 - Demonstrates and compares status against specific targets
- Supports re-examination and refinement of objectives
 - Illustrates trends identifying whether indicators are moving in the right direction
 - Assesses the feasibility of meeting objectives within the specified time frame
- Informs adjustments to projects/programs based on results



Reasons to Monitor and Evaluate Performance (cont'd)

- Improves the effectiveness of communications with decisionmakers, stakeholders, and the public
- Provides accountability
- May provide information to calibrate or refine planning tools



Methods and Data Sources for Monitoring System Performance

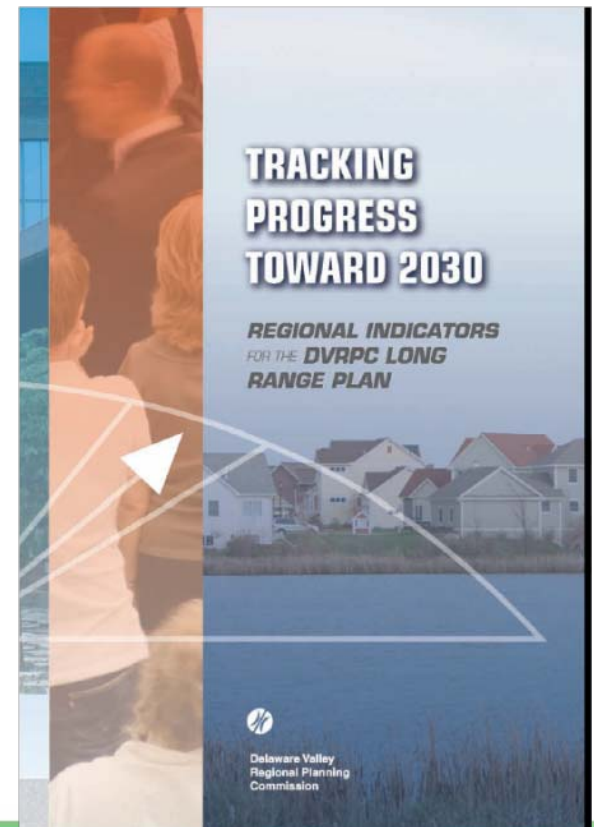
- Traffic counts
 - GPS technologies
 - Transit data
 - Aerial photo surveys
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- Archived traffic operations data
 - Other data sets (crash data, customer satisfaction surveys)

Methods to Evaluate M&O Strategy Effectiveness

- Collect before and after travel data
- Conduct program evaluation studies (e.g., to analyze changes in attitudes, participation, or outcomes, etc.)
- Develop guidelines or incentives for local governments to evaluation projects

Communicating Results

- Periodic reports
 - Regional congestion reports
 - “State of the Commute” reports
 - Performance dashboards
 - Others
- Brochures and newsletters
- Websites



For More Information

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