



Accelerating solutions for highway safety, renewal, reliability, and capacity

Regional Operations Forum

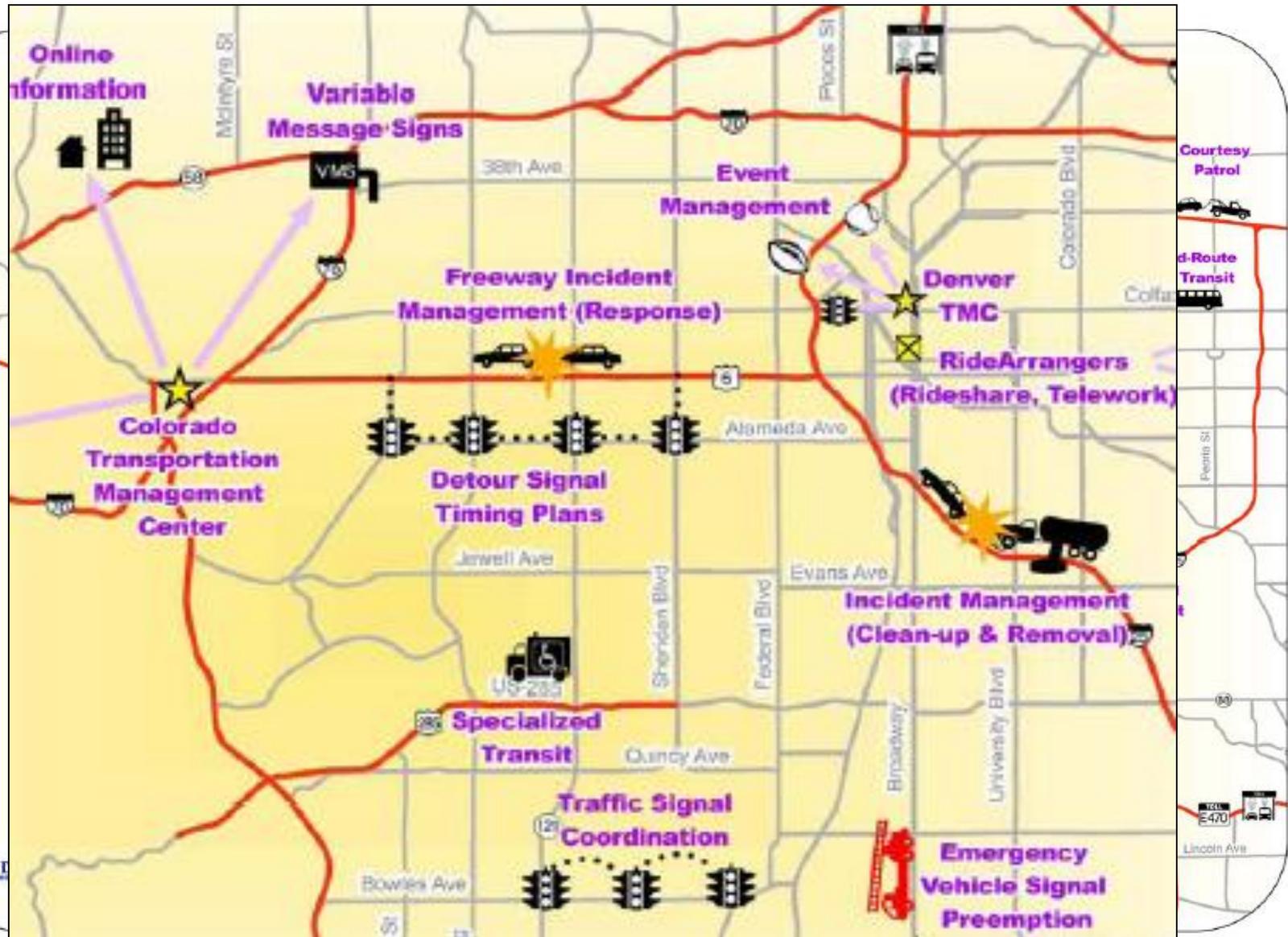
Planning for Operations

TRANSPORTATION RESEARCH BOARD
OF THE NATIONAL ACADEMIES

What do our travelers want?

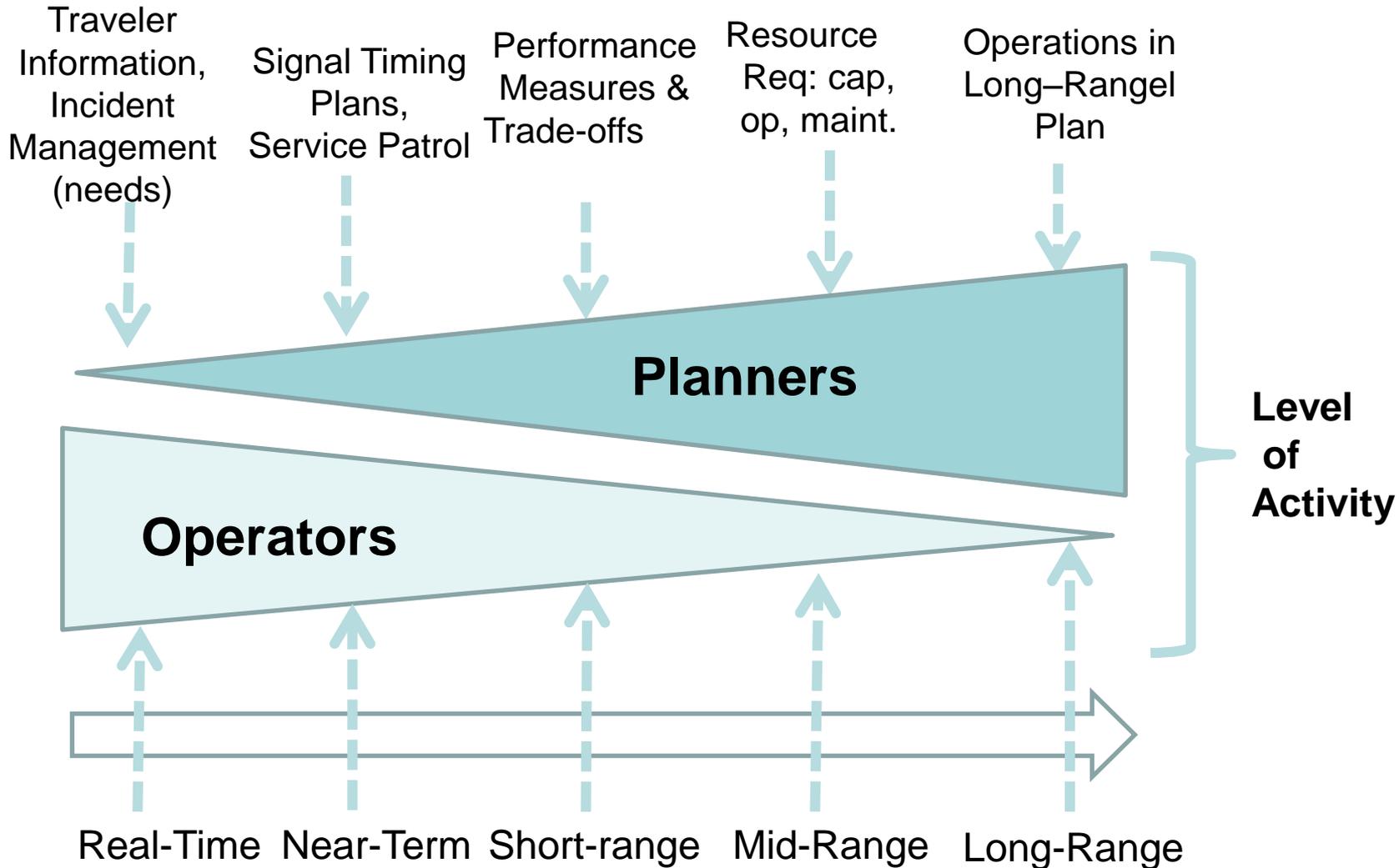
Consistency across modes & jurisdictional boundaries

Coordinated Across the Region



What is Planning for Operations?

Operators/Planners Collaboration

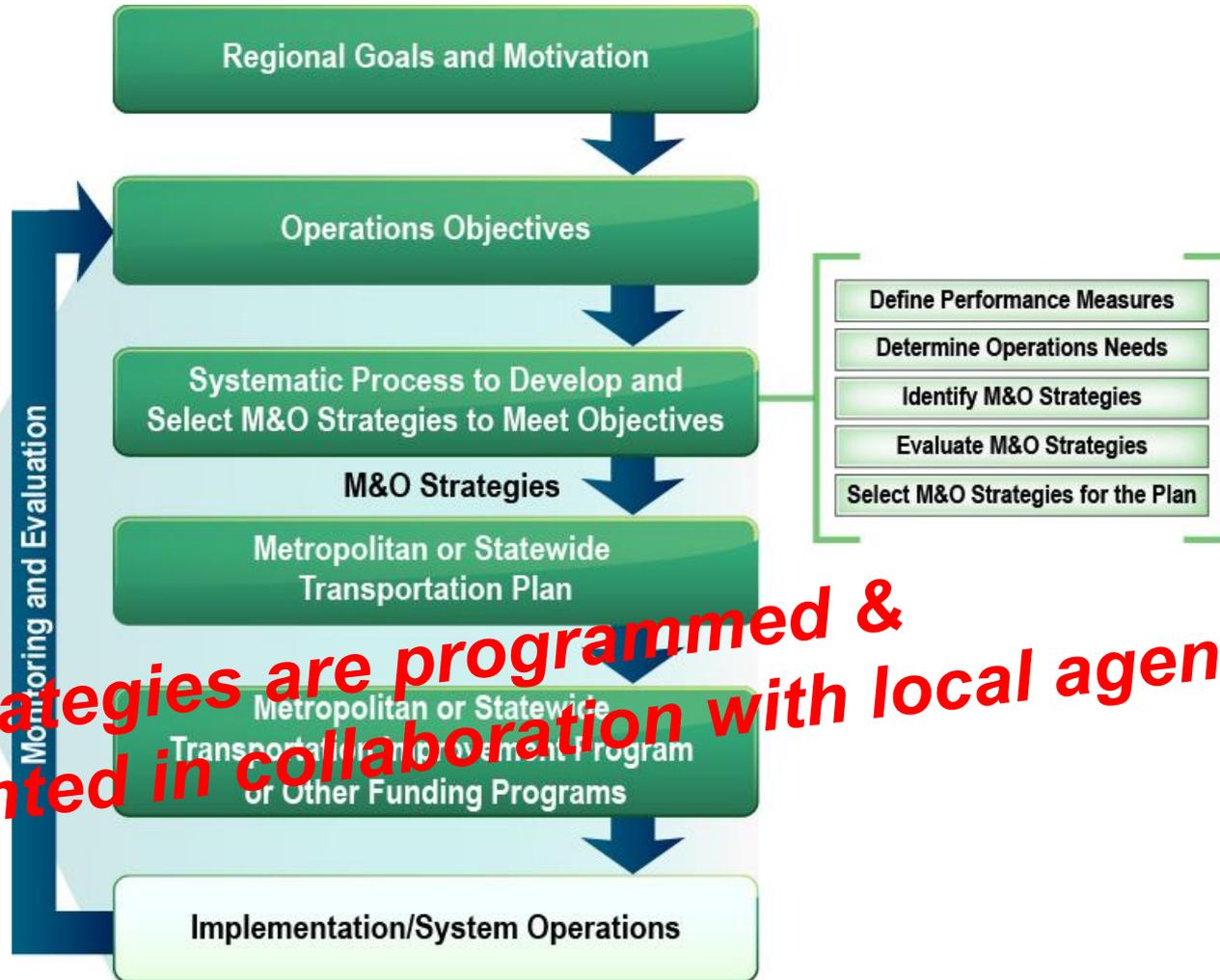


How about the Congestion Management Process (CMP)?

How is the CMP Related to Planning for Operations?

**How do we effectively
integrate
TSMO and CMP into our
planning processes?**

Integrating TSMO into Metro and Statewide Planning



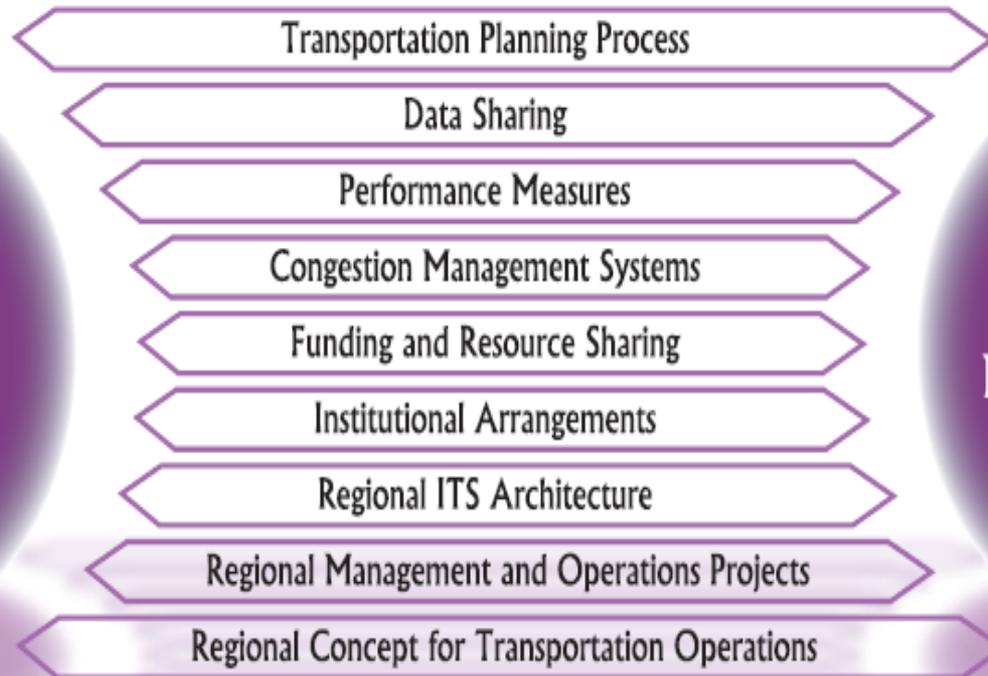
TSMO strategies are programmed & implemented in collaboration with local agencies

The Scope of Linking TSMO strategic planning into the formal regional/statewide planning process

Requires Coordination Among Decisionmakers



Linkage Opportunities



Requires Coordination Among Day-to-Day Operations Managers



HOW DO WE MAKE THE CASE FOR TSMO IN THE PLANNING PROCESS?

What do you think is needed???

Let's address some key ingredients to support by TSM&O program planning

1. A “business case” – how TSM&O relates to agency mission/goals to get buy in
2. Performance measures to gauge progress and use in real time
3. A road map for sustainable strategy application improvements related to problems
4. Clear concepts-of-operations(architecture) to identify systems needed and roles of partners
5. An organizational structure and staff capable of coordinated operational management
6. Budget for sustainable funding (put forward to “planners”)
7. New forms of collaboration: within DOT, among partners – recognizing differential capacities

“TSMO Program Plan” Compared to Conventional “Plan”

- Identifies the Mobility objectives, deficiencies with special attention to non-recurring congestion and related strategies
- Recognizes synergism among various TSMO strategies
- Addresses all the procedures and related roles of participants to conduct TSMO strategies
- Identifies *complete range of resources* required for effective operations – not just technology/capital, not just capital and maintenance, but also approach to staffing/training, conops, role definitions, real-time/field procedures and protocols , development/utilization of performance information
- Incorporates incremental approach

Why do a “Program Plan” for TSMO?

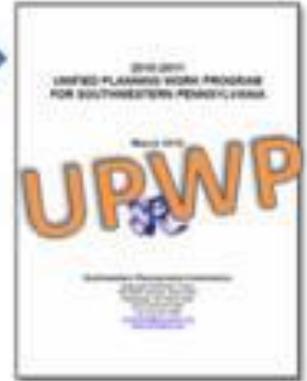
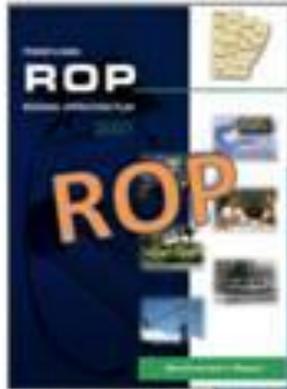
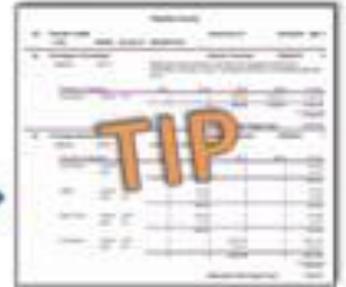
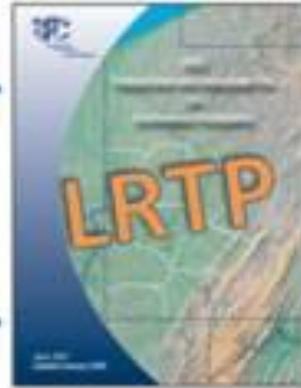
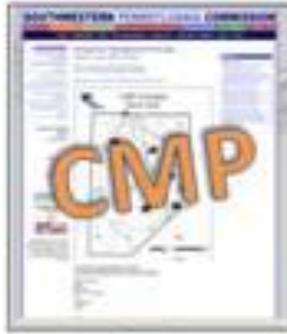
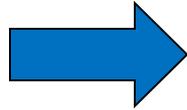
1. Identifies key needs/deficiencies re operational effectiveness of roadway network (focus on non-recurring congestion)
2. Identifies strategies relevant and effective re problems experienced
3. Insures all strategy components are coordinated – concept, architecture, technology, procedures, roles
4. Identifies logical increments in effectiveness, next steps, expansions, improved procedures, data etc.
5. Specifies business and technical processes unique to TSMO
6. Measures/evaluates impact and improvements (performance) to know if what we are doing is making a difference (and proving it to others!!)
7. Identifies needed resources to support improvements (cap, op., maint., staff, etc.)
8. Makes sure the agency supports TSMO as policy

Who Prepares a TSMO Program Plan?

Who Prepares a TSMO Program Plan?

- Any serious DOT mission with strategies requires some kind of program plan for effective use of resources, improved TSMO and sustainability
- Probably not DOT or MPO “Planners” who may not know much about TSMO – and may not be encouraged by the policy environment they work in
- Therefore it is the TSMO staff who need to be involved – working with planning staff, drawing on best practice examples
- Its up to you

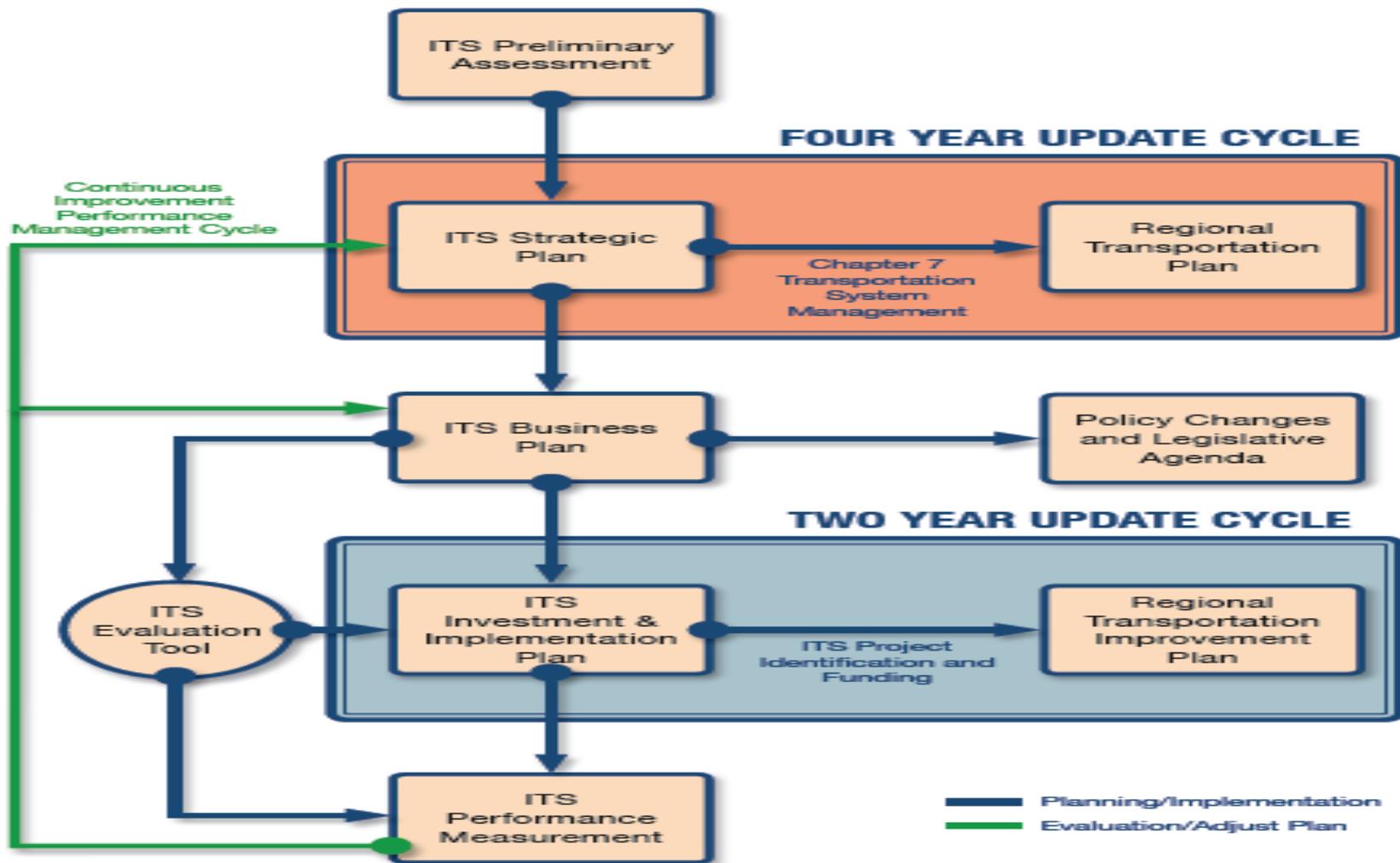
TSMO
Program
Plan



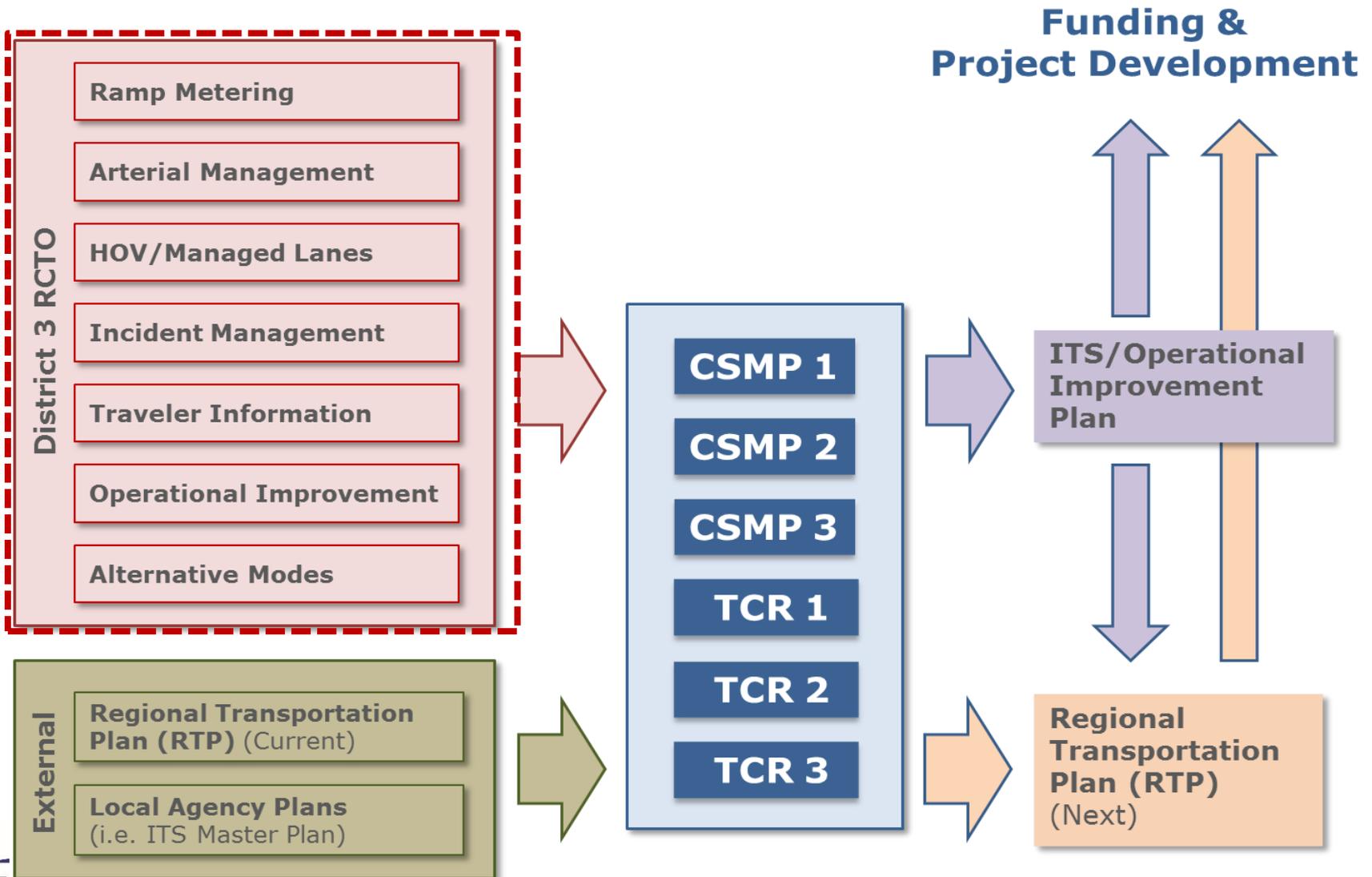
Caltrans District 8 region: Is there a Regional Transportation Plan that includes TSMO?

- Does the Plan include discussion of TSMO as related to policy?
- Are projects identified – or a program?
- Is there a line item with investment level?
- What level of detail?
- Who prepared it?

Integration TSMO into the Regional Planning Process



D3 Operations Planning Process



Bottom Line

- If TSMO is part of agency mission – and TSMO strategies are being deployed/operated, they need their own program plan (just like other agency programs)
- This is new – to both TSMO managers – and to planners
- There is new ground to be broken – in defining what should be in a TSMO program plan, who does it, how it is done, etc.
- You can be part of the solution

Useful Publications:

USDOT (www.plan4operations.dot.gov)

- A Primer – Statewide Opportunities for Linking Planning and Operations
- Advancing Metropolitan Planning for Operations: An Objectives-Driven, Performance-Based Approach – A Guidebook
- Advancing Metropolitan Planning for Operations: Set Objectives, Measure Progress, See Results
- Advancing Metropolitan Planning for Operations: The Building Blocks of a Model Transportation Plan Incorporating Operations – A Desk Reference
- An Interim Guidebook on the Congestion Management Process in Metropolitan Transportation Planning
- Applying a Regional ITS Architecture to Support Planning for Operations: A Primer
- Creating an Effective Program to Advance Transportation Systems Management and Operations: Primer
- Delaware Valley Regional Planning Commission Philadelphia Metropolitan Region Case Study
- Developing Decision maker Support for Management and Operations at MetroPlan Orlando

Useful Publications:

USDOT (www.plan4operations.dot.gov)

- Getting More by Working Together – Opportunities for Linking Planning and Operations: A Reference Manual
- Management & Operations in the Metropolitan Transportation Plan: A Guidebook for Creating an Objectives-Driven, Performance-Based Approach
- Operations Benefit/Cost Analysis Desk Reference
- Regional Concept for Transportation Operations: A Tool for Strengthening and Guiding Regional Transportation Operations Collaboration and Coordination
- Regional Concept for Transportation Operations: The Blueprint for Action – A Primer
- Regional Transportation Operations Collaboration and Coordination: A Primer for Working Together to Improve Transportation Safety, Reliability, and Security
- The Collaborative Advantage: Realizing the Tangible Benefits of Regional Transportation Operations Collaboration
- The Regional Concept for Transportation Operations: A Practitioner's Guide
- Wilmington Area Planning Council New Castle County, Delaware and Cecil County, Maryland Case Study

Useful Publications: SHRP2 Reliability

(www.trb.org/StrategicHighwayResearchProgram2SHRP2/Pages/Reliability_Projects_302.aspx)

- Integrating Business Processes to Improve Reliability
- Establishing Monitoring Programs for Mobility and Travel Time Reliability
- Analytic Procedures for Determining the Impacts of Reliability Mitigation Strategies
- Incorporating Reliability Performance Measures in Operations and Planning Modeling Tools
- Incorporating Reliability Performance Measures into the Transportation Planning and Programming Processes
- Institutional Architectures to Advance Operational Strategies
- Evaluation of Cost-Effectiveness of Highway Design Features
- Incorporation of Travel Time Reliability into the Highway Capacity Manual
- Incorporation of Non-recurrent Congestion Factors into the AASHTO Policy on Geometric Design
- Feasibility of Using In-Vehicle Video Data to Explore How to Modify Driver Behavior that Causes Non-Recurring Congestion
- Evaluating Alternative Operations Strategies to Improve Travel Time Reliability
- Improving Traffic Incident Scene Management
- Archive for Reliability and Related Data

Useful Publications: SHRP2 Reliability

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- Design and Implement a System for Archiving and Disseminating Data from SHRP 2 Reliabilities and Related Studies/ Assistance to Contractors to Archive their Data for Reliability Projects
- Traveler Information and Travel Time Reliability
- Innovative IDEA Projects
- Assistance to Contractors to Archive Their Data for Reliability and Related Projects
- A Framework for Improving Travel Time Reliability
- e-Learning for Training Traffic Incident Responders and Managers
- Post-Course Assessment and Reporting Tool for Trainers and TIM Responders Using the SHRP 2 Interdisciplinary Traffic Incident Management Curriculum
- Validation of Urban Freeway Models
- e-Tool for Business Processes to Improve Travel Time Reliability
- Local Methods for Modeling, Economic Evaluation, Justification and Use of the Value of Travel Time Reliability in Transportation Decision Making
- Regional Operations Forums for Advancing Systems Operations, Management, and Reliability
- Pilot Testing of SHRP 2 Reliability Data and Analytical Products
- Reliability Implementation Support

Questions