

Congestion Management Safety Plan 4

Minnesota Department of Transportation

Metropolitan Council Transportation Advisory Committee
November 2, 2016

We all have a stake in $A \oplus B$

















Congestion Management Safety Plan

Objective:

- Quickly develop and implement lowercost/high-benefit projects to improve existing congestion and safety problem locations on MnDOT's Metro District trunk highway system.
 - CMSP identified as a Mobility investment strategy in the *Transportation Policy Plan*



















CMSP Background

- ▶ Phase 1 (2007)
 - Recommended 19 demonstration projects
 - 13 of these have been implemented
- ▶ Phase 2 (2009)
 - Addressed policy questions about lower– cost/high-benefit projects and flexible design
 - Developed System Problem Statement
- ▶ Phase 3 (2012)
 - Developed solution concepts for highest-priority problem locations
 - Produced list of 53 project opportunities











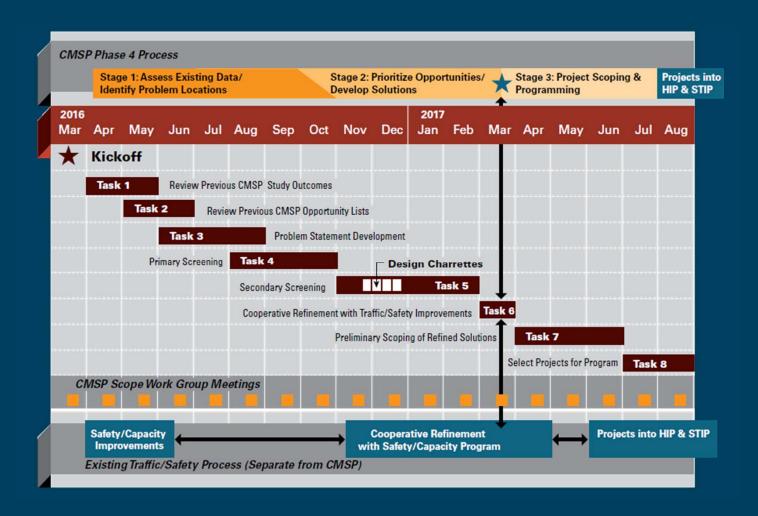








CMSP 4 Schedule





















CMSP Key Milestones



Review Previous Outcomes System
Problem
Statement

Primary Screening Secondary Screening Project Pre-Scoping

- Before & After Studies
- ProgramDeliveryInterviews
- Project One-Pagers
- Congestion, Reliability, Safety Measures
- Describe Problem Locations
- MonetizeProblemMagnitudes
- Identify Top Problem Locations
- DesignCharrettes
- Sketch-Level
 Costs
 and Benefits
- Return Period

- TrafficModeling
- Enhanced
 Cost/Risk
 Assessment



















CMSP Key Milestones

System Problem
Statement

Primary Screening Secondary Screening

- Over 450 problem locations identified on Metro District highway system
- Characterized by roadway type and problem causes

- Identify top priority locations based on problem magnitude
- Approximately 50 carried forward to concept development
- Develop concepts for top priority problem locations
- Estimate return-oninvestment for solution concepts
- List of high ROI solutions provided for TPP update



















CMSP Project Interviews

- MnDOT Program Delivery (Area) interviewed to identify current status of past CMSP opportunities
 - Completed
 - Under Construction
 - Programmed
 - Under Study
 - Superseded by Larger Project
 - Low Priority
 - Dropped



















Technical Report 1

Review of Previous CMSP Opportunity Lists and Projects (Technical Memorandum)

- Introduction
- Summary of Previous CMSP Phases and Opportunity Lists
- Process and Policy Considerations for CMSP
- Project Narratives (Summary of Interviews)
- Technical Results of Before and After Studies
- Summary of Project Categories
- Appendix: One-Pagers of Successful Projects













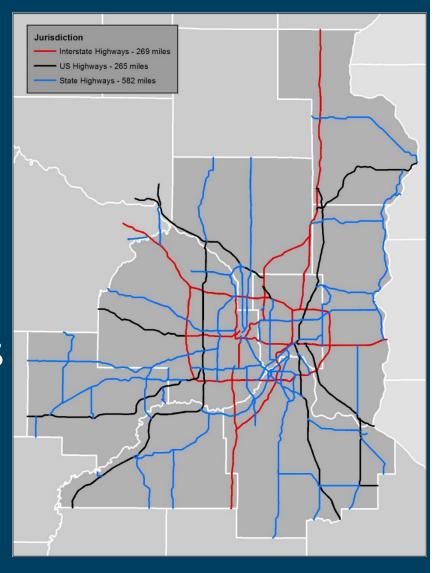






System Problem Statement

- ▶ 8-county Metro District + D3 Planning Area
 - 1,116 CL miles
- Performance measures
 - Congestion
 - Reliability
 - Crashes
- Problem descriptions



















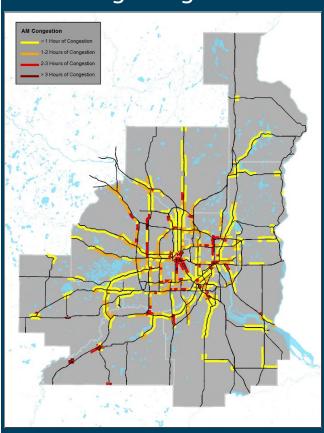


Performance Measures

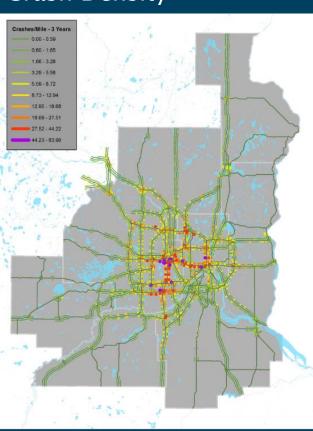
Recurring Congestion

Travel Time Reliability

Crash Density

























System Problem Statement



Roadway Section

2 Lane Rural or Suburban

2 Lane Urban

4+ Lane Expressway

4+ Lane Urban

4 Lane Freeway

----- 6+ Lane Freeway

Problem

← Entering Traffic

Intersection Capacity

Lane Drop

Mainline Weaving

Ramp to Ramp Weaving

Substandard Geometry or Other



















Local Stakeholder Outreach

- Provide overview of CMSP Schedule & Process
- Present county-level detail of System Problem Statement
- Seek feedback on problem locations and descriptions



















Next Steps

- Primary Screening
 - Identify highest priority problem locations for solution development
- Design Charrettes
 - Development of lower-cost/high-benefit solution concepts for high priority locations
- Coordination with other studies
 - Corridor studies: I-494/TH 62, Hwy 169, I-94
 - Principal Arterial Intersection Conversion Study

















