

Transportation Staff Meeting

September 28, 2011

2:00 PM

Uptown Conference Room, 8th floor

AGENDA

1. Congestion Management Process (CMP)

Description:

CMPs are intended to examine the sources of congestion, evaluate alternative strategies for alleviating congestion and monitor the performance of these strategies. MUMPO is required to assess strategies that are not traditional capacity-adding projects before programming roadway expansion construction projects. The purpose of this study is to discuss the appropriate framework for updating the CMP, including tasks that involve data collection needs/methods, linkages to project priority mechanisms, long range transportation planning and other efforts already underway at MUMPO.

This discussion is a follow up to one held after the August TCC meeting. The focus will be on:

- a) **Developing objectives** (30minutes)
See attached 2035 LRTP goals and CMP objectives developed during the LRTP development process.
- b) **Establishing performance measures** (20 minutes)
- c) **Establishing study areas** (20 minutes)
- d) **Reviewing survey results** (10 minutes)

Access number: 704-432-5484

evaluating performance measures

assess each measure on four characteristics (see back page)

①=WORST

②=MEDIOCRE

③=BEST

	Measure	Clarity			Purpose*			Availability			Uniqueness		
Automobile	Volume-to-Capacity	①	②	③	①	②	③	①	②	③	①	②	③
	Reduced Total Crashes	①	②	③	①	②	③	①	②	③	①	②	③
	Reduced Crash Severity	①	②	③	①	②	③	①	②	③	①	②	③
	Reduced Buffer Time	①	②	③	①	②	③	①	②	③	①	②	③
	Level-of-Service	①	②	③	①	②	③	①	②	③	①	②	③
	Other:												
	_____	①	②	③	①	②	③	①	②	③	①	②	③
Transit	% On-Time Buses	①	②	③	①	②	③	①	②	③	①	②	③
	Average Route Delay	①	②	③	①	②	③	①	②	③	①	②	③
	% Standing Room Only	①	②	③	①	②	③	①	②	③	①	②	③
	Other:												
	_____	①	②	③	①	②	③	①	②	③	①	②	③
Bicycle+Pedestrian	Bicycle Counts	①	②	③	①	②	③	①	②	③	①	②	③
	Pedestrian Counts	①	②	③	①	②	③	①	②	③	①	②	③
	Bike + Ped Crashes	①	②	③	①	②	③	①	②	③	①	②	③
	Miles of Bike Lanes	①	②	③	①	②	③	①	②	③	①	②	③
	Sidewalk-to-Street Miles	①	②	③	①	②	③	①	②	③	①	②	③
	Latent Demand	①	②	③	①	②	③	①	②	③	①	②	③
	Other:												
	_____	①	②	③	①	②	③	①	②	③	①	②	③
ITS	No. Variable Message Signs	①	②	③	①	②	③	①	②	③	①	②	③
	Miles of Roadside Assist.	①	②	③	①	②	③	①	②	③	①	②	③
	Coordinated-to-All Signals	①	②	③	①	②	③	①	②	③	①	②	③
	Intersection Delay	①	②	③	①	②	③	①	②	③	①	②	③
	Other:												
	_____	①	②	③	①	②	③	①	②	③	①	②	③
Crash+Maint.	Reduce Incident Clearance Time	①	②	③	①	②	③	①	②	③	①	②	③
	Duration of Lane Closure	①	②	③	①	②	③	①	②	③	①	②	③
	Other:												
	_____	①	②	③	①	②	③	①	②	③	①	②	③

*Note: Compare to LRTP Goals and CMP Objectives on pages 3 and 4

Four Characteristics of Performance

The following four characteristics of performance are central to selecting good performance measures: linkages to goals/objectives; clarity to diverse audiences; having data available to populate and manage the performance measures; and the ability to add unique value not addressed by another measure.



Clarity: Can the audience quickly understand the performance measure?

Who is the audience of the CMP... decision-makers, technical staff, and others may be used to dealing with transportation topics, but the media and general public will demand to know why decisions are made as well. Performance measures describe priorities and severity as well as how well a solution addresses a particular problem.



Purpose: Does the performance measure really describe one or more of the MPO goals? (see LRTP Goals and CMP Objectives)

The primary purpose of a performance measure is to help everyone make a more informed decision, and the goals of the MPO lay out the rough course that the agency and its members need to take to reach a desired outcome. Hence, the performance measure is the mile marker along the roadside, the waypoint on a bicycle route, and the stop on a transit line: it should tell us how far we've come in addressing a particular goal.



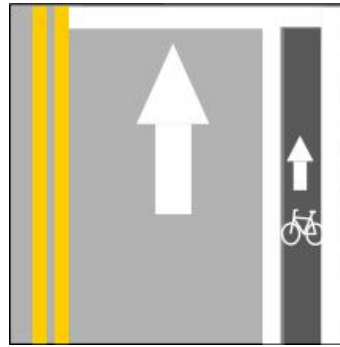
Availability: Does the MPO or one of its partners have access to and the responsibility for maintaining data used in the construction of the performance measure?

Obviously, the most robust performance measure isn't worth very much if there is not data to develop the statistic. If vehicle occupancy ratios (how many people in vehicles divided by the total number of vehicles) measure a goal of increasing ridesharing and increased transit use, do we have historical and future data needed at enough locations in our study area(s) to create and compare the performance measure?



Uniqueness: Does each performance measure have its own role in understanding some dimension of congestion?

Because there are many ways of describing roadway congestion – level-of-service, vehicle-to-capacity ratios, travel delay, congested compared to free-flow conditions – doesn't mean that we should use all of them as a yardstick to measure congestion. Not only can some measures be redundant, but they can do so across modes of travel, too (a traveler delayed at an intersection in a car or a bus is equally delayed). Similar performance measures can provide subtle insights into congestion: Buffer Time, Mean Travel Time and Planning Time indices have slightly different interpretations.



long-range transportation plan goals from the LRTP

1. Provide a safe and efficient transportation system.
2. Improve the quality of life for residents of the Mecklenburg-Union MPO area.
3. Provide a transportation system that serves the public with mobility choices, including walking, bicycling and transit options.
4. Provide a transportation system that is sensitive to significant features of the natural and human environment.
5. Provide equitable transportation options for low income and minority neighborhoods.
6. Provide meaningful opportunities for public involvement in the transportation planning process.



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congestion management process adapted from objectives in the existing CMP

1. The CMP has to satisfy federal requirements.
2. The CMP is to be considered at the local, MPO and State levels when identifying, ranking, and recommending capacity expansion of either highway and/or transit systems.
3. The CMP should be flexible to meet the changing needs of the region.
4. The CMP should not be overly complex or cumbersome.
5. The CMP is incorporated in the MPO's existing LRTP project ranking system as a function of the Congestion Reduction component of the projects ranking/selection list.