



MEMORANDUM

To: Regional Transportation Operations Coalition

From: Todd Schmidt

Date: Thursday, October 11, 2012

Re: Recommended Interim Operations Performance Measures

The Regional Transportation Operations Coalition (RTOC) identified system modernization, corridors, special projects, and operations strategies as four areas to focus RTOC activities. These four areas should continue to guide the group's work and inform its CMAQ project recommendations.

To further support the review of CMAQ projects, CMAP staff recommends tracking a limited number of performance measures, previously discussed and shown below. Note that CMAP and the region's implementing agencies are currently exploring performance-based programming methods. The effort to apply additional performance measures to the selection of CMAQ projects is not part of the larger effort to come to a regional agreement, or an indication that these performance measures are endorsed for the larger effort.

Performance measures can be used in two important ways. First, the data can be mapped or otherwise analyzed to identify areas for improvement. Second, the data can be tracked over time to measure the overall effectiveness of system investments.

The data to track these performance measures should be readily available and be easy to understand. The staff-recommended performance measures for RTOC activities include:

Category	Measures	Data Sources
Congestion	Travel time index, speed, person delay	on-board & on-road sensors
Reliability	Planning time index	on-board & on-road sensors
Safety	Crash rate	IDOT crash reports

Congestion will be measured by travel time index, speed and person delay. The travel time index can be used to track whether transportation network conditions are getting better or

worse and to identify locations for improvement. The travel time index is consistently used by the FHWA and can be used for comparison purposes. Travel speed is a desirable measure because it is easily understood; however, it is only appropriate at the corridor level. Person delay is used because, while speed and travel time index measure facility conditions, person delay reflects the total impact on travelers.

Reliability will be measured by the planning time index. Like travel time index, this measure is consistently used by the FHWA and the data is readily available for many areas in the region.

Safety of the transportation system will be measured by crash rates. Reducing the crash rate will reduce casualties, decrease congestion, and make travel times more reliable. The data to track this performance measure is readily available and collected by IDOT. All modes of transportation will be considered including pedestrian and bicycle crashes.

CMAP staff currently tracks a number of indicators as part of the congestion management process (see the draft congestion management system documentation). The intent of the measures above is to identify measures to focus on, and upon which to identify potential locations for improvements.