



RTOC Goals and Strategies

Proposed CMAP Synthesis

Draft

February 18, 2011

The MPO Policy Committee has adopted a new approach for the development of the Congestion Mitigation and Air Quality (CMAQ) Improvement Program. The new process will include a five-year program to help implement GO TO 2040, the comprehensive regional plan. The CMAQ program is a federally funded program that supports surface transportation projects and other related efforts that **improve air quality** and **relieve traffic congestion**.

Four program focus groups will be responsible for the *initial review of proposed CMAQ projects* and the *identification of projects that advance the regional program goals*. The Regional Transportation Operations Coalition is one of the four program focus groups. This synthesis lays out the process for identifying and reviewing potential CMAQ projects within a context of the newly initiated Coalition.

CMAQ Program Goals

The overall goals of the CMAQ Program are to improve air quality and reduce congestion, as established in the Federal authorizing legislation.

CMAQ Objectives

To carry out these goals, four CMAQ objectives have been identified:

- **Localized Congestion Relief** – this will include projects aimed at reducing congestion through relieving both rail and roadway bottlenecks.
- **Operational Improvements** – this will include projects that reduce congestion by improving roadway, intersection, rail and transit operations.
- **Mode Shift** – this will include projects geared towards shifting travel from single occupant vehicle travel to transit, non-motorized, and multiple-occupant modes.
- **Direct Emissions Reduction** – this will include projects geared directly towards reducing emissions through improving the efficiency of vehicles or switching to alternate fuels (e.g., diesel retrofits, GenSet technology, electric vehicles and support facilities for same).

GO TO 2040 Action Areas

The desired effect of the new approach to CMAQ programming is expedited implementation of GO TO 2040. GO TO 2040 contains recommendations and identifies action areas that implement the CMAQ objectives above. The following Implementation Action Areas are particularly relevant to RTOC and CMAQ programming:

- Adopt best practices in new technologies;
- Widely implement traveler information systems;
- Establish seamless coordination between modes;
- Include transit components as part of major highway capital projects;
- Focus investment on maintenance and modernization (note that projects consisting solely of maintenance are not eligible for CMAQ funding);
- Prioritize and implement the CREATE Program;
- Implement high-priority transit projects

RTOC Approach

The Regional Transportation Operations Coalition (RTOC) focus group is a coalition of system operators from the Northeastern Illinois region, which have a unique set of experience and knowledge on transportation operations. RTOC is expected to develop a package of operations related projects, which are consistent with CMAQ goals and GO TO 2040 recommendations and action areas, as a recommendation for the CMAQ Project Selection Committee (PSC). The recommended package of projects should achieve an identifiable goal over the five year time frame. Each project requires a committed implementer.

Review of Projects. RTOC is ultimately responsible for the initial review of proposed CMAQ projects that cover arterial and intersection improvements, bottleneck relief and Intelligent Transportation System (ITS) improvements.

Identification of Projects. Projects which come in for consideration through the direct identification process would come from existing plans and programs as noted, and would have particular significance in advancing the goals, objectives and action areas identified above. Sponsors would need to be found and be asked to confirm their commitment to these regionally proposed projects and to submit an application. It is anticipated that the direct identification process will occur within the planning process of groups with a broad array of regional program goals, for example: addressing gaps and/or barriers, managing the system to achieve reliable and efficient performance, and improving the safety and security of all users.

Projects may be directly identified by the RTOC process during or after the project call.

RTOC Role Is Advisory; Program Development by CMAQ PSC; Final Authority with MPO Policy Committee. The package of projects will then be sent to the CMAQ PSC for approval. The CMAQ PSC will evaluate, discuss and develop the 5-year CMAQ program which is recommended to the MPO Policy Committee for approval. All projects in the recommended program will have to be eligible under the federal authorizing legislation. Projects that are not

selected for CMAQ funding or not eligible will be kept as RTOC priority projects and will be considered for implementation with other funding sources.

RTOC Goals

Performance Data. At the January, 2011 meeting of RTOC, participants emphasized the importance of performance measures in the review and identification of projects. Based on RTOC participant feedback prior to the February meeting, and with a view toward what may be feasible in the evaluation process, CMAP staff proposes that existing data regarding proposed projects, rather than prospective project impacts, be the basis for performance evaluations. For example, proposed expressway improvements could be prioritized based on existing travel time index data.

Screening Approach. CMAP staff further proposes that performance data be used as part of a multi-tier screening approach to the identification and review of projects. This approach will facilitate a synthesis between the goals of implementing GO TO 2040, reducing congestion, and improving transportation operations. This approach will address feedback since the January meeting, but is subject to further discussion and refinement. The screening process will consist of an evaluation, prioritizing a proposal's ability to meet the following goals:

Goals

- Integrate management and operations strategies into GO TO 2040 major capital projects. Fiscally constrained major capital projects in GO TO 2040 include the following:
 - Elgin-O'Hare Expressway/West O'Hare Bypass (Under Study)
 - I-294/I-57 Interchange (Under Study)
 - West Loop Transportation Center
 - Central Lake County Corridor (IL 53)
 - CTA Red Line South Extension (Under Study)
 - I-190 Access Improvements (Under Study)
 - I-80 Add Lanes (US 30 to US 45) (Let)
 - I-55 Managed Lanes (Under Study)
 - I-90 Managed Lanes
 - I-290 Multi-Modal Corridor (Under Study)
 - CTA North Red and Purple Line Improvements
 - Metra Improvements: Rock Island, Southwest, UP North, Northwest, and West Improvements

- Prioritize the following systems identified within the Congestion Management Process documentation (see [Congestion Management Documentation, Part 1](#)):
 - Interstate Highways
 - Other Freeways and Expressways
 - Strategic Regional Arterial System
 - Other Principal Arterials
 - Freight Network

- Passenger Rail System
- Arterial Bus Transit Network
- Evaluate project sites for existing congestion:
 - Pre-identified congestion (e.g., maps provided in advance of February RTOC meeting)
 - Regional evaluations (ex. Travel Time Index, Planning Time Index, Congested Hours)
 - Professional Judgment
- *For projects identified through the RTOC process, rather than the project call:*
 - Projects come from existing plans and programs
 - Projects have particular significance in advancing the goals, objectives and action areas identified above
 - Project sponsors have been found and confirmed their commitment to these regionally proposed projects and to submit an application.

Proposed RTOC Management and Operations Strategies

CMAP received numerous suggestions leading up to the February RTOC meeting. From these suggestions, GO TO 2040, and prior work, CMAP staff proposes that the following strategies receive consideration for direct project identification by RTOC.

- Improve intersection control through the following:
 - Constructing Roundabouts
 - Signal Timing Optimization
 - Demonstrating Adaptive Signal Control
 - Implementing Signal Interconnects
 - Transit Signal Priority
 - Reduce traffic conflicts between non-motorized and motorized traffic, by grade-separating movements or by demonstrating methods to narrow pedestrian crossings to increase major movement green-time
 - Improving bike/ped signal controls, including facilitating bicycle boulevards
- Actively manage traffic through local demonstrations of the following technologies:
 - Speed harmonization
 - Active freeway ramp metering
 - Congestion pricing/managed lanes.
 - construction management (maintenance of traffic)
- Minimize freight passenger conflicts for multi-modal transportation systems
- Minimize non-recurrent congestion (arterials & expressways) through the following:
 - Incident Detection
 - Incident response
 - Incident clearance
 - Traveler information
- Increase real-time traffic data coverage

- Implement ITS plans, consistent with the Regional ITS Architecture
- Actively manage parking supply and demand
- Enhance and facilitate inter-agency system integration
- Centralize traffic signal control
- Implement integrated cashless payment systems
- Facilitate multi-modalism through M&O strategies (Signal, MUTCD)
- Manage arterial access