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Direct Emissions Reduction Focus Group Goals and Strategies

Proposed CMAP Synthesis

May 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 Direct Emissions Reduction Focus Group (DER) 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 group.

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.
- **Mode Shift** – this will include projects geared towards shifting travel from single occupant vehicle travel to transit, non-motorized, and multiple-occupant modes.
- **Operational Improvements** – this will include projects that reduce congestion by improving roadway, intersection, rail and transit operations.
- **Direct Emissions Reduction** – this will include projects geared directly toward 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 the DER and CMAQ programming:

Action Areas from Go To 2040: (*You May Suggest a Re-Ordering of this list or only list particular action areas to better reflect DER priorities*)
Adopt Best Practices in new technologies – Modernize the Region's Transit System
Implement green infrastructure demonstration projects
Focus investment on maintenance and modernization
Prioritize maintenance and modernization projects when making investment decisions

While the action areas that are applicable to the DER focus group are limited, GO TO 2040 also makes several acknowledgements of energy use, emissions and transportation. The follow excerpts pertain to DER and CMAQ programming:

Excerpts from Go To 2040
Local governments should also make a commitment to using alternative fuels in their fleets and public works equipment. Indeed, communities could undertake a multitude of actions to "lead by example," including the review of procurement processes to ensure the inclusion of green materials for governmental equipment (e.g., increased use of recycled materials in construction activities), a higher commitment to waste reduction and recycling, and so forth.
The conservation of energy and water is a top priority for GO TO 2040. Over the next 30 years, these resources will likely become more constrained, affecting businesses, local governments, and residents alike. By taking a proactive approach to resource conservation, the region can avoid price shocks farther down the road, while saving money in the medium term.

Direct Emissions Reduction Focus Group Approach

The DER consists of staff from Illinois Environmental Protection Agency, the U.S. Environmental Protection Agency, City of Chicago Department of Transportation and Department of Environment, the Regional Transportation Authority, Metra, Pace, Indiana Harbor Belt Railroad, Norfolk Southern, Respiratory Health Association of Metropolitan Chicago and Citizen Action Illinois. Each is expected to have a unique set of experiences and knowledge on projects that will reduce emissions by improving the efficiency of vehicles or the use of alternative fuels. The DER is expected to develop a package of 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 or set of goals over the five year time frame. Each project requires a committed implementer.

Review of Projects. The DER has primary responsible for the initial review of proposed CMAQ projects that cover diesel retrofit projects and many of the projects which fall in the other category. The DER may be asked to review projects in both these and additional categories that are expected to benefit transit direct emissions recommendations and action areas in the GO TO 2040 Plan.

Identification of Projects. Projects considered 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.

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

DER Focus Group 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 review. The CMAQ PSC will evaluate the proposals for their air quality and congestion mitigation benefits. With this information and the five-year accomplishments recommended by the focus group, the Committee will discuss and develop the 5-year CMAQ program for MPO Policy Committee approval. All projects in the recommended program will have to be eligible under federal regulations. Projects that are not selected for CMAQ funding or not eligible will be kept as DER priority projects and can be considered for implementation with other funding sources.

DER Goals

Goals

- Increase the livability of the region by improving the air quality.
    - Reduce diesel emissions
    - Reduce VOC and NOx emissions
    - Reduce greenhouse gas emissions
    - Reduce fossil fuel consumption

Strategies for Achieving Specific Goals

- Retrofit, repower, and replace motorized vehicles with emissions reduction or idling reduction equipment and technology. This should focus on public works, transit (both revenue and non-revenue) and school bus fleets but could include fleets from construction, marine and freight industries.
- Increase the availability of alternative fueling stations and electric vehicle charging stations.

- Support freight industries to increase more fuel efficient vehicles and reduce idling.
- Demonstrate emerging technologies for both fuels and vehicles.
- Increase the general public's awareness of emissions reduction programs.

Project Screening

Plans or Systems that proposed projects should be part of/complete

- State Implementation Plan and related programs
- Regional Green Transit Plan
- Chicago Climate Action Plan
- Municipal sustainability plans
- Private sector sustainability plans
- Pace Strategic Plan

Measures for Project Evaluation (Qualitative or Quantitative)

- Primary
    - Reduced ozone precursors (NOx and VOC)
    - Reduced Particulate Matter (PM)
- Secondary
    - Reduced Greenhouse Gases or CO2e
    - Reduced fossil fuel consumption
- Complementary Measures
    - Proximity to sensitive populations (seniors & children).
    - Number of reported asthma cases within proximity to the projects.
    - Is the project innovative to or does it demonstrate a state of the art technology that directly reduces vehicle emissions?
    - Does the project help improve the overall condition of the region's public fleets?