I. Introduction

A. Coordinating Transportation Operations in Northeastern Illinois

This work plan describes how the transportation operators and planners from Northeastern Illinois will enhance collaboration and coordination of regional transportation operations. Such coordination will help to facilitate a seamless transportation system across the Northeastern Illinois region.

Several transportation operators and planners in the region strongly believe there is a need to develop an institutional forum and structure where regional operations can be addressed. With collaboration and coordination between transportation operators the region would experience a more efficient and safe transportation system across jurisdictional boundaries. Many agencies realize there is a benefit of such a forum which will allow for a more streamlined approach to operating the regional transportation network.

Transportation operations effectively manage the existing transportation network daily to ensure all users experience a smooth, safe and efficient regional transportation system. Ideally this is achieved by optimizing the existing regional transportation system through the collaboration of transportation operators and emergency responders regardless of jurisdictional boundaries or transportation mode. Another important aspect to operations is project coordination at the regional level to ensure a seamless transportation network. Transportation operations are quickly becoming increasingly important in regions with increasing congestion and the lack of available funding to expand transportation capacity.
Transportation operators have a variety of strategies that help them achieve a more efficient system which include:

- Travel information services
- Freeway management
- Transit priority systems
- Active traffic signal and arterial management
- Incident management
- Road weather management
- Work zone management
- Freight and flight management

The effectiveness of each strategy is evaluated through regionally agreed-upon performance measures. The performance measures will be created with analytical tools utilized by transportation operators using data collected regionally. This allows all operators to continuously monitor the transportation network in real-time and track changes to the network over time.

A regional data archive would be the central source for regional transportation-related data. A web-based archive is essential for transportation operators to share consistent data region-wide on a near real-time basis. The data archive would also allow for consistent performance measures and analysis tools to evaluate the transportation system regardless of jurisdictional boundaries or mode of transportation. A regional data archive has the ability to assist transportation operators and planners with the study and creation of innovative solutions to recurring and non-recurring congestion, emergencies, freight delays and multi-modal issues.

Transportation operators, transportation planners and emergency responders would all benefit from actively participating in a regional transportation operations group. The collaboration and coordination of these groups are crucial for a successful regional operations group. Transportation planners would gain a better understanding of the day-to-day operations of a transportation system and how operational strategies can improve the development of regional transportation goals, objectives and priorities. Transportation operators would have increased input into the planning process, which would allow them to clarify and stress the importance of operation strategies to meet the vision and goals of the region’s transportation plans. Emergency responders will see the benefits of working with operators to redirect traffic when incidents or emergencies occur. These benefits should be clearly identified to each participating agency along with the users of the regional transportation system.
B. Associated CMAP Committees

With the former Gary-Chicago-Milwaukee Corridor Coalition now focusing on Interstate highway activities and facilities, a need has emerged to develop an institutional forum and structure where regional operations can be addressed. The members of the Advanced Technology Task Force (ATTF) Group realized a need for the creation of a collaborative regional operations group. An Operations Group Development Sub-Committee consisting of Advanced Technology Task Force (ATTF) members and CMAP staff was formed to discuss if there truly was a need for a regional operations group and how the operations group should be structured. The development sub-committee and CMAP staff agreed there was indeed a need for the regional operations group and have begun to move forward with developing an institutional structure for a regional operations group.

The Regional Transportation Operations Coalition (RTOC) would be associated with and act as a unified voice for the following committees:

- Advanced Technology Task Force (ATTF)
- Bicycle and Pedestrian Task Force
- Freight Committee

In addition, to assure that congestion management needs are addressed, RTOC would be represented on:

- Congestion Mitigation and Air Quality (CMAQ) Project Selection Committee
- Transportation Committee

A major component of each committee is related to transportation operations and all would benefit being involved in a management and operations group. The groups will work together to highlight the benefits of management and operations projects to elected officials and the traveling public.

The ATTF meets quarterly and is charged to “Identify, assess, promote and assist with the implementation of intelligent transportation systems and advanced technologies as part of the transportation system. Provide overall guidance for the development of the Advanced Technologies component of the Regional Transportation Plan.” The regional operations group would supersede the ATTF given that Intelligent Transportation Systems (ITS) and advanced technologies are tools used in the management and operations of the transportation network. The ATTF would still be a group in charge of the regional ITS architecture and its implementation, but would only meet on an as-needed basis.

The Freight Committee meets 8 times per year and is charged to “Identify, assess and respond to goods movement travel issues and opportunities and provide overall
guidance for the development of the regional goods movement component of the Regional Comprehensive Plan. Examples of key issues include safety, congestion relief, air quality, economic development, and community impacts.” Transportation management and operations are a vital component to increasing the efficiency in which goods move across our region. In conjunction with the freight committee, the new operations group will work on strategies and physical facility improvements to facilitate the movement of goods through the region. The freight industry would benefit from many management and operations improvements such as congestion relief, traveler information services, road weather management, and traffic signal management on freight-significant corridors.

The Bicycle and Pedestrian Task Force meets quarterly and is charged to “Identify, assess and address bicycle and pedestrian travel issues and provide overall guidance for the development of the regional bicycle and pedestrian program. Examples of key issues include safety, convenience, economic development, and access for people with disabilities.” The Bicycle and Pedestrian Task Force would benefit from operational improvements such as traffic signal management and arterial management. One major aspect of the operations group will be to look at signal timing and coordination throughout the region.

The CMAQ Project Selection Committee recommends approval of CMAQ projects in the northeastern Illinois region. The federally funded CMAQ program is designed to improve air quality and relieve congestion in a region through a variety of management and operations related projects such as transit improvements and traffic flow improvements. The regional operations group would be the ideal committee to recommend regionally significant management and operations related projects to the CMAQ Project Selection Committee. The regional operations group will also be a forum for agencies to coordinate and collaborate on possible CMAQ applications, which will greatly benefit the region.

C. Work Program

The Regional Transportation Operations Coalition would encompass all the aspects of transportation management and operations in the northeastern Illinois region. The coalition would help advocate for the collaboration and coordination in:

- Regional data archiving
- Traffic signalization improvement
- Freight management
- Cooperative funding
- Project implementation
II. Goals and Objectives

A. Goal: Foster collaboration and coordination among the region's transportation operators.

Objectives:

- Hold well attended bi-monthly/quarterly meetings.
- Establish a working committee with members from all stakeholders including emergency response agencies.

B. Goal: Identify overlapping needs for operational improvements to better leverage investments

Objectives:

- Identify funding streams for multiple agencies to apply for (Economies of scale).
- Survey agencies for overlapping needs.

C. Goal: Reduce barriers to operational improvements on the region's multi-modal transportation system

Objectives:

- Assist officials in recognizing the benefits of transportation operations.
- Develop a working relationship between operations and planning staff.

D. Goal: Create a forum to discuss data needs and assure appropriate data sharing

Objectives:

- Continue to enhance Gateway as needed.
- Create a regional data archive for operators to store and retrieve traffic operations data.
- Promote data archive to all transportation agencies.
E. Goal: Promote best practices for operations

Objectives:

- Example for other regions to follow.
- Operations related training opportunities.
- Prepare periodic strategy evaluations.
- Support and implement operations related demonstrations.
- Support widespread adoption of best practices.
- Develop/identify funding sources for operations.

III. Resources and Constraints

A. Resources

- Participating agencies
- CMAP staff support
- Prior work
- Federal assistance
  - Staff support
  - Training
- Other regions experience
- Information from other regions experience

B. Constraints

- Lack of dedicated operations funding
- Unusual role for MPO for past 15 years in Chicago

IV. Plan of Action

The creation of the Regional Transportation Operations Coalition will require buy in from not only multiple transportation operators and planners in the region, but also many emergency responders and the freight industry. The RTOC will institute an open forum for agencies to share ideas, promote innovative operations solutions and foster relationships between the member agencies. CMAP and its partners will need to:

- Institutionalize the Regional Transportation Operations Coalition.
  - Establish the working committee under the CMAP committee structure.
  - Identify RTOC staffing resources.
- Identify potential RTOC participants.
- Engage participants.
- Create RTOC structure and agreements.
Establish committee chair and co-chair.

Establish CMAQ Project Selection Committee and Transportation Committee representatives.

Create Memorandum of Understanding and/or Agency agreements.

- Committee processes and products.
  - Create forum for agencies to share ideas and create relationships.
    - Sample of potential focus areas:
      - Arterial traffic operations.
      - Freight management.
      - Arterial incident management.
  - Create forum for agencies to collaborate on operations related projects.
    - Sample of potential projects:
      - Regional data archive.
        - Establish champion.
      - Create for trucks.
        - Establish champion.
      - Arterial incident management strategies.
        - Establish champion.
  - Establish and adopt region-wide accepted operations performance measures.
    - Secure funding for ongoing operations related projects.
    - Perform periodic review of committee performance.

V. Schedule

December 2009: Initial group development and review and finalize work plan

January 2010: Finalize work plan and present to Planning and Transportation Committee

February 2010: Present to Programming Coordinating Committee

March 2010: Present to MPO Policy Committee and CMAP Board