

USING CMP TOOLS TO ADVANCE NEPA DOCUMENTATION – MID-AMERICA REGIONAL COUNCIL



In 2001, the Mid-America Regional Council (MARC), the MPO serving the greater Kansas City area, developed an enhanced congestion management system (CMS) designed to integrate with the Regional Transportation Plan (RTP), Transportation Improvement Program (TIP), and corridor evaluations, including the Major Investment Study (MIS) planning processes. At this time, MARC adopted a policy that its CMS Toolbox of strategies will be considered when the purpose and need for an environmental study includes congestion management. The agency wanted to directly demonstrate how any suggested capacity improvements had been evaluated using the congestion management process.

At the time MARC was developing its CMS, the agency had established a network of facilities on which it collected data, including travel time studies and traffic counts, but was only using CMS methods indirectly to support the regional planning process by providing CMS data to potential project sponsors for the RTP and TIP. Because the system is less congested than most other metropolitan regions of comparable size, the CMS has been less of a planning focus than in other locations.

MARC needed to develop a clearer way of showing how a capacity improvement had gone through the congestion management process. Linking NEPA studies with the CMS Toolbox was a logical approach given that alternatives defined with congestion relief potential would be developed, screened, and evaluated for any NEPA study underway in the region. MARC wanted to establish a policy that would be sustainable and meaningful that also would not present a great additional resource burden.

MARC's CMS Policy document identifies this policy under the section on integration with the metropolitan planning process. Called "Relationship to Major Investment Studies (MIS) and Other Special Studies," the policy language is:

The CMS Toolbox provides alternative congestion management strategies for consideration in MIS and Corridor Studies. When traffic congestion is referenced in the Purpose and Need Statement for an MIS, the MIS shall consider the congestion management strategies included in the MARC CMS Toolbox as a starting point for the development of alternative strategies. This does not preclude the MIS from considering other strategies that may not be in the CMS Toolbox, nor does it require that the MIS select a strategy from the CMS Toolbox be the preferred alternative, however, the MIS document must include a discussion of how the CMS Toolbox strategies were addressed.

MARC needed to develop a clearer way of showing how a capacity improvement had gone through the congestion management process. Linking NEPA studies with the CMS Toolbox was a logical approach.



Under 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) regulations, roadway capacity expansion projects were required to be evaluated and assessed as a product of the CMS, and MARC wanted to ensure that projects in the Kansas City region included in updates of the state TIP went through this process. MARC's CMS Policy strengthened the defensibility of the congestion management process being used for roadway capacity increases in the region. As stated previously, MARC implemented its CMS in 2001 to develop a process to consistently identify and assess projects in the RTP, TIP, and corridor evaluation planning processes.

CMS Toolbox

MARC's CMS Toolbox was designed to serve as a key tool in its congestion management process. According to MARC's 2001 policy, this Toolbox must be considered as part of the review of alternatives for major investment studies. The Toolbox strategies are divided into eight categories:

1. Highway projects;
2. Transit projects;
3. Bicycle and pedestrian projects;
4. Transportation Demand Management (TDM) strategies;
5. Intelligent Transportation System (ITS) and Transportation System Management (TSM) strategies;
6. Access management strategies;
7. Land development strategies; and
8. Parking management strategies.

Use of the Toolbox for NEPA Studies

Currently, there is no NEPA requirement that the CMS be incorporated into the NEPA process. Furthermore, MARC's policy that NEPA studies incorporate the CMS Toolbox is not codified in any agreements with implementing agencies, but instead is implemented on a voluntary and cooperative basis. The involvement of MARC staff has varied depending on their level of involvement in the study. MARC is often not the lead agency on major studies in the Kansas City region but will often work in partnership with the

lead agency, which in most cases is the Missouri DOT (MoDOT) or the Kansas DOT (KDOT). MARC is often involved with MIS documents, usually serving as lead staff or on an advisory or technical committee.

The process of linking environmental studies and the CMS Toolbox has been most successful when MARC staff are actively involved in a given study's technical committee, when MARC is leading the study, and in cases in which they are closely involved in the development of the environmental document.

One challenge in linking the CMS and NEPA process is that project sponsors may or may not know of MARC's policy, particularly because both state DOTs are large agencies with decentralized staff. KDOT staff that work with MARC on metropolitan planning are often in the bureau of design section, which is mainly responsible for NEPA documentation. In the case of MoDOT, the design and planning staff functions reside in district offices, while the preparation of NEPA documents is the ultimate responsibility of headquarters. The level of MARC involvement in NEPA studies depends on whether headquarters or district staff take the lead, with MARC tending to be more involved in the latter case.

Outcomes

The CMS process, including the evaluation of transportation conditions and performance using the regional travel demand model, is used to identify congested locations on the system. The resulting needs and deficiencies on the system defined through the CMS process are typically used to support the purpose and need statement. The purpose and need statement serves



as a trigger for use of the CMS Toolbox. The CMS Toolbox is designed to identify the potential set of projects and strategies that are applicable to potentially mitigate the congestion identified at these locations.

While MARC currently has no formal process for monitoring which CMS Toolbox strategies are included in regional NEPA studies, the agency has observed consistent trends in alternatives (projects and strategies) presented and those selected in the five years since the policy was put in place. The studies conducted during this period have had a highway capacity focus and most often include highway-oriented project recommendations. Access management and traffic operations/ITS strategies and projects are often included as part of the preferred strategy.

Strategies from the CMS Toolbox have been included in many of the environmental studies conducted since the Policy has been in place. For an EIS in which MARC has some role in the plan's development, discussion of CMS Toolbox strategies is included. Sometimes the Toolbox is consulted during the development of the MIS documents, which may be used to develop the NEPA document. However, when reviewing the NEPA document, the reader may not know the strategies came from the CMP Toolbox. When studies do not include the use of the CMS Toolbox, MARC notes that in its official comments. Environmental assessments are often not provided to MARC, and the agency never reviews Categorical Exclusion documents.

MARC's policy does not articulate the final point of documentation as to where CMS Toolbox strategies are

included in a NEPA study. In practice, the final point of documentation varies, based on where the NEPA work occurs. Documentation that the Toolbox has been consulted is located at the point where the strategies developed are listed. In some cases, the Toolbox strategies are part of a technical memorandum that is not part of the final document.

MoDOT staff, especially at the district level, reference MARC's CMS Toolbox on a regular basis but also define project and strategy alternatives using other methods designed to meet the needs and deficiencies of a given corridor. For example, when the purpose and need of a given environmental study is not readily addressed by congestion mitigation strategies as defined in the Toolbox, MoDOT may define different strategies and projects to meet those needs.

One example of how the process works is the preparation of environmental documents for a project on the I-29/I-35 corridor including the Paseo Bridge. When MARC reviewed and provided comments on the draft documents, it noted that the CMS Toolbox had not specifically been referenced. As a result, in the next version of the documents, MoDOT will identify alternatives considered from the CMS Toolbox and document the reasons why alternatives are included or not. Therefore the work to generate alternatives for the EIS was made more efficient by virtue of utilizing the CMP Toolbox.

Overall MARC and MoDOT have worked together successfully on implementing the CMS Policy because of their positive and close working relationship. MARC is always represented on the MoDOT team for environmental studies, and MoDOT generally relies on MARC to discuss the use of the CMS Toolbox as part of committee discussion. KDOT reported that they do not complete many EIS documents and have not accessed the MARC CMS Toolbox directly, as does MoDOT.

Resources

Normally, MARC provides staff support for the CMS Toolbox through the explanation, refinement, or expansion of congestion relief projects and strategies only if they are the lead agency for a particular MIS study. In other cases, resources to implement the CMS Policy primarily include staff time to participate on study advisory committees and brief the study team on the CMS Toolbox.



Benefits

A major benefit is that by coordinating planning and NEPA through the CMP, duplication or redoing the planning work in the NEPA process is avoided. This helps to “streamline” the NEPA process. Since adoption of the Policy, MARC has not been challenged about any projects in the TIP. MARC feels the region is accomplishing the goals that Congress had set for CMS when it was established, since transportation is being approached from a multimodal perspective. Overall, MARC feels that the partnerships among state, Federal, and regional government agencies are working well with MARC staff continually being involved in a significant number of projects.

In addition to the CMP Toolbox providing benefits for environmental documentation, the MARC region has had success in implementing CMP projects. A specific example of a CMP project in the Kansas City area that has generated benefits is the Operation Green Light (OGL) project, which focuses on signal timing optimization along regional corridors. Through deployment of effective signal coordination timing plans, OGL is able to decrease the number of stops, decrease vehicle emissions, decrease travel time, and improve driver satisfaction. Five pilot projects have been conducted as the project is rolling out. Results of one of the pilots, the two-mile Santa Fe Road Corridor from Ridgeview to Blackbob, show that 694 vehicle hours of travel were reduced per day and time and fuel cost savings amounted to \$15,688 per day as a result of the project.

Challenges and Lessons Learned

In some cases, MARC may not be at the table as part of the technical committee for a given environmental study and therefore would not have the opportunity to discuss the appropriate use of the CMS Toolbox with the study team. The process works if MARC is the lead agency, but MARC is not always in the lead. MARC is more likely to be in the lead on multijurisdictional projects when all stakeholders are not fully supportive, or

on projects for which MoDOT or KDOT may not be the appropriate lead. When developing its Policy in 2001, MARC conducted a robust program of outreach to partner agencies, but MARC staff note that they may have lost some momentum because they have not been promoting the Policy on a regular basis.

In order to ensure that all staff in partner agencies are aware of the policy, MARC realizes that ongoing communication is required to ensure that new staff (of local partners) are briefed. Despite the Toolbox not being explicitly referenced in some environmental documents, it may contribute via the MIS documentation. MARC notes that the most important part of the process is to develop and maintain strong relationships with partner agencies.

Potential Future Directions

Since the policy’s implementation, there has been no discussion of modifying the policy. MARC does not feel it would add value if the policy were mandatory, other than as “insurance,” to the environmental planning currently being conducted in the region. MARC feels that enforcing mandatory use of the CMS Toolbox would not improve the process and is not necessary, considering the Policy and Toolbox were initially designed to help guide and support (rather than replace) the planning process in regional corridor and environmental studies. However, MARC is considering referencing the CMS policy in future agreements regarding the metropolitan planning process with state DOTs and local transit operators in the region.

In addition, MARC intends to update and broaden the strategies included in the CMS Toolbox to be more reflective of transportation conditions compared to 2001. For example, MARC is considering strengthening the land use element of the Toolbox by working with local governments on land use issues and potential strategies that may prove more meaningful for congestion relief.

