

TASK # 4 Systems Planning

Sub-element 4.1 Congestion Management Process

Objective: Congestion management is the application of strategies to improve transportation system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods. A congestion management process (CMP) is a systematic and regionally-accepted approach for managing congestion that provides information on transportation system performance and assesses alternative strategies for congestion management that meets state and local needs. The CMP is intended identify congestion management strategies for funding and implementation. The CMP will provide for the safe and effective management and operation of new and existing transportation facilities through the use of demand reduction and operational management strategies.

Previous Work: The CORE MPO's first Congestion Management System (CMS) was initiated in 2003 and was formally adopted in 2004. This initial CMS included a rigorous GPS based review of travel speeds and congestion on all arterials and major collectors, and developed a congestion index to measure corridor congestion. An innovative feature of the first CMS is the designation of constrained corridors, and the call for traffic management strategies where conventional capacity increases are not feasible.

With the passage of SAFETEA-LU, the requirements of a CMS became more rigorous, and became known as a Congestion Management Process (CMP). MPO and FHWA staff at that time conducted a review of the existing CMS and determined that it significantly exceeded the minimum requirements in place at the time of its adoption, and in fact already met the new requirements of a CMP. With the support of FHWA, the CMS was formally designated a CMP by the MPO Board on June 27, 2007.

In 2008, the CORE MPO initiated the first major update to the CMP. Completed in 2009, the CMP update established a process for corridor and hot spot analysis, and reiterated the need for a traffic management center.

In FY 2013, CORE MPO acted on one of the key initial findings of the 2004 CMP, that approximately 30% of arterial congestion could be improved through Transportation Systems Management (TSM) strategies at signalized intersections, by conducting Phase 1 of the Savannah Regional Traffic Management Center (TMC) Strategic Plan which included data collection and a comprehensive needs assessment.

In FY 2014, CORE MPO initiated Phase 2 of the Savannah Regional TMC Strategic Plan which will produce the TMC Strategic Plan Report including a prioritized list of projects and planning level cost estimates and schedule for deployment. This phase of the TMC planning effort is ongoing in FY 2015 and is expected to conclude in FY 2016.

Project Description: : In FY 2016, CORE MPO will begin the first comprehensive re-evaluation of its major thoroughfare network since the first CMP was initiated in 2003. Network congestion will be evaluated to gauge current system performance, and the effectiveness of mitigation strategies undertaken since the initial CMP report was published in 2004. This will include MAP-21 performance based planning approach performance measures and targets once they are defined.

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The MPO will seek consultant services to conduct data collection and analysis for the CMP update. The CORE MPO staff will serve a project manager. Tasks will include:

- Develop Regional Objectives: review existing objectives and refine.
- Define the CMP Network: review existing CMP network and refine.
- Develop Multimodal Performance Measures:
 - Review performance measures used in the past CMP and refine as necessary.
 - In coordination with the GDOT and CAT incorporate MAP 21 system performance measures and targets as federal guidance become available.
- Collect Data/Monitor System performance
- Analyze Congestion Problems and needs: identify areas of congestion based on data collection and performance measures.
- Identify and Assess Strategies: link areas of congestion to possible strategies.
- Program and Implement Strategies:
 - Identify strategies, programs and projects.
 - Identify projects in the TIP
- Evaluate Strategy Effectiveness:
 - Identify previous projects and programs in place and evaluate effectiveness of improving congestion.
 - Look back at previous CMP reports and TIPs

Consultants: Depending upon the nature, complexity, and desired deadlines, consultants may be contracted when necessary. Consultant recruitment activities are a part of this task.

Product: The final product will be an online report which includes an updated congestion management process consisting of an updated CMP network, traffic data and recommended congestion reduction strategies.

Transportation Planning Related Activities of Other Agencies	
Organization	Activities

Target Start and End Dates	July 1, 2015 - June 30, 2016	Lead Agency	MPC
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Funding Source	Amount
FHWA PL	\$19,200.00
GDOT PL Match	\$0.00
Local PL Match	\$4,800.00
FHWA M230	\$45,470.24
Local M230 Match	\$11,367.56
FTA Section 5303	\$0.00
GDOT 5303 Match	\$0.00
LOCAL 5303 Match	\$0.00
TOTAL FUNDS	\$80,837.80