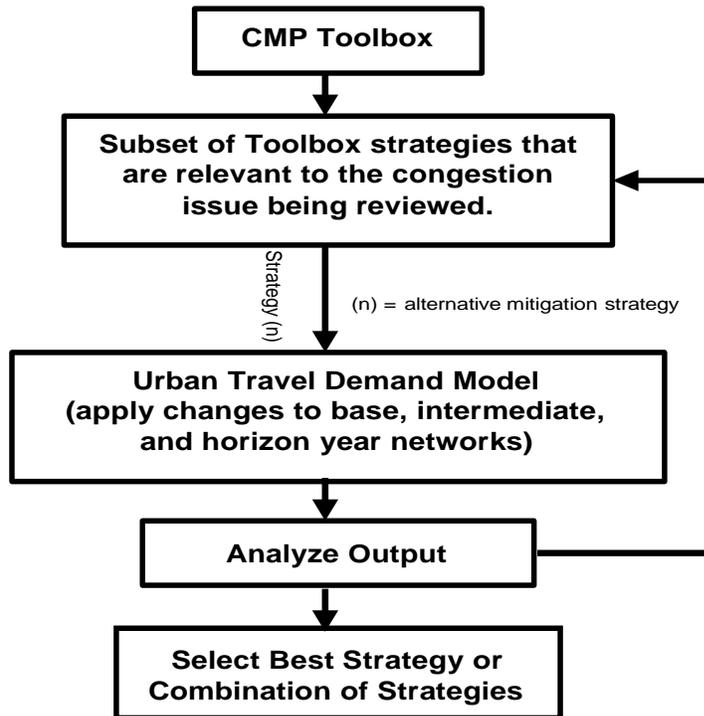


## Travel Demand Model Strategy Selection



## Congestion Management Checklist and Toolbox

All project applications that were submitted for the 2040 long Range Transportation Plan were required to complete the Congestion Management Checklist as part of their completed application. A copy of the checklist is included here.

# Congestion Management Checklist

2040 Long Range Transportation Plan

## AGENCY

Applicant Agency:

Contact Person:

## PROJECT INFORMATION

Project Name:

Project Description:

Project Purpose:

**Please provide the current and one historical traffic count from this corridor:**

**Current Data:**  
Year      Count

**Historical Data:**  
Year      Count

\*Note: Historical count must have been collected at least five years prior to current count

**Proposed Project Year:**

**Is the corridor identified as being congested (Level of Service E or F) in the 2005 or 2040 Capacity Deficiencies Map?**

Yes       No

**What do you feel is the primary cause of congestion along this corridor?**

## CMP TOOLBOX STRATEGIES

To begin the strategy evaluation, a “toolbox” of congestion mitigation measures was assembled that includes a variety of strategies that could be used. Following an approach used by the New Jersey DOT, the strategy “toolbox” is arranged so that the measures on top take precedence over those on the bottom. The general categories for the “toolbox” are as follows:

### GENESEE COUNTY CMP “TOOLBOX” STRATEGIES:

- Strategy #1:** Reduce Person Trips or Vehicle Miles Traveled (VMT)
- Strategy #2:** Shift Automobile Trips to Other Modes
- Strategy #3:** Shift Trips from SOV to HOV Auto/ Van
- Strategy #4:** Improve Roadway Operations (signal timing, turning lanes, etc.)
- Strategy #5:** Adding Thru-Lane Capacity

#### 1) Reduce Person Trips or Vehicle Miles Traveled

- Are land use policies in place to encourage the creation of sidewalks, bike paths, and/or transit facilities along the proposed corridor? Check all that apply.

Sidewalks       Bike Paths       Transit       None

- Have major businesses along the corridor been informed about strategies to reduce traffic such as telecommuting, flextime scheduling, or a compressed work week?  
 Yes       No

**If “No” was checked for any of the #1 CMP Toolbox Strategies, please explain below why the particular option has not been used to decrease congestion and improve traffic flow along the corridor.**

**Comments:**

#### 2) Shift Automobile Trips to Other Modes

- Are there available transit options along the proposed project corridor?

Yes       No

- Are there sidewalks, bicycle lanes, or other non-motorized facilities currently in place along the proposed corridor? Check all that apply

Sidewalks       Bike Paths       Other Non-Motorized       None

**If “No” was checked for any of the #2 CMP Toolbox Strategies, please explain below why the particular option has not been used to decrease congestion and improve traffic flow along the corridor.**

**Comments:**

**3) Shift Trips from Single Occupancy Vehicles to High Occupancy Vehicles**

- Are there programs and facilities in place to encourage the use of High Occupancy Vehicles?

Yes  No

- Is there the potential to offer transportation demand management solutions such as ridesharing, preferential parking, employer-provided shuttles, or additional car pool lots along the corridor?

Yes  No

**If “No” was checked for any of the #3 CMP Toolbox Strategies, please explain below why the particular option has not been used to decrease congestion and improve traffic flow along the corridor.**

**Comments:**

**4) Improve Roadway Operations**

- Have the traffic signals along the corridor been timed for optimal traffic flow?

Yes  No

If yes, when?

- Is there the potential to improve traffic flow at intersections along the corridor through dedicated turn lanes and/or turning restrictions?

Yes  No

- If so, which intersections?

- Have Intelligent Transportation Systems been implemented along the corridor to help address accidents and other non-recurring congestion?

Yes  No

- Has access management been implemented along the corridor to help reduce conflict points and improve traffic flow?

Yes       No

**If “No” was checked for any of the #4 CMP Toolbox Strategies, please explain below why the particular option has not been used to decrease congestion and improve traffic flow along the corridor.**

**Comments:**

## **Strategy Selection**

Strategy selection was performed using our Urban Travel Demand Model. Through the use of the model, the data gathered helped to demonstrate the current congestion conditions on the CMP network. It also provided a glimpse into the horizon year. The selection of one particular strategy over another was supported by both qualitative and quantitative data illustrating where one strategy is more effective than the other, and to what degree. Quantitative data was provided by the travel demand model. The model was utilized to evaluate alternative strategies that may potentially reduce congestion on the CMP network. The use of qualitative data, such as nationally recognized statistics, helped to assess the potential impact a strategy had on the system in instances where modeling was not feasible and/or local data was not available. Also, analyzing data from the "monitoring and evaluation" component of the CMP helped staff to better deduce which strategies worked for particular situations.

## **Policy, Planning, and Project Selection**

This particular step brings much of the process together. In the past, prior to project selection, staff has provided considerable information regarding congested corridors throughout the county as well as possible congestion mitigation strategies to state, local road, and transit agencies. However, it was up to the road agency to consider congestion strategies when developing project applications and ultimately implement them during construction.

GCMA guided the implementation of the process through education, alternative analysis, project planning, and finally a recommendation to the project selection committee to improve on this phase of the overall process. Staff worked hand-in-hand with local agencies to incorporate the CMP during these initial phases to ensure projects are designed to effectively mitigate congestion. By way of education and collaborative planning, capacity projects were analyzed and ultimately improved through the application of the CMP process prior to their application for entry into the LRTP and TIP. As an example, staff had previously completed a 4-to-3 lane road conversion study for the Complete Streets Technical Report. This report helped to educate transportation agencies on how some roads may benefit from a turn lane rather than having additional through lanes. The local transportation agencies completed an alternative analysis for their projects and selected projects that added center-left turn lanes rather than just expanding lanes to accommodate through traffic. For these projects, the transportation agency had previously

considered and tried various strategies from the Congestion Management Toolbox, or strategies were not feasible due to restricted rights-of-way. A left-center turn lane was the next option for most of the projects. The projects were well-analyzed prior to model analysis. This illustrates a change in the thought process of local transportation agencies as of result of the CMP. The alternative model analysis showed that the projects that were submitted best addressed the identified deficiencies.

## **Long Range Transportation Plan and Transportation Improvement Program**

The Congestion Mitigation Process is a significant part of the transportation planning process and exists within the Long Range Transportation Plan (LRTP). The GCMA has fully integrated the CMP as part of the LRTP development process and it is further utilized to provide system performance information throughout the planning process. All projects that are selected for the TIP must come directly from the LRTP.

## **Project Implementation**

Project implementation currently happens through the Long Range Transportation Plan and the Transportation Improvement Program. Staff will work with local road agencies to ensure programmed projects move forward from the programming stages through to project implementation and changes to the system will be updated in the CMP as well as in the urban travel demand model.

## **Performance Evaluation**

All elements of the GCMA CMP will be reviewed and updated periodically to reflect changes to the region's transportation goals and objectives and transportation systems. These updates will include, at a minimum, an analysis of the CMP network performance and an update of both the CMP road network and the urban travel demand network every four years, in advance of each update to the Long Range Transportation Plan.