CHAPTER 4

CONGESTION MANAGEMENT PROCESS

A PRODUCT OF THE

Western Piedmont

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Greater Hickory Metropolitan Planning Organization

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INTRODUCTION

The Congestion Management Process (CMP) is a systematic approach to congestion management, required in metropolitan transportation planning by federal law. Through a federally prescribed process, CMP in the region manages new and existing transportation systems for relieving congestion and maximizing the safety and mobility of people and goods. This procedures and responsibilities report describes how the CMP will be implemented and used on a continuing basis to comply with federal requirements. It includes congestion management objectives, a description of the coverage area and networks, performance measurement matrix, performance monitoring plan, identification and evaluation strategies, and implementation and management.

In updating the Congestion Management Process, MPO staff seek to create a process that more accurately identifies, classifies, and mitigates congestion in the region. The 2023 CMP update achieves this goal by introducing performance measures that allow both broad and targeted assessment of congestion, and instituting an improved monitoring system that ensures progressive evaluation and mitigation of congested areas within the region.

CMP HISTORY

In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA), established initial congestion management requirements. The Congestion Management System (CMS) was the planning document outcome. Introduced in 2016, current congestion management legislation requires Transportation Management areas conduct congestion management through a process of safe, reliable, effective, and integrated operation of the multimodal transportation system.

REQUIREMENTS

Congestion is federally defined as "the level at which transportation system performance is no longer acceptable due to traffic interference." The level of system performance deemed acceptable by state and local officials may vary by type of transportation facility, and geographic location. For many of the performance metrics referenced within this report, a road segment is considered congested if the reported speed falls below 60% of the reference (or free-flow) speed.

Federal regulation requires that an MPO address congestion management through a process that provides for effective management and operation, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities.

Further federal guidance establishes the CMP as an eight step process, with eight key elements included within the process aligning with each step of the process, as illustrated by Table 1.

MPO staff considered four (4) main objectives in developing an updated CMP:

1. Satisfy Federal Requirements
2. Create a structured and data driven process that is conducive to continuous evaluation and improvement of congestion management.
3. Remain flexible to meet the changing needs of the region
4. Avoid being overly complex or cumbersome

Table 1 - Congestion Management Process Steps
Congestion Management Process Steps and Aligning Elements

Process Step	Resulting Element
1. Develop Congestion Management Objectives	Congestion Management Objectives
2. Identify area of Application	Identified Area of Application
3. Define System/Network of Study	Transportation System Network Definition
4. Develop Performance Measures	Defined Performance Measures
5. Institute System Performance Monitoring Plan	Defined Performance Monitoring Plan
6. Identify/Evaluate Strategies	Identification and evaluation of strategies
7. Implement Selected Strategies	Implementation of Selected Strategies
8. Monitor Strategy Effectiveness	Defined plan for Strategy Performance Measurement

WHY IS A CMP HELPFUL?

A successful CMP works to benefit and increase efficiency of the regional multimodal transportation system as a whole. The Congestion Management Process provides the GHMPO a structured, data-driven approach to monitoring and evaluating congestion in the region. This approach ensures that the GHMPO method for managing congestion is continuous and consistent. The CMP also provides a tool that can be used to make targeted investment decisions to improve congestion in the region.

The continuous nature of the CMP also allows MPO's to progressively update and improve their congestion management process, to better serve the MPO and the region. Through ongoing evaluation and implementation, the plan ensures an improving transportation system.

CMP Element 1: Developing Congestion Management Objectives

CMP Objectives are to be consistent with regional goals and plans. The existing Greater Hickory MPO Congestion Management Process featured objectives that aligned with the 2045 Metropolitan Transportation Plan. To develop updated CMP objectives, MPO staff reviewed the 2050 MTP goals, objectives, and policies. The following goals and objectives were identified as applicable to the Congestion Management Process.

Freight Local Goal	Metric
Incorporate resiliency planning principles into the initial project planning and prioritization phases.	Update local methodology to reflect resiliency planning principles.
Work with NCDOT to prioritize improvements to insufficient Interstate 40 interchanges (exits, on-ramps and bridges).	Meet with NCDOT divisions during Prioritization to determine insufficient interchanges and submit projects accordingly.
Work with NCDOT to address bottlenecks in the region.	Meet with NCDOT divisions to ensure all bottlenecks are identified and addressed. Continue to monitor data sources such as NCDOT's PDAS/RITIS data/Travel Demand Model.
Work with NCDOT to synchronize traffic light timing on major freight routes at high volume times to increase efficiency, and reduce noise and air pollution, especially within city limits.	Meet with NCDOT divisions to discuss traffic light efficiency on major freight routes. Discuss any potential signal studies.
Ensure that new industrial and manufacturing areas have sufficient access to arterials.	Coordinate meetings with NCDOT and municipal staff during planning and design.

Health & Equity Local Goal	Measure
Identify and work to resolve bottlenecks to reduce the impacts of pollution on communities located near high-volume roads.	Continue to monitor data sources such as NCDOT's PDAS/RITIS data/Travel Demand Model. Coordinate project submissions with NCDOT.

CMP Element 2: Identifying the Area of Application

INTRODUCTION

A congestion management process should be applied to a specific geographic area and network of surface transportation facilities. As a Transportation Management Area, the GHMPO must include, at minimum, the TMA within the CMP boundary.

GEOGRAPHIC COVERAGE

MPO staff identified the Greater Hickory Metropolitan Planning Organization (GHMPO) boundary as the CMP coverage area. The GHMPO is located in the foothills of Western North Carolina about 30 miles north of Gastonia, 50 miles northwest of Charlotte, 70 miles west of Winston-Salem, and 75 miles east of Asheville. The GHMPO is responsible for transportation planning in the municipalities of Brookford, Cajah's Mountain, Catawba, Cedar Rock, Claremont, Connelly Springs, Conover, Drexel, Glen Alpine, Granite Falls, Hickory, Hildebran, Hudson, Lenoir, Long View, Maiden, Morganton, Newton, Rhodhiss, Rutherford College, Sawmills, Taylorsville, and Valdese; and the

counties of Alexander, Burke, Caldwell, and Catawba. Again, the geographic coverage of the CMP is the same as the GHMPO's planning boundary.

CMP Element 3: Defining a Network/System of Study

BACKGROUND

Once the area of application has been established, the network that is subject to consideration can be identified. The network of study is a subset of the area of application.

While the CMP should be multimodal, and GHMPO staff reviewed several modes of transportation including automobile, public transportation, bicycle, pedestrian, rail transportation, and for-hire passenger transportation (microtransit/taxi/uber), GHMPO staff concluded that automobile transportation was the only mode of transportation exhibiting need for the analysis through the CMP. This conclusion was made based on ACS data, and qualitative observations made by planning staff. The 2021 ACS five-year estimates found that 90.9% of the Greater Hickory area commuted to work in a private vehicle. The GHMPO will continue to monitor multimodal transportation in the area, and will update the CMP to include other modes when quantitatively justified.

METHOD FOR SELECTING CORRIDORS OF STUDY

The GHMPO seeks to maintain a CMP that is data-driven. To do so, the identification of the CMP network itself must be data driven. GHMPO used a combination of performance measures, tools, and data provided by the Regional Integrated Transportation Information System's (RITIS) Probe Data Analytics Suite (PDA Suite). More information on RITIS and PDA Suite is available under CMP Element 4 "Developing Performance Measures". Through the PDA Suite, GHMPO staff were able to use the tools noted in Table 2 to identify and select corridors of study.

Health & Equity Local Goal	Measure
PDA Suite Trend Map	PDA Suite's trend map allows MPO staff to create animated maps showing changes in congestion over the course of time at various intervals and date-ranges. Within the mapping tool, different congestion performance measures can be used. The MPO uses Travel Time Index, and Planning Time Index, to identify congestion within the animated map. Corridors showing a Planning Time Index above 2 or Travel Time Index above 1.6 were selected.
Bottleneck Identification and Ranking (ranked by total delay)	PDA Suite's Bottleneck Identification and Ranking tool allows MPO staff to easily select a congestion performance measure, and rank all intersections within the region based upon the selected measure. The top 25 intersections were selected to be included in the network of study.

ABOUT PDA SUITE

The Probe Data Analytics Suite provides historical data analysis within the Regional Integrated Transportation Information System. Data is sourced from INRIX and HERE. Both data providers utilize vehicle probe data. Vehicle probe data is information generated from vehicles based on the position of vehicles over space and time. Simply put, modern vehicles report their location and duration of time spent at that location. For the purpose of Congestion Management, this data allows MPO staff to know when, where, and how intensely vehicles are experiencing congestion. PDA Suite is operated by the University of Maryland CATT (Center for Advanced Transportation Technology) Lab.

Using both tools, MPO Staff identified 6 corridors of study, broken down into 28 intersections.

Corridors of Study

- I-40 from Exit 138/Oxford School Road to Exit 98 Causby Road
- US-70 from Sanford Drive to NC-16
- US-70 BR from Huffman Street to US-70
- US-321 from US-64/NC-90/NC-18/Wilkesboro BLVD to NC-10
- NC-127 from 29th Avenue to NC-10
- NC-16 from US-64 to NC-10

Table 3 - Intersections of Study	
1. McDonald PKWY S @ I-40	15. US-321N @ US-64/NC-90/NC-18
2. I-40W @ US-321/Exit 123	16. I-40E @ Oxford School Road/Exit 138
3. I-40W @ Jamestown Road/Exit 100	17. I-40E @ Exit 126
4. I-40E @ Carolina Street/Exit 111	18. I-40E @ Exit 125
5. US-70W @ US-70-BR/E Union Street	19. NC-18S @ Bush Dr / I-40
6. US-70E @ Drexel Rd/S Main Street	20. I-40W @ N Oxford Street/Exit 135
7. I-40E @ Old NC 10/Exit 118	21. I-40E @ US-70A/Exit 130
8. US-70W @ US-70/E Union Street	22. I-40W @ Mineral Springs Mtn Road/Exit 112
9. US-321S @ US-64/NC-90/NC-18	23. I-40W @ Malcolm BLVD/Exit 113
10. NC-18N @ Bush Dr/I-40	24. US-321N @ Maizel Rd/New Farm Road
11. US-321S @ 2nd Ave	25. NC-16N @ NC-16 Bus
12. I-40W @ Center St/Exit 119	26. S Center Street @ US-70
13. US-64W @ I-40 (Morganton)	27. NC-127 @ 2nd Ave
14. US-70BR-W @ Huffman St/Center St	28. NC-16 @ US-64

CMP Element 4: Developing Performance Measures

BACKGROUND

Performance measures are used within the CMP to evaluate the effectiveness, or ineffectiveness, of the transportation system. Specifically, performance measures are used to identify and classify congestion. Performance measures should align with the vision, goals, and objectives of the region. The MPO sought to implement performance measures that assessed the region as a whole, as well as performance measures capable of assessing individual intersections.

FEDERAL PERFORMANCE MEASURES AND GOALS

The Greater Hickory MPO supports all performance measures, goals, and requirements as outlined in federal performance management initiatives. These performance measures and goals can be found in the "Performance Measures" Chapter of the 2050 Metropolitan Transportation Plan.

CONSIDERATIONS

Prior to developing performance measures, MPO staff established several considerations to be taken into account.

- **Data:** Costs of Data Collection, Availability, Timeliness of Data, and Extraneous influences upon data.
- **Tools:** Availability of software tools to MPO staff to perform the analysis.
- **Applicability:** Ability for selected measures to be quantified for system performance evaluation.
- **Ability:** Ability of selected performance measures to measure and identify system deficiencies.

DEVELOPMENT

Using the considerations listed above, MPO staff evaluated and refined the compiled list of performance measures to reach the final performance measures selected for the CMP. The selected performance measures provide MPO staff with data, and tools that are readily available and applicable to MPO congestion goals.

REGIONAL PERFORMANCE MEASURES

To assess congestion across the region, MPO staff selected two performance measures. These performance measures are implemented to allow MPO staff to quickly evaluate the state of congestion in the region.

REGIONAL PERFORMANCE MEASURE – USER DELAY COST ANALYSIS

User Delay Cost Analysis allows MPO staff to quickly and accurately evaluate the state of congestion regionally. User Delay Cost is calculated by multiplying the total time of delay by a specified cost per hour. PDA Suite utilizes default values provided by the Texas Transportation Institute for cost per hour, based on the passenger value of time and commercial operating cost.

Table 4 - User Delay Cost			
Measure	**Measurement**	**Data Source**	**Desired Trend**
User Delay Cost Analysis	Congestion Intensity	PDA Suite (RITIS)	Downward

Time Delay is the amount of extra time spent traveling due to congestion, represented as total vehicle hours of delay. PDA Suite calculates time delay using the "User Delay Cost Analysis" tool. For this tool, the GHMPO volume provider is NCDOT.

User Delay Cost = Regional Total Delay Time x Cost Hour

REGIONAL PERFORMANCE MEASURE – TOTAL CRASH RATE PER 100 MVMT (MOTOR VEHICLE MILES TRAVELED)

The GHMPO is committed to identifying and mitigating non-recurring congestion in the region. Non-recurring congestion is commonly caused by vehicle accidents, vehicle breakdowns, construction, and inclement weather. Total Crash Rate allows MPO staff to quickly and accurately assess the regional performance of the transportation system. These rates will be examined for each county in the biennial report.

Table 5 - Total Crash Rate			
Measure	**Measurement**	**Data Source**	**Desired Trend**
Total Crash Rate	Reliability	NCDOT	Downward

INTERSECTIONAL PERFORMANCE MEASURES

The goal of the CMP is targeted and accurate congestion management. MPO staff selected the following performance measures based on their applicability to individual corridors and intersections. These performance measures enable MPO staff to comprehensively evaluate and monitor the performance of individual intersections.

INTERSECTIONAL PERFORMANCE MEASURES – RECURRING CONGESTION

Recurring congestion is congestion that can be expected to occur on the same weekday at the same time as a result of high volumes of commuter traffic. The FHWA concisely states "This is the type of congestion where there are simply more vehicles than roadway". MPO staff selected the following measures to assess recurring congestion at the individual intersection or corridor.

MPO staff use performance measures to identify when congestion is occurring, where congestion is occurring, how intense congestion is, and how reliable travel time is. Table 4 illustrates the questions answered by each of the performance measures selected

Table 6 - Information Provided by Performance Measures				
Measure	**How Intense is Congestion?**	**How Reliable is Travel Time?**	**When is Congestion Occurring?**	**Where is Congestion Occurring?**
Travel Time Index (TTI)	X		X	X
Planning Time Index (PTI)		X	X	X
Bottleneck Identification & Ranking	X			X

TRAVEL TIME INDEX

Travel Time Index represents actual travel time as a percentage of the ideal (free flow) travel time. Travel Time Index is sourced from PDA Suite. For scoring purposes, peak Travel Time Index will be used.

Travel Time Index = Travel Time / Free-Flow Travel Time

PLANNING TIME INDEX

Planning Time represents the total time a traveler should plan to ensure on-time arrival. The 95th percentile travel time is used for the calculation, meaning that if a traveler leaves the duration of planning time before they need to arrive, the traveler will arrive at or before the necessary time 95% of the time. Therefore, planning time is the near worst case travel time. A PTI of 1.60 means that, for a 15 minute trip in light traffic, the total time that should be planned for the trip is 24 minutes. Planning Time Index is sourced from PDA Suite. For scoring purposes, peak planning time index will be used.

Planning Time Index (PTI) = 95th Percentile Travel Time / Free Flow Travel Time

BOTTLENECK IDENTIFICATION AND RANKING

Bottlenecks consist of congestion occurring on consecutive road segments and/or time. A road segment is considered congested if the reported speed falls below 60% of the free flow speed. PDA Suite identifies bottlenecks in a dynamic manner, allowing the bottleneck to grow, shrink, change locations, merge, and split apart. For the purpose of performance measurement, MPO staff will score intersections based on their bottleneck ranking, as ranked by total delay. Previously, base impact score had been the ranking criteria. However, base impact does not account for volume, thus allowing for a disproportionate bias towards low volume intersections.

INTERSECTIONAL PERFORMANCE MEASURES – NON-RECURRING CONGESTION

Non-recurring congestion is commonly caused by vehicle accidents, vehicle breakdowns, construction, and inclement weather. The selected performance measures assess individual corridors and intersections vehicle accident data. Identification and classification of non-recurring congestion will allow MPO staff to monitor individual intersections.

Table 7 - Non-recurring Performance Measures

Measure	Measurement	Data Source	Desired Trend
Total Crashes/Intersections	Number of Crashes	NCDOT TEAAS	Downward
Severity Index	Severity of Crashes	NCDOT TEAAS	Downward

CRASH FREQUENCY –

NCDOT TEAAS provides the MPO with access to data for individual intersections within the region. Using this data, MPO staff can rank intersections across the region based upon the number of accidents across a set timeframe, and identify particularly hazardous intersections.

SEVERITY INDEX –

NCDOT TEAAS also provides MPO staff with a severity index, representing the severity of accidents at a specified intersection. Severity index is equal to equivalent property damage only (EPDO) divided by the number of crashes. EPDO uses assigned values to quantify the severity of injuries sustained in car crashes.

EQUITY AND ACCESSIBILITY

The GHMPO, in efforts to improve equity and accessibility within the region, will also seek to analyze and measure congestion in Title VI concentration areas. Title VI demographics include race, age 65+, vehicle availability, disability status, english proficiency, and single parent households. MPO staff will analyze and score each intersection based upon the demographic concentrations it falls within. Intersections with a disproportionate impact on Title VI groups will receive a higher scoring that intersections that do not.

CMP Element 5: Instituting a System Performance Monitoring Plan

BACKGROUND

The Final Rule on Metropolitan Transportation Planning calls for “a coordinated program for data collection and system performance monitoring to assess the extent of congestion, to contribute in determining the causes of congestion, and evaluate the efficiency and effectiveness of implemented actions”. To meet this requirement, the GHMPO has developed a defined, three step plan to monitor and evaluate congestion in the region. This plan consists of data collection, data analysis, and data reporting guidance.

DATA COLLECTION

MPO Staff will collect a range of data and use a number of tools to compile necessary performance measure input for CMP reporting. The grid below illustrates each performance measure and the source for the necessary data. Where applicable, the appropriate tool is also listed. Each data point will be collected for the intersections identified in CMP element 2.

Table 8 - Data Sources

Performance Measure	Source	Tool
Bottleneck Rankings	PDA Suite	Bottleneck Ranking Tool
User Delay Cost	PDA Suite	User Delay Cost Analysis
Peak Travel Time Index	PDA Suite	Trend Map
Peak Planning Time Index	PDA Suite	Trend Map
Total Cashes/Intersections	NCDOT TEAAS	High Accident Intersections
Severity Index	NCDOT TEAAS	Severity at High Accident Intersections
Title VI Analysis	ACS/Census Data	N/A

DATA ANALYSIS

In alignment with the processual nature of the CMP as prescribed by federal regulation, the GHMPO will implement a performance measurement matrix that will allow for both comprehensive and continuous analysis. Following data collection, MPO staff will create a CMP scorecard for each intersection. This scorecard will assign each intersection a score which will be drawn from a scoring matrix established within the data report. A **higher** score represents a greater overall level of congestion and need for congestion management.

Table 9 - Example Scorecard
Intersection of NC16 and NC64 - Alexander County

Performance Measure	Base Value	Score
Bottleneck Ranking	39	0/10
Travel Time Index	1.6	10/10
Planning Time Index	2.3	7/10
Total Crashes (1/1/20 - 12/30/31)	14	3/10
Severity Index	2.06	1/10
		Total: 21

Table 10 - Example Matrix

Bottleneck Intersection Ranking	Ranks 1-5 = 10 points Ranks 5-10 = 7 points Ranks 10-15 = 5 points	Ranks 15-20 = 3 points Ranks 20-25 = 1 point
Number of Crashes / 2 Year Monitoring Period	45+ Crashes = 10 points 30-45 Crashes = 7 points	15-30 Crashes = 5 points 0-15 Crashes = 3 points
Crash Severity Index	SI of 15+ = 10 points SI of 12-15 = 8 points SI of 10-12 = 6 points	SI of 7-10 = 4 points SI of 4-7 = 2 points SI of 0-4 = 0 points
Planning Time Index	PTI of 3.0+ = 10 points PTI of 2.0-3.0= 7 points	PTI of 1.0-2.0= 3 points PTI of 0.0-1.0= 0 points
Travel Time Index	TTI of 1.5+ = 10 points TTI of 1.2-1.4=5 points TTi of 0-1.1= 0 points	

DATA REPORTING

Biennially, MPO staff will prepare a Congestion Management Data Analysis report. This report will be the main product of the Congestion Management Process. The initial GHMPO congestion analysis report will be the baseline performance report. This report will include a scorecard for each intersection identified as the CMP network within this report. The initial MPO Congestion Management Data Analysis Report will present the baseline data, with successive reports providing actual measurements of improvement.

CMP Element 6: Identification of Strategies

Following the collection and analysis of data, intersections will be further analyzed by MPO staff to identify potential causes of congestion. Once possible causes of congestion are identified, strategies will be assigned to each intersection. The selected strategies will be included on the intersection scorecard. This creates a direct linkage between the strategies selected and the performance measures for evaluation within the CMP.

In preparation for the initial Congestion Management Data Analysis Report, MPO staff have compiled possible strategies to be evaluated for implementation. The updated strategies bank is considerably more concise. There are three classes of congestion management strategies: Demand Management, Operational Management, and Capital Intensive Improvement.

OPERATIONAL MANAGEMENT STRATEGIES:

- Optimizing the timing of traffic signals;
- Faster and anticipatory responses to traffic incidents;
- Reserved travel lanes or rights-of-way for transit operation;
- Realigned transit service schedules and stop locations;
- Providing travelers with information on travel conditions as well as alternative routes and modes;
- Improved management of work zones;
- Identifying weather and road surface problems and rapidly targeting responses;
- Providing real-time information on transit schedules and arrivals;
- Monitoring the security of transit patrons, stations, and vehicles;
- Anticipating and addressing special events, including emergency evacuations, that cause surges in traffic;
- Better freight management, especially reducing delays at border crossings;
- Reversible commuter lanes;
- Congestion pricing strategies, including high occupancy toll (HOT) lanes;
- Movable median barriers to add capacity during peak periods;
- Restricting turns at key intersections;
- Geometric improvements to roads and intersections;
- Converting streets to one-way operations; and
- Access management.

DEMAND MANAGEMENT STRATEGIES:

- Programs that encourage transit use and ridesharing;
- Curbside and parking management;
- Flexible work hours;
- Telecommuting programs;
- Bikeways and other strategies that promote non-motorized travel;
- Pricing fees for the use of travel lanes by the number of persons in the vehicle and the time of day;
- Pricing fees for parking spaces by the number of persons in the vehicle, the time of day or location;
- Land use controls or zoning;
- Growth management restrictions such as urban growth boundaries;
- Development policies that support transit-oriented designs for corridors and communities involving homes, jobsites, and shops; and
- Incentives for high-density development, such as tax incentives.

CAPITAL INTENSIVE IMPROVEMENTS:

- Adding travel lanes on major freeways and streets (including truck climbing lanes on grades);

» Adding capacity to the transit system (buses, urban rail or commuter rail systems);
» Closing gaps in the street network;
» Removing bottlenecks;
» Overpasses or underpasses at congested intersections;
» High-occupancy vehicle (HOV) lanes; and
» Increasing intercity freight rail capacity to reduce truck use of highways.

CMP Element 7: Implementation and Management

CMP Element 7, implementation and management, involves taking the analysis from the previous steps, and using it as a tool to prioritize investments. On the MPO level, this would take the form of using CMP scores as a tool for prioritization. FHWA guidance uses the ranking and weighting of projects using CMP data as they enter the Transportation Improvement Program as an example. Federal code does not regulate the level of formality required in the linkage between the CMP and funding decisions. The MPO will establish the level of formal CMP influence when the local prioritization methodology is developed. MPO staff will actively document the strategies implemented for each identified corridor on the intersection scorecards.

Table 11 - How CMP recommendations are incorporated	
1. Metropolitan Transportation Plan	MTP - Linkage should be clear between the MTP and CMP, through project description and prioritization where applicable.
2. Prioritization	Prioritization - Projects submitted for prioritization should be consistent with the CMP.
3. Transportation Improvement Program	TIP - Projects added to the TIP should be consistent with the CMP.

CMP ELEMENT 8: EVALUATION OF STRATEGIES

The final step of the Congestion Management process is the evaluation of strategies implemented. Biennially, MPO staff will evaluate the effectiveness of congestion management strategies implemented.

FHWA recommends that CMP analysts use the performance measures developed through the CMP to assess the effectiveness of strategies. The GHMPO Congestion Management Data Analysis will follow this recommendation, as identified strategies will be linked to the respective performance measures they are targeted to improve. Subsequent GHMPO Congestion Management Data Analysis reports will include scoring reports for implemented congestion management strategies.