CONGESTION MANAGEMENT PROCESS

REGIONAL PLANNING COMMISSION FOR JEFFERSON, ORLEANS, PLAQUEMINES, ST. BERNARD, ST. CHARLES, ST. JOHN THE BAPTIST, ST. TAMMANY AND TANGIPAHOA PARISHES

INTRODUCTION

The Congestion Management Process (CMP) is an ongoing series of activities that identifies traffic congestion throughout the region, defines needs related to congestion reduction, and selects congestion mitigation strategies. The CMP will be updated in concurrence with each update of the RPC's Metropolitan Transportation Plan (MTP). As a complementary document, the CMP will both inform and be informed by the MTP. The current version was developed in advance of MTP 2052, which is planned for adoption in August, 2022.

ABOUT THE RPC

The Regional Planning Commission (RPC) for Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Tammany and Tangipahoa Parishes is a board of local elected officials and citizen members appointed to represent the public on regional planning issues. The RPC's Transportation Policy Committee (TPC) serves as the Metropolitan Planning Organization (MPO) for four separate Metropolitan Planning Areas (MPA's): Mandeville-Covington, New Orleans, Slidell, and South Tangipahoa. TPC membership consists of all RPC members as well as additional elected officials and representatives from major regional transportation interests. In its role as MPO, the TPC has final decision making authority over metropolitan transportation planning decisions, including goal and priority setting, project selection, and programming federal transportation funding.

CMP REQUIREMENTS, GUIDANCE, AND LESSONS LEARNED

Federal legislation (23 CFR 450.322) requires MPOs to maintain a CMP (previously called a congestion management system), and the RPC has done so for over 20 years. The strengths and weaknesses of prior iterations inform this update. Previous processes included quantitative assessments of congestion that proved useful in analyzing change over time and prioritizing highly congested routes. Data was supported and enhanced by input from stakeholders, who provided invaluable insight into the causes of, and potential solutions to, congestion. However, prior versions of the CMP relied on data that was not always available and outlined procedures that required intensive ongoing staff resources. This update to the process retains the prior emphasis on combining quantitative data with stakeholder input, but it uses new data sources that are readily available and attempts to streamline the various tasks of monitoring regional congestion.

Current guidance from the Federal Highway Administration (FHWA)[1] suggests that a successful CMP will include the following eight actions:

- Action 1: Develop Regional Objectives for Congestion Management
- Action 2: Define CMP Network
- Action 3: Develop Multimodal Performance Measures
- Action 4: Collect Data / Monitor System Performance
- Action 5: Analyze Congestion Problems and Needs
- Action 6: Identify and Assess CMP Strategies
- Action 7: Program and Implement Strategies
- Action 8: Evaluate Strategy Effectiveness

The CMP follows this guidance, while incorporating regional priorities, and is organized according to the eight actions. Each Action description concludes with a summary of its required tasks and expected timeline.

ACTION 1: DEVELOP REGIONAL OBJECTIVES FOR CONGESTION MANAGEMENT

The CMP is guided by a series of Principles and Objectives. The Principles are broad policies that will guide decision making over time. The Objectives are more specific actions and outcomes that the RPC aspires to achieve through application of the CMP.

CONGESTION MANAGEMENT PRINCIPLES

Implementation of the CMP will adhere to the following Principles:

Focus on what's important to the traveling public: The strategies and priorities advanced by the CMP will reflect the needs and preferences of the traveling public, as identified through the RPC's ongoing stakeholder coordination and public participation programs.

Coordinate with partners: The CMP will provide valuable information about congestion to local, state, and federal partners. At the same time, decisions about mitigating congestion will be made in coordination with those agencies.

Focus on unacceptable congestion and acknowledge competing needs: The CMP will consider the priority placed on congestion mitigation in relation to other needs such as safety, access, mobility, sustainability, resilience, economic development, and livability. To this end it acknowledges that some level of congestion may be unavoidable due to the prioritization of competing public interests. It will attempt to define the level of congestion that is considered unacceptable by the community when compared to other needs and prioritize those locations and causes.

[1] FHWA. (2011). *Congestion Management Process: A Guidebook.* https://www.fhwa.dot.gov/planning/congestion_management_process/cmp_guidebook/cmpguidebk.pdf

Prioritize VMT/VHT reductions, address all modes of transportation: The CMP will prioritize the selection and implementation of congestion mitigation strategies that reduce vehicle miles travelled (VMT) and/or vehicle hours travelled (VHT), particularly single-occupant VMT and VHT. Strategies that enhance the use of non-single occupant vehicle (non-SOV) transportation modes will be encouraged. The CMP also acknowledges the importance of land use to transportation mode choice. While the RPC has no direct control over land use it can encourage transportation strategies which enable land uses that are conducive to reduced congestion and enhanced mode choice.

Coordinate congestion with other regional programmatic goals: The CMP will consider and incorporate the goals and priorities put forth by other RPC plans and programs. These include the goals described in the MTP, as well as programmatic priorities related to safety, economic development, sustainability, resilience, and livability. Concurrently, the CMP will provide a mechanism for considering congestion mitigation in other RPC plans, programs, and projects. Importantly, this includes incorporating congestion mitigation strategies in work scopes where appropriate.

Remain agile: One of the challenges experienced with previous iterations of the CMP was the relative lack of available time or resources to regularly update the process's outputs. This CMP will rely on input from existing RPC processes and readily available datasets. It is intended to integrate subject-specific guidance into the overall planning process, not serve as a stand-alone program. In keeping with the CMP's status as an ongoing process, it may be altered over time to reflect regional needs and available resources.

CONGESTION MANAGEMENT OBJECTIVES

The CMP will accomplish the following objectives:

Achieve 2- and 4-year targets for federally required Performance Measures on the National Highway System: As described in Action 3 the Performance Measures are a valuable tool for evaluating regional congestion. The targets for each of the measures are developed in concurrence with the MTP, and are included therein.

Incorporate consideration of the CMP into all appropriate RPC plans and studies. As discussed in Actions 6 and 7 the primary mechanism for implementing congestion mitigation strategies is to ensure they are considered during project development, then incorporated into planning and design, and finally included in the MTP and Transportation Improvement Program (TIP). The CMP, MTP, and TIP should all include standard processes for including congestion as a primary consideration during project development.

Produce regular assessments of regional congestion. Since 2019 the RPC has produced an Annual Report outlining the state of the regional transportation system and the RPC's planning and project implementation efforts. The Annual Report will continue to be published and will include a summary of the congestion Performance Measures outlined in the CMP. Full CMP updates that are completed in concurrence with MTP updates will also include a more detailed System Performance Report, described in Actions 4-8 and included in Appendix B.

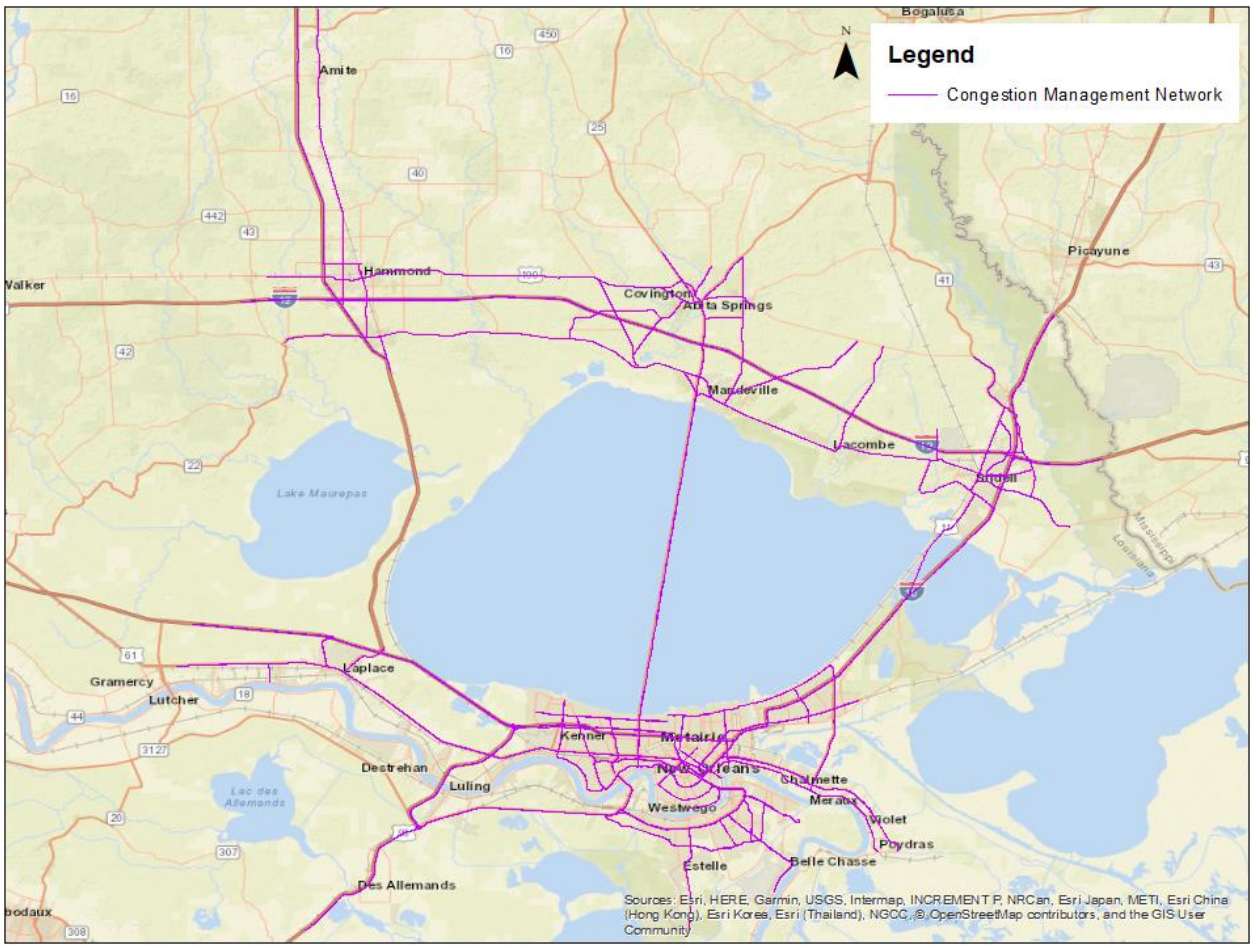
ACTION 1 TASKS AND TIMELINE

- Ensure CMP complies with stated Principles: Ongoing
- Evaluate federal-required congestion performance measures: Every 4 years in concurrence with MTP updates
- RPC Annual Report: Produced annually
- System Performance Report: During CMP updates, in concurrence with MTP updates

ACTION 2: DEFINE CMP NETWORK

Geographic Area: The RPC serves as MPO for four urbanized areas: Mandevillle-Covington, New Orleans, Slidell, and South Tangipahoa. Development and maintenance of a CMP is required for urbanized areas with populations greater than 200,000. The New Orleans urbanized area meets this threshold, but the others do not. Nonetheless, the RPC has included all four urbanized areas in the CMP several reasons. First, it is possible that in the future the urbanized areas of St. Tammany and Tangipahoa Parishes may reach the 200,000 person threshold, either due to merging of existing urbanized areas or through population growth. Second, The North Shore's rapid economic and population growth necessitates a systematic approach to proactively mitigating traffic congestion. Finally, travel between the North and South Shores is closely linked to congestion in both areas. Including all urbanized areas in the CMP is a logical and responsible approach to alleviating regional congestion.

The Congestion Management Network: While the CMP is intended to address congestion across the entire transportation system it focuses on a subset of Federal-Aid routes that carry the majority of regional travel and which experience the most severe congestion. The Congestion Management Network serves as the core basis for analyzing and measuring congestion in the region, and consists of routes with the highest traffic volumes, regional connectivity, and significance as defined by stakeholders. Congestion observed on these routes serves as an indicator of overall regional congestion. Correspondingly, alleviating congestion on these routes can be expected to have a considerable impact on regional travel delay. Routes on the CM Network will be prioritized for data collection, performance monitoring, and implementation of congestion mitigation strategies. The CM routes are shown in the map below and a list of routes is included in Appendix A.



Beyond the CM Network: System monitoring within the CMP is not limited to the CM Network. Newly available datasets allow the RPC to perform congestion analyses on the majority of the Federal-Aid Network, greatly enhancing its ability to identify issues and monitor the impact of implemented projects. Federally required Performance Measures provide additional data on the National Highway System. These Performance Measures, discussed in Action 3, allow a more nuanced understanding of congestion on some of the region's most critical routes.

ACTION 2 TASKS AND TIMELINE

- Monitor Data on CM Network and Other Major Routes: Ongoing
- Update CM Network Designations: During CMP updates, in concurrence with MTP updates

ACTION 3: DEVELOP MULTIMODAL PERFORMANCE MEASURES

One of the primary tasks of the CMP is quantitatively assessing congestion on the transportation system as a whole and on individual routes. Measuring performance allows the RPC to identify areas of critical need, to track trends over time, and to evaluate the success of

implemented mitigation strategies. All of these outcomes lead to Performance Based Planning and Programming (PBPP), an approach to project selection and implementation that uses data-driven decision making to make strategic enhancements to the transportation system that can be expected to lead to measurable improvements in system performance. The CMP utilizes multiple Performance Measures to better understand regional congestion and derive solutions. The data used to calculate several of these measures are available through the National Performance Management Research Dataset (NPMRDS), while other data is collected directly by the RPC. They are also available at differing scales. Some are limited to the Interstate and non-Interstate NHS while others are available on the larger CM Network or entire Federal-Aid Network. Federal legislation requires the RPC to track some measures while others have been selected specifically for this region to provide a more nuanced understanding of system performance.

The Performance Measures tracked by the CMP will be used to accomplish the following tasks:

- Identify the locations where congestion frequently occurs, and attempt to discern its causes.
- Track changes in congestion over time, both at specific locations and regionwide.
- Evaluate the effectiveness of implemented congestion mitigation strategies.
- Inform planning, operations, and project decision making for partner agencies, including the state, local governments, and transit operators.

The federally required and regionally selected Performance Measures tracked by the CMP are described below.

- Federally required measures:
    - The **Level of Travel Time Reliability (LOTTR)** indicates whether trips on a given road segment consistently take the same amount of time to complete, regardless of the time of day, day of the week, or other conditions. LOTTR is calculated on the Interstate system and on the non-Interstate National Highway System (NHS). A measurement of 100% is ideal and indicates that travel time is perfectly reliable. LOTTR measures are available through the NPMRDS.
    - The **Truck Travel Time Reliability Index (TTRI)** is a measure of the reliability of truck travel times on the Interstate system. Similar to LOTTR, it measures whether truck trips on a given Interstate segment can be completed in the same amount of time, regardless of the time of day, day of the week, or other conditions. An index of 1.0 is ideal and indicates that truck travel time on the Interstate is perfectly reliable. The Truck TTRI is available through the NPMRDS.
- Regionally selected measures:
    - **Overall Congestion** indicates the actual measured speed of vehicles on a roadway as a percentage of the potential free flow speed that would exist under

ideal conditions. Road segments measuring 100% allow vehicles to travel at full free flow speed. The Overall Congestion measure is available through the NPMRDS on the CM Network and most Federal-Aid routes.

- **User Delay Cost** is an estimate of the total dollar cost of roadway users spending time in congestion rather than being otherwise economically productive. User Delay Cost is available through the NPMRDS on the CM Network and most Federal-Aid Routes.

- The **Buffer Time Index** is derived from the Buffer Time, which is the additional time that travelers must add to their plans to ensure on-time arrival. The Buffer Time is the difference between the Average Travel Time on a road segment and the 95th percentile travel time on that same segment (95% Travel Time – Average Travel Time). The Buffer Time Index takes this a step further by expressing the Buffer Time as a percentage of the Average Travel Time. A Buffer Time Index of 0 is ideal, indicating that travel time is consistently the same on a given road segment and travelers do not need to plan for extra time to ensure on-time arrival. The Buffer Time Index is available through the NPMRDS on the CM Network and most Federal-Aid routes.

- **Average Daily Traffic (ADT)** is the estimated number of vehicles that traverse a specific road segment in a single day. Averages are derived from actual traffic counts acquired by the RPC using both physical and remote sensing technology. They are available on a limited number of Federal-Aid routes, including most of the CM Network, and are collected on a rolling basis every 3-5 years by the RPC, DOTD, and local agencies.

The individual Performance Measures assess multiple aspects of system performance that, taken together, provide a comprehensive understanding of congestion's impacts to the region. The Overall Congestion and LOTTR measures indicate reliability – whether congestion levels are consistently the same on roadways over time. The LOTTR measure has the additional benefit of focusing on passenger-mile reliability, thereby tracking impacts to all passenger vehicles including single occupant vehicles (SOVs), high occupant vehicles (HOVs), and public transit. The Truck TTRI similarly indicates reliability for freight vehicles. User Delay Cost and Buffer Time Index highlight the real-world impacts of congestion to people, in terms of both economic cost and time. Finally, Volume measurements provide an overall picture of system use, and allow changes in use to be tracked over time.

ACTION 3 TASKS AND TIMELINE

- Monitor Performance Measures: Reviewed annually in RPC Annual Report
- Reassess Performance Measures to be Used: During CMP updates, in concurrence with MTP updates

ACTION 4: COLLECT DATA / MONITOR SYSTEM PERFORMANCE

As discussed in Action 3 the data required for performance monitoring is available through the NPMRDS or is collected directly be the RPC. Traffic volume data is collected through regular traffic counting programs operated by the RPC and its partners, and NPMRDS data is continuously updated. New and innovative data sources are constantly being developed, and RPC staff regularly investigate new options. When they are deemed appropriate, these new sources and their associated performance metrics will be incorporated into the CMP during regular updates.

System performance will be monitored and summarized in each Annual Report produced by the RPC, and a full System Performance Report will be included in each update of the CMP (completed concurrently with MTP updates). The most recent Report is included in Appendix B.

ACTION 4 TASKS AND TIMELINE

- RPC Annual Report: Produced annually
- System Performance Report: During CMP updates, in concurrence with MTP updates
  Action 2: Define CMP Network

ACTION 5: ANALYZE CONGESTION PROBLEMS AND NEEDS

The previous sections outlined how the CMP will identify the locations of congestion, where it is most severe, and how it changes over time. With this information the RPC can consult with regional stakeholders to accomplish one of the CMP's core tasks: analyzing congestion problems and needs.

The RPC maintains regular communication with local, state and federal stakeholders who all add context to the quantitative data in the System Performance Report. Through avenues such as the Technical Advisory Committee, public participation program, and other regular interactions the RPC can ascertain the perceived causes of congestion in specific locations and describe the overall traveler experience. The information gathered through stakeholder input is summarized in the System Performance Report to provide a comprehensive picture of regional congestion problems and needs. From this, the RPC can then identify mitigation strategies, program their implementation, and evaluate their effectiveness.

ACTION 5 TASKS AND TIMELINE

- Technical Advisory Committee Meetings: Quarterly
- Stakeholder & Public Engagement: Ongoing
- System Performance Report: During CMP updates, in concurrence with MTP updates

ACTION 6: IDENTIFY AND ASSESS CONGESTION MITIGATION STRATEGIES

The RPC's staff of transportation planners continually investigates congestion mitigation strategies and evaluates their potential impact. Regional stakeholders additionally provide input on strategies that may be effective. Special emphasis is given to strategies that are in keeping with the congestion management principles described above and with the RPC's overall planning goals as outlined in the MTP.

STRATEGY OVERVIEW

There are numerous congestion mitigation strategies that vary in effectiveness, cost, sophistication, and difficulty of implementation. Furthermore, each strategy type must be tailored to the specific and can be combined with other strategies for a more comprehensive approach. In this sense, then, there are countless potential methods for reducing congestion. Federal guidance, industry best practices, and the RPC's own policies emphasize maintaining and improving existing transportation infrastructure, leading to a focus on congestion management strategies that improve operations of the current system or manage overall travel demand. Several major congestion management strategies that have proven effective are described below, but this is not an exhaustive list. The RPC will continue to encourage the development of innovative, context-sensitive approaches to congestion management that best fit the needs of the region.

TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS

Transportation Systems Management and Operations (TSMO) can enhance the efficiency of the transportation system through improved operations and management. TSMO strategies are often less expensive and easier to implement than other congestion management approaches, and are therefore be prioritized by the FAST Act. Strategies fall under the broad categories of Access Management, Transportation Systems Management, Incident Management, and Intelligent Transportation Systems.

Access Management strategies control the entrance and exit of vehicles on the roadway to remove potential conflict points between vehicles and/or areas requiring reductions in speed. Examples include removing turning vehicles from through lanes; limiting deceleration requirements (e.g., minimizing stop signs); and separating and limiting conflict areas (e.g., regulating driveway curb cuts).

Operations Management strategies optimize the efficiency of the transportation system by improving the flow of vehicles. Examples include reversible lanes; highway geometric improvements; traffic signal improvements; and enhanced wayfinding.

Incident Management strategies attempt to improve response to roadway incidents such as collisions that may cause non-recurrent congestion. Examples included reducing detection and response times; reducing clearance times; and Motorist Assistance Patrols.

Intelligent Transportation Systems use information technology to improve the functionality of the transportation system. Examples include ramp metering; traveler information and rerouting systems; and electronic commercial vehicle clearance.

TRAVEL DEMAND MANAGEMENT

Travel demand strategies (TDM) take many forms, but all have the general goal of reducing the need to travel by SOV. Some TDM strategies, such as increased ridesharing, are particularly useful in suburban applications where commute distances are longer. Others, such as

improving transit ridership, are more appropriate for implementation in denser, more urban contexts.

TDM strategies, like TSMO strategies, are encouraged by federal legislation. They attempt to directly reduce Vehicle Miles Travelled (VMT), thereby reducing congestion and its various negative impacts. The RPC has taken a particular interest in implementing TDM, largely due to its relatively low costs and the potentially strong correlation between lower VMT and reduced congestion. Selected TDM strategies are described below.

HOV Usage can be increased through programs that encourage carpooling and vanpooling, and through provision of dedicated infrastructure such as HOV lanes.

Alternative Work Arrangements reduce the number of commuters at peak hours by encouraging and aiding employers to implement policies such as flexible work hours, remote working, or satellite offices.

Parking Supply & Pricing Management attempt to encourage walking in dense urban areas by regulating the price and supply of parking spaces. Briefly, pricing structures can be adopted wherein spaces in premium locations have higher prices, and drivers not wishing to pay the higher prices will not try to find spaces in prime locations. This results in a decrease in the number of drivers driving on urban streets looking for parking spaces, a significant cause of congestion. Centralized parking lots can similarly reduce the number of drivers on urban streets by offering a small number of parking options rather than a multitude of decentralized, dispersed locations. Both strategies also encourage pedestrian activity in urban areas, as most drivers are required to walk from their parking space to their eventual destination.

Transit, Bicycling, and Walking Improvements mitigate congestion by reducing the number of vehicles on the roadway. Use of these modes can be increased through education and outreach as well as directly improving infrastructure and services.

CAPACITY INCREASES

Roadway capacity increases (i.e., adding travel lanes) are often seen as primary tool for reducing congestion. However, both federal legislation and RPC policy prioritize CM strategies that maintain the existing transportation system while still improving mobility and accessibility. These are very often more cost effective than capacity increases, and typically have a longer lasting and more sustainable impact on congestion. Generally, capacity increases are to be considered a strategy alternative of last resort. In some cases capacity increases are necessary, however, and the CMP should be an aid in identifying and selecting the situations in which they are implemented.

Federal regulations (23 CFR 450.322) require that where the addition of general purpose lanes (i.e., an SOV capacity increase) is deemed appropriate consideration should be given to other congestion management strategies for incorporation into the project, thereby increasing the likelihood the facility will continue to operate effectively in the future. The regulations also stipulate that regions designated as nonattainment areas for ozone or carbon monoxide under

the Clean Air Act may not use federal funds to significantly increase SOV capacity unless the project is addressed through a congestion management process that uses a higher standard for analysis than regions in attainment, as described in 23 CFR 25.322 (e) and (f). None of the four MPA's served by the RPC are in non-attainment status as of the writing of this document; however, this CMP will attempt to meet the standards for non-attainment regions where practicable. This will ensure that capacity increases, which can increase VMT and ultimately lead to more congestion, are only implemented where other strategies will not be effective. It will also position the RPC to be in compliance with the regulations in the event one or more MPA's in the region fall into nonattainment.

When potential increases in SOV capacity are considered on any of the region's roadways, the RPC will, when practicable, analyze the potential impact of TDM, TSMO, or other appropriate strategies that may reduce congestion without the need for the capacity increase. If the analysis demonstrates that alternative strategies cannot adequately reduce congestion, and that a capacity increase is needed, the RPC will identify strategies to manage the new capacity safely and effectively. Where possible, other congestion management strategies will also be incorporated into the capacity increase project or otherwise programmed by the RPC for implementation. There are two important exceptions to this process that eliminate the need for the analysis described above: safety improvements and the elimination of bottlenecks. Potential projects falling under these categories will be analyzed based on their impacts to safety and/or bottleneck elimination, but where possible should also include additional congestion reduction strategies.

STRATEGY SELECTION

Potential strategies will be identified through three primary sources: stakeholder input; public participation; and internal RPC analysis. Stakeholder input is routinely received at Technical Advisory Committee (TAC) and TPC meetings, as well as through ongoing agency coordination efforts. The RPC also regularly conducts public participation as guided by its public participation process. Finally, RPC staff as regional transportation planners, can be expected to independently identify potential congestion reduction strategies.

In most cases the best method for identifying strategies is through direct interaction with stakeholders, who provide insight that is unavailable from any other source. While objective tools such as the Performance Measures are indispensable for assessing the performance of the regional transportation system and identifying congestion priorities, they cannot identify the unique conditions of specific corridors that can have a drastic impact on the congestion management strategies that are appropriate for implementation. The potential cumulative effects of proposed changes to the transportation system can only truly be assessed through the collaboration of multiple stakeholders.

Once identified, strategies will be analyzed for their potential impact and selected based on overall feasibility and effectiveness. The analysis and selection process typically takes the form of internal RPC analysis or studies conducted under RPC management. Such analyses will take into consideration the strategies described above, current best practices, and the evaluations of previously implemented strategies described in Action 8.

The RPC may also be involved in projects that are not specifically focused on congestion but could incorporate congestion reduction strategies. To ensure that congestion mitigation is considered in as many circumstances as possible the RPC will incorporate the assessment of potential strategies into work plans and project scopes wherever appropriate.

All potential congestion mitigation strategies will be considered and analyzed through the lens of the CMP Principles, Objectives, and Performance Measures. Projects that adhere most closely the Principles and Objectives, and which are likely to have the greatest positive impact on the Performance Measures, will be prioritized for implementation.

ACTION 6 TASKS AND TIMELINE

- Analyze and Select CM Strategies: Ongoing

ACTION 7: PROGRAM AND IMPLEMENT STRATEGIES

To be implemented, projects must be approved for inclusion in the TIP by the Transportation Policy Committee. For this to occur the RPC must accomplish the following tasks:

- Identify project funding and primary stakeholders.
- Conduct any necessary feasibility and environmental impact studies.
- Identify an implementation schedule, timeline, and scope of work.
- Present project to the Transportation Policy Committee for consideration.

As mentioned previously recent federal guidance places a strong emphasis on planning and programming projects using a performance-based approach. The RPC incorporates performance measurements throughout the CMP to ensure implementation decisions are data-driven. System performance is used to identify and prioritize congestion throughout the region, and the performance impacts of potential congestion mitigation strategies influence project selection. Data is further used to evaluate strategy effectiveness and inform future planning, as described in Action 8. Through continued application of this process the CMP supports the performance-driven principles of PBPP.

ACTION 7 TASKS AND TIMELINE

- TIP Update: Every 4 Years, amendments as necessary

ACTION 8: EVALUATE STRATEGY EFFECTIVENESS

Once congestion reduction projects have been implemented, their impacts must be tracked and measured over time. Evaluating strategy effectiveness provides critical feedback on which types of projects can have the greatest effect on reducing regional congestion. Such evaluations can then be used in future strategy selection. This component of the CMP includes three major tasks: (1) tracking implemented congestion reduction strategies; (2) evaluating strategy effectiveness regionally and in specific locations; and (3) incorporating evaluations into future strategy selection efforts.

Tracking Implemented Strategies: The RPC tracks all projects in the MTP and TIP, and implemented projects are listed in the Annual List of Obligated Projects. An internal project scoring system categorizes expected project impacts by topic area, including congestion reduction. In each update of the CMP, a list of projects with a congestion reduction component implemented since the last update will be included in the System Performance Report.

Evaluating Effectiveness: Projects are evaluated at two scales: regionally and at their location of implementation. Regional improvements are tracked over time via the region-wide Performance Measures described in the System Performance Report. Newly available longitudinal data also makes it possible to track changes at specific locations. This enables the RPC to identify how Performance Measures have changed in relation to implemented projects. Within each System Performance Report a selection of previously implemented congestion mitigation projects will be analyzed for potential impacts to congestion measures. While it is impossible to analyze every implemented project individually a representative sample of projects will be used to provide information about the effectiveness of project types in varying contexts.

Incorporating Evaluations Into Future Strategy Selection: The CMP is intended to be an iterative process wherein information gathered through analysis of past efforts informs future decision making. The strategy evaluations conducted as part of the CMP will therefore be included in future RPC efforts to identify new congestion mitigation projects, as described in Action 6 above.

ACTION 8 TASKS AND TIMELINE

- Track Implemented Strategies: MTP and TIP updates every four years; Annual List of Obligated Projects produced annually; System Performance Report during CMP updates, in concurrence with MTP updates
- Evaluating Effectiveness: System Performance Report during CMP updates, in concurrence with MTP updates
- Incorporating Evaluations Into Future Strategy Selection: Ongoing

CONCLUSION

The CMP outlined in this document constitutes an ongoing, iterative series of actions that will allow the RPC to continually monitor regional congestion and identify strategies for its reduction. It is both data- and stakeholder-driven, and supportive of the RPCs broader planning goals and policies. The process will be accomplished through the eight actions described herein. The specific tasks and timeline for completion of those actions is summarized below.

Action 1: Develop Regional Objectives for Congestion Management

- Ensure CMP complies with stated Principles: Ongoing
- Evaluate federal-required congestion performance measures: Every 4 years in concurrence with MTP updates
- RPC Annual Report: Annually
- System Performance Report: During CMP updates, in concurrence with MTP updates

Action 2: Define CMP Network

- Monitor Data on CM Network and Other Major Routes: Ongoing
- Update CM Network Designations: During CMP updates, in concurrence with MTP updates

Action 3: Develop Multimodal Performance Measures

- Monitor Performance Measures: Reviewed annually in RPC Annual Report
- Reassess Performance Measures to be Used: During CMP updates, in concurrence with MTP updates

Action 4: Collect Data / Monitor System Performance

- RPC Annual Report: Produced annually
- System Performance Report: During CMP updates, in concurrence with MTP updates
  Action 2: Define CMP Network

Action 5: Analyze Congestion Problems and Needs

- Technical Advisory Committee Meetings: Quarterly
- Stakeholder & Public Engagement: Ongoing
- System Performance Report: During CMP updates, in concurrence with MTP updates

Action 6: Identify and Assess Congestion Mitigation Strategies

- Analyze and Select CM Strategies: Ongoing

Action 7: Program and Implement Strategies

- TIP Update: Every 4 Years, amendments as necessary

Action 8: Evaluate Strategy Effectiveness

- Track Implemented Strategies: MTP and TIP updates every four years; Annual List of Obligated Projects produced annually; System Performance Report during CMP updates, in concurrence with MTP updates
- Evaluating Effectiveness: System Performance Report during CMP updates, in concurrence with MTP updates
- Incorporating Evaluations Into Future Strategy Selection: Ongoing

APPENDICES

APPENDIX A: LIST OF CONGESTION MANAGEMENT ROUTES

Congestion Management Route	Begin	End	Parish(es)
Brownswitch Rd.	US 11	LA 1090 / Military Rd.	St. Tammany
Canal St. / Blvd.	Robert E. Lee Blvd.	Convention Center Blvd.	Orleans
Carrollton Ave.	Esplanade Ave.	St. Charles Ave.	Orleans
Causeway	LA 22	River Rd.	Jefferson, St. Tammany
E. Causeway Approach	Causeway	US 190	St. Tammany
Harrison Ave.	US 190	LA 59	St. Tammany
Hickory Ave. / Dickory Dr. / David Dr. / Power Blvd.	W. Esplanade Ave.	LA 48 / Jefferson Hwy.	Jefferson
I-10	St. James / St. John the Baptist Parish Line	LA / MS State Line	Jefferson, Orleans, St. Charles, St. John the Baptist, St. Tammany
I-12	I-10 / I-59	I-10 / I-59	Livingston, St. Tammany, Tangipahoa
I-310	US 90 West	US 90 West	St. Charles
I-510/LA 47/Paris Rd.	I-10	LA 46 / St. Bernard Hwy.	Orleans, St. Bernard
I-55	North MPA Boundary	I-55 SB Exit #22	Tangipahoa
I-59	I-12 / I-10	LA / MS State Line	St. Tammany
I-610	I-10 West Interchange	I-10 East Interchange	Orleans
LA 1077	LA 22	US 190	St. Tammany
LA 1085 / Bootlegger Rd.	LA 22	LA 21	St. Tammany
LA 1088	LA 59	LA 36	St. Tammany
LA 1090 / Military Rd.	Gause Blvd.	US 11	St. Tammany
LA 1091 / Robert Rd.	Gause Blvd.	US 11	St. Tammany
LA 21 (North)	US 190	LA 59	St. Tammany
LA 21 (South)	LA 1077	US 190	St. Tammany
LA 22 / Pine St.	Tangipahoa / Livingston Parish Line	N. Causeway Blvd.	St. Tammany, Tangipahoa
LA 23 / Belle Chasse Hwy.	US 90 B / Westbank Expressway	Russel Dr.	Jefferson, Plaquemines
LA 25	US 190	LA 40	St. Tammany
LA 3021 / Elysian Fields Ave.	Leon C. Simon Ave.	N. Peters St.	Orleans

LA 3134 / Lafitte Pkwy.	Barataria & Lafitte Pkwy. (N Intersection)	Barataria & Lafitte Pkwy. (S Intersection)	Jefferson
LA 3139 / Earhart / Calliope St.	Dickory Ave.	Convention Center Blvd.	Jefferson, Orleans
LA 3152 / Clearview Pkwy.	W. Esplanade Ave.	LA 48 / Jefferson Hwy.	Jefferson
LA 3188 / Belle Terre Blvd.	I-10	Airline Hwy. / Fairway Dr.	St. John the Baptist
LA 3234 / W. University Ave.	I-55	N. Cherry St. / LA 1065	Tangipahoa
LA 36 / Abita Hwy.	LA 21	Dundee St.	St. Tammany
LA 39 / Claiborne Ave. / N. Robertson St. / Judge Perez Dr.	Tulane Ave.	LA 300	Orleans, St. Bernard
LA 407 / Gen. DeGaulle Blvd.	US 90 B / Westbank Expressway	LA 406 / Woodland Hwy.	Orleans
LA 41	LA 36	US 11	St. Tammany
LA 433 (East)	Pontchartrain Dr.	I-10	St. Tammany
LA 433 (West)	US 190	Carroll Rd.	St. Tammany
LA 434	US 190	LA 36	St. Tammany
LA 437	US 190	LA 1081	St. Tammany
LA 437 S / Columbia St.	US 190	US 190 B	St. Tammany
LA 45 / Barataria Blvd.	US 90 B	Barataria & Lafitte Pkwy. (N Intersection)	Jefferson
LA 46 / N. Rampart Ave. / St. Claude Ave. / St. Bernard Hwy.	Canal St.	LA 39	Orleans, St. Bernard
LA 48 / Jefferson Hwy.	Williams Blvd.	Clearview Ave.	Jefferson
LA 59	US 190	LA 21	St. Tammany
Lapalco Blvd. / Behrman Hwy.	US 90	Gen. DeGaulle Blvd.	Jefferson, Orleans
Manhattan Blvd.	US 90 B / Westbank Expwy.	Lapalco Blvd.	Jefferson
Northshore Blvd. / Airport Rd.	US 190	Bellaire Blvd.	St. Tammany
Pontchartrain Expwy. / Westbank Expwy.	I-10	US 90	Jefferson, Orleans
R.E. Lee Blvd. / L.C. Simon Blvd. / Hayne Blvd.	Lake Ave.	LA 47 / Paris Rd.	Jefferson, Orleans
Read Blvd.	Hayne Blvd.	Almonaster Ave.	Orleans

St. Charles Ave.	Carrollton Ave.	US 90 B / Ponchartrain Expressway	Orleans
Tchoupitoulas St.	Napoleon Ave.	US 90 B / Pontchartrain Expressway	Orleans
Terry Pkwy. / Wall Blvd.	US 90 B / Westbank Expwy.	Lapalco Blvd.	Jefferson
US 11	I-10	LA 41	Orleans, St. Tammany
US 190 / Ronald Reagan Hwy. / Gause Blvd. / Military Rd.	Tangipahoa / Livingston Parish Line	Military Rd. & 190B	St. Tammany, Tangipahoa
US 190B (East) / Fremaux Ave.	Front St. / US 11	Military Rd.	St. Tammany
US 190B (West) / Boston St.	US 190 (West Int.)	US 190 (East Int.)	St. Tammany
US 51 (North) / Morrison Blvd. / N.W. Central Ave. / S. 1st St.)	North MPA Boundary	I-55 (Exit 28)	Tangipahoa
US 51 (South)	I-10	US 61 / Airline Hwy.	St. John the Baptist
US 51 B / Oak St. / Carter Ln. / Railroad Ave. / Veterans Blvd.	LA 3234	I-55 Exit 23	Tangipahoa
US 61 / Airline Hwy. / US 61	St. James / St. John the Baptist Parish Line	Claiborne Ave.	Jefferson, Orleans, St. Charles, St. John the Baptist
US 90 (East) / Broad St. / Gentilly Ave. / Chef Menteur Hwy.	Tulane Ave.	Alcee Fortier Blvd.	Orleans
US 90 (West) / Jefferson Hwy. / Claiborne Ave.	West MPA Boundary	Tulane Ave.	Jefferson, Orleans
Veterans Blvd.	Williams Blvd.	West End Blvd.	Jefferson, Orleans
W. Causeway Approach	LA 22	Causeway	St. Tammany
W. Esplanade Ave.	Loyola Dr.	Lake Ave.	Jefferson
Williams Blvd.	Sunset Blvd.	LA 48	Jefferson

APPENDIX B: SYSTEM PERFORMANCE REPORT