Gulf Regional Planning Commission

2050 Metropolitan Transportation Plan | GRPC MPO

Technical Report #3

Transportation Performance Management

September 2025

Prepared by:

NEEL-SCHAFFER

Gulf Regional Planning Commission

2050 Metropolitan Transportation Plan

This Plan was prepared as a cooperative effort of the U.S. Department of Transportation (USDOT), Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Mississippi Department of Transportation (MDOT), and local governments in partial fulfillment of requirements in Title 23 USC 134 and 135, amended by the IIJA, Sections 11201 and 11525, October 1, 2021. The contents of this document do not necessarily reflect the official views or policies of the USDOT.

Table of Contents

1.0 Introduction

The 2050 Metropolitan Transportation Plan (MTP) for the Gulf Regional Planning Commission follows related federal regulations described in the Infrastructure Investment and Jobs Act (IIJA) and the principles of Performance-Based Planning and Programming (PBPP).

IIJA regulations require all Metropolitan Planning Organizations (MPOs) to track specific transportation performance measures related to national goals and to either set their own targets for these measures or support state targets. These regulations also require the establishment of responsibilities related to development and maintenance of performance measures and targets between MPOs, each state's Department of Transportation (DOT), and transit agencies. This is done through Memoranda of Understanding (MOU), which were established for cooperatively developing, sharing, and reporting information related to performance measures and performances targets.

PBPP refers to the methods transportation agencies use to apply performance management as standard practice in their planning and programming processes. The goal of PBPP is to ensure that transportation investment decisions help meet established goals. As a federal requirement, states will invest resources in projects to achieve individual targets that make collective progress toward national goals. MPOs, through their MTP and Transportation Improvement Program (TIP), must also work toward meeting individual targets or supporting state targets.

This report addresses the specific performance measures required by federal transportation performance management regulations. It also discusses future actions that the MPO can take to improve regional performance and further support state targets. A more complete assessment of current transportation conditions by mode can be found in *Technical Report #2: State of Current Systems*.

1.1 National Goal Areas and Measures

Through the federal rule-making process, the Federal Highway Administration (FHWA) requires state DOTs and MPOs to monitor the transportation system using specific performance measures associated with the national goal areas prescribed in MAP-21 and continued in subsequent transportation legislation. These are:

Safety Performance (PM1)

Goal: To achieve a significant reduction in traffic fatalities and serious injuries on all public roads

Performance Measure:

1. Number of fatalities
2. Fatality rate (per 100 million vehicle miles traveled)
3. Number of serious injuries
4. Serious injury rate (per 100 million vehicle miles traveled)
5. Number of non-motorized fatalities and non-motorized serious injuries

Bridge/Pavement Performance (PM2)

Goal: To maintain the highway infrastructure asset system in a state of good repair

Performance Measure:

1. Percentage of pavements on the Interstate System in good condition
2. Percentage of pavements on the Interstate System in poor condition
3. Percentage of pavements on the non-Interstate National Highway System (NHS) in good condition
4. Percentage of pavements on the non-Interstate NHS in poor condition
5. Percentage of NHS bridges classified as in good condition
6. Percentage of NHS bridges classified as in poor condition

System Performance (PM3)

Goal: To maintain the suitability and reliability of the transportation system while providing good air quality

Performance Measure:

1. Percent of person-miles traveled that are reliable (Interstate)
2. Percent of person-miles traveled that are reliable (Non-Interstate NHS)
3. Truck Travel Time Reliability
4. Percent of Non-Single Occupancy Vehicle Travel
5. Annual Hours of Peak-Hour Excessive Delay
6. Volatile Organic Compound Reduction
7. Nitrogen Oxides (NOx) reduction

1.2 Transit Goal Areas and Measures

Transit Asset Management (TAM) Performance

The Federal Transit Administration (FTA) requires that public transit fund recipients, including states, local authorities, and public transportation operators, establish performance targets for safety and state of good repair. They must also develop transit asset management and safety plans and report their progress toward achieving targets. These operators must share information with MPOs and states so that all plans and performance reports are coordinated. Coast Transit Authority (CTA) has developed information and targets for the following four state of good repair performance measures:

1. **Rolling Stock:** The percentage of revenue vehicles (by type) that exceed the useful life benchmark (ULB).
2. **Equipment:** The percentage of non-revenue service vehicles (by type) that exceed the ULB.
3. **Facilities:** The percentage of facilities (by group) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale.
4. **Infrastructure:** The percentage of track segments (by rail mode) that have performance restrictions due to a rating of less than 3.0 on the TERM Scale.

Transit Safety

In addition to TAM, the FTA requires the establishment of Public Transportation Agency Safety Plans (PTASP). These require certain operators of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems.

Since CTA receives federal financial assistance under the Urbanized Area Formula Program (49 U.S.C. § 5307) that operates public transportation, it is required to set safety performance targets consistent with FTA regulations.

1.3 Federal Requirements

Targets

- The Gulf Regional Planning Commission (GRPC), as the MPO for the Gulf Coast planning area, is required to establish performance targets no later than 180 days after the Mississippi Department of Transportation (MDOT) or CTA set their respective performance targets.
- For each performance measure, the MPO reviewed the state targets and voted to support them.
- GRPC, MDOT, and CTA must coordinate performance measure targets to ensure consistency to the fullest extent practicable.

Reporting

- The MTP update must describe the performance measures and targets, evaluate the performance of the transportation system, and report on progress made in subsequent MTP updates.
- The TIP must link investment priorities to the targets in the MTP and describe, to the fullest extent practicable, the anticipated effect of the program on achieving established targets.
- The GRPC must also report to MDOT the baseline roadway transportation system condition, performance data, and progress toward achieving targets.

Assessments

- FHWA and FTA will not directly evaluate the GRPC's progress toward meeting performance measure targets, however, the GRPC's performance will be assessed as part of regular cyclical transportation planning process reviews.
- FHWA and FTA will determine if MDOT and CTA have met or made significant progress toward selected targets for the transportation system.

The scorecards on the following pages display the MPO's baseline performance and comparisons to state baseline performance and targets.

1.4 MPO Performance Measure Scorecards

Transportation Performance Management Scorecard

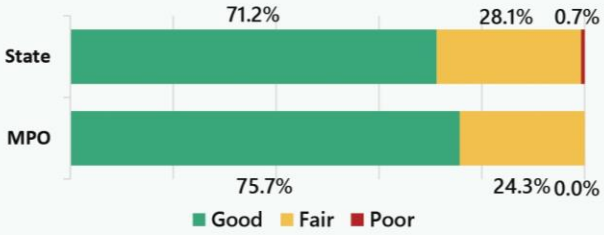
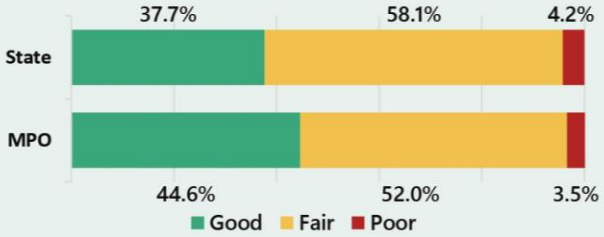
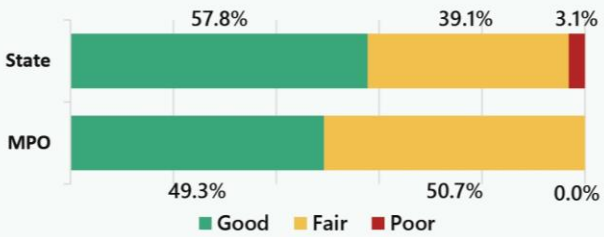
Legend

Safety Performance Measures (PM1)

Measure	Five-Year State Rolling Average	Five-Year MPO Rolling Average	Target	Score	Analysis Description
Number of Fatalities	719.2	71.6	757.0		The number of fatalities within the region is less than 10% of the overall state average.
Rate of Fatalities (per 100 Million Vehicle Miles Traveled)	1.780	1.583	1.860		The rate of fatalities within the region meets the state target and performs better than the state average.
Number of Serious Injuries	3,064.0	467.6	3,217.0		The number of serious injuries within the region comprises 15% of the overall state average.
Rate of Serious Injuries (per 100 Million Vehicle Miles Traveled)	7.577	10.339	7.920		The rate of serious injuries within the region is nearly one and a half times the state average and does not meet the state target.
Number of Non-Motorized Fatalities & Serious Injuries	281.8	59.8	271.0		The number of non-motorized fatalities and serious injuries within the region is less than 22% of the overall state average.

Source: Fatality Analysis Reporting System (FARS); MDOT (2019-2023)

Bridge/Pavement Performance Measures (PM2)

Measure	Trends	Target	Score	Analysis Description
Pavements of the Interstate System		Good ≥55.0%		The percent of Interstate pavements in Good condition within the region meets the state target and performs better than the state value.
		Poor ≤5.0%		The percent of Interstate pavements in Poor condition within the region meets the state target and performs better than the state value.
Pavements of the Non-Interstate NHS		Good ≥20.0%		The percent of Non-Interstate pavements in Good condition within the region meets the state target and performs better than the state value.
		Poor ≤10.0%		The percent of Non-Interstate pavements in Poor condition within the region meets the state target but is close to being below the state average.
NHS Bridges		Good ≥45.0%		The percent of NHS bridges in Good condition by deck area in the region meets the state target but performs worse than the state value.
		Poor ≤5.0%		The percent of NHS bridges in Poor condition by deck area in the region meets the state target and performs better than the state value.

Source: MDOT, National Bridge Inventory (NBI) (2024)

System Performance Measures (PM3)					
Measure	State Trend	MPO Trend	Target	Score	Analysis Description
Percent of Person-Miles Traveled on the Interstate that are Reliable	99.9%	100.0%	93.0%		The percent of reliable person-miles traveled on the Interstates in the region meets the state target and performs better than the state value.
Percent of Person-Miles Traveled on the Non-Interstate NHS that are Reliable	96.0%	97.4%	85.0%		The percent of reliable person-miles traveled on the Non-Interstate NHS routes in the region meets the state target but is in need of improvement to stay ahead of the state value.
Truck Travel Time Reliability (TTTR) Index on the Interstate	1.15	1.30	1.40		The TTTR within the region meets the state target but performs worse than the state value.
Peak Hour Excessive Delay (PHED)	0.00	N/A	10.80	N/A	N/A
Non-Single Occupancy Vehicle Travel (SOV)	0.0%	N/A	16.2%	N/A	N/A

Source: National Performance Management Research Data Set (NPMRDS) (2023)

Transit Asset Management (TAM)

Measure	Asset Category	MPO Trend	Target	Score	Analysis Description
Vehicle Asset Inventory					
Percent of Revenue Vehicles Exceeding Useful Life Benchmark (ULB)	Bus 	0%	45%		
	Cutaway 	0%	45%		All minivans within the region are beyond their Useful Life Benchmark. Otherwise, the region meets its target for vehicles.
	Van 	0%	45%		
	Minivan 	100%	45%		
Equipment					
Percent of Non-Revenue Vehicles Exceeding Useful Life Benchmark (ULB)	Trucks & Other Rubber Tire Vehicles 	0%	67%		The percent of non-revenue vehicles exceeding the ULB meets the target.
Facilities					
Percent of Facilities Rated Under 3.0 on the Transit Economic Requirements Model (TERM) Scale	Administrative Office/Sales Office 	0%	25%		
	Maintenance Facility (Service & Inspection) 	0%	25%		None of the facilities are rated under 3.0 on the TERM Scale.
	Surface Parking Lot 	0%	30%		
Infrastructure					
Not Applicable in the GRPC Metropolitan Planning Area					

Source: National Transit Database (NTD) (2019-2023)

Transit Safety					
Measure	Mode	Five-Year MPO Rolling Average	Target	Score	Analysis Description
Number of Fatalities by Mode	Demand Responsive	0.0	*	*	*
	Motor Bus	0.0	*	*	*
	Vanpool	0.0	*	*	*
Rate of Fatalities per 100,000 Total Vehicle Revenue Miles by Mode	Demand Responsive	0.00	*	*	*
	Motor Bus	0.00	*	*	*
	Vanpool	0.00	*	*	*
Number of Injuries by Mode	Demand Responsive	1.0	*	*	*
	Motor Bus	6.8	*	*	*
	Vanpool	0.0	*	*	*
Rate of Injuries per 100,000 Total Vehicle Revenue Miles by mode	Demand Responsive	0.20	*	*	*
	Motor Bus	0.87	*	*	*
	Vanpool	0.00	*	*	*

Source: Integrated National Transit Database (iNTD) (2019-2023)

Transit Safety

Measure	Mode	Five-Year MPO Rolling Average	Target	Score	Analysis Description
Number of Safety Events by Mode	Demand Responsive	1.2	*	*	*
	Motor Bus	6.4	*	*	*
	Vanpool	0.0	*	*	*
Rate of Safety Events per 100,000 Total Vehicle Revenue Miles by Mode	Demand Responsive	0.30	*	*	*
	Motor Bus	0.82	*	*	*
	Vanpool	0.00	*	*	*
Mean Distance Between Major Mechanical Failures by Mode	Demand Responsive	22,540	*	*	*
	Motor Bus	47,628	*	*	*
	Vanpool	157,958	*	*	*
Collision Rate by Mode	Demand Responsive	0.0	*	*	*
	Motor Bus	0.2	*	*	*
	Vanpool	0.0	*	*	*

Source: Integrated National Transit Database (iNTD) (2019-2023)

Transit Safety					
Measure	Mode	Five-Year MPO Rolling Average	Target	Score	Analysis Description
Pedestrian Collision Rate by Mode	Demand Responsive	0.0	*	*	*
	Motor Bus	0.0	*	*	*
	Vanpool	0.0	*	*	*
Vehicular Collision Rate by Mode	Demand Responsive	0.0	*	*	*
	Motor Bus	0.2	*	*	*
	Vanpool	0.0	*	*	*
Transit Worker Fatality Rate by Mode	Demand Responsive	0.0	*	*	*
	Motor Bus	0.0	*	*	*
	Vanpool	0.0	*	*	*
Transit Worker Injury Rate by Mode	Demand Responsive	0.0	*	*	*
	Motor Bus	0.0	*	*	*
	Vanpool	0.0	*	*	*

Source: Integrated National Transit Database (iNTD) (2019-2023)

Transit Safety					
Measure	Mode	Five-Year MPO Rolling Average	Target	Score	Analysis Description
Assaults on Transit Workers by Mode	Demand Responsive	0.0	*	*	*
	Motor Bus	0.0	*	*	*
	Vanpool	0.0	*	*	*
Rate of Assaults on Transit Workers by Mode	Demand Responsive	0.0	*	*	*
	Motor Bus	0.0	*	*	*
	Vanpool	0.0	*	*	*
Major Events by Mode	Demand Responsive	0.2	*	*	*
	Motor Bus	1.2	*	*	*
	Vanpool	0.0	*	*	*
Major Events Rate by Mode	Demand Responsive	0.1	*	*	*
	Motor Bus	0.2	*	*	*
	Vanpool	0.0	*	*	*

Source: Integrated National Transit Database (iNTD) (2019-2023)

In April 2024 FTA published an update to the National Safety Plan. The update established new performance measures to improve safety of public transportation systems. Each transit agency subject to PTASP regulations must revise its Agency Safety Plan to address the new safety performance measures during the next annual review and update cycle of the Agency's Safety Plan. This section will be updated once targets have been established by CTA.

2.0 Future MPO Actions

2.1 Safety Performance (PM1)

The GRPC MPO did not meet the target for the rate of serious injuries. However, this is not unexpected or uncommon for urbanized areas due to their higher populations and traffic volumes. The region accounts for fifteen percent of serious injury crashes, despite representing only ten percent of the population. This increase is notable when compared to the previous MTP, which accounted for eleven percent of serious injury crashes and ten percent of the statewide population.

To support the state targets and help improve statewide performance, the MPO can explore ways to reduce fatalities and serious injuries on its roadways. Strategies to reduce fatality and serious injury rates include:

- Keep roadways and bridges maintained and as congestion-free as possible.
- Work with state and local officials, as well as other safety stakeholders, to reduce fatalities and serious injuries on roadways.
- Coordinate with MDOT to develop their state Highway Safety Improvement Program (HSIP).
- Ensure that transportation projects and safety improvements are coordinated with the state Strategic Highway Safety Plan (SHSP).
- Identify safety programs that may be implemented.
- Consider how projects placed in the Transportation Improvement Program will impact safety.
- Increase the implementation of Complete Streets to reduce congestion, lower speeds, and provide safer facilities for non-motorized users.
- Conduct driver education and safety enforcement campaigns which include monitoring seatbelt usage, distracted driving, and DUI involvement.
- Implement the projects and strategies identified in the recently completed Safe Streets and Roads For All plan.

2.2 Bridge/Pavement Performance (PM2)

The MPO meets established pavement condition targets for Interstate systems, non-Interstate pavements, and NHS bridges. For each of these categories there was a moderate decrease of pavements/bridges in good condition when compared to the 2045 MTP. While region remained consistent for systems in poor condition, a significant number of bridges within the region are in Fair Condition and are expected to deteriorate over time.

Actions and strategies the MPO can undertake to maintain or improve bridge and pavement conditions include:

- Prioritize timely repairs and pavement resurfacing on routes with deteriorating pavement conditions.
- Work with state and local stakeholders to identify and repair pavement cracking, rutting, potholes, etc.
- Reduce or eliminate heavy vehicle traffic on roadways with poor pavement conditions by establishing designated truck routes on roadways with better pavement conditions.
- Use the local Intelligent Transportation System (ITS) infrastructure to monitor roadway conditions and redirect drivers to less congested routes to reduce vehicle loads and pavement condition deterioration.
- Employ Travel Demand Management (TDM) strategies.
- Prioritize repairs on bridges in Poor Condition, followed by those in Fair Condition, to avoid the need for route closures and emergency repairs. These bridges should be prioritized through the plan's operation and maintenance budget.

Where possible, the MPO can coordinate with MDOT to apply for applicable federal grants for bridge repairs and maintenance. While there is no guarantee of receiving these funds, grants would allow the MPO to expedite bridge repairs and bring as many bridges as possible to Good Condition.

2.3 System Performance (PM3)

The MPO region has two interstate segments for the purpose of Truck Travel Time Reliability (TTTR), I-10 and I-110. The National Performance Management Research Dataset (NPMRDS) data shows that travel time reliability for both Interstate and non-Interstate NHS routes within the region meet the state target. However, it should be noted that the performance of TTTR decreased compared to the 2045 MTP TTTR value of 1.12.

Actions the MPO may take to continue supporting reliability measures include:

- Encourage law enforcement to remove crashes from travel lanes to reduce congestion.
- Use ITS to advise motorists of roadway conditions and redirect drivers to less congested routes.
- Implement signal coordination projects to reduce congestion.
- Schedule roadway work at off-peak times.
- Employ Travel Demand Management strategies.
- Develop roadway projects that provide parallel routes and increase the connectivity of the roadway system. Alternative routes can also be used in the event of roadway closure or congestion.
- Promote the use of Complete Streets design concepts and provide additional non-motorized and public transportation options.

2.4 Transit Asset Management (TAM) Performance

Of the vehicles operated by Coast Transit Authority (CTA), all except for minivans meet established State of Good Repair (SGR) targets. Of minivans within the fleet, none meet STG targets. As a result, the CTA will need to incorporate newer minivans while phasing out older vehicles in order to maintain and upgrade its fleet.

Of the CTA facilities, none rate below 3.0 on the Transit Economic Requirements Model (TERM) scale. To maintain this performance, CTA should continue regular maintenance efforts in the facilities to upgrade and/or fix any elements requiring repair.

2.5 Transit Safety

As CTA is a recipient and sub-recipient of federal financial assistance under the Urbanized Area Formula Program (49 U.S.C. § 5307) that operates public transportation, it is required to set safety performance targets for the following measures:

1. **Fatalities:** Total number of reportable fatalities and rate per vehicle revenue miles by mode.
2. **Injuries:** Total number of reportable injuries and rate per vehicle revenue miles by mode.
3. **Safety Events:** Total number of reportable events and rate per vehicle revenue miles by mode.
4. **System Reliability:** Mean distance between major mechanical failures by mode.

The Federal Transit Administration (FTA) states that:

> *"Each transit provider is required to review its agency safety plan annually and update the plan, including the safety performance targets, as necessary. The MPO is not required to set new transit safety targets each year but can choose to revisit the MPO's safety targets based on the schedule for preparation of its system performance report that is part of the Metropolitan Transportation Plan (MTP).*"

To improve performance, GRPC can coordinate with CTA to consider the following actions:

- Keep the roadways and bridges maintained and as congestion-free as possible, reducing the chance of collisions and crashes.
- Work with state and local officials, as well as other safety stakeholders and CTA, to reduce the frequency and severity of transit-related incidents.
- Coordinate with MDOT during development of the state's Highway Safety Improvement Program (HSIP) to place emphasis on transit-related safety concerns.
- Ensure that transit projects and safety improvements are coordinated with the state's Strategic Highway Safety Plan (SHSP).
- Identify safety programs and educational opportunities that may be implemented by transit providers, and coordinate with state and local partners to secure funding to implement these programs.
- Identify educational opportunities to teach drivers of personal vehicles how to share the road with transit vehicles.
- Consider how projects in the Transportation Improvement Program will improve transit service and safety.