Vision2045 Metropolitan Transportation Plan – Vision2045 Admendment # 8

Updated State Safety Performance Targets are in Red.

Performance-Based Planning

The FAST Act requires states and MPOs to develop performance measures for their long-range transportation plans. Performance-based planning and programming (PBPP) is an integral component within transportation performance management, a strategic approach that uses data to support decisions that help to achieve performance goals. Performance-based planning is the use of a strategic direction (goals and objectives) and performance trends to drive the development of agency strategies and priorities in the long-range transportation plan (LRTP) and other performance-based plans (e.g., safety, asset management, mobility/operations, freight, etc.). The identified strategies and priorities in these plans lead to the programming of projects selected to make progress toward performance targets, objectives and goals.⁴

States and MPOs must develop performance measures for their long-range transportation plans in accordance with the Moving Ahead for Progress in the 21st Century Act (MAP-21), which has been replaced with the Fixing America's Surface Transportation Act (FAST Act). While the law provides broad national goals for performance measures, the states and MPOs are required to jointly develop quantifiable targets for transportation plans based on regulations promulgated by the Federal Highway and Transit Administrations. These performance measures were enacted to help improve highway safety, travel time reliability, among other important areas to help create and maintain a safe, efficient transportation network.

In order to build the framework and jointly develop performance measures and targets through PBPP, as well as provide a better display the framework integration with the goals of the Vision2045 Plan, he following table was created to show how the local CCV objectives align with national goals and federal planning factors.

The performance measures and targets table is below are the national, state and local performance measures and targets for the MPO.

⁴ TPM Guidebook, 2016; <u>https://www.tpmtools.org/wp-content/uploads/2016/09/guidebook-component-03.pdf</u>

National Goals	Planning Factors	CCV Transportation Objectives		
	Support Economic Vitality Enhance travel and tourism	Support Regional Economic Engines through Accessible, Multi-Modal Transportation Systems for the Movement of People and Goods. Improve Workforce Development Training Through Investments in Affordable, Accessible, Multi-Modal Transportation Systems for the Movement of People.		
Freight Movement	Increase accessibility and mobility options of people and freight	Encourage Entrepreneurship and Small Businesses through Affordable, Accessible, Multi-modal Transportation Investments.		
and Economic Vitality —	Enhance the integration and connectivity of the transportation system	Support local schools through affordable, accessible, and efficient multi-modal and public transit investments.		
	Increase the security of the transportation system for motorized and	Provide Regional Connectivity through an Efficient, Safe, Accessible, and Affordable Multi-Modal Transportation System		
	non-motorized users	Implement Transportation and Land Use Policies that Support Cultural/Historic Resources and Promote Tourism.		
Environmental	Improve the resiliency and reliability of the transportation system	Develop Basic Transportation and Utility Infrastructure		
Sustainability	Protect and enhance the environment, promote energy conservation	that Promotes Resiliency and Reliability. Promote Conservation and Renewable Energy through Alternative Transportation and Fuel Technologies.		
Congestion Reduction	Promote consistency between transportation improvements and State and local planned growth and economic development patterns	Develop Land Use Policies that Promote to Community Infrastructure and Amenities through Multi-Modal Transportation Investments Provide Housing that is Safe, Affordable and Accessible to All Income Levels and has Multi-Modal Transportation Investments that are Context Sensitive.		
Safety – Reduce	Improve the quality of life	Promote Healthy Eating and Active Lifestyles by Implementing Active, Healthy Lifestyle Transportation Strategies		
Fatalities and Serious Injuries	Increase the safety of the transportation system for motorized and nonmotorized users	Implement Bicycle and Pedestrian Transportation Projects that Promote an Active, Healthy Lifestyle		
System Reliability	Emphasize the preservation of the existing transportation system	Coordinate with Emergency Responders to Develop Resilient, Well Maintained Transportation Infrastructure.		
Reduced Project Delivery Delays	Promote efficient system management and operation	Develop Regional Leadership that Promotes Transparency, Citizen Engagement, and Coordinated Planning and Delivery of Transportation Projects.		

	Performance Measures:	Targets:		Performance Measures:	Targets:
Goal 1: Safety and System Reliability	% of the person-miles traveled on the Interstate that are reliable # of Fatalities Rate of Fatalities (/100M VMT) # of Serious Injuries Rate of Serious Injuries(/100M VMT) Number of Combined Non- Motorized Fatalities and Non- Motorized Serious Injuries	2-year: 73%; 4-year: 67% 1,680 1.36 8,966 7.679 802	Goal 2: Infrastructure Condition	% of Interstate System Pavements in Good/Poor Condition % of non-Interstate NHS pavements in Good/Poor Condition % of NHS Bridges in Good/Poor Condition	> = 50%/ < = 5% > = 40%/ < = 12% > = 60%/ < = 10%
	Performance Measures:	Targets:		Performance Measures:	Targets:
Goal 3: Congestion Reduction	% of person-miles traveled on the non-Interstate that are reliable % of the person-miles traveled on the Interstate that are reliable	2-year: NA; 4-year: 81% 2-year: 73%; 4-year: 67%	Goal 4: Freight Movement and Economic Vitality	Truck Travel Time Reliability (TTTR) Index	2-year: 1.66; 4-year: 1.78
	Performance Measures:	Targets:		Performance Measures:	Targets:
Goal 5: Environmental Sustainability	No federal performance measures determined at this time	Report on local activities to promote infrastructure resiliency to extreme weather events and local investments in alternative fuel infrastructure	Goal 6: Reduced Project Delivery Delays	No federal performance measures determined at this time	Report on local activities to promote regional leadership, transparency, citizen engagement, and coordinated planning and delivery of transportation investments

System Performance Report

Georgia Metropolitan Planning Organization Metropolitan Transportation Plan (MTP)/Transportation Improvement Program (TIP) System Performance Report (Updated May 2023)

Background

Pursuant to the <u>Moving Ahead for Progress in the 21st Century Act (MAP-21) Act</u> enacted in 2012 and the <u>Fixing America's Surface Transportation Act (FAST Act</u>) enacted in 2015, state Departments of Transportation (DOT) and Metropolitan Planning Organizations (MPO) must apply a transportation performance management (TPM) approach in carrying out their federallyrequired transportation planning and programming activities. The process requires the establishment and use of a coordinated performance-based approach to transportation decisionmaking to support national goals for the federal-aid highway and public transportation programs.

To help transportation agencies take the necessary steps toward achieving the national goals, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) promulgated a series of rulemakings between 2016 and 2019 that established performance measures (PM) for the federal-aid highway and public transportation programs. Part of that series of rulemakings was the Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning Final Rule (The Planning Rule)¹ issued on May 27, 2016, that implemented the transportation planning and TPM provisions of MAP-21 and the FAST Act.

On November 15, 2021, President Joe Biden signed into law The Infrastructure Investment and Jobs Act (IIJA), also known as the <u>Bipartisan Infrastructure Law (BIL)</u>. The BIL (or IIJA) delivers generational investments in our roads and bridges, promotes safety for all road users, helps combat the climate crisis, and advances equitable access to transportation. The TPM approach from MAP-21 and the FAST Act is carried forward to this current law.

In accordance with National Performance Management Measures², the Planning Rule, as well as the Georgia Performance Management Agreement between the Georgia DOT (GDOT) and the Georgia Association of Metropolitan Planning Organizations (GAMPO), GDOT and each Georgia MPO must publish a System Performance Report (SPR) for applicable performance targets in their respective statewide and metropolitan transportation plans and programs.

- A System Performance Report (SPR) and subsequent updates <u>is a federal requirement</u> as part of any Metropolitan Transportation Plan (MTP) to evaluate the condition and performance of the transportation system with respect to the established performance targets;
- While the implemented Transportation Improvement Program (TIP) shows progress towards meeting the established performance targets.

¹ 23 CFR Part 450, Subpart B and Subpart C

² <u>23 CFR 490.107</u>

The SPR presents the condition and performance of the transportation system with respect to required performance measures, documents performance targets and progress achieved in meeting the targets in comparison with previous reports. This is required for the following:

- In any statewide or <u>metropolitan transportation plan or program</u> amended or adopted after May 27, 2018, for Highway Safety/PM1 measures;
- In any statewide or <u>metropolitan transportation plan or program</u> amended or adopted after October 1, 2018, for transit asset measures;
- In any statewide or <u>metropolitan transportation plan or program</u> amended or adopted after May 20, 2019, for Pavement and Bridge Condition/PM2 and System Performance, Freight, and Congestion Mitigation and Air Quality/PM3 measures; and
- In any statewide or <u>metropolitan transportation plan or program</u> amended or adopted after July 20, 2021, for transit safety measures.

The Valdosta-Lowndes 2045 Metropolitan Transportation Plan (MTP) was adopted on [September 2, 2020. Per the Planning Rule and the Georgia Performance Management Agreement, the System Performance Report for the Valdosta-Lowndes 2045 MTP is included, herein, for the required Highway Safety/PM1, Bridge and Pavement Condition/PM2, and System Performance, Freight, and (if applicable) Congestion Mitigation and Air Quality/PM3 measures.

Highway Safety/PM1

Effective April 14, 2016, the FHWA established the highway safety performance measures³ to carry out the Highway Safety Improvement Program (HSIP). These performance measures are:

- 1. Number of fatalities;
- 2. Rate of fatalities per 100 million vehicle miles traveled;
- 3. Number of serious injuries;
- 4. Rate of serious injuries per 100 million vehicle miles traveled; and
- 5. Number of combined non-motorized fatalities and non-motorized serious injuries.

Safety performance targets are provided annually by the States to FHWA for each safety performance measure. GDOT submits the HSIP report annually to FHWA. The HSIP 2022 annual report was submitted to FHWA by August 31, 2022 and established the statewide safety targets for year 2023 based on an anticipated five-year rolling average (2019-2023). Georgia statewide safety performance targets for 2023 are included in Table 1, along with statewide safety performance for the two most recent reporting periods⁴. MPOs have 180 days after the states (GDOT) submit their targets to FHWA to either adopt the state targets or set their own PM1 targets; The 2023 MPO PM1 targets must be set by February 27, 2023.⁵ The Valdosta-Lowndes MPO adopted/approved the Georgia statewide safety performance targets on January 9, 2023.

³ 23 CFR Part 490, Subpart B

⁴ <u>https://safety.fhwa.dot.gov/hsip/spm/state_safety_targets/</u>

⁵ https://safety.fhwa.dot.gov/hsip/spm/timeline.cfm

Safety Performance Targets Timeline (2022-2024)



The latest safety conditions will be updated annually over a rolling 5-year window and reflected within each subsequent System Performance Report, to track performance over time in relation to baseline conditions and established targets.

Table 1 shows the Georgia statewide safety performance and targets and five-year rolling averages over the last three years.

Table 1. Statewide Highway Safety/PM1, System Conditions and Performance Targets (Due August each year to FHWA)

	2021 Georgia Statewide Performance Target	2022 Georgia Statewide Performance Target	2023 Georgia Statewide Performance Target
Performance Measures	(Five-Year Rolling Average 2017-2021)	(Five-Year Rolling Average 2018-2022)	(Five-Year Rolling Average 2019-2023)
Number of Fatalities	1,715	1,671	1,680
Rate of Fatalities per 100 Million Vehicle Miles Traveled	1.23	1.21	1.36
Number of Serious Injuries	6,407	8,443	8,966
Rate of Serious Injuries per 100 Million Vehicle Miles Traveled	4.422	4.610	7.679
Number of Combined Non- Motorized Fatalities and Non- Motorized Serious Injuries	686.5	793.0	802

Source: GDOT's HSIP reports.

The <u>Valdosta-Lowndes MPO</u> recognizes the importance of linking goals, objectives, and investment priorities to stated performance objectives, and that establishing this link is critical to

the achievement of national transportation goals and statewide and regional performance targets. As such, the <u>2045 MTP</u> directly reflects the goals, objectives, performance measures, and targets as they are available and described in other State and public transportation plans and processes; specifically, the Georgia Strategic Highway Safety Plan (SHSP), the Georgia Highway Safety Improvement Program (HSIP), and the Georgia 2050 Statewide Transportation Improvement Plan (SWTP)/2021 Statewide Strategic Transportation Plan (SSTP).

- The Georgia SHSP is intended to reduce the number of fatalities and serious injuries resulting from motor vehicle crashes on public roads in Georgia. Existing highway safety plans are aligned and coordinated with the SHSP, including (but not limited to) the Georgia HSIP, MPO and local agencies' safety plans. The SHSP guides GDOT, the Georgia MPOs, and other safety partners in addressing safety and defines a framework for implementation activities to be carried out across Georgia.
- The GDOT HSIP annual report provide for a continuous and systematic process that identifies and reviews traffic safety issues around the state to identify locations with potential for improvement. The ultimate goal of the HSIP process is to reduce the number of crashes, injuries and fatalities by eliminating certain predominant types of crashes through the implementation of engineering solutions.
- The 2021 SSTP/2050 SWTP combines GDOT's strategic business case for transportation investment with the long-range, comprehensive transportation planning considerations under Federal law. The SSTP/SWTP is organized into three investment categories, reflecting three major ways people and freight move in Georgia; statewide freight and logistics, people mobility in Metro Atlanta, and people mobility in emerging metros and rural Georgia. The plan identifies strategies to bring about Foundational, Catalytic, and Innovation investments for the above mentioned categories.⁶

The Valdosta-Lowndes MPO 2045 MTP increases the safety of the transportation system for motorized and non-motorized users as required by the Planning Rule. The MTP identifies safety needs within the metropolitan planning area and provides funding for targeted safety improvements The Valdosta-Lowndes MPO recognizes the importance of linking goals, objectives, and investment priorities to stated performance objectives, and that establishing this link is critical to the achievement of national transportation goals and statewide and regional performance targets.

As such, the FY 2024-2027 TIP planning process directly reflects the goals, objectives, performance measures, and targets as they are available and described in other State and public transportation plans and processes; specifically, the Georgia Strategic Highway Safety Plan (SHSP), the Georgia Highway Safety Improvement Program (HSIP), the current Georgia Statewide Transportation Plan (SWTP), and the current Vision2045 Metropolitan Transportation Plan (MTP). Further implementation of Safety Measures/ Targets will be analyzed in the 2050 MTP. To support progress towards implemented highway safety targets, the FY 2024-2027 TIP includes key safety investments. A total of \$\$29,779,209 has been programmed in the FY 2024-2027 TIP to improve highway safety; averaging approximately \$7,444,802.25 per year.

Appendix A shows project types and Appendix B shows the current Tier I projects' contribution to established targets.

⁶ <u>2021Statewide Strategic Transportation Plan/2050 Statewide Transportation Plan</u>

Pavement and Bridge Condition/PM2

Effective May 20, 2017, FHWA established performance measures to assess pavement condition⁷ and bridge condition⁸ for the National Highway Performance Program. This second FHWA performance measure rule (PM2) established six performance measures:

- 1. Percent of Interstate pavements in good condition;
- 2. Percent of Interstate pavements in poor condition;
- 3. Percent of non-Interstate National Highway System (NHS) pavements in good condition;
- 4. Percent of non-Interstate NHS pavements in poor condition;
- 5. Percent of NHS bridges by deck area classified as in good condition; and
- 6. Percent of NHS bridges by deck area classified as in poor condition.

Pavement Condition Measures

The pavement condition measures represent the percentage of lane-miles on the Interstate or non-Interstate NHS that are in good condition or poor condition. FHWA established five metrics to assess pavement condition: International Roughness Index (IRI); cracking percent; rutting; faulting; and Present Serviceability Rating (PSR). For each metric, a threshold is used to establish good, fair, or poor condition.

Pavement condition is assessed using these metrics and thresholds. A pavement section in good condition if three metric ratings are good, and in poor condition if two or more metric ratings are poor. Pavement sections that are not good or poor are considered fair.

The pavement condition measures are expressed as a percentage of all applicable roads in good or poor condition. Pavement in good condition suggests that no major investment is needed. Pavement in poor condition suggests major reconstruction investment is needed due to either ride quality or a structural deficiency.

Bridge Condition Measures

The bridge condition measures represent the percentage of bridges, by deck area, on the NHS that are in good condition or poor condition. The condition of each bridge is evaluated by assessing four bridge components: deck, superstructure, substructure, and culverts. FHWA created a metric rating threshold for each component to establish good, fair, or poor condition. Every bridge on the NHS is evaluated using these component ratings. If the lowest rating of the four metrics is greater than or equal to seven, the structure is classified as good. If the lowest rating is less than or equal to four, the structure is classified as poor. If the lowest rating is five or six, it is classified as fair.

To determine the percent of bridges in good or in poor condition, the sum of total deck area of good or poor NHS bridges is divided by the total deck area of bridges carrying the NHS. Deck area is computed using structure length and either deck width or approach roadway width. Good condition suggests that no major investment is needed. Bridges in poor condition are safe to drive on; however, they are nearing a point where substantial reconstruction or replacement is needed.

^{7 23} CFR Part 490, Subpart C

⁸ 23 CFR Part 490, Subpart D

Pavement and Bridge Targets

Pavement and bridge condition performance is assessed and reported over a four-year performance period. The first performance period began on January 1, 2018, and runs through December 31, 2021. GDOT reported baseline PM2 performance and targets to FHWA on October 1, 2018, and will report updated performance information at the midpoint and end of the performance period. The second four-year performance period covers January 1, 2022, to December 31, 2025, with additional performance periods following every four years. The PM2 rule requires states and MPOs to establish two-year and/or four-year performance targets for each PM2 measure. Current two-year targets under the second four-year performance period represent expected pavement and bridge condition at the end of calendar year 2023, while the current four-year targets represent expected condition at the end of calendar year 2025.

SECOND Performance Period (January 1, 2022, to December 31, 2025)



* FHWA changed the due date from October 1, 2022, due to a technical issue with the reporting system.

States establish targets as follows:

- Percent of Interstate pavements in good and poor condition four-year targets;
- Percent of non-Interstate NHS pavements in good and poor condition two-year and fouryear targets; and
- Percent of NHS bridges by deck area in good and poor condition two-year and four-year targets.

MPOs have 180 days after the states (GDOT) submit their targets to FHWA to establish four-year targets for each measure by either agreeing to the statewide targets or setting quantifiable targets for the MPO's planning area that differ from the state targets.

GDOT established current statewide two-year and four-year PM2 targets on December 16, 2022. MPOs have 180 days from December 16, 2022 to adopt the state PM2 targets or set their own PM2 targets; The MPO second performance period PM2 targets must be set by June 14, 2023. The Valdosta-Lowndes MPO adopted/approved the Georgia statewide PM2 targets on April 26,

2023]. Table 2 presents statewide baseline performance for each PM2 measure as well as the current two-year and four-year statewide targets established by GDOT.

On or before October 1, 2024, GDOT will provide FHWA with a detailed mid-performance report of pavement and bridge condition performance covering the period of January 1, 2022, to December 31, 2023, for the second performance period. GDOT and the Valdosta-Lowndes MPO will have the opportunity at that time to revisit the four-year PM2 targets.

Performance Measures	Georgia Performance (Baseline 2021)	Georgia 2- year Target (2023)	Georgia 4- year Target (2025)
Percent of Interstate pavements in good condition	67.4%	50.0%	50.0%
Percent of Interstate pavements in poor condition	0.1%	5.0%	5.0%
Percent of non-Interstate NHS pavements in good condition	49.2%	40.0%	40.0%
Percent of non-Interstate NHS pavements in poor condition	0.6%	12.0%	12.0%
Percent of NHS bridges (by deck area) in good condition	79.1%	50.0%	60.0%
Percent of NHS bridges (by deck area) in poor condition	0.5%	10.0%	10.0%

Table 2. Pavement and Bridge Condition/PM2 Performance and Targets

The Valdosta-Lowndes MPO recognizes the importance of linking goals, objectives, and investment priorities to stated performance objectives, and that establishing this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the 2045 MTP directly reflects the goals, objectives, performance measures, and targets as they are available and described in other State and public transportation plans and processes; specifically, Georgia's Transportation Asset Management Plan (TAMP), the Georgia Interstate Preservation Plan, and the current SSTP/2050 SWTP.

- MAP-21 initially required GDOT to develop a TAMP for all NHS pavements and bridges within the state In addition, BIL requires considering extreme weather and resilience as part of the life-cycle planning and risk management analyses within a State TAMP process and evaluation. GDOT's TAMP describes Georgia's current bridge (bridge culverts) and pavement asset management processes for improving and preserving the condition of the National Highway System (NHS), which comprised of approximately 7,200 miles of roadway within the State which includes interstates, state routes and local roads as well as 4,300 structures of both bridges and bridge culverts. GDOT has recently developed TAMP for FY 2022-2031, which uses life-cycle planning and outlines the priorities and investment strategies leading to a program of projects that would make progress toward achievement of GDOT's statewide pavement and bridge condition targets and cost effectively manage and preserve these assets over the next 10 years.
- The Georgia Interstate Preservation Plan applied a risk profile to identify and communicate Interstate preservation priorities; this process leveraged a combination of asset management techniques with risk management concepts to prioritize specific investment strategies for the Interstate system in Georgia.

• The 2021 SSTP/2050 SWTP combines GDOT's strategic business case for transportation investment with the long-range, comprehensive transportation planning considerations under Federal law. The SSTP/SWTP is organized into three investment categories, reflecting three major ways people and freight move in Georgia; statewide freight and logistics, people mobility in Metro Atlanta, and people mobility in emerging metros and rural Georgia. The plan identifies strategies to bring about Foundational, Catalytic, and Innovation investments for the above-mentioned categories.⁹

The <u>Valdosta-Lowndes MPO 2045 MTP</u> addresses infrastructure preservation and identifies pavement and bridge infrastructure needs within the metropolitan planning area, and allocates funding for targeted infrastructure improvements. As such, the FY 2024-2027 TIP planning process directly reflects the goals, objectives, performance measures, and targets as they are available and described in other State and public transportation plans and processes; specifically, the Georgia Strategic Highway Safety Plan (SHSP), the Georgia Highway Safety Improvement Program (HSIP), the current Georgia Statewide Transportation Plan (SWTP), and the current Vision2045 Metropolitan Transportation Plan (MTP). Further implementation of Safety Measures/ Targets will be analyzed in the 2050 MTP. To support progress towards implemented highway safety targets, the FY 2024-2027 TIP includes key safety investments. A total of \$ \$29,779,209 has been programmed in the FY 2024-2027 TIP to improve highway safety; averaging approximately \$7,444,802.25 per year.

Appendix A shows project types and Appendix B shows the current Tier I projects' contribution to established targets.

⁹ 2021Statewide Strategic Transportation Plan/2050 Statewide Transportation Plan

System Performance, Freight, and Congestion Mitigation & Air Quality Improvement Program/PM3

Effective May 20, 2017, FHWA established measures to assess performance of the National Highway System¹⁰, freight movement on the Interstate system¹¹, and the Congestion Mitigation and Air Quality Improvement (CMAQ) Program¹². This third FHWA performance measure rule (PM3) established six performance measures, described below.

National Highway System Performance:

- 1. Percent of person-miles on the Interstate system that are reliable;
- 2. Percent of person-miles on the non-Interstate NHS that are reliable;

Freight Movement on the Interstate:

3. Truck Travel Time Reliability Index (TTTR);

Congestion Mitigation and Air Quality Improvement (CMAQ) Program:

- 4. Annual hours of peak hour excessive delay per capita (PHED);
- 5. Percent of non-single occupant vehicle travel (Non-SOV); and
- 6. Cumulative two-year and four-year reduction of on-road mobile source emissions for CMAQ funded projects (CMAQ Emission Reduction).

The CMAQ performance measures apply to states and MPOs with projects financed with CMAQ funds whose boundary contains any part of a nonattainment or maintenance area for ozone, carbon monoxide or particulate matter. The Valdosta-Lowndes MPO meets air quality standards, therefore, the CMAQ measures do not apply and are not reflected in the System Performance Report.

System Performance Measures

The two System Performance measures assess the reliability of travel times on the Interstate or non-Interstate NHS system. The performance metric used to calculate reliability is the Level of Travel Time Reliability (LOTTR). LOTTR is defined as the ratio of longer travel times (80th percentile) to a normal travel time (50th percentile) over all applicable roads during four time periods (AM peak, Mid-day, PM peak, and weekends) that cover the hours of 6 AM to 8 PM each day.

The LOTTR ratio is calculated for each segment of applicable roadway, essentially comparing the segment with itself. A segment is deemed to be reliable if its LOTTR is less than 1.5 during all four time periods. If one or more time periods has a LOTTR of 1.5 or above, that segment is unreliable.

The measures are expressed as the percent of person-miles traveled on the Interstate or non-Interstate NHS system that are reliable. Person-miles take into account the number of people traveling in buses, cars, and trucks over these roadway segments. To determine total person

¹⁰ 23 CFR Part 490, Subpart E

¹¹ 23 CFR Part 490, Subpart F

¹² 23 CFR Part 490, Subparts G and H

miles traveled, the vehicle miles traveled (VMT) on each segment is multiplied by average vehicle occupancy. To calculate the percent of person miles traveled that are reliable, the sum of the number of reliable person miles traveled is divided by the sum of total person miles traveled.

Freight Movement Performance Measure

The Freight Movement performance measure assesses reliability for trucks traveling on the Interstate. A TTTR ratio is generated by dividing the 95th percentile truck travel time by a normal travel time (50th percentile) for each segment of the Interstate system over five time periods throughout weekdays and weekends (AM peak, Mid-day, PM peak, weekend, and overnight) that cover all hours of the day. For each segment, the highest TTTR value among the five time periods is multiplied by the length of the segment. The sum of all length-weighted segments is then divided by the total length of Interstate to generate the TTTR Index.

PM3 Performance Targets

Performance for the PM3 measures is assessed and reported over a four-year performance period. For all PM3 measures, the first performance period began on January 1, 2018, and will end on December 31, 2021. GDOT reported baseline PM3 performance and targets (for First Performance Period) to FHWA on October 1, 2018, the baseline PM3 performance and targets (for Second Performance Period) to FHWA on December 16, 2022, and will report updated performance information at the midpoint and end of the performance period. The second four-year performance period will cover January 1, 2022, to December 31, 2025, with additional performance periods following every four years.

The PM3 rule requires state DOTs and MPOs to establish two-year and/or four-year performance targets for each PM3 measure. For all targets the current two-year and four-year targets represent under the second four-year performance period expected performance at the end of calendar years 2023 and 2025, respectively.

SECOND Performance Period (January 1, 2022, to December 31, 2025)



States establish targets as follows:

- Percent of person-miles on the Interstate system that are reliable two-year and four-year targets;
- Percent of person-miles on the non-Interstate NHS that are reliable four-year targets;
- Truck Travel Time Reliability two-year and four-year targets;
- Annual hours of peak hour excessive delay per capita (PHED) four-year targets;
- Percent of non-single occupant vehicle travel (Non-SOV) two-year and four-year targets; and
- CMAQ Emission Reductions two-year and four-year targets.

MPOs establish four-year targets for the System Performance, Freight Movement, and PHED measures, and two-year and four-year targets for the Non-SOV and CMAQ Emission Reduction measures. MPOs establish targets by either agreeing to program projects that will support the statewide targets, or setting quantifiable targets for the MPO's planning area that differ from the state targets.

GDOT established statewide PM3 targets and submitted to FHWA by December 16, 2022. The Valdosta-Lowndes MPO adopted/approved the Georgia statewide PM3 targets on April 26. 2023.

On or before October 1, 2024, GDOT will provide FHWA with a detailed mid-performance report of PM3 performance covering the period of January 1, 2022, to December 31, 2023, for the second performance period. GDOT and the Valdosta-Lowndes MPO will have the opportunity at that time to revisit the four-year PM3 targets.

Performance Measure	Georgia Performance (Baseline 2021)	Georgia 2- year Target (2023)	Georgia 4- year Target (2025)
Percent of person-miles on the Interstate system that are reliable	82.8%	73.9%	68.4%
Percent of person-miles on the non-Interstate NHS that are reliable	91.9%	87.3%	85.3%
Truck Travel Time Reliability Index	1.47	1.62	1.65
Annual hours of peak hour excessive delay per capita (PHED)	14.4 hours	23.7 hours	27.2 hours
Percent Non-SOV travel	25.7%	22.7%	22.7%
CMAQ VOC Cumulative Emission Reductions	365.006 kg/day*	157.200 kg/day	257.100 kg/day
CMAQ NOx Cumulative Emission Reductions	1,184.582 kg/day*	510.900 kg/day	904.200 kg/day

Table 3. System Performance/Freight Movement/CMAQ (PM3) Performance and Targets

*4-year Cumulative Emission Reductions from 2018-2021

The <u>Valdosta-Lowndes MPO</u> recognizes the importance of linking goals, objectives, and investment priorities to stated performance objectives, and that establishing this link is critical to

the achievement of national transportation goals and statewide and regional performance targets. As such, the 2045 MTP directly reflects the goals, objectives, performance measures, and targets as they are available and described in other State and public transportation plans and processes; specifically, the Georgia Statewide Freight and Logistics Action Plan, and the current 2021 SSTP/2050 SWTP.

- The 2023 Georgia Freight Plan documents freight planning activities and investments in the state, identifies and assesses current and future freight needs and challenges incorporating both technical analysis and stakeholder engagement, and guides freight-related transportation decisions and investments. The plan integrates policy positions and strategies from existing documents to help identify and prioritize freight investments critical to the state's economic growth and global competitiveness. The Georgia Freight Plan establishes specific goals for freight transportation and addresses freight issues that are not covered in other statewide planning documents.¹³
- The 2021 SSTP/2050 SWTP combines GDOT's strategic business case for transportation investment with the long-range, comprehensive transportation planning considerations under Federal law. The SSTP/SWTP is organized into three investment categories, reflecting three major ways people and freight move in Georgia; statewide freight and logistics, people mobility in Metro Atlanta, and people mobility in emerging metros and rural Georgia. The plan identifies strategies to bring about Foundational, Catalytic, and Innovation investments for the above mentioned categories.¹⁴

The <u>Valdosta-Lowndes MPO 2045 MTP</u> addresses infrastructure preservation and identifies pavement and bridge infrastructure needs within the metropolitan planning area, and allocates funding for targeted infrastructure improvements. As such, the FY 2024-2027 TIP planning process directly reflects the goals, objectives, performance measures, and targets as they are available and described in other State and public transportation plans and processes; specifically, the Georgia Strategic Highway Safety Plan (SHSP), the Georgia Highway Safety Improvement Program (HSIP), the current Georgia Statewide Transportation Plan (SWTP), and the current Vision2045 Metropolitan Transportation Plan (MTP). Further implementation of Safety Measures/ Targets will be analyzed in the 2050 MTP. To support progress towards implemented highway safety targets, the FY 2024-2027 TIP includes key safety investments. A total of \$ \$29,779,209 has been programmed in the FY 2024-2027 TIP to improve highway safety; averaging approximately \$7,444,802.25 per year.

Appendix A shows project types and Appendix B shows the current Tier I projects' contribution to established targets.

¹³ <u>https://www.dot.ga.gov/GDOT/Pages/Freight.aspx</u>

¹⁴ 2021Statewide Strategic Transportation Plan/2050 Statewide Transportation Plan

Appendix A: Project Types

The matrix below is based on 2024-2027 STIP projects as general guidelines; In reality, individual projects may yield benefits to other PMs than shown here given specific project characteristics.

 Table 4: Projects/Work Types That Support Each Performance Measure Targets

	PM1	PM2		PM	3
Work Type	Safety	Bridges	Pavement	System Reliability	Truck Reliability
Bicycle / Pedestrian Facilities	⊘				
Bridges		\bigcirc			
Drainage Improvements			O		
Grade Separation				0	
Interchange				0	O
Intersection Improvement	0			Ø	
ITS				⊘	
Lighting					
Managed Lanes	0				O
Operational Improvement					
Pavement Rehabilitation			O		
Railroad Crossing	0			0	
Transit					
Truck Lanes					O
Widening				\bigcirc	

Appendix B: Example MPO TIP Projects – Valdosta MPO

			PM1	Р	M2	PM3		
PI#	Cost	Work Type	Safety	Bridges	Pavement	System Reliability	Truck Reliability	CMAQ*
0014485	\$9,068,419	Passing Lanes	\bigcirc			Ø	0	
0010296	\$1,500,000	Bridges						
0015614	\$1,415,918	Bridges						

Table 5: Valdosta-Lowndes MPO, 2024-2027

Note: The CMAQ measures including PHED, Non-SOV, and Emission Reduction apply only within the boundaries of each U.S. Census Bureau-designated urbanized area (UZA) that contains an NHS road, has a population of more than 200 thousand, and contains any part of a nonattainment or maintenance area for ozone, carbon monoxide or particulate matter. Greater Dalton MPO does not have to track CMAQ measures on PHED, Non-SOV, or Emissions Reduction performance.

Project Contribution to Established Performance Targets

The table below displays the Constrained list of projects in this Plan and FY 2024-2027 TIP and the targets that they are anticipated to positively affect. By agreeing to support GDOT's performance targets in the area of safety, pavement and bridge conditions and travel & freight reliability, the MPO has agreed to coordinate with GDOT to program projects that will contribute to the accomplishment of these National and State goals, measures, and targets.

LRTP # / Pt#	Project Name	Safety PM	PM2: Pavement & Bridge	PM3: Travel & Freight Reliability & Delay
L022	CR 136/Old Quitman Road @ CSX #637487Y 6 Mi W of Valdosta	х	Х	-
L019	CR 274 / CS 1078 /Lake Park / Bellville Road	х		х
G020	I-75 @ SR 133 Phase II	х	Х	х
G040	SR 31	х	Х	Х
V075	CR 784 / Jerry Jones Drive/ Eager Road	Х	х	х
G016	I-75 @ SR 31 - Phase II	х	х	
G009	SR 38/ US 84	х		х
G008	SR 38/US 84	х		х
L029	Val Del Road	х		Х
L532	Howell Road Bridge	х	Х	
G502	I-75 @ SR 376 - Phase II	Х	Х	х
G503	I-75 @ CR 783/ Loch Laurel Road Phase II	х	Х	
G501	South Valdosta Truck Bypass	х		Х
V061	Old 41 North Widening	х	x	x
L018	Old Clyattville Road	x	x	x
L532	Country Club Drive	x		x
V035	Forrest Street	x	x	x
V502	Old Clyattville Road	x		x
L024	Orr Road Extension	x		x
L007	St. Augustine Road at CSX Railroad	x	x	x
L529	Lucas Richardson Road Extension	Х		х
L502	Cherry Creek Road	х		х

Table 5. Project Contribution to Established Performance Targets