



2045 METROPOLITAN TRANSPORTATION PLAN UPDATE

Appendix C: System Performance Report

Prepared for:

GSATS

The Grand Strand Area Transportation Study



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GRAND STRAND AREA TRANSPORTATION STUDY
METROPOLITAN PLANNING ORGANIZATION

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INTRODUCTION

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

On May 27, 2016, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued the Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning Final Rule (The Planning Rule)¹. This rule details how state DOTs and MPOs must implement new MAP-21 and FAST Act transportation planning requirements, including the transportation performance management provisions.

In accordance with the Planning Rule, the GSATS MPO must include a description of the performance measures and targets that apply to the MPO planning area and a System Performance Report as an element of its Metropolitan Transportation Plan (MTP). The System Performance Report evaluates the condition and performance of the transportation system with respect to required performance targets and reports on progress achieved in meeting the targets in comparison with baseline data and previous reports.

There are several milestones related to the required content of the System Performance Report:

- In any MTP adopted on or after May 27, 2018, the System Performance Report must reflect Highway Safety (PM1) measures;
- In any MTP adopted on or after October 1, 2018, the System Performance Report must reflect Transit Asset Management measures;
- In any MTP adopted on or after May 20, 2019, the System Performance Report must reflect Pavement and Bridge Condition (PM2) and System Performance (PM3) measures; and
- In any MTP adopted on or after July 20, 2021, the System Performance Report must reflect Transit Safety measures.

Per 23 CFR Part 490², MPOs shall establish a target by either agreeing to plan and program projects so that they contribute toward the accomplishment of the State DOT safety target

¹ The Final Rule modified the Code of Federal Regulations at 23 CFR Part 450 and 49 CFR Part 613.

² 23 CFR 490.105(f)(3)

for that performance measure; or by committing to a quantifiable target for that performance measure for their metropolitan planning area.

Since GSATS serves a multistate planning area, 23 CFR 490.105(f)(4) specifies that if MPOs choose the option to agree to plan and program projects to contribute toward State DOT targets, then they shall plan and program projects in support of State DOT targets for the portion of the planning area within each State.

Per the Planning Rule, the System Performance Report for the GSATS MPO is included as part of the 2045 MTP Update for the required Highway Safety (PM1), Bridge and Pavement (PM2), System Performance (PM3), Transit Asset Management, and Transit Safety targets.

HIGHWAY SAFETY | PM1

Effective April 14, 2016, the FHWA established five 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 (VMT);
3. Number of serious injuries;
4. Rate of serious injuries per 100 million VMT; and
5. Number of non-motorized fatalities and non-motorized serious injuries.

NCDOT and SCDOT publishes statewide safety performance targets in the HSIP Annual Report that it transmits to FHWA each year. Current safety targets address calendar year 2023.

SAFETY TARGETS

On February 17, 2023, the GSATS MPO approved by resolution to support both North Carolina and South Carolina statewide safety targets across all five required safety measures applicable to all public roads - Number and Rate of Fatalities, Number and Rate of Serious Injuries, and Number of Non-Motorized Fatalities and Serious Injuries. Categories reported as rates are based on the number of incidents per million vehicle miles (MVM). **Table 1** indicates the areas in which the MPO is expressly supporting the statewide targets developed by NCDOT and SCDOT.

Table 1. NCDOT and SCDOT 2023 Highway Safety (PM1) Targets

Performance Target	NC Statewide Target	SC Statewide Target
Number of Fatalities	1,202.2	1,119.0
Rate of Fatalities per 100 MVM	1.011	1.940
Number of Serious Injuries	3,423.0	2,868.0
Rate of Serious Injuries per 100 MVM	2.863	4.960
Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	468.2	485.0

North Carolina and South Carolina statewide system conditions for each safety performance measure are included in **Table 2** and **Table 3**. The latest safety conditions will be updated annually on a rolling five-year window and reflected in subsequent system performance

³ 23 CFR Part 490, Subpart B

reports to track performance over time in relation to baseline conditions and established targets.

Table 2. North Carolina Highway Safety (PM1) Conditions and Performance

Performance Measures	North Carolina Statewide Baseline Performance (Five-Year Rolling Average) ⁴			
	2014-2018	2015-2019	2016-2020	2017-2021
Number of Fatalities	1,392.2	1,426.8	1,458.6	1,501.2
Rate of Fatalities per 100 MVM	1.206	1.206	1.250	1.284
Number of Serious Injuries	3,362.4	3,905.0	4,410.2	4,898.4
Rate of Serious Injuries per 100 MVM	2.884	3.278	3.776	4.186
Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	491.0	537.6	583.4	624.0

Table 3. South Carolina Highway Safety (PM1) Conditions and Performance

Performance Measures	South Carolina Statewide Baseline Performance (Five-Year Rolling Average) ⁵			
	2014-2018	2015-2019	2016-2020	2017-2021
Number of Fatalities	969.4	1,006.0	1,023.4	1,059.0
Rate of Fatalities per 100 MVM	1.802	1.820	1.838	1.880
Number of Serious Injuries	2,983.8	2,974.2	2,877.2	2,862.2
Rate of Serious Injuries per 100 MVM	5.584	5.390	5.160	5.076
Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	393.2	417.4	440.8	458.8

SAFETY PERFORMANCE TARGET ASSESSMENT

A State DOT has met or made significant progress towards meeting its safety performance targets when at least four of the five safety performance targets established under 23 CFR 490.209(a) have been met or the actual outcome is better than the baseline performance. The baseline performance is the 5-year average ending with the year prior to the establishment of the target.

⁴ Fatalities: 2015-2020 Final FARS, 2021 FARS Annual Report File; Serious Injuries: 2022 North Carolina HSIP Annual Report

⁵ Fatalities: 2015-2020 Final FARS, 2021 FARS Annual Report File; Serious Injuries: 2022 South Carolina HSIP Annual Report

North Carolina

In 2023, FHWA completed an assessment of target achievement for NCDOT’s calendar year (CY) 2021 safety targets, based on the 5-year averages for 2017-2021 for each measure. Based on FHWA’s review, North Carolina has not met or made significant progress toward achieving its safety performance targets.

As a result, NCDOT must ensure that all HSIP safety funds are obligated and must develop an HSIP Implementation Plan that describes actions the State will take to meet or make significant progress toward achieving its targets. Table 4 provides a summary of the North Carolina target assessment determination completed by FHWA.

Table 4. North Carolina 2021 Safety Performance Target Assessment

Performance Measure	2017-2021 Target	2017-2021 Actual	2015-2019 Baseline	Met Target?	Better Than Baseline?	Met or Made Significant Progress?
Number of Fatalities	1,309.9	1,501.2	1,426.8	No	No	No
Rate of Fatalities	1.105	1.284	1.206	No	No	
Number of Serious Injuries	3,656.1	4,898.4	3,905.0	No	No	
Rate of Serious Injuries	3.065	4.186	3.278	No	No	
Number of non-motorized fatalities and non-motorized serious injuries	504.4	624.0	537.6	No	No	

South Carolina

The most recently assessed safety targets were for the five-year rolling average from 2017 to 2021. As shown in Table 5, South Carolina met or performed better than baseline for two of the five safety targets.

To combat the number of fatalities and fatality rate, SCDOT continues to focus 100% of the apportioned amounts of HSIP funds towards projects and programs that use both crash data and injury severity to guide funding allocations for project locations, rankings, and countermeasures. Additionally, the state continues to provide state funding for its Rural Road Safety projects to aid in preventing rural run-off the road crashes which statistically have high rates of fatal and serious injuries.

In response to the increasing number of non-motorized user fatalities, SCDOT has developed the state’s first Pedestrian and Bicycle Safety Action Plan (PBSAP). As a part of the final report, two lists were created.

Table 5. South Carolina 2021 Safety Performance Target Assessment

Performance Measure	2017-2021 Target	2017-2021 Actual	2015-2019 Baseline	Met Target?	Better Than Baseline?	Met or Made Significant Progress?
Number of Fatalities	1,005.0	1,059.0	1,006.0	No	No	No
Rate of Fatalities	1.760	1.880	1.820	No	No	
Number of Serious Injuries	2,950.0	2,862.2	2,974.2	Yes	N/A	
Rate of Serious Injuries	5.350	5.076	5.390	Yes	N/A	
Number of non-motorized fatalities and non-motorized serious injuries	440.0	458.8	417.4	No	No	

GSATS SUPPORT OF PM1 TARGETS

MPOs are not directly assessed by FHWA on their progress towards meeting safety performance targets. However, coordination and deliberate action will be needed to achieve the goals outlined in the North Carolina and South Carolina HSIP and as communicated through the safety performance targets adopted by each state.

The GSATS MPO will continue to coordinate with NCDOT, SCDOT, and safety stakeholders to integrate each State’s safety goals, objectives, and plans into its planning process by linking investment priorities to the State’s safety targets to the maximum extent practicable. Furthermore, the MPO will continue to place an emphasis on maintaining and improving the safety of the transportation system for motorized and non-motorized users by continually implementing the goals and objectives related to safety outlined in the plan, and directing investments in the MTP toward projects that have the potential to reduce crash rates, improve pedestrian safety, reduce speeds, enhance safety design, and incorporate security improvements. As part of this effort, the Steering Committee of the GSATS MTP Update approved the promotion of safety scoring to the most significant category of project need in the regional project ranking.



INFRASTRUCTURE CONDITION | PM2

Effective May 20, 2017, FHWA established performance measures to assess pavement condition and bridge condition 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.

The four pavement condition measures represent the percentage of lane-miles on the Interstate and non-Interstate NHS that are in good condition or poor condition. The PM2 rule defines NHS pavement types as asphalt, jointed concrete, or continuous concrete. Five metrics are used to assess pavement condition:

- International Roughness Index (IRI) - an indicator of roughness; applicable to asphalt, jointed concrete, and continuous concrete pavements;
- Cracking percent - percentage of the pavement surface exhibiting cracking; applicable to asphalt, jointed concrete, and continuous concrete pavements;
- Rutting - extent of surface depressions; applicable to asphalt pavements only;
- Faulting - vertical misalignment of pavement joints; applicable to jointed concrete pavements only; and
- Present Serviceability Rating (PSR) - a quality rating applicable only to NHS roads with posted speed limits of less than 40 miles per hour (e.g., toll plazas, border crossings). States may choose to collect and report PSR for applicable segments as an alternative to the other four metrics.

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.

The bridge condition measures refer to the percentage of bridges by deck area on the NHS that are in good condition or poor condition. The measures assess the condition of four bridge components: deck, superstructure, substructure, and culverts. Each component has a metric rating threshold to establish good, fair, or poor condition. Each bridge on the NHS is evaluated using these 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.

The bridge measures are expressed as the percent of NHS bridges in good or poor condition. The percent is determined by summing the total deck area of good or poor NHS bridges and dividing by the total deck area of the bridges carrying the NHS. Deck area is computed using structure length and either deck width or approach roadway width.

A bridge in good condition suggests that no major investment is needed. A bridge in poor condition is safe to drive on; however, it is nearing a point where substantial reconstruction or replacement is needed.

PAVEMENT AND BRIDGE TARGETS

Federal rules require State DOTs and MPOs to coordinate when setting pavement and bridge condition performance targets and monitor progress towards achieving the targets. States must establish:

- Four-year statewide targets for the percent of Interstate pavements in good and poor condition;
- Two-year and four-year targets for the percent of non-Interstate NHS pavements in good and poor condition; and
- Two-year and four-year targets for the percent of NHS bridges (by deck area) in good and poor condition.

MPOs must establish four-year targets for all six measures. MPOs can either agree to program projects that will support the statewide targets or establish their own quantifiable targets for the MPO's planning area.

On June 30, 2023, the GSATS MPO approved by resolution to support both North Carolina and South Carolina statewide pavement and bridge condition targets across all six required highway condition measures for the NHS - Percent Interstate Pavement in Good/Poor Condition, Percent Non-Interstate NHS in Good/Poor Condition, and percent NHS Bridges Deck Area on Non-Structurally Deficient Bridges. **Table 6** indicates the areas in which the MPO is expressly supporting the statewide targets developed by NCDOT and SCDOT.

Table 6. NCDOT and SCDOT 2022-2025 Pavement and Bridge Condition (PM2) Targets

Category	Measure	NCDOT (2yr/4yr)	SCDOT (2yr/4yr)
PM2: Pavement Condition	% Good Interstate	60.0%/62.0%	77.0%/78.0%
	% Poor Interstate	1.8%/1.5%	2.5%/2.5%
	% Good Non-Interstate NHS	30.0%/31.0%	36.0%/38.0%
	% Poor Non-Interstate NHS	3.5%/3.0%	10.0%/10.0%
PM2: Bridge Condition	% Good	38.0%/36.0%	35.0%/34.0%
	% Poor	5.0%/5.0%	6.0%/6.0%

INFRASTRUCTURE CONDITION PERFORMANCE TARGET ASSESSMENT

FHWA determines significant progress for these measures after the mid-point and end of each performance period. A State has met or made significant progress toward target achievement if “actual” condition/performance is equal to or better than the established two-year target or “actual” condition/performance is better than baseline performance 23 CFR 490.109(e). As provided in 23 CFR 490.107(b)(2)(ii)(A), baseline condition/performance is derived from the latest data collected through the beginning date of the performance period. FHWA will classify the assessment of progress toward the achievement of an individual 2-year or 4-year target as “progress not determined” if a State provides the extenuating circumstance information required in 23 CFR 490.109(e)(5), and FHWA accepts the information.

North Carolina

NCDOT made significant progress toward all PM2 targets during the 2022 Full Performance period. Four of the six targets assessed improved over the 2020 baseline set in the 2020 Mid Performance Period Progress Report, and no consequences were recommended. Table 7 shows FHWA’s most recent determination for the Infrastructure Condition performance measures in North Carolina.

Table 7. North Carolina 2022 Full Performance Period Significant Progress Determination Results⁶

Category	Measure	Baseline	Target	Actual	Better than Baseline?	Achieved Target?	Made Significant Progress?	
PM2: Pavement Condition	% Good Interstate NHS	70.3%	37.0%	75.1%	Yes	Yes	Yes	
	% Poor Interstate NHS	0.1%	2.2%	0.2%	No	Yes	Yes	
	% Good Non-Interstate NHS	IRI	63.8%	--	65.1%	Yes	--	Yes
		Full Distress + IRI	--	27.0%	36.6%	--	Yes	
	% Poor Non-Interstate NHS	IRI	7.1%	--	5.8%	Yes	--	Yes
		Full Distress + IRI	--	4.2%	1.0%	--	Yes	
PM2: Bridge Condition	% Good	38.2%	30.0%	45.9%	Yes	Yes	Yes	
	% Poor	6.6%	9.0%	2.8%	Yes	Yes	Yes	

South Carolina

SCDOT made significant progress toward five of the six PM2 targets during the 2022 Full Performance period. Four of the six targets assessed improved over the 2020 baseline set in the 2020 Mid Performance Period Progress Report. The requirements of 23 CFR 490.109(f)(1) stipulates that if FHWA determines that significant progress is not made for an individual NHPP target, then the State DOT must document in the next State Biennial Performance Report the actions it will take to achieve targets for all measures in the measure area. Table 8 shows FHWA’s most recent determination for the Infrastructure Condition performance measures in South Carolina.

⁶ North Carolina 2018, 2020, 2022 Biennial Performance Report; North Carolina 2018, 2019, 2020, 2021, 2022 NBI Data Submittal; North Carolina 2018, 2019, 2020, 2021, 2022 HPMS Data Submittal

Table 8. South Carolina 2022 Full Performance Period Significant Progress Determination Results⁷

Category	Measure	Baseline	Target	Actual	Better than Baseline?	Achieved Target?	Made Significant Progress?	
PM2: Pavement Condition	% Good Interstate NHS	63.2%	71.0%	75.8%	Yes	Yes	Yes	
	% Poor Interstate NHS	1.2%	3.0%	0.2%	Yes	Yes	Yes	
	% Good Non-Interstate NHS	IRI	50.4%	--	56.9%	Yes	--	Yes
		Full Distress + IRI	--	21.1%	38.8%	--	Yes	
	% Poor Non-Interstate NHS	IRI	8.6%	--	7.7%	Yes	--	Yes
		Full Distress + IRI	--	4.6%	1.6%	--	Yes	
PM2: Bridge Condition	% Good	41.1%	42.7%	38.5%	No	No	No	
	% Poor	4.0%	6.0%	4.3%	No	Yes	Yes	

SCDOT did not meet the 4-year target for statewide Percentage of deck area of Bridges on the NHS classified as in Good Condition of 42.7% to the actual 4-year performance condition of 38.5%. The agency did meet the 4-year target of statewide Percentage of deck area of Bridges on the NHS classified as in Poor Condition of 6.0% to the actual 4-year performance condition of 4.3%. In the near term although the percent good target was not met the agency has boosted the funding to the bridge program by \$69 million and has balanced the approach to bridge preservation, rehabilitation, and replacement projects. Additional funding has been strategically aligned with the Strategic Transportation Asset Management Plan to achieve asset management objectives and rebuild and improve the bridge network as the agency works towards a State of Good Repair (SOGR).

GSATS SUPPORT OF PM2 TARGETS

By agreeing to support the North Carolina and South Carolina Infrastructure Condition targets, GSATS agrees to:

- Work with the states and relevant stakeholders to address areas of concern for pavement and bridge conditions within the GSATS region.

⁷ South Carolina 2018, 2020, 2022 Biennial Performance Report; South Carolina 2018, 2019, 2020, 2021, 2022 NBI Data Submittal; South Carolina 2018, 2019, 2020, 2021, 2022 HPMS Data Submittal



- Coordinate with the states and include the infrastructure condition targets for those measures in the MTP.
- Integrate into the MTP process, the infrastructure goals, objectives, performance measures, and targets described in other state transportation plans and processes.
- Include a description in the TIP (Transportation Improvement Program) of the anticipated effect of the TIP toward achieving pavement and bridge condition targets in the MTP.



SYSTEM PERFORMANCE | PM3

Effective May 20, 2017, FHWA established measures to assess performance of the National Highway System, freight movement on the Interstate system, and the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. This third FHWA performance measure rule (PM3) established six performance measures. GSATS is not designated as a nonattainment or maintenance area for ozone, carbon monoxide or particulate matter, and thus not required to address CMAQ-specific performance measures. GSATS is required to set targets for the following three performance measures:

1. Percent of person-miles on the Interstate system that are reliable, also referred to as Level of Travel Time Reliability (LOTTR)
2. Percent of person-miles on the non-Interstate NHS that are reliable (LOTTR)
3. Truck Travel Time Reliability index (TTTR)

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 a.m. to 8 p.m. each day. The LOTTR ratio is calculated for each roadway segment, essentially comparing the segment with itself. Segments with $LOTTR \geq 1.50$ during any of the above time periods are considered unreliable. The two LOTTR measures are expressed as the percent of person-miles traveled on the Interstate or non-Interstate NHS system that are reliable.

TTTR is defined as the ratio of longer truck travel times (95th percentile) to a normal travel time (50th percentile) over the Interstate during five time periods (AM peak, Mid-day, PM peak, weekend, and overnight) that cover all hours of the day. TTTR is quantified by taking a weighted average of the maximum TTTR from the five time periods for each Interstate segment. The maximum TTTR is weighted by segment length, then the sum of the weighted values is divided by the total Interstate length to calculate the Travel Time Reliability Index.

SYSTEM PERFORMANCE TARGETS

On June 30, 2023, the GSATS MPO approved by resolution to support both North Carolina and South Carolina statewide System Reliability/PM3 performance targets across all three required performance measures for system performance on the NHS - Percent Reliable Person-Miles Travelled on Interstate and Non-Interstate NHS and Truck Travel Time Reliability Index.

Table 9. NCDOT and SCDOT 2022-2025 System Performance (PM3) Targets

Performance Measure	NCDOT		SCDOT	
	2 year target	4 year target	2 year target	4 year target
Percent of the Person-Miles Traveled on the Interstate that are Reliable (LOTTR)	75.0%	75.0%	89.1%	89.1%
Percent of the Person-Miles Traveled on the Non-Interstate NHS that are Reliable (LOTTR)	70.0%	70.0%	85.0%	85.0%
Truck Travel Time Reliability Index (TTTR)	1.70%	1.70%	1.45%	1.45%

SYSTEM PERFORMANCE TARGET ASSESSMENT

FHWA determines significant progress for these measures after the mid-point and end of each performance period. A State has met or made significant progress toward target achievement if “actual” condition/performance is equal to or better than the established two-year target or “actual” condition/performance is better than baseline performance 23 CFR 490.109(e). As provided in 23 CFR 490.107(b)(2)(ii)(A), baseline condition/performance is derived from the latest data collected through the beginning date of the performance period. FHWA will classify the assessment of progress toward the achievement of an individual 2-year or 4-year target as “progress not determined” if a State provides the extenuating circumstance information required in 23 CFR 490.109(e)(5), and FHWA accepts the information.

North Carolina

NCDOT made significant progress toward all the PM3 targets during the 2022 Full Performance period. All targets assessed improved over the 2020 baseline set in the 2020 Mid Performance Period Progress Report, and no consequences were recommended. Table 10 shows FHWA’s most recent determination for the System Performance measures in North Carolina.

Table 10. North Carolina 2022 Full Performance Period Significant Progress Determination Results⁸

Measure Area	Measures	Baseline	Target	Actual	Better than Baseline?	Achieved Target?	Made Significant Progress?
The performance of the National Highway System	Interstate LOTTR	88.1%	75.0%	96.6%	Yes	Yes	Yes
	Non-Interstate LOTTR	91.8%	70.0%	95.7%	Yes	Yes	Yes
Freight movement on the Interstate System	TTTR	1.39	1.70	1.27	Yes	Yes	Yes

South Carolina

SCDOT made significant progress toward all of the PM3 targets during the 2022 Full Performance period. All targets assessed improved over the 2020 baseline set in the 2020 Mid Performance Period Progress Report, and no consequences were recommended. Table 11 shows FHWA’s most recent determination for the System Performance measures in North Carolina.

Table 11. South Carolina 2022 Full Performance Period Significant Progress Determination Results⁹

Measure Area	Measures	Baseline	Target	Actual	Better than Baseline?	Achieved Target?	Made Significant Progress?
The performance of the National Highway System	Interstate LOTTR	94.7%	90.0%	95.9%	Yes	Yes	Yes
	Non-Interstate LOTTR	91.4%	81.0%	95.0%	Yes	Yes	Yes
Freight movement on the Interstate System	TTTR	1.34	1.45	1.31	Yes	Yes	Yes

⁸ North Carolina 2018, 2020, 2022 Biennial Performance Report; North Carolina 2018, 2019, 2020, 2021, 2022 HPMS Data Submittal

⁹ South Carolina 2018, 2020, 2022 Biennial Performance Report; South Carolina 2018, 2019, 2020, 2021, 2022 HPMS Data Submittal



GSATS SUPPORT OF PM3 TARGETS

By adopting the NCDOT and SCDOT PM3 targets, the GSATS MPO agrees to plan and program projects that help both State DOT's achieve these targets.

GSATS recognizes the importance of linking goals, objectives, and investment priorities to established performance objectives, and that this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the GSATS 2045 MTP reflects the goals, objectives, performance measures, and targets as they are described in NCDOT and SCDOT public transportation plans and processes.

TRANSIT PERFORMANCE MEASURES

TRANSIT ASSET MANAGEMENT MEASURES

On July 26, 2016, FTA published the final Transit Asset Management (TAM) rule. This rule applies to all recipients and subrecipients of Federal transit funding that own, operate, or manage public transportation capital assets. The rule defines the term “state of good repair,” requires that public transportation providers develop and implement TAM plans, and establishes state of good repair standards and performance measures for three asset categories: equipment, rolling stock, and facilities. The rule became effective on October 1, 2018.

Transit Asset Management Targets

Public transportation agencies are required to establish and report transit asset management targets annually for the following fiscal year. Each public transit provider or its sponsors must share its targets, TAM, and asset condition information with each MPO in which the transit provider’s projects and services are programmed in the MPO’s TIP.

On May 31, 2019, the GSATS MPO approved by resolution to support Coast RTA’s transit asset management targets across all three required performance categories. Table 12 establishes the Transit Asset Performance Targets for the GSATS region.

Table 12. Coast RTA Transit Asset Performance Targets¹⁰

Performance Category	Asset Type	Measure	2022 Target	2023 Target
Equipment	Non-Revenue / Service Automobile	% of revenue vehicles that meet or exceed Useful Life Benchmark (ULB)	50%	50%
	Trucks and other Rubber Tire Vehicles		50%	50%
Rolling Stock	Bus		25%	20%
	Cutaway Bus		--	25%
	Trolleybus		25%	--
Facility	Administration		% of facilities with condition rating <3.0 on the FTA TERM Scale	50%
	Maintenance	50%		--
	Passenger Facilities	50%		50%

MPOs are required to establish initial transit asset management targets within 180 days of the date that public transportation providers establish initial targets. However, MPOs are not required to establish transit asset management targets annually each time the transit

¹⁰ GSATS 2019 Transit Asset Management Plan

provider establishes targets. Instead, subsequent MPO targets must be established when the MPO updates the MTP.

TRANSIT SAFETY PERFORMANCE MEASURES

The Federal Transit Administration (FTA) published a final Public Transportation Agency Safety Plan (PTSAP) rule and related performance measures as authorized by Section 20021 of MAP- 21. The PTASP rule requires operators of public transportation systems that receive federal financial assistance under 49 U.S.C. Chapter 53 to develop and implement a PTASP based on a safety management systems approach. Development and implementation of PTSAPs is anticipated to help ensure that public transportation systems are safe nationwide.

The rule applies to all operators of public transportation that are a recipient or sub-recipient of FTA Urbanized Area Formula Grant Program funds under 49 U.S.C. Section 5307, or that operate a rail transit system that is subject to FTA's State Safety Oversight Program. The rule does not apply to certain modes of transit service that are subject to the safety jurisdiction of another Federal agency, including passenger ferry operations that are regulated by the United States Coast Guard, and commuter rail operations that are regulated by the Federal Railroad Administration.

The transit agency sets targets in the PTASP based on the safety performance measures established in the National Public Transportation Safety Plan (NPTSP). The required transit safety performance measures are:

1. Total number of reportable fatalities.
2. Rate of reportable fatalities per total vehicle revenue miles by mode.
3. Total number of reportable injuries.
4. Rate of reportable injuries per total vehicle revenue miles by mode.
5. Total number of reportable safety events.
6. Rate of reportable events per total vehicle revenue miles by mode.
7. System reliability - Mean distance between major mechanical failures by mode.

Transit Safety Targets

Each provider of public transportation that is subject to the federal rule must certify that its SSPP meets the requirements for a PTASP, including transit safety targets for the federally required measures. Providers initially were required to certify a PTASP and targets by July 20, 2020. However, on April 22, 2020, FTA extended the deadline to December 31, 2020 to provide regulatory flexibility due to the extraordinary operational challenges presented by the COVID-19 public health emergency. On December 11, 2020, FTA extended the PTASP deadline for a second time to July 20, 2021.

In May of 2020, the GSATS MPO approved by resolution to support Coast RTA’s transit safety targets across all seven required performance categories. Table 13 establishes the Transit Safety Performance Targets for the GSATS region.

Table 13. Coast RTA Transit Safety Performance Targets¹¹

Mode of Transit	Annual Reported Fatalities	Fatalities (per 1 million VRM ¹²)	Annual Reported Injuries	Injuries (per 1 million VRM)	Annual Reported Safety Events	Safety Events (per 1 million VRM)	System Reliability (Breakdowns per 1M VRM)
Fixed Route	0	0	11	11.8	17	18.3	72
Paratransit	0	0	4	16.4	9	37	6
Safety Performance Targets: Coast RTA will reduce its events across the board by at least 5%.							

¹¹ Waccamaw Regional Transportation Authority 2020 Public Transit Agency Safety Plan

¹² VRM = Vehicle Revenue Miles