Performance Measures and Targets

Performance management involves using performance-based planning and programming to make investment and policy decisions. Performance-Based Planning and Programming (PBPP) refers to the methods utilized by transportation agencies to apply performance management to their planning and programming processes, ensuring long-term and short-term transportation investment decisions are based on the ability to meet goals. This includes using detailed data collected from the system to measure trends, set targets, and to monitor if those targets are being met. As a federal requirement, the State and local Metropolitan Planning Organizations (MPOs) are responsible for developing Long-Range Transportation Plans (LRTPs) and Transportation Improvement Programs (TIPs) using this performance-driven, outcome-based approach to planning.

Regional performance must be monitored in seven national goal areas: Safety, Infrastructure Condition, System Reliability, Freight Movement and Economic Vitality, Congestion Reduction, Environmental Stability, and Reduced Project Delivery Delay. At this time, only a small number of these goal areas have measures and targets associated with them by the State. These are listed below.

Safety

South Carolina has the highest fatality rate in the nation. It is abnormally high when compared to the National fatality rate and the rate of other Southeastern states. In an attempt to combat rising trends, South Carolina created a Strategic Highway Safety Plan called Target Zero and sets and monitors safety performance targets as required by FAST Act legislation. SCDOT has begun conducting safety audits for the State's MPOs as a tool to enable regional entities to combat safety problems as well. A regional safety audit for the GPATS region can be found online here: http://gpats.org/Programs/Safety.aspx

Currently, there are thirty-one projects in the safety category alone across the Counties of Greenville, Pickens, Laurens, Anderson, and Spartanburg in the State Transportation Improvement Program (STIP). These include everything from interstate safety improvements to standard intersection safety improvements. On August 30th, 2024, the South Carolina Department of Transportation (SCDOT) set new annual safety targets for five measures: Traffic Fatalities, Fatality Rate, Severe Injuries, Severe Injury Rate, and Non-Motorized Fatalities and Severe Injuries combined. The targets are based on baseline information generated using an analysis of data relating to each measure using a five-year rolling average. The state estimated reductions in fatalities and severe injuries by looking at existing and planned safety initiatives and set the safety targets below. These targets were adopted by the Greenville-Pickens Area Transportation Study (GPATS) Policy Committee on October 21st, 2024. These targets will inform all decisions made in the TIP and LRTP and can be found in the tables below, along with Transit Safety Targets adopted by regional transit agencies in their safety plans.

Projects implementing safety improvements will receive extra points in the prioritization process. For example, projects like the US-29 corridor improvement project (#2 in Horizon2040) and the Wade Hampton Access Management project (#6 in Horizon2040) will help eliminate curb cuts and left turns and theoretically decrease collisions at these points of conflict. These safety improvements layered on extra points to these projects during the ranking process. Safety projects are not limited by any boundaries. Just as intersection improvements on SC-153 in Anderson County, which can be currently seen in the GPATS TIP, received safety points from GPATS, the intersection improvement project of US-76 and S-72 in Laurens County targets similar problems and received safety points from the State.

Safety Targets and Baseline Data					
	# Traffic Fatalities	Fatality Rate*	# Severe Injuries	Severe Injury Rate*	# Non-Motorized Fatalities and Severe Injuries
SC Baseline (2019 – 2023)	1081.6	1.775	2782.2	4.567	479.8
GPATS Baseline (2019 – 2023)	112.0	1.828	339.2	5.536	58.4
SC 2021 - 2025 Targets	1080.0	1.782	2764.0	4.561	453.4

*Fatality rate and severe injury rate are based on the traffic fatalities, or revere injuries per 100 million vehicle miles traveled.

2022 Transit Safety Data								
Transit Agency	Mode of Transit Service	Fatalities (Total)	Fatality Rate*	Severe Injuries (Total)	Severe Injury Rate*	Safety Events (Total)	Safety Event Rate*	System Reliability**
CATbus	Fixed Route	0	0.00	8.5	1.44	19.5	3.32	10,527
	Demand Response/ Paratransit	0	0.00	1	0.10	3	0.30	16,002
Greenlink	Fixed Route	0	0.00	12	1.47	7	0.84	20,450
	Demand Response/ Paratransit	0	0.00	1	0.70	1	0.94	71,561

*Rates are based on the unit per 100 thousand vehicle revenue miles
**Reliability is determined by vehicle revenue miles/failures per 100 thousand miles

Transit Asset Management (TAM)

Transit Asset Management (TAM) Plans have been employed by the State and local transit agencies to inform the distribution of transit funds. Transit funding decisions are based on the condition of transit assets in an attempt to maintain a state of good repair. South Carolina has created a Group TAM Plan for rural transit agencies in the State, but these plans are generally done in-house by larger transit agencies and are then supported by the local MPO. The state of an asset is determined by measuring the percentage of each asset class that has met or exceeded its useful life benchmark (ULB). Greenlink, the Greenville area's transit agency, and Clemson Area Transit have set their own targets. They can be found below. Targets for FY 2021 and 2024 can be found in their TAM Plans. GPATS is not required to create a TAM Plan of its own, as the MPO is only the designated recipient of FTA funds. However, GPATS has adopted the targets set by the region's transit agencies. All transit funding decisions made in the TIP and LRTP will consider these targets moving forward.

Greenlink 2024 Transit Asset Management Targets			
Category	Class	Performance Measure	Target
Rolling Stock	Bus	% of rolling stock that has met or exceeded ULB	50%
	Trolley Bus	% of rolling stock that has met or exceeded ULB	100%
	Cutaway Bus	% of rolling stock that has met or exceeded ULB	14%
	Van	% of rolling stock that has met or exceeded ULB	0%

Equipment	SUV	% of vehicles that have met or exceeded their ULB	40%
	Van	% of vehicles that have met or exceeded their ULB	100%
	Truck	% of vehicles that have met or exceeded their ULB	83%
	Car	% of vehicles that have met or exceeded their ULB	100%
Facilities	100 W. McBee (Terminal)	% of facilities with a condition rating below 3.0 on TERM Scale	100%
	154 Augusta St (Maintenance Garage)	% of facilities with a condition rating below 3.0 on TERM Scale	0%

Clemson Area Transit 2021 Transit Asset Management Targets			
Category	Class	Performance Measure	Target
Rolling Stock	Articulated Bus	% of revenue vehicles that have met or exceeded their ULB	0%
	Bus	% of revenue vehicles that have met or exceeded their ULB	20%
Equipment	Trucks and other Rubber Tire Vehicles	% of vehicles that have met or exceeded their ULB	0%
Facilities	Administration	% of facilities with a condition rating below 3.0 on TERM Scale	0%

Infrastructure Condition

South Carolina, which has one of the largest state-owned roadway systems in the United States, is in need of extensive infrastructure repair and replacement. Federal Regulations required state departments of transportations (DOTs) to establish and report quadrennial (4-year) targets for six infrastructure condition performance measures by January 1st, 2022. SCDOT created 4 –year targets for Interstate pavement condition and 2- and 4-year targets for non-Interstate pavement condition and bridge conditions.

Pavement condition was calculated by comparing road segments to multiple different thresholds, including the International Roughness Index (IRI), percent cracking, percent rutting, and percent faulting on a scale of good to poor. If all metrics rated "good," the segment was considered in good condition. If two or more metrics rated "poor," the segment was considered in poor condition. Anything in between was considered fair condition. The targets were set using the average deterioration rates of the system while considering existing and planned construction projects in the region.

Bridge condition was measured similarly, but with the following thresholds: deck condition, superstructure condition, substructure condition, and culvert condition on a scale of 0-9. Scores of 4 or below were considered poor condition, while scores of 7-9 were considered good condition. Any scores in the middle were considered fair condition. Targets were set using the average bridge