2045 METROPOLITAN TRANSPORTATION PLAN UPDATE

Appendix I: Project Financing and Implementation Plan

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

This technical memorandum documents the 2045 GSATS Metropolitan Transportation Plan (MTP) Update transportation project scoring, transportation funding, and implementation plan. Within this document, the process of identifying recommended projects and the scoring methodology to reach those recommendations is detailed.

The following information was presented, discussed, and approved through the public engagement process and monthly meetings with the GSATS MTP Steering Committee.

Processes utilized during the 2040 MTP were updated to reflect new availability of data and emerging trends in transportation priorities. These updates are also detailed in this document.

Throughout this document, alignment between project scoring and the established Goals, Objectives and Performance Measures are noted, reinforcing the principles of performance-based planning. Additional detail on the established Goals, Objectives and Performance Measures are detailed in **Appendix B**.[1]

[1] FHWA Performance-Based Planning and Programming https://ops.fhwa.dot.gov/plan4ops/performance_based.htm#:~:text=Performance%2Dbased%20planning%20and%20programming%20is%20a%20system%2Dlevel%2C,and%20scenarios%20for%20meeting%20goals.

PROJECT IDENTIFICATION

During the 2045 MTP Update, a list of projects was initially generated from the previous GSATS 2040 Long Range Transportation Plan process. Member jurisdictions, through their representation on the MTP Steering Committee, were then asked to review the previous list to update any change in information as well as provide new projects for consideration in the 2045 MTP. Projects from the 2040 list that were constructed or were deemed no longer practical by the sponsoring jurisdiction were removed. Sponsoring jurisdictions also contributed projects identified in local transportation and comprehensive plans throughout the region. A GIS-based tool was provided for members of the Steering Committee to update the geography and project attributes. Improvements were also identified to address estimated demand and safety concerns in the region based on available data and input from the public at multiple Public Involvement Meetings. A final list of projects for consideration were submitted to the Steering Committee in September 2023 for approval. The projects to be ranked were categorized by type of improvement as follows:

- New Location
- Widening
- Access Management/Streetscape/Complete Streets
- Intersection Improvements

NEW LOCATION PROJECTS

Major investment in the regional roadway network is essential if current and future demand for automobile use in the region is to be satisfied. There are limitations on new roadway construction, such as natural and man-made barriers that hinder these improvements. Barriers often include factors that determine when and how costly improvements are, such as the processes used to obtain funding, environmental review requirements, and other government regulations.

WIDENING PROJECTS

Widening recommendations are projects on existing roadways that may require additional right-of-way acquisition. For estimating costs and relative impacts to these projects, information detailing the number of additional lanes and the bicycle and/or pedestrian elements are included in the project descriptions.

ACCESS MANAGEMENT/STREETSCAPE/COMPLETE STREETS PROJECTS

Access management, streetscape, and complete streets projects seek to improve mobility, alleviate congestion, and accommodate all users within the existing transportation system. These projects typically involve roadway improvements that increase capacity, optimize traffic operation, or apply traffic calming in residential or commercial areas and areas experiencing elevated safety concerns. Access management includes a broad set of techniques designed to improve roadway capacity, mobility, and safety by limiting the accessibility of vehicular traffic. The techniques usually control and regulate the location, spacing, and design of driveways, medians, median openings, traffic signals, and freeway interchanges. Furthermore, when combined with streetscape improvements, access management techniques can also contribute to attractive multimodal environments. Complete Streets improve the safety and efficiency of transit and multimodal transportation, improving pedestrian conditions as they cross the street, walk to shops, and bicycle to work.

INTERSECTION IMPROVEMENTS

Like widening projects and access management projects, intersection improvements are considered when traffic operations and/or safety conditions are a concern. For the purpose of project identification and ranking, information is collected about proposed improvements at each intersection, including combinations of signalization, addition of turn lanes, realignment, and other enhancements. In ranking these projects, intersection improvements are scored similarly to widenings by estimating the current conditions on adjacent roadways and estimating the length of recommended improvements.

PROJECT PLANNING LEVEL COST ESTIMATE METHODOLOGY

A key part of the project identification task was estimating planning level project build and maintenance costs. Many project costs were provided by the public agencies recommending or responsible for the roadways under consideration or identified in the previous plan. Other new projects necessitated developing new cost estimates, developed using data obtained from SCDOT on recently constructed projects of similar roadway cross sections. This data allowed the development of per mile costs that were applied to the proposed projects to obtain the estimated project cost. From SCDOT's base data, factors were added if a project was expected to have major right-of-way and utility impacts. A minimum of 10 percent contingency was added to all projects to account for the uncertainty of the future cost of materials. Higher contingency factors were added if a project was of medium or high complexity. An inflation rate of 3 percent was also applied to all projects to obtain an inflation-adjusted 2045 cost estimate.

TYPICAL SECTIONS

To estimate roadway improvements, a series of typical sections were utilized based on current conditions and desired characteristics of each project. These include numbers of lanes, median types, bicycle, and pedestrian elements, streetscaping and other potential features. This section illustrates this series of typical sections, grouped by functional class, to provide a visualization of project types.

CONTROLLED ACCESS WITH FRONTAGE ROADS

Figure 1: Controlled Access Facility (4-6 Lanes) with Frontage Roads

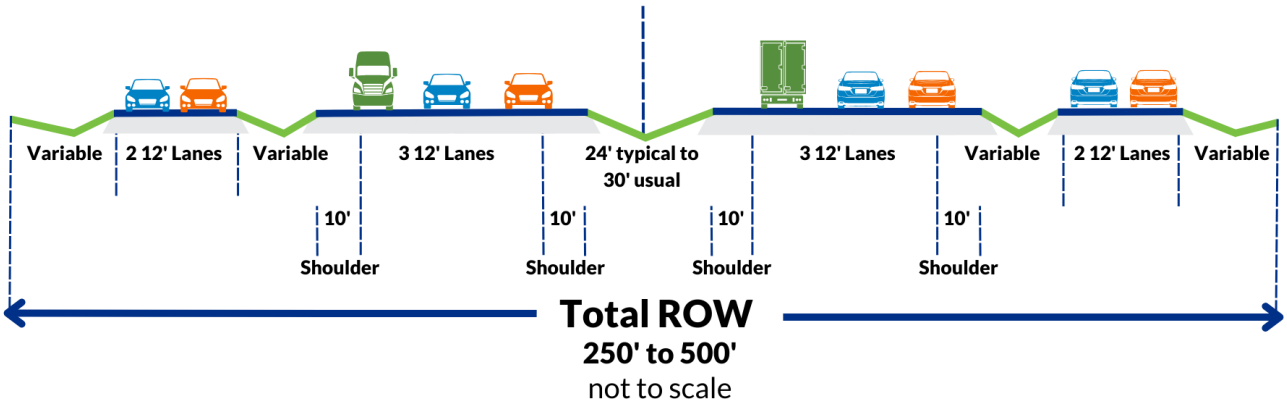
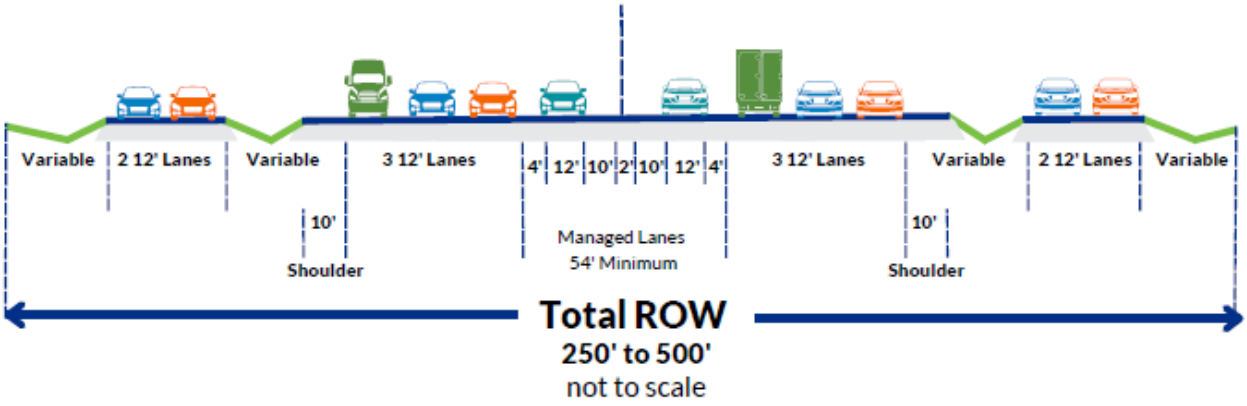


Figure 2: Controlled Access Facility (4-6 Lanes) with Managed Lanes and Frontage Roads



MAJOR ARTERIAL

Figure 3: Major Arterial-4 Lane with Raised Median, Left-Turn Bays, and Standard Bicycle/Pedestrian Accommodation

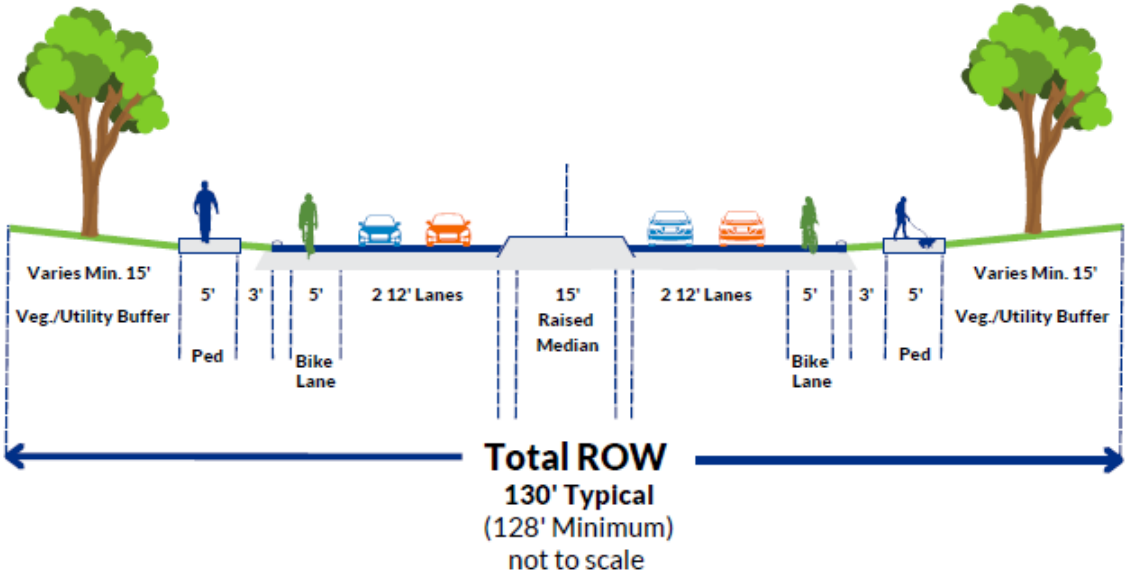


Figure 4: Major Arterial-4 Lane with Raised Median, Left-Turn Bays, and Multi-Use Path and Standard Bicycle/Pedestrian Accommodation

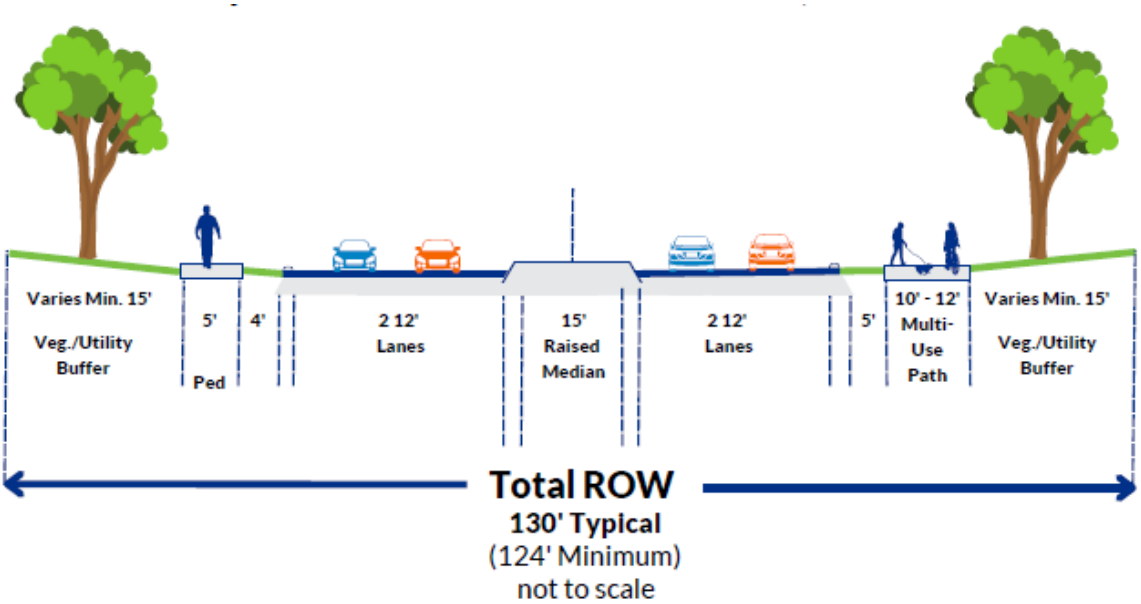


Figure 5: Major Arterial-6 Lane with Standard Bicycle/Pedestrian Accommodation

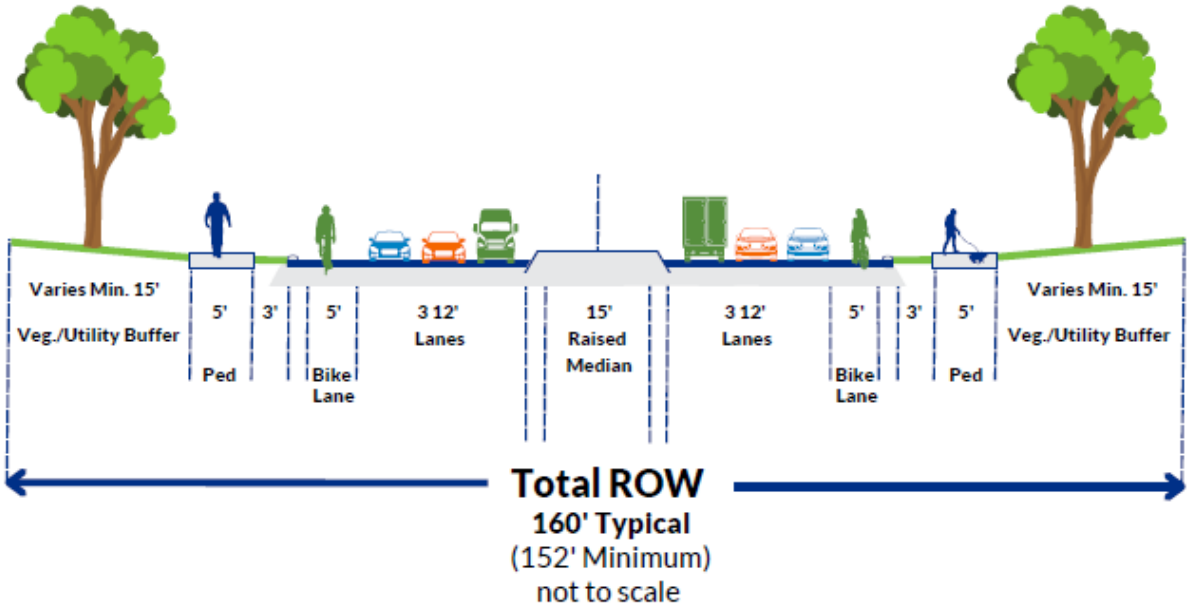
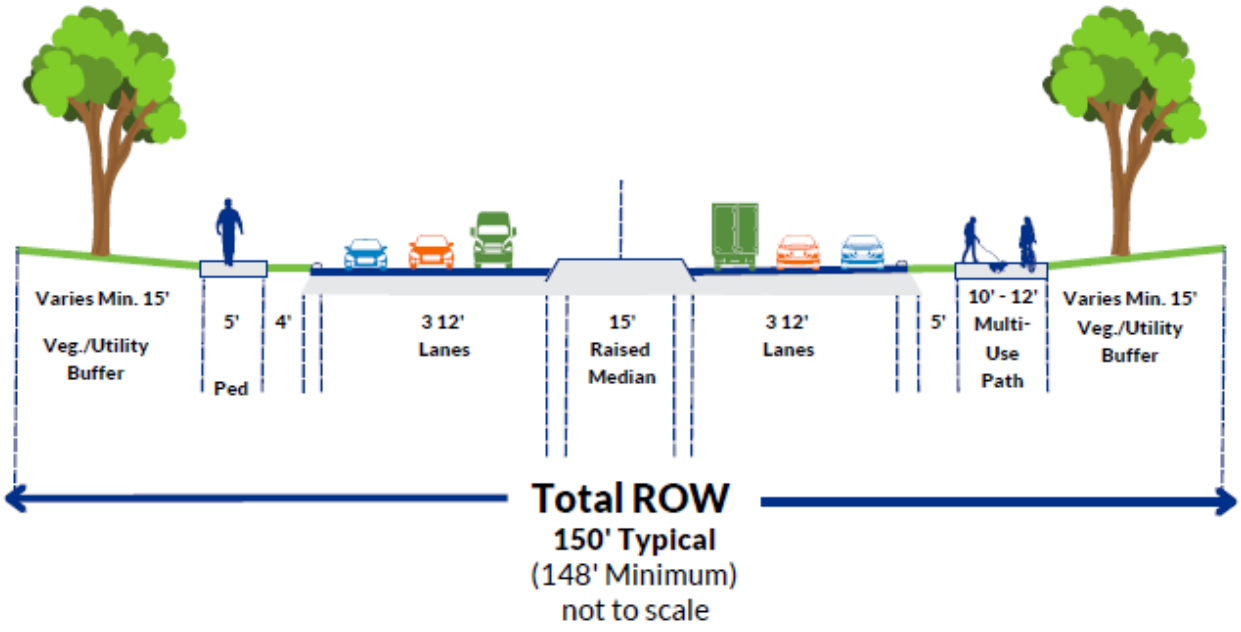


Figure 6: Major Arterial-6 Lane with Multi-Use Path



MINOR ARTERIAL

Figure 7: Minor Arterial-5 Lane (includes Continuous Left Turn Lane) Standard Bicycle/Pedestrian Accommodation

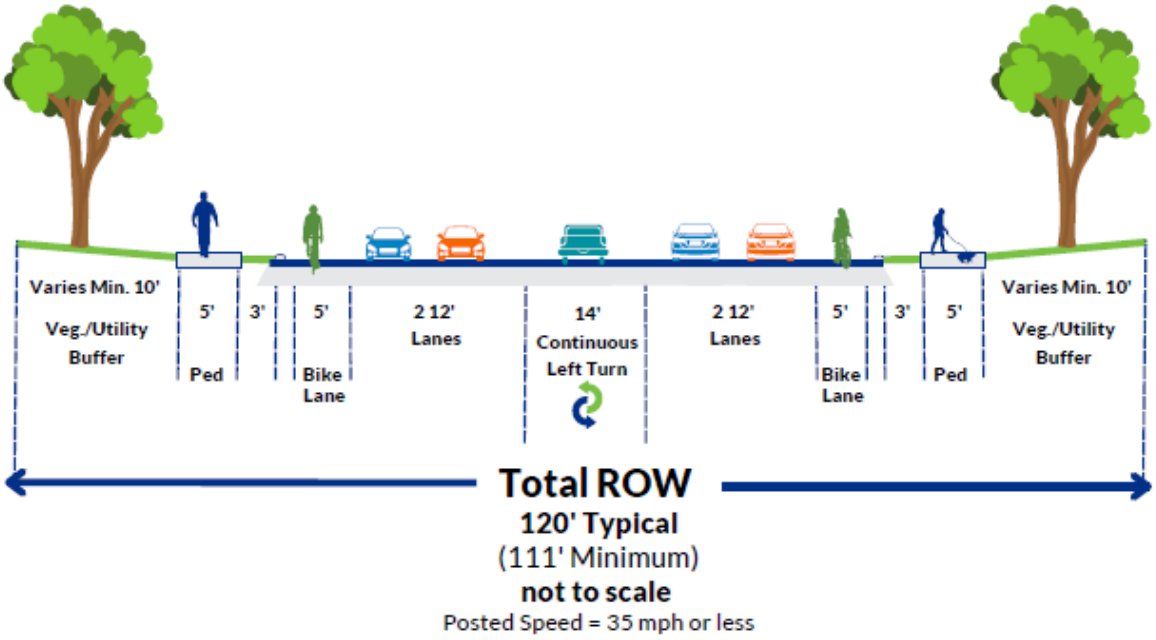


Figure 8: Minor Arterial-5 Lane with Multi-Use Path

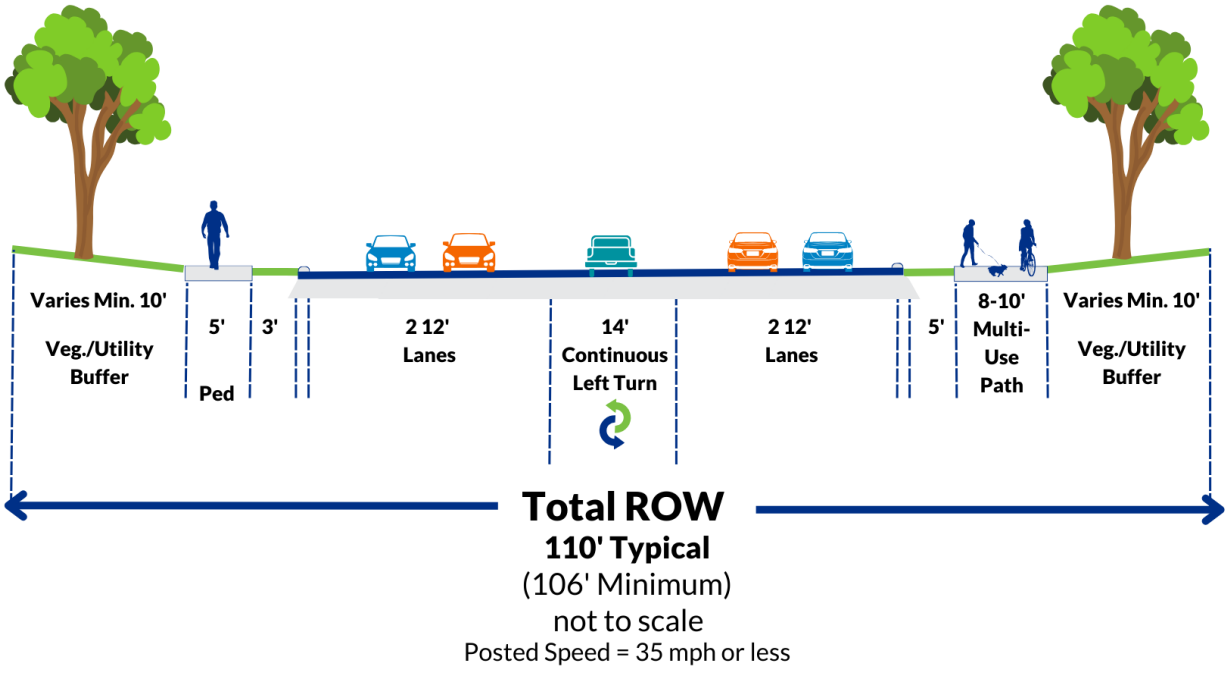


Figure 9: Minor Arterial-4 Lane with Standard Bicycle/Pedestrian Accommodation

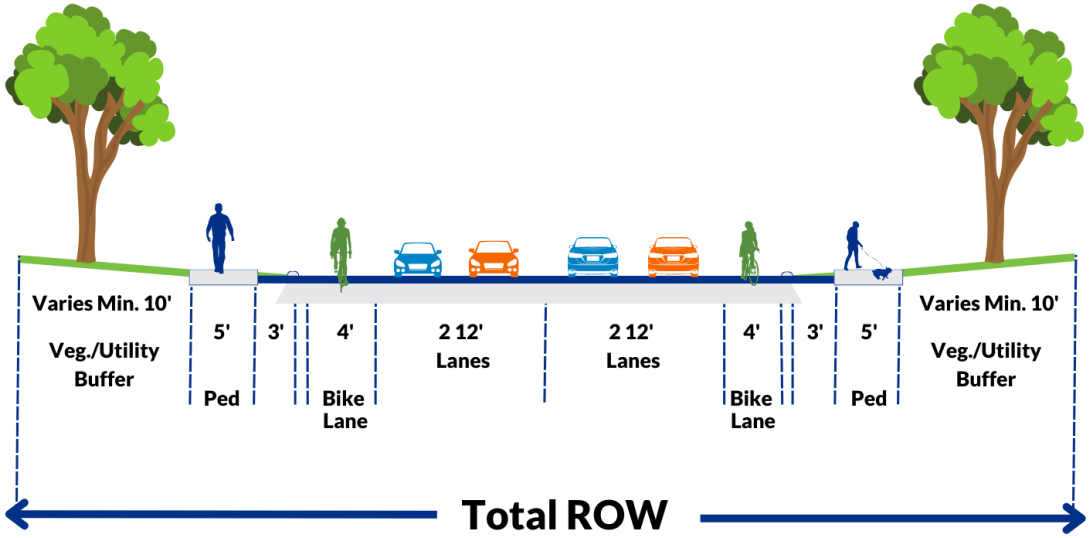


Figure 10: Minor Arterial-4 Lane Minimum with Shared Outer Lane

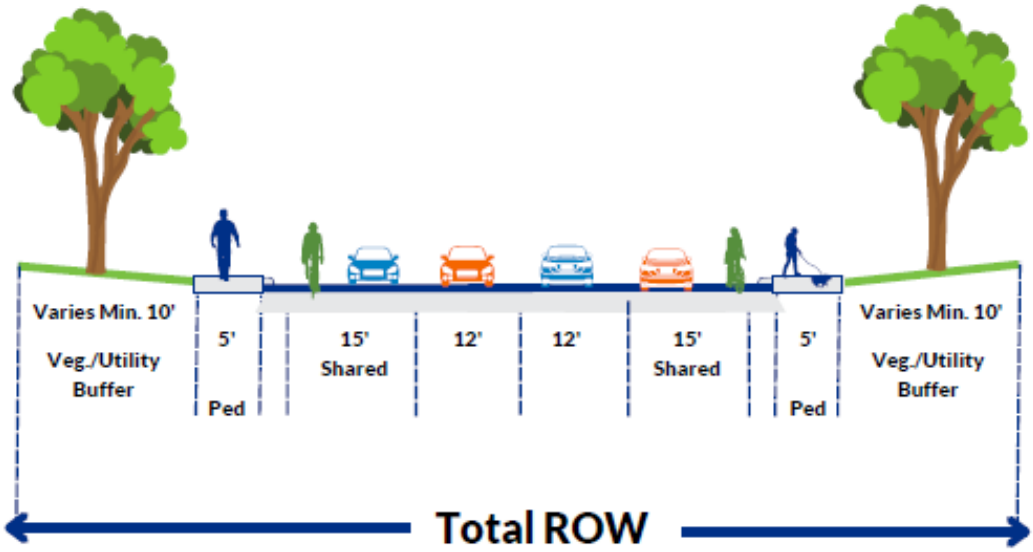
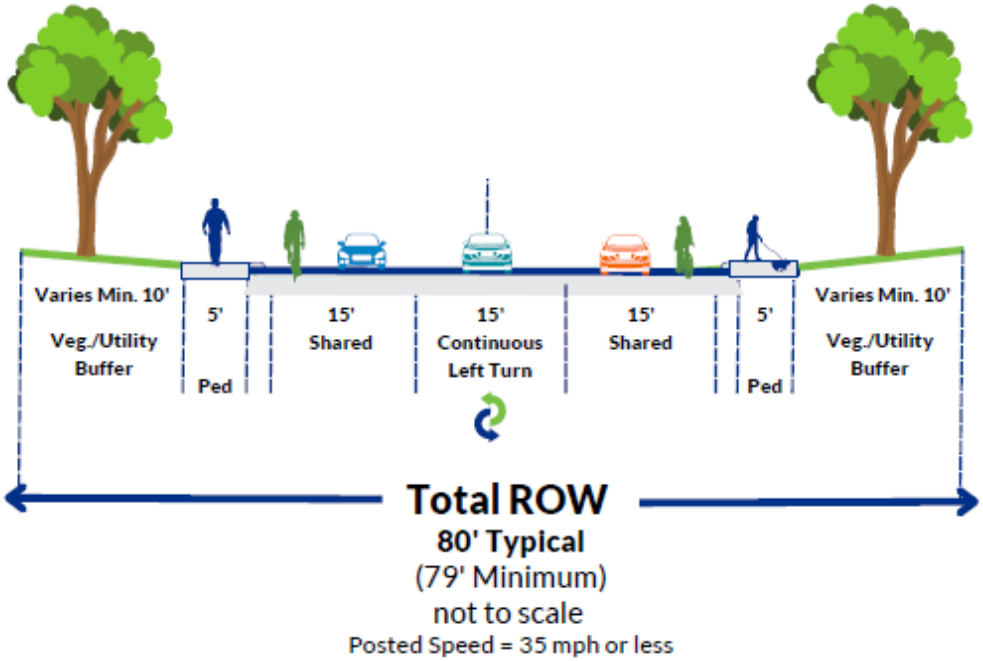


Figure 11: Minor Arterial-3 Lane Minimum with Shared Outer Lane



COLLECTOR

Figure 12: Collector-4 Lane with Standard Bicycle and Pedestrian Accommodations

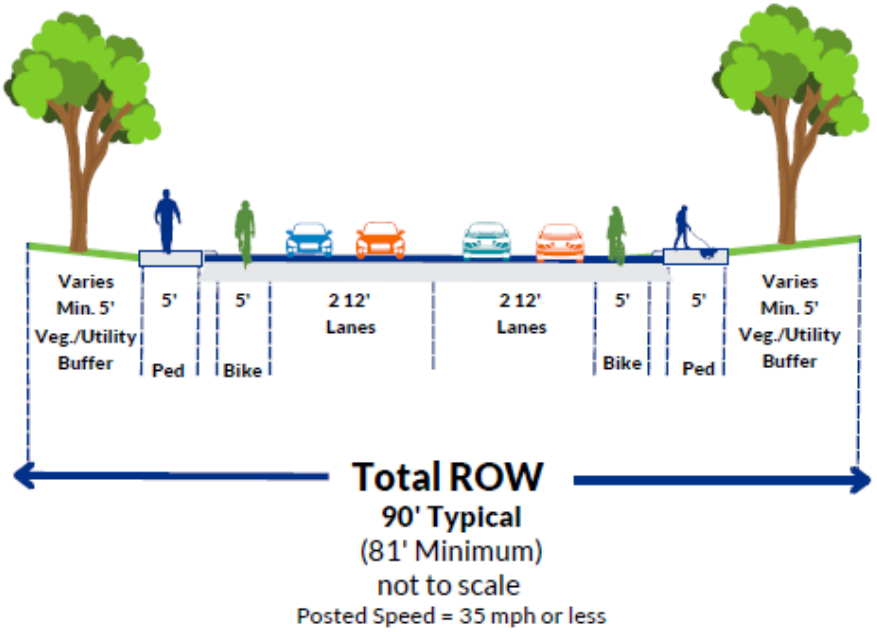


Figure 13: Collector-4 Lane with Multi-Use Path

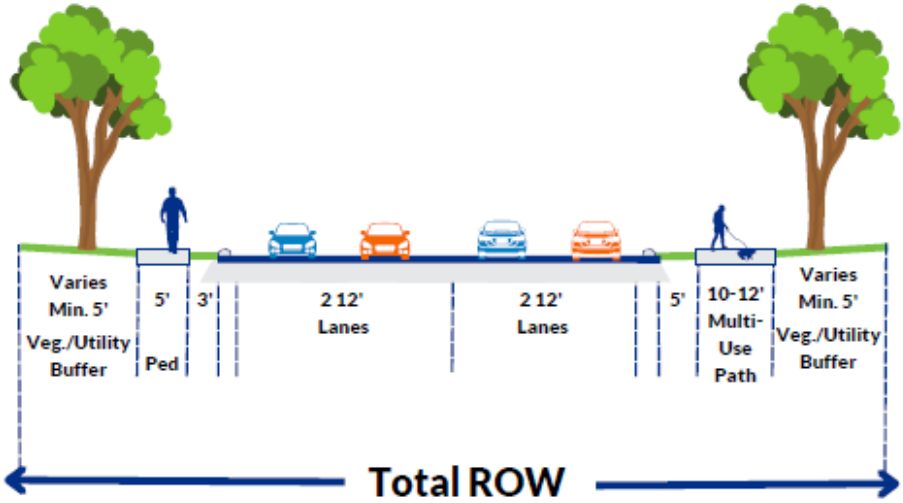


Figure 14: Collector-4 Lane with Shared Curb Lane

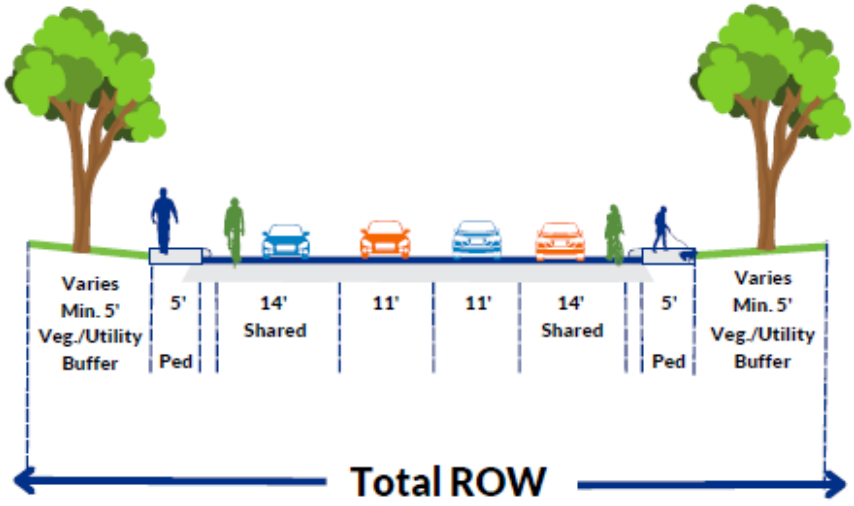


Figure 15: Collector-3 Lane with Standard Bicycle and Pedestrian Accommodations

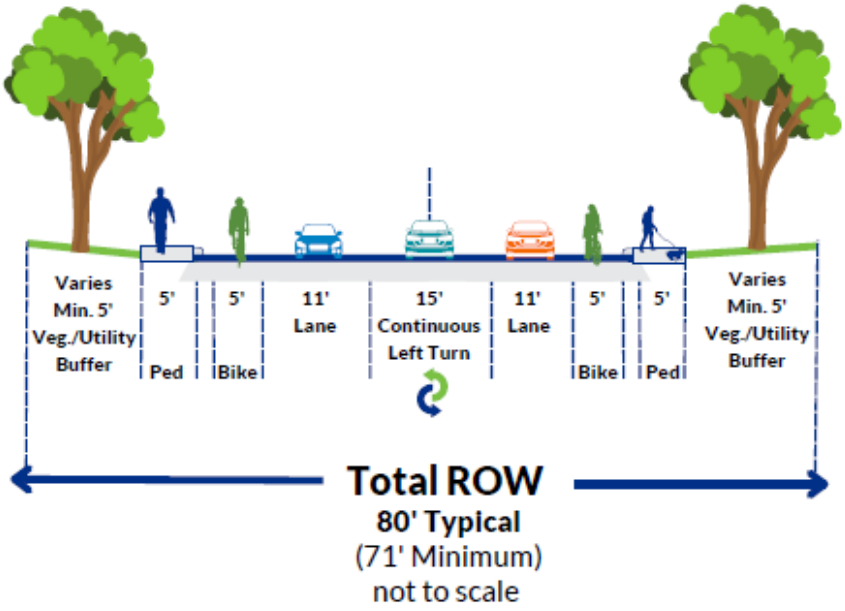


Figure 16: Collector-3 Lane with Shared Curb Lane

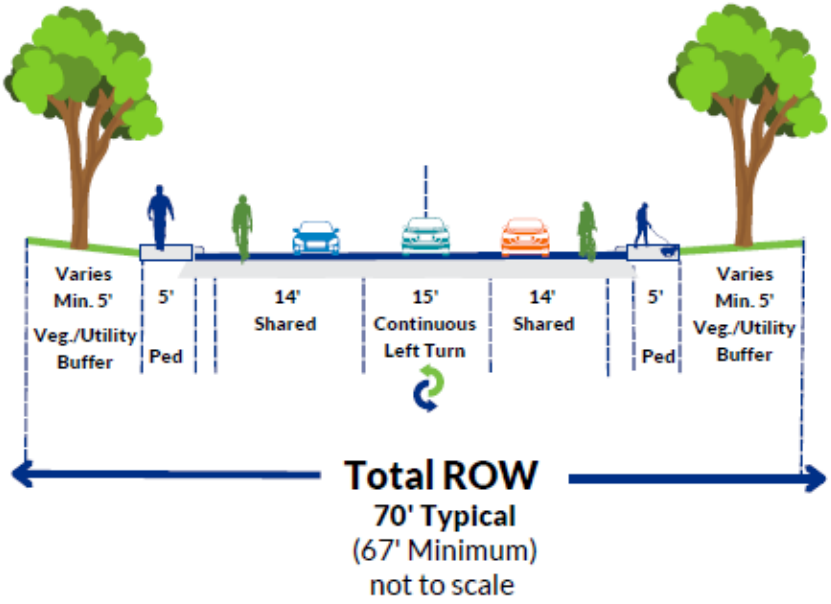


Figure 17: Collector-2 Lane with Parking and Multi-Use Path

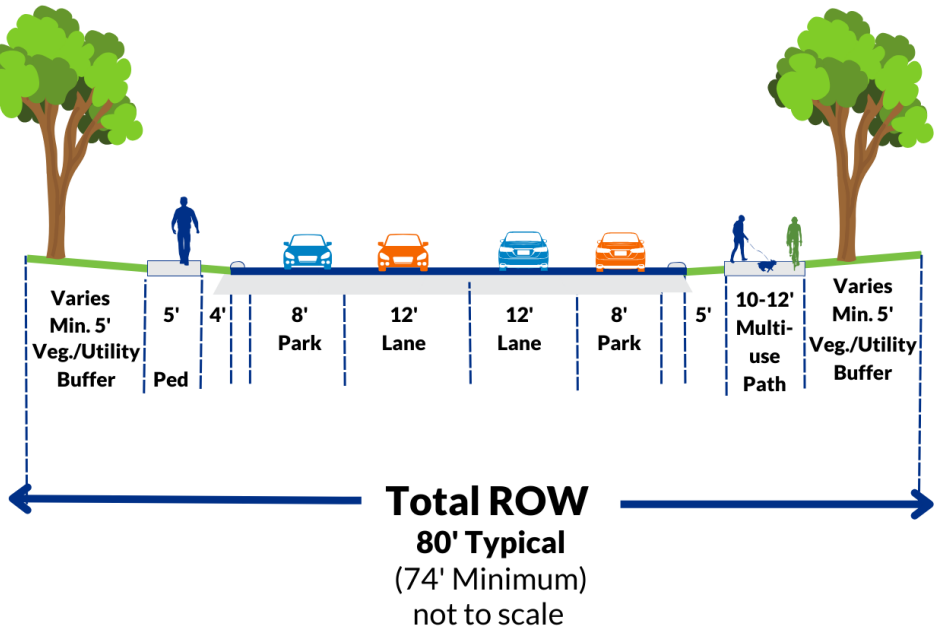


Figure 18: Collector-2 Lane with Standard Bicycle/Pedestrian Accommodations

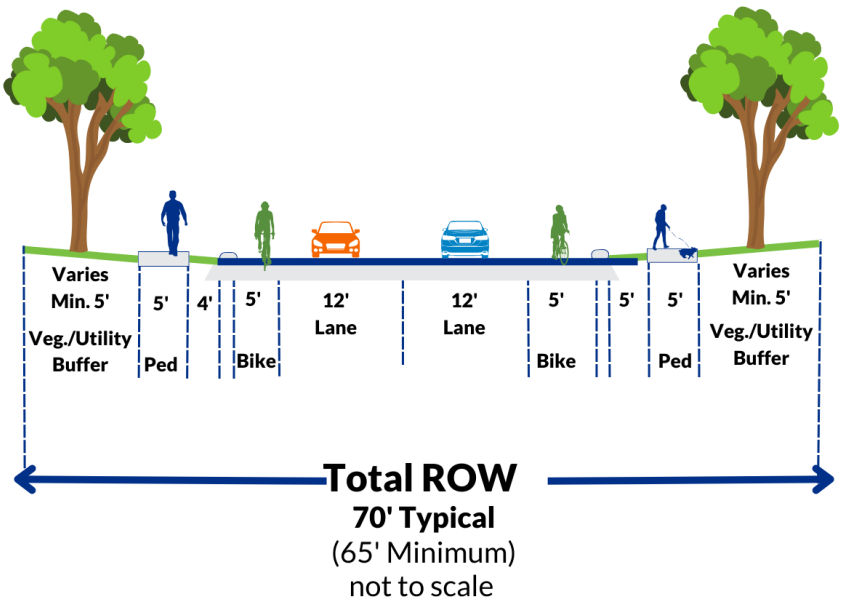
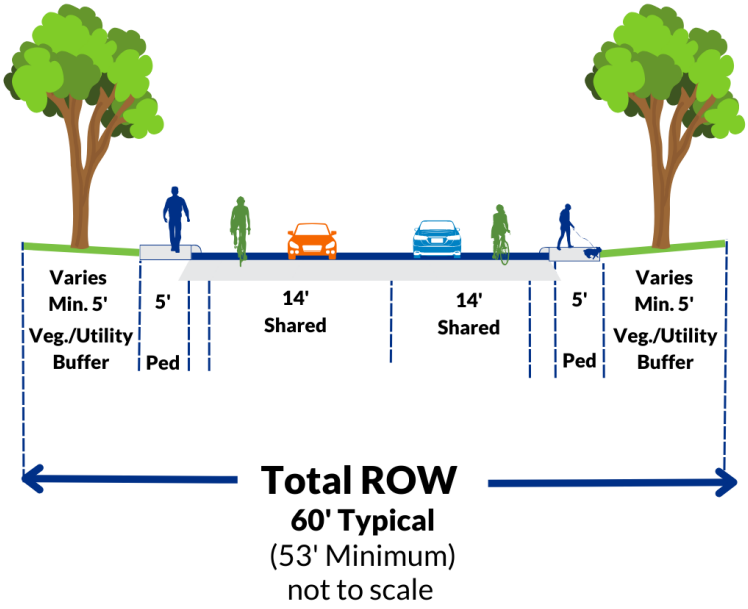
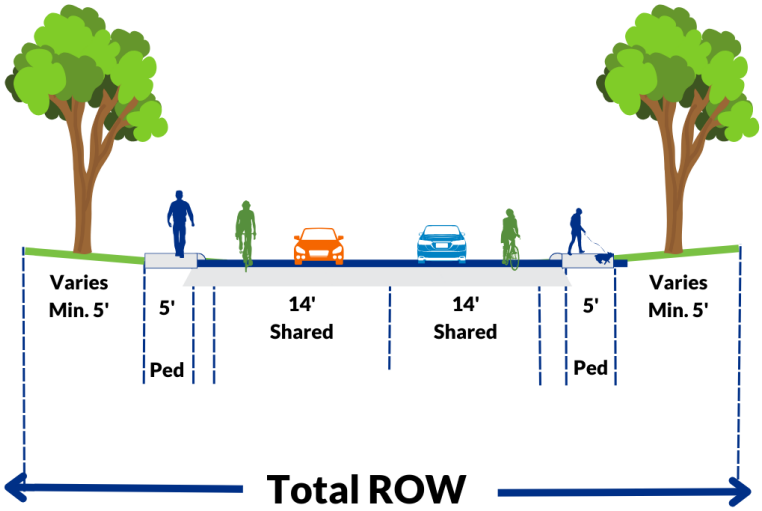


Figure 19: Collector-2 Lane with Shared Curb Lane



LOCAL

Figure 20: Local-2 Lane with Shared Curb Lane



PROJECT SCORING CRITERIA

During the previous 2040 LRTP process, GSATS developed project evaluation criteria based on priorities tailored to the GSATS region. The GSATS prioritization criteria is compliant with the South Carolina Act 114 statewide framework for evaluating and funding projects in South Carolina and the North Carolina Department of Transportation SPOT 7.0 Prioritization Process for projects in North Carolina. A discussion of the Act 114 and SPOT process and their relationship to the identified projects in this MTP is further described in this document. The 2045 MTP continues these same prioritization criteria outlined in **Table 1 and Table 2**. **Table 1** lists the prioritization criteria for widening, corridor improvements, interchange, and large intersection projects. **Table 2** lists the prioritization criteria for new location projects. Each set of criteria totals 100 maximum points. Both tables identify the accompanying GSATS 2045 Goal Area for each criterion.

For road widening projects, safety scoring was increased from 20 to 30 between the 2040 MTP Update (2017) and 2045 MTP Update, reflecting the local emphasis on improving safety as a top regional priority. Another change made in the scoring is a modification from "Environmental Impact" to "Environmental Impact and Resiliency," reflecting GSATS established goals and objectives. This scoring was changed from only estimating the environmental impacts of a potential project to also including a resiliency score based on asset vulnerability for a combined 10 points.

Table 1: Road Widening, Access Management, Large Intersection Project Criteria

2045 Project Prioritization Criteria	Maximum Points	GSATS 2045 Goal Area
Public Safety	30	• Safety and Security
Traffic Volume and Congestion	20	• Congestion and Reliability
Livability	20	• Modal Choices and Balanced System • Economic Competitiveness • Coordinated Land Use and Transportation • Mobility and System Accessibility
Financial Viability and Maintenance Costs	10	• Infrastructure Preservation and Maintenance
Environmental Impact and Resiliency	10	• Environmental Stewardship (Environmental Impacts and Resiliency)
Functional Class (Truck Traffic)	5	• Congestion and Reliability
Consistency with Local Land Use Plans	5	• Coordinated Land Use and Transportation Planning

Table 2: New Location Projects Criteria

2045 Project Prioritization Criteria	Maximum Points	GSATS 2045 Goal Area
Traffic Volume and Congestion	40	• Congestion and Reliability
Livability	20	• Modal Choices and Balanced System • Economic Competitiveness • Coordinated Land Use and Transportation • Mobility and System Accessibility
Financial Viability and Maintenance Costs	20	• Infrastructure Preservation and Maintenance
Environmental Impact	10	• Environmental Stewardship (Environmental Impacts and Resiliency)
Functional Class (Truck Traffic)	5	• Congestion and Reliability
Consistency with Local Land Use Plans	5	• Coordinated Land Use and Transportation Planning

GSATS PROJECT SCORING METHODOLOGY

The following subsections describe the scoring process and point scale for each criterion.

Traffic Volume and Congestion

The traffic volume and congestion score is a quantifiable criterion based on estimated 2045 traffic volumes and the associated level-of-service of the roadways. Future traffic volume and congestion levels are used to evaluate the long-term performance of the roadway network, along with the identification of deficiencies and recommended projects. Prior to programming projects in the GSATS Transportation Improvement Program (TIP), current day traffic volumes and congestion will also be considered in the ranking process for the financially constrained portion of the MTP, as well as any other candidate projects to support a "worst-first" approach to project selection. A weighted point assignment is based on projected 2045 volume to capacity ratio from the GSATS 2045 travel demand model, with more points going to the more congested roadways, as detailed in **Table 3**. Volume and congestion scores are assigned based on the sliding scale of estimated volume to capacity (V/C) ratios. For widening projects, the V/C ratio of the existing roadway is used for scoring. For new location projects, the V/C ratio of the existing facility in need of improvement is used for scoring. This is a GIS process of identifying adjacent and/or parallel routes to be improved by additional network capacity. *This criterion supports the MTP goal area of Congestion and Reliability and aligns with performance measures of improved Travel Time Reliability and annual hours of truck and auto delay on principal arterials.*

Table 3: Traffic Volume and Congestion Point Scale

Project Type	Points by V/C Ratio							
	0 to 5	6 to 10	11 to 15	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40
Widening & Access Management	0.00 - 0.74	0.74 - 1.07	1.07 - 1.28	1.28 - 2.07	--	--	--	--
New Location	0.00 - 0.53	0.53 - 0.64	0.64 - 0.69	0.69 - 0.72	0.72 - 0.77	0.77 - 0.94	0.94 - 1.24	1.24 - 1.99

Source: GSATS 2045 Travel Demand Model, Existing plus Committed Network

Public Safety

Public safety is a quantifiable criterion based on observed crash data provided by SCDOT and NCDOT. A weighted point assignment is based on the number of crashes for existing roads from 2017-2021 for North Carolina and South Carolina roads divided by the length in feet of the improvement. This crash data reflects geographically referenced points where a crash occurred, including cars, trucks, and non-motorized vehicles. Projects to improve roads with higher crash rates receive more points, supporting the plan goals of improving safety on the regional infrastructure. This point scale is presented in **Table 4**. Because new construction projects do not have historical crash data available, crash rates are excluded from new location project scoring. *This criterion supports the MTP goal area of Safety and Security and supports aligns with performance metrics of improving number and rate of fatalities, number and rate of serious injury, number of non-motorized fatalities and number of non-motorized serious injuries.*

Table 4: Public Safety Point Scale

Project Type	Points					
	0 to 5	6 to 10	11 to 15	16 to 20	21 to 25	26 to 30
Widening & Access Management	0.00 - 0.000555	0.000555 - 0.00323	0.00323 - 0.0366	0.0366 - 0.109	0.109 - 0.253	0.253 - 0.487

Source: SCDOT and NCDOT Crash Data, 2017 - 2021

Livability

The livability score is a quantifiable criterion based on distance from defined public facilities/destinations and the project's ability to improve access, connectivity, and mobility for other, non-auto, modes of travel. Projects can receive a total of 20 points. Projects receive two points for being within 0.5 mile and one point for being within one mile of schools, public buildings, parks, libraries, hospitals, transit, and other destinations. These geographically referenced datasets are obtained from County governments and sponsoring jurisdictions. This scoring was updated in the 2045 MTP to include distance from an identified

Justice40 census tract, reflecting the planning priority of supporting access and mobility for Justice40 communities. The same method listed above was used. 8 scores were summed for 16 of the 20 total livability criterion project score.

The last four points of the 20-point Livability criterion was a discretionary point allocation based on a projects ability to enhance walkability and connectivity. Each of these factors were scored with a maximum of two points. *This criterion supports the MTP goal areas of modal choices and balanced system, supporting economic competitiveness, coordinating land use and transportation, and supporting mobility and system accessibility. This also supports the performance measures of aligning recommendations with comprehensive plans, improving the percent of non-single occupant vehicle travel, percent increase in transit ridership, and percent of population within 0.5 miles of transit routes.*

Financial Viability and Maintenance Cost

The financial viability and maintenance cost score is a quantifiable criterion based on estimated project construction and 20-year maintenance costs, resulting in a project's total lifecycle cost. Once lifecycle costs are calculated for each project, Jenks natural breaks classification method is used to determine the best arrangement of values into different classes. Two classes were defined for Widening & Access Management projects and four classes were defined for New Location projects. The score is intended to have an inverse relationship with the cost of a project, meaning that more points are given to projects that exhibit lower lifecycle costs. The financial viability and maintenance cost score is presented in **Table 5**.

Table 5: Financial Viability and Maintenance Costs Point Scale

Project Type	Points			
	0 to 5	6 to 10	11 to 15	16 to 20
Widening & Access Management	$466.57m - $11.41m	$11.41m - $0m	--	--
New Location	$366.44m - $28.70m	$28.70m - $14.95m	$14.95m - $6.34	$6.34m - $0m

Environmental Impact and Resiliency

The quantifiable environmental impact criterion is based on a combination of an estimated environmental impact and flood resiliency. A higher Environmental Impact score reflects a lesser level of environmental impact and a higher Resilience score reflects a greater need for resilient infrastructure in project locations.

The environmental impact score is the result of a GIS analysis of project level assessments of potential impacts to natural, social, and cultural resources. Each project begins with 5 points and then lose points for each resource located within a 100-foot buffer around the project.

Point assignment is based on 22 environmental criteria including: the potential for impacting threatened and endangered species, forested habitat, wetlands, drainage crossings, floodplains, outstanding resource water, uplands, HAZMAT sites, Parks/Refuges/WMA 4(f)/6(f), historic structures, archeological sites, farmland, communities, residencies, planned residencies, commercial sites, other relocations, environmental justice impacts, noise receptors, and visual impacts. The score is then translated into the estimated environmental documentation required: preparation of a Categorical Exclusion (CE), Environmental Assessment (EA) and Finding of No Significant Impact (FONSI), or Environmental Impact Statement (EIS). The Environmental Impact point allocation is detailed in **Table 6**. *This scoring supports the MTP goal area of environmental stewardship.*

Table 6: Environmental Impact Point Scale

Project Type	Points			
	0 to 1	2	3	4 to 5
All Types	EIS with major mitigation	EIS	EA and Finding of No Significant Impact (FONSI)	Categorical Exclusion

Resiliency is scored based on the highest flood zone grade that each project passes through. Projects that intersect with NOAA-identified flood composite risk areas are assigned a score based on the classification of the zone through which they pass. Higher flood zone classifications received higher scores due to the larger benefit these projects would provide due to improved building materials, standards, and techniques. The Resilience score reasoning is based upon the requirement to improve a roadway to current stormwater design standards if and when a roadway right of way is modified or constructed. The 8 flood zone grades were broken into quintiles to determine respective project scores. The Resiliency point allocation is detailed in **Table 7**. *This scoring supports the MTP goal area of environmental stewardship.*

Table 7: Resiliency Point Scale

Project Type	Points				
	1	2	3	4	5
All Types	0.01 - 1.4	1.141 - 2.8	2.81 - 4.2	4.21 - 5.6	5.61 – 7.0

Functional Class (Truck Traffic)

The functional class (truck traffic) score is a quantifiable criterion based on roadway functional classes (Expressway, Ramp, Principal Arterial, Minor Arterial, and Collector). In situations where facilities that provide an alternative to a route operating at a level of service "F," the functional classification of the failing route will be used. In all other

situations, point assignment is based on the functional class of the road being improved or constructed. This supports freight mobility based on the preference of freight trucks to traverse routes on higher functional classes due to their design standards, posted speeds and relative safety and efficiency for larger vehicles compared with lower functional class roadways. The Functional Class point scale is shown in **Table 8**. *This scoring criterion supports the MTP goal area of improving congestion and reliability and aligns with performance measures of annual hours of truck delay on principal arterials.*

Table 8: Functional Class Point Scale

Project Type	Points					
	0	1	2	3	4	5
All Types	Local	Collector	Minor Arterial	Principal Arterial	Ramp	Expressway

Consistency with Local Land Use Plans

The Consistency with Local Land Use Plans criterion is a quantifiable based on support of future land use, comprehensive plan objectives, and established communities. Point assignment is based on the local government's (city, town, or county) input regarding a project's compatibility with the adopted future land use map, comprehensive plan, contribution to walkable communities, open space, and established communities. For each of the five factors, one point is possible with each project earning a maximum potential score of 5 points. *This scoring supports the MTP goal areas of supporting economic competitiveness and coordinated land use and transportation planning. It aligns with the performance measures of aligning recommendations with comprehensive plans and increasing the percent of population within 0.5 miles of transit routes.*

RESULTS OF PROJECT SCREENING PROCESS

Using the project scoring criteria described in the prior section, each project was scored for each specific metric and a total score out of 100 points was determined. A comprehensive list of 120 projects, of all project types, sorted by the ranking criteria approved for the 2045 MTP, are listed below in **Table 9 and Table 10**. Projects in South Carolina and North Carolina are listed in separate tables and ranked independently of one another due to the different funding and state level ranking processes This ranking informs planners and regional decision makers of the performance of the ranking criteria, confirming their reinforcement of locally established goals, objectives, and performance measures. In the planning process, this list is then evaluated against available funds. This table is termed a "fiscally unconstrained list," indicating that no projects have been eliminated due to the lack of available funding. In the following sections, the funding scenarios are applied, and a "fiscally constrained list" is presented in later sections. Each project is assigned a project ID number that corresponds with the project type as follows: B: Bridges; I: Intersections, Interchanges, Corridor Management; N: New Construction; R: Access Management; S: Superstreet; W: Widening

Table 9. South Carolina Roadway Project Screening Results

Rank	Project ID	Local Government	Project Name	Project Description	Congestion Score	Safety Score	Total Livability Score	Financial Viability Score	Truck Traffic Functional Class Score	Environmental Scaled Score	Land Use	Resiliency Score	TOTAL SCORE
1	I - 3i	Georgetown County	US 17 Signalizations	Install adaptive signal timing at 17/Litchfield Drive, 17/Willbrook Boulevard, 17/N Boyle Road, 17/Watchesaw Road, 17/Bellamy Road, 17/Riverwood Drive, 17/Burgess Road, 17/Blackgum, 17/Retreat Beach Blvd	16	30	13	7	3	5	3	4	81
2	I - 19	City of Conway	1st / 2nd Avenue Underpass at US 501	Underpass connecting 1st / 2nd Avenue to US 501 ramps for access to downtown Conway	35	NA	9	18	1	3	2	2	70
3	I - 7i	Georgetown County	US 17 Access Mgmt	Remove concrete median opening and replace with grass at 17/Eagles, 17/Channel Bluff Ave, 17/Georgieville St, 17/Atalaya Rd	15	21	9	8	3	5	3	3	67
4	N - 98	Horry County	US 17 and US 17 Business Connection	A new connector between US 17 Bypass and US 17 BUS in Garden City north of the Garden City Connector and South of Glenns Bay Road, including bicycle and pedestrian facilities	35	NA	9	14	1	4	4	0	67
5	N - 22	City of Conway	SC 90 Extension	Extend SC 90 from US 501 Bus to intersect US 501 east of Conway	40	NA	5	10	2	3	2	5	67
6	I - 3	Horry County	Hwy 17 Bypass / Hwy 544 Intersection/Interchange	Interchange and Intersection Improvements at Hwy 17 Bypass & Hwy 544 interchange from Beaver Run Blvd to South Strand Commons Including bicycle and pedestrian facilities	17	24	6	5	2	4	4	5	67
7	I - 5i	Georgetown County	US 17 Access Mgmt	Remove concrete median opening and replace with grass US 17 at (Wesley Rd North, Nicoles, Nelson Dr, and Hammock Ave)	9	25	10	8	3	5	3	3	66

Rank	Project ID	Local Government	Project Name	Project Description	Congestion Score	Safety Score	Total Livability Score	Financial Viability Score	Truck Traffic Functional Class Score	Environmental Scaled Score	Land Use	Resiliency Score	TOTAL SCORE
8	W - 19	City of North Myrtle Beach	Hwy 17 - Windy Hill Intersections	US 17 Intersections. Widen for dual left at intersections	10	27	9	4	3	4	4	5	66
9	I - 12	Horry County	US 17 Bus / SC 544 Intersection	Intersection improvements/signalization for right turn congestion and queuing onto SC 544	9	29	6	7	2	4	3	5	65
10	N - 3i	City of North Myrtle Beach	Possum Trot Rd Extension	Extend Possum Trot Rd. across US 17 to Madison Dr	30	NA	8	18	1	5	3	0	65
11	I - 21	Georgetown County	US 17 at Litchfield Drive and Country Club Drive in Litchfield	Project to improve two intersections approximately 300 feet apart on Highway 17. Litchfield Drive is an signalized intersection with commercial uses on all four corners and Country Club is an unsignalized intersection located 300 feet north on the west side	15	25	7	6	3	4	2	3	65
12	N - 2	City of North Myrtle Beach	Edge Parkway and Sand Ridge Rd connector	Connect Sandridge Rd to Edge Parkway signal. Add bike/ped facilities.	29	NA	7	18	1	4	4	0	63
13	N - 10	Horry County	Scipio Lane Ext.	Scipio Lane Extension from Holmestown Road to Big Block Road with multipurpose path	36	NA	10	7	1	3	5	0	62
14	R - 9	City of Conway	Hwy 501 Access Mgmt	Hwy 501 from 4th Avenue to 16th Avenue - Coordinate Access Management.	7	20	12	6	3	4	4	5	61
15	R - 20a	City of Myrtle Beach	Kings Highway	Improve Kings Highway from Farrow Parkway to 31st N with Bike/Ped/Transit improvements	12	20	15	3	2	1	3	5	61
16	B - 1i	North Myrtle Beach	Barefoot Bridge Replacement	Replace existing swing span bridge with a fixed bridge	40	NA	9	1	1	2	3	5	61
17	N - 44	City of North Myrtle Beach	Outrigger Rd / Hilton Drive Connector	Connect Outrigger Road with Hilton Drive near 27th South	30	NA	9	11	1	5	4	0	60
18	N - 5a	Horry County	Postal Way extension to Atlantic Center	Extend Postal Way to the north to Atlantic Center, including bicycle and pedestrian facilities with transit potential	35	NA	9	8	1	3	4	0	60
19	R - 20c	City of Myrtle Beach/ Horry County/City of North Myrtle Beach	Kings Highway Access Mgmt	Improve Kings Highway from 67th Ave. N (MB) to 48th Ave S (NMB) with Bike/Ped/Transit improvements	13	13	14	4	2	5	5	4	60
20	W - 35	City of Georgetown	Anthuan Maybank Drive Widening / Extension	Widen and extend Anthuan Maybank Drive to Highmarket St	30	NA	16	6	2	5	0	1	60
21	R - 7i	Georgetown County	US 17 and Burgess Road Intersection	Improve operation on corridor after capacity upgrades at grade quadrant intersection design. US 17 and Burgess Road (707)	15	20	8	6	3	4	3	0	59

Rank	Project ID	Local Government	Project Name	Project Description	Congestion Score	Safety Score	Total Livability Score	Financial Viability Score	Truck Traffic Functional Class Score	Environmental Scaled Score	Land Use	Resiliency Score	TOTAL SCORE
22	N - 14	Horry County/City of North Myrtle Beach	Champions Blvd Connector	New road connecting Water Tower Road and Long Bay Rd as 2 lanes divided with multipurpose path	31	NA	4	15	1	4	4	0	59
23	N - 49	City of Conway	2nd Avenue Extension	2nd Avenue Extension to S-723 (US 501 exit ramp to 2nd Avenue)	25	NA	9	15	1	3	3	3	59
24	R - 4i	Georgetown County	US 17 Bypass Widening	Widen to 6 lanes between Bellamy Ave and Burgess Rd on 17 Byp. Install a reduced conflict intersection at Macklen Avenue	14	18	10	5	3	4	3	1	58
25	W - 30	Horry County	US 17 Bus Access Mgmt	Install Additional Lanes on Bus 17/Eliminate Frontage Roads Between Myrtle Beach and Surfside, match existing section in MB and extend East Coast Greenway	17	14	11	3	2	3	5	3	58
26	N - 8	Georgetown County	Georgetown Bypass/Brick Chimney Rd Phase 4	Georgetown Bypass/Brick Chimney Road PH 4: Hwy 521 to Hwy 17, south (across Sampit River)	28	NA	15	4	2	2	2	5	58
27	R - 32	Horry County	SC 179 Widening	Improve and widen 179 from US 17 to NC 179 to multilane facility with multipurpose path	17	11	9	5	1	4	5	4	56
28	M - 6	Horry County	SC 9 Access Mgmt	Access management improvements from SC 57 to Water Grande Blvd including plantable median between intersections and bicycle and pedestrian facilities	7	15	11	5	3	5	4	5	55
29	N - 5i	Horry County	Conway Perimeter Road / Busbee Bypass	Conway Perimeter Rd / Busbee Bypass-From US 701 to SC 544	35	NA	7	0	3	2	3	5	55
30	N - 54	City of Conway	Powell St Extension	Extend Powell Street from 1st Avenue to Marina Drive and install sidewalks in Conway	10	NA	12	20	1	4	5	2	54
31	B - 8	City of Myrtle Beach	Hwy 501 Bridge	Replace and widen HWY 501 Intracoastal Waterway bridge, add bike lanes and sidewalks (or build parallel bridge)	16	15	6	3	2	4	3	5	54
32	W - 12	Horry County/City of North Myrtle Beach	Little River Neck Road Widening	Widen Little River Neck Road from 2 to 3 lanes with multipurpose path in North Myrtle Beach and construct roundabout north of Hill St	20	8	11	2	1	4	4	4	54
33	B - 4	Horry County	New Bridge over Waccamaw River	New Bridge over Waccamaw River, which would link SC 90 with SC 905 east of Conway	40	NA	2	3	1	2	1	5	54
34	I - 16i	Georgetown County	US 17 Access Mgmt	Install a NB U-turn at Boyle and 17 in conjunction with other access mgmt efforts in this corridor	7	15	10	8	3	4	3	3	53
35	I - 12i	Georgetown County	US 17 Signalizations	Install unsignalized reduced conflict measures at all three intersections between Sandy Island Road and Wesley Road	13	12	9	7	3	3	3	3	53
36	R - 6i	Georgetown County	US 17 / Pendergrass and Wachesaw Intersections	Convert 17/Pendergrass and 17/Wachesaw to a RCI. Wesley Road may need to align with Coquina. Pendergrass may not need to be signalized.	11	13	10	6	3	4	3	3	53
37	W - 4	Horry County	SC 90 Widening	Widen SC 90 from 17 to Robert Edge Parkway Intersection with bicycle and pedestrian facilities	15	12	10	1	2	4	4	5	53

Rank	Project ID	Local Government	Project Name	Project Description	Congestion Score	Safety Score	Total Livability Score	Financial Viability Score	Truck Traffic Functional Class Score	Environmental Scaled Score	Land Use	Resiliency Score	TOTAL SCORE
38	W - 3b	Horry County	US 17 Bypass Widening	Widen US 17 Bypass from Hwy 544 to Horry County line	13	13	11	1	3	4	3	5	53
39	N - 19	Georgetown County	Parkersville Rd Extension	Extension of Parkersville Road from Baskerville Road north to Gilman Road in Litchfield	15	NA	9	17	1	4	3	3	52
40	W - 5	Horry County	SC 90 Widening	Widen SC 90 from Robert Edge Parkway to SC 22, including bicycle and pedestrian facilities	13	11	10	1	5	3	4	5	52
41	R - 1i	Georgetown County	US 17 / Alston Rd Intersection	Restripe Petigru Dr approach with an exclusive left-turn lane and construct an exclusive left-turn lane on Alston Rd with 125 feet of storage	9	16	9	7	1	5	3	1	51
42	I - 15i	Georgetown County	US 17 Access Mgmt	Install raised concrete medians at certain access points in this high crash fatality area between Smalls Loop Rd and Island Shops (N Causeway Road)	9	15	10	5	3	4	3	2	51
43	W - 39	City of Myrtle Beach	29th Avenue North	Widen 29th Ave North from Robert Grissom Parkway to North Kings Highway with bike lane and sidewalk (Limit project to the Oak Street intersection)	12	16	10	5	1	3	1	3	51
44	W - 3a	Horry County	US 17 Bypass Widening	Widen US 17 Bypass from Back Gate to Hwy 544	14	13	7	2	3	4	3	5	51
45	N - 3	Horry County/City of North Myrtle Beach	Sandridge Road Extension	Extend Sandridge Rd/Old Sanders Dr to Bourne Trail all the way to Long Bay Rd, with dedicated bicycle lanes	31	NA	9	0	1	4	4	2	51
46	W - 6	Horry County	SC 90 Widening	Widen SC 90 from International Drive to US 501, including bicycle and pedestrian facilities	17	10	10	0	2	3	4	5	51
47	I - 10i	Georgetown County	US 17 / US 17 Bus Intersection	Improve intersection of 17 and 17 Bus with a signal. Change alignment to right angle in long term	9	18	6	6	3	4	3	1	50
48	W - 38	City of Myrtle Beach	38th Avenue North	Widen 38th Ave North from Robert Grissom Parkway to North Kings Highway with bike lane, and sidewalk	11	16	9	5	2	3	1	3	50
49	I - 10	City of Conway	4th and 3rd Avenue Intersections	Intersection improvements at 4th Ave and 3rd Ave (Hwy 701)	6	19	11	4	2	4	4	0	50
50	R - 4	Horry County	Sea Mountain Highway Widening	Improve alignment of Sea Mountain Highway (SC 9 to the Intracoastal Waterway Bridge) in Horry County from 2-lane to 3-lane undivided minor arterial standards, including bicycle and pedestrian amenities with turning pockets at major intersections	10	13	8	4	2	4	4	5	50
51	W - 1	City of Myrtle Beach	Seaboard St Widening	Widen Seaboard St between US 501 and Mr. Joe White Ave in Myrtle Beach including bicycle and pedestrian improvements.	15	16	7	4	1	4	3	0	50
52	N - 6i	Horry County	Gardner Lacy Rd Extension	Extension of Gardner Lacy to International Dr	39	NA	3	0	1	4	3	0	50
53	W - 11	Horry County	SC 90 Widening	Widen SC 90 from SC 22 to International Drive, including bicycle and pedestrian facilities	17	10	8	1	2	3	4	5	50
54	R - 30	Horry County	Garden City Connector Widening	Widen Garden City Connector to include turn lanes at major intersections and construct multi-purpose path to improve capacity and safety	11	14	8	5	2	4	4	1	49

Rank	Project ID	Local Government	Project Name	Project Description	Congestion Score	Safety Score	Total Livability Score	Financial Viability Score	Truck Traffic Functional Class Score	Environmental Scaled Score	Land Use	Resiliency Score	TOTAL SCORE
55	I - 8i	Georgetown County	US 17 Access Mgmt	Remove concrete median and install grass at Rodeway Inn/SGA Architects office and US 17	6	18	4	9	3	5	3	0	48
56	R - 20b	City of Myrtle Beach	Kings Highway Access Mgmt	Improve Kings Highway from 31st N to 67th Ave. N with Bike/Ped/Transit improvements	8	14	10	4	2	5	2	3	48
57	W - 18	Horry County	SC 57 Widening	Widen SC 57 from SC 90 to SC 9 with bicycle and pedestrian amenities	15	12	10	2	1	4	4	0	48
58	I - 6	City of Conway	US 501 / SC 544 Interchange	US 501 / SC 544 Interchange improvements	18	16	6	2	2	4	0	0	48
59	R - 12i	Horry County	Hwy 905 Widening	Widening in Conway to SC 9, Hwy 905-from 4-lane section near Conway to SC 9-(Ended at GSATS boundary at Hwy 19)	15	10	9	2	2	4	3	3	48
60	I - 6i	Georgetown County	US 17 / US 17 Bus Signalization	US 17 at US 17 Bus - Signalize NB 17 when warranted	8	11	7	8	2	5	3	3	47
61	R - 3i	Georgetown County	S Causeway Road/Tyson Dr and Beaumon Dr Intersections	Signal spacing improvements and realignment between S Causeway Road/Tyson Drive to S Causeway Drive/Beaumon Drive	8	15	8	5	3	4	3	0	46
62	W - 16	Horry County	Big Block Rd Widening	Widen from SC 707 to SC 544 and Realign Big Block Rd and Include bicycle and pedestrian facilities	15	12	7	3	1	4	4	0	46
63	R - 11	City of Conway	2nd/3rd/4th/Powell/Wright Intersections	Realign road segments to allow for better capacity, function, flow and safety	6	15	10	5	2	4	3	0	45
64	AM - 3	Georgetown County/Horry County	US 17 Bus Access Mgmt	Access management improvements from Belin Rd to Tadlock Rd	11	10	9	5	2	4	0	4	45
65	W - 10	Horry County	River Oaks Drive Widening	Widen River Oaks Drive including turn lanes at major intersections to improve capacity and safety and construct multi-purpose path	12	13	7	2	2	4	4	1	45
66	W - 9	Horry County/Georgetown County	US 701 Widening	Widen US 701 from Georgetown to Conway	7	10	17	0	2	2	2	5	45
67	I - 1	City of North Myrtle Beach	Edge Parkway / SC 31 Interchange	Robert Edge Parkway / SC 31 interchange ramp improvements. Convert existing signalized diamond interchange to diverging diamond interchange to improve traffic floc and eliminate left turn conflicts	8	10	9	5	4	4	4	0	44
68	R - 8i	Georgetown County	Petigru Dr and Waverly Rd Roundabout	Single lane roundabout at Petigru Dr and Waverly Rd	5	10	12	7	1	4	3	1	43
69	R - 10i	Horry County	Tournament Blvd Widening	Widening to Hwy 707 with bicycle and pedestrian improvements	11	11	7	3	2	5	3	1	43
70	W - 8	City of Myrtle Beach	US 17 Bypass Widening	Widen US 17 Bypass from 4 lanes to 6 lanes from 29th Avenue N northwards to Grissom with interchange improvements	10	14	7	1	3	3	0	5	43

Rank	Project ID	Local Government	Project Name	Project Description	Congestion Score	Safety Score	Total Livability Score	Financial Viability Score	Truck Traffic Functional Class Score	Environmental Scaled Score	Land Use	Resiliency Score	TOTAL SCORE
71	R - 27	Town of Surfside Beach	Sandy Lane Access Mgmt	Improve Azalea Drive and Sandy Lane to Improve Backside Access in Surfside Beach	9	10	9	6	1	4	3	0	42
72	B - 1	Horry County/City of North Myrtle Beach	US 17 Bridges in North Myrtle Beach	Widen US 17 Bridges at SC 9, SC 90, and Sea Mountain Highway with additional grade separation at SC 9	6	11	10	2	2	3	3	5	42
73	I - 20	Georgetown County	US 17 at Hog Heaven and the Colony Intersection Improvement	Project to close a dangerous median break in front of an existing business on US Highway 17 (located in the middle of a horizontal curve) in Pawleys Island and improve/install a dedicated U-turn lane both northbound and southbound halfway between The Colony	10	10	4	6	5	4	2	0	41
74	R - 13i	Horry County	Hwy 378 Widening	From the western limit of current 5-lane section to Little Pee Dee River Bridge approach at county line with bile and pedestrian improvements (Project ends at GSATS boundary for this inclusion at Juniper Bay Rd)	10	12	5	4	3	4	3	0	41
75	I - 11i	Georgetown County	US 17 / Kings River Rd Signalization	Signalization at Kings River Rd and 17 to meet LOS needs	4	12	5	8	3	5	3	0	40
76	W - 7	City of North Myrtle Beach	2nd Avenue N Widening	Widen 2nd Avenue North in North Myrtle Beach with bike lane, and multipurpose path	1	13	10	4	1	3	4	4	40
77	I - 9i	Georgetown County	Traffic Study	Traffic study to determine alternative forms of traffic control at DeBordieu Colony Neighborhood	8	10	3	10	NA	5	3	0	39
78	B - 7	Horry County/City of North Myrtle Beach	US 17 and Champions Blvd Connector	Construct connector from US 17 (between 17th Ave S and 21st Ave S) and Champions Blvd via existing Bourne Trail bridge over SC 31	20	NA	7	2	1	2	3	4	39
79	R - 5i	Georgetown County	Kings River Rd and Waverly Rd Roundabout	Install roundabout to maintain LOS especially in regard to nearby schools at Kings River Rd and Waverly Rd	4	11	6	7	1	4	3	2	38
80	R - 5	Horry County	Mt. Zion Road Access Mgmt	Improve alignment of Mt Zion Road (SC 90 to SC 57) to two-lane undivided minor arterial standards, including bicycle and pedestrian amenities with turning pockets at major intersections	6	10	7	5	2	4	4	0	38
81	W - 21	Horry County	Singleton Ridge Road Widening	Widen Singleton Ridge Road from US 501 to SC 544 with multipurpose path in Conway	2	15	8	3	2	4	4	0	38
82	W - 32	Horry County	Myrtle Ridge Drive Widening	Widen Myrtle Ridge Drive from US 501 to SC 544	7	13	5	3	1	4	3	2	38
83	R - 15i	City of Conway	Church St Access Management	Church Street between Mill Pond and 16th safety and access management improvements	8	0	6	7	3	5	3	2	34
84	R - 9i	Georgetown County	Kings River Rd and Hagley Dr Roundabout	Single-lane roundabout at Kings River Rd and Hagley Dr if cul de sac is not implemented	0	13	6	7	1	4	3	0	34
85	B - 3	Horry County	Highway 22 Expansion	Environmental Studies and Right of Way	5	NA	11	4	5	1	3	5	34

Rank	Project ID	Local Government	Project Name	Project Description	Congestion Score	Safety Score	Total Livability Score	Financial Viability Score	Truck Traffic Functional Class Score	Environmental Scaled Score	Land Use	Resiliency Score	TOTAL SCORE
86	N - 4i	Horry/Myrtle Beach	Bowline Boulevard Extension to Edge Pkwy	Bowline Boulevard Extension to Edge Pkwy	0	0	7	13	1	4	3	4	32
87	W - 20	Georgetown County	Pennyroyal Road Widening	Widen Pennyroyal Rd from E of Montford Drive to US 17 in Georgetown	0	10	10	4	1	4	3	0	32
88	R - 14i	Horry County	Hwy 111 Access Mgmt	Safety and capacity improvements, Hwy 57 to US 17 (includes portion of S-50 / Mineola). Add bike/ped improvements	2	10	6	4	1	4	3	0	30
89	N - 25	City of Conway	Medlen Parkway Extension	Medlen Parkway Extension: Realign western terminus at US 501 to continue straight to US 378	10	NA	7	5	1	5	0	2	30
90	W - 17	Horry County	Water Tower Road Widening	Widen Water Tower Road from SC 31 to SC 90 and Widen Long Bay Road, including bicycle and pedestrian facilities	7	5	7	1	2	4	4	0	30
91	N - 100	City of North Myrtle Beach	Long Bay Rd Widening	Widen Long Bay Road form SC90 to Champions Blvd.	4	4	8	2	2	4	4	0	28
92	R - 2i	Georgetown County	Hagley Dr Roundabout	Cul de sac Hagley Dr	1	5	5	6	1	5	3	0	26
93	W - 61	City of North Myrtle Beach	Champions Blvd and Sandridge Loop Connector	Pave and/or widen existing 2 lane road connecting Champions Blvd. to Sandridge Loop. Connect to Edge Pkwy. 2 to 4 lane widening	3	6	4	3	1	4	4	0	25
94	W - 37	City of Conway	Cultra Road Widening	Widen Cultra Road from Church to Main St with center median and multipurpose path	0	1	9	2	2	5	4	0	23

Table 10. North Carolina Roadway Project Screening Results

Rank	Project ID	Local Government	Project Name	Project Description	Congestion Score	Safety Score	Total Livability Score	Financial Viability Score	Truck Traffic Functional Class Score	Environmental Scaled Score	Land Use	Resiliency Score	TOTAL SCORE
1	N - 9	Town of Shallotte	Smith Av to Bridgers Rd Connection	A new interconnection between Smith Ave (SR 1357) to Bridgers Road (SR 1349); 2-Lane, Shoulder	34	NA	10	18	1	4	4	2	73
2	N - 1i	NCDOT	Main St. and Holden Beach Rd. Connection	New Street Connection from Main St. (Hwy 17 Business) to Holden Beach Rd.	35	0	9	18	1	4	3	0	70
3	N - 7	Town of Shallotte	South Main and Village Point Rd Connector	A new interconnection between South Main Street near Shallotte Park to NC 179 and Village Point Road; 2-Lane with shoulder	34	NA	11	12	1	3	4	4	69
4	N - 13	Town of Shallotte	North Main St and Smith Ave Connector	New interconnection between US 17 Business/Main Street (SR 1434) to Smith Ave (SR 1357); 2-Lane, Shoulder	31	NA	8	14	1	4	3	3	64
5	N - 2i	Town of Shallotte	Smith Ave. and Hwy 130 Connection	Collector Street Connection to Smith Ave Interchange Project (U-5862). Potential tie-in to Carolina Bays Pkwy.	30	NA	10	9	1	4	3	3	60
6	W - 28	Town of Shallotte	NC 179 Widening	Widen NC 179 to a multi-lane facility from US 17 BUS to Hale Swamp Road (future NC 179); 4-Lane W/median & multipurpose path	16	10	14	2	1	4	4	4	55
7	B - 5	Town of Ocean Isle Beach	New Bridge on Brick Landing Rd	New Bridge from Brick Landing Road (SR 1143) to Shallotte Blvd (SR 1202)	28	NA	6	8	1	3	3	5	54
8	W - 46	Town of Shallotte	White St Widening	Widen White Street to a multi-lane facility from Smith Avenue (SR 1357) to Mulberry Street (SR 1357); 4-Lane W/Median	16	10	10	4	1	4	4	3	52
9	W - 31	Brunswick County	SC 130 Widening	Widen NC 130 to a multi-lane facility from Smith to Sabbath Home Intersection; 4-Lane W/median & multipurpose path	15	11	10	1	1	4	5	4	51
10	S - 3	Town of Shallotte	Ocean Hwy Superstreet	Upgrade roadway to superstreet from NC-211 to US 17 B (Main Street)	13	12	11	3	3	4	3	1	50
11	S - 5	Town of Shallotte	Ocean Hwy Superstreet	Upgrade roadway to superstreet from the US 17 B (Main Street) to US 17 B (Main Street)	10	11	12	3	3	4	2	4	49
12	W - 51	Town of Holden Beach	NC 130 Widening	Widen NC 130 to a multi-lane facility from Sabbath Home Intersection to the end of state maintenance; 4-Lane W/Median & Sidewalk	16	10	10	3	1	3	0	5	48
13	W - 53	Town of Shallotte	NC 130 Widening	Widen NC 130 to a multi-lane facility from McMilly Road (SR 1320) Village Road (NC 179); 4-Lane W/Median & Sidewalk	6	11	13	2	2	4	4	5	47
14	I - 2i	Town of Shallotte	Village Rd / Village Pond Rd Intersection	Intersection improvement at Village Rd (Hwy 179) & Village Point Rd	6	15	9	6	1	4	3	0	44

Rank	Project ID	Local Government	Project Name	Project Description	Congestion Score	Safety Score	Total Livability Score	Financial Viability Score	Truck Traffic Functional Class Score	Environmental Scaled Score	Land Use	Resiliency Score	TOTAL SCORE
15	W - 44	Town of Ocean Isle Beach	Ocean Isle Beach Rd Widening	Widen Ocean Isle Beach Road (SR 1184) to a multi-lane facility from US 17 to NC 179 (Beach Drive); 4-Lane W/Median	13	10	9	1	1	4	3	3	44
16	W - 59	Town of Sunset Beach	NC 904 Widening	Widen NC 904 to a multi-lane facility from US 17 to NC 179 (Beach Drive); 4-Lane W/Median & Sidewalk	16	11	8	1	1	4	3	0	44
17	I - 8	Brunswick County	Persimmon Rd / NC 179 Intersection	Intersection improvements at Persimmon Rd and NC 179	4	15	7	6	1	5	2	0	40
18	W - 26	Town of Ocean Isle Beach	Beach Dr Access Mgmt	Access management	9	10	6	6	1	5	3	0	40
19	S - 4	Town of Shallotte	Ocean Hwy Superstreet	Upgrade roadway to superstreet from US 17 B (Main Street) to NC-904	2	11	11	3	3	4	3	3	40
20	W - 23	Town of Calabash	NC 179 Widening	Widen NC 179 to a multi-lane facility from the South Carolina State Line to Old Georgetown (SR 1163); 4-Lane W/Median & Multipurpose Path	11	11	9	2	1	4	0	0	38
21	I - 1i	Town of Shallotte	Forest St Extension	Right in right out intersection with Forest St Ext. & Hwy 17 Bypass	13	0	9	6	1	4	3	0	36
22	W - 40	Brunswick County	Longwood Rd Widening	Widen NC 904 to a multi-lane facility from Etheridge Road (SR 1308) to US 17; 4-Lane W/Median	7	10	7	1	1	4	3	2	35
23	W - 22	Town of Sunset Beach	NC 179 Bus Widening	Widen NC 179 BUS to a multi-lane facility from NC 904 (Seaside Road) to the Sunset Blvd Bridge; 4-Lane W/Median	5	7	7	2	1	4	3	4	33
24	S - 1	Town of Carolina Shores	Ocean Hwy Superstreet	Upgrade roadway to superstreet from the NC-904 to the South Carolina State Line	0	10	11	2	3	4	0	2	32
25	W - 41	Brunswick County	Hickman Rd Widening	Widen Hickman Road (SR 1303) to a multi-lane facility from US 17 to State Line; 4-Lane W/Median	1	10	8	2	1	4	2	0	28
26	W - 60	Town of Sunset Beach	NC 179 Widening	Widen NC 179 to a multi-lane facility from NC 904 (Seaside Road) to Beach Drive (179B); 4-Lane W/Median & Sidewalk	3	9	7	1	1	4	3	0	28

FINANCING AND IMPLEMENTATION

Federal planning regulations require that the financial plan presented in the MTP be financially constrained, which means that the estimated cost for all transportation improvements presented in the plan cannot exceed the amount of reasonably expected revenues projected from identified funding sources.

This section focuses on the long-range financial constraints and opportunities in the GSATS region over the 23 fiscal years of this MTP. The MPO, in cooperation with Steering Committee members, SCDOT staff, and NCDOT staff, have conducted a careful analysis of what funds are to be reasonably expected, how those funds may be allocated, and how and when projects will be financed.

The projects that have been included within the GSATS 2045 MTP Update have been carefully selected and prioritized. These projects represent the current priorities based upon anticipated needs over the coming years. However, planning for the future always includes revisiting priorities, evaluating new trends, and considering a wide variety of other factors. Therefore, this plan is to be considered a living document and will be revised as events warrant.

During the course of the development of this MTP, a wide variety of worthwhile and needed projects were identified. However, due to financial constraints, there is not enough funding to support all proposed recommendations. These projects are considered as illustrative and are outside the financial constraint of this plan.

ROADWAY FUNDING SOURCES AND REVENUE FORECASTS

The GSATS region relies on state and federal funding to implement regional transportation improvements. Considerable statewide needs, coupled with rising fuel efficiency and an unstable transportation funding trend, leave many future transportation funding questions unanswered.

Actual funding availability during the period to 2045 will depend largely upon future actions and public policy directives initiated at the federal and state levels. Roadway, bicycle, and pedestrian projects are traditionally financed through federal, state, and local funds, which are primarily derived from taxes on fuel, fees from vehicle registrations, and local option sales taxes, such as the Horry County Ride programs. Transit projects are also funded through federal, state, and local sources, as well as revenue received through fares. The Financial Plan provides an analysis of anticipated federal, state, and local revenues, cost inflation factors, year-of-expenditure dollars, and planning level cost estimates.

Federal and State Funding Sources

One of the primary sources of funding comes from a mixture of state and federal transportation dollars. State departments of transportation are required to sub-allocate federal highway funds by formula to designated Transportation Management Areas (TMAs).

South Carolina

In South Carolina, the SCDOT Commission determines the funding level allocation to MPOs for the federal-aid program following each new federal highway bill and annual appropriations act. Since the mid-1990s, the allocation between urban and rural federal-aid funds for MPOs, called Guideshare, has been based on study area population. In an effort to provide regions with enough funding to plan meaningful projects, the SCDOT Commission approved a multi-year increase in MPO and COG funding allocations beginning in 2022. In addition to the funding increase, the SCDOT Commission voted to change the name of the Guideshare program to the Regional Mobility Program. The 2023 GSATS allocation will increase to $12.7 million and eventually ramp up to the fully phased-in annual allocation of $15.7 million in FY 2024-25. The State portion of these monies serves as the local match to the federal dollars, so local governments do not have to identify monies to encumber these funds. Between 2023 and 2045, there will be at least $358.1 million of Regional Mobility Program gross revenue available for roadway projects (1 year at $12.7 million and 22 years at $15.7 million per year).

North Carolina

Based on the FY 2020-2029 NCDOT STIP and FY 2020-2029 GSATS MTIP, the GSATS area has $31.3 million programmed between FY 2020-2025, equating to approximately $5.2 million of federal funds and local match annually for roadway projects in the North Carolina portion of the GSATS region. In general, local governments will be required to identify non-federal funds to serve as the 20 percent match to the federal dollars. Between 2023 and 2045, there will be approximately $119.6 million of gross revenue available for roadway projects (23 years at $5.2 million per year).

Local Funding Source – RIDE III

The Road Improvement and Development Effort (RIDE) program was initiated in Horry County in 1996 to determine the short and long-term transportation infrastructure needs for the County, along with various funding options. Funding for the first phase, totaling $1.1 billion, was provided through applications to the State Infrastructure Bank together with matching funds from a 1.5 percent hospitality fee. The second phase, called RIDE II, was paid for through a one-cent Capital Projects Sales Tax approved by Horry County voters on November 7, 2006. RIDE II went into effect on May 1, 2007 and expired April 30, 2014. Funding for RIDE II totaled approximately $425 million.

On November 8, 2016, Horry County voters supported a One-Cent Capital Projects Sales Tax for roads, also known as the RIDE III. This tax went into effect on May 1, 2017, and will expire on April 30, 2025. It will increase the level of sales tax in Horry County an additional penny on all retail sales, accommodations, and prepared food/ beverage. Groceries (unprepared food) will be exempt from the sales tax. Horry County is slated to receive $592 million over the eight-year life of the one-cent Capital Projects Sales Tax; approximately $408 million is funding projects within the GSATS portion of Horry County.

In 2022, Horry County approved the framework for choosing the advisory committee for RIDE IV. The RIDE IV local option sales tax would be collected over a seven-year period from May 1, 2025 to April 30, 2032. The 18-member advisory committee finalized their list of recommended projects in April 2023, allocating a projected $826 million in revenue to bridge and roadway projects, paving and resurfacing projects, and environmental mitigation. Assuming the same proportion from RIDE III, the GSATS portion of Horry County could expect approximately $569 million worth of programmed projects over the seven-year period.

Due to the success of the first three rounds of the RIDE program, it is anticipated that the RIDE program will continue during the life of the 2045 MTP. With an anticipated average annual GSATS RIDE IV allocation of $100 million, an additional $2 billion ($100 million per year from 2026 to 2045) is forecast for the GSATS portion of Horry County to fund transportation projects. GSATS does not manage the RIDE program, but RIDE projects are required to be on the GSATS TIP and the SCDOT STIP.

Additional Funding Sources

- **Other Publicly Funded Improvements** – Federal Highway High Priority Projects, South Carolina's State Infrastructure Bank, Local Option Sales Taxes, Horry County's Road Improvement Development Effort, and the County Transportation Committees often provide funding for transportation improvements in the GSATS region.

- **Privately Funded Improvements** – Impact Fees, Tax Increment Financing, Municipal Improvement Districts, or other private investment also provide funding for transportation improvements in the region.

ROADWAY REVENUE FORECAST

Using historic data and projected allocations from SCDOT and NCDOT, future roadway funding was forecast to the year 2045.

Project expenditures programmed through FY 2027 from the FY 2021-2027 SCDOT Statewide Transportation Improvement Program (STIP) and the FY 2024-2033 NCDOT STIP were deducted from the revenue projection, providing a net revenue forecast available for newly identified projects. **Table 11** indicates the net funding for roadway projects by state.

Table 1111. GSATS Roadway Net Revenue Forecast

State	2023-2045 Gross Revenue Forecast	TIP Committed Projects through FY 2027	2023-2045 Net Revenue Forecast
North Carolina	$114,400,000	($19,700,000)	**$94,700,000**
South Carolina	$358,100,000	($23,200,000)	**$334,900,000**

The projected revenue was broken down into three horizon periods: 2023-2027 (Short-Term), 2028-2033 (Medium-Term), and 2034-2045 (Long-Term). **Table 12** indicates the funding for roadway projects by state and horizon period. The short-term horizon period considers projects already committed and programmed for funding in each state.

Table 12. GSATS Roadway Net Revenue Forecast by Time Horizon

State	Short-Term 2023-2027	Medium-Term 2028-2033	Long-Term 2034-2045
North Carolina	$6,300,000	$31,200,000	$57,200,000
South Carolina	$52,300,000	$94,200,000	$188,400,000

SOUTH CAROLINA ACT 114

In 2007, the South Carolina General Assembly enacted Act 114. One of the landmark items in Act 114 was the requirement that the South Carolina Department of Transportation (SCDOT) establish a project prioritization process. In 2016, the General Assembly enacted Act 275. Act 275 eliminated some of Act 114's requirements but it retained the requirement for project prioritization. This requirement is codified in Section 57-1-370 of the South Carolina Code of Laws, 1976, as amended. Additional detail on the process is found in S.C. Code of Regulations 63-10, as amended.

SCDOT Planning Directive 15 provides the details of scoring and ranking processes for Metropolitan Planning Organizations (MPO) and Council of Governments (COG) for the following project improvement type classifications: corridor improvement/road widening, new-location roadway, and functional intersection. MPOs and COGs may choose to adopt the state defined ranking templates below or define a similar methodology compliant with Act 114 to prioritize projects. Specific MPO and COG ranking procedures are ratified by the SCDOT Commission.

The project scoring criteria described above were developed during the 2045 LRTP process in compliance with Act 114 and Planning Directive 15.

NCDOT SPOT 6.0 AND 7.0

The Strategic Transportation Investments (STI) is a process to determine how the North Carolina Department of Transportation, in partnership with local governments, will fund and prioritize transportation projects in the state of North Carolina. Under the STI, all modes will compete for the same funding. This means that roadway projects will compete with ferry projects which will compete with public transportation projects, and so on.

The STI places projects into three categories: Statewide Mobility, Regional Impact, and Division Needs levels. Metropolitan Planning Organizations (MPOs), Rural Planning Organizations (RPOs), and division engineers will assign local input points to projects in the Regional and Division levels. MPOs and RPOs are required to develop a methodology for the assignment of local input points. Funding levels are designated according to the 2013 Strategic Transportation Investments law. Each of the three categories identified under STI have their own criteria:

- Statewide Mobility Level
  - Projects of statewide significance will receive 40% of the available revenue; and
  - The project selection process will be 100% data-driven/quantitative scoring.

- Regional Impact Level
  - Projects of regional significance will receive 30% of the available revenue based on regional population. Projects on this level compete within specific regions made up of two NCDOT Divisions. GSATS is located in Region B; and
  - Data / quantitative scoring will comprise 70% of the decision-making process and local rankings will comprise of the remaining 30%.

- Division Needs Level
  - Projects that address local concerns such as safety, congestion and connectivity will receive 30% of the available revenue shared equally over NCDOT's 14 Transportation Divisions. GSATS is located in NCDOT Division 3; and the department will choose projects based 50% on data and 50% on local rankings.

NCDOT utilizes a cascading method as part of the funding eligibility criteria. Projects not funded in the Statewide Mobility category are eligible for funding in the Regional Impact category. Similarly, projects not funded in the Regional Impact category are eligible in the Division Needs category.

The Strategic Prioritization Office of Transportation (SPOT) will calculate quantitative scores for all projects based on the adopted methodology. Default criteria were recommended by

the Prioritization 6.0 (P6.0) workgroup and agreed to by NCDOT to quantitatively score projects across all modes.

Due to rising costs for projects funded in the previously adopted 2020-2029 STIP, little to no funding was projected to be available for new projects in the 2024-2033 STIP timeframe. Therefore, on August 4, 2021, the P6.0 workgroup recommended, and the N.C. Board of Transportation approved, the P6.0 prioritization cycle be halted. The decision was made to develop the 2024-2033 STIP using existing projects from the previously adopted 2020-2029 STIP. The conclusion of the P6.0 cycle was the release of the quantitative scores and the local input point procedure was halted. The P6.0 workgroup was reconvened to finalize the methodology and procedures used for this one-time STIP development exception and the N.C. Board of Transportation approved the process. Projects with current construction schedules in the first three years (2024-2027), projects with right-of-way actively underway, and those with federal grants were programmed first; followed by a seniority approach of combined factors as oldest Prioritization cycle and highest scoring projects. There were no newly submitted projects from the P6.0 prioritization cycle included in the 2024-2033 STIP.

The Prioritization 7.0 (P7.0) workgroup began meeting monthly in October 2022. Workgroup recommendations were presented to the NC Board of Transportation on and approved on June 6, 2023. Project submittal officially opened to Prioritization partners on July 10, 2023.

It is expected that MPOs, RPOs and NCDOT division engineers will be given flexibility to develop alternative highway criteria weights and formulas for the quantitative evaluation and project scoring in the Regional Impact projects and Division Needs projects as part of P7.0 methodology. SPOT requires that any deviation from the adopted criteria be approved by MPOs and RPOs in the region and/or division. During the Prioritization 5.0 (P5.0) cycle, Region B and Division 3 chose not to deviate from the statewide default criteria.

GSATS Local Input Point Assignment

The following process is used by GSATS to allocate local input points in NCDOT's prioritization process. It has been developed by the GSATS MPO for the purposes of participating in determining transportation funding priorities in the regional and division funding level in P7.0. This process will be used to rank all projects within the GSATS boundary in Brunswick County and is designed to be both data-driven and responsive to local needs. Local input can come in the form of surveys; comment periods; historical documentation that supports a priority project important to the community; nearby RPO, MPO, or Division priorities; or other evidence made available to the GSATS-North Carolina Transportation Advisory Committee (NCTAC).

The methodology has been developed to meet the requirements of North Carolina Session Law 2012-84 (NC Senate Bill 890), which requires that MPOs and RPOs have a process including both quantitative and qualitative elements for determining project prioritization. The MPO's participation in the Strategic Transportation Investments consists of the following steps: (1)

select projects for consideration in the Statewide, Regional, and Division levels; (2) develop draft qualitative scoring of projects and ranking; (3) seek public involvement; and (4) finalize project scoring and ranking.

Schedule

As part of the STI process, GSATS requests projects from the local member governments (counties, towns, transit departments, airports, etc.). The GSATS-North Carolina Technical Coordinating Committee (NCTCC) then evaluates the candidate projects. The NCTAC and Policy Committee then approve the draft prioritized project list and point allocation pending public comment. New projects are submitted to the NCDOT's SPOT. GSATS next advertises the projects for a 30-day public comment period, as prescribed in the GSATS Public Participation Process, followed by NCTCC, NCTAC, and Policy Committee meetings to consider the public comments and any suggested modifications to the point allocation.

Local Point Methodology

During the P7.0 cycle, points will be allocated to projects in order of their MTP quantitative ranking. Projects partially located within the study area could be given up to 100 points and the balance of points necessary to provide 100 points could be shared with the neighboring MPO/RPO. If a points sharing arrangement is approved, both parties are required to agree to the number of points donated and to provide a written agreement to the SPOT Office. High priority projects that are expected to cascade to the Regional or Division funding levels could be awarded GSATS' local input points at the discretion of the NCTAC.

Non-highway projects are evaluated when received. Point allocation for non-motorized projects are only made when local matching funds could be reasonably expected. The P7.0 non-motorized project score will be provided by NCDOT and will be used, along with local input, to evaluate non-motorized projects.

Final Ranking and Local Points Assignment

Points are assigned to each project based on project MTP score and local input. The P7.0 DRAFT Local Input Point Allotments from February 2023 gives GSATS 1,100 points to assign toward Regional Projects and a submittal allotment of 14 per mode while Division 3 is given 2,500 points and a submittal allotment of 14 per mode. Each project can receive a maximum of 100 points. Division Consultation with the RPO, Division Engineer, Division Planning Engineer, and District Engineer for each project to gauge Division priority will occur prior to final point allocation. Any justification/rationale for point assignments made by the NCTAC which deviate from this local methodology will be placed on the GSATS website.

ALTERNATIVE FUNDING STRATEGIES

Federal and state transportation revenue streams are rapidly losing pace with needed investments. Federal gas taxes have not changed since the early 1990s, forcing states to increase taxes to maintain crumbling infrastructure. North Carolina raised the state gas tax to

40.5 cents per gallon in 2023. In 2017, the South Carolina General Assembly voted to increase the gas tax by 12 cents to a total of 28 cents per gallon, phased in over a 6-year period. An increase in oil prices in the mid-2000s caused people to adjust their driving habits and buy more fuel-efficient cars. Federal programs have made strides toward rejuvenating the automobile industry and decreasing emissions, but those advances have come at the cost of decreasing federal and state transportation revenue. According to data from the International Energy Agency (IEA), nearly 1 million battery-powered or hybrid vehicles were purchased in the United States in 2022. IEA projects annual sales to exceed 3.3 million by 2025 and 7.8 million in 2030. The electrification of the overall vehicle fleet poses a revenue problem for funding road improvements in the future. In order to address the reduction in gas tax revenues due to fuel efficient cars, North Carolina enacted legislation in 2022 to allocate approximately six percent of annual sales tax revenue to the state highway fund.

Various suggestions have been made to bolster federal and state transportation funding mechanisms, including increasing the gasoline tax and/or indexing it to the consumer price index, increasing local vehicle registration fees, and imposing a local tax dedicated to transportation improvements. The South Carolina General Assembly recently raised the gas tax for the first time in decades, so additional increases in the near term are unlikely. Other suggestions include transitioning to a tax based upon miles driven, rather than gasoline consumed. GPS and other technologies to implement this type of solution have been around for years, but concerns over privacy are may limit this type of solution from widespread adoption.

At the local level, Horry County residents voted to extend a local option sales tax dedicated to transportation capital projects in 2016. Plans are already underway for the fourth installment of the Horry County one-cent sales tax for infrastructure. Local option taxes are increasingly becoming a solution for funding transportation projects across the country.

Impact Fees are one-time charges levied by local governments on new development. They are charged to developers to help municipalities mitigate growth-related infrastructure impacts. While impact fees can help municipalities make the required investments in infrastructure to accommodate growth, they can have the effect of shifting development to other areas with little or no regulation.

Nevertheless, MPOs must make some prediction on future revenue funding streams in order to try and keep up with the transportation infrastructure investments that are necessary to keep their regional economies competitive in the global marketplace.

POLICY RECOMMENDATIONS

Resilience and Green Infrastructure

In 2022, the Waccamaw Regional Council of Governments (WRCOG) partnered with the South Carolina Forestry Commission (SCFC) and the nonprofit Green Infrastructure Center, Inc. (GIC) to create a strategic green infrastructure network and plan for the South Carolina Waccamaw Region[2]. The plan provided regional implementation strategies for protecting and restoring green infrastructure habitat cores and connecting corridors statewide. Addressing significant issues such as stormwater, sea level rise, storm surge, and alternative energy sources will require regional collaboration. The following recommendations and strategies are critical toward creating a more resilient and adaptable Waccamaw Region.

- **Utilize data and maps from Green Infrastructure Plan to secure trail grants**. The WRCOG, counties, and municipalities should use the maps and data from this plan to secure grants for trail and greenway master planning, with a focus on habitat connectivity. This data could inform the selection of future Transportation Alternatives projects in the GSATS region to prioritize projects that encourage habitat connectivity.

- **Facilitate Collaborative Regional Planning to address Flooding and Stormwater.** Marshes and floodplains are extensive in the region and sea level rise and storm surge are risks likely to impact habitats and human use of the land in all three counties over the next 40 years. Another risk for the region is urban development, especially suburban sprawl patterned growth. Development risks are greatest in Horry and Georgetown counties, and around Myrtle Beach, Conway, Georgetown, and Andrews. GSATS can proactively work with these communities to encourage Green Infrastructure best practices such as bioswales, constructed wetlands, permeable pavers, tree planting, rain gardens, and green streets, alleys, and parking lots. Addressing regional stormwater issues is a multi-faceted approach and must include solutions at the local jurisdictional level.

- **Watershed Management Plans.** WRCOG has completed several watershed management plans in the Region funded by USEPA Section 319 and 604(b) grants through the South Carolina Department of Health and Environmental Control (SCDHEC). The 2014 Murrells Inlet Watershed Plan[3] identifies watershed management measures such as low impact development (LID) techniques and public education and outreach in order to address water quality issues. GSATS and WRCOG can identify areas of flooding and stormwater concern and investigate context-sensitive solutions.

[2] https://gicinc.maps.arcgis.com/sharing/rest/content/items/fbe8cd5765fb473193e1ea4ffd8edd1b/data
[3] https://scdhec.gov/sites/default/files/media/document/Murrells%20Inlet%20Wtrshd%20Pln_2014.pdf

GSATS can advocate for these solutions during the design phase of transportation projects.

- **Climate Action and Resilience Plans.** A Climate Action & Resilience Plan provides evidenced-based measures to reduce greenhouse gas emissions and preventative measures to address the negative outcomes of extreme weather events. The South Carolina Office of Resilience recently completed the Strategic Statewide Resilience and Risk Reduction Plan[4] which offers recommendations on incorporating resilience into infrastructure design. GSATS can work with the Office of Resilience to ensure that future conditions are considered when transportation projects are planned and designed.

- **Utilize Free Planning Tools.** Several Federal agencies offer free web-based tools to assist with resilience planning efforts. Some examples include NOAA's CHaMP Tool[5], The Council on Environmental Quality's Climate & EJ Screening Tool[6], Climate Mapping for Resilience and Adaption (CMRA) Assessment Tool[7], and FEMA's Hazus software[8].

Agency Coordination for Integrated Infrastructure Planning and Programming

For continued efforts to integrate transportation and mobility planning with climate, resilience, stormwater, and other infrastructure improvement efforts, it is recommended that additional agencies and organizations be invited to engage in regional planning efforts. Future efforts could include additional municipal planning and infrastructure subject matter experts in utilities, stormwater, and resilience, representatives from the housing community, and participation from representatives of the travel and tourism industry. This allows for collaboration in the identification of infrastructure needs and leveraging funding across multiple project types to accomplish more goals in streamlined construction efforts.

Additional state agencies to consider may include:

- South Carolina Office of Resilience[9]
- North Carolina Office of Recovery and Resiliency[10]
- South Carolina Office of Regulatory Staff[11]

[4] https://scor.sc.gov/resilience
[5] https://champ.rcc-acis.org/
[6] https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5
[7] https://resilience.climate.gov/
[8] https://msc.fema.gov/portal/resources/hazus
[9] https://scor.sc.gov/
[10] https://www.rebuild.nc.gov/about-us#:~:text=North%20Carolina%20Office%20of%20Recovery,mitigation%2C%20community%20development%20and%20resiliency.
[11] https://ors.sc.gov/

- North Carolina Utilities Commission [12]

North Carolina RISE (Regions Innovating for Strong Economies and Environment)

The North Carolina Office of Recovery and Resiliency (NCORR) and the NC Rural Center, in collaboration with the North Carolina Councils of Government (NC COGs) is working with NCORR's RISE Program to develop a portfolio of priority projects that strengthen regional resilience. This multi-phase effort includes a forward-looking vulnerability assessment, the identification of 5-10 high-priority projects, and a list of the actions needed to implement each proposed project. A diverse stakeholder partnership is guiding the project to ensure that the scope of work reflects local priorities. Brunswick County joined the RISE program in 2022.

WRCOG and GSATS will support Brunswick County and the RISE program in their aim to support resilience through hosting regional leadership training workshops that emphasize resilience as a tool for community economic development; developing the North Carolina Resilient Communities Guide, a statewide resource detailing the different avenues, supports, and opportunities for building community resiliency; and providing coaching and technical assistance to regional partners to support community vulnerability assessments, identify priority actions to reduce risk and enhance resilience in their region, and develop paths to implementation.

Environmental Mitigation

GSATS and its members are committed to protecting and enhancing natural resources, improving quality of life, and promoting compatibility of transportation improvements with state and local planned growth. Therefore, resource conservation and environmental and stormwater impact mitigation are key elements of the GSATS' transportation planning process. GSATS recognizes that not every project will require the same type or level of mitigation. Some projects involve major construction with considerable earth disturbance, while others, like intersection improvements, street lighting, and resurfacing projects, involve minor construction and minimal, if any, earth disturbance. The mitigation efforts used for a project should be dependent upon how severe the impact on environmentally sensitive areas is expected to be.

Equity and Justice40

Executive Order 14008 [13], Tackling the Climate Crisis at Home and Abroad, created the "Justice40 Initiative" that aims to deliver 40 percent of the overall benefits of relevant

[12] https://www.ncuc.gov/
[13] https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/

Federal investments to disadvantaged communities. GSATS is committed to identifying transportation projects that improve accessibility and equity through a data-driven project prioritization process. GSATS can enhance their Justice40 screening by investing in data collection that defines and identifies the Region's underserved population such as citizens with no vehicle, citizens older than 65, citizens living below the poverty level, citizens with Limited English Proficiency (LEP). By better understanding the needs and locations of underserved populations, GSATS can ensure that these communities are being included in the transportation planning process.

Housing and Transportation

The Bipartisan Infrastructure Law (BIL) placed increased emphasis on housing considerations in an effort to better connect housing and employment through infrastructure investment. The BIL encourages MPOs to consult with affordable housing organizations as part of transportation planning process and emphasizes consideration of projects and strategies that will promote consistency between transportation improvements and State and local housing patterns. Through stakeholder engagement and data collection and analysis, GSATS will continue to actively foster the transportation-land use connection in the Region and ensure that housing, transportation, and economic development strategies are integrated in the transportation planning process.

Travel and Tourism

The passage of the FAST Act in 2015 added new provisions for long-range transportation planning, including the enhancement of travel and tourism. GSATS recognizes the role that travel and tourism have on the transportation system, and the need for the system to be intuitive and easy to navigate for the Region's visitors, as well as serving the Region's many tourist destinations. Tourism continues to be a major industry, and especially so as the Baby Boomer generation transitions out of the workforce with more disposable income and a greater degree of mobility compared to previous generations. As a process enhancement, GSATS will collect relevant transportation data related to tourism and use in transportation planning efforts. GSATS will also encourage involvement from local Convention and Visitors Bureau's and Chambers of Commerce in the transportation planning process.

System Preservation

Preserving the existing system and maintaining it in good condition will continue to be a high priority for the MPO. Adequate resources must be directed toward system preservation to keep the transportation network in good condition. These resources will be used to maintain high quality, smooth roadway surfaces, to quickly repair unexpected damages, and to reduce the number of structurally deficient bridges.

System Efficiency

Transportation System Management (TSM) strategies help to improve the safe and efficient movement of people and vehicles within the existing transportation system. They typically involve roadway improvements that increase capacity, optimize traffic operation, or apply traffic calming in residential areas. Generally, implementation of these strategies can be completed at relatively low cost, requiring minimal right-of-way, and often can be accomplished quickly.

Safety and Security

Safety may be defined as the freedom from unintended harm. Transportation safety planning considers ways that all elements of the system can operate efficiently while still being safe for users. This could include any number of projects or programs such as police surveillance, intelligent transportation systems (ITS), and improvements at high-crash locations. Security, on the other hand, may be defined as the freedom from intentional harm, including those inflicted by people and natural phenomena. Security goes beyond safety and includes planning to prevent, manage, and respond to threats to the regional transportation system. These threats could include a variety of events, such as natural disasters, terrorist threats, or hazardous spills, all of which endanger the lives of people and important transportation infrastructure. In the GSATS region, safety and security of the transportation system is coordinated within various agencies at the federal, state, and local levels.

Travel Demand Management

Travel Demand Management (TDM) is the application of strategies and policies to reduce travel demand (specifically that of single-occupancy private vehicles), to redistribute this demand in time or space, and to offer a set of strategies aimed at maximizing traveler choices. Managing demand can be a cost-effective alternative to increasing capacity and also has the potential to deliver better environmental outcomes, improved public health, stronger communities, and more prosperous and livable cities.

TDM strategies are effective in influencing travel patterns and behavior, increasing vehicle occupancy, promoting and encouraging alternative transportation modes, and redistributing the timing of trips to reduce traveling peaks, thereby reducing the overall demand on the transportation system.

Additional TDM recommendations that would benefit the GSATS region include:

- **TDM Toolkit** – In order to educate local governments and developers on the benefits of TDM, a TDM toolkit could provide guidance for local governments and developers on the implementation of TDM strategies. A toolkit would provide information on how TDM can be encouraged and incorporated into development review, list and explain a

variety of TDM strategies, and offer an interactive tool to assist local officials and developers with the selection context-sensitive TDM strategies.

- **Telecommuting** - It is quite feasible and practical to work closer to home with today's communication technologies. This is an excellent tactic for reducing the number of vehicles on the road. Additionally, other flexible work options which enable employees to shift their work schedules to earlier or later parts of the day spread out demand for travel, thereby reducing congestion.

- **Support for Transit** - Providing necessary support for transit ridership can be instrumental in encouraging people to use alternative modes of transportation. People value their time and the convenience of a vehicle; therefore, transit should provide frequent service and be accessible to multiple origins and destinations. Specific programs to encourage transit use include employer-provided, tax-free transit passes and guaranteed-ride-home programs.

- **Support for Walking and Bicycling** - Bicycle and pedestrian facilities that offer safe, accessible, contiguous, and direct pathways are most ideal and can take some of the burden off the roadway network.

- **School Considerations** - Schools generate a substantial amount of vehicular traffic when parents drive their children to and from school. Even the children living within close proximity to schools may not walk or bike to school because parents do not feel that the environment is safe. Programs such as Safe Routes to School and the Walking School Bus (which provides chaperoned walks to schools) are effective in providing safe and accessible walking environments. Better coordination between local governments and school districts can also help with selecting sites for new schools that are conducive to walking and bicycling.

Land Use and Urban Design

Land use and development in a region generally fall into the categories of where a person lives, works, or plays. These nodes of activity are oftentimes separated but are becoming more integrated as people realize the benefits of mixed-use. The links connecting the nodes of activity are the highways, roads, and other such pathways in a transportation system. Therefore, promoting smart and integrated land use and transportation development planning policies is vital for the overall health of a region. The MPO regularly works with stakeholders to promote the integration of transportation improvements and land use development, especially mixed-use development.

Technology and Electrification

In the last few years, the automobile and technology industry are undergoing dramatic innovations in vehicle technology, smart infrastructure advancement, and shared mobility concepts. Several major automakers are working towards fully autonomous vehicles (AVs) available to the public within the next decade. While current opinion suggests the anticipated increase in autonomous and connected vehicles will enhance safety and efficiency; changes in mode, ridesharing, parking, and number of vehicle trips are not fully understood.

GSATS should consider the following strategies to address the potential changes to the transportation system:

- **Leverage technology to enhance mobility.** Partner with transit agencies and private companies to adopt smartcards, open data, and universal apps to allow riders to compare, book and pay for trips that combine buses, trains, bikes and ridesharing vehicles. This will match customers with the most efficient travel choice.

- **Prioritize and modernize public transit.** The role of transit will evolve as AVs and shared mobility become widespread. Transit agencies should focus on high-frequency, high-capacity services in dense urban corridors (such as rail, bus rapid transit), provide first and last-mile connections through driverless shuttles, and expand kiss-and-rides/mobility hubs.

- **Implement dynamic pricing.** To ensure that AV use supports public objectives and complements public transit, localities may consider a dynamic road pricing plan that varies by origin, destination, number of passengers, congestion, and household income. This can be done through a combination of proven policy tools such as congestion pricing, zone pricing, variable tolls and vehicle miles traveled fee.

- **Plan for mixed-use, car-light neighborhoods.** AVs can unlock demand for living and working in mixed-use neighborhoods – whether they are urban or suburban. To shape this demand, localities need to plan for and incentivize mixed-use development, overhaul parking requirements, and reevaluate new public transit projects.

- **Encourage adaptable parking.** Fewer cars means fewer parking spaces, especially in city centers. Parking garages need to be built with housing or office conversion in mind and include level floors, higher ceiling heights and centralized ramps.

- **Promote equitable access to new jobs and services.** To support disadvantaged populations, cities must encourage public and private operators to provide alternative payment methods, access via dial-a-ride and equitable service coverage. Cities and private partners must also create new employment and training opportunities for drivers and others in legacy occupations.

- **Take active participation in the development and implementation of National Electric Vehicle Infrastructure** (NEVI) initiatives in both South Carolina [14] and North Carolina [15], and seek opportunities to participate in funding opportunities to provide access to charging infrastructure in the region.

Residential Shared Street Policy

A Residential Shared Street is defined as a street in a residential area that permits pedestrians, bikers, runners, and local motorists to safely occupy the same roadway without designated travel lanes. Many low-volume streets in the Grand Strand region's older neighborhoods already operate in this way without designated notices or street markings. Establishing a Residential Shared Streets policy can facilitate safe movement of all road users within the existing right-of-way with the use of low-cost and low-intensity materials, street furniture, or street designs.

The policy should provide the framework of the shared street concept, and should be accompanied by physical signage, street furniture, or roadway redesigns to clearly indicate to roadway users that they are sharing the space with other transportation modes. The signage, furniture, and redesign will be unique to each individual street. The National Association of City Transportation Officials (NACTO) provides design recommendations for implementing safe Residential Shared Streets. Characteristics of residential shared streets include the following, as seen in **Figure 21** [16]:

1. Textured, painted, or pervious surfaces
2. Street furniture, bollards, planters (etc.)
3. Stormwater design elements, including bioretention
4. Street signage
5. Street width guidelines
6. Staggering street furniture and chicane traffic calming

[14] https://www.scdot.org/projects/NEVI%20Formula-Program.aspx
[15] https://www.ncdot.gov/initiatives-policies/environmental/climate-change/Pages/national-electric-vehicle-infrastructure-program.aspx
[16] https://nacto.org/publication/urban-street-design-guide/streets/residential-shared-street/

Figure 21. Residential Shared Street Example, Santa Monica, CA

To keep the implementation of Residential Shared Streets at a low cost, the use of textured, painted, or pervious surfaces can be used to indicate the presence of Residential Shared Streets. Paint markings and planters can be used to add traffic calming or indicate designated uses at a much lower cost than new asphalt, curbing, and restriping. Bioretention facilities and other Low Impact Development techniques eliminate the need for costly runoff detention basins and pipe delivery systems. Further, signage and paint can be utilized at entryways and intersections of shared streets to indicate to users where the shared space begins and ends while having the added benefit of placemaking at low costs.

Applicable Locations

A Residential Shared Street policy could be implemented in communities of the GSATS region, starting in areas that meet the following criteria:

Neighborhood Criteria

- Persistent Poverty or Disadvantaged Area (Justice40)
- Near the coastline or other bicycle and pedestrian generators

Roadway Criteria

- High bike or pedestrian collisions or volumes
- Existing low traffic volumes and low speeds
- Limited right-of-way
- Limited or no curb present

Several communities in the GSATS region could benefit from the implementation of Residential Shared Streets. These neighborhood locations meet the previously identified criteria and can provide initial pilots as the shared streets policy is implemented along the residential streets of these neighborhoods. Potential neighborhoods in South Carolina are

Litchfield Beach in Georgetown County and Surfside Beach, Downtown Myrtle Beach, Atlantic Beach, Cherry Grove Beach in Horry County. Communities in South Carolina that do not meet the identified criteria but would benefit from Residential Shared Streets include Murrells Inlet in Georgetown County and Garden City, Conway, and Little River in Horry County.

In North Carolina, the identified neighborhoods meeting the aforementioned criteria are Ocean Isle Beach and Holden Beach in Brunswick County. Communities in North Carolina that do not meet the identified criteria but would benefit from Residential Shared Streets include Shallotte and Calabash in Brunswick County.

The implementation will be subject to the preferences of the local agencies to fit within branding guidelines. However, a consistent design across the GSATS region will help motorists and non-motorists become familiar with the expected behavior of each other within the designated areas. Examples of funding sources for shared streets include:

- **GSATS TAP Funds:** The Transportation Alternatives Program (TAP) (officially known as the "Transportation Alternatives Set-Aside") is a Federal reimbursement grant program funded through the US Department of Transportation's Federal Highway Administration (FHWA). TAP allows local governments and other eligible entities to apply for grants for a variety of non-motorized transportation projects. As a Transportation Management Area (TMA), GSATS has a dedicated set-aside of TAP funds annually. The FY 2023 allocation for GSATS is $646,000.

- **Safe Streets for All (SS4A) Grants:** The Bipartisan Infrastructure Law (BIL) established the new SS4A discretionary program, with $5 billion in appropriated funds over 5 years, 2022-2026. The SS4A program funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries. SS4a Implementation grants can be used for applying low-cost roadway safety treatments, installing pedestrian safety enhancements and closing network gaps, and carrying out speed management strategies.

- **C Funds (SC Only):** C funds may be used for construction, improvements, or maintenance on the state highway system; local paving or improving county roads; street and traffic signs; and other road and bridge projects. Resurfacing, sidewalk construction, and drainage improvements are also eligible C Fund activities.

- **Powell Bill Funds (NC Only):** The Powell Bill funds are used primarily to resurface municipal streets but also may be used to maintain, repair, construct, or widen streets, bridges, and drainage areas. Municipalities can also use Powell Bill funds to plan, construct, and maintain bike paths, greenways, or sidewalks.

- **Community Development Block Grant (CDBG) Program:** The CDBG program offers an abundance of resources for communities nationwide, including grants to carry out a wide range of community development activities directed toward revitalizing neighborhoods, economic development, and providing improved community facilities and services. Not less than 70 percent of CDBG funds must be used for activities that benefit low- and moderate-income persons.

FISCALLY-CONSTRAINED PROJECTS

The culmination of the GSATS 2045 MTP planning process is a list of projects to be programmed in order to meet the needs of a growing region. A financial plan that demonstrates how the adopted transportation plan can be implemented is required[17] as part of the development and content of the MTP.

This fiscally constrained plan identifies the projects to be funded using the funding levels for North Carolina and South Carolina indicated in the prior section. As projects utilize the funding for each horizon period, any remaining funds were disbursed to the next horizon period. Ultimately, all the project funds were expended by horizon year 2045. The projects and their associated costs by horizon period and state are listed in **Table 14** and **Table 15.** Projects funded through the Horry County RIDE III program are shown in **Table 13.** At the end of each horizon period, a summary of revenues and expenditures is provided.

For illustrative purposes, the financial plan may include additional projects that would be included in the adopted transportation plan if additional resources beyond those identified in the financial plan were to become available[18]. These projects are considered part of the 2045 MTP unfunded list and are shown for South Carolina in **Table 16** and North Carolina in **Table 17**.

Table 13. Horry County RIDE III Funded Projects within the GSATS Region

Name	Project Description	Cost Estimate ($1,000s)
U.S. Hwy. 501 Corridor improvements	Complete 6-lane widening and signalized intersection improvements on U.S. Hwy. 501, from SC Hwy. 31 to SC 544 interchange. Phase I: US 501 Southbound from Gardner Lacy to SC 31. Phase II: US 501 Northbound and Southbound from Gardner Lacy to SC 544.	$41.0
Conway Perimeter Road Phase II	Construct new road with multi-use path from U.S. Hwy. 378 (at El Bethel Road) to U.S. Hwy. 701 south. The new road will feature 4-lanes with median and turning lanes at the intersection.	$18.4
Southern Evacuation Lifeline (SELL) – Environmental Studies and Right-of-Way	Funding to complete the final environmental impact studies required to obtain Record of Decision (ROD) for future roadway. Purchase land for right-of-way of final alignment identified in the Record of Decision.	$25.0
US Hwy. 17 Business Intersection Improvements - Garden City	Improve capacity and safety at the following three intersections in Garden City (intersection widening, turn lane extensions, and other operational improvements): 1.) U.S. 17 Business @ Inlet Square Mall/Mt. Gilead Road 2.) U.S. 17 Business @ Atlantic Avenue 3.) U.S. 17 Business @ Garden City Connector/Pine Avenue.	$19.8
US Hwy. 501 Realignment	Realign U.S. Hwy. 501 at Broadway Street intersection to connect to 7th Avenue North at Oak Street in the City of Myrtle Beach (new alignment). Install sidewalks and intersection improvements on 7th Avenue North, between Oak Street and North Kings Highway.	$13.9
Forestbrook Road Widening	Widen Forestbrook Road, between U.S. Hwy 501 and Dick Pond Road. Improvements will feature 5-lanes including a center turn-lane and the installation of bike/pedestrian facilities such as sidewalks and wider travel lanes.	$89.1
Fred Nash Blvd. connection to Harrelson Blvd. – Myrtle Beach	Construct new 3-lane road, including a center turn-lane, to extend Fred Nash Boulevard around the end of the airport runway (MYR) to provide a direct connection to Harrelson Boulevard. The project includes bicycle facilities.	$19.3
SC Hwy. 31 (Carolina Bays Parkway) Extension To SC/NC State line	Final phase of SC Hwy. 31 (Carolina Bays Parkway). Build new limited-access freeway to extend SC Hwy. 31 from SC Hwy. 9 to North Carolina state line.	$185.0

[17] 23 CFR 450.324(f)(11)
[18] 23 CFR 450.324(f)(11)(vii)

Table 14. South Carolina Fiscally Constrained Projects

Rank	Project ID	Local Government	Project Name	Project Description	Cost Estimate ($1,000s)
SHORT-TERM 2023-2027 FISCALLY CONSTRAINED PROJECTS					
1	I - 3i	Georgetown County	US 17 Signalizations	Install adaptive signal timing at 17/Litchfield Drive, 17/Willbrook Boulevard, 17/N Boyle Road, 17/Watchesaw Road, 17/Bellamy Road, 17/Riverwood Drive, 17/Burgess Road, 17/Blackgum, 17/Retreat Beach Blvd	$1.39
2	I - 19	City of Conway	1st / 2nd Avenue Underpass at US 501	Underpass connecting 1st / 2nd Avenue to US 501 ramps for access to downtown Conway	$3.08
3	I - 7i	Georgetown County	US 17 Access Mgmt	Remove concrete median opening and replace with grass at 17/Eagles, 17/Channel Bluff Ave, 17/Georgieville St, 17/Atalaya Rd	$0.33
4	N - 98	Horry County	US 17 and US 17 Business Connection	A new connector between US 17 Bypass and US 17 BUS in Garden City north of the Garden City Connector and South of Glenns Bay Road, including bicycle and pedestrian facilities	$7.24
5	N - 22	City of Conway	SC 90 Extension	Extend SC 90 from US 501 Bus to intersect US 501 east of Conway	$14.57
6	I - 3	Horry County	Hwy 17 Bypass / Hwy 544 Intersection/Interchange	Interchange and Intersection Improvements at Hwy 17 Bypass & Hwy 544 interchange from Beaver Run Blvd to South Strand Commons Including bicycle and pedestrian facilities	$18.72
7	I - 5i	Georgetown County	US 17 Access Mgmt	Remove concrete median opening and replace with grass US 17 at (Wesley Rd North, Nicoles, Nelson Dr, and Hammock Ave)	$0.27
				Short-Term Project Expenditures	**$45.60**
				Short-Term Revenue	**$52.30**
				Short-Term Surplus	**$6.70**
MID-TERM 2028-2033 FISCALLY CONSTRAINED PROJECTS					
8	W - 19	City of North Myrtle Beach	Hwy 17 - Windy Hill Intersections	US 17 Intersections. Widen for dual left at intersections	$21.00
9	I - 12	Horry County	US 17 Bus / SC 544 Intersection	Intersection improvements/signalization for right turn congestion and queuing onto SC 544	$1.49
10	N - 3i	City of North Myrtle Beach	Possum Trot Rd Extension	Extend Possum Trot Rd. across US 17 to Madison Dr	$3.89
11	I - 21	Georgetown County	US 17 at Litchfield Drive and Country Club Drive in Litchfield	Project to improve two intersections approximately 300 feet apart on Highway 17. Litchfield Drive is a signalized intersection with commercial uses on all four corners and Country Club is an unsignalized intersection located 300 feet north on the west side	$6.76
12	N - 2	City of North Myrtle Beach	Edge Parkway and Sand Ridge Rd connector	Connect Sandridge Rd to Edge Parkway signal. Add bike/ped facilities.	$4.48
13	N - 10	Horry County	Scipio Lane Ext.	Scipio Lane Extension from Holmestown Road to Big Block Road with multipurpose path	$17.56
14	R - 9	City of Conway	Hwy 501 Access Mgmt	Hwy 501 from 4th Avenue to 16th Avenue - Coordinate Access Management.	$7.05
15	R - 20a	City of Myrtle Beach	Kings Highway	Improve Kings Highway from Farrow Parkway to 31st N with Bike/Ped/Transit improvements	$32.34
				Mid-Term Project Expenditures	**$100.35**
				Mid-Term Revenue + Short-Term Surplus	**$100.90**
				Mid-Term Surplus	**$0.55**

Rank	Project ID	Local Government	Project Name	Project Description	Cost Estimate ($1,000s)
LONG-TERM 2034-2045 FISCALLY CONSTRAINED PROJECTS					
16	B - 1i	North Myrtle Beach	Barefoot Bridge Replacement	Replace existing swing span bridge with a fixed bridge	$80.00
17	N - 44	City of North Myrtle Beach	Outrigger Rd / Hilton Drive Connector	Connect Outrigger Road with Hilton Drive near 27th South	$11.28
18	N - 5a	Horry County	Postal Way extension to Atlantic Center	Extend Postal Way to the north to Atlantic Center, including bicycle and pedestrian facilities with transit potential	$17.45
19	R - 20c	City of Myrtle Beach/ Horry County/City of North Myrtle Beach	Kings Highway Access Mgmt	Improve Kings Highway from 67th Ave. N (MB) to 48th Ave S (NMB) with Bike/Ped/Transit improvements	$20.32
20	W - 35	City of Georgetown	Anthuan Maybank Drive Widening / Extension	Widen and extend Anthuan Maybank Drive to Highmarket St	$20.45
21	R - 7i	Georgetown County	US 17 and Burgess Road Intersection	Improve operation on corridor after capacity upgrades at grade quadrant intersection design. US 17 and Burgess Road (707)	$5.23
22	N - 14	Horry County/City of North Myrtle Beach	Champions Blvd Connector	New road connecting Water Tower Road and Long Bay Rd as 2 lanes divided with multipurpose path	$6.07
23	N - 49	City of Conway	2nd Avenue Extension	2nd Avenue Extension to S-723 (US 501 exit ramp to 2nd Avenue)	$7.29
24	R - 4i	Georgetown County	US 17 Bypass Widening	Widen to 6 lanes between Bellamy Ave and Burgess Rd on 17 Byp. Install a reduced conflict intersection at Macklen Avenue	$13.27
				Long-Term Project Expenditures	**$181.36**
				Long-Term Revenue + Mid-Term Surplus	**$188.95**
				Long-Term Surplus	**$7.59**

Table 15. North Carolina Fiscally Constrained Projects

Rank	Project ID	Local Government	Project Name	Project Description	Cost Estimate ($1,000s)
SHORT-TERM 2023-2027 FISCALLY CONSTRAINED PROJECTS					
1	N - 9	Town of Shallotte	Smith Av to Bridgers Rd Connection	A new interconnection between Smith Ave (SR 1357) to Bridgers Road (SR 1349); 2-Lane, Shoulder	$4.05
				Short-Term Project Expenditures	**$4.05**
				Short-Term Revenue	**$6.30**
				Short-Term Surplus	**$2.25**
MID-TERM 2028-2033 FISCALLY CONSTRAINED PROJECTS					
2	N - 1i	NCDOT	Main St. and Holden Beach Rd. Connection	New Street Connection from Main St. (Hwy 17 Business) to Holden Beach Rd.	$3.83

3	N - 7	Town of Shallotte	South Main and Village Point Rd Connector	A new interconnection between South Main Street near Shallotte Park to NC 179 and Village Point Road; 2-Lane with shoulder	$9.81
4	N - 13	Town of Shallotte	North Main St and Smith Ave Connector	New interconnection between US 17 Business/Main Street (SR 1434) to Smith Ave (SR 1357); 2-Lane, Shoulder	$7.37
				Mid-Term Project Expenditures	**$21.01**
				Mid-Term Revenue + Short-Term Surplus	**$33.45**
				Mid-Term Surplus	**$12.44**
LONG-TERM 2034-2045 FISCALLY CONSTRAINED PROJECTS					
5	N - 2i	Town of Shallotte	Smith Ave. and Hwy 130 Connection	Collector Street Connection to Smith Ave Interchange Project (U-5862). Potential tie-in to Carolina Bays Pkwy.	$16.27
				Long-Term Project Expenditures	**$16.27**
				Long-Term Revenue + Mid-Term Surplus	**$69.64**
				Long-Term Surplus	**$53.37**

Table 16. South Carolina Unfunded Projects

Rank	Project ID	Local Government	Project Name	Project Description	Cost Estimate ($1,000s)
25	W - 30	Horry County	US 17 Bus Access Mgmt	Install Additional Lanes on Bus 17/Eliminate Frontage Roads Between Myrtle Beach and Surfside, match existing section in MB and extend East Coast Greenway	$24.60
26	N - 8	Georgetown County	Georgetown Bypass/Brick Chimney Rd Phase 4	Georgetown Bypass/Brick Chimney Road PH 4: Hwy 521 to Hwy 17, south (across Sampit River)	$53.70
27	R - 32	Horry County	SC 179 Widening	Improve and widen 179 from US 17 to NC 179 to multilane facility with multipurpose path	$16.90
28	M - 6	Horry County	SC 9 Access Mgmt	Access management improvements from SC 57 to Water Grande Blvd including plantable median between intersections and bicycle and pedestrian facilities	$14.95
29	N - 5i	Horry County	Conway Perimeter Road / Busbee Bypass	Conway Perimeter Rd / Busbee Bypass-From US 701 to SC 544	$361.49
30	N - 54	City of Conway	Powell St Extension	Extend Powell Street from 1st Avenue to Marina Drive and install sidewalks in Conway	$0.47
31	B - 8	City of Myrtle Beach	Hwy 501 Bridge	Replace and widen HWY 501 Intracoastal Waterway bridge, add bike lanes and sidewalks (or build parallel bridge)	$50.72
32	W - 12	Horry County/City of North Myrtle Beach	Little River Neck Road Widening	Widen Little River Neck Road from 2 to 3 lanes with multipurpose path in North Myrtle Beach and construct roundabout north of Hill St	$50.96
33	B - 4	Horry County	New Bridge over Waccamaw River	New Bridge over Waccamaw River, which would link SC 90 with SC 905 east of Conway	$70.72
34	I - 16i	Georgetown County	US 17 Access Mgmt	Install a NB U-turn at Boyle and 17 in conjunction with other access mgmt efforts in this corridor	$0.44
35	I - 12i	Georgetown County	US 17 Signalizations	Install unsignalized reduced conflict measures at all three intersections between Sandy Island Road and Wesley Road	$3.49
36	R - 6i	Georgetown County	US 17 / Pendergrass and Wachesaw Intersections	Convert 17/Pendergrass and 17/Wachesaw to a RCI. Wesley Road may need to align with Coquina. Pendergrass may not need to be signalized.	$7.40

Rank	Project ID	Local Government	Project Name	Project Description	Cost Estimate ($1,000s)
37	W - 4	Horry County	SC 90 Widening	Widen SC 90 from 17 to Robert Edge Parkway Intersection with bicycle and pedestrian facilities	$117.16
38	W - 3b	Horry County	US 17 Bypass Widening	Widen US 17 Bypass from Hwy 544 to Horry County line	$155.59
39	N - 19	Georgetown County	Parkersville Rd Extension	Extension of Parkersville Road from Baskerville Road north to Gilman Road in Litchfield	$4.67
40	W - 5	Horry County	SC 90 Widening	Widen SC 90 from Robert Edge Parkway to SC 22, including bicycle and pedestrian facilities	$119.73
41	R - 1i	Georgetown County	US 17 / Alston Rd Intersection	Restripe Petigru Dr approach with an exclusive left-turn lane and construct an exclusive left-turn lane on Alston Rd with 125 feet of storage	$1.04
42	I - 15i	Georgetown County	US 17 Access Mgmt	Install raised concrete medians at certain access points in this high crash fatality area between Smalls Loop Rd and Island Shops (N Causeway Road)	$11.22
43	W - 39	City of Myrtle Beach	29th Avenue North	Widen 29th Ave North from Robert Grissom Parkway to North Kings Highway with bike lane and sidewalk (Limit project to the Oak Street intersection)	$14.39
44	W - 3a	Horry County	US 17 Bypass Widening	Widen US 17 Bypass from Back Gate to Hwy 544	$67.55
45	N - 3	Horry County/City of North Myrtle Beach	Sandridge Road Extension	Extend Sandridge Rd/Old Sanders Dr to Bourne Trail all the way to Long Bay Rd, with dedicated bicycle lanes	$85.81
46	W - 6	Horry County	SC 90 Widening	Widen SC 90 from International Drive to US 501, including bicycle and pedestrian facilities	$206.72
47	I - 10i	Georgetown County	US 17 / US 17 Bus Intersection	Improve intersection of 17 and 17 Bus with a signal. Change alignment to right angle in long term (L-2)	$6.76
48	W - 38	City of Myrtle Beach	38th Avenue North	Widen 38th Ave North from Robert Grissom Parkway to North Kings Highway with bike lane, and sidewalk	$12.85
49	I - 10	City of Conway	4th and 3rd Avenue Intersections	Intersection improvements at 4th Ave and 3rd Ave (Hwy 701)	$18.45
50	R - 4	Horry County	Sea Mountain Highway Widening	Improve alignment of Sea Mountain Highway (SC 9 to the Intracoastal Waterway Bridge) in Horry County from 2-lane to 3-lane undivided minor arterial standards, including bicycle and pedestrian amenities with turning pockets at major intersections	$21.76
51	W - 1	City of Myrtle Beach	Seaboard St Widening	Widen Seaboard St between US 501 and Mr. Joe White Ave in Myrtle Beach including bicycle and pedestrian improvements.	$30.50
52	N - 6i	Horry County	Gardner Lacy Rd Extension	Extension of Gardner Lacy to International Dr	$80.59
53	W - 11	Horry County	SC 90 Widening	Widen SC 90 from SC 22 to International Drive, including bicycle and pedestrian facilities	$202.22
54	R - 30	Horry County	Garden City Connector Widening	Widen Garden City Connector to include turn lanes at major intersections and construct multi-purpose path to improve capacity and safety	$18.06
55	I - 8i	Georgetown County	US 17 Access Mgmt	Remove concrete median and install grass at Rodeway Inn/SGA Architects office and US 17	$0.09
56	R - 20b	City of Myrtle Beach	Kings Highway Access Mgmt	Improve Kings Highway from 31st N to 67th Ave. N with Bike/Ped/Transit improvements	$21.02
57	W - 18	Horry County	SC 57 Widening	Widen SC 57 from SC 90 to SC 9 with bicycle and pedestrian amenities	$48.88
58	I - 6	City of Conway	US 501 / SC 544 Interchange	US 501 / SC 544 Interchange improvements	$81.17
59	R - 12i	Horry County	Hwy 905 Widening	Widening in Conway to SC 9, Hwy 905-from 4-lane section near Conway to SC 9-(Ended at GSATS boundary at Hwy 19)	$94.82
60	I - 6i	Georgetown County	US 17 / US 17 Bus Signalization	US 17 at US 17 Bus - Signalize NB 17 when warranted	$0.75
61	R - 3i	Georgetown County	S Causeway Road/Tyson Dr and Beaumon Dr Intersections	Signal spacing improvements and realignment between S Causeway Road/Tyson Drive to S Causeway Drive/Beaumon Drive	$13.53
62	W - 16	Horry County	Big Block Rd Widening	Widen from SC 707 to SC 544 and Realign Big Block Rd and Include bicycle and pedestrian facilities	$39.07

Rank	Project ID	Local Government	Project Name	Project Description	Cost Estimate ($1,000s)
63	R - 11	City of Conway	2nd/3rd/4th/Powell/Wright Intersections	Realign road segments to allow for better capacity, function, flow and safety	$10.34
64	AM - 3	Georgetown County/Horry County	US 17 Bus Access Mgmt	Access management improvements from Belin Rd to Tadlock Rd	$10.77
65	W - 10	Horry County	River Oaks Drive Widening	Widen River Oaks Drive including turn lanes at major intersections to improve capacity and safety and construct multi-purpose path	$144.50
66	W - 9	Horry County/Georgetown County	US 701 Widening	Widen US 701 from Georgetown to Conway	$445.56
67	I - 1	City of North Myrtle Beach	Edge Parkway / SC 31 Interchange	Robert Edge Parkway / SC 31 interchange ramp improvements. Convert existing signalized diamond interchange to diverging diamond interchange to improve traffic floc and eliminate left turn conflicts	$18.45
68	R - 8i	Georgetown County	Petigru Dr and Waverly Rd Roundabout	Single lane roundabout at Petigru Dr and Waverly Rd	$4.30
69	R - 10i	Horry County	Tournament Blvd Widening	Widening to Hwy 707 with bicycle and pedestrian improvements	$28.08
70	W - 8	City of Myrtle Beach	US 17 Bypass Widening	Widen US 17 Bypass from 4 lanes to 6 lanes from 29th Avenue N northwards to Grissom with interchange improvements	$144.43
71	R - 27	Town of Surfside Beach	Sandy Lane Access Mgmt	Improve Azalea Drive and Sandy Lane to Improve Backside Access in Surfside Beach	$6.70
72	B - 1	Horry County/City of North Myrtle Beach	US 17 Bridges in North Myrtle Beach	Widen US 17 Bridges at SC 9, SC 90, and Sea Mountain Highway with additional grade separation at SC 9	$71.39
73	I - 20	Georgetown County	US 17 at Hog Heaven and the Colony Intersection Improvement	Project to close a dangerous median break in front of an existing business on US Highway 17 (located in the middle of a horizontal curve) in Pawleys Island and improve/install a dedicated U-turn lane both northbound and southbound halfway between The Colony	$3.07
74	R - 13i	Horry County	Hwy 378 Widening	From the western limit of current 5-lane section to Little Pee Dee River Bridge approach at county line with bile and pedestrian improvements (Project ends at GSATS boundary for this inclusion at Juniper Bay Rd)	$23.82
75	I - 11i	Georgetown County	US 17 / Kings River Rd Signalization	Signalization at Kings River Rd and 17 to meet LOS needs	$0.63
76	W - 7	City of North Myrtle Beach	2nd Avenue N Widening	Widen 2nd Avenue North in North Myrtle Beach with bike lane, and multipurpose path	$22.91
77	I - 9i	Georgetown County	0	Traffic study to determine alternative forms of traffic control at DeBordieu Colony Neighborhood	$0.03
78	B - 7	Horry County/City of North Myrtle Beach	US 17 and Champions Blvd Connector	Construct connector from US 17 (between 17th Ave S and 21st Ave S) and Champions Blvd via existing Bourne Trail bridge over SC 31	$78.45
79	R - 5i	Georgetown County	Kings River Rd and Waverly Rd Roundabout	Install roundabout to maintain LOS especially in regard to nearby schools at Kings River Rd and Waverly Rd	$4.30
80	R - 5	Horry County	Mt. Zion Road Access Mgmt	Improve alignment of Mt Zion Road (SC 90 to SC 57) to two-lane undivided minor arterial standards, including bicycle and pedestrian amenities with turning pockets at major intersections	$12.01
81	W - 21	Horry County	Singleton Ridge Road Widening	Widen Singleton Ridge Road from US 501 to SC 544 with multipurpose path in Conway	$35.60
82	W - 32	Horry County	Myrtle Ridge Drive Widening	Widen Myrtle Ridge Drive from US 501 to SC 544	$49.18
83	R - 15i	City of Conway	Church St Access Management	Church Street between Mill Pond and 16th safety and access management improvements	$2.74

Rank	Project ID	Local Government	Project Name	Project Description	Cost Estimate ($1,000s)
84	R - 9i	Georgetown County	Kings River Rd and Hagley Dr Roundabout	Single-lane roundabout at Kings River Rd and Hagley Dr if cul de sac is not implemented	$4.30
85	B - 3	Horry County	Highway 22 Expansion	Environmental Studies and Right of Way	$25.00
86	N - 4i	Horry/Myrtle Beach	Bowline Boulevard Extension to Edge Pkwy	Bowline Boulevard Extension to Edge Pkwy	$8.62
87	W - 20	Georgetown County	Pennyroyal Road Widening	Widen Pennyroyal Rd from E of Montford Drive to US 17 in Georgetown	$18.34
88	R - 14i	Horry County	Hwy 111 Access Mgmt	Safety and capacity improvements, Hwy 57 to US 17 (includes portion of S-50 / Mineola). Add bike/ped improvements	$25.75
89	N - 25	City of Conway	Medlen Parkway Extension	Medlen Parkway Extension: Realign western terminus at US 501 to continue straight to US 378	$27.11
90	W - 17	Horry County	Water Tower Road Widening	Widen Water Tower Road from SC 31 to SC 90 and Widen Long Bay Road, including bicycle and pedestrian facilities	$141.75
91	N - 100	City of North Myrtle Beach	Long Bay Rd Widening	Widen Long Bay Road form SC90 to Champions Blvd.	$56.35
92	R - 2i	Georgetown County	Hagley Dr Roundabout	Cul de sac Hagley Dr	$4.30
93	W - 61	City of North Myrtle Beach	Champions Blvd and Sandridge Loop Connector	Pave and/or widen existing 2 lane road connecting Champions Blvd. to Sandridge Loop. Connect to Edge Pkwy. 2 to 4 lane widening	$32.12
94	W - 37	City of Conway	Cultra Road Widening	Widen Cultra Road from Church to Main St with center median and multipurpose path	$55.77

Table 17. North Carolina Unfunded Projects

Rank	Project ID	Local Government	Project Name	Project Description	Cost Estimate ($1,000s)
6	W - 28	Town of Shallotte	NC 179 Widening	Widen NC 179 to a multi-lane facility from US 17 BUS to Hale Swamp Road (future NC 179); 4-Lane W/median & multipurpose path	$65.99
7	B - 5	Town of Ocean Isle Beach	New Bridge on Brick Landing Rd	New Bridge from Brick Landing Road (SR 1143) to Shallotte Blvd (SR 1202)	$18.08
8	W - 46	Town of Shallotte	White St Widening	Widen White Street to a multi-lane facility from Smith Avenue (SR 1357) to Mulberry Street (SR 1357); 4-Lane W/Median	$22.03
9	W - 31	Brunswick County	SC 130 Widening	Widen NC 130 to a multi-lane facility from Smith to Sabbath Home Intersection; 4-Lane W/median & multipurpose path	$184.03
10	S - 3	Town of Shallotte	Ocean Hwy Superstreet	Upgrade roadway to superstreet from NC-211 to US 17 B (Main Street)	$33.31
11	S - 5	Town of Shallotte	Ocean Hwy Superstreet	Upgrade roadway to superstreet from the US 17 B (Main Street) to US 17 B (Main Street)	$26.90
12	W - 51	Town of Holden Beach	NC 130 Widening	Widen NC 130 to a multi-lane facility from Sabbath Home Intersection to the end of state maintenance; 4-Lane W/Median & Sidewalk	$30.41
13	W - 53	Town of Shallotte	NC 130 Widening	Widen NC 130 to a multi-lane facility from McMilly Road (SR 1320) Village Road (NC 179); 4-Lane W/Median & Sidewalk	$55.65
14	I - 2i	Town of Shallotte	Village Rd / Village Pond Rd Intersection	Intersection improvement at Village Rd (Hwy 179) & Village Point Rd	$6.76
15	W - 59	Town of Sunset Beach	NC 904 Widening	Widen NC 904 to a multi-lane facility from US 17 to NC 179 (Beach Drive); 4-Lane W/Median & Sidewalk	$99.64
16	W - 44	Town of Ocean Isle Beach	Ocean Isle Beach Rd Widening	Widen Ocean Isle Beach Road (SR 1184) to a multi-lane facility from US 17 to NC 179 (Beach Drive); 4-Lane W/Median	$96.21

Rank	Project ID	Local Government	Project Name	Project Description	Cost Estimate ($1,000s)
17	I - 8	Brunswick County	Persimmon Rd / NC 179 Intersection	Intersection improvements at Persimmon Rd and NC 179	$6.76
18	W - 26	Town of Ocean Isle Beach	Beach Dr Access Mgmt	Access management	$10.77
19	S - 4	Town of Shallotte	Ocean Hwy Superstreet	Upgrade roadway to superstreet from US 17 B (Main Street) to NC-904	$35.20
20	W - 23	Town of Calabash	NC 179 Widening	Widen NC 179 to a multi-lane facility from the South Carolina State Line to Old Georgetown (SR 1163); 4-Lane W/Median & Multipurpose Path	$54.60
21	I - 1i	Town of Shallotte	Forest St Extension	Right in right out intersection with Forest St Ext. & Hwy 17 Bypass	$6.76
22	W - 40	Brunswick County	Longwood Rd Widening	Widen NC 904 to a multi-lane facility from Etheridge Road (SR 1308) to US 17; 4-Lane W/Median	$95.89
23	W - 22	Town of Sunset Beach	NC 179 Bus Widening	Widen NC 179 BUS to a multi-lane facility from NC 904 (Seaside Road) to the Sunset Blvd Bridge; 4-Lane W/Median	$50.13
24	S - 1	Town of Carolina Shores	Ocean Hwy Superstreet	Upgrade roadway to superstreet from the NC-904 to the South Carolina State Line	$44.84
25	W - 41	Brunswick County	Hickman Rd Widening	Widen Hickman Road (SR 1303) to a multi-lane facility from US 17 to State Line; 4-Lane W/Median	$73.66
26	W - 60	Town of Sunset Beach	NC 179 Widening	Widen NC 179 to a multi-lane facility from NC 904 (Seaside Road) to Beach Drive (179B); 4-Lane W/Median & Sidewalk	$103.98