#### FY 2021-2027

# TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

#### **FOR**

### ROCK HILL – FORT MILL AREA TRANSPORTATION STUDY



## ADOPTED BY POLICY COMMITTEE 5-29-2020

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#### List of Acronyms

FHWA	Federal Highway Administration	See Page 4
FTA	Federal Transit Administration	See Page 4
МРО	Metropolitan Planning Organization	See Page 4
RFATS	Rock Hill-Fort Mill Area Transportation Study	See Page 4
LRTP	Long Range Transportation Plan	See Page 4
TIP	Transportation Improvement Program	See Page 4
UPWP	Unified Planning Work Program	See Page 4
CAC	Citizens Advisory Committee	See Page 4
SIB	State Infrastructure Bank	See Page 6
TAP	Transportation Alternatives Program	See Page 6
CMAQ	Congestion Mitigation & Air Quality Improvement Program	See Page 6
VMT	Vehicles Miles Traveled	See Page 6
STIP	State Transportation Improvement Program	See Page 8
MAP-21	Moving Ahead for Progress in the 21st Century Act	See Page 8
PBPP	Performance-Based Planning & Programming	See Page 8
FAST	Fixing America's Surface Transportation Act	See Page 9
SHSP	Strategic Highway Safety Plan	See Page 9
HSIP	Highway Safety Improvement Program	See Page 9

### TRANSPORTATION IMPROVEMENT PROGRAM FOR FY 2021–2027

#### **INTRODUCTION**

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) regulations require all urbanized areas with populations of 50,000 or greater to create a Metropolitan Planning Organization (MPO). Each MPO must then develop a cooperative, comprehensive and continuing transportation planning process in order to qualify for federal funding of transportation projects.

The three major work products developed by the Rock Hill-Fort Mill Area Transportation Study (RFATS) are a Long Range Transportation Plan (LRTP; a Transportation Improvement Program (TIP); and a Unified Planning Work Program (UPWP). Opportunities for public input are advertised and public comments are actively solicited for each of these planning documents.

The RFATS Long Range Transportation Plan (LRTP) is a 20 year forecast plan required at both the metropolitan and state level. It must be updated every five years and it must consider a wide range of social, environmental, energy and economic factors in determining overall regional goals and how transportation can best meet these goals. The plan is multi-modal, covering highways, public transportation, bicycle and pedestrian travel, as well as aviation. It includes a financial plan for transportation expenditures, as well as a congestion management process. The plan summarizes the priority "strategies" that have been identified to help meet regional transportation goals. These strategies include both capital projects and operations (such as roadway maintenance and public transit service). Once the LRTP has been adopted, the near-term strategies receive funding for implementation by being included in the region's Transportation Improvement Program (TIP).

The Rock Hill-Fort Mill Area Transportation Study (RFATS) FY 21-27 TIP outlines the planning objectives, priority status and funding source for all projects scheduled for implementation over a seven-year period and must be updated every four years. Specifically, the TIP lists the most immediate, financially constrained transportation projects slated for implementation within the RFATS Area. After a project has been included in the adopted TIP, the responsible agency may begin formal project development. This typically starts with confirming the purpose and need of the

project, securing the necessary environmental agency approvals, and completing the design. If needed, right-of-way is then purchased and then construction begins. This process generally takes several years from planning to construction, particularly in the case of the larger projects.

The RFATS Unified Planning Work Program (UPWP) is developed biennially and documents all major transportation planning initiatives and related activities with the RFATS Study Area. These often include studies, analysis, modeling, and coordination efforts. It is important to note that federal financial support is received through a consolidated planning grant from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA); with state funding from the South Carolina Department of Transportation (SCDOT); as well as local funding assistance from the member jurisdictions. Notable transportation planning activities identified in the RFATS UPWP include: implementation of the LRTP; continued coordination on the Metrolina Regional Travel Demand Model; coordination with FHWA / SCDOT on Transportation Performance Management Requirements; as well as continued coordination of the Transportation Alternatives and CMAQ programs.

#### **ADOPTION PROCESS**

The RFATS planning process is guided by a Policy Committee that is comprised of twelve (12) voting members from each of the following jurisdictions: City of Rock Hill, Town of Fort Mill, City of Tega Cay, Catawba Indian Nation, the eastern urbanized portion of York County and the panhandle of Lancaster County. The Policy Committee is the primary decision–making body that ultimately approves all transportation plans, projects and funding commitments.

There are two additional committees that participate in this process as well; the RFATS Technical Team and Citizen's Advisory Committee. The Technical Team is made up of city and county staff members along with representatives from SCDOT, FHWA, SCDHEC and the Catawba Council of Government. The Citizen's Advisory Committee (CAC) includes eleven appointed members from each RFATS community as well as specific representatives on behalf of traditionally underserved populations.

As the Transportation Improvement Program (TIP) is a multi-modal plan of highway, transit, bicycle, pedestrian and transportation enhancement projects, its adoption involves considerable review and consultation between the CAC, Study Team and

Policy Committee to ensure that the projects within the TIP are consistent with the priorities identified in the Long Range Transportation Plan (LRTP).

The procedure for reviewing and ultimately adopting the TIP involves a multi-step process that includes staff evaluation, interagency coordination, public review and comments as well as the completion of a conformity analysis of the projects – that will determine whether the TIP is in compliance with the applicable air quality standards for the RFATS Area. Once all of these activities have been completed, the RFATS Policy Committee will then consider formal adoption.

It should be noted that TIP amendments are periodically made to incorporate additional projects once a funding source has been identified. Each time this action is sought, a 21-day public comment period will be held and a summary report will be presented to the Policy Committee for their review prior to amending the TIP. Additionally, it should be noted that the TIP is periodically updated, which is a more involved process; and as such, a 30-day public comment period is associated with this action.

#### **PUBLIC ACCESS**

Once the Policy Committee provides preliminary approval of a draft version of the TIP, a public comment period will be scheduled so that all interested parties and stakeholders can actively participate in the review and development process. Staff will then post a draft version of the TIP on the websites of all RFATS members (City of Rock Hill, City of Tega Cay, Town of Fort Mill, Catawba Indian Nation and York County), as well as place a newspaper advertisement announcing this opportunity to provide feedback and suggestions. It should be noted that RFATS staff will prepare a summary report of all written and oral comments received and present this information to the Policy Committee as a part of the overall planning process.

#### **AMENDMENT PROCESS**

The Transportation Improvement Program (TIP) is the primary document that reflects all regionally significant and federally funded transportation projects. And although it periodically undergoes a comprehensive update every 4 years – it is also amended

and/or revised on a more frequent basis whenever a new project is added or a revision is requested in order to reflect changes in the funding of existing projects.

With this in mind, the process for amending the TIP involves staff evaluation, agency coordination, public review of the proposed action, and then approval by the MPO's Policy Committee. When these actions are completed, the amended document is then submitted to the South Carolina Department of Transportation for further evaluation and approval to be incorporated into the State Transportation Improvement Program.

It is important to note that not all changes to the TIP are approached in the same manner. For example, when a decision is made to commit new federal funds to support a project, it is treated as a TIP Amendment; and as such, is a more formal process that involves both staff evaluation and a public review period. These steps are established so that adequate time and opportunity is available to provide input as well as suggestions before such an action is finalized.

However, when a revision to the TIP is requested – which typically involves administrative and/or supporting programmatic changes, such actions are approached more as minor updates or corrections (i.e., changes in the schedule of a project; combining or separating phases of work to improve implementation, etc.). With this in mind, staff evaluation and coordination continues to be a part of this action, but a separate public review period is not generally involved, as this action was completed when funding was originally considered.

#### **FUNDING/REVENUE SOURCES**

RFATS projects are funded through a variety of federal, state and local transportation funding programs. Specific funding sources included in the TIP include:

<u>Guideshare Funds</u> – Funds for road improvements are allocated by SCDOT through the Guideshare Program. SCDOT sets aside funds each year and then distributes the money among the state's Metropolitan Planning Organizations and Councils of Government. The allocation formula is based on the population totals and amount of vehicle miles traveled (VMT) in each area and/or region. RFATS annual apportionment is approximately \$6.035 million dollars.

<u>Exempt Projects</u> – Projects that are funded on a statewide basis through other federal programs are listed in the TIP as "Projects Exempt From Guideshare," which means the projects are funded through other sources. Most of these projects are on the Interstate Highway System; SCDOT identifies and funds Interstate projects through a statewide system and the advises each MPO. Bridge replacement projects, resurfacing projects, safety projects and other statewide programs are also listed here.

<u>State Infrastructure Bank</u> - This institution provides financing for a wide variety of highway and transit projects through loans and credit enhancements. A State Infrastructure Bank is designed to complement the traditional Federal Aid Highway and transit grants administered by SCDOT.

<u>Transportation Alternative(s) Projects</u> – Funds that help expand transportation choices as well as improve the overall transportation system are supported through the Transportation Alternatives Program (TAP). The RFATS Study Area receives an annual allocation from SCDOT to implement improvements principally to pedestrian and bicycle facilities. RFATS annual apportionment is \$112,987.

Congestion Mitigation & Air Quality Improvement Projects – Funds under this program are reserved for projects that reduce vehicle congestion and improve air quality. Typical projects include transit improvement, shared-ride services, traffic flow improvements, pedestrian and bicycle programs, and travel demand management strategies. The Environmental Protection Agency has designated RFATS as being a maintenance area for ground level ozone, and thus RFATS is eligible to receive CMAQ funding. RFATS annual apportionment is approximately \$2.0 million dollars.

York County One Cent Sales Tax Program (Pennies for Progress) – This program is a Capital Project Sales & Use Tax that was initiated by York County to provide funding for road widenings, sidewalk / bikeway, and intersection improvements. To date, four funding rounds have been approved (1997, 2003, 2011, and 2017); total generated revenues are approximately \$747,175,000.00.

<u>Federal Transit Administration - (FTA 5307 Program)</u> This funding source is known as the Section 5307 Urban Area Formula Program which provides funding for planning, operating, and capital needs to support the provision of transit services. Funds under

this program are apportioned annually and remain available for 4 fiscal years (the year of apportionment plus 3 additional years).

#### PROJECT RANKING PROCESS/CRITERIA (ACT 114)

In 2007, the South Carolina Legislature established a statewide project priority list for all federal aid projects proposed for inclusion in the State Transportation Improvement Program (STIP). It should be noted that all federally funded projects and/or categories of projects are required to be included in the STIP in order to be eligible for federal funds (Title 23 and Title 49, Chapter 53 of the United States Code).

As a part of this action, the State Highway Engineer developed a ranking process for applying uniform and objective criteria applicable to all projects, except State Infrastructure Bank, local option sales tax projects (Pennies for Progress Program) and projects funded solely by C-Funds (County Funds). This ranking process is designed to serve as a useful decision-making tool to improve the overall transportation planning process.

Specifically, there are nine (9) evaluation points each project (road widenings, intersection improvements and new alignments) must undergo prior to inclusion in the TIP: (1) financial liability; (2) public safety; (3) potential for economic development; (4) traffic volume and congestion; (5) truck traffic; (6) pavement quality index; (7) environmental impact; (8) alternative transportation solutions; (9) consistency with local land use.

#### PERFORMANCE-BASED PLANNING & PROGRAMMING

Performance-based planning and programming or "performance management" is a strategic approach that uses system generated information to make investment and policy decisions to achieve goals set for the multimodal transportation system in the MPO Study Area. Specifically, Performance-Based Planning & Programming (PBPP), refers to the application of performance management as standard practice in the planning and programming decision-making process. The goal of PBPP is to ensure that transportation investment decisions – both long term planning and short term planning – are based on the ability to meet established performance goals. As a federal requirement, states will invest resources in projects to achieve individual performance

targets that collectively will make progress toward established national goals. Like states, MPOs are also expected to make transportation investment decisions based on a performance-driven, outcome-based approach as well. With this in mind, the key planning documents of an MPO; specifically, the LRTP and this TIP, are required to reflect this same approach to the planning and decision-making process.

Through the federal rulemaking process, FHWA is requiring state DOTs and MPOs to monitor the transportation system using specific performance measures. These measures are reflective of the national goal areas outlined in MAP-21 and the FAST Act. The national goal areas include: Safety, Infrastructure Condition, and System Reliability. The RFATS Policy Committee has formally elected to accept and support the State of South Carolina's targets for these three goal areas for the current performance period.

#### **SAFETY**

The State of South Carolina has the highest fatality rate in the nation, it is 67% higher than the national rate and 40% higher than states in the southeast. Reducing the number of transportation-related collisions, injuries, and fatalities is SCDOT's highest priority as is making safety everyone's business.

The 2015 South Carolina Strategic Highway Safety Plan (SHSP) is the statewide plan that focuses on how to accomplish the vision of eliminating fatalities and reducing serious injuries on all public roads. The SHSP guides SCDOT, MPOs, COGs, and other safety partners in addressing safety and defines a framework for implementation activities to be carried out throughout the state. The South Carolina SHSP and the STIP both commit to a visionary performance target of zero deaths. The SCDOT Highway Safety Improvement Program (HSIP) annual report documents that statewide interim performance measures toward that zero deaths vision. The state will set targets advancing towards this goal over the next 20 years.

In 2017, SCDOT provided a safety workshop for the MPO with data specific to the MPO's Study Area boundary. The workshop further examined the crash data just within the MPO area to provide some perspective on what safety problems the MPO is experiencing with the study area boundary. Potential focus areas for the MPO include Roadway Departures, Intersections, Access Management, and Non-Motorized

Roadway Users. These areas could be influenced by MPO policy as a project moves through the planning, programming, and delivery process.

SCDOT is required to evaluate and report on safety targets for five required measures on an annual basis. These five measures for safety are Fatalities, Serious Injuries, Non-Motorized Fatalities and Serious Injuries, Rate of Fatalities per 100 Million VMT, and Rate of Serious Injuries per 100 Million VMT. The baseline and targets for these measures for both the state and the MPO are shown below.

SAFETY TARGET BASELINE (2016 - 2020 AVERAGE)

	Traffic	Fatality	Severe	Severe	Non-
	Fatalities	Rate	Injuries	Injury Rate	Motorized
SC Baseline	969.6	1.804	2,961.6	5.545	391.6
SC Targets	1,011.0	1.819	2,781.0	4.979	380.0
MPO Baseline	22.6	1.090	105.0	5.136	10.2

This TIP includes specific investment priorities that support all of the MPO's goals including safety, using a prioritization and project selection process established previously in the LRTP. The MPO has long utilized a project ranking criteria that identifies and prioritizes projects aimed at improving transportation safety.

While all projects include consideration of safety in the design process, there are active and recently completed projects that are expected to favorably impact the targets in the current performance period. SCDOT has identified several safety projects to strengthen safety in the RFATS Study Area. Those projects include a Safety Improvement for I–77, spanning twenty–one miles (21), which is being undertaken to maintain and improve the safety and efficiency of the interstate system. The MPO has approved both TAP Funding and CMAQ Funding for multiple projects aimed at implementing pedestrian facilities near schools and a university, where pedestrian activity is highest. The MPO has coordinated closely with SCDOT to implement access management improvements, which reduce the opportunity for crashes at intersections. It is also worth noting that there are ten (10) safety improvements funded by York County Pennies for Progress, which are expected to be completed during the current performance period.

Going forward, the project evaluation and prioritization process for the MPO will continue to use a data-driven strategy that considers stakeholder input to evaluate projects that have an anticipated effect of reducing both fatal and injury crashes. During the most recent update to the Congestion Management Process, eight (8) priority intersections were identified for consideration of future safety audits. These locations were identified using safety data provided by SCDOT, linking the planning process back to the performance management requirements. The goal of reducing fatal and serious injury crashes is linked to the TIP and the process used in prioritizing the projects is consistent with federal requirements. However, it should be noted that long-term safety performance for the MPO could be influenced by significant increases in VMT as the MPO continues to experience high growth rates in population and employment.

#### SYSTEM PERFORMANCE

The RFATS Study Area is a dynamic, high growth planning environment located south of Charlotte, NC. Given this operating atmosphere, RFATS is particularly focused on and committed to extracting the highest degree of operational efficiency from our principal arterial roadways and the interstate system. With this in mind, RFATS will seek to advance the efforts of the South Carolina Department of Transportation to continually improve the functional quality and reliability of infrastructure conditions.

SCDOT is required to evaluate and report on Infrastructure Conditions targets for three required measures. These include Interstate Pavement, Non-Interstate NHS Pavement, and Bridges. The baseline and targets for these measures for both the state and the MPO are shown in the table below.

Infrastructure Conditions: Baseline & Targets			
	Interstate	Non-Interstate NHS	
	Pavement	Pavement	Bridges
SCDOT Baseline	61.4% Good	10% Good	41.6% Good
	1.7% Poor	2.6% Poor	4.2% Poor
2 Year Targets	N/A	14.9% Good 42.2%	
		4.3% Poor	4% Poor
4 Year Targets	71% Good	21.1% Good 42.79	
	3% Poor	4.6% Poor	6% Poor
MPO Baseline	96.7% Good	3.9% Good	23% Good

Based on SCDOT processes for selecting pavement improvement projects, the MPO anticipates improvements to the percentage in good condition and reductions to the percentage in poor condition on both the interstate and non-interstate NHS. While the condition of interstate pavement within the RFATS Study Area is favorably impacting both the two-year and four-year state targets, the condition of the non-interstate NHS pavement is currently outside both the two-year and four-year targets. SCDOT has allocated funding to pavement preservation treatments that extend the service life of good pavements. In addition, it is worth noting that there are several resurfacing projects that are being completed through York County Pennies for Progress that are expected to favorably impact both the two-year and four-year state targets for Non-Interstate NHS pavement.

Currently, the condition of bridges on the Interstate and Non-Interstate NHS within the RFATS Study Area is below both the two-year and four-year state targets. SCDOT and the MPO have approved six (6) non-interstate NHS bridge replacement projects in the STIP / TIP. SCDOT has also identified a bridge rehab project on the heavily trafficked I-77 bridge over the Catawba River. Based on the current project delivery schedule, all of these projects are expected to be complete within the current performance period and should favorably impact both the two-year and the four-year state targets. Conversely, approximately 75% of the bridge deck area within RFATS is considered to be in fair condition and normal bridge deterioration based on age and traffic usage could potentially impact the future performance condition of bridges rated in the poor category.

SCDOT is also required to evaluate and report on System & Freight targets for three required measures. These include Interstate Travel Time Reliability, Non-Interstate Travel Time Reliability, and Truck Travel Time Reliability. The baseline and targets for these measures for both the state and the MPO are shown in the table below.

Control O Fortable Bulliability Taylor			
System & Freight Reliability Targets			
Travel <sup>-</sup>	Time		
Reliabil	ity Travel Time	Truck Travel	
(Interst	ate) Reliability	Time Reliability	

		(Non-Interstate NHS)	
	94.8% Person	89.8% Person	
SCDOT	miles traveled	miles traveled	1.34 TTTR
Baseline	reliable	reliable	Index
	91.0% Person	N/A	
2 Year	miles traveled		1.36 TTTR
Targets	reliable		Index
	90.0% Person	81.0% Person	
4 Year	miles traveled	miles traveled	1.45 TTTR
Targets	reliable	reliable	Index
	88.3% Person	84.5% Person	
	miles traveled	miles traveled	1.40 TTTR
MPO Baseline	reliable	reliable	Index

Travel time reliability on the Interstate within the RFATS Study Area is currently below the SCDOT baseline and is projected to be outside both the two-year and four-year state targets. Travel time reliability on the Non-Interstate NHS is currently below the SCDOT baseline and is projected to be outside the four-year state target. With the RFATS Study Area being such a dynamic and high growth planning environment, VMT is expected to increase as growth continues during the current performance period. Thus, VMT was a major consideration in establishing the future performance goals related to system reliability. It is worth noting that the statewide targets for both interstate and non-interstate reliability reflect declining performance for both Interstate and Non-Interstate reliability. Not only within the RFATS Study Area, but statewide reliability is projected to decrease as key areas of intensity are furthered by growth pressures.

In regards to the interstate in the RFATS Study Area, declining performance is not only attributed to increases in VMT but also limited operational and capacity improvements that are scheduled for completion within the four-year performance period. Most notably the segments along I-77 north of Exit 85 show high AM Travel Time Reliability Ratios. Currently, RFATS has three (3) planned interchange improvements along the interstate, and only one (1) of these projects is scheduled for completion within the current performance period. The interchange at I-77 /

Gold Hill Road is a project funded through both the MPO and York County Pennies for Progress. This improvement is anticipated to strengthen reliability along the interstate and favorably impact the four-year state target.

Declining performance on the Non-Interstate NHS is also attributed to increases in VMT, but at a much faster rate. This is despite significant improvements to capacity that are currently scheduled for completion during the current performance period. Specifically, only one such improvement that is funded by the MPO is expected to be complete within the four-year performance period. That project is the SC 160 Phase 2 Widening Project in Lancaster County, which is transitioning a two-lane highway to a four-lane divided highway. However, it is worth noting that there are five capacity improvements that are funded by York County Pennies for Progress which are anticipated for completion within the four-year performance period. Travel Time Reliability Ratios are especially high at key intersections in close proximity to I-77; hence why the MPO has targeted intersection improvements along major arterials. All of these improvements are expected to help further strengthen reliability along the Non-Interstate NHS and favorably impact the four-year target.

Truck Travel Time Reliability in the RFATS Study Area is currently above the SCDOT baseline but is projected to be outside of the four-year state target. Declining performance is anticipated for Truck Travel Time Reliability due to the same increases in VMT which are attributing to the declining performance in both Interstate and Non-Interstate Reliability. However, it is worth noting that the projects mentioned in the previous two paragraphs should provide benefits to overall traffic and therefore favorably impact the four-year state target.

#### PROJECT NARRATIVE(S)

#### GUIDESHARE PROJECTS: (Funds Available to RFATS)

- 1. <u>SC-160 / I-77 Interchange Reconfiguration.</u> This project is a traffic flow improvement effort that will include consideration of reconfiguring the interchange to improve operational efficiency, particularly during AM and PM peak driving periods.
- 2. <u>Exit 82A, 82B, 82C / I-77 Interchange Reconfiguration</u>. This project is a traffic flow improvement effort that will include consideration of reconfiguring the

interchange to improve operational efficiency, particularly during AM and PM peak driving periods.

- 3. <u>SC-160 Phase 2 Widening Project.</u> This project will widen an existing 2-lane rural roadway to 3-lanes from S-157 to Rosemont Drive / McMillan Park Drive and to the York County line at Sugar Creek. This project is an operational efficiency improvement effort with a project length of 1 mile. It should be noted that it is envisioned that this roadway will be widened to 5 lanes in subsequent years.
- 4. <u>US 521 / Marvin Road Intersection Improvement Project.</u> This project is a traffic flow improvement effort that will improve the operational efficiency of this intersection during AM and PM peak driving periods.
- 5. <u>Carowinds / Pleasant Road Intersection.</u> This project is a traffic flow improvement effort that will incorporate additional turning capacity as well as additional storage capacity. It should be noted that this project is the recipient of multiple sources of federal and state funding.
- 6. <u>India Hook / Celanese Road Intersection.</u> This project is a traffic flow improvement effort that will incorporate additional through movements and additional turning capacity. It should be noted that this project is the recipient from multiple sources of federal and state funding.

#### PROJECTS EXEMPT FROM GUIDESHARE

- 1. <u>Riverview Road Extension</u>. This project will provide additional north-south connectivity on the west side of I-77 as well as provide a parallel facility to Anderson Road. The project length is 1.0 mile and is classified as non-exempt and regionally significant. This project underwent a conformity emissions analysis 04/2013.
- 2. <u>Eden Terrace Extension</u>. This project will provide additional connectivity on the east side of I-77 and serve new development. The project length is 1.0 mile and is classified as non-exempt and regionally significant. This project underwent a conformity emissions analysis 04/2013.

- 3. <u>Corporate Boulevard Connector</u>. This project will provide additional connectivity on the east side of I-77 and serve new development. The project length is 1.25 miles and is classified as non-exempt and regionally significant. This project underwent a conformity emissions analysis 04/2013.
- 4. <u>Meeting Street / Galleria Boulevard Extension</u>. This project provides additional connectivity on the east side of I-77 and serve new development. The project length is 1.25 miles and is classified as non-exempt and regionally significant. This project underwent a conformity emissions analysis 04/2013.
- 5. <u>Commerce / Galleria Connector</u>. This project will provide additional connectivity on the east side of I-77 and serve new development. The project length is 0.25 miles and is classified as non-exempt and regionally significant. This project underwent a conformity emissions analysis 04/2013.
- 6. <u>Galleria Extension to US 21 Through Antrim</u>. This project will provide additional connectivity on the east side of I-77 and serve new development. The project length is 0.50 miles and is classified as non-exempt and regionally significant. This project underwent a conformity emissions analysis 04/2013.
- 7. Riverwalk Road Connector. This project will provide additional north-south connectivity on the east side of I-77 for future development. Includes three lane bridge over existing railroad tracks and intersection with Commerce Drive. The project length is 0.25 miles and is classified as non-exempt and regionally significant. This project underwent a conformity emissions analysis 04/2013.
- 8. <u>S-46-654 (Church Road) Bridge over Burgis Creek.</u> This project is a part of the Federal Bridge Replacement Program. SCDOT serves as the project manager. Construction is estimated to begin in spring 2018.
- 9. <u>SC-72 Stony Fork Creek.</u> This project is part of the Federal Bridge Replacement Program. SCDOT serves as the project manager. Construction is estimated to begin in 2019.

- 10. <u>S-46-50 (Red River Road) Bridge over Manchester Creek.</u> This project is a part of the Federal Bridge Replacement Program. SCDOT serves as the project manager.
- 11. <u>US 21 BUS Bridge over Steel Creek.</u> This project is a part of the Federal Bridge Replacement Program. SCDOT serves as the project manager.
- 12. <u>S-82 Bridge over Chappell Road E.</u> This project is a part of the Federal Bridge Replacement Program. SCDOT serves as the project manager.
- 13. <u>S-103 Bridge over Oak Park Road.</u> This project is a part of the Federal Bridge Replacement Program. SCDOT serves as the project manager.
- 14. <u>Safety Projects (P, R & C).</u> This is a program activity undertaken by SCDOT to resurface and provide guardrail and other safety improvements to federal aid eligible roads.
- 15. <u>I-77 Corridor Improvement (SC 9 Exit 65 to US 21 Exit 77) Feasibility Study.</u> This is a study undertaken by SCDOT to examine potential improvements for this section of the interstate system.
- 16. <u>I-77 Safety Improvements (Exit 60 to Exit 91).</u> This is a project undertaken by SCDOT to maintain and improve the safety and efficiency of the interstate system.
- 17. <u>S-54 (Paraham Rd.) / S-80 (Campbell Rd.).</u> This project is a part of the safety program undertaken by SCDOT to resurface and provide guardrail and other safety improvements to federal aid eligible roads.
- 18. <u>US 21 (Anderson Rd.) / S-162 (Hall-Spencer Rd.).</u> This project is a part of the safety program undertaken by SCDOT to resurface and provide guardrail and other safety improvements to federal aid eligible roads.
- 19. <u>Pavement Marking & Signing Projects</u>. This is a program activity undertaken by SCDOT to maintain and improve the safety and efficiency of the transportation system.

- 20. <u>ITS (Interstate).</u> This is a program activity undertaken by SCDOT to add lanes to existing Interstate facilities as well as to provide necessary maintenance. This activity is primarily funded with NHS, STP and IM funds.
- 21. <u>Incident Response Program</u>. This is a program activity undertaken by SCDOT to provide traffic control and emergency assistance to motorists in the RFATS Area.
- 22. <u>Catawba River Trail Extension Project.</u> This is a project activity undertaken by the SC Parks, Recreation and Tourism program.
- 23. <u>Pavement Projects</u>. This is a program activity undertaken by SCDOT to maintain and resurface federal aid eligible roads.

#### **INFRA GRANT & AGENCY FUNDED PROJECTS**

1. Exit 81 / I-77 Interchange Project. This project is a traffic flow improvement effort that features construction of a new interchange and connecting roadway infrastructure to Mt Gallant Road on the west of the interstate and Paragon Way to the east of the interstate. This project will improve operational efficiency, particularly during AM and PM peak driving periods.

#### TRANSPORTATION ALTERNATIVES PROJECTS

- 1. <u>City of Rock Hill Oakland Ave Streetscape Improvements</u>. This project is a pedestrian enhancement effort that involves widening of sidewalks, curb and gutter, and lighting to provide safe alternative transportation for area residents.
- 2. <u>City of Rock Hill White Street Pedestrian Safety Improvements.</u> This project is a pedestrian safety improvement effort that involves the widening of sidewalks, installing new stamped crosswalks, as well as accessible ramps. Fundamentally, this project is designed to improve pedestrian visibility and clearly demarcate appropriate crossing points along this corridor.
- 3. <u>City of Rock Hill Columbia Avenue Pedestrian Improvements Project.</u> This project is a pedestrian enhancement effort that will improve pedestrian

infrastructure along Columbia Avenue. Specific improvements include a sidewalk, ADA accessibility improvements, pedestrian lighting, and landscaping.

4. <u>City of Tega Cay - Tega Cay Drive / Heron Harbor Drive Safety Enhancement.</u>
This project is a pedestrian enhancement effort that is focused on improving pedestrian safety and visibility by providing a lighted crosswalk and lighted pedestrian crossing signs.

#### **CMAQ PROJECTS**

- 1. <u>City of Rock Hill Downtown Traffic Management Project.</u> This project is a traffic flow improvement effort that will reduce extensive idling of vehicles caused by train blockages in the downtown area. The project will utilize signal coordination and signage to route traffic to available grade-separated crossings.
- 2. <u>City of Rock Hill East White Street / SC 72 / Firetower Rd Intersection</u>. This project is a traffic flow improvement effort that involves the construction of a left turn lane on the East White Street approach.
- 3. York County Gold Hill Road Interchange. This project is a traffic flow improvement effort that will involve geometric changes to the interchange of Gold Hill Road / I-77 to reduce peak period traffic congestion.
- 4. Town of Fort Mill Clebourne / N. White Street Intersection. This project is a traffic flow improvement effort that involves the incorporation of a dedicated right turn option from Clebourne onto N. White Street. Fundamentally, this project is designed to reduce traffic congestion caused by westbound traffic continuing from Tom Hall Street onto Clebourne and turning right onto N. White Street.
- 5. York County Carowinds / Pleasant Road Intersection. This project is a traffic flow improvement effort that will incorporate additional turning capacity as well as additional storage capacity. It should be noted that this project is the recipient of multiple sources of federal and state funding.

- 8. <u>City of Rock Hill India Hook / Celanese Road Intersection.</u> This project is a traffic flow improvement effort that will incorporate additional through movements and additional turning capacity. It should be noted that this project is the recipient from multiple sources of federal and state funding.
- 9. <u>RFATS SC 160 Adaptive Traffic Control Signals Project.</u> This project is a traffic flow improvement effort that will optimize signal timing and coordination between Pleasant Road / Sutton Road and US 21.

#### LOCALLY FUNDED PROJECTS: (York County One Cent Capital Projects)

- 1. <u>Mt Gallant Road (Dave Lyle Blvd to Anderson Road)</u>. This project involves the widening of an existing 2 lane road to 3 lanes; this action will improve operational efficiency in an area which has experienced significant increases in traffic levels. Project length is 1.3 miles and is classified as exempt.
- 2. <u>SC 160 West (Gold Hill Road to NC State Line)</u>. This project will provide additional roadway capacity and improve traffic operations. Project length is 1.1 miles and is classified as exempt.
- 3. <u>SC 274 / Pole Branch Road (SC 274 to NC State Line)</u>. This project will provide additional roadway capacity and improve traffic operations. Project length is 2.4 miles and is classified as exempt.
- 4. <u>US 21 North Phase I & SC 51 (Springfield Pkwy to NC State Line)</u>. This project will widen an existing 2-lane rural roadway to a 5-lane urban roadway with curb and gutter that will provide additional roadway capacity and improve traffic operations. Project length is 3.0 miles and is classified as non-exempt and regionally significant. This project underwent a conformity emissions analysis 04/2013.
- 5. Gold Hill Road / I-77 Interchange Improvements. This project will reconfigure an existing Interstate Interchange that will improve the operational efficiency and safety for this highly congested interchange. Project length is 1.0 mile and is classified as exempt; in addition to the Pennies for Progress funding for this project there is also \$825,000 provided in CMAQ funding.

- 6. <u>Cel-River Road / Red River Road Phase I (Cherry Road to the Southern Eden Terrace Extension).</u> This project will widen an existing 2-lane rural roadway to a 5-lane urban roadway with curb and gutter and sidewalk that will provide additional roadway capacity and improve traffic operations. Project length is 1.1 miles and is classified as non-exempt and regionally significant.
- 7. <u>US 21 / Anderson / Cowan Farm Intersection</u>. This project is an intersection safety project that will improve safety at a high volume intersection. Project length is 1.0 mile and is classified as exempt.
- 8. <u>Fort Mill Southern Bypass / Spratt Street Intersection.</u> This project is an intersection safety project that will improve safety at a high volume intersection. Project length is .96 miles and is classified as exempt.
- 9. <u>SC 160 East (Springfield Pkwy to Lancaster County Line)</u>. This project will provide additional roadway capacity and improve traffic operations. Project length is 0.75 miles and is classified as exempt.
- 10. Riverview Road (Eden Terrace to Celanese Road). This project will widen an existing 2-lane rural roadway to a 3-lane urban facility that will improve operational efficiency and pedestrian safety. Project length is 1.1 miles and is classified as exempt.
- 11. Mt. Gallant Road (SC 161 to Twin Lakes Road). This project will provide additional roadway capacity and improve traffic operations. Project length is 2.5 miles and is classified as exempt.
- 12. <u>SC 72 (SC 901 to Rambo Road).</u> This project will provide additional roadway capacity and improve traffic operations and drainage. Project length is 2.0 miles and is classified as exempt.
- 13. <u>SC 49 / SC 274 / SC 557 Intersection.</u> This project is an intersection safety project that will improve safety at a high volume intersection. Project length is 0.6 miles and is classified as exempt.

- 14. <u>Flint Hill Street Intersection.</u> This project is an intersection safety project that will improve safety at a high volume intersection. Project length is 1.1 miles and is classified as exempt.
- 15. <u>Celanese Road / US 21 (Cherry Road) Intersection</u>. This project is an intersection safety project that will improve safety at a high volume intersection. Project length is 0.4 miles and is classified as exempt.
- 16. <u>US 21 / Cannon Drive Intersection.</u> This project is an intersection safety project that will improve safety at a high volume intersection. Project length is 0.1 miles and is classified as exempt.
- 17. <u>US 21 / Springdale Road Intersection.</u> This project is an intersection safety project that will improve safety at a high volume intersection. Project length is 0.1 miles and is classified as exempt.
- 18. <u>Sutton Road / New Gray Rock Road Intersection.</u> This project is an intersection safety project that will improve safety at a high volume intersection. Project length is 0.2 miles and is classified as exempt.
- 19. <u>Sutton Road / Sam Smith Road Intersection</u>. This project is an intersection safety project that will improve safety at a high volume intersection. Project length is 0.1 miles and is classified as exempt.
- 20. <u>Sutton Road / Harris Road Intersection.</u> This project is an intersection safety project that will improve safety at a high volume intersection. Project length is 0.2 miles and is classified as exempt.
- 21. <u>SC 557 (Kingsbury Road to SC 49 / 274).</u> This project will widen an existing 2-lane rural roadway to a 5-lane urban roadway with curb and gutter that will provide additional roadway capacity and improve traffic operations. Project length is 2.4 miles and is classified as non-exempt.
- 22. <u>Neely Road (Robertson Road to Crawford Road)</u>. This project will widen an existing 2-lane roadway to a 3-lane roadway that will provide additional

- roadway capacity and improve traffic operations. Project length is 1.5 miles and is classified as non-exempt.
- 23. <u>Cel- River Road / Red River Road Phase II.</u> This project will widen an existing 2-lane rural roadway to a 5-lane urban roadway with bike lanes and sidewalk that will provide additional roadway capacity and improve traffic operations. Project length is 2.3 miles and is classified as non-exempt and regionally significant.
- 24. Fort Mill Southern Bypass (I-77 to Railroad Overpass). This project will widen an existing 2-lane rural roadway to a 5-lane urban roadway that will provide additional roadway capacity and improve traffic operations. Project length is 2.2 miles and is classified as non-exempt and regionally significant.
- 25. <u>Hubert Graham Way Extension (Dry Run Road to Gold Hill Road).</u> This project involves the construction of a new road connection that will provide access from the existing Hubert Graham Way to Gold Hill Road. Project length is 0.3 miles and is classified as exempt and regionally significant.
- 26. <u>US 21 North (SC 160 to Springfield Parkway)</u>. This project will widen an existing 2-lane rural roadway to a 5-lane urban roadway that will provide additional roadway capacity and improve traffic operations. Project length is 2.8 miles and is classified as non-exempt and regionally significant.
- 27. <u>York County Pennies for Progress Resurfacing Projects.</u> This is a program activity undertaken by York County to maintain and improve the safety and efficiency of the transportation system.

#### FEDERAL TRANSIT ADMINISTRATION

1. York County Disabilities and Special Needs Board (Section 5310). This is a federally funded transportation assistance program. The York County Disabilities and Special Needs Board utilizes these funds to support capital purchases.

- 2. <u>City of Rock Hill Commuter Bus Services (Section 5307)</u>. This is a federally funded transportation assistance program. The City of Rock Hill utilizes these funds to support the CATS 82X Express Bus Service.
- 3. <u>City of Rock Hill Demand Response Program (Section 5307)</u>. This is a federally funded transportation assistance program. The City of Rock Hill utilizes these funds to support an on-demand transportation service (known as York County Access).
- 4. Rock Hill Urbanized Area Route Service (Section 5307). This is a federally funded transportation assistance program. The City of Rock Hill utilizes these funds to develop a fixed-route transit service.
- 5. York County Disabilities and Special Needs Board (Section 5310). This is a federally funded transportation assistance program. The York County DSNB utilizes these funds to support capital purchases.
- 6. <u>City of Rock Hill Initiation of Fixed Route Public Transit System.</u> This is a program for improved transit which will assist with the start-up costs associated with the initiation of a fixed route public transit system.
- 7. Rock Hill Urbanized Area Fixed Route Service (Section 5339). This is a federally funded transportation assistance program. The City of Rock Hill utilizes these funds to develop a fixed-route transit service.

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