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South Carolina
Transportation Infrastructure Bank



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July 16, 2020

Brennan Hansley
Transportation Planner
GPATS - Greenville-Pickens Area Transportation Study
Greenville County Department of Planning and Code Compliance
301 University Ridge, Suite 3800
Greenville, SC 29601

Re: Status of Greenville County's Woodruff Road Congestion Relief Project Application for Financial Assistance from the South Carolina Transportation Infrastructure Bank (the Bank)

Dear Ms. Hansley,

I am pleased to report that, at its meeting of July 7, 2020, the South Carolina Transportation Infrastructure Bank Board (the Board) approved providing financial assistance for your application, the Woodruff Road Congestion Relief Project subject to certain conditions. After a thorough analysis of your application, the Board approved a grant in an amount up to \$49,010,199 to construct improvements as described in the application for financial assistance. The local match for the project is from the Special Source Revenue Bonds, as explained in the application. The Bank's provision of financial assistance also requires approval of the Department of Transportation Commission (Commission) and the Joint Bond Review Committee (JBRC), and an executed Intergovernmental Agreement (IGA) between the parties in a form determined by the Bank. It is my understanding that the Commission approved Bank-approved applications at their meeting July 16, 2020, and that the JBRC potentially plans to review Bank-approved applications at its next meeting currently scheduled for August 11, 2020. Please note that, due to COVID-19 concerns, these dates are tentative and subject to change.

The next step will involve the Bank, Greenville County, and possibly SCDOT, beginning the process of executing an IGA. At the appropriate time, counsel for the Bank will prepare the IGA between the Bank, Greenville County, and possibly SCDOT and distribute to all parties for review. As time progresses, the Bank will ask for updates to the project status and timeframe in which the Bank's financial assistance of \$49,010,199 will be needed. The Bank also will need the contact information for the County's representatives who will work with us on preparing the IGA and providing project updates in the future. You may send this information to Tami Reed by email at reedtb@scdot.org.

Please do not hesitate to contact me if you have other questions.

Sincerely,


John B. White, Jr.
Chairman

WOODRUFF ROAD CONGESTION RELIEF PROJECT

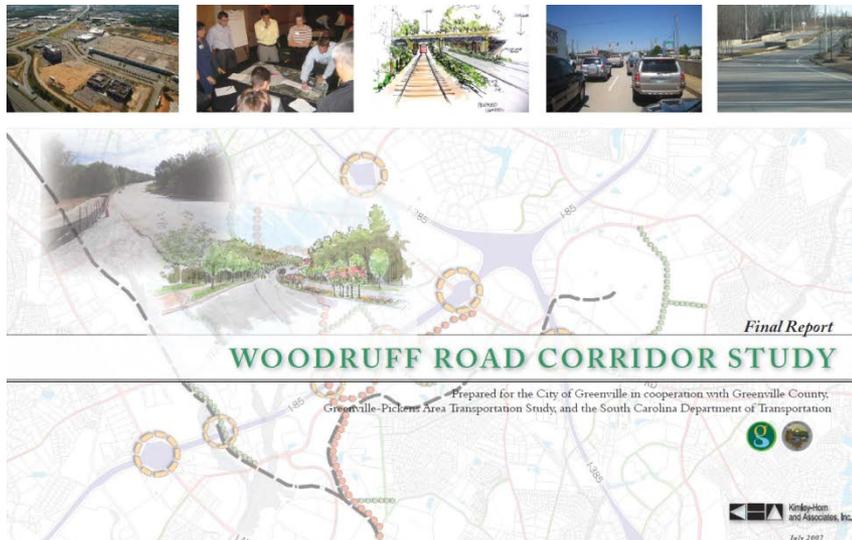
Request for State Infrastructure Bank Funding Assistance

Butch Kirven, Greenville County Council Chairman



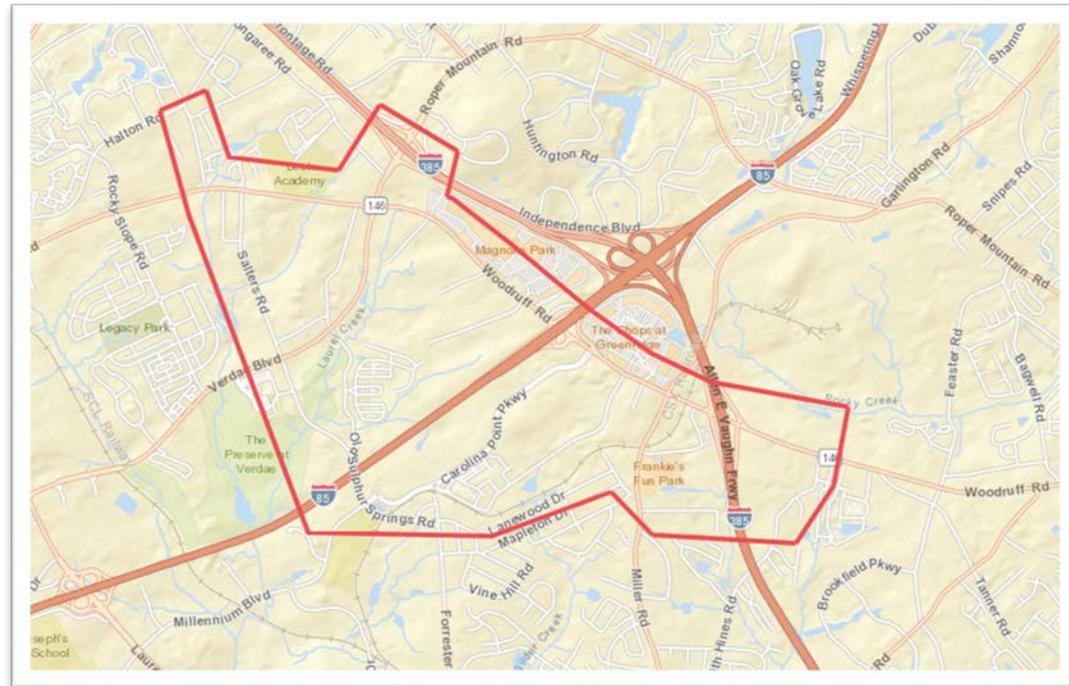
Some History:

- Congestion relief on Woodruff Road using alternative routes introduced in 2007 Woodruff Road Corridor Study
- One of the 85/385 Gateway alternatives included a road parallel to Woodruff Road in its scope in 2009
- Woodruff Road Parallel was adopted into the GPATS Long-Range Transportation Plan (LRTP) in 2013



Project Description:

- New roadway project to improve operational efficiency and alleviate traffic congestion on Woodruff Road.
- Study Area:
 - Salters Road to Smith Hines
 - Woodruff Road to Carolina Point Parkway/Miller Road
- 1.25 miles of I-85 and .75 miles of I-385 lie within study area



FixWoodruffRoad.com

Project Description Continued:

Woodruff Road Average Daily Traffic

| | |
|------------------------------------|--------|
| 2015 Base Year | 49,000 |
| 2040 Future Year | 57,000 |
| 2040 (With Project Implementation) | 47,900 |

Woodruff Road Congestion Relief Project Average Daily Traffic

| | |
|------------------|--------|
| 2040 Future Year | 20,800 |
|------------------|--------|



- Project includes large scale bridges across I-85 and I-385
 - ▣ Bridge over I-85 will span 10 lanes of traffic
 - Estimated AADT of 90,200 on I-85 near the Gateway Interchange in 2019
 - ▣ Bridge over I-385 will span 11 lanes of traffic
 - Estimated AADT of 100,100 on I-385 near the Gateway Interchange in 2019
 - ▣ No Interstates or Interchanges will be effected by this project
 - However, positive changes to Woodruff Road traffic will positively impact the Interstates

WOODRUFF ROAD CONGESTION RELIEF PROJECT

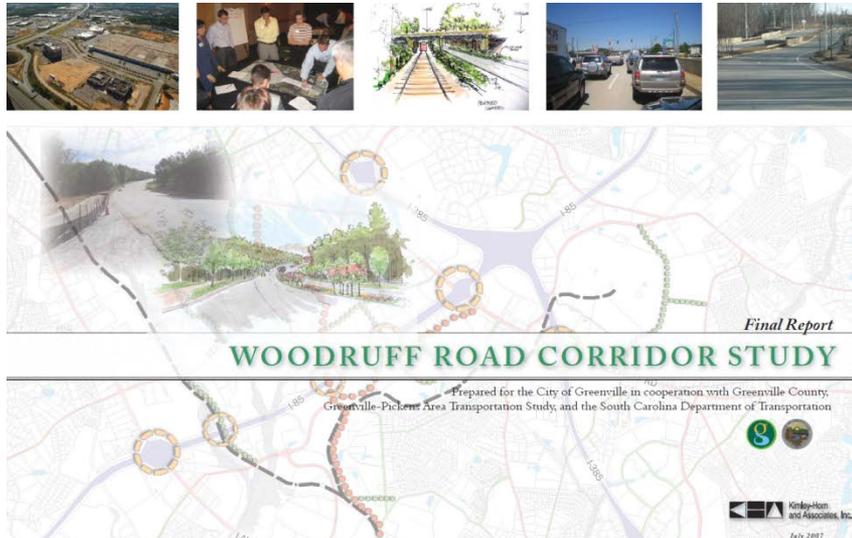
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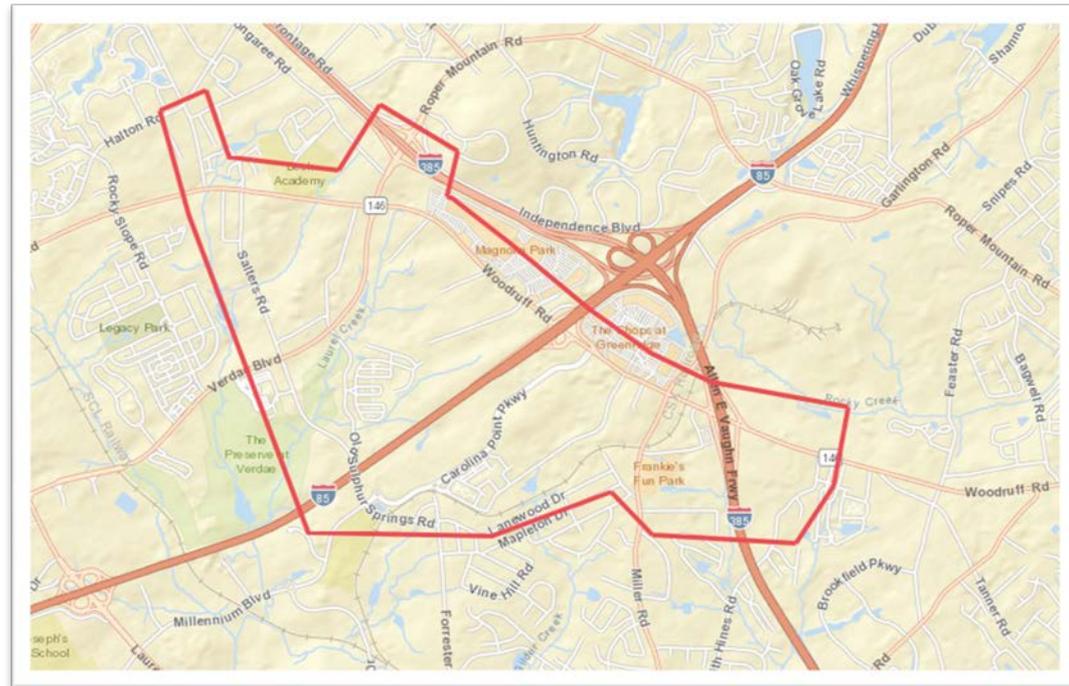
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 - ▣ No Interstates or Interchanges will be effected by this project
 - However, positive changes to Woodruff Road traffic will positively impact the Interstates

Construction to Date:

| Agency | Construction Costs | Donation/In-Kind Estimates |
|---|--------------------|----------------------------|
| Piedmont Natural Gas | \$1,287,500 | |
| Verdae Development/Hollingsworth Funds | \$312,500 | \$750,000 (ROW) |
| GLDTC | \$400,000 | |
| Greenville County | \$400,000 | |
| Magnolia Park (Private) | \$200,000 | |
| City of Greenville (Cash Dedicated) | \$1,600,000 | |
| City of Greenville (Design and Const. Management) | | \$630,000 (15%) |
| Total: | \$4,200,000 | \$1,380,000 Estimated |



Funding Breakdown:

| Funding Source | Funding Amount | % Total |
|-------------------------|------------------------------|---------|
| GPATS Guideshare | \$42,000,000 | 35% |
| Local Match | \$30,336,733 | 25% |
| SCTIB Funding Requested | \$49,010,199 | 40% |
| Total Cost | \$121,200,000 (2022 Dollars) | 100% |

GPATS Transportation Improvement Program (TIP)

| GUIDESHARE PROJECTS CONTINUED | | | | | | | | | | | | | | |
|---|----------|--|----------------------|--------------------|---------|---------|---------|----------|---------|---------|----------------------|------------------------|----------|-----------------|
| PIN # | Priority | GUIDESHARE PROJECTS | Previous Obligations | FY 2020 | TIP | | | | | | TIP COST (2021-2026) | REMAINING COST (2027+) | FUNDING | |
| | | | | | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | FY 2026 | | | | |
| Road Improvement Projects Currently in the TIP with Updated Schedule and Cost Estimates Cont. | | | | | | | | | | | | | | |
| 0041471RD0 | 7 | ROPER MOUNTAIN ROAD (S-548) **** ROPER MOUNTAIN EXT TO GARLINGTON ROAD (THREE LANES, BIKE LANES, AND SIDEWALK ON ONE SIDE) | 1,150 P 1,500 R | 3,250 C 1,000 C | 4,500 C | | | | | | | \$4,500 | | STBGP Safety |
| P030553 | 8 | BUTLER ROAD (S-107) BRIDGES RD TO US 276 (FOUR LANES, DIVIDED, BIKE LANES AND SIDEWALKS) | 1,500 P | | 1,000 R | | 4,500 C | 10,000 C | | | | \$15,500 | | STBGP |
| P030554 | 11 | BATESVILLE ROAD (S-164) PHASE II PELHAM ROAD TO THE PARKWAY (THREE LANES, WIDE OUTSIDE LANES, AND SIDEWALKS) | 1,200 P | | | | | 1,900 R | 2,500 C | 8,500 C | | \$12,900 | ON HOLD | STBGP |
| P028743 | | WOODRUFF ROAD PARALLEL WOODRUFF ROAD TO MILLER RD (FOUR LANE DIVIDED, PLANTED MEDIAN, AND MULTI-USE PATH) | 2,900 P | 2,000 P | 8,750 R | 9,450 R | 9,450 R | 9,450 R | | | | \$37,100 | \$76,000 | STBGP |
| | | SC-153 IMPROVEMENTS I-85 TO OLD PENDLETON RD (INTERSECTION IMPROVEMENTS, TURNING LANES) | 500 P 1,000 R | 3,800 C | | | | | | | | | | STBGP |
| | | GARLINGTON ROAD FROM SC-146 TO ROPER MOUNTAIN ROAD (SCOPE TBD) | | | | 300 PL | | | | | | \$300 | | STBGP |
| | | | | | | | | TBD | | TBD | | | | |

Spent to Date: 1.2 Million

Obligated: 4.9 million to PE

Considered Alternatives:

- Started out with 17 alternatives and narrowed it to a final 5.
 - Alternative 1: Widening Woodruff Road to 7 lanes with Diverting Diamond Interchange at I-85
 - Alternative 2C: Same improvements, adding modification of the existing I-385 Interchange and an alternative 3 lane route from Carolina Point Parkway to Smith-Hines Road
 - Alternative 3C: Same improvements as above except the alternative route is from the Parallel Parkway (Verdae Blvd) to Smith-Hines Road
 - Alternative 6C: Construction of a 5 lane alternative route from Verdae Boulevard to Smith-Hines Road, including widening the Parallel Parkway to 5 lanes as well
 - Alternative 6D: Construction of same 5 lane alternative route with the addition of a Diverging Diamond Interchange at I-85
 - Of these 5, Alternative 6C is the preferred
- More information and cost estimates can be found online here:
<https://scdot.maps.arcgis.com/apps/MapSeries/index.html?appid=7d7abec06d3c40e6ba0c7a86eb11f95d>





What has Been Done?

- Ranked 1st in GPATS 2035 LRTP: November 2013
- Programmed into the GPATS TIP: March 2014
- Programmed into State TIP: April-May 2014
- Preliminary Engineering Began: April 2017
- Public Information Meeting: November 9, 2017
- Environmental Assessment (EA) comments received from FHWA: Early March 2020
- Resubmission of EA: March 13th, 2020
- EA signed: April 7th, 2020

Project Timeline & Path Forward:

- SCTIB Approval of Project Funding
- Public Hearing: July 7th – August 7th, 2020
- FONSI: December 2020
- Finalize ROW Plans: January 2021-January 2022
- Begin ROW Acquisition: Spring 2022
- Begin Construction: Spring 2024

**Application by Greenville County, South Carolina
For Financial Assistance from the
South Carolina State Infrastructure Bank (SIB)**

Executive Summary

Greenville, South Carolina is one of the fastest-growing counties in the country, and the fastest-growing in South Carolina. With the growth and development that has occurred over the last few decades, and expected to occur for the foreseeable future, Greenville County recognizes that the pace of development has outstripped the ability for infrastructure to match. Greenville County submits, with respect, this application for Financial Assistance from the South Carolina State Infrastructure Bank (SIB) for \$241,636,400 Million to complete the following projects:

1. I-85 at Batesville Road Interstate Interchange (Estimated Cost, \$61.9 Million)
2. US Hwy 25 Improvements, from Travelers Rest to the North Carolina State Line (Estimated Cost, \$56.683 Million)
3. Woodruff Road Parallel Road and Miller Road, from Woodruff Road to Old Mill Road (Estimated Cost, \$72.018 Million)
4. West Georgia Road Widening, from Simpsonville to US 25 (Estimated Cost, \$75.66 Million)
5. I-185 Reduction, from Henrydale Road to W. Farris Road for new access (Estimated Cost, \$9.955 Million)

The total Estimated Cost of the projects comes to \$275,216,400 Million, of which Greenville County will match locally at 8.19% to the amount of \$33.580 Million, with potential to increase.

These projects will benefit not only the residents of Greenville County and the surrounding region in their daily commutes and travels, but assist with better freight movement and improve the overall safety of these corridors. These projects, while high priorities for the County, state, and region, are projects that will either be underfunded for years or not prioritized at all given the current allocations and prioritization mechanisms available.

Table of Contents

| | |
|--|------------|
| Executive Summary..... | 1 |
| Description of Projects..... | 3 |
| 1. Public Benefit..... | 3 |
| a. I-85 at Batesville Road Interstate Interchange..... | 3 |
| b. US-25 Improvements (Travelers Rest to NC State Line)..... | 7 |
| c. Woodruff Road Parallel..... | 11 |
| d. West Georgia Road Widening..... | 16 |
| e. I-185 Reduction..... | 20 |
| 2. Financial Plan..... | 24 |
| 3. Project Approach..... | 26 |
| Resolutions..... | Appendix A |
| Project Maps..... | Appendix B |
| Certificates..... | Appendix C |
| Project Support..... | Appendix D |

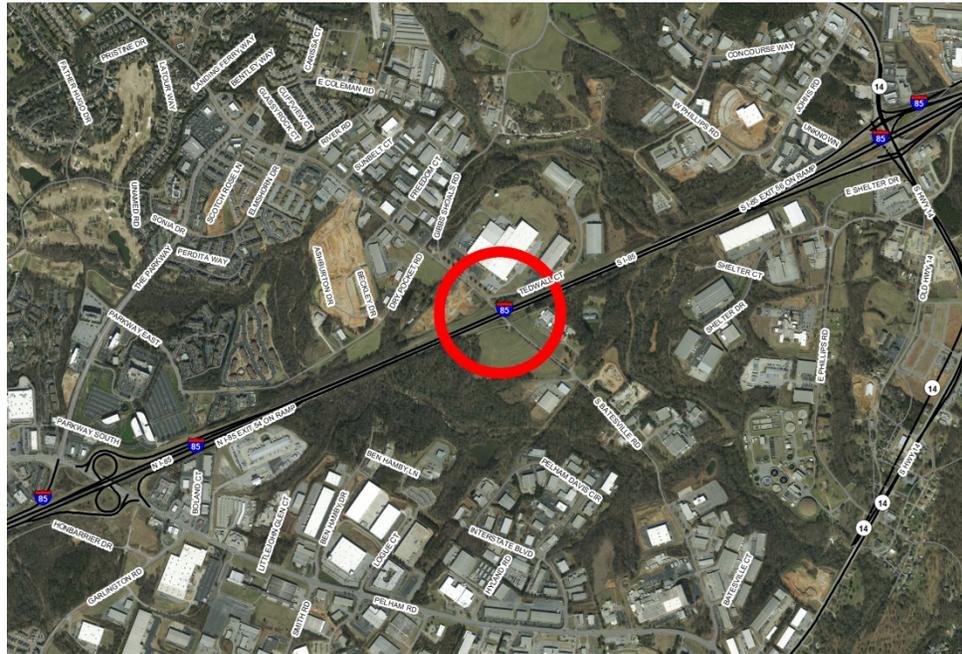
Description of Projects

1. Public Benefit

A) I-85 at Batesville Road Interstate Interchange

The proposed project to build a new interchange on Interstate 85 at the overpass of Batesville Road in Greenville County (as shown in **Figure 1**) would include ramps, intersections, and collector/distributor lanes on I-85. The C/D lanes would be required in order to accommodate the nearby interchanges with Pelham Road and SC-14. The project will be designed to accommodate the Greenville-Pickens Area Transportation Study (GPATS) Project of improving Batesville Road from Pelham Road to The Parkway.

FIGURE 1: Project Location Map (See **Appendix B** for more detail)



A.1 Traffic Studies

The Interchange at I-85 and Batesville Road was assessed by the GPATS 2030 Long-Range Transportation Plan completed in 2007 as a recommended project. A detailed traffic study and Interchange Justification Survey has not been completed to this date.

Traffic Volumes as computed by the GPATS Travel Demand Model for Batesville Road are as follows:

- 2010 Base Year: 6,800 trips per day
- 2035 Future Year: 11,200 trips per day

A primary purpose of completing this interchange is to alleviate traffic congestion on nearby Pelham Road. The Traffic Volumes for Pelham Road are as follows:

- 2010 Base Year: 29,780 trips per day
- 2035 Future Year: 41,483 trips per day

Allowing Batesville Road to assume a portion of these Future Year trips would prevent a need for expensive future widening of Pelham Road. From SCDOT, the Pavement Quality Index of Batesville Road at I-85 is an average of 2.92.

From SCDOT, the 5-year Crash Data is provided below:

- Total Crashes: 222
- Injuries: 33
- Fatalities: 0
- Bicycle/Pedestrian Involved: 1

A.2 Urgency of Project

SCDOT is currently in the process of upgrading and widening I-85 from US-25 in Anderson County to I-85 Business in Spartanburg County. The funding for the I-85 project does not include sufficient funds to include this interchange, although it is a high regional priority. Inclusion of funds for an interchange at this time will allow for cost savings as the interchange could be constructed at the same time as other upgrades are made, while ensuring that the current I-85 does not complete

improvements that would prohibit a future interchange at Batesville Road, or would be expensive to remove.

Growth and development of this portion of Greenville County also plays a factor in the urgency for the project. Delays in initiating the project increase the likelihood that a developer will remove the available space needed to complete the interchange or collector/distributor system on I-85.

A.3 Resolution

The resolution to seek funding for the Batesville Road Project was passed on February 21, 2017 by Greenville County Council. This resolution is included in **Appendix A**.

A.4 Commerce Certificate

See Appendix C.

A.5 Unemployment Data

Over the past five years the average unemployment rate in Greenville County has steadily gone down. The average unemployment rate in 2011 was 8.6%, whereas the average unemployment rate in 2016 had lowered to 4.3%. The chart below shows the current average unemployment rate and the five years prior.

| Year | Avg. Unemployment Rate |
|----------------|-------------------------------|
| 2011 | 8.6% |
| 2012 | 7.4% |
| 2013 | 6.1% |
| 2014 | 5.3% |
| 2015 | 5.0% |
| 2016 (Current) | 4.3% |

A.6 Local Support Documents

No hearings were held for any of the projects. However, the Greenville-Pickens Area Transportation Study is currently updating their Long Range Transportation Plan, which has involved extensive public outreach. This public outreach has included a regional kick-off meeting, 8 sub-regional

meetings throughout their jurisdiction, an online MetroQuest survey, a statistically valid survey, and a series of meetings with local jurisdictions. Anonymous public commentary has been pulled from these outreach measures in relation to the proposed project area. The commentary seen around this portion of I-85 has generally stated that the roadways are no longer equipped to handle the increase in traffic, especially on Batesville Road as one approached the intersection. See **Appendix D** for more detail.

A.7 Local Resolutions

Please find in **Appendix A**, a Resolution of Support from the Greenville-Pickens Area Transportation Study (GPATS) Metropolitan Planning Organization (MPO). Resolutions from other jurisdictions and supporters are pending.

A.8 Regional Significance

The I-85 Corridor through which this project location lies is a critical travel, commuter, and freight corridor for the entire southeast. Relieving congestion through the Greenville-Spartanburg stretch of I-85 has been and will remain a high priority for SCDOT, with several hundred million dollars spent or programed to upgrades, repairs, and congestion management.

A large percentage of the congestion on the I-85 mainline comes from heavy ramp traffic at the major interchanges. Pelham Road and SC-14 to the south and north (respectively) of Batesville Road see significant congestions, particularly at rush hours. This congestion not only affects the surrounding surface streets, but mainline congestion is affected for miles in either direction.

This project, providing an alternative route to Pelham Road and SC-14, would alleviate interchange congestion and decrease overall travel times on the I-85 Corridor through the Greenville and Spartanburg region.

A.9 Alternative Transportation Plans

No alternative transportation plans have been developed for the Batesville Road Interchange at this time. Interchange configuration would be

determined by the Federal Interchange Justification Survey, SCDOT, and NEPA processes, in accordance with the project budget.

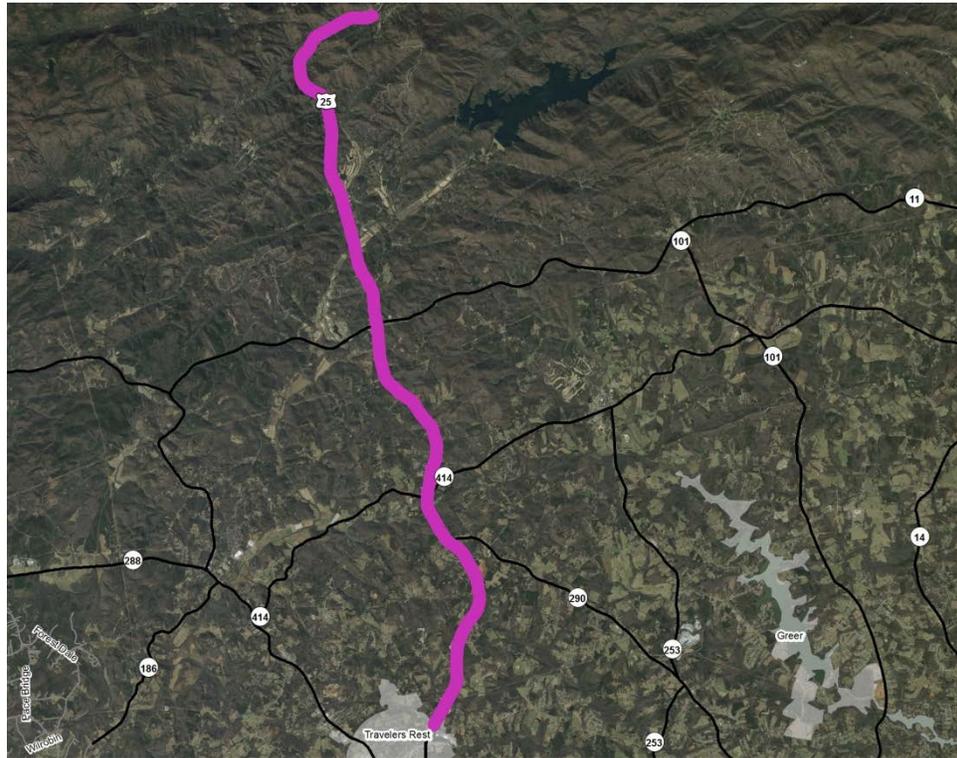
A.10 Environmental Impact Analysis

No Environmental Impact Analysis has been done on this project to date. Analysis is expected to occur during NEPA/SCDOT Preliminary Engineering

B) US-25 Improvements (Travelers Rest to NC State Line)

The proposed project to implement improvements on US Hwy 25 from Tigerville Road, Travelers Rest to the NC state line (See **Figure 2**) will include resurfacing, drainage improvements, median wall repairs, and shoulder repairs as a few examples. The project's primary focus is to address safety concerns throughout the corridor that have been expressed by numerous citizens (See **Appendix D**).

FIGURE 2: Project Location Map (See **Appendix B** for more detail)



B.1 Traffic Studies

SCDOT has studied this section of US-25 due to public concerns, and have begun letting for some repairs for safety and drainage. The repairs will not address congestion and access management-related safety issues, which included in this applications scope.

Traffic Volumes as computed by the GPATS Travel Demand Model for US-25 are as follows:

- 2010 Base Year: 13,500 trips per day
- 2035 Future Year: 18,800 trips per day

It should be noted that a portion of the US-25 project lies outside of GPATS within the Appalachian Council of Governments, however traffic north of Hwy-414 drops off significantly. The northern portion of US-25 from Hwy-414 to the NC State Line is mountainous and contains portions needed for the median, safety, and drainage repairs.

From SCDOT, the Pavement Quality Index of Batesville Road at I-85 is an average of 2.12.

From SCDOT, the 5-year Crash Data is provided below:

- Total Crashes: 463
- Injuries: 105
- Fatalities: 10
- Bicycle/Pedestrian Involved: 3

B.2 Urgency of Project

US-25 is a primary commuting and truck freight line from the mountains of North Carolina into the Greenville region. As such, the road is under a lot of stress and receives environmental damage faster than many of the Greenville Primary Highways. In addition, residential development in the foothills and mountains north of Travelers Rest have increased the vehicle trip generation, placing additional pressures for better access management, in particular acceleration and deceleration lanes to permit ingress and egress traffic to not interfere with the travel lanes, much of which occurs on significant grades through this stretch of US-25 and creates a safety issue. SCDOT recognizes the priority of repairing the median and drainage work, but are unable to make additional safety and congestion improvements at this time.

B.3 Resolution

The resolution to seek funding for the US-25 Improvements Project was passed on February 21, 2017 by Greenville County Council. This resolution is included in **Appendix A**.

B.4 Commerce Certificate

See Appendix C.

B.5 Unemployment Data

Over the past five years the average unemployment rate in Greenville County has steadily gone down. The average unemployment rate in 2011 was 8.6%, whereas the average unemployment rate in 2016 had lowered to 4.3%. The chart below shows the current average unemployment rate and the five years prior.

| Year | Avg. Unemployment Rate |
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| 2011 | 8.6% |
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| 2013 | 6.1% |
| 2014 | 5.3% |
| 2015 | 5.0% |
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B.6 Local Support Documents

No hearings were held for any of the projects. However, the Greenville-Pickens Area Transportation Study is currently updating their Long Range Transportation Plan, which has involved extensive public outreach. This public outreach has included a regional kick-off meeting, 8 sub-regional meetings throughout their jurisdiction, an online MetroQuest survey, a statistically valid survey, and a series of meetings with local jurisdictions. Anonymous public commentary has been pulled from these outreach measures in relation to the proposed project area. The generally consensus seen from the public is that US-25 is in poor condition between Travelers Rest and the NC state line and is not considered safe. Additionally, see the petition calling for repairs to US-25 that has been supplied by SCDOT. See **Appendix D** for more detail.

B.7 Local Resolutions

Please find in **Appendix A**, a Resolution of Support from the Greenville-Pickens Area Transportation Study (GPATS) Metropolitan Planning Organization (MPO). Resolutions from other jurisdictions and supporters are pending.

B.8 Regional Significance

US-25 is a critical commuting and freight corridor between North Carolina and South Carolina, and is the primary northern connection from the Greenville Urbanized Area. As the road degrades and safety worsens, travel times increase and cost of transport increases. Due to safety concerns, freight providers may choose alternative routes that are longer

and more costly to their business. Safety concerns would prevent economic and residential development from utilizing US-25 as a transportation link to the greater region, and would develop elsewhere. The project to repair US-25 and improve access would maintain a safe and stable flow between the Greenville region and North Carolina.

B.9 Alternative Transportation Plans

There are no alternative transportation plans at this time. US-25 is an established route and this project does not look to develop alternatives or realignments.

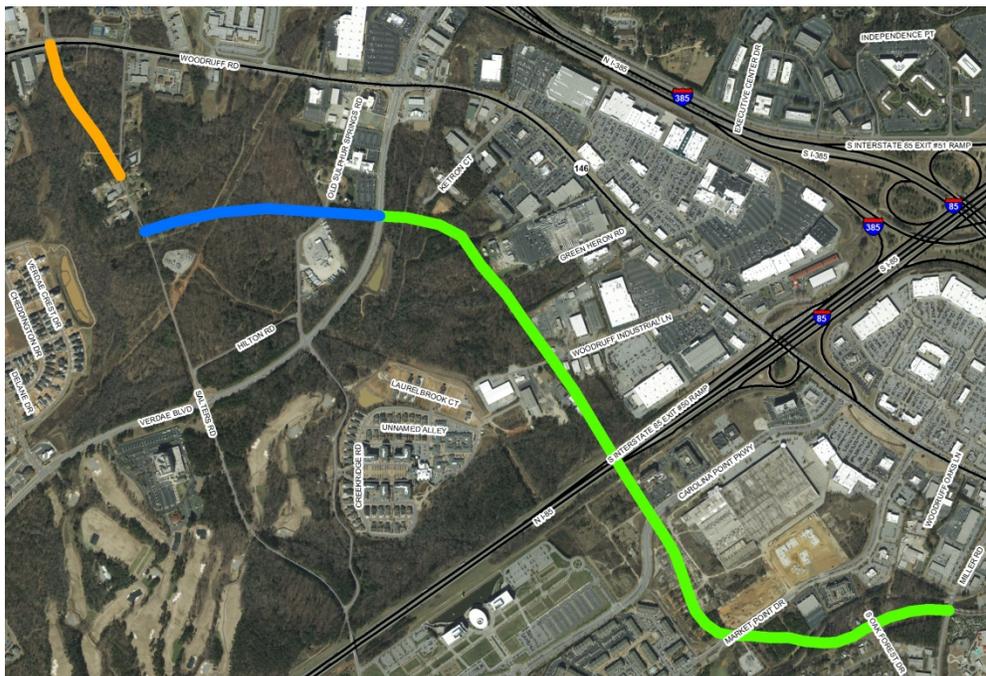
B.10 Environmental Impact Analysis

No Environmental Impact Analysis has been done on this project to date. Analysis is expected to occur during NEPA/SCDOT Preliminary Engineering

C) Woodruff Road Parallel

The proposed project to construct a parallel road off of Woodruff Rd. between Verdae Blvd. and Miller Road will alleviate extreme congestion experienced throughout the Woodruff Road corridor. Woodruff Road is a well-known transportation stressor for many citizens in the region and is a constant recipient of public commentary (See **Appendix D**). The project is to be constructed in three phases: Verdae Blvd. to Miller Road, including widening Miller Road to Old Mill Road, Salters Road to Verdae Blvd., and the realignment of Salters Road with Mall Connector Road (See **Figure 3**).

FIGURE 3: Project Location Map (See Appendix B for more detail)



C.1 Traffic Studies

The Woodruff Road Parallel project was evaluated as a part of the GPATS 2035 Long-Range Transportation Plan (LRTP). It ranked objectively as the highest priority for the GPATS region, and Phase One, from Verdae Blvd to Miller Rd was brought into the Short-Range Transportation Improvement Program (TIP) soon after.

Woodruff Road and Miller Roads currently experience high levels of traffic congestion, which this Parallel project is hoping to mitigate.

Traffic Volumes as computed by the GPATS Travel Demand Model for Woodruff Road are as follows:

- 2010 Base Year: 34,900 trips per day
- 2035 Future Year: 68,900 trips per day

The Woodruff Parallel, being entirely new location, does not have a base year of traffic. However, it was modeled as completed by 2035:

- 2035 Future Year: 33,400 trips per day

Miller Road, being located on the terminus of the Parallel, has a GPATS LRTP project that will become more relevant with the opening of the parallel. At this time, that project does not rank high enough through SC Act 114 to be prioritized for funding with the Parallel, and thus is included with the SIB application to ensure that Miller is not adversely impacted by the traffic utilizing the Woodruff Parallel

The primary purpose of the Woodruff Parallel is to better distribute the traffic from Woodruff Road, which has few alternatives and many bottlenecks. Connecting to several roads including Ketron Ct., Green Heron Rd., Woodruff Industrial Ln., Carolina Point Pkwy, and Market Point Drive, Phase One of the Parallel creates a ladder network for traffic to divert to when congestion levels are high.

The City of Greenville and SCDOT are in concert with GPATS that the Parallel be built as a “boulevard,” without direct commercial access, to better serve traveling vehicles and draw traffic off of Woodruff Road. Phase Two and Three of the Parallel, which are currently not funded by GPATS, would extend the Parallel to Salters Road, and then realign Salters with Mall Connector Road, providing better access between Haywood Road and Haywood Mall with Woodruff Road. These phases are seen as critical in ensuring that the traffic utilizing the Parallel have adequate access to the greater region.

From SCDOT, the Pavement Quality Index of Woodruff Road is 2.19 The PQI of Miller Road is 3.15.

From SCDOT, the 5-year Crash Data is provided below:

- Total Crashes: 1353
- Injuries: 218
- Fatalities: 1
- Bicycle/Pedestrian Involved: 1

C.2 Urgency of Project

The Woodruff Parallel is critical to mitigating the terrible congestion that occurs on Woodruff Road. From a regional view, the congestion on

Woodruff Road is far-reaching, impacting travel on adjacent roads such as Roper Mountain Road, Miller Road, Garlington Road, and particularly I-85 and I-385. During peak travel times, the congestion will spill onto the interstate ramps and affect the interstate mainlines. Currently SCDOT is upgrading the nearby interchange of I-85 and I-385, however only minimal improvements are scheduled for Woodruff Road itself and will not serve as a long term solution.

In every public meeting held by GPATS, the question is raised as to how Woodruff Road is being “fixed.” The response of GPATS was to develop and fund the Woodruff Parallel, however GPATS funding is scattered between projects and cannot be allocated fully towards the project at one time, and so the schedule of completion is greatly increased. GPATS accelerated Phase One as swiftly as funding would allow, but for the integrity of the transportation systems in the area, the Parallel needed to be completed 10 years ago.

C.3 Resolution

The resolution to seek funding for the Woodruff Parallel was passed on February 21, 2017 by Greenville County Council. This resolution is included in **Appendix A**.

C.4 Commerce Certificate

See Appendix C.

C.5 Unemployment Data

Over the past five years the average unemployment rate in Greenville County has steadily gone down. The average unemployment rate in 2011 was 8.6%, whereas the average unemployment rate in 2016 had lowered to 4.3%. The chart below shows the current average unemployment rate and the five years prior.

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C.7 Local Resolutions

Please find in **Appendix A**, a Resolution of Support from the Greenville-Pickens Area Transportation Study (GPATS) Metropolitan Planning Organization (MPO). Resolutions from other jurisdictions and supporters are pending.

C.8 Regional Significance

Woodruff Road, SC-146, is a Minor Arterial in functional classification, but in reality holds a much greater purpose to the Greenville, GPATS, and Upstate region. It not only serves as a primary surface road for commuting from southeast Greenville County, Simpsonville, and Mauldin, but it has two interstate interchanges within a mile of each other, one for I-

85 and another for I-385. This not only exasperates the congestion issues, but makes Woodruff a critical nexus point for traffic in the region.

As such, Woodruff Road has become a “Super-Regional” Commercial Center as identified by Greenville County’s Comprehensive plan. It commands high commercial property values and even some service and industrial properties.

Completion of the Parallel project not only preserves an area of critical infrastructure for the Greenville region, but improves economic, industrial, and the surrounding residential development.

C.9 Alternative Transportation Plans

SCDOT is currently in NEPA process for Phase One (Verdae to Miller) and is assessing potential alternatives for how the Parallel will best function. Phases Two and Three have been conceived by the City of Greenville with Verdae Developments, but no final alternatives have been put forward at this time. No alternatives have been developed for Miller Road.

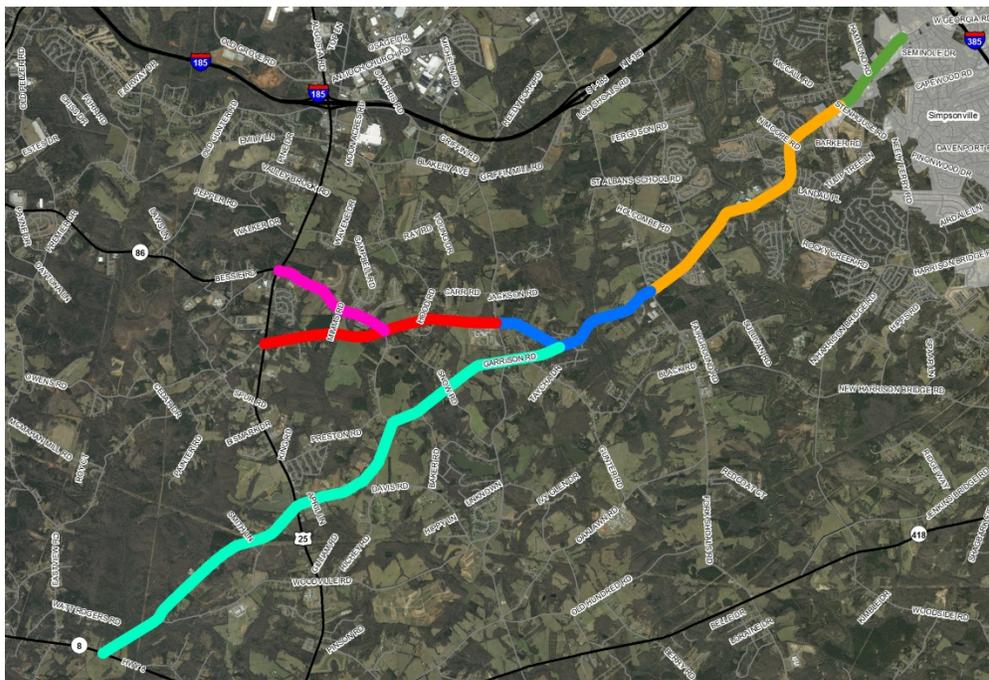
C.10 Environmental Impact Analysis

No Environmental Impact Analysis has been done on this project to date. Analysis is expected to occur during NEPA/SCDOT Preliminary Engineering

D) West Georgia Road Widening

The proposed project to widen and improve 8.3 miles of W. Georgia Road in four phases will address safety concerns and congestion in the corridor (See **Appendix D** for Public Commentary). The four segments will include: Neely Ferry Road to E. Standing Springs Road, E. Standing Springs Road to Fork Shoals Road, Fork Shoals Road to Reedy Fork Road, and lastly Reedy Fork Road to US-25, also including Garrison Road to SC 86 and SC 20 and Sandy Springs Road to SC 8 and SC 20 (See **Figure 4**).

FIGURE 4: Project Location Map (See Appendix B for more detail)



D.1 Traffic Studies

West Georgia Road is an extremely long corridor that serves as one of the primary east-west routes for southern Greenville County. It is a critical freight corridor and heavily used for residential commuting.

The traffic along West Georgia Road is highly varied. Traffic volumes are here reported as a range of representative values:

- 2010 Base Year: 4,000-8,200 trips per day
- 2035 Future Year: 6,000-14,000 trips per day

In addition, to ensure the efficacy of the project, improvements are proposed for Sandy Springs Road and Garrison Road. Both of these roads currently carry minimal traffic, but would be relied upon if West Georgia was widened to make connections to SC-20 and SC-8.

From SCDOT, the Pavement Quality Index of West Georgia Road is in a range of 3.23-3.96.

From SCDOT, the 5-year Crash Data is provided below:

- Total Crashes: 412
- Injuries: 88

- Fatalities: 7
- Bicycle/Pedestrian Involved: 2

D.2 Urgency of Project

West Georgia Road is in an area of high residential development and experiences increasing levels of congestion. GPATS has been able to fund selected intersection projects over the years to maintain a proper level of service, however the needed full widening or complete corridor attention is unlikely to be funded through GPATS given the length and scope of the project. Funding intersection projects in piecemeal would not be able to maintain the level of service required for efficient residential commuting at the current rate of development.

D.3 Resolution

The resolution to seek funding for the West Georgia Road Project was passed on February 21, 2017 by Greenville County Council. This resolution is included in **Appendix A**.

D.4 Commerce Certificate

See Appendix C.

D.5 Unemployment Data

Over the past five years the average unemployment rate in Greenville County has steadily gone down. The average unemployment rate in 2011 was 8.6%, whereas the average unemployment rate in 2016 had lowered to 4.3%. The chart below shows the current average unemployment rate and the five years prior.

| Year | Avg. Unemployment Rate |
|----------------|-------------------------------|
| 2011 | 8.6% |
| 2012 | 7.4% |
| 2013 | 6.1% |
| 2014 | 5.3% |
| 2015 | 5.0% |
| 2016 (Current) | 4.3% |

D.6 Local Support Documents

No hearings were held for any of the projects. However, the Greenville-Pickens Area Transportation Study is currently updating their Long Range Transportation Plan, which has involved extensive public outreach. This public outreach has included a regional kick-off meeting, 8 sub-regional meetings throughout their jurisdiction, an online MetroQuest survey, a statistically valid survey, and a series of meetings with local jurisdictions. Anonymous public commentary has been pulled from these outreach measures in relation to the proposed project area. The general consensus seems to be that West Georgia Road has begun to exceed traffic capacity and needs to have measures taken to rectify that. Many specifically request a road widening. See **Appendix D** for more detail.

D.7 Local Resolutions

Please find in **Appendix A**, a Resolution of Support from the Greenville-Pickens Area Transportation Study (GPATS) Metropolitan Planning Organization (MPO). Resolutions from other jurisdictions and supporters are pending.

D.8 Regional Significance

West Georgia Road serves as a crucial link between southern Greenville County, the “Golden Strip” (Mauldin, Simpsonville, Fountain Inn), and access to I-385. Without improvements, congestion on West Georgia will spill onto adjacent roads that are ill-suited to bear the load.

D.9 Alternative Transportation Plans

Specific scopes of the segments identified in **Figure 4** may vary as needed during NEPA/Preliminary Engineering. Current expectation is that close to Simpsonville, a 5-lane section is needed, while to the west “Improved 2-lane” upgrades would be sufficient. Inclusion of Sandy Springs and Garrison Roads are options that would benefit the corridor, but additional work on West Georgia at Augusta Rd. may be sufficient.

Traffic Volumes as computed by the GPATS Travel Demand Model for I-185 at this location are as follows:

- 2010 Base Year: 19,700 trips per day
- 2035 Future Year: 24,400 trips per day

Traffic on I-185 tends to be light outside of peak times, however removal of Interstate designation in this section and addition of an access may adversely impact its capacity and congestion.

From SCDOT, the Pavement Quality Index of I-185 is 4.058 from US-25 to Henrydale Avenue. The information in ITMS does not provide the ability to breakdown the PQI by northbound and southbound for I-185.

From SCDOT, the 5-year Crash Data is provided below:

- Total Crashes: 39
- Injuries: 10
- Fatalities: 0
- Bicycle/Pedestrian Involved: 0

E.2 Urgency of Project

Greenville Health System, the hospital nearby, has expressed that with the current configuration of roads at the terminus of I-185, their ambulances are unable to effectively ingress and egress during peak periods. In addition, they own significant land which will soon see development requiring access that would exacerbate the current traffic congestion. This project is needed in order to maintain a level of service that is conducive to the operations of a regional hospital and provide access for future development.

E.3 Resolution

The resolution to seek funding for the I-185 Reduction Project was passed on February 21, 2017 by Greenville County Council. This resolution is included in **Appendix A**.

E.4 Commerce Certificate

See Appendix C.

E.5 Unemployment Data

Over the past five years the average unemployment rate in Greenville County has steadily gone down. The average unemployment rate in 2011 was 8.6%, whereas the average unemployment rate in 2016 had lowered to 4.3%. The chart below shows the current average unemployment rate and the five years prior.

| Year | Avg. Unemployment Rate |
|----------------|-------------------------------|
| 2011 | 8.6% |
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| 2014 | 5.3% |
| 2015 | 5.0% |
| 2016 (Current) | 4.3% |

E.6 Local Support Documents

No hearings were held for any of the projects. However, the Greenville-Pickens Area Transportation Study is currently updating their Long Range Transportation Plan, which has involved extensive public outreach. This public outreach has included a regional kick-off meeting, 8 sub-regional meetings throughout their jurisdiction, an online MetroQuest Survey, a statistically valid survey, and a series of meetings with local jurisdictions. Anonymous public commentary has been pulled from these outreach measures in relation to the proposed project area. Though the commentary seen specifically in relation to this stretch of I-185 is small, there has been demand for more access to the Greenville Health System. See **Appendix D** for more detail.

E.7 Local Resolutions

Please find in **Appendix A**, a Resolution of Support from the Greenville-Pickens Area Transportation Study (GPATS) Metropolitan Planning Organization (MPO). Resolutions from other jurisdictions and supporters are pending.

E.8 Regional Significance

I-185 is a major access from downtown Greenville and the surrounding areas to I-85 towards Atlanta, and is the most direct route, particularly for freight and travel.

The GHS hospital campus is a regional nexus of medical services and research, and requires unfettered ingress and egress access for effective function.

E.9 Alternative Transportation Plans

There are no alternative transportation plans developed for this project at this time.

E.10 Environmental Impact Analysis

No Environmental Impact Analysis has been done on this project to date. Analysis is expected to occur during NEPA/SCDOT Preliminary Engineering

2. Financial Plan

1) Project Cost (TABLE 1)

| Project | Project Elements | Units | Costs |
|-----------------------------|---------------------------------|--|-------------------|
| West Georgia Road | Base Const 5 Lane | 4.1 mi x \$6.0 mil/mi | \$ 24,600,000.00 |
| | Reedy River Bridge | | \$ 3,000,000.00 |
| | Base Const 2 Lane | 11.96 mi x \$2.0 mil/mi | \$ 23,920,000.00 |
| | Subtotal before utilities/CE&I: | | \$ 51,520,000.00 |
| | 13% CE&I | | \$ 6,697,600.00 |
| | Utilities 5 Lane | 4.1 mi x \$500,000/mi | \$ 2,050,000.00 |
| | Utilities 2 Lane | 11.96 mi x \$200,000/mi | \$ 2,392,000.00 |
| | Cost before R/W and PE: | | \$ 62,659,600.00 |
| | R/W | | \$ 5,000,000.00 |
| | PE | | \$ 8,000,000.00 |
| Total Cost: | | \$ 75,659,600.00 | |
| Woodruff Rd. Parallel | Base Const Parallel | 2.82 mi x \$7 mil/mi | \$ 19,740,000.00 |
| | Bridge over I-85 | Same as Salters | \$ 5,500,000.00 |
| | Miller Rd Bridge | 1.7 mi x \$4 mil/mi | \$ 6,800,000.00 |
| | 60' x 60' x \$200 | | \$ 720,000.00 |
| | Subtotal before utilities/CE&I: | | \$ 32,760,000.00 |
| | 13% CE&I | | \$ 4,258,800.00 |
| | Utilities & RR | | \$ 5,000,000.00 |
| | Cost before R/W and PE: | | \$ 42,018,800.00 |
| R/W | | \$ 20,000,000.00 | |
| PE | | \$ 10,000,000.00 | |
| Total Cost: | | \$ 72,018,800.00 | |
| Batesville Rd. Interchange | Base Const | | \$ 30,000,000.00 |
| | 13% CE&I | | \$ 3,900,000.00 |
| | Utilities | | \$ 3,000,000.00 |
| | Cost before R/W and PE: | | \$ 36,900,000.00 |
| | R/W | | \$ 15,000,000.00 |
| PE | | \$ 10,000,000.00 | |
| Total Cost: | | \$ 61,900,000.00 | |
| US 25 (TR to NC State Line) | Base Const | 2.0 mil/mi x 15.62 mi | \$ 31,240,000.00 |
| | Bridges | 400 x 45 x \$200 x 2 | \$ 7,200,000.00 |
| | Bridges | 175 x 45 x 200 x 2 | \$ 3,150,000.00 |
| | Subtotal before utilities/CE&I: | | \$ 41,590,000.00 |
| | 13% CE&I | | \$ 5,407,000.00 |
| | Utilities | \$100,000/mi | \$ 1,562,000.00 |
| | Cost before R/W and PE: | | \$ 48,559,000.00 |
| | R/W | \$200,000/mi | \$ 3,124,000.00 |
| PE | | \$ 5,000,000.00 | |
| Total Cost: | | \$ 56,683,000.00 | |
| I-185 Reduction | Base Const | | \$ 2,000,000.00 |
| | I-185 modifications | | \$ 1,000,000.00 |
| | Henrydale Ave. modifications | | \$ 500,000.00 |
| | Subtotal before utilities/CE&I: | | \$ 3,500,000.00 |
| | 13% CE&I | | \$ 455,000.00 |
| | Utilities | | \$ 1,000,000.00 |
| | Cost before R/W and PE: | | \$ 4,955,000.00 |
| | R/W | | \$ 3,500,000.00 |
| PE | | \$ 1,500,000.00 | |
| Total Cost: | | \$ 9,955,000.00 | |
| | | | |
| | | Combined Project Cost Estimate: | \$ 276,216,400.00 |

SCDOT has verified these numbers. See SCDOT Certificate in Appendix C.

2) Local Contribution

Greenville County anticipates roughly an eight percent (8.19%) local contribution, or match of \$33,580,000. This has the flexibility to increase.

3) Source of the Local Contribution

The source of Greenville County’s local contribution is a municipal special source revenue bond. The bonds will be secured by the County’s local road maintenance fee.

4) Amount of Bank Assistance Requested

\$241,636,400 Million. This is flexible.

5) Form of Assistance Requested

Greenville County is requesting assistance in the form of a grant.

6) Other Proposed Sources of Funds

There are currently no other funding sources identified to help with the projects.

7) Anticipated Fund Disbursement Schedule

TABLE 2:

Greenville County

| Projects | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | FY 2026 | FY 2027 |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Woodruff Rd. Parallel | 2,000 P | 14,006.27 C | 14,006.27 C | 14,006.27 C | | |
| I-85/Batesville Rd. Interchange | 1,430,000 P | 1,430,000 P | 1,430,000 P | 1,430,000 P | 10,000 R | 1,430,000 P | 1,430,000 P | 12,300,000 C | 12,300,000 C | 12,300,000 C |
| | | | | | 5,000,000 R | 5,000,000 R | 5,000,000 R | | | |
| US-25 Improvements | | 1,000,000 P | 16,200,000 C | 16,200,000 C | 16,200,000 C | |
| | | | | | 1,560,000 R | 1,560,000 R | | | | |
| I-185 Reduction | | 300 P | 2,477.5 C | 2,477.5 C | | |
| | | | | | 1,750 R | 1,750 R | | | | |
| W. Georgia Rd. Widening | | | 1,600 P | 20,886.53 C | 20,886.53 C | 20,886.53 C |
| | | | | | | 2,500 R | 2,500 R | | | |

Reference the SCDOT Letter in Appendix C

8) Schedule of Project Revenues

There are no identified revenue sources for the projects at this time. Bonds for local match will not be issued unless State Infrastructure Bank funding is approved.

9) Useful Life and Maintenance

Reference the SCDOT Letter in Appendix C

10) Commitment to Assume Future Maintenance

Reference the SCDOT Letter in Appendix C

11) Component Priority List

Priorities shall be provided after consultation with SIB board and SCDOT on viable project costs and scopes.

12-21) Financing Mechanisms and why nots

Greenville County has determined that they are going to use a Municipal Source Revenue Bond. No other Financing Mechanism was considered at this time.

22) Discount Future Payments

Not applicable because Greenville County will be issuing level debt service general obligations bonds at the time of construction.

23) Inflation Rate Assumed

Not applicable because Greenville County will be issuing level debt service general obligations bonds at the time of construction.

24) Condemnation

Greenville County can be named as a party in a condemnation proceeding for any road related project, but the County does not use condemnation for any other purpose.

25) Other Sources of Financing

No other financing sources other than the above have been utilized or sought.

3) Project Approach

1) Timetable for implementation

Timetable for implementation will depend on approval and award of SIB funding. The US-25 and Woodruff Parallel projects have some aspects in development (see below). According to SCDOT, once funds are awarded, the timetable for implementation will be 10 years.

2) Projects Status

- Woodruff Parallel: Phase One is in NEPA funded by GPATS. Otherwise not started
- I-85 at Batesville Interchange: Not started
- US-25: Some repair work is in letting prep by SCDOT. Otherwise not started
- West Georgia Road: Not started

- I-185 Reduction: Not started.

3) Potential Obstacles

There are many potential obstacles these projects could face such as acquiring necessary right-of-way, heavy costs, acquiring local match, and local opposition. The I-85/Batesville Road interchange project will require a favorable result to a Federal Interchange Justification Survey, which to this date has not been performed. The interchange poses some interesting challenges due to its location and the timeliness of when it could be built. The longer this project is put off, the higher the likelihood it will not be done. This was acknowledged before in the application. If development comes to this location, it will stifle the ability to add ramps and widen Batesville Road so that it can handle the extra load.

Development will also increase the difficulty of acquiring necessary right-of-way and the costs associated with purchase/compensation of that right-of-way. The threat of time also comes from current construction on I-85. If this construction is completed without including revisions to the I-85/Batesville Road intersection, a valuable opportunity will have been lost. Construction costs to, in a sense, redo what was just completed will make the project financially unappealing.

The improvements on US-25 could prove challenging due to the corridor's length. A portion of the project leaves GPATS jurisdiction and enters the jurisdiction of the Appalachian Council of Governments. Cross-jurisdictional projects, while more intricate, are still possible and in this case necessary due to the hazardous nature of this corridor. Widening US-25 could prove challenging where turn lanes are needed to allow better access management, one of the primary concerns expressed by the public. This corridor is mountainous and would likely need more grading and excavation to complete widening projects than traditional stretches of roadway.

Right-of-way could be especially difficult to acquire for the Woodruff Road Parallel. This project involves fashioning a new segment of road versus widening/updating an existing segment. While local opposition towards the idea of a parallel road will likely be slim, it may be difficult to keep the parallel free of curb cuts. As long as there are no curb cuts on the parallel itself, it should do its

job and provide a reliable way to travel without entering the bustle of Woodruff Road. Development does not need to halt around the new road, but perhaps entry and exit can be limited to side streets, and cross-connectivity between parcels be required. This would need to be handled through development and land use regulations with the City of Greenville.

West Georgia Road could experience some difficulties as well. Acquiring all necessary right-of-way may prove difficult in sections of the corridor lined with residential housing, especially if these houses do not lie far from the road. While people generally agree something needs to be done with the corridor, properties that will be impacted may resent the idea.

I-185 Reduction faces issues of public perception, as the primary beneficiary to the project would be the Greenville Health System hospital campus. To serve health, safety, and public welfare, the project's primary benefit of improving emergency vehicle access is of sufficient need to warrant the spending of public dollars, but for even a small project such as this questions will be raised as to whether GHS should be funding the project outright themselves.

4) Responsible Entity

SCDOT will serve as the responsible entity for all of the projects in their entirety.