BOARD OF DIRECTORS

John B. White, Jr., Chairman

Ernest Duncan, Vice Chairman

David E. "Gene" Branham, Sr.

H.B. "Chip" Limehouse, III

David B. Shehan

Representative J. Gary Simrill

Senator C. Ross Turner, III

September 22, 2022

South Carolina Transportation Infrastructure Bank



955 Park Street Room 120 B Columbia, SC 29201 P: (803) 737-2825 Fax: (803) 737-2014

<u>Via Email and USPS</u> Steve Thigpen Director of Transportation Development 4045 Bridge View Drive, Suite C204 North Charleston, SC 29405

RE: Charleston County, SC 41 SCTIB Application

Dear Mr. Thigpen,

I am pleased to report that, at its meeting of September 8, 2022, the South Carolina Transportation Infrastructure Bank Board (the Board) approved providing financial assistance for Charleston County, SC 41 Widening Project (the Widening Project), subject to certain conditions.

After a thorough analysis of the County's application and supplemental submissions, the Board approved a grant in an amount up to \$62,193,500 to construct improvements for the Widening Project as described in the County's application for financial assistance. The payment of \$122,600,000 local match for the Project is from the County, as stated in the application, is a mandatory condition of receiving the South Carolina Transportation Infrastructure Bank's (the Bank) financial assistance. The Bank's provision of financial assistance also requires approval of the South Carolina Department of Transportation Commission (Commission), which approved the financial assistance on September 15, 2022, and the Joint Bond Review Committee (JBRC), and an executed Intergovernmental Agreement (IGA) between the parties in a form determined by the Bank.

Upon approval of the Commission and JBRC the next step will involve the Bank, the County, and possibly the South Carolina Department of Transportation, beginning the process of reviewing and executing an IGA. At the appropriate time, counsel for the Bank will prepare the IGA and distribute to all parties for review. The IGA must include construction commencement and completion dates for the Project. As time progresses, the Bank will ask for updates to the Project status and timeframe in which the Bank's financial assistance of \$62,193,500 will be needed. The Bank also will need the contact

Page 2 of 2

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 <u>reedtb@scdot.org</u>.

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

Sincerely,

h. B. Mhite, Jr. hairman

Enclosure



South Carolina Transportation Infrastructure Bank

Financial Assistance Application for: SC 41 Widening & Interchange Project

ETT.T.

Submitted by:



February 28, 2017

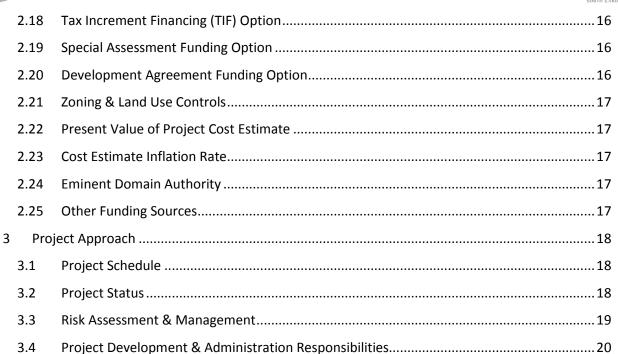




<u>Contents</u>

Exec	utive S	ummary3
1	Pub	lic Benefit4
	1.1	Traffic Data4
	1.2	Project Urgency5
	1.3	Local Governing Body Resolution8
	1.4	Economic Development Certificate8
	1.5	Unemployment Data8
	1.6	Local Support9
	1.7	Priority Listing9
	1.8	Regional & Statewide Significance10
	1.9	Project Alternatives10
	1.10	Environmental Impacts
2	Fina	ncial Plan12
	2.1	Total Project Cost Estimate
	2.2	Amount of Local Contribution12
	2.3	Source of Local Contribution12
	2.4	Requested Bank Assistance13
	2.5	Form of Assistance Requested13
	2.6	Other Funding Sources13
	2.7	Disbursement Schedule
	2.8	Local Contribution Revenue Schedule14
	2.9	Useful Project Life
	2.10	Maintenance Commitment15
	2.11	Insufficient Award Contingency Plan15
	2.12	Impact Fee Financing Option15
	2.13	Local Accommodations Tax Funding Option15
	2.14	Local Hospitality Tax Funding Option16
	2.15	Local Option Sales Tax Funding Option16
	2.16	Toll Funding Option16
	2.17	User Fee Funding Option16





Appendices:

- Appendix A City of Charleston Letter of Support
- Appendix B SCDOT Participation Agreement
- Appendix C Town of Mount Pleasant Approved Budget
- Appendix D SCDOT Cost Estimate and Schedule Verification Request Letter





Executive Summary

Charleston County voters have twice elected by referendum to impose a special sales and use tax on purchases made within the county to generate revenue for the purposes of financing highway improvements, operating mass transit systems, and preserving greenspace. The first of the two referenda was passed in November, 2004, to levy one-half percent sales and use tax for a period of 25 years or until \$1.303 Billion in revenue has been collected. These funds have since been used with great success to complete construction of numerous large transportation projects such as Johnnie Dodds Boulevard Improvements, Bees Ferry Road Widening, Palmetto Commerce Parkway, and many others.

In recognition of the County's success developing projects under the 2004 sales tax program, voters authorized Charleston County in November, 2016, to levy an additional one-half percent sales and use tax for a further 25 years or until \$2.100 Billion in revenue has been collected. Approximately sixty-one (61) percent of the new revenue will be allocated to highway construction with the remainder allocated towards mass transit and greenspace acquisition.

Charleston County has and will continue to seek out opportunities to match the local sales tax revenue with outside funding sources in order to maximize the return on our citizens' investment in the local and state transportation system. Accordingly, Charleston County has been awarded and successfully administered funds through multiple sources which have included Federal Earmarks, SCDOT-Federal Match Program Funds, and Berkeley-Charleston-Dorchester Council of Governments Charleston Area Transportation Study (BCDCOG-CHATS) Federal Guideshare Funds.

This application for funding from the South Carolina Transportation Infrastructure Bank (SCTIB) to complete the SC 41 widening and interchange project as described below has been prepared and submitted in continuation of the County's efforts to maximize the effect of locally generated funds for the benefit of our citizens, the region, and the state. The application has been formatted in accordance with the SCTIB's application instructions and scoring criteria in order to simplify review of the proposal.

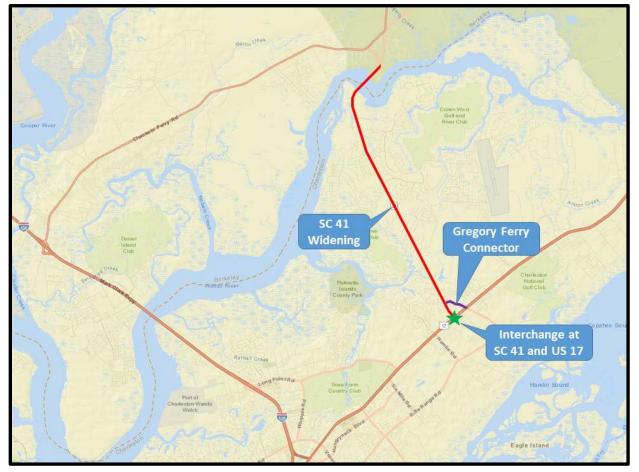
Project Description

Charleston County proposes to construct a grade separated interchange at the intersection of US 17 and SC 41, widen SC 41 from US 17 to Clements Ferry Road (S-30), and complete the Gregory Ferry Connector roadway between SC 41 and US 17. The precise scope of improvements shall be determined through alternative analysis performed in accordance with the National Environmental Policy Act (NEPA). A project location map is provided below in Figure 1.





Figure 1: Project Location Map



Evaluation Criteria

1 Public Benefit

1.1 Traffic Data

Current traffic volumes and the Pavement Quality Index (PQI) have been sourced from the South Carolina Department of Transportation (SCDOT). Projected traffic volumes for the year 2040 and current truck volumes have for the project been sourced from the Berkeley-Charleston-Dorchester Council of Governments (BCDCOG). Traffic accident data shown in Section 1.2 below has been provided by the South Carolina Department of Public Safety.

SCDOT maintains three (3) traffic count stations on SC 41 within the project limits. BCDCOG Charleston Area Transportation Study (CHATS) Travel Demand Model truck volumes for year 2010 were converted into a percentage and applied to SCDOT 2015





AADT volumes to calculate estimated year 2015 truck volumes. The SCDOT AADT volumes and estimated year 2015 truck volumes are provided in Table 1 below.

Traffic volumes have been projected to the year 2040 using growth rates calculated from the BCDCOG Charleston Area Transportation Study (CHATS) Travel Demand Model for the roadway segments corresponding with SCDOT count stations. The growth rates for each segment have been applied to SCDOT 2015 AADT volumes to generate the projected year 2040 volumes shown in Table 1 below.

Station Number	Route	Location on Project Corridor	2015 AADT	2015 Truck Volume	2040 AADT
193	SC 41	US 17 to Joe Rouse Road	22400	1701	29,373
198	SC 41	Joe Rouse Road to County Line	13100	1104	19,864
152	SC 41	County Line to S-33 (Clements Ferry Road)	14800	1247	22,442

Table 1: Traffic Volumes

The Pavement Quality Index score for SC 41 for each 0.1-mile-long segment of roadway was provided by the SCDOT district office. This data was converted into an average PQI score for the entire project corridor of 2.095.

1.2 Project Urgency

The urgent need to improve the capacity of SC 41 is driven by several factors which include, but are not limited to, public safety, emergency evacuation, coordination with adjacent projects, population growth and traffic congestion. These factors are described in further detail below.

Public Safety

Traffic accident data for the three-year period spanning from 2014 through 2016 was provided by the South Carolina Department of Public Safety – Office of Highway Safety and Justice Programs. A summary of accidents occurring on SC 41 during this period is provided below in Table 2.





Table 2: SC 41 Accident Data

Year	Fatal Collision	Injury Collision	Property Damage Only Collision	Total Collisions	Persons Killed	Persons Injured
2014	0	26	61	87	0	38
2015	1	40	78	119	1	60
2016	0	38	79	117	0	60
3 Year Total	1	104	218	323	1	158

The project as described above will provide opportunities to improve roadway safety and reduce the accident rates. These proposed roadway improvements will provide the following safety benefits:

- 1. Improved sight distance to reduce failure to yield accidents,
- 2. Increased roadway capacity to reduce congestion related accidents,
- 3. Adequate bicycle and pedestrian facilities to separate these users from motor vehicle traffic.

Emergency Evacuation

SC 41 serves as the designated hurricane evacuation route for residents of northern Mount Pleasant and the Isle of Palms. Evacuees from these areas are directed to use SC 41 via US 17 to travel inland. In the event of an emergency evacuation, such as was recently ordered for Hurricane Matthew, residents of Mount Pleasant encounter significant traffic congestion as a result of inadequate capacity on SC 41 and US 17. This traffic congestion greatly extends the amount of time needed to evacuate the Town and increases the risk to citizens and emergency responders.

Coordination with Adjacent Projects

The need to widen SC 41 is especially urgent when the project is viewed from a regional perspective. Berkeley County and SCDOT are presently developing separate projects to widen Clements Ferry Road from two to four lanes on the Cainhoy Peninsula between I-526 and SC 41. SCDOT is also presently constructing a new bridge on SC 41 over the Wando River which has been designed to accommodate four through lanes of traffic. Charleston County's proposed widening of SC 41 from US 17 to Clements Ferry Road will serve as the last link needed to complete an improved transportation corridor extending from the northern end of Mount Pleasant through the Cainhoy Peninsula to I-526. Figure 2 below illustrates the route continuity provided by the widening of Clements Ferry Road and SC 41.





Figure 2: SC 41 Widening and Adjacent Projects

Population Growth & Traffic Congestion

The Town of Mount Pleasant and northern Charleston County has experienced incredible growth over the past several years. The Town of Mount Pleasant specifically has been recently identified as the fastest growing city east of the Mississippi River and the 10th fastest growing city in the nation with a population greater than 50,000 according to data from the US Census Bureau. In the period from 2005 through 2015, the town of Mount Pleasant grew from 59,104 residents to an estimated 81,317 residents. This rapid growth has strained area infrastructure and resulted in significant traffic congestion on regional roads such as SC 41.

Traffic congestion occurring on SC 41 can be expressed as a ratio of volume to capacity (V/C) and associated Level of Service (LOS) grade. Table 3 below illustrates the calculated V/C ratios and associated LOS at each SCDOT count station within the project limits for current and projected year traffic volumes.





Station Number	Route	Location on Project Corridor	2015 V/C	2015 LOS	2040 V/C	2040 LOS
193	SC 41	US 17 to Joe Rouse Road	1.40	E	1.90	F
198	SC 41	Joe Rouse Road to County Line	0.82	С	1.21	E
152	SC 41	County Line to S-33 (Clements Ferry Road)	0.93	С	1.21	E

Table 3: Existing and Projected SC 41 V/C Ratios and LOS

1.3 Local Governing Body Resolution

The project is supported by the Town of Mount Pleasant as evidenced by the letter of support from Mayor Page included herein as Appendix B.

1.4 Economic Development Certificate

This certificate has been requested from the Advisory Coordinating Council for Economic Development of the Department of Commerce and will be provided to the SCTIB by Charleston County upon receipt.

1.5 Unemployment Data

The unemployment rate for Charleston County currently stands at 3.3% according to data from the U.S. Bureau of Labor Statistics. Over the past five years, the unemployment rate in Charleston County has been trending downward as the economy recovers from the most recent recession. Figure 3 below illustrates the unemployment rate in Charleston County over the past five years.





Figure 3: Five (5) Year Unemployment Rate for Charleston County (Source: US BLS)

The low unemployment rate is shown in Figure 4 above is evidence of the strong economy of the Charleston Area. This economic expansion is associated with the rapid population growth seen throughout the area, and especially within the Town of Mount Pleasant. This trend is expected to continue through the foreseeable future as the Charleston Harbor is deepened to accommodate larger ships and major manufacturing companies expand in the area. It is critical that the infrastructure needed to support this economy keeps pace with the rate of economic expansion and population growth.

1.6 Local Support

Local support of the project is evident by Charleston County voter approval of the November, 2016 local option sales tax referendum which authorized an increase in the local sales tax rate by one-half of one percent over a period of 25 years or until \$2.100 Billion in revenue has been collected. The widening of SC 41 was presented to voters as one of the major projects to be developed by Charleston County through revenue generated by the sales tax increase.

1.7 Priority Listing

The widening of SC 41 from US 17 to Joe Rouse Road (S-2057) is identified as priority number 5 in the Charleston Area Transportation Study (CHATS) Long Range Transportation Plan (LRTP).





1.8 Regional & Statewide Significance

The proposed widening of SC 41 and construction of a grade separated interchange at the intersection of SC 41 and US 17 will provide a number of significant benefits to the state and region.

US 17 is identified as part of the National Highway System (NHS) Strategic Highway Network (STRAHNET). This designation signifies the importance of US 17 to the United States' strategic defense policy as it provides access, continuity, and emergency capabilities for defense purposes.

US 17 is also designated in the South Carolina Multimodal Transportation Plan -Statewide Freight Plan as part of the Strategic Freight Roadway Network. This designation is based upon the volume of freight carried by the roadway and the roadways function within the state transportation network. US 17 through the Lowcountry was specifically identified in the Statewide Freight Plan as a priority corridor for improvements to preserve and improve the movement of freight by truck in South Carolina.

The South Carolina Multimodal Transportation Plan – Strategic Corridors Plan also identifies US 17 at a Tier 1 Strategic Corridor. This designation recognizes the importance of US 17 to the statewide roadway network due to its high traffic volumes, statewide and regional connectivity, multimodal connectivity, and its impact on employment and tourism.

Construction of a grade separated interchange at the intersection of SC 41 and US 17 will substantially decrease traffic congestion and enable US 17 to continue serving these critical functions for the state and region. Further, the widening of SC 41 will serve as part of a larger corridor of continuous roadway improvements stretching from US 17 in Mount Pleasant through the Cainhoy Peninsula to I-526.

1.9 Project Alternatives

The SC 41 widening project will be developed in accordance with the National Environmental Policy Act (NEPA) in order to maintain eligibility for federal funding. NEPA compliance will require that Charleston County develop an environmental document that considers the range of reasonable alternatives to the proposed action. This document will be subject to approval by the SCDOT and Federal Highway Administration (FHWA).





The Charleston area is composed largely of densely populated sea islands and peninsulas separated from one another by tidal rivers bordered by wide expanses of marshland. This geography has shaped the transportation network into one which is heavily reliant upon only a few major arterial roadways with little connectivity. The range of reasonable alternatives to improving the transportation network is similarly limited by these factors.

The range of "build" alternatives considered when evaluating a highway corridor generally consist of widening the existing roadway or constructing a new bypass roadway to divert traffic off of the existing road. As described above, the Charleston area geography and dense population effectively eliminates construction of a bypass route from the range of reasonable alternatives. Thus the only remaining alternative is to widen the existing roadway.

1.10 Environmental Impacts

Charleston County, SCDOT, and the Town of Mount Pleasant have completed the initial project scoping and have a strong understanding of the environmental constraints associated with the project. These constraints are largely related to jurisdictional wetland and critical area impacts and impacts to adjacent established communities. The following sections describes these in further detail.

Jurisdictional Wetlands & Critical Areas

The proposed widening of SC 41 crosses several tidal streams including Horlbeck Creek, an unnamed tributary to Horlbeck Creek, and Mill Creek. The proposed widening will result in unavoidable impacts to the wetlands and critical areas adjacent to these streams. Charleston County will endeavor to minimize impacts to these resources through the use of steepened roadway slopes, retaining walls, and bridging.

Community Impacts

The project limits traverse the Phillips Community in Mount Pleasant which has been designated by the South Carolina State Historic Preservation Office (SHPO) as a traditional cultural property (TCP) and potentially eligible for listing on the National Register of Historic Places. The Phillips Community was settled in the 1870s by former slaves from the Laurel Hill, Parker Island, and Boone Hall plantations. Charleston County will take measures to avoid, minimize, or mitigate for any adverse effects to this community through development and evaluation of project alternatives during the NEPA process.





2 Financial Plan

2.1 Total Project Cost Estimate

Charleston County engaged the services of an outside engineering consulting firm to prepare an independent estimate of the total project cost. The total project cost estimate was divided into the phases of preliminary engineering (PE), right of way acquisition (ROW), and construction (CON).

As shown in Table 4 below, the total project cost estimate in the base year of 2015 was \$106,454,000. Applying an annual inflation rate of 3% to account for cost escalation over the life of the project yields a projected total cost estimate of \$129,187,000.

Phase	2015 Cost Estimate	2017	2018	2019	2020	2021	2022	2023	2024	Projected Cost Estimate
PE	8,897	1,818	1,873	2,077	2,213	1,845				9,826
ROW	20,764				11,848	12,204				24,052
CON	76,793						42,025	22,074	31,209	95,309
Total	106,454	1,818	1,873	2,077	14,062	14,049	42,025	22,074	31,209	129,187

Table 4: Total Project Cost Estimate

Notes:

1) All costs shown are represented in \$1,000s.

The project cost estimate has been submitted to SCDOT for review and concurrence in accordance with the SCTIB application instructions. A copy of Charleston County's request to SCDOT is contained in Appendix D. SCDOT's response will be provided to the SCTIB upon receipt.

2.2 Amount of Local Contribution

Charleston County proposes to contribute \$31,479,000 in local option sales tax revenues towards the phases of Preliminary Engineering and Right of Way Acquisition. This amount, in combination with the \$2,000,000 committed by the BCDCOG-CHATS Policy Committee and \$400,000 provided by the Town of Mount Pleasant described in Section 2.6 below, will completely fund these phases of project development. Charleston County's \$31,479,000 commitment represents approximately 24% of the total project cost.

2.3 Source of Local Contribution

The local contribution shall be provided by Charleston County from revenues generated from the local option sales tax increase approved by voters in November, 2016.





2.4 Requested Bank Assistance

Charleston County respectfully requests \$95,309,000 in funding from the SCTIB to be used for the Construction phase of the project. This amount represents approximately 74% of the total project cost estimate. SCTIB funds would be applied towards actual construction costs, construction engineering & inspection, and utility relocations associated with the project.

2.5 Form of Assistance Requested

Charleston County is requesting funding assistance in the form of a grant to supplement locally generated funding.

2.6 Other Funding Sources

The BCDCOG-CHATS Policy Committee has committed to contribute up to \$2,000,000 in CHATS Guideshare funds for the Preliminary Engineering phase of the project. This commitment is stated in the attached signed participation agreement between SCDOT and Charleston County dated August 25, 2016 included as Appendix B.

The Town of Mount Pleasant has also committed to providing up to \$400,000 in funds towards the Preliminary Engineering phase of the project. This commitment is identified in the town's approved budget for Fiscal Year 2016 which is attached as Appendix C.

2.7 Disbursement Schedule

As described above, Charleston County is requesting assistance from the SCTIB for funding of the Construction phase of the project. The following table illustrates the estimated disbursement schedule for SCTIB funds applied towards project construction. Charleston County proposes to fund the Preliminary Engineering and Right of Way Acquisition phases of the project as the local contribution.

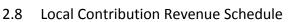
Phase	Agency	2017	2018	2019	2020	2021	2022	2023	2024	Agency Share
CON	SCTIB						42,025	22,074	31,209	95,309

Notes:

1) All costs shown are represented in \$1,000s.

Charleston County has requested SCDOT review of the project cost estimate and schedule to verify the accuracy and reasonableness of the disbursement schedule. A copy of the request letter from Charleston County to the SCDOT is included as Appendix D.





The following revenue schedule has been provided by the Charleston County budget office. A 4.0% average annual growth rate was used to forecast revenue over the life of the program. This growth rate is based upon growth rates observed over the duration of Charleston County's first transportation sales tax program enacted in 2004.

Year	Fiscal Year	Total Receipts	Roads Portion (61% Revenue)						
1	2018	50,500	30,805						
2	2019	52,520	32,037						
3	2020	54,621	33,319						
4	2021	56,806	34,651						
5	2022	59,078	36,037						
6	2023	61,441	37,479						
7	2024	63,899	38,978						
8	2025	66,455	40,537						
9	2026	69,113	42,159						
10	2027	71,877	43,845						
11	2028	74,752	45,599						
12	2029	77,742	47,423 49,320 51,293						
13	2030	80,852							
14	2031	84,086							
15	2032	87,450	53,344						
16	2033	90,948	55,478						
17	2034	94,586	57,697						
18	2035	98,369	60,005						
19	2036	102,304	62,405						
20	2037	106,396	64,901						
21	2038	110,652	67,498						
22	2039	115,078	70,197						
23	2040	119,681	73,005						
24	2041	124,468	75,926						
25	2042	126,328	77,060						
1	otals	2,100,000	1,281,000						

Notes:

1) All revenues shown are represented in \$1,000s.

2.9 Useful Project Life

In accordance with SCDOT standard project development procedures, Charleston County shall use a design horizon of 20 years from completion of the project for planning purposes. Further, it is expected that the project will employ a flexible asphalt pavement section which has an expected design life of 10 years from completion of the





project before requiring significant maintenance such as crack sealing or microsurfacing. Charleston County has requested that SCDOT verify these design standards as required by the SCTIB application instructions.

2.10 Maintenance Commitment

SC 41 is part of the state highway system maintained by SCDOT. Charleston County has entered into a participation agreement with SCDOT under the Local Public Agency (LPA) procedures which outlines the responsibility of each party. The agreement permits Charleston County, as an LPA, to administer projects on the state highway system subject to review and approvals by SCDOT. The agreement further establishes that SCDOT will be responsible for normal maintenance of standard transportation materials, structures, and workmanship within the SCDOT rights of way.

Charleston County has requested a letter from SCDOT stating the estimated future maintenance costs as required by the SCTIB application instructions. This letter will be forwarded to the SCTIB upon receipt.

2.11 Insufficient Award Contingency Plan

In the event that the SCTIB's funding grant is insufficient to complete the entire project scope, Charleston County may elect to divide the project into separate phases which would be advanced to construction in the following order of priority as funding allows.

- 1. Widening of SC 41 from US 17 to Joe Rouse Road, construction of a grade separated interchange at the intersection of SC 41 and US 17, and completion of the Gregory Ferry Connector Road.
- 2. Widening of SC 41 from Joe Rouse Road to Clements Ferry Road.

This priority order has been determined based upon a comparison of existing and future traffic volumes as shown in Table 1 above. Each phase described above would have independent utility and logical termini.

2.12 Impact Fee Financing Option

Charleston County elected to generate funds for the project through an increase in the local option sales tax as described in Section 2.15 below.

2.13 Local Accommodations Tax Funding Option

Charleston County elected to generate funds for the project through an increase in the local option sales tax as described in Section 2.15 below.





2.14 Local Hospitality Tax Funding Option

Charleston County elected to generate funds for the project through an increase in the local option sales tax as described in Section 2.15 below.

2.15 Local Option Sales Tax Funding Option

Charleston County Council determined that a long term increase in the local sales tax was the only means available to generate the significant funding needed to implement a major transportation improvement program. Charleston County voters have since twice elected to raise the local sales tax to generate a total of \$3.403 Billion in new revenue for the purposes of funding highway improvements, operating mass transit systems, and protecting greenspace.

The first of two referenda was approved by Charleston County voters in November, 2004 to raise the sales tax by one-half percent over a period of 25 years to generate \$1.303 Billion in new revenue. The second referendum was recently approved by voters to increase the sales tax by an additional one-half percent for a further 25 years to generate \$2.100 Billion in new revenue.

2.16 Toll Funding Option

The nature of tolling requires that the tolled route be controlled access. Since SC 41 is not a controlled access route, tolling is not a feasible funding option.

2.17 User Fee Funding Option

Charleston County elected to generate funds for the project through an increase in the local option sales tax as described in Section 2.15 above.

2.18 Tax Increment Financing (TIF) Option

Charleston County elected to generate funds for the project through an increase in the local option sales tax as described in Section 2.15 above.

2.19 Special Assessment Funding Option

Charleston County elected to generate funds for the project through an increase in the local option sales tax as described in Section 2.15 above.

2.20 Development Agreement Funding Option

Charleston County elected to generate funds for the project through an increase in the local option sales tax as described in Section 2.15 above.





2.21 Zoning & Land Use Controls

The Town of Mount Pleasant has enacted restrictions on building permits on several occasions over the past two decades in effort to slow the rate of development and population growth. Most recently, the town council voted to enact a 180-day moratorium on new multi-family developments on February 14, 2017.

2.22 Present Value of Project Cost Estimate

Discounting the project cash flow shown in Table 5 of section 2.1 above to present value using a 5% discount rate produces the figures shown in Table 7 below. As noted above, Charleston County is proposing to fund the Preliminary Engineering and Right of Way Acquisition Phases entirely with local funds. The present value of the grant funding requested is represented in the Construction phase.

Project Phase	Present Value
PE	8,915
ROW	20,275
CON	71,580
Total	100,771

Table 7: Present Value of Project Cash Flow at 5% Discount Rate

Notes:

1) All costs shown are represented in \$1,000s.

2.23 Cost Estimate Inflation Rate

An inflation rate of 3% compounded annually was used to project the current value estimate to future value shown in Table 5 of Section 2.1 above.

2.24 Eminent Domain Authority

Charleston County will serve as the eminent domain authority for acquisition of rights of way necessary to construct the project.

2.25 Other Funding Sources

As noted in Section 2.6 above, Charleston County has secured a \$2.0 Million commitment from the BCDCOG-CHATS Policy Committee for preliminary engineering on the project. The Town of Mount Pleasant has also committed up to \$400,000 for preliminary engineering on the project.

Charleston County has and will continue to seek out additional opportunities to match the local sales tax revenue with outside funding sources in order to maximize the return





on our citizens' investment in the local and state transportation system. These efforts are evidenced by our past success with securing and administering funds on other projects managed by the County.

Funding sources employed by Charleston County on past projects have included Federal Earmarks, SCDOT-Federal Match Program Funds, and Berkeley-Charleston-Dorchester Council of Governments Charleston Area Transportation Study (BCDCOG-CHATS) Federal Guideshare Funds. Charleston County will continue to pursue additional funds for use on the SC 41 widening project as opportunities arise during development of the project.

3 Project Approach

3.1 Project Schedule

Figure 4 below presents the estimated schedule for development of the project. This schedule has been submitted to SCDOT for review and concurrence. A copy of SCDOT's response will be provided to the SCTIB upon receipt.

Figure 4: Project Schedule

			20)17			20)18			20)19			20	20			20)21			20	22			20	23			20	24	
Task	Subtask	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Surveys																																
	Prelim Design																																
PE	NEPA/Enviro																																
FE	ROW Plans																																
	Permitting																																
	Final Plans																																
ROW	Land Acquisition																																
	Utility Relo																																
CON	CE&I																																
	Construction																																

3.2 Project Status

The following steps have already been taken by Charleston County in anticipation of funding availability.

- ✓ SCDOT approved Charleston County's application to administer the project as a Local Public Agency (LPA) on February 3, 2016
- ✓ The SCDOT Charleston County Participation Agreement was executed on August 24, 2016
- ✓ Charleston County advertised a solicitation for professional engineering and environmental services needed for the project on September 27, 2016
- ✓ Charleston County voters approved an increase in the local sales tax to fund transportation projects, mass transit operations, and greenspace acquisition in November, 2016





✓ Charleston County Council approved execution of a contract with an engineering consultant for design of the project in January, 2017.

Charleston County will continue development of the project in accordance with SCDOT Local Public Agency regulations and procedures to ensure that the project maintains federal funding eligibility.

3.3 Risk Assessment & Management

Several factors have been identified which will influence the schedule at which the project advances to construction. These factors include the development of a NEPA compliant environmental document, securing of environmental permits, and acquisition of right of way necessary to accommodate the project footprint.

As described above, the project will require FHWA approval of an environmental document in order to satisfy NEPA and remain eligible to receive federal funding. This environmental document will describe all alternatives considered by the County to avoid, minimize, or mitigate for unavoidable impacts to the human and natural environment. These impacts may fall within the categories of noise, jurisdictional wetlands, critical area, water quality, farmland, threatened & endangered species, cultural resources, Section 4(f) and 6(f) resources, and hazardous material sites.

The proposed widening of SC 41 is expected to result in impacts to the wetlands and critical areas adjacent to Horlbeck Creek, an unnamed tributary to Horlbeck Creek, and Mill Creek. Charleston County will endeavor to minimize impacts to these resources through the use of steepened roadway slopes, retaining walls, and bridging. Unavoidable impacts will require permitting through the US Army Corps of Engineers. Charleston County and SCDOT have reviewed the project and determined that the amount of impacts will likely require an individual permit from the Corps. The timeline associated with application and receipt of this permit has been built into the project schedule.

Charleston County anticipates that acquisition of rights of way from both commercial and residential properties will be required to accommodate the project footprint. The anticipated schedule and costs for these acquisition has been built into the project cost estimate and schedule described above. Charleston County has extensive experience in right of way acquisition as evidenced by the successful completion of many major transportation projects funded by the 2004 transportation sales tax program.





3.4 Project Development & Administration Responsibilities

The following matrix identifies the agency responsible for key functions associated with project development. Letters accepting responsibility for each of these functions have been requested and will be provided to the SCTIB upon receipt.

Project Phase	Responsible Agency	Contact						
Environmental Studies	Charleston County	Steve Thigpen Director of Transportation Development 4045 Bridge View Drive, Suite C204 North Charleston, SC 29405 Phone: (843)202-6146						
Project Design	Charleston County	Steve Thigpen Director of Transportation Development 4045 Bridge View Drive, Suite C204 North Charleston, SC 29405 Phone: (843)202-6146						
Right of Way Acquisition	Charleston County	Steve Thigpen Director of Transportation Development 4045 Bridge View Drive, Suite C204 North Charleston, SC 29405 Phone: (843)202-6146						
Construction	Charleston County	Steve Thigpen Director of Transportation Development 4045 Bridge View Drive, Suite C204 North Charleston, SC 29405 Phone: (843)202-6146						
Construction Management	Charleston County	Steve Thigpen Director of Transportation Development 4045 Bridge View Drive, Suite C204 North Charleston, SC 29405 Phone: (843)202-6146						
Operation	SCDOT	955 Park Street Columbia, SC 29201 Phone (855)467-2368						
Maintenance	SCDOT	955 Park Street Columbia, SC 29201 Phone: (855)467-2368						
Tort Liability	Charleston County	Steve Thigpen Director of Transportation Development 4045 Bridge View Drive, Suite C204 North Charleston, SC 29405 Phone: (843)202-6146						
Ownership	SCDOT	955 Park Street Columbia, SC 29201 Phone: (855)467-2368						
Law Enforcement	Charleston County Sheriff's Office	Sheriff J. Al Cannon, Jr. Charleston County Sheriff's Office 3691 Leeds Avenue North Charleston, SC 29405 Phone: (843)202-1700						
Marketing	Charleston County	Steve Thigpen Director of Transportation Development 4045 Bridge View Drive, Suite C204 North Charleston, SC 29405 Phone: (843)202-6146						