



**SCTIB Application**  
**Compliant with**  
**ACT 98 of 2013**



South Carolina Department of Transportation

*August 2013*



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## Introduction

SCDOT appreciates the opportunity to submit the following application to the State Transportation Infrastructure Bank in accordance with Act 98 of 2013. The proposed SCTIB Interstate Program included in this application has been prepared in accordance with SCDOT Commission direction and follows three guiding principles:

1. Follow ACT 114.
2. Take good stewardship action soon.
3. Focus on large capital projects on the Interstate.

Accordingly, the proposed program included in this application has been designed in a manner to allow rapid deployment of the resources allocated by the Legislature with Act 98. \$100,000,000 is proposed to be deployed immediately on the "Shovel Ready" I-85/I-385 Interchange Improvement Project and the balance of the funding is recommended to be deployed towards advancing the next projects on the SCDOT Act 114 Compliant Interstate priority list. This strategy not only takes advantage of the currently still relatively low interest rates, but it accelerates delivery of the next round of ranked projects planned as part of the key freight and transportation network of the state of South Carolina. Dependable interstate systems are essential to our existing business community that relies heavily on just-on-time deliveries and minimal truck delays and the health of the overall system plays a vital role in the continued economic development success of our state and local communities.

We look forward to continuing to strengthening the partnership between our organizations as we both strive to improve the transportation infrastructure system of the Great State of South Carolina. Thank you in advance for reviewing this submittal and we stand ready to assist in your review of the application.

## General Project Information

### I-85/I-385 Interchange

AADT = 65,100

Truck AADT = 13,000



The scope of this project consists of upgrading the existing system interchange, primarily by replacing two existing loop ramps with directional ramps, and providing auxiliary lanes in both the northbound and southbound directions of I-85 between I-385 and Pelham Road. I-385 will be widened through the interchange area for approximately 2.15 miles. The project will also provide for a future eight lane widening of I-85. Additional right of way was required for this project.

County: Greenville

Termini: I-85 from Salters Road to Pelham

I-385 from Roper Mountain Road to Smith Hines Road

Distance: 2.15 miles on I-385, 4.33 miles on I-85

Estimated Total Construction Cost: \$240,000,000

**SCTIB Funding Requested: \$100,000,000**

SCDOT Planned Funding Allocation: \$140,000,000



## General Project Information (continued)

### I-20 Widening from US 378 to Longs Pond Road (S-204)

AADT = 51,000

Truck AADT = 10,200



The scope of this project includes widening I-20 with a third travel lane to the median in each direction for approximately 10.3 miles. The project will also include the widening or replacement of two I-20 mainline bridges over Southern Railroad near mile point 57 with rehabilitation and resurfacing of the existing mainline interstate travel the full length of the corridor.

County: Lexington

Termini: From US 378 (Exit 61) to Longs Pond Road (Exit 51)

Distance: 10.3 miles

Preliminary Estimated Total Cost: \$154,701,000\* (PE, ROW & CONSTRUCTION)

**SCTIB Funding Requested: \$154,701,000\***

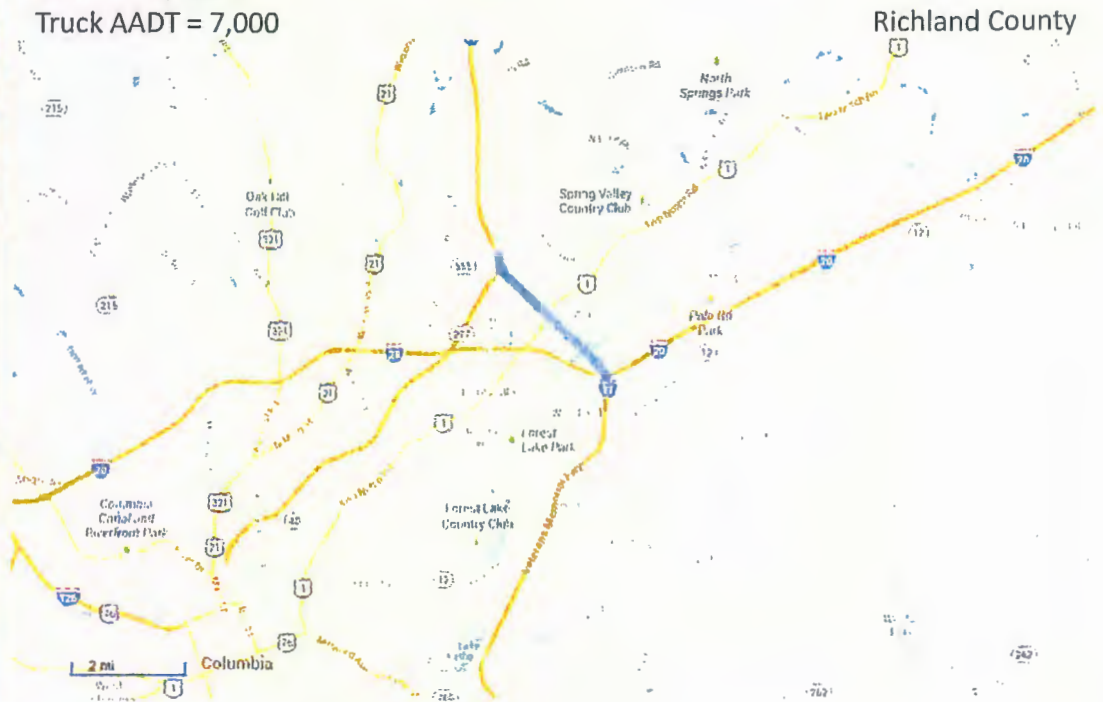
\* See Financial Plan for additional information

## General Project Information (continued)

### I-77 Widening from I-20 to SC 277

AADT = 46,900

Truck AADT = 7,000



The scope of this project includes widening I-77 with a third travel lane to the median in each direction for approximately 2.6 miles, including rehabilitation and resurfacing of the existing mainline interstate travel lanes. The project will also include the widening or replacement of ten I-77 mainline bridges: four over I-20 and I-20 exit ramps near mile point 16; two over Windsor Lake Boulevard (S-1196) near mile point 16.3; two over Windsor Lake near mile point 16.6; and two over Edgewater Drive (S-1722) and Jackson Creek near mile point 18.

County: Richland

Termini: From I-20 (Exit 16) to SC 277 (Exit 18)

Distance: 2.6 miles

Preliminary Estimated Total Cost: \$38,701,000\* (PE, ROW & CONSTRUCTION)

**SCTIB Funding Requested: \$38,701,000\***

\* See Financial Plan for additional information



## General Project Information (continued)

### I-85 Widening Phase I from Gossett Road (S-57) to SC 105 & I-85 Widening Phase II from SC 105 to SC 18

AADT = 49,700

Truck AADT = 14,900

Spartanburg & Cherokee Counties



The scope of this project includes improving 16 miles of I-85 in Spartanburg and Cherokee Counties. Improvements include widening I-85 in both the northbound and southbound directions. The widening will be done towards the median to reduce impacts to property owners and the natural environment. The existing interstate mainline lanes will receive rehabilitation and resurfacing the full length of the project. Interchange improvements will be required at four interchanges: Exit 80 (SC110), Exit 87 (S-39), Exit 95 (S-82), and Exit 96 (SC 18)

It is anticipated that construction will occur in two phases. A third phase from SC 18 to US 29 will be advanced as funding allows.

#### Phase I

County: Spartanburg/Cherokee  
Termini: From Gossett Rd. (S-57) to SC 105  
Distance: 10 miles

#### Phase II

County: Cherokee  
Termini: From SC 105 to SC 18  
Distance: 6 miles


Preliminary Estimated Cost: \$160,000,000\*

Preliminary Estimated Cost: \$102,000,000\*

Prelim. Estimated Total Cost for Phase I & II: \$262,000,000\* (PE, ROW & CONSTRUCTION)

**SCTIB Funding Requested: \$262,000,000\***

\* See Financial Plan for additional information



## Public Benefit and Prioritization

The projects included in this proposed SCTIB Interstate Program were selected and prioritized in accordance with Act 114 which was enacted in June 2007 by the South Carolina General Assembly. The projects were ranked based on a numerical system in which seven separate categories were evaluated and assigned a score. The scores ranged from 0 to 5 for each category. In all categories, higher values represented a higher priority for the project. An established weighted percentage was then applied to the value of each category and added together for a total score. Projects were ranked in priority from the highest total score to the lowest.

The categories evaluated and their assigned weighted percentages were: Volume and Capacity (30%); Average Truck Volume (10%); Safety (20%); Pavement Quality Index (10%); Financial Viability (10%); Economic Development (10%); and Environmental Impacts (10%). Below is a brief explanation of each category and the corresponding ranking value:

### ***Volume and Capacity***

The Volume to Capacity Ratio (V/C) is an accepted formula to determine a roadway's ability to carry current or anticipated traffic volumes. The ratio divides the average daily traffic volumes by the capacity of the roadway which is determined by the Highway Capacity Manual.

### ***Truck Volume***

The truck volume data was established by permanent counting stations located along the interstate. The counting stations provide a truck percentage based on total traffic. The average truck volume is derived by multiplying the percent trucks by the total volume of vehicles for that section of roadway.

### ***Safety***

Three years of crash data was provided by the South Carolina Department of Public Safety. SCDOT used this data to determine accident rates.

### ***Pavement Quality Index***

The pavement condition was evaluated by using the Pavement Quality Index (PQI). The index is an indicator of pavement condition based on the amount of roughness and distress occurring on the surface of a road. SCDOT's Pavement Management Section evaluated the road's condition and determined the PQI value.



## Public Benefit and Prioritization (continued)

### *Financial Viability*

Financial viability reflects the Department's ability to fund the proposed improvements. The scoring is calculated using the three year, non-rehabilitation interstate capacity budget divided by the project's projected cost.

### *Economic Development*

The economic development score is provided by the South Carolina Department of Commerce. The score is based on an assessment of available infrastructure and existing industrial and manufacturing employment in relation to the location of a proposed improvement.

### *Environmental Impacts*

The environmental score is based on an assessment of known environmental, cultural and social resources in relation to the location of the proposed project.

**Table 1**

ACT 114 CRITERIA							
Project	Volume to Capacity Score	Truck Volume Score	Safety Score	Pavement Quality Index Score	Financial Viability Score	Economic Development Score	Environmental Impacts Score
I-85/385 Interchange	3.685	3.000	5.000	1.865	5.000	2.000	3.000
I-20 Widening from US 378 to Longs Pond Road	2.614	2.614	4.000	2.203	3.000	2.000	5.000
I-77 Widening from I-20 to SC 277	2.000	2.000	3.000	2.428	5.000	2.000	3.000
I-85 Widening from Gossett Road to NC State Line	1.306	3.306	3.000	1.411	1.000	5.000	3.000

## Financial Plan

The proposed SCTIB Interstate Program is financially supported through the utilization of the available cash on hand and bond proceeds generated from the \$50,000,000 in annual revenue transfers that the legislature has enacted with Act 98 of the 2013 legislative session. As noted in Table 2 below, the SCDOT Finance Division estimates that the legislature's commitment of up to \$50,000,000 in annual debt service may generate between \$500,000,000 to \$600,000,000 in bond proceeds, depending on interest rates and terms selected when the bonds are brought to market. A 15 year bond is anticipated to generate proceeds on the lower end of the estimate whereas a 20 year bond is anticipated to generate proceeds on the upper end of the estimate.

*Table 2*

<b>Potential Bond Proceeds (Millions)</b>		
<b>Annual Debt Service=</b>	<b>\$50</b>	<b>Million</b>
<b>Term (Years)</b>	<b>15</b>	<b>20</b>
Rate		
3.50%	575.9	710.6
3.75%	565.8	694.8
4.00%	555.9	679.5
4.25%	546.3	664.7
4.50%	537.0	650.4
4.75%	527.9	636.5
5.00%	519.0	623.1
5.25%	510.3	610.1
5.50%	501.9	597.5
5.75%	493.6	585.3
6.00%	485.6	573.5
6.25%	477.8	562.0
6.50%	470.1	550.9
6.75%	462.7	540.2
7.00%	455.4	529.7
7.25%	448.3	519.6
7.50%	441.4	509.7
7.75%	434.6	500.2
8.00%	428.0	490.9



## Financial Plan (continued)

This anticipated range of available resources is in alignment with the forecasted \$555,402,00\* in expenditures for the proposed project as described earlier in this packet and is comprised of:

\$100,000,000 in funds for the Construction phase of the I-85/385 interchange upgrade project. The total Construction costs are estimated at \$240,000,000, with SCDOT planning to allocate \$140,000,000 in Federal and State dollars to fund the balance.

\$154,701,000\* in order to fund the Design, Right of Way acquisition and Construction phases of the I-20 Widening project from US 378 to Longs Pond Road.

\$38,701,000\* in order to fund the Design, Right of Way acquisition and Construction phases of the I-77 Widening project from I-20 to SC 277.

\$262,000,000\* in order to fund the Design, Right of Way acquisition and Construction of various components of the proposed widening of I-85 in Spartanburg and Cherokee Counties.

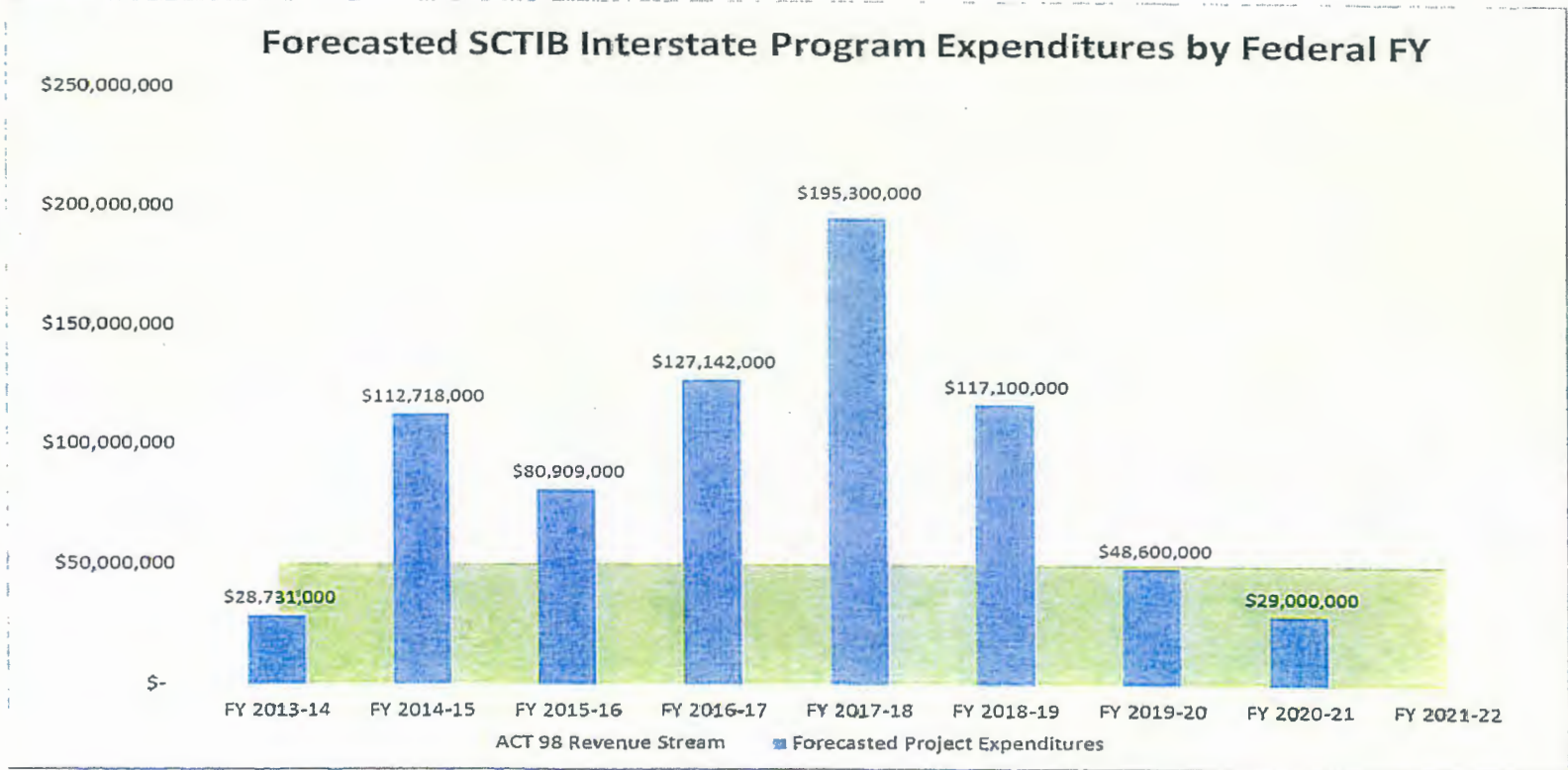
\*It should be noted that the estimates for the I-20, I-77 and I-85 proposed projects are all very preliminary estimates. These estimates were generated following an initial scoping review and are likely to change as the projects mature. SCDOT's intent is to develop a blended program for these projects by deploying nominal amounts of federal funds to these projects. The benefits of deploying federal funds are two fold: 1. Assist in closing any funding gaps that may develop over time and 2. Utilize our existing partnerships to facilitate the NEPA (National Environmental Policy Act) process with the Federal oversight agencies.

Table 3 on the next page outlines the aggregated forecasted expenditures for the proposed SCTIB Interstate Program.

## Financial Plan (continued)

Table 3 below outlines the aggregated forecasted expenditures for the proposed SCTIB Interstate Program.

**Table 3**





## Financial Plan (continued)

Table 4 on the next page outlines the detailed cash flow forecasts for each project by phase as well as the forecasted costs for the final phase of I-85, from SC 18 to US 29 in Cherokee County, which currently is listed outside of the core proposed SCTIB Interstate Program.

It is respectfully requested that flexibility be provided in the event that there is additional financial capacity realized in the future via project underruns, lower than anticipated debt service requirements, favorable interest rates, refinancing opportunities or uncommitted cash on hand such that it could be redeployed towards the currently unfunded final phase of I-85 either in whole or in combination with SCDOT's future federal funds. Conversely, overruns and other higher than anticipated costs are requested to be addressed by adjusting scope on the project components identified for construction in the later years and potentially deploying federal funds towards the proposed program.

## Financial Plan (continued)

Table 4 below outlines the detailed cash flow forecasts for each project by phase as well as the forecasted costs for the final phase of I-85, from SC 18 to US 29 in Cherokee County, which currently is listed outside of the core project

**Table 4**

### SCTIB Interstate Program Forecasted Expenditures

PROJECT	COUNTY	FY 2014 Planned	FY 2015 Planned	FY 2016 Planned	FY 2017 Planned	FY 2018 Planned	FY 2019 Planned	FY 2020 Planned	FY 2021 Planned	FY 2022 Planned	FY 2023 Planned	FORECASTED COST (2014-2020)	REMAINING COST (2021+)	SCTIB Request
<b>Interstate Mainline Improvements</b>														
I-85/385 DB - Improve System Interchange	Greenville	20,000 C	80,000 C									\$100,000		\$100,000
I-20 Widening from US 378 to Longs Pond Rd	Lexington	2,667 P	2,667 P	2,667 P		48,900 C	48,900 C	48,900 C				\$8,001 \$146,700 \$154,701		\$154,701
I-77 Widening from I-20 to SC 277	Richland	2,084 P	1,032 P		14,242 C	14,242 C	7,121 C					\$3,098 \$35,605 \$38,701		\$38,701
I-85 from S-57 to NC State Line Widening Gossett Rd. (S-57) to SC 105 (10 miles) includes 2 Interchanges Widening SC 105 to SC 18 (6 miles) includes 2 Interchanges Widening SC 18 to US 29 (10 miles) includes 3 Interchanges	Spartanburg/Cherokee	4,000 P	4,000 P		52,000 C	52,000 C	52,000 C	39,200 C	39,200 C	19,800 C		\$8,000 \$156,000 \$98,000 \$262,000	\$171,000	\$262,000
													\$171,000	\$555,402
Subtotal SCTIB Funds		\$28,731	\$87,699	\$98,909	\$115,142	\$147,221	\$88,100	\$19,600				\$555,402		
Total		\$28,731	\$87,699	\$98,909	\$115,142	\$147,221	\$88,100	\$19,600	\$0	\$0	\$0	\$555,402		

<b>Project Fund Legend</b>  <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;"> <span style="display: inline-block; width: 15px; height: 10px; background-color: #cccccc; border: 1px solid black;"></span> SCTIB Funds         </div> <div style="border: 1px solid black; padding: 2px;"> <span style="display: inline-block; width: 15px; height: 10px; background-color: #e0e0e0; border: 1px solid black;"></span> To Be Determined         </div>	<b>Work Phase Legend</b> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;"> <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; text-align: center; line-height: 10px;">P</span> Preliminary Engineering         </div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;"> <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; text-align: center; line-height: 10px;">R</span> Right of Way         </div> <div style="border: 1px solid black; padding: 2px;"> <span style="display: inline-block; width: 10px; height: 10px; border: 1px solid black; text-align: center; line-height: 10px;">C</span> Construction         </div>	<table style="width: 100%;"> <tr> <td style="text-align: right;">Value of Proposed Program (2014-2020)</td> <td style="text-align: right;">\$555,402</td> <td style="text-align: right;">SCTIB Request</td> <td style="text-align: right;">\$555,402</td> </tr> </table>	Value of Proposed Program (2014-2020)	\$555,402	SCTIB Request	\$555,402
Value of Proposed Program (2014-2020)	\$555,402	SCTIB Request	\$555,402			



**ADDENDUM TO ACT 98 COMPLIANT SCTIB APPLICATION**

August 2013

**Proposed Blended Federal-Aid and SCTIB Interstate Program**

PROJECT	COUNTY	FY 2014 Planned	FY 2015 Planned	FY 2016 Planned	FY 2017 Planned	FY 2018 Planned	FY 2019 Planned	FY 2020 Planned	FY 2021 Planned	FY 2022 Planned	FY 2023 Planned	FORECASTED COST (2014-2023)	REMAINING COST (2024+)	SCTIB Request
<b>Interstate Mainline Improvements</b>														
I-85/385 DB - Improve System Interchange	Greenville	20,000 C	80,000 C	80,000 C	60,000 C							\$240,000		\$100,000
I-26 Widening & Express Lane from SL Andrews Rd to Broad River Rd	Richland/Lexington	2,487 P	2,467 P	2,487 P 4,267 R	2,133 R	25,400 C	25,400 C	25,400 C				\$7,400 \$6,400 \$78,200 \$90,000		
I-85 TDM-Modal-Congestion Management Strategies Interchange Improvements and Mainline Widening (Includes Laurens Rd., SC 290, US 29, SC 129 and various widening between White Horse and 85 Bus.)	Greenville Spartanburg	650 P 8,700 P	1,720 P 1,980 C	19,200 C 4,000 P 1,500 R 4,200 C	2,000 P	50,200 C	38,000 C	21,000 C	1,000 R	5,500 P	200 R	\$2,370 \$21,180 \$18,200 \$2,700 \$131,400 \$175,850	\$65,000	
I-526 TDM-Modal-Congestion Management Strategies Interchange Improvements and Mainline Widening International DDI I-26 Interchange Widening US 17 to Clements Ferry Widening East of Clements Ferry	Berkeley Charleston	1,625 P 300 C 5,339 P	5,339 P	50 P 4,400 C 5,339 P	90 P 5,339 P	55 P	37,640 C	37,640 C 59,933 C	18,820 C 59,933 C 53,142 C	59,933 C	53,142 C	\$1,780 \$4,700 \$21,358 \$94,100 \$179,799 \$159,426	\$100,575	
I-20 Widening from US 378 to Longs Pond Rd	Lexington	2,667 P	2,667 P	2,667 P	48,900 C	48,900 C	48,900 C					\$8,001 \$146,700 \$154,701		\$154,701
I-77 Widening from I-20 to SC 277	Richland	2,064 P	1,032 P	14,242 C	14,242 C	7,121 C						\$3,096 \$35,605 \$38,701		\$38,701
I-85 from S-57 to NC State Line Widening Gossett Rd. (S-57) to SC 105 (10 miles) includes 2 Interchanges Widening SC 105 to SC 18 (6 miles) includes 2 Interchanges Widening SC 18 to US 29 (10 miles) includes 3 Interchanges	Spartanburg/Cherokee	4,000 P	4,000 P	52,000 C	52,000 C	52,000 C 39,200 C	39,200 C	19,600 C	57,000 C	57,000 C	57,000 C	\$8,000 \$156,000 \$98,000 \$262,000	\$171,000	\$262,000
												\$1,422,413	\$336,575	\$555,402
<b>Subtotal Federal Program</b>		\$17,061	\$11,506	\$125,422	\$119,722	\$101,095	\$143,973	\$158,295	\$127,575	\$62,142	\$200	\$887,011		
<b>Subtotal SCTIB Funds</b>		\$28,731	\$87,899	\$88,909	\$115,142	\$147,221	\$68,100	\$19,600				\$555,402		
<b>Total</b>		\$45,812	\$99,205	\$214,331	\$234,864	\$248,316	\$232,073	\$177,895	\$127,575	\$62,142	\$200	\$1,422,413		\$555,402

<b>Project Fund Legend</b>		<b>Work Phase Legend</b>		<b>Value of Blended Program=</b>		<b>\$1,422,413</b>	<b>SCTIB Request=</b>	<b>\$555,402</b>
	Federal Program Funds		Preliminary Engineering					
	SCTIB Funds		Right of Way					
	To Be Determined		Construction					

## Financial Plan (continued)

Table 5 below indicates a potential cash and bond utilization scenario in order to meet the cash flow demands of the proposed SCTIB Interstate Program. This scenario assumes a 5% interest rate for the bonds, a required reserve amount equivalent to the annual debt service load and that the bond issuance is timed to only require a partial debt service payment during the first year. Under this scenario, a surplus of funds may be available to direct towards the currently unfunded portion of I-85 in Cherokee County and/or fund any other overruns on the submitted project. It is our understanding that the SCTIB's financial advisor will develop a proposed financing plan for the proposed project as part of the staff review and we stand ready to assist with any cash flow related details that may be required in order to finalize the staff review.

**Table 5**

<b>Financial Plan Scenario</b>								
	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
ACT 98 Funding	\$ 50,000,000	\$ 50,000,000	\$ 50,000,000	\$ 50,000,000	\$ 50,000,000	\$ 50,000,000	\$ 50,000,000	\$ 50,000,000
Cash Carryforward	\$ -	\$ 21,269,000	\$ 125,051,000	\$ 93,142,000	\$ 15,000,000	\$ 65,900,000	\$ -	
Bond Proceeds	\$ -	\$ 162,000,000	\$ -	\$ -	\$ 184,400,000	\$ -	\$ -	\$ -
Reserve from Bond Proceeds		\$ (13,000,000)			\$ (14,800,000)			
SCTIB Interstate Program Expenses	\$ (28,731,000)	\$ (87,699,000)	\$ (68,909,000)	\$ (115,142,000)	\$ (147,221,000)	\$ (88,100,000)	\$ (19,600,000)	TBD
Est. Underwriting & Issuance Costs		\$ (1,019,000)			\$ (1,079,000)			
Debt Service	\$ -	\$ (6,500,000)	\$ (13,000,000)	\$ (13,000,000)	\$ (20,400,000)	\$ (27,800,000)	\$ (30,000,000)	\$ (30,000,000)
<b>NET</b>	<b>\$ 21,269,000</b>	<b>\$ 125,051,000</b>	<b>\$ 93,142,000</b>	<b>\$ 15,000,000</b>	<b>\$ 65,900,000</b>	<b>\$ -</b>	<b>\$ 400,000</b>	<b>\$ 20,000,000</b>
<i>NOTE: Assumes Bonds are 20 year terms @ 5% Interest Rate. First Bond Issuance may be delayed depending on SCTIB Cash Posture.</i>								





## Program Approach

### Milestones to Implement Phases of the Program

As noted earlier, the proposed SCTIB Interstate Program has been designed in a manner to allow rapid deployment of the resources allocated by the Legislature with Act 98 of the 2013 legislative session. \$100,000,000 is proposed to be deployed immediately on the "Shovel Ready" I-85/I-385 Interchange Improvement Project and the balance of the funding is recommended to be deployed towards advancing the next projects on the SCDOT Act 114 Compliant Interstate priority list.

Table 6 on the following page is a time table indicating the chart of events necessary for the implementation of the project.

## Project Approach (continued)

### Milestones to Implement Phases of the Project

Table 6 below is a time table indicating the chart of events necessary for the implementation of the project.

**Table 6**

Activity Name	2014				2015				2016				2017				2018				2019				2020			
	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
<b>I-85/385 System Interchange Improvement</b>																												
Construction																												
<b>I-20 Widening from US 378 to Longs Pond Road</b>																												
Preliminary Engineering																												
Environmental Document																												
Construction																												
<b>I-77 Widening from I-20 to SC 277</b>																												
Preliminary Engineering																												
Environmental Document																												
Construction																												
<b>I-85 Widening from Gossett Road to SC 105</b>																												
Preliminary Engineering																												
Environmental Document																												
RW Acquisition																												
Construction																												
<b>I-85 Widening from SC 105 to SC 18</b>																												
Preliminary Engineering																												
Environmental Document																												
RW Acquisition																												
Construction																												



## Program Approach (continued)

### Complete Description of the Current Status of the Project

#### **I-85 / I-385 System Interchange Improvement**

The environmental document and conceptual plans are complete. The Federal Highway Administration has issued a Finding of No Significant Impact for the project and approved the Interchange Modification Report. The City of Greenville and the City of Mauldin have issued municipal consent. SCDOT recently initiated a Value Engineering study on the conceptual design and is in the process of procuring a design build team for construction. The current schedule would allow the selected design build team to begin work in the spring of 2014. Federal funds are being used for surveys, public involvement activities, preliminary design, preparation of bidding documents and evaluation of design build teams and concepts.

#### **I-20 Widening from US 378 to Longs Pond Road**

SCDOT has conducted a preliminary scoping meeting on the project to identify the termini, major components of work, any substantial environmental impacts, and potential permitting requirements. SCDOT has also developed a preliminary cost estimate and schedule for delivering the project.

#### **I-77 Widening from I-20 to SC 277**

SCDOT has conducted a preliminary scoping meeting on the project to identify the termini, major components of work, any substantial environmental impacts, and potential permitting requirements. SCDOT has also developed a preliminary cost estimate and schedule for delivering the project.

#### **I-85 Widening from Gossett Road to SC 108**

SCDOT has conducted a preliminary scoping meeting on the project to identify the termini, major components of work, any substantial environmental impacts, and potential permitting requirements. SCDOT has also developed a preliminary cost estimate and schedule for delivering the project.

#### **I-85 Widening from SC 105 to SC 18**

SCDOT has conducted a preliminary scoping meeting on the project to identify the termini, major components of work, any substantial environmental impacts, and potential permitting requirements. SCDOT has also developed a preliminary cost estimate and schedule for delivering the project.





## Program Approach (continued)

### Description and Explanation of Potential Obstacles

#### **I-85 / I-385 Interchange**

Many of the potential typical obstacles encountered on similar type projects have already been overcome. FHWA has approved the environmental document and issued a Finding of No Significant Impact for the project. FHWA has also approved the Interchange Modification Report. The only two municipalities impacted by the project have provided written consent for the improvements. Right of way impacts have been limited for a project this size. SCDOT received minimal opposition to the project during the public involvement phase.

The design build team will have to get an approved water quality permit from the Army Corps of Engineers and the South Carolina Department of Health and Environmental Control for anticipated stream impacts. Traffic control and the maintenance of large volumes of traffic during construction will need to be thoroughly investigated prior to beginning construction to ensure minimal disruption to the traveling public.

#### **I-20 Widening from US 378 to Longs Pond Road**

At this time, there have been no major issues identified that should delay the delivery of the project.

This section of I-20 carries a substantial volume of traffic and delays occur in both the morning and afternoon peak travel times. It is anticipated that the majority of the traveling public will be strong proponents of the improvement. There are some residential subdivisions and schools along the corridor in relatively close proximity to the existing interstate. Although all of the widening is proposed to occur towards the median of the roadway and no new right of way is anticipated, experience has shown that interstate widening projects typically reveal a public concern over roadway noise. As part of the environmental process, SCDOT will conduct a thorough analysis of the existing noise levels and the projected noise levels after the project is constructed. Early coordination with the public through public meetings is anticipated to discuss the project, including the noise analysis and any required mitigation for increased noise levels.

Two mainline bridges over a railroad will also be widened or replaced as part of the project which will require early coordination with the railroad company. SCDOT has a unit dedicated to coordinating with railroad companies that are impacted by highway improvement projects. *(continued on next page)*



## Program Approach (continued)

### Description and Explanation of Potential Obstacles

#### **I-20 Widening from US 378 to Longs Pond Road (continued)**

SCDOT has developed a good working relationship with the railroad company and no issues have been identified that cannot be addressed through coordination.

Thorough and direct coordination with any companies that are affected by utility conflicts will occur throughout the project development process to avoid or minimize impacts to utilities within the corridor including any unnecessary downtimes.

#### **I-77 Widening from I-20 to SC 277**

At this time, there have been no major issues identified that should delay the delivery of the project.

This section of I-77 carries a substantial volume of traffic and serves as one of the primary routes connecting northeast Richland County to Fort Jackson. It is anticipated that the majority of the traveling public will be strong proponents of the improvement. There are some residential subdivisions and apartment complexes along the corridor in relatively close proximity to the existing interstate. Although all of the widening is proposed to occur towards the median of the roadway and no new right of way is anticipated, experience has shown that interstate widening projects typically reveal a public concern over roadway noise. As part of the environmental process, SCDOT will conduct a thorough analysis of the existing noise levels and the projected noise levels after the project is constructed. Early coordination with the public through public meetings is anticipated to discuss the project, including the noise analysis and any required mitigation for increased noise levels.

There are two mainline bridges that are proposed to be widened over Windsor Lake and two to be widened over Jackson Creek. SCDOT will coordinate with both Richland County and the US Army Corps of Engineers to avoid, minimize, or mitigate any impacts to these water bodies and any jurisdictional wetlands.

Thorough and direct coordination with any companies that are affected by utility conflicts will occur throughout the project development process to avoid or minimize impacts to utilities within the corridor including any unnecessary downtimes.





## Program Approach (continued)

### Description and Explanation of Potential Obstacles

#### **I-85 from Gossett Rd. (S-57) to SC 18**

At this time, there have been no major issues identified that should delay the delivery of the project.

I-85 carries a significant amount of in-state and out of state traffic. I-85 connects Alabama, Georgia, South Carolina, North Carolina and Virginia. Cities on this route include Montgomery, Alabama, Atlanta, Georgia, and Anderson, Greenville, Spartanburg and Gaffney in South Carolina.

It is anticipated that the majority of the traveling public will be strong proponents of the improvement. Most of the corridor is rural with businesses, churches and house located periodically adjacent to the interstate. The widening is proposed to occur towards the median of the roadway to minimize property and environmental impacts. Minimal right of way may be required at interchange locations and in areas where existing bridges do not have adequate vertical or horizontal clearance. There are 4 proposed interchange improvements along the project corridor. Those interchanges are at Exit 80 (SC110), Exit 87 (S-39), Exit 95 (S-82), and Exit 96 (SC 18). In addition, some of the slips ramps along the corridor are unconventional and may require an updated design.

Several interchanges and bridges within the project corridor have been recently improved and will not need further improvement for this project. These include the interchange with SC 105 and SC 11. The SC 150 overpass bridge was constructed in 2012 and will accommodate the proposed widening.

Experience has shown that interstate widening projects typically reveal a public concern over roadway noise. As part of the environmental process, SCDOT will conduct a thorough analysis of the existing noise levels and the projected noise levels after the project is constructed. Early coordination with the public through public meetings is anticipated to discuss the project, including the noise analysis and any required mitigation for increased noise levels. A noise wall may be required just north of SC 11 in the town of Gaffney.

The only two significant water bodies that may have the potential for minimal impacts as a result of this project are the Pacolet River and the headwaters of Irene Creek.

Thorough and direct coordination with any companies that are affected by utility conflicts will occur throughout the project development process to avoid or minimize impacts to utilities within the corridor including any unnecessary downtimes.





## Program Approach (continued)

### *Confirmation that SCDOT Will Assume Future Maintenance Costs*

All of the interstate routes are located within rights of way owned and maintained by the State of South Carolina. SCDOT will assume responsibility for future maintenance costs within the rights of way of these interstate improvements.

### *Alternative Transportation Solutions Considered*

At this time, no detailed analysis has been performed on the I-20 Widening from US 378 to Longs Pond Road, the I-77 Widening from I-20 to SC 277, the I-85 Widening from Gossett Road to SC 105, or the I-85 Widening from SC 105 to SC 18. As part of the environmental documentation process, SCDOT will complete a rigorous alternatives analysis. The analysis will include a discussion of all reasonable alternatives considered, including alternative transportation solutions, and the basis of elimination for any alternatives that are not selected.

The purpose and need of the I-85/I-385 Interchange Project was to improve operational deficiencies of the system to system interchange. No alternative forms of transportation were deemed a reasonable solution to meet the purpose and need of the project; therefore, no formal studies were prepared to analyze alternative transportation solutions.



Addendum



SCDST





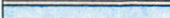



**ADDENDUM TO ACT 98 COMPLIANT SCTIB APPLICATION**

August 2013

**Proposed Blended Federal-Aid and SCTIB Interstate Program**

PROJECT	COUNTY	FY 2014 Planned	FY 2015 Planned	FY 2016 Planned	FY 2017 Planned	FY 2018 Planned	FY 2019 Planned	FY 2020 Planned	FY 2021 Planned	FY 2022 Planned	FY 2023 Planned	FORECASTED COST (2014-2023)	REMAINING COST (2024+)	SCTIB Request
<b>Interstate Mainline Improvements</b>														
I-85/385 DB - Improve System Interchange	Greenville	20,000 C	80,000 C	80,000 C	60,000 C							\$240,000		\$100,000
I-26 Widening & Express Lane from St. Andrews Rd to Broad River Rd	Richland/Lexington	2,467 P	2,467 P	2,467 P 4,267 R	2,133 R	25,400 C	25,400 C	25,400 C				\$7,400 \$6,400 \$76,200 \$90,000		
I-85 TDM-Modal-Congestion Management Strategies Interchange Improvements and Mainline Widening (Includes Laurens Rd., SC 290, US 29, SC 129 and various widening between White Horse and 85 Bus.)	Greenville Spartanburg	650 P 6,700 P	1,720 P 1,980 C	19,200 C 4,000 P 1,500 R 4,200 C	2,000 P 50,200 C	36,000 C	21,000 C	1,000 R	5,500 P 9,000 C	9,000 C	200 R	\$2,370 \$21,180 \$18,200 \$2,700 \$131,400 \$175,850	\$65,000	
I-526 TDM-Modal-Congestion Management Strategies Interchange Improvements and Mainline Widening International DD I-26 Interchange Widening US 17 to Clements Ferry Widening East of Clements Ferry	Berkeley Charleston	1,625 P 300 C 5,339 P	5,339 P	50 P 4,400 C 5,339 P	50 P 5,339 P	55 P 37,640 C	37,640 C 59,933 C	18,820 C 59,933 C 53,142 C	59,933 C 53,142 C	53,142 C		\$1,760 \$4,700 \$21,356 \$94,100 \$179,799 \$159,426 \$461,161	\$100,575	
I-20 Widening from US 378 to Longs Pond Rd	Lexington	2,667 P	2,667 P	2,667 P	48,900 C	48,900 C	48,900 C					\$8,001 \$146,700 \$154,701		\$154,701
I-77 Widening from I-20 to SC 277	Richland	2,064 P	1,032 P	14,242 C	14,242 C	7,121 C						\$3,096 \$35,605 \$38,701		\$38,701
I-85 from S-57 to NC State Line Widening Gossett Rd. (S-57) to SC 105 (10 miles) Includes 2 interchanges Widening SC 105 to SC 18 (6 miles) Includes 2 interchanges Widening SC 18 to US 29 (10 miles) Includes 3 interchanges	Spartanburg/Cherokee	4,000 P	4,000 P	52,000 C	52,000 C	52,000 C 39,200 C	39,200 C	19,900 C	57,000 C	57,000 C	57,000 C	\$8,000 \$156,000 \$98,000 \$262,000	\$171,000	\$262,000
												\$1,422,413	\$336,575	\$555,402
Subtotal Federal Program		\$17,081	\$11,506	\$125,422	\$119,722	\$101,095	\$143,973	\$168,295	\$127,575	\$62,142	\$200	\$867,011		
Subtotal SCTIB Funds		\$28,731	\$87,699	\$68,909	\$115,142	\$147,221	\$88,100	\$19,600				\$555,402		
Total		\$45,812	\$99,205	\$194,331	\$234,864	\$248,316	\$232,073	\$177,895	\$127,575	\$62,142	\$200	\$1,422,413		

<b>Project Fund Legend</b>	<b>Work Phase Legend</b>	Value of Blended Program=	\$1,422,413	SCTIB Request=	\$555,402
 Federal Program Funds	 Preliminary Engineering				
 SCTIB Funds	 Right of Way				
 To Be Determined	 Construction				