

Project Budget

Introduction

The Town of East Spencer is requesting **\$25 million** in Rebuilding American Infrastructure with Sustainability and Equity (RAISE) planning grant funds to develop environmental documentation, finalize right of way (ROW) acquisition and construct the I-85/SR 2114 interchange in East Spencer, North Carolina. The total Developing an East Spencer Interchange for a Growth Nexus (DESIGN) project cost is anticipated to be \$39,980,340. Costs are broken out as per specifications in the Notice of Funding Opportunity (NOFO) in the tables below.

Table 1: Budget Overview

Funding Source	RAISE	Other Funds Source	Other Funds Total	Total Funding
Project Development	\$1,000,000			\$1,000,000
ROW Acquisition	\$5,000,000			\$5,000,000
Utility Relocation	\$515,000			\$515,000
Construction	\$18,485,000	Town of East Spencer Loan TIFIA Program Loan Town of East Spencer Funds NC Legislative Grant	\$3,500,000 \$1,500,000 \$4,980,340 \$5,000,000	\$33,465,340
Total Project Costs	\$25,000,000		\$14,980,340	\$39,980,340

Table 2: Cost Per 2020 Census Tracts

2020 Census Tracts	Project Costs Per Census Tract
Rowan 508	\$39,980,340
Total Project Cost: \$39,980,340	

Table 3: Cost Per 2010 Census Tracts

2010 Census Tracts	Project Costs Per Census Tract
Rowan 508	\$39,980,340
Total Project Cost: \$39,980,340	

Table 4: Urban vs. Rural Costs

Urban and Rural	Project Costs
Urban (2020 Census-designated urban area with a population greater than 200,000)	\$13,193,512
Rural (Located outside of a 2020 Census-designated urban area with a population greater than 200,000)	\$26,786,828
Total Project Cost: \$39,980,340	

Table 5: Construction Cost Estimate

Description	Quantity	Unit	Price/Unit	Amount
Clearing and Grubbing	24.0	Acre	\$50,000.00	\$ 1,200,000
Unclassified Excavation	332,980	CY	\$8.50	\$ 2,830,330
Drainage - 4-Lane Divided, Shoulder	4.00	Miles	850,000.00	\$3,400,000
Fine Grading	51,780	SY	\$2.75	\$142,395
Subgrade Stabilization	53,960	SY	\$12.00	\$647,520
-L- Concrete Pavement, Widening	11,185	SY	\$152.00	\$1,700,120
-Y1- Asphalt Pavement, Wedging/Resurfacing	6,000	SY	\$37.00	\$222,000
-Y1- Asphalt Pavement, Widening	3,870	SY	\$80.00	\$309,600
-Y2- Asphalt Pavement, Wedging/Resurfacing	2,330	SY	\$37.00	\$86,210
-Y2- Asphalt Pavement, Widening	720	SY	\$80.00	\$57,600
-Y1RPA- Asphalt Pavement, Full Depth	3,510	SY	\$68.00	\$238,680
-Y1RPB- Asphalt Pavement, Full Depth	3,340	SY	\$68.00	\$227,120
-Y1RPC- Asphalt Pavement, Full Depth	7,325	SY	\$68.00	\$498,100
-Y1LPC- Asphalt Pavement, Full Depth	3,900	SY	\$68.00	\$265,200
2'-6" Concrete Curb & Gutter	1,710	LF	\$30.00	\$51,300
5" Monolithic Concrete Islands	990	SY	\$82.00	\$81,180
Precast Reinforced Concrete Barrier, Single Faced	440	LF	\$105.00	\$46,200
Steel Beam Guardrail	325	LF	\$27.00	\$8,775
Guardrail Anchor Units, Type B-77	4	Each	\$2,950.00	\$11,800
Guardrail Anchor Units, Type TL-3	4	Each	\$3,600.00	\$14,400
Remove Existing Guardrail	620	LF	\$1.50	\$930
Erosion Control	67	Acre	\$60,000.00	\$4,020,000
Pavement Markings - Thermo and Markers				
-L-	1.00	Miles	115,000.00	\$115,000
-Y1-	0.42	Miles	\$35,000.00	\$14,700
-Y1RPA-	0.98	Miles	\$32,000.00	\$31,360
-Y1RPB-	0.48	Miles	\$30,000.00	\$14,400
-Y1RPC-	0.65	Miles	\$32,000.00	\$20,800
-Y1LPC-	0.32	Miles	\$20,000.00	\$6,400
-Y2-	0.16	Miles	\$35,000.00	\$5,600
Traffic Control - Interchange	1.00	LS	\$400,000.00	\$400,000
Structures				
-L- over I-40 Single Span Widening (110' x 13.5')	1,485	SF	\$250.00	\$371,250
-L- Concrete Approach Slabs (2 @ 25' x 13.5')	675	SF	\$50.00	\$33,750
Utility Construction				
Utility Construction (per Utility Unit, 6/13/2023)	1	LS	\$17,300.00	\$17,300
Misc. & Mob (15% Structures & Utilities)	1	LS	\$63,400.00	\$63,400
Misc. & Mob (45% Functional)	1	LS	\$7,500,580	\$7,500,580
Contract Cost				\$24,654,000
Inflation (5 percent per year 2023 to 2025)				\$2,465,400
E. & C. 23.4%				\$6,345,940
Construction Cost				\$33,465,340

Budget Narrative

Funding Sources

In addition to the RAISE grant, East Spencer will secure the remaining funding through Town funds, as shown in *Table 1*. Additional documentation on funding is provided in the supplemental materials.

Contingency Amount and Plan

Project concept designs were developed in 2023 and are provided in the supplemental materials. Cost estimates initially included a 17 percent contingency per standard North Carolina Department of Transportation (NCDOT) cost estimation protocols. Because the estimate is more than one year old, the estimate was updated for inflation. To ensure delivery, the contingency amount was increased to 23.4 percent. NCDOT policy is to anticipate an annual inflation rate of 5 percent, resulting in an estimated construction cost of \$33,465,340. NCDOT will oversee construction work and has developed [cost containment measures](#). These include a Cost Containment Planning Checklist and a Cost Containment Worksheet. Both forms are included in the supplemental materials.

Level of Design

Current cost estimates are based on conceptual designs (roughly 15 percent plans) that were completed in 2023. These designs are based on existing aerial photography. Once RAISE funding is secured, 60 percent plans will be developed to complete the environmental document and right of way (ROW) determinations.

Cost Estimates

Quantities for cost estimates were developed by the NCDOT Feasibility Studies Unit (FSU) project consultant. Based on these quantities, NCDOT developed cost estimates for construction, utilities and ROW.

Cost Share

As the Town of East Spencer is an APP and an HDC, no cost share is required; however, the Town will supply \$14,980,340 to complete the construction projects. This will amount to a practical match of over 37 percent.