



NCDOT Prioritization 3.0 Project Summary

SPOT ID: H090163-A

Mode: Highway

Status: Submitted

US-421

From/Cross Street: Tennessee Line

Specific Improvement Type: 1 - Widen Existing Roadway

To: US 321-US 421 Junction Near Vilas

Project Category: Regional Impact

Length: 6.8

TIP#: R-2615A

Fully Funded in Draft STIP? No

Cost to NCDOT: \$86,712,000

Description:

Tennessee Line to US 321-US 421 Junction near Vilas. Widen to Multi-Lanes.

Division(s): Division 11

County(s): WATAUGA

MPOS(s)/RPO(s): High Country RPO

Project Location



Statewide Mobility Total Score: 0

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
	N/A	N/A
Totals: Weight: 0% Weighted Score: 0		

Regional Impact Total Score: 0

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (25%) 31.78	Percent: 15% Points:	Percent: 15% Points:
Safety (10%) 0.00		
[Travel Time] Benefit/Cost (25%) 0.11		
Accessibility / Connectivity (10%) 21.36		
Totals: Weight: 70% Weighted Score: 10.11		

Division Needs Total Score: 0

Quantitative Score	Division Engineer Local Input Points	MPO/RPO Local Input Points
Congestion (V/C) (20%) 31.78	Percent: 25% Points:	Percent: 25% Points:
[Travel Time] Benefit/Cost (20%) 0.11		
Safety (10%) 0.00		
Totals: Weight: 50% Weighted Score: 6.38		

Project Data ***Existing Conditions**

Existing Cross-Section:	
Speed Limit:	55
Length (miles):	6.8
Facility Type:	Two Lane Highway
Access Control:	None
Functional Classification:	Minor Arterial
Terrain Type:	Mountainous
Lane Width:	12
Paved Shoulder Width:	0
Roadway has Curb & Gutter?	No
Volume (AADT):	7441.78
Capacity:	15500.02
Volume/Capacity Ratio:	0.48
% Autos:	94%
% Trucks:	6%
Truck Volume:	435.61
Crash Density:	0
Crash Severity:	0
Critical Crash Rate:	0
Crash Frequency:	0
Severity Index:	0
County Tier Designation:	3
Non-Interstate STRAHNET Route?	No
Average Commuting Time:	22
Existing Median Type (for Cost Estimation):	Undivided
Pavement Condition Rating:	87
Actual Congested Speed:	51
Travel Time Index:	1.08

Project Benefits

Project Cross-Section:	4A - 4 Lane Divided (46' Depressed Median) with Paved Shoulders
Speed Limit:	55
Length (miles):	6.8
Facility Type:	Multi-Lane Highway
Access Control:	Partial
Functional Classification:	Other Principal Arterial
Terrain Type:	Mountainous
DOT Design Lane Width:	12
DOT Design Paved Shoulder Width:	2
Travel Time Savings for 30 Years (Total):	430522.88
Travel Time Savings for 30 Years (Autos):	405322.11
Travel Time Savings for 30 Years (Trucks):	25200.77
Long-Term Employment:	
% Change in Economy:	
Provides Direct Connection to Transportation Terminal?	No
Does project upgrade how the roadway functions?	Yes
In CTP or LRTP?	No
CTP/LRTP Name:	
CTP/LRTP Completion Year:	
Submitted by:	Division 11

* Data reflects calculations which include weighted averages (where applicable) and represent raw output from the Department's SPOT On!ine tool and associated databases.

Project Ownership**Division**

Division	Percent	Regional Impact	Division Needs
Division 11	100%	0	0
	0%	0	0
	0%	0	0
TOTAL Division Points		0	0

MPO/RPO

MPO/RPO	Percent	Regional Impact	Division Needs
High Country RPO	100%	0	0
	0%	0	0
	0%	0	0
TOTAL MPO/RPO Points		0	0

Project Cost and Source

Construction Cost:	\$53,808,000	TIP Unit
Right-of-Way Cost:	\$29,379,000	Cost Estimation Tool
Utilities Cost:	\$3,525,000	Cost Estimation Tool
Total Project Cost:	\$86,712,000	
Other Funding:	\$0	None
Cost to NCDOT :	\$86,712,000	