Fiscal Years 2024 through 2026 Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation Competitive Grant Program, Resilience Grant Application, PROTECT



The NC 88 Mountain Corridor Resilience and Stabilization Project

Budget Narrative

NCDOT Priority #11

Applicant:
North Carolina Department of Transportation

October 9, 2026

Budget Narrative

The North Carolina Department of Transportation (NCDOT), requests Resilience Improvement funding under the federal PROTECT program for the NC 88 Mountain Corridor Resilience and Stabilization Project ("the Project"). The Project will modernize and fortify a highly vulnerable 3.76-mile mountainous section of NC 88 stretching from the NC 194 intersection in Smethport to the NC 194/NW School Road intersection in Warrensville. Located in the flood-prone Blue Ridge Mountain region, this critical corridor suffers from sharp curves and severe structural vulnerabilities to flooding along Buffalo Creek. The proposed project will replace two critically at-risk bridges over Buffalo Creek which were built in 1949 and are now rated as in poor condition (4 out of 10). The Project will also implement curve realignments, construct systemic drainage improvements, and add 5-foot paved shoulders along with a modern roundabout.

The estimated total cost of the Project is $104.9 million; the estimated eligible future costs of the Project total $81.7 million in year of expenditure dollars (YOE$). The North Carolina Department of Transportation (NCDOT) is requesting $60 million in PROTECT grant funding to complete the Resilience Improvement Project. If awarded, NCDOT commits to providing the required non-federal funding match, which calculates to $11.5 million (14% of total eligible costs); the balance of funding $10.1 million, is anticipated to come from Other Federal sources: Surface Transportation Block Grant Program suballocation BGLT5. The source of funds for the NCDOT match will come from the State Highway Trust Fund. The match funds are secured, available and can be used for all components and completion of the Project. Contingency is included for each task, and any cost overruns will be covered by NCDOT.

The Project includes costs for mobilization and site prep, utilities, roadway construction, structures like bridges, culverts, and walls, and miscellaneous expenses, engineering and contingency (E&C), grant administration, and escalation. Costs were estimated in 2024 by NCDOT's contractor, and escalated by 4% per year to the midpoint of the estimated spending year. NCDOT expects to begin mobilization in third quarter of 2028, and construction completion targets the third quarter of 2032.

1.1 Future Eligible Costs: Construction Budget

1.1.1 Administrative and Legal Expenses

NCDOT includes a fee for grant administration estimated at $3.4 million. Escalation of 4% per year for four years results in a total of $3.9 million ($YOE).

1.1.2 Site Work

Site work includes mobilization, construction surveying, clearing and grubbing, reinforcing the bridge approach fills, and earthwork. The majority of sitework is attributed to the over 220,000

cubic yards of rock excavation, estimated to cost over $10 million. Site work totals $20.8 million and escalation adds $1.7 million for a total of $22.5 million ($YOE).

1.1.3 Construction

Construction includes costs for roadway construction and structures, as well as a flood gauge. In 2024 dollars, the construction costs total $29.4 million. Escalation brings utilities to 2029, and roadway construction and structures to 2031, adding $4.7 million for a total of $34.1 million (YOE$).

1.1.1 Miscellaneous

Miscellaneous costs are added as a lump sum based on 5% of the costs of structures and utilities ($400,000) and 20% of the roadway total ($7.9 million) in 2024 dollars. Escalation adds another $1.4 million, for a total of $9.8 million (YOE$).

1.1.2 Contingencies

The Project estimate includes contingency of 16% on top of the estimated contract costs (all other costs above) of $11.1 million in 2024 dollars. Continency is apportioned according to each task's share of the total Project cost. Table 1 shows the Contingency by task, and totals $11.0 million ($2026).

Table 1. Contingency by Task

Task Description	2026 $
Mobilization and Site Prep	$3,509,467
Roadway Construction	$3,891,558
Structures	$1,465,264
Miscellaneous	$1,523,687
Engineering & Contingency	0
Grant Administration	$619,563
Total	**$11,009,539**

1.1.3 Total Costs

The future eligible Project budget by task is shown in Table 2 and includes the 4% per year escalation cost included in each line item to bring its 2024 cost estimate into year of expenditure (YOE) dollars. The Project budget also includes contingency for each task. Table 3 displays the total Project cost (inclusive of prior expenditures and costs of underway tasks) and the eligible future expenditures. Note that PE, ROW, and Utilities are not included as future eligible costs because those stages of construction are prior expenditures (totaling $6,527,700 to date) and/or underway and will be completed before mobilization begins for the PROTECT-funded Project elements.

Table 2. Future Eligible Project Budget by Task

Task Description	YOE $	2024 $	Years of Escalation	Cost of Escalation
Mobilization and Site Prep	$22,530,346	$20,830,571	2	$1,699,775
Roadway Construction	$24,983,325	$21,355,851	4	$3,627,474
Structures	$9,406,815	$8,040,985	4	$1,365,830
Miscellaneous	$9,781,881	$8,361,592	4	$1,420,288
Engineering & Contingency	$11,009,539	$9,411,000	4	$1,598,539
Grant Administration	$3,977,519	$3,400,000	4	$577,519
Total	**$81,689,425**	**$71,400,000**		**$10,289,425**

Table 3. Budget by Funding Source and Share

Task Description	Project Total ($YOE)	Future Eligible Costs ($YOE)
PE	$ 5,243,923	
ROW	$ 16,300,000	
Utilities	$ 1,700,000	
Mobilization and Site Prep	$ 22,530,346	$ 22,530,346
Roadway Construction	$ 24,983,325	$ 24,983,325
Structures	$ 9,406,815	$ 9,406,815
Miscellaneous	$ 9,781,881	$ 9,781,881
Engineering & Contingency	$ 11,009,539	$ 11,009,539
Grant Administration	$ 3,977,519	$ 3,977,519
Total	**$ 104,933,348**	**$ 81,689,425**
Federal PROTECT (87%)		$ 60,000,000
Non-Federal PROTECT Match (13%)		$ 8,965,517
Remaining Project Costs		$ 12,723,908
Other Federal (80%)		$ 10,179,126
Other Federal Match (20%)		$ 2,544,782

