

SMART SCALE PROPOSED BUDGET INCREASE 1-81 EXIT 17 INTERCHANGE MODIFICATION – BRISTOL DISTRICT

Commonwealth Transportation Board

SMART SCALE Policy

CTB Policy for Scope Changes and/or Budget Increases, February 2020

- A project that has been selected for funding must be re-scored and the funding decision re-evaluated if there are significant changes to either the scope or cost of the project, such that the anticipated benefits relative to funding requested would have substantially changed.
- If an estimate increases prior to project advertisement or contract award that exceeds the following thresholds, and the applicant is not covering the increased cost with other funds, Board action is required to approve the budget increase:
 - i. Total Cost Estimate <\$5 million: 20% increase in funding requested
 - ii. Total Cost Estimate \$5 million to \$10 million: \$1 million or greater increase in funding requested
 - iii. Total Cost Estimate > \$10 million: 10% increase in funding requested; \$5 million maximum increase in funding requested



Project Information

I-81 Exit 17 Interchange Modification (UPC 109419)

- Submitted by the Town of Abingdon in Round 1 of SMART SCALE
 - Total Original Project Cost: \$21,200,000
 - Total SMART SCALE Request: \$21,200,000
 - Request funded with DGP and HPP funds
- Project is VDOT administered
 - A \$10.6M budget increase was previously approved by the CTB in October 2018
 - Project was advertised and VDOT received bids on November 18, 2020
 - There is currently a \$1.5M shortfall for award
- Original Scope Included:
 - Relocate and extend I-81 northbound on- and off-ramps
 - Relocate intersection for I-81 northbound on- and off-ramps
 - Reconfigure property access due to road closures from construction of new ramps



Change in Project Design

What changed after Project Selection?

- Signal improvements at I-81 southbound ramps were included in the project scope
 - This allows both the northbound ramps signal and southbound ramps signal to be upgraded simultaneously and facilitates better operations of the interchange
- Proposed signal at Gravel Lake Road was removed from the project scope
 - During project development it was determined that the signal location would impact wetlands and further review indicated the signal was not warranted for the amount of traffic
- Roundabout was included in project scope along the realignment of Gravel Lake Road
 - During the public involvement process requests were made to include a roundabout at the proposed entrance for several industrial businesses along the proposed realignment for Gravel Lake Road



Project Location





Shortfall for Award

Factors contributing to \$1.5M shortfall for award

- Design refinements enhance safety operations of the interchange and do not adversely impact project benefits
- Design refinements do not contribute to the shortfall for award
- Additional costs related to environmental cultural resources monitoring at archaeological sites on project
- Higher unit prices for asphalt and aggregate
- Higher utility relocation costs



Project Budget Increase

- VDOT received bids and has determined that price proposals are responsive and represent good competition
 - Estimated budget increase required for award is \$1.5M
 - Total budget increase of \$12.1M or 57% increase overall
 - Sufficient deallocated DGP funds are available to cover the increase

	Original Application	Previously Revised (Approved 10-30-2018)	Current
Total \$	\$21.2M	\$31.8M	\$33.3M
SMART SCALE \$	\$21.2 (\$12.3 DGP+\$8.9MHPP)	\$31.8M (increase of \$10.6M funded with \$7.6M DGP+\$3.0M HPP)	\$33.3M (increase of \$1.5M)
Score	1.48	0.99	0.94
Funding Scenario	10/10	Dropped five spots; would not have been funded	Drops another spot
Expenditures as of 12/2/20			\$18.9M



Recommendation for Action

Approve budget increase request so that the project can be awarded

Fund increase from surplus Bristol District DGP balances

Bristol DGP Surplus Funds	Amount
Surplus	\$12,157,875
Less Proposed Budget Increase for UPC 109419	\$1,499,746
Total Remaining	\$10,658,129



