# CapitalBudgetRequest

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Overview				
Agency	Virginia Polytechnic Institute and State University (208)			
Project Code	none			
Project Type	Improvements-Life Safety Code			
Biennium	2024-2026			
Budget Round	Initial Bill			
Bill Version	Regular Session			
Request Type	New Project			
Project Location	Roanoke Area			
Facility/Campus	Blacksburg Main Campus			
Source of Request	Agency Request			
Infrastructure Element	Accessibility			

Contains O & M costs? No

Contains significant technology costs? No

Contains significant energy costs? No

Possible that project will be used by other than a state or local governmental entity, or for research under sponsored programs (higher education)? No

# **Agency Narrative**

### Agency Description

**Executive Summary:** 

The university's life, health, safety, and accessibility initiative for the campus is an ongoing effort. The university has made important progress on these compliance items over time working together with the Commonwealth.

The university has developed a comprehensive solution to eliminate accessibility barriers for pedestrian pathways as part of its 2018 Campus Master Plan and is working to implement components of the solution over time.

The focus of this request is campus pedestrian accessibility improvements and life safety improvements that are beyond the scope of normal maintenance reserve and would not be addressed as part of other capital projects.

The university has identified high priority accessibility improvements that reduce barriers and improve safety at particularly challenging pedestrian intersections in the core of the university's Blacksburg campus. These improvements will establish a system of accessible connecting pathways to ensure accessible service for campus.

This project is to address the area of campus with the most significant barriers and greatest needs. The scope includes installing 87,500 square feet of ADA compliant pathways, and the sitework necessary to overcome grade changes equivalent to a four-story building. This request is for \$8 million of General Funds to continue making safety, accessibility, and health improvements around campus as part of the E&G infrastructure improvements.

## Project Description:

As part of the university's comprehensive plan to address pedestrian accessibility and mobility needs, it has evaluated and prioritized zones of campus for improvements to eliminate barriers and challenging pedestrian intersections and pathways.

The scope of this project is the southeastern zone of the main campus. This area of campus is a major pedestrian throughway connecting heavily used academic, research, and student services facilities.

The existing campus infrastructure and pathways that connect and provide mobility in this area have the most significant elevation variances, are not sufficiently accessible to accommodate common mobility needs, and are not compliant with the Americans with Disabilities Act.

The project scope includes installing a system of approximately 87,500 square feet of pathways including dedicated rest-points in order to establish a safe and appropriate service for all members and visitors of the campus. Significant sitework and grading will be required to achieve barrier-free accessibility.

### Justification

#### Program Description:

Virginia Tech is a land grant-university with a three-part mission of instruction, research, and outreach that brings tens of thousands of students, faculty, staff, and visitors to campus on a daily basis. Ensuring the safety, health, and accessibility of the campus environment is critical to the long-term success of the university and its service to the Commonwealth.

The main academic campus covers approximately one thousand acres with 12 million square feet distributed across hundreds of buildings that surround an iconic Drill Field. The campus topography reflects mountains of western Virginia with steep grades equal to a four-story tall building from its lowest to highest point. The university has developed a comprehensive solution to eliminate accessibility barriers for pedestrian pathways as part of its 2018 Campus Master Plan and is working to implement components of the solution in phases and over time

### Funding Plan:

The scope of this project is Educational and General campus infrastructure improvements; thus, the funding plan calls for 100 percent General Fund support for this \$8 million project.

## **Options Considered:**

The campus physical improvements required to establish an appropriate mobility system in the southeastern corridor of campus exceed the university's operating budget funding capacity or Maintenance Reserve funding. Thus, capital funding is necessary to complete the project scope. Permanently deferring or delaying this project to a future biennium is not an option because of the growing backlog of campus safety and accessibility projects and barriers to service for students, faculty, staff and campus visitors. While delaying this project does not have a direct cost impact, it does result in a lack of accessible services and increase the odds of slips, trips, and falls which often result in litigation.

### Methodology

Cost Explanation and Methodology:

# A. Methods Used to Estimate Costs:

The costs are based on internal estimates developed by university staff from comparable past and current accessibility improvements and upgrades around campus. The project will utilize the traditional Design, Bid, Build delivery method. Project costs are estimated to a mid-point of construction in 2027 using escalation in accordance with the instructions for developing the Six-Year Capital Outlay Plan and the rate utilized in the most recent CR-1 Project Planning form (as of February 2023).

On a total project cost basis, inclusive of design and construction, the unit costs based on the surface area of the pathways are \$91 per surface area square foot. The unit construction costs of the project are \$71 per surface area square foot.

- B. The proposed costs include the following considerations to ensure the project fully meets the needs of the program and the university:
- 1) These projects represent improvements to pedestrian pathways in congested areas of campus. This will necessitate the installation of temporary routes during construction to maintain pedestrian flow while implementing the new work.
- 2) The project will alter the existing site significantly, including demolition of existing hardscapes and new earthwork.

Funding Request				
Phase	Year	Subobject	Fund	Amount
Full Funding	2025	2411 - Unallotted Capital Amount	01000 - General Fund	\$8,000,000
			Total	\$8,000,000

Project Costs			
Cost Type	Requested Funding		
Acquisition Cost	\$0		
Building & Built-in Equipment	\$6,199,940		
Sitework & Utility Construction	\$0		
Construction Cost Total	\$6,199,940		
DESIGN & RELATED SERVICE ITEMS			
A/E Basic Services	\$233,165		
A/E Reimbursables	\$2,916		
Specialty Consultants (Food Service, Acoustics, etc.)	\$5,829		
CM Design Phase Services	\$23,316		
Subsurface Investigations (Geotech, Soil Borings)	\$14,573		
Land Survey	\$0		
Archeological Survey	\$0		
Hazmat Survey & Design	\$0		
Value Engineering Services	\$0		
Cost Estimating Services	\$23,316		
Other Design & Related Services	\$93,265		
Design & Related Services Total	\$396,380		
INSPECTION & TESTING SERVICE ITEMS			
Project Inspection Services (inhouse or consultant)	\$46,633		
Project Testing Services (conc., steel, roofing, etc.)	\$23,316		
Inspection & Testing Services Total	\$69,949		
PROJECT MANAGEMENT & OTHER COST ITEMS			
Project Management (inhouse or consultant)	\$242,128		
Work By Owner	\$0		
BCOM Services	\$5,829		
Advertisements	\$5,829		
Printing & Reproduction	\$1,166		
Moving & Relocation Expenses	\$0		
AV Cabling	\$0		
IT Cabling	\$0		
Telephone Cabling	\$0		
AV Equipment	\$0		
IT Equipment	\$29,146		
Telephone Equipment	\$0		
Signage	\$5,830		
Demolition Demolition	\$34,975		
Hazardous Material Abatement	\$0		
Utility Connection Fees	\$0		
Utility Relocations	\$408,037		
Commissioning	\$406,037		
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Miscellaneous Other Costs  Project Management & Other Costs Total	\$291,456		
Project Management & Other Costs Total	\$1,024,396		
Furnishings & Movable Equipment	\$0		
Construction Contingency TOTAL PROJECT COST	\$309,335		
TOTAL PROJECT COST	\$8,000,000		
Size and Scope			

Unit of Measure

Units

Cost Per Unit

Cost Type

Acquisition Cost		0	\$0
Construction Cost	Surface Area Sqft	87,536	\$71
Total Project Cost	Surface Area Sqft	87,536	\$91

Supporting Documents					
File Name	File Size	Uploaded By	Upload Date	Comment	
Attachment A - Map of Scope .pdf	3,004,635	Rob Mann	6/20/2023		
LHSCC Program Chart 6.2023.pdf	92,796	Matthew Digman	6/21/2023		
CR-1 LHSCC 6.2023.xlsx	603,851	Matthew Digman	6/21/2023		

Workflow History				
User Name	Claimed	Submitted	Step Name	Submit Action
Rob Mann	06/05/2023 01:20 PM	06/05/2023 01:20 PM	Enter Capital Budget Request	Continue Working
Rob Mann	06/05/2023 01:20 PM	06/05/2023 01:21 PM	Continue Drafting	Continue Working
Matthew Digman	06/15/2023 03:50 PM	06/15/2023 04:06 PM	Continue Drafting	Continue Working
Matthew Digman	06/16/2023 02:41 PM	06/16/2023 02:48 PM	Continue Drafting	Continue Working
Matthew Digman	06/16/2023 04:13 PM	06/16/2023 04:18 PM	Continue Drafting	Continue Working
Matthew Digman	06/16/2023 04:18 PM	06/16/2023 04:19 PM	Continue Drafting	Continue Working
Matthew Digman	06/16/2023 04:19 PM	06/16/2023 04:20 PM	Continue Drafting	Continue Working
Rob Mann	06/19/2023 01:28 PM	06/19/2023 01:32 PM	Continue Drafting	Continue Working
Matthew Digman	06/20/2023 02:39 PM	06/20/2023 02:41 PM	Continue Drafting	Continue Working
Matthew Digman	06/20/2023 02:49 PM	06/20/2023 02:59 PM	Continue Drafting	Continue Working
Matthew Digman	06/20/2023 02:59 PM	06/20/2023 03:00 PM	Continue Drafting	Continue Working
Rob Mann	06/20/2023 04:11 PM	06/20/2023 04:16 PM	Continue Drafting	Continue Working
Matthew Digman	06/21/2023 12:51 PM	06/21/2023 12:51 PM	Continue Drafting	Continue Working
Matthew Digman	06/21/2023 12:58 PM	06/21/2023 12:59 PM	Continue Drafting	Continue Working
Matthew Digman	06/21/2023 04:06 PM	06/21/2023 04:06 PM	Continue Drafting	Continue Working
Matthew Digman	06/21/2023 04:21 PM	06/21/2023 04:21 PM	Continue Drafting	Continue Working
Rob Mann	06/21/2023 05:55 PM	06/21/2023 06:25 PM	Continue Drafting	Submit for Agency Review
Rob Mann	06/22/2023 10:53 AM	06/22/2023 10:53 AM	Agency Review Step 1	Ready for DPB Bulk Submit
Rob Mann	06/22/2023 05:11 PM	06/22/2023 05:11 PM	Ready for DPB Submission	Submit to DPB
			DPB Review	