

Capital Budget Request

Overview	
Biennium	2012-2014
Budget Round	Introduced Bill
Request Origin	Previously Submitted
Agency	208: Virginia Polytechnic Institute and State University
Project Title	Construct Veterinary Medicine Instruction Addition
Project Type	New Construction
Facility/Campus	Blacksburg Main Campus
Project Location	Roanoke Area
Building Name	Veterinary Medicine Instruction Addition
Building Name	
Building Function	Higher Education Academic -- 100% E&G
Contains significant energy costs?	No
Contains significant technology costs?	No
Infrastructure Element	Classroom / Multi-Purpose

Supporting Documents				
File Name	File Size (Kb)	Uploaded By	Uploaded Date	Comment

Narrative	
Description	<p>This request is for a 100 percent nongeneral fund debt authorization to complete an addition to the College of Veterinary Medicine. This project has been initiated under the university's restructuring authority using entirely nongeneral fund resources and the project is in design. This request is for authorization to issue debt through the Virginia College Building Authority (VCBA) 9(d) pooled debt program to finance project costs. The state's VCBA program carries a lower cost of capital than the university's stand-alone issuance costs, and the lower financing costs will benefit the students. The debt service will be covered by university nongeneral fund revenues under the full faith and credit of Virginia Tech. The discussion below covers the normal narrative information about the project.</p> <p>This project has been on the university's plan since 1993, formerly titled Veterinary Medicine Addition. The existing instructional and office space in the College of Veterinary Medicine, constructed over twenty-five years ago, is no longer capable of meeting the needs and demands of the school's modern clinically-based teaching and learning program. The faculty is currently housed in a limited number of substandard open cubicles which are far below the recommended state guideline size. The current open cubicle environment is inadequate for meeting with and advising students, for holding confidential conversations with other faculty and research partners, and for housing the expanded technology for preparation of instructional materials. Further, the College is expanding its faculty as it grows its clinical and outreach programs and as it successfully competes for externally funded research. The College has outgrown the office space planned in the 1960's and recruitment of new faculty is difficult because of the ill-suited space. Existing large classrooms in the Veterinary Medicine facility are over scheduled and a large new classroom and specialized teaching lab with lab support spaces are required to meet expanding class offerings.</p> <p>The project scope is based on an internal analysis of the space requirements to reach the basic standards of faculty office space and student instruction space. The building life expectancy is about 50 years with proper maintenance.</p>

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Justification

Program description:

This project requests authorization to construct a building addition of about 24,000 gross square feet for faculty office, related workspace, and classrooms/teaching labs. The existing office space to be vacated will be renovated for faculty office space meeting university space standards as part of the project to minimize the amount of new construction.

The College of Veterinary Medicine enrolls approximately 460 graduate and professional student including 360 Doctor of Veterinary Medicine and 100 graduate students. The college employs 95 faculty, is a leading biomedical and clinical research center, and provides professional continuing education services for veterinarians practicing throughout the two states.

The existing classroom and office space in the College of Veterinary Medicine, constructed over twenty-five years ago, is no longer capable of meeting the needs and demands of the school's modern clinically-based teaching and learning program. Faculty are currently housed in a limited number of eight-foot by eight-foot open cubicles which are far below the recommended state guideline size. The existing overcrowded, open system results in the faculty's academic and scholarly books, papers and specimens being stacked on floors and in hallways. The academic program is hampered by the space constraints, and faculty recruitment and retention are becoming increasingly difficult due to the lack of appropriate space for scholarly activities and student interaction. The requested addition is needed to provide the necessary instruction support to meet the expectations of faculty and students for modern academic facilities.

The mission statement of Virginia Tech as a public land-grant university serving the Commonwealth of Virginia, the nation, and the world community includes discovery and dissemination of new knowledge central to its mission. Through its focus on teaching and learning, research and discovery, and outreach and engagement, the university creates, conveys, and applies knowledge to expand personal growth and opportunity, advance social and community development, foster economic competitiveness, and improve the quality of life.

The university's strategic plan includes three scholarship domains: Learning, Discovery, and Engagement; and three Foundational Strategies: Development of the Organization, Investment in the Campus Infrastructure, and Effective Resource Development, Allocation, and Management. This project supports several key domains and strategies of the strategic plan, and the specific goals of each area addressed by this project are listed below.

Learning:

Increase student involvement in discovery and engagement by creating more opportunities for undergraduates to be involved in research capstone experiences, education abroad, and experiential learning.

Strengthen and integrate all aspects of the undergraduate academic experience, including the academic experience for transfer students.

Invest in departmental and university-level support for undergraduate education.

Enhance quality graduate and professional education.

Establish a graduate education portfolio reflective of a 21st century university.

Develop and integrate advanced technology and information systems applications that assist collaboration, reflection, assessment, and sharing among faculty members, students, and staff members.

Contribute to the holistic and transformative educational experiences of Virginia Tech undergraduate and graduate students.

Improve the capital assets that underpin student learning and support programs.

Discovery:

Strengthen research activities with a focus on the environment.

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Establish research strengths in the study of infectious disease.

Establish research strengths in the study of health, food, and nutrition.

Achieve research strength in the areas of innovative technologies and complex systems through the strategic integration and support of critical research areas.

Engagement:

Engage students, at the undergraduate and graduate levels, in opportunities for service learning and experiential education that prepare them to serve a diverse and complex marketplace and society while building the capacity of communities.

Foundational Strategies:

Effectively manage the university's space and land resources for learning, living, and work.

Enhance health, safety, and security operations to support the university's discovery, learning, and engagement endeavors.

Existing facilities:

The existing classroom and office space in the College of Veterinary Medicine, constructed over twenty-five years ago, is no longer capable of meeting the needs and demands of the school's modern clinically-based teaching and learning program. The classrooms and laboratories are not sufficient to accommodate student class offerings, the building does not have adequate conference and seminar rooms available for faculty and students to develop team lesson plans and collaborative projects, and faculty are currently housed in a limited number of eight-foot by eight-foot open cubicles which are far below the recommended state guideline size. The space situation is a concern to the students and a retention concern for existing faculty.

Beyond the existing space constraints, the College is expanding its faculty as it grows its clinical and outreach programs. The College has outgrown the space planned in the 1960's and recruitment of new faculty is difficult because of the ill-suited space. As an example, in the past year, three intensively recruited faculty candidates declined our invitation to join the faculty with a compelling reason being lack of adequate office and laboratory space.

The American Veterinary Medical Associations' Council on Education, which is the accrediting body for the College of Veterinary Medicine, has indicated that the lack of adequate faculty workspace has become a major concern for the program. In order to assure the College's continued accredited status, the university needs to have in place plans to resolve this deficiency. Further, as noted above, faculty recruitment and retention are becoming increasingly difficult due to the lack of appropriate space for scholarly activities and student interaction.

Funding Plan:

While the program is 100 percent Educational and General instruction and would qualify for 100 percent General Fund support, the university has moved the project forward using nongeneral fund resources. This request is for authorization to finance the project costs under the Virginia College Building Authority (VCBA) 9(d) pooled debt program. The state's VCBA program carries a lower cost of capital than the university's stand-alone issuance costs, and the lower financing costs will benefit the students. The debt service will be covered by university revenues under the full faith and credit of Virginia Tech.

Alternatives considered

Other options considered but not selected include leasing, renovating existing space, or delaying the project entirely. Constructing an addition to the current facility is the selected option because the additional space needs to be located near the current veterinary medicine facilities for program coordination and shared use of laboratory and office resources. This is the most cost effective solution to the shortage of modern instructional space for the College of Veterinary Medicine. Leasing is not a feasible option because there is no available space for lease near the College of Veterinary Medicine and, to maintain program functionality, the required additional faculty workspace must be adjacent to the current facility. Renovating an already existing facility is not a viable option for the additional space required due to a shortage of office and classroom space in the vicinity of the College of Veterinary Medicine. Furthermore, the

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majority of classroom and teaching laboratory space on campus does not include adequate levels of essential infrastructure support and would be less economical to develop, as opposed to new construction. Thus, no existing space is available to allocate for renovation to accommodate this expanding program. Delaying the project to a future biennium was not a selected option because the faculty and student demands for adequate instruction space need to be met within a reasonable period of time.

Funding Request

Phase	Year	Subobject	Fund	Amount
Full Funding	FY 2013	2322 - Construction, Buildings	0300 - HIGHER EDUCATION OPERATING	\$3,000,000
Full Funding	FY 2013	2322 - Construction, Buildings	0815 - 9(D) DEBT SERVICE - CONSTRUCTION COSTS	\$11,000,000
				\$14,000,000

Methodology

Methodology

The construction costs are based on the efforts of an existing Pre-Planning Study and Construction Manager at Risk, which analyzed the program requirements, constructability, and compared to current market building comparables within university settings. Soft cost estimates developed by university staff based on historical data costing analysis and trends over the past eight years. The project is anticipated to have moderate site conditions and is planned to utilize the Construction Manager at Risk delivery method. Project costs are estimated to the mid-point of construction using three percent escalation in accordance with the instructions for developing the Six-Year Capital Outlay Plan.

Project Costs

Cost Type	Total Project Costs	Requested Funding
Acquisition Cost	\$0	\$0
Building & Built-in Equipment	\$8,636,000	\$8,636,000
Sitework & Utility Construction	\$864,000	\$864,000
Construction Cost	\$9,500,000	\$9,500,000
Design & related Services	\$1,646,500	\$1,646,500
Inspection & Testing Services	\$301,000	\$301,000
Project Management & Other Costs	\$899,000	\$899,000
Furnishings & Movable Equipment	\$1,273,000	\$1,273,000
Construction Contingency	\$380,500	\$380,500
Total Project Cost	\$14,000,000	\$14,000,000

Capacity

Cost Type	Unit of Measure	Units	Cost Per Unit
Acquisition Cost			\$0.00
Construction Cost	square feet	24,000	\$395.83
Total Project Cost	square feet	24,000	\$583.33

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Other Costs		
Cost Type	Total Project Costs	Requested Funding
Design & Related Service Items		
A/E Basic Services	\$271,000	\$271,000
A/E Reimbursables	\$1,305,000	\$1,305,000
Specialty Consultants (Food Service, Acoustics, etc.)	\$0	\$0
CM Design Phase Services	\$9,500	\$9,500
Subsurface Investigations (Geotech, Soil Borings)	\$19,000	\$19,000
Land Survey	\$0	\$0
Archeological Survey	\$0	\$0
Hazmat Survey & Design	\$0	\$0
Value Engineering Services	\$0	\$0
Cost Estimating Services	\$7,000	\$7,000
Other Design & Related Services	\$35,000	\$35,000
Design & Related Services	\$1,646,500	\$1,646,500
Inspection & Testing Service Items		
Project Inspection Services (inhouse or consultant)	\$217,000	\$217,000
Project Testing Services (conc., steel, roofing, etc.)	\$84,000	\$84,000
Inspection & Testing Services	\$301,000	\$301,000
Project Management & Other Cost Items		
Project Management (inhouse or consultant)	\$254,500	\$254,500
Work By Owner	\$14,000	\$14,000
BCOM Services	\$19,000	\$19,000
Advertisements	\$2,000	\$2,000
Printing & Reproduction	\$3,000	\$3,000
Moving & Relocation Expenses	\$19,000	\$19,000
Data & Voice Communications	\$173,000	\$173,000
Signage	\$8,000	\$8,000
Demolition	\$0	\$0
Hazardous Material Abatement	\$0	\$0
Utility Connection Fees	\$0	\$0
Utility Relocations	\$0	\$0
Commissioning	\$108,000	\$108,000
Miscellaneous Other Costs	\$298,500	\$298,500
Project Management & Other Costs	\$899,000	\$899,000

O & M Costs						
Cost Type	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018

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GF Dollars	\$258,000	\$258,000	\$266,000	\$274,000	\$282,000	\$290,000
NGF Dollars	\$0	\$0	\$0	\$0	\$0	\$0
GF Positions	1.00	1.00	1.00	1.00	1.00	1.00
NGF Positions	0.00	0.00	0.00	0.00	0.00	0.00
GF Transfer	\$0	\$0	\$0	\$0	\$0	\$0
GF Revenue	\$0	\$0	\$0	\$0	\$0	\$0
Layoffs	0	0	0	0	0	0

O & M Costs

Planned start date of new O&M costs (if different than the beginning of the fiscal year)

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