

- The estimated useful life of the proposed building is 60 years with proper maintenance.
- Surge space is needed to support the academic program, in particular the instructional program, and thus the funding plan calls for \$12 million of General Fund support. The first surge building is funded with 100 percent nongeneral fund support.

4. Project scope change:

NONE.

5. a. Approved Master Site Plan:

Yes No

If not, explain:

b. 2004-10 Capital Outlay Plan:

Yes No

If not, explain:

- The university originally pursued the strategy of phasing building renovations and moving and consolidating occupants from one area of a building to another during the renovation. This strategy proved unworkable from the program perspective, added significant time to project schedules, and generated higher costs than originally expected. In order to move forward with the many renovation needs on campus, the university needs surge space and thus this project was added to the plan.

1. Equipment for a previously funded project.

NONE.

2. Supplement to a previously funded project.

NONE.

C. Project Justification

1. a. Existing condition:

- The design of the first Surge Space building totaling 45,000 gross square feet (36,000 net square feet) is underway with a planned completion late in 2006. The initial existing renovation project slated for relocation to this surge space building includes the School of Architecture's Cowgill Building Mechanical/Electrical Systems Renovation at 36,000 net square feet, for occupancy in the first Surge Space Building through the summer of 2008. The College of Architecture will fully occupy the first Surge Space Building throughout this period.
- The university has three other renovation projects underway in the planning phase for academic programs including the College of Architecture and Urban Studies, the School of

the Arts, and the College of Agriculture and Life Sciences that may be delayed without additional surge space accommodations.

Higher Education Only

b. Facility Condition Index:

FCI _____

c. Space deficit:

Yes **No**

2. Programmatic information:

- The university's six year capital plan includes 13 high priority major renovation projects for academic space that require surge space to move forward. The projects are listed below along with the benefiting program. With the one surge building underway, these projects would require a schedule out to about 2029. The university needs to move forward at a much faster pace than the one surge building allows. The age and condition of many of these buildings already impose negative impacts on the occupying academic programs. The proposed second surge space building would provide the capacity to significantly accelerate the renovation schedules of the projects identified below to a more practical time frame of about 2014.

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|-----------------------------|--|
| 1. Davidson Hall, Phase I | (chemistry) |
| 2. Liberal Arts Building | (ASPECT and english) |
| 3. Davidson Hall, Phase II | (chemistry) |
| 4. Lane Hall | (corp & general assignment classrooms) |
| 5. Price Hall | (agriculture & life sciences) |
| 6. Classroom Infrastructure | (general assignment classrooms) |
| 7. Robeson Hall | (physics) |
| 8. Patton Hall | (engineering) |
| 9. Norris Hall | (engineering) |
| 10. Derring Hall | (sciences) |
| 11. Holden Hall | (engineering) |
| 12. Hutchison/Smyth Hall | (agriculture and life sciences) |
| 13. McBryde Hall | (liberal arts and human sciences) |

- These renovation projects are focused on academic buildings in the "heart" of campus to improve and optimize instructional space for state-of-the-art classrooms and laboratories to accommodate, in particular, undergraduate instruction and enrollment. These renovations will involve a significant scale of construction that will not allow occupancy by the academic programs during the construction process. The university does not have excess or unoccupied space available for the affected academic programs to use temporarily while their permanent space is being renovated in light of the planned renovation program.
- Overall, the university has 66 E&G campus buildings that include about 3.753 million gross square feet, have an average age of 45 years, and an average facility condition index of 14.1. These buildings will each require renovation work in the future to meet the demands

on the academic program, and thus the surge buildings will be needed and will provide service in an ongoing capacity as part of a continual renovation program.

- Without surge space, the logistics of vacancy for construction presents a block for many renovation projects. The first surge building underway is an important step forward and provides the capacity to move forward on renovations that would otherwise be difficult to manage and seriously disruptive to academic programs. The pace of renovation activity envisioned on the capital plan cannot be reached in a reasonable amount of time with a single surge building and a second is needed to make progress at a more desired scale.

3. Alignment to strategic plan:

This project will support Virginia Tech's strategic plan in the areas of Graduate Education and Undergraduate Education. The construction of the second surge space building will facilitate the future renovation of numerous existing university educational and general use buildings in support of the following university goals:

Graduate Education:

1. Increase the quality of the graduate programs.

Undergraduate Education:

2. Strengthen the quality of undergraduate instruction.
3. Create learning experiences for undergraduate students that maximize the benefits of attending a large research university.

D. Options Considered

- Delaying this project to a future biennium is not a favorable option as the university would be unable to implement critically needed renovation projects in a timely manner. Delays to a future biennium would impede implementation of the university master plan and cripple initiatives critical to improving educational programs housed in the building designated for renovations.
- Phase the renovation of buildings, moving occupants from floor-to-floor or from side-to-side as sections of the projects are completed was originally considered and rejected. This option carries a number of negative side effects, including the inconvenience and cost of multiple relocations of program units, increased time, complexity of construction phasing, and cost, and the tangible significant disruption in the delivery of the academic programs, not to mention the noise, vibration, and dust. The cumulative effect of these impacts makes the phasing strategy untenable for nearly all of the planned renovation projects.
- Leasing private space on a temporary basis was considered and rejected because the local inventory of lease space was reviewed, and no viable options exist in the town of Blacksburg or could be identified for future development adjacent to campus that could support the academic programs. For comparative purposes, if space were available at that scope, the annual lease cost would be about \$960,000, or approximately the same as annual debt service on \$12 million financed over 20 years at 5 percent. The annual debt service amount reflects the difference in the first year, and thus the savings would grow over time as rent rates increased with inflation. Further, the displacement of potential commercial

space off campus by university programs has a negative effect on the local government revenue base.

E. Project Schedule Changes:

NONE.