



Virginia Department of Planning and Budget  
**Project Request Justification**

2006-2008 Biennium Date: October 27, 2006

**A. General Information**

- |   |   |                     |            |
|---|---|---------------------|------------|
| 1. Agency Name:                               | <u>Virginia Tech</u>                    | 2. Agency Code:     | <u>208</u> |
|   | Supplement:                             |                     |            |
| 3. Project Title:                             | <u>Building Construction Laboratory</u> | 4. Agency Priority: | <u>5</u>   |
| 5. Name of Person to Contact about this Form: | <u>M. Dwight Shelton, Jr.</u>           |                     |            |
| 6. Contact Person's Telephone Number:         | <u>(540) 231-8775</u>                   |                     |            |
| 7. Contact Person's E-mail Address:           | <u>mdsjr@vt.edu</u>                     |                     |            |

**B. Proposed Project**

1. Description (include project size, capacity, and purpose):

The Building Construction Laboratory project was authorized in the 2002 General Obligation Bond (GOB) Program with \$2.5 million in GOB funding and \$5 million of private gifts for a total project budget of \$7.5 million. The project is a 32,000 gross square foot state-of-the-art facility that will house the undergraduate and graduate students in the Building Construction program. The facility will include laboratory space, classroom space, and support space that will complement and define the Building Construction learning objectives. Laboratory spaces include testing labs, wet labs, material handling, tool and welding labs, and workshops for assembly of construction systems. Classroom spaces include classrooms, seminar rooms, and studios.

Since planning began on the building in 2002, there has been a significant worldwide escalation in the cost of construction and related materials. As a result, initial cost estimates for the building in 2005 were over the authorized project budget by about \$2.0 million. After value engineering and reprogramming exercises exhausted all cost-cutting measures, the overrun was reduced to \$1.5 million. The University addressed the estimated overrun through an infusion of \$750,000 of nongeneral funds and a \$750,000 General Fund supplement approved in the 2006 budget. The current total project budget is \$9 million including \$2.5 million of GOB funds, \$750,000 of General Fund, and \$5.75 million of private gifts.

The project was bid in October 2006, with the low bid reflecting an additional cost overrun of \$298,000, for an adjusted total project cost of \$9,298,000. The current low bid included offers from six general contractors and is considered the best price the University will receive for the project. The University needs to move forward at the earliest possible time to get the project under contract to hold the low bid price and to meet the expected occupancy date of October 2007.

Prior to the bid process, the University put the project through two exhaustive value engineering studies and several programmatic reviews in an effort to manage the costs. The University's efforts to reduce costs resulted in significant design changes and

reprogramming that exhausted all cost-cutting measures, and thus the project is now down to its most acceptable form.

In accordance with the state's support to supplement previously authorized GOB project cost overruns associated with materials inflation and code compliance, this request is to complete the funding of the cost overrun and increase the budget for the Building Construction Laboratory (project code 16796) by \$298,000 of General Fund support. This funding is needed in the 2007 session to move forward with the pending construction contract.

2. In approved Master Site Plan: Yes  No   
If not, explain:

3. In current Strategic Plan: Yes  No   
If not, explain:

---

### C. Project Justification

#### 1. Programmatic:

The proposed Building Construction Laboratory building is planned as a 32,000 gross square foot state-of-the-art facility that will accommodate the undergraduate and graduate student population growth in the Building Construction program. The facility will house laboratory space, classroom space, and support space that will complement and define the Building Construction learning objectives. Laboratory spaces include testing labs, wet labs, material handling, tool and welding labs, and workshops for assembly of construction systems. Classroom spaces include classrooms, seminar rooms, and studios.

The Building Construction department is a growing program with significant expectations from the contractor community for a higher volume of graduates with a state-of-the-art education. While our students have enjoyed significant employment opportunities, many companies lament the need for a larger throughput of students. Virginia building contractors often go without or are forced to hire from outside the Commonwealth to satisfy their workforce needs.

#### 2. Existing facilities:

The Building Construction program is currently housed in private leased space off-campus because on-campus space is not sufficient to accommodate the program's enrollment and instructional laboratory requirements. Without this project, the University has no viable alternatives to accommodate the students' and the industry's expectation for an expansion in the amount and quality of Building Construction graduates.

---

**D. Options Considered** (include as an option delaying this project until future biennia. For supplements to existing projects, identify what scope changes would be necessary to complete the project within existing resources)

**Supplement Project:** The project was bid in October 2006 and the University needs to move forward at the earliest possible time to get the project under contract to hold the low bid price and to meet the expected occupancy date of October 2007. Prior to the bid, value engineering and reprogramming exercises exhausted all cost-cutting measures in an effort to manage the project costs. The current low bid included offers from six general contractors and is considered the best price the University will receive for the project. In order to avoid further delays and cost increases and meet the expected occupancy date of October 2007, the University needs to move forward at the earliest possible time.