



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

2008-2010

Biennium

Date: August 16, 2007

**A. General Information**

1. Agency Name: Virginia Tech 2. Agency Code: 208  
 3. Project Title: Library High Density Storage-High Speed Access Facility 4. Agency Priority: 10  
 5. Name of Person to Contact about this Form: Robert R. Broyden  
 6. Contact Person's Telephone Number: (540) 231-8782  
 7. Contact Person's E-mail Address: rbroyden@vt.edu

**B. Proposed Project**

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

This project has been on the University's plan since 2001, formerly titled Newman Library Addition. The project request is to construct a 5,000 gross square foot addition to the east side of Newman Library between the existing loading dock and Squires Student Center. The addition will contain high-density, self-supporting, heavy-duty storage shelving and an automated, robotic retrieval system capable of handling up to one million volumes. The addition will increase the ability to efficiently store and quickly retrieve materials without delay and without additional staff or floor space. This project will also free up library floor space to restore needed student study areas that have been lost to accommodate the growth of critical on-site volume storage.

The program is 100 percent Educational and General library space; thus, the funding plan calls for full state General Fund support

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 size of the University's collection (2.3 million volumes), and young age mean that it is unsuitable to move major parts of the collection to a remote storage site. Materials need to be stored in a way that a user can reasonably expect to get what she or he needs within a few minutes of requesting the item on the automated system.

The proposed project will install a robotic, high density library storage cube linked to Newman Library for fast and automated retrieval of items stored in the cube. The cube will be seven times more efficient than conventional library shelving for storage, is economical in using staff resources, and will allow for the delivery of better service to the user than is possible with traditional remote storage facilities.

For the user, getting something from the linked storage would be fast and easy. For example, a student on Newman's fifth floor might search Addison, the library catalog, and identify that the item wanted is in the storage cube. The student would request the item on the library system and go down to the third floor to pick it up. The request would be sent immediately to the storage retrieval site. The storage retrieval machine would move to the appropriate rack and level and pick off the bin holding the item. The bin would be automatically delivered to a staff station, and the item would be ready to place in the student's hands by the time he or she got to the pick-up location.

With more than a million visits a year, Newman Library needs to be reconfigured to provide for group project rooms, secured study carrels for graduate students, and an information commons that will consolidate library help staff in one area. The consolidated information commons concept will mean that users will have one place to stop for help for most library services, and staff will be able to be more efficiently located to provide services to library visitors. The proposed project will free up a small portion of the stack space that would be reallocated to accommodate these critical programmatic needs.

## **2. Existing facilities:**

Newman Library, the main Virginia Tech facility, was constructed in 1955, with an addition in 1980. Student support, book storage, and all other library functions for the university are managed at this facility. At approximately 227,000 gross square feet, Newman is a comparatively small library for a university of over 25,000 students and the building is at full capacity. New storage space is needed for two reasons: First, to accommodate a conservatively projected growth of collections in recognition of the likely mix of future print and electronic resources. Second, to free up space in Newman so that it can be reconfigured to meet the ways that 21st century students and scholars expect to work within library spaces.

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## **D. Options Considered (include as an option delaying this project until future biennia)**

Other options considered but not selected include leasing off-campus storage capacity or delaying the project to a later biennium. Improving the current library building to include high-density storage with automated retrieval is the selected option because it is the most effective choice for meeting expanded storage needs, while maintaining timely service to patrons.

Leasing off-campus storage space is not operationally feasible because this would not allow timely service of student and faculty needs for library materials and would require additional staff and vehicles to effect retrieval.

Delaying the project to a future biennium is not a viable option because current shelf storage capacity has been exhausted and additional space is necessary to meet the needs of expanding academic and research programs. Further, each year of delay adds about five percent to the total project costs, or about \$390,000 the first year of the delay.

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**E. Project Scope Changes:**

None.

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**F. Project Cost Changes:**

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## **Instructions for DPB Form CNJ Project Request Justification**

**This form is to be prepared only for projects authorized for detailed budget development during the 2008-2010 biennium.**

The project request justification (DPB Form CNJ) details the project's scope and justifies its need. The need must be demonstrated from several perspectives, including the agency's programs and activities and the condition of the existing facilities, in order to show why it is important to fund your request. The narrative should be as thorough and complete as necessary. The quality of your submission is extremely important. Remember who your audience is for this submission and **do not** use technical engineering terms and jargon. Decision-makers may only have your narrative as the basis for considering the merits of your request.

**The justification for additional funding due to anticipated cost overruns on a currently approved and funded project must include the scope adjustments (i.e., reduction in scope) that would be needed to finish the project with existing funding.**

### **Section A. General Information**

- Item 1.     **Agency Name.** Enter your agency's name.
- Item 2.     **Agency Code.** Enter the three-digit agency code for your agency.
- Item 3.     **Project Title.** Give the new project a clear descriptive title.
- Item 4.     **Agency Priority.** Number from the DPB Form H-1.
- Item 5.     **Name of Person to Contact about this Form.** Enter the name of the person to contact who can answer specific questions concerning the information provided on this form.
- Item 6.     **Contact Person's Telephone Number.** Enter the telephone number of the contact person.
- Item 7.     **Contact Person's E-mail Address.** Enter the e-mail address of the contact person.

### **Section B. Proposed Project**

**Item 1. Description.** The project description should be of sufficient detail to clearly define the scope of the project. This description should address the project's size and capacity. It should also describe how the project would meet specific needs. Below is some of the information that should be presented in this section, as applicable:

- The scope of the project, including type of space proposed, the square footage, and any unique or unusual features.
- Life expectancy of the new facility.
- Methods or sources used to determine the proposed scope.

**Item 2. In approved Master Site Plan.** An explanation should be provided if not in master site plan.

**Item 3. In current Strategic Plan.** An explanation should be provided if not in the current strategic plan

## **Section C. Project justification**

**Item 1. Programmatic information.** The justification for a project is based on how it supports your agency's strategic plan. Specifically, this section should address the following:

- Description of the current use of the facility(ies).
- Description of the relevant programmatic activities, both current and projected, that would be affected by the project. Indicate any services, operations, or activities that will be initiated, expanded, or improved because of this project.
- How the project will support your agency's mission and your current and planned program goals and objectives. How does the proposed project relate to the agency's strategic plan?
- The necessity of the project in terms of objectives, services, and customers. Be sure to indicate the number and type of clients or staff who will benefit from the proposed project. Provide numerical estimates of current and future users of the facility using quantitative data such as number of positions (FTE), average prisoner days, or full-time equivalent students. Highlight any population characteristics important to the project. Indicate and discuss projection methodologies used.
- Address whether the project is required to continue current services, to handle a workload increase, or to provide for new or better quality services.
- For institutions of higher education, be sure to include a summary of the impact of student fee increases

**Item 2. Existing Facility(ies).** To determine the need for a project, you must describe your present facilities. Include in this description information on the adequacy of existing facilities to meet current and projected program demands. To support the need, provide the following information, as appropriate:

- Why the existing facility is inappropriate or inadequate, such as overcrowding or the need to accommodate new programs.
- Age and condition of current facility, analysis of man-hours and expenses invested annually in repairs, interruptions of services or backlogs of services, safety hazards to customers, and health and safety code violations. (Specify which code edition.) Indicate if the request is a result of legislative (federal or state) or judicial mandate or from standards or certification requirements. Be as specific as possible. Use quantitative measures when available and applicable to demonstrate why the capital project is needed.
- Interim accommodations being used to compensate for facility deficiencies or the lack of facilities, including currently leased space.
- Information on the future use of the existing facility(ies) that could impact upon the proposed capital project, such as any future expansion or conversion of the facility.

- How the proposed project fits into the approved Master Site Plan for your agency.

#### **Section D. Options Considered**

This section should identify and discuss any alternatives to the proposed project that were considered and the rationale for selecting the requested project. Provide the estimated cost for each of the alternatives considered. **One option that must be addressed is the impact of deferring the project until a future biennium.**

#### **Section E. Project Scope Changes**

This section should identify and explain any differences between the scope on the DPB Form C-1\_S-1 in this submission and those provided on the previously submitted DPB Form H-1.

#### **Section F. Project Cost Changes**

This section should identify and explain any differences between the cost estimates on the DPB Form C-1\_S-1 in this submission and those provided on the previously submitted DPB Form H-1.