# Appendix E: Selected Board of Visitors Survey Results

This appendix presents the following selected results from a JLARC staff survey of current and former board of visitor members at Virginia's 15 public four-year higher education institutions:

- Prior board experience,
- Professional backgrounds,
- Level of understanding public finance and higher education operations,
- Level of commitment,
- SCHEV training attendance,
- Satisfaction with SCHEV training,
- Institutional training attendance,
- Level of influence in various decisions at their institution,
- Opinion regarding the cost of tuition and fees for students at their institution and relative to peer institutions,
- Level of trust between boards of visitors and institutional staff,
- Effectiveness of institutional staff communication.

All of the results presented in this appendix represent responses from 97 current board members and 115 former board members. See Appendix B for additional information about the survey.

**TABLE E-1**
**Survey question: Did you serve on other governing boards, foundations, or similar bodies before you were appointed to your institution's board of visitors?**

| | Current board members | Former board members |
|---|---|---|
| Yes | 86% | 72% |
| No | 14 | 28 |
| | 100% | 100% |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.

**TABLE E-2**
**Survey question: Please select the occupational area below that best describes your primary professional background.**

| | Current board members | Former board members |
|---|---|---|
| Business | 33% | 26% |
| Health care | 13 | 12 |
| Law | 12 | 22 |
| Agriculture | 2 | 0 |
| Construction | 7 | 0 |
| Education (K-12) | 6 | 7 |
| Higher education | 2 | 6 |

**TABLE E-2 (continued)**

| | | |
|---|---|---|
| Finance (public) | 3 | 3 |
| Finance (other) | 8 | 11 |
| Government | 9 | 10 |
| Manufacturing | 1 | 1 |
| Military | 4 | 3 |
| Non-profit | 4 | 6 |
| STEM | 5 | 8 |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Notes: Includes responses from 97 current board members and 115 former board members.
Column totals exceed 100% due to some respondents selecting more than one occupational area.

**TABLE E-3**

**Survey question: In your opinion, which backgrounds, skills, or types of experience do you believe are most important for board of visitors members to have? Please select up to three.**

| | Current board members | Former board members |
|---|---|---|
| Business | 72% | 52% |
| Management | 38 | 37 |
| Higher education | 31 | 30 |
| Alumni | 29 | 49 |
| Finance (public) | 29 | 30 |
| Finance (other) | 26 | 24 |
| Law | 13 | 16 |
| Government | 9 | 15 |
| STEM | 6 | 3 |
| State resident | 6 | 5 |
| Military | 5 | 1 |
| Non-profit | 5 | 2 |
| Construction | 4 | 0 |
| Geographic diversity | 4 | 9 |
| Education (K-12) | 3 | 4 |
| Agriculture | 1 | 0 |
| Health care | 1 | 7 |
| Manufacturing | 0 | 0 |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.

**TABLE E-4**

**Survey question: How well do you understand public finance, including how your institution's financial decisions are impacted by the state's higher education operating and capital funding decisions?**

| | Current board members | Former board members |
|---|---|---|
| Not well at all | 1% | 3% |
| Slightly well | 4 | 11 |
| Somewhat well | 25 | 25 |
| Very well | 48 | 39 |
| Extremely well | 22 | 23 |
| | 100% | 100% |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.
Numbers may not add due to rounding.

**TABLE E-5**

**Survey question: In your opinion, does or did your institution's board have a sufficient number of members with a background in public finance?**

| | Current board members | Former board members |
|---|---|---|
| Yes | 78% | 64% |
| No | 22 | 36 |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.

**TABLE E-6**

**Survey question: How well do you understand higher education operations?**

| | Current board members | Former board members |
|---|---|---|
| Not well at all | 2% | 0% |
| Slightly well | 3 | 5 |
| Somewhat well | 26 | 23 |
| Very well | 49 | 47 |
| Extremely well | 21 | 25 |
| | 100% | 100% |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.
Numbers may not add due to rounding.

**TABLE E-7**

**Survey question: In your opinion, does or did your institution's board have a sufficient number of members with a background in higher education operations?**

| | Current board members | Former board members |
|---|---|---|
| Yes | 76% | 67% |
| No | 24 | 33 |
| | 100% | 100% |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.

**TABLE E-8**

**Survey question: What portion of board members at your institution have or had a sufficient level of commitment to their duties?**

| | Current board members | Former board members |
|---|---|---|
| None | 0% | 0% |
| Few | 1 | 3 |
| Some | 6 | 6 |
| Most | 61 | 68 |
| All | 32 | 23 |
| | 100% | 100% |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.
Numbers may not add due to rounding.

**TABLE E-9**

**Survey question: When did you most recently attend the in-person orientation session offered by SCHEV?**

| | Current board members | Former board members |
|---|---|---|
| 2010 or earlier | 7% | 41% |
| 2011 | 15 | 0 |
| 2012 | 19 | 2 |
| 2013 | 32 | 1 |
| Have not attended | 27 | 56 |
| | 100% | 100% |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.

**TABLE E-10**

**Survey question: (If attended) How satisfied were you with SCHEV's in-person orientation session?**

| | Current board members | Former board members |
|---|---|---|
| Not at all satisfied | 0% | 8% |
| Slightly satisfied | 6 | 6 |
| Somewhat satisfied | 21 | 42 |
| Very satisfied | 54 | 32 |
| Extremely satisfied | 17 | 6 |
| Don't know | 1 | 6 |
| | 100% | 100% |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.

**TABLE E-11**

**Survey question: Has your institution offered or did it offer training opportunities to board of visitors members in addition to the in-person orientation session offered by SCHEV?**

| | Current board members | Former board members |
|---|---|---|
| Yes | 9% | 29% |
| No | 91 | 71 |
| | 100% | 100% |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.

**TABLE E-12**

**Survey question: In your opinion, how influential is or was your board in decisions at your institution?**

| **Current board members** | | | | | |
|---|---|---|---|---|---|
| | Not at all influential | Slightly influential | Somewhat influential | Very influential | Extremely influential |
| Spending on non-academic operations | 3% | 15% | 32% | 39% | 12% |
| Capital spending decisions | 1 | 9 | 16 | 39 | 35 |
| Strategic planning | 3 | 10 | 22 | 41 | 23 |
| Setting tuition | 0 | 5 | 18 | 34 | 43 |
| Setting mandatory fees | 2 | 13 | 22 | 35 | 28 |
| Improving the efficiency of institutional operations | 4 | 18 | 29 | 38 | 11 |
| Financial aid policies | 12 | 14 | 42 | 27 | 5 |
| Ensuring affordability for students | 5 | 12 | 21 | 39 | 23 |
| | | | | | |
| **Former board members** | | | | | |
| | Not at all influential | Slightly influential | Somewhat influential | Very influential | Extremely influential |
| Spending on non-academic operations | 2% | 14% | 32% | 43% | 8% |
| Capital spending decisions | 2 | 4 | 17 | 49 | 28 |
| Strategic planning | 2 | 5 | 19 | 53 | 20 |
| Setting tuition | 1 | 8 | 21 | 44 | 27 |
| Setting mandatory fees | 2 | 13 | 24 | 43 | 18 |
| Improving the efficiency of institutional operations | 6 | 21 | 29 | 38 | 6 |
| Financial aid policies | 5 | 19 | 30 | 38 | 9 |
| Ensuring affordability for students | 4 | 16 | 32 | 36 | 13 |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.

**TABLE E-13**

**Survey question: Please describe your opinion of the average cost of tuition and fees for students at your institution.**

| | **Current board members** | **Former board members** |
|---|---|---|
| Underpriced | 15% | 20% |
| About right | 72 | 56 |
| Too expensive | 12 | 24 |
| | 100% | 100% |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.

**TABLE E-14**

**Survey question: In your opinion, how does the cost of tuition and fees for students compare to your institution's peers?**

| | Current board members | Former board members |
|---|---|---|
| Less expensive than my institution's peers | 52% | 44% |
| About the same as my institution's peers | 42 | 50 |
| More expensive than my institution's peers | 6 | 6 |
| | 100% | 100% |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.

**TABLE E-15**

**Survey question: Please select one of the following statements that best reflects your opinion regarding the cost and value of attending your institution.**

| | Current board members | Former board members |
|---|---|---|
| My institution is underpriced relative to its value. | 42% | 47% |
| My institution costs what it should relative to its value. | 54 | 45 |
| My institution is too expensive relative to its value. | 4 | 8 |
| | 100% | 100% |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.

**TABLE E-16**

**Survey question: Please select one of the following statements that best reflects your opinion regarding the cost and value of the higher education sector as a whole in the United States.**

| | Current board members | Former board members |
|---|---|---|
| Higher education is underpriced relative to its value. | 4% | 8% |
| Higher education costs what it should relative to its value. | 37 | 32 |
| Higher education is too expensive relative to its value. | 59 | 60 |
| | 100% | 100% |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.

**TABLE E-17**

**Survey question: In your opinion, what level of trust exists or existed between the board of visitors and institutional staff?**

| | Current board members | Former board members |
|---|---|---|
| Very high level of trust | 48% | 26% |
| High level of trust | 24 | 55 |
| Moderate level of trust | 21 | 12 |
| Low level of trust | 5 | 6 |
| Very low level of trust | 1 | 1 |
| | 100% | 100% |

Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.

**TABLE E-18**

**Survey question: In your opinion, how effectively have institutional staff communicated with your board on important issues they have asked you to consider?**

| | Current board members | Former board members |
|---|---|---|
| Not at all effectively | 0% | 0% |
| Slightly effectively | 4 | 5 |
| Somewhat effectively | 17 | 12 |
| Very effectively | 30 | 55 |
| Extremely effectively | 49 | 27 |
| | 100% | 100% |

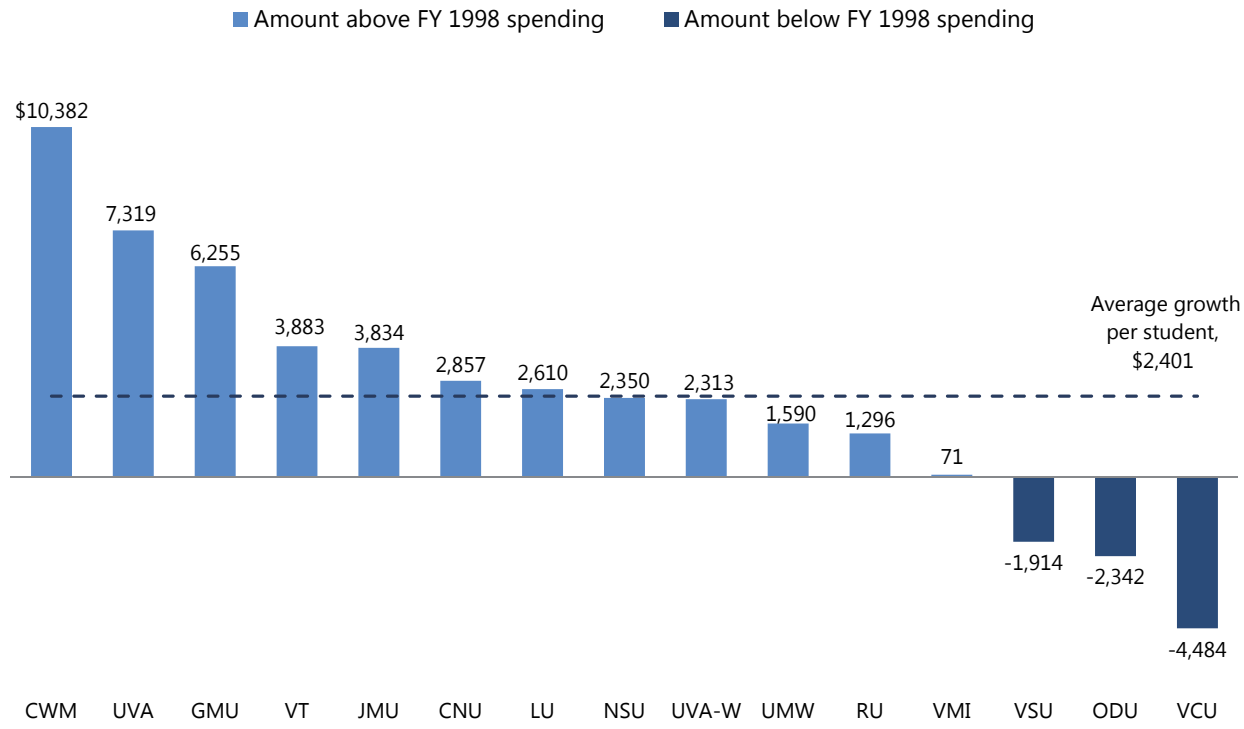
Source: JLARC staff analysis of 2014 JLARC staff survey of current and former board of visitor members.
Note: Includes responses from 97 current board members and 115 former board members.

# Appendix F: Operating Spending

## E&G spending increased moderately

Virginia's public four-year institutions spent $4.7 billion on E&G functions ($23,799 per student) in FY 2012, an increase of 44 percent over spending in FY 1998. As JLARC's 2013 *Review of Academic Spending at Virginia's Public Higher Education Institutions* found, enrollment growth is the most substantial driver of increased spending on E&G functions. Accounting for increased enrollment, average E&G spending per student grew by 12 percent ($2,401) between FY 1998 and FY 2012 (Figure F-1). Virginia State, ODU, and VCU all experienced declines in E&G spending per student. Institutional spending on E&G functions also appears to have been moderately affected by increases in fixed costs, which include utility costs, facility operation and maintenance, and state-mandated salary and benefit increases. Fixed costs accounted for 18 percent ($41.6 million) of new operating funding requested by the public four-year institutions for FY 2015.

**FIGURE F-1**
**E&G spending increased moderately or declined at most institutions (FY 1998 to FY 2012)**

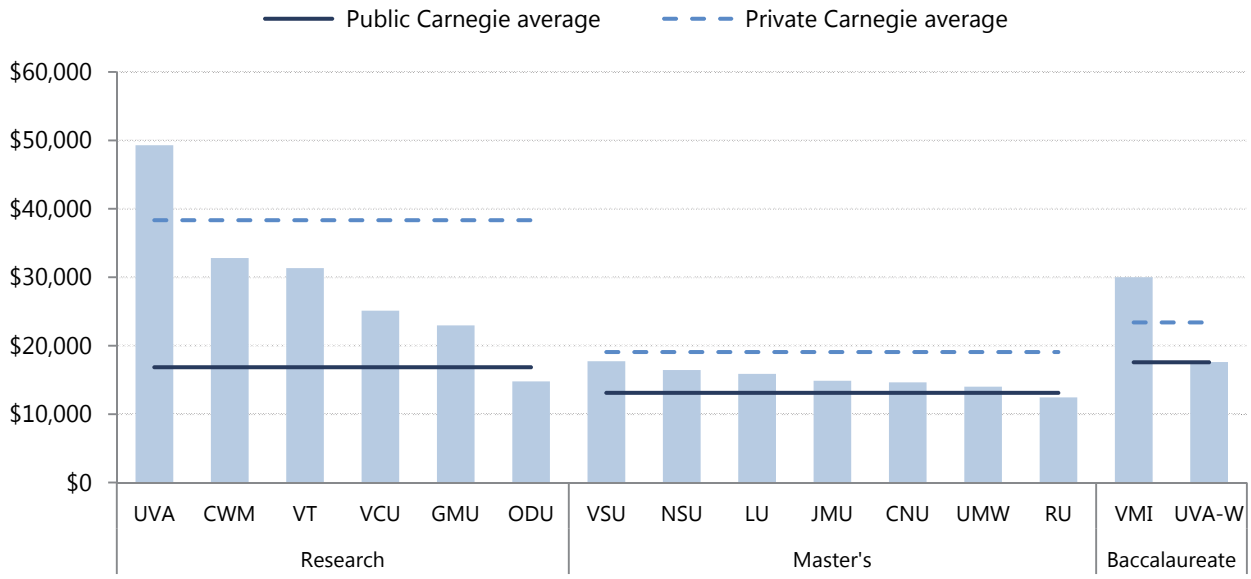



Source: JLARC staff analysis of DCP data on FY 1998 E&G spending, IPEDS data on FY 2012 E&G spending, and CPI.
Notes: Data are in constant 2013 dollars. Spending is calculated per full-time equivalent student using Delta Cost Project methodology.

## Spending on core E&G operations is generally comparable to spending at other public institutions but falls below private institutions

National higher education experts often compare spending on core educational operations, referred to as education and related (E&R) spending, to account for the difference in research missions across public four-year institutions. (E&R spending is another measure of spending on educational operations. It excludes sponsored research spending, as this level of spending often varies widely across institutions.) Spending per student on E&R operations is generally comparable to public Carnegie averages at the majority of Virginia's public four-year institutions, but falls below average spending at private institutions (Figure F-2). Comparable levels of spending and relatively high student outcomes, as noted in Chapter 1, indicate that most Virginia institutions may be operating their core educational functions more efficiently than public institutions nationwide.

**FIGURE F-2**
**E&R spending per student generally comparable to public Carnegie averages (FY 2012)**

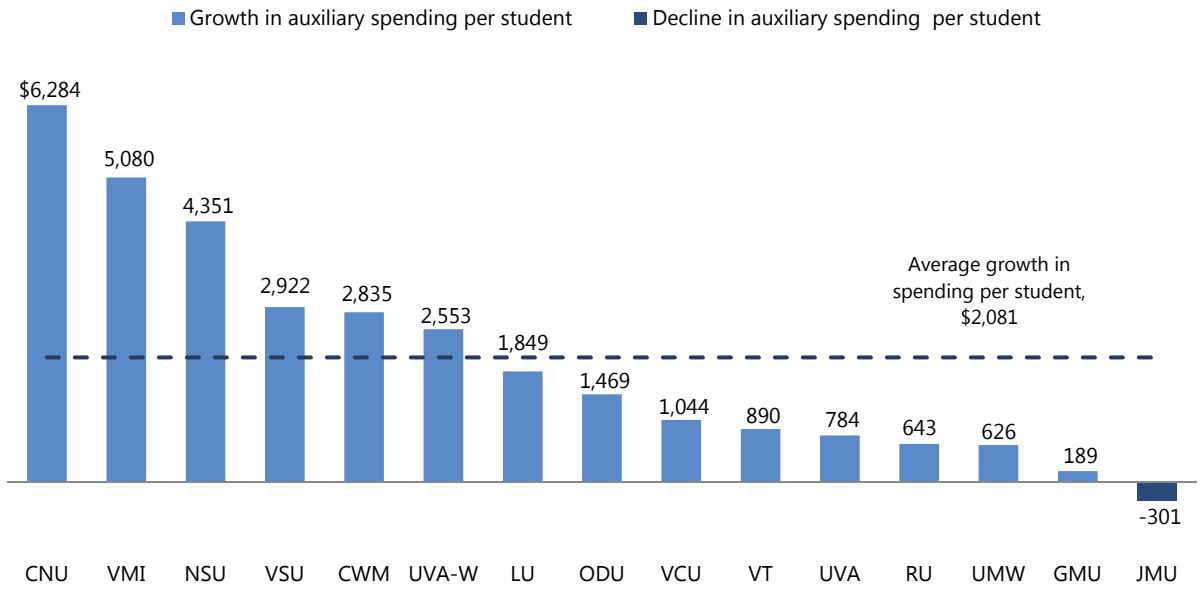



Source: JLARC staff analysis of IPEDS data on FY 2012 E&G spending.
Notes: Data are in constant 2013 dollars. Spending is calculated per full-time equivalent student using Delta Cost Project methodology. Additional details on methodology can be found in Appendix B.

## Auxiliary spending increased faster than spending on E&G operations

Institutional spending on auxiliary enterprises increased significantly at the majority of public four-year institutions and was driven by more than the expansion of existing services due to enrollment growth. Spending per student FTE grew by 37 percent between FY 1998 and FY 2012, a faster rate of growth than the increase in spending on institutions' core missions (12 percent). Several institutions significantly exceeded statewide average growth in auxiliary spending per student FTE of $2,081, including Christopher Newport, VMI, and Norfolk State (Figure F-3).

**FIGURE F-3**
**Auxiliary spending increased at most institutions (FY 1998–FY 2012)**



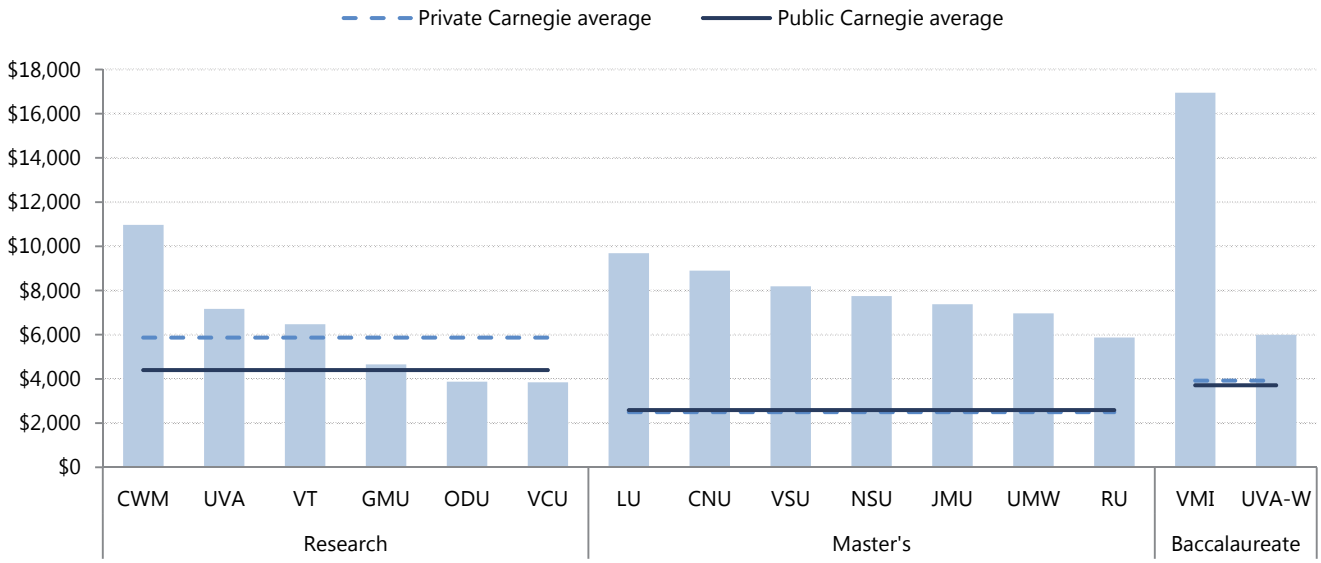

Source: JLARC staff analysis of DCP data on FY 1998 auxiliary spending, IPEDS data on FY 2012 auxiliary spending, and the Consumer Price Index.
Notes: Data is in constant 2013 dollars. Spending is calculated per full-time equivalent student using Delta Cost Project methodology.

## Spending on auxiliary operations generally exceeds spending at other public and private institutions

Stakeholders in Virginia often identified increasing student expectations for auxiliary services and competition with peer institutions to provide amenities as drivers of auxiliary spending. Staff at some institutions noted the importance of having unique amenities to attract students, and many specifically noted high student expectations related to dining (e.g., substantial choice, environmental consciousness, convenience) and residence halls (e.g., wireless internet, air-conditioning, private bathrooms).

The majority of Virginia's public four-year institutions spend more per student FTE on auxiliary enterprises than average spending among both public and private Carnegie peers, however, suggesting that other factors have also influenced growth in auxiliary spending (Figure F-4).

**FIGURE F-4**
**Auxiliary spending per student generally exceeds Carnegie averages (FY 2012)**




Source: JLARC staff analysis of IPEDS data on FY 2012 auxiliary spending and the Consumer Price Index reported by the Bureau of Labor Statistics.
Notes: Data is in constant 2013 dollars. Spending is calculated per full-time equivalent student using Delta Cost Project methodology. Carnegie averages are for public and for private not-for-profit institutions. Research category includes research–very high, research–high, and doctoral. Master's category includes master's–large, master's–medium, and master's–small. Baccalaureate category includes baccalaureate–arts & sciences and baccalaureate–diverse fields. Institutions that did not report FY 2012 auxiliary spending data to IPEDS are omitted.

# Appendix G: Performance-Based Funding Programs for Higher Education

This appendix provides information about higher education performance funding programs in other states, including the percent or amount of funding that other states have designated for such programs, as well as the goals and metrics used or considered. JLARC staff obtained this information through a review of research literature, as well as through structured interviews with other states that either have a performance funding program in place or are transitioning to such a program, as well as staff at Virginia's higher education institutions and other stakeholders. See Appendix B for more information on the research methods and activities.

## Virginia has proposed performance funding for higher education and several other states have a program in place

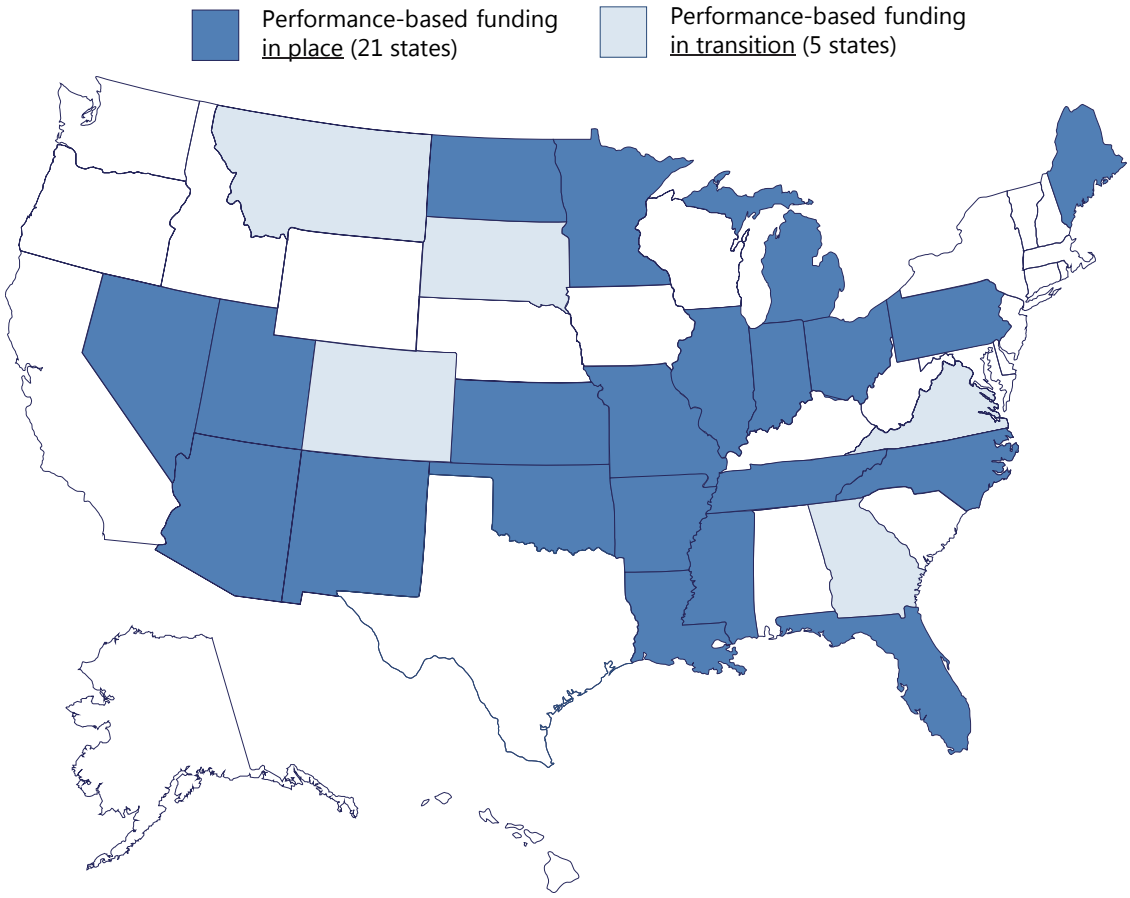
States are increasingly considering or implementing performance-based funding programs in an effort to incentivize better institutional performance with increasingly constrained higher education funding. Historically, states have provided funding to higher education based upon access, typically tied to institutions' total student enrollments. Legislators across the nation have been adopting higher education funding systems that allocate funds to colleges and universities based partly or heavily on output indicators, such as degree completion or graduation rates, rather than enrollment, as has historically been the case.

According to NCSL, 21 states currently have established performance-based funding programs for public four-year higher education institutions (Figure F-1), an increase from 12 states in 2012. Of those, 11 states have designated five percent or more of higher education funding as performance-based (see Table F-2 at the end of this appendix). In addition, five states—Colorado, Georgia, Montana, South Dakota and Virginia—have approved performance-based funding formulas that have yet to be implemented. In Virginia, SCHEV has requested performance funding of approximately $65 million in general funds over the 2014-2016 biennium. Twelve other states have formally considered the adoption of performance funding models but have not implemented or approved a plan.

## Performance funding goals and metrics vary

Virginia and other states have established a number of different goals for their performance-based funding programs for higher education and measure institutional performance using a variety of metrics. Examples of performance indicators used in other states include: the number of degrees awarded, course completion, retention rate, and the number of low-income and minority graduates. Several states provide bonus incentives for degrees completed by low-income and minority students, and for graduating students in STEM fields. Many states focus on degree completions generally, as well as student progress toward graduation (Table F-1). Some states have considered institution-specific measures to account for different missions and strategic initiatives. Others measure the percent of students employed after graduating to ensure that the institutions are meeting the needs of the state's economy and that their performance goals are aligned with the state's economic development plan.

**FIGURE G-1**
**21 states have established performance-based funding formulas**




Source: NCSL (March 2014).
Note: See the table at the end of this appendix for a complete list of states and the percent or amount of designated funding.

In Virginia, some of the metrics that may be used to determine the allocation of performance funding to higher education institutions include: increased enrollment of Virginia students, including under-represented populations; increased degree production in high-demand areas such as STEM-H; increased degree completion in a timely or expedited manner; and improved retention. According to Virginia's institutions, the goals and metrics of the proposed performance funding model are aligned with their institutional strategic plans and the Virginia Higher Education Opportunity Act of 2011 (also known as the Top Jobs Act or TJ21).

**TABLE G-1**

**Other states have established several different goals and metrics for their performance funding programs (public four-year higher education institutions)**

| | **Examples of performance funding goals or metrics** | | | | | |
|---|---|---|---|---|---|---|
| **State** | Increase number of degrees awarded | Improve student progress (completed credit hours) | Increase retention rate | Increase number of STEM degrees | Increase number of degrees awarded to low-income students | Increase revenue or decrease expenditures |
| **Performance funding in place** | | | | | | |
| Arizona | ✓ | ✓ | | | | |
| Arkansas | ✓ | ✓ | | ✓ | ✓ | |
| Florida | ✓ | ✓ | ✓ | | | |
| Illinois | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Indiana | ✓ | ✓ | | | ✓ | |
| Kansas | ✓ | ✓ | ✓ | ✓ | | |
| Louisiana | ✓ | | ✓ | | | ✓ |
| Maine | ✓ | | | ✓ | | |
| Michigan | ✓ | | | ✓ | | ✓ |
| Minnesota | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Mississippi | ✓ | ✓ | | | | ✓ |
| Missouri | ✓ | ✓ | ✓ | | | ✓ |
| Nevada | ✓ | ✓ | | ✓ | | ✓ |
| New Mexico | ✓ | ✓ | | | ✓ | |
| North Carolina | ✓ | ✓ | | | | |
| North Dakota | | ✓ | | | | |
| Ohio | ✓ | ✓ | | ✓ | | |
| Oklahoma | ✓ | ✓ | ✓ | | | |
| Pennsylvania | ✓ | | | ✓ | | ✓ |
| Tennessee | ✓ | ✓ | | | | ✓ |
| Utah | ✓ | ✓ | ✓ | | | |
| **Performance funding in transition** | | | | | | |
| Colorado | ✓ | ✓ | | | | |
| Georgia | ✓ | ✓ | | | ✓ | |
| Montana | ✓ | | ✓ | | | |
| South Dakota | ✓ | | | ✓ | | ✓ |
| Virginia | ✓ | | | ✓ | ✓ | |

Source: NCSL (March 2014) and interviews with higher education administrators in other states.
Note: Does not include all performance-based funding goals or metrics used or considered by other states.

## Short-term effects of performance-based funding have varied, and long-term effects are unknown

Higher education officials in other states reported to JLARC staff that effects of performance-based funding have varied. For example, Louisiana reported that the retention rates of their public institutions increased within one year of the establishment of performance metrics measuring retention rates. Staff in Tennessee also reported positive short-term effects following implementation of their performance funding model, stating that institutions have increased their focus on the productivity of their academic programs, student services and advising, and earlier detection and intervention in cases where students have academic struggles.

Conversely, several states reported that they have not yet seen a change in institutional behavior or outcomes, although this may be attributable to the relatively recent implementation of their performance funding models. JLARC staff found little research assessing the long-term effects of the implementation of performance-funding models. Few states have experienced measurable gains from performance funding, and positive outcomes were often not observed for several years after implementation.

## Significant level of performance funding is likely needed to incentivize institutional behavior or outcomes

The majority of the performance-based funding programs have been tied to relatively small funding amounts, which may have accounted for the varied outcomes of performance funding implementations. In recent years, several states have designated five percent of their total budget for higher education. Some states indicated that they have proposed a conservative amount, with overall variation ranging from one or two percent of higher education funding to 100 percent of base funding in Tennessee.

As noted previously, SCHEV has proposed performance funding of approximately $65 million in general funds over the next biennium. Accordingly, JLARC staff asked various higher education stakeholders whether this amount is sufficient to potentially influence institutions' behavior or outcomes. SCHEV reported to JLARC staff that it is not realistic or feasible to fund higher education in Virginia entirely through performance-based funding. Various stakeholders stated that it is questionable whether $65 million would be enough to impact institutional behavior, as this recommended amount represents only five percent of total state appropriations for higher education.

**TABLE G-2**
**Performance-based funding programs for public four-year higher education institutions**

| **State** | Performance-based funding program **in place (21)** | Performance-based funding program **in transition (5)** | Percent or amount of designated funding |
|---|---|---|---|
| Alabama | | | |
| Alaska | | | |
| Arizona | ✓ | | $5 million |
| Arkansas | ✓ | | 5% (25% cap) |
| California | | | |
| Colorado | | ✓ | 25% |
| Connecticut | | | |
| Delaware | | | |
| Florida | ✓ | | 10% |
| Georgia | | ✓ | new $ |
| Idaho | | | |
| Illinois | ✓ | | <1% |
| Indiana | ✓ | | 6% |
| Iowa | | | |
| Kansas | ✓ | | new $ |
| Kentucky | | | |
| Louisiana | ✓ | | 15% |
| Maine | ✓ | | 5% (30% cap) |
| Maryland | | | |
| Michigan | ✓ | | new $ |
| Minnesota | ✓ | | 5% |
| Mississippi | ✓ | | 100% |
| Missouri | ✓ | | new $ |
| Montana | | ✓ | 5% |
| Nebraska | | | |
| Nevada | ✓ | | 5% (20% cap) |
| New Hampshire | | | |
| New Jersey | | | |
| New Mexico | ✓ | | 5% |
| New York | | | |
| North Carolina | ✓ | | $1 million |
| North Dakota | ✓ | | almost 100% |
| Ohio | ✓ | | 100% |
| Oklahoma | ✓ | | new $ |

**TABLE G-2 (continued)**
**Performance-based funding programs for public four-year higher education institutions**

| **State** | Performance-based funding program **in place (21)** | Performance-based funding program **in transition (5)** | Percent or amount of designated funding |
|---|---|---|---|
| Oregon | | | |
| Pennsylvania | ✓ | | 2% |
| Rhode Island | | | |
| South Carolina | | | |
| South Dakota | | ✓ | TBD |
| Tennessee | ✓ | | 100% |
| Utah | ✓ | | $1 million |
| Vermont | | | |
| Virginia | | ✓ | 50% |
| West Virginia | | | |
| Wisconsin | | | |
| Wyoming | | | |

Source: NCSL (March 2014).

# Appendix H: Potential Athletic Savings Targets and Fee Reductions

This appendix provides information on potential savings targets for institutions' athletic fees, as well as the associated fee reduction with potential savings targets.

## Athletic fees

### TABLE H-1
**Potential savings resulting from limits on athletic fees as portion of total mandatory charges (FY 2013)**

| | FY 2013 Athletics Fee | Portion of Total Mandatory Charges | 5% Limit | 10% Limit | 15% Limit |
|---|---|---|---|---|---|
| VT | $267 | 2% | $0 | $0 | $0 |
| UVA | 657 | 5 | 0 | 0 | 0 |
| GMU | 577 | 6 | 96 | 0 | 0 |
| VCU | 635 | 6 | 106 | 0 | 0 |
| UMW | 747 | 8 | 280 | 0 | 0 |
| CWM | 1,584 | 12 | 924 | 264 | 0 |
| VMI | 1,622 | 12 | 946 | 270 | 0 |
| VSU | 892 | 12 | 520 | 149 | 0 |
| RU | 1,138 | 13 | 700 | 263 | 0 |
| UVA-W | 1,219 | 15 | 813 | 406 | 0 |
| CNU | 1,795 | 17 | 1,267 | 739 | 211 |
| JMU | 1,528 | 17 | 1,079 | 629 | 180 |
| ODU | 1,453 | 17 | 1,026 | 598 | 171 |
| LU | 2,044 | 19 | 1,506 | 968 | 430 |
| NSU | 1,618 | 24 | 1,281 | 943 | 607 |

Source: JLARC staff analysis of mandatory athletic fees charged to undergraduate students for the 2012-13 academic year as reported to JLARC staff for the September 2013 *Review of Non-Academic Services and Costs.*
Notes: Mandatory athletic fee removes subsidies from other auxiliary enterprises. At VMI, auxiliaries such as housing and dining cover a portion of the athletic programs' indirect costs. If the amount per student related to indirect costs was included, the FY 2013 athletic fees for VMI would be $1,948.

# Appendix I: Annual Growth in Mandatory Non-E&G Fees

As noted in Chapter 5, growth in mandatory non-E&G fees generally exceeded five percent annually since FY 2004, due to the exemptions allowable under the state's cap. The following data provides additional context on individual institutions' mandatory non-E&G fee growth.

**TABLE I-1**

**Annual growth in mandatory non-E&G fees often exceeded five percent**

| | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 | FY 2014 | FY 2015 | Avg. annual growth | Total growth |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CNU | 21.7% | 21.5% | 10.4% | 12.4% | 13.7% | 11.3% | 8.7% | 8.3% | 5.1% | 4.6% | 4.9% | 3.2% | 10.5% | 225.3% |
| UMW | 4.0 | 12.2 | 15.0 | 8.1 | 8.5 | 5.0 | 5.0 | 9.0 | 12.0 | 5.0 | 4.5 | 7.0 | 7.9 | 148.9 |
| VMI | 6.8 | 7.5 | 8.0 | 9.6 | 6.2 | 6.2 | 7.5 | 10.8 | 4.1 | 6.0 | 5.3 | 9.5 | 7.3 | 132.0 |
| UVA-W | 4.3 | 7.0 | 5.0 | 16.7 | 12.0 | 6.9 | 7.1 | 4.0 | 6.0 | 5.0 | 5.0 | 4.0 | 6.9 | 121.6 |
| VT | 1.5 | 16.7 | 6.8 | 7.3 | 6.6 | 5.3 | 4.8 | 9.2 | 8.0 | 3.9 | 4.7 | 3.9 | 6.6 | 113.1 |
| CWM | 3.6 | 3.5 | 9.3 | 8.0 | 10.2 | 15.2 | 6.3 | 5.9 | 4.3 | 0.5 | 2.9 | 3.2 | 6.1 | 101.4 |
| GMU | 3.0 | 1.7 | 4.1 | 8.7 | 9.0 | 10.0 | 10.0 | 8.2 | 6.3 | 3.8 | 3.0 | 4.9 | 6.1 | 101.7 |
| LU | 12.8 | 9.1 | 10.3 | 5.5 | 5.1 | 7.3 | 5.3 | 5.7 | 3.4 | 2.6 | 3.8 | -4.9 | 5.5 | 88.2 |
| ODU | 3.9 | 4.3 | 3.8 | 9.4 | 9.7 | 9.2 | 7.0 | 2.8 | 3.5 | 4.4 | 3.1 | 3.3 | 5.4 | 86.6 |
| RU | 6.0 | 7.5 | 6.0 | 6.5 | 6.5 | 9.3 | 6.8 | 5.0 | 4.9 | 2.5 | 2.0 | 1.0 | 5.3 | 86.0 |
| NSU | 17.2 | 8.1 | 10.8 | 7.7 | 5.9 | 6.0 | 5.1 | 5.1 | 5.0 | 3.1 | 2.9 | -14.6 | 5.2 | 78.0 |
| VCU | 5.8 | 7.2 | 4.3 | 12.8 | 7.9 | 6.9 | 4.3 | 0.0 | 2.8 | 1.3 | 5.1 | 0.0 | 4.9 | 75.9 |
| UVA | 8.6 | 6.9 | 8.0 | 6.6 | 7.4 | 7.3 | -0.2 | 2.7 | 2.4 | 2.5 | 3.0 | 3.4 | 4.9 | 76.9 |
| JMU | 3.0 | 3.3 | 6.0 | 6.0 | 6.0 | 5.0 | 3.0 | 4.8 | 3.5 | 3.7 | 3.2 | 4.5 | 4.3 | 66.3 |
| VSU | 38.8 | -2.8 | 5.1 | -3.3 | 1.5 | 4.9 | 0.0 | 3.6 | 0.0 | 0.0 | 7.2 | 1.6 | 4.7 | 64.8 |
| **Avg.** | **9.4** | **6.8** | **7.7** | **7.9** | **7.6** | **7.9** | **5.6** | **6.0** | **4.6** | **3.4** | **4.1** | **2.3** | **6.1** | **79.6** |

Source: JLARC staff analysis of SCHEV's Tuition and Fee reports and the state's cap on annual growth.

Note: Annual growth is assessed based on nominal mandatory non-E&G fee rates. VMI's mandatory non-E&G fees include a Quartermaster charge that funds military uniforms, laundry, and haircuts.

**TABLE I-2**

**Annual growth in mandatory non-E&G fees affected student costs to varying degrees**

| | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 | FY 2014 | FY 2015 | Avg. annual growth | Total growth |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VMI | $235 | $276 | $316 | $413 | $289 | $308 | $396 | $614 | $258 | $393 | $369 | $696 | $380 | $4,563 |
| CNU | 312 | 376 | 222 | 292 | 362 | 340 | 292 | 300 | 200 | 192 | 210 | 146 | 270 | 3,244 |
| CWM | 92 | 91 | 252 | 237 | 327 | 536 | 254 | 253 | 197 | 25 | 140 | 160 | 214 | 2,564 |
| LU | 316 | 254 | 313 | 186 | 180 | 270 | 210 | 240 | 150 | 120 | 180 | -240 | 182 | 2,179 |
| UVA-W | 75 | 127 | 98 | 340 | 286 | 184 | 202 | 122 | 190 | 168 | 176 | 148 | 176 | 2,116 |
| UMW | 50 | 158 | 218 | 136 | 154 | 99 | 103 | 196 | 284 | 132 | 124 | 204 | 155 | 1,858 |
| JMU | 78 | 86 | 164 | 174 | 184 | 162 | 102 | 168 | 128 | 140 | 126 | 184 | 141 | 1,696 |
| ODU | 71 | 83 | 76 | 194 | 220 | 229 | 191 | 80 | 106 | 137 | 99 | 109 | 133 | 1,595 |
| GMU | 42 | 24 | 60 | 132 | 149 | 181 | 198 | 180 | 150 | 96 | 78 | 132 | 119 | 1,422 |
| RU | 94 | 124 | 107 | 123 | 132 | 199 | 159 | 126 | 130 | 70 | 56 | 30 | 113 | 1,350 |
| NSU | 282 | 155 | 225 | 176 | 146 | 157 | 141 | 148 | 152 | 100 | 96 | -500 | 107 | 1,278 |
| VSU | 688 | -68 | 123 | -84 | 36 | 121 | 0 | 94 | 0 | 0 | 194 | 46 | 96 | 1,150 |
| VT | 13 | 145 | 69 | 79 | 77 | 66 | 62 | 126 | 119 | 63 | 79 | 68 | 81 | 966 |
| UVA | 101 | 88 | 109 | 97 | 116 | 123 | -3 | 49 | 44 | 48 | 58 | 68 | 75 | 898 |
| VCU | 67 | 89 | 56 | 176 | 122 | 116 | 77 | 0 | 53 | 25 | 100 | 0 | 73 | 881 |
| **Avg.** | **168** | **134** | **161** | **178** | **185** | **206** | **159** | **180** | **144** | **114** | **139** | **83** | **154** | **1,851** |

Source: JLARC staff analysis of SCHEV's Tuition and Fee reports and the state's cap on annual growth.

Note: Annual growth is assessed based on nominal mandatory non-E&G fee rates. VMI's mandatory non-E&G fees include a Quartermaster charge that funds military uniforms, laundry, and haircuts.

# Appendix J: Capital Spending and Existing Policies to Manage Levels of Spending and Debt

As noted in Chapter 6, capital spending on higher education facilities and other capital projects has been substantial over the past two decades. This appendix provides more detailed information on capital spending over the past decade and future debt service obligations. This appendix also provides information on how the public four-year institutions decide which capital projects to move forward with and how they oversee and monitor capital spending and debt.

## State debt service payments

### TABLE J-1
### 9(b) general obligation debt service payments, in millions (FY 2002-FY 2013)

| | FY2002 | FY2003 | FY2004 | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CNU | $1.7 | $1.5 | $1.2 | $1.5 | $1.8 | $2.2 | $2.6 | $3.2 | $3.3 | $3.2 | $3.0 | $2.7 | $27.8 |
| CWM | 3.9 | 3.4 | 2.7 | 3.4 | 4.0 | 4.8 | 5.7 | 7.2 | 7.3 | 7.1 | 6.8 | 6.0 | 62.1 |
| GMU | 5.3 | 4.6 | 3.7 | 4.7 | 5.5 | 6.7 | 7.9 | 9.9 | 10.1 | 9.8 | 9.4 | 8.3 | 85.8 |
| JMU | 6.7 | 5.8 | 4.6 | 5.9 | 6.9 | 8.4 | 9.9 | 12.4 | 12.6 | 12.3 | 11.8 | 10.4 | 107.7 |
| LU | 0.8 | 0.7 | 0.6 | 0.7 | 0.8 | 1.0 | 1.2 | 1.5 | 1.5 | 1.5 | 1.4 | 1.2 | 12.9 |
| NSU | 1.4 | 1.2 | 1.0 | 1.3 | 1.5 | 1.8 | 2.1 | 2.7 | 2.7 | 2.6 | 2.5 | 2.2 | 23.0 |
| ODU | 3.0 | 2.6 | 2.0 | 2.6 | 3.1 | 3.7 | 4.4 | 5.5 | 5.6 | 5.4 | 5.2 | 4.6 | 47.7 |
| RU | 1.8 | 1.6 | 1.3 | 1.6 | 1.9 | 2.3 | 2.7 | 3.4 | 3.5 | 3.4 | 3.2 | 2.8 | 29.6 |
| UMW | 1.2 | 1.1 | 0.8 | 1.1 | 1.3 | 1.5 | 1.8 | 2.3 | 2.3 | 2.3 | 2.2 | 1.9 | 19.9 |
| UVA | 4.6 | 4.0 | 3.1 | 4.1 | 4.7 | 5.7 | 6.8 | 8.5 | 8.6 | 8.4 | 8.1 | 7.1 | 73.6 |
| UVA-W | 0.6 | 0.6 | 0.4 | 0.6 | 0.7 | 0.8 | 0.9 | 1.2 | 1.2 | 1.2 | 1.1 | 1.0 | 10.2 |
| VCU | 5.1 | 4.5 | 3.5 | 4.6 | 5.3 | 6.4 | 7.6 | 9.5 | 9.7 | 9.4 | 9.0 | 8.0 | 82.7 |
| VMI | 1.5 | 1.3 | 1.0 | 1.3 | 1.6 | 1.9 | 2.2 | 2.8 | 2.9 | 2.8 | 2.7 | 2.4 | 24.4 |
| VSU | 1.5 | 1.3 | 1.0 | 1.3 | 1.5 | 1.9 | 2.2 | 2.8 | 2.8 | 2.7 | 2.6 | 2.3 | 24.0 |
| VT | 4.8 | 4.2 | 3.3 | 4.3 | 5.0 | 6.1 | 7.2 | 9.0 | 9.1 | 8.8 | 8.5 | 7.5 | 77.7 |
| **Statewide** | **$44.0** | **$38.3** | **$30.3** | **$39.1** | **$45.4** | **$55.3** | **$65.3** | **$81.7** | **$83.1** | **$80.7** | **$77.5** | **$68.4** | **$709.1** |

Source: JLARC staff analysis of capital data provided by Treasury.
Note: Data is in constant 2013 dollars. Numbers may not add due to rounding. Payments for individual institutions are estimated based on methodology developed with Treasury staff; see Appendix B for additional information on methodology. CWM includes VIMS.

## TABLE J-2
## 9(d) 21st Century Program debt service payments, in millions (FY 2002-FY 2013)

| | FY2002 | FY2003 | FY2004 | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CNU | 0.0 | 17.2 | 10.7 | 3.3 | 3.6 | 2.9 | 0.0 | 9.9 | 30.2 | 34.8 | 44.2 | 31.8 | 188.6 |
| CWM | 0.0 | 7.1 | 4.8 | 5.1 | 7.1 | 21.7 | 0.0 | 47.4 | 34.4 | 26.2 | 9.1 | 14.7 | 177.6 |
| GMU | 9.7 | 14.0 | 17.0 | 2.8 | 2.7 | 7.4 | 0.6 | 42.3 | 54.7 | 20.2 | 29.1 | 35.7 | 236.3 |
| JMU | 0.9 | 4.5 | 14.4 | 10.4 | 9.3 | 1.7 | 0.1 | 16.7 | 17.3 | 27.6 | 34.3 | 59.5 | 196.6 |
| LU | 0.0 | 1.1 | 11.1 | 17.2 | 5.1 | 0.7 | 0.2 | 11.7 | 15.3 | 18.1 | 9.1 | 11.6 | 101.2 |
| NSU | 2.3 | 4.9 | 3.0 | 13.0 | 6.9 | 2.5 | 3.2 | 5.3 | 7.7 | 20.9 | 24.6 | 12.8 | 106.9 |
| ODU | 0.7 | 7.8 | 13.8 | 5.1 | 1.5 | 0.7 | 4.8 | 24.2 | 6.7 | 19.8 | 8.3 | 17.0 | 110.6 |
| RU | 1.9 | 7.9 | 6.1 | 0.7 | 0.8 | 4.5 | 0.6 | 2.0 | 10.9 | 12.6 | 19.4 | 7.1 | 74.4 |
| UMW | 0.8 | 2.4 | 0.9 | 1.3 | 9.0 | 3.6 | 0.1 | 7.4 | 5.0 | 17.8 | 17.1 | 12.5 | 77.9 |
| UVA | 2.1 | 16.3 | 2.7 | 2.6 | 26.7 | 7.2 | 0.0 | 28.2 | 32.2 | 27.7 | 24.6 | 38.6 | 208.8 |
| UVA-W | 0.0 | 4.5 | 0.5 | 0.0 | 0.3 | 0.3 | 0.0 | 18.9 | 20.2 | 18.8 | 11.6 | 4.1 | 79.3 |
| VCU | 1.9 | 2.9 | 3.4 | 3.1 | 12.0 | 10.8 | 15.7 | 38.6 | 14.9 | 20.2 | 36.8 | 44.2 | 204.5 |
| VMI | 0.0 | 1.2 | 0.8 | 3.0 | 11.3 | 2.4 | 0.0 | 27.8 | 22.2 | 12.8 | 7.8 | 15.8 | 104.9 |
| VSU | 1.7 | 5.6 | 10.5 | 4.0 | 1.5 | 0.1 | 0.1 | 3.2 | 10.5 | 27.2 | 19.7 | 10.4 | 94.4 |
| VT | 3.7 | 23.4 | 29.5 | 13.8 | 4.4 | 1.7 | 0.0 | 28.2 | 76.5 | 30.4 | 46.9 | 54.7 | 313.1 |
| **Statewide** | **25.5** | **120.7** | **129.1** | **85.3** | **102.3** | **68.2** | **25.5** | **311.9** | **358.5** | **335.1** | **342.6** | **370.7** | **2,275.3** |

Source: JLARC staff analysis of capital data provided by DPB.
Note: Data is in constant 2013 dollars. Numbers may not add due to rounding. CWM includes VIMS.

## Institutional debt service payments

### TABLE J-3
### 9(c) higher education debt service payments, in millions (FY 2002-FY 2013)

| | FY2002 | FY2003 | FY2004 | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CNU | 3.2 | 9.6 | 4.3 | 29.7 | 6.2 | 4.0 | 3.9 | 6.1 | 5.7 | 4.7 | 5.2 | 6.2 | 88.8 |
| CWM | 4.1 | 14.9 | 3.3 | 12.0 | 6.7 | 5.7 | 5.5 | 10.8 | 15.9 | 6.2 | 9.3 | 10.9 | 105.2 |
| GMU | 7.1 | 34.3 | 8.8 | 21.3 | 9.8 | 11.5 | 13.4 | 17.1 | 42.8 | 17.5 | 26.5 | 45.4 | 255.5 |
| JMU | 4.6 | 11.2 | 3.9 | 23.5 | 4.4 | 4.9 | 6.5 | 10.6 | 12.4 | 8.1 | 9.0 | 19.2 | 118.2 |
| LU | 1.8 | 5.7 | 1.7 | 5.9 | 2.6 | 2.0 | 2.5 | 4.6 | 6.2 | 3.0 | 5.2 | 7.2 | 48.4 |
| NSU | 2.0 | 13.5 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 | 1.6 | 1.5 | 1.1 | - | - | 28.4 |
| ODU | 2.5 | 14.3 | 2.4 | 2.5 | 2.8 | 3.5 | 4.7 | 7.1 | 13.7 | 6.9 | 7.0 | 16.0 | 83.4 |
| RU | - | - | - | - | - | - | - | - | - | - | - | - | 0.0 |
| UMW | 1.3 | 6.9 | 0.9 | 2.5 | 1.6 | 1.6 | 1.5 | 2.8 | 3.3 | 1.2 | 2.1 | 1.5 | 27.3 |
| UVA/W | 7.6 | 33.6 | 5.6 | 12.1 | 5.3 | 6.1 | 5.8 | 11.9 | 5.9 | 4.6 | 7.8 | 2.6 | 108.8 |
| VCU | 3.6 | 6.8 | 2.6 | 12.6 | 3.4 | 3.0 | 3.2 | 9.0 | 4.0 | 4.6 | 6.3 | 9.7 | 69.0 |
| VMI | - | - | - | 0.5 | 1.0 | 1.0 | 1.0 | 1.0 | 5.6 | 0.9 | 3.9 | 0.8 | 15.7 |
| VSU | 1.3 | 5.4 | 1.2 | 2.0 | 1.5 | 1.6 | 3.6 | 4.4 | 11.8 | 4.5 | 7.4 | 27.9 | 72.8 |
| VT | 5.0 | 15.4 | 4.2 | 22.0 | 4.7 | 5.0 | 5.6 | 10.4 | 12.7 | 11.9 | 16.2 | 27.5 | 140.6 |
| **Statewide** | **44.1** | **171.7** | **40.8** | **148.3** | **51.7** | **51.6** | **58.8** | **97.4** | **141.7** | **75.2** | **106.0** | **174.9** | **1,162.0** |

Source: JLARC staff analysis of capital data provided by the APA.
Note: Data is in constant 2013 dollars. Numbers may not add due to rounding. CWM includes VIMS.

**TABLE J-4**

**9(d) Pooled Bond Program debt service payments, in millions (FY 2002-FY 2013)**

| | FY2002 | FY2003 | FY2004 | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CNU | 1.0 | 2.3 | 4.4 | 8.0 | 7.0 | 7.9 | 30.8 | 8.1 | 9.3 | 25.0 | 27.3 | 11.1 | 142.2 |
| CWM | 0.4 | 0.4 | 0.6 | 4.4 | 3.6 | 5.5 | 7.4 | 10.2 | 11.6 | 15.1 | 47.3 | 16.8 | 123.4 |
| GMU | 4.5 | 9.9 | 4.8 | 25.3 | 6.6 | 8.2 | 17.4 | 16.1 | 25.2 | 33.9 | 52.3 | 32.2 | 236.2 |
| JMU | 5.5 | 17.3 | 5.4 | 19.9 | 5.4 | 5.3 | 11.5 | 6.9 | 8.3 | 13.6 | 15.0 | 14.9 | 128.8 |
| LU | - | 0.1 | 0.6 | 1.0 | 1.6 | 2.5 | 5.1 | 3.6 | 4.0 | 6.6 | 14.9 | 3.7 | 43.6 |
| NSU | 1.2 | 1.1 | 1.1 | 1.6 | 2.2 | 2.6 | 2.5 | 2.4 | 2.4 | 2.6 | 13.0 | 3.7 | 36.4 |
| ODU | 4.3 | 6.5 | 6.6 | 24.6 | 7.8 | 9.7 | 22.4 | 12.4 | 14.6 | 30.5 | 36.7 | 13.5 | 189.5 |
| RU | - | - | - | - | - | - | - | - | 0.0 | 0.3 | 0.4 | 0.7 | 1.4 |
| UMW | 0.7 | 0.8 | 1.0 | 3.5 | 1.2 | 1.4 | 3.6 | 1.8 | 1.9 | 4.5 | 8.7 | 5.8 | 34.9 |
| UVA/W | 22.4 | 79.9 | 16.0 | 59.1 | 80.8 | 8.1 | 20.9 | 7.3 | 7.1 | 13.3 | 6.5 | 6.7 | 328.1 |
| VCU | 8.8 | 9.8 | 63.3 | 23.4 | 17.1 | 19.4 | 40.8 | 23.5 | 26.2 | 49.5 | 66.3 | 47.2 | 395.1 |
| VMI | 0.4 | 0.5 | 0.6 | 0.8 | 0.8 | 0.8 | 2.4 | 0.7 | 0.4 | 1.7 | 0.5 | 0.6 | 10.1 |
| VSU | - | 0.1 | 0.4 | 0.6 | 0.6 | 0.9 | 3.1 | 0.9 | 0.8 | 2.5 | 2.7 | 0.8 | 13.4 |
| VT | 12.9 | 14.2 | 71.6 | 32.4 | 21.0 | 25.3 | 41.0 | 24.4 | 20.8 | 53.4 | 44.4 | 60.2 | 421.5 |
| **Statewide** | **62.2** | **143.0** | **176.4** | **204.5** | **155.6** | **97.4** | **208.8** | **118.3** | **132.5** | **252.4** | **336.0** | **217.8** | **2,104.9** |

Source: JLARC staff analysis of capital data provided by the APA.
Note: Data is in constant 2013 dollars. Numbers may not add due to rounding. CWM includes VIMS.

## TABLE J-5
## 9(d) independently issued bond debt service payments, in millions (FY 2002-FY 2013)

| | FY2002 | FY2003 | FY2004 | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2011 | FY2012 | FY2013 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UVA | | | | | | | | 6.3 | 7.1 | 30.8 | 21.7 | 28.1 | 94.0 |
| UVA-W | | | | | | | | 0.5 | 0.4 | 0.4 | 0.4 | 0.5 | 2.3 |
| **Statewide** | | | | | | | | **6.7** | **7.5** | **31.3** | **22.2** | **28.6** | **96.3** |

Source: JLARC staff analysis of capital data provided by UVA and VCU.
Note: Data is in constant 2013 dollars. Numbers may not add due to rounding.

## Outstanding principal and interest payments

### TABLE J-6
### Outstanding principal and interest payments, in millions (FY 2014-FY 2043)

| | 9(b) General obligation bonds | 9(d) 21st Century Program bonds | State, subtotal | 9(c) higher education | 9(d) Pooled Bond Program | 9(d) independently issued | Institutional, subtotal | Grand total |
|---|---|---|---|---|---|---|---|---|
| CNU | $23.6 | $228.6 | $252.2 | $83.3 | $160.3 | | $243.6 | $495.8 |
| CWM | 52.7 | 309.7 | 362.4 | 81.1 | 187.9 | | 269.0 | 631.4 |
| GMU | 72.8 | 366.2 | 438.9 | 338.1 | 511.5 | | 849.6 | 1,288.5 |
| JMU | 91.4 | 323.3 | 414.7 | 84.0 | 211.4 | | 295.4 | 710.1 |
| LU | 11.0 | 115.8 | 126.7 | 25.4 | 44.9 | | 70.3 | 197.0 |
| NSU | 19.5 | 211.2 | 230.8 | - | 60.9 | | 60.9 | 291.7 |
| ODU | 40.5 | 189.9 | 230.4 | 81.6 | 161.5 | | 243.1 | 473.5 |
| RU | 25.1 | 195.3 | 220.4 | 6.9 | 26.6 | | 33.5 | 253.9 |
| UMW | 16.9 | 110.0 | 126.8 | 5.5 | 170.6 | | 176.1 | 302.9 |
| UVA/W | 71.2 | 392.7 | 463.8 | 8.9 | 49.7 | 1,517.0 | 1,575.6 | 2,039.4 |
| VCU | 70.2 | 329.1 | 399.3 | 112.0 | 400.2 | 146.3 | 658.5 | 1,057.8 |
| VMI | 20.7 | 229.2 | 249.9 | 10.4 | 7.7 | | 18.1 | 268.0 |
| VSU | 20.4 | 194.0 | 214.3 | 143.6 | 8.5 | | 152.1 | 366.4 |
| VT | 65.9 | 329.0 | 394.9 | 225.0 | 382.4 | | 607.4 | 1,002.3 |
| **Statewide** | **601.7** | **3,524.0** | **4,125.6** | **1,205.9** | **2,384.0** | **1,663.3** | **5,253.2** | **9,378.8** |

Source: JLARC staff analysis of capital data provided by Treasury, DPB, APA, and Level III institutions .
Note: Data is in constant 2013 dollars. Outstanding principal and interest payments as of June 30, 2013. Numbers may not add due to rounding. CWM includes VIMS. 21st Century Program debt service payments are limited to debt authorized after FY 2002 and excludes debt for equipment.

## Institutional policies on capital spending and use of debt

Institutional policies and management decisions related to capital spending and the use and monitoring of capital debt often vary.

### *Institutional staff develop capital proposals*

Generally, institutions' processes to evaluate proposed projects follow the same basic structure, and institutions often consider similar criteria in determining the need for capital projects. Institutional staff indicated that similar methods are used to determine need for E&G and auxiliary capital projects. The process of developing an institutional capital master plan may last anywhere from six months to several years. Some institutions, such as Virginia Tech, align their capital planning process with the state's six-year capital planning process.

The development of institutions' capital master plans begins with capital and facility management staff or hired consultants, who develop a list of proposed facility needs for consideration. Staff consider a number of factors during plan development, including:

- space needed to achieve the goals outlined in institutional strategic plans, including programmatic needs unmet by current facilities or anticipated enrollment growth that may strain existing facilities;
- facility condition and student safety and well-being;
- state higher education goals (such as emphasis on more science, mathematics, technology, engineering, and health degrees);
- student expectations, competition with peer institutions, and student and faculty recruitment;
- anticipated availability of state capital financing (such as whether a large bond package may be offered); and
- proposed project scope (e.g., size, cost).

The broader university community is also consulted during plan development. For example, staff at Norfolk State noted that they have a cross-institutional space advisory committee, which is comprised of the provost, vice presidents, faculty and staff, and associate vice president for facilities management. A capital planning committee works in conjunction with the space advisory committee to prioritize proposed projects and provide a finalized list to the president for consideration.

### *Board involvement with capital proposals*

Institutional staff generally noted that their board members are highly engaged in the process of selecting capital proposals. For example, staff at Christopher Newport commented that board members receive a summary report at their annual retreat, which includes information on recently completed and future capital projects. Institutional staff also indicated that they provide board members with a high-level summary of capital projects at each board meeting, which includes an estimated budget, funding source, and purpose of the facility (Exhibit I-1).

**EXHIBIT J-1**
**Board members typically receive updates including high-level capital information**

**STUDENT SUCCESS CENTER**

| | | |
|---|---|---|
| ***Budget*** | $ | 42,199,633 |
| ***Square Footage*** | | |
| ***New Construction*** | | 80,870 |
| ***Architect*** | | Glave & Holmes (Richmond) |
| ***CM@Risk Contractor*** | | Whiting-Turner (Richmond) |
| ***Design Start*** | | June 2009 |
| ***Construction Start*** | | August 2013 |
| ***Construction End*** | | May 2015 |
| ***Funding Source*** | | Commonwealth of Virginia |
| ***Comments*** | | Under Construction. The Student Success Center will enhance and complement our commitment to student engagement and success by linking students and resources to address those issues most affecting the quality and success of the undergraduate educational experience. The co-location of these essential support services will emphasize the importance of each to the students' success and will establish a sense of place for students as they move from the admissions process to graduation four years later. Offices will include Registrar, Financial Aid, Housing, Academic Success, Admissions, Study Abroad, Student Success, Student Accounts/Cashier, payroll, Business Offices, Alumni Relations and Events, Institutional Research, Internal Audit, Planning and Budget and the Executive Offices. |

Source: Information from a February 2014 Capital Projects Summary handout to board members provided by Christopher Newport staff.

The boards of visitors also provide official approval to move forward with specific capital projects, must approve the use of debt to finance projects, and approve the selection of contractors, builders, and architects. At the Level 3 institutions issuing their own debt, board approval is the only approval required to use independently issued 9(d) bonds. For all other institutions and bond types, General Assembly approval is also required.

### *Debt management policies*

The 2006 Appropriation Act (§4-9.02) first introduced the requirement that all institutions maintain and comply with an institutional debt management policy as part of the financial and administrative standards established under the 2005 Restructuring Act. Stakeholders and institutional staff noted a number of benefits of having a debt management policy, including response to internal concerns (e.g., student affordability concerns and risk management) and external concerns (e.g., credit rating agencies and the potential effect on the state's credit rating).

The state requirement to implement debt management policies was intended to define the maximum percent of institutional resources that could be used to repay institutional debt service in a given fiscal year, as well as the maximum amount of debt that an institution could "prudently" issue within a specified period. The Secretary of Finance was responsible for developing and evaluating the financial and administrative standards.

In 2009, the Secretary of Finance modified the financial and administrative standards. Level III institutions (William and Mary, UVA/UVA-Wise, VCU, and Virginia Tech) were exempt from the original standards and required to adhere to a different set of measures. These included requirements to maintain a bond rating of AA- (or better) and a debt burden ratio equal to or less than the level approved by the board of visitors in the institution's debt management policy.

There is considerable variation in how institutions implemented and use their debt management policies, however. For example, JMU's debt management policy was initially developed by a consultant and approved by the institution's board of visitors, while Virginia Tech's debt management policy pre-dates the Restructuring Act. For many of the Level II and Level I institutions, their debt management policies have remained unchanged since implemented in 2006. In contrast, staff at several Level III institutions generally tended to express having a higher degree of engagement with their policies. William and Mary's board reviews and approves the debt management policy annually. VCU recently implemented a new debt policy, which includes language about the affordability of capital debt and the university's ability to make debt service payments.

A 2006 APA review of the public four-year institutions' debt management policies noted that, at the time, only UVA's debt management policy focused on debt capacity (or the ability to repay debt service without overcommitting revenues or restricting ability to redirect funding). The APA noted other deficiencies with debt management policies at the time, including a lack of consideration of institutions' consumers: students. The APA noted that institutions traditionally managed debt on a project-by-project basis, which appears to continue through the state's current capital oversight process (specifically the requirement to complete financial feasibility studies for capital projects financed through 9(c) and 9(d) bonds). According to the APA, such an approach ignores the cumulative effects of debt service costs on students, a sentiment echoed by other stakeholders during interviews with JLARC staff.

At least one Virginia institution–George Mason–has a nationally recognized debt management policy.

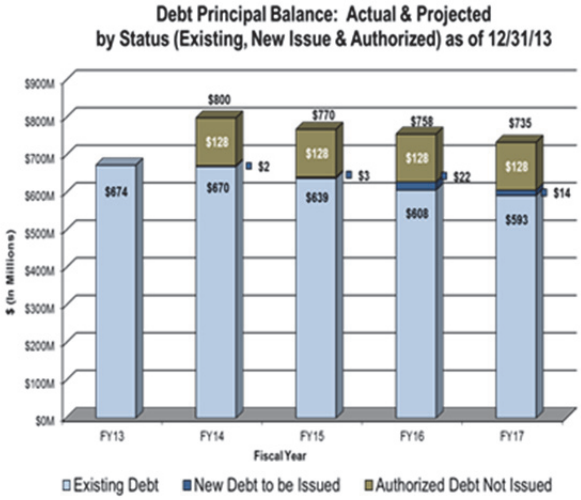
**CASE STUDY**
**George Mason's debt management policy**

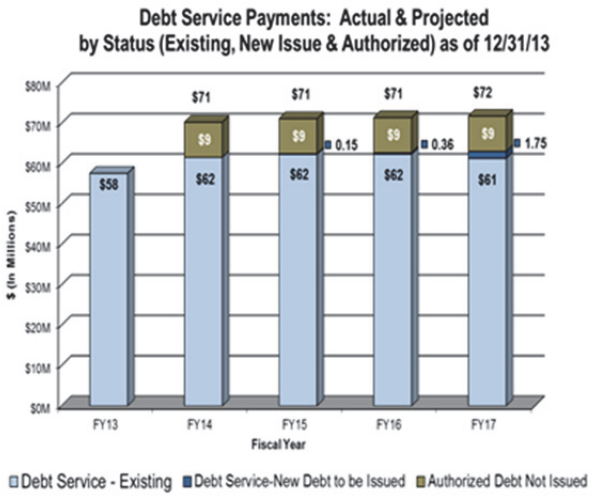
> The National Association of College and Business Officers recognized George Mason's recently revised debt management policy as a best practice. George Mason's debt management policy sets out four objectives: (1) maintain long-term financial health through guidelines for debt capacity and affordability, (2) support institutional mission and strategic goals through a framework to allocate debt to projects that best support these goals, (3) outline debt management and risk considerations, and (4) implement guidelines for debt reporting. George Mason's debt management policy will be subject to annual review by its board of visitors.
>
> Institutional staff noted that their board of visitors is focused on limiting George Mason's debt exposure. As a result, George Mason staff review institutionally-held debt several times a year. When reviewing capital proposals, staff present information to board members on project size, scope, anticipated budget, how the use of capital debt fits into the institution's debt policy, the funding source for debt payments, and the resulting impact on tuition and fees used to finance debt service payments (Exhibit I-2).
>
> George Mason's new policy also establishes a debt advisory team, headed by the Senior Vice President for Administration and Finance, that will provide advice on debt related matters. Institutional staff noted that as of May 2014, the debt advisory team had only met once but will likely meet quarterly. The team is looking at future capital

recommendations, debt sales, and other relevant matters, including whether George Mason could return debt authorization to minimize its reliance on capital debt.

**EXHIBIT J-2**

**George Mason staff closely monitor institutional debt with implementation of new policy**




| Capital Projects : Financed w/ GMU Debt | Cost ($M) | GMU Debt | Issued to Date | Spring 2014 (FY14) | Fall 2014 (FY15) | Fall 2015 (FY16) | Fall 2016 (FY17) |
|---|---|---|---|---|---|---|---|
| Housing VIII - Taylor Hall | $18.3 | $18.3 | $15.9 | $2.4 | | | |
| Central Plant | $10.1 | $6.0 | $3.0 | | $3.0 | | |
| Academic VII | $73.0 | $8.0 | | | | $8.0 | |
| Housing VIII - Rappahannock | $27.3 | $27.3 | | | | $13.7 | $13.7 |
| PW Life Science (Bull Run) | $61.0 | $0.6 | | | | | $0.6 |
| **Total** | **$189.6** | **$60.1** | **$18.9** | **$2.4** | **$3.0** | **$21.7** | **$14.2** |

GEORGE MASON UNIVERSITY

8

Source: Information provided by George Mason staff.

For many institutions, the primary tool of debt management appears to be the debt burden ratio (generally the ratio of annual debt service expenditures to total operating expenditures). There is some variation in how institutions calculate their debt burden ratios. For example, Christopher Newport's debt burden ratio excludes debt for revenue-producing capital projects that are secured through user fees (e.g., residence halls and dining facilities), a practice staff noted is consistent with the National Association of College and University Business Officers' policy. Staff at other institutions indicated that debt on these facilities was included in their debt burden ratio, although this type of debt may be used to exceed the debt burden ratio at a few institutions, including ODU.

Institutions also tend to have varying thresholds for their debt burden ratios, ranging from a low of 6.0 percent at VCU to a high of 10.0 percent at Christopher Newport, William and Mary, Mary Washington, and VMI (Table I-7). Virginia Tech staff noted that their current board sets an unofficial debt burden ratio (5.0 percent) that falls below the ratio set in policy (7.0 percent). Staff at both George Mason and UVA noted that their institutions' target debt burden ratios are flexible and vary based on external benchmarks, including information reported by Moody's.

**TABLE J-7**
**Institutions' target debt burden ratios vary, and several institutions are approaching targets**

| | Target debt burden ratio | FY 2005 debt burden ratio | FY 2012 debt burden ratio | FY 2013 debt burden ratio |
|---|---|---|---|---|
| VCU | 6.0% | n.d. | 4.7% | 5.1% |
| NSU | 7.0 | 4.5 | 1.9 | 1.7 |
| ODU | 7.0 | 3.8 | 7.5 | 6.9 |
| RU | 7.0 | 0.1 | 0.3 | 0.4 |
| VSU | 7.0 | 1.9 | 5.5 | 6.6 |
| VT | 7.0[a] | 2.8 | 3.7 | 3.8 |
| LU | 9.0 | 3.6 | 6.2 | 5.5 |
| CNU | 10.0 | 4.6 | 8.0 | 9.2 |
| CWM | 10.0 | 3.0 | 6.5 | 6.9 |
| JMU | 10.0 | 3.7 | 5.9 | 5.3 |
| UMW | 10.0 | 9.2 | 5.6 | 5.8 |
| VMI | 10.0 | 2.2 | 1.6 | 1.7 |
| GMU | ---[b] | 3.7 | 7.6 | 8.1 |
| UVA/UVA-W | ---[c] | 1.9 | 2.3 | 2.2 |

Source: Information provided by institutional staff.

[a] Virginia Tech staff noted that although the institution's official debt burden ratio is 7.0 percent, the current board of visitors has set an effective limit of 5.0 percent to which institutional management is held accountable.

[b] George Mason staff noted that the institution does not currently have a debt burden ratio. Instead, staff noted that they monitor the impact of total debt and total debt service on the institution's financial health by benchmarking key financial indicators to external sources such as Moody's Higher Education median for the A2 rating category. Prior to implementing this policy, George Mason's target debt burden ratio was 10.0 percent.

[c] UVA's debt burden ratio includes the Academic Division, UVA-Wise, and the Medical Center. Staff noted that UVA does not target a specific debt burden ratio. Instead, it seeks to maintain a composite ratio that puts it in the top half of among its AAA-rated public university peers, allowing UVA to maintain a dynamic benchmark that changes with both industry and university-specific events. Institutional staff instead considers a number of ratios contained in the Moody's Scorecard, a composite of financial ratios.

Several institutions appear to be approaching their target debt burden ratios, including VCU, ODU, Virginia State, and Christopher Newport. Others–including Radford, Norfolk State, VMI, and UVA/UVA-Wise–have very low debt burden ratios, indicating relatively low debt service payments compared with total operating expenses.

# Appendix K: Strategies to Increase Graduation and Transfer Rates at Virginia Public Four-Year Institutions

This appendix provides information about state and institutional efforts to increase graduation and transfer rates. Increasing graduation rates can reduce total higher education costs to students by reducing the number of years students must pay for higher education. Increasing transfer rates can also substantially reduce the cost of higher education because the $3,900 average tuition and mandatory fees at Virginia's public two-year institutions were only one-third of the $10,386 at Virginia's public four-year institutions in FY 2014, excluding an additional $9,000 in room and board costs at the four-year institutions.

## Institutions have utilized several best practices to increase graduation rates

Research literature and institutional staff identified several factors that may hinder a student's ability to graduate with a four-year degree. For example, insufficient academic preparation presents an obstacle to successful progression toward a four-year degree. Students with less-advantaged socioeconomic backgrounds, particularly first-generation students and students from low-income families, are more likely to have constrained financial resources or a lack of knowledge or insufficient support in various aspects of attending college, such as choosing a major or registering for classes.

Institutional staff reported using several strategies to increase graduation rates identified as best practices in research literature (Table K-1). Strategies used include campaigns encouraging students to take 15 credits per semester, guided course registration, targeted advising, and the establishment of student resource centers. However, it is difficult to measure or assess the impact of a given strategy due to data limitations and the fact that strategies are often implemented simultaneously and for different portions of institutions' student populations.

Institutional staff commonly stated that improving retention and graduation rates is an ongoing institutional focus, and that the effectiveness of strategies are continually reevaluated. A substantial portion of funding requested by institution for FY 2015 supported initiatives targeting retention and graduation rates. Institutions requested additional funding to support a range of activities, including additional research on the reasons students do not graduate, and the expansion of winter and summer online courses. Low levels of institutional resources make it difficult for institutions to address some of the aforementioned obstacles through, for instance, academic support services, social support services, and student aid.

Virginia's public four-year institutions have the second highest six-year graduation rates nationwide. All but one institution's six-year graduation rates were comparable to, or above, what would be expected given key student and institutional characteristics (See JLARC's 2013 *Trends in Higher Education Funding, Enrollment, and Students Costs)*. These key characteristics were the percentage of undergraduate students receiving Pell grants, average SAT score of the freshman class, instructional spending per student, and the percentage of students who attend full-time.

**TABLE K-1**
**Virginia's public four-year institutions have several strategies to increase graduation rates**

| Strategy | Description |
|---|---|
| Campaigns for 15 credits per semester | Encouragement from institutional leadership or tuition pricing for students to take at least 15 credits per semester to reduce time to graduation |
| Freshmen or sophomore-year experience | Programming to educate freshmen or sophomores on academic and career success, including goals for the academic year, resume reviews, internship searches, and campus leadership opportunities |
| Guided course registration | Software helping students identify the critical courses needed for their major as well as the best sequencing of these courses |
| Learning communities | Students are placed into groups of students with similar interests to take the same courses or live together |
| Resource centers | Centers that assist students who need extra academic support in certain topic areas, such as writing or math |
| Student aid | Financial assistance to students, including emergency funds for students who are at risk of dropping out due to insufficient financial resources |
| Targeted student advising | Advisors reach out to students who are likely to face, or have faced, academic difficulty based on grade point averages, standardized test scores, academic probation status, financial need, or distance from campus. |

Source: JLARC staff analysis of information provided by staff at Virginia's public four-year institutions.

## State has utilized several best practices for transfer and is refining its policies

According to research, students transferring from two- to four-year institutions face several challenges. Course credits may not transfer due to substantial variation in curriculum across two- and four-year institutions. Students may not be academically prepared to transfer, or may be discouraged if the two-year or four-year institution culture does not support transfer students. Students may also be unable to afford the cost of a four-year institution.

### *State has several policies and programs to facilitate transfer*

Virginia has several statewide policies and programs to facilitate the transfer of credits and students from two- to four-year institutions (Table K-2). These policies include articulation, dual admission, and guaranteed admission agreements which must comply with the state policy on college transfer and state guidelines established by SCHEV. These agreements clarify what credits are transferable, including the circumstances under which they are transferable, and allow students to engage in student life at the four-year institution prior to transfer. Virginia also offers grants for transfer students who have financial need and a 3.0 grade point average to help reduce financial barriers to transfer.

**TABLE K-2**
**Virginia has several policies and programs to facilitate the transfer of credits and students**

| Transfer policy or program | Description |
|---|---|
| Articulation agreements | Guarantee the transferability of certain credits between two- and four-year institutions, contingent on a student's admission to the four-year institution |
| Dual admission agreements | Grant students concurrent enrollment status at both two- and four-year institutions so students can engage in student life activities and limited courses at the four-year institution before transfer |
| Guaranteed admission agreements | Guarantee admission to a four-year institution if the student receives a certain type of associate's degree, takes certain courses, and meets certain academic performance criteria at the two-year institution |
| Two-year college transfer grant | Students with financial need who earn an associate's degree at a state public two-year institution with a minimum grade point average of 3.0 receive grants up to $1,000 per year (or $2,000 for students in science, technology, engineering, math, or health fields). Grants can be renewed if 3.0 grade point average maintained. |

Source: JLARC staff analysis of information from SCHEV.

Virginia has adopted several, but not all, best practices cited in the research literature on articulation agreements (Table J-3).Virginia guarantees that students with certain associate's degrees will have met lower-level general education requirements and have junior status at a four-year institution. Virginia has also developed one-year certificates of general studies for community college students that are transferable to four-year institutions. A state advisory committee oversees the state's transfer policies and a transfer website informs students about the policies. However, Virginia does not commonly label courses that are comparable across two- and four-year institutions or have reverse articulation agreements which allow students to combine credits earned at both two- and four-year institutions to receive an associate's degree.

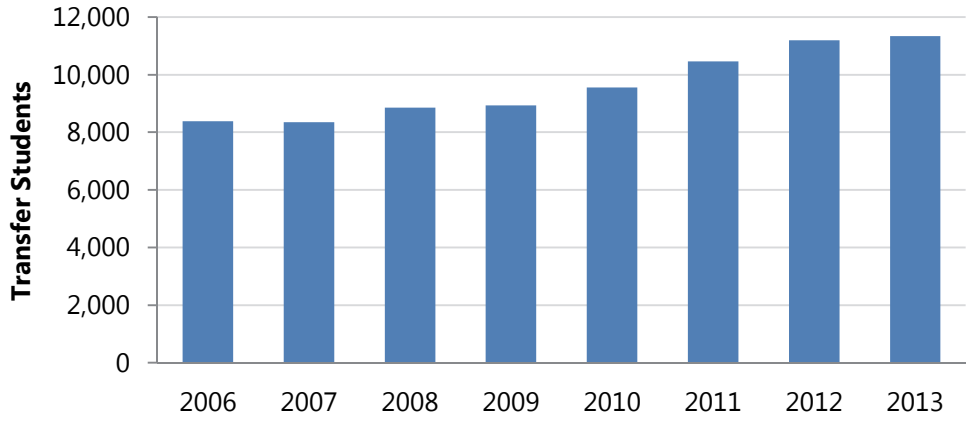
**TABLE K-3**
**Virginia uses several, but not all, best practices for articulation agreements in the literature**

| Best Practice | Used in Virginia |
|---|---|
| Guarantee junior status at four-year institution for student with associate's degree | ✓ |
| Guarantee transfer of general education courses | ✓ |
| Transfer committee | ✓ |
| Transfer website | ✓ |
| Common course numbering between two- and four-year institutions | |
| Reverse articulation agreements | |

Source: JLARC staff analysis of information from the National Conference of State Legislatures and Southern Regional Education Board.
Notes: (i) Virginia has common course numbering across two-year schools, but not between two- and four-year schools. (ii) Some two- and four-year schools may have developed reverse articulation agreements of their own accord, but there are no statewide policies.

The number of transfer students has increased more than twice as fast as the number of undergraduates at four-year institutions. The number of students who transferred from public two- to four-year institutions increased 35 percent between FYs 2006 and 2013, from approximately 8,000 to 11,000 students (Figure K-1). At the same time, the number of undergraduate students at four-year institutions increased only 15 percent, from 145,000 to 167,000 students. Consequently, the percentage of undergraduates at Virginia's public four-year institutions who transferred from public two-year institutions increased from approximately six to seven percent.

**FIGURE K-1**
**Number of transfer students increased 35 percent (FYs 2006-13)**




Source: JLARC staff analysis of SCHEV's TR01 Report.

According to SCHEV and the Virginia Community College System (VCCS) staff, several factors may have contributed to the increased transfer rates, but data limitations make it difficult to isolate the impact of any one factor. First, the creation of various state transfer agreements and the Two-Year College Transfer Grant in the mid-2000s may have increased the number of transfer students. However, VCCS staff cautioned that the grant may have had limited impact because students may not have known about it. Second, the increased cost of four-year institutions may have incentivized some students to start their higher education at a less-expensive two-year institution. A third potential factor is an increase in economically disadvantaged students. From FYs 2006-13, the number of transfer students of color grew by 71 percent compared to only 20 percent for other students. Fourth, some institutions may have created a culture that is more conducive to transfer students.

**CASE STUDY**
**Northern Virginia Community College and George Mason's transfer cultures**

The Pathway to the Baccalaureate, a consortium of K-12 public schools, Northern Virginia Community College (NOVA), and George Mason, was implemented in 2005 to improve support for transfer students. The program has three primary stages that address the full range of student needs. In the first stage, counselors recruit high school students and personally assist the students in the community college and student aid applications. In the second stage, counselors advise students as needed on

academic and personal challenges while at the community college, and students are able to attend student life activities at George Mason. In the third stage, NOVA counselors assist students in applying to the four-year institution and throughout the rest of the transfer process.

The program appears to have contributed to an increased number of transfer students. Despite coming from lower-income families and first-generation families, program participants have higher retention, grade point averages, and graduation rates than similar students at NOVA. NOVA accounted for over 60 percent of the statewide increase in students transferring from public two- to four-year institutions between FYs 2006 and 2013, and NOVA students transferring to George Mason accounted for over one-third of the increase.

### *State is refining and considering the expansion of transfer policies and programs*

According to SCHEV and VCCS staff, the state has reduced the primary statewide policy barriers to transfer and is now working on refining and expanding the policies. For example, the state is

- updating the state policy on college transfer to better account for alternative modes of instruction, transfer students without associate's degrees, and feedback across institutions;
- evaluating a transfer model that would allow students to take three years of classes at a community college and the final year at a four-year institution to further reduce costs;
- reducing mental barriers to transfer; and
- improving transfer students' graduation rates.

Student advising is another area in which the state may be able to improve, according to VCCS staff. Nationwide, two-year institutions have a median of 441 students per advisor. VCCS has substantially more median students per advisor, ranging from 570 to 926 across the institution. The median number of students is even higher per professional advisor, which excludes faculty advisors, ranging from approximately 1,400 to 3,000 across the institutions.

According to VCCS staff, this relatively high advisor workload may have resulted in students transferring to four-year institutions before completing an associate's degree. Early transfer prevents students from being eligible for the state's Two-Year College Transfer grant and is associated with lower completion rates for bachelor's degrees. This year, VCCS required institutions to complete a plan detailing how the institution would use additional tuition revenue to improve student success, including the use of additional personnel to coach students on success and transfer.

According to VCCS staff, statewide policy solutions are limited because each community college has different challenges. Compared to northern Virginia, for instance, other regions of the state place less emphasis on attaining higher education. Other regions also have less access to education, which poses additional financial and personal challenges as students must move away from their families.

The viability of using transfer to increase the affordability of a four-year degree may be limited. Some institutions report that their students are generally not interested in completing part of their degrees at community colleges because they want the full experience of a four-year institution, including the more varied curriculum. According to VCCS staff, the challenge is getting parents and

students to see the value that community colleges can provide. Ultimately, efforts to increase utilization of two-year institutions do not directly address the rising costs of four-year institutions and may consequently restrict full access to four-year institutions to students who can afford to pay.

# Appendix L: Net Cost by Institution and Income Level

This appendix provides information on average net cost to in-state students by institution and income level. Net cost is published cost of attendance—which includes tuition and fees, room and board, and books—minus student aid that does not have to be repaid.

**Table L-1**
**Average net cost to in-state students varies substantially across schools and income levels (FY 2012)**

| | Students with household incomes... | | | | |
|---|---|---|---|---|---|
| **Institution** | **≤$30,000** | **between $30,001 and $48,000** | **between $48,001 and $75,000** | **between $75,000 and $110,000** | **≥$110,001** |
| CNU | $14,370 | $16,137 | $18,594 | $21,027 | $22,692 |
| VCU | 13,672 | 14,505 | 17,862 | 20,334 | 22,434 |
| LU | 12,984 | 14,057 | 17,717 | 20,173 | 21,922 |
| GMU | 12,120 | 13,665 | 16,070 | 18,202 | 19,873 |
| VT | 11,775 | 13,728 | 17,538 | 21,327 | 23,113 |
| UMW | 10,957 | 14,218 | 17,884 | 20,502 | 20,831 |
| VSU | 10,812 | 11,678 | 14,381 | 15,946 | 17,634 |
| NSU | 10,513 | 10,321 | 13,418 | 14,927 | 15,394 |
| RU | 10,023 | 11,645 | 15,533 | 18,590 | 19,258 |
| JMU | 9,727 | 11,063 | 14,896 | 19,670 | 20,418 |
| ODU | 9,244 | 10,497 | 14,461 | 17,082 | 18,028 |
| UVA-Wise | 6,687 | 8,005 | 10,977 | 12,745 | 13,690 |
| VMI | 5,137 | 8,996 | 12,114 | 17,331 | 20,578 |
| UVA | 4,405 | 9,144 | 17,712 | 23,844 | 23,986 |
| CWM | 3,528 | 7,487 | 13,837 | 20,604 | 23,662 |

Source: JLARC staff analysis of data from the National Center for Education Statistics.
Note: In-state, first-time, full-time, degree-seeking students living on campus and receiving federal student aid. Excludes private student aid and tax benefits.

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