HIGHER EDUCATION
COMPARATIVE REPORT

FISCAL YEAR 2020

Auditor of Public Accounts
Staci A. Henshaw, CPA
www.apa.virginia.gov
(804) 225-3350

EXECUTIVE SUMMARY

The purpose of this report is to provide comparative financial information for Virginia's four-year public institutions of higher education. The citizens of Virginia partially fund the operations of each of these institutions with taxes paid and through tuition and fees paid by Virginia residents attending each institution. The basic mission of each of these institutions, providing post-secondary education to students, is essentially the same. However, the methodology for accomplishing this mission differs among institutions. Some examples of these differences in approach include the incorporation of military training in the educational environment, engagement of professors and students in various levels of research activities, and the inclusion of health systems or hospitals as part of the university entity. In addition, both the age and location of the institution can cause large financial and physical resource differences. For example, some institutions have had more time to build financial reserves and expand their physical footprints. Newer institutions, which may be attempting to achieve faster rates of growth, could be investing more heavily in their facilities and capital projects. This growth could contribute to lower reserves and higher levels of expense relative to total assets.

The Auditor of Public Accounts (APA) released the 2017 Higher Education Comparative Report during calendar year 2018 as the first installment of a planned periodic report to assess financial health and flexibility at Virginia's public four-year institutions of higher education. This iteration of the report focuses on institution financial health as of fiscal year 2020 but also includes trend analysis for certain ratios for the six-year period from fiscal year 2015 to fiscal year 2020. We have made some changes from the previous report to focus on specific ratios. The appendices to this report include condensed financial statement information for each four-year institution, detailed ratio information for each institution by fiscal year, and average and median ratios by institution category with comparable information for selected institutions from neighboring AAA-rated states.

The following statistics represent some key takeaways for the period between fiscal year 2017 and fiscal year 2020:

- **Most institutions have adequate reserves to cover expenses** or fall slightly below needed reserves with respect to benchmarks established by the primary reserve ratio. However, there is a wide disparity in reserves at master's or baccalaureate institutions. Christopher Newport University (CNU), Longwood University (LU), Norfolk State University (NSU), University of Mary Washington (UMW), and Virginia State University (VSU) remain below the benchmark measure even when considering combined institution and discretely presented component unit resources.

- **Long-term debt limits future financial flexibility** in terms of the use of expendable resources. Only five institutions, the University of Virginia (UVA), Virginia Tech (VT), Radford University (RU), the University of Virginia's College at Wise (UVAW), and Virginia Military Institute (VMI), have adequate resources (on an institution-only basis) in terms of their respective long-term debt obligations when compared to the viability ratio benchmark. Virginia Commonwealth University (VCU) and the College

of William and Mary (W&M) also exceed the benchmark when considering both institution and discretely presented component unit debt and resources. While many institutions use debt to finance the physical footprint and utilization of their respective campuses, balancing growth and financial stability will continue to be an important consideration for most institutions.

- **Management and those charged with governance should monitor negative return on net position** to ensure the underlying cause is due to one-time charges and not indicative of larger problems that might require substantial future action. While several institutions experienced negative return on net position ratios in a single year, LU (2017 and 2018) and NSU (2018 and 2019) experienced negative return on net position ratios during consecutive years. Despite the COVID-19 pandemic, all institutions had positive return on net position ratios for fiscal year 2020. For some institutions, positive ratios for fiscal year 2020 are likely, in part, due to additional CARES Act funding that bolstered institutional revenues. While institutions do not operate primarily to generate return on investment, a decrease in net position after including capital funding indicates potential concerns that may be the result of decreases in enrollment or other funding streams or significant unforeseen expenses.

- **Net operating revenues ratio trends can indicate budget concerns** either in the form of inconsistent revenue streams or unpredictable spending. Many institutions show negative net operating revenues ratios before including the impact of discretely presented component unit revenues; however, the addition of those component unit resources results in slightly positive ratios at all but a few institutions. LU, NSU, and UMW's net operating revenues ratios when including component unit resources remain negative or very close to zero for each year in the four-year period from fiscal year 2017 to fiscal year 2020. Since this ratio does not consider capital revenues, it can identify problems that the return on net position ratio may otherwise obscure. Institutions should monitor large changes in the ratio from year to year, or those ratios that remain negative for several years after the inclusion of component unit activity to assess underlying causes and whether revisions to budgetary assumptions or spending are necessary.

- **Composite Financial Index (CFI) ratios remained consistent** for most institutions when performing a trend analysis of CFI ratios including both institution and discretely presented component unit resources from fiscal year 2017 to fiscal year 2020; however, while the CFI ratio for UMW generally trended up from fiscal year 2017 through fiscal year 2020, the CFI ratio for UMW including its discretely presented component unit trended downward over the same period. Component units are significant to institution finances and should be considered as part of any analysis of institutional financial health. In most cases, an institution's CFI increases after factoring in resources held by component units for the benefit of their respective institutions. For instance, W&M and VCU appear to have relatively low CFI ratios compared to their peer institutions when excluding component unit resources from

the calculation. However, when including these resources, W&M has the third highest CFI among Virginia's public four-year institutions. The inclusion of component unit resources increases VCU's ratio from just over 1.8 to approximately 4.0, well over the benchmark ratio of 3.0. These examples highlight one of the nuances in evaluating the fiscal health of institutions, where university foundations recognized as component units often hold significant endowments. Institutions with low or declining CFI ratios after including component unit financial data are at a higher risk than those that see markedly larger CFI ratios upon the addition of component unit resources. As the very high research institutions exceeded the benchmark ratio for each year during the period, we did not perform additional trend analysis over these institutions.

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BACKGROUND

The Commonwealth of Virginia has 15 four-year, public institutions of higher education. The basic mission of these institutions is to provide post-secondary education; however, the methodology for accomplishing this mission varies considerably among institutions based on several factors. Some of these factors include the age of the institution, the size of its endowments, and its approach to providing higher education. For instance, Virginia's institutions range in age from just over 50 years old to over 320 years old. The size of each institution's endowment ranges from the tens of millions to $7 billion (as of June 30, 2020). Additionally, one institution incorporates a military structure and environment as an integral part of the educational experience. Analysis of these institutions must consider a variety of factors including age, size, and type of institution.

The Auditor of Public Accounts (APA) audits the financial statements of these institutions annually and reports the results and related findings and recommendations in an annual report on internal control and compliance. The table below includes links to each institution's annual financial statements and respective internal control and compliance audit reports for fiscal years 2018 through 2020 along with each institution's commonly accepted abbreviation. These abbreviations will be used throughout this report.

Institution Abbreviations and Financial Information

Table 1

Abbreviation	Institution	Audit Report			Financial Statements		
CNU	Christopher Newport University	2018	2019	2020	2018	2019	2020
W&M	The College of William and Mary in Virginia	2018	2019	2020	2018	2019	2020
GMU	George Mason University	2018	2019	2020	2018	2019	2020
JMU	James Madison University	2018	2019	2020	2018	2019	2020
LU	Longwood University	2018	2019	2020	2018	2019	2020
NSU	Norfolk State University	2018	2019	2020	2018	2019	2020
ODU	Old Dominion University	2018	2019	2020	2018	2019	2020
RU	Radford University	2018	2019	2020	2018	2019	2020
UMW	University of Mary Washington	2018	2019	2020	2018	2019	2020
UVA	University of Virginia	2018	2019	2020	2018	2019	2020
UVAW	The University of Virginia's College at Wise	2018	2019	2020	2018	2019	2020
VCU	Virginia Commonwealth University	2018	2019	2020	2018	2019	2020
VMI	Virginia Military Institute	2018	2019	2020	2018	2019	2020
VT	Virginia Polytechnic Institute and State University	2018	2019	2020	2018	2019	2020
VSU	Virginia State University	2018	2019	2020	2018	2019	2020

For purposes of this report, data presented for UVA includes UVAW, as the institutions present consolidated financial statements for reporting purposes. Where practicable, the report will also present separate ratios for UVAW, as it is a separate and distinct four-year higher education institution despite its connection with UVA. The inclusion of UVAW financial data in the UVA ratios does not have a significant impact on UVA's ratios, and therefore, we did not extract UVAW from the UVA financial data prior to calculation of the ratios for UVA. W&M includes Richard Bland College, Virginia's only junior college, as the institutions report to the same governing board and present consolidated financial statements for financial reporting purposes. However, as Richard Bland College is not a four-year institution, we do not present ratios for it as part of this report. The inclusion of Richard Bland College financial data within W&M's financial data does not have a significant impact on the ratios presented for W&M.

This comparative analysis does not include the Virginia Community College System (VCCS), as this report does not intend to compare financial information of four-year institutions to financial information of the Commonwealth's two-year institutions. The VCCS consists of 23 individual community colleges located throughout the Commonwealth of Virginia. The institutions that comprise the VCCS do not offer bachelor's degrees; instead, they typically provide two-year associate degrees and certificates. Due to these differences, it is difficult to provide a direct comparison between the VCCS and the Commonwealth's four-year institutions. Except for VMI and UVAW, all of Virginia's four-year higher education institutions operate graduate programs with varying degree options.

Knowledge of the size of the institutions and their respective endowments is essential in understanding how each institution operates. Endowments are donations of money or property, which provide ongoing support for an organization. Institutions typically invest these funds and use the income and occasionally principal from those investments to support the institutions in accordance with the donors' conditions. The original donation is typically not spendable but allows for the continued earning of income to support future operations of the institution. Some institutions invest endowment funds directly, while affiliated university not-for-profit foundations primarily hold and invest endowment funds for other institutions. For purposes of this report, to obtain endowment asset amounts, enrollment data, and endowment assets per full-time equivalent student, we used self-reported data from each of the institutions to the National Center for Education Statistics Integrated Postsecondary Education Data System (IPEDS)[1] as of fiscal year 2020, which was the latest data available.

According to IPEDS, the average endowment of U.S. institutions (2,004 four-year institutions and higher education systems with submitted amounts for fiscal year 2020) was approximately $344 million with a median endowment of $39 million; however, these averages include both public and private institutions. When considering institutions following Governmental Accounting Standards Board (GASB) standards, as in this report, the average endowment per institution and university system decreased to $309 million while the median endowment remained $39 million. The average endowment for Virginia public institutions of higher education included in this report for fiscal year 2020 was $861 million, with a median endowment of $117 million. As noted in Table 2 below, five of Virginia's 15 public four-year institutions have endowments larger than the national average for public institutions, while 13 exceed the national median for endowment assets at four-year public institutions. Further, endowments

increased from fiscal year 2017 to fiscal year 2020 at most institutions with an average increase of 26 percent and a median increase of 22.5 percent.

The average endowment per full-time equivalent (FTE) student for public four-year institutions nationally is $18,474 for institutions reporting enrollment information with a median endowment per FTE student of $6,629. IPEDS data likely understates the actual endowment per FTE amount as it does not include endowment per FTE for several statewide systems of higher education that report large endowments to IPEDS. The average endowment per full-time equivalent student for Virginia's public four-year institutions derived from information reported to IPEDS is $61,517 with a median endowment per full-time equivalent student of $14,278. As noted in Table 2 below, six of Virginia's four-year public institutions have endowment dollars per student exceeding national averages for public institutions, while 11 institutions exceed the national median. Full-Time enrollment decreased for ten of 15 institutions with an average decrease of four percent, with Longwood University (LU) experiencing a nine percent decline. Five institutions experienced an average increase of 6.5 percent, with Virginia Polytechnic Institute and State University (VT) and George Mason University (GMU) at approximately 11 percent and nine percent, respectively.

Institution Endowment Data[1]

Table 2

Classification	Institution	Fiscal Year 2020 Endowment Dollars (In millions)	2019-2020 Annualized FTE Enrollment	Endowment Dollars per FTE Student
Doctoral: Very High Research	GMU	$ 138.0	31,736	$ 4,348
Doctoral: Very High Research	UVA	7,146.5	26,597	268,696
Doctoral: Very High Research	VCU	1,992.3	27,462	72,548
Doctoral: Very High Research	VT	1,329.4	37,128	35,806
Doctoral: High Research or Doctoral/Professional	JMU	116.7	21,258	5,490
Doctoral: High Research or Doctoral/Professional	ODU	276.4	19,728	14,011
Doctoral: High Research or Doctoral/Professional	RU	58.7	9,449	6,212
Doctoral: High Research or Doctoral/Professional	W&M	967.7	8,485	114,048
Master's or Baccalaureate	CNU	39.2	4,852	8,079
Master's or Baccalaureate	LU	72.7	4,267	16,967
Master's or Baccalaureate	NSU	30.2	5,103	5,918
Master's or Baccalaureate	UMW	58.8	4,121	14,268
Master's or Baccalaureate	UVAW	112.2	1,527	73,477
Master's or Baccalaureate	VMI	516.9	1,919	269,359
Master's or Baccalaureate	VSU	56.9	4,231	13,448

In addition to size of the institution and available resources, certain differences in organizational structure can impact comparability of financial information. For example, the University of Virginia Medical Center (UVA Medical Center) is a division of UVA and accounting standards require the inclusion of its financial information in a single column in the financial statements with the financial activity of UVA's academic division. In contrast, the VCU Health System Authority is a component unit of VCU and is reported in a separate column in VCU's financial statements alongside the institution's information. For purposes of this report, we will use financial information of the primary university entity consistent with the presentation in the independently published financial statements of each institution. Except as otherwise noted, UVA Medical Center's financial information will be combined with UVA, but the VCU Health System Authority will not be included with the information presented for VCU.

Certain differences in organizational structure impact comparability of financial information performed in this report.

It is important to note, however, that component units of higher education institutions exist primarily to support the mission of the corresponding institution of higher education and will use their resources for various purposes to benefit the institution. In most cases, including component unit resources will significantly improve the financial position of each institution. To account for these differences, the report will present some ratios both with and without the impact of an institution's discretely presented component units (which can also include an institution's non-profit foundations) to provide for appropriate comparisons. We have labeled charts showing ratios that include the impact of discretely presented component unit resources as "including component units." The graphs labeled "including component units" do not include UVAW, as separate audited information regarding its foundation was not available for the analysis in this report.

To aid in comparability among higher education institutions, this report refers to four basic classifications prescribed by the Carnegie Foundation for the Advancement of Teaching.[2] These Carnegie classifications include doctoral or doctoral research institutions (very high research activity, high research activity, professional), master's (larger programs, medium programs, and smaller programs), and baccalaureate colleges. As shown in Table 2, we have classified Virginia's state-supported institutions into three broad categories based on Carnegie classifications: large doctoral research institutions with very high research activity; doctoral research institutions with high research activity or doctoral/professional institutions; and master's or baccalaureate institutions. These classifications consider research and development spending, science and engineering research staff, doctoral conferrals, program size, and number of master's degrees awarded. The assumption is that institutions with similar levels of research activity and similar degrees awarded operate in similar ways to each other compared with institutions outside of their assigned classification. Institutions operating similarly are likely to be more comparable in types and levels of expenses and investments.

INTRODUCTION TO FINANCIAL ANALYSIS

Ratios are quantitative relationships between two amounts showing the number of times one value (numerator) contains the other (denominator). This report uses several ratios to compare balances and activities within institution financial statements. Ratios help to provide relative comparability of each institution's activities, financial performance, and reserves rather than comparing total dollar values from one institution to the next. The tables, charts, and graphs in this report show summarized financial health and performance by assigned classification for the institutions. The charts use color to highlight specific institutions, particularly when they fall below the benchmark for a particular ratio or below the median of comparable institutions. Unless otherwise noted, the charts and graphs present ratio information for fiscal year 2020. In most cases, separate graphs show the ratios in each classification including the financial impact of each institution's discretely presented component units. In addition to graphs evaluating ratio performance for fiscal year 2020, an important component of fiscal health analysis is the trend within a given ratio over a longer period. Trend analyses included in the report will focus on those institutions that remain below the benchmark ratio for a period greater than one year or after the inclusion of component unit resources. We have calculated ratios for cohorts of institutions from other AAA-rated states for comparison purposes and provide this additional information along with ratio information for the Commonwealth's institutions in Appendix B: Detailed Ratio Information. We do not include these institutions in the charts and graphs below as the focus of this report is on Virginia's four-year public institutions. Appendix A: Condensed Financial Information provides additional detailed information for fiscal year 2020 for each institution.

Starting in fiscal year 2015, changes in accounting standards significantly affected financial statements prepared by each institution of higher education following standards published by the Governmental Accounting Standards Board. With respect to Virginia's public institutions of higher education, these standards require each institution to record a liability representing the institution's share of the Commonwealth of Virginia's overall net pension liability for employee pension benefits. Public institutions implemented a similar standard for postemployment benefits other than pensions during fiscal year 2018. Before these standards, it was uncommon for institutions to show a negative balance in unrestricted net position. However, following the implementation of the standards, only a few institutions continued to have a positive balance for this net position classification. As some uncertainty remains as to the best way to account for the impact of these standards within the traditional ratio analysis model, this report excludes the impact of these standards from the ratios presented. As these standards affect all institutions, we believe the exclusion of these liabilities should not significantly impact the comparability of ratios from one institution to another.

RATIOS AND ANALYSIS

Financial Resource Ratios

The financial resource ratios focus on available resources and the returns those resources generate. Financial resource ratios help to assess whether institutions have sufficient resources and whether they use those resources to support the mission and strategic direction of the institution.

Primary Reserve Ratio

The primary reserve ratio measures the financial strength and flexibility of an institution by comparing expendable net position to total expenses. Expendable net position consists of resources the institution can access in a short amount of time to satisfy obligations. Expendable net position excludes an institution's net investment in capital assets and other nonexpendable net position elements. Resources considered nonexpendable are generally not available to meet obligations unless the institution satisfies specific restrictions. For example, institutions do not generally sell their capital assets to cover obligations, except in extreme circumstances, and as such, resources invested in capital assets do not meet the liquidity requirement this ratio requires. A high primary reserve ratio indicates an institution can withstand economic downturn, decreases in enrollment, decreases in fundraising activities, or an inability to secure debt. A low ratio indicates that during an economic downturn, an institution could encounter difficulty meeting its obligations. The ratio also indicates the length of time an institution could continue operations without additional revenue or support. In other words, the primary reserve ratio provides a snapshot of the financial strength and flexibility of an institution. A ratio of 1.0 generally indicates an institution could continue to meet obligations for a year without additional revenue, increased state appropriation support, or short-term borrowing. The accepted benchmark for this ratio is 0.40.[3]

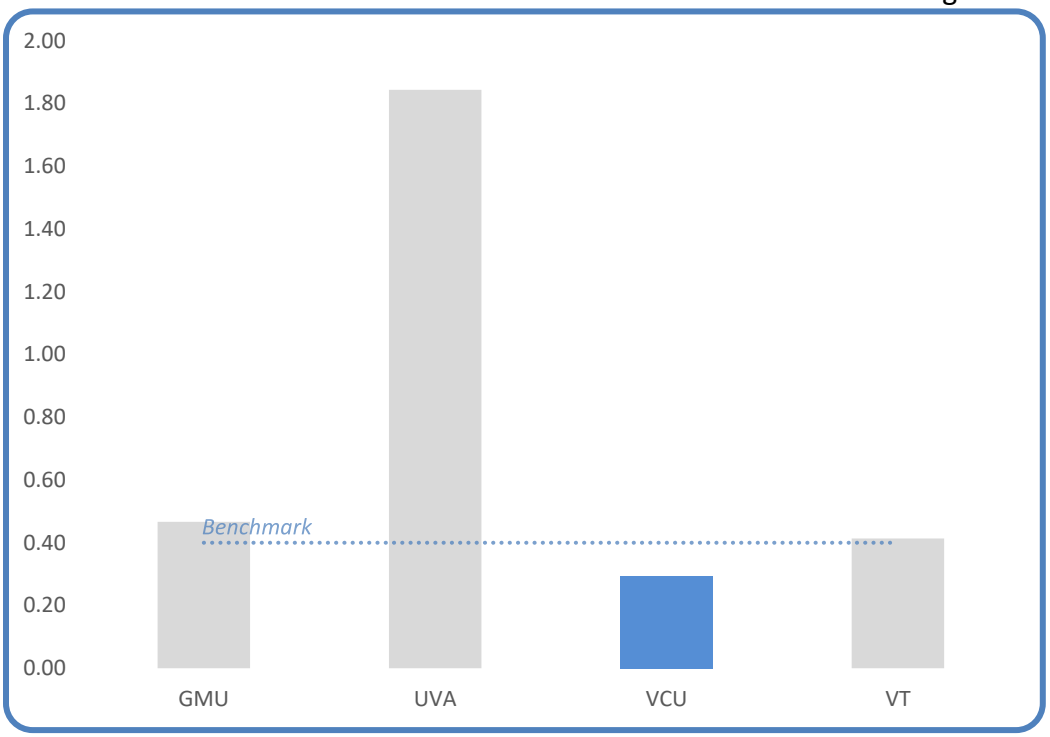
The primary reserve ratio provides a snapshot of the financial strength and flexibility of an institution.

Doctoral: Very High Research Institutions

As shown in Figure 1, an analysis of the primary reserve ratio for Virginia's very high research institutions shows generally satisfactory performance with respect to the benchmark.

Primary Reserve Ratio

Figure 1

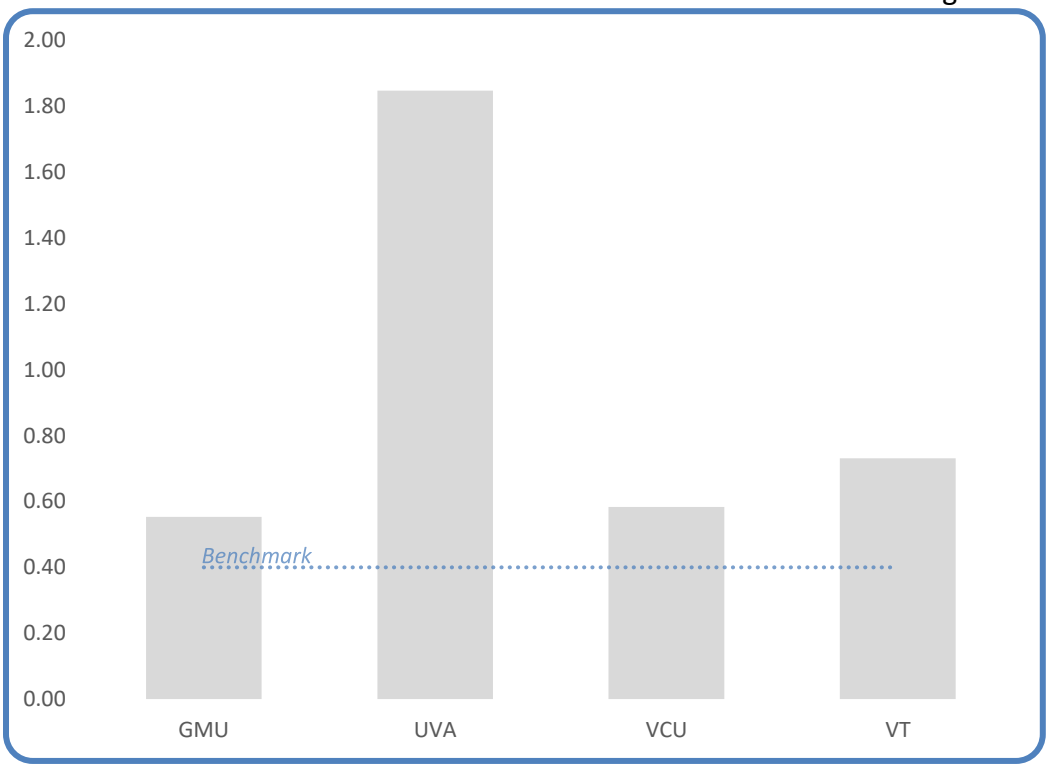


UVA's high primary reserve ratio of 1.84 in fiscal year 2020 is the outlier among very high research institutions largely due to its significant investments and restricted, but expendable, funds. Cash, cash equivalents, and investments comprise approximately 61 percent of UVA's total assets and UVA holds significant endowment funds directly, whereas non-profit foundations of other institutions control giving and investment activities. In contrast to UVA, most combined-endowment investments for GMU, VCU, and VT legally belong to and reside with affiliated foundations, rather than the universities directly. Figure 2 illustrates how the primary reserve ratio for both VCU and VT increases significantly with the addition of the financial resources of their respective discretely presented component units. While GMU's ratio also improves with the addition of the resources of its component units, GMU's ratio performance is mostly the result of approximately $546 million in cash and cash equivalents that provide it with significant liquidity with respect to the benchmark ratio rather than due to the size of its endowment.

Organizations with larger expendable endowments are likely to have much larger primary reserve ratios.

Primary Reserve Ratio
Including Component Units

Figure 2

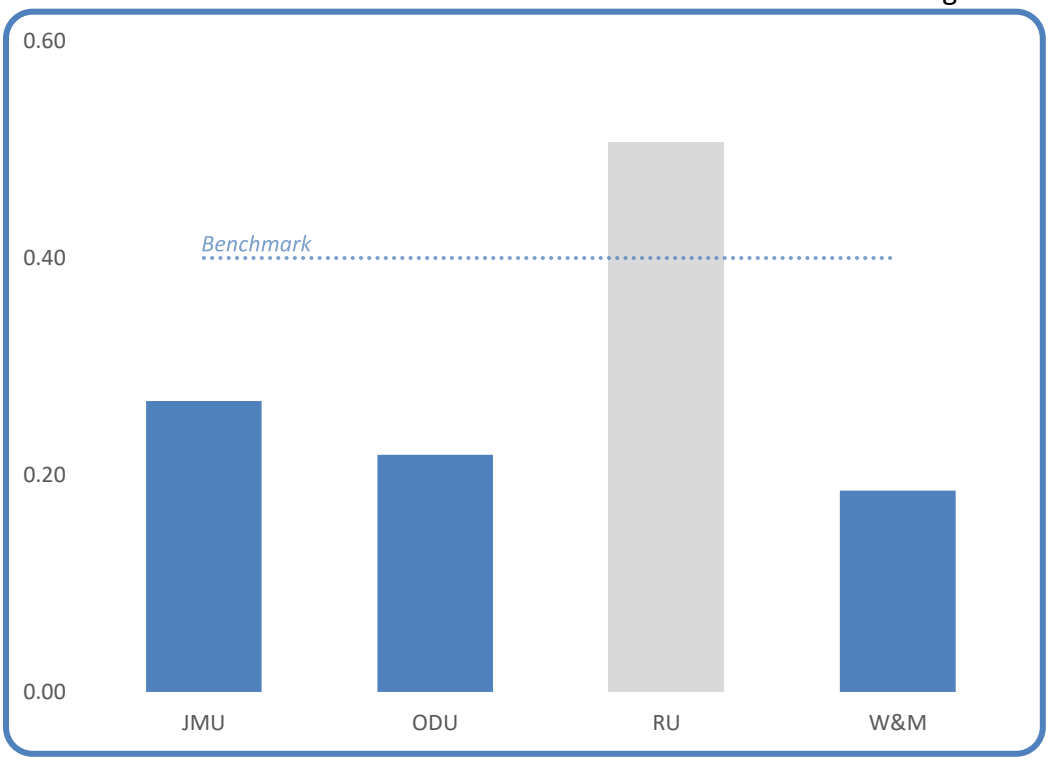


Doctoral: High Research or Doctoral/Professional Institutions

Like the institutions in the very high research classification, the primary reserve ratios of the institutions in the high research or doctoral/professional classification depend heavily on the size of institutional endowments, whether those endowments reside with the institution directly or with affiliated foundations, and whether institutions have significant cash and cash equivalents or other liquid assets. As shown in Figure 3, RU has the largest primary reserve ratio of the Virginia institutions in this classification due primarily to larger balances of liquid assets in comparison to peer institutions.

Primary Reserve Ratio

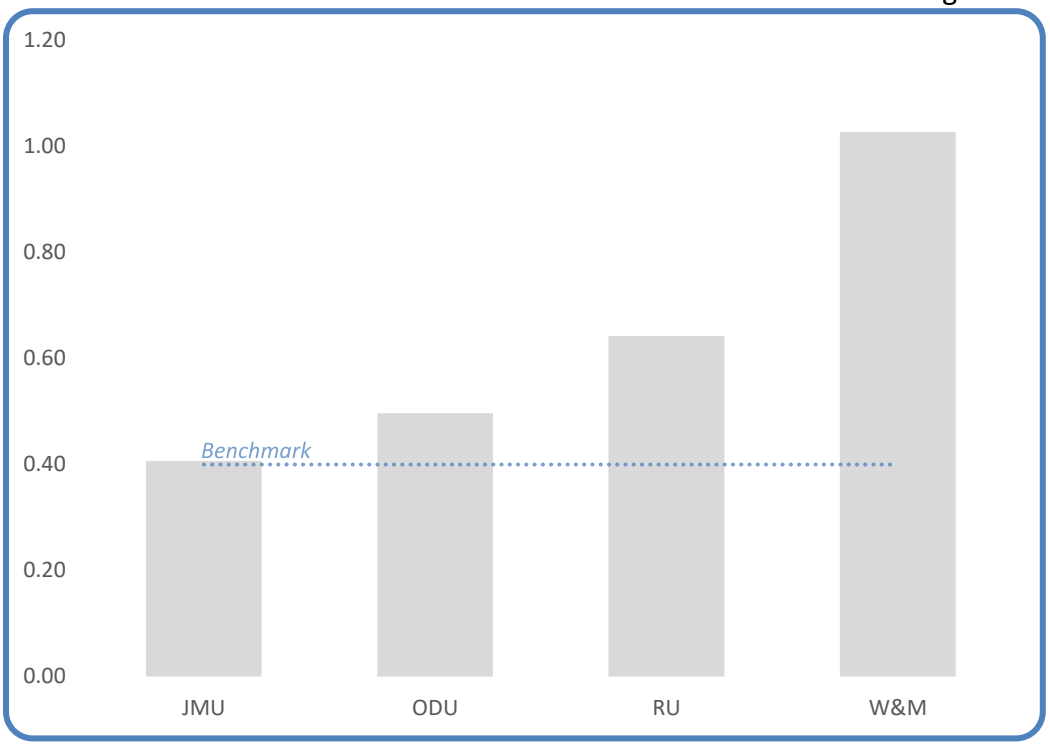
Figure 3



Approximately 29 percent of RU's total assets are current assets compared to smaller percentages for the remaining institutions in the classification. Figure 4 below shows the impact of discretely presented component unit balances on the primary reserve ratios of the Virginia institutions in this classification. W&M's primary reserve ratio increases notably with the addition of component unit resources, as much of its nearly $1 billion endowment resides with the William & Mary Foundation. The other institutions in the classification also exceed the benchmark ratio after including component unit resources in the ratio calculation.

Primary Reserve Ratio
Including Component Units

Figure 4



Master's or Baccalaureate Institutions

Figure 5 below shows a large range of values for the master's or baccalaureate institution classification with respect to primary reserve ratios and the corresponding benchmark. As with institutions in the previous classifications, endowment and investment balances are a primary driver for institutions with higher ratios. UVAW and VMI both have significant endowment resources for institutions of their size, as indicated by the endowment resources per full-time equivalent student in Table 2 above. VMI's endowment per full-time equivalent of approximately $269 thousand is the highest among all Virginia public institutions with UVAW ranking fourth among Virginia institutions at $73 thousand per student.

Primary Reserve Ratio

Figure 5

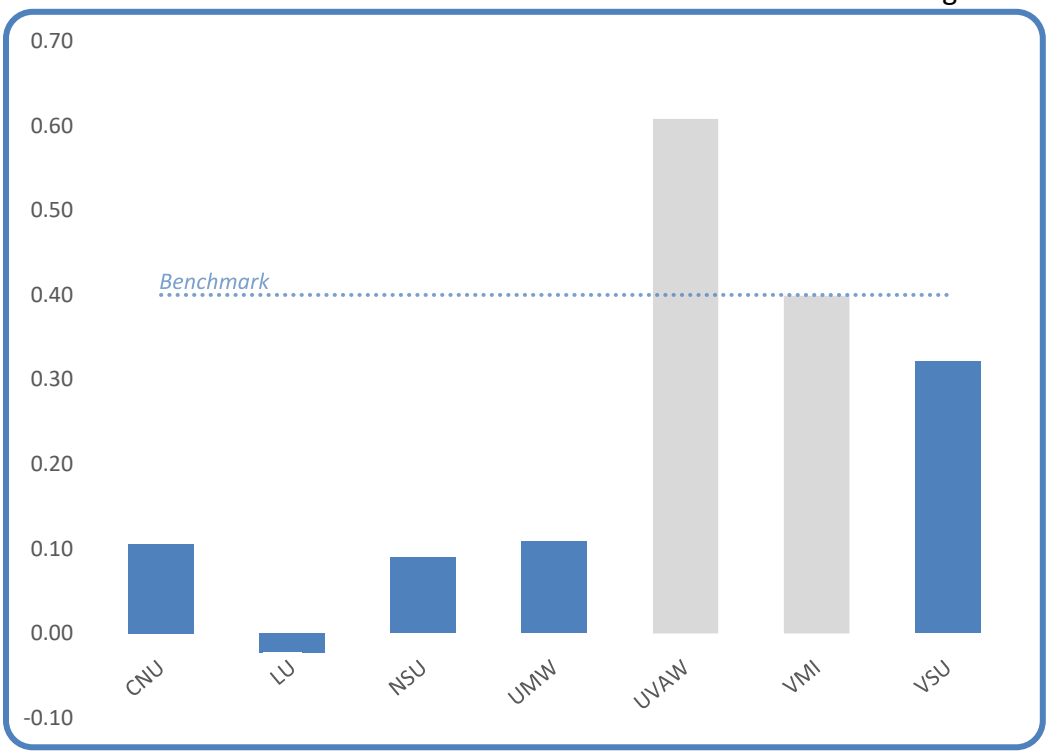


Figure 6 shows the impact of discretely presented component unit resources on the primary reserve ratios of the Virginia institutions in this classification. Although in most cases the ratio improves significantly for those Virginia institutions below the benchmark, all institutions except for UVAW and VMI remain below the benchmark ratio of 0.4. Interestingly, many of the institutions in this classification have larger endowments in dollars per full-time equivalent student than some institutions in the very high research and high research or doctoral/professional institution classification; however, endowment resources are not necessarily expendable resources, so larger endowments may not always have a tremendous impact on the ratio. UMW's primary reserve ratio decreases from slightly positive to slightly negative with the addition of its discretely presented component unit, indicating that the net additional resources held or generated by the foundation are not significant enough to cover its expenses.

Primary Reserve Ratio

Figure 6

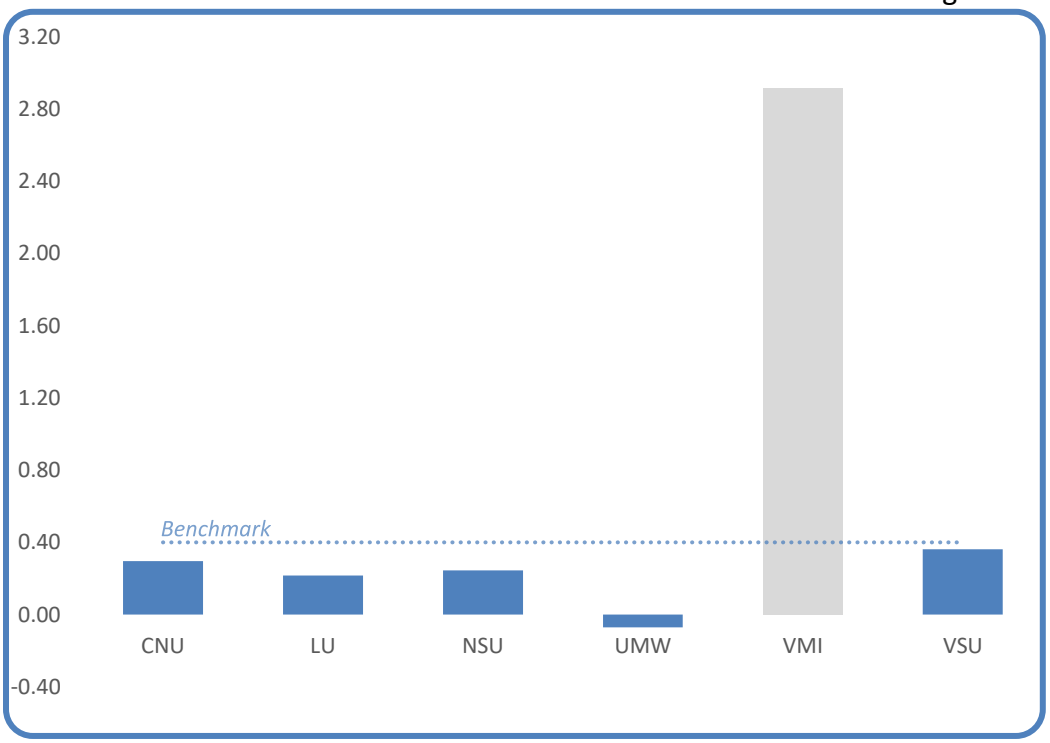
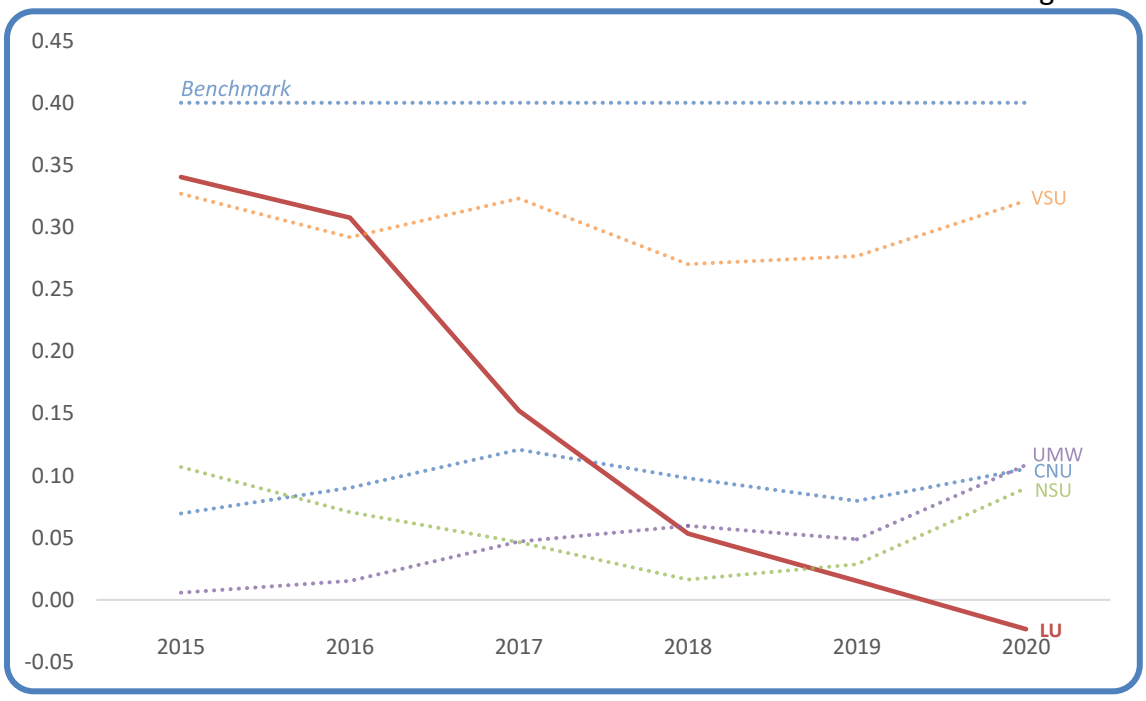


Figure 7 reflects the overall difficulty in achieving significant improvement in the primary reserve ratio over time as institutions work to balance competing priorities: the ability to provide a certain level of service to its students and the improvement of the institution's long-term fiscal health and stability. Most institutions in Figure 7 experienced marginal increases or decreases in the primary reserve ratio over the six-year period, while LU's primary reserve ratio decreased from 0.34 for fiscal year 2015, or just below the benchmark ratio of 0.40, to -0.02 for fiscal year 2020. The primary reserve ratio can decline for two reasons, a decrease in resources available to pay expenses or an increase in expenses given a constant level of resources available to pay for those expenses. The 106 percent decrease in primary reserve ratio largely reflects the change in LU's current assets from approximately $52 million in 2015 to $32 million in 2020, a decrease of 38 percent. Over the same period current liabilities increased slightly from $17.6 million to $22 million, an increase of 25 percent. Current assets and current liabilities generally are a component of unrestricted net position, therefore, decreases in current assets or increases in current liabilities have a direct impact on the primary reserve ratio. Additionally, operating expenses increased by 12 percent from 2015 to 2020 while operating revenues decreased by four percent. As further explained below, a positive net operating revenues ratio is one measure of whether an institution is spending within its available resources. LU's income before capital and other revenues, expenses, gains, or losses was negative for each year from 2015 to 2020, indicating spending each year for operations exceeded available resources.

Primary Reserve Ratio Trends

Figure 7



Viability Ratio

The viability ratio measures one of the most basic determinants of clear financial health: the availability of expendable net position to cover plant-related long-term debt at par value should the institution need to settle its obligations as of the date of the statement of net position.[3] This report makes a simplifying assumption that all debt is plant-related debt as a practical expedient for calculating the ratio and due to the availability of total debt from the financial statements. The viability ratio does not consider capital assets to be expendable resources available to settle obligations. Additionally, many institutions finance facilities through the issuance of debt, which decreases this ratio. Some institutions and discretely presented component units may issue taxable debt that provides financial flexibility for operating purposes. To the extent that institutions use debt to provide flexibility for operations and not specifically for capital projects, our methodology may result in an artificially lower value for this ratio; however, we do not believe the impact of calculating the ratio in this manner has a significant impact on the overall conclusions noted in this report. This ratio also indicates whether an institution can assume new debt. Although the institution will receive more funds as it continues to operate past the balance sheet date, this ratio can be an indicator of whether the existing debt assumed exceeds a level the institution can afford to pay. A benchmark ratio of 1.0 or greater indicates sufficient expendable resources available to cover outstanding debt obligations.[3]

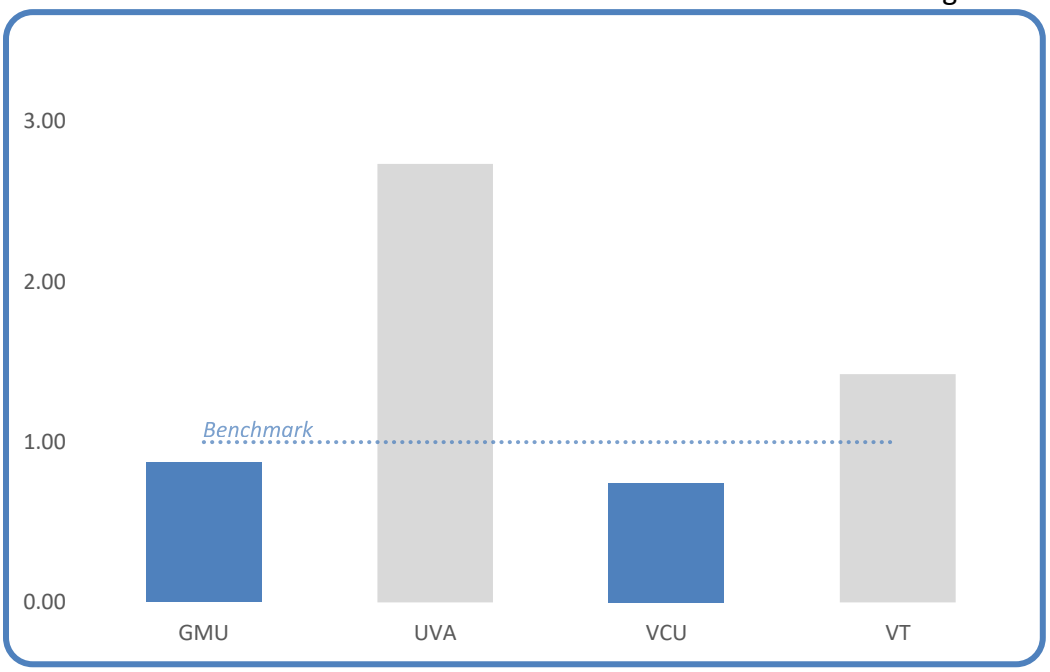
As noted in the primary reserve ratio discussion and analysis, to varying degrees some institutions have directed giving or philanthropic activities to their non-profit foundations, which can reduce the expendable resources shown on the Statement of Net Position and deflate the viability ratio. In addition, the extent to which an institution has arrangements with a non-profit affiliated foundation to provide resources to service long-term debt, these types of arrangements improve the viability of the institution, but the viability ratio is unable to capture the impact.

Doctoral: Very High Research Institutions

Virginia's very high research institutions generally perform well relative to the benchmark ratio. UVA's much larger viability ratio is primarily due to significant cash equivalents and investments at its disposal as expendable resources. As already noted above, UVA's endowment and other investments make up a significant portion of its total assets. GMU's viability ratio is lower than the benchmark and several other institutions classified as very high research institutions due to its significant investment in capital assets and corresponding long-term debt obligations incurred to finance those assets. The age of facilities ratio shown later in this report confirms this assessment, as GMU's facilities are younger in age than the other institutions in the very high research category. While GMU's viability ratio is lower than the benchmark, the ratio increased 405 percent from 0.17 in 2015 to 0.87 in 2020, representing the largest increase among very high research institutions over the six-year period.

Viability Ratio

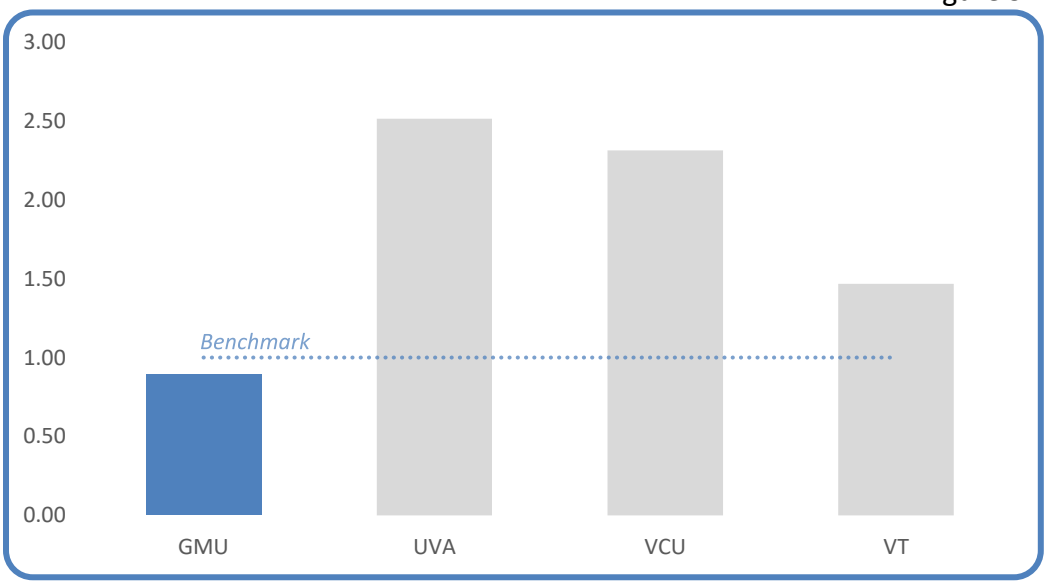
Figure 8



As GMU does not have large endowment resources like other institutions in the classification, the addition of component unit resources improves the ratio, but it remains slightly below the benchmark ratio of 1.0. As shown in Figure 9 below, while VCU appears to have the lowest overall ratio on a standalone institution basis (per Figure 8), the addition of the VCU Health System Authority, along with various discretely presented component units helps to increase VCU's ratio well beyond the benchmark.

Viability Ratio
Including Component Units

Figure 9

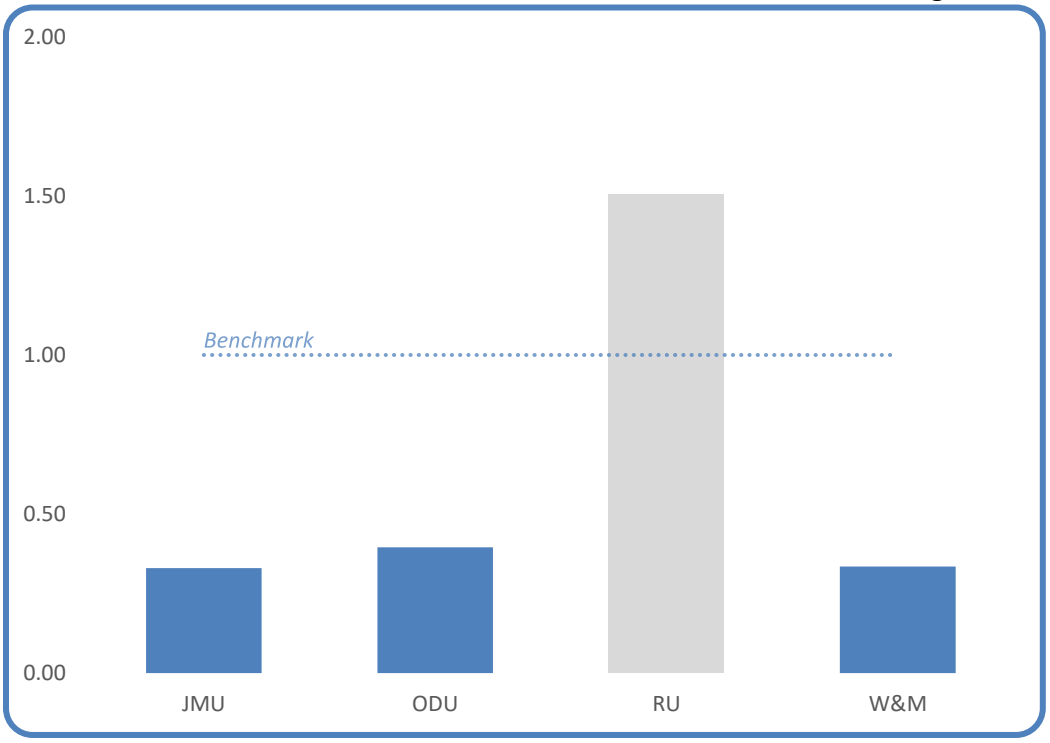


Doctoral: High Research or Doctoral/Professional Institutions

Like the primary reserve ratio, and as shown in Figure 10 below, the viability ratio for most of Virginia's high research or doctoral/professional institutions lags the benchmark ratio of 1.0 prior to the inclusion of the resources of the institutions' respective component units.

Viability Ratio

Figure 10

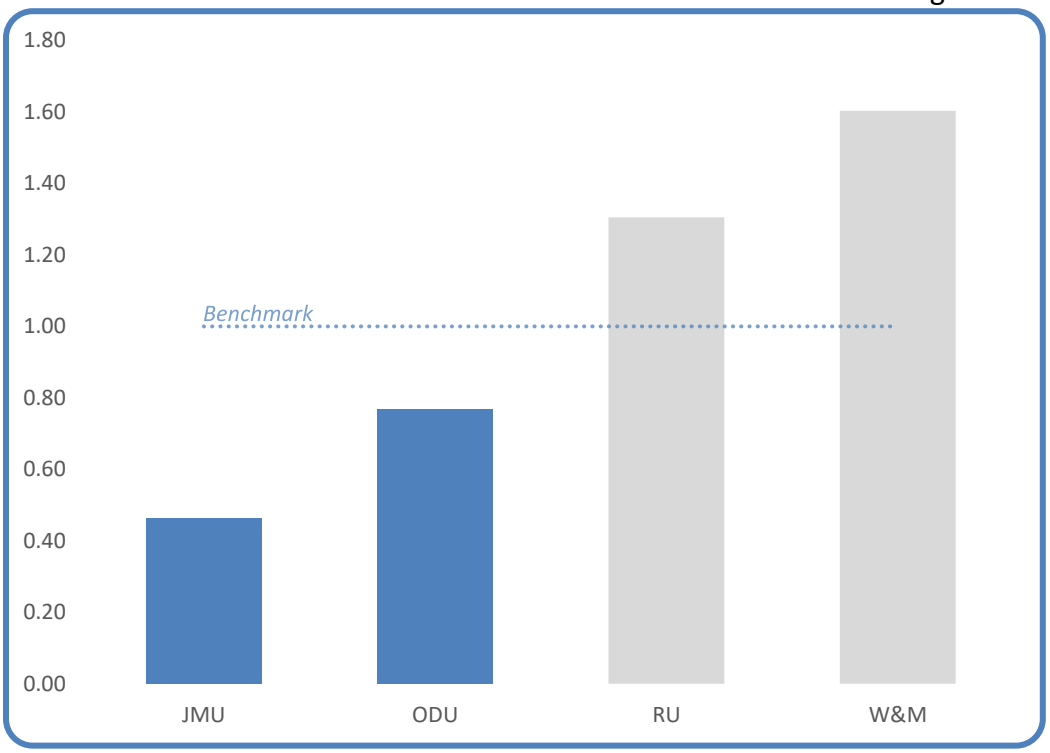


RU's low long-term debt balance and highly liquid assets result in a high viability ratio relative to peer institutions with the classification. Since the primary reserve and viability ratios both start with expendable resources, it is understandable that the ratios will perform similarly. However, the ratios differ in the ability to directly assess future burden in terms of long-term debt and expendable resources.

As with the primary reserve ratio, W&M's viability ratio increases significantly past the benchmark with the addition of component unit resources. While both JMU and ODU's ratios increase with the addition of component unit resources, they remain below the benchmark ratio, as shown in Figure 11 below.

Viability Ratio
Including Component Units

Figure 11

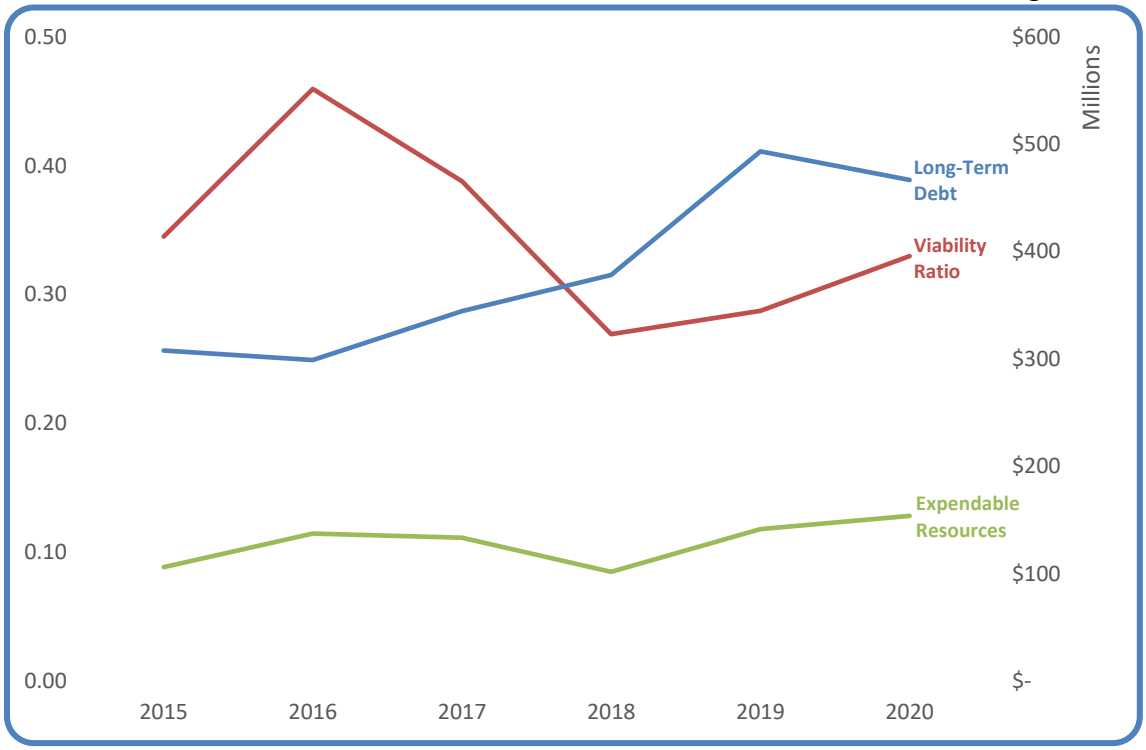


An important component of analyzing the viability ratio is the change in the ratio over time. ODU's viability ratio improved six percent when considering the institution's standalone resources; however, with the inclusion of component unit resources, ODU's viability ratio increased by 63 percent from fiscal year 2017 to fiscal year 2020. This improvement is primarily the result of significant increases in expendable resources. While the viability ratio for institutions in this classification generally improved from fiscal year 2015 to 2020, JMU's viability ratio, without considering component unit resources, decreased by approximately four percent over this period. Since the viability ratio contemplates the unlikely scenario that an institution would have to repay its outstanding debt at one time, it serves as a point in time assessment of overall debt burden and flexibility to take on additional long-term debt. Institutions with recent debt-funded projects or in periods of high growth in enrollment are likely to see lower ratios. Growth in enrollment can result in the need for additional facilities, including residence halls, and institutions often fund those construction projects with long-term debt. As noted in JMU's fiscal year 2019 audited financial statements, long-term debt increased from $378 million in 2018 to $493 million in 2019 due to the issuance of debt to construct a new convocation center, dining hall, and parking deck.

Per Figure 12 below, despite the 30 percent increase in long-term debt in fiscal year 2019, JMU's viability ratio increased from fiscal year 2018 to fiscal year 2019 due to a 40 percent increase in expendable resources during the same period. JMU's strength in operations, as shown in the return on net position and net operating revenues ratios below, is likely one reason for the significant improvement in expendable resources.

JMU Viability Ratio Trends

Figure 12

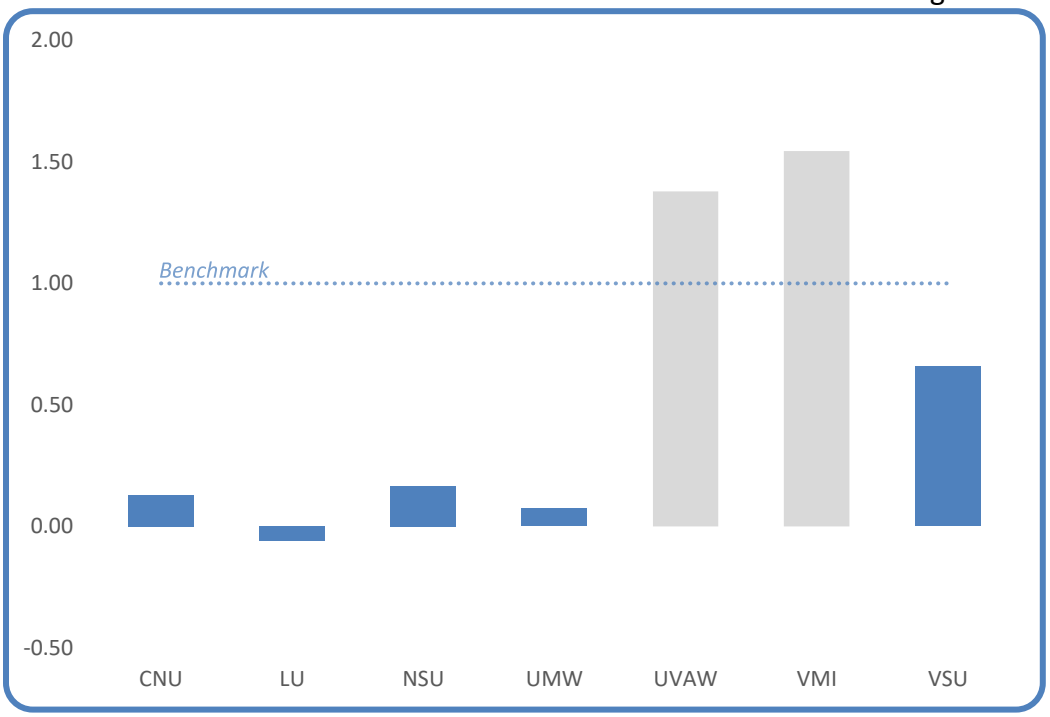


Master's or Baccalaureate Institutions

Like the primary reserve ratio, both UVAW and VMI's viability ratios are larger than other institutions in the master's or baccalaureate category as both institutions have less debt outstanding relative to total assets. Figure 13 shows several Virginia institutions in this classification have far lower ratios, in some instances approaching or below zero. UMW and LU have lower ratios than others in the master's or baccalaureate category primarily due to fewer expendable resources available to pay long-term debt obligations. As noted in the discussion on primary reserve ratio above, the decrease in LU's current assets and increase in current liabilities are primary factors in the decline in ratios based on expendable resources. On a standalone basis, LU's viability ratio is negative indicating that it does not have sufficient expendable resources to liquidate non-debt related liabilities. UMW's noncurrent assets, most of which are capital assets, represent approximately 94 percent of total assets, leaving limited assets in expendable resources prior to considering liabilities. Additionally, UMW's total liabilities represent 57 percent of total assets, which exceeds the 44 percent average for the Virginia institutions in this classification by over ten percent. In absolute terms, UMW has the largest long-term debt balance of all Virginia institutions in the master's or baccalaureate institution classification.

Viability Ratio

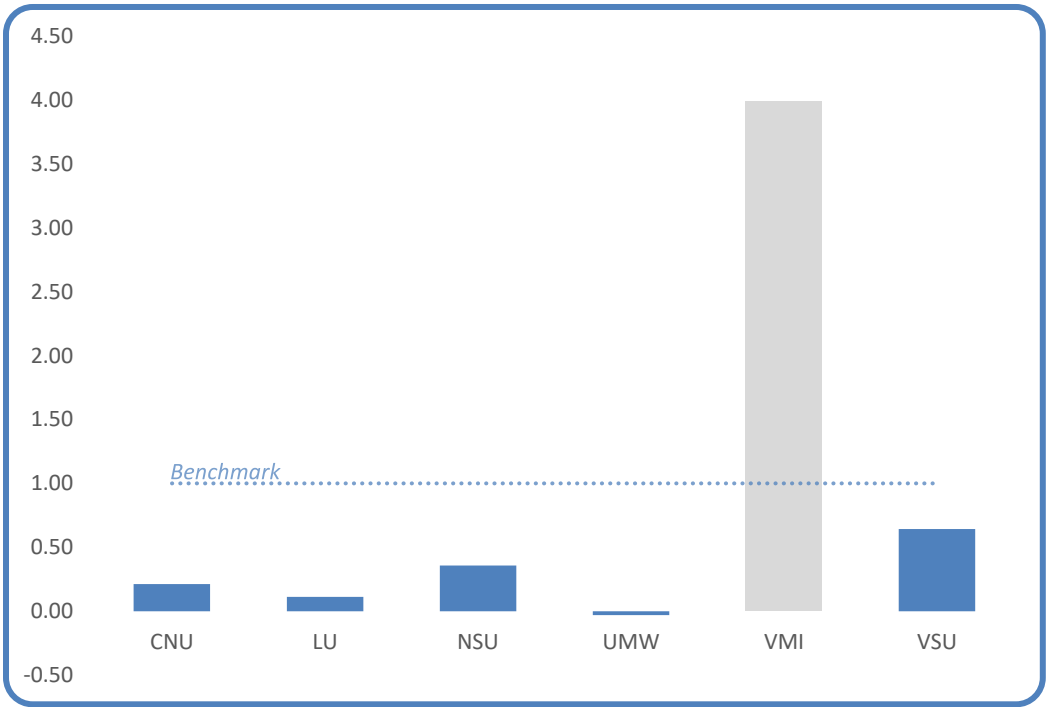
Figure 13



As with the primary reserve ratio, the addition of resources of the respective component units for the Virginia institutions in the master's or baccalaureate institution classification generally has a positive, but insignificant impact (Figure 14). The outliers with respect to impact of component unit resources on the viability ratio are VMI and UMW. As noted previously, VMI's large endowment and smaller size positively impact this ratio. It is also likely that VMI's unique military-based approach to education aids its ability to maintain lower debt levels as housing and dining options are more comparable to a military installation than other higher education institutions. UMW's viability ratio moves negative when considering the resources of its component unit, as permanently restricted nonexpendable endowment funds comprise most of the UMW Foundation's net position. The UMW Foundation's expendable net position is negative, indicating that noncapital liabilities exceed noncapital and non-endowment assets. In other words, as of June 30, 2020, there are insufficient noncapital assets to liquidate noncapital liabilities as of fiscal year end.

Viability Ratio
Including Component Units

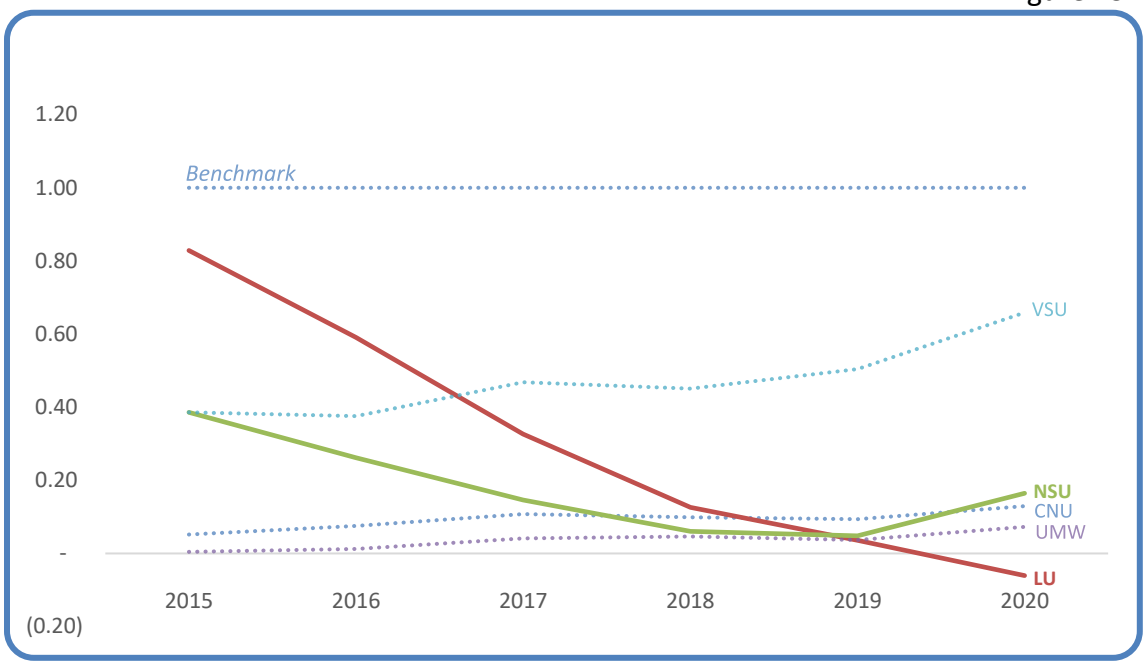
Figure 14



A year-to-year comparison of viability ratio for institutions below the benchmark ratio is helpful to determine if a low ratio is the result of a one-time event or if it is the result of a long-term trend. In some cases, the viability ratio may experience a temporary decrease because of an institution's growth initiatives. For example, construction of a new building may result in an increase in debt, which may further constrain existing expendable resources. While these types of activities may temporarily decrease the viability ratio for an institution, the ratio should trend upwards over a longer term. Figure 15 shows a six-year trend analysis for each institution whose viability ratio does not exceed the benchmark ratio (after inclusion of component unit resources).

Master's or Baccalaureate
Viability Ratio Trends

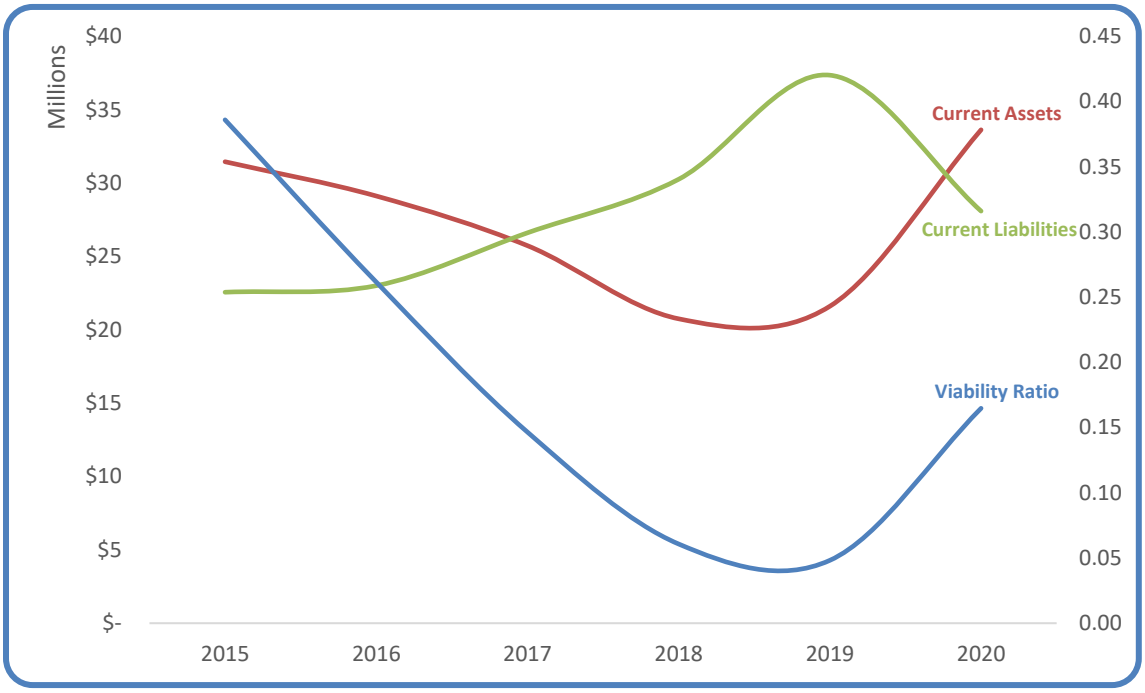
Figure 15



The six-year trend shows similar results to the trend for the primary reserve ratio; however, the viability ratio trend analysis shows a more pronounced and steeper drop for NSU than the primary reserve ratio analysis. Figure 16 below shows the change in current assets and current liabilities during the six-year period and the corresponding change in the viability ratio over the same period. The primary cause of the decrease in NSU's viability ratio is a decrease in current assets each year during the period, a 31 percent drop from 2015 to 2019, and a corresponding 66 percent increase in current liabilities during the same period. While a sizeable increase in long-term debt did contribute to the decrease in the ratio between 2018 and 2019, the change in long-term debt did not contribute significantly to changes in NSU's viability ratio for the fiscal years 2015 through 2018. The viability ratio improved in 2020 due to an increase in current assets and a decrease in current liabilities and the associated improvement in expendable resources.

Norfolk State University
Liquidity Trends

Figure 16



Return on Net Position Ratio

The return on net position ratio answers whether a university is achieving a positive economic return on its investment of resources.

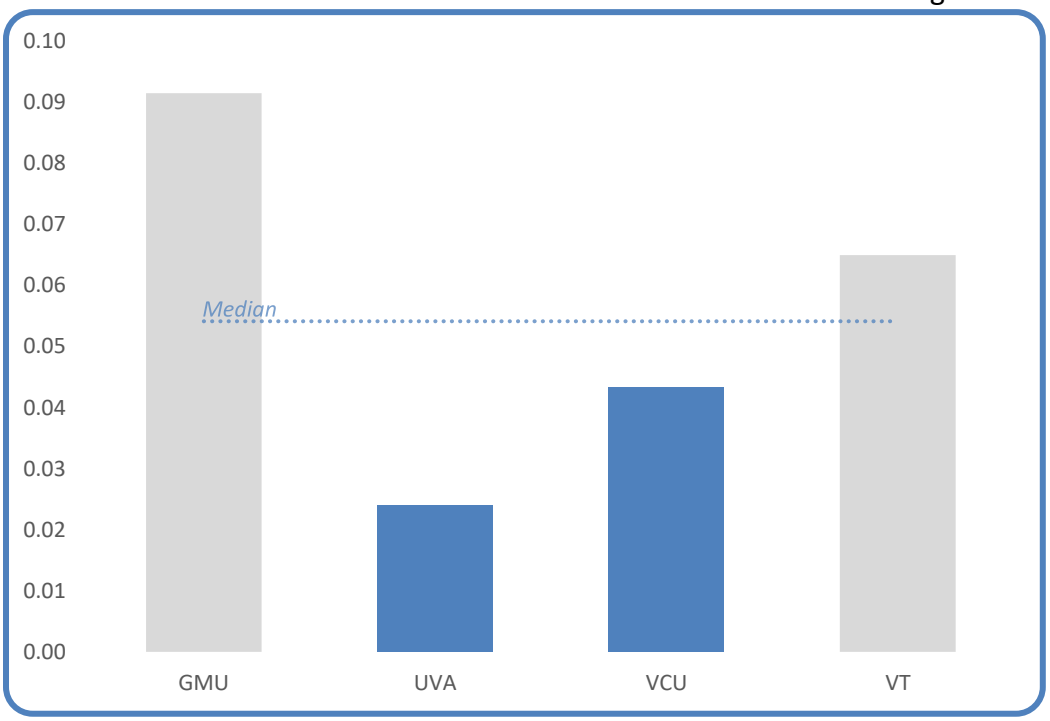
Another measurement of an institution's operating performance is the return on net position ratio, which measures total economic return. This ratio considers all revenues and expenses for a given fiscal year compared to the institution's net position by dividing the change in net position by beginning net position. In general, a higher return on net position indicates a stronger year of financial performance. Several different factors can impact this ratio, including periods of capital expansion or periods of high investment returns. There is generally not a fixed benchmark to apply or achieve for this ratio; however, as this analysis focuses on public institutions of higher education, the general expectation is that institutions will generate a positive return on net position ratio even though the primary objective is not to produce income or profit. While a negative ratio can occur, and usually is the result of volatility in certain revenue sources like investment income, it should not be a regular occurrence in normal operating circumstances. Additionally, while return on net position represents an institution's total economic return, it does not reflect actual excess return available for expenditure due to unrealized gains and losses on investments. Many institutions have endowment spending policies that provide a payout of endowment funds based on a benchmark in combination with other factors, like market performance over several years. These policies help to provide a consistent distribution of endowment funds, while preserving endowment principal, which allows for more effective budgeting and reduces the volatility associated with a single year 's investment performance.

Doctoral: Very High Research Institutions

An analysis of Virginia's very high research institutions shows a median return on net position ratio of 0.05, with a range from 0.02 to 0.09. Investment returns and capital contributions increase the volatility in this ratio from year to year, as institutions record revenue based on changes in fair value of investments or when the Commonwealth provides capital funding for selected projects; however, these sources of revenue are not usually consistent from year to year. Investment returns are subject to market volatility, changes in investment strategies, and the size of the investment portfolio, which can result in large variances in revenue recorded from year to year. Capital contributions are primarily appropriations from the General Assembly through the 21st Century and Equipment Trust Fund programs through the Virginia College Building Authority. While Equipment Trust Fund resources are typically provided each year, the General Assembly appropriates resources from the 21st Century program based on timing of General Assembly approved construction projects.

Return on Net Position Ratio

Figure 17

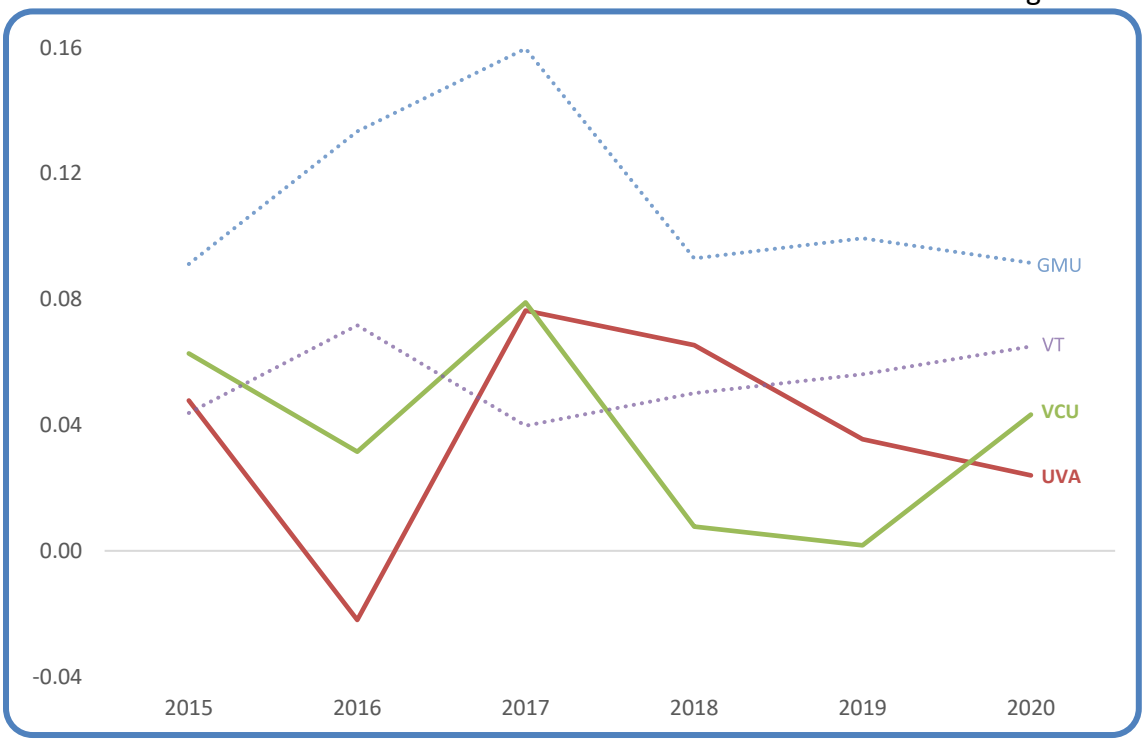


This ratio is generally positive for the very high research institutions. This report uses the median as a reference point or a proxy for a "normal" ratio for a given year, and not a benchmark. UVA and VCU fall below the median return on net position ratio for the very high research institution classification for fiscal year 2020.

As shown in Figure 18 below, UVA's return on net position ratio varies significantly from year to year primarily due to investment income, which was a negative $113 million in 2016, exceeded $700 million in 2017, but decreased to $342 million in 2020. As mentioned above, fluctuations in investment income are usually the result of unrealized gains and losses due to the change in fair market value of investments and are not typically indicative of structural concerns or spending over available resources. In this way, the return on net position ratio is not a perfect proxy for financial health, as these volatile revenue sources have an outsized impact on the ratio but are not typically used in their entirety for operations in a given fiscal year. Investment income does not impact VCU as significantly when compared with UVA. Rather, VCU experienced a steady increase in operating expenses and a corresponding increase in the loss from operations. As nonoperating revenues have not grown (in absolute terms) at the same amount as the growth in operating loss, VCU recorded a loss before capital and other revenues for fiscal year 2016 and fiscal years 2018 through 2020. Capital and related revenues, when added to nonoperating revenues, do make VCU's change in net position positive for these fiscal years. As noted previously, public higher education institutions are not primarily in operation for the purpose of generating profit or return on investment. Additionally, since the VCBA 21st Century program partly funds maintenance reserve expenses (included in operating expenses), a loss before capital and other revenues may not indicate any significant issue other than an institution having an operating margin that is close to zero; however, it is important to monitor this ratio over time as an indicator of any structural concerns in an institution's budgeting process and whether an institution is operating within its available resources.

Return on Net Position Ratio Trends

Figure 18

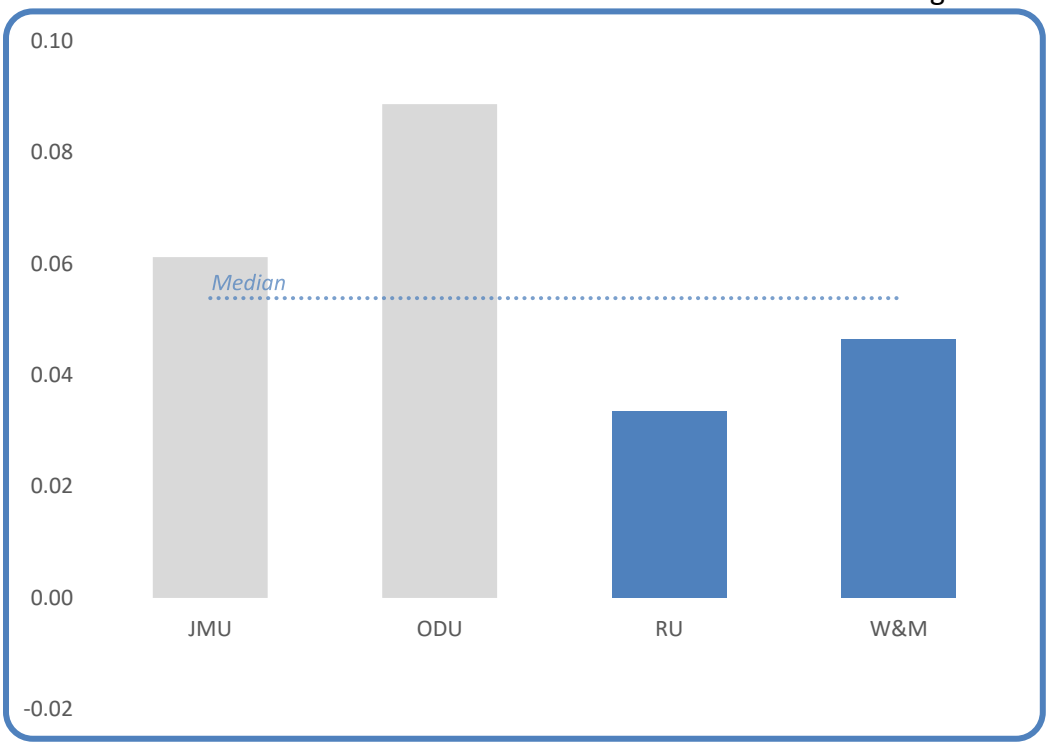


Doctoral: High Research or Doctoral/Professional Institutions

Investment income is not a large component of nonoperating revenues in this classification when compared with the very high research classification. As noted previously, investment income is fundamentally the result of the size of an institution's investable resources, including its endowment, and whether the endowment primarily resides with the institution or with an institution's component units, as is the case with W&M. However, Figure 19 depicts the median ratio for this classification, which is similar to the median ratio for the very high research institution classification.

Return on Net Position Ratio

Figure 19

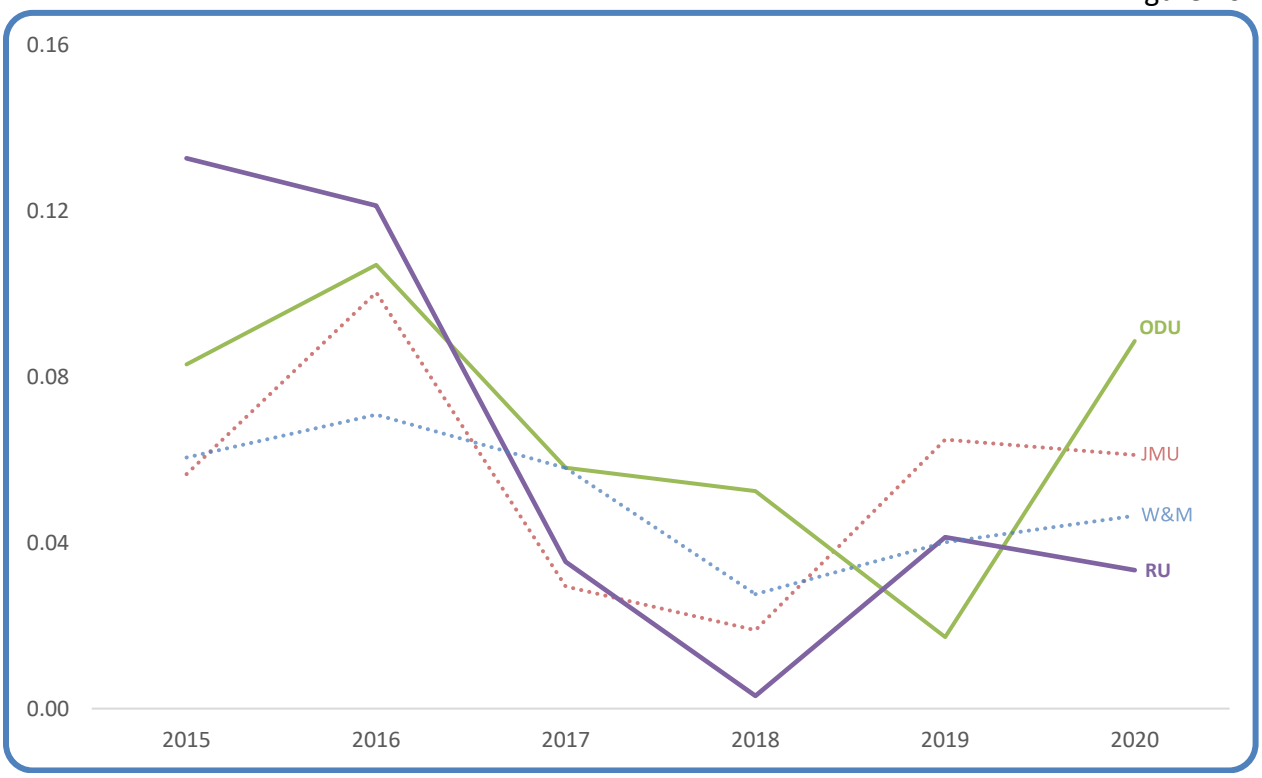


State appropriations comprise between 19 percent and 33 percent of operating expenses for Virginia's high research or doctoral/professional institutions. ODU's return on net position ratio is larger than the peer group median return on net position ratio due to significant capital appropriations in fiscal year 2020 and an influx of federal funding for the Higher Education Emergency Relief Fund due to the COVID-19 pandemic. JMU's ratio is larger than others in the peer group due to a lower overall loss from operations compared to other similarly sized institutions. As a result, even though JMU's state appropriations comprise only 19 percent of operating expenses, it returns positive income before considering capital and other revenues. The remaining Virginia institutions in this classification return slightly negative income before capital and other revenues.

Figure 20 below shows an analysis of trends in the return on net position ratio for the Virginia institutions in the high research or doctoral/professional institution classification for the six-year period. The overall trend for this ratio appears to apply to all Virginia institutions in this classification with corresponding increases and decreases in fiscal years likely caused by changes in capital appropriation funding. Importantly, the ratio is positive in all years presented. RU's ratio spiked in 2015 and 2016 but remains consistently between 0.03 and 0.04 for three of the most recent fiscal years presented. Most institutions experienced an increase in the ratio for fiscal year 2019 and slight decrease in 2020, while ODU had the largest ratio in fiscal year 2018, the lowest ratio in fiscal year 2019, and the largest in fiscal year 2020. These fluctuations are primarily the result of one-time nonoperating revenue recognition and fluctuations in capital funding and emphasize the reason that it is important to look at trends in this ratio, rather than only analyzing it at a point in time.

Return on Net Position Ratio Trends

Figure 20

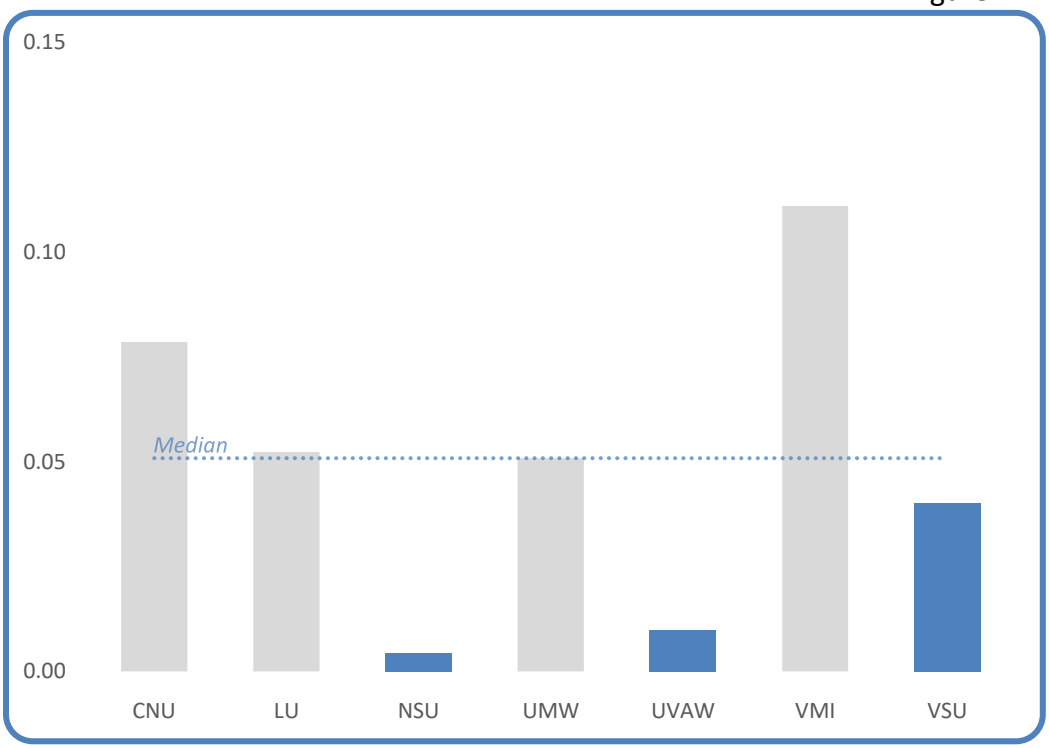


Master's or Baccalaureate Institutions

The institutions in the master's or baccalaureate classification generally have ratios similar to the institutions in other classifications; however, as shown in Figure 21, there is significant variability across the institutions. UVAW has the largest ratio of state appropriations to operating expenses at 42 percent, with the other Virginia institutions in this classification ranging from 20 percent (VMI) to 38 percent (NSU). Institutions with lower state appropriations as a percentage of operating expenses are likely to have additional revenues sources in the form of gifts or investment income. Unlike in the previous categories, all institutions except VSU reported a loss before considering capital and other revenues for fiscal year 2020. In most cases, these losses were small and more than offset by capital revenues, some of which related to maintenance reserve activities reported as operating expenses.

Return on Net Position Ratio

Figure 21

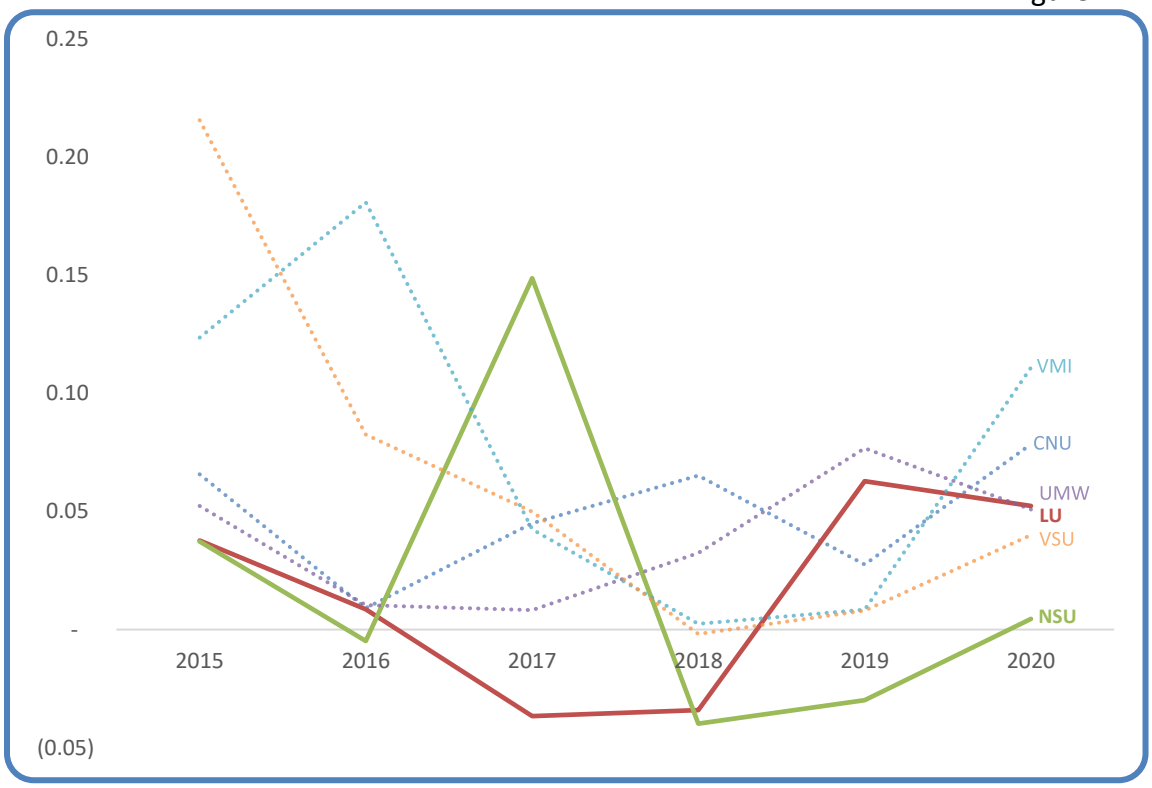


As noted previously for the institutions in the other classifications, it is important to assess these ratios over time to determine if high ratios or low ratios are recurring or the result of one-time events. While a decrease in net position can occur for a variety of reasons, including variability in investment income or one-time expenses, it can also indicate overspending with respect to revenue sources available or decreases in enrollment that result in increased losses from operations. Both NSU and LU experienced negative return on net position ratios at least twice during the six-year period from fiscal year 2015 to fiscal year 2020. Figure 22 highlights the changes in this ratio for the institutions in this classification, while focusing on the ratios for LU and NSU.

LU's decline in 2017 and 2018 appear to be primarily the result of one-time events and one-time charges. As mentioned in the prior report, LU's hosting of the vice-presidential debate during fiscal year 2017 increased its loss from operations significantly from previous years. In fiscal year 2018, the loss from operations returned to a normal level, but one-time charges for losses on disposal of capital assets and other nonoperating expenses pushed the ratio negative for the year. Excluding these charges results in a slightly positive ratio for LU in 2018. Additionally, as noted in Figure 22, the ratio returned positive for fiscal year 2019 due to additional narrowing of LU's loss from operations, the reduction in one-time charges from previous years, and capital funding. As capital funding is a significant component of the numerator of the return on net position ratio, most institutions in this classification would have negative return on net position ratios without including that funding source. An assessment of the loss before considering capital and other funding shows that LU's loss as a percentage of its beginning net position (4%) remains larger than most institutions in the classification, which range from zero to two percent.

Return on Net Position Ratio Trends

Figure 22

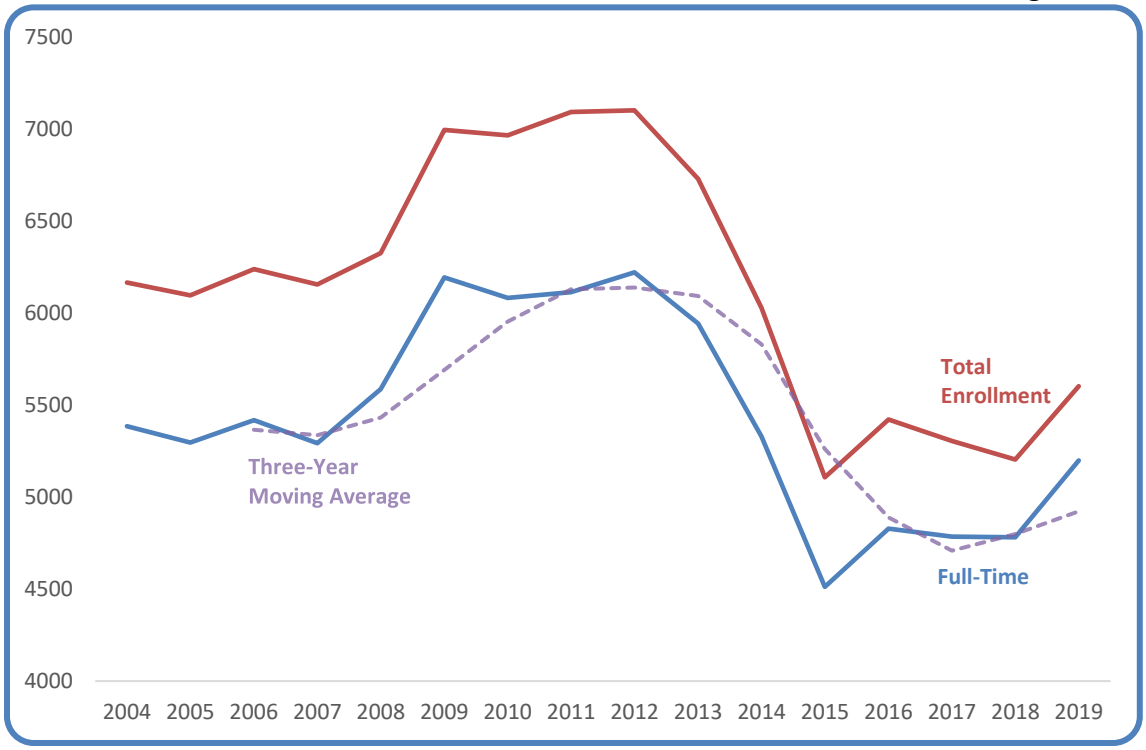


NSU's return on net position ratio was slightly negative in 2016, turned positive in 2017, and then was negative again for fiscal years 2018 and 2019. An analysis of these fiscal years shows that significant capital appropriations of approximately $39 million buoyed NSU's return on net position ratio for fiscal year 2017. Additionally, in most fiscal years between 2015 and 2019, NSU's loss from operations in actual dollars is larger than all institutions in the master's or baccalaureate classification and both JMU and RU from the high research or doctoral/professional institution classification. While the ratio is positive for fiscal year 2020, much of the improvement in income before capital and other revenues is the result of federal funding due to the COVID-19 pandemic.

An analysis of trends in NSU's enrollment, as noted in Figure 23, provides some additional insight regarding this ratio. IPEDS enrollment data shows both total and full-time equivalent enrollment peaked at NSU in Fall 2012, but by Fall 2015 enrollment declined to its lowest level during the 16-year period from Fall 2004 through Fall 2019. A three-year moving average of full-time equivalent enrollment shows peak average full-time equivalent enrollment in Fall 2012 with the lowest three-year average full-time equivalent enrollment in Fall 2017. During the period from 2015 through 2020, NSU's main revenue sources funding operations increased a total of 25 percent while operating expenses increased 38 percent over the same period. The net operating revenues ratio included in the report below provides an additional method for assessing operating performance.

Norfolk State University
Enrollment Trends

Figure 23



Net Operating Revenues Ratio

The net operating revenues ratio indicates whether an organization is operating within its available resources.

The net operating revenues ratio measures the operating performance of institutions and indicates whether an institution is operating within its available resources. There is generally not a fixed benchmark to apply or achieve for this ratio; however, as with other operating ratios, the trend in the net operating revenues ratio over time can highlight concerns. This ratio compares net income excluding capital revenues to the sum of total noncapital revenues. Operating revenues include student tuition, grants and contract revenue, sales and services of educational departments, auxiliary services, and other operating revenues. Nonoperating revenues include state appropriations, Pell grants, investment income, and gift revenue. When calculating the net operating revenues ratio, it is best to exclude unrealized gains and losses on investments and endowment investments since unrealized gains and losses are not readily available for operating purposes. Instead, the calculation should include endowment income based on an institution's endowment spending policy. In practice, backing out the impact of unrealized gains and losses and adding back endowment spending income for both the primary institution and its discrete component units may not be easy to accomplish without a separate data collection form.

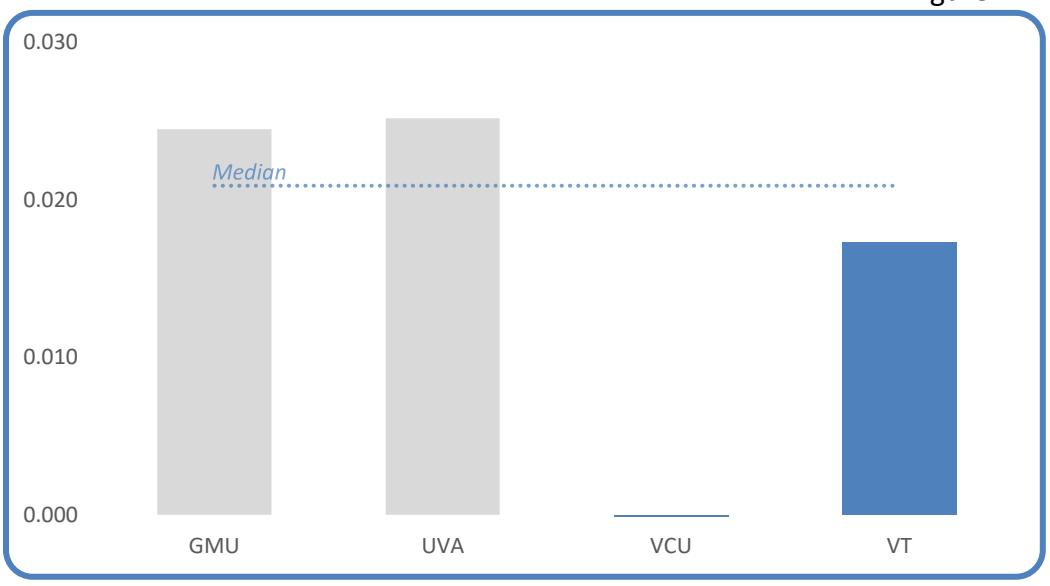
Most of Virginia's public institutions receive endowment spending appreciation in the form of payments from discretely presented component units and reflect these payments as gift revenue in the financial statements. Additionally, many institutions do not invest money internally, but rather rely on foundations to collect and invest gifts from alumni. For these institutions, the effect of including gift revenue in the calculation of net operating revenues ratio has a similar impact to obtaining the amount of endowment income paid to the institution per its endowment spending policy. For institutions with large institutional endowments that receive gifts and invest funds internally, the calculation methodology used in this report will likely result in a net operating revenue ratio and return on net position ratio that is more volatile due to the impact of unrealized gains and losses on investments. During years with significant unrealized gains on investments, the institution's net operating revenues ratio will appear higher, and in contrast, during years with significant unrealized losses, the ratio will appear lower. While an understanding of the limitations of this calculation methodology is important, we believe the benefit of using information obtained directly from the audited financial statements outweighs the potential increase in volatility. Institutions calculating ratios for internal monitoring purposes should consider making these modifications to obtain a more accurate picture of their institution's ratios over time without the added volatility.

Doctoral: Very High Research Institutions

As with the return on net position ratio above, the very high research institution classification tends to produce a positive net operating revenues ratio. The net operating revenue removes some of the variability and volatility associated with capital revenues to provide a better assessment of operating performance. The two ratios will typically trend in the same direction with the net operating revenues ratio generally producing smaller values than the return on net position ratio. Figure 24 shows that most institutions in this classification perform comparably to one another with almost all institutions at or exceeding the median value for the classification. As with the return on net position ratio, VCU's ratio is lower than the peer institutions in this classification; however, trends over time are a better indicator for this ratio than a calculation for a single fiscal year.

Net Operating Revenues Ratio

Figure 24

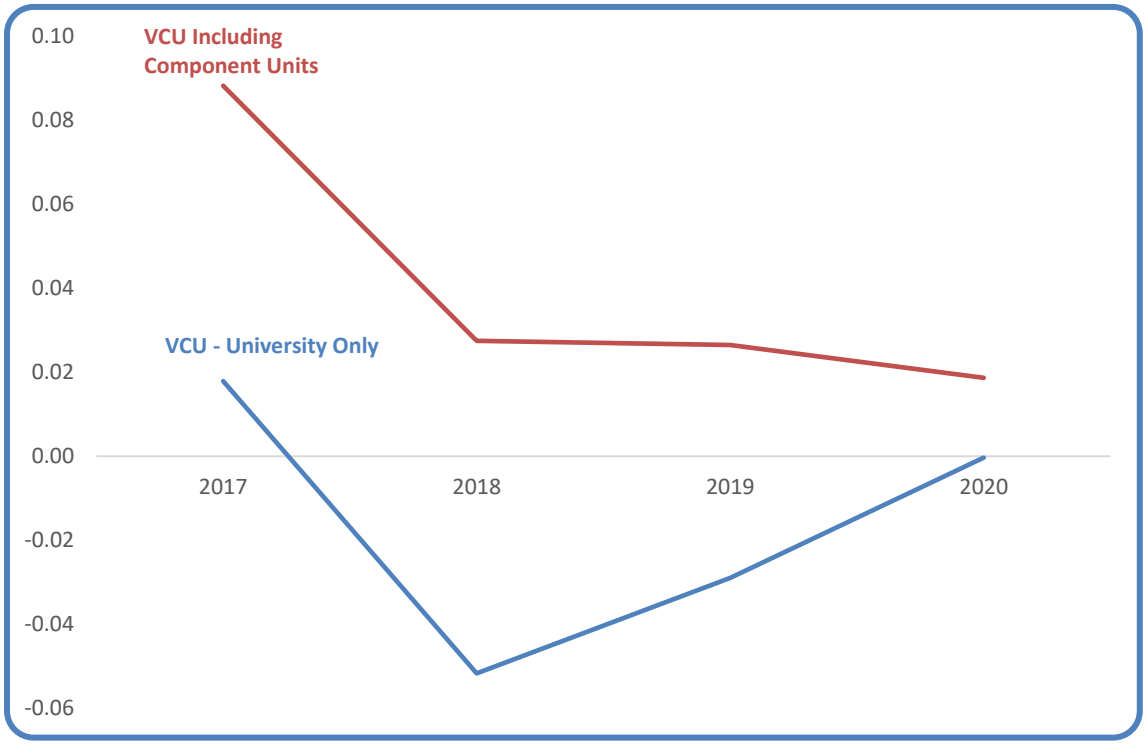


As noted previously, VCU's structure is unique in that the VCU Health System Authority is a component unit of VCU rather than a department or division. This structure differs from that of UVA, where the UVA Medical Center is a division of the University. As a result of these differences, the ratios in Figure 24 above for VCU do not include the activity of the VCU Health System Authority to provide for a comparison of each standalone institution based on accepted presentation provided by the Governmental Accounting Standards Board.

To provide an assessment of this ratio including the VCU Health System Authority, Figure 25 below shows the trend of the net operating revenues ratio for VCU over a four-year period from fiscal year 2017 through fiscal year 2020, both with and without the inclusion of the institution's component units. While VCU's net operating revenues ratio, as a standalone institution, was negative or near zero for both fiscal year 2018 and 2019, VCU's ratio with the inclusion of its component units was positive in both fiscal years. Given the highly connected nature of higher education institutions with their component units, no ratio analysis is complete without considering the impact of component unit resources and performance on the overall fiscal health of the institution. The analysis of VCU's ratio underscores the complexity in assessing ratio performance against peer institutions and the importance of also viewing ratio trends within an institution over time. A negative ratio with the addition of component unit activity would highlight a potential concern and the need for additional analysis.

Virginia Commonwealth University
Net Operating Revenues Ratio Trends

Figure 25



Doctoral: High Research or Doctoral/Professional Institutions

The net operating revenues ratio for the high research or doctoral/professional institution classification shows considerably more variability than its very high research institution peers. Per Figure 26 below, there are positive and negative net operating revenues ratios resulting in a median ratio slightly below zero.

Net Operating Revenues Ratio

Figure 26

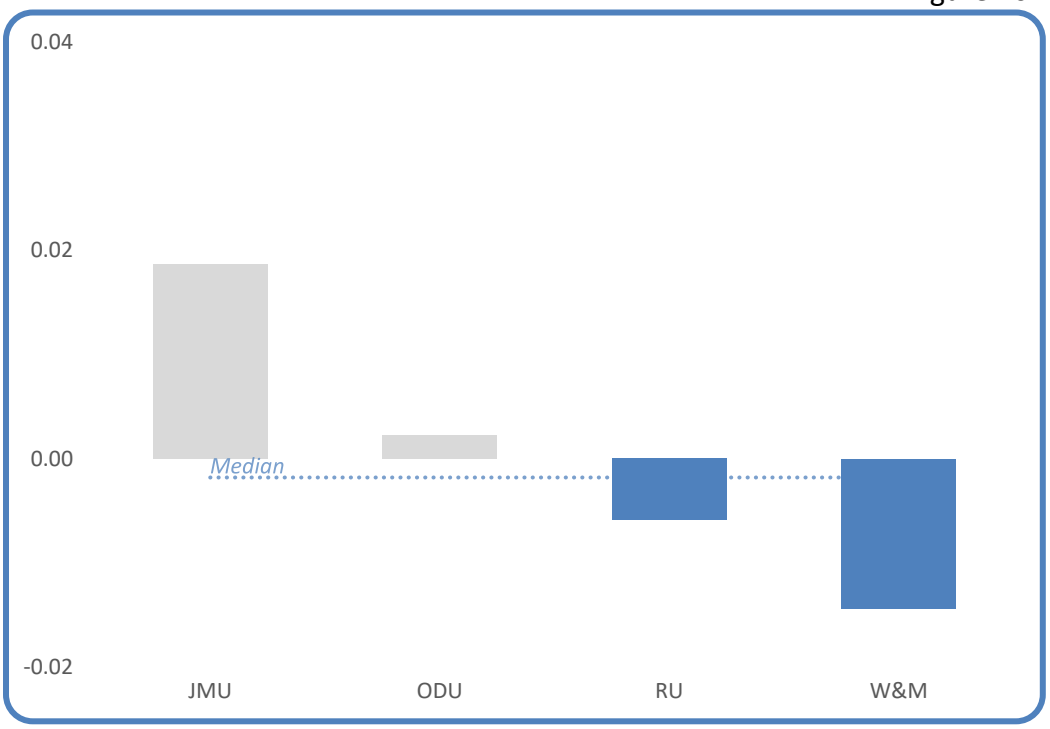
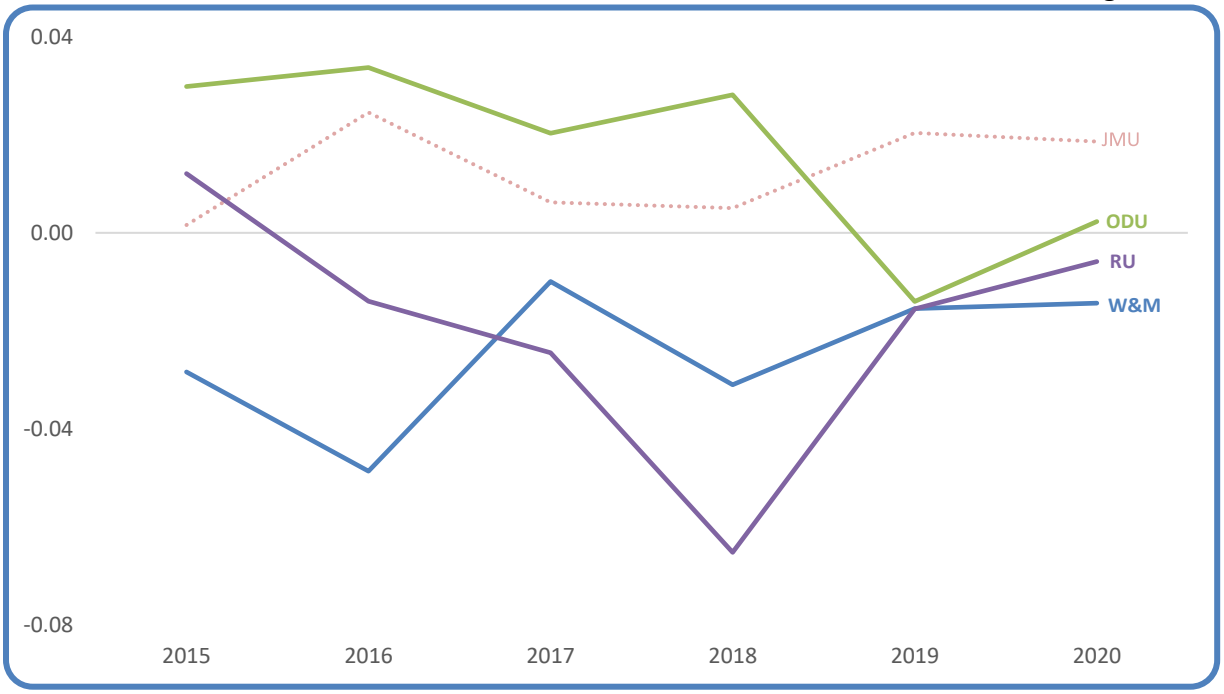


Figure 27 below shows the trend of the net operating revenues ratio for Virginia's high research or doctoral/professional institutions over the six-year period from fiscal year 2015 to fiscal year 2020. The trend analysis is similar to the trend analysis performed above for the return on net position ratio; however, the trend lines are flatter for most institutions due to the exclusion of capital-related funding in this ratio.

Net Operating Revenues Ratio Trends

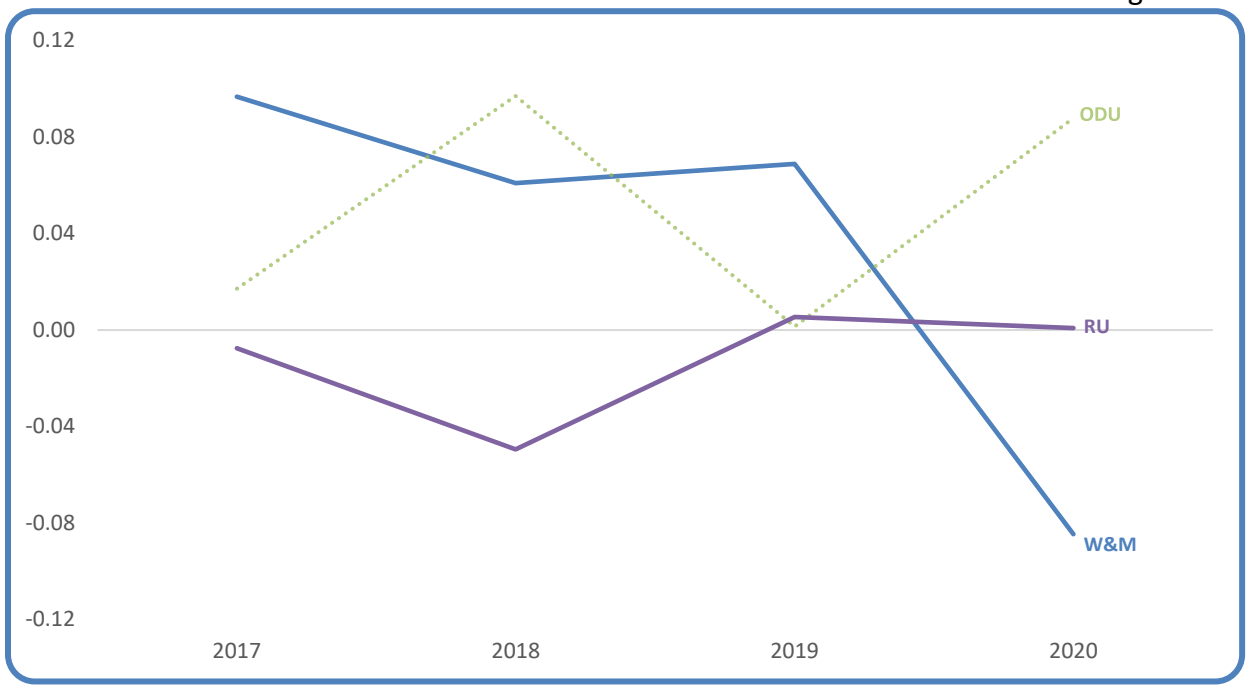
Figure 27



While JMU's ratio remained positive throughout the six-year period, indicating strong management of expenses considering corresponding revenue sources for a given fiscal year, W&M, RU, and ODU all experienced negative ratios at least one time during the period. Compared to other institutions in this classification, JMU reports less gift revenue and investment income revenue, which contributes to lower volatility in this ratio. As with VCU in the very high research institution classification, it is important to also consider the performance of this ratio with the inclusion of an institution's component units to determine if the ratio moves in a positive direction. Figure 28 shows the ratios for W&M, RU, and ODU with the inclusion of their respective component units.

Net Operating Revenues Ratio Trends
Including Component Units

Figure 28



Of the three institutions presented in Figure 28, only ODU's net operating revenues ratio with component unit data is positive for all years during from fiscal year 2017 through fiscal year 2020. For RU, only fiscal year 2018 appears to be an outlier with fiscal years 2017, 2019, and 2020 approximating zero. Further analysis shows that the decrease in the net operating revenues ratio during fiscal year 2018 is primarily the result of a large increase in nonoperating transfers to the Commonwealth and a $3.5 million increase in loss from operating activities. Both the loss from operations and transfers to the Commonwealth returned to 2017 levels for fiscal year 2019. Nonoperating transfers to the Commonwealth are typically indicative of funding changes (e.g., converting funding mechanisms for capital projects). As noted in Chapter 836 of the 2017 Virginia Acts of Assembly, Item C-52.40, general fund appropriations of $7.4 million for the renovation of Whitt Hall at RU reverted to the Commonwealth to be supplanted by proceeds of bonds authorized for issuance by the Virginia College Building Authority. While the ratio remains negative for the fiscal year, removing this activity does improve the ratio from approximately -0.05 to approximately -0.03. W&M's ratio generally remains above 0.06 from fiscal year 2017 through fiscal year 2019 but drops steeply to -.08 in fiscal year 2020. The primary cause of the decline in the ratio for fiscal year 2020 is investment performance and a decline in contributions from W&M's discretely presented component units, which experienced a total decline in net position from the prior year.

Master's or Baccalaureate Institutions

Figure 29 shows how the master's or baccalaureate classification differs from the previous two classifications in that most institutions have negative net operating revenues ratios for fiscal year 2020. VSU has the highest net operating revenues ratio in the classification. VSU's positive net operating revenues ratio in 2020 is primarily the result of a seven million dollar increase in net nonoperating revenues. The increase in net nonoperating revenues is principally the result of federal funding related to the COVID-19 pandemic. As with the previous classifications, examining performance of the ratio over a longer period is necessary to analyze whether negative ratios are the product of one-time events or recurring operating decisions.

Net Operating Revenues Ratio

Figure 29

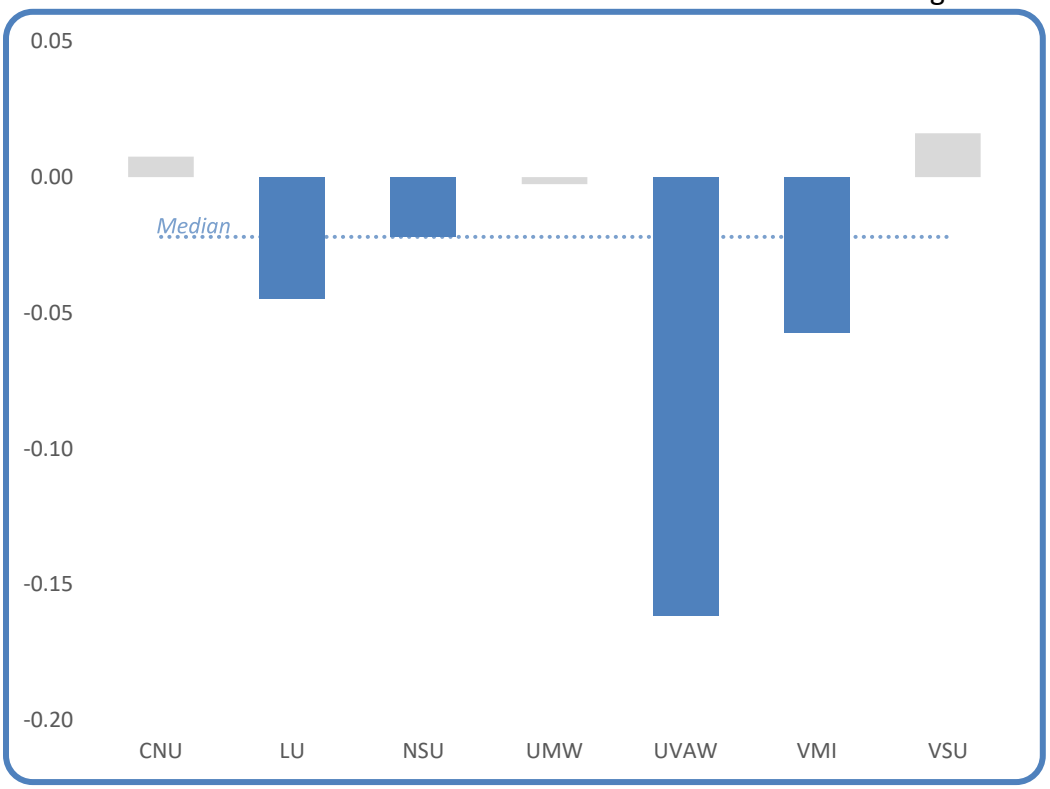


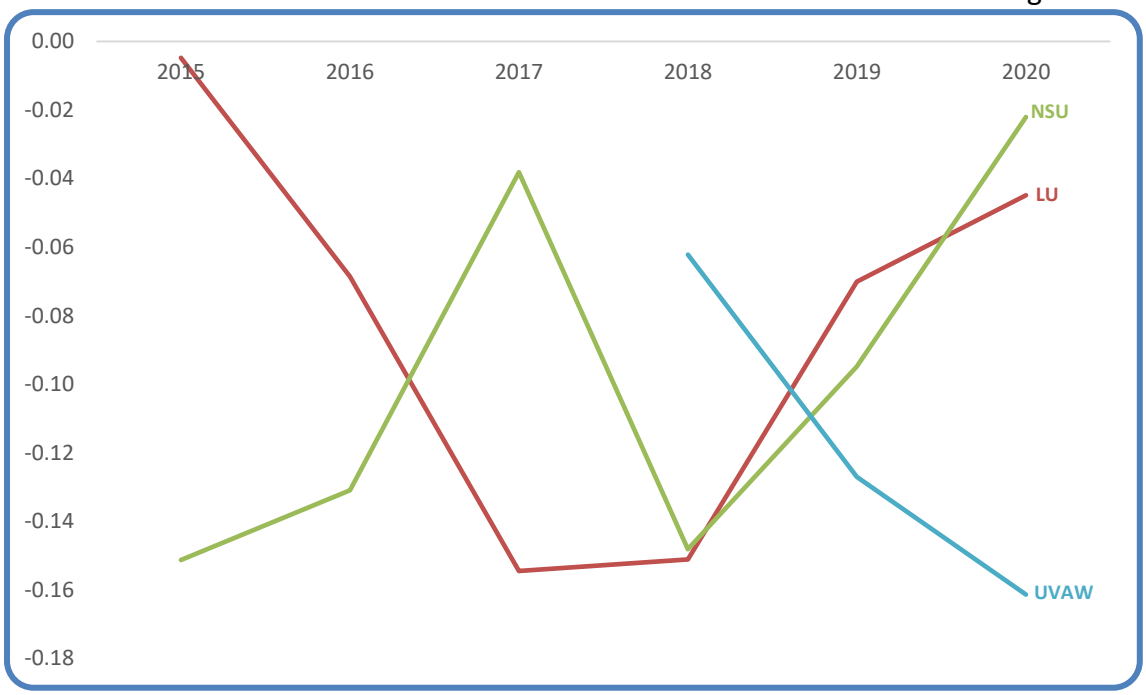
Figure 30 below shows a trend analysis for certain Virginia's master's or baccalaureate institutions over the six-year period from fiscal year 2015 to fiscal year 2020. Other than CNU and VSU, the remaining institutions in the classification are consistently negative for the entire six-year period. Despite having the second lowest state appropriation revenue as a percentage of operating expenses, CNU compares well to peer institutions and achieves a positive ratio in fiscal years 2017 and 2020. While both consistently negative, VMI and UMW also have consistent trend lines (like CNU) when compared to the trend lines of other institutions with negative ratios. Figure 30 shows only three years of data for UVAW due to the lack of detailed data sufficient to perform the analysis for previous years. A review of the trend analysis indicates additional analysis is necessary to determine the root cause of the consistently negative net operating revenues ratio.

Consistent performance in this ratio across fiscal years may show that although the ratio is negative, the institution has intentionally managed its loss within a narrow range. The institutions presented in Figure 30 have more volatility in their net operating revenues ratios, including years where the ratio dips below -0.10. For ease of analysis, we have excluded institutions with consistent ratios to focus on institutions with ratios with higher volatility. Chapter 836 of the 2017 Virginia Acts of Assembly, Item C-52.40 required the reversion of $5.45 million in general fund appropriations for an additional biomass boiler at LU and conversion of that funding to bond proceeds to be issued by the Virginia College Building Authority. Along with other nonrecurring expenses like losses on the disposal of capital assets, the capital appropriation reversion deflated the ratio for fiscal year 2018, making it worse than it otherwise would have been when considering recurring revenues and expenses. LU's net operating revenues ratio improved in 2019 due to a narrowing of its operating loss and reduction in one-time nonoperating charges. While LU's operating loss increased during fiscal year 2020, additional state appropriations and federal funding related to the COVID-19 pandemic had a positive impact leading to year over year improvement in the ratio.

The net operating revenues ratio for UVAW declined from fiscal year 2018 through fiscal year 2020 due to a 20 percent increase in the loss from operations over the three-year period. The increase in the loss from operations is due to a slight decrease in operating revenue and a 13 percent increase in operating expenses for compensation and benefits and supplies and other services. As noted previously, the net operating revenues ratio for NSU follows a pattern like its return on net position ratio, as both ratios are measures of the university's operating performance. Improvement in operating revenues during fiscal year 2019 narrowed the loss from operations resulting in improvement in the ratio when compared with 2018. The ratio improved further in 2020; however, some of the improvement in 2020 relates to the impact of federal funding due to the COVID-19 pandemic.

Net Operating Revenues Ratio Trends

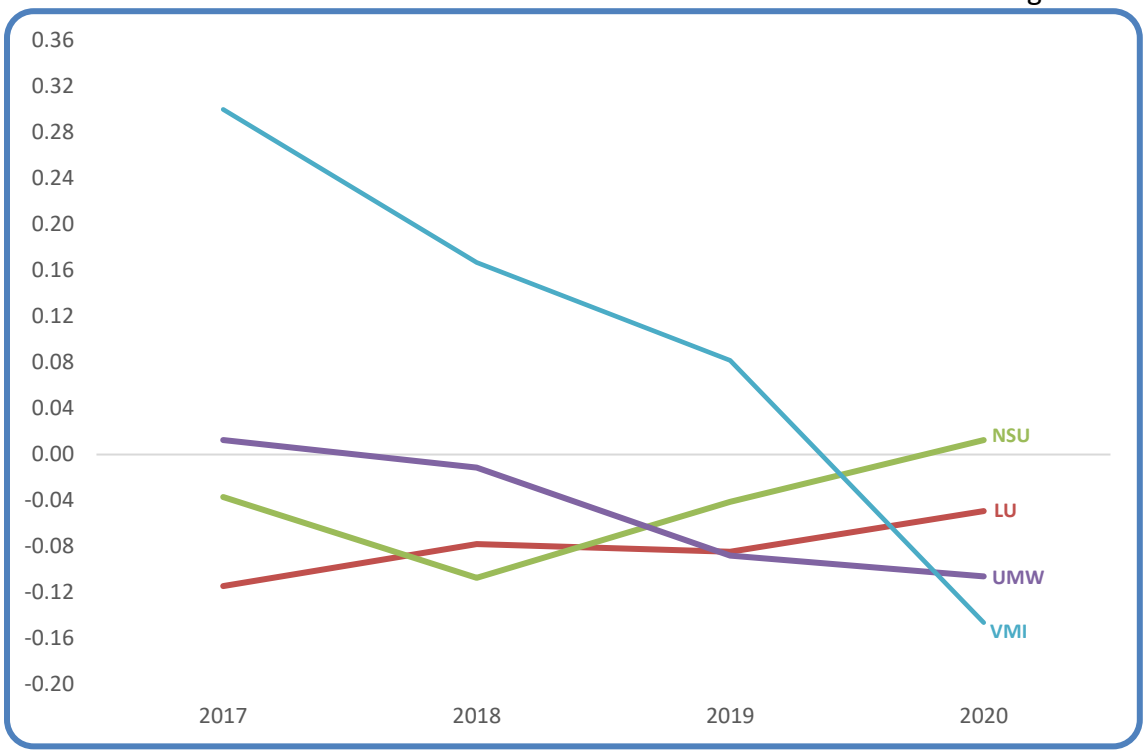
Figure 30



Appendix B: Detailed Ratio Information shows that VSU and CNU's ratios are positive, or nearly positive, when including component unit performance. Figure 31 shows UMW, LU, and NSU's ratios generally remain negative, except for improvement in NSU's ratio for fiscal year 2020. The decrease in VMI's ratio with the inclusion of component unit activity is primarily the result of a decrease in investment performance from fiscal year 2019 to fiscal year 2020.

Net Operating Revenues Ratio Trends
Including Component Units

Figure 31



Composite Financial Index (CFI)

The Composite Financial Index or CFI combines the four core ratios by assigning various weights to generate an aggregate score for financial strength and stability. These ratios: primary reserve ratio, viability ratio, net operating revenues ratio, and return on net position ratio provide for an understanding of the institutions' available resources and results of current operations, which when applied to certain benchmark factors generates a score from one to ten indicating strength of the institution. A score close to one indicates that the institution may have few expendable resources and have difficulty meeting operating demands in the current environment. On the contrary, a score of ten indicates that an institution has significant financial flexibility and is operating well within its means. A benchmark score of three generally indicates that an institution is financially healthy.[3] We have modified the suggested CFI calculation so that if a specific ratio is negative for an institution, the calculation used in this report uses a strength score of zero for that particular ratio, rather than using a negative number to avoid calculating a negative CFI score. In some cases, this approach may make an institution's CFI appear better than it otherwise would appear with the inclusion of negative ratios; however, this impact does not appear to be significant. Institutions will generally benefit from the inclusion of component unit resources in

The CFI provides a snapshot of an institution's total financial health by weighting four core ratios to develop an aggregate score.

calculating the CFI. However, as the CFI weights the primary reserve ratio and viability ratios more heavily than the return on net position and net operating revenues ratios, institutions with component units that have significant endowment and investable assets will experience the largest improvement in the performance of the CFI. Formulas for ratios used in the combined CFI calculation are generally consistent with the CFI calculation shown for the institutions as standalone entities; however, the viability ratio calculated for the combined entity uses total long-term liabilities rather than long-term debt in the denominator. The relative difficulty in obtaining detailed comparable data for long-term debt of the consolidated higher education entity from the Commonwealth's Annual Comprehensive Financial Report is the reason for this variation. As a result, the CFI scores shown below for an institution including its component units are likely lower than they otherwise would be when excluding long-term liabilities other than long-term debt. Regardless, the ratios provide a relative understanding of the impact of foundations and affiliated organizations on the financial health of the combined enterprise.

Doctoral: Very High Research Institutions

As shown in Figure 32 below, the CFI for very high research institutions generally meets or exceeds the benchmark ratio of 3.0. While VCU's ratio appears not to meet the benchmark, the primary cause is its organizational structure which results in component unit accounting treatment for the VCU Health System Authority and exclusion of the endowment resources that reside with VCU's component units.

Composite Financial Index

Figure 32

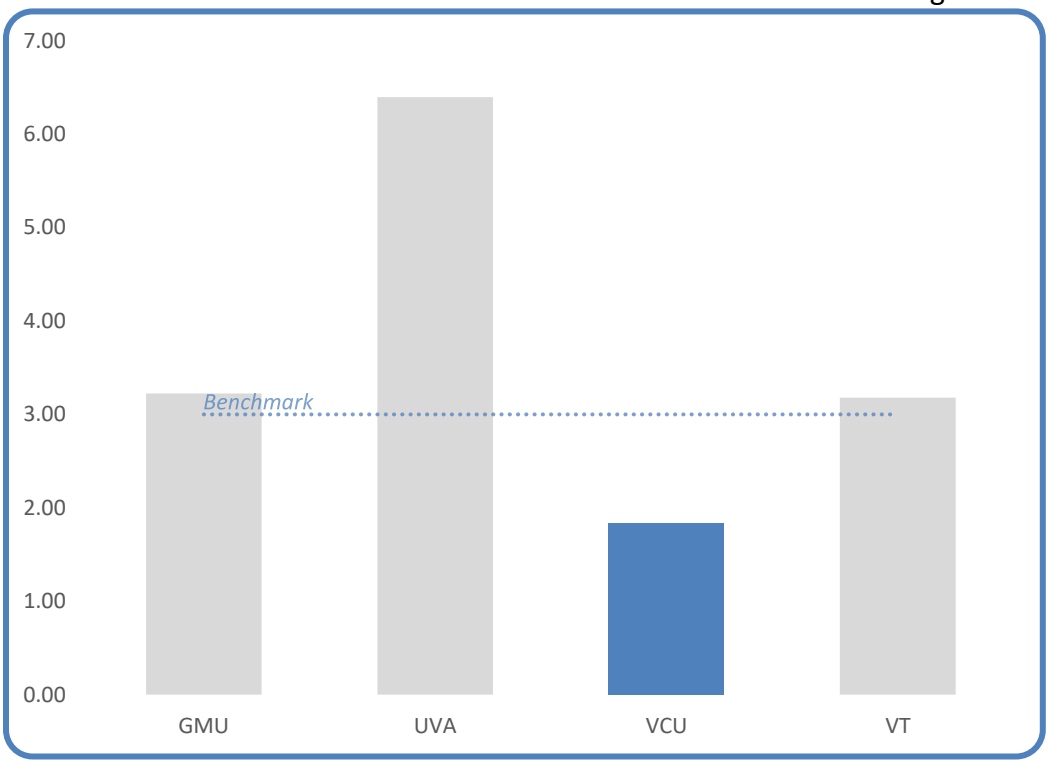
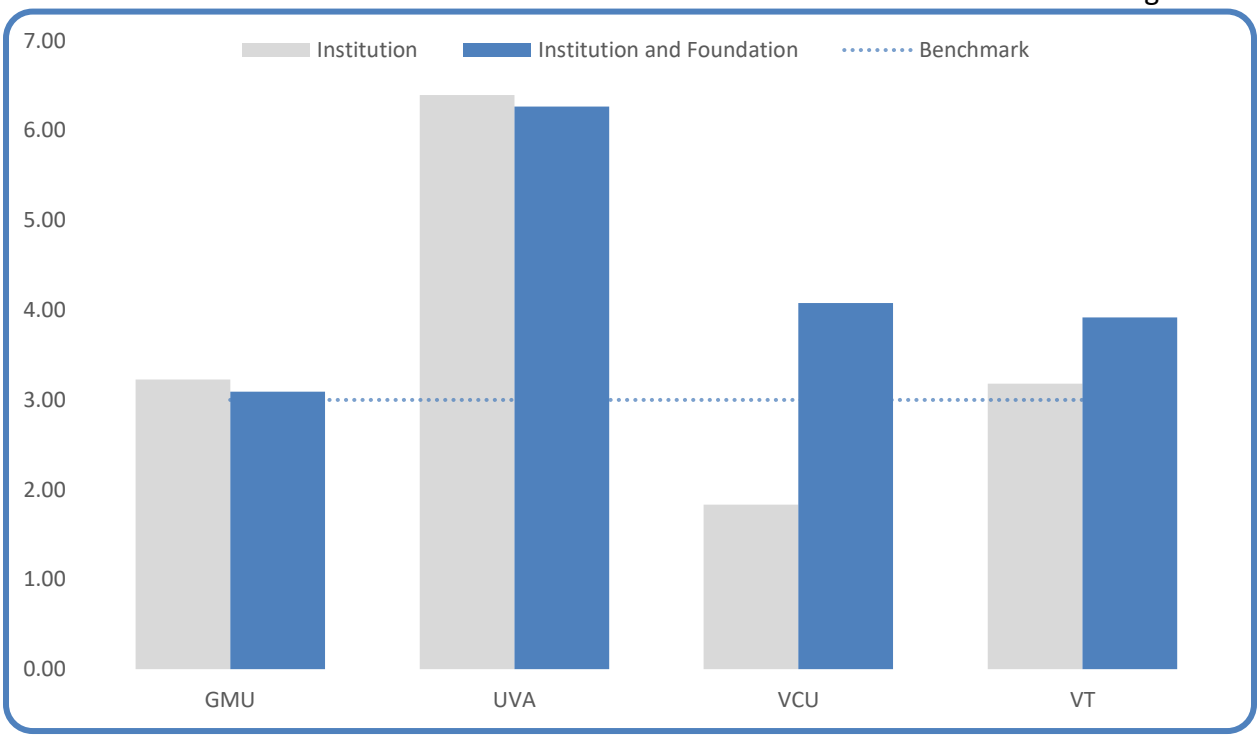


Figure 33 shows the impact on each Virginia institution in the very high research institution classification with several institutions showing a large increase with the addition of component unit resources. All Virginia institutions in this classification have CFI's that exceed the benchmark ratio for each year in the four-year period fiscal year 2017 through fiscal year 2020, when including component unit resources.

Composite Financial Index
Including Component Units

Figure 33

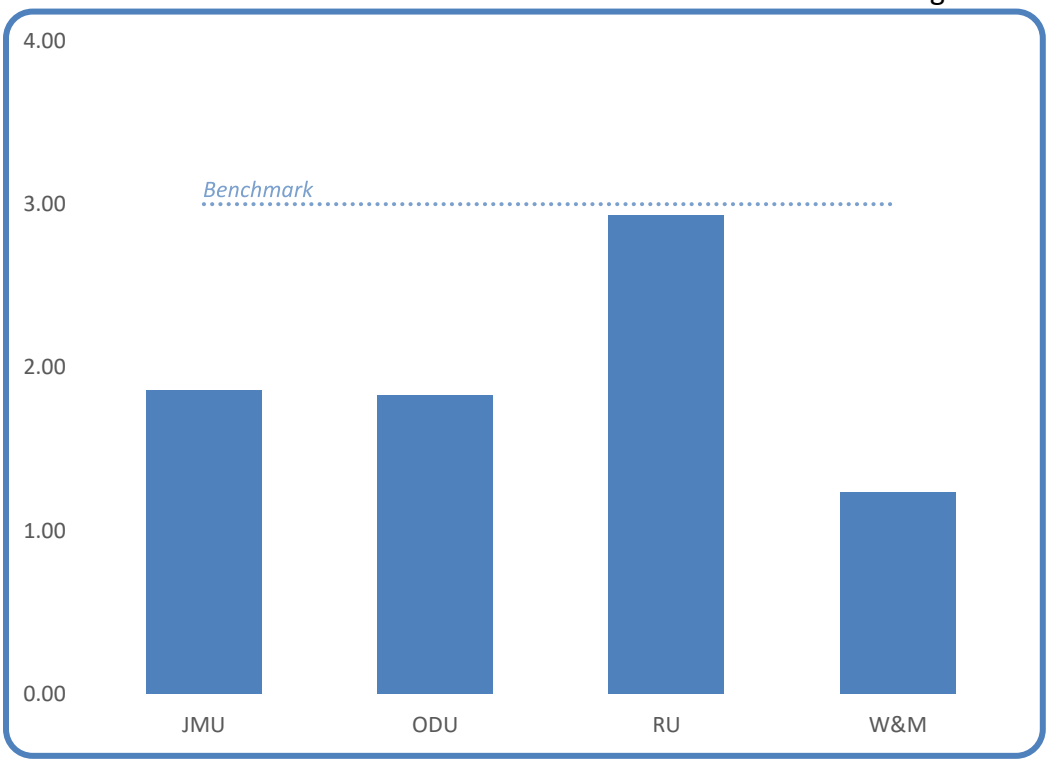


Doctoral: High Research or Doctoral/Professional Institutions

Figure 34 shows the CFI for each institution in the classification excluding its component units. As expected, most institutions perform similarly to their primary reserve and viability ratios with JMU receiving a significant boost due to its performance in the return on net position ratio and the net operating revenues ratio.

Composite Financial Index

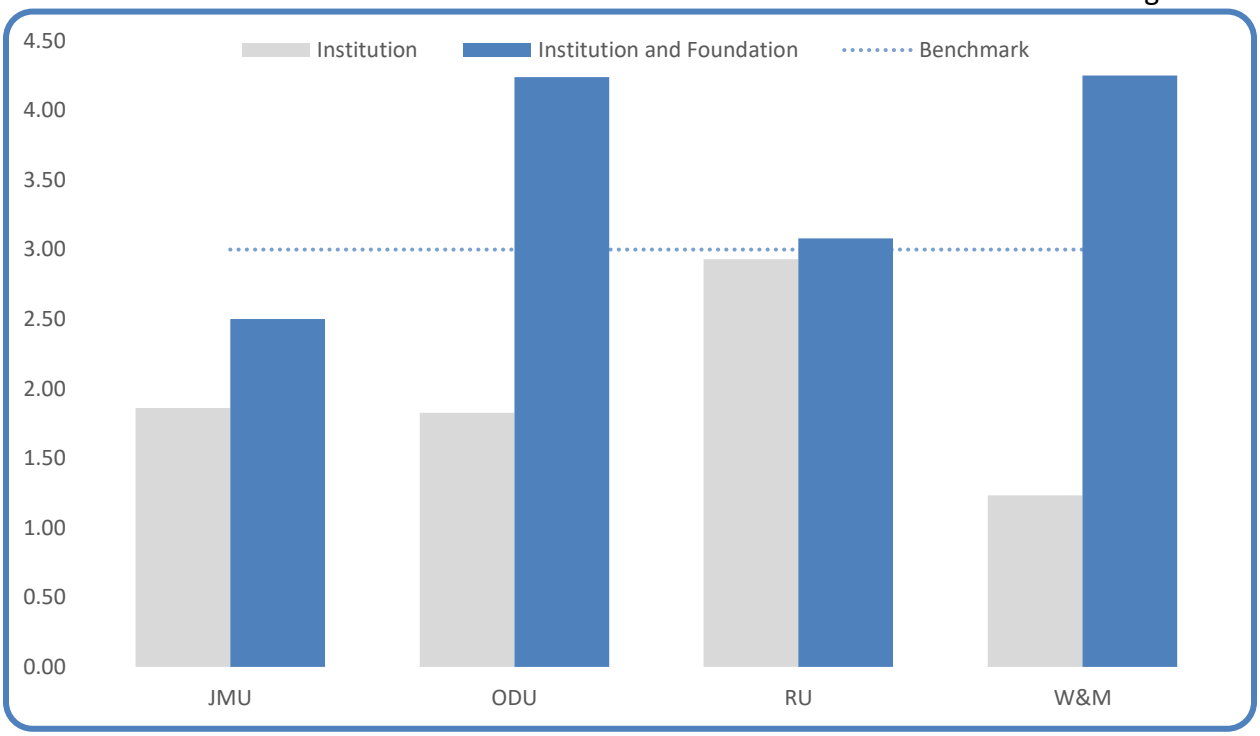
Figure 34



None of the institutions exceed the benchmark ratio of 3.0 on a standalone basis; however, Figure 35 shows significant improvement due to the inclusion of component unit resources with three of four institutions exceeding the benchmark. W&M's performance improves the most of all institutions as its ratio increases from just over 1.23 to 4.25 after including resources of its component units. This combined CFI ratio is the third largest ratio of all Virginia public institutions behind VMI and UVA.

Composite Financial Index
Including Component Units

Figure 35

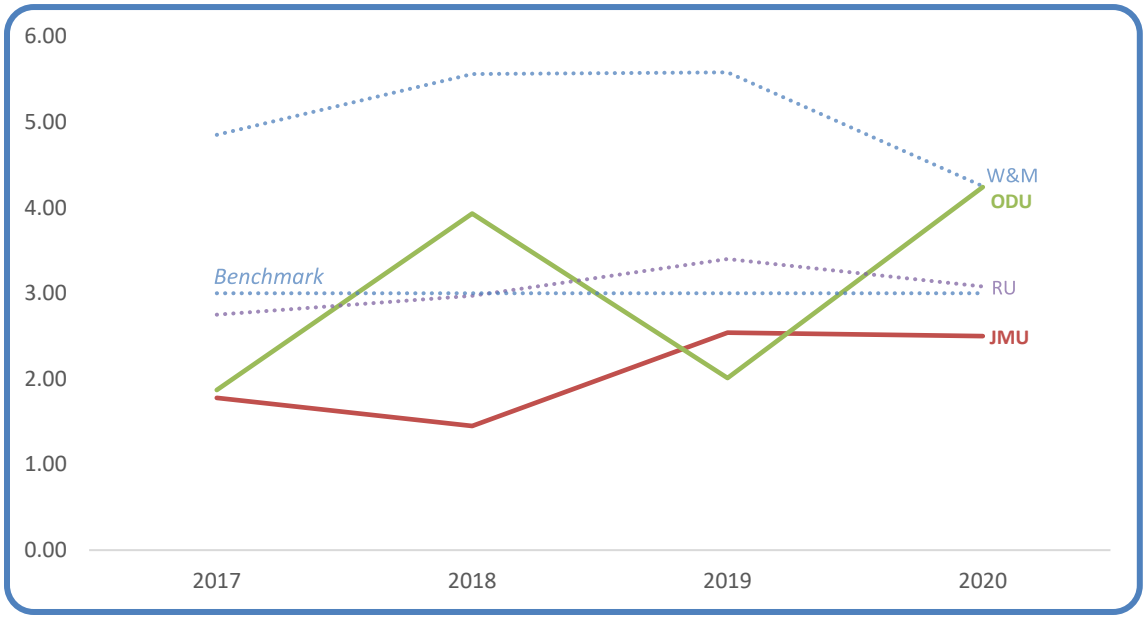


JMU's ratio lags the benchmark ratio of 3.0 with the primary cause being the lower viability ratio relative to the viability ratio benchmark. As the viability ratio makes up 35 percent of the composite ratio, better performance in the viability ratio will improve the CFI. In other words, as the ratio of expendable resources to long-term debt improves, the CFI will also improve. Strength in the net operating revenues and return on net position ratios helps JMU's overall CFI ratio, but the CFI calculation assigns less weight to these ratios.

Figure 36 highlights the performance of the CFI over time for JMU and ODU. JMU's CFI appears to be trending upward after a slight dip in 2018. JMU's primary reserve ratio, including component units, improved each year from 2017 to 2020, which helped to improve the CFI closer to the benchmark. ODU's CFI shows some volatility, improving from 1.87 in fiscal year 2017 to 3.93 in fiscal year 2018 and back to 2.01 in fiscal year 2019; however, its fiscal year 2018 CFI is primarily the result of improvement in the net operating revenues ratio and the return on net position ratio. As noted for the return on net position ratio above, ODU recognized a large one-time nonoperating revenue source in 2018, which resulted in the large improvement in the performance of the related ratios for that fiscal year. ODU's fiscal year 2020 CFI also improves significantly due to strength in the return on net position and net operating revenues ratios; however, the primary reserve ratio also shows improvement. Despite some volatility, the long-term trajectory of the CFI for all institutions in this classification appears to be positive with respect to the benchmark ratio which highlights overall improvement in expendable resource balances and operating efficiency.

Composite Financial Index Trends
Including Component Units

Figure 36

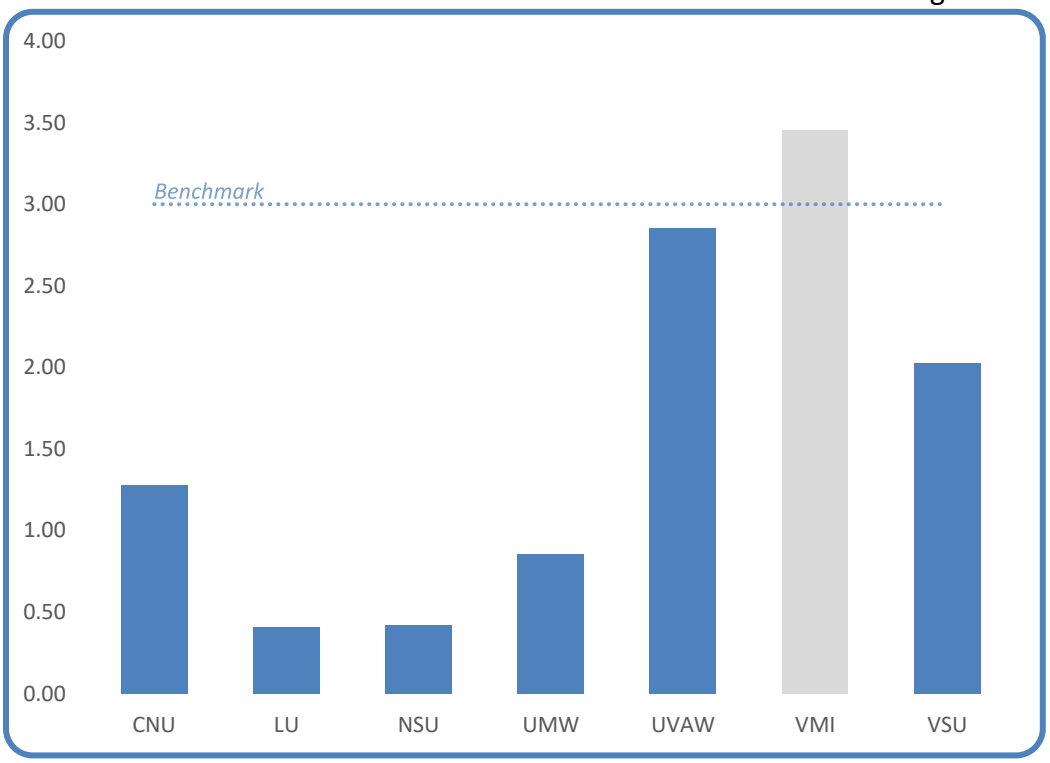


Master's or Baccalaureate Institutions

Figure 37 shows both UVAW and VMI's CFI ratios closely approximate the benchmark ratio of 3.0. A review of the primary reserve ratio and viability ratio of these institutions shows strong performance relative to all Virginia institutions reviewed in this report, not just those in the master's or baccalaureate classification. Notably, these institutions have large endowments, relatively low enrollment compared to other institutions, and low long-term debt relative to the size of their expendable resources. While UVAW and VMI have net operating revenues ratios below the median of the institutions in the classification, their respective endowments and the performance of those endowments over time should provide flexibility to help position both institutions for the future.

Composite Financial Index

Figure 37



We analyzed UVAW's ratios separately for fiscal years 2018 through 2020, but we did not retroactively analyze fiscal years prior to 2018. UVAW's CFI ratio exceeded the benchmark ratio for both fiscal years 2018 and 2019; however, the CFI trended down to just below the benchmark for fiscal year 2020. The primary cause for the three-year decline is a decline in the primary reserve and viability ratios. Despite the downward trend, UVAW remains better positioned to absorb short-term changes in the higher education environment.

Composite Financial Index
Including Component Units

Figure 38

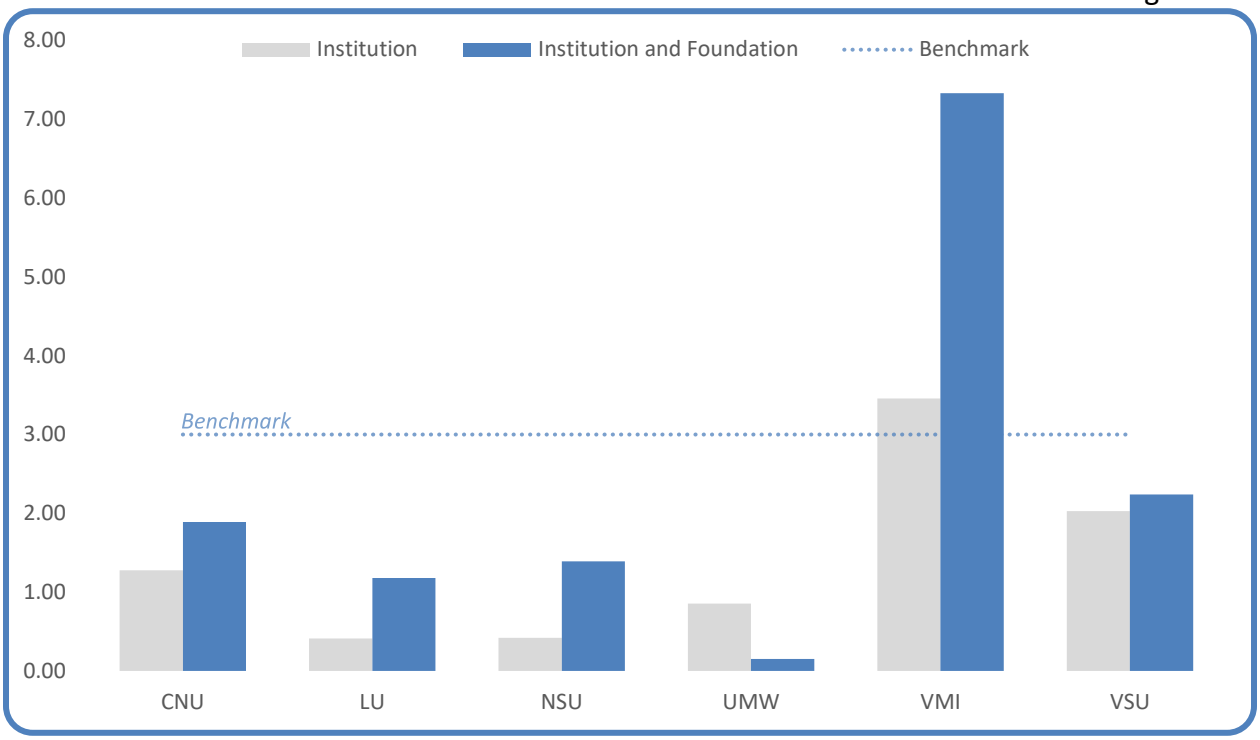
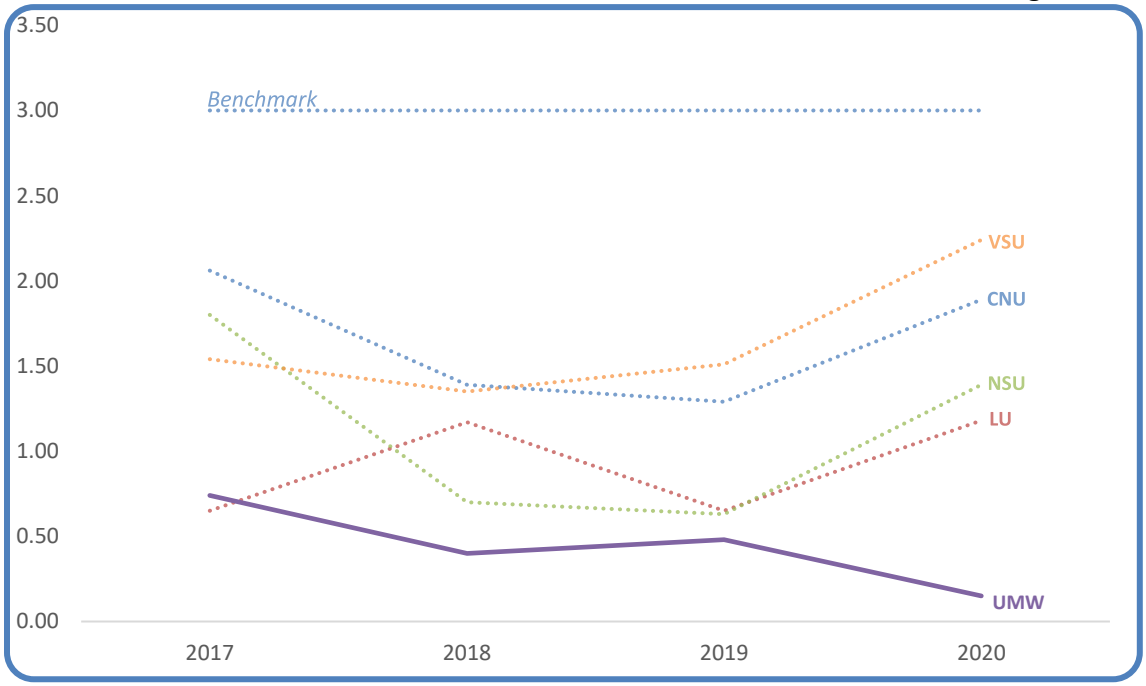


Figure 38 shows the addition of component units mostly improves the CFI ratio. VMI, NSU, LU and CNU's CFI ratios improve substantially when factoring component unit resources and performance into the ratio calculations. Somewhat surprisingly, several institutions experience a decline or little to no improvement in their CFI. While the goal of this report is not to analyze institution component unit performance, a decline in the CFI with the inclusion of component unit resources generally indicates potential burden to the institution in the form of financial guarantee or support arrangements and requires careful monitoring. While institutions may benefit from non-profit foundations for fundraising and other purposes, arrangements to service debt or guarantee occupancy percentages for residence facilities constructed by foundations can have long-term negative consequences if an institution's economic circumstances change. For example, an institution experiencing a long-term significant decline in enrollment may have difficulty meeting guarantees of occupancy rates or may shift students out of institution-owned dormitories to meet contractual obligations, which could reduce revenues generated by the institution to support maintenance and debt service.

Figure 39 further analyzes the CFI ratios of institutions below the benchmark ratio of 3.0 by showing the change in the ratio for each institution over the four-year period from fiscal year 2017 to 2020. Most institutions show either a slight decline from the ratio in fiscal year 2017 to 2020 or a slight increase. UMW shows a steeper decline from fiscal year 2019 to fiscal year 2020. The decrease in the CFI for UMW is primarily the result of the decrease in the related ratios as detailed previously in this report. UMW is the only institution with negative primary reserve and viability ratios after the inclusion of component unit resources, which stems from the UMW Foundation's negative expendable net position. In June 2021, UMW purchased several properties from the UMW Foundation while issuing debt to finance the purchase. In doing so, UMW eliminated a support and management agreement with the UMW Foundation for the associated properties. The purchase will not result in immediate improvement on UMW's ratios as it is an intra-entity transaction; however, the purchase may give UMW management more operating flexibility in managing its housing operation. Future iterations of this report will continue to monitor UMW's CFI and the associated ratios, including the impact of the foundation's resources and activity.

Composite Financial Index Trends
Including Component Units

Figure 39



Other Ratios

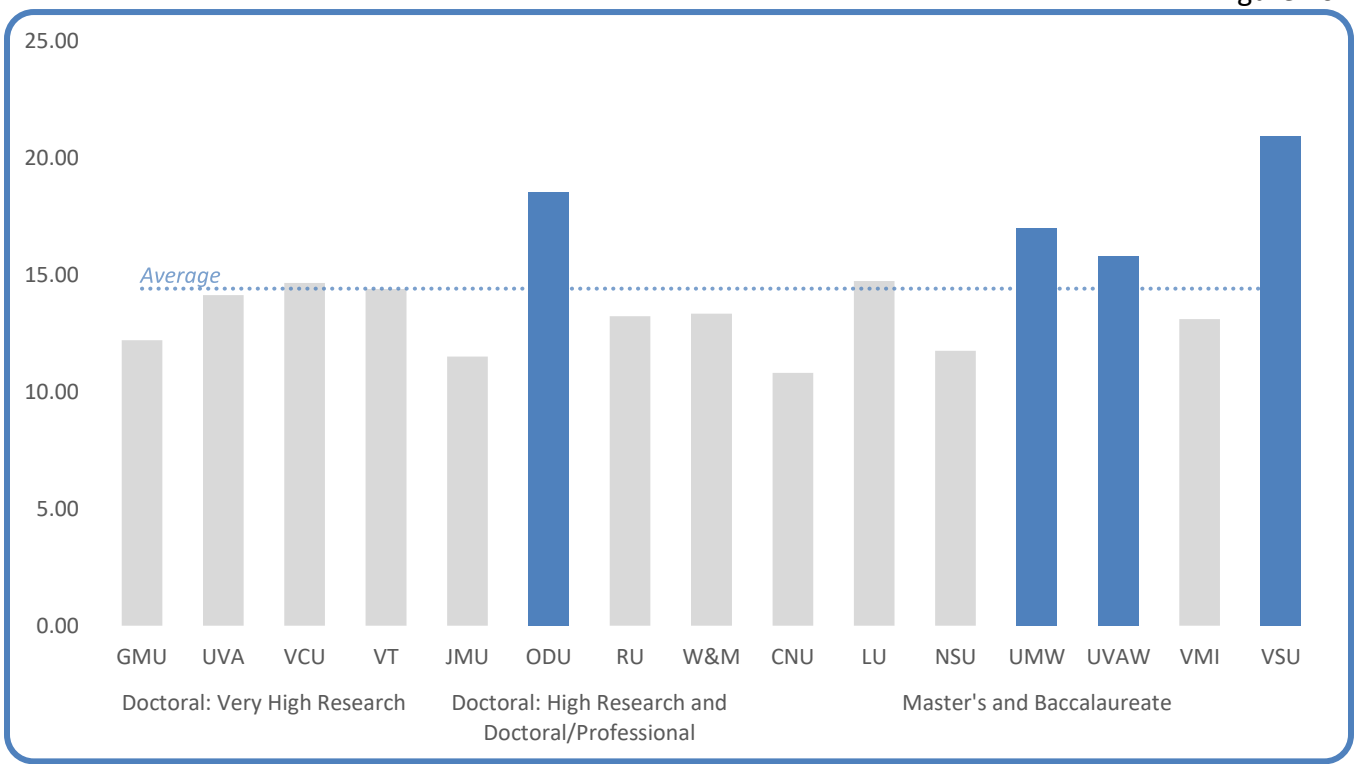
Age of Facilities Ratio

The age of facilities ratio roughly calculates the average age of facilities in years.

The age of facilities ratio is a comparison of the current year's depreciation expense for buildings, infrastructure, and improvements compared to the total accumulated depreciation for those asset categories. This ratio provides an approximate average age of facilities in years by dividing the accumulated depreciation by the current year's depreciation expense. This ratio can be an indicator of future building, infrastructure, and maintenance needs. In general, a higher age of facilities ratio represents a greater immediate need for facility improvements. In Figure 40 below, we see a comparison of the age of facilities ratio across institutions, grouped according to institution classification.

Age of Facilities Ratio

Figure 40

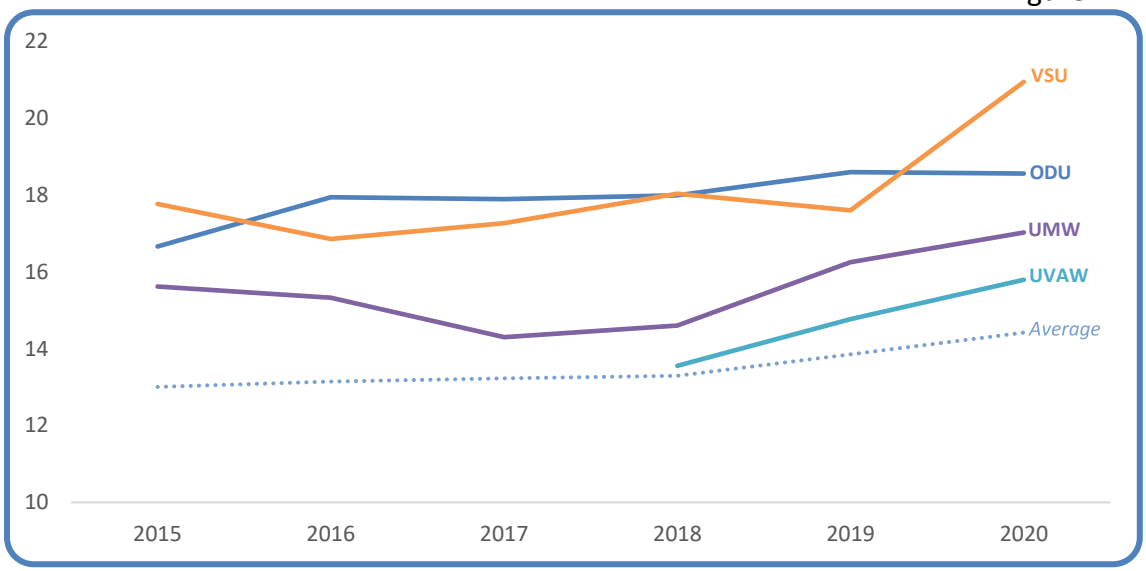


The institutions with the highest and lowest age of facilities ratio are VSU (20.95) and CNU (10.82) with both ratios increasing from the prior year. The average ratio for all institutions also increased from 13.30 in fiscal year 2018 to 14.42 in fiscal year 2020. Many different factors affect this ratio, the most prevalent of which is investment in capital assets. CNU is the newest comprehensive institution in the Commonwealth as the institution was part of W&M until 1977 and gained university status in 1992. Therefore, CNU's expansion and investment in capital assets is consistent with a newer, growing institution.

The extent to which the institution relies upon its foundation to finance capital projects may also impact this ratio. In many cases, an institution contracts with a related foundation or other entity to rent space. As operating leases may result in the use of new space, but not the recording of a newer asset on the Statement of Net Position, the significant use of operating leases can result in a higher age of facilities ratio relative to other institutions. Additionally, the geography or geographical location of an institution's main campus may also impact its ability to construct new assets, particularly if land is in short supply based on the location of the campus in a major city. A trend analysis of the change in the ratio over time is important, particularly for institutions with ratios above the average ratio for all institutions. As facilities age, maintenance can become more costly and may result in the need to issue bonds to finance large scale renovation or replacement projects. As a result, aging facilities can constrain resources in multiple ways including maintenance needs that consume resources in the current period and long-term constraints due to payment terms and requirements of long-term debt issuances. Figure 41 shows the trend in this ratio for ODU, UMW, UVAW, and VSU. The rising trend at several institutions indicates depreciation of buildings and improvements at a faster pace than new construction. As new construction occurs, the ratio may correct downward depending on the size and scope of the new construction and the percentage of newer assets constructed to assets nearing the end of their useful lives.

Age of Facilities Trends

Figure 41



Auxiliary Income Ratio

The auxiliary income ratio intends to show whether the revenues in support of auxiliary enterprises exceed the expenses for those services. Auxiliary services are all those not related to an institution's core educational objectives and include housing, food services, bookstore operations, parking, and others. These enterprises do not receive state general fund support and should be self-sustaining in that the revenues they earn should generally equal or exceed their expenses. It is important to note that donors often restrict the use of gifts given to institutions for athletics and other auxiliary activities. As institutions receive donations restricted to auxiliary activities and earn auxiliary income, cash reserves can affect activities in the current period under analysis. Institutions with larger auxiliary cash reserves have more flexibility to set and adjust fees for auxiliary services than institutions relying on current period auxiliary income, such as student fees. Although some institutions have negative auxiliary ratios and negative income related to their auxiliaries, a negative ratio can indicate when an institution elects to use its auxiliary reserve funds or significant resources from endowments, gifts, or other investments to support auxiliary services as opposed to increasing fees for these types of services. Declines in enrollment can also result in significant swings in the auxiliary income ratio, particularly if expenses do not decline at the same rate as reduced auxiliary revenues from student fees.

The auxiliary income ratio shows the extent to which auxiliary services are self-sustaining.

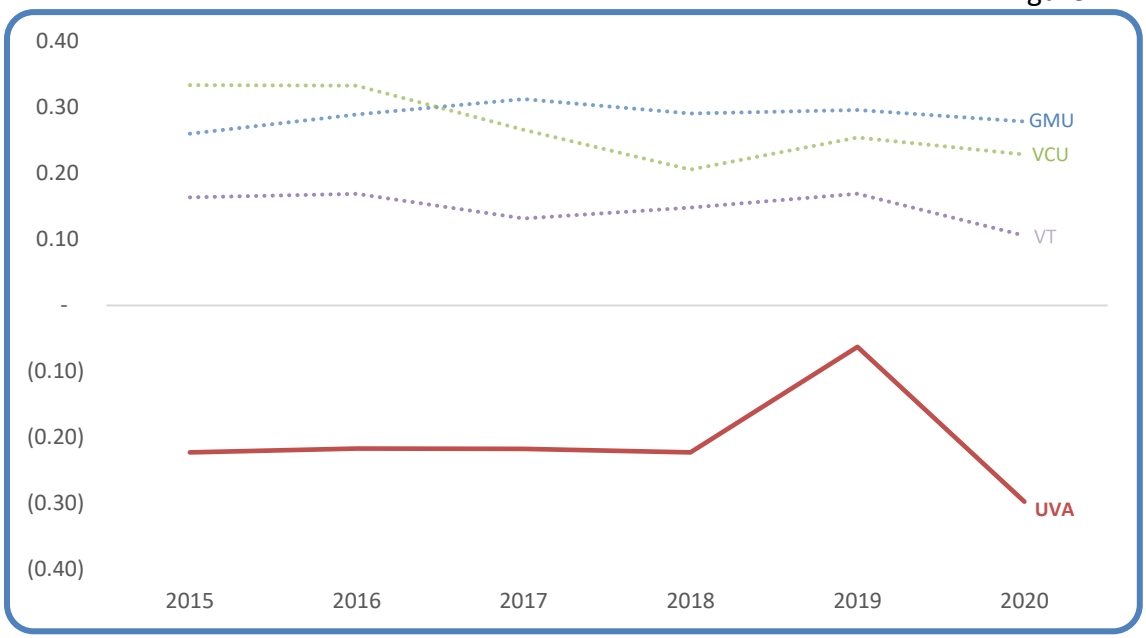
This ratio compares auxiliary income to the amount of net auxiliary revenue. The relative values for each institution are not the focus of this analysis, rather the trend of the ratio over time is the most important factor. If an institution's auxiliary income ratio is positive and stable, it likely indicates consistent performance and expense management within the institution's available revenues. If the institution is consistently negative, but changes in the ratio are relatively flat, it could indicate that the institution uses private gifts to balance auxiliary operations for certain auxiliaries, like athletics, which show up as gift income in the institution's financial statements rather than auxiliary income. GASB financial reporting requirements require reporting of gift and endowment income, and federal funding related to the COVID-19 pandemic used to support auxiliary activities as a nonoperating revenue rather than as auxiliary revenue.

Doctoral: Very High Research Institutions

Per Figure 42, most of the very high research institutions' auxiliary income ratios seem to operate in a narrow range. UVA uses contributions from individuals and affiliated foundations to aid in funding its athletic budget. The improvement in UVA's auxiliary income ratio for fiscal year 2019 is primarily the result of a $20 million decrease in supplies and other services expense for UVA's auxiliary enterprises rather than an increase in revenue, which stayed approximately the same when compared to fiscal year 2018. The ratio declines in 2020 as supplies and other services expense returned to fiscal year 2018 levels and auxiliary revenue decreased, primarily due to housing and dining refunds given to students at the beginning of the COVID-19 pandemic. Since the ratio does not include federal COVID-19 funding used to reimburse UVA for refunds issued to students for dining and housing, the ratio appears worse than it would be when including this funding source. Additionally, given the size of UVA's endowment and the resources provided by the institution's endowment spending policy, it is likely that the negative auxiliary income ratio represents a spending level for auxiliaries based on all available funding sources, and not just fee-for-service revenues generated by the auxiliary enterprises directly.

Auxiliary Income Ratio Trends

Figure 42



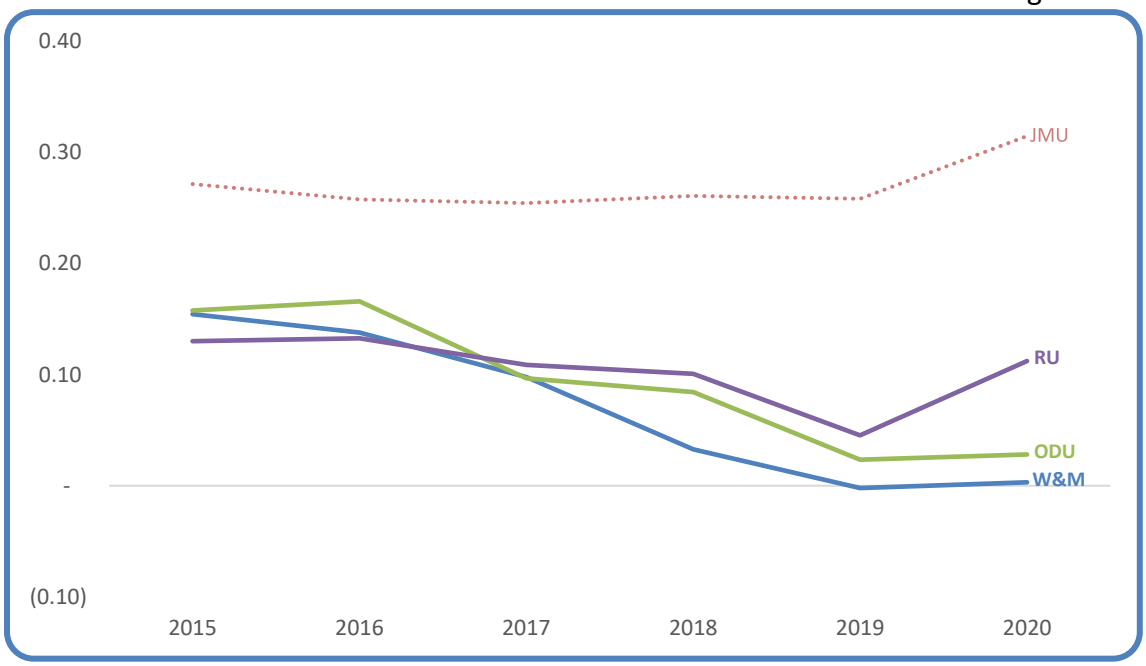
Doctoral: High Research or Doctoral/Professional Institutions

Virginia's high research or doctoral/professional institutions generally have positive auxiliary income ratios. Figure 43 shows JMU's ratio is consistently much higher than the other institutions in this classification; however, as noted in the analysis of the previous ratios in this report, JMU generally performs well in operating ratios such as the net operating revenues ratio and the return on net position ratio relative to peer institutions, and not as well on resource ratios like the primary reserve ratio and viability ratio. The performance in operating ratios suggests that JMU benefits less from outside resources in the form of donations and contributions from affiliated organizations and foundations but does well in managing expenses paid from revenues generated in the current fiscal year. W&M, ODU, and RU all experienced declining auxiliary income ratios over the last five fiscal years. These declining ratios are not necessarily indicative of a problematic trend, as the decline may indicate intentional actions taken by institutions to decrease the growth of student fees and the cost of attendance of the institution related to auxiliary components of the institutions' operations. On the contrary, declining ratios can indicate a narrowing of the gross margin from auxiliary operations.

As noted in the fiscal year 2018 and 2019 National Collegiate Athletic Association (NCAA) Agreed Upon Procedures reports for ODU, the institution has used reserves from previous fiscal years to cover increases in athletic expenses. W&M recognized steady increases in expenses over the five-year period from fiscal year 2015 to 2019, while revenues remained relatively even, resulting in a decrease in the ratio. Like many institutions, W&M also issued refunds to students related to housing and dining plans at the beginning of the COVID-19 pandemic, resulting in a $7 million decrease in revenue; however, the decline in revenue did not have a significant impact on the net auxiliary income ratio as W&M's auxiliary expenses declined by a similar amount, primarily due to a reduction in services and supplies expense. As mentioned previously, W&M has a sizeable endowment and significant gifts and contributions each year that help to cover expenses from operations, therefore, it may be less concerning to have an auxiliary income ratio that is at or below zero. RU auxiliary income ratio also declined during the period; however, the decline was gradual between fiscal year 2015 and fiscal year 2018. Fiscal year 2019 saw a further narrowing of the ratio due to a decrease in revenue generated from its comprehensive fee; however, both dining and housing revenue increased year over year. While the beginning of the pandemic decreased revenue in dining, housing, and other student auxiliary revenue sources, RU reduced expenses across the board in compensation and benefits, services and supplies, and utilities, resulting in improvement in the ratio for fiscal year 2020.

Auxiliary Income Ratio Trends

Figure 43



Master's or Baccalaureate Institutions

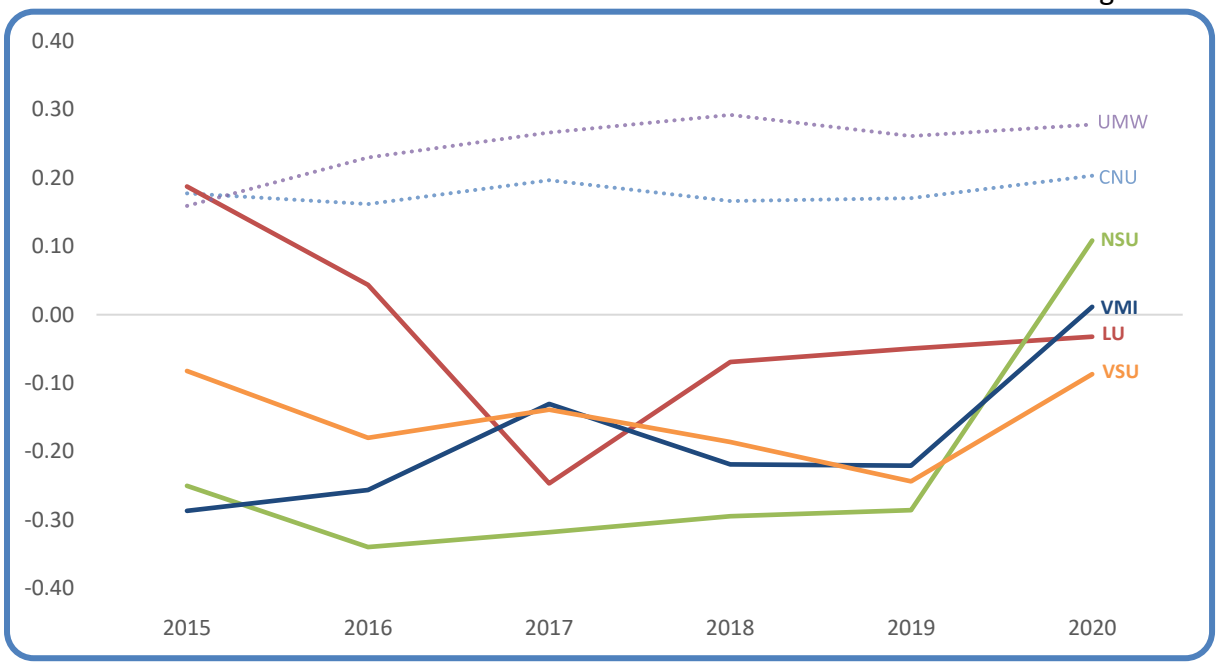
Figure 44 illustrates the wide variation in the auxiliary income ratio for the master's or baccalaureate institutions. This variation is not wholly surprising, given the evaluation of the previous ratios in this report. UMW and CNU both show consistently performing positive ratios with values like the very high research institutions and JMU, indicating spending within available resources each year. VMI's negative auxiliary income ratio is not particularly concerning as VMI has the largest endowment per full-time equivalent student of all institutions and can use endowment income and gift and contribution resources as part of its budget for operating expenses. Somewhat surprisingly, ratios trended upward in fiscal year 2020 despite refunds made to students at the beginning of the COVID-19 pandemic. Driving factors of these increases appear to primarily be decreases in supplies and services expense as auxiliary enterprises suspended operations in the last quarter of fiscal year 2020.

As noted above, NSU's enrollment declines have contributed to decreases in other operating ratios like the net operating revenues ratio and the return on net position ratio. A review of NSU's NCAA Agreed Upon Procedures schedules for the period from fiscal year 2015 to fiscal year 2019 shows the institution required the use of an average of $4 million in auxiliary reserves to balance the athletic budget in each fiscal year. The amount of auxiliary reserves used for athletic operations in fiscal year 2020 decreased to approximately $1.4 million resulting from improvement in other athletic revenue sources and the waiver of indirect cost recoveries from auxiliaries due to the COVID-19 pandemic. The positive increase in the net auxiliary income ratio for fiscal year 2020 is primarily the result of an increase of $6 million in auxiliary revenue due to an increase in mandatory fees and room and board rates and a decrease of $5.5 million in auxiliary expenses. VSU's auxiliary revenue and expense have generally both increased from fiscal year 2015 to 2019; however, expenses increased at a faster rate during the period,

which widened the operating deficit in auxiliaries. While revenue remained flat for fiscal year 2020, expenses decreased by $4.5 million, resulting in an improved auxiliary net income ratio. LU's net auxiliary income ratio increased again in fiscal year 2020 after trending upward over the past two fiscal years. The improvement of the ratio was primarily the result of decreased expenses outpacing a slight decrease in revenue. While the net auxiliary income ratio for the master's or baccalaureate institutions generally improved overall during fiscal year 2020 and most trended above or toward zero, it will be important to continue to watch trends in the ratio and ensure adequate resources are available to address maintenance and replacement needs

Auxiliary Income Ratio Trends

Figure 44



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Commonwealth of Virginia

Auditor of Public Accounts

Staci A. Henshaw, CPA
Auditor of Public Accounts

P.O. Box 1295
Richmond, Virginia 23218

March 6, 2023

The Honorable Glenn Youngkin
Governor of Virginia

Joint Legislative Audit
and Review Commission

Please find enclosed a report analyzing financial performance of Virginia's four-year public institutions of higher education. This report primarily uses ratio analysis to analyze financial activity at each institution for the fiscal year ended June 30, 2020, and evaluate trends in financial performance from fiscal years ending June 30, 2015, through June 30, 2020. We have compiled this report by analyzing financial statements audited by our office at each institution for the fiscal years presented. We provided a draft of this report to each institution on October 27, 2022, and an opportunity to provide feedback on the content presented herein. We would like to express our appreciation to each institution for their collaboration and suggestions.

Sincerely,

Staci A. Henshaw
Auditor of Public Accounts

EMS/vks

BIBLIOGRAPHY

[1] Integrated Postsecondary Education Data System, IPEDS, https://nces.ed.gov/ipeds/

[2] The Carnegie Classification of Institutions of Higher Education (n.d.), About Carnegie Classification, Retrieved (June 2022) from http://carnegieclassifications.iu.edu/

[3] Prager, Sealy & Co., LLC, Strategic Financial Analysis for Higher Education, 2010, https://emp.nacubo.org/wp-content/uploads/2017/10/NSS_Handbook.pdf

CONDENSED STATEMENT OF NET POSITION

As of June 30, 2020
(in thousands)

	HIGHEST RESEARCH				HIGHER RESEARCH & LARGER MASTER'S				MASTER'S AND BACCALAUREATE						
	GMU	UVA	VCU	VT	JMU	ODU	RU	W&M	CNU	LU	NSU	UMW	UVAW*	VMI	VSU
ASSETS															
Current Assets:															
Cash, cash equivalents, & investments	$ 546,390	$ 491,395	$ 340,109	$ 187,802	$ 230,063	$ 102,394	$ 143,074	$ 64,373	$ 39,498	$ 26,223	$ 23,477	$ 20,036	$ 138	$ 26,171	$ 38,905
Other current assets	105,773	543,810	85,858	119,941	24,899	37,284	16,749	24,562	8,947	5,800	10,148	4,260	2,342	21,069	8,021
Noncurrent Assets:															
Cash, cash equivalents, & investments	19,600	7,837,233	154,572	602,274	9,912	88,712	-	157,764	1,425	6,789	3,220	24,921	87,837	21,950	42,054
Capital assets, net	1,240,110	4,338,842	1,217,773	1,936,096	1,351,618	757,979	382,198	943,368	551,278	285,930	305,238	356,110	154,454	380,905	287,771
Other noncurrent assets	7,626	399,316	143,250	43,243	5,987	6,490	3,218	3,781	1,475	1,298	6,895	5,120	382	1,473	2,818
Total Assets	1,919,499	13,610,596	1,941,562	2,889,356	1,622,479	992,859	545,239	1,193,848	602,623	326,040	348,978	410,447	245,153	451,568	379,569
DEFERRED OUTFLOWS	72,667	200,480	118,279	120,057	60,284	42,403	21,181	37,345	16,914	13,291	14,755	9,710	3,498	7,391	15,927
LIABILITIES															
Current Liabilities:															
Accounts payable & accrued expenses	71,458	645,842	90,890	156,573	62,762	47,214	20,480	45,784	20,171	10,671	13,734	14,501	2,760	17,544	10,179
Unearned revenue	80,758	85,781	55,589	53,673	13,867	24,762	4,851	14,592	3,798	2,805	3,667	1,785	1,519	1,042	5,815
Long-term liabilities - current portion	48,324	115,160	59,459	55,169	33,834	26,357	4,967	31,655	15,721	5,984	7,475	7,363	3,248	2,338	11,540
Other current liabilities	34,421	17,874	8,528	67,915	13,031	8,106	9,973	1,877	6,142	2,506	3,208	1,848	609	2,265	4,615
Noncurrent Liabilities:															
Net pension liability	211,507	569,102	351,519	410,451	174,091	138,713	74,477	121,587	47,276	42,463	57,261	35,591	13,603	26,268	59,487
OPEB liability	100,203	265,810	146,979	185,500	65,529	54,103	26,257	58,633	19,152	16,423	17,302	14,936	4,310	11,466	15,479
Long-term liabilities	495,878	2,627,519	455,739	451,283	454,650	262,171	78,695	253,302	118,619	71,797	88,395	157,435	23,409	29,285	70,683
Other noncurrent liabilities	2,450	56,595	18,253	10,712	1,404	552	2,554	1,418	-	1,024	1,076	539	-	849	1,522
Total Liabilities	1,044,999	4,383,683	1,186,956	1,391,276	819,168	561,978	222,254	528,848	230,879	153,673	192,118	233,998	49,458	91,057	179,320
DEFERRED INFLOWS	52,144	301,640	81,135	104,176	40,613	30,145	17,648	34,478	12,613	10,033	11,567	11,793	2,706	7,413	10,482
NET POSITION															
Net investment in capital assets	726,154	2,064,432	846,148	1,437,622	893,078	511,472	303,209	701,520	421,110	235,533	214,583	213,442	132,810	357,813	217,251
Restricted: Nonexpendable	7,166	998,964	61,010	12,562	-	5,666	-	55,162	-	-	-	-	46,679	1,273	9,792
Restricted: Expendable	6,314	3,356,964	44,315	199,343	10,651	30,295	4,044	33,477	1,362	5,777	9,910	1,109	41,783	13,170	34,907
Unrestricted	155,389	2,705,393	(159,722)	(135,566)	(80,745)	(104,290)	19,265	(122,291)	(46,429)	(65,686)	(64,447)	(40,184)	(24,786)	(11,768)	(56,256)
Total Net Position	$ 895,023	$ 9,125,753	$ 791,751	$ 1,513,961	$ 822,984	$ 443,143	$ 326,518	$ 667,868	$ 376,043	$ 175,624	$ 160,046	$ 174,367	$ 196,486	$ 360,488	$ 205,694

* Information derived from consolidated UVA financial statements.

CONDENSED STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

For the year ended June 30, 2020
(in thousands)

	HIGHEST RESEARCH				HIGHER RESEARCH & LARGER MASTER'S				MASTER'S AND BACCALAUREATE						
	GMU	UVA	VCU	VT	JMU	ODU	RU	W&M	CNU	LU	NSU	UMW	UVAW*	VMI	VSU
OPERATING REVENUES:															
Student tuition and fees, net of scholarship allowances	$ 392,744	$ 619,517	$ 341,224	$ 575,869	$ 232,874	$ 151,398	$ 76,255	$ 182,319	$ 42,549	$ 28,277	$ 27,581	$ 27,124	$ 8,090	$ 26,117	$ 27,020
Hospital and Patient services, net of charity care	-	1,688,766	42,839	-	-	-	-	-	-	-	-	-	-	-	-
Federal grants, contracts, and appropriations	122,765	333,612	165,877	239,420	14,498	9,122	9,541	32,974	1,547	1,645	17,026	821	2,311	256	21,333
State and local grants and contracts	33,170	7,539	13,836	29,132	9,125	1,848	1,143	3,857	245	405	696	52	657	-	1,230
Nongovernmental grants and contracts	-	71,907	27,987	53,808	6,130	1,212	467	6,572	232	5,920	1,230	1,131	7	-	-
Sales and services of educational departments	-	26,259	55,918	20,081	2,805	-	-	-	-	-	-	-	349	461	-
Auxiliary enterprises, net of scholarship allowances	188,862	137,345	117,593	264,083	179,852	110,288	51,357	88,388	68,961	48,813	33,588	36,627	4,893	21,396	28,637
Unique military activities, net of scholarships allowances	-	-	-	-	-	-	-	-	-	-	-	-	-	3,602	-
Other operating revenues	14,229	61,750	19,218	6,440	3,702	3,855	1,494	6,846	3,393	433	564	1,617	-	924	1,035
Total operating revenues	751,770	2,946,695	784,492	1,188,833	448,986	277,723	140,257	320,956	116,927	85,493	80,685	67,372	16,307	52,756	79,255
OPERATING EXPENSES:															
Instruction	342,987	462,345	369,944	426,003	178,383	178,690	90,535	140,310	38,622	36,877	42,876	30,139	-	22,571	37,941
Research	112,654	442,919	218,355	343,206	2,847	16,800	845	55,648	1,975	161	6,301	395	-	165	9,429
Public service	22,528	50,526	9,261	98,496	16,561	129	2,972	63	-	1,463	382	934	-	1,175	8,382
Academic support	82,769	210,540	125,301	106,423	50,721	47,680	11,320	42,482	11,093	7,367	15,079	8,618	-	6,350	6,881
Student services	32,818	51,927	16,800	25,994	22,003	18,734	11,906	16,976	8,299	4,494	6,144	7,854	-	3,680	5,453
Institutional support	57,039	216,823	88,845	81,715	51,008	36,842	24,439	47,484	11,376	10,780	20,331	10,580	-	7,404	18,792
Operation and maintenance of plant	61,725	123,305	85,895	91,945	47,324	35,480	16,717	29,319	11,173	8,316	14,694	5,804	-	10,701	13,391
Student aid	39,883	90,471	47,389	30,643	22,638	28,777	7,178	20,011	3,014	5,572	13,198	1,003	-	1,903	6,991
Auxiliary enterprises	136,225	178,170	90,681	236,151	123,234	107,200	45,590	88,122	54,954	50,396	29,948	26,444	-	21,151	31,132
Unique military activities	-	-	-	-	-	-	-	-	-	-	-	-	-	8,882	-
Depreciation and amortization	65,621	150,108	64,826	109,175	48,905	25,343	21,148	37,702	18,050	10,804	18,976	9,329	-	12,586	9,493
Hospital and Patient services	-	1,671,783	46,016	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	(35,985)	-	-	-	-	-	226	-	113	-	2,338	-	-	8
Total operating expenses	954,249	3,612,932	1,163,313	1,549,751	563,624	495,675	232,650	478,343	158,556	136,343	167,929	103,438	55,236	96,568	147,893
Operating income (loss)	(202,479)	(666,237)	(378,821)	(360,918)	(114,638)	(217,952)	(92,393)	(157,387)	(41,629)	(50,850)	(87,244)	(36,066)	(38,929)	(43,812)	(68,638)
NONOPERATING REVENUES/(EXPENSES):															
State appropriations	184,503	192,642	253,299	303,808	106,062	163,908	68,100	90,401	39,380	37,128	63,489	33,814	22,532	18,904	52,752
Gifts	4,196	206,454	50,893	71,641	1	16,331	-	52,976	2,015	-	1,174	-	1,615	17,465	1,103
Nonoperating grants and contracts	13,065	65,009	35,441	20,832	12,081	7,100	7,782	4,631	736	2,712	5,346	3,079	473	1,208	-
Investment income, net	8,374	342,496	17,914	(19,518)	4,196	1,832	2,364	2,138	720	163	213	518	3,930	433	(189)
Pell grant revenue	38,810	15,010	32,549	20,233	13,602	34,903	14,653	5,909	3,078	4,865	16,711	3,795	3,303	1,106	13,606
Interest on capital asset related debt	(17,977)	(87,607)	(14,436)	(16,687)	(11,247)	(7,687)	(1,454)	(5,980)	(4,639)	(1,794)	(2,185)	(5,712)	(474)	(907)	(2,555)
Other nonoperating revenues/(expenses)	(2,537)	4,714	(89)	561	(3,941)	1,082	(137)	451	(112)	1,205	(959)	533	(132)	(195)	6,578
Total nonoperating revenue (expenses)	228,434	738,718	375,571	380,870	120,754	217,469	91,308	150,526	41,178	44,279	83,789	36,027	31,247	38,014	71,295
Income/(loss) before other revenues, gains, or losses	25,955	72,481	(3,250)	19,952	6,116	(483)	(1,085)	(6,861)	(451)	(6,571)	(3,455)	(39)	(7,682)	(5,798)	2,657
Capital Appropriations, Grants, and Contributions	75,212	89,047	52,363	101,030	49,455	50,243	15,007	44,450	30,755	17,458	4,714	11,246	1,399	45,028	7,555
Additions to Permanent Endowments	-	46,692	8	-	-	-	-	-	-	-	-	-	4,768	-	595
Other**	-	-	-	-	-	(344)	-	-	-	-	-	-	3,449	67	-
Change in net position	101,167	208,220	49,121	120,982	55,571	49,416	13,922	37,589	30,304	10,887	1,259	11,207	1,934	39,297	10,807
Total net position - beginning of year, as restated	793,855	8,917,533	742,629	1,392,979	767,414	393,726	312,597	630,281	345,739	164,738	158,785	163,159	194,552	321,191	194,888
Total net position - end of year	$ 895,022	$ 9,125,753	$ 791,750	$ 1,513,961	$ 822,985	$ 443,142	$ 326,519	$ 667,870	$ 376,043	$ 175,625	$ 160,044	$ 174,366	$ 196,486	$ 360,488	$ 205,695

* Information derived from consolidated UVA financial statements. Operating expenses by functional classification are not available for UVAW due to consolidation methodology and presentation in consolidated UVA financial statements. UVA presents operating expenses by natural classification in its Statement of Revenues, Expenses, and Changes in Net Position and reconciles this presentation to expenses by functional classification in its footnotes on a consolidated basis.

** For UVAW, includes transfers with UVA-related entities eliminated in consolidation

DETAILED RATIO INFORMATION NOTES AND DISCLAIMERS

* Information shown for other states represents calculations of ratios for institutions from other AAA-rated states using publicly available financial statement information. We have elected to report other state information in aggregate by classification rather than show each institution separately. While the methodology for performing the calculations for institutions from other states is the same methodology used for calculating ratios for Virginia's four-year institutions, there may be nuances to how those institutions classify certain activities in their financial statements that are unknown to us. As such, we believe an aggregate number provides a data point that is useful while providing smoothing of any potential calculation discrepancies. The other state cohort for very high research activity institutions includes the University of North Carolina at Chapel Hill, North Carolina State University, and the University of Tennessee. The other state cohort for high research or doctoral/professional institutions includes Appalachian State University, East Carolina University, Western Carolina University, and the University of Memphis. The other state cohort for master's or baccalaureate institutions includes Fayetteville State University, Winston-Salem State University, and the University of North Carolina at Asheville. We did not provide information for other states in our original report through fiscal year 2017, and as such, we have not reported ratio information for the fiscal years 2015 through 2017 for other states in the tables below.

** The previous report through fiscal year 2017 did not include separate ratio analysis for UVAW. UVA's financial statements include the activity of UVAW. To evaluate ratios for UVAW, we compiled information from supporting documentation UVA uses to generate its consolidated financial statements. We did not retroactively perform this analysis for the fiscal years 2015 through 2017. Additionally, separate component unit information is not distinguishable for UVAW, therefore we do not include a combined institution and component unit ratio in the tables below.

*** Our original report calculated combined institution and component unit ratios for fiscal year 2017 but did not perform these calculations for fiscal year 2015 and 2016. As a result, we have not included information for those fiscal years in the table below.

Primary Reserve Ratio

Benchmark >= 0.40

	2015	2016	2017	2018	2019	2020
Doctoral: Very High Research						
GMU	0.149	0.223	0.324	0.388	0.438	0.466
UVA	2.038	1.847	1.898	1.903	1.854	1.844
VCU	0.393	0.360	0.369	0.294	0.269	0.294
VT	0.384	0.415	0.417	0.402	0.420	0.414
Virginia - Average	**0.741**	**0.711**	**0.752**	**0.747**	**0.745**	**0.755**
Virginia - Median	**0.388**	**0.388**	**0.393**	**0.395**	**0.429**	**0.440**
Other States - Average	*	*	*	**0.586**	**0.621**	**0.603**
Other States - Median	*	*	*	**0.561**	**0.565**	**0.581**
Doctoral: High Research or Doctoral/Professional						
JMU	0.218	0.277	0.255	0.185	0.250	0.268
ODU	0.236	0.257	0.282	0.301	0.260	0.219
RU	0.387	0.432	0.443	0.441	0.484	0.507
W&M	0.154	0.148	0.155	0.140	0.169	0.186
Virginia - Average	**0.249**	**0.278**	**0.284**	**0.267**	**0.291**	**0.295**
Virginia - Median	**0.227**	**0.267**	**0.269**	**0.243**	**0.255**	**0.243**
Other States - Average	*	*	*	**0.410**	**0.457**	**0.492**
Other States - Median	*	*	*	**0.358**	**0.383**	**0.445**
Master's or Baccalaureate						
CNU	0.070	0.090	0.121	0.098	0.080	0.105
LU	0.340	0.308	0.152	0.053	0.015	(0.024)
NSU	0.107	0.071	0.046	0.016	0.029	0.090
UMW	0.006	0.015	0.047	0.060	0.049	0.109
UVAW	**	**	**	0.691	0.669	0.608
VMI	0.332	0.323	0.394	0.457	0.444	0.399
VSU	0.327	0.292	0.323	0.270	0.277	0.321
Virginia - Average	**0.197**	**0.183**	**0.181**	**0.235**	**0.223**	**0.230**
Virginia - Median	**0.217**	**0.191**	**0.137**	**0.098**	**0.080**	**0.109**
Other States - Average	*	*	*	**0.237**	**0.240**	**0.234**
Other States - Median	*	*	*	**0.229**	**0.210**	**0.245**
Virginia Average – All Institutions	**0.367**	**0.361**	**0.373**	**0.380**	**0.380**	**0.387**
Virginia Median – All Institutions	**0.281**	**0.284**	**0.303**	**0.294**	**0.269**	**0.294**

Primary Reserve Ratio with Component Units

Benchmark >= 0.40

	2015	2016	2017	2018	2019	2020
Doctoral: Very High Research						
GMU	***	***	0.317	0.483	0.534	0.553
UVA	***	***	1.752	1.895	1.863	1.848
VCU	***	***	0.621	0.618	0.569	0.573
VT	***	***	0.667	0.749	0.785	0.731
Virginia - Average	***	***	**0.839**	**0.936**	**0.938**	**0.926**
Virginia - Median	***	***	**0.644**	**0.683**	**0.677**	**0.652**
Doctoral: High Research or Doctoral/Professional						
JMU	***	***	0.290	0.308	0.392	0.407
ODU	***	***	0.318	0.482	0.445	0.497
RU	***	***	0.486	0.593	0.650	0.643
W&M	***	***	0.801	1.027	1.078	1.028
Virginia - Average	***	***	**0.474**	**0.603**	**0.641**	**0.643**
Virginia - Median	***	***	**0.402**	**0.537**	**0.547**	**0.570**
Master's or Baccalaureate						
CNU	***	***	0.174	0.242	0.251	0.295
LU	***	***	0.200	0.265	0.162	0.217
NSU	***	***	0.101	0.156	0.169	0.245
UMW	***	***	(0.117)	(0.003)	(0.051)	(0.071)
UVAW	**	**	**	**	**	**
VMI	***	***	2.647	3.044	3.040	2.918
VSU	***	***	0.263	0.330	0.366	0.362
Virginia - Average	***	***	**0.545**	**0.672**	**0.656**	**0.661**
Virginia - Median	***	***	**0.187**	**0.253**	**0.210**	**0.270**
Virginia Average – All Institutions	***	***	**0.609**	**0.728**	**0.732**	**0.732**
Virginia Median – All Institutions	***	***	**0.318**	**0.482**	**0.490**	**0.525**

Viability Ratio

Benchmark >= 1.00

Institution	2015	2016	2017	2018	2019	2020
Doctoral: Very High Research						
GMU	0.173	0.276	0.433	0.585	0.725	0.873
UVA	4.267	4.104	4.011	3.279	3.386	2.736
VCU	0.748	0.750	0.852	0.758	0.668	0.745
VT	0.999	1.058	1.166	1.197	1.325	1.424
Virginia - Average	**1.547**	**1.547**	**1.616**	**1.455**	**1.526**	**1.445**
Virginia - Median	**0.873**	**0.904**	**1.009**	**0.977**	**1.025**	**1.149**
Other States - Average	*	*	*	**1.341**	**1.479**	**1.529**
Other States - Median	*	*	*	**1.157**	**1.222**	**1.307**
Doctoral: High Research or Doctoral/Professional						
JMU	0.345	0.460	0.388	0.269	0.287	0.330
ODU	0.372	0.451	0.572	0.685	0.545	0.395
RU	1.441	1.771	1.645	1.845	2.076	1.504
W&M	0.245	0.257	0.295	0.258	0.293	0.335
Virginia - Average	**0.601**	**0.735**	**0.725**	**0.764**	**0.800**	**0.641**
Virginia - Median	**0.358**	**0.456**	**0.480**	**0.477**	**0.419**	**0.365**
Other States - Average	*	*	*	**0.765**	**0.815**	**0.876**
Other States - Median	*	*	*	**0.841**	**0.902**	**0.874**
Master's or Baccalaureate						
CNU	0.052	0.075	0.108	0.099	0.094	0.129
LU	0.829	0.591	0.327	0.126	0.036	(0.061)
NSU	0.386	0.262	0.147	0.061	0.048	0.165
UMW	0.004	0.013	0.041	0.047	0.037	0.073
UVAW	**	**	**	1.554	1.460	1.378
VMI	1.304	1.129	1.552	1.958	1.837	1.545
VSU	0.386	0.376	0.468	0.451	0.504	0.659
Virginia - Average	**0.493**	**0.408**	**0.441**	**0.614**	**0.574**	**0.555**
Virginia - Median	**0.386**	**0.319**	**0.237**	**0.126**	**0.094**	**0.165**
Other States - Average	*	*	*	**0.348**	**0.351**	**0.363**
Other States - Median	*	*	*	**0.303**	**0.367**	**0.376**
Virginia Average – All Institutions	**0.825**	**0.827**	**0.858**	**0.878**	**0.888**	**0.815**
Virginia Median – All Institutions	**0.386**	**0.456**	**0.451**	**0.585**	**0.545**	**0.659**

Viability Ratio with Component Units

Benchmark >= 1.00

	2015	2016	2017	2018	2019	2020
Doctoral: Very High Research						
GMU	***	***	0.338	0.635	0.784	0.893
UVA	***	***	2.714	2.871	3.001	2.513
VCU	***	***	1.958	2.247	2.158	2.187
VT	***	***	1.100	1.571	1.720	1.467
Virginia - Average	***	***	**1.527**	**1.831**	**1.916**	**1.765**
Virginia - Median	***	***	**1.529**	**1.909**	**1.939**	**1.827**
Doctoral: High Research or Doctoral/Professional						
JMU	***	***	0.377	0.434	0.425	0.464
ODU	***	***	0.470	0.881	0.769	0.769
RU	***	***	1.271	1.428	1.543	1.305
W&M	***	***	1.143	1.586	1.576	1.603
Virginia - Average	***	***	**0.815**	**1.082**	**1.078**	**1.035**
Virginia - Median	***	***	**0.807**	**1.155**	**1.156**	**1.037**
Master's or Baccalaureate						
CNU	***	***	0.097	0.158	0.179	0.211
LU	***	***	0.149	0.143	0.057	0.113
NSU	***	***	0.174	0.346	0.219	0.356
UMW	***	***	(0.059)	(0.002)	(0.025)	(0.032)
UVAW	**	**	**	**	**	**
VMI	***	***	3.190	4.080	4.130	3.987
VSU	***	***	0.298	0.443	0.531	0.591
Virginia - Average	***	***	**0.642**	**0.862**	**0.849**	**0.871**
Virginia - Median	***	***	**0.162**	**0.252**	**0.199**	**0.284**
Virginia Average – All Institutions	***	***	**0.944**	**1.202**	**1.219**	**1.173**
Virginia Median – All Institutions	***	***	**0.424**	**0.758**	**0.776**	**0.831**

Return on Net Position Ratio

Benchmark >= 0.00[1]

	2015	2016	2017	2018	2019	2020
Doctoral: Very High Research						
GMU	0.091	0.133	0.160	0.093	0.099	0.092
UVA	0.048	(0.022)	0.076	0.065	0.035	0.024
VCU	0.063	0.032	0.079	0.008	0.002	0.043
VT	0.044	0.072	0.040	0.050	0.056	0.065
Virginia - Average	**0.061**	**0.054**	**0.089**	**0.054**	**0.048**	**0.056**
Virginia - Median	**0.055**	**0.052**	**0.078**	**0.058**	**0.046**	**0.054**
Other States - Average	*	*	*	**0.046**	**0.055**	**0.030**
Other States - Median	*	*	*	**0.046**	**0.053**	**0.044**
Doctoral: High Research or Doctoral/Professional						
JMU	0.057	0.100	0.029	0.019	0.065	0.061
ODU	0.083	0.107	0.058	0.052	0.017	0.089
RU	0.133	0.121	0.035	0.003	0.041	0.033
W&M	0.061	0.071	0.058	0.028	0.040	0.046
Virginia - Average	**0.083**	**0.100**	**0.045**	**0.025**	**0.041**	**0.057**
Virginia - Median	**0.072**	**0.104**	**0.047**	**0.023**	**0.041**	**0.054**
Other States - Average	*	*	*	**0.065**	**0.047**	**0.052**
Other States - Median	*	*	*	**0.059**	**0.039**	**0.038**
Master's or Baccalaureate						
CNU	0.066	0.009	0.045	0.065	0.028	0.079
LU	0.038	0.009	(0.037)	(0.034)	0.063	0.052
NSU	0.037	(0.005)	0.149	(0.040)	(0.030)	0.004
UMW	0.052	0.010	0.008	0.032	0.077	0.051
UVAW	**	**	**	0.033	0.018	0.010
VMI	0.124	0.181	0.042	0.002	0.008	0.111
VSU	0.216	0.083	0.050	(0.002)	0.008	0.040
Virginia - Average	**0.089**	**0.048**	**0.043**	**0.008**	**0.024**	**0.050**
Virginia - Median	**0.059**	**0.010**	**0.044**	**0.002**	**0.018**	**0.051**
Other States - Average	*	*	*	**0.040**	**0.069**	**0.042**
Other States - Median	*	*	*	**0.035**	**0.021**	**0.029**
Virginia Average – All Institutions	**0.079**	**0.064**	**0.057**	**0.025**	**0.035**	**0.053**
Virginia Median – All Institutions	**0.062**	**0.071**	**0.047**	**0.028**	**0.035**	**0.051**

1. As public institutions not primarily focused on generating income or profit, there is no fixed benchmark for the return on net position ratio; however, the general expectation is that institutions will achieve a positive return on net position ratio.

Return on Net Position Ratio with Component Units[1]

Benchmark >= 0.00[2]

	2015	2016	2017	2018	2019	2020
Doctoral: Very High Research						
GMU	***	***	0.145	0.094	0.131	0.069
UVA	***	***	0.079	0.069	0.046	0.026
VCU	***	***	0.121	0.053	0.045	0.034
VT	***	***	0.075	0.060	0.061	0.047
Virginia - Average	***	***	**0.105**	**0.069**	**0.071**	**0.044**
Virginia - Median	***	***	**0.100**	**0.065**	**0.053**	**0.041**
Doctoral: High Research or Doctoral/Professional						
JMU	***	***	0.043	0.027	0.068	0.058
ODU	***	***	0.039	0.092	0.019	0.129
RU	***	***	0.041	0.021	0.039	0.028
W&M	***	***	0.078	0.059	0.059	0.019
Virginia - Average	***	***	**0.050**	**0.050**	**0.046**	**0.059**
Virginia - Median	***	***	**0.042**	**0.043**	**0.049**	**0.043**
Master's or Baccalaureate						
CNU	***	***	0.062	0.062	0.036	0.072
LU	***	***	(0.002)	0.035	0.018	0.052
NSU	***	***	0.139	(0.029)	(0.018)	0.027
UMW	***	***	0.056	0.040	0.048	0.015
UVAW	**	**	**	**	**	**
VMI	***	***	0.122	0.044	0.030	0.048
VSU	***	***	0.046	0.011	0.010	0.036
Virginia - Average	***	***	**0.070**	**0.027**	**0.021**	**0.042**
Virginia - Median	***	***	**0.059**	**0.037**	**0.024**	**0.042**
Virginia Average – All Institutions	***	***	**0.075**	**0.046**	**0.042**	**0.047**
Virginia Median – All Institutions	***	***	**0.068**	**0.049**	**0.042**	**0.042**

1. The report focuses on the evaluation of this ratio for the institution as a standalone entity. However, for consistency with the presentation of other ratios and calculation of the CFI, we have included information on the return on net position ratio including component unit activity.

2. As public institutions not primarily focused on generating income or profit, there is no fixed benchmark for the return on net position ratio; however, the general expectation is that institutions will achieve a positive return on net position ratio.

Net Operating Revenues Ratio

Benchmark – Not Applicable[1]

	2015	2016	2017	2018	2019	2020
Doctoral: Very High Research						
GMU	0.001	0.037	0.070	0.054	0.053	0.024
UVA	0.098	(0.087)	0.141	0.117	0.019	0.025
VCU	0.027	(0.014)	0.018	(0.052)	(0.029)	(0.000)
VT	0.016	0.014	0.014	0.025	0.017	0.017
Virginia - Average	**0.036**	**(0.013)**	**0.061**	**0.036**	**0.015**	**0.017**
Virginia - Median	**0.021**	**0.000**	**0.044**	**0.039**	**0.018**	**0.021**
Other States - Average	*	*	*	**0.028**	**0.037**	**(0.009)**
Other States - Median	*	*	*	**0.034**	**0.023**	**0.001**
Doctoral: High Research or Doctoral/Professional						
JMU	0.002	0.025	0.006	0.005	0.020	0.019
ODU	0.030	0.034	0.020	0.028	(0.014)	0.002
RU	0.012	(0.014)	(0.024)	(0.065)	(0.015)	(0.006)
W&M	(0.028)	(0.049)	(0.010)	(0.031)	(0.015)	(0.014)
Virginia - Average	**0.004**	**(0.001)**	**(0.002)**	**(0.016)**	**(0.006)**	**0.000**
Virginia - Median	**0.007**	**0.005**	**(0.002)**	**(0.013)**	**(0.015)**	**(0.002)**
Other States - Average	*	*	*	**0.032**	**0.022**	**0.016**
Other States - Median	*	*	*	**0.027**	**0.012**	**0.014**
Master's or Baccalaureate						
CNU	(0.016)	(0.022)	0.014	(0.010)	(0.018)	0.007
LU	(0.005)	(0.069)	(0.154)	(0.151)	(0.070)	(0.045)
NSU	(0.151)	(0.131)	(0.038)	(0.148)	(0.095)	(0.022)
UMW	(0.081)	(0.074)	(0.037)	(0.048)	(0.059)	(0.003)
UVAW	**	**	**	(0.062)	(0.127)	(0.161)
VMI	(0.068)	(0.066)	(0.056)	(0.051)	(0.075)	(0.057)
VSU	(0.006)	(0.081)	0.009	(0.060)	(0.044)	0.016
Virginia - Average	**(0.054)**	**(0.074)**	**(0.044)**	**(0.076)**	**(0.070)**	**(0.038)**
Virginia - Median	**(0.042)**	**(0.071)**	**(0.038)**	**(0.060)**	**(0.070)**	**(0.022)**
Other States - Average	*	*	*	**0.002**	**(0.014)**	**(0.018)**
Other States - Median	*	*	*	**(0.003)**	**(0.029)**	**(0.000)**
Virginia Average – All Institutions	**(0.012)**	**(0.035)**	**(0.002)**	**(0.030)**	**(0.030)**	**(0.013)**
Virginia Median – All Institutions	**(0.002)**	**(0.035)**	**0.007**	**(0.048)**	**(0.018)**	**(0.000)**

1. As public institutions not primarily focused on generating income or profit, there is no fixed benchmark for the net operating revenues ratio; however, the general expectation is that institutions should attempt to achieve positive income before consideration of capital and other revenues. Maintenance reserve funds provided to institutions and appearing as capital revenues in institution financial statements may cause this ratio to be negative as the financial statements recognize the corresponding maintenance expenses as operating expenses. Other differences in calculation methodology (such as the treatment of unrealized gains and losses) may also increase volatility in the net operating revenues ratio resulting in negative ratios.

Net Operating Revenues Ratio with Component Units

Benchmark – Not Applicable[1]

	2015	2016	2017	2018	2019	2020
Doctoral: Very High Research						
GMU	***	***	0.073	0.069	0.060	0.013
UVA	***	***	0.138	0.130	0.023	0.028
VCU	***	***	0.088	0.027	0.028	0.019
VT	***	***	0.073	0.037	0.030	0.021
Virginia - Average	***	***	**0.093**	**0.066**	**0.035**	**0.020**
Virginia - Median	***	***	**0.081**	**0.053**	**0.029**	**0.020**
Doctoral: High Research or Doctoral/Professional						
JMU	***	***	0.019	(0.012)	0.033	0.032
ODU	***	***	0.017	0.099	(0.010)	0.088
RU	***	***	(0.008)	(0.043)	(0.010)	0.001
W&M	***	***	0.097	0.065	0.058	(0.085)
Virginia - Average	***	***	**0.031**	**0.028**	**0.018**	**0.009**
Virginia - Median	***	***	**0.018**	**0.027**	**0.011**	**0.016**
Master's or Baccalaureate						
CNU	***	***	0.063	(0.002)	0.009	0.015
LU	***	***	(0.114)	(0.080)	(0.100)	(0.049)
NSU	***	***	(0.037)	(0.129)	(0.076)	0.013
UMW	***	***	0.013	(0.022)	(0.113)	(0.106)
UVAW	**	**	**	**	**	**
VMI	***	***	0.300	0.162	0.063	(0.146)
VSU	***	***	0.010	(0.027)	(0.024)	0.030
Virginia - Average	***	***	**0.039**	**(0.016)**	**(0.040)**	**(0.041)**
Virginia - Median	***	***	**0.011**	**(0.024)**	**(0.050)**	**(0.018)**
Virginia Average – All Institutions	***	***	**0.052**	**0.020**	**(0.002)**	**(0.009)**
Virginia Median – All Institutions	***	***	**0.041**	**0.012**	**0.016**	**0.014**

1. As public institutions not primarily focused on generating income or profit, there is no fixed benchmark for the net operating revenues ratio; however, the general expectation is that institutions should attempt to achieve positive income before consideration of capital and other revenues. Maintenance reserve funds provided to institutions and appearing as capital revenues in institution financial statements may cause this ratio to be negative as the financial statements recognize the corresponding maintenance expenses as operating expenses. Other differences in calculation methodology (such as the treatment of unrealized gains and losses) may also increase volatility in the net operating revenues ratio resulting in negative ratios.

Composite Financial Index (CFI) Ratio

Benchmark >= 3.00

	2015	2016	2017	2018	2019	2020
Doctoral: Very High Research						
GMU	1.467	2.678	3.810	3.213	3.520	3.226
UVA	8.478	6.945	8.630	7.906	6.971	6.396
VCU	2.674	1.891	2.730	1.487	1.285	1.833
VT	2.513	2.896	2.670	2.921	3.018	3.181
Virginia - Average	**3.783**	**3.603**	**4.460**	**3.882**	**3.698**	**3.659**
Virginia - Median	**2.593**	**2.787**	**3.270**	**3.067**	**3.269**	**3.203**
Other States - Average	*	*	*	**3.527**	**3.955**	**3.231**
Other States - Median	*	*	*	**2.933**	**3.231**	**3.245**
Doctoral: High Research or Doctoral/Professional						
JMU	1.452	2.469	1.380	0.975	1.838	1.860
ODU	2.190	2.606	2.090	2.293	1.313	1.826
RU	3.728	3.835	2.900	2.739	3.431	2.931
W&M	1.217	1.313	1.230	0.862	1.091	1.234
Virginia - Average	**2.147**	**2.556**	**1.900**	**1.717**	**1.918**	**1.963**
Virginia - Median	**1.821**	**2.538**	**1.735**	**1.634**	**1.575**	**1.843**
Other States - Average	*	*	*	**2.808**	**2.721**	**2.799**
Other States - Median	*	*	*	**2.485**	**2.137**	**2.490**
Master's or Baccalaureate						
CNU	0.885	0.391	1.050	0.994	0.564	1.278
LU	1.968	1.392	0.670	0.246	0.699	0.410
NSU	0.978	0.405	1.730	0.094	0.116	0.419
UMW	0.542	0.153	0.240	0.521	0.927	0.855
UVAW	**	**	**	3.450	3.163	2.857
VMI	3.206	3.607	2.760	2.869	2.793	3.456
VSU	3.184	1.909	1.860	1.090	1.232	2.028
Virginia - Average	**1.794**	**1.310**	**1.385**	**1.323**	**1.356**	**1.615**
Virginia - Median	**1.473**	**0.899**	**1.390**	**0.994**	**0.927**	**1.278**
Other States - Average	*	*	*	**1.441**	**1.726**	**1.371**
Other States - Median	*	*	*	**1.340**	**1.357**	**1.178**
Virginia Average – All Institutions	**2.463**	**2.321**	**2.411**	**2.111**	**2.131**	**2.253**
Virginia Median – All Institutions	**2.079**	**2.189**	**1.975**	**1.487**	**1.313**	**1.860**

CFI Ratio with Component Units

Benchmark >= 3.00

	2015	2016	2017	2018	2019	2020
Doctoral: Very High Research						
GMU	***	***	3.570	3.730	4.230	3.090
UVA	***	***	7.570	7.600	6.810	6.270
VCU	***	***	5.490	4.420	4.150	3.960
VT	***	***	4.430	4.420	4.550	3.920
Virginia - Average	***	***	**5.265**	**5.043**	**4.935**	**4.310**
Virginia - Median	***	***	**4.960**	**4.420**	**4.390**	**3.940**
Doctoral: High Research or Doctoral/Professional						
JMU	***	***	1.780	1.450	2.540	2.500
ODU	***	***	1.870	3.930	2.010	4.240
RU	***	***	2.750	2.970	3.400	3.080
W&M	***	***	4.850	5.560	5.580	4.250
Virginia - Average	***	***	**2.813**	**3.478**	**3.383**	**3.518**
Virginia - Median	***	***	**2.310**	**3.450**	**2.970**	**3.660**
Master's or Baccalaureate						
CNU	***	***	2.060	1.390	1.290	1.890
LU	***	***	0.650	1.170	0.650	1.180
NSU	***	***	1.800	0.700	0.630	1.390
UMW	***	***	0.740	0.400	0.480	0.150
UVAW	**	**	**	**	**	**
VMI	***	***	8.390	8.370	8.170	7.330
VSU	***	***	1.540	1.350	1.510	2.240
Virginia - Average	***	***	**2.530**	**2.230**	**2.122**	**2.363**
Virginia - Median	***	***	**1.670**	**1.260**	**0.970**	**1.640**
Virginia Average – All Institutions	***	***	**3.392**	**3.390**	**3.286**	**3.249**
Virginia Median – All Institutions	***	***	**2.405**	**3.350**	**2.970**	**3.085**