



# **Financial Ratios**

## **(Fiscal Year 2013)**

*Mississippi Institutions of Higher Learning  
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<i>Are resources sufficient and flexible enough to support the mission?</i>	<i>Are resources, including debt, managed strategically to advance the mission?</i>	<i>Does asset performance and management support the strategic direction?</i>	<b>Do operating results indicate the institution is living with available resources?</b>	
Primary Reserve Ratio	Viability Ratio	Return on Total Net Assets Ratio	Net Operating Revenues Ratio	Salaries, Wages and Fringe Benefits Demand Ratio
Secondary Reserve Ratio	Debt Burden Ratio	Return on Expendable Net Assets Ratio	Gross Tuition Contribution Ratio	Payments to Suppliers Demand Ratio
Capitalization Ratio	Debt Coverage Ratio	Composition of Equity Ratio	Gross Tuition Contribution per Student FTE Ratio	Instruction Demand Ratio
Current Ratio		Financial Net Assets Ratio	State Appropriation Contribution Ratio	Research Demand Ratio
Days of Cash on Hand Ratio		Physical Net Assets Ratio	Gifts, Grants and Contracts Contribution Ratio	Public Service Demand Ratio
		Physical Asset Reinvestment Ratio	Auxiliary Enterprises Contribution Ratio	Institutional Support Demand Ratio
		Age of Facilities Ratio	Hospital Operations Contribution Ratio	Educational Support Demand Ratio
				Operations and Maintenance Demand Ratio
				Student Aid Demand Ratio
				Auxiliary Enterprises Demand Ratio
				Hospital Operations Demand Ratio

# **Mississippi Institutions of Higher Learning Financial Ratios Fiscal Year 2013**

The following section of this report contains financial ratio data from the most current period available, fiscal year 2013. The ratios contained herein are the same as that presented in previous editions. The ratio data is primarily based upon audited financial statements, prepared as prescribed by the GASB (Governmental Accounting Standards Board). There will be no attempt to explain the ratio differences between IHL institutions. Instead the information is presented by institution on a side-by-side basis so as to generate thought and conversation.

**Mississippi Institutions of Higher Learning System**  
(including UMMC and Executive Office)  
**Financial Ratio Analysis**  
**F.Y. 2013**

Ratio	Target *	ASU	DSU	JSU	MSU	MUW	MVSU	UM	USM	UMMC	EO	SYSTEM
<b>Measures of Resource Sufficiency and Flexibility</b>												
Primary Reserve Ratio (revised)	.40x	0.40	0.14	0.24	0.28	0.34	0.25	0.55	0.27	0.31	0.49	0.34
Secondary Reserve Ratio	none	0.09	0.00	0.04	0.03	0.06	0.01	0.11	0.00	0.02	0.40	0.05
Capitalization Ratio	50% to 85%	71.17%	77.51%	63.27%	70.74%	94.56%	77.79%	79.76%	62.46%	60.05%	62.53%	69.23%
Current Ratio	2.00x	5.55	1.72	1.97	2.67	2.74	5.19	1.88	2.62	3.03	1.29	2.61
Days of Cash on Hand Ratio	> 80	152.70	-7.33	74.96	49.94	63.25	69.56	75.11	129.21	112.84	58.93	89.87
<b>Measures of Resource Management, including Debt</b>												
Viability Ratio (revised)	none	0.79	0.43	0.49	0.88	0.00	0.76	1.77	0.46	1.32	0.00	1.05
Debt Burden Ratio (revised)	< 7%	3.04%	3.21%	2.93%	2.98%	0.01%	1.89%	2.96%	3.33%	1.83%	0.00%	2.45%
Debt Coverage Ratio (revised)	1.2x to 1.4x	0.58	0.06	1.87	2.66	392.66	1.27	3.32	2.82	3.94	0.00	2.96
<b>Measures of Asset Performance and Management</b>												
Return on total Net Assets Ratio	3% to 4%	1.50%	2.16%	0.77%	3.75%	8.07%	14.04%	4.47%	4.25%	4.24%	3.16%	4.09%
Return on Expendable Net Assets Ratio	none	14.62%	-7.30%	2.71%	3.54%	9.17%	10.63%	-0.85%	-3.46%	6.14%	6.33%	3.17%
Composition of Equity Ratio	1.00x	0.43	0.15	0.35	0.36	0.27	0.23	0.53	0.44	1.20	21.79	0.57
Financial Net Assets Ratio	none	30.37%	9.40%	24.23%	25.43%	16.55%	18.57%	33.78%	20.58%	52.78%	92.99%	33.20%
Physical Net Assets Ratio	none	69.93%	90.60%	75.77%	74.57%	83.45%	81.43%	66.22%	79.42%	47.22%	7.01%	66.80%
Physical Asset Reinvestment Ratio	1.00x	0.04	0.11	0.11	2.07	0.15	0.03	1.35	1.41	1.29	0.89	1.29
Age of Facilities Ratio	< 14 years	16.23	16.55	11.55	14.14	15.93	21.09	12.42	12.75	7.68	48.03	11.67
<b>Measures of Operating Performance (Contribution &amp; Demand Ratios)</b>												
Net Operating Revenues Ratio (revised)	2% to 4%	-6.46%	-6.00%	-2.65%	1.56%	-1.31%	-2.86%	2.25%	1.42%	1.64%	0.24%	0.89%
Gross Tuition Contribution Ratio	none	28.09%	34.98%	32.10%	29.82%	37.67%	27.66%	48.55%	39.62%	2.08%		22.78%
Gross Tuition Contribution per Student FTE Ratio	none	\$7,322	\$6,223	\$8,480	\$9,714	\$7,456	\$7,431	\$12,568	\$8,882	\$8,594		\$9,638
State Appropriations Contribution Ratio	none	29.88%	31.76%	24.07%	28.00%	30.94%	32.61%	17.74%	26.37%	15.77%	57.15%	22.41%
Gifts, Grants and Contracts Contribution Ratio	none	32.33%	22.51%	37.04%	33.87%	33.53%	30.82%	27.07%	34.06%	6.75%	15.30%	22.05%
Auxiliary Enterprises Contribution Ratio	none	14.47%	11.12%	9.43%	12.61%	9.33%	15.98%	17.53%	10.00%	0.26%	3.09%	8.03%
Hospital Operations Contribution Ratio	none									72.43%		72.43%
Salaries, Wages and Fringe Benefits Demand Ratio	none	54.96%	54.49%	53.18%	64.91%	54.74%	54.27%	51.88%	58.39%	62.64%	18.87%	58.73%
Payments to Suppliers Demand Ratio	none	25.78%	25.31%	26.42%	17.32%	21.30%	25.57%	23.82%	19.89%	28.51%	32.61%	24.36%
Instruction Demand Ratio	none	25.03%	34.04%	27.99%	19.45%	28.40%	28.84%	31.21%	28.94%	13.16%	0.00%	20.67%
Research Demand Ratio	none	9.31%	0.47%	13.32%	22.58%	2.53%	0.16%	10.17%	12.71%	2.51%	0.00%	9.40%
Public Service Demand Ratio	none	6.67%	3.58%	1.01%	14.86%	0.99%	4.99%	1.15%	6.01%	1.34%	1.19%	4.69%
Institutional Support Demand Ratio	none	12.86%	11.19%	15.68%	7.86%	10.37%	9.72%	5.73%	6.84%	8.21%	32.68%	8.91%
Educational Support Demand Ratio	none	14.54%	16.86%	11.45%	8.37%	22.69%	16.91%	11.24%	9.87%	1.45%	11.95%	7.33%
Operations and Maintenance Demand Ratio	none	8.91%	8.32%	9.26%	4.51%	10.22%	12.15%	7.40%	8.40%	2.57%	5.04%	5.35%
Student Aid Demand Ratio	none	10.32%	10.38%	8.78%	4.31%	12.29%	11.80%	7.34%	7.80%	0.55%	43.28%	5.46%
Auxiliary Enterprises Demand Ratio	none	10.46%	10.09%	7.93%	10.39%	6.93%	13.03%	16.44%	10.50%	0.19%	3.75%	7.14%
Hospital Operations Demand Ratio	none									62.97%		62.97%

\* - targets are industry specific for public four-year higher education institutions....

## Measures of Resource Sufficiency and Flexibility

The ratios depicted in this section are useful in calculating whether the institution is financially sound, and whether it has the ability to achieve and sustain a level of resources sufficient to realize its strategic objectives. The institution's needs must be linked to its mission. Determining what resources are required to enable the institution to achieve its strategic objectives may be one of the most significant issues addressed by a governing board. Questions to ask of the institution are:

- Can resources be increased sufficiently in order to realize objectives?
- Does the institution need to reevaluate and perhaps modify its mission and priorities in light of its current and future resources?

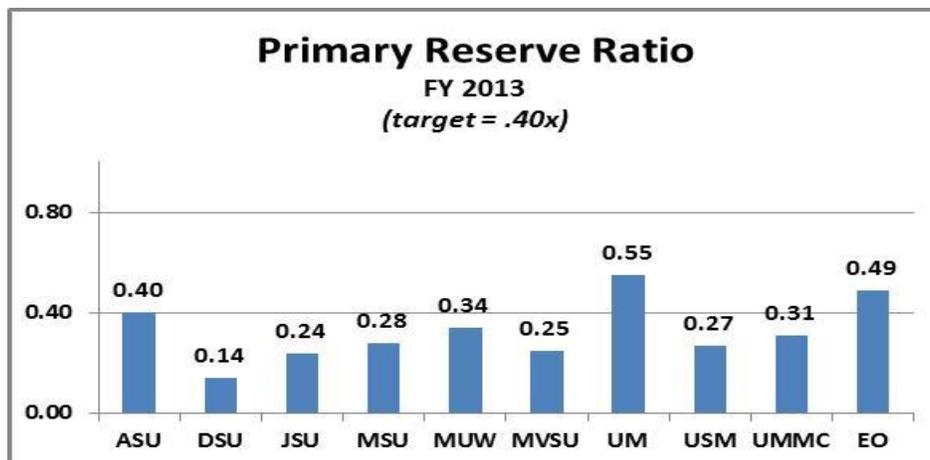
### Primary Reserve Ratio

The Primary Reserve Ratio measures the financial strength of the institution by comparing expendable net assets to total expenses. Expendable net assets represent those assets that the institution can access quickly and spend to satisfy its debt obligations. By providing a snapshot of the institutions financial strength and flexibility, this ratio indicates how long the institution could function using its expendable reserves without relying on additional net assets generated by operations. It is reasonable to expect expendable net assets to increase at least in proportion to the rate of the rate of growth in operating size. A negative or decreasing trend over time indicates a weakening financial condition.

The revised Primary Reserve Ratio is calculated as follows:

$$\frac{\text{Unrestricted + Expendable Net Assets}}{\text{Total Expenses}}$$

Industry accounting standards suggest that a Primary Reserve Ratio of .40X or better is advisable to give the institutions the flexibility to transform the enterprise. The implication of .40X is that the institution would have the ability to cover about five months of expenses (40 percent of 12 months). Generally, institutions operating at this ratio level rely on internal cash flow to meet short-term cash needs, are able to carry on a reasonable level of facilities maintenance, and appear capable of managing modest unforeseen adverse financial events.

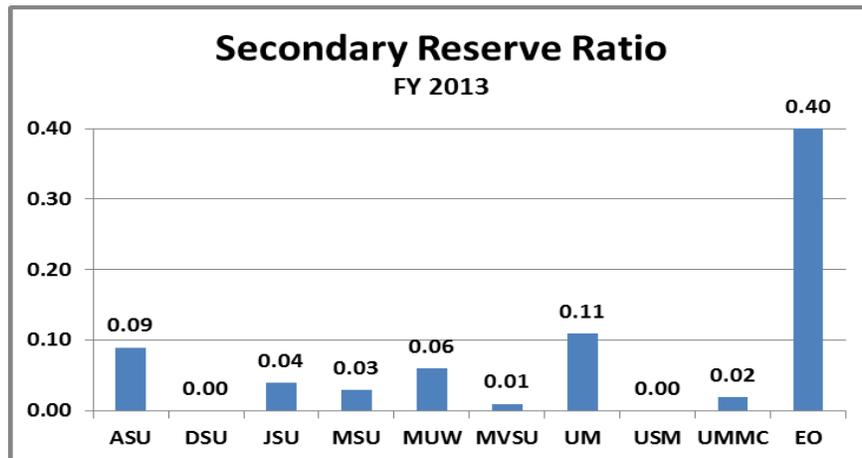


### Secondary Reserve Ratio

The Secondary Reserve Ratio measures the financial strength of the institution by comparing non-expendable net assets to total expenses. Non-expendable net assets represent those assets that are generally permanently restricted or restricted for an extended period of time. This ratio provides an assessment of the significance of these net assets in relation to operating size. The ratio is important because over the long term, these net assets may provide a significant stream of secondary financing for operating and plant requirements. A decreasing trend over time indicates a weakening financial condition. Overall the long term, institutions should strive to increase non-expendable net assets faster than operating size. This condition will signal an improvement in the institution's capital base and increased flexibility in its long-term financial condition.

The Secondary Reserve Ratio is calculated as follows:

$$\frac{\text{Non-Expendable Net Assets}}{\text{Total Expenses}}$$

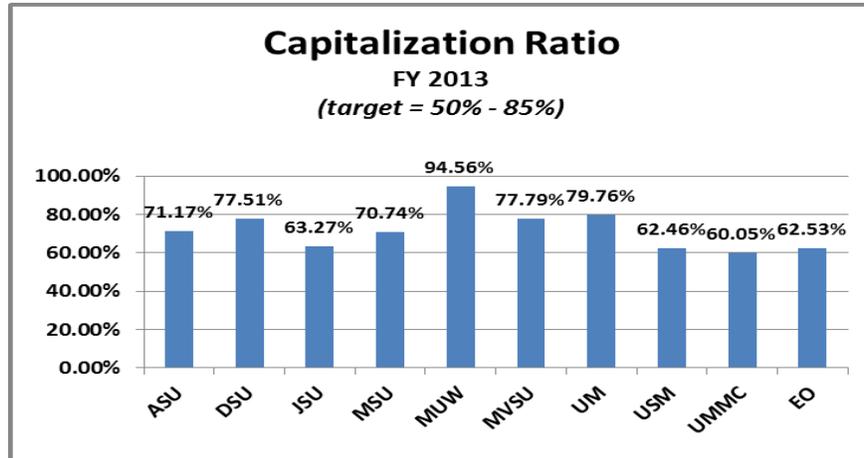


### Capitalization Ratio

The Capitalization Ratio measures the financial flexibility of the institution by not only looking at the current period's return on net assets, but also the accumulated return from previous periods as well. For most institutions the ratio will simply be net assets divided by total assets. A higher ratio is not necessarily preferable to a low ratio. A very high capitalization ratio implies that an institution may not be leveraging its assets effectively and might be investing too much costly equity in physical assets. Institutions with a low capitalization ratio will find themselves constrained with less ability to undertake future capital opportunities without negatively impacting credit. The higher education industry has a desirable range for this ratio of 50 percent and 85 percent. Institutions above 85 percent may find it in their best interest to consider altering their capitalization structure and leveraging their assets to potentially increase income and future financial wealth.

The Capitalization Ratio is calculated as follows:

$$\frac{\text{Total Net Assets}}{\text{Total Assets}}$$

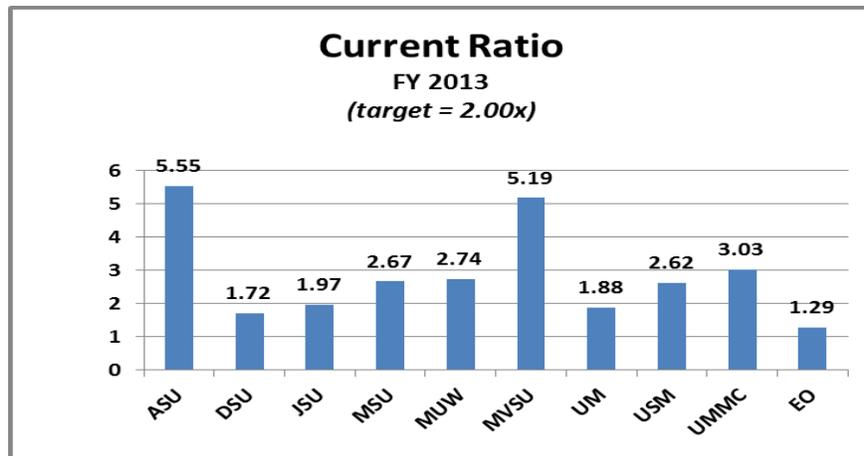


**Current Ratio**

The Current Ratio is one of the most widely recognized measures of liquidity. This calculation measures short-term assets of an institution with its current liabilities. Conventional wisdom hold that this ratio should be at least 2:1...that is, for every dollar of liability coming due there should be at least two dollars of assets available to pay them. Generally, the higher the ratio the better, however there is a point where one should question the wisdom of holding significant amounts of short-term assets when a higher return could be achieved by investing these assets in longer-term investments.

The Current Ratio is calculated as follows:

$$\frac{\text{Total Current Assets}}{\text{Total Current Liabilities}}$$

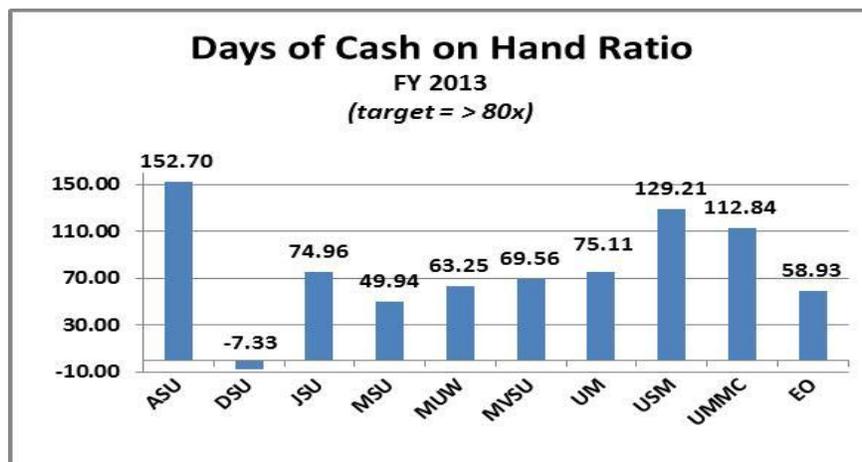


### Days of Cash on Hand Ratio

The Days of Cash on Hand Ratio is one of the most widely recognized measures of liquidity. This calculation measures the number of days a university is able to operate (cover its cash operating expenses) from unrestricted cash and short-term investments that can be liquidated and spent within a short period of time (30 days). One major bond rating company has established an 80-day minimum standard in order to gain an “Aa” bond rating (the IHL’s current rating at 6-30-2013). Generally, the higher the ratio the better, however there is a point where one should question the wisdom of holding significant amounts of short-term assets when a higher return could be achieved by investing these assets in longer-term investments.

The Days of Cash on Hand Ratio is calculated as follows:

#### Total Cash, Cash Equivalents and Short-Term Investments Daily Operating Expense Average (365 days)



### **Measures of Resource Management, including Debt**

The ratios presented in this section are fundamental to an institution trying to understand its debt position in relation to its overall financial health. *Has the institution managed debt (and all other sources of capital) strategically to advance its mission?* These ratios will also help the institution understand how analysts, as well as lenders and purchasers of debt, evaluate its ability to assume and pay debt service.

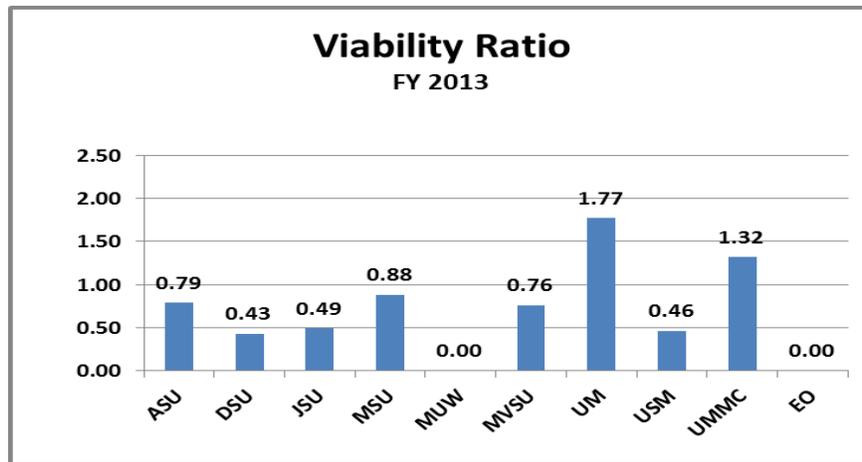
#### Viability Ratio

The Viability Ratio measures the availability of expendable net assets to cover debt should the institution need to settle its obligations as of the balance sheet date. There is no absolute threshold (rule of thumb) to highlight the institutions financial viability because in reality, long-term capital debt would not have to be paid all at once, but trends should be developed and measured. Generally the

higher the ratio, the greater the ability to cover the long-term debt. Analysts should be aware that institutions often show a remarkable resiliency that permits them to continue long beyond what appears to be their point of financial collapse. Frequently, this means living with no margin for error and meeting severe cash flow needs by obtaining short-term loans.

The revised Viability Ratio is calculated as follows:

$$\frac{\text{Unrestricted + Expendable Net Assets}}{\text{Total Long-term Debt (Bonds, Notes \& Capital Leases)}}$$

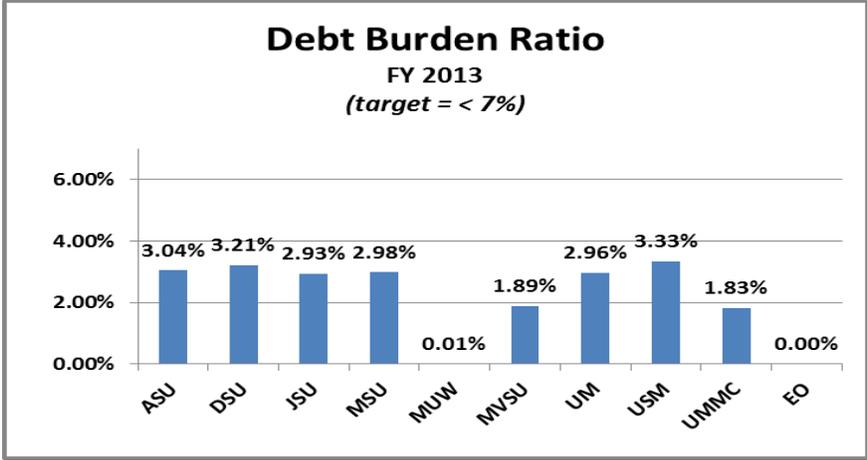


**Debt Burden Ratio**

The Debt Burden Ratio examines the institution’s dependence on borrowed funds as a source of financing its mission and the relative cost of borrowing to overall expenditures. Debt service includes both interest and principal payments. The higher education industry has viewed an upper threshold for this ratio at 7 percent, meaning that current principal and interest expense should not represent more than 7 percent of total expenditures; however, a number of institutions operate effectively with a higher ratio, while others could find this ratio unacceptable. A higher debt service burden indicates that the institution has less flexibility to manage the remaining portion of the budget. Institutions with greater budgetary flexibility will find that they are comfortable with a higher ratio. It is important to note that institutions that exceed 7 percent will not necessarily be excluded from obtaining additional external funding, however it is clear that institutions above this threshold will face greater scrutiny from rating agencies and lenders.

The revised Debt Burden Ratio is calculated as follows:

$$\frac{\text{Annual Principal and Interest Payments (debt service)}}{(\text{Operating expenses} + \text{Non-Operating expenses}) - \text{Depreciation expense} + \text{Principal payments made on Capital Debt and Leases}}$$

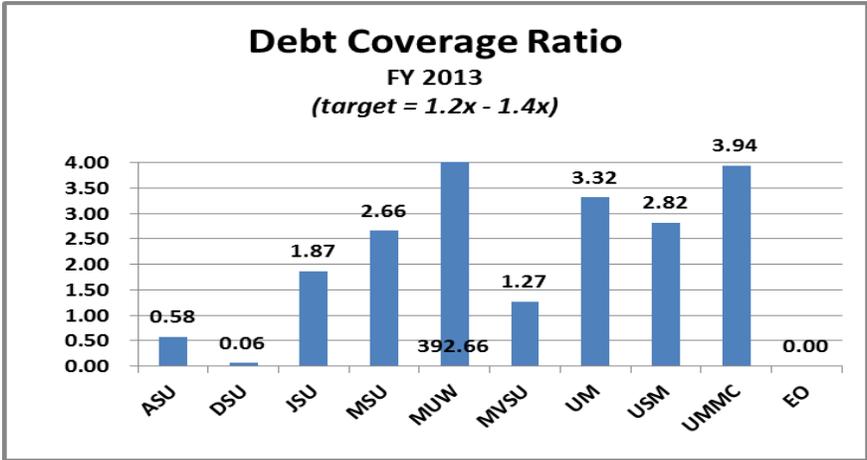


**Debt Coverage Ratio**

The Debt Coverage Ratio measures the excess of income over adjusted expenses available to cover annual debt service payments. This ratio gives the analyst a level of comfort that the institution has a net revenue stream available to meet its debt burden should economic conditions change. A high ratio is considered advantageous, while a low ratio or declining trend gives reason for concern regarding the institution’s ability to sustain its operations, especially in the face of future budgetary challenges. Due to the volatility inherent in the change in net assets from year to year, many institutions find that it may be helpful to smooth the trend by examining a rolling two-year average for the ratio and establishing a target based on that measure.

The revised Debt Coverage Ratio is calculated as follows:

$$\frac{\text{Net operating Income/(Loss) + Net Non-Operating Revenue/(Expenses) + Depreciation expense + Interest Expense paid on Capital Debt}}{\text{Annual Principal and Interest Payments (debt service)}}$$



## Measures of Asset Performance and Management

All assets that are under the stewardship of a board and senior management need to demonstrate some financial return over a long period of time or the institution will be consumed by deficits that draw resources away from other activities. These ratios that follow help an institution understand whether the investments it has historically made are obtaining returns that can be reinvested in other programs and/or facilities. Specifically these ratios will help answer the following questions:

- Is the institution better off financially at the end of the year than at the beginning of the year?
- Is the institution sufficiently invested in financial assets to continue expanding its equity?
- Is the institution making appropriate investments and maximizing their return for appropriate levels of risk?
- Is the institution adequately reinvesting and renewing its physical assets?

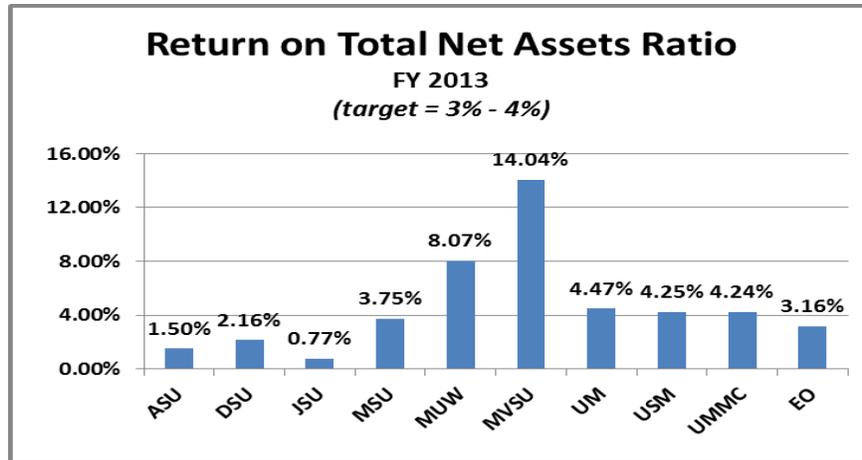
### **Return on Total Net Assets Ratio**

The Return on Total Net Assets Ratio determines whether an institution is financially better off than in previous years by measuring total economic return. This ratio furnishes a broad measure of the change in an institution's total wealth over a single year. A decline in this ratio may be appropriate and even warranted if it reflects a strategy to better fulfill the institution's mission. On the other hand, an improving trend indicates that the institution is increasing its net assets and is likely to be able to set aside financial resources to strengthen its future financial flexibility.

The Return on Net Assets Ratio is calculated as follows:

$$\frac{\text{Change in Total Net Assets (CY – PY)}}{\text{Total Net Assets (beginning of year)}}$$

Institutions should establish a real rate of return target in the range of approximately 3 to 4 percent. However if an institution's strategic plan calls for activities that will consume substantial resources, such as program expansion, a high return on net assets may be required in order to maintain a properly capitalized institution. Regardless, because this ratio could be affected by a number of volatile items, it is important that the institution understand the causes of the change in the ratio from year to year.



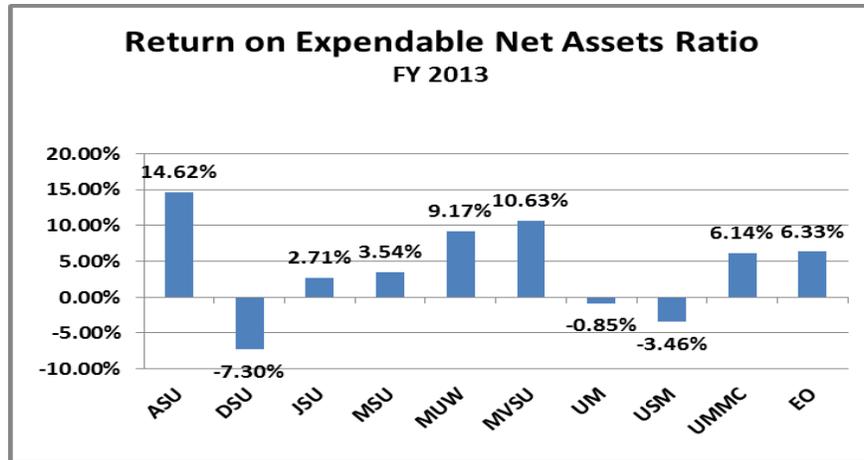
### **Return on Expendable Net Assets Ratio**

The Return on Expendable Net Assets Ratio determines whether an institution is financially better off than in previous years by measuring total economic return. This ratio should be evaluated as a subset to the Return on Total Net Assets Ratio. The difference between the two ratios is the removal of the Restricted Non-expendable and Invested in Capital Net Assets components leaving only the expendable components intact (restricted-expendable and unrestricted net assets). This modified approach allows the institution to ensure that resources are not solely accruing on the basis of nonexpendable or capital (plant) activities. This ratio furnishes a broad measure of the change in an institution's total wealth over a single year. A decline in this ratio may be appropriate and even warranted if it reflects a strategy to better fulfill the institution's mission. On the other hand, an improving trend indicates that the institution is increasing its net assets and is likely to be able to set aside financial resources to strengthen its future financial flexibility.

The Return on Expendable Net Assets Ratio is calculated as follows:

$$\frac{\text{Change in Expendable Net Assets (CY - PY)}}{\text{Expendable Net Assets (beginning of year)}}$$

There is no established industry target for this modified ratio. However if an institution's strategic plan calls for activities that will consume substantial resources, such as program expansion, a high return on net assets may be required in order to maintain a properly capitalized institution.

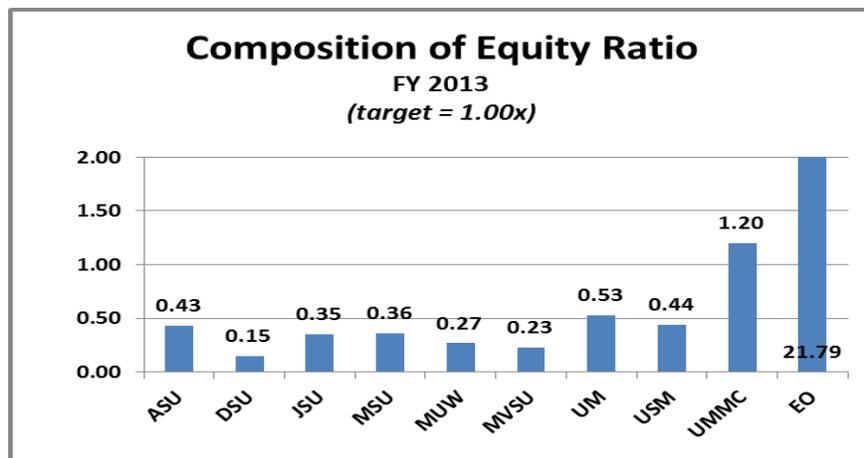


### Composition of Equity Ratio

The Composition of Equity Ratio provides useful insights into the allocation of equity among different types of assets, primarily financial and physical assets. Together with the Capitalization Ratio, these ratios help an analyst understand the institution's flexibility and whether its asset structure is in equilibrium. If equity is weighted heavily in property, plant, and equipment, the institution has less ability to allocate internal funds to new initiatives. If equity is comprised primarily of physical assets, the opportunity to increase expendable wealth will be reduced if those physical assets do not directly generate a return on invested equity. Therefore the Composition of Equity Ratio provides an indication of the equilibrium of investments for an institution because it recognizes the tradeoffs between investment for the current generation (physical assets) and investment for future generations (financial assets). Stronger institutions typically exhibit a ratio in excess of 1, which would indicate financial resources have been retained within the institution at a rate exceeding the need for capital investment.

The Composition of Equity Ratio is calculated as follows:

$$\frac{\text{Total Financial Assets}}{\text{Total Physical Assets}}$$

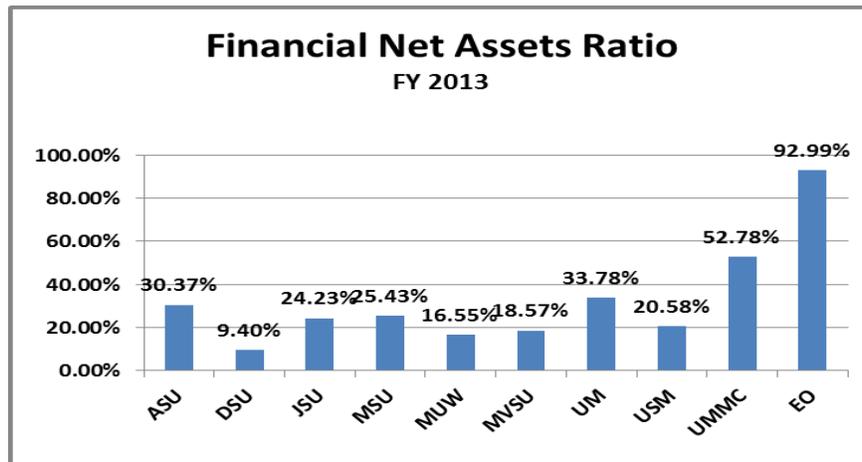


### Financial Net Assets Ratio and Physical Net Assets Ratio

The Financial Net Assets Ratio and its counterpart, the Physical Net Assets Ratio provides useful insights into the allocation of equity between physical and financial net assets. Together, these ratios help an analyst understand the institution's flexibility and whether its asset and net asset structures are in equilibrium. If the equity is weighted heavily in property, plant and equipment, the institution may have less ability to allocate internal funds to new initiatives. If equity is comprised primarily of physical assets, the institution may have reduced opportunities to increase expendable wealth because physical assets generally do not directly generate a return on invested equity. This may place the institution at a competitive disadvantage versus its peers.

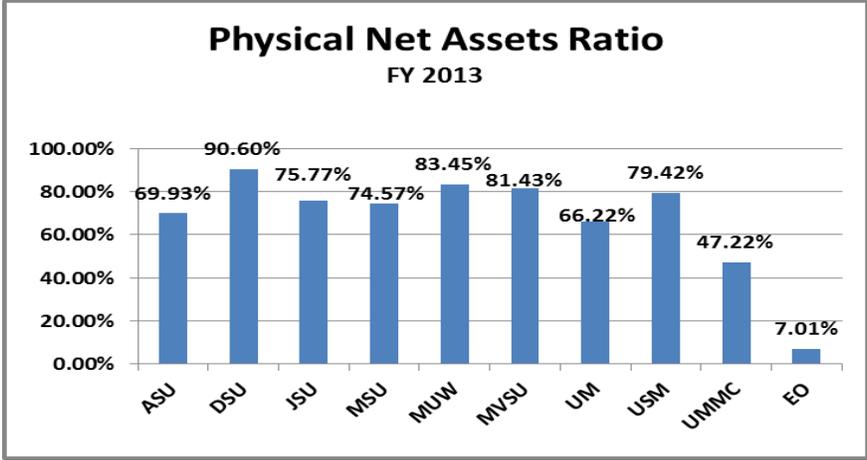
The Financial Net Assets Ratio is calculated as follows:

$$\frac{\text{Total Net Assets} - \text{Invested in Capital Assets (net)}}{\text{Total Net Assets}}$$



The Physical Net Assets Ratio is calculated as follows:

$$\frac{\text{Total Net Assets} - \text{Expendable, Non-Expendable \& Unrestricted Net Assets}}{\text{Total Net Assets}}$$

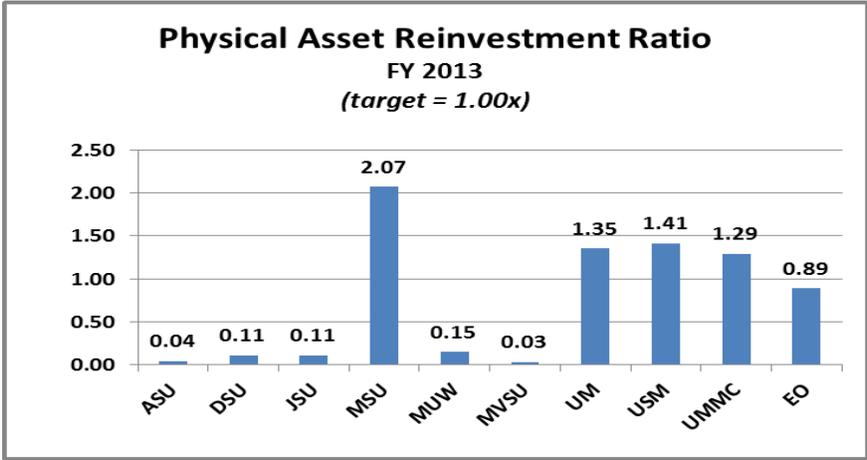


**Physical Asset Reinvestment Ratio**

The Physical Asset Reinvestment Ratio calculates the extent capital renewal is occurring compared with physical asset usage represented as depreciation expense. A ratio above 1:1 indicates an institution’s increasing investment in physical assets, whereas a lower ratio potentially indicates an under-investment in campus facilities. This ratio should be evaluated on a multiyear basis. Comparison of this ratio is instructive only across institutions with similar programs and operating sizes. A ratio substantially less than 1:1 may indicate that the institution is consistently under-investing in plant and increasing its deferred maintenance obligation. Substantial ratios above 1:1 indicate a continued growth in facilities.

The Physical Asset Reinvestment Ratio is calculated as follows:

$$\frac{\text{Purchased Cash Assets (from Cash Flow Statement)}}{\text{Depreciation Expense}}$$

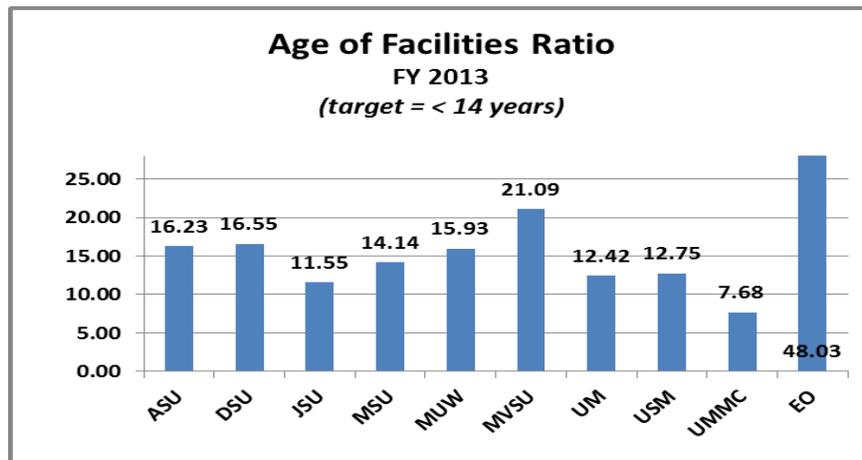


## Age of Facilities Ratio

The Age of Facilities Ratio measures the average age of total plant facilities. It accomplishes this by measuring the relationship between current depreciation to total accumulated depreciation. This ratio is important because it provides a rough sense of the age of the facilities and the potential need for considerable future resources to be invested in plant to cover deferred maintenance. A low ratio is better, since it indicates that an institution has made recent investments in its plant facilities. A high ratio signifies that an institution has deferred reinvestment in its plant and is likely to require a significant expenditure for plant facilities in the near future. An acceptable ratio for this ratio is 10 years or less for research institutions and 14 years for predominantly undergraduate liberal arts institutions. This ratio does not provide a sense of whether or not the institution will be able to afford the necessary improvements.

The Age of Facilities Ratio is calculated as follows:

$$\frac{\text{Accumulated Depreciation}}{\text{Depreciation Expense}}$$



## Measures of Operating Performance

All institutions must over time operate in either a surplus or at least a break-even position. A prime reason for this is because operations are one of the sources of resources for reinvestment in institutional initiatives. Issues become critical for institutions when deficits are unplanned, unmanaged and occurring in core existing operations. The ratios in this section explore the different aspects of an institution's operations. It is important that analysis be put in the perspective of the institution's mission.

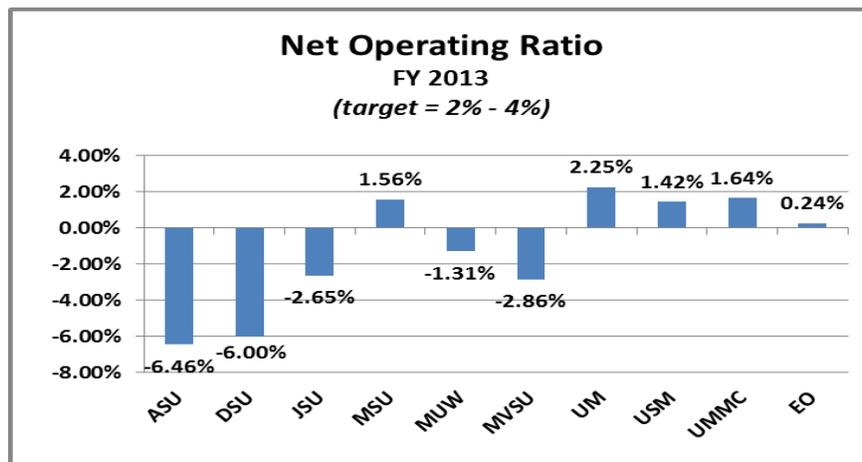
### Net Operating Revenues Ratio

The Net Operating Revenues Ratio measures financial performance by comparing whether the institution completed the fiscal year with an annual operating surplus or deficit. Generally speaking, the larger the surplus, the stronger the institution's financial performance as a result of the year's activities. A negative ratio indicates a loss for the year. A small deficit during a particular year may be relatively unimportant if the institution is financially strong, is aware of the causes of the deficit and has an active plan in place that cures the deficit. Large deficits are almost always a bad sign, particularly if management has not identified initiatives to reverse the shortfall. A pattern of large deficits can quickly sap an institution's financial strength to the point where it may have to make major adjustments to programs.

The Net Operating Revenues Ratio is calculated as follows:

$$\frac{\text{Operating income (loss) + net Nonoperating revenues (expenses)}}{\text{Operating revenues + Nonoperating revenues}}$$

The Net Operating Revenue Ratio target should be at least 2 to 4 percent over an extended period of time, although the target will likely vary from year to year. A key for institutions establishing a benchmark for this ratio would first be the anticipated institutional growth in total expenses.



### Contribution and Demand Ratios

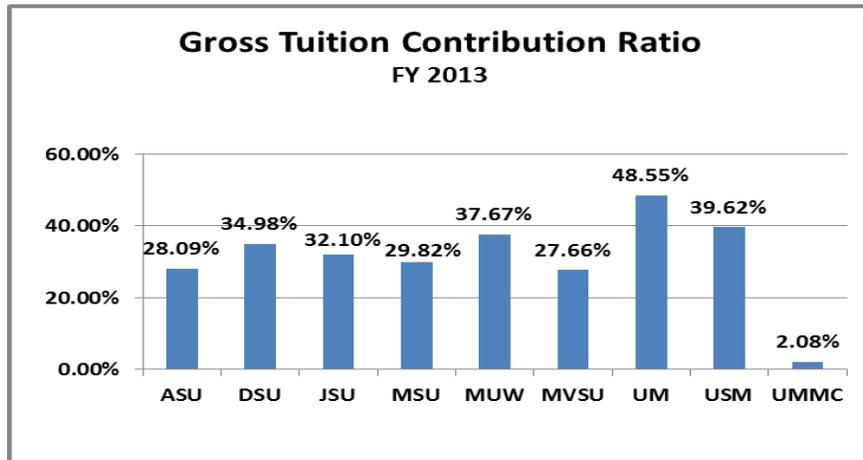
Using ratios referred to as Contribution and Demand ratios can also result in further analysis of revenues by source and expense by type. Contribution and Demand ratios address the causes of why an institution's overall financial ratios have behaved in the manner observed. Contribution ratios measure the extent to which each type of revenue is consumed by operating and non-operating expense. Demand ratios measure the extent to which each type of expense is consuming operating revenues. Since public institutions may report expenses by either natural classification or by function, demand ratios may be calculated either way.

**Gross Tuition Contribution Ratio**

The Gross Tuition Contribution Ratio provides the reader further analysis about an institutions revenues by source. Heavily tuition-dependent institutions (that is, institutions that receive more than 60 percent of this revenue from tuition) are particularly sensitive to changes in enrollment patterns. These revenues are measured against an institution’s total operating and non-operating expenses.

The Gross Tuition Contribution Ratio is calculated as follows:

$$\frac{\text{Gross Tuition revenue}}{\text{Operating expenses} + \text{Nonoperating expenses}}$$

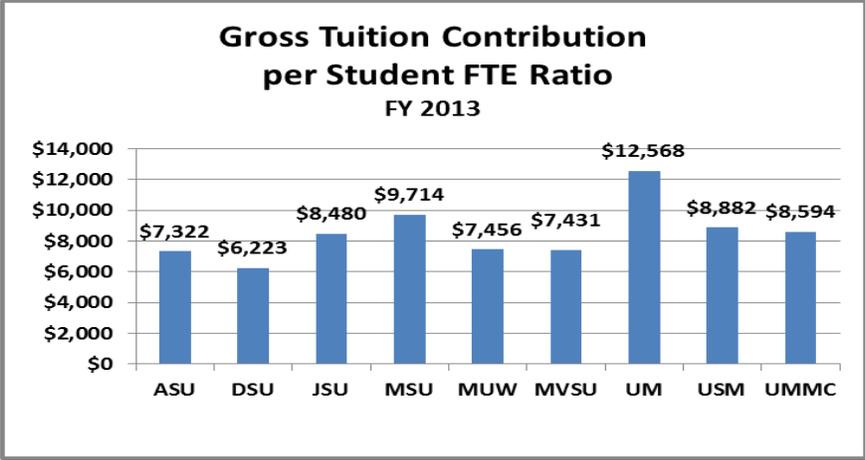


**Gross Tuition Contribution per Student FTE Ratio**

The Gross Tuition Contribution per Student FTE Ratio allows the reader to measure the average amount of accrual tuition revenue on a per student full-time equivalency basis. An increase in this ratio is a positive occurrence for an institution.

The Gross Tuition Contribution per Student FTE Ratio is calculated as follows:

$$\frac{\text{Gross Tuition revenue}}{\text{Student Full-time Equivalent (fall enrollment)}}$$

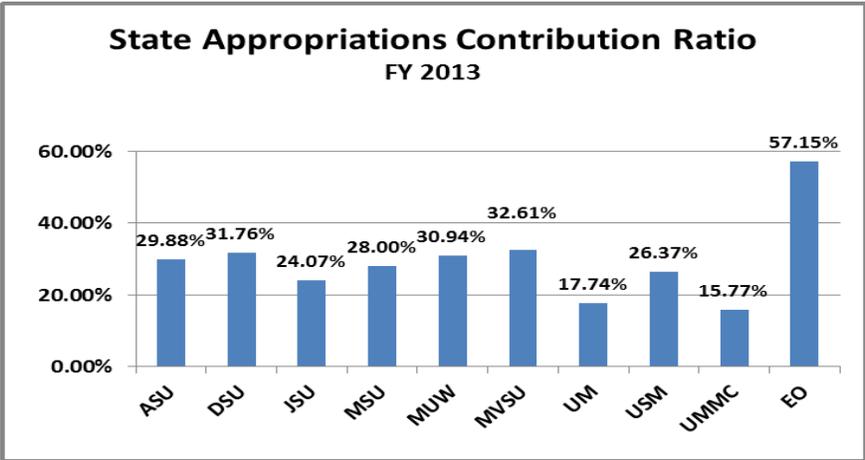


**State Appropriation Contribution Ratio**

The State Appropriation Contribution Ratio provides the reader further analysis about an institutions revenue by source. Heavily state appropriation dependent institutions (that is, institutions that receive a majority of their revenues from state appropriated sources) are particularly sensitive to changes in economic conditions within state government. State appropriated revenues for capital purposes are not included in this calculation, as these revenues are usually not directed towards the institutions general operations. These revenues are measured against an institution’s total operating and non-operating expenses.

The State Appropriation Contribution Ratio is calculated as follows:

$$\frac{\text{State Appropriations revenue}}{\text{Operating expenses} + \text{Nonoperating expenses}}$$

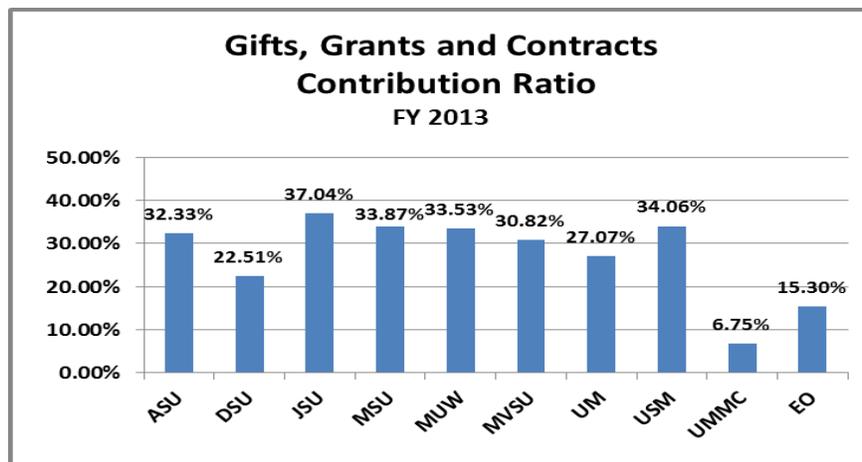


### Gifts, Grants and Contracts Contribution Ratio

The Gifts, Grants and Contracts Contribution Ratio provides the reader further analysis about an institutions revenue by source. Heavily gift, grants and contracts dependent institutions (that is, institutions that receive a majority of their revenues from grants and contract sources) are particularly sensitive to changes in economic conditions within government (federal, state, local, etc...) and private corporate sectors. Gifts, grants and contracts revenue restricted for capital purposes are not included in this calculation, as these revenues are usually not directed towards the institutions general operations. These revenues are measured against an institution’s total operating and non-operating expenses.

The Gift, Grants and Contracts Contribution Ratio is calculated as follows:

$$\frac{\text{Gifts, Grants and Contracts revenue}}{\text{Operating expenses + Nonoperating expenses}}$$

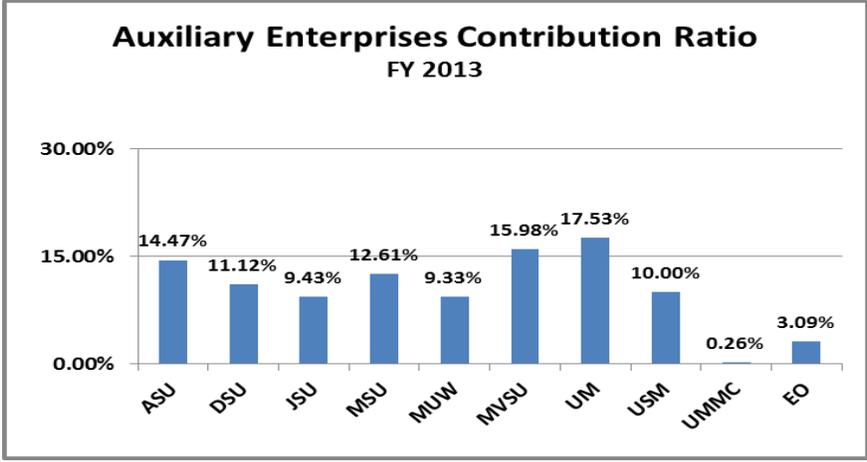


### Auxiliary Enterprises Contribution Ratio

The Auxiliary Enterprises Contribution Ratio provides the reader further analysis about an institutions revenue by source. Auxiliary enterprises typically exist to furnish goods or services to students, faculty, or staff. They are generally self-sustaining by nature, but sometimes receive smaller levels of supplemental support from general campus operations. Auxiliary enterprises receive most of their revenue from user fees, or in the case of large intercollegiate athletic programs, from conference affiliation shares, television and radio broadcasting rights, etc.... Examples of common campus auxiliaries would include student housing, dining services, bookstores and some larger intercollegiate athletic programs. These revenues are measured against an institution’s total operating and non-operating expenses.

The Auxiliary Enterprise Contribution Ratio is calculated as follows:

$$\frac{\text{Auxiliary Enterprise revenues}}{\text{Operating expenses + Nonoperating expenses}}$$

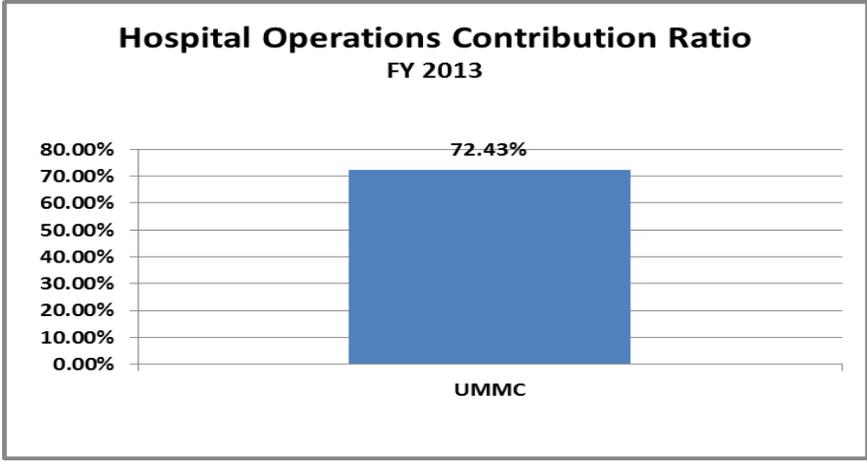


**Hospital Operations Contribution Ratio**

The Hospital Operations Contribution Ratio provides the reader further analysis about the University of Mississippi Medical Center’s (only) revenue by source. Hospital operation revenues are presented as Patient Care revenues in the GASB financial statements. UMMC’s hospital revenues are received from patients, third-party payers and others for services rendered. These revenues are measured against an institution’s total operating and non-operating expenses.

The Hospital Operations Contribution Ratio is calculated as follows:

$$\frac{\text{Patient Care revenues}}{\text{Operating expenses} + \text{Nonoperating expenses}}$$

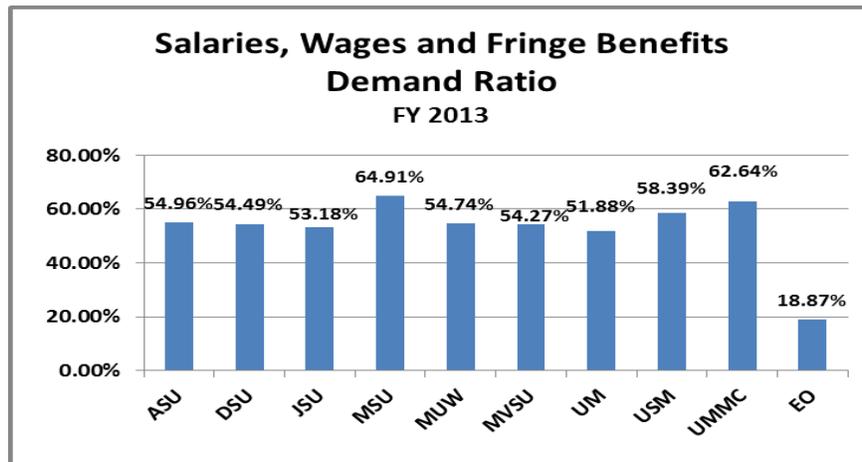


### Salaries, Wages and Fringe Benefits Demand Ratio

The Salaries, Wages and Fringe Benefits Demand Ratio provides the reader further analysis about an institutions expense by natural classification. Expenditures at most public institutions of higher learning are heavily concentrated in the area of salaries, wages and fringe benefits. Therefore these institutions are particularly sensitive to changes in economic conditions within government (federal, state, local, etc...) and private corporate sectors. When economic conditions drive downward an institutions revenue support, budget decisions invariably have to consider the effect on personnel costs. For ratio purposes these expenses are measured against an institution's total operating and non-operating revenues.

The Salaries, Wages and Fringe Benefits Demand Ratio is calculated as follows:

$$\frac{\text{Salaries, Wages and Fringe Benefits expenses}}{\text{Operating revenues + Nonoperating revenues}}$$

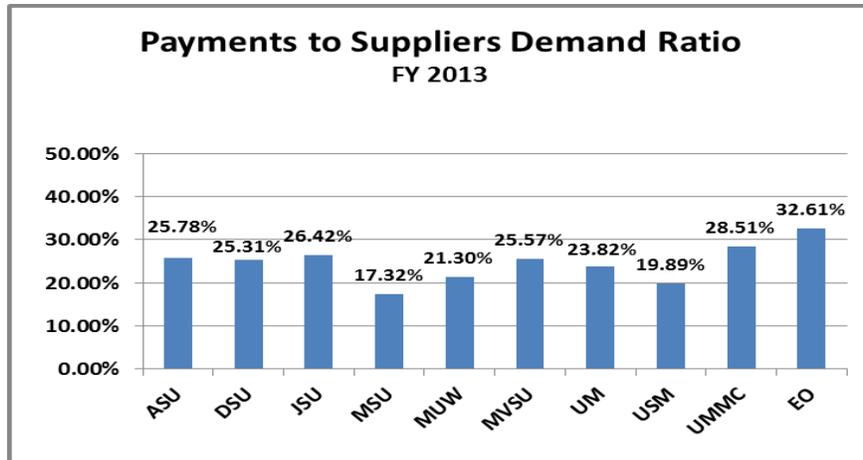


### Payments to Suppliers Demand Ratio

The Payments to Suppliers Demand Ratio provides the reader further analysis about an institutions expense by natural classification. On the GASB financial schedules, these payments are classified as contractual services and commodities. For ratio purposes these expenses are measured against an institution's total operating and non-operating revenues.

The Payments to Suppliers Demand Ratio is calculated as follows:

$$\frac{\text{Contractual Services expense + Commodities expense}}{\text{Operating revenues + Nonoperating revenues}}$$

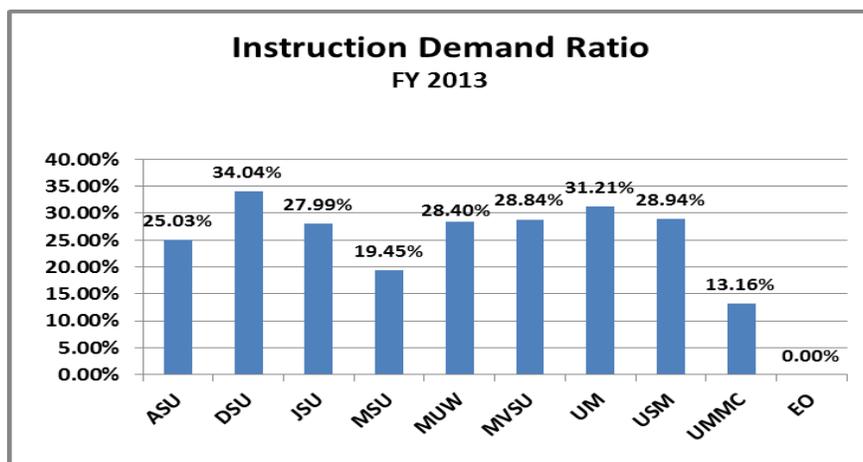


### Instruction Demand Ratio

The Instruction Demand Ratio provides the reader further analysis about an institutions expense by functional classification. On the GASB financial statements, these payments are depicted in note disclosure format as supplemental information to the basic financial schedules. Instructional costs represent the backbone for an institution of higher learning. This category includes all activities associated with the instructional function. Instructional costs are considered core operations in the higher education environment, along with research and public service. For ratio purposes these expenses are measured against an institution's total operating and non-operating revenues.

The Instruction Demand Ratio is calculated as follows:

$$\frac{\text{Instruction expense}}{\text{Operating revenues} + \text{Nonoperating revenues}}$$

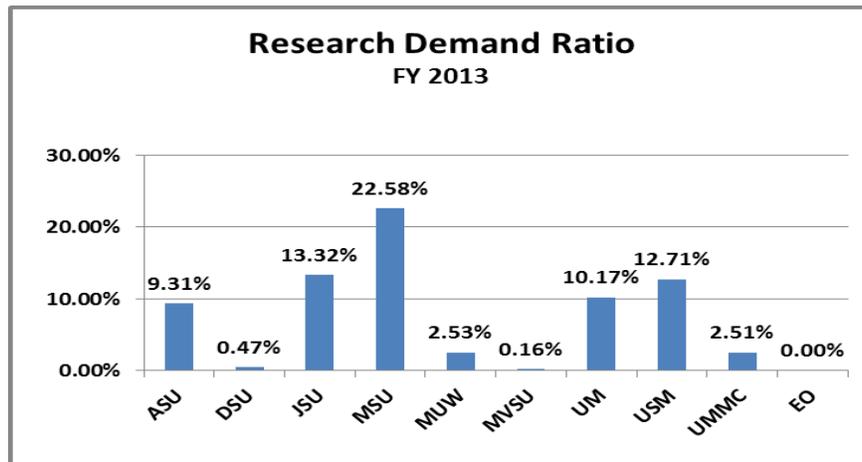


### Research Demand Ratio

The Research Demand Ratio provides the reader further analysis about an institutions expense by functional classification. On the GASB financial statements, these payments are depicted in note disclosure format as supplemental information to the basic financial schedules. These costs include activities organized to produce research. Whether commissioned by an agency external to the institution or separately budgeted by an organizational unit within the institution. Research costs are considered core operations in the higher education environment, along with instruction and public service. For ratio purposes these expenses are measured against an institution’s total operating and non-operating revenues.

The Research Demand Ratio is calculated as follows:

$$\frac{\text{Research expense}}{\text{Operating revenues} + \text{Nonoperating revenues}}$$

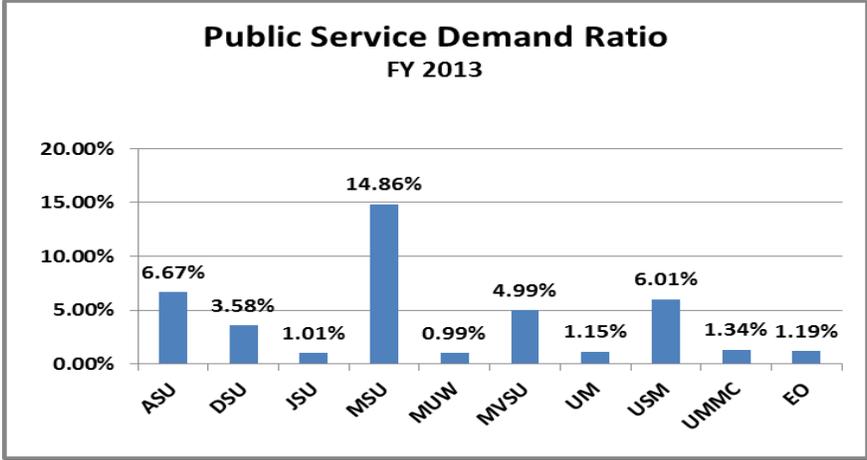


### Public Service Demand Ratio

The Public Service Demand Ratio provides the reader further analysis about an institutions expense by functional classification. On the GASB financial statements, these payments are depicted in note disclosure format as supplemental information to the basic financial schedules. These costs include activities established primarily to provide non-instructional services beneficial to individuals and groups external to the institution, such as community programs and cooperative extension services. Public Service costs are considered core operations in the higher education environment, along with instruction and research. For ratio purposes these expenses are measured against an institution’s total operating and non-operating revenues.

The Public Service Demand Ratio is calculated as follows:

$$\frac{\text{Public Service expense}}{\text{Operating revenues} + \text{Nonoperating revenues}}$$

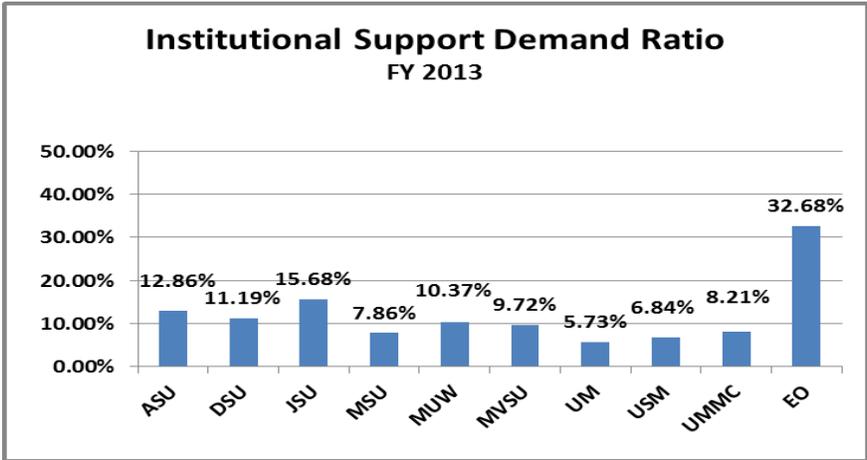


**Institutional Support Demand Ratio**

The Institutional Support Demand Ratio provides the reader further analysis about an institutions expense by functional classification. On the GASB financial statements, these payments are depicted in note disclosure format as supplemental information to the basic financial schedules. These costs include activities aligned with central executive-level activities concerned with the management and long-range planning of the entire institution. Back office operations, such as general accounting and HR functions are also reported within this function. For ratio purposes these expenses are measured against an institution’s total operating and non-operating revenues.

The Institutional Support Demand Ratio is calculated as follows:

$$\frac{\text{Institutional Support expense}}{\text{Operating revenues} + \text{Nonoperating revenues}}$$

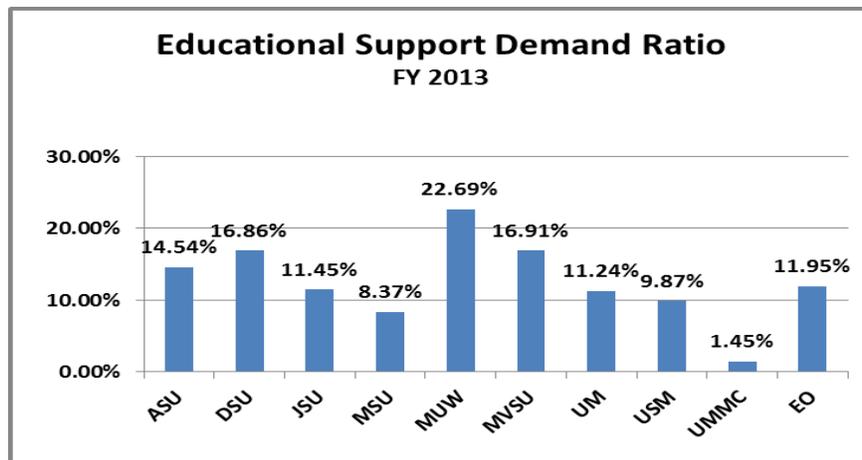


### Educational Support Demand Ratio

The Educational Support Demand Ratio provides the reader further analysis about an institutions expense by functional classification. On the GASB financial statements, these payments are depicted in note disclosure format as supplemental information to the basic financial schedules. Included in the Educational Support ratio are costs associated with the Academic Support and Student Service functions. Academic Support costs include activities that primarily support the institution’s core mission functions—instruction, research and public service. It includes the libraries, academic administrations (Deans Offices) and often the ITS functions. The Student Service functional costs includes those of the offices of admissions and registrar, the financial aid office, and departmental costs associated with the student’s emotional and physical well-being development (intramurals, student government, career center, etc...). For ratio purposes these expenses are measured against an institution’s total operating and non-operating revenues.

The Educational Support Demand Ratio is calculated as follows:

$$\frac{\text{Academic Support expenses} + \text{Student Service expenses}}{\text{Operating revenues} + \text{Nonoperating revenues}}$$



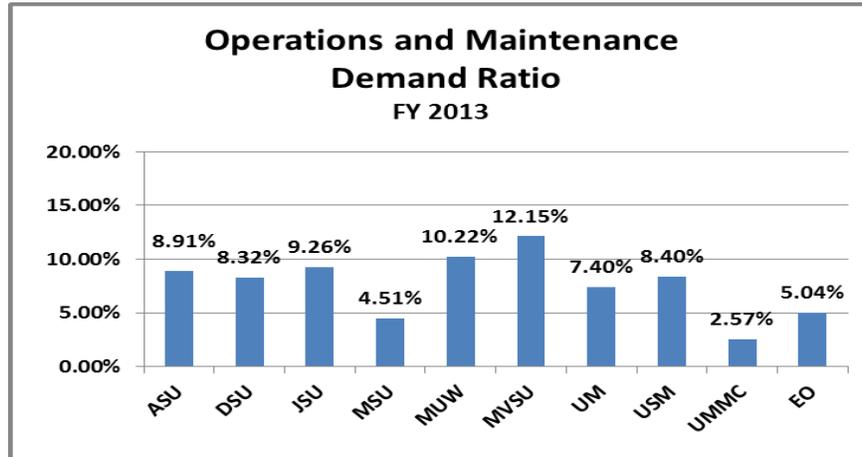
### Operations and Maintenance Demand Ratio

The Operations and Maintenance Demand Ratio\* provides the reader further analysis about an institutions expense by functional classification. On the GASB financial statements, these payments are depicted in note disclosure format as supplemental information to the basic financial schedules. Operations and Maintenance (O&M) costs include all costs associated with the operation and maintenance of the physical plant. Generally this includes utility costs, fire and security costs and grounds and facility maintenance costs. O&M costs associated with the Auxiliary enterprises and Hospital are reported separately within those unique functional areas and are not included in this ratio. For ratio purposes these expenses are measured against an institution’s total operating and non-operating revenues.

The Operations and Maintenance Demand Ratio is calculated as follows:

$$\frac{\text{Operations and Maintenance expenses}}{\text{Operating revenues} + \text{Nonoperating revenues}}$$

\* - This ratio is also known as the Facilities Maintenance Ratio.

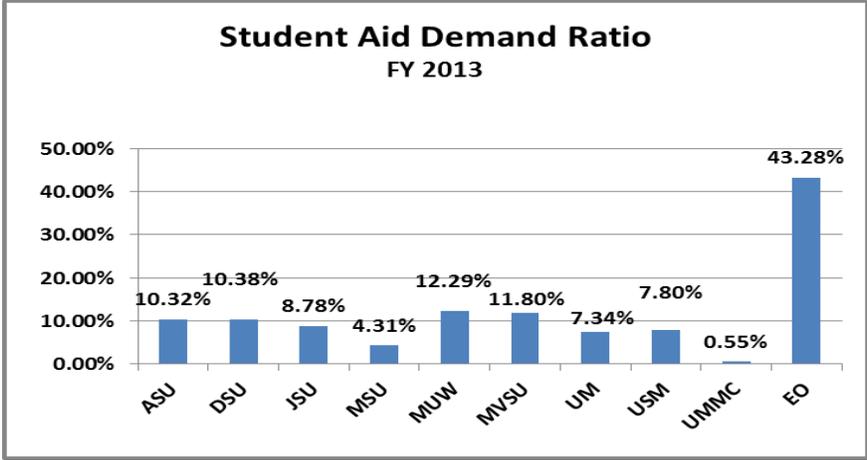


### Student Aid Demand Ratio

The Student Aid Demand Ratio provides the reader further analysis about an institutions expense by functional classification. On the GASB financial statements, these payments are depicted in note disclosure format as supplemental information to the basic financial schedules. The Student Aid function includes expenditures for scholarships, fellowships and waivers in the form of financial aid to students selected by the institution and financed from both institutional and external sources. This function would include federal grant aid such as Pell awards and state aid such as MTAGs and MESGs. For ratio purposes these expenses are measured against an institution's total operating and non-operating revenues.

The Student Aid Demand Ratio is calculated as follows:

$$\frac{\text{Student Aid expenses}}{\text{Operating revenues} + \text{Nonoperating revenues}}$$

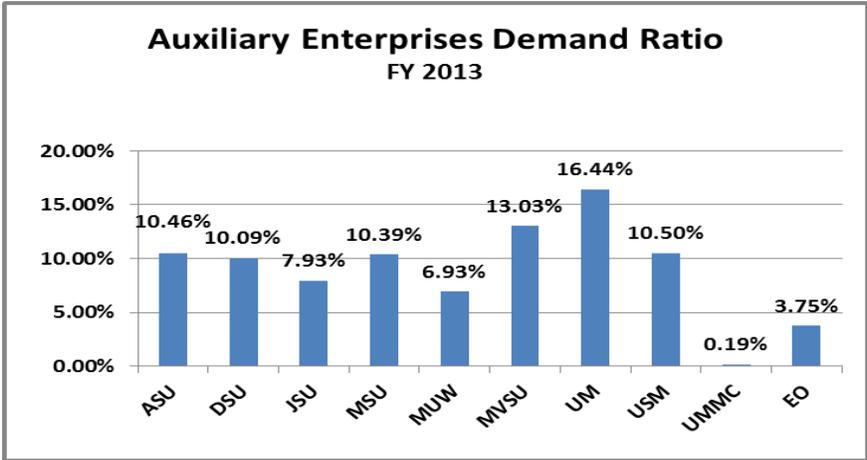


**Auxiliary Enterprises Demand Ratio**

The Auxiliary Enterprises Demand Ratio provides the reader further analysis about an institutions expense by function classification. Auxiliary enterprises typically exist to furnish goods or services to students, faculty, or staff. They are generally self-sustaining by nature, but sometimes receive smaller levels of supplemental support from general campus operations. Auxiliary enterprises receive most of their funding from user fees, or in the case of large intercollegiate athletic programs, from conference affiliation shares, television and radio broadcasting rights, etc.... Examples of common campus auxiliaries would include student housing, dining services, bookstores and some larger intercollegiate athletic programs. For ratio purposes these expenses are measured against an institution’s total operating and non-operating revenues.

The Auxiliary Enterprise Demand Ratio is calculated as follows:

$$\frac{\text{Auxiliary Enterprise expenses}}{\text{Operating revenues} + \text{Nonoperating revenues}}$$



**Hospital Operations Demand Ratio**

The Hospital Operations Demand Ratio provides the reader further analysis about the University of Mississippi Medical Center's (only) expense by functional classification. These expenses are measured against an institution's total operating and non-operating revenues.

The Hospital Operations Demand Ratio is calculated as follows:

$$\frac{\text{Hospital expenses}}{\text{Operating revenues} + \text{Nonoperating revenues}}$$

