

Worcester State University  
Financial Ratio Trend Analysis  
Fiscal Years 2003 through 2011

**Note:** *The ratios were developed and defined by KMPG on behalf of the State and Community College's.*

Primary Reserve Ratio

Are the resources sufficient and flexible enough to support the College's mission?

This ratio provides a snapshot of financial strength and flexibility by indicating how long the institution could function using its expendable reserves without relying on additional net assets generated by operations.

**FY 2011 Analysis:**

WSU has achieved the DHE benchmark of a Primary Reserve ratio of 40% of operating expenses. WSU has been purposeful in growing its reserve balance over the past decade and more specifically since 2006 as an integral part of the long term capital financing plan. Reserves are being accumulated in the Capital Improvement Trust Fund for the specific purpose of financing a new athletic center and second parking garage. The University is hesitant to expend reserves for operations as it could jeopardize long term capital plans.

	FY 2011	FY 2010	FY 2009	FY 2008	FY 2007	FY 2006	FY 2005	FY 2004	FY 2003
<b>PRIMARY RESERVE RATIO</b>									
Unrestricted Net Assets	27,806,659.00	22,438,104.00	17,142,378.00	14,388,882.00	12,689,821.00	10,313,135.00	8,851,822.00	6,987,911.00	6,002,137.00
Expendable restricted net assets	2,161,890.00	1,724,010.00	3,557,552.00	1,409,141.00	846,974.00	543,102.00	670,027.00	1,705,505.00	1,707,400.00
Expendable Net Assets	29,968,549.00	24,162,114.00	20,699,930.00	15,798,023.00	13,536,795.00	10,856,237.00	9,521,849.00	8,693,416.00	7,709,537.00
Total Operating Expenses	72,801,806.00	64,932,066.00	61,383,809.00	65,492,114.00	62,307,852.00	57,293,416.00	51,492,668.00	45,095,635.00	43,843,421.00
Interest Expense	72,801,806.00	64,932,066.00	61,383,809.00	65,492,114.00	62,307,852.00	57,293,416.00	51,492,668.00	45,095,635.00	43,843,421.00
Total Expenses	72,801,806.00	64,932,066.00	61,383,809.00	65,492,114.00	62,307,852.00	57,293,416.00	51,492,668.00	45,095,635.00	43,843,421.00
<b>PRIMARY RESERVE RATIO</b>	0.4116	0.3721	0.3372	0.2412	0.2173	0.1895	0.1849	0.1928	0.1758

**Return on Net Asset Ratio**

Does financial asset performance support the strategic direction of the College?

This ratio determines whether the institution is financially better off than in previous years by measuring total economic return. A temporary decline in this ratio may be appropriate and even warranted if it reflects a strategy to better fulfill the institution's mission.

An improving trend indicates the institution is increasing its net assets and is likely able to set aside financial resources to strengthen its future financial flexibility.

**FY 2011 Analysis:**

The increase in net assets reflects the creation of the Strategic Plan Trust fund which came about as a result of additional unexpected ARRA funds in FY 2011. Net assets also increased in the Capital Improvement Trust fund in accordance with the Capital Financing Plan to build reserves to finance a new Athletic Center and Parking garage.

	FY 2011	FY 2010	FY 2009	FY 2008	FY 2007	FY 2006	FY 2005	FY 2004	FY 2003
<b>RETURN ON TOTAL NET ASSETS</b>									
Change in Total Net Assets	4,645,535.00	2,751,812.00	17,210,178.00	4,884,313.00	2,500,172.00	2,487,795.00	5,931,839.00	1,829,094.00	2,241,703.00
Total Net Assets - Beginning of Year	82,517,422.00	79,765,610.00	62,555,432.00	57,671,118.00	55,170,946.00	52,683,151.00	46,751,312.00	44,922,218.00	42,680,515.00
<b>RETURN ON TOTAL NET ASSETS</b>	5.63%	3.45%	27.51%	8.47%	4.53%	4.72%	12.69%	4.07%	5.25%

**Net Operating Revenue Ratio**

Do the operating results indicate that the College is living within available resources?

This ratio indicates whether total operating activities resulted in a surplus or deficit.

A positive ratio indicates that the institution experienced an operating surplus for the year.

**FY 2011 Analysis:**

While the US has continued to experience a stagnant economy, the Commonwealth has been unable to restore previously cut operating appropriations and ARRA funds are being depleted with all ARRA funds expiring September 2011 the University remained committed to its Capital Financing Plan by achieving a surplus in the capital improvement trust fund. Additional, unexpected ARRA funds were also received in FY 2011 creating the opportunity to bank General fund surplus in the newly created Strategic Plan Trust Fund.

	FY 2011	FY 2010	FY 2009	FY 2008	FY 2007	FY 2006	FY 2005	FY 2004	FY 2003
<b>NET OPERATING REVENUES RATIO</b>									
Operating Revenues	51,102,894.00	45,159,771.00	38,988,968.00	36,007,029.00	34,982,532.00	32,477,113.00	29,440,985.00	25,161,416.00	22,184,582.00
Less Operating Expenses	(72,801,806.00)	(64,932,066.00)	(61,383,809.00)	(65,492,114.00)	(62,307,852.00)	(57,293,416.00)	(51,492,668.00)	(45,095,635.00)	(43,843,421.00)
Plus Net Nonoperating Revenues	26,242,447.00	22,036,060.00	26,628,200.00	31,213,120.00	28,866,760.00	26,132,777.00	23,593,723.00	20,700,694.00	23,725,939.00
Oper. Inc (loss) plus Non-Op Rev (Exp)	4,543,535.00	2,263,765.00	4,233,359.00	1,728,035.00	1,541,440.00	1,316,474.00	1,542,940.00	766,475.00	2,067,100.00
Operating Revenues	51,102,894.00	45,159,771.00	38,988,968.00	36,007,029.00	34,982,532.00	32,477,113.00	29,440,985.00	25,161,416.00	22,184,582.00
Plus Net Nonoperating Revenues	26,242,447.00	22,036,060.00	26,628,200.00	31,213,120.00	28,866,760.00	26,132,777.00	23,593,723.00	20,700,694.00	23,725,939.00
Interest									
Oper Revenues plus Oper Expn	77,345,341.00	67,195,831.00	65,617,168.00	67,220,149.00	63,849,292.00	58,609,890.00	53,034,708.00	45,862,110.00	45,910,521.00
	5.87%	3.37%	6.45%	2.57%	2.41%	2.25%	2.91%	1.67%	4.50%
<b>NET OPERATING REVENUES RATIO</b>									

**Viability Ratio**

Is debt managed strategically to advance the College's mission?

This ratio measures one of the most basic determinants of clear financial health -- the availability of expendable net assets to cover debt should the institution need to settle its obligations as of the balance sheet date.

A ratio of 1:1 or greater indicates that, as of the balance sheet date, the College has sufficient expendable net assets to satisfy its debt obligation.

**FY 2011 Analysis:**

WSU continues to improve this ratio in accordance with the long term Capital Financing Plan. The intent is to raise the ratio as we will need the excess capacity created to cover additional debt and the expenditure of reserves in order to finance \$20 million towards the planned \$45.5 million Athletic Center for which we are expecting to complete by September 2015. Shortly after that we will look to build a 700 space parking garage on campus. The goal is to sustain a 1:1 ratio as each project comes on line keeping the institution fiscally stable and not burdened by excess debt load.

	FY 2011	FY 2010	FY 2009	FY 2008	FY 2007	FY 2006	FY 2005	FY 2004	FY 2003
<b>VIABILITY RATIO</b>									
Unrestricted Net Assets	27,806,659.00	22,438,104.00	17,142,378.00	14,388,882.00	12,689,821.00	10,313,135.00	8,851,822.00	6,987,911.00	6,002,137.00
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<b>Expendable Net Assets</b>	<b>29,968,549.00</b>	<b>24,162,114.00</b>	<b>20,699,930.00</b>	<b>15,798,023.00</b>	<b>13,536,795.00</b>	<b>10,856,237.00</b>	<b>9,521,849.00</b>	<b>8,693,416.00</b>	<b>7,709,537.00</b>
<b>Current Liabilities</b>									
Current Portion of Cap Lease	355,667.00	345,667.00	335,667.00	325,667.00	295,000.00	290,000.00	280,000.00		
<b>Noncurrent Liabilities</b>									
Capital Lease Obligations	12,061,667.00	12,417,333.00	12,763,000.00	13,098,667.00	13,135,000.00	13,430,000.00	13,720,000.00	14,000,000.00	14,000,000.00
Bonds, notes payable, & other	12,417,334.00	12,763,000.00	13,098,667.00	13,424,334.00	13,430,000.00	13,720,000.00	14,000,000.00	14,000,000.00	14,000,000.00
<b>Long Term Debt</b>									
<b>VIABILITY RATIO</b>	<b>2.41</b>	<b>1.89</b>	<b>1.58</b>	<b>1.18</b>	<b>1.01</b>	<b>0.79</b>	<b>0.68</b>	<b>0.62</b>	<b>0.55</b>

### Composite Financial Index

The composite financial index is based on the four core ratio values defined above. These values are converted to strength factors by using a common scale from 1 to 10. Within this scale, a measure equal to 3 would represent an institution with moderate financial strength, 1 would indicate financial weakness, and 10 would point out a financially superior institution.

Strength factors have been established for each ratio based on an assessment of industry experience. The relevant strength scale for each of the core ratios is:

Primary reserve ratio 1.33X  
 Return on net assets ratio 0.7%  
 Net operating revenue ratio 2.0%  
 Viability ratio .417X

To obtain the composite financial index, the strength factors are weighted, giving more weight to the primary reserve and viability ratios [35% each], than to the net operating revenue and return on net assets ratios, at 10 and 20 percent respectively.

Strength factor  $\leq 1.00$  indicates trouble and  $\geq 3.00$  is a financially healthy attribute. ["Ratio Analysis in Higher Education: Measuring Past Performance to Chart Future Direction"]

Reference: "How to Assess and Enhance Financial Health" NACUBO Business Officer

	<u>Core Ratio</u>	<u>Relevant Value</u>	<u>Strength Factor</u>	<u>Weight Factor</u>	<u>Score</u>
<b>FY 2004</b>					
Primary reserve	0.19	0.133	1.45	35%	0.51
Return on net assets	4.07%	2.00%	2.04	20%	0.41
Net operating revenue	1.67%	0.70%	2.39	10%	0.24
Viability	0.62	0.417	1.49	35%	0.52
Composite financial index					<u>1.67</u>
<b>FY 2005</b>					
Primary reserve	0.19	0.133	1.39	35%	0.49
Return on net assets	12.69%	2.00%	6.35	20%	1.27
Net operating revenue	2.91%	0.70%	4.16	10%	0.42
Viability	0.68	0.417	1.63	35%	0.57
Composite financial index					<u>2.74</u>
<b>FY 2006</b>					
Primary reserve	0.19	0.133	1.42	35%	0.50
Return on net assets	4.72%	2.00%	2.36	20%	0.47
Net operating revenue	2.25%	0.70%	3.21	10%	0.32
Viability	0.79	0.417	1.89	35%	0.66
Composite financial index					<u>1.95</u>
<b>FY 2007</b>					
Primary reserve	0.22	0.133	1.63	35%	0.57
Return on net assets	4.53%	2.00%	2.27	20%	0.45
Net operating revenue	2.41%	0.70%	3.45	10%	0.34
Viability	1.01	0.417	2.42	35%	0.85
Composite financial index					<u>2.22</u>

	Core Ratio	Relevant Value	Strength Factor	Weight Factor	Score
<b>FY2008</b>					
Primary reserve	0.24	0.133	1.81	35%	0.63
Return on net assets	8.47%	2.00%	4.23	20%	0.85
Net operating revenue	2.57%	0.70%	3.67	10%	0.37
Viability	1.18	0.417	2.82	35%	0.99
Composite financial index					<u>2.84</u>

<b>FY2009</b>					
Primary reserve	0.34	0.133	2.54	35%	0.89
Return on net assets	27.51%	2.00%	13.76	20%	2.75
Net operating revenue	6.45%	0.70%	9.22	10%	0.92
Viability	1.58	0.417	3.79	35%	1.33
Composite financial index					<u>5.89</u>

<b>FY2010</b>					
Primary reserve	0.37	0.133	2.80	35%	0.98
Return on net assets	3.45%	2.00%	1.72	20%	0.34
Net operating revenue	3.37%	0.70%	4.81	10%	0.48
Viability	1.89	0.417	4.54	35%	1.59
Composite financial index					<u>3.39</u>

<b>FY2011</b>					
Primary reserve	0.41	0.133	3.10	35%	1.08
Return on net assets	5.63%	2.00%	2.81	20%	0.56
Net operating revenue	5.87%	0.70%	8.39	10%	0.84
Viability	2.41	0.417	5.79	35%	2.03
Composite financial index					<u>4.51</u>

**Debt Capacity Ratio**

Debt capacity analysis evaluates the College's long-term obligations and the institution's ability to meet debt service demands.

The debt capacity ratio is used by rating agencies and assesses an institution's ability to meet future debt service obligations with current unrestricted resources.

The ratio equals the maximum annual debt service divided by unrestricted current fund expenditures less mandatory transfers.

	Annual Debt Service	all exp Ratio
Actual	264,886	0.6%
FY 2003	635,728	1.4%
FY 2004	635,728	1.2%
FY 2005	911,528	1.6%
FY 2006	912,978	1.5%
FY 2007	929,869	1.4%
FY 2008	930,870	1.5%
FY 2009	931,176	1.4%
FY 2010	930,370	1.3%
FY 2011		
	3,640,090	0.05 oper exp.

CY benchmark

**Debt Service Coverage Ratio**

This ratio measures the excess of income over adjusted expenses available to cover annual debt service payments.

Provides a level of comfort that an institution has a net revenue stream available to meet its debt burden should economic conditions change.

A high ratio is preferred, a low ratio or declining trend would create concern about the institution's ability to sustain operations, especially during a period budgetary challenges.

Ratio is calculated as adjusted change in net assets divided by debt service.

	Annual Debt Service	Ratio
Actual	264,886	8.46
FY 2003	635,728	2.88
FY 2004	635,728	9.33
FY 2005	911,528	2.73
FY 2006	912,978	2.74
FY 2007	929,869	5.25
FY 2008	930,870	18.49
FY 2009	931,176	2.96
FY 2010	930,370	4.99
FY 2011		