An Updated Analysis of the Financial Statements

of

The University of Akron
Academic Years 2002-2019

Prepared for AAUP

By

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Introduction

This update provides an analysis of the financial status of the University of Akron for the years 2002 through 2019 Due to space limitations the tables in this report, for the most part, have data for the years 2014 through 2019. However, the graphs will generally have data for the years 2002-2019, updating my last report that ended looking at data through 2014. The year 2002 is the first year the University of Akron adopted the new GASB 34 reporting standards and thus data from 2002-2019 is reported in a consistent format. By necessity there will also be some changes in the way data is presented because of the implementation of GASB 68 and 75. Wherever possible, this report will present data that has been corrected to exclude the changes brought about by implementation of GASB 68 and 75.

The analysis contained in this report is based on information contained in the audited financial statements and other information that appears in the Annual Financial Reports of the University as well as information from the Integrated Post-Secondary Educational Data System (IPEDS) for the aforementioned years.

Most businesses have a goal of earning profit for stockholders. Thus, the financial statements of most businesses are designed to allow stockholders and others concerned with profitability a means to monitor the performance of the business in question.

Universities, colleges and other non-profit organizations ostensibly have an entirely different purpose. Universities and colleges, in particular, are institutions of higher learning established primarily to create and disseminate knowledge. Universities and colleges receive a significant portion of their funding from donors and governmental entities. These funds are often given with certain restrictions and conditions. Consequently, universities use a system of fund accounting. The primary purpose of fund accounting is to provide trustees, who are legally responsible for running universities, the information to monitor the funds that come into the institution and make sure that they are expended for their intended purpose.

Since the primary purpose of fund accounting systems is to ensure that funds provided by donors and government are expended in the manner they were intended, it has been difficult for faculty to look at a university or college's financial statements and get a true picture of the university's financial health. In the past, financial statements for universities were broken down into various fund groups. In effect, each fund group had its own financial statements and universities could move money between funds making it difficult to understand whether universities had revenues in excess of expenses or whether expenses exceeded revenues.

The Governmental Account Standards Board (GASB) governs the reporting of financial data for public universities and colleges. In 2002, public universities and

colleges changed their financial statements so that they too more closely resembled those in for profit businesses (GASB 34).

The main effect of the changes brought about by GASB 34 was to put financial data reported by universities in a format that is more closely aligned with for profit businesses. In fact, one might argue that this new reporting format reflects the growing corporatization of universities, which are increasingly being run more and more like for-profit enterprises. However, one of the benefits of the new reporting format is that it is now easier for faculty to understand the financial status of their institutions.

Historically, most universities have had some sort of a faculty budget oversight committee as part of faculty governance institutions. Many of the functions of these budget oversight committees have been taken over by collective bargaining agents at institutions where faculty members have opted to engage in collective bargaining. However, whether an institution has collective bargaining or a traditional budget oversight committee, faculty at most institutions focus on the annual budget of the institution.

Looking only at a university or college's budget can be misleading. Budgets are plans that normally deal with the current fund. However, universities have the ability to transfer money from one fund to another so looking only at the current fund does not give a true picture of a university's finances. Figure 1 below shows the structure of university or college funds.

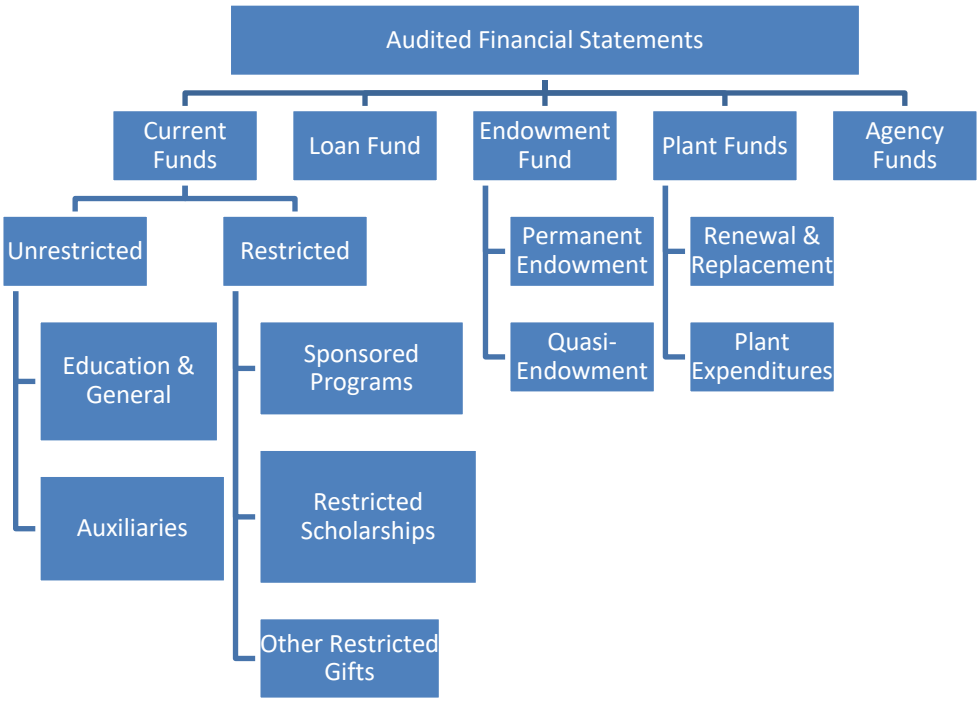


Figure 1.

In addition, since a budget is just a financial plan, institutions have no legal obligation to spend money in accordance with their budgets. For example, a budget may show that money has been allocated for a certain number of faculty positions. However, in any given year a certain number of faculty members leave institutions, e.g., to take jobs elsewhere or retire. Consequently, in any given year a certain number of positions that are budgeted are vacant. Therefore, what a university or college budgets for faculty salaries and benefits is not necessarily what it actually spends. As a result, some percentage of funds for budgeted positions either gets spent elsewhere or accumulates and becomes part of a university or college's net assets.

In addition, when faculty members retire, and institutions hire replacements, they are often replaced by faculty hired at lower salaries. We refer to this as the swap, wherein institutions swap lower paid for higher paid faculty, but budget as if the higher paid faculty members are still employed. This has the effect of systematically over-estimating expenses.

Budgets also depend on making projections regarding enrollment and other sources of revenue. Administrators are notorious for under-estimating enrollment growth or for assuming that tuition is the only sources of revenue. This tends to systematically under-estimate revenue.

Budgets require estimates of inflation e.g., how much health care costs, energy costs or the cost of library materials will increase. Changing any of these assumptions can drastically alter a budget. For example, for campuses that are located in areas where there is snow administrators may assume that every winter will be have record snow fall and thus over-estimate the cost of snow removal or salt. Where campuses are located in warmer climates, administrators assume that there will be record temperatures and hence over-estimate the cost of air conditioning.

In many cases administrators argue that they are just being risk averse and don't want any negative surprises. While this may be true consistently over-estimating costs or under-estimating expenses means that actual revenues will exceed actual expenses and lead to the accumulation of reserves. Having reserves is certainly desirable, because they can be used for a "rainy day." However, budgeting as if every day is a "rainy day" means that funds are accumulated in reserves, when they could have been used to support the primary mission of the institution.

Finally, budgets are always balanced, and this creates the impression that institutions spend every dollar of revenue that they take in. This is far from true for most institutions. In general, most universities and colleges will have balanced budgets and yet in most years they will have revenues that are substantially in excess of expenses.

To get a true picture of a college or university's finances, one must look at the actual financial statements, which represent the actual revenues and expenses of the institution. Evaluating a college or university's finances by looking at its budget would be the equivalent of evaluating the performance of a for-profit company by looking at its business plan.

In a for-profit business, revenues are generated through the sale of goods and services. In the process of producing goods and providing services firms incur expenses. The difference between revenues and expenses represents a firm's profit or loss. This profit or loss is one of the primary indicators of how a firm is performing.

As non-profit organizations, most universities and colleges take in revenue in the form of tuition dollars, donations and governmental support. In the process of carrying out the mission of their institution, universities and colleges also incur expenses. The difference between the revenues and expenses is known as the change in net assets (change in net position). If a university or college's revenue exceeds its expenses, there is an increase in net assets. Conversely, if the expenses exceed the revenues there is a decrease in net assets. Increases (or decreases) in net assets are one of the prime indicators of how a university is performing financially. They are the rough equivalent of profits (or losses).

Financial data is reported either as a stock (a level) or flow (a change). A stock is a snapshot taken at a particular point in time. For example, the amount of money in your savings account is a stock. Flows are measurements that tell us about changes overtime, as a particular stock moves from one level to another. Flows always have a time dimension. For example, income is a flow; it is measuring the number of dollars we receive per year.

Universities and colleges have three main financial statements. First there is a balance sheet or a statement of net position (statement of net assets). Balance sheets have three main components: assets, liabilities and net assets. Assets are things of value owned by a university. Liabilities are claims against a university and net assets are the difference between assets and liabilities. Balance sheets deal primarily with levels i.e., it is a snapshot of a university or college's finances on the last day of the fiscal year.

Net assets represent the wealth of the institution. A well-presented balance sheet for a particular fiscal year will report on assets, liabilities, and net assets not only at the end of the current fiscal year, but also at the end of the previous fiscal year. (Fiscal years are always associated with the calendar year in which they end. For example, a fiscal year starting on July 1, 2016 and ending on June 30, 2017 is known as "fiscal year 2017" for short).

The full name of the second major financial statement is the statement of revenues, expenses and changes in net position (changes in net assets). In the accounting world, another common name for this statement is the income statement. This financial statement shows how a university's finances are changing over a period of time, namely a fiscal year that normally runs from July 1 to June 30 of the following year. This statement therefore deals with flows and measures how a university's revenues and expenses are changing over time.

There is a relationship between stocks and flows or between the balance sheet and income statement. For example, suppose the income statement for a given fiscal year shows revenues that are greater than expenses; then, the same income statement will show a positive change in net assets, and the balance sheet for the same fiscal year will report end-of-year net assets greater than beginning-of-year net assets.

More specifically, the following equation shows an important relationship between the balance sheet and the income statement: the net assets at the beginning of a fiscal year (shown on the balance sheet) plus the change in net assets (shown on the income statement) equals the net assets at the end of the fiscal (again, shown on the balance sheet).

$$Net\ Assets_t = Net\ Assets_{t-1} + \Delta Net\ Assets_t$$

Here is a related equation: The change in net assets (shown on the income statement) equals revenue minus expenses (both shown on the income statement) which in turn equals the change in assets minus the change in liabilities (shown on the balance sheet).

$$\Delta Net\ Assets_t = Revenue_t - Expenses_t = \Delta Assets_t - \Delta Liabilities_t$$

In 2011 GASB 63 introduced the term net position and change in net position, which has now taken the place of net assets and change in net assets. The difference is relatively minor and like many institutions, the University of Akron did not adopt GASB 63 until 2013. In this report, we will use the two terms interchangeably. The net position is the difference between (assets + deferred outflows of resources) minus (liabilities + deferred inflows of resources). Deferred outflows are consumption of net assets by a college that is applicable to a future reporting period. Deferred inflows are acquisition so of net assets applicable to a future reporting period.

Deferred outflows and inflows generally report on the use of derivatives, refunding bonds or on unfunded liabilities of pensions and retiree health care known as other post-employment benefits (OPEB) .

The third major financial statement is the statement of cash flows. To understand what the cash flow statement is and why it is needed, one must realize that universities use a system of accrual accounting; this means they book revenues when they earn them and book expenses when they are incurred. However, recognizing revenue is not always the same as collecting cash. For example, a university may send a bill to a student for tuition but not immediately collect the money owed. This shows up on a university's balance sheet as an increase in accounts receivable and is booked as revenue on the income statement (a.k.a. the statement of revenues, expenses and changes in net assets). Thus, the university reports this revenue, but it does not actually have more cash. The role of the cash flow statement is to show the inflows and outflows of cash.

In providing an analysis of each of these financial statements it is important to look at trends such as the increase or decrease in net assets. In addition, this report will also calculate certain ratios, which are indicators of financial performance. There are a number of different types of ratios that can be used to evaluate the performance of colleges and universities. There are revenue and expense ratios, liquidity ratios, solvency ratios, activity ratios and margin ratios. These ratios can be used to look at the historical performance of the institution. In addition, these ratios can also be used to compare one institution to another institution, or to certain standards that have been established in the field of higher education. However, caution should be exercised when comparing one institution to another because of differences in reporting.

After reviewing each of the financial statements this update will present data on summary indices, that functions as a report card for the institutions. These summary indices use data from the three financial statements to try and paint an overall picture of an institution's financial health.

Following the section on financial indices the report will present a summary and conclusions.

The purpose of this report is to help educate faculty at the University of Akron about the financial status of their institution. The information provided in this report is provided solely for educational purposes. Every effort has been made to ensure that the information in this report is accurate. Any errors or misstatements are purely unintentional and the author accepts no responsibilities for any damage that may result.

The Balance Sheet

A balance sheet (statement of financial position or statement of net assets) is a snapshot of the university or college's financial position on the last day of the fiscal year. This statement deals with stocks (levels as opposed to changes). Generally fiscal years begin on July 1 and end on June 30 and when a fiscal year is referred to the number refers to the calendar year in which a particular fiscal year ends. A balance sheet has two sides and represents a balance between assets and deferred outflows on the left side and liabilities plus deferred inflows and changes in net assets on the right side. The equation that summarizes a balance sheet is:

$$assets + deferred\ inflows = liabilities + deferred\ outflows + net\ assets.$$

The basic structure of the balance sheet is illustrated in Figure 2 below.

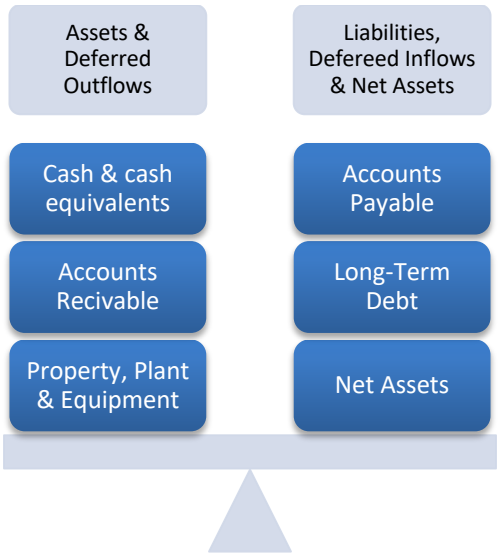


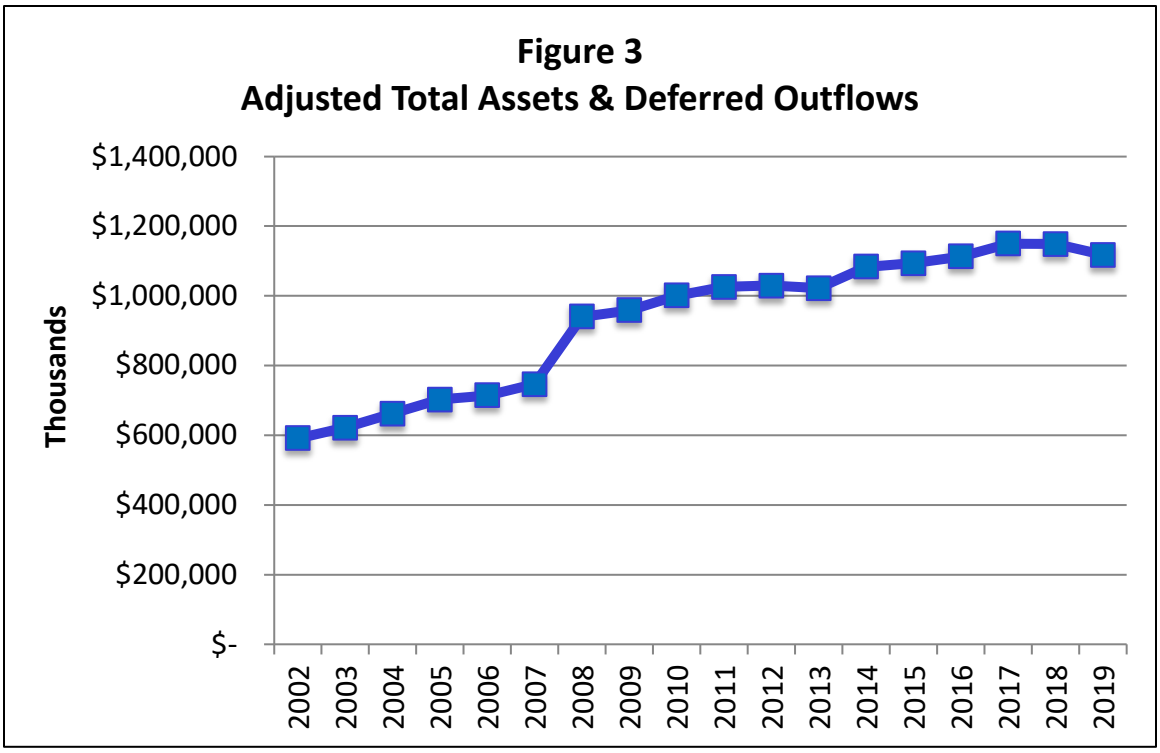
Figure 2.

Assets and Deferred Outflows

An asset is something that an institution owns that is expected to provide a benefit in the future. Assets can be divided into two classes: real assets such as classrooms, laboratories, computers, library books and journals etc., and financial assets such as cash that can be used to make student loans and finance current operations, and investments in financial instruments such as endowments which can be used to generate income to defray certain expenses or be liquidated during a period of a financial crisis. Assets increase as resources are obtained and decrease as assets are disposed of or used up. Public universities separate their assets into current and non-current assets.

Table 1 shows assets and deferred outflows for the University from 2014-2019 and Figure 3 shows assets and deferred outflows from 2002-2019.

Table 1 Assets and Deferred Outflows Thousands of $ For year ending June 30						
	2014	2015	2016	2017	2018	2019
ASSETS						
Current assets:						
Cash and cash equivalents	$11,801	$13,143	$11,710	$12,263	$15,079	$15,353
Pooled investments	$150,652	$150,302	$149,327	$170,008	$179,261	$184,815
Accounts receivable, net	$32,318	$32,279	$41,195	$26,505	$23,721	$16,283
Pledges receivable, net	$161	$304	$346	$234	$429	$968
Student notes receivable, net	$1,564	$1,490	$1,565	$1,556	$1,454	$1,257
Accrued interest receivable	$402	$460	$473	$501	$564	$667
Inventories	$787	$784	$584	$574	$516	$574
Prepaid expenses and deferred charges	$4,252	$4,407	$4,261	$2,960	$1,830	$1,866
Total current assets	**$201,937**	**$203,169**	**$209,461**	**$214,600**	**$222,854**	**$221,783**
Noncurrent assets:						
Restricted cash and cash equivalents	$2,753	$4,660	$2,922	$245	$313	$159
Restricted investments	$46,486	$12,051	$6,977	$4,974	$5,714	$8,236
Endowment investments	$68,158	$65,313	$61,985	$65,678	$68,720	$69,572
Other investments (held in trust)	$9,320	$7,586	$6,635	$8,705	$8,437	$8,550
Pledges receivable, net	$195	$641	$517	$365	$750	$2,494
Notes receivable, net	$8,885	$8,807	$8,082	$7,515	$7,236	$6,210
Prepaid expenses and deferred charges	$-	$-	$-	$-	$-	$-
Capital assets, net	$727,461	$736,789	$742,865	$734,229	$716,058	$689,279
Net OPEB asset						$11,628
Total non-current assets	$863,257	$835,848	$829,983	$821,711	$807,229	$796,128
Total assets	**$1,065,194**	**$1,039,017**	**$1,039,444**	**$1,036,311**	**$1,030,082**	**$1,017,911**
Deferred Outflows						
Deferred amount on bond refunding's	$18,861	$30,070	$38,914	$36,507	$34,099	$32,145
Pensions		$24,443	$34,906	$77,009	$81,087	$70,601
OEPB	$-	$-	$-	$-	$3,969	$8,257
Total Deferred Outflows	**$18,861**	**$54,514**	**$73,820**	**$113,515**	**$119,155**	**$111,003**
Total Assets & Deferred Outflows	**$1,084,055**	**$1,093,531**	**$1,113,264**	**$1,149,827**	**$1,149,237**	**$1,128,915**



Current assets consist of assets that will be converted to cash or used up during the course of a year. The major items that comprise current assets are cash and cash equivalents, short-term investments, accounts receivable, notes receivable, and inventories.

Between 2002 and 2019 there were significant increases in assets and deferred outflows. In 2002 total assets were $590.9 million. Total assets and deferred outflows increased to $1.1billion, an average annual increase of 3.9% which is somewhat slower than the average annual growth rate for the period covered in my last report (2002-2014) which was 5.2%. (Between 2002 and 2012 total assets and total assets plus deferred outflows were equivalent.) As is evident from Figure 3, the growth of total assets was fairly stable between 2002 and 2007, increasing at an average annual rate of 4.8 percent. Then during 2008 there was a sharp jump in total assets – an increase of 26 percent in one year. Since 2009, the increase in total assets and deferred outflows has moderated increasing at an average annual rate of 2.5%. In fact, from 2011 to 2013 total assets and deferred outflows were essentially flat (they actually decreased slightly in 2013) but this was followed by a significant increase in 2014. Since 2014 the average annual growth rate has only been 0.8% and between 2018 and 2019 total assets and deferred outflows decreased for only the second time between 2002 and 2019.

The University's assets can be divided into current and non-current assets. Current assets consist of assets that will be used up during the course of a year. The major items that comprise current assets are cash and cash equivalents, accounts receivable, inventories, deposits and prepaid expenses.

Current assets have with some minor fluctuations following a decline between 2002 and 2003, due to a decline in investments held in trust. Between 2003 and 2019 current assets grew from $74.4 million in 2003 to $221.8 million in 2019. The average annual growth rate in current assets between 2003 and 2019 was 7.1% and between 2014 and 20019 the growth of slowed current assets growing at an average annual rate of 1.9%. Current assets make up about 22% of total assets and deferred outflows. The largest component of current assets are pooled investments, which have increased from $20.6 million to $184.8 million in 2019.

Non-current assets are tangible assets that will last longer than a year or financial assets that will be held more than a year. The major items in this category are investments, endowment and capital assets along with some receivables. From 2002 through 2019 non-current assets have grown at an average annual rate of 3.9%. However, since 2014 the average annual growth rate has been -1.6%.

Figure 4 shows the fair market value of investments for the University of Akron. . It appears that there was a dramatic decline in the value of these investments between 2002 and 2003. However, this apparent decline was due primarily to a sharp decline funds held in trust by others. Since funds held in trust by others generally result from investing money that has been borrowed for the purpose of capital expenditures one expects a decline in this category of investment. Between 2003 and 2009 the value of investments increased from $103.4 million to $259 million in 2009 an average annual growth of 16.5%. With the financial crisis and the stock market crash the value of investments declined to $208.5 million in 2010. Some of the losses in the value of investments were recovered in 2011. In 2014 the value of investments finally surpassed the pre-crisis high of 2009, reaching $274.6 million, which was a high point for investments. Subsequently, investments declined until 2017 and then rebounded in the next two years, although they were still short of their 2014 level. As Figure 4 shows, volatility notwithstanding, there has been an upward trend in investments.

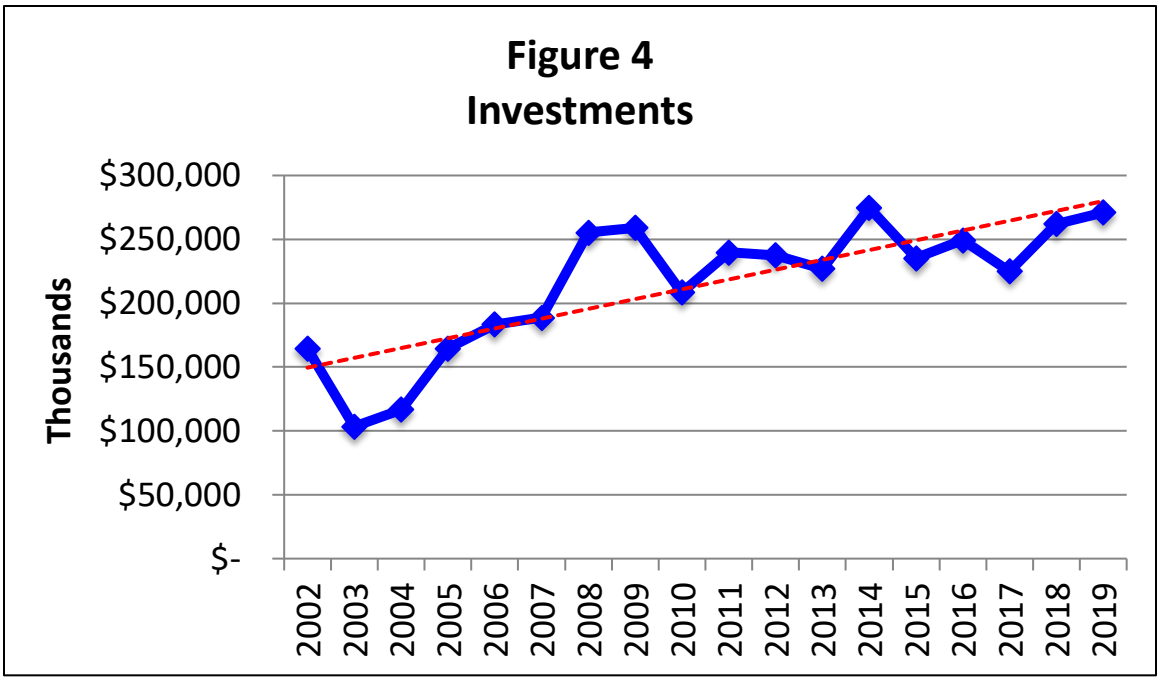


Table 2 and Figure 5 shows the book value of capital assets for the University. Most of the growth in the value of capital assets comes from buildings and improvements and infrastructure. Capital assets are valued at historic costs. The book value of capital assets increased from $373.5 million in 2002 to $736.8 million in 2015. Since 2015 the value of capital assets has trended down reaching $689.3 million in 2019. The decline in capital assets was not the result of a decline in the value of buildings but rather a decline in the value of equipment, furniture and books, land improvement and increases in accumulated depreciation.

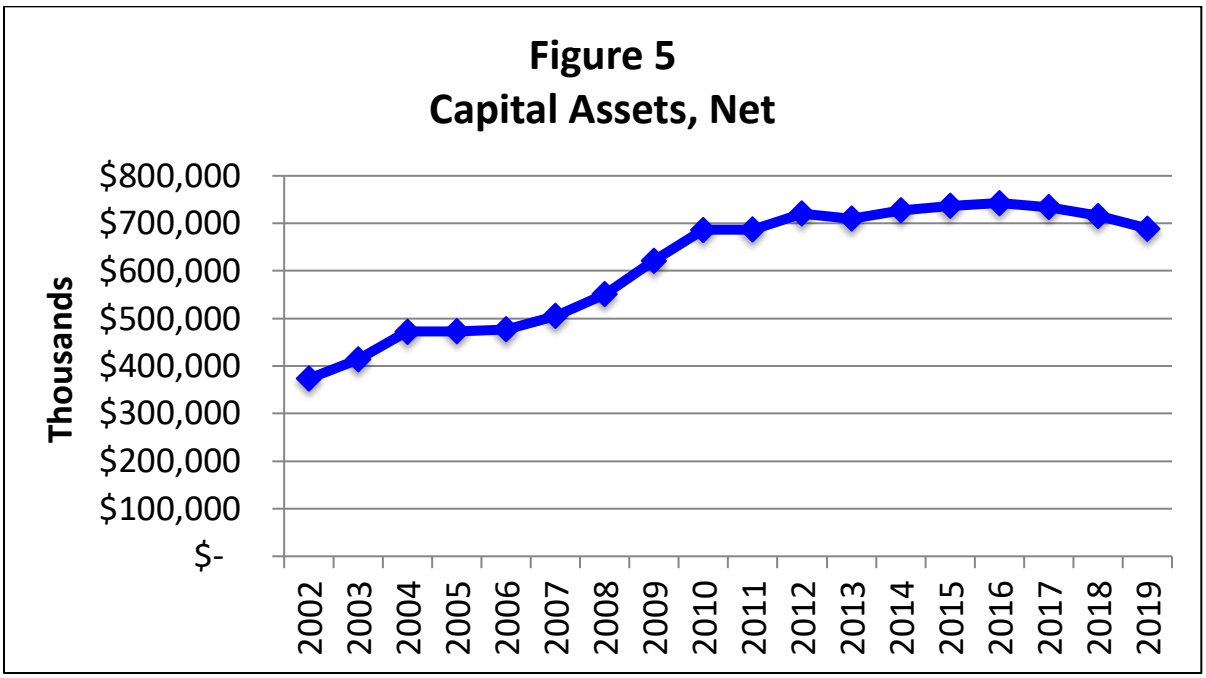
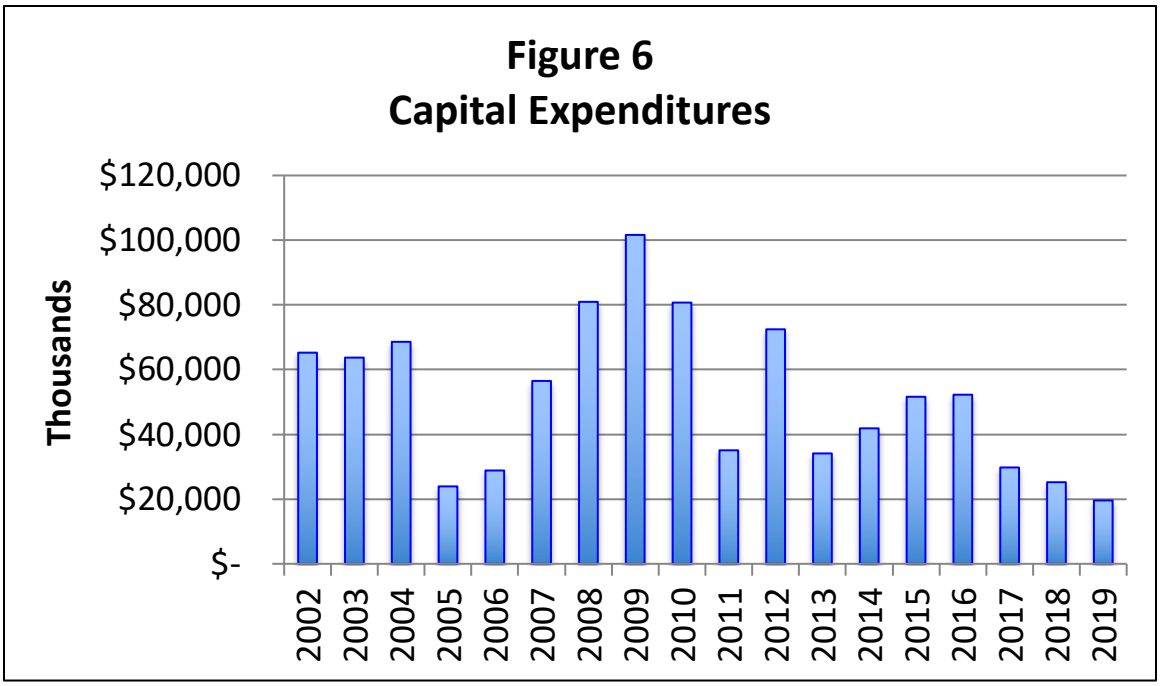
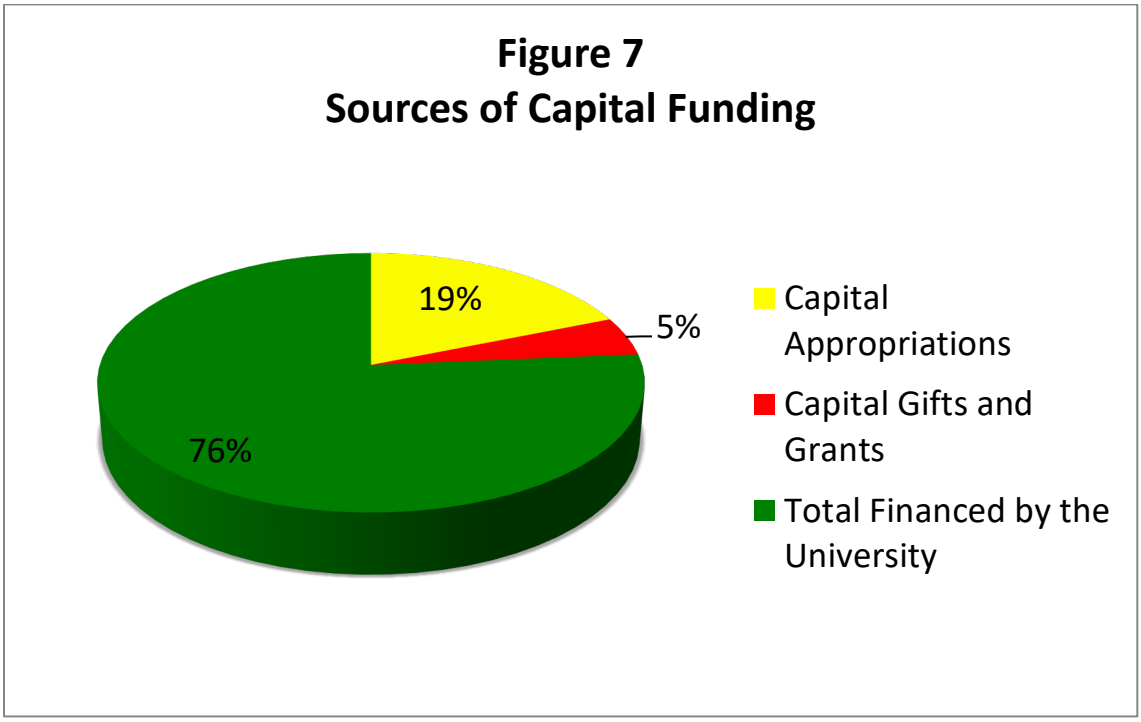


Table 2 Capital Assets, Net Thousands of $ For year ending June 30						
	2014	2015	2016	2017	2018	2019
Non-depreciable capital assets:						
Land	$39,661	$39,661	$39,661	$44,869	$44,869	$44,500
Historical collections	$4,587	$4,587	$4,626	$4,771	$4,771	$4,779
Construction in progress	$3,584	$10,821	$9,103	$25,201	$4,908	$10,830
Total non-depreciable capital assets	$47,832	$55,068	$53,390	$74,841	$54,548	$60,109
Depreciable capital assets:						
Land improvements	$49,480	$47,716	$45,878	$43,855	$43,623	$34,141
Buildings	$927,985	$933,898	$957,673	$962,724	$998,649	$1,001,693
Infrastructure	$46,415	$75,227	$82,774	$87,656	$92,188	$92,374
Equipment, furniture and books	$118,981	$120,067	$133,079	$131,546	$133,094	$129,940
Total depreciable capital assets	$1,142,861	$1,176,908	$1,219,404	$1,225,781	$1,267,554	$1,258,148
Total capital assets	$1,190,693	$1,231,977	$1,272,794	$1,300,622	$1,322,101	$1,318,258
Less accumulated depreciation:			-			
Land improvements	$29,381	$29,052	$28,988	$28,688	$28,707	$20,481
Buildings	$343,068	$368,359	$392,076	$417,924	$443,679	$464,888
Infrastructure	$10,106	$13,768	$18,533	$23,590	$28,827	$34,337
Equipment, furniture and books	$80,678	$84,009	$90,332	$96,191	$104,830	$109,272
Total accumulated depreciation	$463,232	$495,188	$529,929	$566,393	$606,043	$628,979
Capital assets, net	**$727,461**	**$736,789**	**$742,865**	**$734,229**	**$716,058**	**$689,279**

Figure 6 shows the major capital expenditures undertaken by the University of Akron in the years 2002-2019. These figures come from the Cash Flow statements. Over the eighteen-year period, from 2002-2019, the University spent a total of $932.1 million for the purchase of capital assets, which is an average of $51.7 million per year. Since 2013 there has been a marked decline in capital expenditures.



The University financed these capital expenditures from a combination of capital appropriations, capital grants and gifts and University funds. University funds are obtained either by borrowing, thereby obligating the University to make interest and principal payments on debt or through the use of funds accumulated over a period of time when revenues were greater than expenses. As shown in Figure 7, of the total amount spent on capital projects from 2002-2019, 19% came from the state, 5% came from capital gifts and grants and the remaining 76% came from the University.



Liabilities and Deferred Inflows

Current liabilities are liabilities due within a year. Examples of current liabilities are accounts payable (claims of other businesses or institutions for goods and services), deferred revenue (revenue that has already been received for services that the institution will supply in the next fiscal year (e.g., collecting tuition in one fiscal year for classes that will be offered in the next fiscal year) and the current portion of long-term debt. Here, current again refers to the amount of long-term debt the institution expects to pay during the current year.

Non-current liabilities consist primarily of capitalized lease obligations and long-term debt obligations that are due in more than one year. Examples of non-current liabilities long-term debt, which consists of bonds, notes and capital leases as well as compensated absences and other post-retirement benefits. Compensated absences are liabilities for vacation and sick leave.

The requirement to report other post-retirement benefits (OPEB) as a liability on university and college balance sheets at public institutions started in 2008. This means that any university or college that has post-retirement benefits, saw a decline in its unrestricted net assets starting in 2008. The University of Akron has had a relatively small liability for OPEB for the UA Plan, a program that offers health insurance to the spouse of retirees. The University has no assets set aside to fund this liability because the program is funded on a pay-as-you go basis, which is not uncommon for University funded post-retirement health benefits. In 2019 the liability was $50.1 million, but the expense associated with the program was $3.1 million up from $2.7 million in 2018. However, starting in 2018, the University of Akron, along with all other public entities in Ohio started recognizing an OPEB liability for retiree health care provided by Ohio's retirement systems.

The liability for post-retirement benefits represents the present value of all future expenses associated with current retirees and everyone who works at an institution who will retire in the future. Present value is a concept that derives from the fact if you have a dollar today you can in invest that dollar and earn interest. Thus, it is better to have a dollar today than it is to have a dollar a year from now. This means that if you have to spend $1 in ten years to pay for retirement benefits, you don't need a $1 today.

The present value is the amount that you would need to invest today to generate the money you need to cover your promise to provide a benefit in the future. It turns out that this is a very soft number and it depends on whether interest rates are going to rise or fall in the future. It also depends life expectancy, the future cost of medical care as well as on how many of your current employees will actually retire and be eligible for benefits. A full discussion of post-retirement benefits is beyond the scope of this report. However, many bond rating agencies as well as the Ohio Department of Higher Education (ODHE) discount the post-retirement benefits liability when calculating

certain key performance ratios because accounting for this liability does not reflect any fundamental change in the institution's performance. In Ohio the main reason to discount this liability is that the liability is really that of the retirement systems that offer the benefits.

Table 3 Liabilities and Deferred Inflows Thousands of $ For year ending June 30						
	2014	2015	2016	2017	2018	2019
Current liabilities:						
Accounts payable	$4,369	$4,932	$6,517	$4,111	$3,501	$6,162
Accrued liabilities	$22,023	$23,250	$22,828	$22,412	$20,416	$22,732
Accrued interest payable	$9,312	$7,322	$6,623	$8,693	$8,435	$8,550
Unearned income	$22,729	$22,237	$29,088	$17,892	$16,080	$15,090
Deposits	$2,114	$1,980	$2,029	$2,048	$1,898	$2,621
Current portion of long-term liabilities	$20,881	$24,548	$19,564	$21,534	$26,216	$20,884
Total current liabilities	**$81,426**	**$84,268**	**$86,649**	**$76,690**	**$76,545**	**$76,039**
Noncurrent liabilities:						
Refundable federal student loans	$11,772	$11,842	$11,995	$10,744	$9,647	$9,836
Net Pension liability		$339,766	$370,890	$418,495	$298,023	$266,076
Net OPEB liability		$-	$-	$-	$136,159	$102,063
Long-term liabilities	$494,966	$487,155	$480,829	$466,587	$425,259	$416,668
Total non-current liabilities	**$506,738**	**$838,763**	**$863,714**	**$895,826**	**$869,088**	**$794,644**
Total liabilities	**$588,164**	**$923,031**	**$950,363**	**$972,516**	**$945,633**	**$870,683**
Deferred Inflow of Resources						
Pensions		$59,541	$34,786	$33,923	$48,299	$57,679
OPEB					$10,854	$33,003
Other deferred inflows		$900	$4,720	$5,098	$9,265	$7,935
Total deferred inflows		**$60,441**	**$39,506**	**$39,021**	**$68,417**	**$98,617**
Total Liabilities and Deferred Inflows	**$588,164**	**$983,472**	**$989,869**	**$1,011,537**	**$1,014,050**	**$969,300**

Starting in 2015 there was a major change in how public pensions are treated in university and college financial statements. Then in 2018 a similar change was made in how retiree health benefits offered by public pensions are treated in financial statements. These changes brought about by GASB 68 and 75 respectively, require universities and colleges to show their proportionate share of any unfunded liability for the pensions as well as any unfunded liabilities for retiree health as institutional liabilities. These changes affect the statement of net position and the statement of changes in revenue, expenses and changes in net position.

The theory behind the change is that pensions and retiree health care (OPEB) as part of an "employment exchange." In other words, employees agree to provide services in exchange for wages, benefits and the promise of a pension and healthcare in the future. Thus, a pension and OPEB are forms of deferred compensation i.e., they are a "bargained for benefit" and therefore the unfunded portions must be reported as liabilities.

So, in effect the unfunded pension and OPEB liabilities in public systems will be counted twice, once by the retirement system and then again by each individual governmental entity whose employees are covered by the public pension system.

In states where public pensions have significant unfunded liabilities this will have a dramatic effect on a college or university's net assets. It is likely that many universities and colleges will show negative unrestricted net assets as a result of this change.

The legal meaning of this change will vary from state to state, depending on pension law in each state. In most states, it is likely that there is no legally enforceable means to collect this liability from institutions, because the benefits and the means of paying for these benefits are determined by state law. Since legislatures and governors can change these laws, a fact that is known to employees when they enter into an employment exchange, individual institutions have no legal or moral obligation to honor these liabilities. Moreover, in Ohio the health benefits associated with public pensions are strictly voluntary i.e., the systems are free to stop offering retiree healthcare at any time. So, unlike the pension itself, the healthcare liabilities of Ohio's retirement systems could disappear if the Boards that run those systems simply voted to discontinue health benefits.

When these changes were made, there was an expectation that these unfunded liabilities would continue to grow. Increases in these liabilities on the balance sheet would then show up as increased expenses on the income statement causing declines in the change in net assets and in some cases result in deficits.

The real impact of these liabilities is to alarm the public about these liabilities, which will lead to attacks on defined benefit public pension plans and increase calls for the elimination of these plans. It will also allow administrators and trustees to call for

cuts in academic programs to under the guise of reducing deficits. However, the truth is that the changes brought about by recognizing these liabilities do not affect the financial health of an institution. In fact, most institutions in the management discussion and analysis discuss and discount these liabilities entirely when reviewing their financial performance. More importantly in Ohio where institutions are subject to SB-6 which calculates ratios that are directly impacted by these liabilities, ODHE adjusts the liabilities and the unrestricted net assets and the expenses associated with those changes before calculating each institution's SB-6 score. In this report we make exactly the same adjustments that are made by ODHE in presenting data on liabilities and unrestricted net assets.

Figure 8 total adjusted liabilities and deferred inflows. Table 3 show the total liabilities and deferred inflows for the University without adjustments. The table clearly shows the huge jump in liabilities between 2014 and 2015 due to GASB 68. Total liabilities and deferred inflows, adjusted for GASB 68 & 75, increased substantially from $262.6 million in 2002 to a high point of $588.2 million in 2014. Since that time total liabilities and deferred inflows have been trending down ending 2019 at $560.6 million.

Current liabilities have moved up and down since 2002 but over the entire period from 2002 through 2014 basically remained stable. Non-current liabilities increased In 2015 increasing. From 2002 to 2014 non-current liabilities grew at an average annual rate of 9.1%. More recently, the growth rate has slowed, increasing at an average annual rate of 3.3% between 2009 and 2014. In fact, roughly speaking there are three distinct periods that can be clearly seen in Figure 8. First, fairly stable liabilities from 2002 to 2007, followed by a major increase in liabilities in 2008. Second stable liabilities from 2008 through, followed by an increase in 2015 and third a period of declining liabilities and deferred inflows from 2014 through 2019.

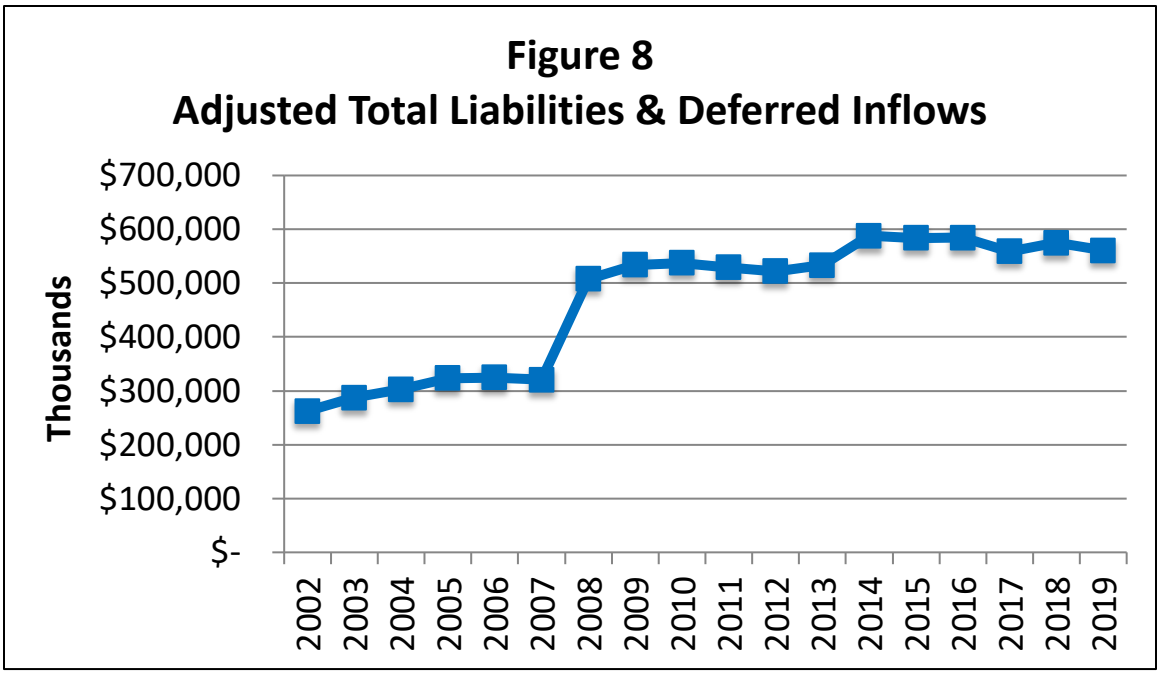


Table 4 shows the long-term liabilities of the University. Long-term liabilities accounts for the lion's share of non-current liabilities, and most of these non-current liabilities consist of debt, made up of notes, bonds and capital leases of the University. The long-term debt of the University increased from $188.8 million in 2002 to $495 million in 2014. Since 2014 the debt has been declining and was down to $445.3 million in 2019. Since 2009 long-term liabilities have moved up and down driven largely by movements in debt.

Another component of long-term liabilities is the liability associated with post-retirement benefits (OPEB) for the UA Plan. This liability grew rapidly in the first three years that the University was required to report on these liabilities but that grow slowed since 2011 and then in 2014 it began to decline. Figure 9 shows the debt of the University.

Table 4 Long-term Liabilities Thousands of $ For year ending June 30						
	2014	2015	2016	2017	2018	2019
Bonds payable		$420,577	$416,047	$401,445	$384,484	$374,246
Bond premiums		$15,953	$31,025	$29,478	$27,931	$28,353
Development Finance Authority		$32,040	$12,870	$12,870	$12,870	$12,870
Innovation Generation Scholarships		$12,665	$12,136	$11,550	$10,983	$10,376
Capitalized Lease Obligations		$965	$387			$44
UA Foundation Land Note Payable		$-	$-	$4,905	$4,592	-
Sick Leave	$8,716	$8,932	$7,652	$7,181	$6,149	$5,281
OPEB Liability	$20,029	$20,572	$20,277			
Voluntary Retirement Incentive Plan					$4,466	$2,827
Voluntary Separation Plan						$3,700
Liquidated damages						$525
Long Term Liabilities	$494,966	$511,703	$500,393	$467,429	$451,474	$438,222
Debt	$466,221	$465,281	$441,053	$430,770	$412,928	$397,492

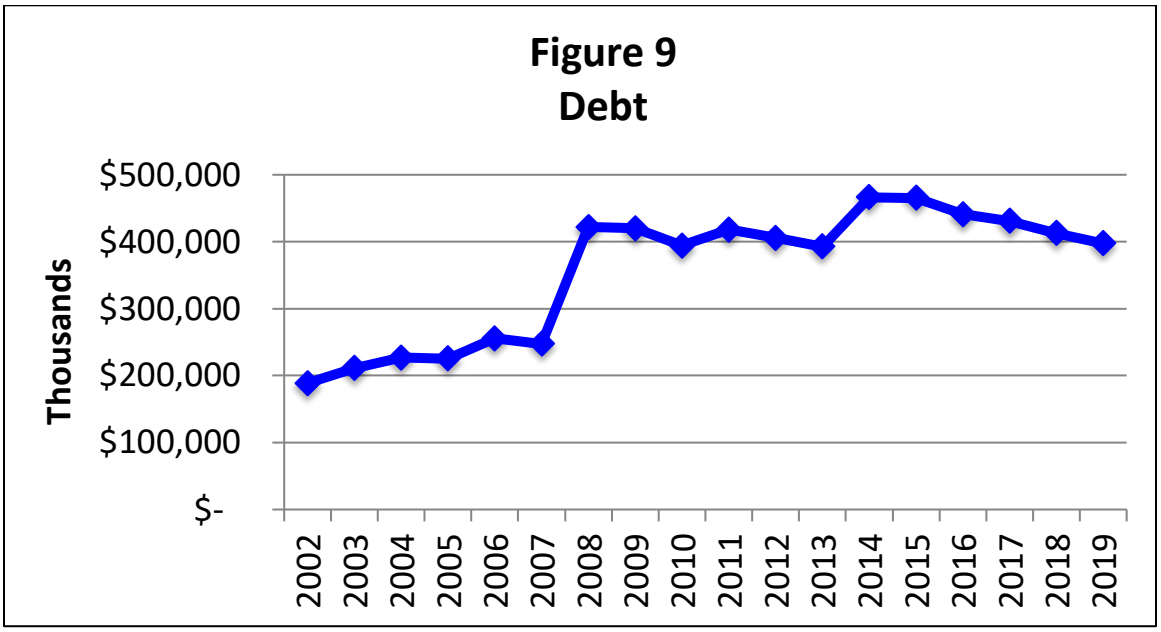


Figure 10 shows several key ratios for the years 2002-2019. These key ratios are also reported in Table 5. First is the ratio of current assets to current liabilities. Current assets consist of unrestricted cash and cash equivalents, inventories, receivables and pledges due within a year, investments that mature within one year and other short-term assets. Current liabilities include all liabilities payable within one year as well as deferred revenues, which consist primarily of tuition collected in one fiscal year to pay for services offered in a subsequent fiscal year.

The ratio of current assets to current liabilities has been trending up. Normally this ratio is greater than 1 and less than 2.5, so the University's current ratio is above the normal range. In 2019 the University had enough current assets to cover 292% of its current liabilities. Ordinarily, a current ratio that too high could impose an opportunity cost on a university since it can generally earn a higher rate of return on long-term investments. However, given the period of historically low interests rates this is not a real concern

Table 5
Asset to Liability Ratios
For year ending June 30

	2014	2015	2016	2017	2018	2019
Current ratio	2.48	2.41	2.42	2.80	2.91	2.92
Total assets to total liabilities	1.84	1.87	1.91	2.06	2.00	1.99
Fixed assets to debt	1.56	1.67	1.66	1.68	1.64	1.65

Figure 10 also shows the ratio of total assets to total liabilities. After declining between 2007 and 2008 this ratio has remained essentially flat.

Another indicator of financial health is the ratio of fixed assets to long-term debt, which is again shown in Figure 10. This ratio appears to be trending down although almost all of the decline was between 2007 and 2008. Since that time, it has been fairly stable.

Rising levels of debt per se are not necessarily a problem. One indicator of the burden of debt on an institution is the ratio of debt to revenue. Figure 11 shows that the ratio of long-term liabilities (debt) to operating and non-operating revenue. Between 2002 and 2007 the ratio of debt to revenue was fairly stable. The ratio increased dramatically in 2008 and then trended down until 2013. In 2014 the ratio increased to about the same level as it was in 2008. Since 2014 the ratio has continued rising. So, looking at the ratio over an eighteen-year period, one can conclude that there has been an increasing burden of debt at the university with debt rising faster than revenue.

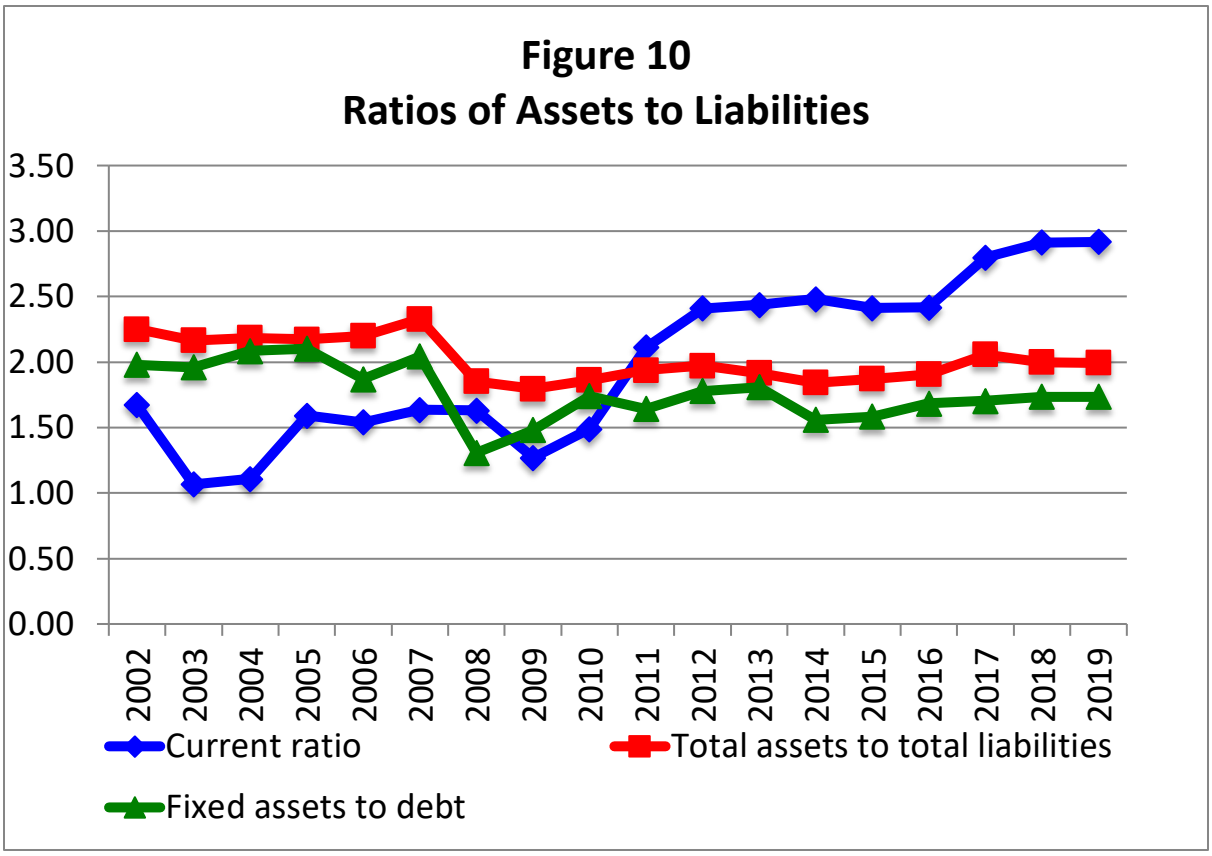


Figure 10
Ratios of Assets to Liabilities
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
Current ratio
Total assets to total liabilities
Fixed assets to debt

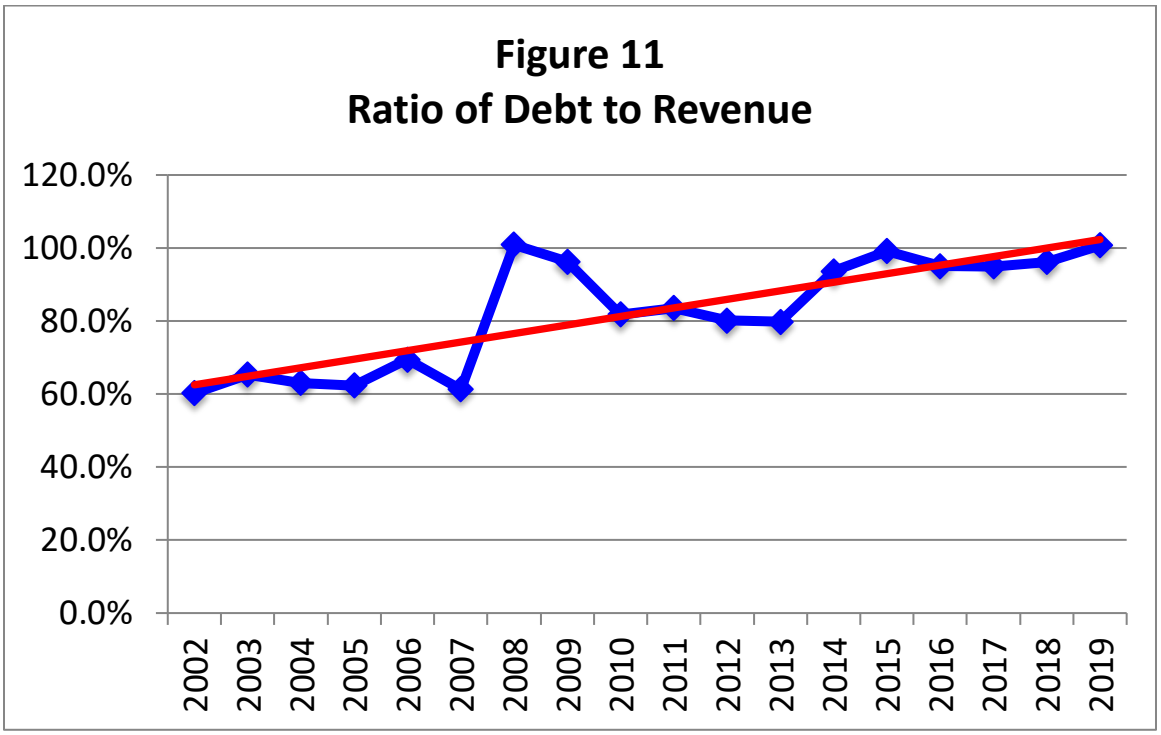


Figure 11
Ratio of Debt to Revenue
120.0%
100.0%
80.0%
60.0%
40.0%
20.0%
0.0%
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019

Net Assets (Net Position)

In for profit businesses, the difference between assets and liabilities is referred to as owner's equity or stockholder's equity. In theory, if a business were to sell off all of its assets and pay off all claims against the business, the amount remaining would be the owner's claims on the business's resources. In a non-profit organization, the difference between assets plus deferred outflows and liabilities plus deferred inflows is referred to as net assets. These net assets represent the wealth of an institution. Therefore, net assets are an important indicator of the financial health. In the past, these net assets were referred to as fund balances.

At public universities and colleges there are four general categories of net assets:

1. Net Assets Invested in Capital Assets
2. Non-Expendable Restricted Net Assets
3. Expendable Restricted Net Assets
4. Unrestricted Net Assets

Net assets represent the net accumulation of a university's assets over a period of time. Large portions of these net assets consist of the value of land, buildings, books and journals and equipment owned by a university. An increase in net assets means that a university has increased its wealth and conversely a decrease in net assets implies that a university's wealth has decreased.

Wealth can be divided into two categories: tangible net assets or financial net assets. Tangible net assets are the book value of buildings, some equipment and other real assets minus accumulated depreciation and any liabilities associated with the purchase of those assets. So, when a university constructs a building the value of that building is the cost of the building minus depreciation and any liabilities e.g., debt associated with the building.

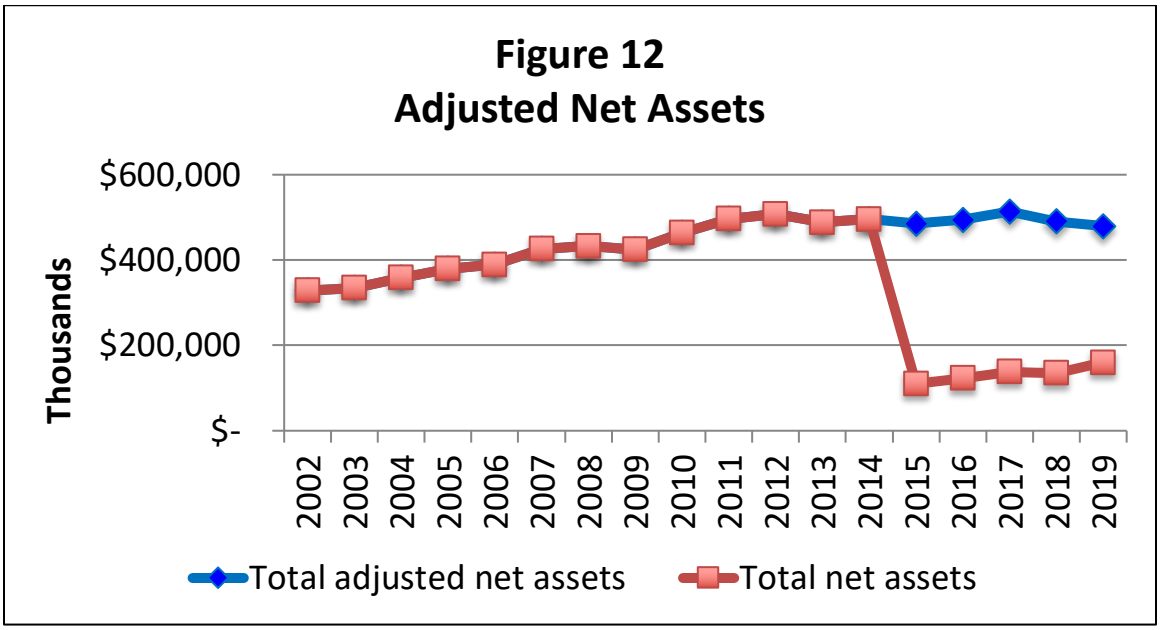
Financial assets are "pieces of paper" (or contracts) that represent ownership or claims on tangible assets outside of the university. A university's wealth can increase either because it has more real (tangible) assets or because it has more financial assets. In many cases, the purchase of tangible assets is financed partially by state capital appropriations or by gifts. An increase in state capital appropriations or gifts for capital increases the wealth of an institution. However, the capital funds universities receive from the state or private donors are generally restricted and cannot be used for operations i.e., paying salaries and benefits.

Table 6 Adjusted Net Assets Thousands of $ For year ending June 30						
	2014	2015	2016	2017	2018	2019
Invested in capital assets, net of related debt	$295,032	$292,967	$311,349	$310,262	$304,256	$292,157
Restricted:						
Nonexpendable:						
Endowment	$24,093	$23,364	$22,186	$21,797	$25,727	$28,087
Expendable:						
Research & gifts	$32,316	$36,710	$38,005	$37,799	$38,279	$41,417
Loans	$818	$826	$826	$850	$854	$873
Endowment	$32,314	$31,458	$29,571	$33,080	$31,228	$30,230
Capital projects	$8,741	$4,645	$2,633	$880	$2,532	$2,606
Debt service	$37	$342	$367	$649	$684	$948
Adjusted Unrestricted	$102,540	$94,657	$89,227	$108,383	$86,766	$82,709
Total Adjusted Net Assets	**$495,891**	**$484,970**	**$494,165**	**$513,699**	**$490,327**	**$479,028**
Addendum:						
Unrestricted	$102,540	$(280,254)	$(281,543)	$(267,026)	$(268,375)	$(236,704)
Total Net Assets	**$495,891**	**$110,059**	**$123,394**	**$138,290**	**$135,187**	**$159,615**

Universities also own financial assets such as stocks and bonds, CDs and mutual funds. They also generally hold small amounts of cash and money in checking and savings accounts to fund day-to-day operations. It is these financial assets that give universities, the flexibility to deal with unforeseen circumstances and make certain long-term investments. However, it is important to recognize that these financial net assets, sometimes called “reserves” are not just piles of cash and investments. They are the cash and investments of an institution minus the institution’s liabilities.

The net assets of the University are also shown in Table 6 and in Figure 12. The table and the graph show unadjusted and adjusted net assets. GASB 68 and 75 have a significant impact on unrestricted net assets and therefore on net assets as a whole. Table 6 shows the net assets reported in the financial statements in the addendum rows. The adjusted unrestricted net assets are estimated using expendable net assets as reported on the ODHE website. ODHE publishes expendable net assets adjusted for the impact of GASB 68 and 75. Expendable net asset are restricted expendable net assets plus unrestricted net assets. So, one can obtain an estimate of unrestricted net assets by subtracting restricted expendable net assets from expendable net assets.

There has been a significant increase in the net assets of the University as seen in Figure 12. Net assets have increased from $328.4 million in 2002 to a high of $507.6 million in 2012. In 2013 net assets declined to $488.2 million and then rose again to $495.9 million in 2014. In 2015, there was a decline in net assets, followed by two-years of increasing net assets and in 2017 net assets surpassed their previous high reaching $513.7 million. Net assets declined in 2018 and 2019 ending 2019 at $479 million.



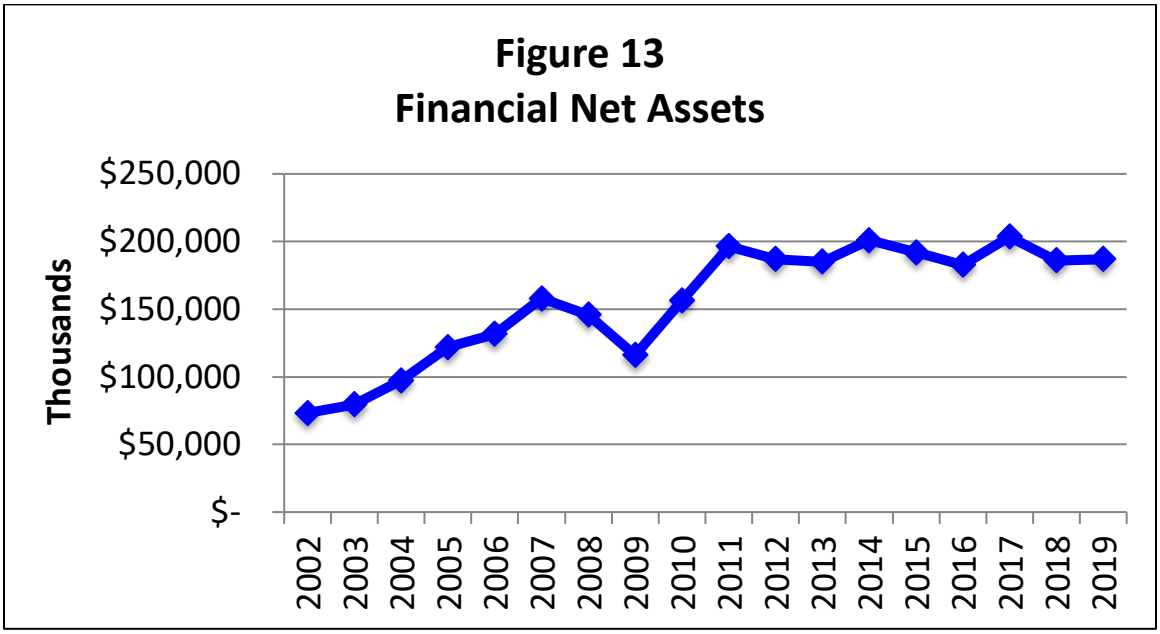
An increase in net assets means the University has increased its wealth and conversely a decrease in net assets implies that the University's wealth has decreased. An increase in a university's net assets occurs when revenues exceed expenses. An increase in net assets also occurs when a university receives funding from the state to finance capital projects, when it receives private funding for capital projects, and when it receives contributions to its permanent endowment.

As mentioned previously some of the University's wealth takes the form of physical assets. In addition, universities often receive funds that are restricted either by donors or government to be used to purchase tangible assets including construction and renovation of buildings. These restricted funds cannot be used for operating expenses, e.g., paying for salaries and benefits. However, not all funds used for the purchase of tangible assets are restricted. In many cases, universities accumulate funds by running an operating surplus and then choose to use these funds to purchase tangible assets. These are unrestricted funds and they can be used to pay salaries and benefits. Thus, it is important to distinguish between the various types of net assets.

If an increase in total net assets is exclusively due to increases in the value of land, buildings and equipment, the increase in wealth while real, does not give a university or college added flexibility with respect to operations. Once a university or college invests

money in its physical plant it is unusual for it to sell that asset. If a university or college changes its priorities and accordingly wishes to change its asset allocation it would most likely reallocate its non-plant assets. Thus, financial net assets can be converted into cash as give universities the ability to react to unforeseen financial emergencies.

Figure 13 shows the financial net assets of the University. Financial net assets increased from $73.3 million in 2002 to $157.9 million in 2007. In the following two years, financial net assets dropped, falling to $116.1 million. By 2010 almost all of the losses were recouped, and financial net assets rose to $156.2 million. Financial net assets continued to rise until 2012 when they reached $187 million. In 2013, there was a slight decrease in financial net assets and followed by an increase in 2014 when financial net assets reach $200.9 million. Financial net assets rose over the next three years reaching $203.4 million in 2017 and then declined in 2018 to $186.1 in 2018. In 2019 financial net assets edged up to $186.9 million.



Restricted and Unrestricted Funds

Universities also divide their net assets into restricted and unrestricted net assets. Restricted net assets are assets net of related liabilities held by a university or college that are designated for specific purposes by external entities, either government agencies or private donors. Unrestricted net assets are assets net of related liabilities that can be spent at the discretion of the institution.

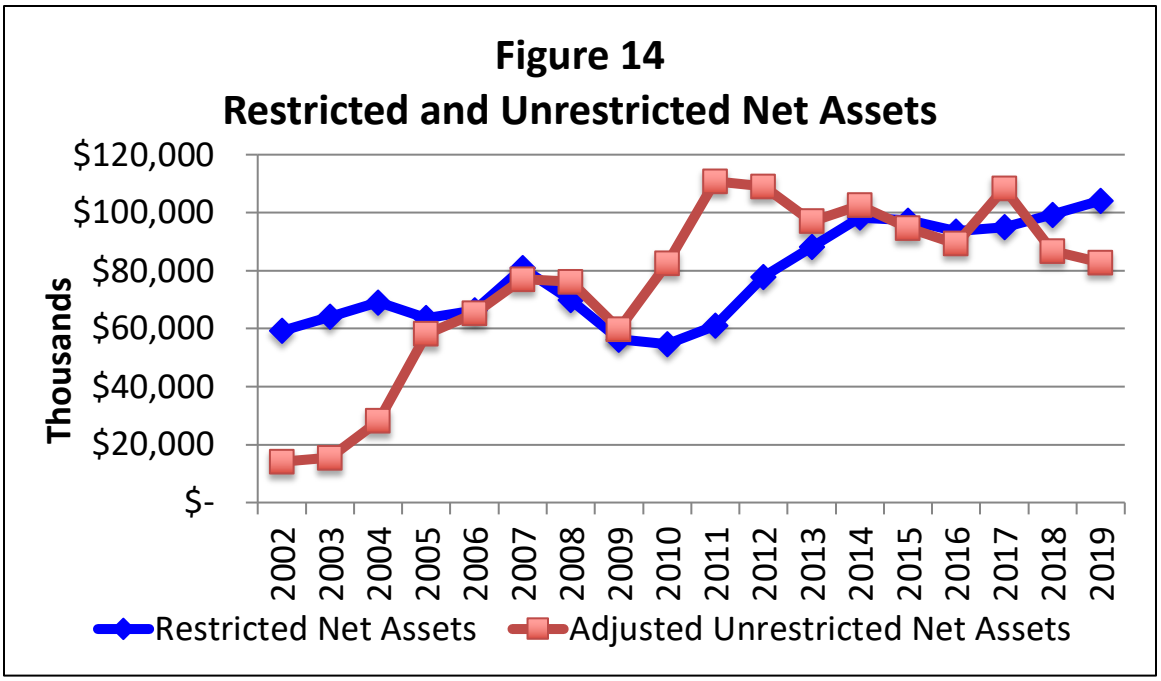
Clearly, unrestricted net assets give universities more flexibility than restricted net assets. However, one should not assume that just because an asset is restricted that it cannot be used for reallocation. For example, a university may be spending a significant amount of unrestricted funds on scholarships and then replace that funding with endowed scholarships. In such a case, there would be no change in unrestricted

funds but there would be an increase in restricted funds. However, the unrestricted funds that were being used for scholarships are now available for reallocation.

The same can be said for capital appropriations. Capital appropriations before they are spent are a restricted net asset. They cannot be spent to fund other expenses. However, in the absence of these restricted funds, the University would have to spend unrestricted funds for investment. Thus one way of viewing restricted funds is that they either free up unrestricted funds for other uses or that in their absence the University would forgo the activities funded by restricted funds.

An institution can use unrestricted net assets for any lawful purpose. Many universities claim that the Board of Trustees or management has designated all or most unrestricted net assets for specific purposes. Some of these designations may result from funds being collected by special fees. This type of statement is misleading in the sense that all of the designated fees are the result of board or management policy and that policy can be changed. Few institutions have funds that are undesignated. The point that faculty need to understand is that current policies with respect to unrestricted net assets reflect the priorities of the governing board and/or management and may not reflect the priorities of faculty. While faculty cannot collectively bargain over the specific designation of unrestricted net assets, collective bargaining can cause the governing board or management to change its priorities resulting in the reallocation of these funds.

Also shown in Table 3 are the restricted and unrestricted net assets. Figure 14 shows restricted and unrestricted net assets. Unrestricted net assets have increased from $14.1 million in 2002 to $102.5 million in 2014, an average annual growth of 18%. In 2008 and 2009 there were declines in unrestricted net assets, which were probably due to the stock market crash associated with the Great Recession. Unrestricted net assets recovered in 2010 and continued to grow rapidly until 2011. There were modest declines in unrestricted net assets in 2012 and 2013 and an increase in 2014. Between 2014 and 2016 unrestricted net assets declined from $102.6 million to $89.2 million. In 2017 they rose to $108.4 million and then in 2018 they declined sharply to $85.6 million followed by a smaller decline in 2019 where they ended the year at $81.5 million.



Restricted net assets have fluctuated until about 2010 but since that time they have been trending up going from $54.6 million in 2010 to $104.2 million in 2019.

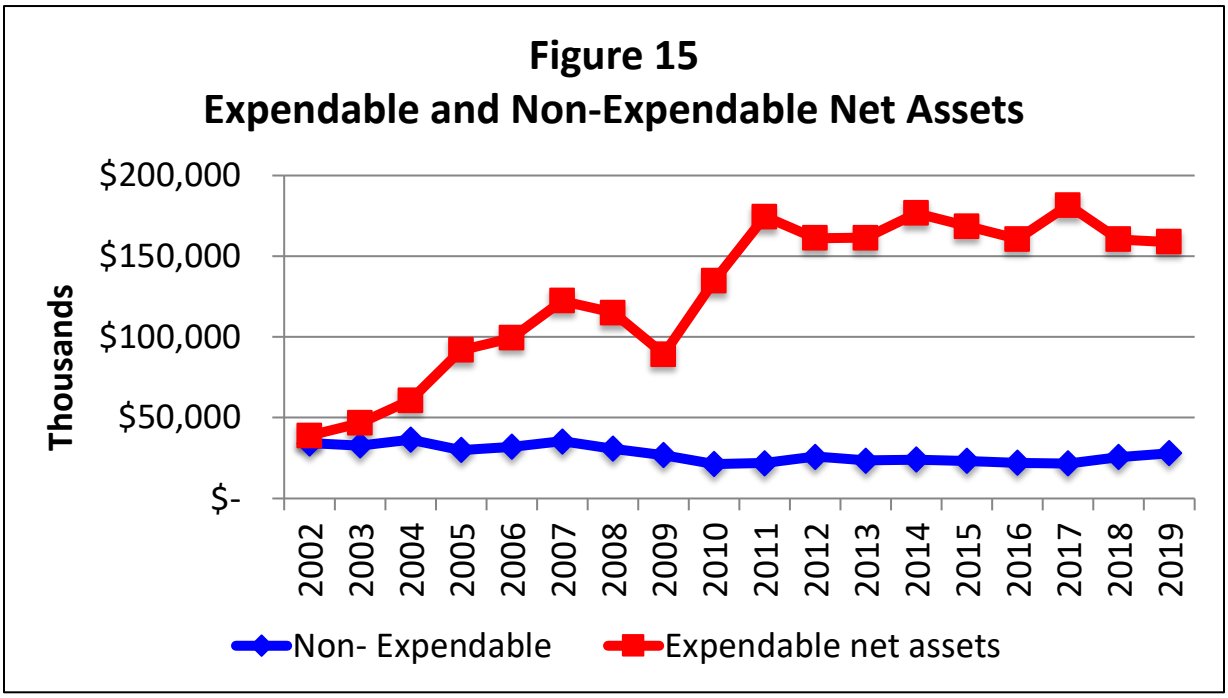
Expendable Net Assets:

At public institutions, in addition to dividing net assets between restricted and unrestricted, net assets can also be categorized as expendable, non-expendable and invested in capital assets. Expendable net assets consist of assets that legally could be used for operations or plant expenditures. Expendable net assets consist of expendable restricted net assets and unrestricted net assets. Expendable restricted net assets are subject stipulations by external entities that can be met by actions taken by colleges or fulfilled by the passage of time. Examples of restricted expendable funds are grants and restricted gifts or sinking funds set aside to make debt payments. Again these expendable funds are a measure of liquidity i.e., the ability to deal with unforeseen financial emergencies. As a result, expendable net assets are often referred to as reserves. Non-expendable net assets are funds that would not be spent for operations, for example the corpus of the endowment fund.

Table 7 and Figure 15 show expendable and non-expendable net assets. Expendable net assets increased from $39.0 million in 2002 to $176.8 million in 2014, with most of the increase coming from an increase in unrestricted net assets. Between 2014 and 2016 expendable net assets decreased, and then increased in 2017 181.6 million. They decreased sharply in 2018 and slightly in 2019 to ending at $158.8 million.

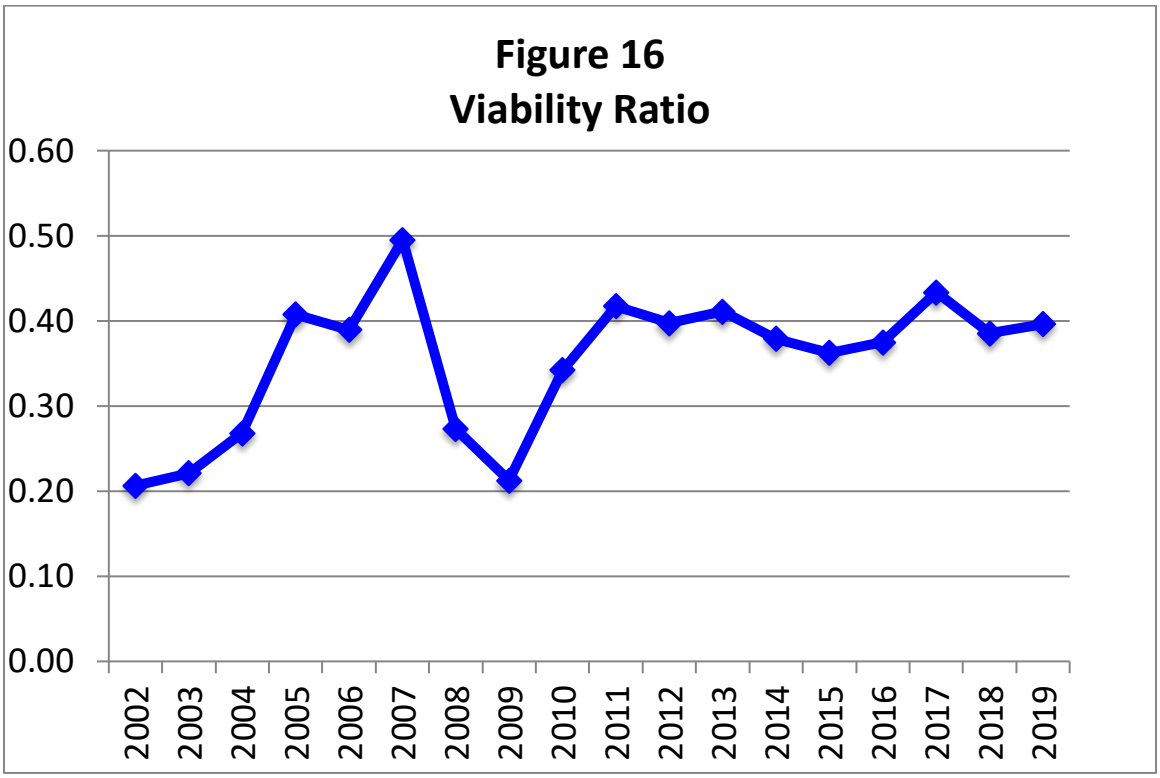
Table 7 also shows two commonly calculated ratios that are indicators of financial health. In fact, these are two of the three ratios that the ODHE calculates to assess the financial health of universities in Ohio in accordance with Senate Bill 6.

Table 7 Expendable and Non-Expendable Net Assets Thousands of $ For year ending June 30						
	2014	2015	2016	2017	2018	2019
Non- Expendable	$24,093	$23,364	$22,186	$21,797	$25,727	$28,087
Expendable	$-	$-	$-	$-	$-	$-
Restricted	$74,226	$73,982	$71,403	$73,257	$73,578	$76,075
Unrestricted	$102,540	$94,657	$89,227	$108,383	$86,766	$82,709
Total Expendable	**$176,766**	$168,639	$160,630	$181,640	$160,344	$158,784
Financial Net Assets	$200,859	$192,003	$182,815	$203,437	$186,071	$186,870
Total Debt	**$466,221**	**$465,281**	**$441,053**	**$430,770**	**$412,928**	**$397,492**
Operating Expenses + Interest	**$489,964**	**$473,894**	**$449,715**	**$438,843**	**$299,075**	**$370,068**
Ratios:						
Viability Ratio	0.38	0.36	0.36	0.42	0.39	0.40
Primary Reserve Ratio	0.36	0.35	0.35	0.42	0.38	0.39

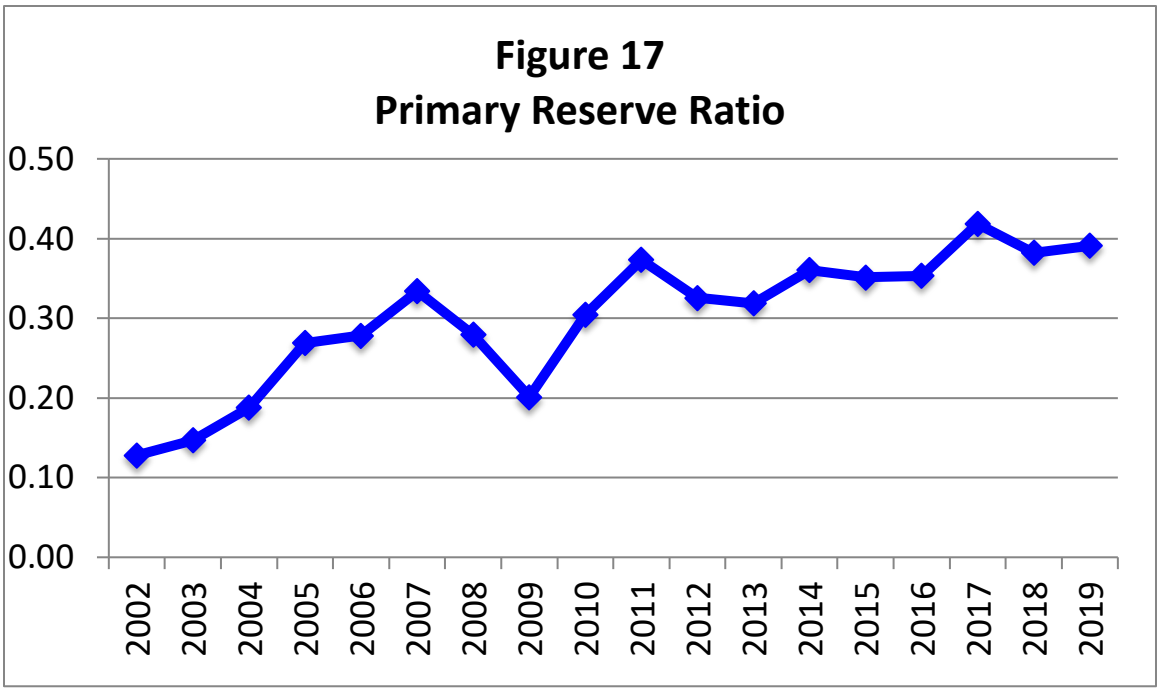


The first is the ratio is known as the viability ratio, which is the ratio of expendable net assets to long-term debt. Viability ratios are shown in Figure 16 In 2002, the viability ratio was 0.206, which meant that the University had sufficient expendable net assets to

pay 20.6 percent of its long-term debt. (This ratio is slightly higher than the published Senate Bill 6 ratio because the published ratio uses total long-term liabilities rather than debt in the denominator. The difference between long-term liabilities and long-term debt is sick leave liability, which should not be included in the denominator). This ratio improved in both 2003 and 2004 reaching 0.268 in 2004. This ratio continued to rise reaching 0.495 in 2007. In 2008 and 2009 the ratio declined sharply, with most of the decline being caused by the decline in expendable net assets. Between 2009 and 2013 the viability ratio rose and then declined slightly in 2014. The decline in 2014 was primarily the result of the additional debt taken on by the University. This viability ratio is a little on the low side. In 2019 among the 13 universities listed on the ODHE Web site, the University of Akron ranked 11th in the state in terms of its viability ratio, just below the University of Cincinnati. This means that relative to other state universities in Ohio the University of Akron has more debt.



The second ratio presented in Table 7 is the primary reserve ratio, which measures the ratio of expendable net assets to expenses. Primary reserve ratios are shown in Figure 17. This ratio has generally been trending upward. The big drop in 2008 and 2009 was due to the financial crisis associated with the Great recession. Since 2011 it has remained fairly stable. Among the 13 universities listed on the Ohio Board of Regents Web site for 2013, the University of Akron ranked 6th in the state in terms of its primary reserve ratio. In 2014, expendable net assets were enough to cover 40% of expenses or enough to cover more than 4.8 months of operating expenses. With respect to operating expenses this is a fairly high level of reserves.



In summary, by 2019 the University of Akron had total net assets of $479 million with $186.9 million in financial assets. Financial net assets as a percentage of net assets increased from 22.3% in 2002 to 39% in 2019. These financial net assets were divided between $158.8 million in expendable funds and $28.1 million in non-expendable funds. Since 2009 the current ratio has improved and other measures of assets to liabilities have been stable. For two key indicators, the primary reserve ratio has risen, and the viability ratio has remained flat since 2014. The viability ratio is still on the low side, but the primary reserve ratio is fairly high. The main area of concern with respect to the University's balance sheet remains its level of debt. The University took on a significant amount of debt in 2008 and again in 2014 and the University's debt to revenue ratio has been rising.

The Income Statement

The second major financial statement is the statement of revenues, expenses and changes in net assets or the statement of activities. This financial statement shows how the a college or university's finances are changing over a period of time, namely a fiscal year that normally runs from July 1 to June 30 of the following year. Again, fiscal years are always associated with the calendar year in which the fiscal year ends. So for example, from July 1, 2013 to June 30, 2014 is known as fiscal year 2014. This statement deals with flows and measures how the college or university's revenues and expenses are changing over time. Figure 18 shows the basic structure of the statement of revenues, expenses and changes in net assets.

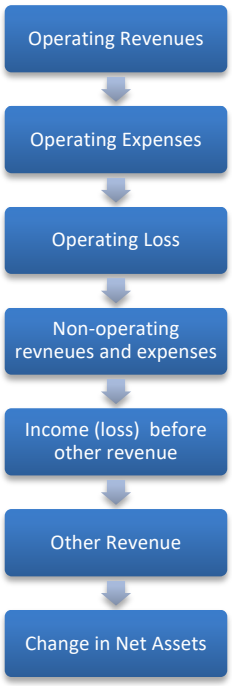


Figure 18.

There are two ways of keeping track of revenues and expenses. The cash method is the one most of us are familiar with. Using the cash method if a paycheck were deposited in a person's checking account on January1, 2014 for work done in December of 2013, it would have been considered income for 2014. Similarly if a person purchased a good or service and paid for it in December 23, 2013 but the good or service delivered on January 5, 2014 it would have been considered an expense incurred in 2013.

Most businesses, including universities, account for revenues and expenses, using the accrual method of accounting. This means they book revenues and expenses in the year the good or service is delivered, which may differ from the year when cash is received. For example, a paycheck received on January 1, 2014 for work performed in December of 2013 would count as revenue in 2013. Similarly, the expense paid for in 2013 for a service delivered in 2014 would count as an expense in 2014, because that is

when the good or service was delivered. Accrual accounting is used because it provides a more accurate picture of a university's financial situation.

Revenue is the inflow of resources to a university for the services it provides. Revenues at public universities are divided into "operating revenues" and "non-operating" revenues. Operating revenues come primarily from student tuition and fees. Other sources of operating revenues are grants and contracts, sales, and auxiliaries. Sales occur when a university provides some sort of a service to the community and charges for offering that service. Auxiliaries are operations that generate revenue that are unrelated to the core mission of a university such as parking, intercollegiate athletics, running a student union, food service or running a bookstore. Non-operating revenues include state appropriations, gifts and investment income. Recently, GASB has started counting Pell Grants as non-operating revenue, so at a number of institutions it appears that operating revenue from Federal grants declined. However, this reclassification has no effect on a university's bottom line; it simply involves moving a portion of federal grants and contracts to another section of the income statement (Statement of Revenues, Expenses and Change in Net Position).

When looking at investment income great care must be taken. Investment income includes interest and dividends but it also includes capital gains and losses. Investments are valued at "fair market" value, which means when stock or bond prices go up the value of an institution's investments go up and when stock or bond prices go down the value of an institution's investments go down. In most cases, large swings in the value of investments are due to unrealized gains or losses, meaning that they are paper gains or losses. For that reason, when calculating "net income" for universities many bond rating services subtract the value of investment income and add 4% of the value of investments taken over a three-year rolling period. These paper gains or losses are often quite large, but they do not give us any insight into the financial operations of an institution.

Expenses for the most part represent an outflow of resources from a university (costs incurred). There are operating and non-operating expenses. Operating expenses include instructional expenses, expenses for public service, administrative services such as academic support and institutional support, plant operations and maintenance, scholarships and fellowships, expenses for auxiliary operations and depreciation. Operating expenses can be listed by functional categories such as those discussed above or they can be listed as natural categories such as wages and benefits or purchases of goods and services. It is often the case that the "natural classification," which contains personnel costs, are not reported in the main financial statements, but are reported in the notes to the financial statements. Non-operating expenses consist primarily of interest paid on debt.

The difference between operating revenues and operating expenses is known as the operating loss. In publicly funded or assisted colleges the difference between operating revenues and operating expenses will always be negative. This is because

public institutions of higher education rely on state appropriations and Pell grants, which are not counted as part of operating revenue. This is simply an accounting quirk. If an administrator claims that a university is running an operating loss, faculty members should be aware of the fact that virtually all public institutions run operating losses and these losses, in and of themselves, are meaningless.

The difference between non-operating revenues and non-operating expenses is known as net non-operating revenues. The sum of operating losses and net non-operating revenues is known as income (loss) before other revenue and can be thought of as "net income." Net income can be an important indicator of how well a university is performing financially.

However, there are three other major sources of revenue for universities. These are capital appropriations, capital grants and gifts and additions to permanent endowments. These sources of revenue are restricted and either the corpus (principal) cannot be spent or the funds are earmarked specifically for capital projects and as such cannot be used to support salary and benefits directly. Nevertheless, when colleges receive capital appropriations and gifts, it frees up funds generated through operations which otherwise would have to be used to support capital projects. Therefore, funding for capital projects, whether by state appropriation or by gift, is an important source of revenue.

Unfortunately, capital appropriations and gifts tend to be lumpy (high in some years, very small in others) and so it may be difficult to count on them as part of a regular revenue stream. However, most universities have a fairly good idea of a certain minimum level of increases in their permanent endowment as well as capital appropriations and gifts and can factor these revenues into their spending plans.

The sum of Income (losses) before other revenue ("net income") along with capital appropriations and gifts and increases to permanent endowment is equal to the increase or decrease in net assets. The change in net assets is in effect the bottom line for a college in a given year. If there is an increase in net assets the flow of revenue into the university has been greater than expenses and if there is a decrease in net assets the university has experienced a loss.

A final issue that demands our attention in trying to understand revenues and expenses is the treatment of non-cash expenses such as depreciation. Historically (pre GASB-34), universities did not account for depreciation of fixed assets. Therefore, at the end of a fiscal year if revenues and other additions exceeded expenditures, universities experienced an increase in "fund balances." An increase in fund balances was the equivalent to an increase in net assets except that net assets also account for depreciation.

When colleges or universities purchase a fixed asset that will be used over a long period of time, the amount of money they spend on construction is not considered an

expense on the income statement. What universities do is to break up the money they spend on construction and renovation by allocating that expenditure over a fixed period of time. The amount of time depends on the particular type of asset being purchased. The expenditure on a building is typically allocated as an expense over a 30-year period. The allocation of this expenditure over a period of time is known as depreciation. Thus, depreciation is a way of allocating the cost of fixed assets over the useful life of those assets. It is an expense and therefore it reduces the net assets of a university.

Each year when a college or university calculates the value of its net assets invested in plant and equipment is subtracts the depreciation for that year. The sum of all the depreciation that has been subtracted is known as accumulated depreciation. Often people have the impression that depreciation is a way of funding future investments i.e., that accumulated depreciation somehow represents a savings account or reserves for future investments and the use the term "funding depreciation." There is no such thing as funding depreciation. It is the case, that colleges and universities can set aside unrestricted funds that are designated for future investment in plant and equipment but this has nothing to do with depreciation per se.

To pay for new investments for-profit businesses, use retained earnings (reserves accumulated from past profits), issue new stock to shareholders or borrowing by selling bonds. Like colleges and universities when they put up a new building there is a large expenditure of cash but again since the fixed asset is going to last a long period of time this large outlay of cash is not considered an expense. As is the case with a college or university, the business divides this expenditure over the useful life of the asset by depreciating the asset. Thus for a business depreciation is an expense, which reduces its net income. Since there is a relationship between expenses on the income statement and liabilities on the balance sheet, whenever expenses go up there will be an increase in liabilities and hence a decline in net assets.

However, in the case of a university, whether this diminution of net assets represents a real decline in the wealth of an institution, in the same way as it represents a decline in wealth in a for-profit company, is questionable. The main difference between the way capital is financed in universities and in for-profit businesses is that universities receive a portion of the cost of purchasing capital assets from state capital appropriations and from private gifts. In that sense, one could argue that depreciation overstates the cost of capital assets for universities in comparison to for-profit businesses.

Other non-cash expenses can also distort the actual health of an institution. In a for profit business it is more important that any post-retirement benefits be funded by assets. Post-retirement benefits are a liability because a business or institution has promised to pay these benefits in the future. As long as the benefits are not too large relative to overall expenses and the institution or business continues to exist it can meet its obligations from current expenses. This is a pay as you go situation. However, if a business or institution were to go bankrupt having not set aside sufficient assets to

meet future claims (liabilities) then retirees would loses some or all of their retirement benefits. However, no public institutions of higher education have gone bankrupt since they started offering post retirement benefits and many have post-retirement benefits that are totally unfunded i.e., no assets have been set aside to meet future obligations. Forcing public institutions to abandon pay as you go is simply a pretense for cutting public pensions and post-retirement health benefits.

Changes brought about by GASB 68 and 75 also affect expenses. Increases in the unfunded liabilities of pensions and OPEB show up in income statements as an increase in expenses. Conversely, a decrease in the unfunded liabilities of pensions and OEPB will show up in the income statement as a reduced expense. These changes make the income statement much less useful for analyzing the financial health of an institution. There are ways of adjusting expenses but the process for doing so is not transparent. It is possible to estimate the impact of the changes in these unfunded liabilities for total expenses although even this process can result in inconsistencies when comparing expenses over time, particularly when institutions are forced to restate their net assets as was the case for the University of Akron in 2017. For example, calculating the change in net assets using ODHE adjusted data for the balance sheet in comparison to ODHE adjusted data for the income statement, results in inconsistencies. Inconsistencies occur in 2015, 2016, 2018 and 2019.

Total Revenue and Total Expenses

Table 8 shows the consolidated position of the University for the years 2014-2019 and Table 9 shows total revenue, adjusted total expenses and adjusted changes in net assets. Figure 19 shows total revenue and total adjusted expenses for the University. (The lower end of the graph has been scaled to start at $250 million to make it easier to see the distinct lines in the graph). Total revenue rose between 2002 and 2012. Since 2012 total revenue for the University has been declining. Enrollment declined 31% between 2012 and 2019 and total revenue declined by 22.1%.

Adjusted total expenses rose until 2013. However, since that time they have been falling, declining by 19.9% between 2013 and 2019.

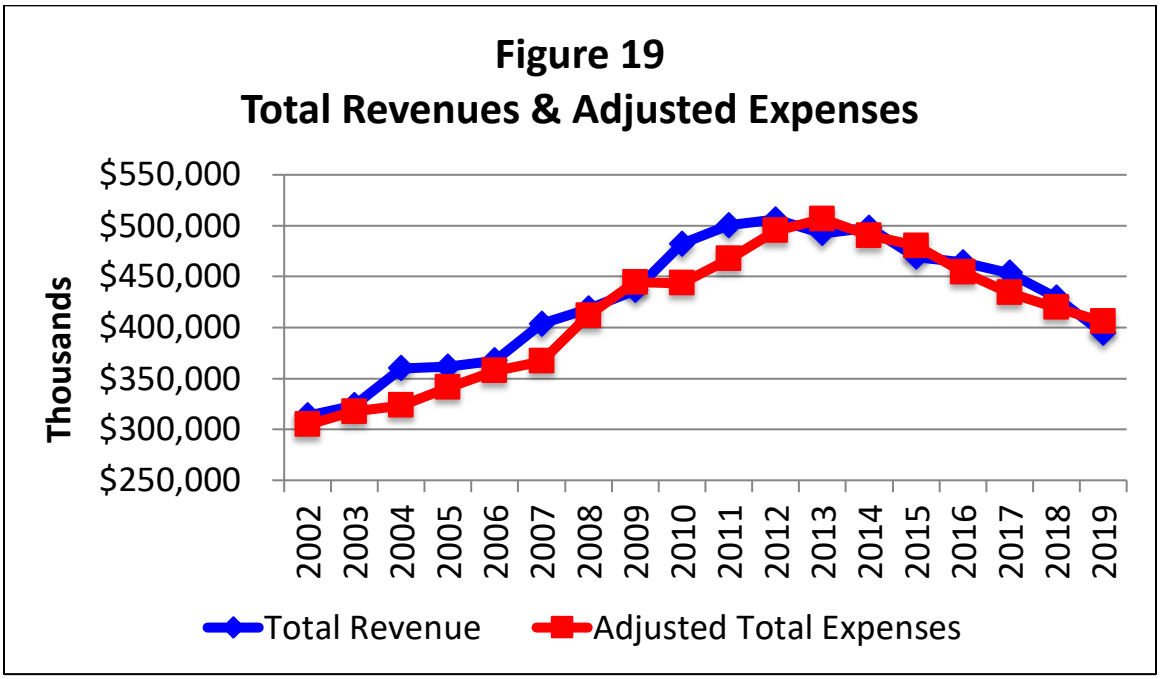
Revenues

Most of the major sources of revenue for the University have been falling since 2012. Figure 20 shows the major sources of revenue for the University. Since 2012 operating revenue has fallen 34.2%. Tuition revenues have declined 34.1% and revenues from auxiliary enterprises have also declined by 34%. These are directly related to the decline in enrollment at the University. In addition, revenue from Federal grants and contracts has declined by 46% and this does not include revenue from Pell grants. Revenue from sales and services declined by 58.6%.

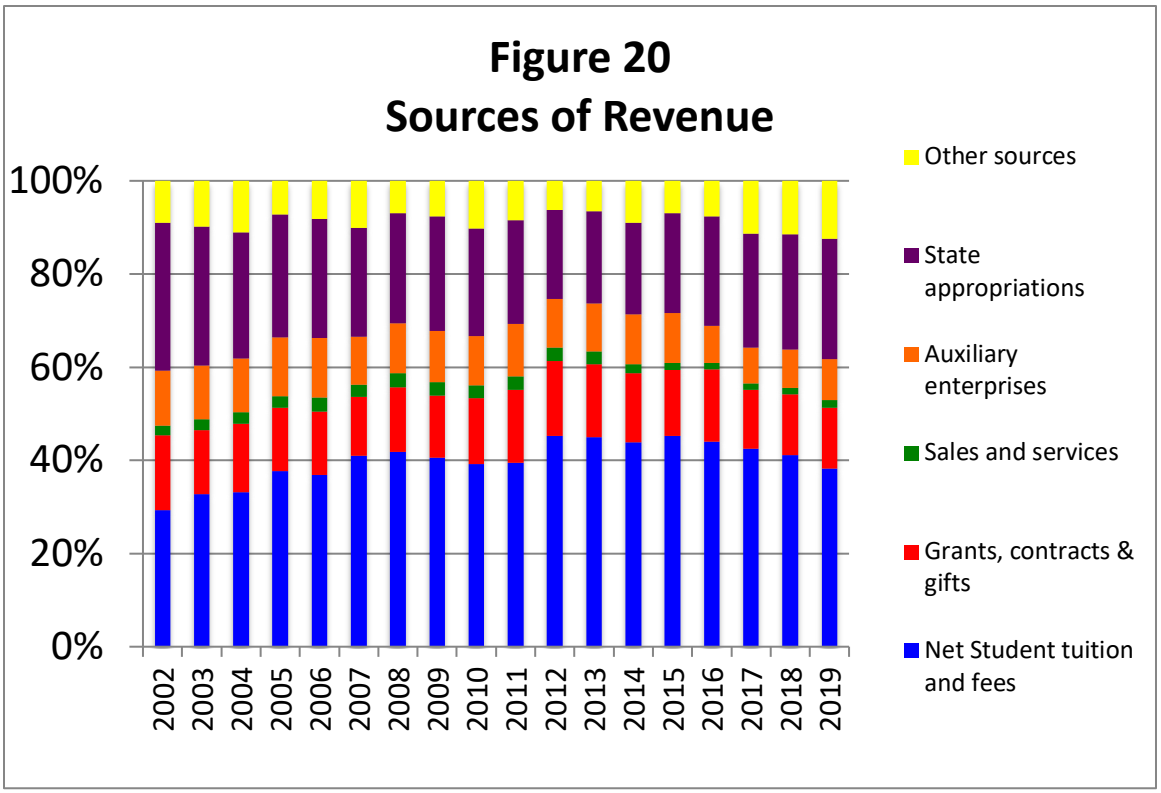
Table 8 Revenues, Expenses and Change in Net Position Thousands of $ For year ending June 30						
	2014	2015	2016	2017	2018	2019
Operating revenues:						
Net Student tuition and fees	$218,424	$212,570	$204,455	$192,574	$176,827	$150,840
Federal grants and contracts	$21,275	$17,542	$25,604	$15,336	$13,884	$11,782
State grants and contracts	$7,893	$8,155	$6,944	$5,398	$5,442	$7,305
Local grants and contracts	$338	$358	$547	$526	$180	$215
Private grants and contracts	$9,691	$8,052	$9,511	$10,418	$9,154	$7,904
Sales and services	$9,868	$6,770	$6,417	$6,301	$6,046	$6,126
Auxiliary enterprises	$53,535	$50,787	$37,211	$34,654	$35,187	$34,965
Other sources	$1,320	$979	$748	$1,241	$2,273	$2,093
Total operating revenues	**$322,343**	$305,226	$291,502	$266,490	$249,023	$221,230
Operating expenses:						
Educational and general:						
Instruction and departmental research	$166,553	$162,172	$157,774	$162,843	$66,187	$114,466
Separately budgeted research	$34,135	$30,497	$29,200	$25,958	$17,963	$19,593
Public service	$9,478	$6,985	$7,147	$6,552	$3,455	$4,581
Academic support	$35,058	$35,115	$35,213	$33,898	$21,083	$29,130
Student services	$13,921	$14,139	$12,375	$14,443	$9,849	$13,153
Institutional support	$54,590	$51,505	$50,856	$34,842	$27,678	$34,343
Operation and maintenance of plant	$23,574	$23,382	$22,107	$22,747	$19,324	$18,410
Scholarships and fellowships	$25,279	$25,152	$25,133	$28,074	$28,979	$22,928
Auxiliary enterprises	$66,367	$64,489	$47,412	$44,945	$43,123	$48,624
Depreciation	$39,282	$41,408	$43,835	$44,979	$47,368	$46,354
Loss on disposal of property		$-	$-	$-	$-	$-
Total operating expenses	**$468,237**	$454,844	$431,051	$419,281	$285,008	$351,584
Operating loss	**$(145,894)**	**$(149,618)**	**$(139,549)**	**$(152,790)**	**$(35,985)**	**$(130,354)**

Table 8 Continued Revenues, Expenses and Change in Net Position Thousands of $ For year ending June 30						
	2014	2015	2016	2017	2018	2019
Non-operating revenues & expenses						
State appropriations	$97,877	$100,218	$109,184	$111,223	$106,360	$101,971
Federal Grants	$34,475	$32,186	$28,883	$25,878	$27,261	#REF!
Federal Fiscal Stabilization Funds						
Gifts	$6,720	$6,804	$7,006	$5,316	$6,412	$7,980
Investment Income	$19,896	$(658)	$293	$13,965	$7,956	$10,283
Interest on debt	$(21,727)	$(19,050)	$(18,663)	$(19,562)	$(18,940)	$(18,484)
Transfer of workers' compensation liability to State of Ohio						
Distributions to the University	$12,873	$16,186	$14,465	$13,903	$15,929	$19,256
Other non-operating revenues (expenses)	$(237)	$(396)	$(823)	$576	$490	$220
Net non-operating revenues	$149,876	$135,289	$140,345	$151,298	$145,467	$145,719
Income (loss) before other changes	$3,982	$(14,329)	$796	$(1,492)	$109,483	$15,365
OTHER CHANGES						
State capital appropriations	$3,180	$8,384	$11,739	$15,913	$12,744	$6,092
Capital gifts and grants	$281	$606	$697	$203	$1,562	$734
Additions to permanent endowments	$283	$439	$104	$270	$1,679	$2,238
Total other changes	$3,745	$9,429	$12,539	$16,387	$15,986	$9,063
Increase in net assets	$7,726	$(4,900)	$13,336	$14,895	$125,468	$24,428
NET ASSETS						
Net assets - beginning of year	$488,165	$495,891	$490,991	$504,327	$519,222	$644,691
Net assets - end of year	$495,891	$490,991	$504,327	$519,222	$644,691	$669,119

Table 9 Total Revenue, Adjusted Expenses and Adjusted Changes in Net Assets Thousands of $ For year ending June 30						
	2014	2015	2016	2017	2018	2019
Total Revenue	$497,927	$469,390	$463,873	$453,738	$429,416	$394,497
Adjusted Total Expenses	$490,201	$480,298	$454,631	$434,204	$419,704	$405,896
Adjusted Change in Net Assets	**$7,726**	**$(10,908)**	**$9,243**	**$19,534**	**$9,713**	**$(11,400)**



Between 2012 and 2019 enrollment at all Ohio universities declined by 5%. Largely this represents the changing demographics of the state, particularly the decline in traditional age college students. But clearly something else is going on at the University of Akron where enrollment declined by 31%, which is the sharpest decline in enrollment at any of the public 4-year institutions in Ohio. The decline in enrollment is so severe that the share of tuition and fees as percent of total revenue has declined from 46% to 39%.



Under GASB 34 & 35 state appropriations are not treated as operating revenue, although clearly they are one of the most important sources of revenue to fund the operations of a public university. Figure 21 shows state appropriations from 2002-2019.

In 2002, state appropriations were greater than tuition and fees at $99.5 million. However, by 2007 state appropriations had declined to $93.9 million. In 2008, there was a substantial increase in state appropriations with state appropriations rising to $99.1 million, just shy of the 2002 level. In 2009, the University received another substantial increase in state appropriations, which rose to $107.7 million. In 2010 state appropriations declined but that decline was more than offset by the Federal fiscal stimulus, so total state appropriations, including the stimulus, rose to $111.1 million. Since 2010 state appropriations have been trending upward slightly, with substantial increases in 2016 and 2017. However, in 2018 and 2019 declined but as a share of revenue it increased from 19% in 2012 to 26% in 2019.

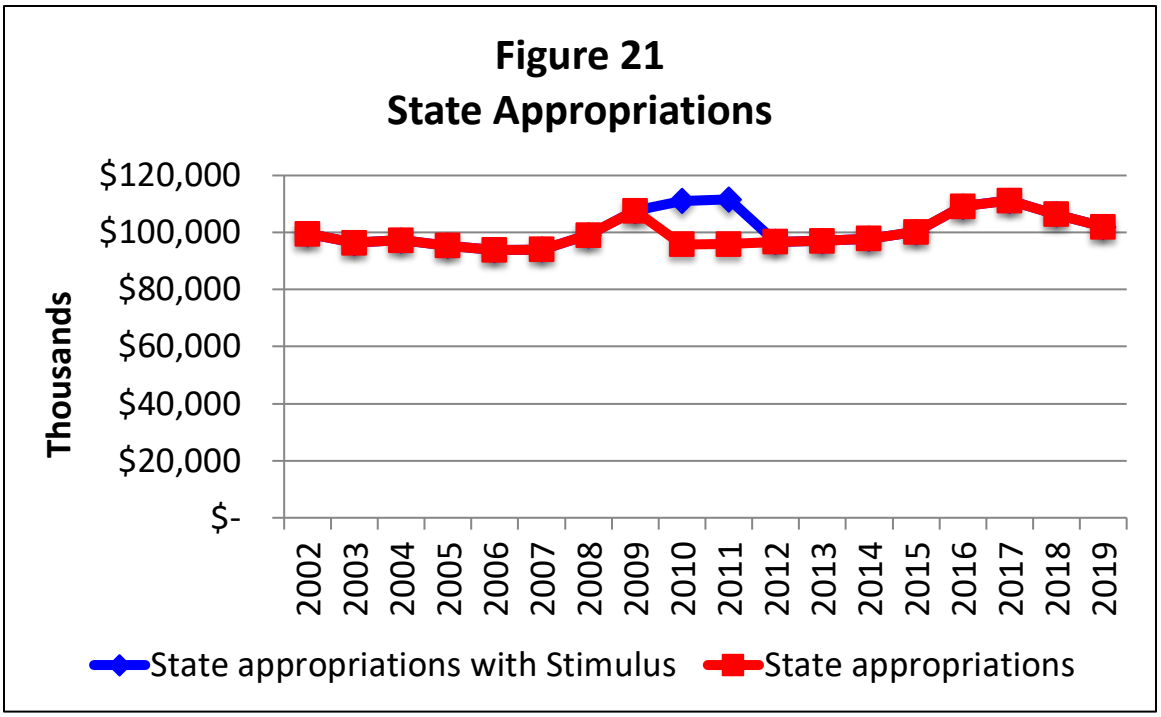
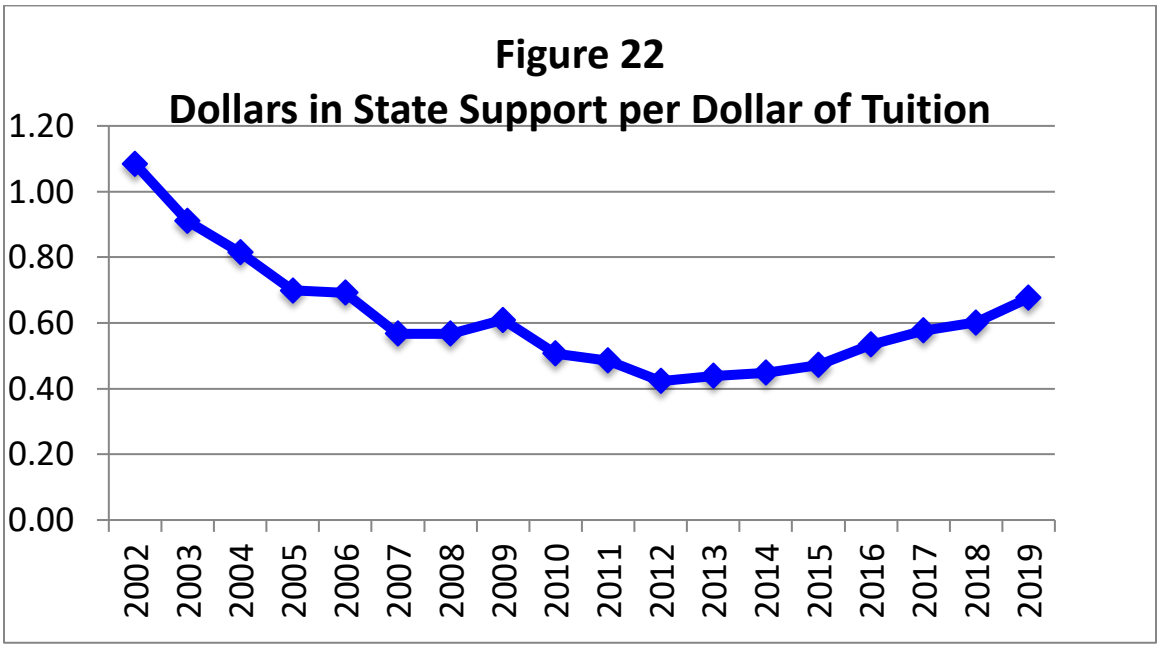


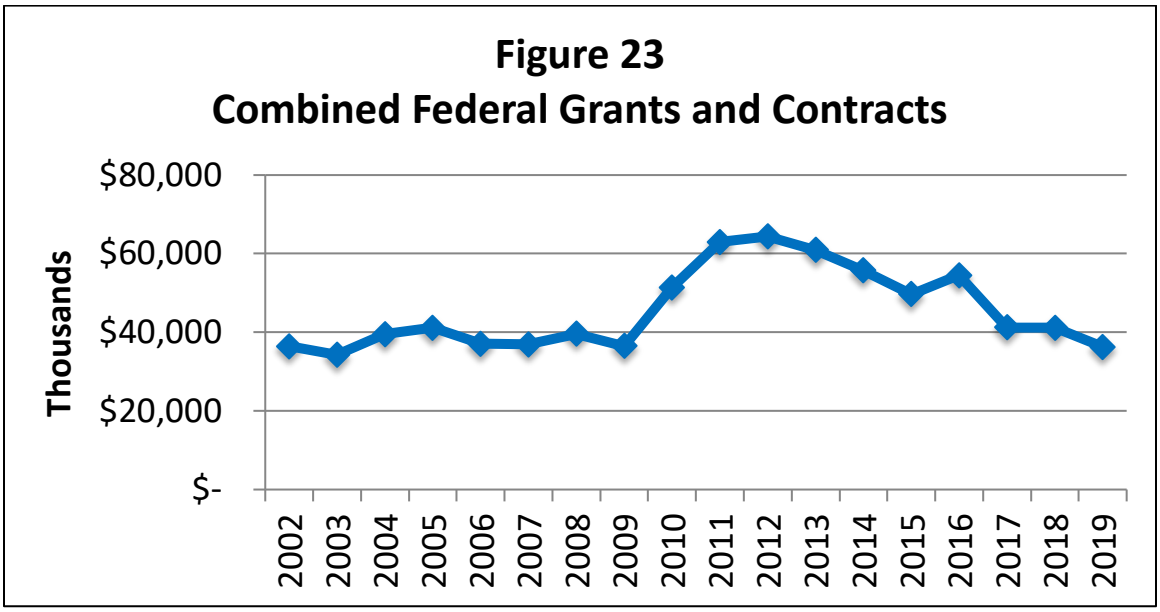
Figure 22 shows the relative decline in state support from 2002-2014. For every dollar of tuition revenue in 2002 the University received $1.08 from the state. By 2008 for every dollar of tuition the University received just $0.57. However, in 2009 the University received $0.61 in state appropriations for each $1 of tuition. Between 2009 and 2012 the ratio of state dollars to tuition resumed its decline reaching a low of $0.42 in 2012. Since 2012 this ratio has been rising and ordinarily this would be an encouraging sign. However, in the case of the University of Akron the increase in the ratio is not due primarily to increased state support but to declining tuition revenue.



Another important source of revenue for the University is Federal grants and contracts. Federal grants and contracts show up in two places on the statement of revenues, expenses and change in net position. They show up under operating revenue as well as under non-operating revenue. In 2008, some Federal grants, including Pell grants were reclassified from being operating revenue to non-operating revenue. This led the University in its 2008 financials statement to restate Federal grants and contracts for 2007.

To get a better picture of what has happened to Federal grants and contracts over time, Figure 23 shows all Federal grants and contracts for the University from 2002 to 2019. The graph reveals that between 2002 and 2009 the total level of Federal grants and contracts did not change substantially. However, from 2009 to 2012 there was a dramatic increase in Federal grants and contracts, which increased from $36.5 million to $64.4 million. Since 2012 Federal grants and contracts have been declining. The decline started with Pell grants but since 2016 Federal grants and contracts for research have also declined.

Figure 23
Combined Federal Grants and Contracts



Expenses

Expenses have become much more difficult to examine because of the impact of adjustments for GASB 68 and 75. For example in 2018 GASB adjustments added $115.8 million to operating expenses. But how this gets allocated to various functional categories is totally opaque. This comes on top of the fact that overtime there appears to be some changes in how many institutions allocate functional costs between various categories. In addition, when institutions restate data it often creates inconsistencies.

On the expense side, operating expenses increased from $287.1 million in 2002 to $468.2 million in 2014. Since 2014 operating expenses have been declining every year and in 2019, they were $387.4 million. So, operating expenses have declined 17.3%. The decline in expenses is actually more significant, masked by an 18% increase in depreciation, which is a non-cash expense. If one excludes depreciation, operating expenses have actually fallen by 20.5% since 2014. Operating revenues, including the state appropriation and Pell grants fell 22%.

Past reports have always looked at how the various categories of functional expenses changed to help faculty understand how the priorities of the institution were changing. But changes in the categorization of expenses and adjustments have made this a less reliable indicator of priorities. IPEDS publishes data on wages and salaries that are not subject to manipulation or adjustments and so looking at salaries is probably a better indicator an institutional priorities. But even salaries have a short coming in that they miss money spend by administrations on consultants and they do not account for outsourcing which has been prevalent at most institutions of high education over the years.

Figure 24
Salary Data from IPEDS

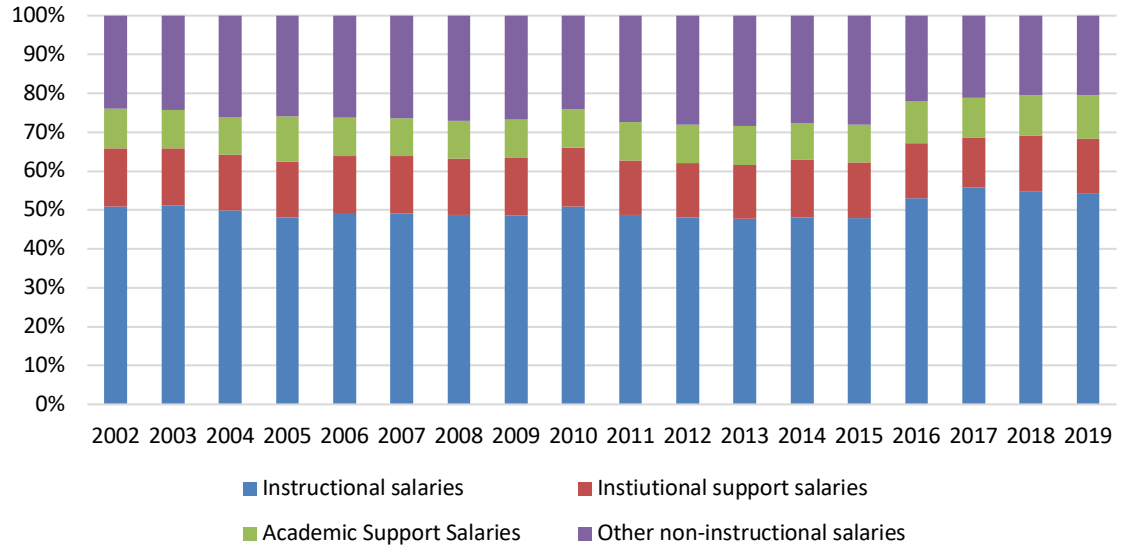


Figure 24 shows the allocation of salaries at the University from 2002-2019. From 2002 through 2015 instructional salaries as a percent of total salaries decreased from 51% to 48%. From 2015 to 2017 instructional salaries rose to 56% of total salaries but since then have declined to 54% of total salaries. Instructional salaries include the salaries of everyone who is teaching, including full-time, part-time and GTAs. IPEDS data on staffing show that in 2015, FT instructional faculty were 22% of the total staff at the University and were still 22% of all staff in 2019. Again, using IPEDS data and the CPI the average

salary for full-time has fallen 3% adjusted for inflation between 2013 to 2019. Figures 25 and 26 show the same data for the 2002 and 2019 respectively.

Figure 25
IPEDS Salaries 2002

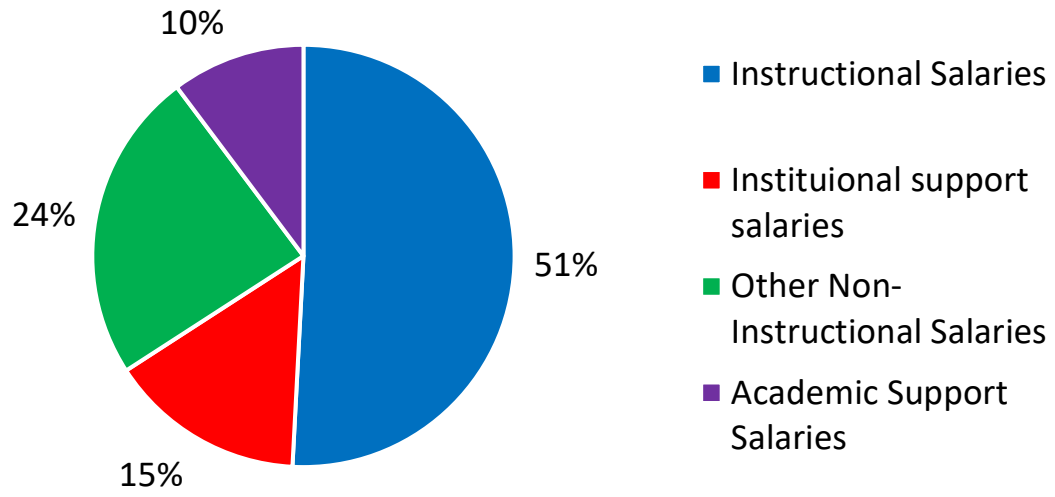
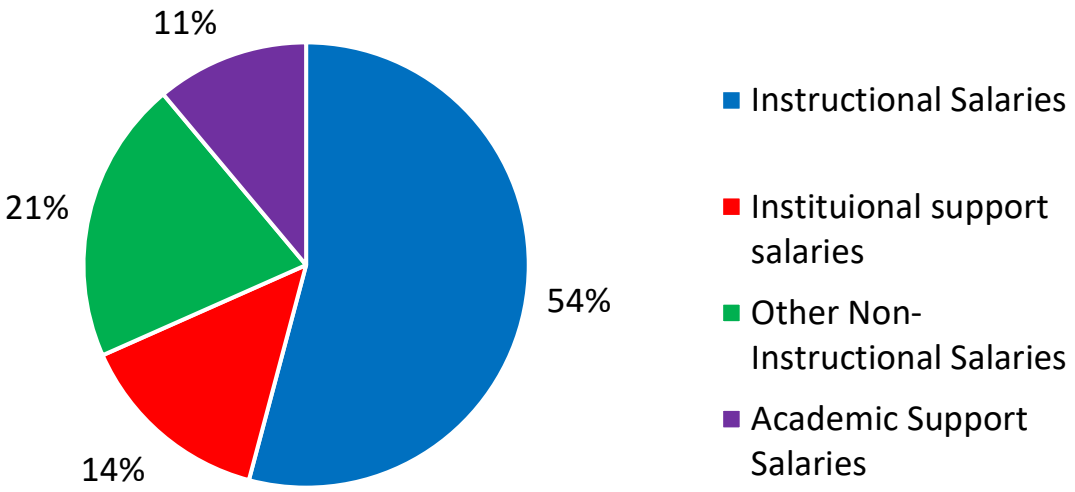
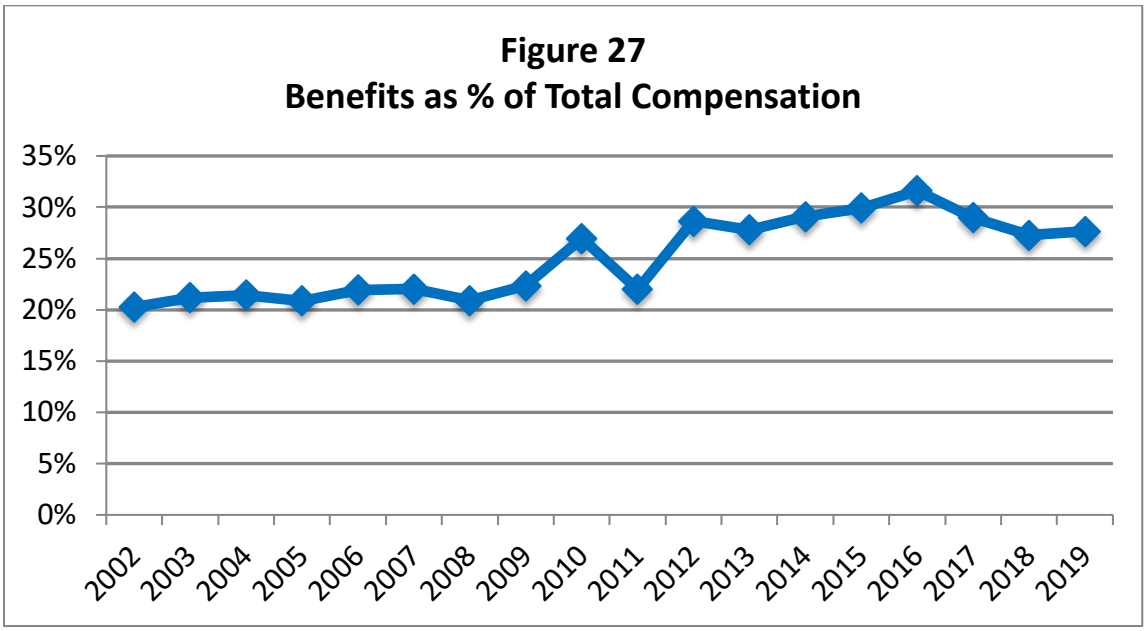


Figure 26
IPEDS Salaries 2019

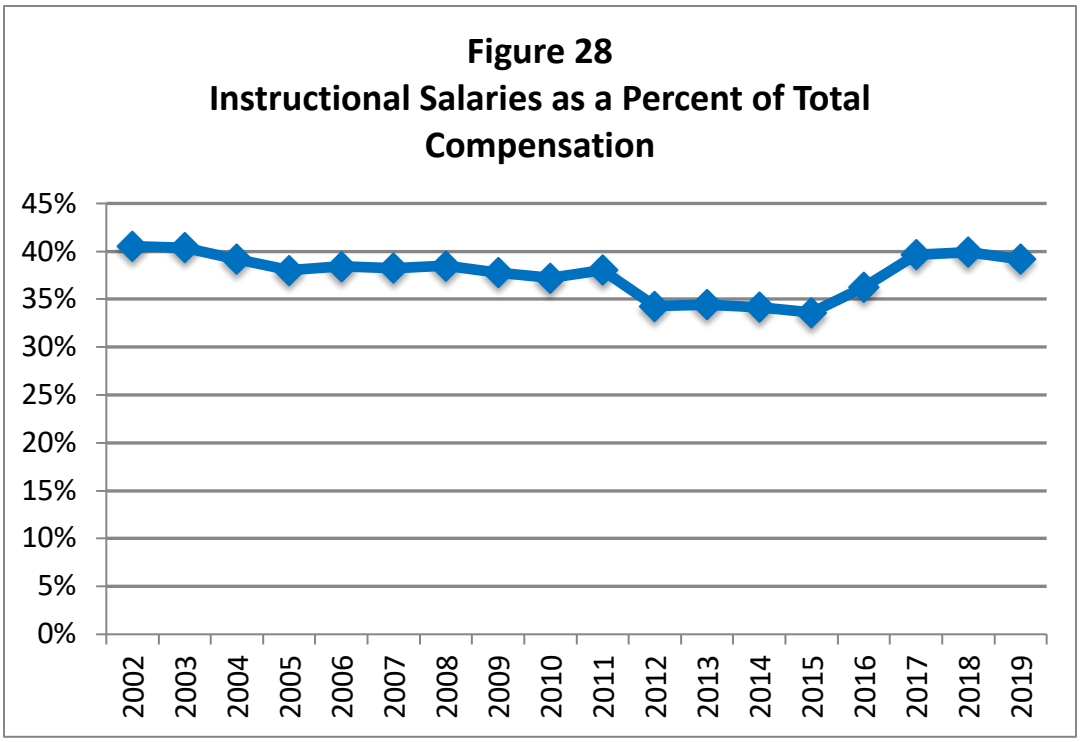


Using data from IPEDS on total salaries and data on compensation (wages and benefits) from the cash flow statement we can also calculate benefit rates for employees

at the University. Figure 27 shows benefit rates from 2002 through 2019. To be clear, these benefit rates are for all employees, both full-time and part-time combined. More part-time employees lower the benefit rate since they generally do not get benefits such as health insurance. Clearly there has been an increase in benefit rates rising from 20.3% in 2002 to 31.6% 2016. However, from 2016 to 2019 benefit rates declined to 27.6%. At the same time, the ratio of full-time to part-time staff went from .87 to 1.11, so while the proportion of full-time to part-time has been rising benefit rates have been fall and this represents a real decline in compensation.



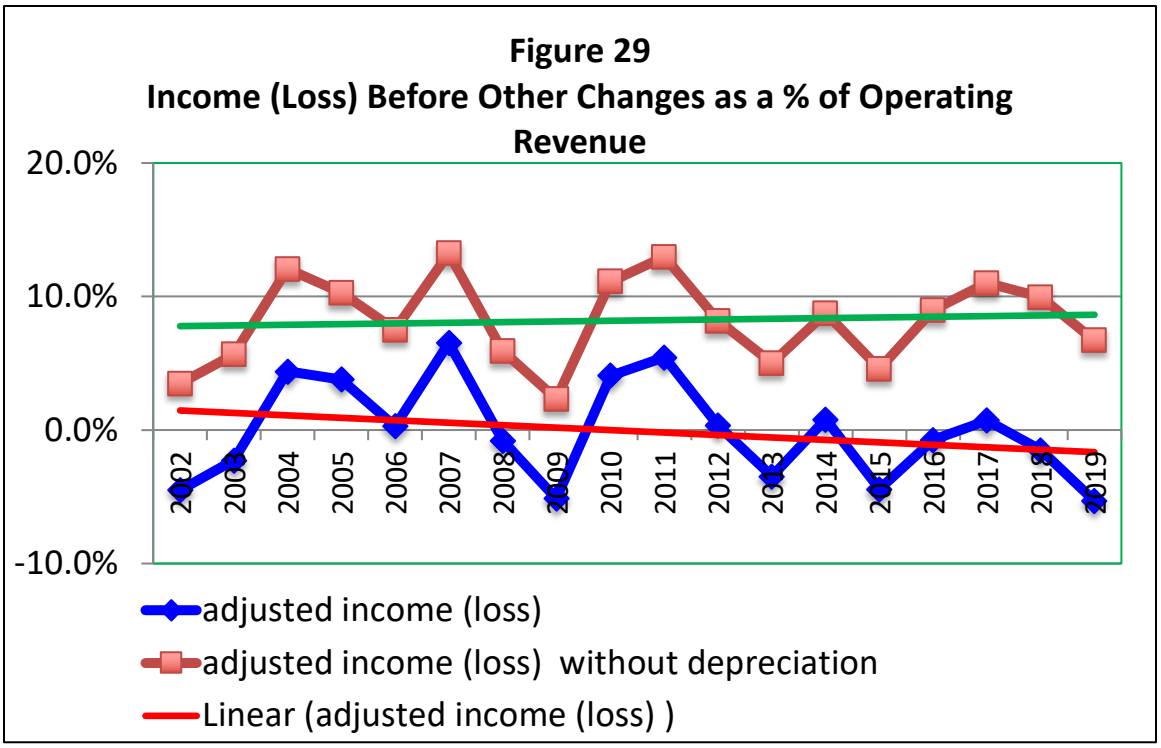
Finally, with respect to the allocation of resources, IPEDS and data on compensation from cash flows to calculate instructional salaries as a percent of total compensation. This data is shown in Figure 28. In 2002 instructional salaries were 40.5% of total compensation. That percentage declined, to 33.6% in 2015. Since 2015 instructional salaries as a percent of compensation have risen to 39.2% which is still below the 2002 level.



Net Income and Changes in Net Position

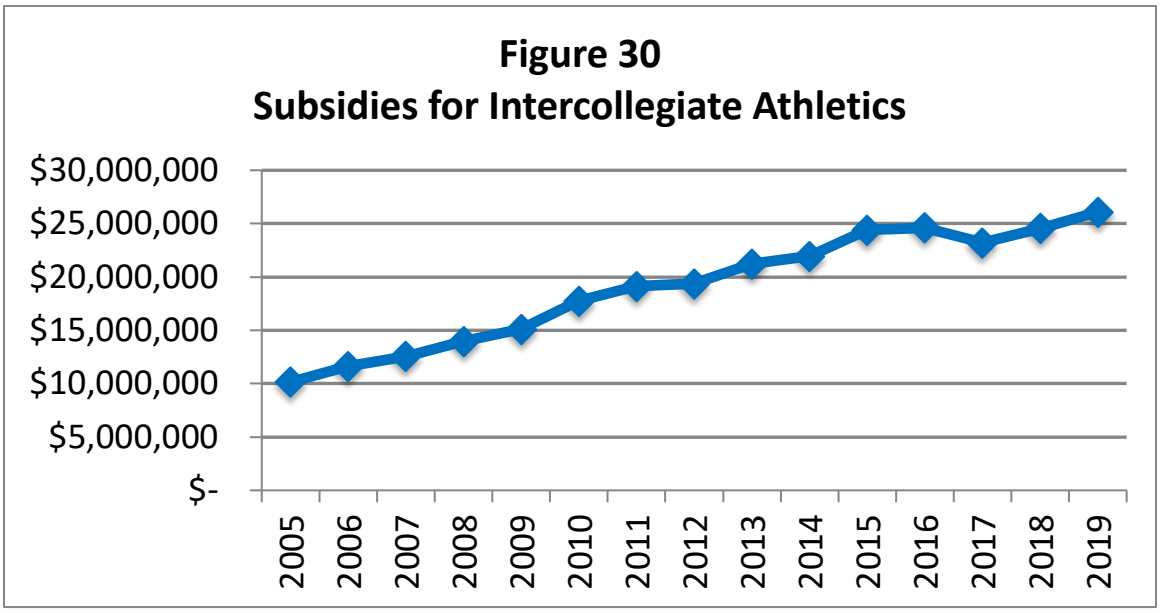
One indicator of how a university is doing is its income (loss) before other changes (net income from operations). Net income is the difference between revenues and expenses, excluding the revenues a university receives for capital equipment and buildings or additions to its endowment. For this calculation we use adjusted expenses. Figure 29 shows the net income as a percentage of operating revenue. of the University. Operating revenue is defined as total revenue minus state capital appropriations, capital gifts and grants and additions to permanent endowments.

In 9 of the last 17 years the University has had negative net income. Moreover, if one looks at the trend line for this data series it has a downward trend. Faculty often wonder how an institution can run operating deficits for such a large proportion of time. The key to understand this phenomenon is to recognize that expenses include depreciation, which is a non-cash expense. The second series shows the net income ratio without depreciation. In this case, every year shows positive net income and the data is slightly trending upward. This shows why looking at cash flows is so important, because they remove all of these non-cash expenses, as well as adjustments for changes in accounting standards and accrual adjustments. We will look at cash flows in detail in the next section of this report.



As we discussed earlier, revenue for the University has been declining largely due to declining enrollments. The take-away from looking at what has been happening to net income is that thus far the University has been managing to deal with the decline in revenue by reducing expenses.

Next we turn to the issue of intercollegiate athletics. The data in Figure 30 comes from the USA Today NCAA database and it shows the increase in subsidy for intercollegiate athletics. Over the years this subsidy has come from either student fees or school funds. For students in effect this means that their tuition dollars are subsidizing athletics instead of paying for instruction.



With the exception of 2017 increases in the subsidy for intercollegiate athletics have continued unabated. What makes these subsidies so stark is looking at how much each student pays from his or her tuition each year to support intercollegiate athletics. Figure 31 show the tuition dollars per student going to intercollegiate athletics. In 2019 each student is paying $1,274 per year to support intercollegiate athletics. Since 2005 tuition and fees going to support intercollegiate athletics has risen at an average annual rate of 7.9%

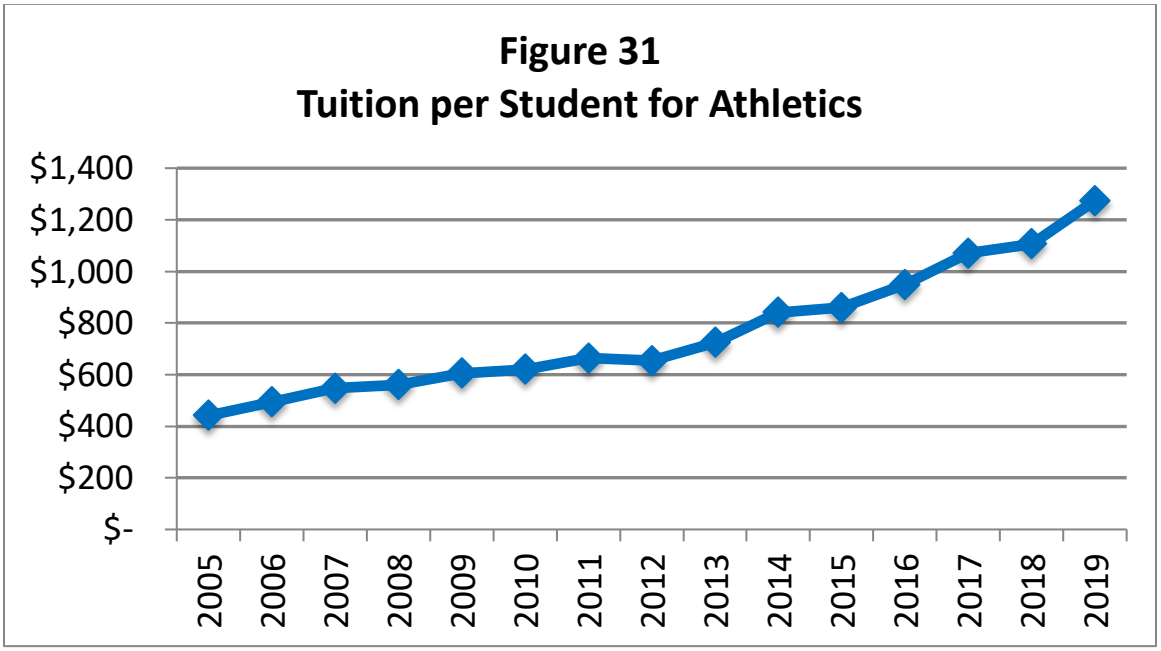


Figure 32 compares the percentage changes in athletic subsidies to the percentage changes in instructional salaries. There have only been two years in which the percentage change in instructional salaries exceeded the percentage change in athletic

subsidies. From 2005 through 2019 instructional salaries rose 19% when the subsidy for intercollegiate athletics rose 157%.

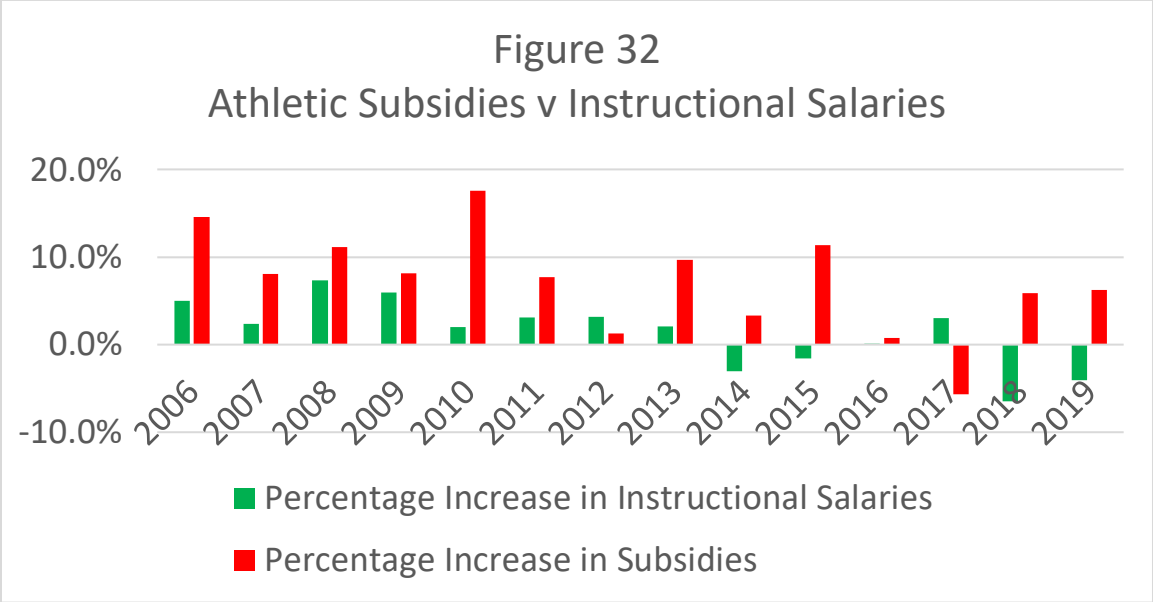
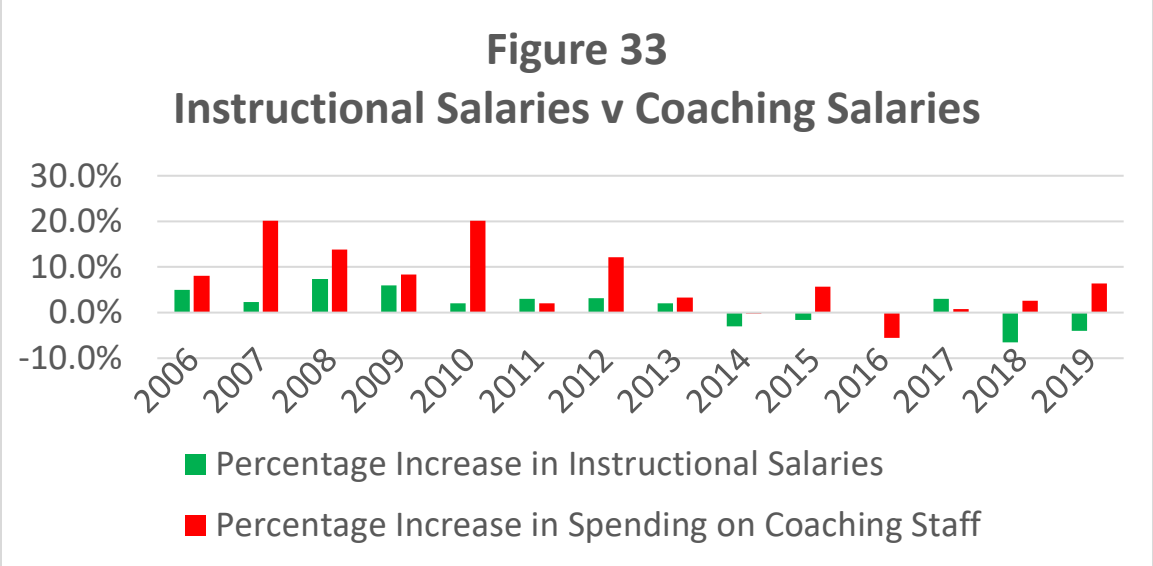
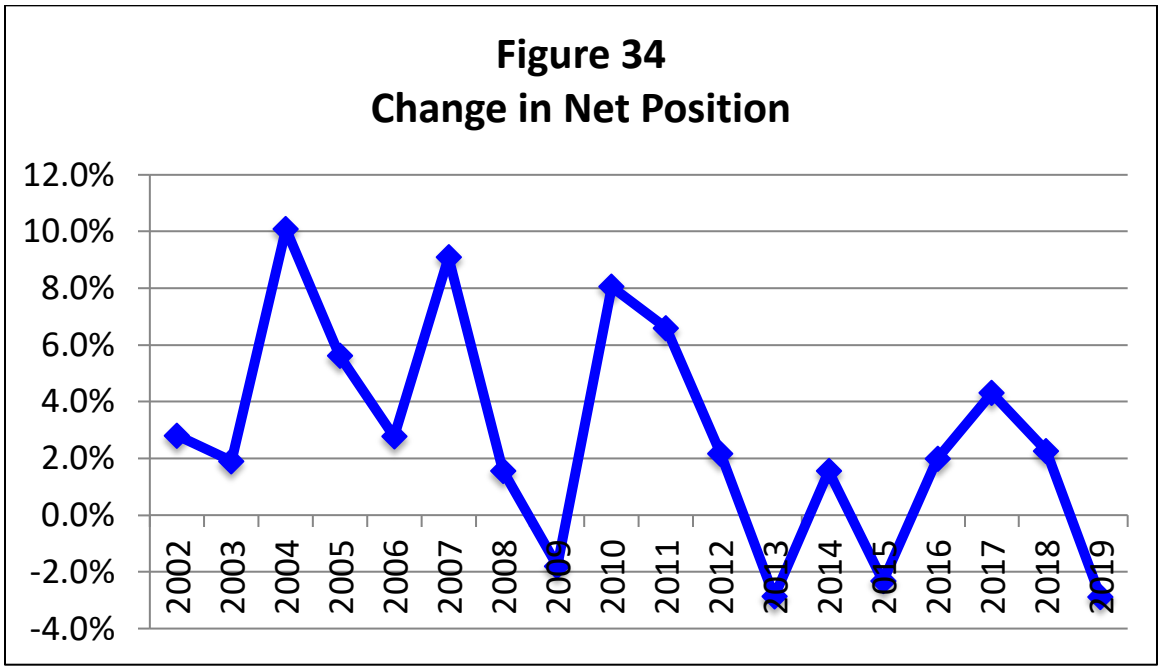


Figure 33 shows the percentage increases in salaries each year for coaching staff compared to increases in salaries for instruction. From 2005 through 2019 there was a 149% increase in salaries for coaching staff compared to 19% for instructional salaries.



Finally, returning to Table 8, we see the bottom line for the University, which is the change in net assets (change in net position). The change in net assets includes not only the net income of the University, but also capital appropriations, capital gifts and grants and additions to the University's endowment. To the extent that these are regular sources of revenue they can be counted as "net income", although clearly they cannot be used for operating purposes. Figure 30 shows the change in net assets

Figure 34 shows the operating margin for the University, which is the adjusted changes in net assets (change in net position) divided by total revenue. This net asset ratio includes not only the net income of the University, but also the state capital appropriations, capital gifts and grants and additions to the permanent endowment of the University. While these sources of revenue cannot be used for operations, they are important because they contribute to the overall financial strength of the institution. The net asset ratio is one of three indicators used by the ODHE to assess the financial health of institutions. It shows a downward trend and there have been 4 years since 2002 when the University had a negative change in net position.



The Cash Flow Statement

The third financial statement is the statement of cash flows. Universities and colleges use a system of accrual accounting, which means they book revenues when they earn them and book expenses when they are incurred. However, recognizing revenue is not always the same as collecting cash. For example a college may send a bill to a student for tuition but not immediately collect the money that is owed. This shows up on the college's balance sheets as an increase in accounts receivable and is booked on the statement of revenues, expenses and changes in net assets as revenue. While the college shows an increase in revenue it does not actually have more cash. Hence the role of the cash flow statement is to show the inflows and outflows of cash. Looking at the Statement of Cash Flows one can see another picture of the flows of resources into and out of a university or college. The basic outline of the statement of cash flows is found in Figure 35.

Figure 35.

The Statement of Cash Flows at public colleges and universities has four major components. First, cash flows from operations, which includes inflows in the form of tuition and fees, grants and contracts, sales and services and outflows in the form of payments to employees, suppliers and students. The second major component is cash flows from non-capital financing activities. The most important item in this category is state appropriations. Also now shown in this category are Federal direct lending receipts and Federal direct lending disbursements as well as gift and grants for non-capital purposes. Third are cash flows from capital and related financing activities which include inflows in the form of capital appropriations and capital grants and outflows in the form of purchases of capital assets as well as outflows for principal and interest payments. Finally, there are cash flows from investing activities such as the purchase and sale of investments and interest received on investments. The sum of each of the categories of cash flow results in an increase or decrease in cash held by the college or university.

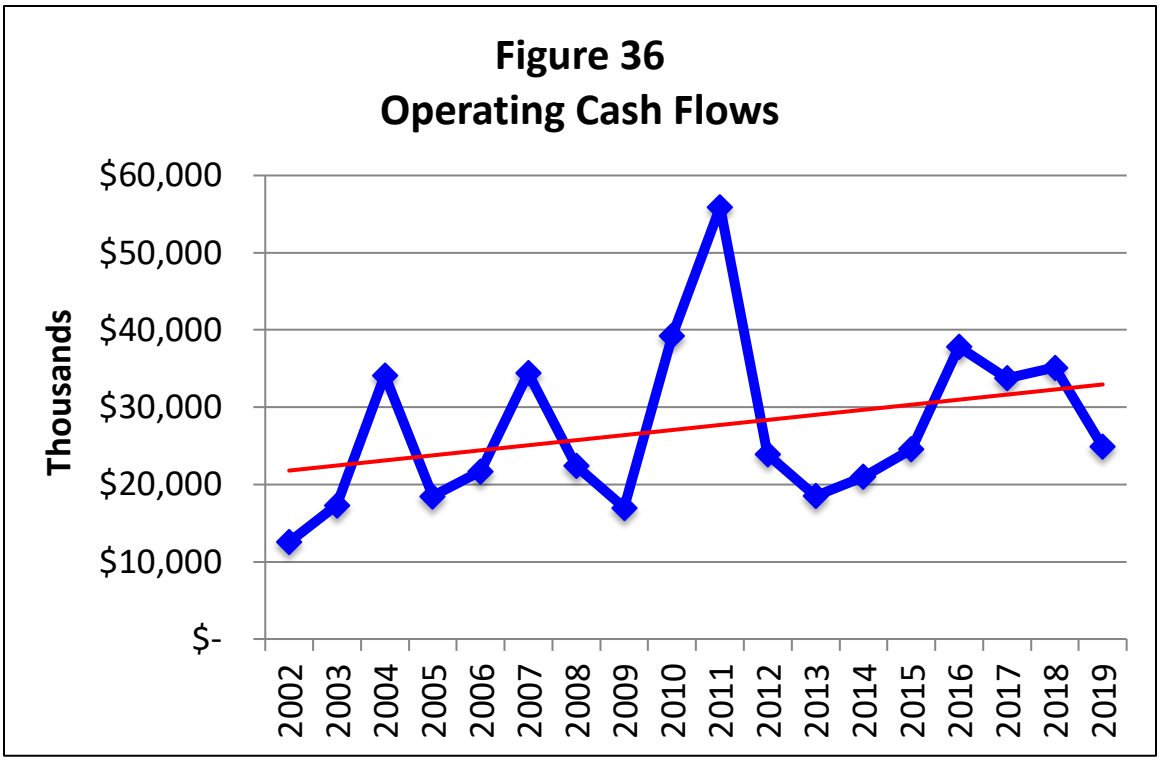
The net cash from operations can be reconciled with the university or college's operating loss. The operating loss minus depreciation and losses on the disposal of capital assets (another non-cash expense) plus change in assets and liabilities equals the net cash used for operating activities.

The cash flow from operations shows the actual inflow and outflow of resources used to fund the operation of a college or university. At public institutions operating cash flow is the sum of cash flows from operations plus cash flows from non-capital financing activities and interest payments on debt. One of the major differences between operating cash flows and income (loss) before other revenue (net income) is that net income includes depreciation as an expense. However, since depreciation is a non-cash expense it does not represent an outflow of cash i.e., it is an expense only on paper. Thus, operating cash flow is one of the most important indicators of how a college or university is doing from a financial perspective. The same would be true for the expense associated with post retirement benefits.

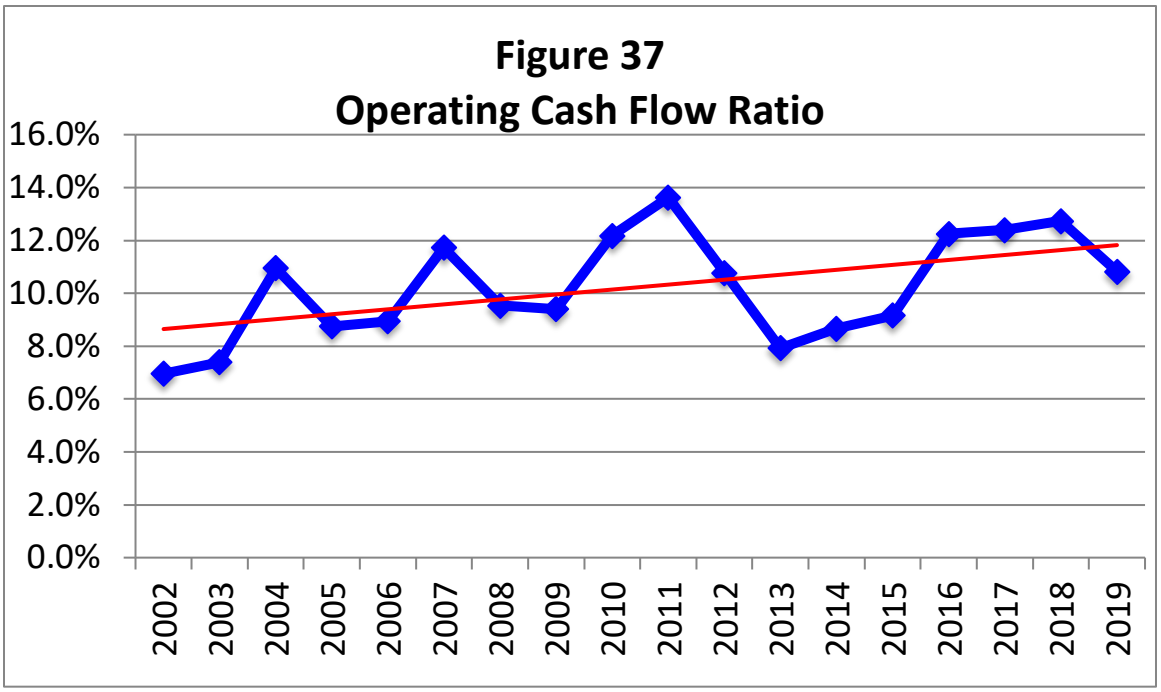
Table 10 below shows the Statement of Cash Flows for the University from 2014-2019 and Figure 36 shows the operating cash flows for the University from 2002 to 2019. In every year since 2002, when universities first started reporting cash flows, the University has had a positive operating cash flow. In general, one can see an upward trend in operating cash flows. In 2002 the operating cash flow for the University was $12.6 million and 2019 the operating cash flow was $24.9 million. Over the eighteen-year period the operating cash flow varied between a low of $12.6 million in 2002 and a high of $55.9 million in 2011. Looking at Figure 33 we can see an unmistakable upward trend in operating cash flows.

Table 10 Cash Flows Thousands of $ For the year ending June 30						
	2014	2015	2016	2017	2018	2019
CASH FLOWS FROM OPERATING ACTIVITIES						
Tuition and fees	$216,336	$212,865	$202,620	$191,012	$177,608	$156,136
Grants and contracts	$40,822	$34,750	$43,145	$35,316	$25,467	$28,525
Auxiliary enterprises	$53,524	$49,732	$37,722	$34,942	$36,347	$35,265
Sales and service of educational activities	$9,868	$6,770	$6,417	$6,301	$6,046	$6,126
Payments to suppliers	$(103,263)	$(91,520)	$(89,912)	$(79,363)	$(78,773)	$(79,649)
Payments for compensation and benefits	$(299,549)	$(299,512)	$(277,929)	$(261,606)	$(243,019)	$(237,612)
Payments for scholarships and fellowships	$(25,739)	$(24,392)	$(24,583)	$(27,786)	$(28,820)	$(23,034)
Loans issued to students	$(2,188)	$(1,585)	$(985)	$(1,095)	$(979)	$(116)
Collection of loans to students	$1,732	$1,737	$1,636	$1,670	$1,359	$200
Other payments	$(246)	$(687)	$(279)	$(47)	$1,862	$1,227
Net cash used in operating activities	**$(108,705)**	**$(111,841)**	**$(102,147)**	**$(100,656)**	**$(102,901)**	**$(112,932)**
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES						
State appropriations	$97,877	$100,218	$109,184	$111,223	$106,360	$101,971
Federal fiscal stabilization funds	$-	$-	$-	$-	$-	$-
Gifts for other than capital purposes	$53,904	$54,717	$50,437	$44,677	$49,067	$50,066
Private gifts for endowment purposes	$283	$297	$152	$419	$1,679	$2,238
Other payments	$(237)	$(396)	$(823)	$576	$490	$220
Net cash provided by noncapital financing activities	**$151,828**	**$154,835**	**$158,950**	**$156,895**	**$157,596**	**$155,634**

Table 11 (Continued) Cash Flows Thousands of $ For the year ending June 30						
	2014	2015	2016	2017	2018	2019
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES						
Proceeds from capital debt	$59,571	$132,396	$109,657			$4,743
Repayment of capital debt	$(13,707)	$(131,505)	$(108,900)			$(4,560)
Capital appropriations	$3,180	$8,384	$11,739	$15,913	$12,744	$6,092
Capital grants and gifts received	$5,442	$406	$810	$314	$835	$393
Purchases of capital assets	$(41,862)	$(51,617)	$(52,255)	$(29,772)	$(25,213)	$(19,578)
Principal paid on capital debt and leases	$(13,707)	$(17,683)	$(19,782)	$(15,066)	$(16,961)	$(14,244)
Interest paid on capital debt and leases	$(22,121)	$(18,443)	$(18,971)	$(22,492)	$(19,542)	$(17,793)
Loans issued for capital purposes						
Collection of loans issued for capital purposes						
Net cash used in capital financing activities	**$(23,204)**	**$(78,062)**	**$(77,702)**	**$(51,103)**	**$(48,137)**	**$(44,947)**
CASH FLOWS FROM INVESTING ACTIVITIES						
Proceeds from sales and maturities of investments	$257,968	$238,822	$248,218	$160,825	$171,054	$168,646
Interest on investments	$18,659	$5,520	$2,205	$5,272	$7,582	$8,574
Purchase of investments	$(296,839)	$(206,025)	$(232,697)	$(173,356)	$(182,310)	$(174,855)
Net cash provided by investing activities	**$(20,212)**	**$38,317**	**$17,727**	**$(7,260)**	**$(3,674)**	**$2,365**
Net increase in cash	**$(294)**	**$3,249**	**$(3,171)**	**$(2,123)**	**$2,883**	**$120**
Cash and cash equivalents - beginning of the year	$14,847	$14,554	$17,803	$14,631	$12,508	$15,392
Cash and cash equivalents - end of the year	$14,554	$17,803	$14,631	$12,508	$15,392	$15,511



It is not surprising that there is an upward trend in operating cash flows. Over time as the revenue of the University increases it is likely that operating cash flows will increase. Therefore it is also import to look a margin ratio for cash flows. Figure 37 shows the cash flow margin for the University, which is the operating cash flow divided by total revenue. The cash flow ratio mirrors the pattern of actual cash flows, showing similar volatility and also has an upward trend. This is an important ratio and it is used by credit rating agencies to determine credit ratings. The credit rating agencies favor this ratio over the net income or net asset ratios because it is not subject to the kinds of adjustments like revenue and expense data, it is not affected by unrealized gains (losses) on investments and does take depreciation into account. At the end of the day it is cash that matters the most and so this is clearly on of the most important measures of financial performance.



Summary Indices and Conclusion

If the financial statements are like report cards, summary indices are like a GPA. These indices can be used to summarize the overall financial status of the institution. In this report we will present two summary indices.

The first is the composite index developed by Moody's for ODHE (formerly the Ohio Board of Regents). Although SB 6 index used by the ODHE is a good index it does have certain deficiencies. The main deficiencies of this index are that it uses a step function for scoring, so that relatively small changes in any ratio can cause a particular score to jump up or down, it gives a too high a weight to the primary reserve and net income ratios and to and totally ignores cash flows and the diversity of revenue sources. With increasing volatility in financial markets, changes in the market value of investments have caused increased volatility in the change in net assets. However, in many cases these changes in net assets reflect only unrealized gains and losses in investments.

Therefore, we also present a second summary measure Moody's Global Higher Education Scorecard, new report card developed a couple of years ago. The scorecard uses 10 indicators covering four broad areas of performance: 1) market profile, 2) operating performance, 3) wealth and liquidity and 4) Leverage

The SB-6 Score is a weighted average assigned to scores for three important ratios. The first is the ratio is known as the viability ratio, which is the ratio of expendable balances to long-term plant debt. The second ratio is the primary reserve ratio, which measures

the ratio of expendable balances to operating expenses. The final indicator is the net asset ratio, which is the change in net assets divided by operating and non-operating revenues. ODHE categorizes all three ratios using a scale of whole numbers from 0 to 5, with 5 being the highest score. These scores are then used to calculate a composite index that reflects the overall financial health of the institution. In Ohio if an institution has scores of 1.75 or lower for two consecutive years it is placed on fiscal watch.

Table 12 shows how each ratio is scored. More details on the SB-6 Score can be found at: https://www.ohiohighered.org/campus-accountability

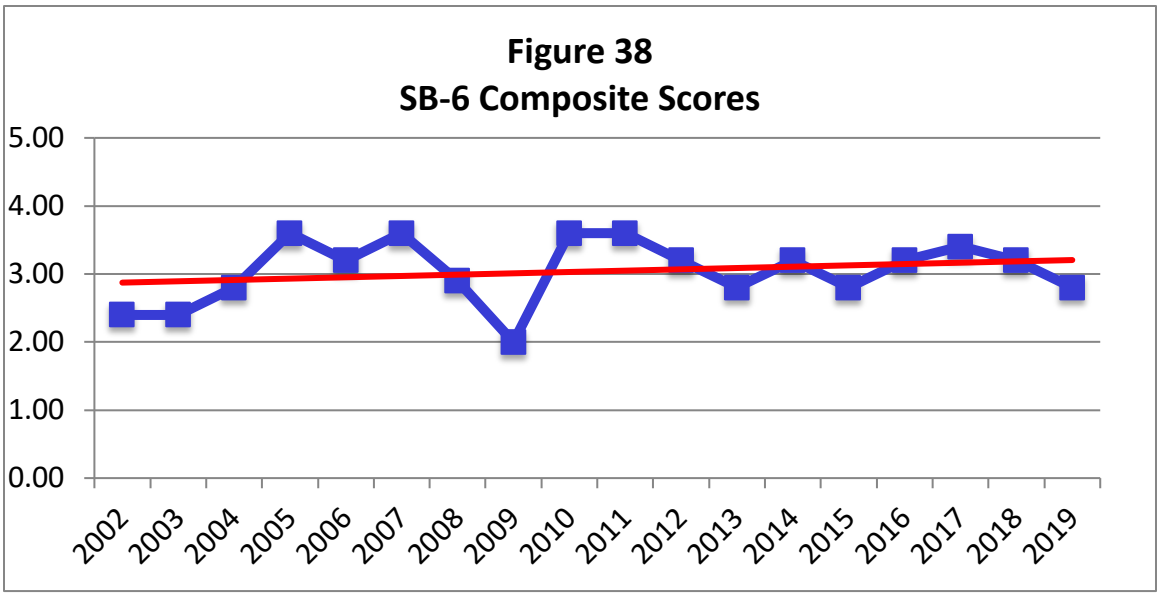
Table 12
SB-6 Ratio Scores

	0	1	2	3	4	5
Viability Ratio	< 0	0 to .29	.30 to .59	.6 to .99	1.0 to 2.5	> 2.5 or N/A
Primary Reserve Ratio	< -.1	-.1 to .049	.05 to .099	.10 to .249	.25 to .49	.5 or greater
Net Asset Ratio	< -.05	-.05 to 0	0 to .009	.01 to .029	.03 to .049	.05 or greater

Table 13 shows the ratio scores for the University from 2014-2019 and Figure 38 shows the composite scores for the University from 2002-2019.

Table 13
SB-6 Composite Scores
For the year ending June 30

	2014	2015	2016	2017	2018	2019
Viability Score	2	2	2	2	2	2
Primary Reserve Score	4	4	4	4	4	4
Net Asset Score	3	1	3	4	3	1
SB 6 Composite Score	**3.20**	**2.8**	**3.2**	**3.4**	**3.2**	**2.8**



The SB-6 scores show have been stable and somewhat less volatile since 2012. Overall there is still a slight upward trend, but I would not read much into that because of the declining enrollments and revenue, which clearly are a problem. However, it is important to note that currently the University is in no danger of being put on fiscal watch.

Next we turn to the Moody's Scorecard. Figure 39 shows the detailed categories and the weight that is accorded each of the factors in the score card.

EXHIBIT 1

Global Higher Education Scorecard

Broad Factors	Factor Weighting	Sub-Factors	Sub-Factor Weighting
Market Profile	30%	**Scope of Operations** Operating Revenue ($000)	15%
		Reputation and Pricing Power Annual Change in Operating Revenue (%)	5%
		Strategic Positioning	10%
Operating Performance	25%	**Operating Results** Operating Cash Flow Margin (%)	10%
		Revenue Diversity Maximum Single Contribution (%)	15%
Wealth & Liquidity	25%	**Total Wealth** Total Cash & Investments ($000)	10%
		Operating Reserve Spendable Cash & Investments to Operating Expenses (x)	10%
		Liquidity Monthly Days Cash on Hand	5%
Leverage	20%	**Financial Leverage** Spendable Cash & Investments to Total Debt (x)	10%
		Debt Affordability Total Debt to Cash Flow (x)	10%
		Total Scorecard-Indicated Outcome	100%

Figure 39

Each of the sub-categories in Figure 39 is given a score that corresponds to 8 broad ratings categories shown in Figure 40.

Aaa	Aa	A	Baa	Ba	B	Caa	Ca
1	3	6	9	12	15	18	20

Figure 40

Then each score is then multiplied by the weights in Figure 39 resulting in an average weighted factor score. The average weighted factor score is then mapped one of Moody's 20 credit ratings shown in Figure 41.

EXHIBIT 2

Scorecard Outcome

Scorecard Outcome	Aggregate Weighted Factor Score
Aaa	x ≤ 1.5
Aa1	1.5 < x ≤ 2.5
Aa2	2.5 < x ≤ 3.5
Aa3	3.5 < x ≤ 4.5
A1	4.5 < x ≤ 5.5
A2	5.5 < x ≤ 6.5
A3	6.5 < x ≤ 7.5
Baa1	7.5 < x ≤ 8.5
Baa2	8.5 < x ≤ 9.5
Baa3	9.5 < x ≤ 10.5
Ba1	10.5 < x ≤ 11.5
Ba2	11.5 < x ≤ 12.5
Ba3	12.5 < x ≤ 13.5
B1	13.5 < x ≤ 14.5
B2	14.5 < x ≤ 15.5
B3	15.5 < x ≤ 16.5
Caa1	16.5 < x ≤ 17.5
Caa2	17.5 < x ≤ 18.5
Caa3	18.5 < x ≤ 19.5
Ca	x > 19.5

Figure 41

Figure 42 for public universities show how each of the subcategories are assigned a score by Moody's. In general, Moody's requires higher levels of performance among private non-profits than among public institutions for each particular credit rating score. This reflects Moody's view that private institutions are more likely to fail than public institutions, which have the state as a back stop.

Appendix III: Public University Quantitative Scorecard Ranges

	Sub-factor Weight	Aaa	Aa	A	Baa	Ba	B	Caa	Ca
Factor 1: Market Profile (30%)									
Scope of Operations Operating Revenue ($000)	15%	≥ 2,700,000	< 2,700,000 ≥ 400,000	< 400,000 ≥ 75,000	< 75,000 ≥ 40,000	< 40,000 ≥ 30,000	< 30,000 ≥ 15,000	< 15,000 ≥ 8,000	< 8,000
Reputation and Pricing Power Annual Change in Operating Revenue (%)	5%	≥ 8	< 8 ≥ 6	< 6 ≥ 4	< 4 ≥ 2	< 2 ≥ 0	< 0 ≥ -6	< -6 ≥ -11	< -11
Strategic Positioning	10%	Exceptional	Excellent	Very Good	Good	Fair	Poor	Very Poor	*
Factor 2: Operating Performance (25%)									
Operating Results Operating Cash Flow Margin (%)	10%	≥ 20	< 20 ≥ 11	< 11 ≥ 4.5	< 4.5 ≥ 1	< 1 ≥ -2	< -2 ≥ -3.5	< -3.5 ≥ -5	< -5
Revenue Diversity Maximum Single Contribution (%)	15%	≤ 35	> 35 ≤ 50	> 50 ≤ 67	> 67 ≤ 75	> 75 ≤ 82	> 82 ≤ 88	> 88 ≤ 95	> 95
Factor 3: Wealth & Liquidity (25%)									
Total Wealth Total Cash & Investments ($000)	10%	≥ 2,500,000	< 2,500,000 ≥ 100,000	< 100,000 ≥ 25,000	< 25,000 ≥ 10,000	< 10,000 ≥ 2,300	< 2,300 ≥ 900	< 900 ≥ 350	< 350
Operating Reserve Spendable Cash & Investments to Operating Expenses (x)	10%	≥ 1	< 1 ≥ 0.5	< 0.5 ≥ 0.15	< 0.15 ≥ 0.05	< 0.05 ≥ 0.044	< 0.044 ≥ 0.038	< 0.038 ≥ 0.032	< 0.032
Liquidity Monthly Days Cash on Hand	5%	≥ 260	< 260 ≥ 140	< 140 ≥ 50	< 50 ≥ 25	< 25 ≥ 14	< 14 ≥ 8	< 8 ≥ 6	< 6
Factor 4: Leverage (20%)									
Financial Leverage Spendable Cash & Investments to Total Debt (x)	10%	≥ 3	< 3 ≥ 0.75	< 0.75 ≥ 0.2	< 0.2 ≥ 0.12	< 0.12 ≥ 0.06	< 0.06 ≥ 0.035	< 0.035 ≥ 0.021	< 0.021
Debt Affordability Total Debt to Cash Flow (x)	10%	> 0 ≤ 4	> 4 ≤ 10	> 10 ≤ 16	> 16 ≤ 22	> 22 ≤ 34	> 34 ≤ 46	> 46 ≤ 58	> 58 < 0

* We have opted to merge the Caa & below rating categories for Strategic Positioning given the similar characteristics at these rating categories.

Figure 42

Table 10 shows the weighted average weighted factor score for the University for the years 2014-2019 and it also shows the credit ratings that are associated with these scores. Figure 43 has the scores from 2003-2019. The scores range from 20 to 1 where a 1 is a Aaa crediting rating, which is Moody's highest credit rating. In general, high scores get low credit ratings and low scores get high credit ratings.

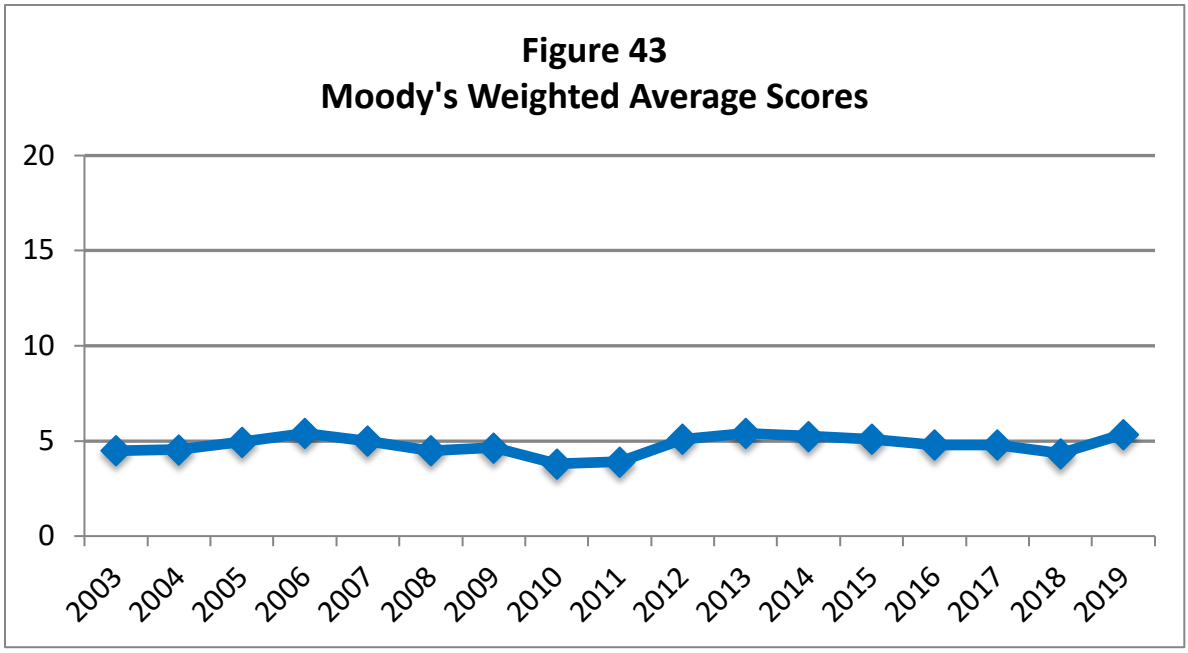


Table 10 Moody's Weighted Average Scores For the year ending June 30						
	2014	2015	2016	2017	2018	2019
Score	**5.25**	**5.10**	**4.80**	**4.80**	**4.65**	**5.35**
Moody's Rating	**A1**	**A1**	**A1**	**A1**	**A1**	**A1**

In 2014 Moody's gave the University of Akron an A1 rating with a stable outlook. A1 is the fifth highest rating out of 21 possible ratings. According to Moody's the major negative factors affecting the University's financial position are high levels of debt and declining enrollment. Again, in October of 2019 Mood's gave the University an A1 credit rating with a stable outlook.

In 2014 Moody's rational was based on the fact that University has diversified sources of revenue and had a positive cash flow every year since 2002. Moody's noted that cash flow was adequate in 2013 and that management had reported that cash flow had improved in 2014, something we discussed in the previous section. In 2019 Moody's rational cited favorable operating performance, healthy liquidity and substantial scale. It noted that the University was regionally important. Moody's noted that based on draft FY 2019 Financial Statements they expected the University to have a strong operating cash flow margin in 2019. They also report the University has no plans for further debt and that they expected the University to continue to improve its viability ratio.

They do note that the positive assessment offered above was tempered by the declining enrollment and declining revenue through fiscal 2020. They note that it also has a high debt to revenue.

Conclusion

As part of my conclusion I want address some points made in a recent budget presentation by Dr. Stephen Storck, UA's interim chief financial officer (https://www.uakron.edu/finance-administration/video). He starts out the presentation by assuming a 20% decline in enrollment for FY 21. Of course, he provides no justification for this decline in his presentation. According to a May 21, 2020 study by McKinsey "The predictive-enrollment models that leaders have used to plan classes won't hold up in a COVID-19 world." They go on to say "Altogether, the total number of high school students planning to enroll in a full-time bachelor's degree program could remain largely unchanged." The same study also points out that students are looking for lower cost institutions and want to stay closer to home. This should give an advantage to state regional institutions like Akron. Moreover, in a new report Moody's Investors Service also forecast projected that enrollments could increase between 2%-5% but that net tuition

revenue might fall 5%-13%. They also point out that there could be a shift to lower priced institutions.

Also remember in 2019 I believe the administration assumed an 11% decline in enrollment, but enrollment declined only 6.5%. So, their track record on forecasting enrollment, even in the absence of COVID-19 has not been great. There is a good chance that if the administration did its job, some of the projected decline in enrollment could be mitigated.

Next Dr. Storck assumes that the state share of instruction will be down by $14.9 from a projection that was $1.1 million less than what Akron finally received in 2020. According to a report issued by ODHE on July 1, 2020 Akron received $95.2 million in 2020 and is projected to get $90.4 million in SSI. So, Dr. Storck assumes a 15.8% reduction from their revised 2020 projection when in reality ODHE says the reduction will be 5%.

Next Dr. Srorck says that due to instability and declining stock prices they budgeted only $500,000 in investment income. But as of today, the S & P 500 is only 5% below its previous peak and financial markets have proven to be pretty resilient. In 2019 the University had $7.9 million in investment income. It seems overly pessimistic given what has transpired thus far to assume that investment income will only be $500,000.

To summarize, the presentation projects a $30.6 million loss in tuition, $19 million in state share of instruction and then says the University has a structural budget deficit of $14 million for a total of $65 million funding short fall.

The biggest problem with the presentation, apart from overly pessimistic assumptions, is that the budget is only a plan and it only deals with the General Fund. The General Fund, however, only accounts for a portion of the University's revenues and expenses. In FY19 the General Funds Budget had revenue of $265.3 million and expenditures of $235.5 million. So, one would think that there was a $29.8 million surplus. But what happened to that surplus? It was transferred to other funds. In fact, the General Fund had net transfers out of exactly $29.8 million. So, the budget was balanced. Yet we are told that there is a $14 million structural deficit.

Total revenues for the University in 2019 were $394.5 million. Compare that to General Fund revenues of $265.3 million. Where is the missing $129.2 million? On a cash basis the University in 2019 had a surplus of $24.9 million. So where is the deficit?

If one assumes an enrollment of decline of 11% and extrapolates from Dr. Storck's presentation, then the tuition decline is $16.8 million. If one just takes the average interest on investment from the cash flow statements over the last 5 years that is $5.8 million so that leaves you with a $11 million shortfall. On top of that ODHE in a recently released spreadsheet projects a loss of just $4.7 million so the total shortfall is $15.7 million, which is a far cry from $65 million. To put it in perspective, the entire shortfall

could be met by cutting intercollegiate athletics and the administration would still have about a $10.4 million to subsidize athletics.

In addition, the University had $158.8 million in reserves in 2019 and even if 2020 turned out to be a terrible year, they would still have substantial reserves. Finally, there is a strong possibility that the next package that the House and Senate will take up to deal with the COVID-19 epidemic will provide some relieve to state governments and it is the job of the University presidents and members of the Board of Trustees collectively to make sure that higher education gets some of that funding.

While the University clearly faces some challenges there is nothing in that I have seen in looking at its financial statements that could justify financial exigency or the use of force majeure to make draconian budget cuts that result in the dismissal of tenured faculty. In fact, such a measure is more likely to harm the University by sending the message to the region that the University cannot manage it finances and it is a sinking ship. That can easily become a self-fulfilling prophecy.

As the McKinsey report noted, the fact that students will be looking to stay closer to home and for institutions that are lower in cost but are high quality should give institutions like the University of Akron a comparative advantage. But taking advantage of this opportunity would require an administration that has well thought out enrollment management and marketing plan and the ability to offer a high-quality education to students. Gutting the faculty hardly seems like a plan that would attract students concerned about getting good value for their tuition dollars.

Data Sources:

1. Audited Financial Statements for the University of Akron
2. Ohio Higher Education Campus Accountability
3. Integrated Post-Secondary Data System (IPEDS)
4. USA Today NCAA Sports Finances