An Updated Analysis of the Financial Statements

of

The University of Delaware

Academic Years 2004-2024

Prepared for AAUP

By

Rudy Fichtenbaum

Professor Emeritus of Economics

7300 Crestway Rd

Clayton, OH 45315-9758

(937) 620-7430

rfichtenbaum@gmail.com

Summary

1. The University of Delaware has a strong balance sheet with substantial debt capacity and has strong reserves which give it great flexibility in dealing with unforeseen circumstances.
2. On an operating basis the University has had positive margins as measured by its EBIDA margin, although since 2017 those margins have been declining. In looking at the change in net assets from operations, there have been negative returns in recent years, and **the main culprit appears to be the growth of administrative spending**.
3. The University has had positive operating cash flow ratios every year although in recent years they have been declining. Nevertheless, the cash flow ratios remain solid.
4. All the summary rating indices have been stable since my last update. The University has maintained its Aa1 rating credit rating, which is the second highest rating given by Moody's and improved from its outlook from negative to stable.

Introduction

This report updates my previous reports, which covered the years 2004-2021. Due The analysis contained in this report is based on information contained in the audited financial statements and other information that appears in the annual audited Financial Statements of the University of Delaware, the Integrated Post-Secondary Educational Data University (IPEDS).

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 and other non-profit organizations ostensibly have an entirely different purpose. Universities are institutions of higher learning established primarily to create and disseminate knowledge. Universities 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 ensure that they are expended for their intended purpose.

Since the primary purpose of fund accounting is to ensure that funds provided by governmental entities or donors are expended in the manner they were intended, it is

difficult for faculty to look at a university'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 more than expenses or whether expenses exceeded revenues. In 2002 public universities changed their financial statements so that they more closely resemble those of for-profit businesses. 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 their faculty governance structure. 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.

Often, looking only at a university's budget misleads faculty members. Budgets are normally based only on the current fund and since universities can transfer money from one fund to another looking at the current fund does not give a true picture of a university's finances. In addition, a budget is just a financial plan. However, institutions have no legal obligation to spend money in accordance with their budget. Figure 1 below shows the structure of university and college funds.

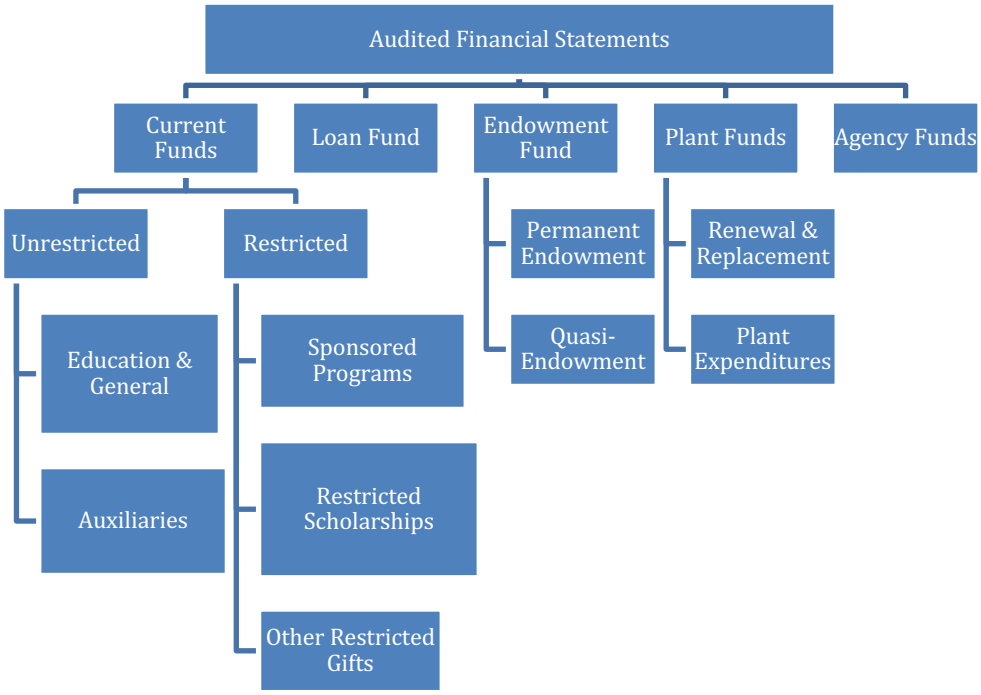


Figure 1

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 either to take jobs elsewhere or to retire. Consequently, in any given year a certain number of positions that are budgeted are vacant. Therefore, what a university budgets for faculty salaries and benefits is not necessarily what they spend on salaries and benefits. Consequently, some percentage of budgeted positions either gets spent elsewhere or accumulates and becomes part of the university's net assets.

To get a true picture of a university's finances one must look at the actual financial statements, which represent the actual revenues and expenses of the university. Evaluating a 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 come into the business through the sale of goods and/or services. In the process of producing goods and services firms incur costs. The difference between revenues and costs represents the firm's profit or loss. This profit or loss is one of the primary indicators of how the firm is performing. Non-profit organizations, such as universities, 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 incur expenses. The difference between the revenues that come into a university and its expenses is known as a change in net assets. If a university takes in more revenue than it expends, there is a positive 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.

Financial data is reported either as a stock or flow. A stock means measurement takes place in dollars without respect to time. For example, the amount of money in your savings account is a stock. Flows are measurements that have a time dimension. For example, income is a flow because it is measured as a certain number of dollars per year.

Universities have three main financial statements. First there is a balance sheet, a statement of net assets, or a statement of financial position. Balance sheets have three main components: assets, liabilities and net assets. Assets are things of value owned by the university. Liabilities are claims against the university and net assets are the difference between assets and liabilities. Net assets represent the wealth of the institution. All the items on a balance sheet deal with stock concepts and represent a snapshot of the university at a point in time. The first part of this report will provide an analysis of the University's balance sheet.

The second major financial statement is an income statement, statement of revenues, expenses and changes in net assets, or a statement of activities. This financial statement shows how the university's finances are changing over a period, namely a fiscal year, which normally runs from July 1 to June 30 of the following year. Fiscal years are always associated with the calendar year in which the fiscal year ends. So, for example, from July 1, 2008 to June 30, 2009 is known as fiscal year 2009. This statement deals with flows and measures how the university's revenues and expenses are changing over time.

There is a relationship between stocks and flows, namely changes in stocks are equal to flows. Therefore, this is a well-defined relationship between a balance sheet and an income statement. For example, if revenues are greater than expenses then there will be an increase in net assets. This means that if you take the net assets at the beginning of a year on the balance sheet and add the change in net assets from the statement of statement of activities you will get the net assets reported at the end of the year. The second part of this report will provide an analysis of the University's statement of activities.

The third financial statement is the statement of cash flows. Universities 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 university may send a bill to a student for tuition but

not immediately collect the money that is owed. This transaction shows up on the university's balance sheet as an increase in accounts receivable and is booked on the statement of activities as revenue. While the university 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. The third section of this report will provide an analysis of the University's cash flow statement.

Most public universities follow standards for reporting financial data established by the Governmental Accounting Standards Board (GASB). The Financial Accounting Standards Board (FASB) governs reporting standards for private non-profit universities. The University of Delaware is unusual in its financial reporting because, although it is a public university, it uses FASB reporting standards. GASB standards for public universities require the disclosure of more information. For example, they require universities to report current and non-current assets and current and non-current liabilities. FASB standards do not require that any distinction be made between current assets and non-current assets or current liabilities and non-current liabilities. Perhaps the biggest difference is that GASB requires a Management Discussion and Analysis (MDA), which reviews the major financial statements and gives management's perspective on how the university is doing with respect to its financial health. This is absent when using FASB standards for non-profits.

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. These ratios can be used to look at the historical performance of the institution. Furthermore, 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.

Finally, for a time the University has become less transparent in its reporting of data, particularly data on net assets. Before 2009 the University used to give a detailed breakdown of net assets allowing us to separate investment in plant and equipment from other unrestricted net assets. Unfortunately, between 2009 and 2018 the University discontinued this breakdown so that the only way to separate investment in plant and equipment from other unrestricted net assets is to estimate the value of investment in plant and equipment using accounting definitions and subtract this estimate from reported unrestricted net assets. Starting in 2018 because of a change in reporting for net assets, the University once again started reporting investment in plant and equipment as a separate line in its financial statements.

The purpose of this report is to help educate faculty of The University of Delaware about the financial status of their university. 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 responsibility for any damage that may result.

What is the Wealth of the University?

Statement of Financial Position

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. 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 fiscal year ends. A balance sheet has two sides and represents a balance between assets on the left side and liabilities and changes in net assets on the right side. The equation that summaries a balance sheet is Assets = Liabilities + Net Assets. The basic structure of the balance sheet is illustrated in Figure 2 below.

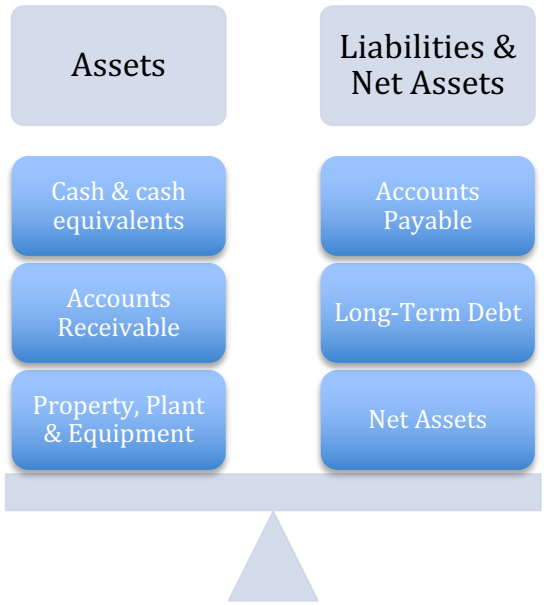


Figure 2

Assets

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.

A college or university's assets consist of cash and cash equivalents made up of physical cash, checking accounts and short-term investments such as certificates of deposit, government securities and money market mutual funds. Accounts receivable represent are amounts that are owed to a college or university for services provided (e.g. tuition, room and board) and are generally reported net of allowances for doubtful accounts, which are amounts the college or university expects that it is unlikely to collect. Notes receivable are amounts owed by other entities such as grants or loans receivable i.e., money that is owed to the university or college by granting agencies or for loans. Inventories at colleges and universities generally consist of publications and general merchandise. In addition, colleges and universities also have notes receivable, long-term investments, endowment investments and capital assets.

Capital assets are recorded at historical cost (the amount you paid for the item, or the amount it cost to build the capital asset), measured net of accumulated depreciation. 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 college. Whether this diminution of net assets represents a real decline in the wealth of an institution is questionable. For private companies, depreciation represents the allocation of the cost of purchasing plant and equipment. However, at universities and colleges, a significant portion of buildings and equipment are paid for by governmental appropriations or private gifts. Thus, universities and colleges have a source of funding for purchasing fixed assets that is not available to for profit businesses. Depreciation is an expense that will show up on the income statement, but unlike other expenses it does not represent an outflow of cash from the college or university.

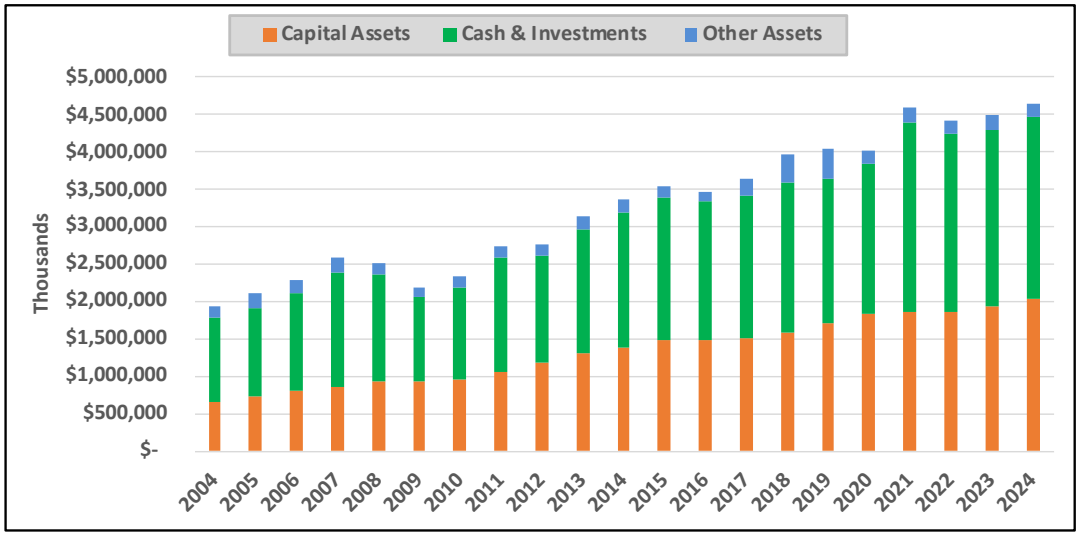
Table 1. Total Assets (Thousands)

Year	Cash & Investments	Capital Assets	Other Assets	Total Assets
2004	$1,111,944	$ 666,312	$ 171,455	$ 1,949,711
2005	$1,168,666	$ 742,639	$ 205,581	$ 2,116,886
2006	$1,292,594	$ 821,930	$ 179,064	$ 2,293,588
2007	$1,536,754	$ 855,620	$ 192,357	$ 2,584,731
2008	$1,437,142	$ 925,358	$ 151,886	$ 2,514,386
2009	$1,129,197	$ 935,388	$ 127,749	$ 2,192,334
2010	$1,227,760	$ 970,974	$ 138,605	$ 2,337,339
2011	$1,510,661	$ 1,067,858	$ 160,576	$ 2,739,095
2012	$1,418,284	$ 1,195,830	$ 163,417	$ 2,777,531
2013	$1,648,755	$ 1,321,631	$ 160,348	$ 3,130,734
2014	$1,810,368	$ 1,393,097	$ 162,558	$ 3,366,023
2015	$1,917,026	$ 1,476,155	$ 145,062	$ 3,538,243
2016	$1,851,763	$ 1,479,213	$ 147,446	$ 3,478,422
2017	$1,916,349	$ 1,506,826	$ 215,724	$ 3,638,899
2018	$2,009,774	$ 1,580,965	$ 367,655	$ 3,958,394
2019	$1,944,848	$ 1,706,809	$ 390,593	$ 4,042,250
2020	$1,996,320	$ 1,837,581	$ 172,202	$ 4,006,103
2021	$2,524,596	$ 1,860,714	$ 207,423	$ 4,592,733
2022	$2,390,652	$ 1,853,598	$ 184,989	$ 4,429,239
2023	$2,354,368	$ 1,937,541	$ 193,543	$ 4,485,452
2024	$2,426,121	$ 2,032,182	$ 191,399	$ 4,649,702

Table 1 and Figure 3 show the total assets of the University between 2004 and 2024 broken down into cash and investments, capital assets and other assets. Between 2004 and 2007 the total value of assets increased from $2.0 billion to $2.6 billion. From 2007 through 2009 the value of total assets decreased by approximately $400 million ending up at $2.2 billion. Most of the decline in total assets in 2008 and 2009 was due to declines in endowment funds and other investments. In 2010 and again in 2011, there was a sharp rise in total assets that surpassed their previous peak in 2008. In 2012, total assets continued to increase, although the increase was modest compared to the previous two years. In 2012 the University had total assets valued at $2.8 billion. Since 2012 the total assets of the University have increased substantially. In 2013 they increased to $3.1 billion and in 2014 they reached $3.4 billion. By the end of 2015, total assets had risen to slightly more than $3.5 billion. In 2016, there was a slight decline in

total assets with the total coming in just under $3.5 billion. For all intents and purposes, one could conclude that total assets were basically unchanged in 2016 compared to the previous year. In 2017 total assets increased by $160.5 million and then rose by $319.5 million in 2018. In 2019 total assets increased by $83.9 million and then declined by $36.1 in 2020. Finally, in 2021 total assets increased by $586.6 million ending the year at $4.6 billion. In 2022 there was a decline in total assets to $4.4 billion, followed by two years of consecutive increases, with total assets coming in at an all-time high of $4.65 billion in 2024.

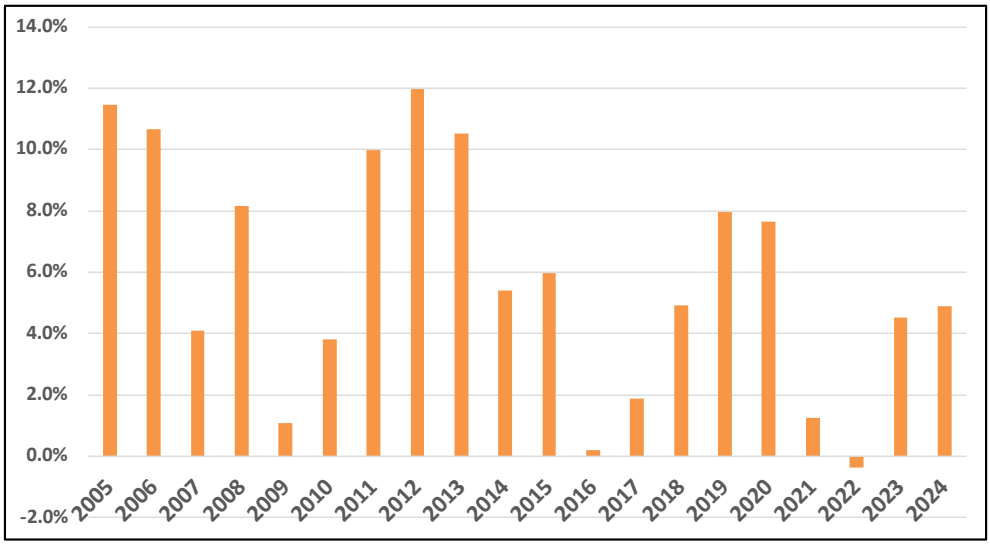
Figure 3. Total Assets



The two largest components of the University's assets are plant, property and equipment, net of accumulated depreciation (capital assets) and cash and investments.

Figure 3 shows the increase in capital assets (in orange), and it is important to remember that these values are book values meaning the land buildings and equipment are valued at historical as opposed to market value. There has been a substantial increase in property plant and equipment. In 2004 it was $666.3 million and by the end of 2024 it was $2.0 billion. Figure 4 shows the percentage increase in the value of plant and equipment by year. Here we can see from year to year there is some volatility in the capital investment. In general, however, the percentage increase has been trending down.

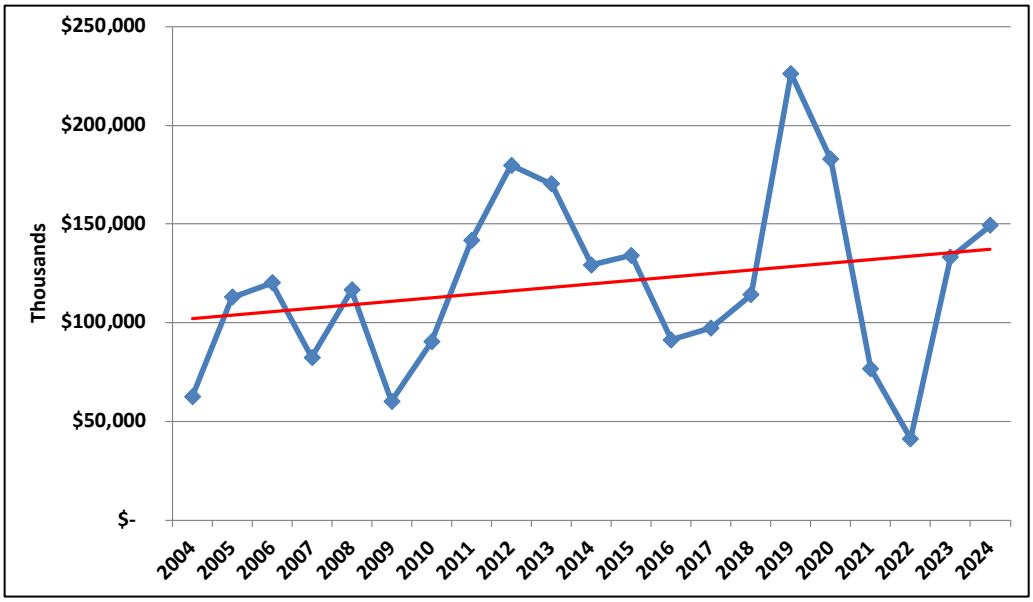
Figure 4. Percentage Change in Capital Assets



In 2022 there was a decline in the value of capital assets net of accumulated depreciation. Every year the University records depreciation on its buildings and the accumulation of this depreciation is subtracted from the book value of its buildings. If the University does not have new construction or renovate existing buildings then the value of the buildings after subtracting depreciation goes down. So, in a year when there is very little being spent to renovate or construct new buildings, the depreciation can be greater than the new capital expenditure and so the net value of capital assets declines.

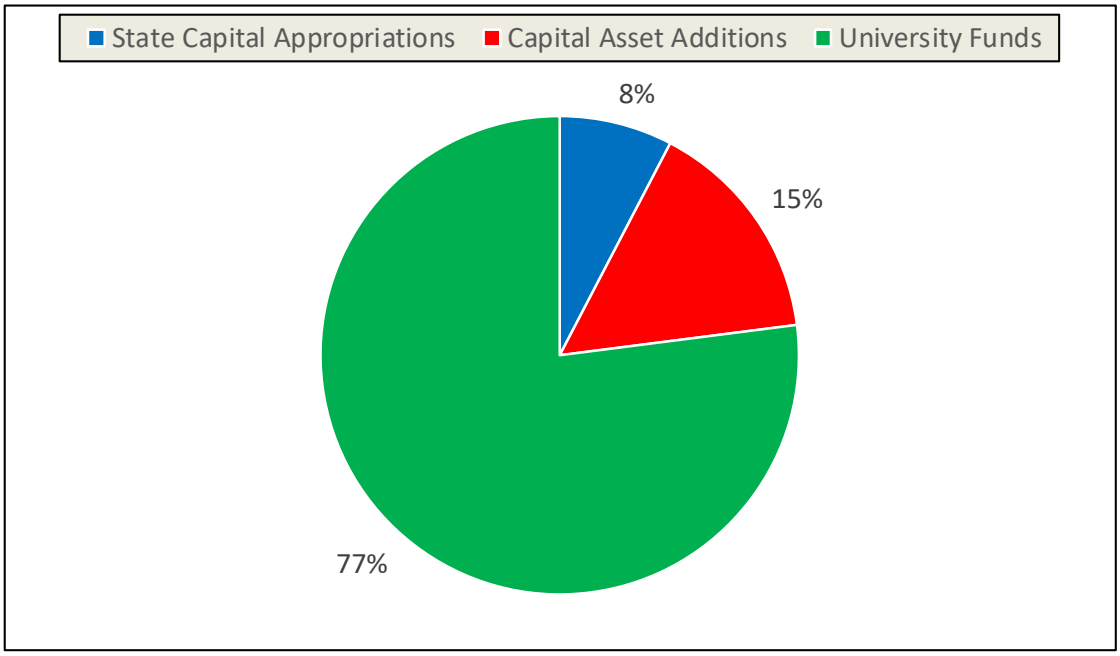
From 2004-2024 the University has spent $2.5 billion on capital expenditures. Figure 5 shows the major capital expenditures undertaken by the University of Delaware in the years 2004-2024. The capital expenditure figures come from the Cash Flow statements. Capital expenditures tend to be lumpy i.e., they go up and down from year to year, but nevertheless there is an unmistakable upward trend in spending on capital assets.

Figure 5. Capital Expenditures



The University financed its capital expenditures using 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 using funds accumulated over a period, when revenues were greater than expenses.

Figure 6. Capital Expenditures 2018-2024



Most of the interest payments (debt service) paid by the University is associated with auxiliary enterprises. Auxiliary enterprises include dormitories, food service, parking and intercollegiate athletics. These are all areas where the University would borrow money to build new facilities or renovate existing facilities. In 2024 auxiliaries accounted for 68% of interest payments made by the University. Of the remaining $7.4 million the University allocated $6.2 million or 84% of interest payments to instruction and departmental research. This seems extraordinarily high given the fact that in FY 2024 the full-time instructional faculty represented only 25% of all full-time employees at the University. It would certainly be worthwhile for the UD-AAUP or the faculty senate to ask the administration how they allocate interest expenses, because on the face of it this seems to be a way of arbitrarily raising instructional expenses relative to other expenses at the University.

The University changed its reporting of capital gifts, which historically had been very small, combining them with other endowment contributions. So, for a period it was impossible to tell the percentage of expenditures being funded by gifts.

However, starting in 2018, the University did start reporting capital asset additions funded by money released from restriction. So, if we take total capital expenditures for a given year and subtract state capital appropriations and capital asset additions released from restriction, the remaining expenditure is what the University contributed either by borrowing or using unrestricted assets accumulated when revenues were greater than expenses. Figure 6 above shows the percentage of capital expenditures by source from 2018-2024.

During the period from 2018-2024 the University spent $923.1 million for capital expenditures (new buildings and renovations) and 77% of the money spent came from University funds. To be clear, the money being spent from University funds was either borrowed, in which case the University incurred interests costs, or it simply used money that it accumulated from surpluses generated from keeping expenses less than revenues.

One of the issues of concern associated with large amounts of capital spending is the potential increase in operations and maintenance cost. If new construction does not have the potential to increase enrollment or revenues from sponsored research, it can be a drain on university resources.

The largest component of the University's assets takes the form of cash and investments. Among cash and investments, endowment funds and other investments account for most of the University's financial assets. Figure 7 shows the growth of cash and investments. Cash and investments, particularly investments can be quite volatile.

The trend for the entire period is up however, there was a substantial decline in 2007 and 2008 and smaller declines in 2012, 2016 and 2019. But over the entire period from 2004-2021 cash and investments grew from $1.18 billion to $2.62 billion an average annual growth rate of 4.75%.

Figure 7. Cash and Investments

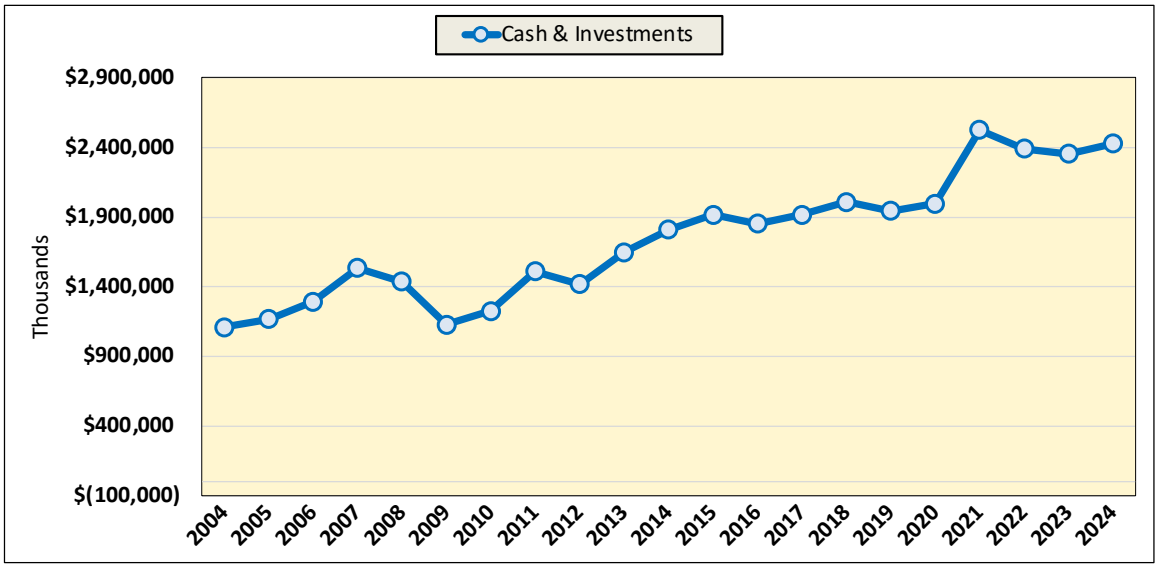


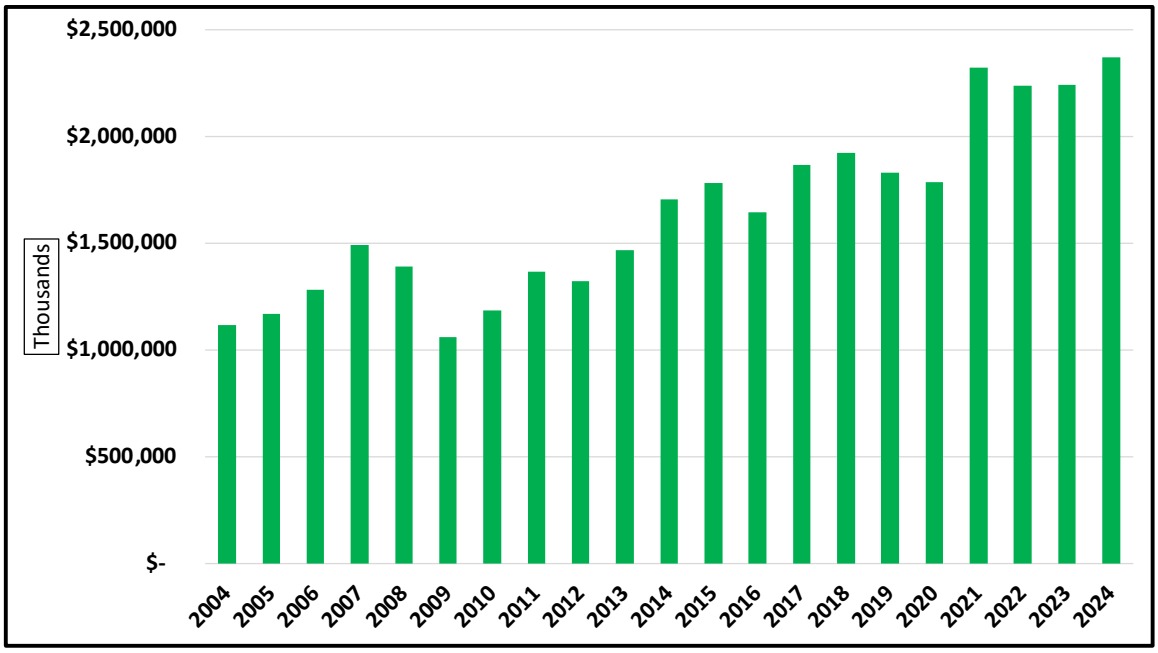
Table 2. Fair Market Value of Investments (thousands)

Year	Money market and other liquid funds	U.S. government obligations	Corporate obligations	Stock and convertible securities	International investments	Limited Partnerships & LLCs	Other	Total Investments
2004	$ 97,593	$ 119,620	$ 109,301	$ 347,979	$ 162,665	$ 262,028	$ 17,280	$ 1,116,466
2005	$ 73,209	$ 153,484	$ 72,962	$ 362,780	$ 206,032	$ 283,887	$ 15,779	$ 1,168,133
2006	$ 46,361	$ 149,911	$ 73,559	$ 367,310	$ 255,329	$ 375,219	$ 14,857	$ 1,282,546
2007	$ 46,124	$ 139,383	$ 172,316	$ 352,127	$ 291,215	$ 475,679	$ 15,381	$ 1,492,225
2008	$ 48,998	$ 114,300	$ 151,793	$ 291,160	$ 272,442	$ 496,927	$ 13,579	$ 1,389,199
2009	$ 8,080	$ 158,452	$ 97,460	$ 207,963	$ 180,051	$ 390,588	$ 19,401	$ 1,061,995
2010	$ 27,689	$ 127,172	$ 136,664	$ 141,067	$ 78,803	$ 649,940	$ 22,711	$ 1,184,046
2011	$ 11,851	$ 98,792	$ 167,217	$ 159,222	$ 92,077	$ 827,327	$ 10,143	$ 1,366,629
2012	$ 17,614	$ 97,275	$ 167,715	$ 177,518	$ 83,759	$ 770,916	$ 7,464	$ 1,322,261
2013	$ 16,986	$ 105,136	$ 221,064	$ 162,911	$ 28,179	$ 928,448	$ 6,239	$ 1,468,963
2014	$ 46,606	$ 87,908	$ 231,113	$ 362,858	$ 3,342	$ 966,986	$ 5,530	$ 1,704,343
2015	$ 50,652	$ 110,237	$ 231,125	$ 383,341	$ 3,281	$ 998,971	$ 4,899	$ 1,782,506
2016	$ 67,131	$ 129,512	$ 163,119	$ 352,912	$ 73,164	$ 856,523	$ 4,232	$ 1,646,593
2017	$ 33,974	$ 191,189	$ 218,870	$ 420,943	$ 87,426	$ 907,658	$ 5,265	$ 1,865,325
2018	$ 44,093	$ 146,628	$ 281,114	$ 412,438	$ 96,500	$ 937,659	$ 6,320	$ 1,924,752
2019	$ 43,364	$ 126,000	$ 211,858	$ 444,016	$ 65,004	$ 933,183	$ 6,025	$ 1,829,450
2020	$ 33,551	$ 165,799	$ 158,649	$ 434,381	$ 54,334	$ 933,590	$ 4,747	$ 1,785,051
2021	$ 41,560	$ 157,295	$ 91,125	$ 597,872	$ 2,271	$ 1,427,872	$ 5,021	$ 2,323,016
2022	$ 35,264	$ 377,898	$ 237,072	$ 241,324	$ 1,933	$ 1,337,219	$ 5,900	$ 2,236,610
2023	$ 35,263	$ 201,380	$ 230,836	$ 272,831	$ 1,722	$ 1,491,641	$ 8,835	$ 2,242,508
2024	$ 41,147	$ 209,460	$ 197,805	$ 408,305	$ 2,733	$ 1,506,464	$ 7,030	$ 2,372,944

Figure 8 shows the market value of the University's investments. In 2004 investments were $1.1 billion and they increased to $1.6 billion by 2007, an increase of about 40%. In 2008 and 2009 the value of the University's investments declined hitting $1.1 billion in 2009. This decline is not too surprising given the turmoil in financial markets in 2008 and 2009. The stock market bottomed out in the summer of 2009 and since then has risen sharply. In my previous report, I stated that since the fiscal year ends June 30 it is reasonable to expect that the University would recover a substantial portion of the losses in investments in 2010. There was an upswing in the value of the University's investments and this upward trend continued into 2011. In 2012, there was a very modest decline in the value of investments. Since 2012 the value of investments has continued to increase reaching $1.8 billion by the end of 2015. In 2016 the value of investments declined to $1.6 billion, which is not surprising given the performance of the stock market. In 2017 and 2018 the value of investments increased reaching $1.9 billion. Then in 2019 and 2020 the value of investments declined ending 2020 at $1.78 billion. In 2021 the value of investments increased dramatically, ending the year at $2.32 billion and then declined in 2022 and were flat in 2023, ending the year at $2.24

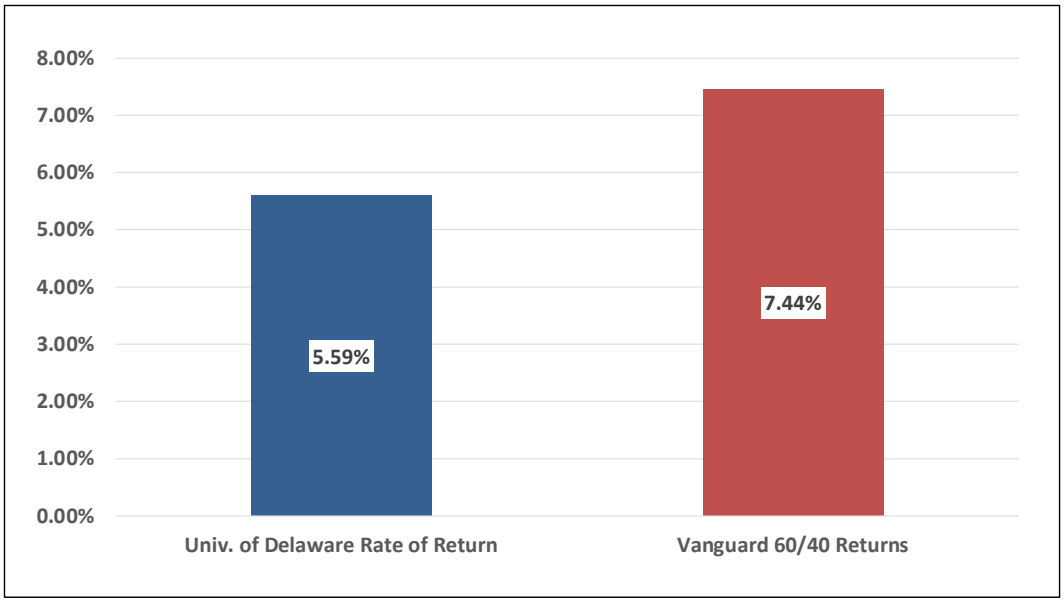
billion. **In 2024 the market value of investments rose to an all-time high ending the year at $2.37 billion**.

Figure 8. Market Value of Investments



It should also be noted that **in 2004, 23% of the University's investments were in "alternative investments"** and **by 2024 these types of risky investments accounted for 64% of the University's portfolio.** Alternative investments are generally very risky. They consist of investments in hedge funds, private equity, venture capital, hybrid fund of funds, distressed securities, oil and gas and other natural resources. Almost all these investments are level 3 which means their values do not reflect observable market inputs, i.e., it is hard to assess their true value. Moreover, they tend to be illiquid and have very high expenses. These expenses eat into the returns earned by the University. The rationale for investing in these risky investments is that they will increase the return on investments. However, as Figure 9 shows, the University's average annual return from 2008-2024 was 5.59% and a 60/40 stock/bond portfolio using Vanguard index funds returned 7.44% of the same period (FY returns). This period was chosen because before 2008 the University did not report the returns on its endowment as part of its financial statements.

Figure 9. University of Delaware v. 60/40 Vanguard Index Funds



Liabilities

Liabilities are claims on an institution's resources (alternatively, *liabilities* are present obligations to sacrifice resources or future resources that an institution cannot get out of). Examples liabilities are accounts payable, deferred revenue and the current portion of long-term liabilities. Accounts payable represent claims of other businesses or institutions for goods and services. Deferred revenue is revenue, which has been received for services that will be supplied at a future date i.e., in the next fiscal year (such as collective tuition revenue before the term starts). The current portion of long-term debt is the amount an institution expects to pay during the current year. Probably the most important liability is long-term debt, which consists of bonds, notes and capital leases. Other long-term liabilities are compensated absences and post-retirement health benefits. Compensated absences are liabilities for vacation and sick leave. Post-retirement health benefits are the present value of the cost of future health benefits for retirees.

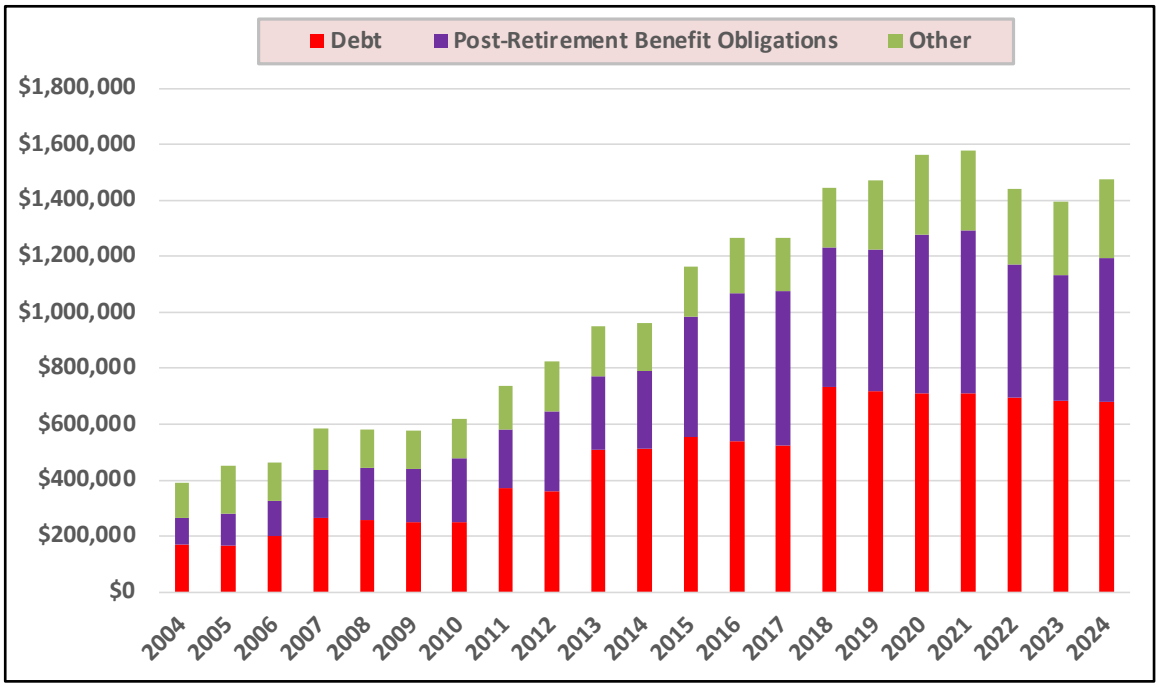
Table 3 and Figure 10 show the total liabilities of the University. Total liabilities increased from $390 million in 2004 to $585 million in 2007 before declining in 2008 and 2009. In 2009 total liabilities were $577.6 million. Since 2009 total liabilities have increased every year with plateaus in 2014 and 2017. By 2021 total liabilities for the University reached $1.6 billion. Since 2021, the liabilities of the University have generally been declining and were $1.5 billion in 2024.

Table 3. Liabilities (thousands)

Year	Debt	Post-Retirement Benefit Obligations	Other	Total Liabilities
2004	$169,091	$ 96,632	$ 124,282	$ 390,005
2005	$167,268	$ 112,100	$ 172,102	$ 451,470
2006	$199,787	$ 127,515	$ 136,107	$ 463,409
2007	$266,115	$ 171,432	$ 146,975	$ 584,522
2008	$259,096	$ 183,991	$ 137,225	$ 580,312
2009	$249,518	$ 189,070	$ 139,009	$ 577,597
2010	$251,366	$ 227,509	$ 138,824	$ 617,699
2011	$371,047	$ 209,491	$ 155,575	$ 736,113
2012	$360,550	$ 283,690	$ 181,401	$ 825,641
2013	$507,034	$ 264,738	$ 178,337	$ 950,109
2014	$513,431	$ 277,120	$ 169,174	$ 959,725
2015	$555,883	$ 426,857	$ 181,104	$ 1,163,844
2016	$540,323	$ 528,234	$ 197,739	$ 1,266,296
2017	$524,210	$ 550,410	$ 192,229	$ 1,266,849
2018	$732,906	$ 497,803	$ 215,905	$ 1,446,614
2019	$718,624	$ 505,986	$ 245,315	$ 1,469,925
2020	$709,343	$ 569,657	$ 283,928	$ 1,562,928
2021	$709,133	$ 582,143	$ 286,232	$ 1,577,508
2022	$696,522	$ 474,677	$ 270,080	$ 1,441,279
2023	$685,530	$ 447,680	$ 260,881	$ 1,394,091
2024	$679,036	$ 515,307	$ 279,697	$ 1,474,040

The most important liability for the University is debt, which is composed of bonds and leases. Debt is used primarily to finance capital projects, which take the form of renovations as well as new construction. The total debt for the University is shown in red in Figure 10. Total debt rose from $169 million in 2004 to $266 million in 2007. It declined in 2008 and 2009 ending 2009 at $249.5 million. Total debt rose slightly in 2010 and then again in 2011 to $371 million. It dropped to $36.5 million and then rose sharply over the following three years to $555.9 million in 2015. Debt declined for the next two years and then increased from $524.2 million in 2017 to $732.9 million in 2018. Since 2018 total debt has been declining and in 2022 fell below the $700 million mark. In 2024 the University had $679 million in debt.

Figure 1010. Liabilities



The second largest liability for the University is post-retirement benefit obligations. These liabilities are also shown in Figure 10. These liabilities can be quite volatile because they are based on a variety of assumptions and those assumptions can change from year to year. The liability represents the present value of all future obligations and present value is very sensitive to the changes in interest rates. Other demographic factors such as the age and life expectancy of retirees also are important factors in determining this liability. This liability would be important if the University were pre-funding these benefits. However, most universities, including the University of Delaware to do not prefund these benefits. They simply pay for these benefits as an operating expense. We will have more to say about this issue later in the report when we discuss salaries and benefits.

Net Assets

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 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 and liabilities are referred to as net assets. Since net assets are the difference between assets and liabilities, they 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.

Since the University of Delaware uses FASB standards for financial reporting, it changed how it classifies net assets in 2018. Before 2018 net assets were either unrestricted, temporarily restricted or permanently restricted. The new method, adopted in 2018, classifies net assets into two broad categories: net assets with donor restrictions and net assets without donor restrictions. Unrestricted net assets are identical to net assets without donor restriction. Net assets with donor restrictions combine what used to be temporarily restricted and permanently restricted into one category. However, using the notes in the financial statements, I have divided net assets into two subcategories: 1) net assets having time or purpose restrictions and 2) net assets with perpetual restrictions. This has been done to provide a consistent set of numbers over time and because net assets with time or purpose restrictions are equivalent to temporarily restricted net assets, which are part of a university's reserves.

Net assets without restrictions (unrestricted net assets) include capital assets (the value of plant, property and equipment, net of accumulated depreciation) as well as financial net assets which also are part of a university's reserves.

Between 2004 and 2012 the University reported on its actual capital assets net of depreciation. We use those reported numbers in this report and subtracted them from unrestricted assets to get at unrestricted financial assets, which are part of reserves. But then starting in 2013, it lumped its unrestricted financial net assets together with its capital assets and simply referred to them as unrestricted net assets (later renamed net assets without donor restriction). So, separate capital assets from unrestricted financial net assets we estimate the net value of capital assets and subtract them from the reported net assets without restriction (aka unrestricted net assets). To estimate the value of capital assets, net we take the value of capital assets net of accumulated depreciation and subtract the University's debt (notes and bonds payable and obligations under capital leases). Starting again in 2018 the University began reporting on the actual capital assets net of depreciation.

Net assets represent the net accumulation of a university's assets over a period. Large portions of these net assets consist of the value of land, buildings, books and journals and equipment owned by the university or college. Universities and colleges are required to show accumulated depreciation on their balance sheets for certain real assets such as buildings and some equipment. 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: financial net assets or tangible net assets. Financial assets are pieces of paper that represent ownership or claims on tangible

assets outside of the university. Examples of tangible assets are the land, buildings, equipment and library books own by a university or college. A university or college's wealth can increase either because it has more real tangible or because it has more financial assets.

As discussed earlier in this report, the purchase of tangible assets is often partially financed by state capital appropriations or by gifts. Any part not financed by a state capital appropriation or gift is funded by the University directly or indirectly from operating funds. Universities can either borrow money, in which case they pay interest, or they can spend reserves that are accumulated whenever revenues exceed expenses. State capital appropriations or gifts for capital increase 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. **But as we have seen most of the money used to fund the purchase of tangible assets is generated from limiting expenses on operations, i.e., limiting spending on salaries and benefits.**

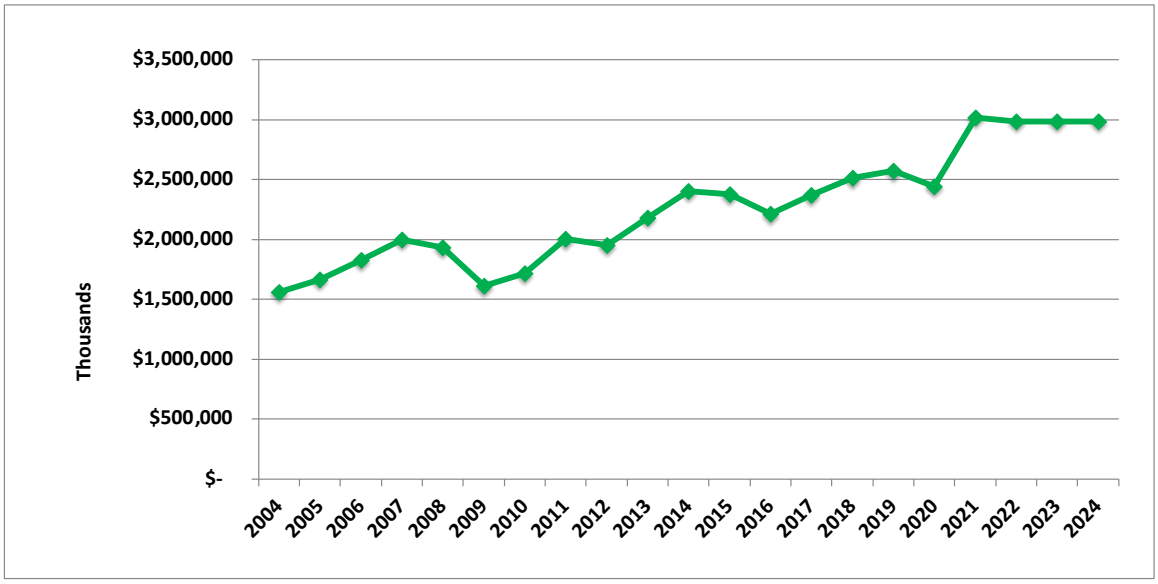
If an increase in total net assets is exclusively due to increases in the value of land, buildings and equipment, the increase in wealth while real, does not give a university or college added flexibility with respect to operations. Once a university or college invests money in its physical plant it 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 also are an indication of how well a university or college can react to unforeseen financial emergencies. The term financial refers liquid assets. The liquidity of an asset is defined by the ease with which an asset can be converted into cash.

The net assets of the University are also shown in Table 4 and Figure 11. Net assets increased from $1.8 billion in 2004 to nearly $2 billion in 2007 and then declined modestly in 2008 and more substantially in 2009 ending up at $1.6 billion by the end of FY 2009. In 2010, net assets increased to $1.7 billion and jumped to $2 billion in 2011, slightly surpassing the previous peak reached in FY 2007. In 2012, there was a very modest decline in net assets, which ended the year at $1.95 billion. In 2013 net assets increased to $2.2 billion and then rose again to $2.4 billion by the end of 2014. In 2015 there was a modest decline in net assets, which ended the year at $2.4 billion. Between 2016 and 2019 net assets increased to $2.6 billion. In 2020 they declined to $2.4 billion and then in 2021 rose to $3 billion. Between 2021 and 2024 net assets were essentially flat.

Table 4. Net Assets (Thousands)

Year	Investment in plant, net	Unrestricted	Time or purpose restricted	Perpetually restricted	Total Net Assets
2004	$ 497,875	$ 707,054	$ 101,478	$ 253,299	$ 1,559,706
2005	$ 566,025	$ 717,916	$ 116,527	$ 264,948	$ 1,665,416
2006	$ 610,960	$ 809,551	$ 122,034	$ 287,634	$ 1,830,179
2007	$ 594,396	$ 947,078	$ 152,997	$ 305,738	$ 2,000,209
2008	$ 639,073	$ 392,093	$ 593,322	$ 309,586	$ 1,934,074
2009	$ 661,120	$ 249,556	$ 410,205	$ 293,856	$ 1,614,737
2010	$ 688,782	$ 269,244	$ 454,692	$ 306,923	$ 1,719,640
2011	$ 670,090	$ 447,003	$ 566,294	$ 319,595	$ 2,002,982
2012	$ 786,469	$ 300,306	$ 533,671	$ 331,444	$ 1,951,890
2013	$ 814,597	$ 435,538	$ 587,306	$ 343,184	$ 2,180,625
2014	$ 879,666	$ 478,566	$ 679,073	$ 368,993	$ 2,406,298
2015	$ 920,272	$ 398,933	$ 663,306	$ 391,888	$ 2,374,399
2016	$ 938,890	$ 273,840	$ 593,112	$ 406,284	$ 2,212,126
2017	$ 982,616	$ 309,582	$ 660,014	$ 419,838	$ 2,372,050
2018	$ 993,316	$ 379,345	$ 716,072	$ 423,047	$ 2,511,780
2019	$ 1,135,322	$ 230,652	$ 767,328	$ 439,023	$ 2,572,325
2020	$ 1,149,635	$ 96,981	$ 745,212	$ 451,347	$ 2,443,175
2021	$ 1,182,886	$ 270,966	$ 1,073,844	$ 487,529	$ 3,015,225
2022	$ 1,189,717	$ 359,692	$ 952,322	$ 486,229	$ 2,987,960
2023	$ 1,232,015	$ 359,078	$ 1,080,460	$ 419,808	$ 3,091,361
2024	$ 1,279,041	$ 280,312	$ 1,182,802	$ 433,507	$ 3,175,662

Figure 11. Net Assets



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.

Beginning in 2018 the nomenclature for net assets changed. Unrestricted net assets combined both unrestricted financial net assets and investment in plant and equipment. Fortunately, the footnotes in the financial statement allow us to separate these two categories of net assets. Temporarily restricted net assets were renamed and are now called time or purpose restricted net assets. A small portion of these time and purpose restricted net assets maybe restricted for use on capital projects, but most of the money in this category ultimately can be used to support the operations of the University. Permanently restricted net assets were renamed to be perpetually restricted net assets (endowment).

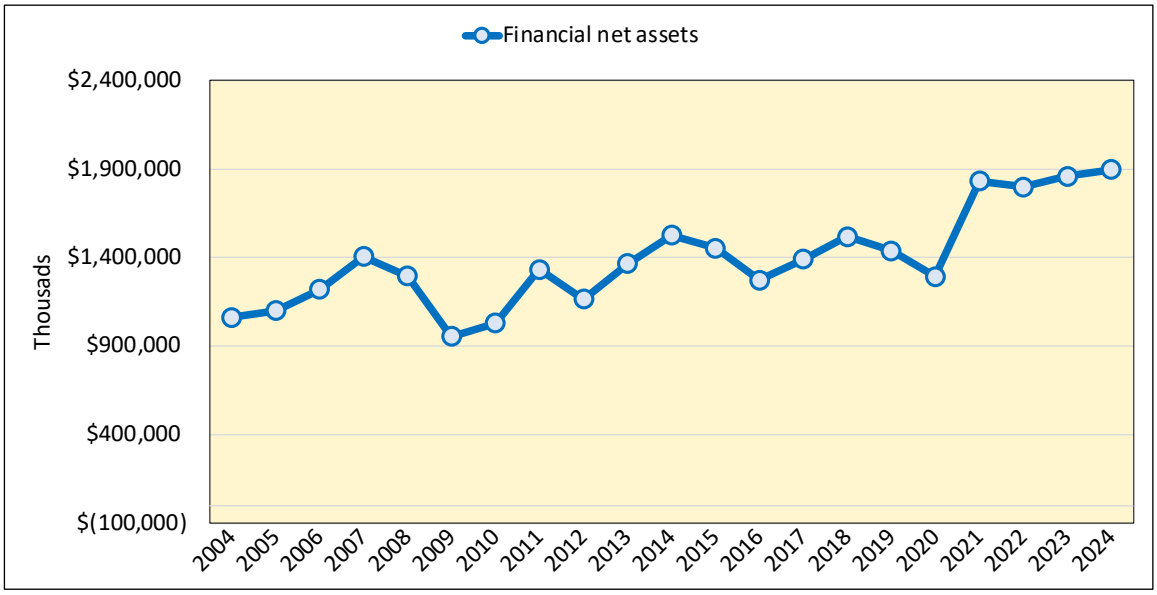
In Table 4 above we also separate net assets into four categories. Plant and equipment are all tangible net assets (land, buildings, library books and equipment). Unrestricted net assets which can be used to support operations. Time and purpose restricted most of which can ultimately be spent on operations and permanently restricted (endowment).

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 the university added flexibility with respect to operations. To the extent that a university uses funds it generates through operations to purchase land, building and equipment it can decide to reallocate these funds for alternative uses. However, to the extent that it uses capital funds from the state or from private sources for purchases of land, buildings and equipment it is limited and cannot reallocate that money for other purposes.

Also, once universities purchase land and construct buildings, they are unlikely to sell these assets to generate funds, which could be used for other purposes, although in recent years some institutions have been selling or leasing various auxiliary services like parking and food services that can result in a one-time infusion of cash. But in general, wealth in the form of tangible assets cannot be used to deal with unforeseen circumstances such as temporary declines in enrollment or declines in investment earnings. Therefore, it is important to look separately at the University's tangible assets and its financial assets.

Net financial assets, shown in Figure 12, increased from $1.1 billion in 2004 to $1.4 billion in 2007. In 2008 and 2009 financial net assets declined. The declines in 2008 and 2009 are largely due to declines in the value of the University's investments resulting from the collapse of financial markets in 2008 and 2009. By the end of fiscal 2009, the University had $957 million in net financial assets. In 2010 and 2011 there were substantial increases in net financial assets, with net financial assets reaching $1.3 billion in 2011. In 2012, net financial assets declined to just under $1.2 billion. In 2013 and 2014, net financial assets increased, reaching a high of $1.5 billion. In 2015, there was a modest decline in net financial assets, which ended the year at just under $1.5 billion; still higher than the previous peak of $1.4 billion in 2007, just before the collapse of financial markets associated with the Great Recession. In 2016 there was another decline in net financial assets which ended the year at $1.3 billion. As noted earlier, some of this decline, particularly was to a significant increase in post-employment liabilities, especially since the value of investments increased. But in 2016 the value of investments declined and this along with another increase in the liability post-employment benefits helps to explain the decrease in net financial assets. In 2017 and 2018 net financial assets increased ending 2018 at $1.5 billion. Financial net assets then declined over the next two years to $1.3 billion before rebounding to $1.8 billion in 2021. Net financial assets since 2021 declined slightly in 2022 and then rose in 2023 and 2024 ending the year at $1.9 billion.

Figure 112. Net Financial Assets



It is also important to remember that financial net assets are not just a pile of cash and investments. They are cash and investments minus liabilities. Therefore, when there is an increase in for example post-retirement benefit obligations (a liability) there is a

decline in net financial assets. Figure 13 shows financial net assets and cash and investments. As we can see, the two series move together (the correlation between the two series is 0.93) financial net assets are lower because they are essentially cash and investments minus certain liabilities. It is for this reason that the concept of reserves, i.e., money that can be used to deal with unforeseen circumstances, is based on looking at a portion of net assets.

Figure 13. Cash & Investments and Financial Net Assets

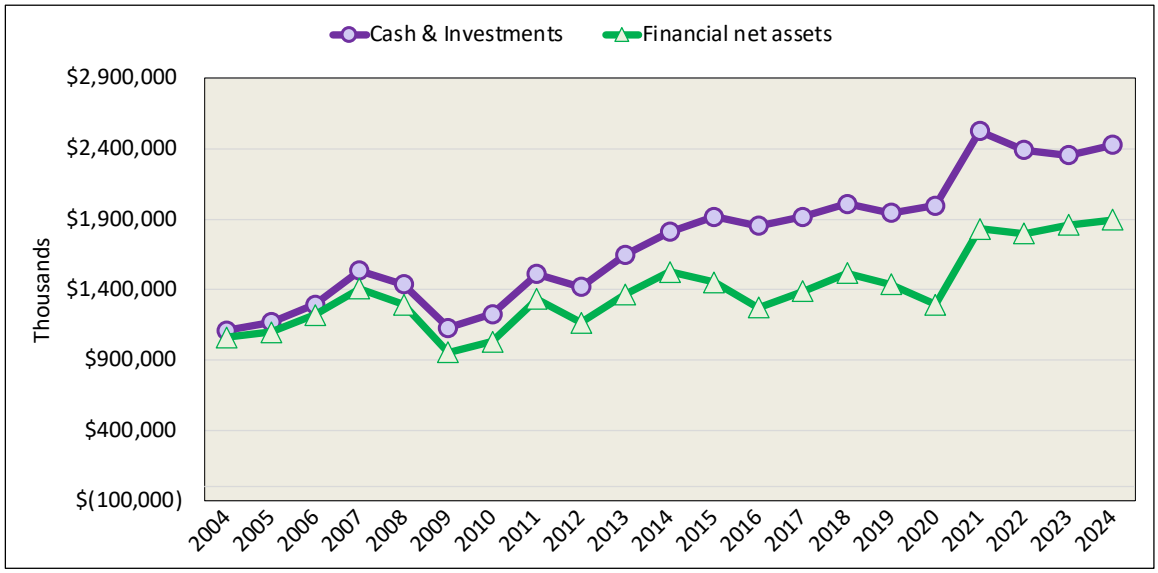
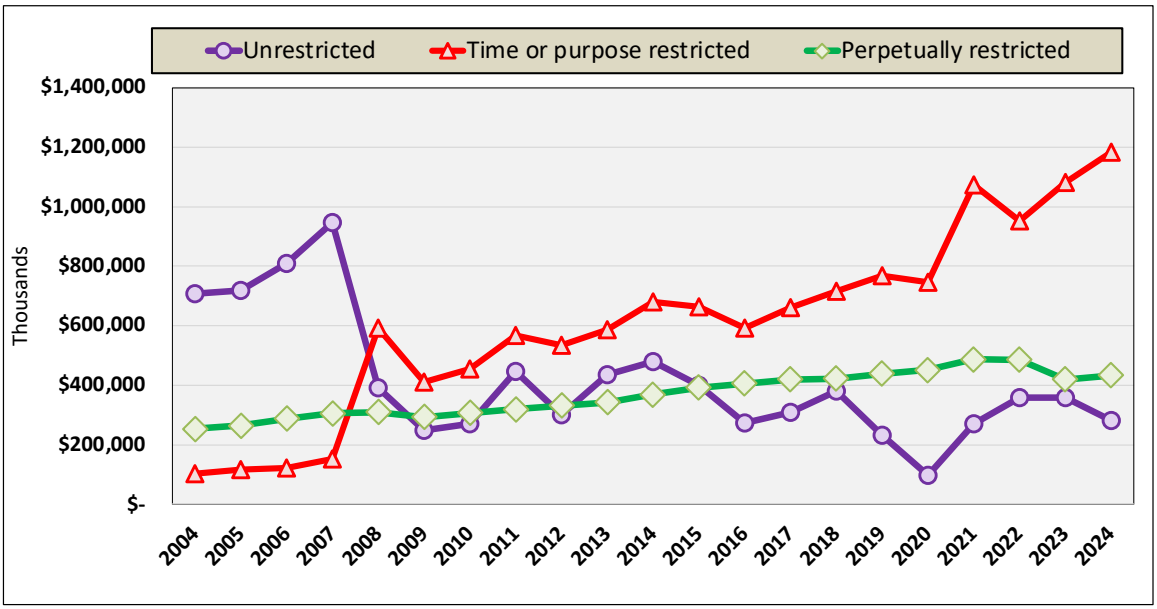


Figure 14 shows the net assets divided into unrestricted, time or purpose restricted (formerly temporarily restricted) and perpetually restricted (formerly) permanently restricted net assets. Between 2004 and 2007 there was a substantial increase in unrestricted net assets. In 2004 unrestricted net assets were $707.1 million and by 2007 they had risen 36.7 % reaching $967.1 million. Then in 2008 there was a dramatic reduction in unrestricted net assets, with unrestricted net assets falling to $392.1 million. Then in 2009 there was a further decline in unrestricted net assets with unrestricted net assets falling to $252.9 million. From 2009 to 2014 unrestricted net assets trended upward trend reaching a post 2008 high of $478.6 million in 2014. Since 2014 unrestricted net assets have been trending down and they dropped dramatically in 2019 and 2020 ending 2020 at just $96.9 million. However, in 2021 they rebounded to $271 million. In 2022 unrestricted net assets were $360 million and then fell slightly to $359 million in 2023. Finally in 2024 unrestricted net asset declined substantially, ending the year at $280 million.

At first glance it appears that the unrestricted net assets have been declining although if one begins looking at unrestricted net assets in 2010 the decline would be small. There was a substantial decline in 2008 and 2009, and a significant portion of this decline was due to the collapse of financial markets during the Great Recession. However, in 2008 when unrestricted net assets declined from $967.1 million to $392.1 million, there was also an offsetting increase in temporarily unrestricted net assets, which rose from $153 million to $593.3 million. A large portion of these changes can be explained by the fact that the **University reclassified donor-related endowment not classified as permanently restricted, from unrestricted to temporarily restricted** in following FASB Staff Position No. 117-1. Reclassification does not necessarily imply any change as to how these reclassified net assets can be used.

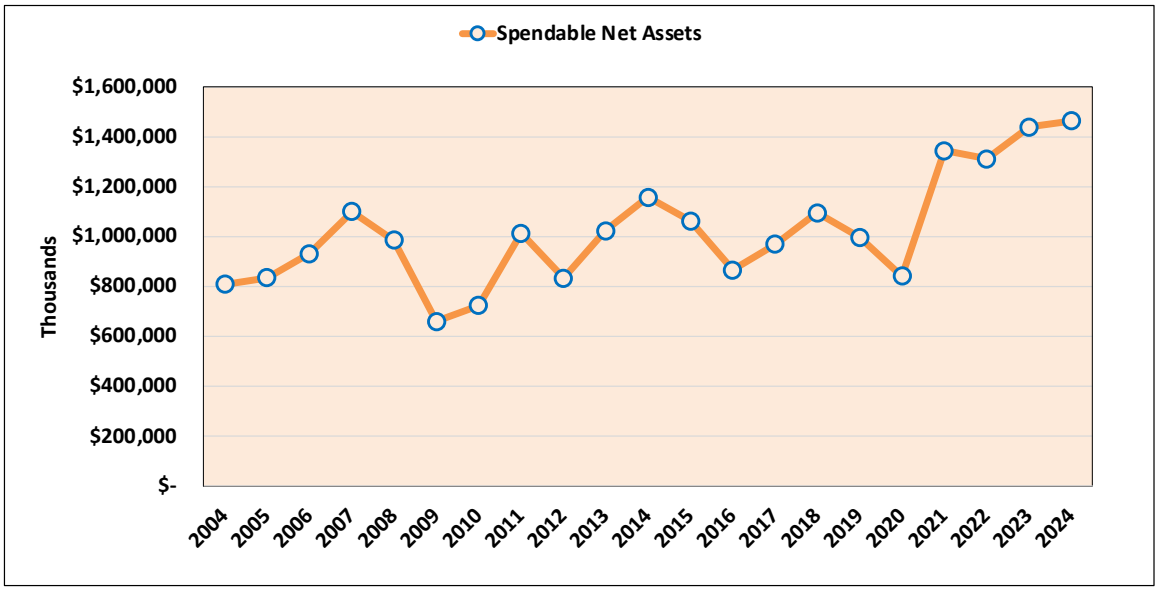
Figure 124. Financial Net Assets by Type



To get a more complete picture of what happened to the value of the University's net assets it is reasonable to combine the unrestricted and time and purpose restricted (temporarily restricted) net assets. There is a small portion of time and purpose related net assets set aside for capital additions, but the overwhelming majority of these funds could be spent for operations**. For example, in 2024 of the $1.2 billion that was time or purpose restricted only $85.4 million (7.2%). So, for all intents and purposes we can combine unrestricted and restricted for time and purpose and refer to them as spendable (expendable) net assets, A.K.A reserves.** These spendable net assets (reserves) are shown in Figure 15.

The combined total then declined to $985.4 million in 2008 and then to $659 million in 2009. So, while at first it appeared as if there was a 73% decline in unrestricted net assets between 2007 and 2009, the decline resulting from the crisis in financial markets, the actual decline was closer to 41%. By 2011, the combined total of unrestricted and time or purpose restricted net assets had risen to $1 billion, before declining to $832.4 million in 2012. Between 2012 and 2014 combined unrestricted and time and purpose restricted net assets rose to $1.16 billion and then declined modestly to $1.1 billion at the end of 2015 and then declined again to $866.9 million in 2016. From 2016 to 2018 the combined unrestricted and time and purpose restricted net assets rose to $1.1 million and then declined in 2019 and 2020, ending 2020 at $842.2 million. Then in 2021 due to record increases in the stock market the combined unrestricted and time and purpose restricted net assets rose $1.34 billion. In 2022 there was a slight decline in spendable net assets, followed by two years of increases, so that **by the end of 2024 spendable net assets were $1.5 billion.**

Figure 135. Spendable Net Assets



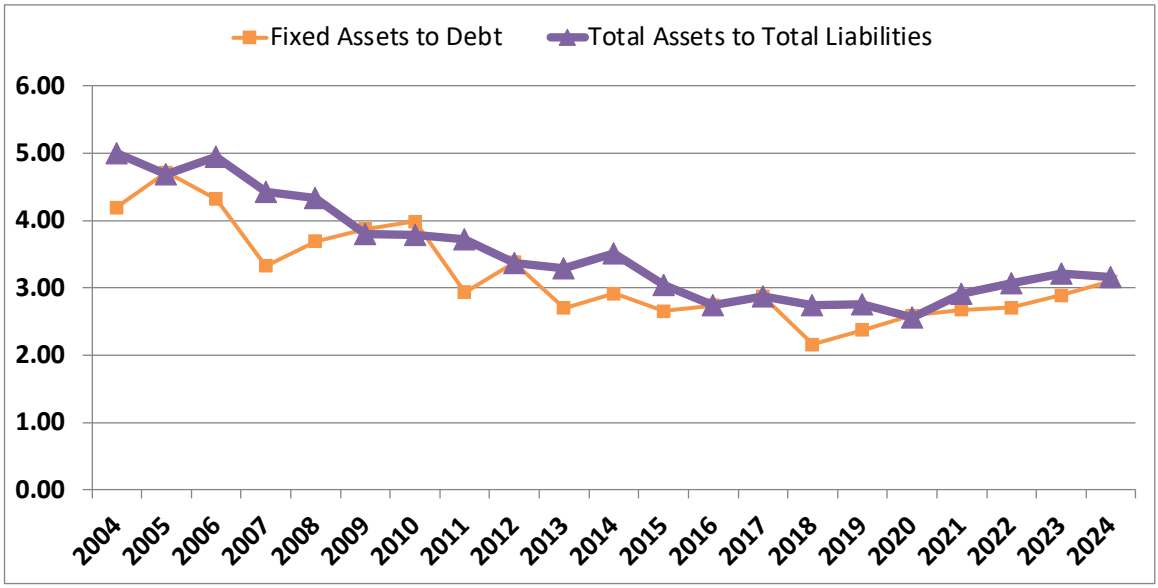
The University of Delaware is a privately chartered non-profit university supported by the State of Delaware and therefore it uses FASB standards. Accordingly, it is customary to report on cash and investments in the form of unrestricted net assets and time or purpose (temporarily restricted) net assets as “available funds” which are equivalent to spendable funds i.e., they provide liquidity to deal with unexpected changes in revenues or expenses. In evaluating the liquidity of an institution, it is customary to look at a couple of key ratios. First is the viability ratio, which is the ratio of expendable or spendable net assets to debt. The second is the primary reserve ratio that looks at the ratio of expendable or spendable net assets to operating expenses.

The University of Delaware seems to mix both approaches in evaluating its liquidity. In the past, a document on the webpage of the Office of the VP for Finance with a graph showed the primary reserve ratios for the University from 2004-2008. The University said that it calculated this ratio as expendable unrestricted net assets to operating expenses. For 2004 the ratio was just over 1.2. The only way to get a number that is approximately 1.2 is to take unrestricted endowment funds plus unrestricted funds designated for plant and divide by operating expenses, which equals 1.22. **However, this leaves out unrestricted net assets set aside for operations. Clearly funds, which are set aside for operations, should be included as expendable unrestricted funds and therefore the University appears to have understated the primary reserve ratio.** If one includes all unrestricted expendable net assets, then the primary reserve ratio would have been approximately 1.31. Is this part of the missing 368m?

When bond rating agencies look at financial resources they are interested in "available" net assets. Normally this would be the sum of unrestricted and time and purpose restricted (temporarily restricted) net assets. This method has been used by bond rating agencies and financial analysts, and it follows the convention in calculating the Composite Financial Index (CFI), which will be discussed later in this report (see: *Strategic Financial Analysis for Higher Education* 7th edition, 2010).

One of the ways that we can evaluate the strength of a balance sheet is to look at certain key ratios. Figure 16 also shows the ratio of total assets to total liabilities. From 2004 through 2016 this ratio has trended down. Since 2016 it seems to have stabilized.

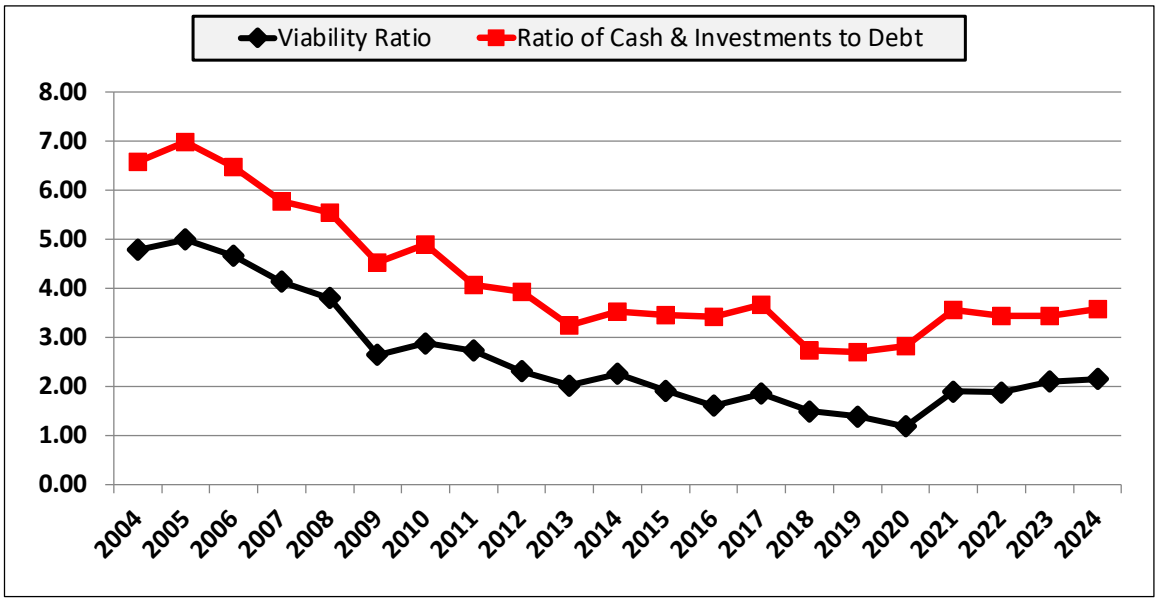
Figure 16. Ratios of Assets to Liabilities



Another indicator of financial health is the ratio of fixed assets to long-term debt, which is again shown in Figure 16. This ratio has been somewhat more volatile than the ratio of assets to liabilities. It trended down from 2004 to 2018. Since 2018 it seems to have started to trend up. In my last report I observed that both ratios appeared to be stabilizing and with the hindsight of an additional three years of data both seem to be exhibiting modest upward trends

Next, we will look at two measures that reflect an institution's ability to take on additional debt. First is the ratio of cash and investments to debt which is used by Moody's as a key indicator of debt capacity. Second is the Viability Ratio which is the ratio of spendable net assets (reserves) to debt. This ratio is widely used in summary indices of financial performance. Figure 17 shows the ratio of cash and investments to debt and the viability ratio for the University from 2004 to 2024. Both ratios move together. The ratios declined sharply between 2004 and 2013. Since 2013 they appear to have stabilized. However, it should be noted that since the University started with very high ratios, even with the decline, it still has significant debt capacity. A viability ratio of 2.15 means that the University had enough reserves to pay 215% of its debt.

Figure 14. Ratio Cash & Investments to Debt



A second set of ratios that can be used to evaluate the health of a university's balance sheet are the ratio of cash and investments to operating expenses and the second is the primary reserve ratio which is the ratio of spendable net assets to operating expenses. Moody's uses the ratio of cash and investments to operating expenses and other summary indices traditionally use the primary reserve ratio. Again, since the denominator is the same in both ratios and spendable net assets are highly correlated

with cash and investments both ratios, move together. However, it appears that the primary reserve ratio is a little more volatile particularly between 2018 and 2020. Nevertheless, they both tell the same story. These ratios are shown in Figure 18.

After sharp declines in 2008 and 2009 again due to the collapse of financial markets during the Great Recession, both ratios stabilized although the primary reserve ratio appears to have diverged somewhat in 2020. Nevertheless, the story told by these two ratios is one of solid performance and show that the University has a strong balance sheet. **A primary reserve ratio of 1.14 shows that the University has enough spendable net assets to cover 114% of its operating expenses or enough to cover nearly than 14 months of operating expenses. This is an extremely high ratio.**

Figure 18. Ratio of Cash & Investments to Operating Expenses & Primary Reserve Ratio

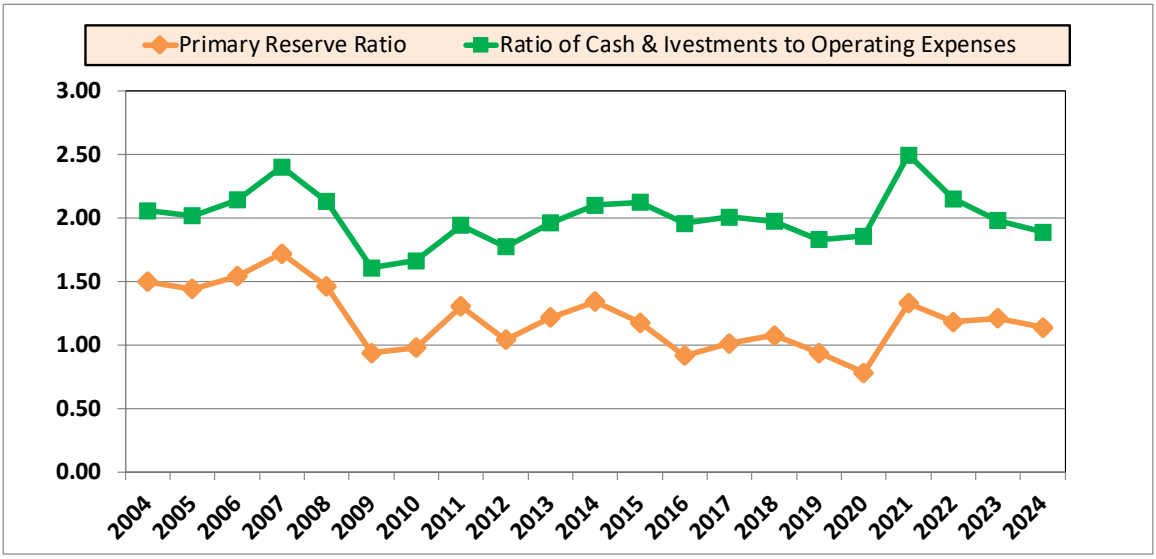
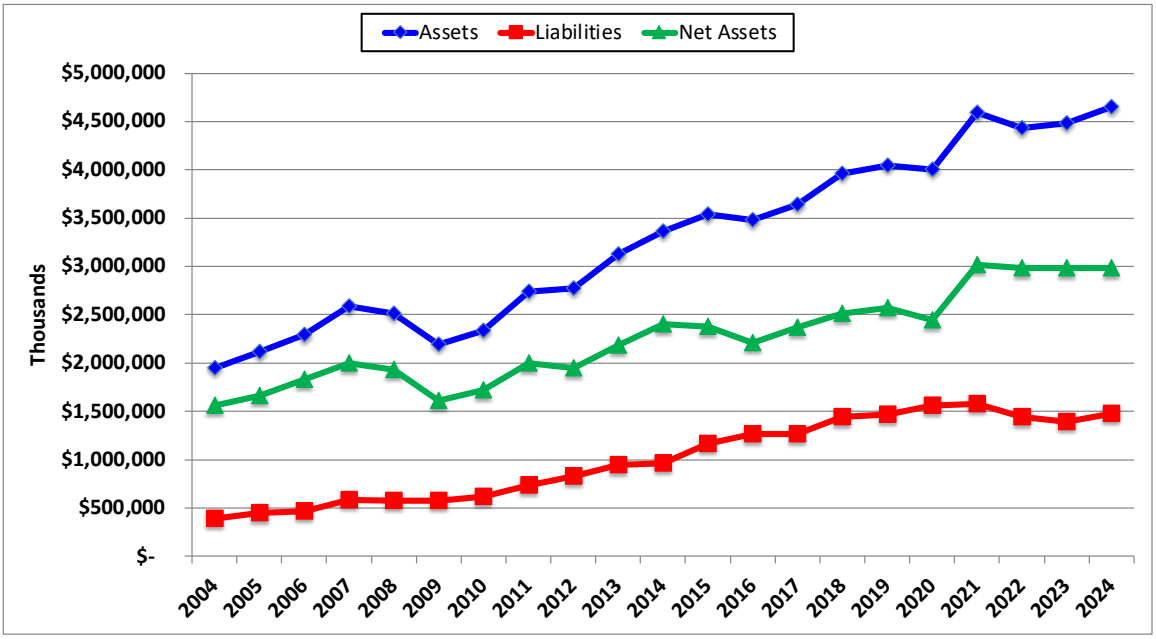


Figure 19 provides a summary of the statement of net position, showing the university's assets, liabilities and net assets. In shows that assets, liabilities and net assets are all rising. It bears repeating that net assets are the difference between assets and liabilities. Therefore, since net assets are rising and liabilities are also rising, it must be the case that assets are growing faster than liabilities, i.e., the change in assets over-time has been greater than the change in liabilities. Finally, we can also see that the volatility in net assets is largely due to volatility in assets, primarily ups and downs in the value of the university's investments.

Figure 19. Statement of Net Position



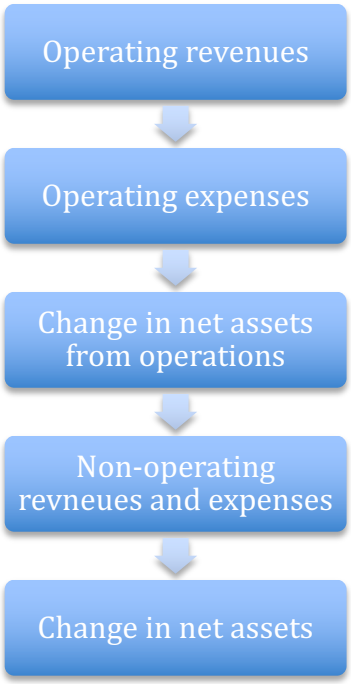
In summary, by 2024 the University of Delaware had total net assets of $4.7 billion with $1.9 billion in financial assets. The University had combined unrestricted and time or purpose restricted net assets of $1.46 billion and perpetually restricted net assets of $434.5 million. It has a strong balance sheet with substantial debt capacity and has strong reserves which give it great flexibility in dealing with unforeseen circumstances.

What are the income and expenses of the University?

Revenue, Expenses and Net Income

The second major financial statement is the statement of activities. This statement deals with revenues and expenses which determine whether the University has a surplus or a deficit. Many faculty focus on this statement because it is like a budget i.e., it tracks revenues, expenses, surpluses and deficits. But as we will see making sense of this statement is often difficult because of the existence of non-cash expenses and because components of it are easier to manipulate. This financial statement shows how a college or university's finances are changing over a period, 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, 2024, to June 30, 2025, is known as fiscal year 2025. This statement deals with flows and measures how the college or university's revenues and expenses are changing over time. Figure 20 shows the basic structure of the statement of revenues, expenses and changes in net assets.

Figure 150.



There are two ways of keeping track of revenues and expenses. The cash method is the one most of us are familiar with. When my paycheck was deposited in my checking account on January 1, 2024, it was considered income for 2024. Similarly, when a good or services was purchased and paid for in December 2024 but the good or service was

delivered on January 5, 2025, it was considered an expense incurred in 2024. However, most businesses, including colleges and 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 not the year when cash is received. For example, if you received a paycheck in January 2025 for work you did in the previous year, accrual accounting would consider it revenue for 2024. Similarly, if you wrote a check in 2024 for goods or services delivered in 2025 it would be considered an expense in 2025, because that is when the goods or services were delivered. Accrual accounting is used because it provides a more accurate picture of a college or university's financial situation.

As noted earlier, there is also a relationship between stocks and flows or between the balance sheet and the income statement. For example, if revenues are greater than expenses, then there will be an increase in net assets. This means that if you take the net assets at the beginning of a year on the balance sheet and add the change in net assets from the statement of revenues, expenses and changes in net assets, you will get the net assets at the end of the year, which is shown on the balance sheet. So, an increase in accounts receivable on a balance sheet shows up as revenue on an income statement even though no cash was received. Similarly, an increase in accounts payable shows up as an expense on the income statement even though no cash has been expended. The following equation shows the relationship between the balance sheet and the income statement.

The change in net assets = revenue – expenses = change in assets – change in liabilities.

Revenues and expenses for public universities using FASB are shown in its Statement of Activities. This statement is the University's income statement or its profit and loss statement.

Revenue is the inflow of resources to a university for the services it provides. Revenues 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 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, food service or running a bookstore. Since the University uses FASB, state appropriations are also included in operating revenues. Non-operating revenues include investment income, decreases (increases) in post-retirement obligations, endowment income, capital gifts and appropriations, and net realized and unrealized gains (losses) on investments.

Expenses, for the most part, represent an outflow of resources from a university. There are operating and non-operating expenses. Operating expenses can be listed by functional categories, 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. A Functional report of operating expenses includes 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. Interest payments are an example of a non-operating expense. (See the Appendix at the end of this report for functional definitions of operating expenses.)

Since the University uses FASB, interest and depreciation are embedded in functional expenses and decisions made by administrators and trustees can determine whether revenue or an expense show up in the operating or non-operating portion of the statement. From a classification perspective the categories in the operating portion of the statement correspond with budget categories e.g., tuition, grants and contracts on the revenue side and instruction, academic support and institutional support on the expense side. **The problem is on the revenue side it includes endowment payouts and investment payouts which represent a portion of investment earnings that the administration decides to allocate to operations. The remainder of endowment and other investment earnings are in the non-operating category. This means that an operating surplus or deficit can depend on how much the administration decides it should transfer from non-operating to operating.**

Investments also move up and down in value but often most gains or losses are unrealized i.e., they are paper gains or losses. Finally, under FASB rules depreciation and interest payments are imbedded in the various functional expense categories. So, when we are looking at instructional spending it includes wages and salaries, benefits but also includes an allocated share of depreciation (another non-cash expense) and interest payments.

Depreciation and other Non-Cash Expenses

Historically, universities and colleges did not account for depreciation of fixed assets. Universities using FASB started reporting depreciation in 1988. Before they started reporting depreciation, 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 position (increase in net assets) except that net position (net assets) also accounts 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 and colleges do is to break up the money they spend on construction and renovation by allocating that expenditure over a fixed period. The amount of time depends on the 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 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 or college.

Depreciation is an expense, but it is a non-cash expense. Depreciation is a way of allocating the cost of fixed capital over the useful life of an asset. In theory, the cost related to the use of a fixed asset each year depends on the wear and tear on fixed assets. It is important for any business to consider the cost of producing a good or service so that it can charge a price for the good or service that at a minimum covers the cost of production. However, unlike other expenses, depreciation does not involve making cash payments to some entity external to a college or university. When an institution has an expense for wages or utilities it writes a check to cover those expenses, which reduce a college or university's cash holdings. When a college or university claims depreciation as an expense, it reduces its net income or the change in net assets on paper but there is no actual outflow of cash. So, it is possible for an institution to have losses every year but still but still meet all its financial obligations if those losses do not exceed depreciation expenses.

When a university or college puts up a building it writes a check to cover the cost of construction. That represents a cash outflow, but it is not an expense. It is characterized as a capital expenditure, which is not the same as an every-day operating expense. The reason for this different treatment is that a building is an asset that will last for several years. When a building is acquired, the cost is not counted as an expense; the depreciation on the building is counted as an expense over the life of the building, usually many years. What depreciation does is to allocate the cost of construction, as an expense, allegedly over the useful life of the asset. However, if you look at actual depreciation schedules you will notice that there are assets that are fully depreciated, but they are still in use. The day that a building becomes fully depreciated does not mean it is ready to be condemned.

Depreciation in the for-profit sector is an important tool for businesses to reduce their tax liability. As an expense, it reduces their net income and hence reduces their tax liability. Most depreciation schedules are not necessarily related to the actual useful life of an asset but are artifacts of the tax code (technically called MACRS for modified accelerated cost recovery University). For example, there are different methods of depreciation, straight-line, sum of years, reducing balance and units of activity. The total amount that is depreciated (expensed) over the "life of the asset" is the same, but some methods allow for even levels of expenses over the life of the asset, while others allow for larger expenses in the beginning and smaller expenses, as the asset gets closer to being fully depreciated. For profit corporations use different depreciation schedules to try and maximize tax avoidance. Of course, this is not a problem for universities, as they generally have no tax liabilities and so most use straight-line depreciation.

It is important to understand that depreciation is calculated based on the book value or the historic cost of purchasing an asset. This means that this expense does not consider actual replacement cost or the actual cost of renovations.

Recently several university and college CFOs have started advocating, "fully funding depreciation." What does this mean? In the past, when universities developed budgets (plans for spending), they ignored depreciation. "Fully funding depreciation" just means adding depreciation as an expense when developing a budget. If there is no additional revenue added to the budget, adding an additional expense just means reallocating resources – in other words, cutting certain expenses with the goal of building reserves.

“Fully funding depreciation” is just a subterfuge to disguise the fact that a university or college administration is simply making a choice about resource allocation. Politically, if the President announces we have no money for raises because we want to build our reserves, faculty are likely to challenge the assertion that a university or college cannot afford raises. However, if the President can simply say, in our budget revenues equal expenses and without additional revenue there is no money for faculty raises, faculty are more willing to accept this bad news. Sound familiar?

Adding depreciation to the budget artificially adds expenses and amounts to a shell game to hide the fact that the administration has simply made a conscious decision that building reserves for the future is more important than paying faculty and other employees in the present.

By focusing on fully funding depreciation or “deferred maintenance,” administrators are in essence choosing buildings over people.

There are additional problems with adding depreciation to a budget. First, the current funds budget is supposed to be an operating budget. Most businesses have an operating budget and a capital budget. The operating budget deals with day-to- day operations. The capital budget is a plan for how to purchase new capital assets or renovate existing assets, when they have reached the end of their useful life. Adding depreciation expenses to a budget is just a way of reducing planned spending in other areas such as instruction, because all operating budgets ultimately need to be balanced. Mixing the operating budget and the capital budget together however is not a standard business practice and makes little sense.

There is a reason that most businesses and governments (here the federal government is an exception) separate their operating budget from their capital budget. One reason is that operations need to be funded out of current revenue, i.e., one cannot borrow money to fund current operations on an ongoing basis. However, borrowing is typically an option to fund capital expenditures. Another reason not to mix the two together is that the state provides some funding in the form of a “state appropriation” for operations and it also has a separate “capital appropriation”. Capital spending can also be financed by using reserves, borrowing or through the receipt of capital gifts.

At a small number of select universities and colleges with large endowments, public and private alike, capital expenditures are largely funded from endowments or donated funds. However, at most public universities, capital gifts tend to be smaller, and most capital funding comes from borrowing or capital appropriations.

Also complicating matters are the treatment of post-retirement benefits. There are service costs associated with these benefits which reflect actual cash outlays but then there are also changes in post-retirement liabilities, which show up as either an expense or revenue but again are non-cash items and not particularly meaningful since most universities, including the University of Delaware, pay these benefits using a pay as you go system as opposed to prefunding these benefits. Service costs are a cash expense but many of the expenses are non-cash expenses and are very soft numbers because they depend on many assumptions, regarding interest rates, mortality, salary increases, retention etc. In addition, **the University has not always counted the faculty retirement plan as a post-retirement obligation, and so when they do start counting them it appears as a dramatic increase in post-retirement expenses**.

The difference between operating revenues and operating expenses is known as the change in net assets from operating activities. The change in net assets from operating activities plus the net change in non-operating activities is the overall change in net assets. The change in net assets is in effect the bottom line for a university in each year. If there is an increase in net assets the flow of revenue into the university has been greater than the outflow of expenses, and if there is a decrease in net assets the university has experienced a loss.

Revenue

Figure 21 shows the total operating revenue for the University from 2004-2024. In general, we see a stable increase in operating revenue. The only exception is in 2020 and 2021 during the COVID-19 pandemic. With that exception there appears to be almost no volatility, suggesting that the administration has some degree of control over operating revenue.

gure 21. Total Operating Revenue

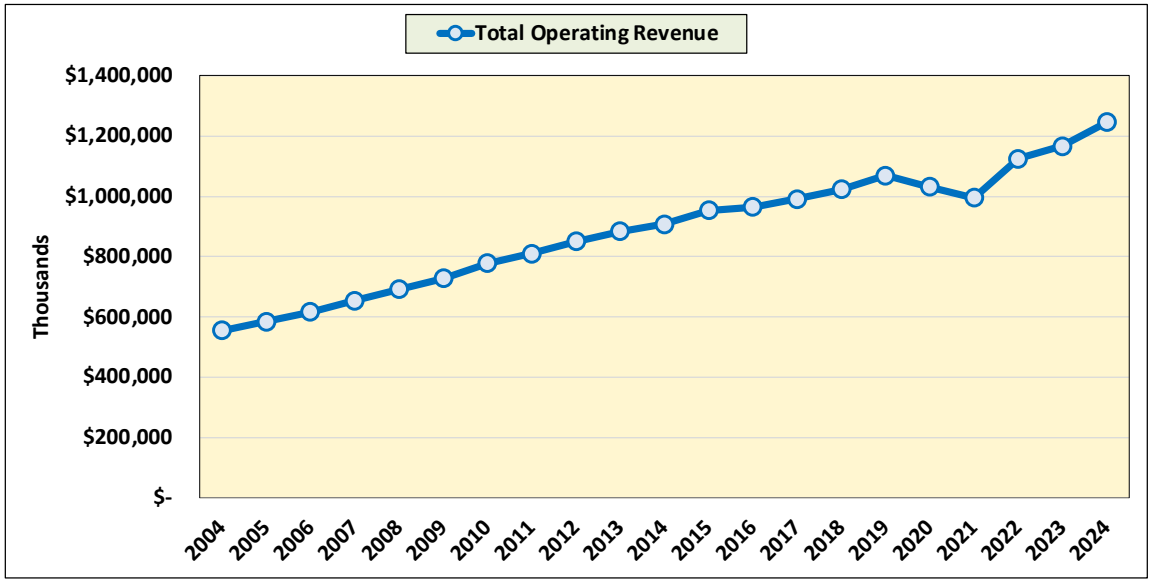


Table 5 shows the operating revenues for the University by category. Tuition and fees and sales and service of auxiliary enterprises are net of financial aid. Scholarships and fellowships that involve tuition remission or reduction are treated like discounts. Think about them as the University running a sale. The numbers in Table 5 are net of those discounts.

Table 5. Operating Revenues

Year	Tutition and Fees	Sales and services of auxiliary enterprises	Grants, Contracts & other exchange	State operating appropriations	Contributions	Endowment spending payout	Other investments payout	Other revenue	Net assets released from restriction	Total Operating Revenue
2004	$ 191,853	$ 69,831	$ 109,844	$ 102,876	$ 18,814	$ 40,343	$ 7,164	$ 15,622		$ 556,347
2005	$ 204,064	$ 73,128	$ 116,087	$ 109,140	$ 18,756	$ 39,434	$ 8,147	$ 16,494		$ 585,250
2006	$ 210,971	$ 77,568	$ 124,168	$ 115,666	$ 18,974	$ 39,898	$ 11,174	$ 18,735		$ 617,154
2007	$ 219,900	$ 81,818	$ 129,586	$ 122,828	$ 19,766	$ 45,869	$ 12,396	$ 21,888		$ 654,051
2008	$ 235,398	$ 88,072	$ 136,432	$ 127,166	$ 20,027	$ 49,489	$ 14,010	$ 21,792		$ 692,386
2009	$ 260,897	$ 92,929	$ 135,371	$ 126,744	$ 20,857	$ 54,158	$ 9,318	$ 28,207		$ 728,481
2010	$ 296,648	$ 99,519	$ 165,951	$ 117,873	$ 19,885	$ 46,239	$ 6,896	$ 25,390		$ 778,401
2011	$ 322,634	$ 101,902	$ 175,151	$ 116,152	$ 18,816	$ 43,902	$ 6,334	$ 25,196		$ 810,087
2012	$ 354,844	$ 110,657	$ 165,692	$ 112,427	$ 25,048	$ 44,603	$ 6,294	$ 31,420		$ 850,985
2013	$ 370,912	$ 116,795	$ 172,725	$ 115,072	$ 23,483	$ 46,557	$ 6,110	$ 32,766		$ 884,420
2014	$ 381,515	$ 121,734	$ 170,948	$ 117,044	$ 28,873	$ 48,187	$ 6,357	$ 33,450		$ 908,108
2015	$ 406,304	$ 128,117	$ 172,078	$ 117,005	$ 31,732	$ 50,152	$ 11,390	$ 36,664		$ 953,442
2016	$ 412,241	$ 129,691	$ 172,405	$ 118,749	$ 29,392	$ 50,470	$ 15,909	$ 35,924		$ 964,781
2017	$ 423,104	$ 129,036	$ 180,417	$ 121,186	$ 28,706	$ 51,033	$ 17,842	$ 40,679		$ 992,003
2018	$ 444,724	$ 136,607	$ 181,600	$ 118,794	$ 25,215	$ 51,429	$ 20,461	$ 44,782		$ 1,023,612
2019	$ 455,052	$ 137,576	$ 201,657	$ 122,320	$ 9,868	$ 51,877	$ 26,782	$ 45,889	$ 18,373	$ 1,069,394
2020	$ 457,838	$ 94,097	$ 214,147	$ 125,314	$ 9,848	$ 52,215	$ 20,824	$ 42,915	$ 14,551	$ 1,031,749
2021	$ 416,774	$ 49,936	$ 272,738	$ 125,168	$ 9,881	$ 53,048	$ 16,041	$ 37,650	$ 14,805	$ 996,041
2022	$ 424,322	$ 120,573	$ 301,468	$ 129,358	$ 9,361	$ 56,097	$ 15,714	$ 50,961	$ 17,080	$ 1,124,934
2023	$ 438,162	$ 136,044	$ 283,115	$ 134,016	$ 8,103	$ 61,936	$ 26,216	$ 61,360	$ 18,003	$ 1,166,955
2024	$ 463,216	$ 142,266	$ 313,993	$ 139,547	$ 10,779	$ 66,497	$ 30,464	$ 62,059	$ 17,000	$ 1,245,821

The largest single source of operating revenue at the University is tuition and fees. In 2004, tuition and fees were $191.9 million and by 2009 they had risen to $260.9 million, an average annual increase of 6.3%. In 2010, tuition and fees increased 13.7% and in 2011 increased to $322.6 million, an increase of 8.8%. In 2012, once again tuition and fees increased, reaching $354.8 million, an increase of 5%. In 2013 tuition revenue increased 4.5% and grew 2.8% in 2014. Finally, tuition revenue grew 6.4% in 2015 and was $406 million for the year. In 2016 it grew only 1.5% and was $412.2 million. Between 2016 and 2019 tuition revenue continued to increase at an average annual rate of 3.3%. It is important to remember that the percentage change in tuition revenue reflects both the tuition charged to students as well as the number of students.

The pandemic notwithstanding, tuition revenue also increased in 2020 by 0.6%. However, in 2021 there was a $41.1 million decline in tuition revenue. The small increase in 2020 and the decline in 2021 were undoubtedly due to the COIVD-19 pandemic. In 2023 tuition and fees rebounded to $438.2 million, still below the pre-Covid maximum of $457.8 million in 2020. But in 2024 tuition and fees increased to $463.2 million, an increase of $25.1 million, surpassing the previous high from 2020.

Tuition revenue has two components, the tuition charged per student, net of discounts, and enrollment. Tuition revenue can also be affected by the mix of students with full-time students paying more per head than part-time students and graduate and professional students generally paying higher tuition than undergraduate students. We will see that proportionately graduate and professional students are somewhat more likely to be part-time. Finally, the overall mix of student attending full-time compared to those attending part-time can also impact tuition revenue.

Of course, one of the most important drivers of revenue is enrollment. In Figure 22 we look at total enrollment broken down by full-time and part-time as well as undergraduate and graduate and professional. This enrollment data is Fall enrollment from the Integrated Post-Secondary Data System (IPEDS). Between 2004 and 2008 total enrollment was declining. Between 2004 and 2008, full-time undergraduate enrollment declined 1.4% and part-time undergraduate enrollment declined by 27.4%. In total undergraduate enrollment declined by 5%. During this same period there was also a 1.8% decline in part-time graduate and professional students. As a rule, full-time undergraduate students generate a lot more revenue per student than part-time undergraduate students because they pay more in tuition and they are also more likely to live on campus, which has major implications for auxiliary revenues. Graduate and professional students' tuition is more than undergraduate tuition, although many graduate students receive assistantships and fellowships which reduces tuition revenue. Of course, many graduate students who receive assistantships are graduate teaching

assistants and classes taught by graduate teaching assistants are much less expensive than those taught by full-time faculty. So, changes in enrollment affect revenue depending on the mix of students.

Figure 22. Enrollment

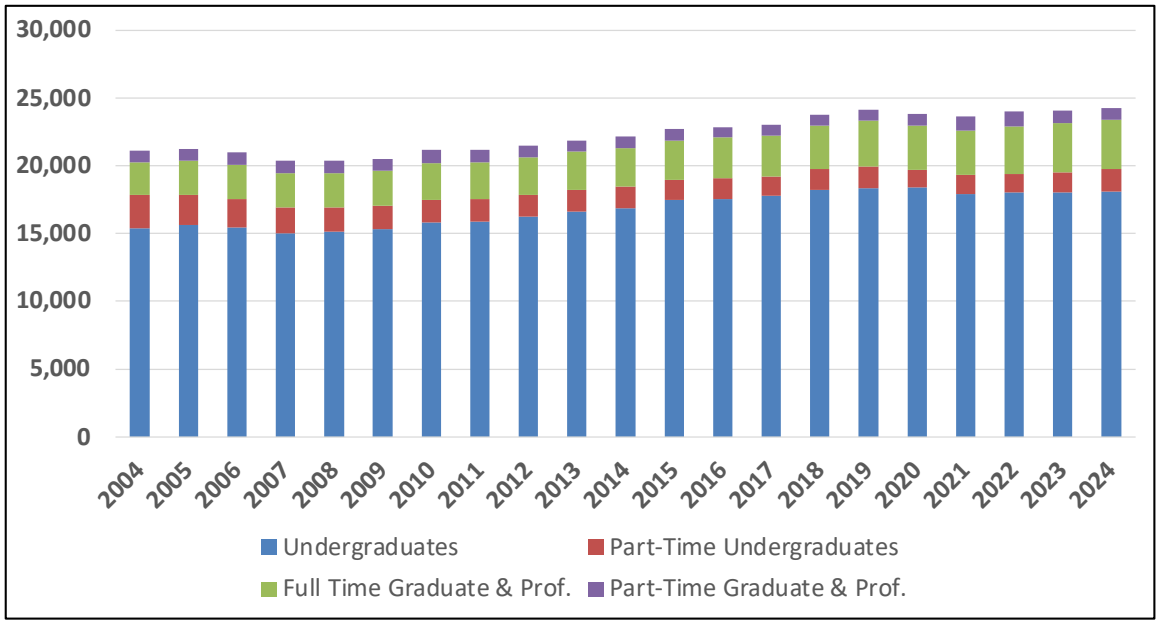


Figure 22 shows enrollment at the University from 2004-2024. Between 2008 and 2019 enrollment at the University grew 18.6%. Part-time enrollment for undergrads continued its decline, down 9.7% but full-time undergraduate enrollment grew 21%. Similarly, full-time graduate student enrollment grew 33% and part-time graduate and professional enrollment declined 7.9%. So, during this period enrollment grew and the mix was more favorable in terms of its impact on revenue.

From 2019-2024 full-time undergraduate enrollment decreased 1.5% while part-time undergraduate enrollment increased 5.6%. Total undergraduate enrollment decreased by 0.9%. While overall enrollment was down slightly the mix of undergraduate students likely had an adverse impact on tuition revenue on a per capita basis. Mix of pt and ft?

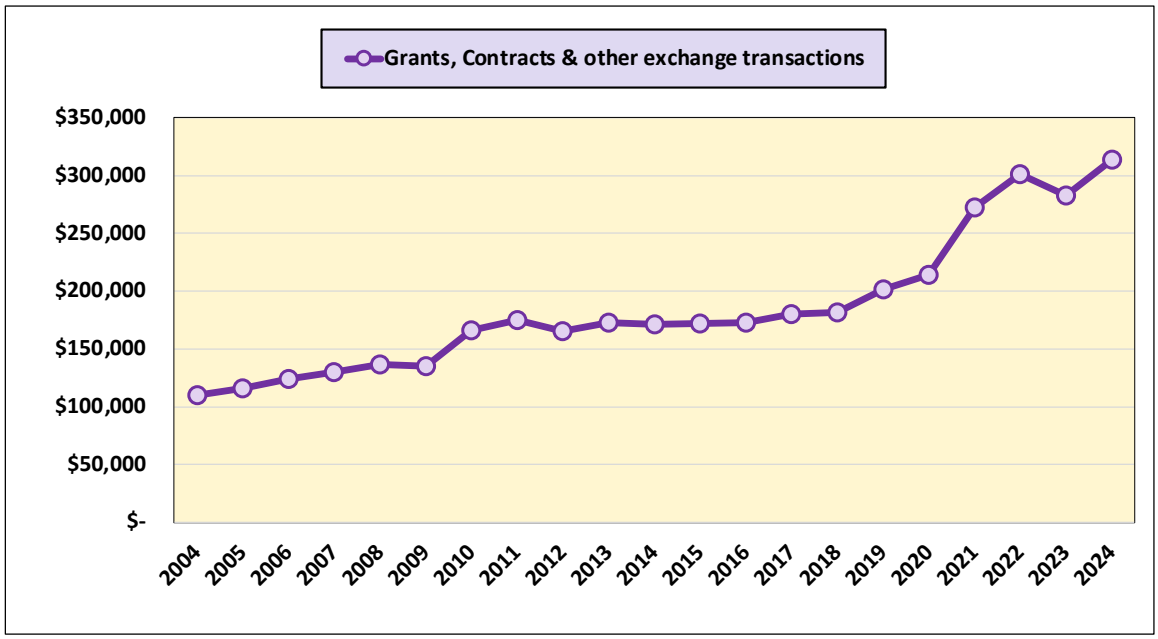
Full-time graduate and professional enrollment increased 7.6% and part-time graduate and professional enrollment increased by 3.9%. Total graduate enrollment was up 6.8%. This change in likely favorable in terms of tuition revenue because graduate and professional tuition is higher.

The University is moderately selective with an admissions rate of about 63% so it does have the ability to control its enrollment. Indeed, if we look at enrollment in the period from 2022-2024, we do see a slight increase in enrollment.

From 2019 to 2024 tuition revenue increased 1.8% and total enrollment increased 0.4%. So, most of the increase in tuition revenue, which was very moderate, came from either rising tuition and/or a change in the mix of students.

The second largest source of revenue grants, contracts and other exchange transactions, which should include all government grants (including Pell grants which are non-exchange grants). These are shown in Figure 23. This source of revenue increased from 2004 through 2011. Between 2011 and 2016 grant and contract revenue was flat, but it started trending upward in 2017 increasing from $172.4 million to $201.6 million in 2019. In 2020 grant and contract income increased by $12.5 million and in 2021 by $58.6 million. A significant portion of the increase in grant and contract income in 2020 and 2021 was due to the CARES act money the University received from the Federal government to offset declines in revenue due to the COVID-19 pandemic.

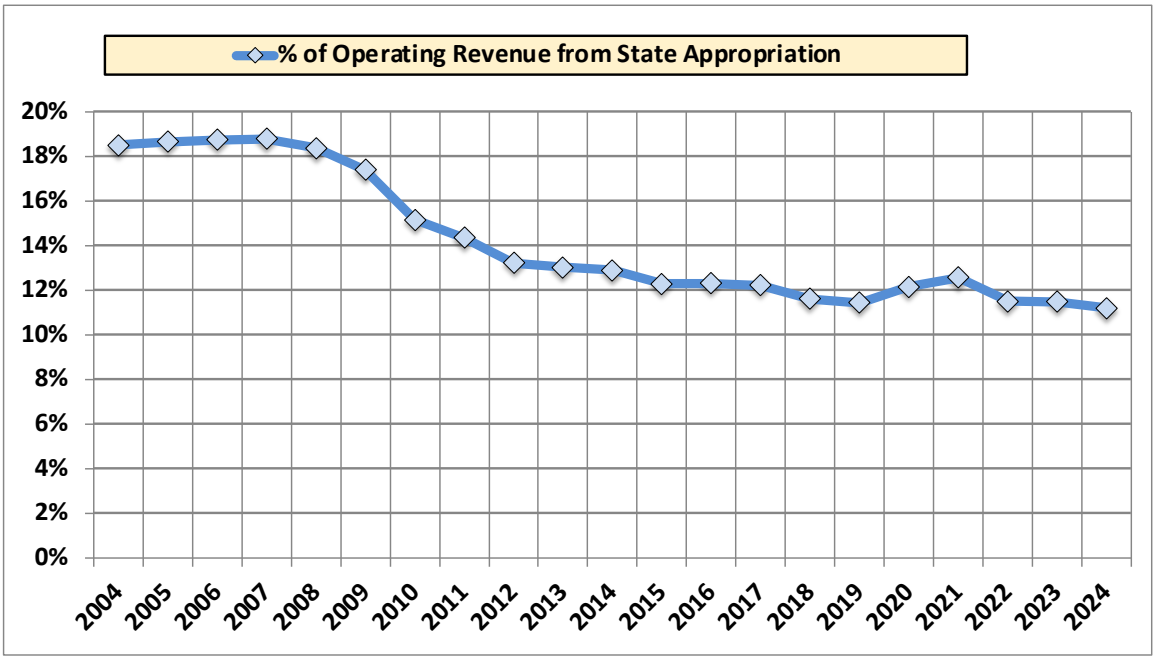
Figure 23. Grants, Contracts and Exchange Revenue



In the past, the third largest source of operating revenue was state appropriations. State operating appropriations are shown in Figure 24 as a percentage of operating revenue. They were stable between 2004 and 2007. This is very unusual because in most states, state support has represented a decreasing share of operating revenue for quite some time. In 2004, state appropriations accounted for 18.5 % of operating revenues and 13.9 % of total revenues. In 2009, state-operating appropriations accounted for 17.4 % of operating revenue and 16.4 % of total revenues. Since 2008, state operating appropriations, as a percentage of operating revenues and total revenue, has been

declining, leveling off in 2019. It did increase slightly in 2020 and 2021, but this is only because of the decline in operating revenue. Beginning in 2013 state operating appropriations were replaced by sales and services of auxiliary operations as third largest source of revenue with state operating appropriations dropping to fourth place. This continued until the onset of the pandemic in 2020. My last report speculated that that downward trend was likely to return and indeed that is exactly what we see in Figure 24. By the end of 2024 state appropriations as a percent of operating revenue was down to 11.2%.

Figure 24. State Subsidy as a Percent of Total Revenue



Sales and services of auxiliary enterprises is also an important source of revenue. Sales and services of auxiliaries have grown from $69.8 million in 2004 to $110.6 million in 2012, an average annual increase of 5.9 %. By 2015 revenues from sales and services had grown to $128.1 million. In 2016 there was a very modest increase in sales and services revenue which was reported at $129.7 million. Sales and service income continued to increase through 2019 when it reached $137.6 million. The large drop in 2020 and 2021 was due to the COVID-19 pandemic. This was part of a national trend as many students remained enrolled but took classes remotely. Auxiliary enterprises include fees for room and board, parking, and other food services. With most students not living on campus in 2020 and 2021 it was not surprising to see declines in this source of revenue. Auxiliary revenues, like tuition, rebounded in 2022 and 2023 and by 2024 reached $142.3 million surpassing the previous high reached in 2019.

Figure 25 shows contributions which have historically been an important source of revenue. Contributions grew from $18.8 million to $20.8 million from 2004 to 2009. In 2010 there was a slight increase in contributions and then in 2011 a decline in contributions. In 2012, there was a substantial increase in contributions, with contributions reaching $25 million. In 2013 there was a decline of contribution income to $23.4 million but it rebounded in 2014 reaching $28.9 million. **In 2015 contribution income peaked at $31.7 million. Since then, it has been declining with a dramatic drop from $25.2 million in 2018 to just $9.9 million in 2019.** It is hard to see how this dramatic drop in contributions is due to the pandemic since it started in 2019, and the level of contributions remained flat at about $9.8 million in both 2020,2021 and 2022. In 2023 they fell to an all-time low of just $8.1 million before rising to $10.8 million in 2024. **Although every campus has a chief development officer and a development staff, the most important person in soliciting donations is the University's President. The buck stops here; and the fact that contributions are still far below the level attained in 2015 is problematic.**

Figure 25. Contributions

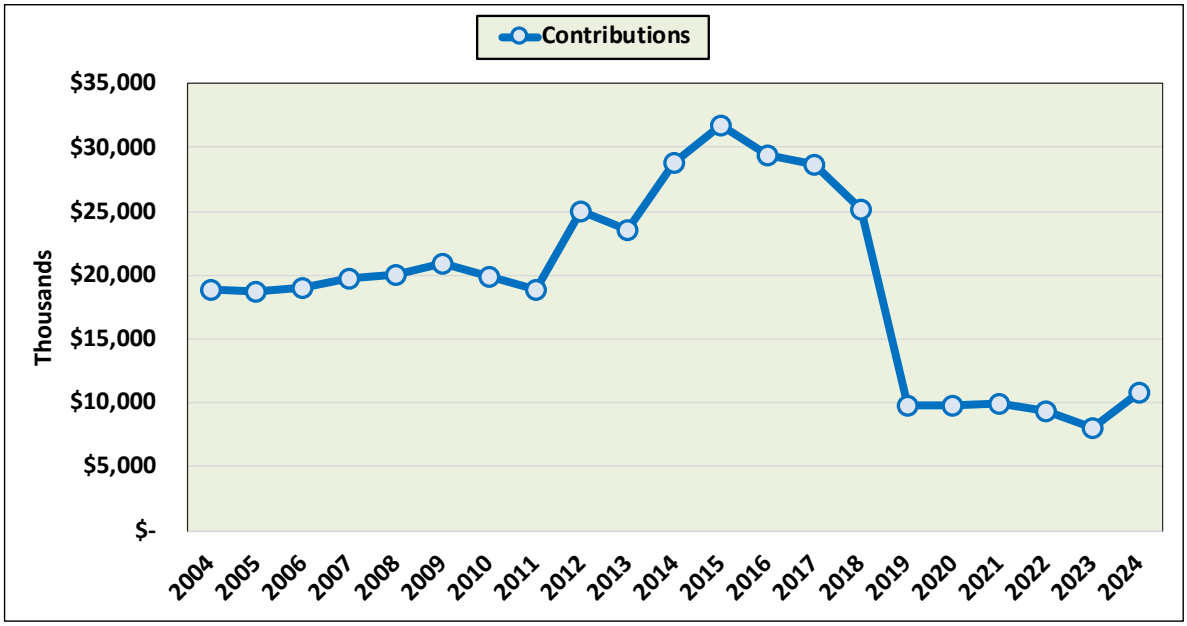
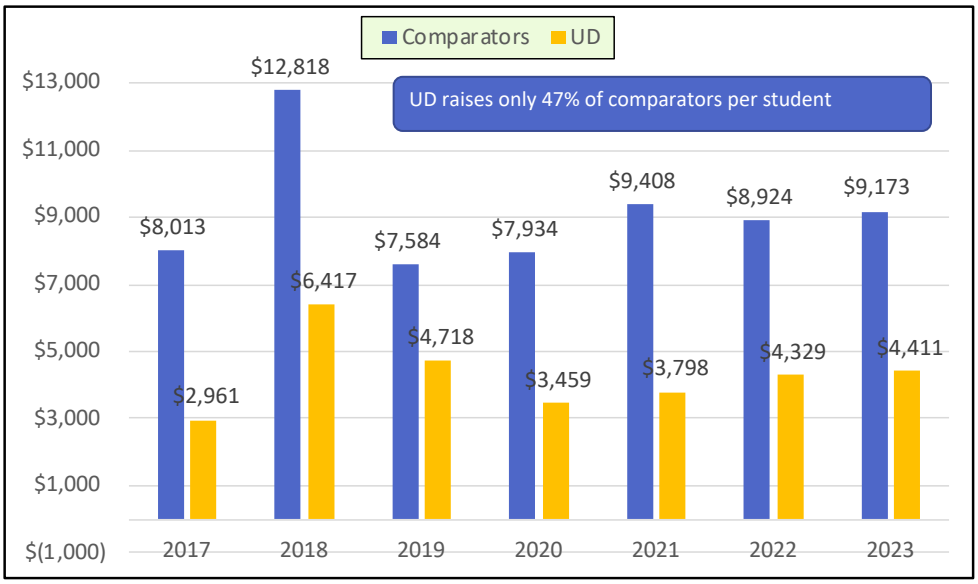


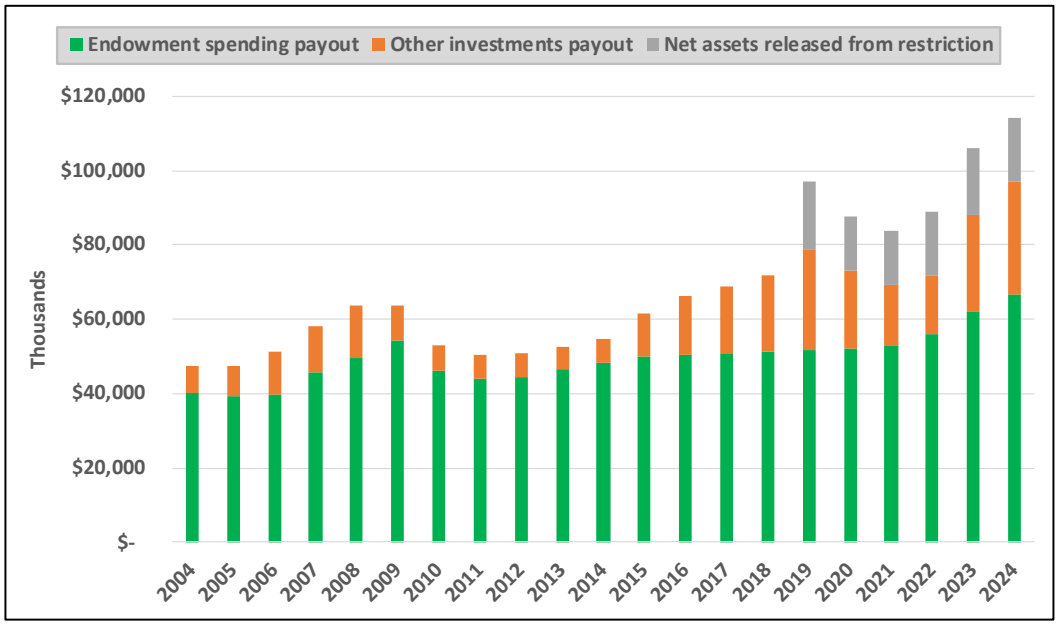
Figure 26 shows fundraising per student FTE for the University and its comparators from IPEDS data which are only available through 2023. We start in 2017 because it is the period before the precipitous decline in contributions and marked the beginning of the term of the current University President. It shows the University is consistently below its comparators when it comes to fundraising.

Figure 26. Fundraising per student FTE, UD and comparators 2017-2023



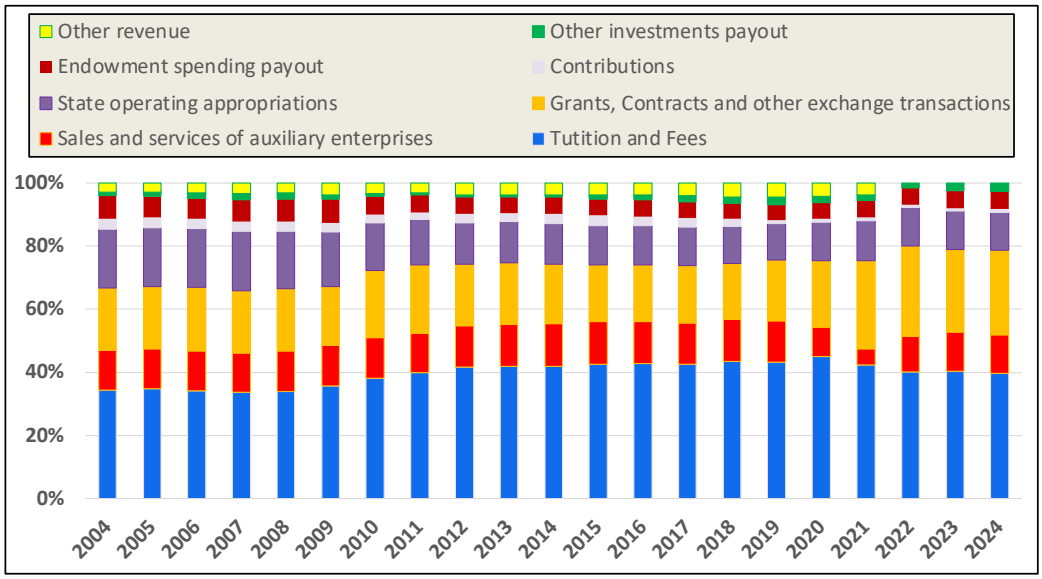
The final major category of operating revenue comes from endowment, other investment payouts, and net assets release from restriction. This category, shown in Figure 27 appears to be used to "fill holes" in operating revenues. This is one of the problems inherent in looking at changes in operating net assets. The administration and Board control this major category of revenue and can either increase this funding or decrease it to meet their strategic objectives. A payout is different than total endowment and investment earnings, something we will look at shortly.

Figure 27. Endowment, Other Investment Payout, & Net Assets Released



Next, we look at the distribution of operating revenue over time as seen in Figure 28. It shows that in recent years the percentage of operating revenue generated through tuition has decreased, as has the percentage of revenue from state appropriations.

Figure 28. Distribution of Operating Revenues



The percentage of revenue accounted for by sales and service of auxiliary enterprises has also declined. The one area that accounts for a substantially larger share of revenue is grants, contracts and other exchange transactions. Contributions are a relatively small share of operating revenue.

Next, we look at the average annual growth in sources of revenue for two periods. First, we look at the average annual growth of revenue from 2004-2024 as shown in Figure 29 and then look at the average annual growth of revenue between 2019-2024 in Figure 30.

Figure 29. Average Annual Growth of Revenue 2004-2024

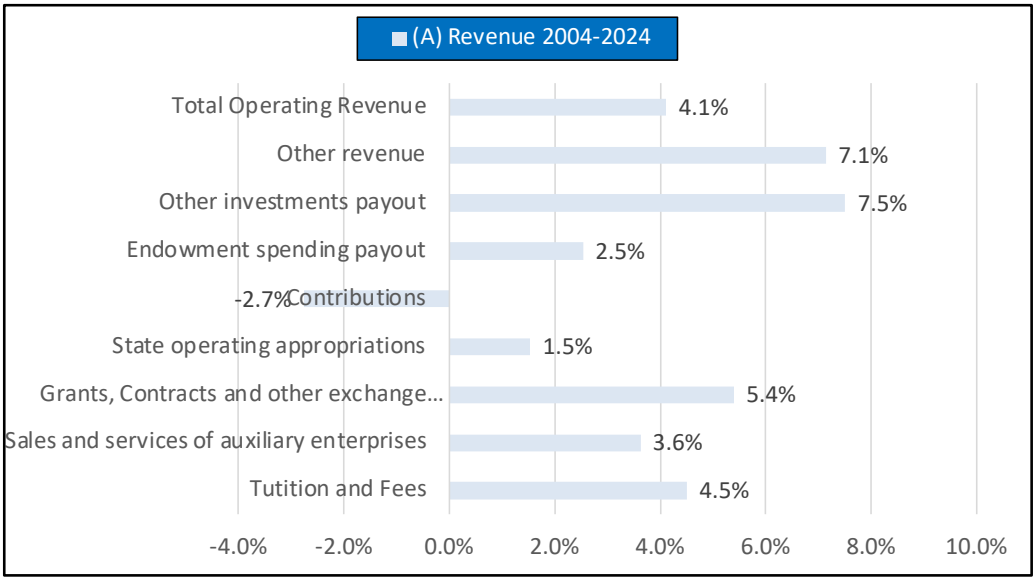
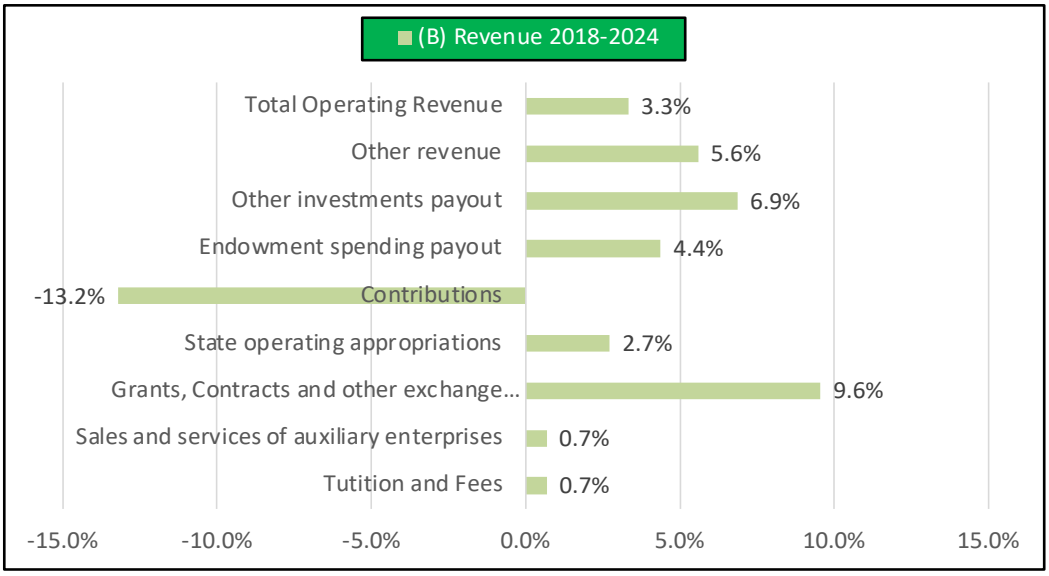


Figure 30. Average Annual Growth of Revenue 2018-2024



So overall, from 2004-2024 operating revenue grew at an average annual rate of 4.1%. But between 2018-2024 operating revenue grew at an average annual rate of 3.1% so there has been a slowdown in the growth of operating revenues. Looking at the details we see a slow-down in the growth of tuition and fees, sales and services of auxiliary enterprises. Grants and contract grew at an average annual rate of 5.4% over the entire period but grew at an average annual rate of 9.6% between 2018 -2024. This is consistent with grants and contract accounting for a larger share of operating revenue.

Expenses

Table 6 shows operating expenses by functional categories. On the expense side, operating expenses increased from $540 million in 2004 to $1.28 billion in 2024. It is important to note that FASB reporting standards do not require that depreciation, which is a non-cash expense, be reported as a separate expense. So, the expense of depreciation is included in each of the various functional categories. (See Appendix for definitions of functional categories.)

Table 6. Expenses

Year	Instruction and departmental research	Sponsored research	Extension and public service	Academic support	Student services	General institutional support	Student aid	Auxiliary enterprises	Other	Total operating expenses
2004	$ 244,055	$ 83,817	$ 30,711	$ 43,094	$ 19,558	$ 50,280	$ 4,319	$ 61,743	$ 2,470	$ 540,047
2005	$ 260,781	$ 86,798	$ 35,080	$ 46,690	$ 19,244	$ 57,927	$ 4,851	$ 65,062	$ 2,479	$ 578,912
2006	$ 267,336	$ 99,782	$ 36,773	$ 49,120	$ 20,725	$ 51,858	$ 4,846	$ 73,105	$ 102	$ 603,647
2007	$ 279,293	$ 103,425	$ 40,492	$ 54,900	$ 22,202	$ 57,985	$ 6,144	$ 76,209	$ (1,013)	$ 639,637
2008	$ 295,173	$ 105,697	$ 44,994	$ 55,563	$ 24,392	$ 60,451	$ 5,722	$ 82,999	$ (1,402)	$ 673,589
2009	$ 307,660	$ 109,585	$ 45,092	$ 56,805	$ 26,251	$ 63,946	$ 5,827	$ 86,938	$ (1,224)	$ 700,880
2010	$ 315,998	$ 123,126	$ 43,719	$ 57,904	$ 27,494	$ 69,465	$ 4,805	$ 94,955	$ 556	$ 738,022
2011	$ 341,221	$ 130,400	$ 43,312	$ 59,480	$ 28,002	$ 74,205	$ 5,475	$ 93,981	$ 1,183	$ 777,259
2012	$ 346,420	$ 135,079	$ 46,780	$ 58,566	$ 28,821	$ 82,114	$ 5,884	$ 95,633	$ 679	$ 799,976
2013	$ 359,645	$ 139,473	$ 47,905	$ 65,316	$ 30,541	$ 90,260	$ 6,521	$ 100,209	$ 884	$ 840,754
2014	$ 372,045	$ 135,143	$ 49,907	$ 65,631	$ 31,886	$ 95,286	$ 6,044	$ 104,961	$ 606	$ 861,509
2015	$ 392,241	$ 137,176	$ 50,122	$ 72,368	$ 33,263	$ 98,984	$ 6,040	$ 109,640	$ 3,397	$ 903,231
2016	$ 408,041	$ 136,842	$ 50,308	$ 76,090	$ 34,682	$ 110,813	$ 6,772	$ 122,544	$ -	$ 946,092
2017	$ 419,269	$ 149,350	$ 48,666	$ 76,382	$ 41,146	$ 96,508	$ 7,234	$ 116,340	$ -	$ 954,895
2018	$ 456,261	$ 150,110	$ 51,703	$ 84,510	$ 41,621	$ 103,150	$ 7,655	$ 123,290	$ -	$ 1,018,300
2019	$ 486,110	$ 155,584	$ 52,045	$ 84,702	$ 43,779	$ 117,894	$ 7,705	$ 115,411	$ 22,659	$ 1,085,889
2020	$ 497,152	$ 173,496	$ 51,798	$ 86,242	$ 44,073	$ 116,364	$ 6,601	$ 98,595	$ (2,968)	$ 1,071,353
2021	$ 457,447	$ 174,762	$ 49,567	$ 78,671	$ 35,175	$ 115,430	$ 14,228	$ 86,475	$ -	$ 1,011,755
2022	$ 475,555	$ 197,007	$ 55,635	$ 84,038	$ 42,522	$ 117,950	$ 24,278	$ 113,591	$ -	$ 1,110,576
2023	$ 496,089	$ 220,974	$ 61,834	$ 104,466	$ 51,199	$ 133,580	$ 8,051	$ 113,732	$ -	$ 1,189,925
2024	$ 527,190	$ 243,644	$ 61,302	$ 112,337	$ 57,430	$ 154,328	$ 7,947	$ 119,219	$ -	$ 1,283,397

Figure 31 shows the distribution of expenses. Between 2004 and 2024, pre-pandemic to present, there was a sharp decline in the percentage of resources being devoted to instruction. Although it may be difficult to see, it shows that a smaller share of resources going to instruction and departmental research and a larger share is going to sponsored research and general institutional support.

Figure 31. Distribution of Expenses

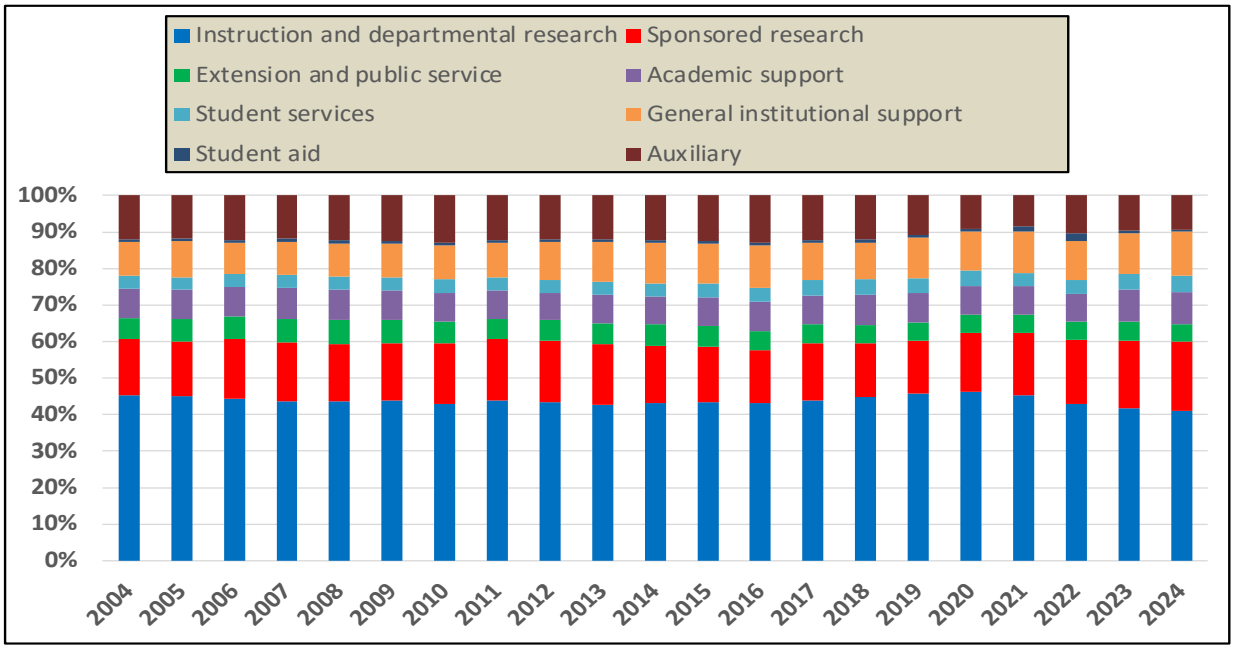
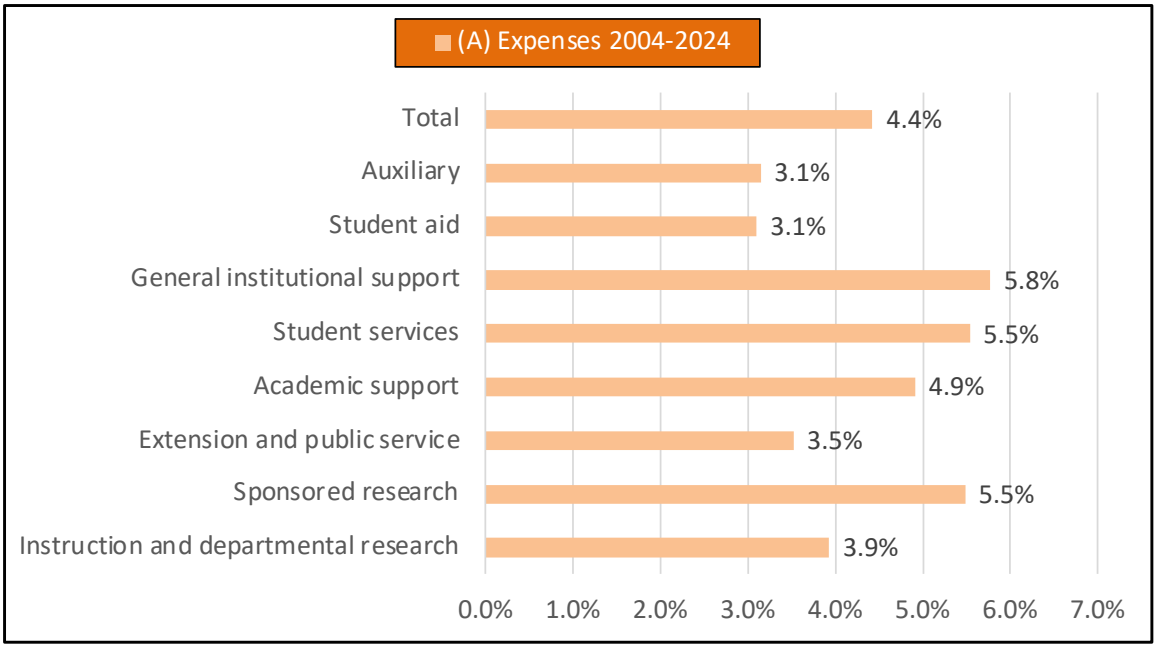


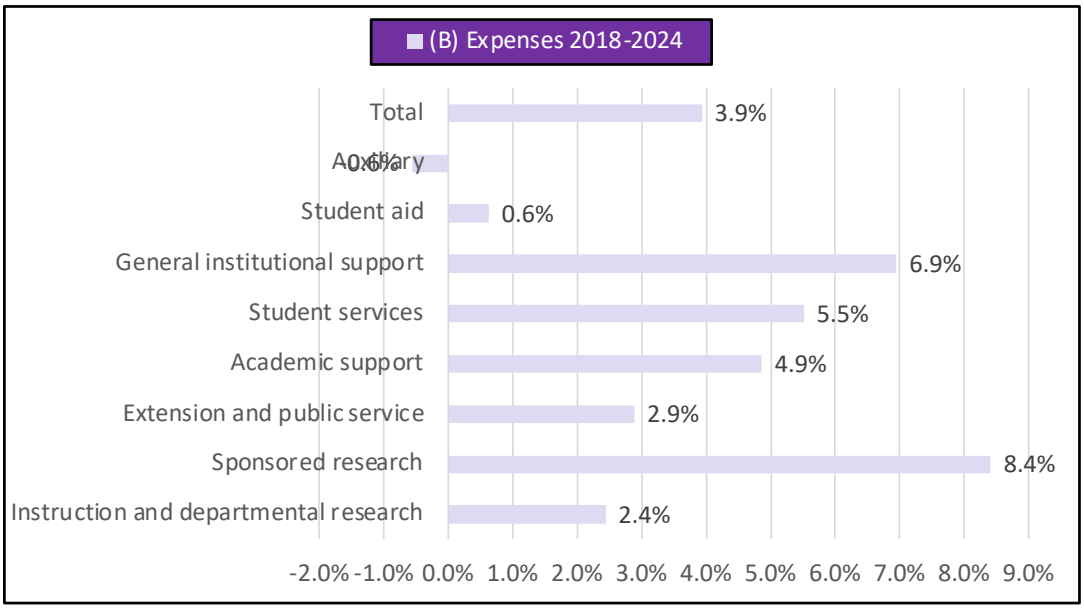
Figure 323. Percentage Change in Expenses 2004-2024



Figures 32 and 33 show the average annual percentage change in expenses from 2004-2024 and 2018-2024 respectively. They show us that over the entire period the fastest growth in spending comes from general institutional support which is the central administration. It grew at an average annual rate of 5.8% compared to 3.9% for instruction and departmental research. Other administrative areas such as student

services and academic support also grew more rapidly than instruction. Finally, it is noteworthy that growth in student aid was tied with auxiliaries for having the lowest growth.

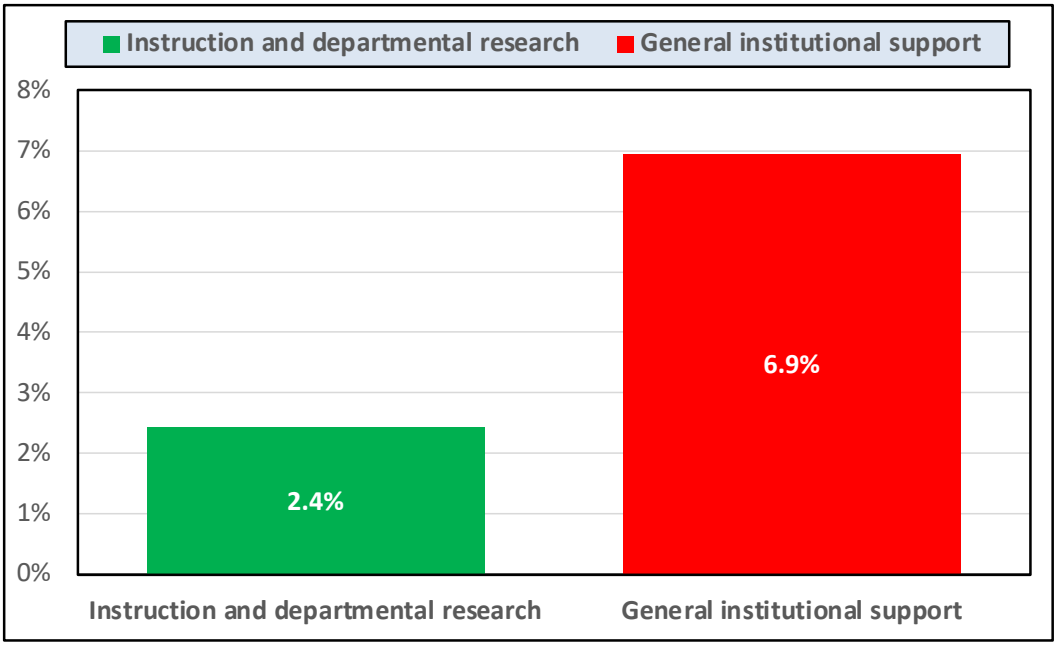
Figure 33. Percentage Change in Expenses 2018-2024



In the period from 2018-2024 instructional spending grew by just 2.4% while administrative spending grew at an average annual rate of 6.9%. The only area that grew faster than administrative spending was sponsored research which grew at an average annual rate of 8.4%. This growth in spending for sponsored research, however, is consistent with 9.6% annual growth in Grants, Contracts and Exchange Transactions. In fact, the only areas which grew less rapidly than instruction were student aid and auxiliary spending. **If one takes the growth of expenses as an indication of an institution's priorities then the lowest priorities appear to be instruction, extension and public service and student aid and the highest priority is the growth of general institutional support**.

Figure 34 shows the contrast between the increase in spending on instruction and the increased spending on administration from 2018-2024.

Figure 34. Average Annual Increase Between 2018-2024



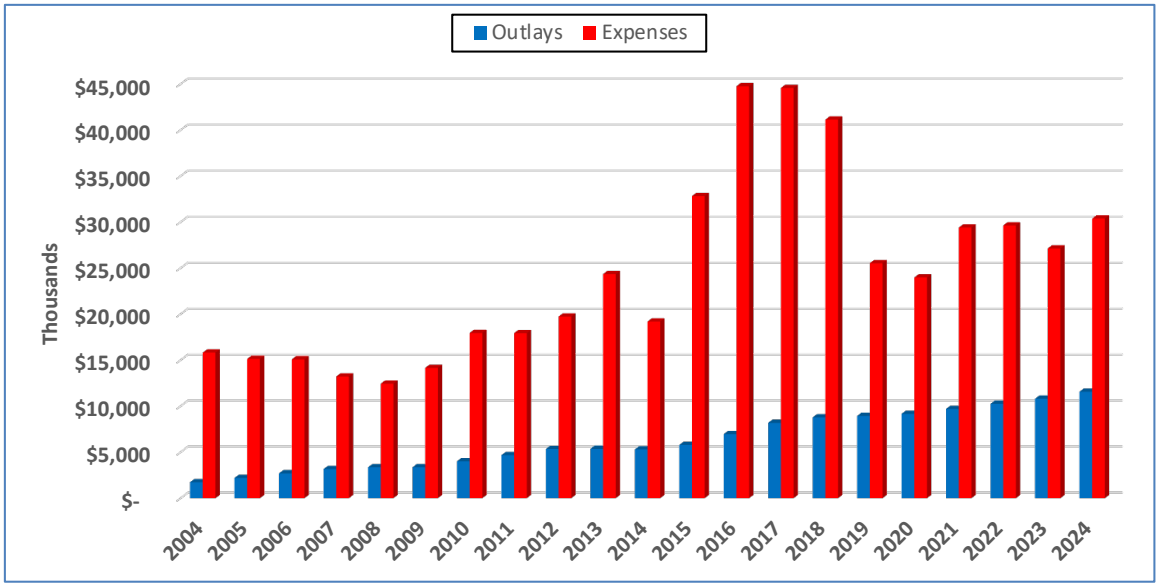
One expense that administrations generally bring up to explain why they cannot spend more on instruction is growth of post-retirement benefits. The notes to the financial statements include estimates of liabilities and expenses for retirement benefits for faculty, that go beyond the defined contribution plan and medical insurance for retirees. In the notes, they say that all their programs are "pay as you go" but they also report the liability, (an unfunded liability), and the expenses (change in liability) associated with all post-retirement benefits, including the "faculty retirement benefits."

Changes in unfunded liabilities are treated as "expenses" but are very different from the actual cash outlays the University makes to fund its post-retirement benefits. The liability is the present value of the future benefits. There are lots of assumptions made to determine the liability. For example, the expenses are very sensitive to the interest rate (discount rate) that is chosen. In 2015 the discount rate was 4.95% and in 2016 it declined to 4.24%. A decline in the discount rate raises the liability and hence increases expenses, all other things equal. As interest rates rise the discount rate should go up and that will, other things equal, reduce the liability causing expenses to go down. **Rather than look at expenses, what really matters are actual cash outlays to fund benefits.** Call out expense items in our operating "budget" that are not cash outlays

Figure 35 shows a graph of expenses and actual cash outlays for post-retirement benefits as reported in the notes to the financial statements. This graph shows us that actual cash outlays are only a fraction of what is reported as an expense for these

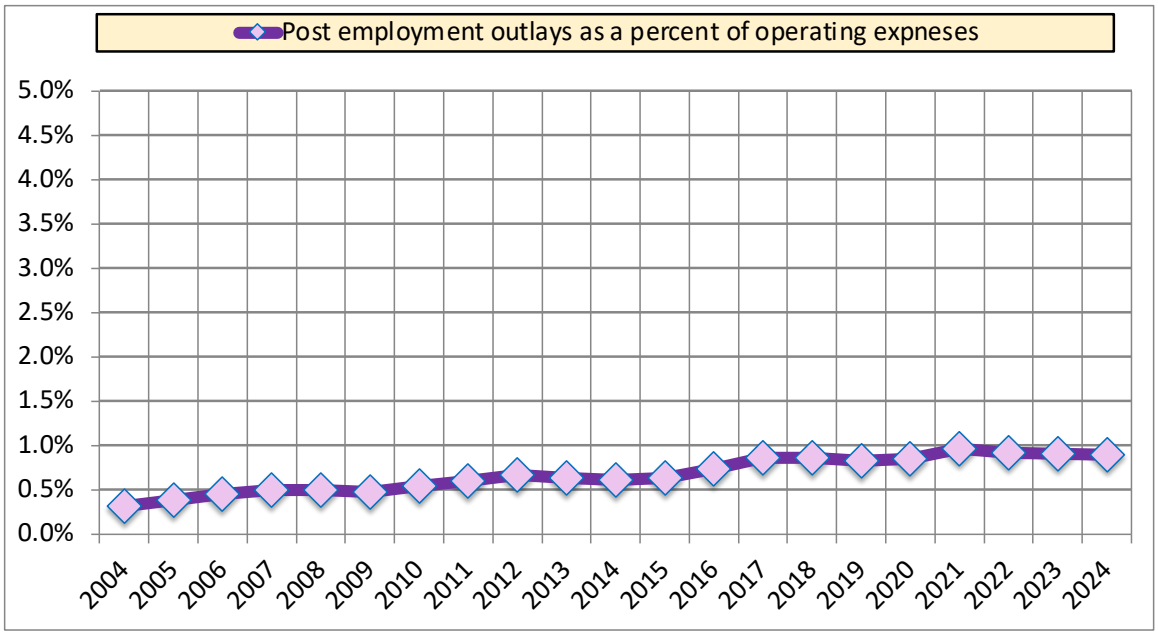
benefits. Over the entire period from 2004-2024 cash outlays averaged 25.5% of reported expenses for post-retirement benefits.

Figure 35. Cash Outlays & Expenses for Post-Retirement



To put this in perspective Figure 36 looks at these cash outlays as a percent of operating expenses. This graph shows that cash outlays as a percent of operating costs rose between 2004 and 2017 and then stabilized at slightly less than 1% of total operating costs. Since this program is “pay as you go” it is sustainable since the overall costs are de minimis and appear to have stabilized.

Figure 36. Post-Retirement Outlays as a Percent of Operating Costs



One area of spending that the University does not disclose in its financial statements is spending on intercollegiate athletics. The Knight Commission has data on athletic spending from 2005-2023. However, the University of Delaware has apparently stopped reporting its data since the last time they reported data on revenues and expenses was 2019. In 2019 87% of the revenue for intercollegiate athletics came from "institutional support." In 2019 this was $41.9 million, and that number had been trending up, so it is likely considerably more today. **Given the trend from 2012-2019, I estimate that spending on intercollegiate athletics in 2024 was $52.1 million. But the real question is what is the University trying to hide by not reporting this information to the Knight Commission?** This is yet another example of misplaced priorities.

Figure 37 shows total operating revenues, and total operating expenses. Both total revenue and total expenses are trending upward and are extremely close to each other. In most years total operating revenues exceed total operating expenses.

Figure 37. Total Operating Revenue and Expenses

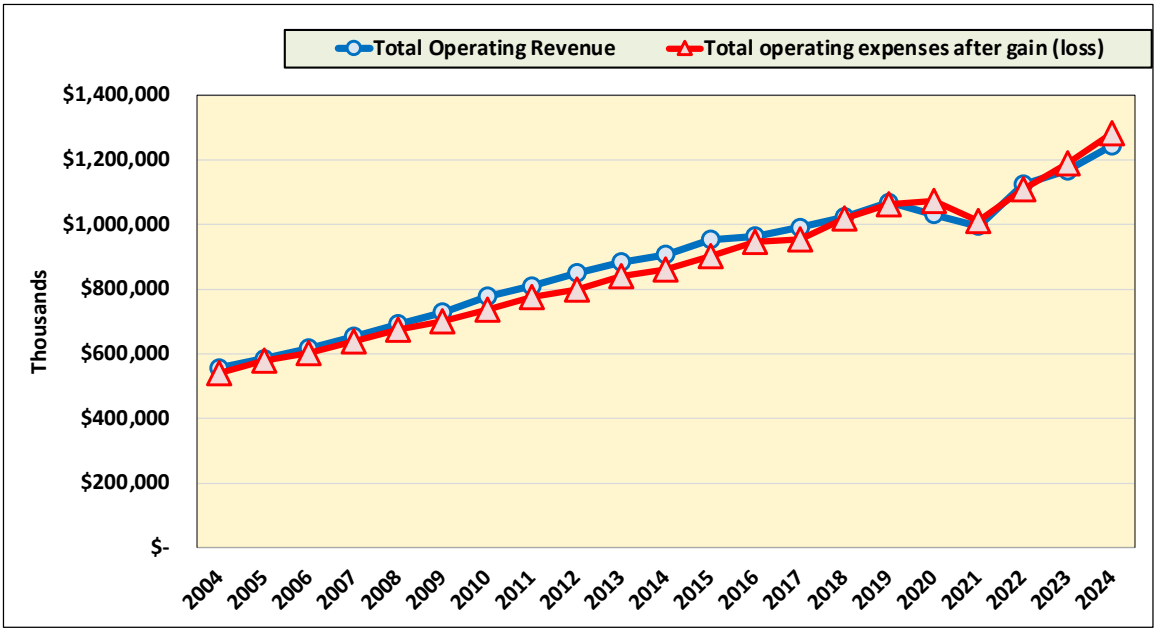
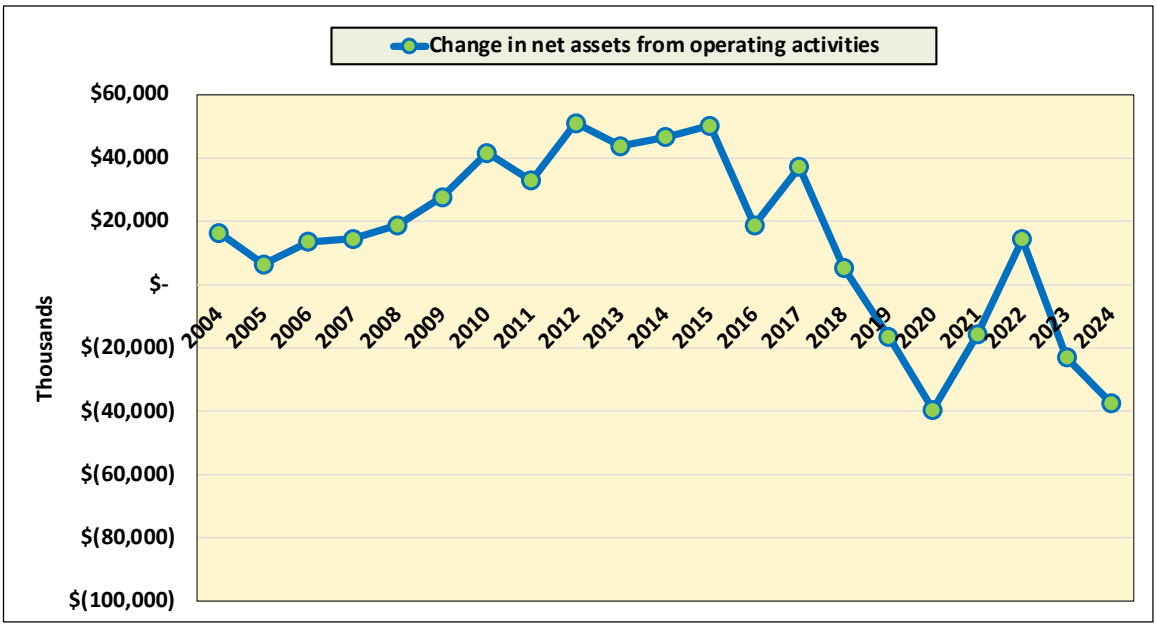


Figure 38 shows the change in net assets from operating activities which is the difference between operating revenues and operating expenses. Between 2004 and 2018 the operating revenues exceeded operating expenses in every year.

In 2019 there was an operating loss of $16.5 million. This operating loss was largely due to two consecutive years of increases in operating expenses which outstripped the increases in operating revenues.

Figure 38. Change in Net Assets from Operating Activities

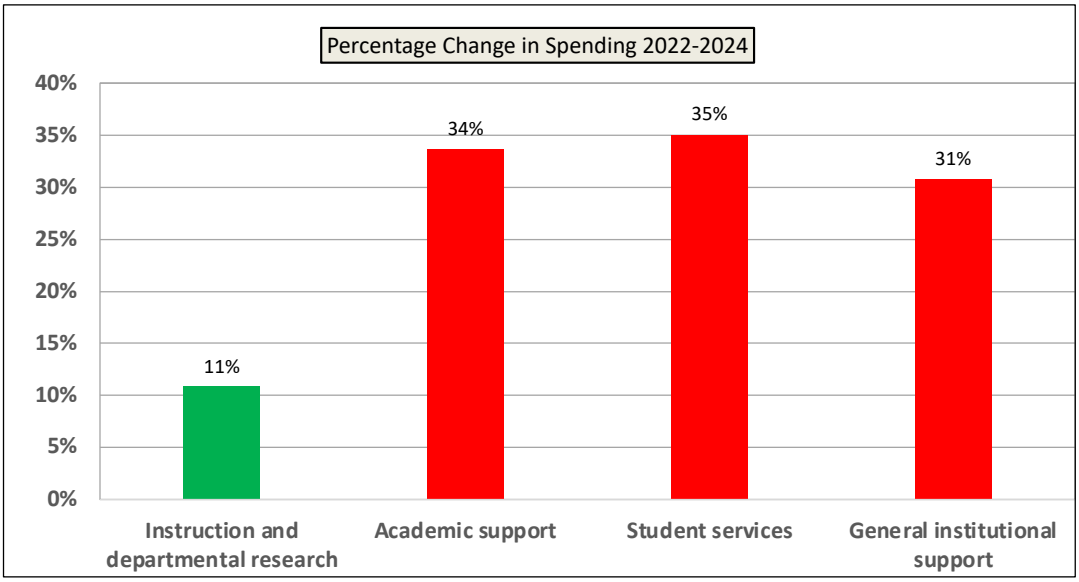


In 2020 there was an operating loss of $39.6 million and this was due primarily to a decline in revenue. Again in 2021 there was a major loss of revenue resulting in an operating deficit. The operating losses in 2020 and 2021 were largely the result of COVID-19. In 2022 the University ran an operating surplus $14.4 million driven by the return of students to campus which increased tuition and auxiliary revenues. The University also received its third installment of Higher Education Emergency Relief Funds in 2022.

In 2023 and 2024 the university ran operating deficits of $22.9 million and $37.6 million respectively. There were significant increases in operating revenues in 2023 and 2024, so the losses were largely due to rising expenses.

What expenses were rising the most in 2023 and 2024? In 2023 Instructional expenses increased by 4.3%, spending on academic support increased 24.3%, spending on student services increased by 20.4%, spending on institutional support increased by 13.3%, and Student aid decreased by 66.8%. In 2024 Instructional expenses increased by 6.3%, spending on academic support increased 7.5%, spending on student services increased by 12.2%, spending on institutional support increased by 15.5%, and Student aid decreased by 1.3%. Figure 39 shows the percentage changes by category. **Clearly this indicates that faculty had the lowest priority and that the deficits in these years were due to increases in administrative spending.**

Figure 39. Percentage Change in Spending 2022-2024

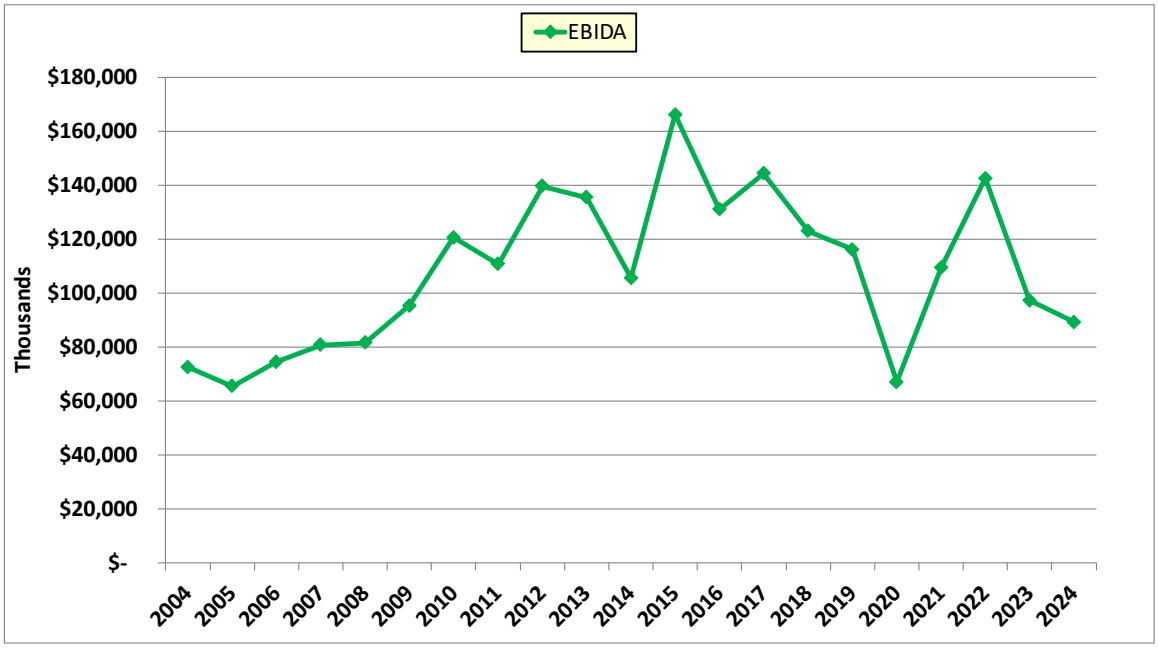


EBIDA

The change in net assets from operating activities represents the University's net income from operations. However, it also includes depreciation, expenses for post-retirement benefits as well as interest payments on debt. Recently Moody's Investors Service, has started using Earnings Before Interest Depreciation and Amortization (EBIDA) to get a better understanding of net cash income rather than reported net income. Depreciation is a non-cash expense and interest payments are related to debt taken on for construction and renovation of facilities. Interest payments are a cash expense but are not considered operating expenses. In the spirt of excluding non-cash expenses, our calculation of EBIDA also excluded expenses for post-retirement benefits but includes actual outlays for these benefits.

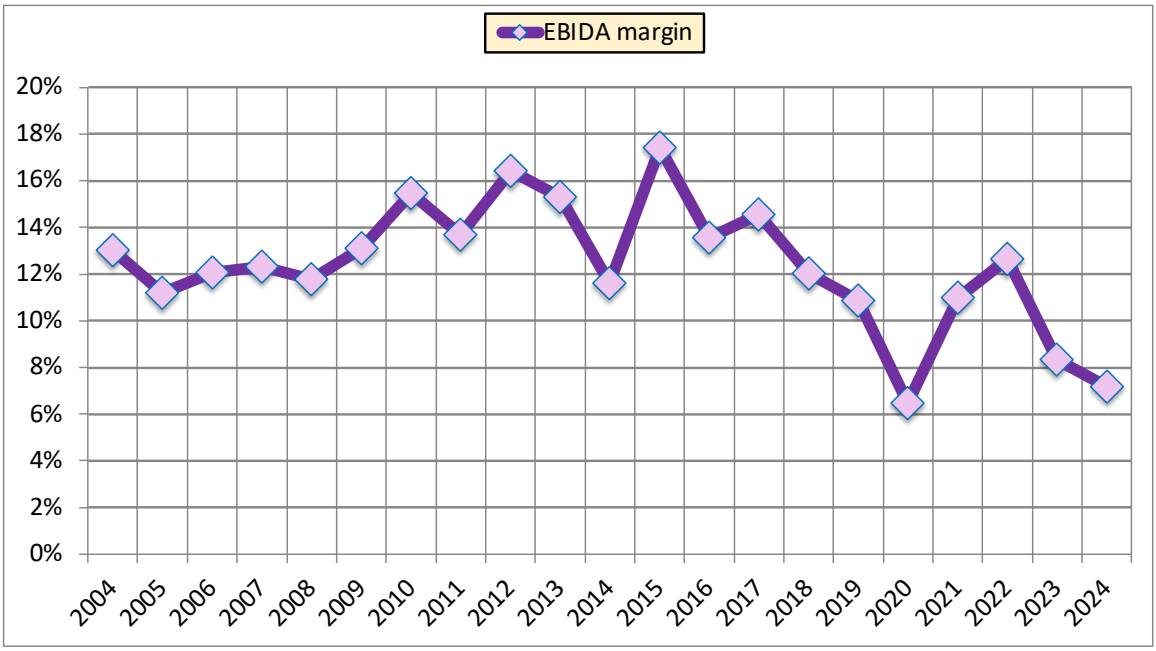
Figure 40 shows the Earnings Before Interest Depreciation and Amortization (EBIDA) for the University. These earnings while consistently positive still have a lot of volatility because they still include some unrealized gains and losses in investment income. Here we can see when interest and other non-cash expenses are included the University in fact ran a surplus every year and although there is some volatility, there is clearly an upward trend.

Figure 40. EBIDA



Since operating revenues and expenses are getting larger over time it is not surprising that in dollar terms EBIDA is rising. However, it is also important to consider earnings relative to revenues. To do this we calculate an EBIDA margin which is the ratio of EBIDA to operating revenues. Here we see a slight upward trend in EBIDA margins from 2004-2017. But since 2017 these margins have been trending down. This can be seen in Figure 41.

Figure 41. EBIDA Margin



Finally, we can see EBIDA is positive in every year, even the years when the University showed an operating loss in 2019, 2020, 2021, 2023 and 2024. This means that in the years that there were losses the University revenues still exceeded expenses on a cash basis because, depreciation, amortization and losses on disposal of assets, all non-cash expenses that totaled more than the operating losses in the aforementioned years.

Total Revenue, Expenses and Changes in Net Assets

Finally, we turn to the examination of total revenue, total expenses and the change in net assets. Universities that report revenue and expenses using FASB report operating revenues and expenses and non-operating revenues and expenses. Non-operating revenues and expenses include investment returns in excess of endowment distributions, contributions restricted to endowment and capital, post-retirement costs other than service costs, state capital appropriations and a variety of other non-operating revenues and expenses. It is important to understand that the operating revenues and expenses are not independent of the non-operating revenues and

expenses. For example, the more money spent from the endowment or other investments for operations affects operating revenues. Importantly, most of the volatility in investments shows up as non-operating revenue and expenses. When investments increase in value it shows up as revenue and when they go down it is treated as an expense. But these changes are unrealized gains and losses for the most part and do not involve any inflow or outflow of cash. The same is true when there are increases or decreases in post-retirement liabilities. An increase in liability shows up as an expense and decrease in liability is a decrease in expense. So, there is much greater volatility in total revenues and expenses and as a result greater volatility in changes in total net assets. This can be seen in Figure 42. Data for total revenue, total expenses, change in total net assets and the net asset ratio are shown in Table 7.

Figure 42. Total Revenues and Expenses

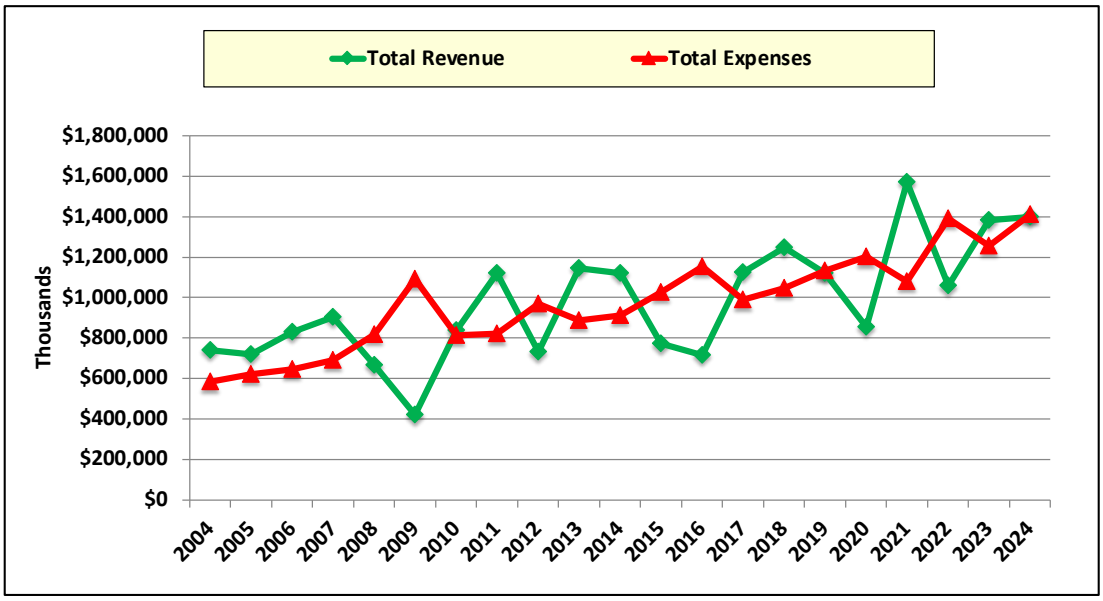


Table 7. Revenue, Expenses, Change in Net Assets and Net Asset Ratio (thousands)

Year	Total Revenue	Total Expenses	Change in Net Assets	Net Asset Ratio
2004	$ 744,645	$ 584,321	$ 160,324	21.5%
2005	$ 725,451	$ 619,741	$ 105,710	14.6%
2006	$ 814,936	$ 645,733	$ 169,203	20.8%
2007	$ 890,440	$ 690,012	$ 200,428	22.5%
2008	$ 752,806	$ 818,941	$ (66,135)	-8.8%
2009	$ 770,674	$ 1,090,011	$ (319,337)	-41.4%
2010	$ 917,817	$ 812,628	$ 105,189	11.5%
2011	$ 1,104,570	$ 821,228	$ 283,342	25.7%
2012	$ 915,955	$ 967,047	$ (51,092)	-5.6%
2013	$ 1,116,851	$ 888,116	$ 228,735	20.5%
2014	$ 1,137,183	$ 911,510	$ 225,673	19.8%
2015	$ 995,190	$ 1,027,089	$ (31,899)	-3.2%
2016	$ 989,638	$ 1,151,911	$ (162,273)	-16.4%
2017	$ 1,150,133	$ 990,209	$ 159,924	13.9%
2018	$ 1,188,428	$ 1,048,698	$ 139,730	11.8%
2019	$ 1,193,089	$ 1,132,744	$ 60,345	5.1%
2020	$ 1,073,406	$ 1,202,556	$ (129,150)	-12.0%
2021	$ 1,651,287	$ 1,079,237	$ 572,050	34.6%
2022	$ 1,362,533	$ 1,389,798	$ (27,265)	-2.0%
2023	$ 1,360,603	$ 1,257,202	$ 103,401	7.6%
2024	$ 1,495,858	$ 1,411,557	$ 84,301	5.6%

Figure 43 shows the change in net assets as well as adjusted changes in net assets. Looking at the change in net assets creates the impression that the University's finances are very unstable and that they lurch from having large surpluses and to large deficits. Therefore, we also present a smoothed estimate of changes in net assets from 2004-2024. The average change in net assets from 2004-2024 is $86.2 million and the average net asset ratio is 8.1%. The average for the smoothed estimate is also $86.2 million and the average net asset ratio is also 8.1%. The difference between the two series is that the standard deviation for the net asset ratio is 17.5% and the standard deviation for the smoothed (adjusted) net asset ratio is 8.1%.

Figure 43. Change in Net Assets

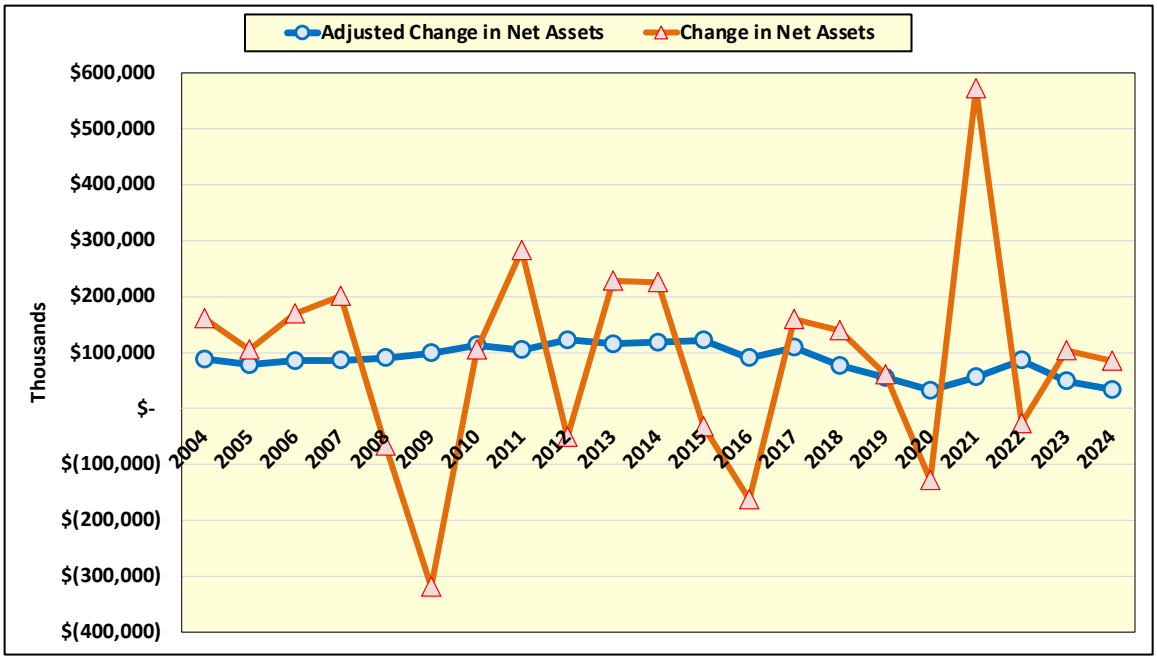
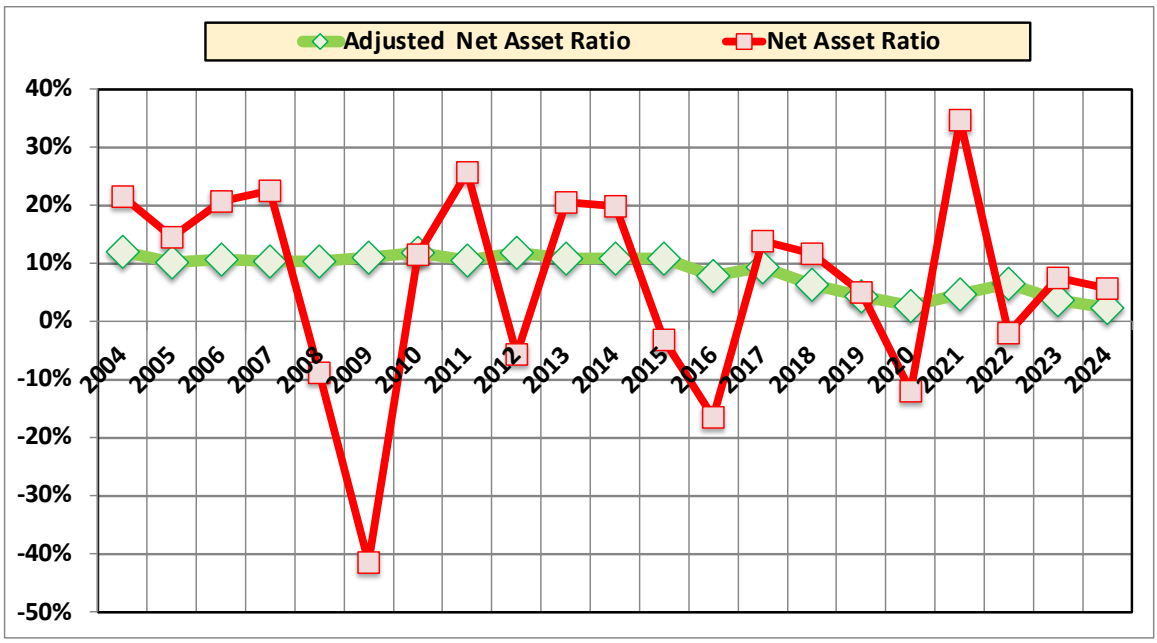


Figure 44 shows the net asset ratio. Clearly, the net asset ratio is more volatile due to large fluctuations in unrealized investment income and changes in post-retirement liabilities. In contrast, the adjusted net asset ratio shows that the **University's return on revenue was stable until 2017. Since 2017 it has trended down.**

Figure 44. Net Asset Ratios



In conclusion, the analysis of the statement of revenue, expenses and change in net assets shows that on an operating basis the University has had positive margins as measured by its EBIDA margin, although since 2017 those margins have been declining. Adjusted net asset margins have also been positive, stable and showed good performance until 2017. Since 2017 those adjusted asset margins have declined.

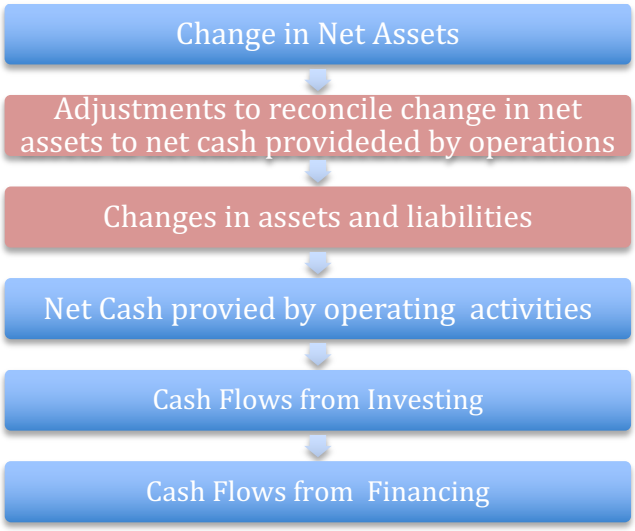
How Much Cash Flows In and Out of the University

The Cash Flow Statement

The third financial statement is the statement of cash flows. It shows how much cash flows into the University and how much flows out. 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 or university may send a bill to a student for tuition but not immediately collect the money that is owed. This shows up on the college or university's balance sheet as an increase in accounts receivable and is booked on the statement of activities as revenue. While a college or university shows an increase in revenue, in this case, it does not actually have more cash. If a university increases the amount of sick leave, it makes available to its employees that increases the liability for compensated absences. The increase in this liability must also be reflected in the university's Statement of Activities because the increase in a liability, other things being equal, will reduce the value of net assets. This means that an increase in sick leave must show up as an increase in expenses on the "income statement" even though the university does not have to write a check to cover this expense. This is known as a non-cash expense. Depreciation is another example of a non-cash expense.

An alternative view of a university's finances can be obtained by looking at the cash that flows into the university and the cash that flows out of the university. This information is found in the Statement of Cash Flows. Table 8 shows the Statement of Cash Flows for the University from 2007-2012. 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 45.

Figure 45.



The Statement of Cash Flows at colleges and universities using FASB has three major components. First, cash flows from operations. In most cases the indirect method is used to calculate these operating cash flows. This method starts with the change in net assets and then adds back non-cash expenses such as depreciation and unrealized losses on investments as well as subtracting unrealized gains in investments. In addition, it excludes non-operating items such as capital appropriations. Finally, it considers changes in assets and liabilities. For example, an increase in accounts receivable shows up on the statement of activities as revenue and hence adds to net assets. However, a receivable means that someone owes the institution money so while the receivable is income it is not cash. For the same reason, a decrease in accounts payable represents an outflow of cash and shows up as a deduction form the change in net assets in calculating operating cash flow.

Second 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.

In our analysis, we will concentrate on the first component of the cash flow statement, cash flows from operations. Cash flows from operations show the cash coming into the institution and the cash going out, thereby excluding non-cash expenses such as depreciation or the cost of disposal of assets. It also shows the differences between the actuarially determined expenses for post-retirement benefits and the actual cash outlays for those benefits.

Figure 46. Operating Cash Flows

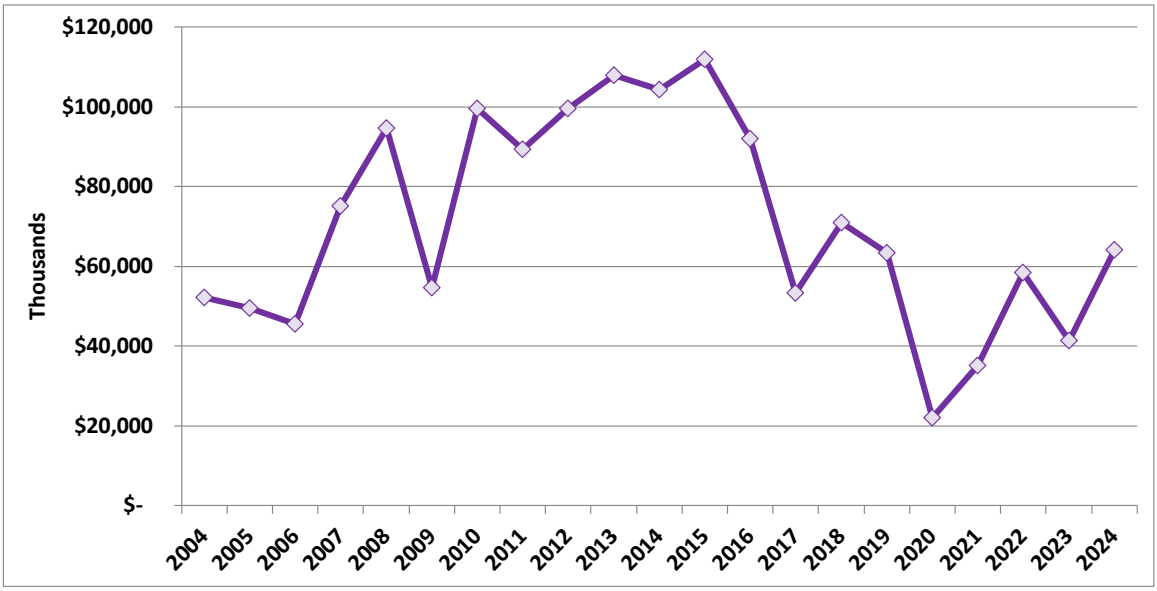


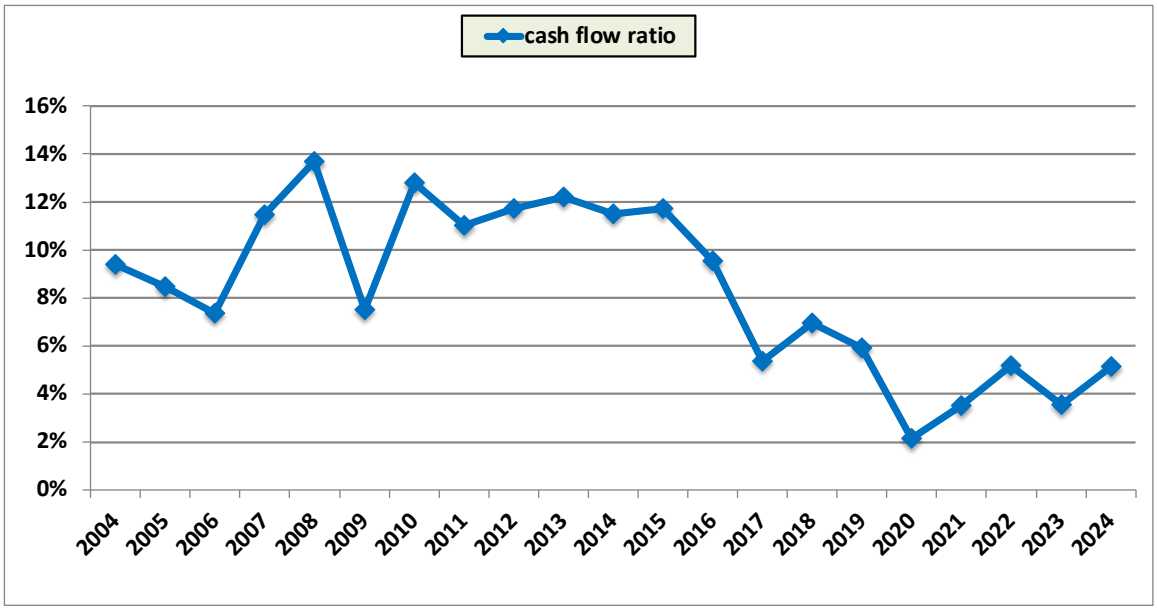
Table 8. Cash Flows (thousands)

Year	Change in net assets	Change in Post Employment benefit	Net realized and unrealized investment	Change in fair value of swap	Gifts of land, building and equip.	State capital appropriations	Contributions restricted for endowment and capital	Endowment income restricted for reinvestment	Depreciation, amortization, & disposals	Other	Net cash provided by operating
2004	$ 160,324		$ (134,232)		$ (871)	$ (5,000)	$ (26,599)	$ (336)	$ 37,129	$ 21,872	$ 52,287
2005	$ 105,710		$ (86,915)		$ (2,951)	$ (8,500)	$ (23,384)	$ (597)	$ 39,500	$ 26,683	$ 49,546
2006	$ 169,203		$ (131,795)		$ (417)	$ (7,000)	$ (28,434)	$ (964)	$ 41,240	$ 3,647	$ 45,480
2007	$ 200,428		$ (174,645)		$ (847)	$ (4,600)	$ (12,292)	$ (1,011)	$ 49,518	$ 18,553	$ 75,104
2008	$ (66,135)		$ 89,509		$ (252)	$ (3,500)	$ (7,230)	$ (870)	$ 47,164	$ 36,029	$ 94,715
2009	$ (319,337)		$ 326,215		$ (430)		$ (8,308)	$ (1,929)	$ 50,451	$ 8,004	$ 54,666
2010	$ 104,903		$ (76,989)		$ (429)	$ (900)	$ (21,681)	$ (1,582)	$ 55,090	$ 41,140	$ 99,552
2011	$ 283,342		$ (206,304)		$ (745)	$ (1,066)	$ (19,420)	$ (1,086)	$ 53,073	$ (18,401)	$ 89,393
2012	$ (51,092)		$ 38,996		$ (393)	$ (3,889)	$ (38,741)	$ (633)	$ 58,811	$ 96,616	$ 99,675
2013	$ 228,735		$ (122,072)		$ (473)	$ (14,380)	$ (25,044)		$ 56,341	$ (15,110)	$107,997
2014	$ 225,673		$ (178,876)		$ (974)	$ (7,244)	$ (20,363)		$ 64,850	$ 21,219	$104,285
2015	$ (31,899)	$ 107,002	$ (58,071)	2,446	$ (264)	$ (3,251)	$ (7,036)		$ 67,966	$ 34,998	$111,891
2016	$ (162,273)	$ 72,931	$ 66,522	$ 10,593	$ (675)	$ (3,212)	$ (15,697)		$ 78,195	$ 45,622	$ 92,006
2017	$ 159,924	$ 17,184	$ (163,221)	$ (11,983)	$ (1,051)	$ (5,781)	$ (8,061)	$ (316)	$ 69,901	$ (3,347)	$ 53,249
2018	$ 139,730	$ (51,117)	$ (96,469)	$ (7,591)	$ (414)	$ (827)	$ (29,160)	$ (200)	$ 85,932	$ 31,173	$ 71,057
2019	$ 60,545	$ 14,188	$ (96,408)	$ 10,529	$ (1,235)	$ (187)	$ (41,983)	$ (281)	$ 98,663	$ 19,501	$ 63,332
2020	$ (129,150)	$ 71,303	$ (21,962)	$ 9,691	$ (1,194)	$ (1,197)	$ (17,166)	$ (373)	$ 85,238	$ 26,961	$ 22,151
2021	$ 572,050	$ 15,927	$ (616,293)	$ (10,355)	$ (955)	$ (3,139)	$ (21,789)	$ (336)	$ 87,821	$ 12,254	$ 35,185
2022	$ (27,265)	$ (104,385)	$ 156,899	$ (15,800)	$ (637)	$ (10,617)	$ (26,863)	$ (348)	$ 89,545	$ (2,152)	$ 58,377
2023	$ 103,401	$ (14,884)	$ (79,933)	$ (6,049)	$ (2,106)	$ (12,341)	$ (17,352)	$ (382)	$ 92,739	$ (21,731)	$ 41,362
2024	$ 84,301	$ 81,402	$ (167,692)	$ (1,810)	$ (875)	$ (38,353)	$ (22,157)	$ (300)	$ 106,065	$ 23,542	$ 64,123

Table 8 and Figure 46 show the operating cash flows from 2004-2024. Operating cash flows declined slightly from $52.3 million in 2004 to $45.5 million in 2006. In 2007 and 2008 there were sharp increases in cash flows and in 2009 cash flows declined to $54.6 million. In 2010 cash flows from operations increased to $99.5 million and then declined slightly to $89.4 million in 2011. In 2012, the University's operating cash flow increased to $99.7 million and then rose to $108 million in 2013, before declining to $104.3 million in 2014. In 2015 operating cash flows reached $111.9 million and in 2016 operating cash flows declined to $92 million. Operating cash flows declined to $53.2 million in 2017, increased to $71.1 million in 2018 and then declined to $63.8 million in 2019. The operating cash flows for 2020 declined to $22.2 million. The operating cash flows in 2020 were the lowest the University has had over the entire period covered in this report. Over the following two years, operating cash flows increased rising to $58.4 million in 2022. Then in 2023 they declined to $58.4 million before rising to $64.1 million in 2024. So, over the entire period the University had an average operating cash flow of $70.7 million and the median operating cash flow was $64.1 million. Missing? were the lowest the University has had over the entire period from 2004 through 2021. The low cashflows in 2020 and 2021 were likely to have resulted from lower cash flows from tuition and auxiliaries that were not totally offset by cash received from the federal government Higher Education Emergency Relief Funds (HEERF).

Next, we look at the cash flow ratio, which is operating cash flow as a percent of operating revenue. This is shown in Figure 47. The average cash flow ratio from 2004 to 2016 was 10.6% and the average from 2017 to 2024 was 4.7% and the difference was statistically significant at the .05 level. So, there has been a decline in cash flow ratios and while the ratios are still positive, they are lower after 2017. If you take 2020 and 2021 out of the average, which were years impacted by the COVID-19 pandemic, the average would be 5.4%. While this is still lower than it was between 2004-2016, it would still be a solid score. A cash flow ratio of 5-10% is solid, so while there has been some deterioration the ratio the cash flow ratio still shows solid performance.

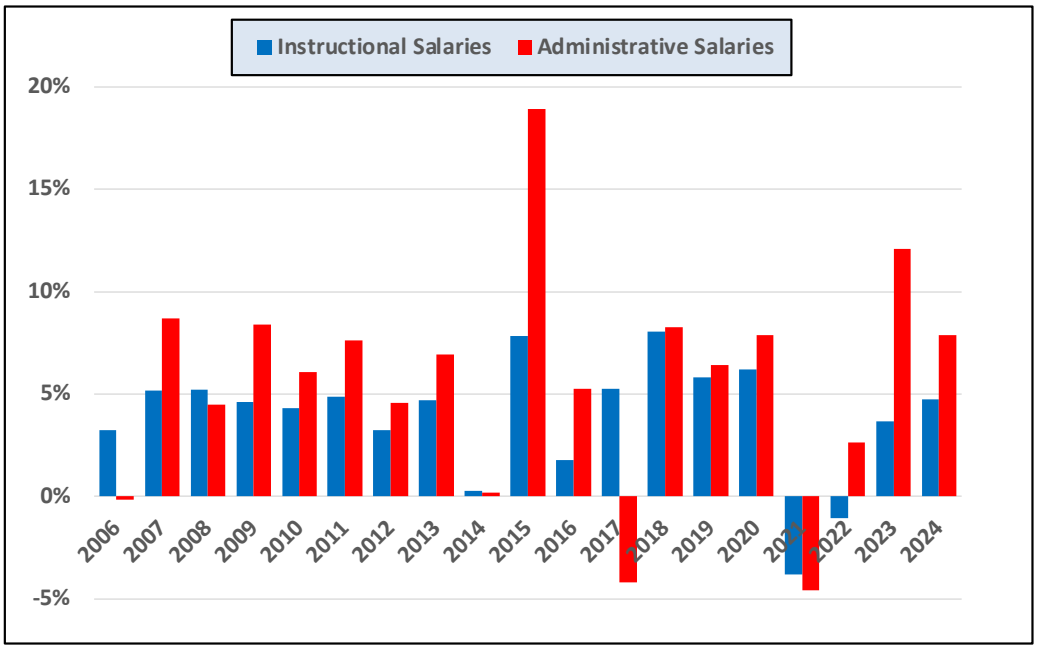
Figure 47. Cash Flow Ratio



Salaries & Benefits

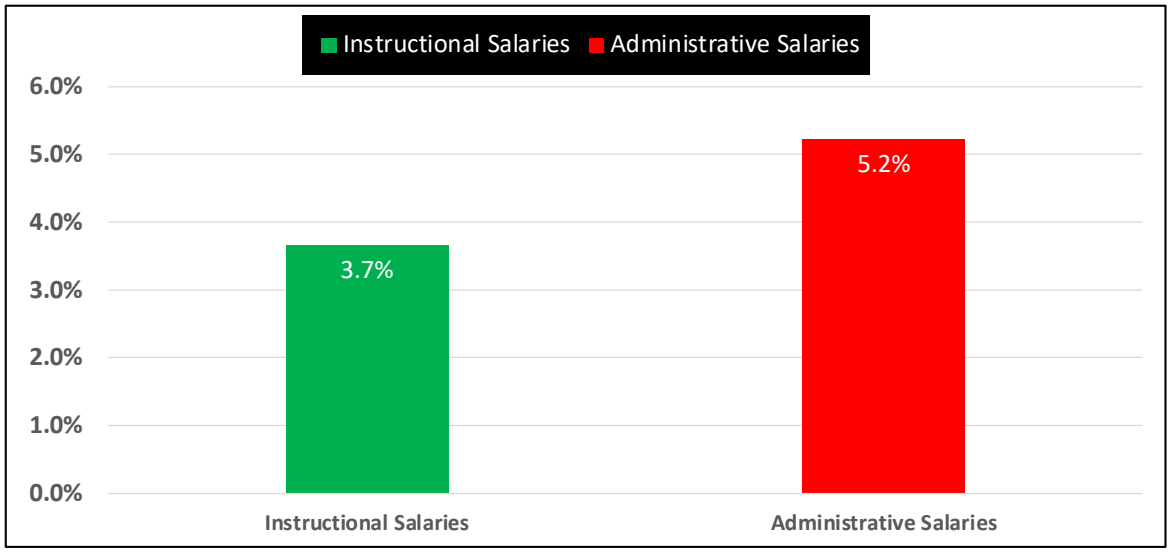
To get a better understanding of the allocation of resources we look at the percentage increase in salaries for instruction compared to the percentage increase in administrative salaries (General Institutional Support). Figure 48 shows the percentage increases for instruction and general institutional support from 2004 to 2024. It shows that in 14 of 21 years administrative salaries grew faster than instructional salaries.

Figure 48. Instructional vs. Administrative Salaries



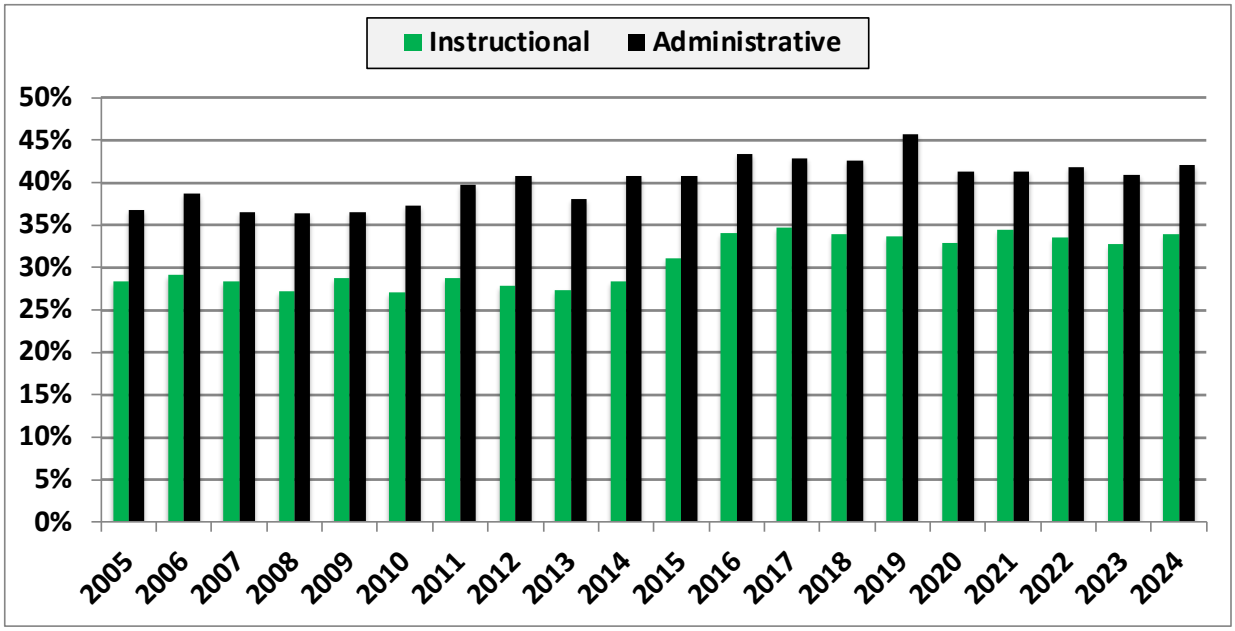
Next in Figure 49 we look at the compound annual increase in instructional salaries compared to administrative salaries between 2005 and 2024. Instructional salaries increased at a compound annual rate of 3.7% compared to 5.2% for administrative salaries. Remember that the percentage increase in salary outlays depends on the percentage change in salaries and the percentage change in employment in each category. So, either administrators are getting bigger raises, or their employment is growing at a faster rate or some combination of both. Either way this is evidence of administrative bloat.

Figure 49. Growth in Instructional vs. Administrative Salaries



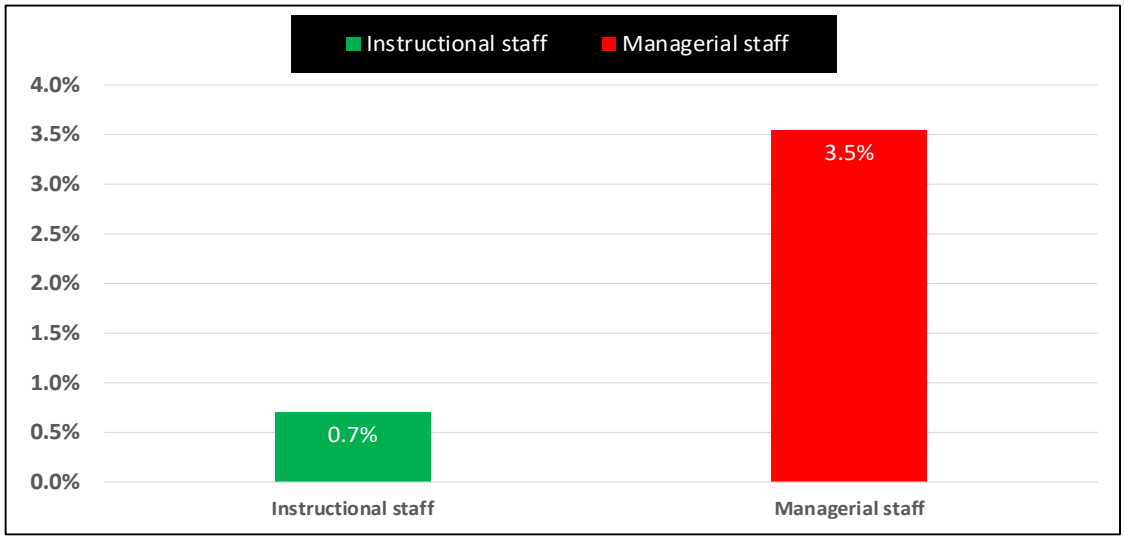
Next, we turn our attention to benefits. The financial statements show salaries, benefits for each category of employees. Figure 50 shows total benefits (excluding post-retirement benefits) as a percent of salary for instruction and for administration. **Clearly, benefit rates for administrative positions have historically been higher than for instruction. So not only have outlays for administrative salaries been rising faster than outlays for instructional salaries but their benefit rates have been higher as well. What accounts for the difference in benefit rates?** I can only speculate that if a significant amount of teaching is being done by graduate students and they do not have benefits, that could account for the difference. But this is a question that should be answered by the administration.

Figure 50. Benefit Rates for Instructional Staff v Administrators



So, in general if there is a problem with growing expenses at the University it is not because of increases in instructional salaries or benefits. If there is a problem, it is due to growing administrative bloat. This can be seen in Figure 51 showing the growth of faculty relative to the growth of managerial staff as reported in IPEDS.

Figure 51. Growth in Faculty v. Administrative Positions from 2008-2024



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. One popular summary index is the composite index like one developed for the Ohio Board of Regents (OBR) by Moody's. The composite index used by OBR assigns scores to three ratios and then uses a weighted average of those scores to create a composite index indicating the financial health of an institution

(http://www.regents.state.oh.us/financial/sb6.html#Methodology).

I have used this composite score in my past reports for the University of Delaware and will include it in this report for the sake of continuity. The OBR composite index uses three key indicators that have also used by major bond rating agencies. The first is the ratio is known as the viability ratio, which is the ratio of expendable net assets to long-term plant debt. The second ratio is the primary reserve ratio, which measures the ratio of expendable net assets 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 (total revenue). Each of these ratios is given a score using a scale of whole numbers from 0 to 5, with 5 being the highest score. These scores are then weighted and used to calculate a composite index that reflects the financial health of an institution.

The OBR index, however, does have certain deficiencies. The two main deficiencies of the OBR index are that it uses a step function for scoring so that relatively small changes in any ratio can cause a score to jump up or down and the OBR measure gives too high a weight to the primary reserve ratio and totally ignores cash flows. 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.

To correct these deficiencies the author and Howard Bunsis a Professor of Accounting at Eastern Michigan University developed a modified composite index which we call the Fichtenbaum-Bunsis Index. It uses the same variables as the OBR index but also includes a cashflow variable. The scores for each ratio for both the OBR index and the Fichtenbaum Bunsis Index are assigned making use of the scores in Table 9 In addition, we use a piecewise continuous function to assign scores, so that small changes in ratios at any level result in small changes in scores. The viability ratio is given a weight of 0.225, the primary reserve ratio a weight of 0.45, the cash flow ratio a weight of 0.2 and

the net asset ratio a weight of 0.125. I have also included this index in previous reports and will again provide it in this report for continuity.

Table 9. Ratio Scores for OBR and Fichtenbaum-Bunsis Indices

Ratio Scores for OBR and Fichtenbaum-Bunsis Indices						
	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
Cash Flow Ratio	< -.05	-.05 to 0	0 to .009	.01 to .029	.03 to .049	.05 or greater
Net Asset Ratio	< -.05	-.05 to 0	0 to .009	.01 to .029	.03 to .049	.05 or greater

Yet another alternative index of financial performance is the CFI. It uses a different approach than the scoring method in the OBR index or the F-B index. It uses four ratios', the viability ratio, the primary reserve ratio, the net income ratio (net income from operations) and the net asset ratio.

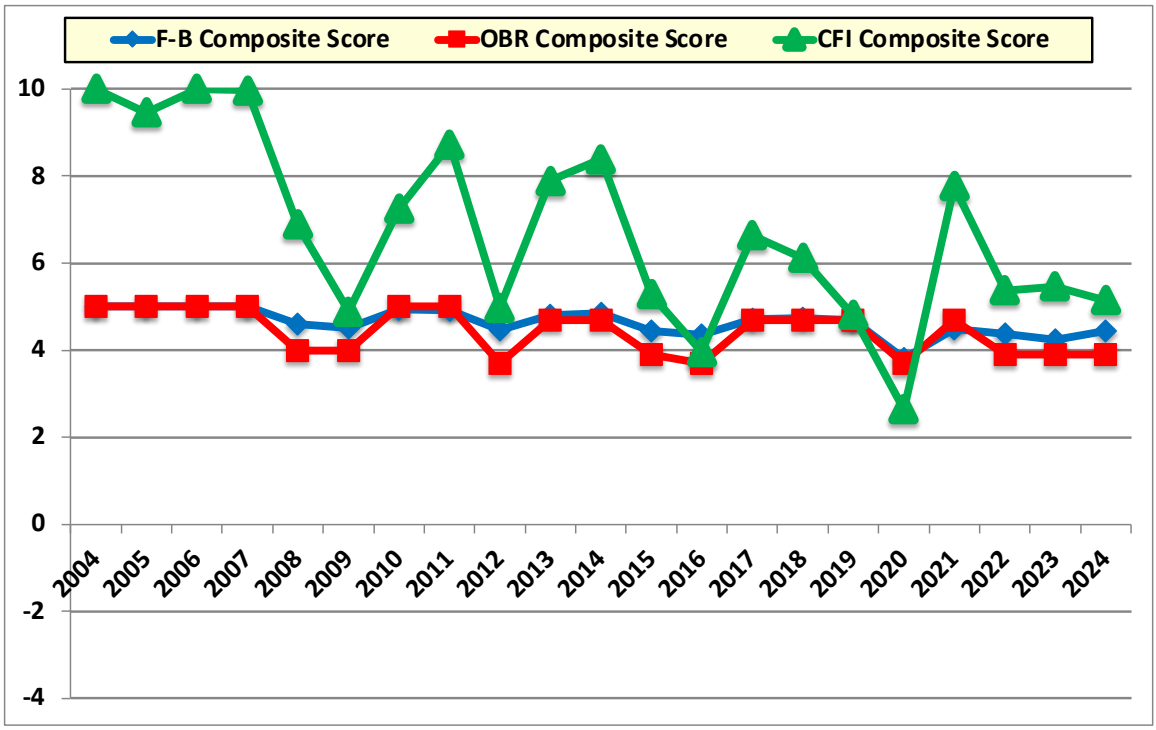
The problem in creating any composite index is how to compare the different ratios when the values of the ratios have different meanings. A 5% ratio for the change in net assets may be very high, but as a viability ratio it would be extraordinarily low. The OBR index and the F-B index overcome this problem by assigning scores to the values of the ratios. The CFI uses something called an inflation factor to take various ratios and create a scores between -4 and 10. So while OBR and F-B indices have a 6-point scale (0-5) the CFI has a 15-point scale (-4 to 10). It also uses different weights giving equal weight (35%) to the viability and primary reserve ratios followed by a 20% weight for the net asset ratio and a 10% weight for the net income ratio. (For more information on CFI see: Strategic Financial Analysis for Higher Education, 7th Edition, 2010, KPMG LLP, Prager, Sealy & Co., LLC and Attain LLC). Since I provided CFI Scores in my last report, I will again provide them in this report for continuity.

Three summary indices discussed above are shown in Table 10 and Figure 52.

Table 10. FB, OBR and CFI Scores

Year	F-B Composite Score	OBR Composite Score	CFI Composite Score
2004	5.00	5.00	10.00
2005	5.00	5.00	9.47
2006	5.00	5.00	10.00
2007	5.00	5.00	9.97
2008	4.60	4.00	6.89
2009	4.51	4.00	4.89
2010	4.94	5.00	7.25
2011	4.92	5.00	8.72
2012	4.47	3.70	4.99
2013	4.82	4.70	7.89
2014	4.85	4.70	8.39
2015	4.45	3.90	5.29
2016	4.35	3.70	3.96
2017	4.71	4.70	6.64
2018	4.74	4.70	6.12
2019	4.69	4.70	4.81
2020	3.82	3.70	2.64
2021	4.49	4.70	7.77
2022	4.37	3.90	5.38
2023	4.25	3.90	5.46
2024	4.45	3.90	5.15

Figure 52. FB, OBR and CFI Composite Scores



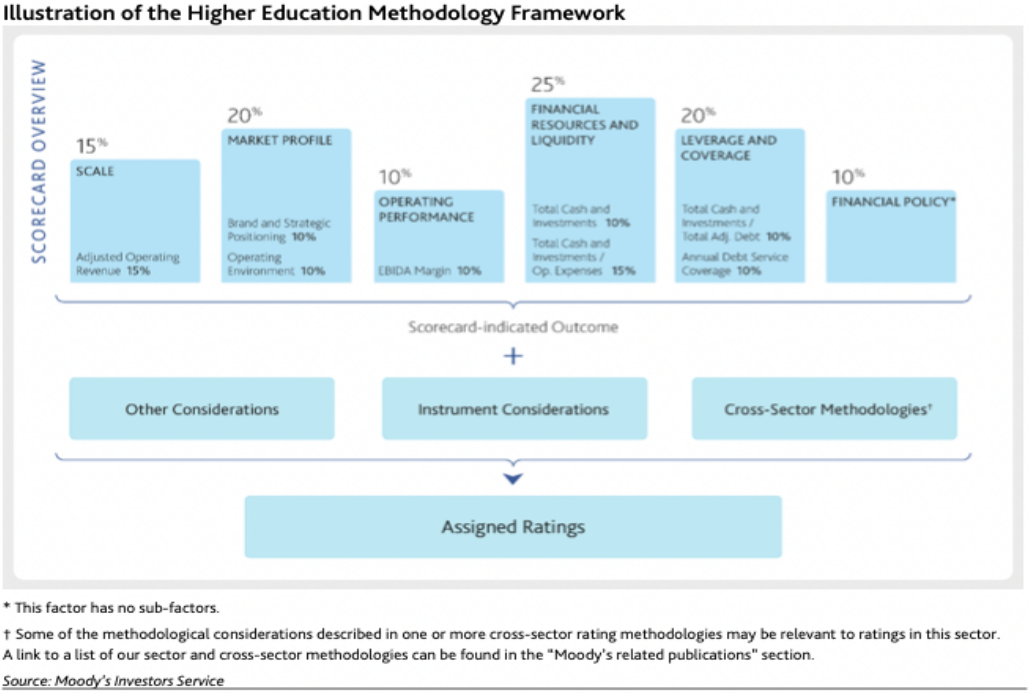
The major difference between the OBR composite scores and the Fichtenbaum-Bunsis composite scores is that the F-B scores tend to be slightly less volatile They are a little lower when the change in net assets is very high and higher when the change in net assets is negative. The CFI shows the same downward trend in the composite score but clearly it is much more volatile.

The best measure of volatility is the coefficient of variation (CV), which is the ratio of the standard deviation to the mean. The CV for the CFI is 0.32 compared to 0.12 for the OBR and 0.07 for F-B. A less volatile index is better, because strategic decisions should respond to long-term trends and not year-to-year fluctuations due to cyclical factors in the economy or volatility in financial markets.

Several years ago, Moody's created a new score card to measure financial performance that corresponds with the credit ratings that it gives to various public and private institutions of higher education. Initially the score card considered four broad areas of performance: 1) market profile, 2) operating performance, 3) wealth and liquidity and 4) Leverage. Each of these categories was then broken down into several sub-factors some of which were ratios and others were levels of performance. This score card used Moody's credit ratings to assign scores on a 0-20 scale, to various factors much like the OBR scores, and then created an average weighted score to correspond with an institution's credit rating.

However, in 2021 Moody's changed its methodology and it now has six categories 1) Scale, 2) Market Profile, 3) Operating performance, 4) Financial Resources and Liquidity, 5) Leverage and Coverage and 6) Financial Policy shown in Figure 53. In addition to changing and simplifying some of the variables to address concerns over accounting changes involving pensions and other post-employment benefits (OPEB) it also started using a piece-wise linear function to assign scores to avoid "threshold effects." It's new index also includes three subjective variables that related to qualitatively evaluating performance.

Figure 53. Illustration of the Higher Education Methodology Framework



* This factor has no sub-factors.

† Some of the methodological considerations described in one or more cross-sector rating methodologies may be relevant to ratings in this sector. A link to a list of our sector and cross-sector methodologies can be found in the "Moody's related publications" section.

Source: Moody's Investors Service

Each of the sub-categories in the top part of Figure 54 is given a score that corresponds to 8 broad ratings categories shown in Figure 55a for qualitative factors and 12b for quantitative factors.

Figure 55a

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

Figure 55b

Aaa	Aa	A	Baa	Ba	B	Caa	Ca
0.5-1.5	1.5-4.5	4.5-7.5	7.5-10.5	10.5-13.5	13.5-16.5	16.5-19.5	19.5-20.5

Source: Moody's Investors Service

A piecewise linear function is used for the scoring of quantitative factors. As was used in the Fichtenbaum-Bunsis Index that function creates a continuous score by using a linear function between the points. Then each score is then multiplied by the weights in Figure 54 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 56. One important difference between Moody's scores and other scores is that a lower score is better than a higher score.

Figure 56.

EXHIBIT 2

Scorecard Outcome

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

Table 11. Moody's Scores and Implied Credit Ratings

Year	Adjusted Operating Revenue	Brand & Strategic Positioning	Operating Environment	EBIDA Margin	Total Cash and Investments	Total Cash and Investments to Operating Expenses	Total Cash and Investments to Total	Annual Debt Service Coverage	Financial Policy and Strategy	Moody's Score	Moody's Credit Rating
Weight	15%	10%	10%	10%	10%	15%	10%	10%	10%		
2004	0.664	0.300	0.200	1.265	0.345	0.154	0.050	0.050	0.300	3.33	Aa2
2005	0.659	0.300	0.200	1.267	0.339	0.162	0.050	0.050	0.300	3.33	Aa2
2006	0.653	0.300	0.200	1.266	0.326	0.140	0.050	0.050	0.300	3.28	Aa2
2007	0.646	0.300	0.200	1.266	0.300	0.093	0.050	0.050	0.300	3.20	Aa2
2008	0.639	0.300	0.200	1.266	0.311	0.142	0.050	0.050	0.300	3.26	Aa2
2009	0.632	0.300	0.200	1.265	0.343	0.236	0.086	0.050	0.300	3.41	Aa2
2010	0.623	0.300	0.200	1.263	0.333	0.226	0.059	0.050	0.300	3.35	Aa2
2011	0.617	0.300	0.200	1.265	0.303	0.175	0.120	0.050	0.300	3.33	Aa2
2012	0.609	0.300	0.200	1.263	0.313	0.206	0.130	0.050	0.300	3.37	Aa2
2013	0.603	0.300	0.200	1.264	0.289	0.172	0.181	0.050	0.300	3.36	Aa2
2014	0.598	0.300	0.200	1.266	0.272	0.147	0.161	0.050	0.300	3.29	Aa2
2015	0.590	0.300	0.200	1.262	0.261	0.143	0.166	0.050	0.300	3.27	Aa2
2016	0.588	0.300	0.200	1.265	0.268	0.173	0.168	0.050	0.300	3.31	Aa2
2017	0.583	0.300	0.200	1.264	0.261	0.164	0.151	0.050	0.300	3.27	Aa2
2018	0.577	0.300	0.200	1.266	0.251	0.170	0.232	0.050	0.300	3.35	Aa2
2019	0.568	0.300	0.200	1.267	0.258	0.196	0.237	0.050	0.300	3.38	Aa2
2020	0.575	0.300	0.200	1.270	0.252	0.191	0.223	0.099	0.300	3.41	Aa2
2021	0.582	0.300	0.200	1.267	0.199	0.076	0.158	0.050	0.300	3.13	Aa2
2022	0.558	0.300	0.200	1.266	0.211	0.138	0.168	0.050	0.300	3.19	Aa2
2023	0.550	0.300	0.200	1.269	0.215	0.169	0.167	0.050	0.300	3.22	Aa2
2024	0.535	0.300	0.200	1.270	0.208	0.185	0.157	0.050	0.300	3.20	Aa2

Figure 57. Moody's Average Weighted Scores

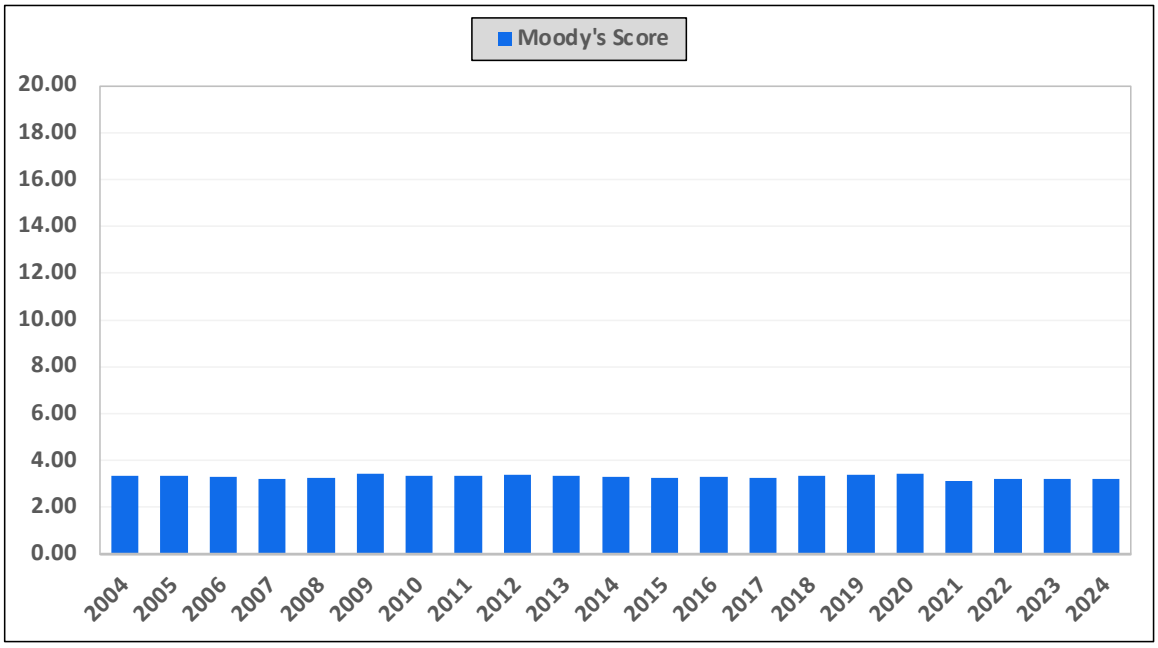


Table 11 shows the Moody's scores, and Figure 57 shows the average weighted scores. Clearly the scores are stable, and this stability is consistent with Moody's actual credit

ratings for the University. Again, it is also important to remember that unlike the OBR, F-B and CFI, where higher scores indicate better performance, with Moody's score, lower is better. The downward trend in CFI scores seems more pronounced and we noted earlier that it was more volatile. In my opinion it is a less reliable indicator of financial performance than OBR, F-B or Moody's average weighted scores.

The only real negative that I see in the Moody's summary analysis is the decline in EBIDA margins, which is also mirrored in the decline in operating cash flow margin. At the end of the day cash is king and so the direction of this indicator is critical. In recent years the decline in performance results from expenses growing faster than revenues. **A major contributing factor to the growth of expenses appears to be administrative spending.**

The University has also taken on more debt; however, the University has ample reserves, and it started with such a low level of debt that the increases in debt have not done much to weaken its balance sheet. Enrollment, the pandemic notwithstanding, remains strong and considering that the University is a flagship institution and is moderately selective, it does not appear that it is facing any enrollment challenges.

With respect to performance one other detail stands out, and that is the returns on endowment. Here the University is not alone in having performance that is worse than index funds. This is a common problem in higher education. But if the University is looking for a way to strengthen its performance it could do so by improving its endowment returns through index investing.

In April 2015 Moody's gave the University an Aa1 rating with a stable outlook. Why did Moody's give the University this extremely high rating? Moody's report states that the University is the flagship university with high non-resident enrollment. It has "good financial resources supporting debt and operations." Moreover, Moody's reports "consistently strong operating margins and cash flow generation."

More recently, in April 2021 Moody's rated the University at Aa1 with a negative outlook. First, we should put this new rating in context. Overall, Moody's downgraded higher education as a sector from stable to negative in response to the pandemic. So, the negative outlook for the University of Delaware is not surprising. In 2023 Moody's revised its outlook giving the University of Delaware an Aa1 rating with a stable outlook. Moody's most recent rating is for 2025 where again it gave the University an Aa1 rating with a stable outlook.

Let's look at what Moody's has to say about the University of Delaware. They say that the University has a strong brand allowing it to attract students both from Delaware and

from out-of-state. They note the University's strong performance in sponsored research, which is testament to the quality of the University's faculty. They do note that competition for students could limit the growth of tuition revenue, and **they made note of ongoing capital plans which they say, "temper credit quality."** In 2021 they raised a concern about the "narrower operating performance." Translation, the EBIDA margin was declining. But in their 2025 report they express the opinion that the University can maintain double digit levels of EBIDA and that it should continue to have good debt service coverage.

This update shows that the University of Delaware remains in excellent financial condition. The University has diversified sources of revenue, has had a positive operating cash flow for the last 21 years, still has relatively little debt, and has maintained stable enrollment. It is also noteworthy that during the pandemic the state of Delaware provided the University with COVID relief beyond that provided directly by the Federal government. This would seem to suggest that the state views higher education as a priority and that bodes well for the University.

Although there is a great deal of uncertainty surrounding the economy, which could affect state budgets, and federal funding for universities, in general, the University of Delaware remains in excellent financial condition and is certainly able to offer competitive salaries and benefits to its faculty.

Appendix GASB Aligned Definitions of Functional Expenses From IPEDS	
Instruction:	A functional expense category that includes expenses of the colleges, schools, departments, and other instructional divisions of the institution and expenses for departmental research and public service that are not separately budgeted. Includes general academic instruction, occupational and vocational instruction, community education, preparatory and adult basic education, and regular, special, and extension sessions. Also includes expenses for both credit and non-credit activities. Excludes expenses for academic administration where the primary function is administration (e.g., academic deans). Information technology expenses related to instructional activities if the institution separately budgets and expenses information technology resources are included (otherwise these expenses are included in academic support). GASB institutions include actual or allocated costs for operation and maintenance of plant and depreciation.
Research:	A functional expense category that includes expenses for activities specifically organized to produce research outcomes and commissioned by an agency either external to the institution or separately budgeted by an organizational unit within the institution. The category includes institutes and research centers, and individual and project research. This function does not include non-research sponsored programs (e.g., training programs). Also included are information technology expenses related to research activities if the institution separately budgets and expenses information technology resources (otherwise these expenses are included in academic support.) GASB institutions include actual or allocated costs for operation and maintenance of plant and depreciation.
Public Service:	A functional expense category that includes expenses for activities established primarily to provide non-instructional services beneficial to individuals and groups external to the institution. Examples are conferences, institutes, general advisory service, reference bureaus, and similar services provided to particular sectors of the community. This function includes expenses for community services, cooperative extension services, and public broadcasting services. Also includes information technology expenses related to the public service activities if the institution separately budgets and expenses information technology resources (otherwise these expenses are included in academic support). Institutions include actual or allocated costs for operation and maintenance of plant, interest, and depreciation.

Academic Support:	A functional expense category that includes expenses of activities and services that support the institution's primary missions of instruction, research, and public service. It includes the retention, preservation, and display of educational materials (for example, libraries, museums, and galleries); organized activities that provide support services to the academic functions of the institution (such as a demonstration school associated with a college of education or veterinary and dental clinics if their primary purpose is to support the instructional program); media such as audiovisual services; academic administration (including academic deans but not department chairpersons); and formally organized and separately budgeted academic personnel development and course and curriculum development expenses. Also included are information technology expenses related to academic support activities; if an institution does not separately budget and expense information technology resources, the costs associated with the three primary programs will be applied to this function and the remainder to institutional support. Institutions include actual or allocated costs for operation and maintenance of plant, interest, and depreciation.
Student Services:	A functional expense category that includes expenses for admissions, registrar activities, and activities whose primary purpose is to contribute to students emotional and physical well-being and to their intellectual, cultural, and social development outside the context of the formal instructional program. Examples include student activities, cultural events, student newspapers, intramural athletics, student organizations, supplemental instruction outside the normal administration, and student records. Intercollegiate athletics and student health services may also be included except when operated as self-supporting auxiliary enterprises. Also may include information technology expenses related to student service activities if the institution separately budgets and expenses information technology resources (otherwise these expenses are included in institutional support.) Institutions include actual or allocated costs for operation and maintenance of plant, interest, and depreciation.

Institutional Support:	A functional expense category that includes expenses for the day-to-day operational support of the institution. Includes expenses for general administrative services, central executive-level activities concerned with management and long range planning, legal and fiscal operations, space management, employee personnel and records, logistical services such as purchasing and printing, and public relations and development. Also includes information technology expenses related to institutional support activities. If an institution does not separately budget and expense information technology resources, the IT costs associated with student services and operation and maintenance of plant will also be applied to this function.
Operation and Maintenance of Plant:	A functional expense category that includes expenses for operations established to provide service and maintenance related to campus grounds and facilities used for educational and general purposes. Specific expenses include utilities, fire protection, property insurance, and similar items. This function **does** include amounts charged to auxiliary enterprises, hospitals, and independent operations. Also includes information technology expenses related to operation and maintenance of plant activities if the institution separately budgets and expenses information technology resources (otherwise these expenses are included in institutional support). Institutions may, as an option, distribute depreciation expense to this function.
Auxiliaries:	Expenses for essentially self-supporting operations of the institution that exist to furnish a service to students, faculty, or staff, and that charge a fee that is directly related to, although not necessarily equal to, the cost of the service. Examples are residence halls, food services, student health services, intercollegiate athletics (only if essentially self-supporting), college unions, college stores, faculty and staff parking, and faculty housing. Institutions include actual or allocated costs for operation and maintenance of plant, interest and depreciation.

Scholarships & Fellowships:	Outright grants-in-aid, trainee stipends, tuition and fee waivers, and prizes awarded to students by the institution, including Pell grants. Awards to undergraduate students are most commonly referred to as "scholarships" and those to graduate students as "fellowships." These awards do not require the performance of services while a student (such as teaching) or subsequently as a result of the scholarship or fellowship. The term does not include loans to students (subject to repayment), College Work-Study Program (CWS), or awards granted to a parent of a student because of the parent's faculty or staff status. Also not included are awards to students where the selection of the student recipient is not made by the institution.