

# Guide to Analyzing University & College Financial Statements

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# Contents

- 1| Introduction
- 2| Budgets vs. Financial Statements
- 3| General Approach
- 4| Step-by-Step Instructions
  - Step 1: Report accompanying financial statements
  - Step 2: Main financial statements
  - Step 3: Spreadsheets
  - Step 4: Statistics
  - Step 5: Computations
- 5| Summary of Diagnoses & Symptoms
- 6| A Final Check
- 7| Conclusion
- Appendices

# 1| Introduction

As active members of our university faculty association, we first started analyzing the financial statements of our own university at the request of our chief bargainer in preparation for bargaining in 2006. Our university, like most, was pleading that their finances were in dire straits. Few of our members questioned that: Manitoba's tuition is among the lowest in the country, the province is a "have-not" province, and what do professors know about University finances, anyway? We did know that our salaries were lower than comparable institutions, and the administration tended to produce alarming statements when developing their budgets about projected shortfalls. The "bottom line" of the statement of operations each year was perilously close to zero: usually there was perhaps enough left over from our institution serving 28,000 students to buy a previously owned compact car. As a result, many members worried that large salary demands were doomed to failure and might even endanger the university.

Our multi-year analysis in 2006 indicated that the university's finances were stable, and in the previous year or two actually seemed to be improving. When we redid the analysis in 2009, we could see that our university was actually piling up huge amounts of unrestricted cash and investments. This seemed perplexing, given that we were urged to "tighten our belts," a large project was underway to identify administrative efficiencies, and the bottom line on the statement of operations continued to register near zero as it always did. What we found was that the true bottom line was healthy indeed ("net revenues," the third to last line on the statement of operations). However, the second last line was "interfund transfers," where the university was transferring all surpluses to "internally restricted net assets," giving us the famous zero bottom line. This gave us our first lesson: The bottom line is not on the bottom line. The bottom line is actually about 2/3 down the page.

From 2009 to 2012 the austerity rhetoric continued. In 2012, the university had their most profitable year ever. However, the transfers to internally restricted net assets had declined, and unrestricted cash and investments were no longer increasing. What was happening at that point was a building spree. Virtually every spare dollar was being used to build buildings (not much appeared to be spent on repairs and maintenance).

This pattern has continued since 2012. The university still makes a reasonably healthy surplus and receives tuition and operating grant increases approximately equal to general inflation, but we have had repeated cuts to faculty budgets. What is happening now is our central administration distributes far less money to the units and controls a proportionately larger amount for its "strategic priorities." Even strategic priorities centred on the student experience tend to involve central administration initiatives rather than faculty initiatives. Other strategic priorities involve large amounts expended on fundraising and marketing, salaries for top administrators, and continued expenditures on capital projects. Sound familiar?

In the last four years, we have analyzed the financial statements of several universities and have seen similar patterns at many of them. We encourage you to look closely at your own institution's financial statements - you may also find within your association people with particular familiarity with financial statements who may be able to help with the more complicated areas.

## 2| Budgets vs. Financial Statements

Many academic staff associations want to analyze the university or college budget. This seems to be a great idea. It's hard to get increases to faculty salaries or new positions if the money has already been committed to advertising, fundraising, or new buildings. However, there are some impediments to doing this analysis:

- There are no external rules governing the production of budgets. Each university and college has its own system, and many are very complex. As a result, your own people, and even many people within the university administration, may not be able to understand them and you may not even be able to hire an outside expert who will understand them either.
- Even comparing a budget to financial statements is difficult. Budgets are generally based on the expected cash inflows and outflows. Those receipts and expenditures are not the same as “revenues” and “expenses” on the financial statements which are based on accrual accounting rules. Two areas in particular where there will be substantial differences are in capital expenditures and pensions. Capital expenditures do not show up as an expense on the income statement – instead, the income statement shows amortization or depreciation which is the cost of the asset spread over its useful life. Pension contributions are based on what the actuary determines the university must contribute to its pension plan. The pension expense on the income statement is the result of accounting wizardry and may be quite different than the pension contributions made that year. (This latter bit is especially true if your institution has a defined benefit pension plan.)
- The budget, particularly the preliminary budget, may not be a true roadmap of the institution's intentions. Once a budget has been passed, expenditures that deviate from the budget are disallowed or require some oversight. However, universities and colleges often seem to “pad” budgets, either by overstating anticipated expenditures or understating anticipated revenues. By doing so, the resulting surplus is held by central administration which will often be used for their initiatives and transfers to capital or internally restricted reserves. In other words, the actions that you most likely would like to stop by analyzing the budget are frequently not in the budget anyway.
- The ability of academic staff voices to change the university's desired course of action seems somewhat limited.

In some cases, however, the budgets may be your only source of information. For example, many universities and colleges have dramatically increased their budget for external relations (fundraising and advertising). The actual and budgeted numbers in the budget are likely to be the only source of this information as the financial statements typically do not have that level of detail.

At our university our analysis for our members has concentrated on the financial statements. The advantage of financial statements is that they are an audited record of what the university actually did, and are prepared according to a set of reasonably standardized accounting conventions.

The disadvantages, though, are:

- Financial statements are historical documents. One of our former professors told us that using financial statement analysis is like trying to drive a car while looking out the back window. Looking backward can tell you about the decisions that the administration has made and the priorities those decisions reflect. In addition, (especially recent) history can help predict the future. However, some important variables (e. g., student numbers, government funding, investment returns) might deviate from past trends.
- Universities and colleges can still exercise discretion regarding the amount of detail in the financial statements. While company financial statements over the last decade have become increasingly detailed, university financial statements have moved in the opposite direction, which obstructs many useful analyses.

In any case, we will proceed with general guidelines about how we have done these analyses.



## 3 | General Approach

Universities and colleges, like most other not-for-profit enterprises, typically receive two sorts of funding. *Unrestricted funds* generally include government grants, student tuition fees, and revenues from so-called ancillary services (e. g., student residence services, conference and catering services, campus bookstore sales). Unrestricted funds can be used for any purpose consistent with the mission of the organization and are generally those used to pay operating costs. *Restricted funds* can only be used for specific purposes, e. g., Capital (land, buildings, equipment) or Endowments. If the specific purpose is identified by a donor, the funds are considered to be *externally restricted*.

Our general approach to analyzing university and college financial statements is to identify the amounts and sources of resources available for additional support for academic teaching and research through, for example, increased employee salaries and benefits and hiring additional academic staff. Generally, these are unrestricted assets. We try to establish whether the institution has unexpended resources that it could use to improve employee compensation and the sustainability of those resources (i.e., is there a reliable, continuing source of these resources?). The central questions we try to answer are:

- How much unrestricted Cash and other liquid assets (investments) does the university have? How have those changed over time?
- If there are any surplus unrestricted Cash and Investments, where does it come from?
- If the surplus is not going to academic staff, where is it going?

*The focus on Cash and Investments is important.* Accounting rules and policies are complex and can create layers of figures and information that are impenetrable. Cash and Investments, on the other hand, are relatively straightforward. They are generally carried on the statement of financial position at their market values. In the simplest sense, a university takes in cash from students, governments and others and uses cash to pay for salaries, benefits, utilities, buildings, etc. In a financially healthy institution, cash inflows exceed cash outflows and the excess accumulates in bank or investment accounts. Our approach is to focus on the balance of cash and investments and see how that changes over time.

The first step is to identify the liquid assets (cash and investments) available to the university or college to pay employee salary and benefits. This is complicated because every institution we have seen uses fund accounting, a system under which all of the assets and liabilities are divided among different funds according to the restrictions donors have placed on those funds. The funds used by each university or college will depend on its circumstances, but generally, all institutions will have at least the following funds:

- *General or Operating Funds* are typically unrestricted, which means that the university can use them for any purpose consistent with the overall goals of the university or college. Employee salaries and benefits and other operating expenses are paid out of this fund. Principal sources of these funds (what accountants call *revenues*) are government grants, student tuition and fees, and ancillary service revenues (e. g., parking services, campus bookstore, student residences).

- *Capital Funds* are long-lived assets like land, buildings, equipment, and library collections, as well as money received specifically to fund future acquisitions. Money in the capital fund can *only* be used to acquire and/or renovate assets like this. These funds can come from government capital grants and capital fundraising campaigns.
- *Endowment Funds* are funds that are established to provide money, sometimes for general operating purposes but often for specific programs, e. g., scholarships and academic chairs. What is unique about an endowment fund is that the original contribution (or capital — unfortunately, the same term used to describe land, buildings, etc.) must remain invested and only the investment income can be spent. Endowment funds often come in the form of bequests and other donations or specific endowment fundraising efforts.

Generally, university and college employee compensation is principally paid out of the Operating Fund. Institutions typically present financial information on a combined basis whereby the balances within each fund are combined into a single figure. We need to rely on other disclosures to estimate what is in the Operating Fund. We have found that this is not always possible.



## 4| Step-by-Step Instructions

### Step 1: Report accompanying financial statements

It's a good idea to read the report (usually written by the President or VP administration) accompanying the financial statements for the two most recent years. They will likely explain many of the trends and major events and transactions in the year. Still, read them with a skeptical eye. They also provide insight into the story that management is selling, which will often correspond with a particular slant on reality. Our experience is that every institution claimed financial difficulty, whether they were actually healthy or not.

### Step 2: Main financial statements

Next, turn to the main financial statements (statement of financial position, statement of operations, statement of net assets and statement of cash flows). Determine if the various funds (unrestricted, capital, and endowment and possibly others) are combined or not. The statement of financial position of most universities combines all of these funds together in one column. These financial statements are a bit tricky, because the unrestricted funds are of primary interest to you. Many universities and colleges also have a combined statement of operations but may have a supplementary note or schedule that shows the statement of operations for the "general," "unrestricted" or "operating" fund. These are more useful for your analysis than the combined statement is.

### Step 3: Spreadsheets

Enter about six years of data into a spreadsheet, grabbing all the items from the statement of financial position and statement of operations. From the statement of cash flows, you will want to pick up at least the cash from operations, cash from (used for) capital expenditures, cash from (used for) long term debt and total change in cash. Look for patterns in the data over the six-year

period. One handy trick is to use the colour functions in Excel to highlight patterns you have noticed: if it looks like it is good news (such as increasing revenues), highlight the cells in green. If it looks like it is bad news (such as increasing expenditures on capital), highlight the cells in red. If you have no idea, highlight them in orange.

### Step 4: Statistics

Look at statistics from the Office of Institutional Analysis or the Data Book (or equivalent). It is useful to get the number of students in full time equivalents, and there may also be interesting statistics regarding numbers of various employee groups (academics, support staff, management and professional, senior administration) which can be useful to determine increased academic workloads (more students per academic, fewer or excessive support staff per academic) and bloated administration.

### Step 5: Computations

Perform computations:

1. Sum of cash, short, and long term investments.
2. Calculate the amount of restricted cash plus investments. Part of this will be the endowment, which can be estimated by "net assets: endowment." The other part, deferred revenues, is more complicated. Look to deferred revenues in the liability section of the balance sheet, and the note attached to it. The problem is that some of these deferred revenues are in still in the form of cash and investments, which you need to determine in this step. However, some of the deferred revenues have been spent on capital projects (typically buildings) so they are no longer in cash. You need to find out what this latter amount is. It may be disclosed as a separate

liability in the balance sheet as something like “unamortized deferred capital.” More likely, though, it is combined in the deferred revenue account and you will have to read the note to determine how much this amount is. Subtract this amount from deferred revenues. The remainder is your best estimate of deferred revenues that are sitting in cash and investments because they have not yet been spent.

3. Estimate the unrestricted cash, short and long term investments. At a minimum, this will be total cash+ investments in part 1, less endowment net assets, less deferred revenue sitting in cash and investments as calculated in part 2. See Appendix 1 for a summary of the accounting principles involved in these calculations. See Appendix 2 for an example of these calculations using the University of New Brunswick’s 2014 financial statements and Appendix 3, which contains the calculations for University of Ottawa.
4. If a statement of operations (or a schedule further into the financial statements) is segmented into general or unrestricted operations and capital, concentrate your analysis on the general/unrestricted operations. If there is only a combined statement of operations, do the following:
  - a) Ascertain what general revenues are. This is available on the Canadian Association of University Business Officers (CAUBO) [website](#) and are also available on the members only section of the CAUT [website](#).
  - b) Deduct amortization from general expenditures. Amortization is an expense of the capital fund, not the general fund.
  - c) Identify what investment gains and losses pertain to. Unless your university has significant unrestricted long term investments, investment gains and losses probably pertain to investments that are restricted or, in some cases, endowed. If this is the case, remove them from net revenues.
5. Use graphs or tables to track the following accounts which we have typically found to be sensitive:
  - a) Net revenues.
  - b) Capital assets.
  - c) Unrestricted cash plus investments.
  - d) Net assets: unrestricted and net assets: internally restricted.
  - e) Long term debt.
6. Calculate the following ratios which we have typically found to be sensitive:
  - a) Capital assets per student.
  - b) Ratio of academic staff to support staff, admin staff, and management and professional staff.
7. When looking at “net revenues,” i.e., “net income,” make sure the expenses you have deducted *do not* include the following:
  - a) Amortization.
  - b) Transfers to capital.
  - c) Transfers to internally restricted net assets.
  - d) Investment gains and losses on restricted or endowed funds.
8. Watch out for 2011 and 2012 fiscal years. Significant changes that year which may have affected certain accounts:
  - a) Capital assets (may have been revalued to their 2011 fair market values).
  - b) Pension (actually, more likely the deficit or surplus which may be significantly different).
  - c) Investments: no longer separated into short and long term investments.

Check out the numbers originally reported in 2011 and then the 2011 numbers reported in the 2012 financial statements to see how big the differences were. If the differences were large, be aware that any six-year analyses including the accounts that changed may be incorrect because the accounting was different prior to 2012.

9. Watch out for pensions. If any members of the university have a defined benefit pension, read the note to determine the period over which actuarial gains and losses are amortized. If they are amortized over the expected average remaining service life of employees, the pension expense is likely to be a relatively “smooth” number that often corresponds reasonably closely to the actual cash contributions the university is making. However, if actuarial gains and losses are recognized in income in the current year (usually called “immediate recognition” or “full recognition”) they will create large fluctuations in income that might well swamp other effects even though their effect on the institution’s cash position is likely to be far less significant.

10. Other interesting analyses:

- a) **Horizontal Analysis** — Comparing increases in various accounts by dividing each figure by its value in the first year of the analysis.

For example:

*Total revenues* for the years 2009, 2010, 2011, 2012, 2013 and 2014, each divided by 2009 revenues.

*Total expenses* for the years 2009, 2010, 2011, 2012, 2013 and 2014, each divided by 2009 expenses.

*Total students* for the years 2009, 2010, 2011, 2012, 2013 and 2014, each divided by 2009 total students.

*Total academic salaries* for the years 2009, 2010, 2011, 2012, 2013 and 2014, each divided by 2009 salaries. Note that even if your university or college reports academic salaries, those may include instructors and support staff outside your academic staff association. You can use (or estimate) the total salaries of your association membership for this calculation.

*Total president’s salary* for the years 2009, 2010, 2011, 2012, 2013 and 2014, each divided by 2009 president’s salary.

*Total number of academic staff* for the years 2009, 2010, 2011, 2012, 2013 and 2014, each divided by 2009 academic staff numbers.

*Total number of support or admin staff* for the years 2009, 2010, 2011, 2012, 2013 and 2014, each divided by 2009 support or admin staff numbers.

- b) **Vertical Analysis** — Comparing components of revenues or expenses as a percentage of total revenues or total expenses to determine if the composition has changed. Of interest would be things like whether government grants plus tuition have remained a stable percentage of total revenues (which would indicate that the university had been able to offset government cuts by raising tuition) or whether spending on academic salaries had declined relative to other expenses. Note that if academic salaries have declined, say, from 32% of total expenses to 28% of total expenses, this is not a drop of just 4%. It effectively is a drop of  $4\% \div 32\%$  which is 12.5%! Trends like this seem to be an important factor in ability-to-pay arbitrations.

11. Determine the amount of unrestricted net assets that have been used to purchase capital assets and the amount that has been transferred to internally restricted net assets. These amounts may be in a note entitled “interfund transfers” or they may show up in the “Statement of changes in net assets.” They also may be near the bottom of the statement of operations (i.e., management may show revenues less expenses to arrive at a number which *should* be called net revenues). Below that line, they may then show transfers to capital and transfers to internally restricted net assets to arrive at a number that they *hope* you will think is net revenues (but of course it is not). It is then useful to calculate these ratios as a:
  - a) percentage of operating revenues; and
  - b) percentage of academic salaries.
12. Universities and colleges are increasingly entering into joint ventures to operate some of their commercial operations. These will be mentioned in the notes to their financial statements. You want to make sure, if these operations are generating significant profits, that they are being included in the net revenues of the institution. This will require reading the notes to the financial statements pertaining to those entities. If they have been “consolidated,” “proportionately consolidated” or “accounted for under the equity method,” then the profits will be included in the main financial statements. If they have been accounted for by the “cost” method or “portfolio method” then the profits have *not* been combined but the university or college could access those accumulated earnings if they wanted to (with the agreement of the other joint venture partners).

## 5 | Summary of Diagnoses & Symptoms

We have certainly noted a few common patterns of behaviour among institutions. If your university or college is engaging in this conduct, or is facing these circumstances, these are likely the symptoms you will see in the financial statements:

Diagnosis	Symptoms
Institution is healthy	<ul style="list-style-type: none"> <li>■ Net revenues <i>before</i> interfund transfers are positive.</li> <li>■ Note that unrestricted cash plus investments may not necessarily be increasing or even steady (if they are decreasing, it is probably due to transfers to capital).</li> <li>■ Note that unrestricted net assets may not necessarily be positive, increasing or even steady (if they are decreasing or negative, it is probably due to funds being internally restricted).</li> </ul>
Institution is struggling financially	<ul style="list-style-type: none"> <li>■ Net revenues <i>before</i> interfund transfers are zero or negative.</li> <li>■ Unrestricted cash plus investments probably low and/or decreasing (and/or long term debt has increased substantially).</li> </ul>
Large amounts of unrestricted funds expended on capital	<ul style="list-style-type: none"> <li>■ Net revenues <i>before</i> interfund transfers are positive.</li> <li>■ Unrestricted net assets have not increased by as much as net revenues.</li> <li>■ Unrestricted cash plus investments have not increased by as much as net revenues.</li> <li>■ Interfund transfers from operating to capital are significant.</li> </ul>
Unrestricted funds are internally restricted	<ul style="list-style-type: none"> <li>■ Net revenues <i>before</i> interfund transfers are positive.</li> <li>■ Unrestricted net assets have not increased by as much as net revenues.</li> <li>■ Unrestricted cash plus investments have increased.</li> <li>■ Interfund transfers from operating to internally restricted are significant.</li> </ul>

## 6 | A Final Check

As a final check to ensure that you have a solid picture of what has happened to your university over the period, compare the following four graphs:

- Net revenues (before interfund transfers and taking out amortization and investment gains and losses on restricted or endowed funds).
- Cash from operations (reported in statement of cash flows).
- Unrestricted cash plus investments.
- Unrestricted net assets.

You should know, from looking at the statement of operations, what factors led to the patterns of net revenues. Were good and bad years the result of investment or pension gains and losses (2008, 2009 and 2011 were bad years for many universities, while 2012 and 2014 were good) or something else?

Generally, cash from operations should mirror the patterns of net revenues except they will be higher by the amount of amortization.

Unrestricted cash plus investments is likely to mirror cash from operations *unless* there were large purchases of capital or transfers to capital (in which case, cash plus investments will be lower than expected) or there have been large infusions or repayments of long term debt.

Unrestricted net assets should also mirror the patterns of net revenues unless net revenues were internally restricted or they were invested in capital assets (because the latter two almost always happen, unrestricted net assets tend to not change very much).



## 7 | Conclusion

Accounting research has documented a substantial increase in the length and detail of public company financial statements over the last twenty years which, in turn, appears to be associated with more efficient operation of financial markets. More information, it seems, is better.

Sadly, universities and colleges have shown an opposite trend. In many cases, financial statements have become shorter and contain far less detail. For example, many institutions used to include supplementary schedules showing the statement of operations separately for unrestricted, restricted and endowment funds. Universities and colleges also often showed their internally restricted net assets and their designated purpose. Now, they generally do not. Universities and colleges also generally showed their expenses organized by object or type: salaries, cost of goods sold, maintenance, amortization, utilities, etc. Usually institutions would also group their expenses by function: instruction, administration, maintenance, student affairs, etc. While the groupings between administration did not necessarily correspond to most academics' views of administration (administration generally referred to central administration only, so support staff and decanal staff were included in "instruction"), the groupings would allow financial statement users to compare universities and colleges on key metrics such as salaries as a percentage of total expenses, and administration as a percentage of total expenses and to track these metrics over time. Now, universities and colleges report expenses by function broken down by instruction and non-sponsored research, sponsored research, ancillary services, special purposes, and facility operations and maintenance. "Administration" is no longer reported.

Given the alleged explosion in administrative costs,<sup>1</sup> this is questionable.

Particularly pre-2012, many institutions set aside internally restricted reserves. What is the purpose of this? Internal restrictions are made through motions of the governing body of an organization. Generally, an internal restriction may be made to ensure that the organization does not "forget" about a large upcoming expenditure. However, they reduce the organization's flexibility to easily divert funds to where they are needed (unless the governing body removes the restriction). Because of the lack of flexibility, an internally restricted dollar is less useful than an unrestricted dollar. Administrations will claim that internal restrictions are fiscally prudent, but saving the dollar and keeping it unrestricted displays the same level of fiscal responsibility without sacrificing flexibility. It would seem that the overriding reason to internally restrict surpluses would be to make them less visible.

Universities and colleges have claimed they have large requirements for deferred maintenance. While most academic staff report buildings and facilities in disrepair, estimates of deferred maintenance appear to be based on general characteristics of the facilities and an understanding of how much has been invested to date (See the [report](#) on CAUBO website). Many universities and colleges have embarked on significant capital spending sprees to address this alleged deferred maintenance gap, yet many of the expenditures are on new buildings rather than deferred maintenance on existing structures. Despite large amounts of capital spending over the last four years, the institutions that report their deferred maintenance estimates have not

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1. For example, see Hechinger, J. *Business Week* November 26, 2012. "The Troubling Dean-to-Professor Ratio" pg. 40-41.

generally reduced these estimates by much, if at all. Even more ironically, many deferred maintenance items do not extend the life of the building beyond its original useful life and do not change the serviceability of the building. Therefore, under accounting rules these expenditures are expensed rather than capitalized. Hence, they cannot be paid for by monies in the institution's restricted capital funds. So, it appears that universities and colleges that transfer unrestricted funds to capital funds for deferred maintenance will not actually be able to use those funds for that purpose in many cases. Many capital expenditures appear to be little more than vanity projects: often, the buildings are not even related to the core university functions of teaching and research. They do not alleviate the deferred maintenance problems. They divert funds that would otherwise be available for faculty salaries, research, and student support. They also increase the institution's future operating costs for utility, maintenance, security, and in some cases interest on debt.

The unfortunate prevalence of these behaviours (reducing financial statement disclosures, internally restricting funds, embarking on capital spending sprees while neglecting deferred maintenance) gives faculty associations a compelling reason to read the financial statements of their institution carefully and educate their members. Knowledge is power. With a greater understanding of the institutions' financial position, members are more prepared to fight for the compensation they deserve. Moreover, understanding the financial position and the decisions that have been made by the administration allows academic staff associations to question priorities, particularly if the institution has denied competitive compensation packages, cut faculty budgets, restricted hiring, cut back on library acquisitions, increased hiring of casualized academic staff, or increased class sizes and workloads under the guise of required austerity.

We want to underline one last item. Financial statements typically are not sufficient to give the reader a *full* understanding of the university's financial position and performance. The statements are condensed to make them manageable and readable, but that also leaves out many details that could be useful to the kind of analysis we have described here. For example, deferred or unearned revenues include some items that restrict the university's Cash (e. g., research grants, unspent capital contributions) but also some that do not (e. g., unearned student tuition fees). There is usually not enough information in the financial statements to distinguish these subcomponents. If possible, it could be a good idea to talk to the university's accountants who work in the Comptroller's Office. When in doubt, be conservative, i. e., tend to underestimate the amount of unrestricted cash and investments. Even an approximate understanding of the university's financial position can be very helpful.

# Appendix 1

## Deferral Method for Donations

Most universities and colleges use the deferral method to account for their donations. The basics of this method are:

- Unrestricted contributions are recorded as revenues when they are received.
- Restricted contributions are recorded as revenue when the required restrictions are met and the associated expense hits the statement of operations:
  - For current expenditures (eg. salaries of people involved in research projects funded by grants or donations), when those expenditures are made.
  - For capital expenditures, when those assets are amortized.

When donations are received for a capital expenditure, the sequence of events and how it would appear on the financial statements would be as follows:

<b>Event</b>	<b>Asset side of statement of financial position</b>	<b>Liability side of statement of financial position</b>
When contribution is received	Cash increases.	Deferred capital contributions are increased (this may just be called “Deferred revenues” but will be shown separately in the notes).
When asset is purchased	Cash is swapped for asset, so cash decreases and capital assets increase.	Deferred capital contributions transferred to unamortized deferred capital contributions. Both of these may be combined in “Deferred revenues” but again will be shown separately in the notes.
As asset is amortized	Capital asset is reduced and amortization expense is deducted from net revenues in the statement of operations.	Unamortized deferred capital contributions is reduced, and revenue is recognized (usually called amortization of deferred revenues, which is a component of revenues in the statement of operations).

Here’s an example:

Upper Rubber Boot (URB) University begins operations on January 1. It receives \$600 in government grants, \$100 of which is unrestricted, \$200 is for capital project A and \$300 is for capital project B. Project A is completed at a cost of \$240 (the extra \$40 comes from URB’s unrestricted funds) and put into operation immediately, with an expected useful life of ten years. URB pays salaries of \$50 during the year.

### Statement of operations

URB’s Statement of operations for the year would be as follows:

<b>Revenue:</b>		
Government grant (the unrestricted grant)		\$ 100
Amortization of deferred capital contributions ( $\$200 \div 10$ years)		<u>20</u>
		120
<b>Expenses:</b>		
Salaries		50
Depreciation ( $\$240 \div 10$ years)		<u>24</u>
		<u>74</u>
Excess of revenue over expense (net revenues)		<b><u>\$ 46</u></b>

### Statement of changes in net assets

The Statement of changes in net assets would be as follows:

	Investments in capital assets	Unrestricted	Total
<b>Balance, Jan 1</b>	\$ 0	\$ 0	\$ 0
Excess of revenue over expense	0	46	46
Transfer to capital assets (Project A)	40	(40)	0
Depreciation	<u>(4)</u>	<u>4</u>	<u>0</u>
<b>Balance, Dec 31</b>	<b><u>\$ 36</u></b>	<b><u>\$ 10</u></b>	<b><u>\$ 46</u></b>

### Statement of financial position

Finally, the Statement of financial position or balance sheet would be the following:

<b>Assets</b>			<b>Liabilities and net assets</b>		
Cash (\$600 – 240 – 50)		\$ 310	Deferred capital contributions (project B)		\$ 300
Capital assets at cost	\$ 240		Unamortized deferred capital contributions (project A: \$200 – [200 ÷ 10])		180
Less accumulated depreciation	<u>(24)</u>	<u>216</u>			
			<b>Net assets:</b>		
			Invested in capital assets		36
			Unrestricted		<u>10</u>
					<u>46</u>
<b>Total</b>		<b><u>\$ 526</u></b>	<b>Total</b>		<b><u>\$ 526</u></b>

How much unrestricted cash does URB have? The answer would be \$10: The original unrestricted contribution of \$100 less \$50 paid in salaries less \$40 of unrestricted cash used for project A. Under our methodology, we take consolidated cash (\$310) less deferred capital contributions (\$300) to arrive at \$10 of unrestricted cash.

## Appendix 2

# Estimated Unrestricted Cash & Investments

## University of New Brunswick<sup>2</sup>

Our calculation of estimated unrestricted cash and investments would be as follows:

### Step 1

Note that UNB's statement of financial position, or balance sheet, combines the unrestricted, restricted, and endowed funds together. Their total amount of cash and investments available (\$ thousands) come from the statement of financial position:

<b>UNIVERSITY OF NEW BRUNSWICK</b>	
Consolidated Statement of Financial Position	
April 30, 2014	
	<b>2014</b>
<b>ASSETS</b>	
<b>Current assets</b>	
Cash and short-term investments (Note 4)	\$ 80,029
Accounts receivable (Note 5)	22,973
Inventories (Note 6)	1,530
Prepaid expenses	<u>3,921</u>
	<u>108,453</u>
<b>Deferred charges</b> (Note 7)	4,353
<b>Long-term investments</b> (Note 8)	291,042
<b>Capital assets</b> (Note 9)	<u>253,759</u>
	<u>549,154</u>
	<b><u>\$ 657,607</u></b>

2. Calculation as at April 30, 2014. Refer to University of New Brunswick's (UNB) consolidated financial statements for the year ended April 30, 2014. These are available on the university [website](#).



The Cash and short term investments are typically listed first among the University’s assets, as they are here. Long-term investments are generally listed closer to the bottom of the list of assets. Using the numbers from the Statement of Financial Position, we calculate total cash and investments, both restricted and unrestricted, below:

Cash and short term investments	\$ 80,029
Long term investments	<u>291,042</u>
<b>Total cash and investments</b>	<b><u><u>\$ 371,071</u></u></b>

## Step 2

Next, estimate the portion of the total cash and investments that are restricted. In most cases that we have encountered, restrictions are in two places:

1. The amount *restricted to the endowment* is estimated from “net assets: endowed,” again from the statement of financial position. In UNB’s case, that amount is \$119,991 and is presented in the Net Assets section at the bottom of the Statement of Financial Position. This section is reproduced below:

<b>UNIVERSITY OF NEW BRUNSWICK</b>	
Consolidated Statement of Financial Position	
April 30, 2014	
	<b>2014</b>
<b>LIABILITIES AND NET ASSETS</b>	
<b>Net assets (liability)</b>	
Accumulated operating surplus	1,469
Unfunded employee benefits (Note 16)	(55,224)
Restricted for specific purposes (Note 17)	112,092
Invested in capital assets (Note 18)	81,029
Endowed (Note 19)	<u>119,991</u>
	<u>259,357</u>
	<b><u><u>\$ 657,607</u></u></b>

2. Next, in the Liabilities sections of the statement of financial position, find the amount of *deferred revenues* or *unearned revenues*. These are donations, grants or other cash receipts restricted for specific purposes that the university has received but has not yet spent. In UNB's case, the statement of financial position shows both current and long-term unearned revenue. The current unearned revenues are small (\$8,337) and there is no explanation as to what these represent. Tuition and residence fees received from students for courses not yet delivered, for example, could be included here. As the amount is small and is likely to be related to operating activities, we make no adjustment for it.

The long-term unearned revenues and contributions is a much bigger item and there is more information on them. This section of the statement of financial position is reproduced below.

<b>UNIVERSITY OF NEW BRUNSWICK</b>	
Consolidated Statement of Financial Position	
April 30, 2014	
	<b>2014</b>
<b>LIABILITIES AND NET ASSETS</b>	
<b>Long-term unearned revenue and contributions</b>	
Long-term unearned revenue (Note 13)	1,725
Unexpended deferred contributions (Note 14)	121,018
Deferred contributions invested in capital assets (Note 15)	<u>146,417</u>
	<b><u>269,160</u></b>

The “Long-term unearned revenue” is an accounting item (I am afraid there is no easy way to explain it) that has no effect on Cash so we can ignore it. The two big components are Unexpended deferred contributions (121,018) and Deferred contributions invested in capital assets (146,417). There are notes for both of these items so we should look at those:

<b>UNIVERSITY OF NEW BRUNSWICK</b>	
Notes to Consolidated Financial Statements	
For the year ended April 30, 2014 (in thousands of dollars)	
<b>14. Unexpended Deferred Contributions</b>	
The account balance is made up of the following:	
	<b>2014</b>
Sponsored research	\$ 36,430
Unexpended restricted donations	54,376
Unexpended endowment income	29,958
Unexpended infrastructure funding	<u>254</u>
	<b><u>\$ 121,018</u></b>

Sponsored research typically means research grants that have been received from external agencies and which must (usually) be spent on identified projects. The \$36,430 in the note here represents the amount of these research grants that have been received but not yet spent. Since this money cannot usually be spent on academic salaries, we remove it from total cash and investments. (There can be exceptions in some institutions – research grants can be used to pay salaries for research professionals, post-docs, etc., and in some universities these people can be in academic unions.)

\$54,376 is called simply “unexpended restricted donations.” It is impossible to tell what this is. It could be money for, and spent on, specific programs but it is safe and conservative to assume that this is not available for academic salaries and benefits. \$29,958 are for Unexpended endowment income. The title suggests that this is income from UNB’s endowments which are typically restricted for things like scholarships and which have not yet been spent.

The remaining \$254 is unexpended infrastructure funding. This could be some sort of government grant, for example, specifically targeted for construction or renovations of some kind.

It is safe (and conservative) to assume that none of the Unexpended deferred contributions is available for unrestricted purposes and so we deduct all of it in our estimate of unrestricted Cash and Investments.

Finally, there is an item in Long-term unearned revenue and contributions called “Deferred contributions invested in capital assets.” This represents restricted contributions for capital that have been received and have already been spent on buildings, equipment, etc. For complicated accounting reasons, it is treated as a liability. The important thing for our purposes is that this represents cash that has already been spent, and not a claim on cash or investments that UNB has on hand. Therefore, we do *not* deduct it from total Cash and investments.

### Step 3

Subtract step 2 from step 1 to arrive at estimated unrestricted cash and investments:

Cash and short term investments	\$ 80,029
Long term investments	<u>291,042</u>
	371,071
<b>Less:</b>	
Net assets-endowed	(119,991)
Unexpended deferred contributions	<u>(121,018)</u>
Estimate of unrestricted cash and investments	<b><u>\$ 130,062</u></b>

## Appendix 3

# Estimated Unrestricted Cash & Investments

## University of Ottawa<sup>3</sup>

Our calculation of estimated unrestricted cash and investments would be as follows:

### Step 1

Note that UO's statement of financial position, or balance sheet, combines the unrestricted, restricted, and endowed funds together. Their total amount of cash and investments available (\$ thousands) come from the statement of financial position:

UNIVERSITY OF OTTAWA		2014
Consolidated Statement of Financial Position		
April 30, 2014		
<b>ASSETS</b>		
<b>Current assets</b>		
Cash and short-term investments (note 3)	\$	202,825
Accounts receivable (note 4)		85,052
Inventories and other		<u>12,663</u>
		300,540
<b>Long-term investments</b> (note 5)		575,376
<b>Capital assets</b> (note 6)		<u>1,638,539</u>
	<b>\$</b>	<b><u>2,514,455</u></b>

The Cash and short-term investments are typically listed first among the University's assets, as they are here. Long-term investments are generally listed closer to the bottom of the list of assets. Using the numbers from the Statement of Financial Position, we calculate total cash and investments, both restricted and unrestricted, below:

Cash and short term investments	\$	202,825
Long term investments		<u>575,376</u>
<b>Total</b>	<b>\$</b>	<b><u>778,201</u></b>

3. Calculation as at April 30, 2014. Refer to University of Ottawa's (UO) consolidated financial statements for the year ended April 30, 2014. These are available on the university [website](#).

## Step 2

Next, determine the portion of the total cash and investments that are restricted. In most cases, restrictions will be identified in two places. The amount restricted to the endowment is estimated from “net assets: endowed” from the statement of financial position. In UO’s case, that amount is \$233,880. Next, find the amount of deferred revenues that the university has received but is not available to spend on operations.

<b>UNIVERSITY OF OTTAWA</b>	
Notes to Consolidated Financial Statements	
Year ended April 30, 2014 (in thousands of dollars)	
<b>8. Deferred revenue</b>	
Deferred revenue represents unexpended amounts which are subject to externally imposed restrictions. Changes in the deferred revenue balance are as follows:	
	<b>2014</b>
Balance, beginning of year	\$ 237,661
Contributions received during the year	536,066
Recognized as revenue	(522,025)
Transfer to deferred contributions related to capital assets	(6,846)
<b>Balance, end of year</b>	<b><u>\$ 244,856</u></b>
<b>The balance is made up of the following:</b>	
Operating	\$ 31,325
Sponsored research and trust	188,053
Capital	25,478
<b>Total</b>	<b><u>\$ 244,856</u></b>

The important information for our purposes is the table at the bottom of the note, which tells us the composition of the *Deferred revenue*. The first item is related to *Operating*. There is no information on what this is. It could include tuition fees paid for courses that have not yet been delivered, residence fees paid in advance, and/or funding for specific programs. Our inclination would be to consider these funds available for employee compensation, but that is a judgement call that could change if more information on this item were available.



The second and largest item is *Sponsored research and trust*, which represents funding for research received from government or other funding agencies. These funds have been received but not yet spent. Since this money cannot usually be spent on academic salaries and benefits, we remove it from total cash and investments. (There can be exceptions in some institutions — research grants can be used to pay salaries for research professionals, post-docs, etc., and in some universities these people can be in academic unions.)

Finally, \$25,478 is related to *Capital*. This represents funds that must be spent on capital assets and so is not available for employee compensation.

The other item that is *deferred* is *Deferred contributions related to capital assets* of \$339,031, reported about three-quarters of the way down in the statement of financial position. This represents restricted contributions for capital that have been received and have already been spent on buildings, equipment, etc. For complicated accounting reasons, it is treated as a liability. The important thing for our purposes is that this represents cash that has already been spent, and not a claim on cash or investments that UO has on hand. Therefore, we do *not* deduct it from total Cash and investments.

### Step 3

Subtract step 2 from step1 to arrive at estimated unrestricted cash and investments:

Cash and short term investments	\$ 202,825
Long term investments	575,376
	<u>778,201</u>
<b>Less:</b>	
Net assets-endowed	(233,880)
Deferred revenue: Sponsored research and trust	(188,053)
Deferred revenue: Capital	<u>(25,478)</u>
	<u>447,411</u>
Estimate of unrestricted cash and investments	<u><u>\$ 330,790</u></u>