Management Discussion & Analysis

For the Year Ended
March 31, 2017
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Management Discussion and Analysis Overview

This Management Discussion and Analysis ("MD&A") should be read in conjunction with the University of Calgary's ("the University") consolidated financial statements and accompanying notes for the year ended March 31, 2017. The MD&A and consolidated financial statements are reviewed and approved by the University's Board of Governors on the recommendation of the University's Audit Committee. The University's consolidated financial statements have been prepared in accordance with Canadian Public Sector Accounting Standards ("PSAS").

The MD&A is an overview of the University's financial results for the year ending March 31, 2017 and offers analysis of the University's:

1. Operating Environment
2. Financial Results
4. Capital Expansion and Renewal
5. Areas of Significant Financial Risk

Operating Environment

On April 29, 2016, the University marked its 50th anniversary and was recognized as North America's top young university. The University was ranked first in both Canada and North America in Times Higher Education (THE) Top 150 under 50 and the Quacquarelli Symonds Limited (QS) World University Rankings.

In large part, this success is driven by the University’s Eyes High strategic vision, which was refined during the fiscal year:

“The University of Calgary is a global intellectual hub located in Canada’s most enterprising city. In this spirited, high-quality learning environment, students will thrive in programs made rich by research, hands-on experiences and entrepreneurial thinking. By 2022, we will be recognized as one of Canada’s top five research universities, fully engaging the communities we both serve and lead.”

We are dedicated to the three foundational commitments established in 2011: 1) sharpen focus on research and scholarship; 2) enrich the quality and breadth of learning; 3) integrate the University with the community.

Our Academic Plan and Research Plan, developed in 2011-12, resulted in seven academic and three research priorities that have provided a roadmap for the achievement of our Eyes High vision. The vision and priorities established at the University are designed to show our community the benefits and rewards of integrating teaching, learning and research in an environment where discovery, creativity, and innovation are central to the mission. Our priorities have guided human, financial, and capital resource allocations for the foreseeable future. This trio of documents (Eyes High Strategy, Academic Plan, Research Plan), produced through broad consultation processes on our campus, has resulted in strong strategic decision-making that has moved the institution forward, while at the same time placed focus on prudent fiscal management.
Financial Results

For the year ended March 31, 2017, the University’s revenues exceeded expenses by $4.3 million. This annual operating surplus decreased from the $11.3 million surplus in 2016 mainly due to increased spending on strategic research, academic, and support initiatives combined with inflationary impacts above operating funding increases.

Total net assets have increased by $108.0 million from March 31, 2016 as the result of additions to endowments of $69.5 million, unrealized gains on portfolio investment – restricted for endowments of $46.2 million, and the annual operating surplus of $4.3 million, which is offset by a $12.0 million reduction in unrealized gains on portfolio investments – non-endowment.

Revenue

Total revenues for the year ended March 31, 2017, were $1,318.1 million, an increase of $34.1 million (2.7%) over the prior year and $43.9 million (3.4%) over budget. Revenue from the Government of Alberta represented the University’s single largest source of income, at 48.0% of total University revenue, and played a key role in the ability to fund University activities. Major components of revenue are as follows:

![Revenue Chart]

Revenue ($ millions)

- Government of Alberta grants
- Federal and other government grants
- Sales of services and products
- Student tuition and fees
- Donations and other grants
- Investment income (includes government business enterprises)

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Budget</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government of Alberta grants</td>
<td>631.4</td>
<td>632.9</td>
<td>612.1</td>
</tr>
<tr>
<td>Federal and other government grants</td>
<td>128.4</td>
<td>144.9</td>
<td>142.3</td>
</tr>
<tr>
<td>Sales of services and products</td>
<td>116.4</td>
<td>126.3</td>
<td>116.8</td>
</tr>
<tr>
<td>Student tuition and fees</td>
<td>219.5</td>
<td>226.5</td>
<td>219.2</td>
</tr>
<tr>
<td>Donations and other grants</td>
<td>140.6</td>
<td>131.7</td>
<td>146.0</td>
</tr>
<tr>
<td>Investment income (includes government business enterprises)</td>
<td>37.0</td>
<td>55.8</td>
<td>47.6</td>
</tr>
</tbody>
</table>
Government of Alberta grants
Government of Alberta grant revenue of $632.9 million was $20.8 million higher than prior year and in line with budgeted amounts. This increase from prior year was primarily due to additional funding received from the Government of Alberta related to cost of living adjustments of 2.0% applied to the operating grant, funding to compensate for the provincial tuition freeze, and grants for targeted enrollment expansion.

Federal and other government grants
Grant revenue from federal and other government sources of $144.9 million was $2.6 million higher than prior year and $16.5 million higher than budget. The increase from the prior year and budget resulted from higher than anticipated revenue from research and special purpose and trust activities that occurred during the year.

Sales of services and products
Sales of services and products revenue of $126.3 million was $9.5 million higher than the prior year and $9.9 million higher than budgeted expectations primarily as a result of $5.2 million in one-time cost recoveries received from the province related to housing Fort McMurray evacuees, $2.0 million in increased Clinical Neurosciences medical fees, $1.3 million from additional lease revenue, and $1.0 million in additional Olympic Oval and Kinesiology student service program fees.

Student tuition and fees
Student tuition and fees represent another important component of the University’s revenue. For the year-ended March 31, 2017, student tuition and fees of $226.5 million were $7.3 million higher than prior year and $7.0 million higher than budget. The increase is due to approximately 1,000 additional full-load equivalent domestic students enrolled and $2.0 million in additional international full-load equivalent students tuition and fees, partially offset by $1.7 million reduction in corporate Continuing Education enrollment as a result of the current economic conditions in Alberta.

Donations and other grants
Donations and other grant revenue of $131.7 was $14.3 million lower than prior year and $8.9 million lower than budgeted. The decrease from prior year and budget is primarily due to lower recognition of donation and other grant revenue from research and special purpose activities specifically funded by donations. The decrease is partially offset by $6.2 million of unbudgeted income from the University’s partnership with Tri-University Meson Facility (TRIUMF) which operates a subatomic physics research facility with eleven other Universities.

Investment income – Including investment loss in government business enterprises
Investment income (including investment loss in government business enterprises (“GBE’s”)), of $55.8 million was $8.2 million higher than prior year and $17.9 million higher than budget mainly due to $10.0 million in gains from floating rate notes that matured earlier than expected combined with $5.8 million in higher than expected endowment income from increased endowment spending, and $1.8 million in unbudgeted foreign exchange gains offset lower returns on Guaranteed Investment Certificates (GICs). Remaining budget variances are from $3.4 million in lower than expected losses from investment in GBE’s partially offset by lower than budgeted returns on non-endowed investments. The lower than expected losses from GBE’s, relate primarily to the start-up land development activities of the West Campus Development Corporation that will become positive upon entering into sub-leases with tenants throughout future development phases.
Expense

For the year ended March 31, 2017, the University recorded $1,313.8 million in expenses representing an increase of $41.0 million (3.2%) over the prior year and $39.6 million (3.1%) higher than budget. Salaries and benefits are the largest expenditure component at the University, representing 56.9% of the University’s expenses. Compensation expenses continue to be a challenge when making budgeting decisions, especially during times where increases in operating grants do not adequately fund increase in salaries that are often governed by union and faculty agreements.

Academic costs and institutional support represents the single largest function at the University, with this function representing 58.3% of the University’s expenses. This includes instruction, non-research academic and administrative support activities, effectively representing the operating activities of the University.

*Other expenses include: Utilities, Maintenance and repairs, and Cost of goods sold.

Expense - By Object

<table>
<thead>
<tr>
<th>Expense by Object</th>
<th>Budget</th>
<th>Mar-17</th>
<th>Mar-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and employee benefits</td>
<td>749.2</td>
<td>747.8</td>
<td>722.8</td>
</tr>
<tr>
<td>Materials, supplies, and services</td>
<td>265.3</td>
<td>284.7</td>
<td>278.1</td>
</tr>
<tr>
<td>Scholarships and bursaries</td>
<td>83.3</td>
<td>96.8</td>
<td>91.4</td>
</tr>
<tr>
<td>Amortization of tangible capital assets</td>
<td>116.1</td>
<td>124.4</td>
<td>119.0</td>
</tr>
<tr>
<td>Other</td>
<td>60.3</td>
<td>60.1</td>
<td>61.5</td>
</tr>
</tbody>
</table>
Salaries and employee benefits
Salaries and employee benefits of $747.8 million have increased by $25.0 million over the prior year but remained consistent with budgeted amounts. The increase from the prior year is primarily due to $27.2 million in additional faculty and support staff salary and benefits costs resulting from negotiated union agreement increases, new positions, and filled vacancies, combined with $2.7 million in additional employee benefit expenses, and offset by lower Universities Academic Pension Plan (“UAPP”) costs.

Materials, supplies and services
Materials, supplies and services of $284.7 million represents the second largest expense component of the University with current year costs being $6.6 million higher than the prior year and $19.4 million higher than budget. Materials, supplies and services were higher than prior year due to $2.0 million in additional IT licensing fees and $3.0 million in IT strategic initiatives, combined with general increased costs across faculties and business units. Additional costs above budgeted amounts were primarily driven from University spending on Internally Restricted Net Asset funded strategic initiatives supporting research, maintenance, academic, and student learning priorities.

Scholarships and bursaries
Scholarships and bursaries of $96.8 million were $5.4 million higher than 2016 and $13.5 million above budget. These higher expenses are in line with University goals for attracting and supporting students across various faculties.

Amortization of tangible capital assets
Amortization of tangible capital assets expense of $124.4 million increased by $5.4 million from the prior year and increased $8.3 million over budget. Of the total increase from budget, $3.1 million in amortization is attributable to the Resolute Bay Incoherent Scatter Radar facility, $2.0 million amortization as a result of the completion of the Schulich School of Engineering building, $1.9 million amortization related to additional equipment, and $1.3 million as a result of various new assets being put into service.

Other
Other expenses totaling $60.1 million were relatively consistent with the prior year and budgeted amounts.
Academic costs and institutional support
While Academic costs and institutional support expense of $766.4 million has increased $15.4 million over the prior year, the total academic costs and institutional support expense was $4.7 million below budget. The increase from prior year is primarily due to $18.9 million in increased salaries and benefits resulting from negotiated union agreement increases, new positions, and filled vacancies being partially offset by reduced UAPP pension costs. The budgetary savings of $4.7 million was as a result of $22.0 million from vacant employee positions and unbudgeted recoveries primarily in research, partially offset by $17.3 million in increased in scholarship and materials, supplies, and services expenses.

Research and Special purpose and trust
Research costs of $361.7 million were $17.9 million higher than prior year and $38.3 million higher than budget. This increase is due to the University's strategic focus on directing resources and activities towards research initiatives in support of Eyes High goals for increasing research across many faculties of the University. Special purpose and trust costs of $69.8 million were comparable to prior year and $4.8 million higher than budgeted amounts primarily due to scholarship expenses.

Facilities operations and maintenance
Facilities operations and maintenance costs of $69.4 million were $2.5 million higher than prior year and $2.5 million higher than budget. The increase is a result of operating and maintaining a growing and aging campus infrastructure, offset by $2.4 million in budgeted utility savings from lower than expected utility costs.

Ancillary services
Ancillary expenditures of $46.5 million were $4.1 million higher than prior year due to increased costs associated with housing Fort McMurray evacuees offset by cost savings in salaries and benefits from reduced positions and improved efficiencies.
Net Assets and Net Financial Assets

Net Assets

The University’s net asset balance is an important indicator of financial health for the University. Prudent financial planning and decision making combined with increased endowment contributions from donors have contributed to the University’s $1,489.5 million in net assets. Endowments of $888.1 million continue to represent the largest component of Net Assets. Endowments must be maintained in perpetuity with investment income earned used to fund specific research, scholarship, and donor supported initiatives on campus. Of the remaining $601.4 million in net assets, $298.5 million represents funds previously spent as a net investment in capital assets and $287.0 million is formally restricted by the University’s Board of Governors for spending on strategic initiatives in support of student learning, research, capital projects, and community service. After amounts already spent on capital assets and Board of Governors restrictions, $15.8 million has been maintained for unforeseen events and future strategic decision making. Net assets at March 31, 2017 are comprised of the following balances and related summarized transactions:

<table>
<thead>
<tr>
<th>Net Assets</th>
<th>Unrestricted</th>
<th>Investment in Capital Assets</th>
<th>Internally Restricted</th>
<th>Endowments</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at March 31, 2016</td>
<td>43,904</td>
<td>281,821</td>
<td>283,303</td>
<td>772,337</td>
<td>1,381,365</td>
</tr>
<tr>
<td>Annual operating surplus</td>
<td>4,345</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4,345</td>
</tr>
<tr>
<td>Transfer to internally restricted net of expenditures</td>
<td>(40,030)</td>
<td>-</td>
<td>40,030</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Endowment contributions and capitalized income</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>69,540</td>
<td>69,540</td>
</tr>
<tr>
<td>Net capital asset acquisition, amortization and debt financing</td>
<td>19,643</td>
<td>16,687</td>
<td>(36,330)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Change in accumulated remeasurement gains</td>
<td>(12,021)</td>
<td>-</td>
<td>-</td>
<td>46,222</td>
<td>34,201</td>
</tr>
<tr>
<td>Balance at March 31, 2017</td>
<td>15,841</td>
<td>298,508</td>
<td>287,003</td>
<td>888,099</td>
<td>1,489,451</td>
</tr>
</tbody>
</table>
Net Financial Assets

The University’s liquidity needs are met primarily through operating cash flows, working capital balances and capital expansion funding received through grants or long-term debt. The Net Financial Asset indicator is intended to identify the availability of net financial resources of an organization to fund future operations after considering liabilities owed to third parties. The University presents the Net Financial Asset indicator in a manner as directed by the Controller of the Province of Alberta. The presentation includes $888.1 million of investments that are restricted for endowments. Portfolio investments – restricted for endowments must be maintained in perpetuity and are therefore not available to pay for University liabilities, nor can the University use the endowment portfolio investments to pay for future operating or capital purchases. As a result, net financial assets excluding portfolio investments restricted for endowments is also presented on the Consolidated Statement of Financial Position.

At March 31, 2017 Net Financial Assets excluding portfolio investments restricted for endowments was $50.1 million, representing a $1.2 million decrease from the prior year. This decrease is due to cash flow timing related to capital expansion being partially offset by the annual operating surplus. The $50.1 million balance demonstrates the University’s commitments to manage its financial position.

Capital Expansion and Renewal

On September 9, 2016, the federal government announced that the University would receive funding for key campus infrastructure projects totaling $160.0 million from the Post-secondary Institution Strategic Investment Fund (“SIF”). $78.0 million of the total funding is from the federal government, with the remaining $82.0 million coming from a mix of provincial funding, philanthropy and the University’s own infrastructure dollars. As at March 31, 2017, the University had received $29.1 million in SIF funding. Given the provincial government facilitates the payment of the SIF program on behalf of the federal government, the SIF funding is included within the Government of Alberta transactions and balances note within the financial statements.

Continuation of capital expansion and renewal projects remains a critical priority for the University, contributing not only to the student learning experience and the quality of research activity, but also positively to the Calgary economy. In 2017, the University acquired $140.3 million (2016 - $204.1 million) of capital assets. This capital activity represents the continuation of the University’s multi-year capital building program through construction of new buildings as well as redevelopment, renovation, and numerous instructional facility upgrade projects.

The following represents progress on the top three major construction projects on campus:

<table>
<thead>
<tr>
<th>Major Capital Project Costs ($ thousands)</th>
<th>2017</th>
<th>Project to Date</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schulich School of Engineering Expansion</td>
<td>42,678</td>
<td>162,392</td>
<td>173,875</td>
</tr>
<tr>
<td>High Density Library Expansion</td>
<td>2,875</td>
<td>2,875</td>
<td>30,000</td>
</tr>
<tr>
<td>Western Canadian Microbiome Centre</td>
<td>7,825</td>
<td>9,205</td>
<td>26,453</td>
</tr>
</tbody>
</table>

Schulich School of Engineering Expansion and Renovation (SSE) – During 2013-14, construction began on this $173.9 million dollar initiative to construct an 18,300 square meter expansion to the Canadian Natural Resources Limited Engineering Complex, along with major renovations to 11,100 square meters of the existing building footprint. The building expansion includes high intensity research labs and support spaces, undergraduate engineering teaching labs, group workrooms, low intensity research facilities, and classroom and theatre spaces.
High Density Library Expansion - The High Density Library (HDL) is a dedicated environmentally controlled storage facility that holds books, journals, archival files, photographs, audio-visual media and museum art and artifacts. The University is expanding the HDL to include additional storage, cold storage, collection evaluation, and processing facilities. This expansion and move will consolidate the University's collection of less-used library material into one location, designed with the goal of long-term material preservation.

The Western Canadian Microbiome Centre (WCMC) – The WCMC is an ambitious research initiative focusing on global leading microbiome research. This program includes the construction of a Germ Free Facility, renovations to accommodate the installation of a Flow Cytometry unit, decanting and related renovations. This includes the Germ Free Lab which is a specialized environment focused on the transplantation of microbes to study the effects of microbiome on chronic diseases. The 950 square meter facility will be located in the basement of the Health Sciences Centre. The Flow Cytometry involves the installation of mass cytometry diagnostic equipment located on the 2nd floor of the Health Sciences Centre allowing investigators to study detailed aspects of individual plant, animal and microbial cells.

Areas of Significant Financial Risk

Deferred Maintenance
The University directs significant resources to ensure that University buildings are updated with relevant technology, operate efficiently, and meet university and external regulatory standards. The University has an outstanding deferred maintenance balance of nearly $518.6 million (2016 - $487.3 million). Infrastructure Maintenance Program funding from the province increased to $14.4 million (2016 - $11.0 million) as compared to the prior year.

Unfunded Pension Liability
The University participates with other Alberta post-secondary institutions in the UAPP to provide pensions for participating faculty and staff. The extrapolated actuarial deficiency for the pension plan at March 31, 2017 was $763.9 million (2016 - $868.7 million) of which the University's portion is $85.0 million (2016 - $108.9 million). This unfunded deficiency in the UAPP is currently being funded by the Government of Alberta, employee and employer contributions. The deficiency will be eliminated by 2043.

Budgetary Pressure
Although the University has a balanced budget for 2017-18, it is presenting deficit forecasts for 2018-19 and 2019-20. The University is facing a number of risk factors, most notably funding uncertainty related to provincial operating funding. Without increases in provincial funding to offset inflationary costs, and combined with legislatively mandated ceilings on tuition increases, the University will continue to explore and implement process efficiencies and revenue generating opportunities. The University will continue to work in partnership with the government, to help bridge the gap between increasing costs and stagnant revenues. While prudent financial management has resulted in balanced results, budgetary pressures remain a significant strategic risk for the University of Calgary.