COVID-19 – McMaster responds to the challenge

Annual Financial Report

2019-2020

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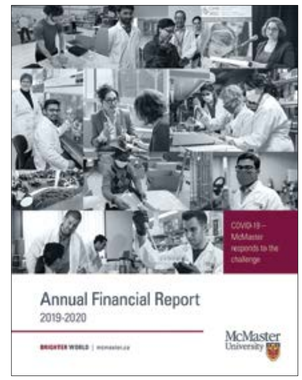
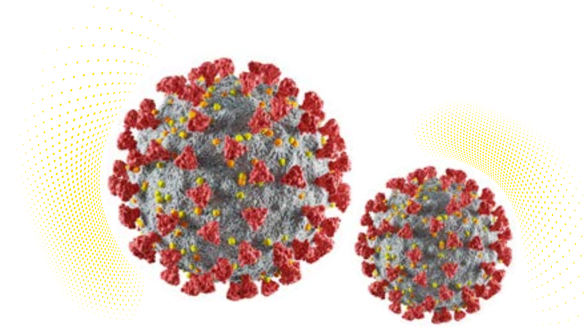
McMaster University

Annual Financial Report

2019-2020



The 2019/20 Annual Financial Report focuses on the unprecedented global pandemic event that unfolded during the academic year. Throughout this report, images capture some of the many ways that the University has responded to the challenge. It highlights key University researchers and student contributors in the fight to address the novel coronavirus disease 2019 (COVID-19). Additionally, images capture the support provided to the community by some of the University's essential workers and donations made by the University to our Hamilton healthcare partners, as well as the ingenuity of faculty and students in adapting to the new teaching and learning environment.



Year in Review

Results of the 2019/20 financial year demonstrate the initial impact of the global pandemic declared on March 12, 2020, just 49 days before McMaster's financial year-end. The impact of COVID-19 during this reporting period mainly affected the ancillary support services such as housing, hospitality, campus stores, parking and more, due to the physical campus shutdown. Key decisions made resulted in partial refunds for services not able to be performed and waivers for charges, such as parking fees, not being used. Further, additional funding was invested into student financial aid while other decisions such as interest-free periods and other student fee waivers or eliminations will mainly affect the 2020/21 fiscal year. In parallel to these financial impacts, the University transitioned to a virtual working environment for all non-essential staff. The University initiated its Crisis Management Committee, which has transitioned to a "Back to the Future" team composed of key academic and administrative personnel from across the University. While shutting down operations across campus, including most research activities, the University donated a significant amount of personal protective equipment (PPE) to the Hamilton hospitals. Overall, March and April demonstrated McMaster's significant commitment to the safety of its students, faculty and staff, and its collaborative support responding to broader Hamilton community needs. Finally, significant recognition and thanks goes to the University's essential workers who remained on campus throughout the closure to provide services for stranded students and maintain core essential operations.

McMaster's consolidated revenues remained just under $1.2 billion, despite being 2.7% lower than 2018/19 results. Consolidated revenues include the activities across operating, capital, research, trusts, and ancillary funds. Revenue increases were realized in the Operating Fund, mainly driven by increased domestic enrolment and a growing international participation of 15.1% (2018/19: 13.1%), which more than offset the 10% domestic tuition reduction. Contributing to improved tuition revenue are increases in fees for non-government-funded programs not subject to the legislative cap, notably the McMaster English Language Development diploma program for prospective international students. Overall, academic revenues increased due to enrolment while the domestic operating grant remains relatively flat to 2016/17 levels. Market volatility due to COVID-19 resulted in a -1.9% return on investments compared to 6.0% last year, or $44.4 million less investment income, which is the most significant income impact to the 2019/20 results. Ancillary revenues dropped $2.2 million due to closures and refunds. Finally, research revenues were slightly lower as a result of closures.

Annual expenditures primarily relate to faculty and staff who advance, sustain, and support McMaster's academic and research mission. In 2019/20, the University continued plans to increase the faculty complement, reflecting needs associated with student growth and the increased capacity delivered by the opening of the Peter George Living and Learning Centre in the fall of 2019. Employee expenditures remain over 60% of the University's annual costs and include pension and other non-pension costs. During the year, McMaster elected to contribute an additional $4.7 million into the closed hourly pension plan and file early on January 1, 2020 to transition the plan to a more sustainable annual payment schedule. The salaried plans continue to have large funding deficits, with most notable impacts resulting from the Bank of Canada interest rate decline totalling 0.75% during the reporting period. The large non-pension plan deficit has an internal reserve being funded to fully service this obligation in the future.

Each year, McMaster monitors reserve funds against future obligations and liabilities while also ensuring internal funds are available to invest in strategic and capital priorities. Each reserve held by the University has a specific purpose and full disclosure of each balance is provided in the notes to the financial statements. Redirection or spending of any reserve for a different purpose than intended increases the risk that funding for committed obligations may not otherwise be available

TRACKING CORONAVIRUS OUTBREAKS WITH WASTEWATER

Scientists hope testing wastewater will address the current limitations of clinical COVID-19 testing which include the availability of reliable test kits, false positives, cost logistics and lingering issues of identifying those who may be mildly symptomatic or asymptomatic.

"We know virus fragments are detected through feces of infected individuals. The ability to test quickly and reliably at the municipal level could provide a real-time indicator of how many people are infected and an important tool to manage the emergence of a possible next outbreak."
– Gail Krantzberg, Professor, W. Booth School of Engineering Practice and Technology

when needed. Further, reserves established for existing obligations promote intergenerational equity so that future generations are not burdened by historically created liabilities. Reserves held within the Faculties are used for strategic and capital investments, however these reserve balances are only a partial and temporary financial offset to existing pension and non-pension deficits associated with these areas. During the year, due to COVID-19 some intended transfers to capital projects were held back awaiting a better understanding of the operational challenges in the year ahead. These transfer deferrals do not impact any of the approved capital projects due to delays occurring on non-essential construction work. Reserves held will help the University achieve strategies associated with changing needs of students driven by fluctuating circumstances affecting how McMaster will operate in the future. Further, some reserves are intended to help the University achieve strategies and milestone targets associated with the gradual implementation of the third Strategic Mandate Agreement, delayed due to COVID-19.

The 2019/20 excess revenues over expenditures was $92.1 million compared to $157.0 million in the previous year. This figure includes a $28.9 million surplus in the Operating Fund, with total appropriations predominantly held by the Faculties or within the Provost's academic priorities envelope. Excess revenues over expenditures are a result of McMaster's prudent approach to budgeting and financial planning for the University to ensure availability of funds for both current and future obligations. As such, McMaster has maintained strong and stable credit ratings of AA from both Standard and Poors and DBRS.

This 2019/20 Annual Financial Report includes new climate-related financial disclosures for the long-term investment pool (Investment Pool) aligned with the University's early adoption of the *Task Force Recommendations for Climate-Related Financial Disclosures (TCFD)*. Future reports will include additional disclosures beyond the governance, risk management and carbon footprint, adding base year measurement disclosure relative to further carbon reduction targets. Since 2016, the University has continually transitioned toward lower carbon. Additional work is underway to factor in sustainable development goals (SDGs) with the belief that organizations that operate with higher environmental, social and governance requirements linked to SDGs will be more profitable and sustainable in the future. The new disclosures in this report demonstrate continued progress related to the recommendations of the *President's Advisory Committee on Fossil Fuel Divestment*.

Research income of $173.7 million is slightly lower than prior year income of $178.0 million. Income reflects current year research expenditures, which were impacted with campus shutdowns due to COVID-19. Research funding receipted in the year increased to $196.5 million compared to $193.7 million in 2018/19, which includes new funds received at the end of the year for COVID-19 research. Research otherwise remained relatively steady and stable.

The information contained in this Annual Financial Report is intended to provide the reader with financial information for the fiscal year ended April 30, 2020. While the focus of this document is the consolidated operations of all funds on an accrual basis, extended variance analysis information regarding the Operating Fund results, which operates on a modified cash basis for budgeting and accounting purposes, has been included on page 21.

Other documents to which the reader can refer to provide a more in-depth discussion of the University include:
Strategic Mandate Agreement
Goals and Priorities
Consolidated Budget – June 2020
University Fact Book

"Every municipality is unique in terms of size, processes, resources, and technical expertise. What we really need is an agile system-wide approach to ensure we understand these challenges and collectively identify feasible and cost-effective rapid testing technologies and methods which can be employed as part of the existing testing framework for Ontario's wastewater systems."
– Zobia Jawed, Professor, W. Booth School of Engineering Practice and Technology

By the Numbers

$598,300,000

Available expendable resources vs. $607,700,000 last year

$127,900,000

Capital spending vs. $148,000,000 last year

$1,161,000,000

Total revenue vs. $1,193,000,000 last year

$1,068,900,000

Total expenses vs. $1,036,000,000 last year

$92,100,000

Excess of revenues over expenses vs. $157,000,000 last year

$22,800

Endowment per FTE students vs. $24,500 last year

$36,200

Revenue per FTE students vs. $38,600 last year

$(277,200,000)

Non-pension employee future benefit unfunded obligation vs. $(274,700,000) last year

$(171,200,000)

Pension employee future benefit unfunded obligation vs. ($82,600,000) last year

$1,185,400,000

Total net assets vs. $1,220,900,000 last year

$28,900,000

Excess of revenues over expenses operating fund only vs. $25,000,000 last year

32,063

Enrolment (full time equivalent (FTE)) vs. 30,894 last year

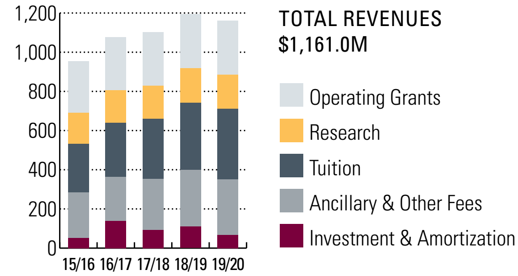
7,954

Staff and Faculty head count vs. 7,772 last year

Financial Analysis

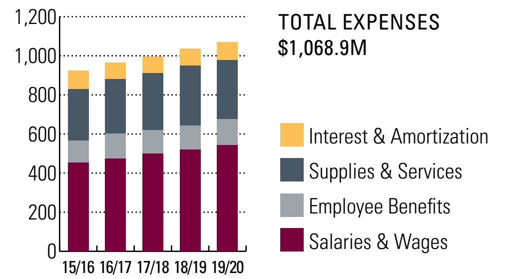
TOTAL REVENUES

- Revenues decreased 2.7% to $1,161.0 million from $1,193.0 million.
- Investment income decreased by $44.4 million (-62.7%) due to a -1.9% rate of return in the Investment Pool compared to 6.0% in the prior year.
- Tuition income increased by $19.0 million (5.6%) despite the 10% tuition rate cut for domestic students due to increased enrolment at both the graduate and undergraduate level, rate changes for international students, and new programs.
- Enrolment-based operating grants remained frozen at 2016/17 levels. A small increase in graduate funding was offset by the international student recovery.
- Ancillary sales & other fees decreased by $6.6 million (-2.3%) primarily due to operational closures effective mid-March as a result of COVID-19.



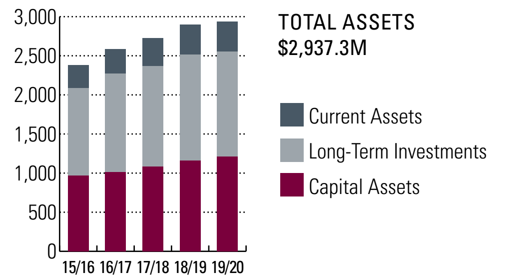
TOTAL EXPENSES

- Expenses increased 3.2% to $1,068.9 million from $1,036.0 million.
- Salaries and wages increased by $22.7 million (4.4%) due to the addition of faculty members and staff along with negotiated pay increases.
- Employee benefits increased by $12.0 million (9.9%) primarily due to increased benefits costs and enhanced funding requirements for pension plans.
- Supplies and services decreased by $7.2 million (-2.3%) due to mid-March operational closures related to COVID-19 and Ministry of Colleges and Universities (MCU) mandated changes to undergraduate scholarships.



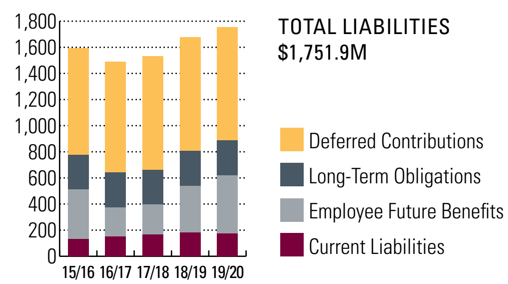
TOTAL ASSETS

- Total assets increased 1.4% to $2,937.3 million from $2,896.6 million.
- Capital assets increased by $49.7 million (4.3%) related to $127.9 million in capital additions for new buildings and equipment less $78.2 million in amortization.
- Investment holdings decreased by $36.2 million (-2.4%) due to the -1.9% return on investments, with gains on short- and medium-term investments offset by losses on long-term investments.



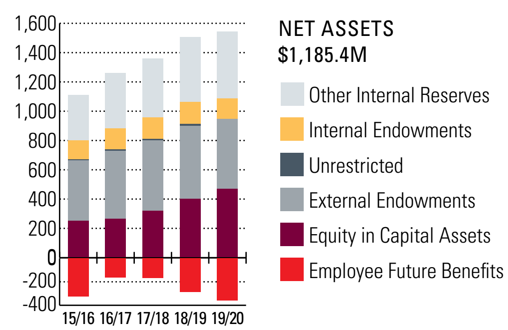
TOTAL LIABILITIES

- Liabilities increased 4.5% to $1,751.9 million from $1,675.7 million.
- Employee future benefit liabilities increased by $91.2 million (25.5%) primarily due to a lower interest rate and return on asset expectation (due to COVID-19) used to measure the pension liability as at April 30, 2020.
- Current liabilities decreased by $9.0 million (-4.9%) related to a decrease in accounts payable and accrued liabilities, attributed to decreased activity at year-end as a result of COVID-19.
- Deferred contributions and long-term obligations remained relatively flat year over year with additions and deductions resulting in small balance changes.



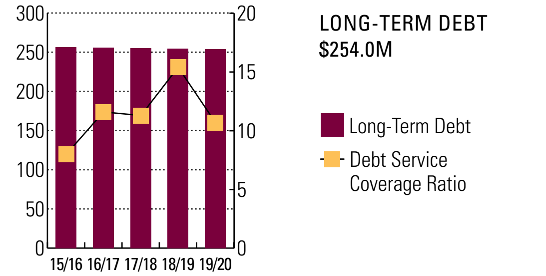
NET ASSETS

- Net assets decreased 2.9% to $1,185.4 million from $1,220.9 million.
- Employee future benefit reserves decreased by $72.2 million (25.1%) due to market volatility affecting pension plan returns, partially offset by transfers from other internal reserves as part of the funding strategy for post-retirement benefits.
- Equity in capital assets increased by $70.9 million (17.8%) mostly related to the capital plan approved investments.
- Internal and external endowments decreased by $33.9 million (-5.2%) due to market volatility and the net negative return on investments.



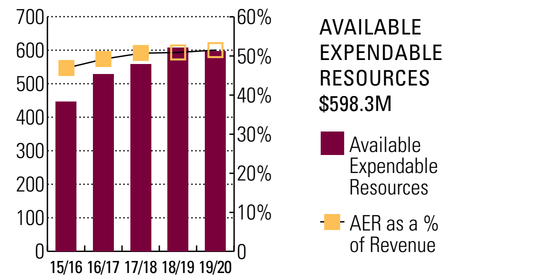
LONG-TERM DEBT

- Long-term debt primarily relates to two $120.0 million bonds maturing in 2052 and 2065, respectively. Two sinking funds (reserves), currently valued at $34.0 million, exist to repay these debts upon maturity.
- The debt service coverage ratio worsened to 10.8 from 15.4 due to the decrease in net income.
- Total long-term debt decreased due to the $0.7 million principal re-payment on the bank loan maturing in May 2033.



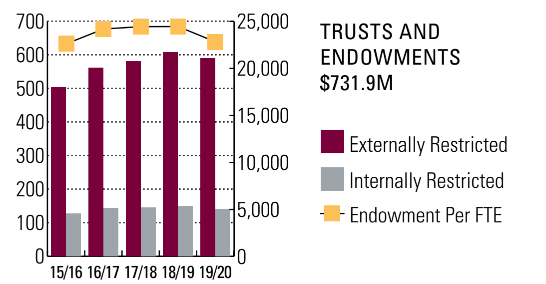
AVAILABLE EXPENDABLE RESOURCES (AER)

- AER represents funds held that are not externally committed, such as unrestricted net assets, specific purpose reserves, faculty and department appropriations, and internally restricted endowments.
- AER remained relatively flat as it decreased 1.6% to $598.3 million from $607.7 million.
- AER is internally restricted for specific purposes such as future financial obligations to settle debt, fund pensions and non-pension liabilities, and invest in strategic and capital priorities. The financial statement notes provide full descriptions of each reserve held for future cost requirements.



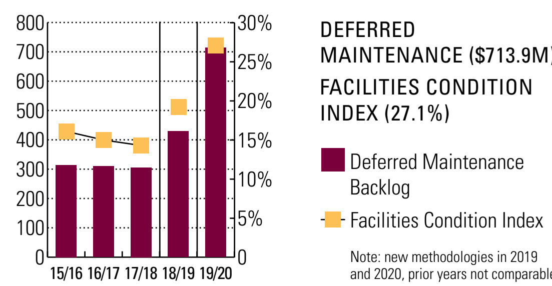
TRUSTS AND ENDOWMENTS

- McMaster's internal and external trusts and endowments decreased 3.4% to $731.9 million from $757.7 million as a result of the investment losses in the long-term investment pool.
- Endowment funds per student declined as student enrolment increased.



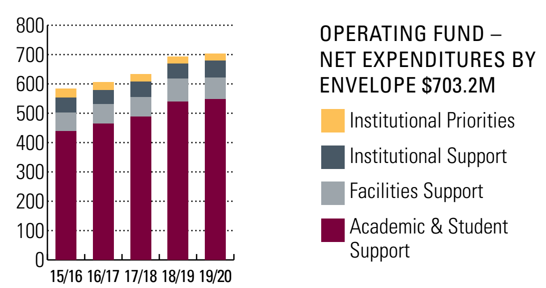
DEFERRED MAINTENANCE

- McMaster has been addressing its deferred maintenance backlog with funding from multiple sources.
- In both 2019 and 2020, changes to methodology were implemented to harmonize with colleges, including implementation of a soft cost multiplier, generation of automatic maintenance requirements, and calculation based on three years instead of five years.
- The new approach is considered more accurate across the Ontario higher education sector, but it is not comparable to prior years' assessments. An additional reassessment cycle is expected to further substantiate maintenance requirements.
- Where required, asbestos abatement is conducted by external contractors as part of building renovations and is not included in the deferred maintenance backlog.



OPERATING FUND – NET EXPENDITURES BY ENVELOPE

- Operating Fund net expenditures increased 1.4% to $703.2 million from $693.6 million.
- Academic and student support increased 1.4% as a result of support for increased enrolment, with some savings due to delayed spending and the impacts of COVID-19.
- Facilities support decreased 2.9% with reduced maintenance costs and gas savings, and a reduction in loan payments, partially offset by increased investment in deferred maintenance.
- Institutional support increased 8.9% due to increased legal expenses and provision for bad debts, and a reduction in recoveries for telecommunication equipment.
- Institutional priorities decreased 2.0% due to additional base support for marketing.



Revenues

Total revenues decreased by $32.0 million (-2.7%) to $1,161.0 million (2018/19: $1,193.0 million) reflecting revenue per student of $36,209 (2018/19: $38,617). Revenue decreases relate to a $44.4 million decrease in net investment income, mainly offset by a $19.0 million increase in tuition fees. McMaster continues to focus on new revenue generation opportunities with increased research spin-off and real estate investments, public-private partnerships, and other non-traditional areas. Within the academy, revenue growth and diversification across international student participation is a key priority, while actively managing existing revenue streams to optimize investments in the student experience, academic and research mission.

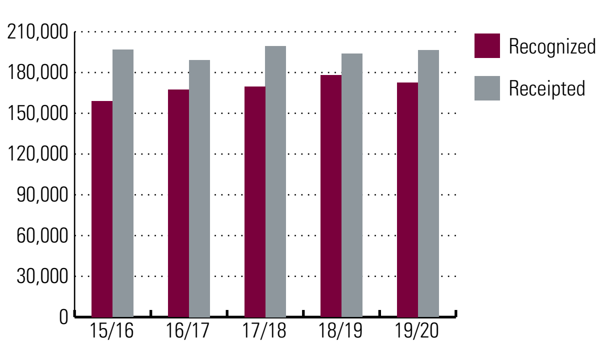
OPERATING GRANTS INCOME

Operating grants from the Ministry of Colleges and Universities (MCU) remains relatively flat for domestic undergraduate enrolment at 2016/17 levels under MCU's corridor funding model. In real terms, the operating grant amount reflects lower grant revenue per year due to inflation not factored into the annual funding amount.

RESEARCH GRANTS AND CONTRACTS

Research revenue is recognized as income in the year related expenditures occur. Unspent research funding is reflected as deferred contributions. McMaster's research revenue does not include funding received and administered by affiliated hospitals or Networks of Centres of Excellence. Research funding receipted in the year increased by $2.7 million (1.4%) to $196.4 million (2018/19: $193.7 million) as shown in Figure 1, including new grants received at the end of the year for COVID-19 research. Research expenditures decreased by $4.3 million (-2.4%) due to suspension of on-campus activity in March, resulting in $173.7 million in research revenue recognized (2018/19: $178.0 million).

Figure 1. RESEARCH REVENUE:
RECEIPTED VS RECOGNIZED IN INCOME – $ THOUSANDS



USING MANUFACTURING EXPERTISE TO PRODUCE PERSONAL PROTECTIVE EQUIPMENT

When the COVID-19 pandemic made its way to Hamilton in mid-March, the McMaster Manufacturing Research Institute (MMRI) team immediately shifted their manufacturing expertise to work within the medical supply chain.

RESEARCH OVERHEAD GRANTS

Research overhead grants increased slightly by $0.2 million (1.1%) to $15.6 million (2018/19: $15.4 million) related to more overhead-eligible awards received. Overhead grants assist the University in defraying indirect costs associated with hosting research activities. The federal and provincial governments contribute indirect costs based upon a portion of the total direct federal research grants and eligible provincial research programs.

"For our industry partners, we're looking at improving their productivity, reducing their costs, and helping them improve their products. That was something we were naturally doing, and now with COVID-19, we've been able to really focus on medical applications." – *Steven Veldhuis, Director, McMaster Manufacturing Research Institute*

TUITION FEES

Revenue from tuition fees increased by $19.1 million (5.6%) to $360.7 million (2018/19: $341.6 million). Domestic enrolment increased 1.7% in 2019/20, however the 10% tuition cut mandated by MCU resulted in a $17.0 million (7.4%) decline in domestic tuition revenue. International students pay higher fees than domestic tuition rates since there is no domestic operating grant to support or defray the costs of these students. The combination of a 19.7% increase in international enrolment and higher international fees increased international tuition revenue by $32.7 million (33.4%). International students now account for approximately 15.1% (2018/19: 13.1%) of the total student population. Contributing to improved tuition revenue are increases in fees for non-government-funded programs not subject to the legislative cap, notably the McMaster English Language Development diploma program for prospective international students.

ANCILLARY OPERATIONS

Ancillary operations provide essential support services across the University, such as housing, food services, parking, campus stores, continuing education, and media/print production.

Ancillary units are responsible for providing efficient and affordable services while covering all related operating and capital expenditures. Additionally, ancillaries contribute approximately 4.5% on sales toward direct student support and the Operating Fund while also providing employment opportunities to students.

A summary of ancillary sales by unit is shown in Table 1. Ancillary sales were impacted by the pandemic mid-March closure, with lost sales and student refunds decreasing revenue by $2.2 million (-2.9%) to $76.0 million (2018/19: $78.2 million). Hospitality Services experienced the greatest revenue decline, decreasing sales by $1.5 million (-5.7%) due to location closures as a result of COVID-19. Parking Services sales dropped $0.9 million (-14.1%) resulting from eliminating parking charges mid-March and raising of parking gates for essential workers starting in the latter part of March. Campus Store sales declined $0.9 million (-6.0%) as a result of shifting from traditional course materials to digital and open educational resources content as well as moving away from technology hardware. Media Production Services decreased total sales $0.1 million (-3.2%) due to the one-time wayfinding project completed last year.

Table 1: SALES BY ANCILLARY OPERATIONS $ thousands

	2015/16	2016/17	2017/18	2018/19	2019/2020
Housing and Conference Services	24,849	26,110	27,231	27,792	28,440
Hospitality Services	23,764	25,303	27,641	27,240	25,696
Campus Store	15,552	16,364	15,897	14,978	14,073
Continuing Education	6,740	7,006	7,183	7,759	8,342
Parking	5,016	5,252	5,821	6,222	5,345
Media Production Services	3,958	3,742	4,190	4,331	4,194
	79,879	83,777	87,963	88,322	86,090
Less internal sales	(9,573)	(9,504)	(10,851)	(10,120)	(10,131)
	70,306	**74,273**	**77,112**	**78,202**	**75,959**

Since March, more than 50 companies have worked with McMaster's Centre of Excellence in Protective Equipment and Materials (CEPEM) to set up production facilities, test PPE designs or modify materials needed to make new designs. Two of these companies, Whitebird and Niko Apparel, are now producing about 65,000 face shields and 20,000 face masks each day for health care workers, respectively.

McMASTER RESEARCHERS ADVANCE PERSONAL PROTECTIVE EQUIPMENT IN CANADA
Engineering and medical researchers at McMaster University assisted Woodbridge Foam Corporation in getting a new made-in-Canada mask designed, tested and certified, as supplies of existing medical masks became less certain. Pictured is engineering researcher Rakesh Sahu trying on a Woodbridge mask inside a lab in the John Hodgins Engineering Building.

INVESTMENT INCOME

The long-term investment pool (Investment Pool), consisting of both endowed and non-endowed funds, earned a total rate of return of -1.9% (2018/19: 6.0%). This return is net of investment management fees approximating 0.3%. The Investment Pool achieved a total rate of return before investment management fees of -1.65% (2018/19: 6.3%) compared to the investment policy benchmark return of -1.1% (2018/19: 7.3%). The April 30, 2020 four-year annualized return for the Investment Pool is 6.4% which is better than the investment policy benchmark return of 5.7%.

Ongoing uncertainty regarding the medium- and long-term impact of COVID-19 increased market volatility and reduced investment returns during the reporting period. Market volatility and low interest rates remain key management concerns; as such, a broad geographic and asset class diversification strategy within the long-term investment pool exists to help mitigate some volatility and protect capital. The Investment Pool is managed by external investment managers in accordance with the Statement of Investment Policy and Guidelines, which incorporates environmental, social and government considerations into its hiring and review practices. The Investment Pool is overseen by the Investment Pool Committee, a sub-committee of the Board of Governors, and involves an investment consultant and a number of investment managers noted in Table 2.

Table 2: **INVESTMENT POOL CONSULTANT AND INVESTMENT MANAGERS** as at April 30, 2020

Investment Consultant: Russell Investments Canada Limited
Investment Managers: Bentall Kennedy, Beutel Goodman & Company Ltd., BlackRock Asset Management Canada Limited, Brookfield Investment Management, Fiera Real Estate[1], Foyston, Gordon & Payne Inc., Harris Associates L.P., Mesirow Financial, Morgan Stanley Investment Management Inc., PCJ Investment Counsel Ltd., and Russell Investments Canada Limited.

[1]Integrated Asset Management Corp. merged with Fiera Real Estate in 2020.

McMaster is committed to implementing the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) across all invested portfolios. TCFD recommendations were issued in June 2017 providing recommendations for disclosing clear, comparable, and consistent reporting of financial information related to climate change. TCFD phased-in adoption will enable McMaster to report information consistent with the Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard using globally aligned reporting standards, measurement and baseline selection, and target setting to enable comparability with other TCFD adopting organizations. In 2019, the Government of Canada issued the *Final Report of the Expert Panel on Sustainable Finance: Mobilizing Finance for Sustainable Growth* endorsing TCFD for voluntary adoption over two timeline phases linked to investment portfolio size with phases ending in 2026. McMaster is committed to early TCFD adoption across all invested assets enhancing public reporting and working with other TCFD universities internationally on refining practice comparability.

McMaster's invested assets include the Investment Pool, salaried pension plan assets, and hourly pension plan assets. The phased implementation plan is shown in Table 3.

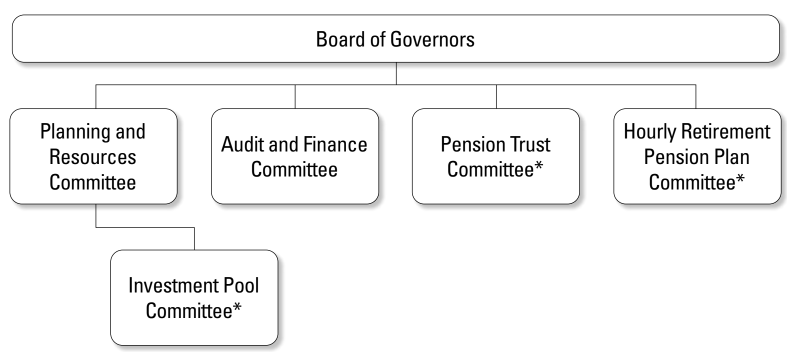
Table 3: **TCFD IMPLEMENTATION PHASES**

Investment Portfolio	Phase 1 Adoption	Phase 2 Adoption
Investment Pool (consisting of both endowed and non-endowed assets)	April 30, 2020	April 30, 2021
Pension Trust (consisting of defined benefit pension plan assets of both Plan 2000 (open to new entrants) and Original Plan (closed to new entrants))	April 30, 2021	April 30, 2022
Hourly Pension Trust (consisting of defined benefit pension plan assets of the closed hourly plan)	April 30, 2022	April 30, 2023

Table 4 summarizes McMaster's Investment Pool TCFD Phase 1 reporting.

Table 4: INVESTMENT POOL TCFD PHASE 1 REPORTING

Area		Disclosure
Governance	Board's oversight of climate-related risks and opportunitites	Climate risk scenario modelling is incorporated into McMaster's annual multi-year financial projection analysis used to summarize an annual Debt Strategy Report for the Planning and Resources Committee and Board of Governors. Beginning in 2021, investment and pension sub-committees* will additionally be provided these reports (see below – this simplified, abbreviated version of the applicable Board structure is not intended to capture all Board-related sub-committees). A Financial Risk Report is produced annually incorporating climate-related risks. This report is provided to the Audit and Risk Committee, the Planning and Resources Committee and the Board of Governors annually, accompanying the Annual Financial Report. In direct relation to the Investment Pool representing approximately $1.0 billion in assets under management, holdings are diversified across asset classes, investment managers, and geography whereby environmental, societal, and governance (ESG[2]) issues are routinely discussed with investment managers and the Investment Pool consultant. Additional analysis to support climate risks and opportunities is obtained through a third-party service (MSCI), which provides carbon emissions and carbon intensity information by holding, as well as other information where available (either from MSCI or in some cases the investment manager), addressing other broader issues of watershed, energy consumption, waste tonnage, land repatriation in partnership with Indigenous peoples, diversity, equity and more. MSCI reporting identifies the top ten contributors to McMaster's portfolio carbon footprint. Proxy voting is delegated to investment managers hired with approaches aligned to McMaster's investment statement of beliefs. Annual proxy voting summaries are reviewed and discussed at the Investment Pool Committee.



[2] ESG – Environmental, Social and Governance refers to the three central factors in measuring the sustainability and ethical impact of an investment in a company or business. These criteria help to better determine the future financial performance of companies (return and risk).

"We are enthusiastic to work with Woodbridge to assist in the design and testing of their products. Woodbridge is a recognized company able to pivot quickly and deliver excellent quality control and reproducibility." – *John Preston, Associate Dean, Engineering*

Table 4: INVESTMENT POOL TCFD PHASE 1 REPORTING

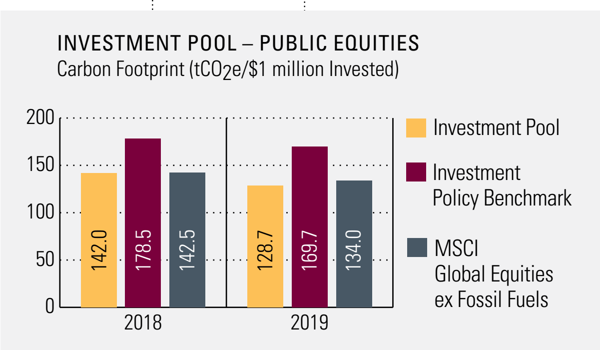
Area		Disclosure
Governance	Management's role in assessing and managing climate-related risks and opportunities	The University is the administrator of the Investment Pool and the Board of Governors is responsible for the overall management. The Board of Governors has delegated certain duties and responsibilities (including the power to sub-delegate) to the Planning and Resources Committee which, in turn, has delegated certain duties and responsibilities to the Investment Pool Committee and the Treasury Department and to various agents it has retained to assist in carrying out its duties in respect to the Investment Pool. For the Investment Pool, management assesses climate-related risks and opportunities for the overall portfolio using investment manager, investment consultant and other third-party service reports. Management assesses investment manager performance against policy benchmarks, along with ESG scores assigned by the investment consultant, and actively discusses climate-related risks related to regulatory risks (such as carbon tax regimes), physical risks (including stranded assets), and technological risks (such as innovations in renewable and solar technology disrupting traditional fuel). Management's role with the Investment Pool Committee is to actively monitor investment manager approaches, review any specific holdings along with justification and rationale for any Carbon Underground 200™ (CU200) holdings, and assess routinely whether both the investment managers' performance and investment beliefs are aligned with McMaster's *Statement of Investment Policies and Objectives*. Management is required to make recommendations for replacement of underperforming or misaligned investment managers during routine meetings (occurring at minimum quarterly).
Strategy	Processes for identifying and assessing climate-related risks	Annual multi-year projections are prepared holistically incorporating all capital and strategic plans. Key risks, including climate- and pandemic/epidemic-related risks, are factored into scenario modelling. Scenarios are formed based on consultation with University stakeholders and reviewed with the President and Vice-Presidents to refine further before finalizing for Board of Governors and sub-committees. Results of scenario modelling defines the University's annual Debt Strategy Report that consolidates all findings.
Risk Management	Processes for identifying and assessing climate-related risks	Climate-related risks are factored into reporting updates by investment managers and discussed during Investment Committee presentations to ensure valuations used by managers in the investment decision process consider climate-related risks where appropriate.

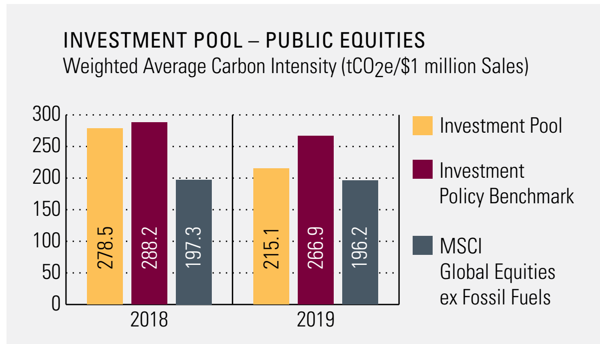
The newly opened Centre of Excellence in Protective Equipment and Materials (CEPEM) aims to create an ecosystem of local expertise to build domestic supply chains for PPE and innovate existing products, including face masks and shields. "We established the Centre to be a hub of companies interested in this area, enable a research and development program and translate those findings into products that Canadian industry would put out into the world."

– Ravi Selvaganapathy, Director, CEPEM

Table 4: **INVESTMENT POOL TCFD PHASE 1 REPORTING**

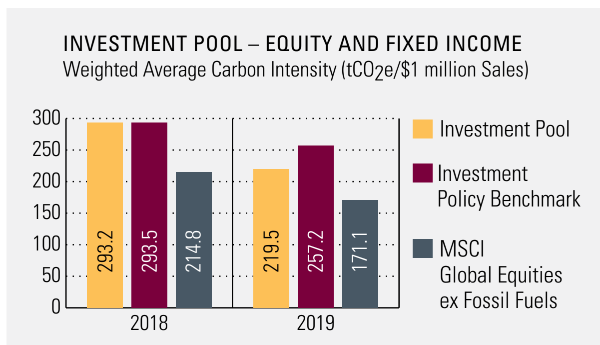
Area		Disclosure
Metrics and Targets	Scope 1 and 2 GHG emissions	McMaster completes a third-party measurement of its carbon footprint relative to its policy benchmark annually. As at April 30, 2019, the Investment Pool carbon footprint[3] was 128.7 tCO2e/$1 million invested (2017/18: 142.0 tCO2e/$1 million invested) relative to the fund policy benchmark of 169.7 tCO2e/$1 million invested (2017/18: 178.5 tCO2e/$1 million invested). The primary measure used to track McMaster's Investment Pool Carbon footprint is tCO2e/$1 million invested for public equity investments which has data availability in excess of 90%. Total Investment Pool Carbon measurements, which include both public equity and fixed income, have lower data availability and are less reliable. McMaster will continue to incorporate the best available measures and data to track and monitor its carbon footprint.





Carbon Intensity Data Availability (Equity and Fixed Income)	2018	2019
Investment Pool	81.5%	78.1%
Investment Policy Benchmark	72.3%	76.4%
MSCI Global Equities ex Fossil Fuels	72.5%	76.0%

McMaster monitors and reports scope 1 and scope 2 greenhouse gas emissions due to the lack of complete and reliable data availability for scope 3 greenhouse gas emissions. As more reliable, comparable, and complete data becomes available, McMaster will track scope 3 greenhouse gas emissions as appropriate.



McMaster further specifically monitors its investment holdings in the Carbon Underground 200™ (CU200). The following table summarizes the investments in the CU200 expressed as a percentage of total investments in the Investment Pool.

McMASTER CARBON UNDERGROUND 200 TOP 5 EXPOSURE

2018	Company	MV ($ millions)	Investment Pool (%)
1	Suncor Energy Inc.	11.0	1.0%
2	Canadian Natural Resources	10.4	1.0%
3	Imperial Oil Ltd.	5.6	0.5%
4	Husky Energy Inc.	4.7	0.4%
5	Glencore plc	3.8	0.4%
	Subtotal - Top 5 CU200 Exposure	35.5	3.4%
	Total CU200 Exposure	**47.5**	**4.5%**

McMASTER CARBON UNDERGROUND 200 TOP 5 EXPOSURE

2019	Company	MV ($ millions)	Investment Pool (%)
1	Canadian Natural Resources	7.7	0.7%
2	Suncor Energy Inc.	7.4	0.7%
3	Husky Energy Inc.	3.8	0.3%
4	Imperial Oil Ltd.	3.3	0.3%
5	Glencore plc	3.0	0.3%
	Subtotal - Top 5 CU200 Exposure	25.2	2.2%
	Total CU200 Exposure	**37.6**	**3.3%**

[3] Carbon Measurement of Investment Pool Public Equity and Public Infrastructure Investments (excludes investments in Bonds and Real Estate).

McMASTER HEADS NETWORK TO STUDY DEADLY BLOOD INFECTIONS
Alison Fox-Robichaud, seen here working in her lab, is the scientific director of the new Sepsis Canada network, bringing together researchers and patients to tackle sepsis – a leading cause of death in COVID-19.

"Canadians should be aware that sepsis, the life-threatening response to an infection, is a global health issue and never is this more apparent than during the current pandemic."
– Alison Fox-Robichaud, Scientific Director, Sepsis Canada Network

Additional TCFD Phase 2 reporting will be introduced in the 2021 Annual Financial Report. Phase 2 reporting will include identification of McMaster's baseline year for setting and measuring further carbon reduction strategies.

Sensitivity analysis is performed to highlight the significance of possible variances in investment income associated with market fluctuations. The endowment funds are invested based on a benchmark asset mix of 60.0% equities and 40.0% fixed income, real estate, and infrastructure.

Total investment earnings are allocated as either income in the Statement of Operations or direct changes to endowment balances as preservation of capital adjustments in the Statement of Changes in Net Assets (Table 5). The amounts posted directly to external endowments are a function of net annual returns, whereas the amounts posted to income are a function of both net returns and revenue recognition associated with required annual spending on some of the trust funds.

Investment returns for endowed funds are used for purposes set out by donors or by the Board of Governors, where gifts are for discretionary purposes. Annual endowment spending is 4.0%, along with a 1.0% allowance for trust administration costs. Spending is monitored using a five-year average rate of return. Any returns in excess of spending and other expenses go toward capital preservation. Approximately $23.4 million (2018/19: $26.1 million) of expenses were funded from the external endowment of which a significant portion is directed towards student scholarships, bursaries and funding of Chairs and Professorships.

Table 5: ALLOCATION OF INVESTMENT INCOME EARNED $ thousands

	2015/16	2016/17	2017/18	2018/19	2019/20
Recognized in income	12,855	98,432	52,275	70,820	26,392
Amount posted directly to external endowments	(31,467)	44,799	2,718	7,266	(33,302)
Total earned	**(18,612)**	**143,231**	**54,993**	**78,086**	**(6,910)**

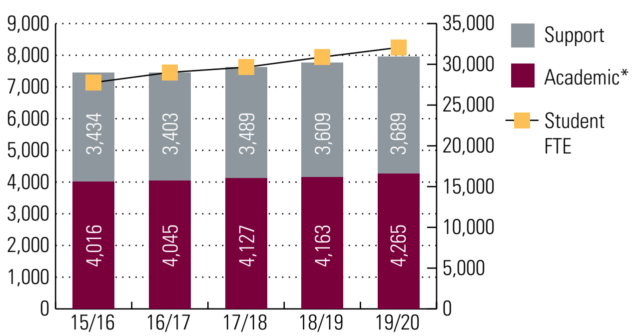
Compensation and Benefits

McMaster University provides compensation and various benefit plans for faculty and staff for both career and retirement phases of life. McMaster manages both current and future costs associated with total compensation plans to ensure long-term financial sustainability. Salary and wage expenses are shown together in the Statement of Operations, with related employee benefit costs identified separately. The employee benefit expenses include statutory benefit costs, other current benefit costs, and accruals for pension and other non-pension benefits (primarily medical benefits and dental care) that are earned in relation to service in the current year. Additional information related to the current year expenses, pension and non-pension liabilities and unfunded deficits are included in this section.

EXPENSE

Total compensation (salary and wage along with benefit costs) accounts for 63.3% of total expenditures (2018/19: 62.0%). Figure 2 shows the count of 7,954 permanent faculty and staff members at October 2019 (October 2018: 7,772).

Figure 2. FACULTY MEMBERS AND PERMANENT STAFF AS OF OCTOBER 2019



*Includes Faculty, Post Doctoral Fellows, Librarians, Teaching Assistants

Salary and wage expenses increased 4.4% due to the addition of faculty members and permanent staff and negotiated pay increases. Benefit expenses increased 9.9% primarily due to increased pension financing costs. Total compensation expenses of $676.5 million are up 5.4% (2018/19: $641.8 million) representing a net 3.0% increase on a per employee basis.

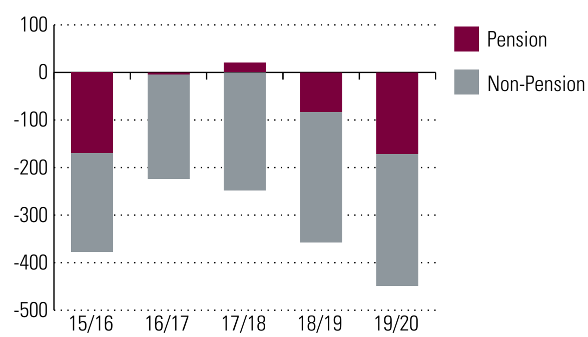
EMPLOYEE FUTURE BENEFIT COSTS

Included in total compensation expenses are defined benefit pension, group RRSP and non-pension benefit costs. The non-pension benefit costs include extended health, dental and life insurance for most employees of the University. Under the Canadian accounting standards for not-for-profit organizations, annual remeasurements, investment gains and losses, and other items specifically related to employee future benefits are recorded directly in the Statement of Changes in Net Assets. Only current year benefit costs are expensed in the Statement of Operations.

The pension and non-pension plan obligations continue to be a significant draw on University resources (Figure 3), increasing by $91.1 million (25.5%) to $448.4 million (2018/19: $357.3 million). Although the obligation for non-pension benefits was almost unchanged, the lower interest rates and year-end return on assets resulted in an increase to the pension obligation. Over the last few years, several cost-balancing measures have been taken including plan eligibility, design changes, and increased employee contributions. The benefit costs could be eased in future years by interest rate improvements. However, changing mortality tables used to measure the liability, resulting from individuals living longer, are a permanent and ongoing increase to future benefit obligations.

The pension and non-pension obligations continue to receive ongoing management monitoring and long-term strategic financial planning, including building an internal reserve to offset the non-pension liability. McMaster continues to deploy a cost-smoothing approach to charging benefit expenses to faculties and departments. Benefits are charged at an average rate of approximately 30.0% of salaries each year, although annual benefit cash outflows can vary year over year.

Figure 3. POST RETIREMENT (UNFUNDED OBLIGATIONS)/ SURPLUS (includes Pension and Non-Pension Benefits) ($448.4M) – NET



PENSION PLANS

Steps taken over the last few years to manage the pension liability have included revised eligibility rules for some groups, increased employee contributions, and the introduction of a group RRSP plan for new employees in some groups. The group RRSP now includes 504 full time employees (2018/19: 388).

McMaster filed an updated valuation for the Salaried Pension Plan as of July 1, 2018 under new pension rules which resulted in a negative remeasurement adjustment in the 2018/19 financial statements. The valuation includes a new funding requirement for a Provision for Adverse Deviation (PfAD), which is based on the plan's open or closed status and its asset mix. The initial regulations identified the University's large salaried plan as closed. Since filing, the definition of a closed plan has changed and the large salaried plan is now under the open plan definition for the PfAD calculation methodology, which will reduce the University's PfAD liability at the next valuation (July 2021).

The last valuation of the Hourly Pension Plan as of July 1, 2019 resulted in a solvency ratio below the minimum 85% required threshold. As a result, the University elected to provide an additional one-time contribution of $4.7 million to bring the solvency above 85%. Further, McMaster re-filed this Plan as of January 1, 2020 (before interest rate declines) in order to improve the required payments over the next three years.

Management continues to monitor the solvency funded status and future PfAD payments for both plans. The current benefit rate funding strategy continues to be effective despite the negative remeasurement adjustment, and the anticipated decrease in required payments for the salaried plans has enabled a reduction in the long-term smoothed benefit rate charged to faculties and departments.

In addition to the above, the province has passed enabling legislation for a jointly sponsored pension plan to be developed for the higher-education sector. The University Pension Plan Ontario (UPP) has achieved the required consent threshold for each of the five existing pension plans in three universities, and the conversion to the UPP is expected to proceed for these universities. The UPP, as designed, is more expensive than McMaster's current plans, however management is monitoring UPP design and transition planning.

The change in the funded status of the defined benefit pension plans is summarized in Table 6.

A $116.1 million negative pension remeasurement adjustment was made in the Statement of Net Assets (2018/19: -$131.6 million) primarily related to the negative return on plan assets. Since remeasurements are adjusted directly in reserves, the remeasurement adjustment had no impact on 2019/20 expenses.

Table 6: CHANGE IN FUNDED STATUS OF PENSION BENEFIT PLANS $ millions

	2015/16	2016/17	2017/18	2018/19	2019/20
Funded status, opening balance	**(63.3)**	**(169.3)**	**(3.5)**	**19.1**	**(82.6)**
Current service and finance cost	(36.3)	(43.3)	(33.3)	(32.3)	(38.8)
Remeasurements	(134.4)	143.8	(10.6)	(131.6)	(116.1)
University contributions	64.7	65.3	66.5	62.2	66.3
Funded status, closing balance, net	**(169.3)**	**(3.5)**	**19.1**	**(82.6)**	**(171.2)**

McMASTER-LED GUIDELINES ISSUED FOR NEW COVID-19 TREATMENT

"Our international guideline panel has given only a weak recommendation that remdesivir be given for treatment of severe COVID-19 in adult patients. Most patients with severe COVID-19 would likely choose remdesivir as there may be a potential shorter time to get better, but at this time we strongly support continued research about this drug."

– Bram Rochwerg, Associate Professor, Michael G. DeGroote School of Medicine

NON-PENSION POST-RETIREMENT AND POST-EMPLOYMENT BENEFIT PLANS

These plans provide extended health benefits to retirees and to employees on long-term disability leave. The deficit status of the plans increased by $2.5 million (0.9%) to $277.2 million (2018/19: $274.7 million). Management continues to actively work with eligible employee groups to reduce the deficit and ongoing liability. A long-term funding strategy for these obligations includes annual contributions to an internally restricted reserve monitored annually and reassessed by actuaries on an annual basis. As part of this strategy, in 2020 a total of $15.0 million was transferred to the post-retirement benefits reserve from an internally restricted specific purpose reserve established in part to supplement other funding sources.

In 2019/20, non-pension employee benefit expenses increased by $1.5 million (7.2%) to $22.9 million (2018/19: $21.4 million) primarily due to interest on the liabilities (Table 7). Payments by the University for claims from the plans decreased by $0.2 million (-3.6%) to $7.1 million (2018/19: $7.3 million) due to shutdowns of some benefit providers in the final months of the year.

Table 7: CHANGE IN FUNDED STATUS OF NON-PENSION BENEFIT PLANS $ millions

	2015/16	2016/17	2017/18	2018/19	2019/20
Funded status, opening balance	**(217.2)**	**(208.0)**	**(220.3)**	**(247.7)**	**(274.7)**
Current service and finance cost	(19.9)	(19.7)	(20.4)	(21.4)	(22.9)
Remeasurements	22.3	0.2	(14.9)	(12.9)	13.3
University contributions	6.8	7.2	7.9	7.3	7.1
	(208.0)	(220.3)	(247.7)	(274.7)	(277.2)
Internally restricted reserve	60.4	73.6	83.2	93.8	116.2
Funded status, closing balance, net	**(147.6)**	**(146.7)**	**(164.5)**	**(180.9)**	**(161.0)**

EMPLOYEE FUTURE BENEFITS IN INTERNALLY RESTRICTED NET ASSETS

In order to promote innovation and accountability in departments, it is McMaster's policy to allow unspent surpluses to be carried forward from year to year, segregated as part of internally restricted net assets. In 2013, there was recognition that charging departments for the full cost of benefits (both current service costs and any unfunded past service costs) was constraining efforts to achieve strategic priorities and reducing McMaster's competitiveness for research funding. As a result, McMaster charges only current service costs to departments, and funds past service costs separately. Under this practice, fluctuations in the reserve for past employee future benefit costs do not impact the funding available to departments and are tracked separately within McMaster's internally restricted net assets.

In order to obtain a complete picture of the net operating department reserves including all related employee future benefits, the reserves for employee future benefits must be netted against the total departmental funds carried forward. Table 8 demonstrates the true net position of McMaster's department reserves after all employee benefit costs are applied.

Table 8: NET OPERATING FUND DEPARTMENTAL RESERVES $ millions

	2019/20			2018/19		
	Faculties	Support/Ancillary	Total	Faculties	Support/Ancillary	Total
Departmental reserves	128.1	78.8	206.9	99.7	77.6	177.3
Pensions	(154.9)	(43.4)	(198.3)	(85.4)	(20.8)	(106.2)
Other post-employment benefits	(117.7)	(44.3)	(161.0)	(136.6)	(44.3)	(180.9)
Employee benefit reserve	5.8	4.6	10.4	6.5	5.1	11.6
Net departmental reserves	**(138.7)**	**(3.3)**	**(142.0)**	**(115.8)**	**17.6**	**(98.2)**

Capital Projects and Financing

McMaster University is committed to building spaces with an emphasis on both purpose and technology, while also renewing existing infrastructure to ensure its research-focused, student-centered identity is maintained to support an environment of excellence.

The McMaster Campus Plan and annual Capital Plan provide a comprehensive framework guiding campus capital development. The University's capital objectives are to preserve and enhance a high-quality campus while meeting McMaster's changing needs.

CAPITAL PROJECTS

Construction of the Peter George Centre for Living and Learning (PGCLL), a 518-bed undergraduate residence on campus adjacent to the Ron Joyce Stadium, was substantially completed in 2019/20. The PGCLL also includes teaching and learning spaces, expanded study and collaborative student spaces, a new home for both the Student Wellness Centre, a child care centre, underground parking, and new hospitality services. This multi-purpose building maximizes the use of campus lands.

Other capital projects underway in 2019/20 included the Student Activity and Fitness Expansion (SAFE), infrastructure projects that support research commercialization, and a new transformer.

In addition to these capital building projects, the University spent approximately $40.7 million on equipment, software, and furnishings. This represents an increase of $13.4 million (49.1%) over last year primarily due to the application of a new accounting standard requiring separate accounting for equipment previously capitalized as part of buildings, as well as an increase in research-related acquisitions.

The University's total capital expenditures totalled $127.9 million (2018/19: $148.0 million) and are summarized in Table 9. Expenditures on buildings and construction in process have decreased largely due to the substantial completion of PGCLL, the Arthur N. Bourns Building retrofit and expansion, the change in accounting policy noted above, as well as the provincially mandated halt to construction due to COVID-19 in the final months of fiscal 2020.

Table 9: CAPITAL ASSET ADDITIONS $ thousands

	2015/16	2016/17	2017/18	2018/19	2019/20
Land, Completed Building Projects & Construction in Progress	44,631	76,317	102,446	110,835	77,150
Computers, Software, Furniture and Other Equipment	31,502	27,673	33,367	27,342	40,694
Library Materials	18,264	9,497	9,778	9,833	10,078
	94,397	**113,487**	**145,591**	**148,010**	**127,922**

McMASTER RESEARCHERS RACE TO CREATE A HOME-BASED COVID-19 TESTING KIT

A team of 11 senior researchers at McMaster's Biointerfaces Institute, led by the institute's director John Brennan and Professor Yingfu Li from the Department of Biochemistry & Biomedical Sciences and the Institute for Infectious Disease Research at McMaster, and including professors Fred Capretta, Carlos Filipe and Leyla Soleymani, is now working to create a test for COVID-19 that consumers could use from the safety of self-isolation, without needing to visit a doctor's office, hospital or lab.

CAPITAL FINANCING

Completed building projects with long-term funding sources such as user fees, parking levies, and future fundraising continued to be financed through internal central bank loans. In 2019/20, all scheduled loan repayments were received. The internal central bank capital loans increased to $110.5 million in 2019/20 from $69.9 million last year as a result of financing for PGCLL. The loans have varying repayment terms and interest rates, which reflect the date of issue and the project's income stream.

The University's Debt Policy ratios provide a framework for monitoring the ability to undertake additional external or internal debt to carry out strategic investments. The University has two long-term bonds outstanding, each for $120.0 million, one maturing in 2052 at 6.15% and the other maturing in 2065 at 4.105%. McMaster holds two sinking funds accumulating the required repayment of each bond. Debt is considered a perpetual component of the University's capital financing structure; as such, additional debt is contemplated annually in conjunction with the Capital Plan updates and other strategic projects within the multi-year financial projections. McMaster's weighted average cost of capital used for internal loans is 5.75%, including administration costs.

FINANCIAL HEALTH AND SUSTAINABILITY METRICS

The MCU has incorporated financial health metrics into the Strategic Mandate Agreement and its annual reporting requirements. The inclusion of financial health metrics recognizes that financial health and sustainability are critical to achieving institutional mandates. McMaster's strong financial health, as indicated also by its strong credit rating, is supported by the MCU metrics outlined in Table 10. Although the key ratios have declined compared to 2019, they are still strong and well above minimum recommended values.

"We're looking down the road at the next wave of testing, which we expect is going to be home-based self-testing. We want to get a self-administered test out the door as quickly as we can. It could be really important for identifying new clusters and stopping community spread by asymptomatic carriers."

– John Brennan, Director, Biointerfaces Institute

Yingfu Li, Professor, Biochemistry and Biomedical Sciences

Fred Capretta, Associate Director, Biointerfaces Institute

Carlos Filipe, Chair/Professor, Chemical Engineering

Leyla Soleymani, Associate Professor, Engineering Physics

Table 10: FINANCIAL HEALTH AND SUSTAINABILITY METRICS

	2015/16	2016/17	2017/18	2018/19	2019/20
Debt Management Policy Ratios					
Expendable Net Assets to Debt (Target > 1.0x)	1.6x	1.9x	2.0x	2.2x	2.2x
Interest Burden (Target < 4.0%)	1.3%	1.5%	1.4%	1.4%	1.3%
Debt per FTE (Target < $12,000)	$10,057	$9,575	$9,321	$8,898	$8,525
Debt Management Monitoring Ratios					
Net Income/(Loss) Ratio (McMaster Target > 1.0%)	3.0%	10.4%	9.6%	13.2%	7.9%
Net Operating Revenues (McMaster Target > 2.0%)[1]	7.1%	14.3%	12.0%	15.7%	8.5%
Primary Reserves Ratio (McMaster Target > 91 days)[2]	176	200	205	214	204
Viability Ratio (McMaster Target > 1.0)[3]	1.7	2.0	2.1	2.3	2.2

[1] Measures cash flow from operating activities as a proportion of revenues
[2] Measures the number of days University reserves can cover operating expenses
[3] Measures the proportion of long-term debt that could be settled using unrestricted assets

Enterprise Risk Management

A number of initiatives were undertaken during 2019/20 focused on the ongoing evolution and enhancement of the Enterprise Risk Program while continuing to action existing program processes.

Enhancements have focused on areas such as alignment with the updated Audit and Risk Committee Terms of Reference incorporating augmented Audit and Risk Committee and Board of Governors oversight roles and responsibilities; updated Risk Appetite to include additional quantification and detailed guidance related to categories of risk; maturing of the risk assessment process steps; and an updating of our risk strategy template to facilitate additional context, assessment, mitigation detail and effectiveness measures.

Detailed review sessions led by identified risk leaders continued in 2019/20. Sessions were held with the President and Vice Presidents (PVP) group and the Audit and Risk Committee for Mental Wellness Risk and Pandemic Risk.

The annual Opportunities and Risks Review and Assessment session was held by the Enterprise Risk Steering Committee (PVP) in January 2020. As well as the review, discussion and update of the University's Opportunity and Risk Registers, the Steering Committee reviewed documentation including key opportunity and key risk maps from the 2019 assessments, emerging risks scan and the key risk mitigation strategies summary authored by key risk leaders.

The Risks Review and Assessment resulted in nineteen key risks being identified and assessed based on residual (net) risk levels. Key risks from 2019 were retained, and pandemic risk was included (Table 11). Several modifications were made to various key risk rankings for 2020 as a result of factors including the higher education strategic and operational environment, current government initiatives and priorities, as well as the impacts that various risk mitigation strategies and other strategic and operational initiatives underway have had on the University.

In addition to the above risk management approach, opportunities are incorporated into discussions with priorities established and aligned into strategic plans.

Table 11: **2020 KEY RISKS**

Attract Graduate Students	Information Availability & Quality	Reputation and Brand
Change Readiness	Information Security	Research
Financial	Leadership	Research Infrastructure
Geopolitical	Mental Wellness	Student Experience, Retention & Satisfaction
Government Policy	Pandemic	Technology
Human Capital	Partnership	Undergraduate Student Enrolment
	Physical Infrastructure	

"Our team from around the world scours the literature every day to find all of the latest randomized trials of treatments for COVID-19." *– Reed Siemieniuk, PhD candidate, Department of Health Research Methods, Evidence, and Impact*

Supplemental Information: Variances to Plans

The audited financial statements are prepared as required by statute in accordance with accounting standards for not-for-profit organizations as prescribed by the Chartered Professional Accountants of Canada using the deferral method of accounting and consolidation of all activity. For external reporting under the deferral method, all funds are consolidated in a single column on the Statement of Operations.

McMaster University's daily finances are managed pursuant to the concepts of fund accounting. Under this method, budgets are established for each fund, which is comprised of assets, liabilities, revenues, and expenses. Fund accounting enhances accountability over resources ensuring restricted grants and contributions are spent only for the purposes intended. McMaster uses the following segregated funds: Operating, Specifically Funded, Research, Capital, Externally Restricted Trusts and Endowments, Internally Restricted Endowments, and Ancillary Operations. The University budget model focuses on the allocation of resources within the Operating Fund; however, the consolidated Statement of Operations and Statement of Financial Position represent the results of all funds combined.

The 2019/20 Operating Fund financial results compared to the approved budget on a modified cash basis are presented in this section as well as a comparison to the consolidated results on a full accrual basis.

OPERATING FUND SUMMARY

The Operating Fund represents approximately 65.8% of the consolidated budget and includes all revenue and expenses for faculties and support departments, such as offices of the President and Provost, student affairs, libraries, finance, human resources, facilities, and information technology. The 2019/20 Operating Fund budget included a number of strategic funding priorities, such as wireless network expansion and other IT initiatives, inflationary journal cost and collection support for libraries, research operations support, and entrepreneurship support. Overall, the budget supported McMaster's Strategic Mandate Agreement objectives, including key differentiation goals, enrolment targets, and other targeted program outcomes. The Operating Fund ended 2019/20 in a more favourable position compared to the budget and projection due to both greater funding and lower expenditures (Table 12).

McMASTER FACULTY HELP LEAD NATIONAL RESPONSE TO COVID-19

Deborah Cook, professor of medicine and health research methods, evidence, and impact, is a member of the multidisciplinary COVID-19 Expert Panel which will advise Mona Nemer, chief science advisor to the prime minister, on the latest scientific developments related to the disease.

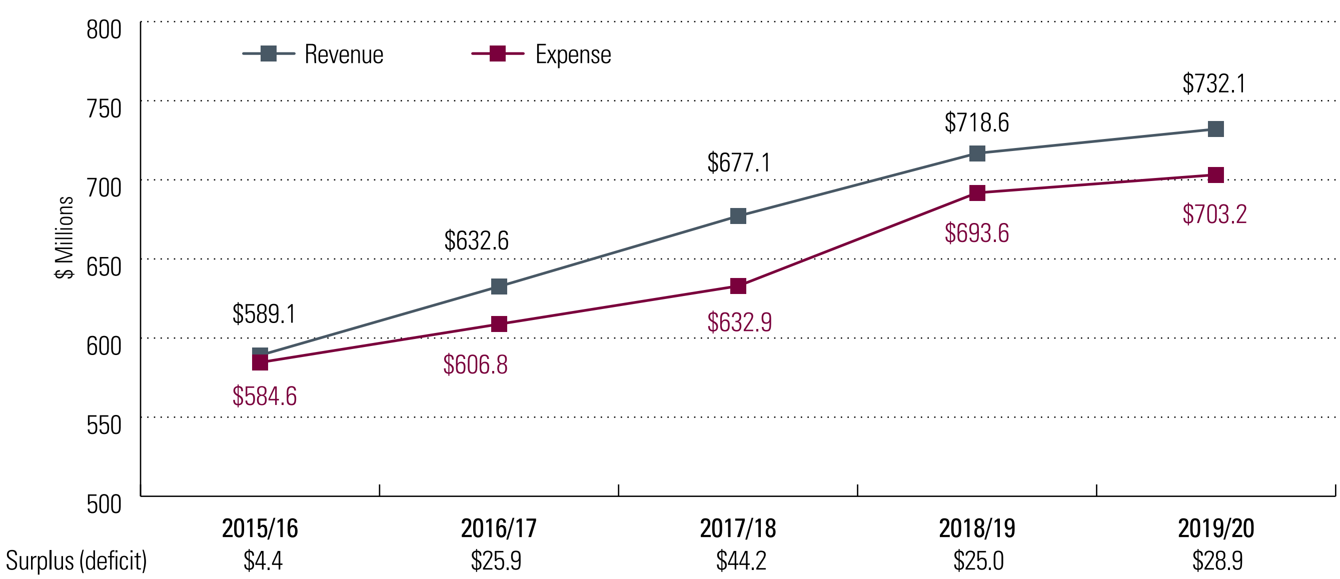
Charu Kaushic, professor of pathology and molecular medicine and scientific director of the Institute of Infection and Immunity, has been asked to serve on the COVID-19 Immunity Task Force announced by Prime Minister Justin Trudeau. The task force is charged with establishing priorities and overseeing the coordination of a series of country-wide blood test surveys that will tell how widely the virus has spread in Canada and provide reliable estimates of potential immunity and vulnerabilities in Canadian populations.

Table 12: **OPERATING FUND SUMMARY** $ thousands

	2019/20 Budget	2019/20 Projection	2019/20 Actual	Variance: Actual vs. Budget		Variance: Actual vs. Projection	
Revenues							
Provincial grants	235,868	235,684	236,942	1,074	0.5%	1,258	0.5%
Tuition	326,962	342,732	342,745	15,783	4.8%	13	0.0%
Research Overhead income	27,470	30,111	28,581	1,111	4.0%	(1,530)	-5.1%
Investment income	12,634	12,634	12,634	-	0.0%	-	0.0%
Other income	106,008	109,368	111,183	5,175	4.9%	1,815	1.7%
Total revenues	**708,942**	**730,529**	**732,085**	**23,143**	**3.3%**	**1,556**	**0.0%**
Expenses							
Salaries, wages and benefits	496,875	498,272	484,332	12,543	2.5%	13,940	2.8%
Utilities and maintenance	38,638	40,900	38,857	(219)	-0.6%	2,044	5.0%
Equipment and renovations	52,030	68,955	65,124	(13,094)	-25.2%	3,831	5.6%
Scholarships, bursaries, and work study	38,739	34,178	34,597	4,143	10.7%	(419)	-1.2%
Library acquisitions	13,249	14,053	14,745	(1,496)	-11.3%	(692)	-4.9%
Debt and financing charges	18,220	18,836	18,551	(330)	-1.8%	286	1.5%
All other expenses	81,096	65,319	46,958	34,138	42.1%	18,362	28.1%
Total expenses	**738,848**	**740,513**	**703,162**	**35,686**	**4.8%**	**37,351**	**5.0%**
Excess of revenues over expenses	**(29,906)**	**(9,984)**	**28,923**	**58,829**	**196.7%**	**38,907**	**389.7%**
Fund balance, beginning of year	145,168	167,657	167,657	22,489	15.5%	-	0.0%
Fund balance, end of year	**115,262**	**157,673**	**196,580**	**81,318**	**70.6%**	**38,907**	**24.7%**

The Operating Fund surplus highlights McMaster's continuing strong academic reputation and resulting enrolment growth as well as the impacts on planned strategic and operational spending impacted by the transition to a remote environment in March 2020 due to COVID-19 (Figure 4).

Figure 4: **OPERATING FUND REVENUE AND EXPENSES TREND**



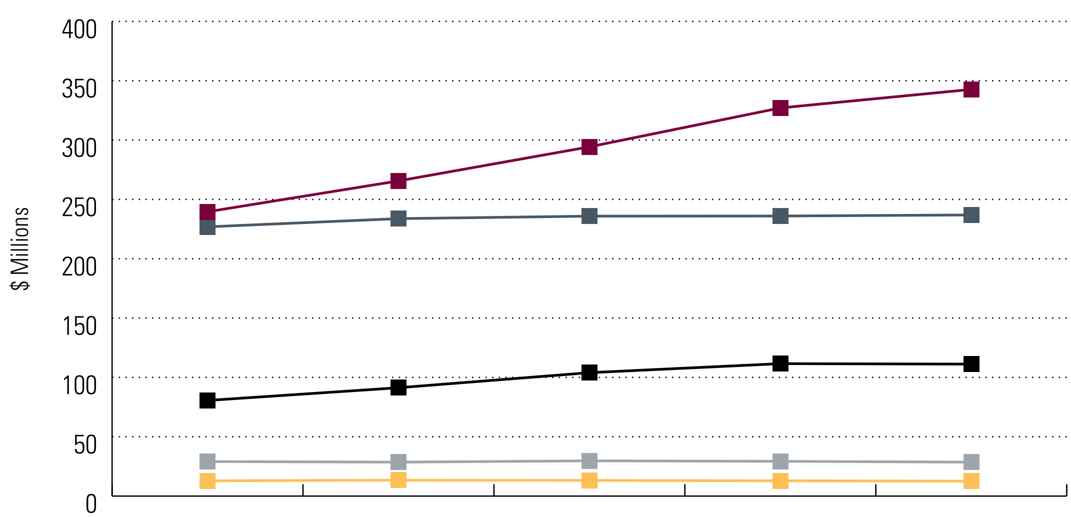
McMASTER RESEARCHER CONTRIBUTES TO WORLD HEALTH ORGANIZATION GUIDELINES FOR COVID-19 VACCINE TESTING

As laboratories worldwide have raced to develop COVID-19 vaccines, ethicists and other experts, including McMaster's Claudia Emerson, director & associate professor of philosophy, have been working urgently to establish World Health Organization guidelines for testing the efficacy of vaccines using human challenge studies – clinical trials where healthy human volunteers are given a test vaccine and then infected with the pandemic virus.

SOURCES OF FUNDING

Total Operating Fund revenues were $732.1 million as compared to the budgeted funding of $708.9 million or to the projected funding of $730.5 million. Growth in overall revenue continues to come from tuition through increased enrolment, international tuition rate increases, and other revenue related to English language programs for international students, while other sources of revenue remain relatively flat (Figure 5).

Figure 5: OPERATING FUND REVENUE TREND BY TYPE



	2015/16	2016/17	2017/18	2018/19	2019/20
Provincial Grants	$226.9	$233.8	$235.9	$236.0	$236.9
Tuition	$239.6	$265.6	$294.3	$327.1	$342.7
Research Overhead Income	$29.1	$28.6	$29.7	$29.3	$28.6
Investment Income	$12.9	$13.4	$13.2	$12.9	$12.6
Other Income	$80.6	$91.3	$104.0	$111.6	$111.2

PROVINCIAL GRANTS

In 2017/18, MCU introduced a corridor funding model, which limits enrolment-based funding to the 2016/17 grant level, while allowing universities to be plus or minus 3.0% (corridor) of the funding mid-point. MCU funding is now flowed to universities via funding envelopes defined as follows:

- Enrolment Envelope: enrolment-based funding that is based on a revised weighted grant unit (WGU) value;
- Differentiation Envelope: funding based on performance and/or achievement of priorities as set out in the Strategic Management Agreement; and
- Special Purpose Envelope: grants based on government priorities such as improving access for Indigenous learners and students with disabilities.

Additionally, a Graduate Expansion Grant funded growth in graduate students over the 2016/17 level (Table 13). Total provincial grant funding was slightly favourable to projection by $1.3 million (0.5%) due to a higher than expected Graduate Expansion Grant and $0.4 million in COVID-19 emergency funding. The International Student Reduction, a $750 decrease in grant funding per student, continues to grow with increased international enrolment, increasing to $2.9 million in 2019/20 from $2.4 million the prior year.

McMASTER CLINICAL TRIAL TESTS "OLD" PLASMA THERAPY FOR COVID-19

The Convalescent Plasma for COVID-19 Research (CONCOR) trial is a collaboration between McMaster and academic partners across the country looking for a treatment for COVID-19.

"When people have recovered from COVID-19 infection, we are hoping they will donate a unit of plasma which is essentially the clear portion of blood where all the antibodies are." *– Donald Arnold, Director, McMaster Centre for Transfusion Research*

Table 13 : PROVINCIAL GRANTS — $ thousands

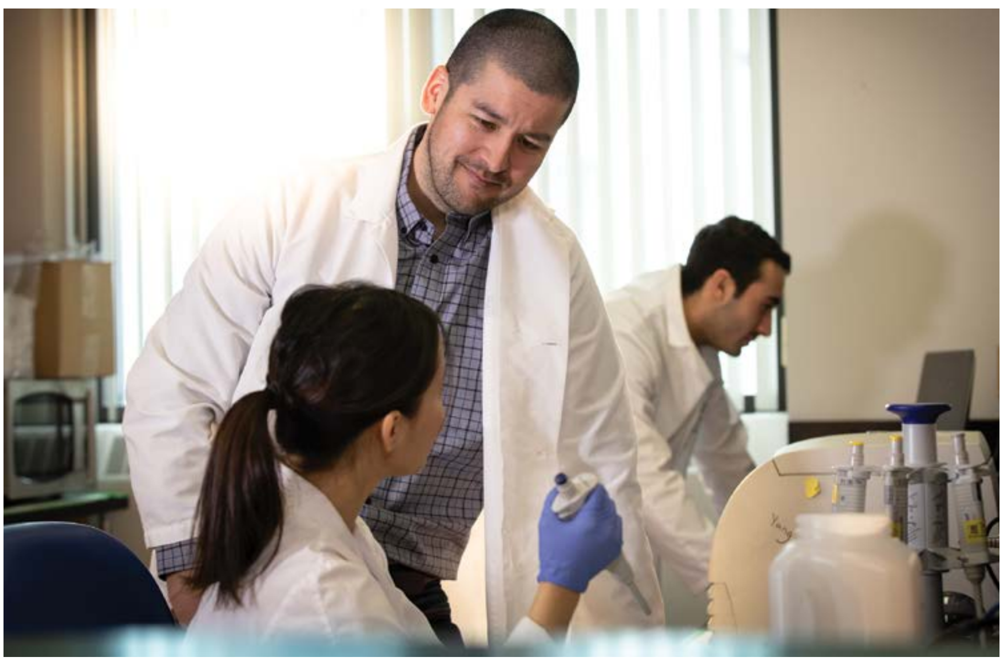
	2019/20 Budget	2019/20 Projection	2019/20 Actual
Enrolment Envelope			
Core Operating Grant	215,371	215,371	215,374
Graduate Expansion Grant	3,245	3,316	4,113
	218,616	218,687	219,488
Differentiation Envelope			
Performance/Student Success Grant	19,169	19,169	19,168
Graduate Expansion – Performance	293	299	371
	19,462	19,468	19,539
Special Purpose Envelope			
Grant for Clinical Programs	429	457	458
COVID-19 – Emergency Funding for Universities	-	-	400
International Student Recovery	(2,639)	(2,928)	(2,942)
Total Provincial Grants	**235,868**	**235,684**	**236,942**

TUITION

Actual tuition increased compared to budget due to higher enrolment than budgeted from both domestic and international students (Table 14).

Table 14: UNDERGRADUATE AND GRADUATE ENROLMENT

				Variance			
	2019/20 Budget	2019/20 Projection	2019/20 Actual	Actual vs. Budget		Actual vs. Projection	
Undergraduate FFTEs – Domestic	23,446	23,968	24,070	624	2.7%	102	0.4%
Undergraduate FFTEs – International	3,138	3,514	3,533	395	12.6%	19	0.5%
Total	**26,584**	**27,482**	**27,603**	**1,019**	**3.8%**	**121**	**0.4%**
Graduate FTEs – Domestic	3,105	3,126	3,140	35	1.1%	14	0.5%
Graduate FTEs – International	1,255	1,316	1,320	65	5.2%	4	0.3%
Total	**4,360**	**4,442**	**4,460**	**100**	**2.3%**	**18**	**0.4%**
Total UG & G Combined – Domestic	26,551	27,094	27,210	659	2.5%	116	0.4%
Total UG & G Combined – International	4,393	4,830	4,853	460	10.5%	23	0.5%
Total	**30,944**	**31,924**	**32,063**	**1,119**	**3.6%**	**139**	**0.4%**



McMASTER RESEARCHER, JEREMY HIROTA, EXPLORES WHY COVID-19 IMPACTS PATIENTS DIFFERENTLY

"We think it is the lung immune system that differs between COVID-19 patients, and by understanding which patients' lung immune systems are helpful and which are harmful, we may be able to help physicians pro-actively manage the most at risk-patients."
– Jeremy Hirota, Assistant Professor, Medicine

Overall enrolment increased in accordance with the Strategic Mandate Agreement and the enrolment management targets (Figure 6 and Table 15), enabled by the completion of Wilson Hall in 2016/17. In 2019/20, a new provincial tuition framework resulted in a domestic tuition rate cut of 10%. This was mitigated by increasing the domestic and international enrolment above initial target levels, as well as continuing to increase international tuition rates to cover the increased costs of support.

Figure 6: **TUITION AND FTE ENROLMENT**

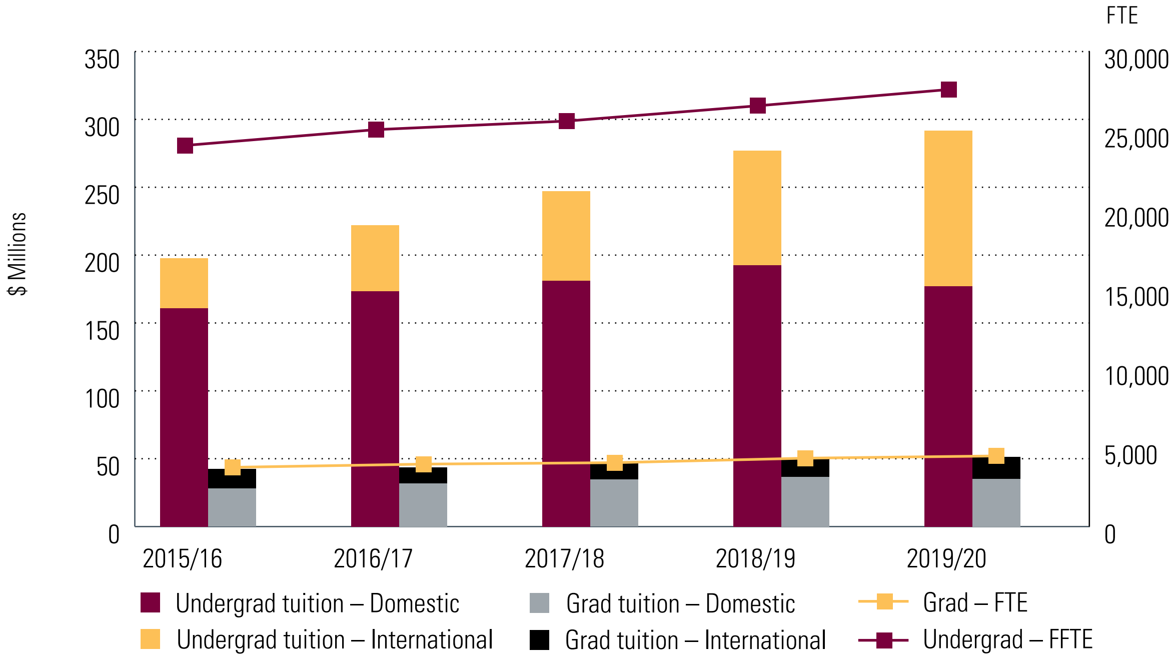


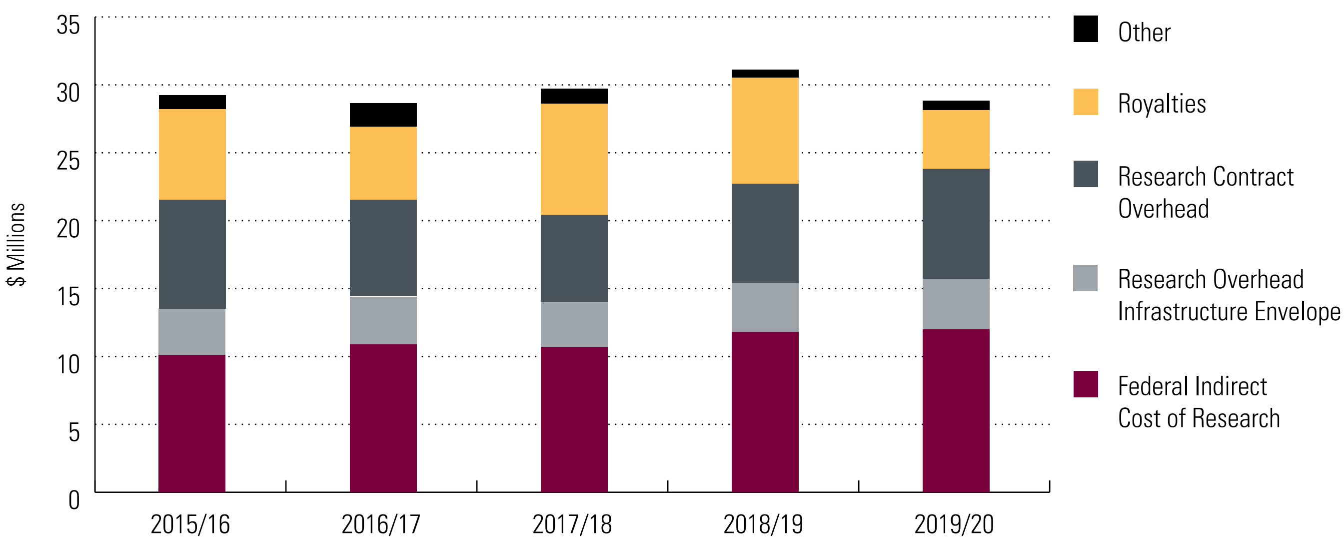
Table 15: **TUITION AND FTE ENROLMENT**

	Tuition ($ millions)					FTE Enrolment				
	2015/16	2016/17	2017/18	2018/19	2019/20	2015/16	2016/17	2017/18	2018/19	2019/20
Undergraduate – Domestic	160.9	173.4	181.2	192.6	177.1	22,545	23,265	23,265	23,759	24,070
Undergraduate – International	36.5	48.6	65.9	84.1	114.3	1,523	1,803	2,344	2,815	3,533
Total	**197.4**	**222.1**	**247.1**	**276.7**	**291.4**	**24,068**	**25,068**	**25,609**	**26,575**	**27,603**
Graduate – Domestic	27.9	31.8	34.6	36.6	35.1	2,904	2,980	2,928	3,080	3,140
Graduate – International	14.4	11.7	12.6	13.8	16.3	838	964	1,108	1,238	1,320
Total	**42.3**	**43.5**	**47.3**	**50.3**	**51.3**	**3,742**	**3,944**	**4,036**	**4,319**	**4,460**
Total UG & G – Domestic	188.7	205.2	215.8	229.1	212.1	25,449	26,245	26,193	26,840	27,210
Total UG & G – International	50.9	60.4	78.5	97.9	130.6	2,361	2,767	3,452	4,054	4,853
Total	**239.6**	**265.6**	**294.3**	**327.1**	**342.7**	**27,810**	**29,012**	**29,645**	**30,894**	**32,063**

RESEARCH OVERHEAD

Research overhead income was $1.1 million (4.0%) favourable to budget and $1.5 million (-5.1%) unfavourable to projection, primarily due to variances in royalties and research contract overheads. Overhead is levied as a percentage of research grants and contracts where allowed, with the objective of recovering the full amount of indirect costs. Royalty income is payment for commercial use of intellectual property owned by McMaster as a result of research discoveries. Both contract overhead and royalties fluctuate depending on activity (Figure 7).

Figure 7: RESEARCH OVERHEAD INCOME



INVESTMENT INCOME

The investment income attributed to the Operating Fund is predominantly fixed. Any differences between the budget and actual returns are absorbed in the University's specific purpose reserve. The specific purpose reserve is used to ensure the Operating Fund receives investment income each year regardless of returns in the year. The annual fixed transfer is $9.5 million, which beginning in 2015/16 and ending in 2019/20, was increased by five one-time $3.0 million per year transfers. This additional funding assists in balancing the Operating Fund during years following the policy lever implementation, which resulted in a permanent $3.4 million funding cut, and transition to the corridor model whereby the operating grant is fixed at the 2016/17 level.

OTHER INCOME

Higher student enrolment contributed more than expected to other income. The favourable variance of $5.2 million (4.9%) compared to budget was primarily due to:

- higher fees from non-degree programs; and
- higher recoveries for utilities from external affiliates due to increased usage.

McMASTER RESEARCHERS' ACT OF KINDNESS COMES FULL CIRCLE

In February, Yingfu Li, professor of biochemistry and biomedical sciences, and his research team raised money and bought N95 masks and goggles for Chinese hospitals during the COVID-19 crisis in that country. In April, his colleagues in China pitched in to buy protective gear for front-line medical workers in Hamilton.

EXPENDITURES

Total Operating Fund expenditures were $703.2 million (Figure 8 and Figure 9) compared to budget and projected expenditures of $738.8 million and $740.5 million, respectively. The favourable variances are small as a percentage of both the original budget (4.8%) and projection (5.0%) and are caused by the impacts of the COVID-19 pandemic on spending plans and the normally observed effect of conservative budgeting.

Under the current budget model, faculties (activity units) are allocated all central revenue net of support unit costs. Early finalization of support unit projections in the fall allows for more certain inputs to activity unit budgets, which are prepared in the spring. However, this means that there is greater chance that support unit plans will change during the remainder of the year. This greater variability is not considered a significant risk to planning and will continue for 2020/21 and beyond.

Figure 8: **2019/20 TOTAL OPERATING FUND ACTUAL EXPENSE BY TYPE** $ Millions

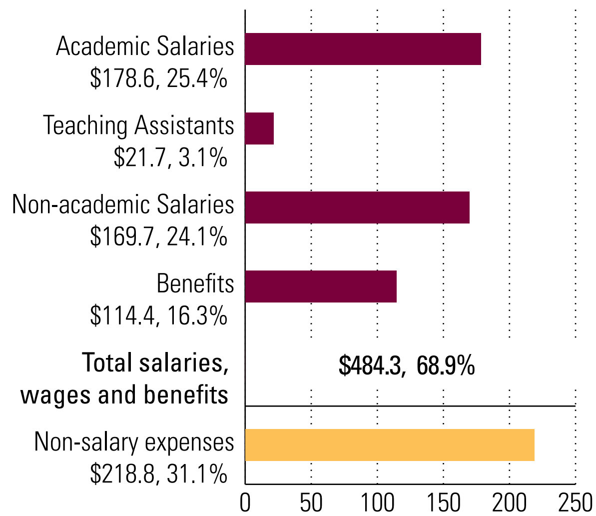
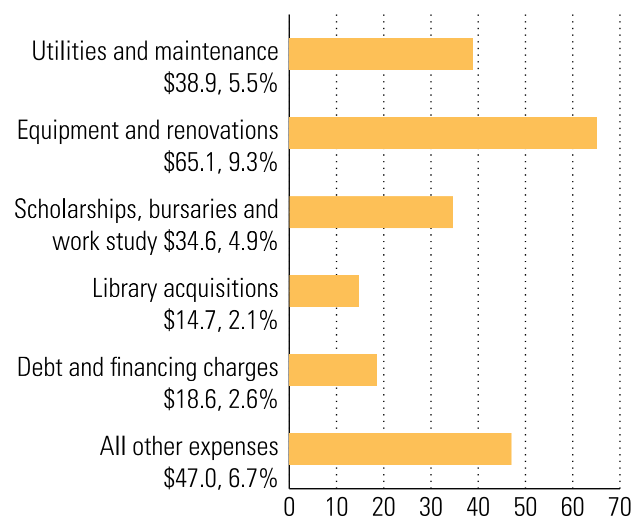
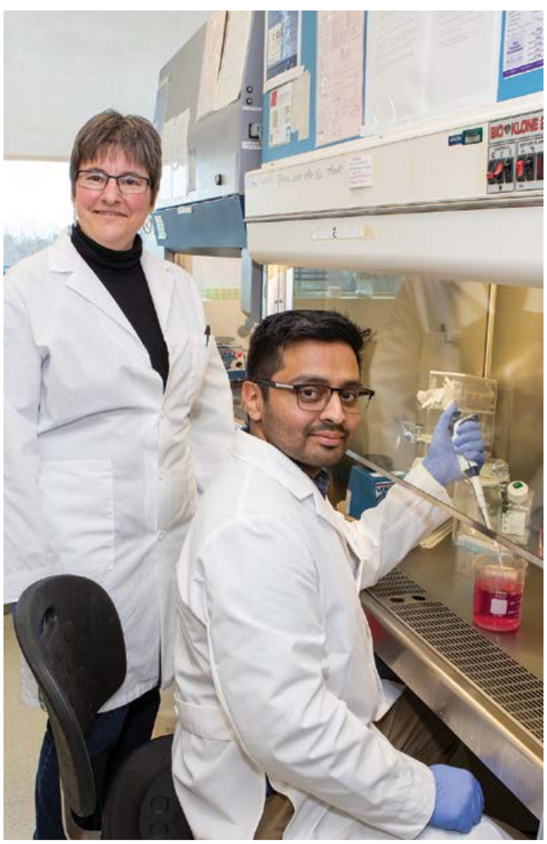


Figure 9: **2019/20 OPERATING FUND ACTUAL NON-SALARY EXPENSE BY TYPE** $ Millions





McMASTER RESEARCHER ISOLATED COVID-19 TO FIGHT THE PANDEMIC

"As most people rush to distance themselves from COVID-19, Canadian researchers have been waiting eagerly to get our (gloved) hands on the hated virus."

– Karen Mossman, Vice-President, Research

Total expenses were favourable by $35.7 million (4.8%) compared to budget:

- Salaries, wages, and benefits were favourable by $12.5 million (2.5%) primarily due to unfilled staff vacancies.
- Equipment and renovations were unfavourable by $13.1 million (-25.2%) due to higher investment in strategic capital projects such as the greenhouse renovation, the School of Interdisciplinary Science 5th floor build, the McLean Centre project, and the Canada Foundation for Innovation Small Angle Neutron project, as well as additional transfers for maintenance projects such as the Nuclear Reactor roof replacement and a new boiler for the main campus.
- Scholarships, bursaries, and work study were favourable by $4.1 million (10.7%) due to Student Access Guarantee (SAG) requirements lower than projected.
- Library acquisitions were unfavourable by $1.5 million (-11.3%) due to journal cost inflation and extra acquisitions.
- All other expenses were favourable by $34.1 million (42.1%) primarily due to savings or delayed spending on expenses such as materials and supplies, special projects, and travel.
- Variances were insignificant in utilities and maintenance, as well as debt and financing charges.

Total expenses were favourable by $37.4 million (5.0%) compared to projection:

- Salaries, wages, and benefits were favourable by $13.9 million (2.8%) primarily due to unfilled staff vacancies.
- Utilities and maintenance were favourable by $2.0 million (5.0%) due to lower utility rates and consumption than projected, along with some delayed maintenance expenditures due to the campus closure.
- Equipment and renovations were favourable by $3.8 million (5.6%) due to deferred investment in capital projects as a result of the COVID-19 pandemic.
- All other expenses were favourable by $18.4 million (28.1%) primarily due to savings or delayed spending across multiple categories mainly due to COVID-19, as well as lower royalty expenses reflecting the lower royalty income.
- Variances were insignificant in scholarships, bursaries and work study, library acquisitions, and debt and financing charges.

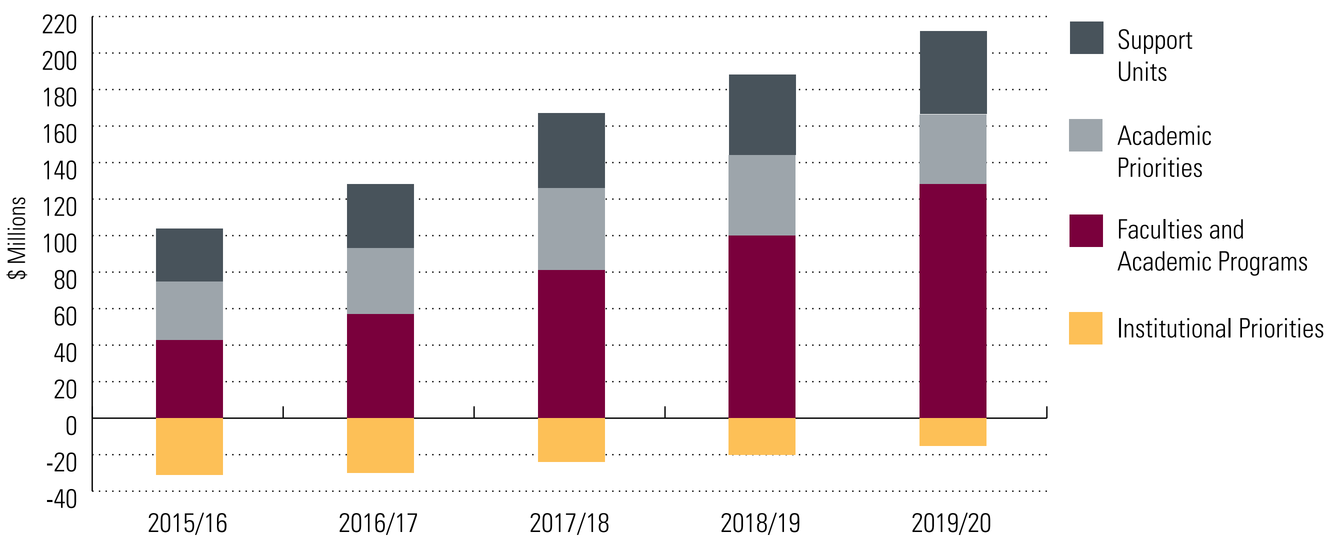
"We're renowned for innovation and interdisciplinary collaboration. This is a fine example of how our creativity and partnerships can quickly come up with solutions." *– Paul O'Byrne, Dean and Vice-President, Faculty of Health Sciences*

McMASTER HELPS HEALTH CARE PROVIDERS WITH DONATED SUPPLIES
The Faculties of Engineering, Health Sciences and Science donated masks, gloves, goggles, sanitizer and other vital medical supplies from labs across McMaster to help local hospitals combat COVID-19.

APPROPRIATIONS

The favourable results increase the Operating Fund appropriations balance by $28.9 million (17.2%) to $196.6 million (Figure 10), which represents an improvement of $58.8 million on budget and $38.9 million on projection. Appropriations are carried forward for expenditure in 2020/21 and future years by activity or support units. Appropriation balances are used for capital renovations and/or Strategic Mandate Agreement initiatives. Of the $196.6 million held in appropriations, $128.1 million is held by faculties and another $38.3 million is held for academic priorities (Table 16). In part, this reflects a conscious decision by faculties to defer transfers to capital pending a better understanding of cash flow needs related to COVID-19 impacts.

Figure 10: OPERATING FUND APPROPRIATIONS



McMASTER'S COVID-19 RESEARCH FUNDS SUPPORTS 36 RESEARCH PROJECTS

McMaster University, with additional support from its generous donors, has invested nearly $3 million toward 36 projects through the McMaster COVID-19 Research Fund. In total, more than 150 researchers (including internal and external collaborators) will benefit from the funds, with project awards ranging from $10,000 to $250,000. The research fund, designed to support immediate and longer term pandemic-related research, attracted 160 applications from across all Faculties.

McMASTER ESTABLISHED A STUDENT EMERGENCY RELIEF FUND TO SUPPORT STUDENTS

McMaster has launched a new fundraising campaign, led by Faith Ogunkoya, Team Lead at the Registrar's Office, aimed at supporting students needing aid because of the pandemic and advancing COVID-19 related research. The McMaster COVID-19 Fund encompasses two funds: a Student Emergency Relief Fund and a COVID-19 Research Fund. For each of these funds, the first $100,000 will be matched to double the impact of these gifts.

Table 16 : APPROPRIATION/ENVELOPE ANALYSIS, YEAR ENDED APRIL 30, 2020 — $ thousands

	Appropriations May 1, 2019	Net Surplus (Deficit)	Appropriations April 30, 2020	Net Surplus (Deficit) Variance
Faculties and Academic Programs				
Business	3,455	6,172	9,627	9,627
Engineering	24,248	9,024	33,272	1,016
Health Sciences	41,243	5,867	47,110	8,149
Humanities	2,578	3,301	5,879	1,581
Science	20,363	1,228	21,591	11,339
Medical Radiation – Mohawk Share	1	-	1	1
Social Sciences	6,276	2,915	9,191	1,054
Arts & Science	1,564	(178)	1,386	(23)
Sub-total	99,728	28,328	128,056	32,744
Academic Priorities	43,887	(5,548)	38,340	(8,066)
Academic Support	12,291	74	12,365	2,695
Research Support	3,665	1,399	5,064	2,660
Student Support	9,860	80	9,940	3,325
Facilities Support	3,948	(2,713)	1,235	(2,569)
Institutional Support	14,058	2,723	16,781	6,550
Institutional Priorities*	(19,780)	4,579	(15,201)	1,567
Total Operating Fund	**167,657**	**28,923**	**196,580**	**38,907**

*Includes the approved funding for the Mosaic project, which will be repaid by 2023/24

CONSOLIDATED RESULTS – FULL ACCRUAL BASIS

The consolidated financial statements are prepared on the accrual accounting basis for accounting standards compliance and auditing purposes. Adjustments from McMaster's modified cash basis budgeting approach to accrual accounting involve the following key changes (Table 17):

- Net capital expenditures within fund units or departments are reversed and only one year of asset use is amortized. Asset lives vary between 1 and 40 years.
- Share of investment income/loss on internal endowments and not already assigned to the Operating Fund and earned/lost on non-operating funds is booked to revenue.
- Non-cash adjustments for pension and non-pension employee accrued future benefit costs measured at April 30 are recorded.
- Adjustments eliminating internal revenue and expense transactions between funds occur.

Table 17: **RECONCILIATION OF OPERATING FUND SURPLUS TO CONSOLIDATED STATEMENT OF OPERATIONS**

$ thousands

				Variance Favourable (Unfavourable)	
	2019/20 Budget	2019/20 Projection	2019/20 Actual	Actual vs. Budget	Actual vs. Projection
Excess (deficiency) of Operating Fund revenues over expenses	**(29,906)**	**(9,984)**	**28,923**	**58,829**	**38,907**
Capital expenditures net of amortization	91,155	43,943	30,240	(60,915)	(13,703)
Investment income (loss) on internal endowments	2,647	(33,587)	(9,077)	(11,724)	(24,510)
Pension and non-pension adjustments	(8,106)	14,355	30,579	38,685	16,224
Changes in other reserves	4,659	(63,984)	11,406	6,746	75,389
Total accrual adjustment	**90,356**	**(39,272)**	**63,148**	**(27,208)**	**102,420**
Excess (deficiency) of revenues over expenses	**60,450**	**(49,256)**	**92,070**	**31,621**	**141,327**

The 2019/20 projection was completed at the beginning of the COVID-19 pandemic and employed a conservative approach as the situation was evolving daily. As a result, some of the projected impacts were not realized by the end of the year, most notably the impact on investment returns. The total 2019/20 positive accrual adjustment of $63.1 million compared to a negative $39.3 million projected results in a $102.4 million favourable variance is explained by:

- Better returns of -1.9% compared to a projected loss of -18.0%, which was a conservative estimate based on the -18.9% investment loss experienced in the 2008/09 financial crisis;
- Lower adjustment for capital expenditures due to end of year delays on capital spending as construction sites were shut down; and
- Smaller unfavourable effects on other reserves as both Operating Fund and consolidated net income were greater than expected.

NEW McMASTER HEALTH SCIENCES COURSE FOCUSES ON INFECTIOUS DISEASES LIKE COVID-19

Padman Jayaratne, associate professor of pathology and molecular medicine, and Hartley Jafine, a facilitator with the BHSc program and lecturer with the department of family medicine at McMaster, have created a new online course called Emerging Infectious Diseases.

STATEMENT OF OPERATIONS

Table 18: CONSOLIDATED STATEMENT OF OPERATIONS (ACCRUAL BASIS) $ thousands

				Variance Favourable (Unfavourable)	
	2019/20 Budget	2019/20 Projection	2019/20 Actual	Actual vs. Budget	Actual vs. Projection
Revenues					
Operating grants	273,528	273,961	275,906	2,378	1,945
Research grants and contracts	176,061	180,692	173,720	(2,340)	(6,972)
Tuition fees	338,962	352,477	360,665	21,703	8,188
Ancillary sales and services	80,227	64,908	75,959	(4,268)	11,052
Other revenues	189,749	206,879	207,555	17,806	676
Investment income, net	62,452	(59,877)	26,392	(36,509)	86,269
Amortization of deferred captial contributions	45,743	45,963	40,773	(4,970)	(5,190)
Total revenues	**1,166,722**	**1,065,003**	**1,160,970**	**(5,752)**	**95,968**
Expenses					
Salaries and wages	562,575	539,566	543,930	18,645	(4,364)
Employee benefits	123,842	126,654	132,576	(8,734)	(5,922)
Supplies and services	316,936	347,287	300,878	16,058	46,409
Interest on long-term obligations	14,739	13,196	13,257	1,482	(61)
Amortization of capital assets	88,181	87,556	78,260	9,921	9,296
Total expenses	**1,106,273**	**1,114,259**	**1,068,900**	**37,373**	**45,359**
Excess (deficiency) of revenues over expenses	**60,450**	**(49,256)**	**92,070**	**31,621**	**141,327**

Total revenues were slightly less than budget. Higher than expected enrolment created a favourable variance in tuition fees, offsetting the provincially mandated 10% tuition cut that was built into the budget. Unfavourable variances were experienced in investment income due to widespread market declines at year-end, and lower ancillary sales due to the campus shutdown beginning in March 2020. Actual results for both investment income and ancillary sales were better than projected.

Padman Jayaratne, Associate Professor, Pathology and Molecular Medicine

Hartley Jafine, Professor, Faculty of Health Sciences

Total expenses were less than budget due to unfilled vacancies throughout the year, as well as reduced supplies and services expense due to the campus closure. Increased employee benefits expense reflects utilization of reserves as part of the long-term strategy to fund post-retirement benefits. Variances to projection were caused by similar factors.

"The perspective I hope students develop is an understanding of emerging infectious diseases like COVID-19, and how all of the conversations we are presently having on this topic are deeply interconnected."

– Hartley Jafine, Professor, Faculty of Health Sciences

STATEMENT OF FINANCIAL POSITION

Table 19: CONSOLIDATED STATEMENT OF FINANCIAL POSITION

$ thousands

				Variance Increase (Decrease)	
	2019/20 Budget	2019/20 Projection	2019/20 Actual	Actual vs. Budget	Actual vs. Projection
Assets					
Cash	30,994	31,228	17,408	(13,586)	(13,819)
Short-term investments	154,972	156,138	183,222	28,250	27,084
Investments	1,341,194	1,153,806	1,313,986	(27,208)	160,180
Capital assets	1,333,324	1,247,805	1,208,455	(124,869)	(39,350)
Other assets	158,680	161,460	214,201	55,521	52,741
Total assets	**3,019,165**	**2,750,437**	**2,937,272**	**(81,893)**	**186,835**
Liabilities and deferred contributions					
Current liabilities	180,552	193,330	172,959	(7,593)	(20,371)
Deferred contributions for future expenses	852,108	862,592	862,762	10,654	170
Long-term debt	342,700	267,194	267,697	(75,003)	502
Employee future benefits and pension	247,839	364,436	448,446	200,607	84,010
Total liabilities and deferred contributions	**1,623,198**	**1,687,552**	**1,751,864**	**128,665**	**64,312**
Net assets					
Unrestricted	9,781	10,755	-	(9,781)	(10,755)
Internally restricted	224,523	41,423	97,679	(126,843)	56,256
Equity in captial assets	514,657	499,364	470,378	(44,278)	(28,986)
Endowments					
Internal	150,028	116,823	141,333	(8,696)	24,510
External	496,978	394,520	476,018	(20,960)	81,498
Total net assets	**1,395,966**	**1,062,885**	**1,185,408**	**(210,558)**	**122,523**
Total liabilities and net assets	**3,019,165**	**2,750,437**	**2,937,272**	**(81,893)**	**186,835**

The Statement of Financial Position is the University's consolidated balance sheet. Variances to budget and projection both show the influence of COVID-19, as the budget was prepared under a normal set of assumptions, while the projection built in conservative assumptions as the pandemic was beginning.

McMASTER LIBRARY RESOURCES MOVE ONLINE
"With the doors closed for the foreseeable future, the library has moved the bulk of its resources online. When you're new to university, you can start to feel overwhelmed, but we can help navigate to the appropriate resources, or just be a friendly voice," says Ariel Stables-Kennedy, the First-Year Experience Librarian. "Come to our virtual front desk and get that friendly experience."

ASSETS

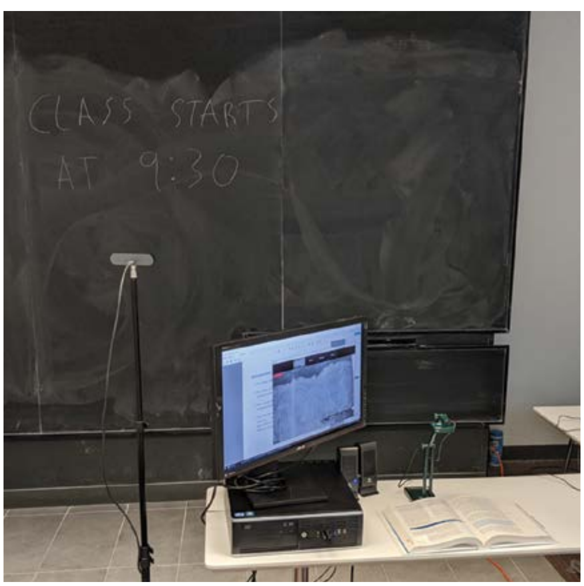
Cash requirements are estimated to cover an average of 10 days of expenses. The lower level of expenses incurred in 2019/20 allowed maintenance of a lower cash balance.

Despite lower investment income than budgeted, the combined balance of short-term and longer-term investments was close to budget. The balance increased compared to projection due to significantly better investment returns than anticipated.

Actual capital assets were less than both budget and projection due to lower spending as construction was shut down at year-end.

The increase in other assets is a combination of greater outstanding receivables and a higher balance of other investments. Receivables include student accounts (net of an increased provision for doubtful accounts) and government funders, as well as loans extended to McMaster Innovation Park to support its operations and increase capacity. The investment in McMaster Innovation Park is accounted for by the equity method, and the increase reflects the surplus earned in the year ended December 31, 2019.

McMASTER FACULTY FINDING DIVERSE AND CREATIVE WAYS TO DELIVER HIGH-QUALITY, VIRTUAL COURSES



LIABILITIES

The drop in current liabilities compared to budget and projection is due to a lower level of outstanding invoices as activity was reduced at the end of the year.

Deferred contributions for future expenses reflect contributions for future expenses and capital that have not yet been expended or met the test to expense. Although funding for research and capital had been received during 2019/20, spending was cut short by the closure, increasing the balance deferred.

The 2019/20 budget originally included plans to issue new long-term debt, however this was deferred a year with the announcement of the new President, Dr. David Farrar, and his objective to update the University's strategic plan. The new debt is delayed to 2020/21, decreasing the amount of actual long-term debt in 2019/20 compared to the original budget.

The liability for employee future benefits increased compared to both budget and projection due to lower interest rates and the negative return on plan assets.

NET ASSETS

The lower balance of net assets compared to budget reflects the reduced investment return, decreased capital spending, and lower surplus of revenues over expenses. Conversely, the greater balance of net assets compared to budget is the result of higher than expected investment returns. During the year, the balance of unrestricted net assets was internally restricted to the specific purpose reserve in order to supplement endowment funding and support student bursaries, scholarships, and other expenditures.

"Although our campus remains physically closed to students, that doesn't mean the quality of our students' learning will be diminished in any way. Faculty and instructors have the ability and enthusiasm to teach our students in diverse and creative ways and are exploring new approaches for bringing in-person courses to our students using remote teaching tools."

– Kim Dej, Acting Vice-Provost, Faculty

STATEMENT OF CASH FLOWS

Table 20: CONSOLIDATED STATEMENT OF CASH FLOWS $ thousands

				Variance Favourable (Unfavourable)	
	2019/20 Budget	2019/20 Projection	2019/20 Actual	Actual vs. Budget	Actual vs. Projection
Excess of revenues over expenses	60,450	(49,256)	92,070	31,621	141,327
Adjustments for non-cash items:					
Amortization of deferred capital contributions	(45,743)	(45,963)	(40,773)	4,970	5,190
Amortization of capital assets	88,181	87,556	78,260	(9,921)	(9,296)
Employee future benefits	2,427	3,664	(11,578)	(14,004)	(15,242)
Increase in decommissioning obligation	1,088	1,056	665	(423)	(392)
Net change in deferred contributions	34,721	48,149	(6,027)	(40,747)	(54,176)
Financing and investing activities:					
Purchase of capital assets	(234,558)	(176,567)	(127,922)	106,636	48,646
Net change in investments	12,593	247,610	36,235	23,642	(211,375)
Net change in external endowments	8,195	(106,299)	(24,801)	(32,996)	81,498
Issuance of long-term debt	75,000	-	-	(75,000)	-
Principal repayments on long-term obligations	(630)	(665)	(665)	(35)	-
Increase/(decrease) in cash	**1,723**	**9,284**	**(4,536)**	**(6,259)**	**(13,820)**
Cash, beginning of year	29,271	21,944	21,944	(7,327)	-
Cash, end of year	**30,994**	**31,228**	**17,408**	**(13,586)**	**(13,820)**

The impacts of COVID-19 and strategic decision to delay debt issuance as discussed above are reflected in the variances on the Statement of Cash Flows.

THE ARCHWAY PROGRAM SUPPORTS FIRST-YEAR STUDENTS

The Archway program has 200 upper-year students to assist incoming first-year students and in just two months received an overwhelming 5,000 responses from first-years who are keen to participate in newly created virtual communities.

"The Archway program is designed to support first-year students through their entire first year, starting in the summer and continuing through to final exams in the Winter term." – *Sean Van Koughnett, Associate Vice-President (Students & Learning), Dean of Students*

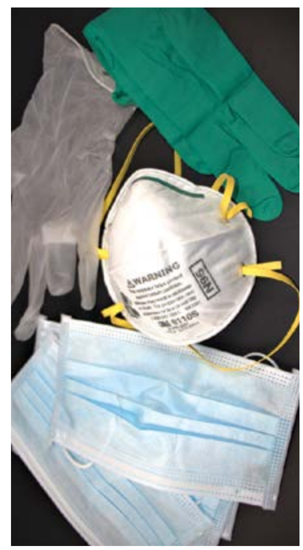
Annual Financial Report

2019-2020

McMASTER RESIDENCES PROVIDE SAFE QUARANTINE FACILITIES

McMaster is making rooms available to people in high-risk environments or who need to quarantine through a collaboration with Hamilton Public Health, Hamilton Health Sciences and St. Joseph's Hamilton Healthcare. The collaboration includes establishing ways to support safe isolation, contactless meal delivery, cleaning and the protection of staff.

Financial Statements



McMASTER STUDENTS DONATE PERSONAL PROTECTIVE EQUIPMENT TO FRONT-LINE HEALTH WORKERS

Medical students from McMaster University and the University of Toronto have joined forces to create 3D-printed face shields for front-line health care workers impacted by the pandemic. A campaign called 3D PPE for GTHA supports workers in hospitals and community medical clinics in Hamilton, Toronto and the Niagara Region.

McMaster
University

Statement of Management Responsibility

Management of the University is responsible for the preparation of the financial statements, the notes thereto and all other financial information contained in this Annual Financial Report.

Management has prepared the financial statements in accordance with Canadian accounting standards for not-for-profit organizations. Management believes the financial statements present fairly the University's financial position as at April 30, 2020 and the results of its operations, changes in net assets and its cash flows for the year ended April 30, 2020. In order to achieve the objective of fair presentation in all material respects, the use of reasonable estimates and judgements were employed. Additionally, management has ensured that financial information presented elsewhere in this Annual Financial Report has been prepared in a manner consistent with that in the financial statements.

In fulfilling its responsibilities and recognizing the limits inherent in all systems, management has developed and maintains a system of internal controls designed to provide reasonable assurance that University assets are safeguarded from loss and that the accounting records are a reliable basis for the preparation of financial statements.

Mercer (Canada) Limited has been retained by the University in order to provide an estimate of the University's current year position for pension and other employee future benefits. Management has provided the valuation actuary with the information necessary for the completion of the University's report and retains ultimate responsibility for the determination and estimation of the pension and other employee future benefits liabilities reported.

The Board of Governors carries out its responsibility for review of the financial statements and this Annual Financial Report principally through the Planning and Resources Committee and its Audit and Risk Committee. No members of the Audit and Risk Committee are officers or employees of the University. The Audit and Risk Committee meets regularly with management, as well as the internal auditors and the external auditors, to discuss the results of the audit examinations and financial reporting matters, and to satisfy itself that each party is properly discharging its responsibilities. The auditors have full access to the Audit and Risk Committee with and without the presence of management.

The financial statements for the year ended April 30, 2020 have been reported on by KPMG LLP, Chartered Professional Accountants, the auditors appointed by the Board of Governors. The Independent Auditors' Report outlines the scope of their audit and their opinion on the presentation of the information included in the financial statements.

Vice-President, Administration	President	AVP (Administration) & CFO
October 8, 2020		

KPMG LLP
Commerce Place
21 King Street West, Suite 700
Hamilton ON L8P 4W7
Canada
Tel 905-523-8200
Fax 905-523-2222

INDEPENDENT AUDITORS' REPORT

To the Board of Governors of McMaster University

Opinion

We have audited the accompanying financial statements of McMaster University (the "University"), which comprise:

- the statement of financial position as at April 30, 2020
- the statement of operations for the year then ended
- the statement of changes in net assets for the year then ended
- the statement of cash flows for the year then ended
- and notes to the financial statements, including a summary of significant accounting policies

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the University as at April 30, 2020, and its results of operations, its changes in net assets and its cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *"Auditors' Responsibilities for the Audit of the Financial Statements*" section of our auditors' report.

We are independent of the University in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other responsibilities in accordance with these requirements.

Other Information

Management is responsible for the other information. Other information comprises:

- the information, other than the financial statements and the auditors' report thereon, included in the Annual Financial Report document.

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit and remain alert for indications that the other information appears to be materially misstated.

We obtained the information, other than the financial statements and the auditors' report thereon, included in Annual Financial Report document as at the date of this auditors' report.

If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in the auditors' report.

We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian accounting standards for not-for-profit organizations and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the University's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the University or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the University's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

  The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the University's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the University to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

Hamilton, Canada
October 8, 2020

McMASTER UNIVERSITY
Statement of Financial Position
April 30, 2020, with comparative figures for 2019
(thousands of dollars)

	2020	2019
Assets		
Current assets:		
Cash	$ 17,408	$ 21,944
Short-term investments (note 2)	183,222	203,902
Government grants and other accounts receivable (note 3)	43,387	34,107
Research grants receivable	94,680	104,083
Loans receivable (note 4)	12,892	-
Inventories	6,379	5,571
Prepaid expenses and deposits	26,154	13,781
	384,122	383,388
Investments (note 2)	1,313,986	1,329,541
Other investments (note 4)	30,012	24,111
Other assets (note 5)	697	752
Capital assets (note 6)	1,208,455	1,158,793
	$ 2,937,272	$ 2,896,585
Liabilities, Deferred Contributions and Net Assets		
Current liabilities:		
Accounts payable and accrued liabilities (note 7)	$ 150,058	$ 157,702
Deferred revenue	22,192	23,555
Current portion of long-term obligations (note 8)	709	665
	172,959	181,922
Accrued employee future benefits (note 9)	448,446	357,290
Long-term obligations (note 8)	267,697	267,741
Deferred contributions (note 10):		
Deferred for future expenses	371,100	363,168
Deferred capital contributions	491,662	505,591
	862,762	868,759
Net assets:		
Unrestricted	-	10,755
Internally restricted (note 11)	97,679	159,426
Equity in capital assets (note 12)	470,378	399,463
Endowments (note 13):		
Internal	141,333	150,410
External	476,018	500,819
	1,185,408	1,220,873
Commitments and contingencies (note 14)		
	$ 2,937,272	$ 2,896,585

On behalf of the Board of Governors:

____________________ Chair, Board of Governors

____________________ Chair, Audit and Risk Committee

See accompanying notes to financial statements

McMASTER UNIVERSITY
Statement of Operations
Year ended April 30, 2020, with comparative figures for 2019
(thousands of dollars)

	2020	2019
Revenues:		
Operating grants	$ 275,906	$ 273,587
Research grants and contracts	173,720	178,022
Tuition fees	360,665	341,629
Other (note 15)	122,183	128,619
Ancillary sales and services	75,959	78,202
Investment income, net	26,392	70,820
Donations and other grants	69,809	67,906
Research overhead grants	15,563	15,390
Amortization of deferred capital contributions	40,773	38,835
	1,160,970	1,193,010
Expenses:		
Salaries and wages	543,930	521,219
Employee benefits	132,576	120,623
Supplies and services	300,877	308,107
Interest on long-term obligations	13,257	13,300
Amortization of capital assets	78,260	72,769
	1,068,900	1,036,018
Excess of revenues over expenses	$ 92,070	$ 156,992

See accompanying notes to financial statements

McMASTER UNIVERSITY
Statement of Changes in Net Assets
Year ended April 30, 2020, with comparative figures for 2019
(thousands of dollars)

	Unrestricted	Internally restricted	Equity in capital assets	Endowments Internal	Endowments External	2020 Total	2019 Total
Net assets, beginning of year	$ 10,755	$ 159,426	$ 399,463	$ 150,410	$ 500,819	$ 1,220,873	$ 1,190,923
Excess (deficiency) of revenues over expenses	129,557	-	(37,487)	-	-	92,070	156,992
External endowment contributions:							
Contributions (note 13)	-	-	-	-	8,501	8,501	10,218
Protection of capital (note 13)	-	-	-	-	(33,302)	(33,302)	7,266
Transfers and adjustments:							
Transfers for specific purposes	(40,987)	40,987	-	-	-	-	-
Capital transactions from operating (note 12)	(108,402)	-	108,402	-	-	-	-
Transfer from internal endowments (note 13)	9,077	-	-	(9,077)	-	-	-
Remeasurements and other items (note 9)	-	(102,734)	-	-	-	(102,734)	(144,526)
	(10,755)	(61,747)	70,915	(9,077)	(24,801)	(35,465)	29,950
Net assets, end of year	$ -	$ 97,679	$ 470,378	$ 141,333	$ 476,018	$ 1,185,408	$ 1,220,873

See accompanying notes to financial statements

McMASTER UNIVERSITY
Statement of Cash Flows
Year ended April 30, 2020, with comparative figures for 2019
(thousands of dollars)

	2020	2019
Cash provided by (used in):		
Operating activities:		
Excess of revenues over expenses	$ 92,070	$ 156,992
Adjustments for non-cash items:		
Amortization of deferred capital contributions	(40,773)	(38,835)
Amortization of capital assets	78,260	72,769
Employee future benefits	(11,578)	(15,815)
Equity earnings of other investments	(5,548)	(973)
Increase in decommissioning obligation	665	596
	113,096	174,734
Net change in contributions deferred for future expenses	7,932	3,977
Net change in other non-cash working capital	(22,065)	9,085
	98,963	187,796
Financing and investing activities:		
Purchase of capital assets	(127,922)	(148,010)
Net change in loans receivable	(12,892)	-
Net change in investments	36,235	(86,940)
Net change in other investments	(353)	-
Net change in other assets	55	478
Net change in external endowments	(24,801)	17,484
Deferred capital contributions	26,844	33,124
Principal repayments on long-term obligations	(665)	(624)
	(103,499)	(184,488)
Net (decrease) increase in cash	(4,536)	3,308
Cash, beginning of year	21,944	18,636
Cash, end of year	$ 17,408	$ 21,944

See accompanying notes to financial statements

McMaster University (the "University"), which operates by authority of The McMaster University Act, 1976, is governed by a Board of Governors (the "Board") and Senate, the powers and responsibility of which are set out in the Act. The University is a comprehensive research institution offering a broad range of undergraduate, graduate and continuing education programs and degrees. The University is exempt from income taxes.

1. Significant accounting policies:

The financial statements have been prepared by management in accordance with Canadian accounting standards for not-for-profit organizations in Part III of the CPA Canada Handbook.

(a) Basis of presentation:

These financial statements include the accounts, transactions and operations for which the University has jurisdiction. They do not include the accounts, transactions and operations of the following entities which are independently governed and managed, and certain other related entities which carry out fundraising and other activities and are not material to these financial statements:

Independent entities:

- McMaster Divinity College
- McMaster Students Union, Inc.
- McMaster University Centre Incorporated
- McMaster Children's Centre, Inc.
- McMaster Association of Part-Time Students (MAPS)
- Graduate Students Association (GSA)

Other entities:

- The McMaster University Trust
- Friends of McMaster Incorporated

McMaster Innovation Park:

The investment in the related entity, McMaster Innovation Park ("Park") relates to two Trusts, The Gore District Land Trust (GORE) and The First Longwood Innovation Trust (FLIT). GORE is controlled by the University based on Board composition, whereas FLIT is not controlled by the University. The investment is accounted for by the equity method (note 4) as permitted by accounting standards for not-for-profit organizations. Since the Trusts which form the Park have fiscal year ends of December 31st, the University records its share of the operating results effective on that date.

Other investments in for-profit entities subject to significant influence are accounted for using the equity method, whereby the investment is initially recorded at cost, net of any impairment and adjusted thereafter for the University's share of the entity's net surplus or deficit and any further impairments. Any distributions received are accounted for as a reduction in the investment.

- Adiga Life Sciences Inc. ("ALS"):

  These financial statements include the University's 50% interest in ALS (note 4). ALS is a joint venture with an unrelated pharmaceutical research company to commercialize intellectual property. ALS has a fiscal year end of August 31st and the University records its share of the operating results on that date.

- Halton McMaster Family Health Centre:

  These financial statements include the University's 50% contribution to the Halton McMaster Family Health Centre (note 4). This joint venture is a project with Joseph Brant Hospital involving the construction and establishment of a family health centre and hospital clinical and administration building. The joint venture is in the process of registering the constructed building as a leasehold condominium corporation.

1. Significant accounting policies (continued):

(a) Basis of presentation (continued):

OSCAR EMR:

OSCAR EMR ("OSCAR") is a not-for-profit technology/software company incorporated under the Ontario Corporations Act, controlled by McMaster University. OSCAR has a fiscal year end of December 31st. Financial information is disclosed in note 4. OSCAR has not been consolidated in the University's financial statements.

(b) Revenue recognition:

The University follows the deferral method of accounting for contributions which include donations and government grants. The principles under this method are summarized as follows:

- Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured.
- Contributions externally restricted for purposes other than endowment and capital assets are deferred and recognized as revenue in the year in which the related expenses are recognized.
- Contributions externally restricted for capital asset purchases are deferred and amortized to operations on the same basis as the related capital asset.
- External endowment contributions, income preserved and activity under the endowment capital protection policy (note 1(m)) are recognized as a direct increase (decrease) in endowment net assets. Income earned from the investment thereof, to the extent it is allocated, is recorded as deferred contributions and recorded as revenue in the periods in which the related expenses are incurred.

Tuition fees which relate to academic terms or parts thereof occurring after April 30th are recorded as deferred revenue. Gifts-in-kind are recorded at their fair market value on receipt, or at nominal value when fair market value cannot be reasonably determined. Pledges from fundraising and other donations are recorded in the period in which they are collected. Ancillary sales and services revenue is recognized at point of sale or when the service has been provided.

(c) Financial instruments:

Financial instruments are recorded at fair value on initial recognition. Freestanding derivative instruments that are not in a qualifying hedging relationship and equity instruments that are quoted in an active market are subsequently measured at fair value. All other financial instruments are subsequently recorded at cost or amortized cost, unless management has elected to carry the instruments at fair value. The University has elected to carry investments in equity instruments, fixed income and other securities at fair value.

Transaction costs incurred on the acquisition of financial instruments measured subsequently at fair value are expensed as incurred. All other financial instruments are adjusted by transaction costs incurred on acquisition and financing costs, which are amortized using the straight-line method.

Financial assets are assessed for impairment on an annual basis at the end of the fiscal year if there are indicators of impairment. If there is an indicator of impairment, the University determines if there is a significant adverse change in the expected amount or timing of future cash flows from the financial asset. If there is a significant adverse change in the expected cash flows, the carrying value of the financial asset is reduced to the highest of the present value of the expected cash flows, the amount that could be realized from selling the financial asset or the amount the University expects to realize by exercising its right to any collateral. If events and circumstances reverse in a future period, an impairment loss will be reversed to the extent of the improvement, not exceeding the initial impairment charge.

1. Significant accounting policies (continued):

(d) Derivative financial instruments:

The University is party to an interest rate swap agreement which is used to manage the exposure to fluctuations in interest rates. The University uses the accrual basis of accounting for hedges. Gains or losses realized on the settlement of the hedging item are deferred until the settlement of the hedged item.

At the inception of the hedging relationship, the University designates that hedge accounting will be applied. The University formally documents the hedging relationship between the hedging instruments and hedged item. At the inception of the hedge and throughout its term, the terms of the hedging item and hedged item are the same.

Hedge accounting is used only when the notional amount of the swap matches the principal amount of the hedged item, the fair value of the swap at the inception is $nil, the fixed rate is the same throughout the swap and the variable rate is based on the same index and includes the same or no adjustment and the debt instrument cannot be settled before maturity and the swap matures within two weeks of the maturity date of the debt.

(e) Investments:

Short-term investments are investments with a remaining term to maturity of one year or less and are intended to be converted to cash within one year. Short-term investments recorded at cost plus accrued income which together approximates fair value. Short-term investments includes cash and short-term investments held within pooled fund investments.

Long-term investments are carried at fair values. Changes in fair values are included in investment income.

Investments in publicly traded research entities not subject to significant influence are carried in investments at fair values. Changes in fair values are included in other income. Investments in private research entities are carried in other assets at cost, net of any impairment.

Externally restricted investment income to the extent it is allocated is included with deferred contributions and recognized as revenue when the related expenses are incurred.

Unrestricted investment income is recognized as revenue during the period in which it is earned. Investment income from internal endowments is recorded as unrestricted revenue and transferred to internal endowments.

(f) Inventories:

Campus stores, scientific stores, and the nuclear reactor inventories are recorded at the lower of cost and net realizable value. Other inventories are recorded at cost which is a reasonable estimate of net realizable value.

(g) Capital assets:

Capital assets are recorded at cost, or if donated, at fair value on the date of receipt. Amortization is recorded on the straight-line basis at the following annual rates:

Buildings and building components	2.5% to 10%
Decommissioning retirement costs	4%
Site improvements	5%
Library materials	20%
Computing systems	5% to 10%
Equipment, furnishings and vehicles	20%
Computing equipment	33.3%
Leasehold improvements	term of lease

Capital assets in progress are carried at cost, with no amortization recorded until such time as the assets are available for their intended use.

1. Significant accounting policies (continued):

(h) Collections and works of art:

The value of collections has been excluded from the statement of financial position except for a nominal value of $1. Donations of works of art are recorded as revenue at values based on appraisals and are expensed in the year received. Purchased collections are expensed in the year of acquisition.

(i) Contributed services:

The University acknowledges the receipt of donated services. Because of the difficulty of determining their fair value, donated services are not recognized in the financial statements.

(j) Ancillary enterprises:

Ancillary enterprises are self-sustaining operations which fund their own replacements and renovations of equipment and facilities. Substantially all of the net operating results are transferred annually from unrestricted net assets to internally restricted net assets.

(k) Employee future benefits:

The University maintains defined benefit registered and non-registered pension plans, a retirement incentive program and group registered retirement savings plans. Non-pension post-retirement and post-employment benefits plans are also provided. Financial information is disclosed in note 9.

- The University accrues its obligations for the defined benefit plans as the employees render the services necessary to earn the benefits. The current service cost and the finance cost for the year are charged to excess of revenues over expenses. The actuarial method of determining the accrued benefit obligations for the defined benefit plans uses the funding valuation method, which reflects the long-term nature of the plan and reflects management's estimates of investment yields, salary inflation, benefit cost trends and other factors.

- The University has elected to accrue its obligations and related costs for unfunded plans on a basis consistent with funded plans.

- Remeasurement and other items are recognized as a direct increase (decrease) to net assets and are not reclassified to the statement of operations in subsequent periods. Remeasurement and other items comprise the aggregate of: the difference between the actual return on plan assets and the return calculated using the discount rate used to determine the defined benefit obligation; the actuarial gains and losses; the effect of any valuation allowance in the case of a net defined benefit asset; past service costs; and any gains and losses arising from settlements and curtailments.

The University also makes regular contributions to its Group Registered Retirement Savings Plan ("RRSP"), administered by a third party, on behalf of each eligible employee. Group RRSP contributions are expensed in the year made.

1. Significant accounting policies (continued):

(l) Net assets:

Net assets are classified as follows:

Unrestricted: excess of revenues over expenses without specific restrictions.

Internally restricted:

- Employee future benefits: unfunded portion of pension and other non-pension retirement and post-employment benefits, net of funds set aside to meet estimated future obligations.
- Other internal reserves: as approved by the Board, amounts include unexpended departmental carry forward amounts for future expenditures or amounts set aside to settle future oriented obligations.

Equity in capital assets: funds invested in capital assets, exclusive of capital assets financed through long-term obligations or deferred capital contributions.

Internal endowments: unrestricted contributions including unspent investment income which have been restricted by action of the Board.

External endowments: external contributions, the principal of which is non-expendable pursuant to the restrictions by the donor, and income retained under the endowment capital protection policy.

(m) Endowment capital protection policy:

In order to protect the capital value of endowment investments, an endowment capital protection policy limits the amount of investment income allocated for spending to 4%, plus 1% administration spending, and requires the reinvestment of excess income earned (interest, dividends, realized and unrealized capital gains, net of investment expenses).

Should endowment spending commitments exceed allocated income, amounts will be drawn from accumulated net investment income balances to fund deficiencies.

For endowments without sufficient accumulated investment income, temporary encroachment on capital is permitted. The encroached amounts will be recovered from future investment returns.

(n) Decommissioning obligation:

The fair value of a future asset retirement obligation is recognized when a legal obligation for the retirement of tangible long-lived assets is incurred and a reasonable estimate thereof can be determined. Concurrently, the associated decommissioning costs are capitalized as a part of the carrying amount of the asset and amortized over its remaining useful life. The liability and the related asset may be adjusted periodically due to changes in estimates until settlement of the obligation.

(o) Foreign currency translation:

The University accounts for transactions in foreign currencies at the exchange rates in effect at the time of the transactions. At year end, monetary assets and liabilities in foreign currencies are translated at year end exchange rates. Foreign exchange gains and losses on investments have been included in investment income.

(p) Use of estimates:

The preparation of the financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the year. Significant items subject to the use of management estimates and assumptions include the valuation of financial instruments, the carrying amount of capital assets, the valuation allowance for receivables, the valuation of pension and other employee future benefits, provisions for contingencies, and the decommissioning obligation. Actual results could differ from those estimates.

1. Significant accounting policies (continued):

(q) Changes in accounting policies:

In March 2018, the Accounting Standards Board issued “Basis for Conclusions - Accounting Standards Improvements for Not-for-Profit Organizations” resulting in the introduction of three new handbook sections in the Accounting Standards for Not-for-Profit Organizations Part III of the Handbook, two of which applied to the University:

- Section 4433, Tangible capital assets held by not-for-profit organizations, which directs organizations to apply the accounting guidance of Section 3061, Property Plant and Equipment in Part II of the Handbook. In so doing, the new section requires that organizations annually assess for partial impairment of tangible capital assets, to be recorded where applicable, as a non-reversible impairment expense. In addition, where practical, to componentize capital assets when estimates can be made of the useful lives of the separate components. This new accounting standard policy was applied prospectively. The change did not have a material impact on these financial statements.

- Section 4441, Collections held by not-for-profit organizations, which defines a collection and directs organizations to record such assets on the statement of financial position at either cost or nominal value. This new accounting standard policy was adopted retrospectively. Collections will continue to be recorded at nominal value. The changes did not have a material impact on these financial statements.

- During the year, management has modified the accounting related to deferred contributions for capital acquisitions. All external contributions for capital programs and projects are initially recorded as Deferred Capital Contributions (note 10(b)) and are no longer recorded as Deferred Contributions. In addition, for capital acquisitions completed in 2020 and future years, amortization of Deferred Capital Contributions is allocated on the related asset rather than allocated based on proportionate spending on class of assets. The impact to prior years is not material and as such, this accounting policy change has been treated on a prospective basis.

2. Investments:

Details of investments are as follows:

(thousands of dollars)	2020		2019	
	Fair value	Cost	Fair value	Cost
Equities:				
Canadian	$ 127,871	$ 136,824	$ 179,581	$ 155,460
United States	297,946	159,434	280,600	138,720
Non-North American	212,248	192,286	221,138	176,507
	638,065	488,544	681,319	470,687
Fixed income	616,174	597,230	589,816	587,009
Other	59,747	47,279	58,406	45,408
	1,313,986	1,133,053	1,329,541	1,103,104
Short-term investments	183,222	183,195	203,902	203,892
	$ 1,497,208	$ 1,316,248	$ 1,533,443	$ 1,306,996

Investments are exposed to foreign currency risk, interest rate risk, and market volatility. The University manages these risks through policies and procedures in place governing asset mix, equity and fixed income allocations, and diversification among and within categories.

3. Government grants and other accounts receivable:

(thousands of dollars)	2020	2019
Government grants	$ 7,938	$ 6,975
Other	41,436	32,548
	49,374	39,523
Less allowance for doubtful accounts	5,987	5,416
Balance, end of year	$ 43,387	$ 34,107

4. Other investments:

Details of other investments are as follows:

(thousands of dollars)	2020	2019
McMaster Innovation Park (a)	$ 23,867	$ 19,271
Halton McMaster Family Health Centre (b)	4,720	4,720
Knightstone Capital Management IV Inc. (c)	750	-
Adiga Life Sciences Inc. (d)	-	120
Other investments (e)	675	-
	$ 30,012	$ 24,111

(a) McMaster Innovation Park:

The First Longwood Innovation Trust and The Gore District Land Trust ("Park") were created by the University in 2006 to develop an entity for research, education, training, innovation and commercialization.

Details of the investment are as follows:

(thousands of dollars)	2020	2019
Balance, beginning of year	$ 19,271	$ 17,234
Equity earnings	5,668	2,037
Distribution	(1,072)	-
Balance, end of year	$ 23,867	$ 19,271

Included in loans receivable are the following items:

(thousands of dollars)	2020	2019
Gore Hamilton Spectator building acquisition loan	$ 11,549	$ -
Gore demand loan	1,043	-
FLIT payroll deferral loan	300	-
	12,892	-

During the year, the University provided a demand loan to The Gore District Land Trust in the amount of $11,500,000 (2019 - $nil). The loan bears interest at a fixed rate of 2.54% and repayment is due in full by February 28, 2021.

The University provided a demand loan during the year to The Gore District Land Trust in the amount of $1,042,809 (2019 - $nil). The demand loan is interest free and is payable at any time at the sole discretion of the lender.

4. Other investments (continued):

(a) McMaster Innovation Park (continued):

During the year, the University provided a non-revolving demand loan to First Longwood Innovation Trust, operating as McMaster Innovation Park, in the amount of $1,500,000 (2019 - $nil). The amounts drawn shall be limited to $150,000 per month for a period of ten months. The loan bears interest at a fixed rate of 1.65% and repayment is due in full by December 31, 2020.

Included in Other assets in note 5 is a loan receivable from McMaster Innovation Park in the amount of $482,219 at April 30, 2020 (2019 - $500,000).

The University is party to a Debt Service Deficiency Agreement as disclosed in note 14(c). As part of the agreement, the University receives a fee of 0.5% on the monthly outstanding balance. For the year ended April 30, 2020, $99,371 (2019 - $103,192) in income was recorded by the University.

Included in rent expense for the University for the year ended April 30, 2020 is $2,996,570 (2019 - $2,966,570). Included in accounts receivable at April 30, 2020 is $820,495 (2019 - $648,020) receivable from the Park. Included in note 14(f) are $11,387,268 (2019 - $11,445,021) in operating lease commitments with the Park.

During the year the University provided payroll services at a fee which amounted to $13,200 (2019 - $13,200) and earned interest income of $28,950 (2018 - $22,548) on the accounts receivable balance.

Pertinent information from the Park's combined financial statements are as follows:

(thousands of dollars)	December 31, 2019	December 31, 2018
Total assets	$ 113,785	$ 110,889
Total liabilities	$ 88,319	$ 89,041
Total deferred capital grants	1,599	2,606
Total trusts' equity	23,867	19,241
	$ 113,785	$ 110,889
Results of operations:		
Total revenues	$ 14,034	$ 12,900
Total expenses	12,260	10,863
Earnings before the undernoted item	$ 1,774	$ 2,037
Gain on exchange of land	2,089	-
Other revenue	1,805	-
Net earnings	$ 5,668	$ 2,037
Cash flows:		
Provided by operating activities	$ 1,645	$ 204
Used in financing and investing activities	(1,531)	(16)
Increase in cash	$ 114	$ 188

(b) Halton McMaster Family Health Centre:

The investment in the Halton McMaster Family Health Centre represents the University's contribution of the base costs to construct the building.

4. Other investments (continued):

(c) Knightstone Capital Management IV Inc.:

The $750,000 is McMaster's equity contribution to the partnership for the Graduate Student Residence Development at 191 King Street West, Hamilton. The contribution is to fund various pre-construction development costs of the project that have been incurred for the mutual benefit of the partnership.

(d) Adiga Life Sciences Inc.:

During the year, the investment in Adiga Life Sciences Inc. ("Adiga") of $120,000 was written off. Adiga has ceased operations and distributed its remaining net assets in 2019. The University's share of dividends from Adiga during the year ended April 30, 2020 amounted to $nil (2019 - $883,000). McMaster has no financial liability associated with the Adiga wind-up.

Financial information from Adiga Life Sciences Inc.'s financial statements are as follows:

(thousands of dollars)	August 31, 2019	August 31, 2018
Total assets	$ 11	$ 246
Total liabilities	$ 17	$ 6
Total equity	(6)	240
	$ 11	$ 246
Results of operations:		
Total revenue	$ 2	$ 10
Total expenses	63	370
Net loss	$ (61)	$ (360)

(e) Other investments:

Other investments consist of shares in privately held companies in which McMaster does not have significant control or influence, recorded at cost.

(f) OSCAR EMR:

Financial information from OSCAR EMR's financial statements are as follows:

(thousands of dollars)	December 31, 2019	December 31, 2018
Total assets	$ 226	$ 294
Total liabilities	$ 1,685	$ 1,766
Net deficiency	(1,459)	(1,472)
	$ 226	$ 294
Results of operations:		
Total revenue	$ 636	$ 682
Total expenses	623	594
Net earnings	$ 13	$ 88

4. Other investments (continued):

(f) OSCAR EMR (continued):

Oscar EMR (the "Organization") has a plan in place to dissolve prior to the end of its upcoming fiscal year. This plan has been approved by the Directors of the Organization and is expected to be carried out during fiscal 2020. Based on the nature of the Organization's remaining assets and liabilities, there are no indications that would suggest impairment indicators exist. The amounts owing to McMaster from the Organization have either been repaid or expensed in prior years. McMaster's investment in the Organization has been carried at a zero value, and there is no liability as a result of the Organization's dissolution. Any amount realized on dissolution is not expected to be material.

5. Other assets:

Details of other assets are as follows:

(thousands of dollars)	2020	2019
Loans receivable (a)	$ 697	$ 752
Collections (b)	-	-
	$ 697	$ 752

(a) Loans receivable:

The University has a loan receivable from a lessee in the amount of $214,912 for lease fit out costs as at April 30, 2020 (2019 - $251,754). The loan bears interest at a rate of 0% per annum and is payable over 10 years beginning in February 2016.

The University has a loan receivable from McMaster Innovation Park in the amount of $482,219 (2019 - $500,000). The loan bears interest at a fixed rate of 5.75% and is repayable in monthly payments of $4,113 over 15 years, beginning in May 2019.

(b) Collections:

The McMaster Museum of Art has significant collections of works of art and coins. Donations of works of art during the year amounted to $5,000 (2019 - $170,000).

6. Capital assets:

(thousands of dollars)	Cost	Accumulated amortization	2020 Net
Land	$ 87,040	$ -	$ 87,040
Buildings and building components	1,407,219	486,154	921,065
Decommissioning retirement costs	3,214	968	2,246
Site improvements	30,128	15,632	14,496
Leasehold improvements	62,500	21,364	41,136
Library materials	199,418	174,874	24,544
Equipment, furnishings and vehicles	414,500	351,484	63,016
Computing systems and computing equipment	145,510	90,598	54,912
	$ 2,349,529	$ 1,141,074	$ 1,208,455

6. Capital assets (continued):

(thousands of dollars)	Cost	Accumulated amortization	2019 Net
Land	$ 84,389	$ -	$ 84,389
Buildings building components	1,336,490	456,823	879,667
Decommissioning retirement costs	3,188	858	2,330
Site improvements	29,166	14,434	14,732
Leasehold improvements	59,691	16,530	43,161
Library materials	189,618	165,609	24,009
Equipment, furnishings and vehicles	409,650	356,876	52,774
Computing systems and computing equipment	143,236	85,505	57,731
	$ 2,255,428	$ 1,096,635	$ 1,158,793

Included in buildings is $62,576,000 (2019 - $152,125,000) representing buildings currently under construction and not available for use or subject to amortization. Included in computing systems and computing equipment is $nil (2019 - $1,770,000) representing software currently under development and not available for use or subject to amortization.

7. Accounts payable and accrued liabilities:

Included in accounts payable and accrued liabilities are government remittances payable, which includes amounts payable for payroll related taxes of $3,257,000 (2019 - $4,415,000).

8. Long-term obligations:

Details of long-term obligations are as follows:

(thousands of dollars)	Maturity	Interest rate	Current portion	Non-current portion	2020 Total outstanding	2019 Total outstanding
Long term debt:						
Bank term loan (a)	May 2033	floating	709	13,314	14,023	14,688
Debentures (b)	Oct 2052	6.15%	-	120,000	120,000	120,000
Debentures (c)	Nov 2065	4.105%	-	120,000	120,000	120,000
			709	253,314	254,023	254,688
Decommissioning obligations (d)			-	14,383	14,383	13,718
			$ 709	$ 267,697	$ 268,406	$ 268,406

Principal payments due in each of the following five years are as follows (in thousands of dollars):

2021	$ 709
2022	756
2023	805
2024	858
2025	915

(a) The bank term loan is unsecured and is being amortized over 30 years. The outstanding loan amount is subject to a 30 year interest rate swap agreement on an original notional principal of $20,954,441 with the banker whereby the University receives a floating interest rate while paying a fixed (10 year) rate of 6.384%.

8. Long-term obligations (continued):

(b) The debentures, which are unsecured, bear interest at 6.15% payable semi-annually in April and October. The proceeds of the issue are being used to finance various capital projects.

A voluntary sinking fund in internally restricted net assets, under other internal reserves (note 11(k)), has been established to provide funds to repay the debenture principal upon maturity. An annual increase to the sinking fund is charged to operations and other annual increases represent interest income of the fund. The value of the fund at April 30, 2020 amounted to $21,531,000 (2019 - $22,021,000).

(c) The debentures, which are unsecured, bear interest at 4.105% payable semi-annually in May and November. The proceeds of the issue are being used to finance various capital projects.

A voluntary sinking fund in internally restricted net assets, under other internal reserves (note 11(k)), has been established to provide funds to repay the debenture principal upon maturity. An annual increase to the sinking fund is charged to operations and other annual increases represent interest income of the fund. The value of the fund at April 30, 2020 amounted to $12,421,000 (2019 - $12,712,000).

(d) It is expected that the nuclear reactor will be decommissioned at some undeterminable future date. Under an agreement with the Canadian Nuclear Safety Commission (CNSC), a trust fund has been established which requires annual funding contributions to provide for the decommissioning costs. As at April 30, 2020, the fair value of the trust funds amounted to $11,701,000 (2019 - $11,697,000). The net present value of the estimated cost for decommissioning at April 30, 2020 is $13,594,000 (2019 - $12,955,000) using risk free rates ranging between 4.0% and 5.1%.

During fiscal 2015, an additional decommissioning obligation related to non-reactor radioactive materials was recognized. The obligation was recognized based on an estimated useful life of 25 years and using a risk free rate of 4.0%. At April 30, 2020, the amount of the obligation was $789,000 (2019 - $763,000), an increase of $26,000 to reflect changes in the number of non-reactor radioactive materials in service. The CNSC does not require that a trust fund be established to satisfy this obligation, however, an internal reserve to offset this obligation is included in Other internal reserves.

(e) The University has in place an interest rate swap agreement for 30 years which expires in 2033. Under the terms of the agreement, the University agrees to receive a floating interest rate on the loan (note 8(a)) while paying a fixed rate of 6.384%. The use of the agreement effectively enables the University to convert the floating rate interest obligation of the loan into a fixed rate obligation and thus manage its exposure to interest rate risk.

The notional and fair values of the interest rate swap agreement is as follows:

(thousands of dollars)	2020		2019	
	Notional value	Fair value	Notional value	Fair value
30-year interest rate swap	$ 14,023	$ (5,468)	$ 14,688	$ (4,609)

The change in fair value of the swap for the year ended April 30, 2020 is ($859,000) (2019 - ($168,000)).

9. Employee future benefits:

The University maintains three contributory defined benefit registered pension plans, one for full-time hourly employees and two for salaried employees (Plan 2000 and Original Plan). The plan for hourly employees was closed to new members on March 15, 2010. The Original Plan was closed to new members on January 14, 2003 and Plan 2000 remains open to new members. The defined benefit registered pension plans provide a pension for life based on the best average earnings of the member and years of pensionable service in the plan. The University also maintains both defined contribution and non-contributory defined benefit supplementary non-registered pension plans, a retirement incentive program and a group RRSP.

9. Employee future benefits (continued):

The University additionally maintains a non-pension post-retirement benefit plan which provides health, dental and life insurance benefits to retirees, a post-employment benefit plan which provides health benefits to employees on long-term disability and a special retirement arrangement for some senior administrators.

The accrued benefit obligations are determined by independent actuaries and the fair values of the plans' assets are recorded as at April 30th.

(a) Information on the accrued benefit liability is as follows:

(thousands of dollars)		2020		
	Pension			
	Registered	Supplemental	Other	Total
Accrued benefit obligation	$ 2,317,672	$ 72,237	$ 277,215	$ 2,667,124
Fair value of plan assets	2,218,678	-	-	2,218,678
Funded status - deficiency	$ (98,994)	$ (72,237)	$ (277,215)	$ (448,446)

(thousands of dollars)		2019		
	Pension			
	Registered	Supplemental	Other	Total
Accrued benefit obligation	$ 2,242,188	$ 67,609	$ 274,681	$ 2,584,478
Fair value of plan assets	2,227,188	-	-	2,227,188
Funded status - deficiency	$ (15,000)	$ (67,609)	$ (274,681)	$ (357,290)

(b) Information on the benefit expense is as follows:

(thousands of dollars)		2020		
	Pension			
	Registered	Supplemental	Other	Total
Current service cost	$ 34,104	$ 35	$ 7,675	$ 41,814
Interest cost, net	886	3,816	15,274	19,976
	$ 34,990	$ 3,851	$ 22,949	$ 61,790

(thousands of dollars)		2019		
	Pension			
	Registered	Supplemental	Other	Total
Current service cost	$ 33,373	$ 37	$ 7,631	$ 41,041
Interest (income) cost, net	(4,493)	3,458	13,769	12,734
	$ 28,880	$ 3,495	$ 21,400	$ 53,775

9. Employee future benefits (continued):

(c) Information on remeasurements and other items is as follows:

(thousands of dollars)	2020			
	Pension			
	Registered	Supplemental	Other	Total
Investment loss	$ (112,877)	$ -	$ -	$ (112,877)
Actuarial gain (loss) on accrued benefit obligation	3,399	(6,590)	13,334	10,143
	$ (109,478)	$ (6,590)	$ 13,334	$ (102,734)

(thousands of dollars)	2019			
	Pension			
	Registered	Supplemental	Other	Total
Investment gain	$ 44,427	$ -	$ -	$ 44,427
Actuarial loss on accrued benefit obligation	(167,128)	(8,918)	(12,907)	(188,953)
	$ (122,701)	$ (8,918)	$ (12,907)	$ (144,526)

(d) Information on the pension plan assets includes the following:

	Percentage of fair value of total plan	Target allocation percentage
Equity securities	64.7%	65.0%
Debt securities	34.8%	35.0%
Other	0.5%	0.0%

(e) The significant actuarial assumptions adopted in measuring the accrued benefit obligations are as follows:

	Pension	Other
Discount rate	5.58%	5.54%
Rate of compensation increase	3.98%	-

(f) The significant actuarial assumptions adopted in measuring the net benefit expense are as follows:

	Pension	Other
Discount rate	5.58%	5.56%
Rate of compensation increase	3.98%	-

9. Employee future benefits (continued):

(g) Details of annual contributions and benefits paid are as follows:

(thousands of dollars)	2020		2019	
	Pension	Other	Pension	Other
Employer contributions	$ 66,306	$ 7,081	$ 62,243	$ 7,347
Employee contributions	28,286	-	27,580	-
Benefits paid	115,221	7,081	106,380	7,347

(h) For measurement purposes, a 4.61% annual rate of increase in per capita medical cost was assumed for 2019, grading down to 4.0% per annum in and after 2031. For per capita dental costs, an annual rate of increase of 4.0% per annum was assumed.

(i) Details of actuarial valuation completion for funding purposes and filing dates of the respective plans are as follows:

- hourly rated employee pensions: completed as at July 1, 2019. An additional valuation was completed as at January 1, 2020 to include additional employer contributions and improve required payments over the next three years.
- salaried employees' pensions: completed as at July 1, 2018, the next required filing date is July 1, 2021.
- other (post-retirement benefit): completed as at March 31, 2019; the next valuation date is March 31, 2022.
- other (post-employment and retirement allowance): completed as at April 30, 2020.

The results of valuations not completed as of April 30, 2020, have been extrapolated to April 30, 2020, which is the measurement date used to determine the accrued benefit obligation for all employee future benefit plans.

The July 1, 2018 valuation of salaried plans was completed using the Pension Benefit Act definition of closed plan. The definition of closed plan was amended under the Act in 2019 such that Plan 2000 no longer meets the closed plan definition and will be filed as an open plan at July 1, 2021. This change is expected to reduce the plan liabilities and the funding requirements for the Provision for Adverse Deviation upon filing the next actuarial valuation.

(j) In 2008, the University created a group RRSP for certain types of new employees. University and employees' contributions in 2020 amounted to $4,144,000 (2019 - $3,356,000).

(k) The University has internal reserves set aside in the amount of $116,252,000 (2019 - $93,816,000) for the accrued benefit obligation of the non-pension post-retirement benefit plan included in note 11(b).

10. Deferred contributions:

(a) Deferred for future expenses:

Deferred contributions represent external contributions restricted for research and trust expenses to be incurred in subsequent fiscal years. Details of the change in deferred contributions are as follows:

(thousands of dollars)	2020	2019
Balance, beginning of year	$ 363,168	$ 359,191
Deferred and capital contributions (2019 only) received	334,774	345,175
	697,942	704,366
Less:		
Amounts recognized as revenue	(304,637)	(308,074)
Deferred capital contributions transfer	(22,205)	(33,124)
Balance, end of year	$ 371,100	$ 363,168

Deferred contributions consist of the following:

(thousands of dollars)	2020	2019
Research grants and contracts	$ 233,612	$ 226,036
Donations, other grants and investment income	114,511	106,505
Capital grants and donations	-	7,911
Other restricted funds	22,977	22,716
	$ 371,100	$ 363,168

(b) Deferred capital contributions:

Deferred capital contributions represent the unamortized amount of donations and grants received for the purchase of capital assets. Unspent deferred capital contributions are recorded as amounts not subject to amortization until such time as the capital expenditures are incurred. Details of the change in the unamortized deferred capital contributions are as follows:

(thousands of dollars)	2020	2019
Balance, beginning of year	$ 505,591	$ 511,302
Add: contribution received and transfers	26,844	33,124
Less: amount amortized to revenue	(40,773)	(38,835)
Balance, end of year	$ 491,662	$ 505,591

Deferred capital contributions consist of the following:

(thousands of dollars)	2020	2019
Amounts subject to amortization	$ 484,980	$ 505,591
Amounts not subject to amortization	6,682	-
	$ 491,662	$ 505,591

11. Internally restricted net assets:

Details of internally restricted net assets are as follows:

(thousands of dollars)	2020	2019
Pensions (a)	$ (198,301)	$ (106,244)
Other retirement and post employment benefit plans (net) (b)	(160,963)	(180,865)
Employee future benefits	(359,264)	(287,109)
Unexpended departmental carryforwards (c)	196,580	167,657
Unexpended research funds (d)	44,836	44,271
Employee benefit (e)	10,360	11,630
Ancillaries (f)	10,300	9,642
Specific purpose (g)	82,787	98,497
Research investments (h)	1,769	3,405
MIP investment (i)	4,965	-
Other (j)	14,834	14,491
Sinking funds (k)	33,952	34,733
Internally financed capital projects (l)	(110,535)	(69,860)
Capital reserves (m)	64,495	112,444
Facilities services projects (n)	102,600	19,625
Other internal reserves	456,943	446,535
	$ 97,679	$ 159,426

(a) Pensions: the net unfunded pension liabilities, determined by a third party actuary, using the funding methodology.

(b) Other retirement and post employment benefit plans (net): unfunded portion of health, dental and life insurance benefits for retirees and employees on long term disability of $277,215,000 (2019 - $274,681,000), net of internal reserves of $116,252,000 (2019 - $93,816,000) for the accrued benefit obligation of the non-pension post-retirement benefit plan (note 9(k)).

(c) Unexpended departmental carryforwards: departmental operating reserves available for spending by faculties to protect against possible adverse circumstances such as changes in student enrolment (tuition fee impacts) and/or operating grant reductions.

Departmental and ancillary carryforwards in (c) and (f) do not reflect the share of future obligations to the related employees for settlement of pensions and other post-employment benefits costs as outlined in items (a) and (b). Allocation of these obligations to the related carryforward would reduce the available balances as follows:

(thousands of dollars)	2020	2019
Unexpended departmental carryforwards (c)	$ 196,580	$ 167,657
Ancillaries (f)	10,300	9,642
Employee benefit (e)	10,360	11,630
Pensions (a)	(198,301)	(106,244)
Other retirement and post employment benefit plans (b)	(160,963)	(180,865)
	$ (142,024)	$ (98,180)

(d) Unexpended research funds: represent research residual funds and other research contributions specifically to fund research operations, facilities and projects.

(e) Employee benefit: funds collected from departments toward benefit related pension and non-pension payments not yet due in the fiscal period.

(f) Ancillaries: funds accumulated to maintain existing infrastructure and/or invest in new infrastructure or projects associated with ancillary operations.

11. Internally restricted net assets (continued):

(g) Specific purpose: funds to mitigate the risks associated primarily with volatility in income from equity investments, representing accumulated realized and unrealized investment earnings (losses) after commitments to the operating fund. The primary use of this reserve is to supplement endowment funding to support student bursaries, scholarships, and other expenditures when investment income is insufficient. It may also be used to fund other strategic reserves such as the post-retirement benefits and capital reserves. In fiscal 2020, $15 million was transferred to each of the post-retirement benefit reserve and capital reserve as part of the long term funding strategy for these commitments.

(h) Research investments: represents the fair value of publicly held research entities, including accumulated realized and unrealized investment earnings, as well as the cost of privately held research entities.

(i) MIP investment: represents accumulated investment earnings from the investment in MIP.

(j) Other: Non-cash reserve which primarily represents timing differences between cash accounting and accrual accounting.

(k) Sinking funds: funds set aside to settle debt bullet repayments of $120 million due in each of 2052 and 2065.

(l) Internally financed capital projects: long term loans for capital projects which have been internally financed by capital reserves as outlined in note 11(m).

Details of the internally financed capital projects which have various recovery terms and periods are as follows:

(thousands of dollars) Project	Funding source	April 30, 2020 balance
Stadium and Parking Project	Parking fees, pledges, fundraising	$ (12,931)
Les Prince Residence	Ancillary operations	(12,644)
David Braley Athletic Centre	Student levies, pledges, fundraising	(3,473)
Peter George Centre for Living and Learning	Ancillary operations	(46,094)
McMaster Automotive Resource Centre (MARC)	Various	(5,647)
McMaster University Medical Centre (MUMC)	Various	(2,938)
Comprehensive Energy Reduction Program	Various	(24,482)
Biomedical Engineering and Advanced Manufacturing (BEAM)	Various	(889)
Other	Various	(1,437)
		$ (110,535)

(thousands of dollars) Project	Funding source	April 30, 2019 balance
Stadium and Parking Project	Parking fees, pledges, fundraising	$ (14,046)
Les Prince Residence	Ancillary operations	(13,416)
David Braley Athletic Centre	Student levies, pledges, fundraising	(4,781)
McMaster Automotive Resource Centre (MARC)	Various	(6,112)
McMaster University Medical Centre (MUMC)	Various	(3,437)
Comprehensive Energy Reduction Program	Various	(25,051)
Biomedical Engineering and Advanced Manufacturing (BEAM)	Various	(1,089)
Other	Various	(1,928)
		$ (69,860)

(m) Capital reserves: funds for planned capital projects committed and confirmed by governance approvals, as outlined in note 14(d).

(n) Facilities services projects: holding accounts for temporarily unspent funds for construction projects in progress.

12. Equity in capital assets:

The equity in capital assets is calculated as follows:

(thousands of dollars)	2020	2019
Capital assets	$ 1,208,455	$ 1,158,793
Less amounts financed by:		
Net long-term obligations	(253,097)	(253,739)
Deferred capital contributions subject to amortization	(484,980)	(505,591)
	$ 470,378	$ 399,463

Details of the transfer for capital transactions are as follows:

(thousands of dollars)	2020	2019
Repayment of long-term debt	$ 665	$ 624
Capital asset purchases from operating, net of disposals	107,737	114,894
	$ 108,402	$ 115,518

13. Endowments:

(a) Internal:

Details of the change in internally restricted endowments are as follows:

(thousands of dollars)	2020	2019
Balance, beginning of year	$ 150,410	$ 145,777
Donations	248	142
Investment (loss) income	(3,840)	8,029
Net transfers and expenses	(5,485)	(3,538)
Balance, end of year	$ 141,333	$ 150,410

Included in internal endowments is an amount of $64,392,000 (2019 - $68,977,000) reflecting the legacy of Dr. H. L. Hooker and $60,435,000 (2019 - $64,141,000) related to the Salaried Pension Plan surplus withdrawal from 2003. A portion of annual investment income generated from this capital is used to fund programs that enrich the academic achievements of the University as approved annually by the Board.

13. Endowments (continued):

(b) External:

Details of the change in externally restricted endowments are as follows:

(thousands of dollars)		2020		2019
Balance, beginning of year	$	500,819	$	483,335
External contributions		8,501		10,218
Income (withdrawn) retained - capital protection policy		(33,302)		7,266
Balance, end of year	$	476,018	$	500,819

Investment loss on external endowments amounted to $14,671,000 (2019 - $24,240,000 income). In accordance with the endowment capital protection policy, this loss/income is withdrawn from/added to net endowment assets, together with reduction of the amount made available for spending of $18,759,000 (2019 - $17,680,000), plus net transfers of $129,000 (2019 - $706,000). The amount made available for spending is recorded as investment income in the statement of operations.

14. Commitments and contingencies:

(a) Canadian Universities Reciprocal Insurance Exchange:

The University is a member of the Canadian Universities Reciprocal Insurance Exchange "CURIE", a self-insurance cooperative comprised of approximately sixty Canadian universities and colleges. CURIE insures property damage, general liability and errors and omissions risks. If premiums collected are insufficient to cover expenses and claims, the University may be requested to pay additional amounts.

(b) Legal claims:

The University is involved in certain legal matters and litigation in the normal course of operations, the outcomes of which are not presently determinable. The loss, if any, from these contingencies will be accounted for in the periods in which the matters are determined. Management is of the opinion that these matters are mitigated by adequate insurance coverage.

(c) Debt Service Deficiency Agreement:

The University has guaranteed the scheduled principal and interest payments, up to $23 million of long-term debt extended to The First Longwood Innovation Trust, in the event of default. The total amount of debt outstanding and subject to the Debt Service Deficiency Agreement at April 30, 2020 was $19.3 million (2019 - $20.2 million). Since the agreement may expire without being drawn upon, it does not necessarily represent future cash requirements. As of April 30, 2020, no obligation exists under the agreement and as a result, no amount has been recognized as a liability on the statement of financial position.

(d) Capital commitments:

The estimated cost to complete approved major capital and system projects amounted to $294.4 million at April 30, 2020 (2019 - $276.3 million). The major commitments are as follows: DeGroote School of Business expansion ($81.4 million), Athletics and Recreation expansion ($48.7 million) and Commercialization of Research ($42.7 million).

14. Commitments and contingencies (continued):

(e) Energy Retrofit Agreement:

In 2007, the University signed a multi-year agreement with Hamilton Health Sciences Corporation ("HHSC") when HHSC undertook a significant energy retrofit project at the McMaster University Medical Centre. Under the terms of the agreement, the University is required to pay approximately 40% of the related costs of the retrofit project. At April 30, 2020, the University's remaining share of the costs are estimated to be $8.6 million (2019 - $9.5 million). Payments to HHSC will take place up to 2029.

(f) Leases:

The University has entered into operating lease agreements for office equipment and buildings. The total annual minimum lease payments in each of the next five years are approximately as follows:

(thousands of dollars)	
2021	$ 4,341
2022	2,933
2023	3,629
2024	3,701
2025	3,707

(g) McMaster Main Street Student Residence:

The University is working with a private developer to provide an approximately 1,400 bed undergraduate residence that includes learning, research and additional ancillary university spaces along Main Street West on lands McMaster owns. The project land once developed will be an extension of main campus. At April 30, 2020, $16.3 million (2019 - $16.3 million) is recorded in land. The project is expected to be completed by 2023/24. The residence will be managed, operated and used by the University to support its mission.

(h) Grad Residence and Parking Garage:

The University is working with a private developer to provide a new graduate residence with approximately 630 beds and a 265 space parking garage in downtown Hamilton. The residence project is designed to be a public-private partnership project, for which the University is in ongoing negotiations. The project is expected to be completed by 2022/23. To support this project the University has entered into a 99 year land lease effective October 1, 2019, with four 25 year renewal options.

(i) Research Commercialization:

In June 2017 the Board approved an investment of up to $25 million in facilities at MIP, including up to $5 million in in-kind rental space and rent subsidies over the next five years in exchange for leases and other financial arrangements, which may include equity interest in one or more of the entities renting the space. The Board approved additional investments of up to $25 million in June 2018 and up to $13 million in June 2020. These facilities investments are in support of research commercialization opportunities for early stage commercialization and established businesses. Construction on this space has begun and third party tenants will begin to move into the space in 2020. $17.3 million of the total $63 million approved investment has been spent as of April 30, 2020 (2019 - $4.3 million).

15. Other income:

Details of other income are as follows:

(thousands of dollars)	Major Sources		2020		2019
Faculty of Health Sciences	Non-degree educational fees, specifically funded programs, international postgraduates stipends, space/equipment rentals, other student fees	$	57,821	$	58,963
Other Faculties	Non-degree educational fees, international postgraduate stipends, space/equipment rentals, other student fees		10,218		10,542
Academic Services	Contracts and patent royalties, registrar administration fees		10,724		14,098
Student Services	Athletics and Recreation memberships and user fees		20,237		21,533
Miscellaneous	Nuclear reactor sales, application fees, late payment fees, sales of utilities and other departmental sales		19,800		22,510
Other Investment Income	McMaster Innovation Park, Adiga Life Sciences Inc. and all private or publicly traded entities.		3,383		973
		$	122,183	$	128,619

16. Related party transactions:

In addition to certain transactions and balances disclosed in note 4, the University received funds of approximately $2,142,000 (2019 - $1,199,000) during the year from fundraising entities.

17. Financial risks and concentration of credit risk:

(a) Liquidity risk:

Liquidity risk is the risk that the University will be unable to fulfill its obligations on a timely basis or at a reasonable cost. In managing liquidity risk, the University focuses on liquid resources available for operations. The University's objective is to have sufficient liquid resources to continue operating even if adverse financial events were to occur and to provide it with the flexibility to take advantage of opportunities that will advance its mission. The need for sufficient liquid resources is considered in the preparation of its annual and capital budgets and by monitoring and forecasting of cash flows. The University has a $75 million line of credit. The credit facility can be used for general corporate purposes including shorter term funding in the event of a short-term deficiency in cash flow. The line of credit was not used in 2020. In addition, the University could issue unsecured debentures or enter into other long term debt to assist in the financing of capital projects. There has been no material change to the risk exposure from 2019.

(b) Credit risk:

Credit risk refers to the risk that a counterparty may default on its contractual obligations resulting in a financial loss. The University is exposed to credit risk with respect to accounts receivable. The University assesses, on a continuous basis, accounts receivable and provides for any amounts that are not collectible in the allowance for doubtful accounts (note 3).

(c) Interest rate risk:

The University is exposed to interest rate risk on its fixed interest rate financial instruments. Further details about the fixed rate investments are included in note 2 and the long-term obligations are included in note 8.

(d) Currency risk:

Investments denominated in foreign currency are exposed to currency risk as the price in local terms in foreign markets is converted to Canadian dollars to determine fair value. The University's overall currency positions are monitored on a daily basis by the portfolio manager. There has been no material change to the risk exposure from 2019.

18. Ontario student opportunity trust fund:

External endowments include grants for funding student aid provided by the Government of Ontario's Student Opportunity Trust Fund matching program. Under the program, the Province has matched qualifying external endowment donations received with equal contributions.

(a) Ontario Student Opportunity Trust Fund - Phase I

The following schedule represents the changes for the years ended April 30th, in the first phase of the Ontario Student Opportunity Trust Fund (OSOTF I) balance:

(thousands of dollars)	2020	2019
Endowment balance, beginning of year	$ 32,163	$ 32,147
Investment income retained for protection of capital	540	333
Investment income transferred to expendable income	(432)	(317)
Endowment balance, end of year	32,271	32,163
Funds available for awards, beginning of year	-	-
Investment income	1,583	1,546
Bursaries awarded (2020 - 1,993 awards; 2019 - 1,775 awards)	(2,015)	(1,863)
Investment income transferred from endowment balance	432	317
Funds available for awards, end of year	-	-
Total funds at book value	$ 32,271	$ 32,163

The market value of the endowment as at April 30, 2020 was $37,157,000 (2019 - $39,727,000).

(b) Ontario Student Opportunity Trust Fund - Phase II

The Ontario government requires separate reporting of balances as at April 30th, and details of the changes in the balances for the period then ended with respect to the second phase of the Ontario Student Opportunity Trust Fund (OSOTF II) of McMaster University including Divinity College.

The following is the schedule of changes for the years ended April 30th:

(thousands of dollars)	2020	2019
Endowment balance, beginning of year	$ 6,178	$ 6,143
Investment income (transferred to) retained for protection of capital	(160)	35
Endowment balance, end of year	6,018	6,178
Funds available for awards, beginning of year	72	69
Investment income for expenditures	289	279
Bursaries awarded (2020 - 377 awards; 2019 - 353 awards)	(305)	(276)
Funds available for awards, end of year	56	72
Total funds at book value	$ 6,074	$ 6,250

The market value of the endowment as at April 30, 2020 was $6,894,000 (2019 - $7,398,000).

19. Ontario trust for student support:

External endowments include grants for funding student aid provided by the Government of Ontario's Ontario Trust for Student Support (OTSS) matching program. Under the program, the Province will provide an equivalent matching contribution for external endowment contributions made to a specified ceiling.

The following is the schedule of changes in the endowment and expendable balances for the years ended April 30th:

(thousands of dollars)	2020	2019
Endowment balance, beginning of year	$ 39,915	$ 39,539
Investment income (transferred to) retained for protection of capital	(893)	376
Endowment balance, end of year	39,022	39,915
Funds available for awards, beginning of year	935	1,056
Investment income for expenditures	1,746	1,644
Bursaries awarded (2020 - 774 awards; 2019 - 732 awards)	(1,840)	(1,765)
Funds available for awards, end of year	841	935
Total funds at book value	$ 39,863	$ 40,850

The market value of the endowment as at April 30, 2020 was $49,994,000 (2019 - $53,051,000).

20. Pledges:

Outstanding but unrecorded pledges for donations and other fund raising amounted to approximately $79,062,000 (2019 - $78,871,000).

21. COVID-19:

In March 2020, the World Health Organization declared the spread of coronavirus ("COVID19") to constitute a global pandemic. This has resulted in governments worldwide enacting emergency measures to combat the spread of the virus including travel restrictions in and out of and within Canada, barring gathering of people and requirements to stay at home. These restrictions impacted the operations of the University and resulted in the closure of physical premises of all post-secondary institutions. The impact of COVID-19 also adversely impacted global commercial activity and contributed to the significant volatility in certain equity and debt markets. This led to significant volatility and declines in the global public equity markets and it is uncertain how long this volatility will continue.

The extent of such adverse effects on the University's business and financial and operational performance are uncertain and difficult to assess. The financial impacts will depend on future developments, including the duration, spread and severity of the outbreak, physical distancing requirements, the duration and geographic scope of related travel advisories and restrictions, and the extent of disruptions to businesses globally and its related impact on the economy.

As at April 30, 2020, the University did not have significant adjustments to reflect the possible future impact of COVID-19. Investments are recorded at fair value which included the impact on financial markets as at year-end and extra emphasis was put on the collectability of receivables and other estimates within the financial statements as at April 30, 2020. Management has assessed the going concern assumptions and believes there are no issues, given the University has a strong working capital base and access to liquid resources to support operations in the coming year. Given the outcome and timeframe to a recovery from the current pandemic is highly unpredictable, it is not practicable to estimate and disclose its financial effect on future operations at this time.

22. Comparative figures:

Certain comparative figures for 2019 have been reclassified to conform with the financial statement presentation adopted in the current year.

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McMaster University

Financial Affairs
1280 Main Street West
Hamilton, ON L8N 1E9

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