POLICY NAME	**FUNDING POLICY OF THE MCGILL UNIVERSITY PENSION PLAN**
Approving Body	Board of Governors
Initial Approval Date	December 5, 2019
Date of last review	March 23, 2023
Date of next review	March 2028
Executive Sponsor	Vice-Principal (Administration and Finance)

Related Documents	Statement of Investment Policy

1. INTRODUCTION

The Funding Policy of the McGill University Pension Plan (“Policy”) is hereby established by McGill University as plan sponsor of the McGill University Pension Plan (“Plan”).

The Plan is funded by contributions made by active members and the University as well as investment returns. This Policy, which takes a long-term focus over short-term perspectives, is intended to establish appropriate funding principles, which take into account the main factors which affect the management of risks inherent in a hybrid pension plan and provides guidance to the University, the plan actuary and the Pension Administration Committee (“PAC”) in the performance of their respective duties.

This Policy has been drafted in compliance with the Quebec Supplemental Pension Plans Act and Regulations (“Act”) and also takes into consideration Guideline No. 7 of the Canadian Association of Pension Supervisory Authorities, “Pension Plan Funding Policy Guideline”.

As the body empowered to amend the Plan, the Board of Governors of McGill University is responsible for adopting the Policy, and shall seek assistance from the University, plan actuary and PAC as required. The PAC in its capacity of administrator of the Plan assumes responsibility for monitoring that funding of the Plan is undertaken in accordance with this policy.

The Policy shall be reviewed at least every five years as may be required due to changing conditions which may include, the financial situation of the University or the Plan, changing Plan provisions, changing legislation, changing member demographics or other similar circumstances.

The Policy came into force on December 5, 2019 and is hereby amended effective March 23, 2023.

2. CHARACTERISTICS OF THE EMPLOYER

A research-intensive, doctoral university incorporated in 1821 and operating on two campuses in Montreal, McGill University is one of the Canada's most prominent universities in enrollment and research capacity. It is a comprehensive university, with 21 faculties and professional schools offering more than 300 programs of study, including engineering, medicine, business, and law. It also has affiliations with a network of nine teaching hospitals. The University benefits from an extremely strong enterprise profile, with an excellent student demand and market positions, and good management and governance practices.

In particular, it demonstrates good financial management with policies and procedures in place to adequately mitigate risks. It prepares a thorough multiyear operating budget, which guides its spending decisions, as well as standard audited and timely unqualified annual financial statements. The University has an enterprise risk management framework and takes action to identify and mitigate risks. Its investment policy guides the investment of its endowment funds. Any uncertainty over the timing and value of government grants is addressed through the University's cash management policy. The University does not have a debt management policy, but in practice, debt proceeds go to capital expenditures, and its use of debt is guided by legislation and overseen by the provincial government.

The higher education sector is of low industry risk, characterized by countercyclicality and low competitive risk and growth. The provincial government oversees the sector and gives directives to universities on tuition and total grants (including operating, research and capital). Total government support remains an important source of funds for McGill, making up close to half of the University's total revenues. Tuition and fees as well represent an important and increasing source of revenue. And though the restrictive and low tuition regime within which McGill operates results in reduced financial flexibility, it is likely that the provincial government will continue to support the sector through its operating grants, given that postsecondary education is one of Quebec's priorities in both expenditure and mandate and that the province retains responsibility for funding and administering a large portion of McGill's long-term debt.

3. McGILL UNIVERSITY PENSION PLAN

3.1 Overview

The Plan was established in 1972 and is registered under the Act. The Plan is funded in accordance with the Act and its regulations as well as the Income Tax Act and its regulations.

The Plan is comprised of a capital accumulation plan type referred to as the defined contribution (DC) segment for all employees and a defined benefit minimum (DB) segment for employees who were participating or eligible to join the Plan on or prior to December 31, 2008 (referred to as the Hybrid segment or Part A). Part B refers to the DC segment of the Plan and covers those who were hired after December 31, 2008. All defined benefit pension plans are required to establish a written funding policy which in the context of the Plan covers Part A members as well as Pensioners in receipt of a monthly pension from the Pensioner Fund. Risk elements identified in the Funding Policy are primarily focused on the DB segment of the Plan although many of the elements may equally apply to the DC segment of the Plan as well.

Hybrid pension plans have been exempted from the restructuring requirements under Bill 75 for the university-sector defined benefit pension plans as well as the measures surrounding contributing to a stabilization fund; however, the objective of reducing risks related to economic and demographic fluctuations remains for this type of plan.

The assets of the Pension Fund are allocated to three separate and distinct investment funds which are established and maintained to respond to the specific investment requirements of the primary liability components of the Plan, as follows:

i. the Accumulation Fund shall be maintained to respond to the investment requirements of active and inactive members covered under the DC provisions of the Plan;

ii. the Pensioner Fund shall be maintained to respond to the investment requirements of retired members who, prior to January 1, 2011, elected to receive an internal retirement benefit and of those members who retired on or after August 31, 2020, in accordance with Amendment #25, and elected to receive their Supplemental Retirement Benefit (SRB) in the form of a monthly lifetime pension; and

iii. the Supplemental Fund shall be maintained to respond to investment requirements arising from the DB provisions and any actuarial deficiencies under the Plan.

3.2 Main Defined Benefit Provisions

The table below shows the main DB minimum provisions which have an impact on the funding of the Plan and on key risks factors affecting the Plan:

Benefit accrual rate	1.22% of highest average earnings not in excess of average YMPE plus 1.8% of excess of average YMPE, multiplied by credited service
Final average earnings	Highest average earnings (adjusted for inflation in excess of 3.75 p.a.) over 60 consecutive months
Early retirement provisions	From age 55, with a reduction of 3% per annum prior to age 65
Normal form of pension	Lifetime pension
Indexation of pension after retirement	Nil

3.3 Contribution Rates

a. Current Service Cost - DC segment

University and active member basic contributions are outlined in the Plan Document and are directed to the individual member accounts in the Accumulation Fund. Contribution rates are reduced by 1.8% on the portion of such member's Basic Earnings which are subject to a Quebec Pension Plan contribution.

The ability to modify the rate of contribution is limited. Member contribution rates were last increased in 2013 for all members above age 39. In the case of those in the age 50 and above tier, the maximum contribution limit of 18% of pensionable earnings permitted under the Income Tax Act has been attained.

b. Current and Past Service Costs: - DB segment

In addition to the University's contributions made in respect of the DC segment of the Plan, University current and past service contributions in respect of the DB components are based on the results of the most recently filed valuation report and are directed to the Supplemental Fund.

c. Cost Sharing Mechanisms

Funding of the Plan is shared by the University and the active members. Subsequent to the results of an actuarial valuation, active members participating in the DB segment in conjunction with the University shall contribute additional amounts necessary to amortize actuarial deficiencies which may arise under the Plan. These additional cost sharing contributions are funded over the time period permitted by the Act and are established following the completion of a going concern valuation exercise and consultation with the University and membership in accordance with the terms and conditions of the Plan.

Such contributions on behalf of active members shall be expressed as a percentage of pensionable earnings capped to the defined contribution earnings limit set by the Income Tax Act. Member cost sharing contributions are directed to the DC segment of the Plan within the Accumulation Fund and result in a corresponding reduction in the University DC segment basic contribution. Combined contributions for active members and the University cannot exceed 18% of earnings without obtaining an exemption from the Canada Revenue Agency. University DB funding shall be expressed as a percentage of eligible payroll and shall be directed to the Supplemental Fund of the Plan.

Although total payroll typically increases over time, deficit cost sharing mechanisms are based on member eligible earnings which coincide with the maximum contribution limits for registered pension plans under the Income Tax Act (Canada). Member earnings above the threshold do not attract cost sharing contributions. As members settle their account holdings due to retirement/termination or attaining age 65, the total eligible payroll upon which cost sharing contribution rates are based will continue to decrease over time.

In accordance with the Act, member contributions including return on investment, as adjusted for periods of unpaid leave and reciprocal transfers which may occur, shall not be used to pay more than 50% of the value of any benefit to which the member becomes entitled.

d. Solvency Deficiency Contributions

Under the Act, all pension plans including those in the university and municipal sector are exempt from funding solvency deficiencies. Plans are however required to provide an annual notice on the financial position of the pension plan.

In order to allow departing members access to 100% of their Supplemental Retirement Benefit Value (SRBV) at the time of settlement, the University has elected to make additional special contributions in accordance with the degree of solvency of the Plan. Degree of solvency contributions shall be based on valuation procedures and methods as may be permitted under applicable legislation or in accordance with the guidance of the regulators and the opinion of experts.

e. Additional Funding

Subject to any limits as may be permitted under the Income Tax Act (Canada), upon obtaining the necessary approvals, the University may at its discretion from time-to-time elect to accelerate the funding of deficits (Solvency and/or Going-Concern) in the Plan by making additional contributions over and above the member cost-sharing provisions of the Plan and the requirements of the Act.

3.4 Membership Data

Part B membership continues to increase over time whereas Part A membership continues to decline following termination, death, or retirement. The average age of Part A members is expected to continue to gradually increase over time along with average DC balances.

Part A Membership	**December 31, 2019 (last complete valuation)**		**December 31, 2017**	
	Male	Female	Male	Female
Active Average Age Average DC Balance	1,143 54.0 $352,800	1,498 53.5 $252,900	1,308 52.9 $299,642	1,679 52.3 $216,011
Deferred Settlements Average Age Average Annual Deferred Pension	772 53.1 $5,900	836 51.9 $4,400	812 52.0 $5,603	876 50.7 $4,118
Pensioner Average Age Average Annual Pension	367 83.6 $34,600	592 83.1 $18,900	411 82.1 $33,894	640 81.9 $19,088
Part B Membership	Male	Female	Male	Female
Active Average Age Average DC Balance	1,427 41.8 $46,700	2,152 40.5 $32,000	1,204 41.4 $33,863	1,687 40.4 $23,444
Deferred Settlements - vested Average Age Average DC Balance	510 43.7 $31,700	602 42.9 $27,300	385 43.1 $18,730	568 41.6 $13,900

3.5 Inflation Protection

Those who elected to receive an internal retirement benefit from the Pensioner Fund prior to January 1, 2011 are eligible to receive ad-hoc increases in the form of Annuity Dividends as described in the Plan document. Increases are only possible when surplus assets exist and the last Annuity Dividend increase was granted in 1997. The payment of Annuity Dividends may only resume once the Plan is fully funded, including the provision for adverse deviation as required by the Act. At such time, ad-hoc increases may be provided on an equitable basis based on the representative holdings for the members of the Pensioner Pool (prior to January 1, 2000) and Pensioner Pool (2000 – 2010). No funding is directed towards the indexation of pensions.

4. Funding Objectives

The objective is to attain a fully funded position for the Plan under a going-concern basis within the requirements of the Statement of Investment Policy, Supplemental Pension Plans Act (Quebec) and the Income Tax Act (Canada).

For the benefit of the University and members of the Plan, the following principles shall be taken into consideration:

- the Plan is financially sustainable for the long term,
- the benefits are secure in the long term,
- the contribution levels are stable and affordable,
- the contribution levels are set at a level which delivers the benefits promised to Plan members and beneficiaries,
- to the extent possible, the Plan maintains intergenerational equity, and
- the Plan's funded position is managed with regard to adverse risk.

5. Risks Impacting Key Funding Considerations

Through the governance process of the PAC and the Pension Investment Committee, the monitoring and assessment of various risk factors which may impact the Plan is undertaken.

The following main risks have been identified as possibly affecting the level of funding related to the DB provisions of the Plan as well as deficit cost sharing contributions rates for members:

5.1 Asset Return and Volatility Risk

Investments held within the Accumulation Fund are directed by the Plan members in accordance with the available investment options provided under the Plan from time-to-time. In order to mitigate the investment risk associated with member directed investments, the SRBV value is determined by comparing the relative performance of the Balanced Account against the transfer value of the defined benefit minimum provisions of the Plan.

In the short term, a degree of uncertainty exists with the rate of return, particularly with equities within the Balanced Account. Furthermore, in the long term, a change to economic conditions could result in long term market return expectations that are lower than those currently anticipated under the actuarial valuation, which could ultimately lead to higher Plan costs.

In determining the composition of the Balanced Account, the objective to obtain a reasonable rate of return within an acceptable risk level must take into account considerations from both the perspective of the member within the context of a capital accumulation plan and the needs of the Plan as they may be impacted by the DB provisions within the Supplemental Fund.

5.2 Interest Rate Risk

Transfer values are influenced by the interest rate assumptions used for computing commuted values of non-indexed deferred pensions prescribed by the Canadian Institute of Actuaries. The interest rate assumptions used will heavily influence transfer values where the lower the interest rate assumption used, the higher the resulting transfer value becomes.

In the case of those retired members who elected to receive an internal retirement benefit prior to January 1, 2011 and those members who retired on or after August 31, 2020 and elected to receive their SRB in the form of monthly lifetime pension, the factors which most influence funding are the Pensioner Fund rate of return, mortality experience and interest rates.

Liabilities in the Pensioner Fund and DB segment of the Plan rise in low interest rate environments. During periods of low interest rates, pension transfer values increase which cause SRBVs to rise. Increased demands on the Supplemental Fund assets cause the fund to deplete more quickly and increase funding requirements.

Low interest rates have a greater impact on funding requirements in situations where transfer values are the only available settlement option.

In order to mitigate investment and interest rate risks with respect to members receiving a monthly pension from the Pensioner Fund, the PAC is authorized to enter into an annuity buy-in contract with an insurance company licensed to do business in Canada in such manner and under such conditions as it may determine.

5.3 Longevity Risk

Life expectancy continues to increase which impacts liabilities for both the DB segment and for those members who elected to receive an internal retirement benefit under the terms of the Plan and the Pensioner Fund.

As the DB segment of the Plan is no longer available to new hires since 2009, over the short and long term, longevity risk is limited to members of the Hybrid segment including those in receipt of a monthly pension payment from the Pensioner Fund. The impact of life expectancy experience exceeding forecasts as established in the mortality tables and assumptions used remains significant. Mortality studies shall be completed from time to time as may be directed by the PAC. Furthermore, in order to mitigate longevity risks with respect to members receiving a monthly pension from the Pensioner Fund, the PAC is authorized to enter into an annuity buy-in contract with an insurance company licensed to do business in Canada in such manner and under such conditions as it may determine.

5.4 Cash Flow Risk – Pensioner Fund

The Pensioner Fund is maintained to respond to the investment requirements of retired members who are in receipt of a monthly pension. In accordance with Plan terms, no contributions are directed to the Pensioner Fund. The PAC continues to monitor and assess the risk of depleting assets and the sensitivity of the Pensioner Fund to changing interest rates and return on investment. In order to maintain the payment of pensions in progress, a cash transfer from the Supplemental Fund to the Pensioner Fund may be required in the future. The ability for the University to provide additional funding in order to meet its obligations under the Plan is dependent on the University's access to additional capital and other operational considerations.

5.5 Demographic Risk

The hybrid segment of the pension plan remains a closed group. The average age of members in the hybrid segment will continue to rise which increases liabilities and associated funding required of a DB plan type. DC contribution rates increase for both members and the University as active members attain age 40 and increase further at age 50. Furthermore, plan experience which may differ from valuation assumptions, such as for early retirement, could result in losses to the Plan and increased costs.

The gradual increase in the number of Part B members and size of their holdings will shift the importance of capital accumulation plan type considerations relative to the funding considerations of a DB plan type. The size of the Accumulation Fund will continue to grow over time relative to the Supplemental Fund and Pensioner Fund.

Overall demographic risk for the Plan diminishes as Part B membership increases whereas deficit sharing will continue to apply on a diminishing population of Part A members. The risk for Part A members regarding deficit cost sharing provisions and contribution rates will increase as the size of the group continues to decline over time.

5.6 <u>Liquidity Risk</u>

The Income Tax Act requires members holding assets in the Plan to settle by no later than December 31 of the year they attain age 71. In general, whenever disbursements exceed new contributions, assets must be liquidated in order to meet cash flow requirements which exposes the plan to timing risk of selling assets under unfavorable market conditions.

Regular monitoring of cash flow requirements is undertaken in order to mitigate this risk. Investments within the Accumulation Fund shall take into account cash flow considerations emanating from member directed investments and liquidity requirements as they pertain to capital accumulation plan type.

5.7 <u>Intergenerational Equity Risk</u>

Intergenerational equity is based on the principle that to the extent possible, each generation of active members contributes towards the Plan in conjunction to the benefits they receive.

In the event of actuarial deficiencies, certain measures introduced in the Act which includes the suspension of inflation protection (indexation) for pensioners are not possible in the Plan. As a result, mechanisms are available to conditionally introduce cost sharing contributions for active members only.

5.8 <u>Inflation Risk</u>

The DB provisions of the Plan provide a non-indexed pension after retirement which largely limits inflation risk to salary inflation prior to retirement.

Inflation risk, however, is mitigated by the fact that any potential rise in inflation which could have the effect of increasing salary inflation and DB benefit accruals would likely result in an offsetting increase to interest rates which would reduce transfer values.

5.9 <u>Legislative Environment Risk</u>

The Plan is subject to the Act and the Income Tax Act and to any other law or regulation otherwise applicable to the Plan. Any important changes to these laws or regulations could affect the funding of the Plan.

6. Plan Funding

DB current and past service costs and degree of solvency funding for the University as well as member deficit cost sharing contribution levels are set in accordance with the results of actuarial valuations performed in accordance with the requirements of the Act and applicable legislation.

In addition to performing regular valuation exercises, the PAC and/or the University may from time-to-time employ tools such as Stochastic and Asset-Liability Modeling (ALM) and Sensitivity Analysis in order to better understand and manage the complex relationships between assets and liabilities and to test funding requirements under various economic and demographic scenarios.

6.1 Actuarial Valuations

Under the Act, a complete actuarial valuation exercise comprised of a solvency and going-concern valuation is required every three years.

In accordance with Section 119.1 of the Act, in years where a valuation exercise is not performed, the pension committee must send to the regulators ("Retraite Québec"), a notice informing them of the financial position of the pension plan. The report is based on an actuarial valuation that establishes the degree of solvency of the plan as at the end of the fiscal year of the pension plan which is December 31.

a. Actuarial Methods and Assumptions

The main assumptions used for valuation purposes focus on the two defined benefit segments of the Plan which are the Pensioner Fund and the Supplemental Fund. The actuary's selection of methods and assumptions shall not deviate from accepted actuarial practices and shall include input from the Plan Sponsor and the PAC. The actuarial valuation reports contain a listing of all assumptions used and are submitted to the Retraite Québec and are subject to legislative requirements.

In consultation with the PAC and the Plan Sponsor, the plan actuary may within a reasonable limit adjust certain assumptions with a degree of conservatism in order to favour the stability of contributions when determining funding requirements. The assumptions used shall also take into consideration the financial perspectives of the University.

b. Going-Concern Valuation

A going-concern valuation is performed at least every three years and is based on long-term actuarial assumptions which assume that the Plan will remain in effect indefinitely. Funding requirements for the Plan are established based on the results of this valuation exercise. Separate economic and demographic assumptions may be used for determining the actuarial assets and liabilities for each of the two defined benefit components of the pension plan which cover Part A members and those in receipt of a monthly pension from the Pensioner Fund. The interest rate assumptions used shall take into account the investment policy and asset mix of each of the Pensioner Fund and the Supplemental Fund.

Flexibility in funding shall be permitted in order to accommodate potential short term operational requirements. Based on the evolution of the financial position of the pension plan, the PAC or the University may trigger an early valuation exercise in order to determine the impact on going-concern deficits and funding requirements. The Plan will continue to assume actuarial costs related with valuation exercises performed on a three-year cycle and the University will assume actuarial costs resulting from accelerated going concern valuation exercises performed at its request.

c. Solvency Valuation

An actuarial valuation on a solvency basis is designed to measure a pension plan's capacity to meet its commitments if the plan were to be terminated on the valuation date. The Plan is however exempted from funding on a solvency basis. An annual notice on the financial position of the pension plan as at the fiscal year end is submitted to the Retraite Québec.

The Plan's degree of solvency is used to determine University funding in order to allow departing members access to 100% of their SRBV. Funding based on the degree of solvency shall be assumed by the University for all members who elect to transfer their pension plan holdings at retirement or termination.

6.2 Utilization of Funding Excess

Any actuarial surplus existing in the Supplemental Fund other than surpluses resulting from or attributed to members' cost sharing contributions under the Plan shall be the property of the University, to be applied in such fashion as the University shall determine including, but not limited to, the payment of University contributions otherwise required under the Plan.

In considering how surpluses are to be used, the Plan's sustainability should be one of the factors taken into account.

6.3 Statement of Investment Policy

The purpose of the Statement of Investment Policy is to establish investment principles and to formulate investment guidelines which are appropriate to the needs and circumstances of the Plan in a manner that conforms to the requirements of the Act. It is designed to address the different investment policies applicable to the three separate and distinct investment funds in accordance to DC members' investment preferences and in respect of the assets accumulated to fund the defined benefit provisions of the Plan. During the process of elaborating and reviewing the Plan's Statement of Investment Policy, the Pension Investment Committee ("PIC") shall ensure that it takes into account the Plan's funding objectives. Any discrepancies between the Plan's Statement of Investment Policy and this Policy shall be discussed between the PAC and the PIC to ensure coherence.

Legislative History:

Approved:

Board of Governors	December 5, 2019	Minute 15.2.1
Executive Committee	March 23, 2023	Minute 7.1.2