The University of British Columbia
Staff Pension Plan

Funding Policy

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Approved by the UBC Board of Governors on
March 27, 2024

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1. Introduction

1.1 The University of British Columbia (the "University"), acting through its board of governors (the "Board of Governors") is the sponsor and administrator of the UBC Staff Pension Plan (the "Plan"). The Board of Governors has established a pension board to oversee the administration of the Plan on behalf of and reporting to the Board of Governors (the "Pension Board").

1.2 The Board of Governors has adopted Terms of Reference and the Governance Policy to document the various powers and duties it has delegated to the Pension Board.

1.3 The Board of Governors has delegated to the Pension Board responsibility for formulating and recommending to the Board of Governors the terms of the Statement of Investment Policies and Procedures, and the terms of this Funding Policy.

2. Background

2.1 The Plan is a non-collectively bargained multi-employer target benefit plan that has operated as a target benefit plan since its inception on January 1, 1972.

2.2 Prior to the *Pension Benefits Standards Act SBC 2012 c.30 ("PBSA")* coming into force on September 30, 2015, the pension legislation did not fully recognize the target benefit plan design structure. The PBSA fully recognizes the target benefit plan design structure and the Plan text was restated effective September 30, 2015 to comply with the requirements for target benefit provisions under the PBSA.

3. Key Authorities

3.1 This Funding Policy is subject to the provisions of the Plan text.

3.2 This Funding Policy is subject to the applicable provisions of the following two Acts and Regulations as amended from time to time:

- *Income Tax Act of Canada* and *Regulations (ITA);and*
- *Pension Benefits Standards Act* and *Regulation (PBSA).*

3.3 This is the only "Funding Policy" as that phrase is used in the PBSA. It is intended to be a guidance document only and in no way fetters the Pension Board's discretion to make benefit-related decisions as they determine appropriate, as permitted by the Plan text, Governance Policy, the Terms of Reference, and the PBSA.

3.4 Unless otherwise specified, in the event of a conflict between this Policy and the Plan text or the PBSA, the Policy will be interpreted so that it is consistent with those other documents.

4. Purpose of Funding Policy

4.1. The purpose of this Funding Policy is to establish a framework for outlining the Plan funding objectives and the intended method for achieving those objectives in accordance with the PBSA.

4.2. While the PBSA requires the Plan to measure its financial position on both a going concern and a solvency basis, the PBSA limits Plan funding by participating employers to that which they are contractually required to contribute.

5. Stakeholders

5.1 The key stakeholders for the Plan, each of whom will have independent concerns and priorities, are:

A. Active and deferred members;

B. Retired members, spouses, and beneficiaries in receipt of benefits under the Plan;

C. The Board of Governors;

D. Other participating employers; and

E. the provincial pension regulator ("BCFSA") and tax authorities ("Canada Revenue Agency" or "CRA").

6. Plan Overview

6.1 Members are required to contribute 6.5% of their salary, and the University contributes 9.4% of the member's salary. These contribution rates are fixed and set out in the Plan text. There is no opportunity for additional contributions, other than those committed by the University.

6.2 The Plan provides a basic pension benefit, determined by a formula based on final average earnings and years of pensionable service. Retirement pensions are indexed subject to the Plan's ability to pay, each January 1.

6.3 If there is not adequate funding, the Plan text requires a reduction of benefits, starting with future indexing.

6.4 Pensions have been increased by 100% of the change in the Consumer Price Index (CPI) from 1974 until 2012.

6.5 Based on the results of the actuarial valuation as at December 31, 2010, it was determined under the Plan's Benefits/Funding Test that full indexing of pension benefits was not sustainable and should be reduced from 100% to 50% of the change in CPI effective January 1, 2012. Subsequent actuarial valuations up to 2019 confirmed that indexing of pension benefits should remain at 50% of the change in CPI. Based on the results of the actuarial valuation as at December 31, 2022, the Pension Board determined that 70% of the change in CPI was sustainable and such change took effect January 1, 2024.

7. Plan Priorities

7.1 The Pension Board has confirmed that its priorities with respect to the Plan are:

1) The provision of basic pension benefits;

2) The provision of pension indexing, subject to available funds;

and this is described in Article 13 of the Plan text.

7.2 The Pension Board has confirmed its objective is to provide 100% indexing, subject to the Plan's ability to finance it in a stable and sustainable manner.

8. Key Risks Faced by the Plan

8.1 The Plan faces a number of risks to meeting the priorities listed in Section 7.1 which could impact the financial position of the Plan and affect the Plan's ability to pay benefits. The following are the most significant of these risks:

- Actual Plan experience being different from actuarial assumptions for economic factors including short and long-term investment returns, inflation, and interest rates;
- Actual Plan experience being different from actuarial assumptions for demographic factors, including longevity, withdrawals and retirements;
- Changes in expectations with regards to the economic outlook impacting assumptions from one valuation to the next;
- The maturity of the Plan, in particular, an increase in the average age of the active member population, and unexpected large shifts in demographic characteristics of active membership;
- The margin included in the Benefits/Funding test is insufficient and creates future shortfalls that result in lower future benefits than currently paid from the Plan; and
- The margin included in the Benefits/Funding Test is too large so that unnecessary reserves are held that limit the benefits that could have been paid to members.
- Fail one or more of the funding tests prescribed by the PBSA and as a result the Plan is required to adjust benefits in a manner inconsistent with the results of the Benefits/Funding Test;

8.2 These risks are managed by the Pension Board through:

- Plan design, in that the level of indexing is contingent on sufficient funding;
- Actuarial valuations of the Plan which determine, based on the Benefits/Funding Test and margin, the sustainability of the base benefit and the level of indexing that can be provided;
- An annual review of the Statement of Investment Policies and Procedures (SIPP);
- Ongoing review of the Plan's investment performance and asset class returns;
- Regular review of the Plan's estimated funded position, Benefits/Funding Test, and other tools to evaluate the sustainability of the indexing level in the inter-valuation period, including assessment of the frequency of actuarial valuations based on the review of these metrics;
- Smoothing market fluctuations of assets;
- Adoption of custom mortality tables, including regular monitoring of experience and updates;
- Major reviews of the Plan's investment policy on a regular basis as deemed appropriate by the Pension Board. Included in these reviews is scenario testing and modelling to assess the risks to the sustainability of the Plan, and test alternative benefit/funding and margin strategies as well as alternative investment strategies.

9. <u>Funding Objectives</u>

9.1 Recognizing that, in accordance with the PBSA, funding from participating employers is limited to that which is contractually required, the funding objectives of the Pension Board are to:

- Ensure the long-term financial sustainability of the Plan as measured by the Benefits/Funding Test.
- Ensure the benefits provided under the Plan are kept in balance with the capacity of the Plan's funding to support them or more than sufficient to support the benefits both now and in the future; and
- Manage the Plan's exposure to adverse risks.

9.2 Given the Plan's robust governance structure and processes, including the comprehensive Benefits/Funding Test described in Section 10 below, the Pension Board expects that the going concern funded ratio will always be above 100%. If any unfunded liabilities are identified in the course of conducting a formal actuarial valuation, the Pension Board intends to address any such deficits in accordance with the priority actions outlined in the Plan's Benefits/Funding Test while remaining compliant with PBSA.

9.3 While achieving the above funding objectives is paramount, the Pension Board is focussed on intergenerational equity, ensuring the Plan meets the needs of the present members without compromising the ability of future generations to meet their own needs.

9.4 Indexing is an effective lever for mitigating funding risks and promoting intergenerational equity because, over time, the risk of a funding shortfall is distributed broadly among the membership.

9.5 While full inflation protection (or 100% indexing) remains the goal, annual indexing could range from zero to 100% of the change in CPI, based on the financial position of the Plan as determined by the Benefits/Funding Test.

10. <u>Plan's Benefits/Funding Test</u>

10.1 Origins and Purpose of the Benefits/Funding Test:

The purpose of the Benefits/Funding Test is to assess the long-term sustainability of the Plan by comparing in a single test accumulated assets and future contributions, against benefits earned to date and in the future. This takes a long term view of the benefits that can be provided, with no undue weight to short term market movements. By looking at past and future benefits and contributions in a single test, it also ensures benefits are provided that are consistent across the whole plan membership. The Benefits/Funding Test was adopted by the Plan in the 1990s to reflect the fixed contribution, variable benefit nature of the Plan and ensure long-term planning was incorporated into all benefit design decisions. The Policy became effective for the January 1, 1999 and subsequent valuations.

The Benefits/Funding Test as described in Article 13 of the Plan text is set out in its entirety in Appendix A.

10.2 The Benefits/Funding Test, set out in Article 13 of the Plan, determines whether the Plan's funding is insufficient, sufficient, or more than sufficient to support the benefits both now and in the future.

10.3 The Benefits/Funding Test requires that indexing will only be granted if it can be granted on all members' benefits (i.e., past and future service at the same level), on a prospective basis, and on the belief that the then current level is sustainable for the long term.

10.4 To that end, effective January 1, 2011, the Benefits/Funding Test requires that an explicit margin be included in the calculation of the Benefits/Funding Test to protect the Plan against future adverse deviations.

10.5 The margin included in the Benefits/Funding Test is adopted by the Pension Board on the advice of the Actuary.

10.6 ***Framework for Determining Appropriate Margin***

A. Given the use of best estimate assumptions, there is a 50% probability that, on average, future experience will support benefits equal to or greater than the valuation projections, and a 50% probability that, on average, future experience will not support benefits at the level revealed by the valuation projections. The inclusion of a margin in the Benefits/Funding Test increases the probability of a favourable outcome to greater than 50%. The larger the margin, the greater the probability of a favourable outcome.

B. The determination of the level of margin is a trade-off between risk and reward. The lower the margin the greater the actual benefit payments made through indexing, which deplete Plan assets faster than if a higher margin were selected. Therefore, if the margin is set too low, the expected level of sustainable indexing is too high, drawing down assets more quickly than otherwise, which could, in turn, affect the ability to provide indexing in the future. If the margin is set too high, the expected level of sustainable indexing is too low.

C. The Pension Board has set the following three objectives in determining an appropriate margin:

- Limit the chance of indexing being reduced to zero, or future service benefits being cut
- Maximize the ability to provide indexing at a long time sustainable level
- Maximize the chance of the PBSA tests being passed

D. The Pension Board will undertake a sustainability study periodically to assess the margin while reflecting the economic environment and current level of indexing at such time. If the Benefits/Funding Test conducted in the context of a formal actuarial valuation indicates that the level of indexing may need to change from the current level, the Pension Board will evaluate its current deterministic reporting tools and consider whether to undertake a sustainability study at that time to provide additional context.

10.7 The most recent sustainability study was completed following the December 31, 2016 actuarial valuation. The study reviewed the Plan's unique risks and characteristics and its ability to provide indexing over a 30-year period. Based on results, the Pension Board determined that a margin of 10% created a reasonable expectation of continued indexing at the level of 50% of CPI while limiting the chance of benefit reductions.

10.8 **As established by the Pension Board, the current margin incorporated into the Benefits/Funding Test is 10%**. It is expected that actuarial valuations will reveal actual margins greater than the established 10% at any given date. These additional margins result from the particular circumstances of the Plan at the particular time, including its established level of indexing, the economic environment, and resulting actuarial assumptions.

10.9 Where the Benefits/Funding Test shows that the funding is insufficient or more than sufficient, Article 13 prescribes certain actions to restore the balance, with future indexing being the first item to be addressed.

11. Legislated Tests

11.1 The level of margin established by the Pension Board is unrelated to the Plan's ability to pass the PBSA tests.

11.2 However, given the interaction of the Benefits/Funding Test and established margin with the minimum prescribed "provision for adverse deviation" (or "PfAD") under legislation, it is expected that, in typical circumstances, the Benefits/Funding Test will result in the "supplementary percentages" (in relation to the prescribed PfAD) on going concern liabilities and normal actuarial cost being greater than 0%.

11.3 The Actuary will include disclosure in their actuarial valuation reports demonstrating the Plan's compliance with the legislated tests, including the resulting "supplementary percentages" applicable on going concern liabilities and normal actuarial cost.

11.4 In support of the Actuary's decisions with respect to the PfAD(s), this Funding Policy should be filed in conjunction with the filing of any actuarial valuation report, in keeping with the expectations of the BCFSA.

12. Contingency Reserve and Income Tax Act Carryforward

12.1 The application of the policy in Article 13 calls for an explicit contingency reserve to be built into the Plan's funding when assets permit. This consists of two parts; the Contingency Reserve and the Income Tax Act Carryforward.

The Contingency Reserve must grow to a maximum level, or ceiling, before the assets reach a threshold at which the funding can be considered to be more than sufficient for the Plan's needs. The Contingency Reserve and Income Tax Act Carryforward are defined in terms of assets accumulated in excess of liabilities (of benefits earned to date).

For purposes of determining the Income Tax Act Carryforward, liabilities are to be calculated assuming full Plan benefits with 100% indexing on an unbiased, best estimate basis, with no margin for adverse deviation.

12.2 On February 15, 2007 the CRA approved a Contingency Reserve ceiling of 40% of unbiased liabilities (past service liabilities with no margin for adverse deviation).

13. Actuarial Methods, Assumptions and Reporting

13.1 *Assumptions:* In performing the actuarial valuation the Actuary shall recommend "best estimate" actuarial assumptions in accordance with Section 13.02 of the Plan text. The assumptions shall be reviewed and, ultimately, approved by the Pension Board.

13.2 *Actuarial* methods*:*

- The going concern valuation shall use the projected unit credit method to measure the Plan's liabilities.
- In accordance with Section 13.02 of the Plan text, for purposes of the Benefits/Funding Test, asset values and investment returns shall be smoothed over a 5-year period. The smoothing technique, which must be consistent with accepted actuarial practice, will be chosen by the Actuary and approved by the Pension Board. Unless the Actuary believes there are reasons to change it, the smoothing technique must be applied consistently over time.

13.3 *Expenses:* As Plan expenses are paid from the trust fund while the Plan is a going concern, the going concern discount rate shall incorporate a reduction for investment expenses and an explicit allowance shall be added to the normal actuarial cost for non-investment expenses. No allowance for wind-up expenses shall be made for solvency purposes as it is expected that in such case expenses will be paid by the University.

13.4 *Future benefit increases:* No allowance shall be explicitly included in the actuarial valuation, other than anticipated indexing for the next inter-valuation period and, shown separately, perpetually.

13.5 *Frequency of actuarial valuations:* Actuarial valuations will be conducted at least triennially, and possibly more often at the discretion of the Pension Board.

14. Communication

14.1 The Funding Policy will be posted to the Staff Pension Plan website. As well, a summary of this Funding Policy will be prepared to help the Plan members and beneficiaries understand this Policy.

15. Review and Amendment

15.1. This Policy will be reviewed at least every three years by the Pension Board, in order to determine whether any modifications are necessary or desirable.

15.2. The Pension Board shall recommend to the Board of Governors such changes to the Policy as it considers appropriate or necessary.

Appendix A – Benefits/Funding Test (Excerpt from Plan Text)

(references within this Appendix are to sections of the Plan text unless otherwise stated)

Article 13– Relationship between Funding and Benefits

13.01. Actuarial Valuation

The University, or the Pension Board as described in Article 18, will commission actuarial valuations of the Plan no less frequently than is required by Applicable Legislation. Such actuarial valuations must be prepared in accordance with the funding rules in the PBSA applicable to target benefit provisions.

13.02. Benefits/Funding Test

An actuarial valuation will include a Benefits/Funding Test at least every three years. If a benefit reduction is in effect, an estimated Benefits/Funding Test will be performed annually and a full actuarial valuation and Benefits/Funding Test will be performed if determined by the Pension Board. For the purposes of this Section, a Benefits/Funding Test will determine the Funds Available and the Funds Required subject to the following requirements:

(a) The actuarial assumptions will be estimates made by the Actuary and approved by the Pension Board that:

   i. may contain reasonable simplifications and approximations;

   ii. will be determined without regard to the results they would produce;

   iii. must be consistent with accepted actuarial practice, and

   iv. to the extent possible, must contain no intentional margin or understatement.

(b) The Actuary will value the Plan's assets using a technique that smoothes market fluctuations over a period not exceeding 5 years. The smoothing technique, which must be consistent with accepted actuarial practice, will be chosen by the Actuary, and approved by the Pension Board. Unless the Actuary believes there are reasons to change it, the smoothing technique must be applied consistently over time.

(c) The projections of future contributions and normal costs will be performed over a period of 25 years using assumptions as to future changes in the composition of the membership, including a new entrant assumption. The Actuary will determine these assumptions as in (a), except that the membership projections may not anticipate growth in the number of Members who are contributing and accruing Pensionable Service.

13.03. Consequences of Benefits/Funding Test

The consequences of the Benefits/Funding Test are, subject to Applicable Legislation, as set out below.

(a) Funds Available Exceed Funds Required

If the Funds Available exceed the Funds Required the following actions are to be taken in the following order of priority and to the extent possible:

Priority	*Action*
1.	Reinstate any previous benefit reductions. The benefits will be reinstated for payments falling due on and after one year following the effective date of the Benefits/Funding Test.
2.	To the extent permitted by Applicable Legislation, build a contingency reserve to the level recommended by the Actuary and approved by the Pension Board.
3.	Build additional assets to the extent permitted as a carry-forward of surplus under Applicable Legislation.
4.	Subject to limits in Applicable Legislation and an amendment to the Plan text, improve the pension formula for Pensionable Service before the effective date of the Benefits/Funding Test. The improvement applies to benefits payable on and after that effective date.
5.	Subject to limits in Applicable Legislation and an amendment to the Plan text, allocate any remaining excess funds in proportion to the accrued liabilities as at the effective date of the Benefits/Funding Test and distribute them to, and only to, Members, Limited Members, Spouses in receipt of a pension, joint annuitants in receipt of a pension, and Beneficiaries of the Plan as at that date. The distribution will be made in a manner permitted by Applicable Legislation and determined by the Pension Board.

(b) Funds Available Are Less than Funds Required

If the Funds Available are less than the Funds Required the following actions are to be taken in order of priority to the extent necessary to eliminate the shortfall:

Priority	*Action*
1.	Reduce the level of future Indexing for Indexing adjustments occurring one year or more after the effective date of the Benefits/Funding Test.
2.	Reduce the pension formula for Pensionable Service occurring one year or more after the effective date of the Benefits/Funding Test.

If the Pension Board concludes that these measures are insufficient to eliminate the shortfall or that the benefit reductions are so severe as to threaten the Plan's ongoing viability, it will so advise the University. The University will then be required to make other amendments to the Plan to eliminate the shortfall and restore its viability, or to terminate the Plan.