University of Saskatchewan 1999 Academic Pension Plan

Funding Policy

April 19, 2013

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Background and Purpose

The University of Saskatchewan 1999 Academic Pension Plan (the "Plan") was established January 1, 1999 following a split of the *Pension Plan for the Academic Employees of the University of Saskatchewan, 1974* (the "Old Plan") between pensioners and active / inactive members. All assets and membership in respect of the active / inactive members were transferred to this Plan.

The Plan provides a pension promise that is funded through employee and employer contributions made prior to retirement as well as accumulated investment returns on such contributions. The level of assets required to fund the promised pensions prior to their commencement cannot be determined with 100% certainty and consequently guidance on the Plan's Funding is desirable. This policy provides such guidance with its primary purpose being to document:

- the relevant environment within which the Plan operates;
- the primary risks that threaten the Plan's financial well-being and the implications of such risks;
- the desired Funding Principles for the Plan;
- the Financial Measurement Parameters that have been established for the Plan; and
- the governance process that is to be followed in relation to this policy.

A glossary accompanies this policy document and words and phrases contained in the glossary have been capitalized throughout the document.

It is important to note that effective June 1, 2007, a stand alone defined contribution component was added to the Plan to which the University and active academic and senior administration members each contribute an additional 0.5% of pensionable earnings. Effective September 1, 2010, these additional contributions ceased to be made to the defined contribution component, with existing account balances remaining on deposit in the Plan. As this additional component is a defined contribution provision, by definition, its assets will equal its obligations. This Funding Policy is in respect to the Plan's defined benefit component only.

Environment and Risks

Environment

The following table summarizes the environment within which the Plan's defined benefit component operates. This summary of the environment is intended to give context to the sections that follow in the Funding Policy.

Regulatory Influence	• Plan is registered under the Saskatchewan Pension Benefits Act and the Income Tax Act as a registered pension plan.
Governing Authority	• The University, acting through its Board of Governors, is the Plan's legal administrator and ultimate governing authority. • The Board retains all decision-making power in relation to the Plan and relies on analysis and recommendations put forth by the Governing Influences and the Actuary.
Governing Influences	• Day-to-day administrative duties have been delegated by the Board to the University Administration. • Oversight of non-administrative operations has been delegated by the Board to the Academic Defined Benefit Pension Committee (ADBPC) who in turn make recommendations to the Board in relation to policy changes and Plan amendments, subject to ratification by the University of Saskatchewan Faculty Association.
Membership	• The Plan was closed to new members effective January 1, 2000. • As at December 31, 2012: Ø active membership is 166 with an average age of 58.7 and average pensionable service of 20.3 years; Ø pensioner membership is 111 with an average age of 70.3; Ø temporary pensioner membership is 22 with an average number of payments remaining of 31.9 months; and Ø other membership is 43 with an average age of 57.1.

Benefit Level (see appendix A for more detail)	• (2% of the best consecutive four year average pensionable earnings multiplied by all service) less (0.4% of the final three year average CPP earnings ceiling multiplied by post-2005 service) • For Members with more than 10 years of service, unreduced early retirement at earlier of age 60 or when age plus pensionable service equals 80 for post-1991 service. No early retirement reductions apply on pre-1992 service. • Minimum value equal to member plus University contributions accumulated with interest.
Indexing	• All pensions in payment are to be adjusted each January 1 up to the lesser of the change in the Consumer Price Index and 2% for the first five years after a member's retirement
Expenses	• Expenses that relate to the Plan's governance, administration of benefits and funding and investment activities are paid from the Plan's assets.
Contributions	• Employees currently contribute 8.5% of earnings, with the University contributing any remaining funding requirements. In 2012, the University contributed 8.65% of earnings. • The University is ultimately responsible for funding past service deficits in accordance with legislation. • The University can fund the portion of the current service cost that exceeds twice the employee contributions using surplus assets, provided it does not impact the long-term sustainability of the plan.

Investment policy

- Assets are invested in the 1999 Academic Pension Plan Fund.
- Asset mix policy (Statement of Investment Policies & Procedures):

Asset Class	Minimum %	Benchmark %	Maximum %
Equities			
Canadian equities	15	20	26
U.S. equities	15	20	26
Non North American equities	15	20	26
Foreign equities	30	40	52
Total equities	50	60	70
Fixed Income			
Bonds	30	39	45
Short-term investments	0	1	5
Total		100	

Risks

Through this policy, the Plan has adopted a number of Funding Principles. These principles are aimed at ensuring sufficient assets are accumulated to meet benefit obligations through regular contributions so as to avoid the risk of deficits. However, there are a number of specific risks that threaten the realization of this end result, the most relevant of which are summarized in the following table.

Risk	Commentary
Assumption Risk (Going-Concern)	• Defined as the risk that actual events turn out to be worse than originally anticipated by the going-concern actuarial assumptions which results in assets and liabilities becoming mismatched. • All actuarial assumptions contain risk that actual experience will prove negative for the Plan; however, those assumptions having the largest bearing on liabilities and the greatest degree of uncertainty are: the rate of return and mortality. • In the short term, a significant degree of uncertainty accompanies the rate of return given short-term economic volatility, particularly with equity based investments. • In the long-term, while there is expected to be greater certainty in the average rate of return, slight differences between actual and expected can have a significant impact on liabilities given the long-term nature of the liabilities. • Over the short and long-term the impact of members living longer than expected (i.e. the mortality risk) is not expected to be significant as the average period until death is still quite long. Hence extending an already long average remaining lifetime by a modest amount has little proportional impact. • Other primary assumption risks include risks relating to: Ø larger than assumed salary increases; and Ø early retirement.
Cashflow mismatch risk	• Defined as the risk that investments may have to be liquidated at depressed values to pay benefits thereby losing opportunity for such undervalued investments to recover to their normalized values. • This risk is highly dependent on the volatility in Plan's investments and the rate of benefit payouts. Greater levels in both investment volatility and benefit payout will result in greater asset / liability mismatch risk. • The downside risk associated with asset / liability mismatch is neutralized to some extent by contribution inflows.

Risk	Commentary
	• For the year 2012, the ratio of pension payments of retired members to contributions is approximately 1.5:1 and is expected to increase in the future since the Plan is closed to new entrants.
Solvency risks	• Defined as the risk that the Plan's liabilities determined by the Solvency Measurement Basis will increase at a greater rate than assets. • In general, solvency risk is of concern when solvency liabilities are increasing due to falling long-term bond rates (the key determinant in the solvency interest rate assumption) without an offsetting increase in the asset investments. • Solvency risk is exacerbated by rapidly rising salary rates and the fact that as interest rates decline, the portion of the Plan's solvency liability that is based on the accumulated contribution value is effectively eroded. This erosion is a consequence of the guaranteed pension value becoming greater than the account balance resulting in solvency liabilities becoming more sensitive to changes to declines in long-term bond rates. • Finally, for pensions in pay, solvency liabilities are determined by reference to the cost to purchase annuities from a commercial insurer. While annuity purchase rates are to a large extent tied to long-term bond rates, currently, there is a cost to purchasing annuities over what would otherwise be expected by the long-term bond rates. This cost is primarily a reflection of the thinly traded annuity markets. As more members become pensioners, this additional cost will need to be factored into the solvency liabilities, thereby increasing solvency liabilities.

The primary implications that these risks could bring to bear are summarized in the following table.

Implication	Commentary
Increased past service contribution requirements for University	• Significant encumbrance in an environment where little excess cashflow is available to respond to increased contribution requirements. • If past service contributions are to support an unfunded liability or solvency deficiency, such additional contributions may not be needed longer-term and result in additional surplus assets. • Could lead to reduction in future service benefits.
Increased future service contribution requirements for Employers and / or Employees	• Significant encumbrance in an environment where little excess cashflow is available to respond to increased contribution requirements. • Perceived inequity with previous generations of members.
Reduced future benefits	• May cause future service benefits to be scaled back. • May delay retirement

Funding Principles

The Plan is administered on the basis of the following Funding Principles:

1. The Plan's investment income, the periodic contributions to the Plan made by active Plan members and the contributions of the University, in conjunction with the Plan’s benefit and investment policies, are designed to ensure that the Plan is fully funded so that the Plan’s benefit obligations are discharged on a sustainable basis.

2. The determination of the amount required to ensure that the Plan is fully funded, as provided in paragraph 1, is made on the basis of expert actuarial assessment and professional investment advice.

3. The periodic (monthly) amounts contributed by Plan members and the University are:
   - equal for the Plan members and the University; and
   - relatively constant from year to year.

4. When the Plan has assets with a value that is more than sufficient to maintain relatively constant contribution rates and fund past and future service benefit obligations, the surplus may be allocated to improved benefits on an equitable basis for all Plan members and in accordance with these Funding Principles and the requirements of the Income Tax Act.

5. Compliance with all statutory regulatory requirements and contractual obligations contained in the Plan documents and the collective agreement between the University and the Faculty Association.

Financial Measurement Parameters

1. The Going-Concern Measurement Basis is used as the actuarial basis to measure the Plan's asset, liabilities, surplus or deficit.

2. Margins in the Going-Concern Measurement Basis are maintained so that the actuarial value of liabilities measured by the Going-Concern Measurement Basis falls between 105% and 120% of liabilities measured using the Best Estimate Measurement Basis, as determined by the Actuary in a Formal Actuarial Review.

3. Notwithstanding paragraph 2, a Going-Concern Measurement Basis established at a Formal Actuarial Review that produces liabilities that are less than 105% of liabilities measured on the Best Estimate Measurement Basis may be temporarily adopted until the next Formal Actuarial Review date, at which time the conditions of paragraph 2 must apply. Such a temporary deviation from the conditions in paragraph 2 is permitted provided:

(a) at the immediately preceding Formal Actuarial Review date, the liabilities measured by the Going-Concern Measurement Basis are at least 105% of those measured by the Best Estimate Measurement Basis;

(b) the Going-Concern Measurement Basis cannot result in a financial position for the Plan that is better than the aggregate unamortized balance, determined at the date of the Formal Actuarial Review, of deficits from previous Formal Actuarial Reviews; and

(c) the Going-Concern Measurement Basis does not produce liabilities that are less than the Best Estimate Basis.

(See Appendix B for examples)

4. The aggregate unamortized balance of deficits from previous Formal Actuarial Reviews shall be determined by the Actuary using the following factors:

i) interest accrued on such deficits;
ii) special payments made to the Plan to amortize such deficits; and
iii) the aggregate difference between experience gains and losses, if positive, that has arisen since the previous Formal Actuarial Reviews.

Governance

The Academic Defined Benefit Pension Committee has been delegated the responsibility to:

- implement the Funding Principles and
- set and when appropriate, make changes in practices in order to ensure compliance with the Funding Principles.

Formal Actuarial Reviews of the Plan's financial position will be conducted at least once every three years with annual status updates being received for information purposes.

The Plan’s risks will be reviewed and evaluated at the same time the Formal Actuarial Review is conducted.

The Funding Policy will be reviewed and evaluated periodically, at a minimum prior to each Formal Actuarial Review.

Glossary

Best Estimate Measurement Basis means the actuarial basis established by the Actuary that measures the Plan's financial position in the same manner as the Going-Concern Measurement Basis but with the exception that assumptions represent the mean or average expected future outcomes – i.e. all margins are excluded.

Eligible Employee means all employees of the University categorized as “academic” whose status is permanent and who are working at least 50% time, and are required to join the Plan after completing three years of service or, if earlier, after being granted tenure.

Formal Actuarial Review means a review of the Plan's financial position as prepared by the Actuary for the purpose of establishing a recommendation on the contributions that should be made to the Plan and that is filed with the regulators.

Funding means the process by which a pension plan accumulates capital for future distribution to plan members in order to satisfy benefit obligations. The sources through which capital is accumulated include principal contributions made by the sponsor or members and investment returns earned on principal contributions prior to distribution.

Funding Outcomes means the outcomes that a pension plan's particular funding strategy is expected to achieve in terms of both an end result and the means to a particular end result.

Going-Concern Measurement Basis means the actuarial basis specific to the Plan that measures its assets, liabilities and surplus / deficit as if it were continuing indefinitely into the future. Key characteristics of the basis for determining going-concern liabilities include:

- inclusion of past and future service benefits;
- projection of future salaries;
- real rate of return assumption that reflects the current investment policy and the premise that this policy continues indefinitely into the future; and
- assumptions that are based on best estimate assumptions with appropriate margin to reflect the significance of the underlying risks and the Strategic Funding Objectives.

Solvency Measurement Basis means the actuarial basis used to measure the Plan's financial position at a particular point in time from the perspective that the Plan was terminated and all obligations settled at that time. The assumptions and methods that make up the Solvency Measurement Basis are largely prescribed by legislation.

Strategic Funding Objectives means the specific objectives established by a pension plan that guide and manage the plan's Funding so as to help ensure the realization of the Funding Outcomes.

Appendix A

Summary of Plan Provisions

The following is a brief summary of the provisions of the Plan that are of importance in determining the actuarial liabilities in respect of the Plan. This summary reflects all amendments up to and including pending Amendment P-14.

The legal plan documents should be referred to for purposes of determining precise benefit entitlements.

Effective Date

The Plan was established January 1, 1999 following a split of the Pension Plan for the Academic Employees of the University of Saskatchewan, 1974 (the “Old Plan”) between pensioners and active / inactive members. All assets and membership in respect of the active / inactive members were transferred to this Plan.

Once created, the Plan initially had the same benefit entitlements as the Old Plan but effective January 1, 2000, the Plan was amended to:

- provide an option for active members as at January 1, 2000 to convert their membership to a money purchase pension option;

- recalculate the interest credited on employee and University contributions up to January 1, 2000 such that it is the greater of interest that has been credited to this date and the net fund rate of return;

- pay out contributions (with accumulated interest) made by the University between January 1, 1992 and June 30, 1994 that could not be credited to members due to restrictions under the Income Tax Act; and

- divide the surplus between the defined benefit and money purchase pension options and pay out the portion allocated to the money purchase pension option to the money purchase members.

Eligibility

A permanent employee is eligible to join the Plan on or after the date he or she becomes a permanent employee and must join the Plan as a condition of employment after completing three years of continuous employment or, if earlier, after being granted tenure. A permanent employee is one who is employed half-time or more in:

- a probationary appointment leading to permanent status;
- a term appointment of two years or longer; or
- a without-term appointment for an expected duration of two years or longer.

Earnings

Earnings has the following meaning:

(a) Earnings will mean only members' basic salary and does not include honorariums, night school and summer earnings, etc.

(b) In the case of a member whose salary is paid by the University and the Province of Saskatchewan, earnings will be:

$$\frac{\text{University salary} \times \text{Median for the rank}}{\text{total salary}}$$

(c) In the case of a member who is a member of the clinical medical staff or whose salary is paid by the University and the University Hospital, earnings will be the academic component of salary.

Earnings in any year are subject to a maximum of the median of annual salaries earned by all full professors and deans. Furthermore, the maximum Earnings in any year prior to 2006 cannot exceed the year's money purchase contribution limit as defined in the *Income Tax Act* ($24,270 for 2012) divided by 18% and for years after 2005 cannot exceed the year's money purchase contribution limit divided by 18% plus 0.4% of the year's YMPE divided by 2.0%.

Contributions

Currently, total fixed rate contributions to the Plan's defined benefit component are 17.0% of earnings, to be shared equally between the members and the University. If such contributions are deemed by the actuary to be insufficient to support the existing level of benefits, the Academic Defined Benefit Pension Committee may recommend adjustments to the contribution rates or the benefits to be earned for service after such time.

Effective June 1, 2007, a 1% DC contribution will be made in respect of USFA and senior administration members. This contribution will be shared equally by the University and the affected members. Upon such members' termination, retirement or death, these DC contributions together with accumulated investment returns will be paid to the member. Effective September 1, 2010, these additional contributions to the defined contribution component ceased, with existing account balances remaining on deposit in the Plan.

Interest Rate Credited

In respect to the defined benefit component of the Plan, member and University contribution balances are credited with interest each year such that the total member and University contribution balance with interest is the greater of:

- the member and University contributions credited each year with the minimum rate prescribed under The Pension Benefits Act (Saskatchewan); and

- the member and University contributions credited each year with the net fund rate of return up to January 1, 2000 and with the net fund rate of return less 1% after December 31, 1999.

In respect to the defined contribution component of the Plan, member and University contribution balances are credited with interest each year at the net fund rate of return.

Normal Retirement

The normal retirement date of a member is the June 30th coincident with or next following the member's 67th birthday.

Early Retirement

A member may, at their option, retire at any time on or after the June 30th coincident with or next following attainment of age 55.

For retiring members with at least 10 years of employment, the pension in respect of post-1991 service is reduced by 0.25% for each month that the member's age at retirement is less than the earlier of:

- the age at which the member's age plus service total 80 (assuming continued active membership in the Plan until the time that the member would have reached the 80 rule); or
- age 60.

This early retirement reduction does not apply to pre-1992 service.

For retiring members with less than 10 years of employment, there is an actuarial equivalent reduction in the normal pension. If the member has at least three years of employment, the actuarial equivalent reduction is calculated from age 60, otherwise it is calculated from age 65.

Postponed Retirement

A member may be permitted to postpone retirement beyond the normal retirement date, in which case contributions and pension accruals will continue to accrue after the normal retirement date. The member's pension must commence prior to the end of the calendar year in which he or she attains age 71. The pension payable at postponed retirement will be actuarially increased from the normal retirement date.

Normal Pension Benefit

The normal annual pension benefit is equal to the sum of (a) and (b) below.

(a) A Future Service Pension equal to:

- (i) 2% of the member's best four years average pensionable salary multiplied by service on and after June 30, 1965;
  less
- (ii) 0.4% multiplied by service after December 31, 2005, multiplied by the average CPP earnings ceiling in the year of retirement and the two previous years.

(b) A Past Service Pension equal to

- (i) 2% of the member's best four years average pensionable salary multiplied by service prior to June 30, 1965;
  less
- (ii) the amount of pension payable under the terms of the prior plans adjusted where appropriate, to the normal form of pension described below.

If the Past Service Pension is negative, it will be ignored.

Alternatively, a retiring member may elect to transfer the greater of the commuted value of the pension or total allocated contributions (member's and University's) together with accrued interest to a locked-in registered retirement savings vehicle, within the maximum transfer limits specified by the *Income Tax Act.* Any excess transfer amount is paid in combination of cash or as a temporary pension.

Normal Form of Pension

The normal form of pension provides for monthly payments for life with 120 monthly payments being guaranteed. Optional forms of pension are available on an actuarial equivalent basis.

Indexing

All pensions in payment are to be adjusted each January 1 up to the lesser of the increase in the Consumer Price Index and 2% for the first five years after a member's retirement.

Maximum Pension Limit

The maximum pension permitted under the Plan is the lesser of:

(1) 2% multiplied by the average of the member's highest three consecutive years' annualized contributory earnings multiplied by years and fractions thereof of full-time equivalent credited service; and

(2) the maximum annual pension accrual prescribed by the *Income Tax Act* multiplied by years and fractions thereof of full-time equivalent credited service.

Benefits on Termination

A member who terminates employment may transfer out the greater of:

- member plus University contributions (or two times member contributions plus interest for service on and after January 1, 1992) with accumulated interest; or
- the commuted value of the pension benefit plus excess contributions.

Such transfers are subject to provincial locking-in rules and the maximum transfer limits under the *Income Tax Act.*

Alternatively, a member may leave his or her contributions on deposit and receive a transfer or pension at a later date.

Death Benefits Before Retirement

On death before retirement, the member's designated beneficiary or estate receives a sum equal to the greater of the member's and the University's contributions with interest (or two times member contributions plus interest for service on and after January 1, 1992) and the commuted value of the pension benefit. If the member has postponed retirement it is assumed that the member retired on the date of death.

Benefits on Disability

While receiving benefits from the University's salary continuance plan, a member's pensionable service will continue to accrue. In addition, member required contributions and University contributions will continue to be made to the Plan based on the member's rate of earnings in effect immediately prior to disability.

APPENDIX B

University of Saskatchewan 1999 Academic Pension Plan Funding Policy
Financial Measurement Parameters Examples

Valuation Date	Best Estimate Liabilities	Target Funding Zone: 105% of Best Estimate Liabilities	Target Funding Zone: 120% of Best Estimate Liabilities	Adopted Going-Concern Liabilities	Assets	Surplus (Deficit) Position	Unamortized Deficit Balance at Valuation Date	Comments
Scenario 1								
2009	10,000,000	10,500,000	12,000,000	10,000,000	10,000,000	0	0	Best estimate basis adopted for 2009 valuation
2012	12,000,000	12,600,000	14,400,000	14,400,000	15,000,000	600,000	0	Significant asset gains allow margin to be set at upper limit
2015	14,500,000	15,225,000	17,400,000	16,000,000	16,000,000	0	0	Margin falls back within range of 105% to 120%
Scenario 2								
2009	10,000,000	10,500,000	12,000,000	10,000,000	10,000,000	0	0	Best estimate basis adopted for 2009 valuation
2012	12,000,000	12,600,000	14,400,000	12,600,000	12,000,000	-600,000	600,000	Margin must be set at 105% as it was less than 105% in 2009 Unamortized Deficit initiates special payments to be made as required by legislation
2015	12,000,000	12,600,000	14,400,000	13,000,000	13,000,000	0	0	Asset gains and special payments eliminate deficit and allow margin to be set within range of 105% to 120%
Scenario 3								
2009	10,000,000	10,500,000	12,000,000	10,000,000	10,000,000	0	0	Best estimate basis adopted for 2009 valuation
2012	12,000,000	12,600,000	14,400,000	12,600,000	12,000,000	-600,000	600,000	Margin must be set at 105% as it was less than 105% in 2009 Unamortized Deficit initiates special payments to be made as required by legislation
2015	13,333,000	14,000,000	16,000,000	13,480,000	13,000,000	-480,000	480,000	$600,000 deficit from 2012 has been reduced to $480,000 by special payments and any net positive experience. Hence margin of less than 105% can be adopted only to the extent that it does not result in a better financial position than a $480,000 deficit