



**A Report on the
Actuarial Valuation of the
Saskatchewan Municipal Employees' Pension Plan
as at December 31, 2008**

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Section 1 Executive Summary

INTRODUCTION

This report has been prepared at the request of the Saskatchewan Municipal Employees' Pension Commission to determine the funding parameters of the defined benefit part of the plan as at December 31, 2008. The Commission has recommended to the Minister of Finance that, effective January 1, 2010, the general member contribution rate be increased to 6.4% from 5.4% and the emergency member contribution rate be increased to 8.75% from 7.3%. A similar increase, to 7.4% for general members and to 10.2% for emergency members (approval under the Income Tax Act will be required for member contributions exceeding 9%) is recommended effective January 1, 2011 based on the results of this valuation. This valuation takes into account the effect of the increase planned for January 1, 2010 and the increase recommended for January 1, 2011. The previous valuation was effective as at December 31, 2007.

This valuation is the third annual valuation performed under a Funding Policy adopted by the Commission to provide a framework for the sound financial management of the plan, and to guide decisions that will have to be made from time to time to restore or maintain a satisfactory funded status. The Funding Policy enables the Commission to be proactive in managing the financial status of the plan, and will help to facilitate communication with stakeholders on the status of the plan.

This report sets forth the results of valuations on both a going-concern and a solvency basis. The going-concern valuation is presented on two bases:

- a. the minimum funding valuation which incorporates incremental investment returns above the lowest-risk portfolio consistent with the investment class allocations in the investment policy, and
- b. the maximum funding valuation which is based on a belief that market yields on long-term government bonds are the best unbiased measure of future investment performance for a lowest-risk investment portfolio, with allowance for a small incremental return.

The results of the minimum and maximum funding valuations, as well as of the solvency valuation, are shown including, and excluding, any future additional allowances ("indexing") that would be granted solely as a result of existing policies adopted by the Commission.

It is anticipated that the funding status in an actuarial valuation will generally show a surplus on the minimum funding basis and a deficit on the maximum funding basis. In other words, a hypothetical basis which would produce neither a surplus nor a deficit would involve assumptions that fall between the assumptions used for the minimum funding basis and the assumptions used for the maximum funding basis. The Funding Policy dictates that action must be taken if this is not the case, as follows:

- a. If minimum funding reveals a deficit, the Commission must consider reducing benefits or increasing contributions, or

- b. If maximum funding reveals a surplus, the Commission should consider establishing a further reserve to fund future current service cost shortfalls, improving benefits or reducing contributions, but
- c. If an excess surplus as defined in the *Income Tax Act* cannot be avoided, then the Commission must consider improving benefits or reducing contributions to eliminate the excess surplus.

In addition, if the solvency valuation excluding future additional allowances reveals a deficit, the Commission must consider reducing benefits or increasing contributions.

The Commission may also consider taking some action if current funding is approaching either minimum funding (a small surplus) or maximum funding (a small deficit).

RESULTS

As there is a deficit under the solvency valuation when excluding future additional allowances, the Commission has taken action effective June 1, 2009 to eliminate future additional allowances. Accordingly, the valuation results are shown below **excluding future additional allowances**.

Consistent with the assumptions used in the December 31, 2007 valuation, we have assumed real salary increases will be at 2% for the first four years following the valuation and 1% thereafter, recognizing that wage increases in Saskatchewan are expected to be higher than average for at least the short-term.

Financial Position at December 31, 2008

A comparison of the financial position under the minimum and maximum funding valuations as at December 31, 2008, excluding future additional allowances, is as follows:

	(thousands of dollars)	
	Minimum Funding	Maximum Funding
Assets at market value	\$1,126,380	\$1,126,380
Adjustment*	<u>56,319</u>	<u>56,319</u>
Adjusted assets (actuarial value)	\$1,182,699	\$1,182,699
Liabilities and reserves	\$1,060,917	\$1,652,601
Surplus/(Deficit)	\$121,782	(\$469,902)
As a percentage of actuarial value	10.3%	(39.7%)

*The adjustment to the assets is the effect of the asset smoothing in accordance with the Funding Policy.

In addition, the solvency valuation produces a deficiency when future additional allowances, granted solely as a result of existing policies adopted by the Commission, are excluded, as follows:

	(thousands of dollars)	
	Solvency Basis 2% indexing for pre-1999 service	Solvency Basis no indexing for pre-1999 service
Assets at market value	\$1,126,380	\$1,126,380
Expenses of plan wind-up	<u>(6,310)</u>	<u>(6,310)</u>
Net assets for solvency purposes	\$1,120,070	\$1,120,070
Total solvency liabilities	\$1,331,829	\$1,175,699
Excess/(Shortfall)	(\$211,759)	(\$55,629)

Current Service Cost

A comparison of the current service cost as a percentage of salary and as dollar amounts under the minimum and maximum funding valuations in 2009, excluding additional future allowances, is as follows:

	(% of Salary)	
	Minimum Funding	Maximum Funding
Current service cost	12.9	21.1
Expected contributions	11.0	11.0
Excess normal cost	1.9	10.1

	(thousands of dollars)	
	Minimum Funding	Maximum Funding
Current service cost	\$48,504	\$79,460
Expected contributions	41,344	41,344
Excess normal cost	7,160	38,116

A comparison of the current service cost as a percentage of salary and as dollar amounts under the minimum and maximum funding valuations, after the increases planned for January 1, 2010 excluding additional future allowances, would be as follows:

	(% of Salary)	
	Minimum Funding	Maximum Funding
Current service cost	13.0	21.1
Expected contributions	13.0	13.0
Excess normal cost	0.0	8.1

	(thousands of dollars)	
	Minimum Funding	Maximum Funding
Current service cost	\$49,172	\$79,786
Expected contributions	49,032	49,032
Excess normal cost	140	30,754

A comparison of the current service cost as a percentage of salary and as dollar amounts under the minimum and maximum funding valuations, after the increases planned for January 1, 2010 and recommended for January 1, 2011 and excluding additional future allowances, would be as follows:

	(% of Salary)	
	Minimum Funding	Maximum Funding
Current service cost	13.3	21.2
Expected contributions	15.0	15.0
Excess normal cost/(contributions)	(1.7)	6.2

	(thousands of dollars)	
	Minimum Funding	Maximum Funding
Current service cost	\$50,005	\$80,164
Expected contributions	56,724	56,724
Excess normal cost/(contributions)	(6,719)	23,440

COMMENTS AND RECOMMENDATIONS

Poor financial returns in 2008 have contributed to a deterioration of the financial position of the plan on the minimum and maximum funding bases, as well as on a solvency basis. A decision by the Commission to eliminate future additional allowances effective June 1, 2009 has served to reduce liabilities and thereby mitigate the effect of the decline in asset values on the financial position of the plan.

Even so, as there is a solvency deficiency, in general, special payments would be required to fund that deficiency. However, amendments to the *Pension Benefits Regulations, 1993*, announced by the Saskatchewan Financial Services Commission ("SFSC") will provide for the election of a 3-year moratorium on solvency deficiency funding payments under valuations prepared and filed between December 31, 2008 and January 1, 2011. In order to take full advantage of this moratorium, it is our recommendation that the next valuation filed with the SFSC be effective December 31, 2010. That is, we do not recommend that either this valuation or the one at December 31, 2009 be filed with SFSC.

In the meantime, we also recommend that the Commission proceed with a second increase in contribution rates effective January 1, 2011, to 7.4% for general members and to 10.2% for emergency members (approval under the Income Tax Act will be required for member contributions exceeding 9%). This increase had been contemplated based on the results of the valuation as at December 31, 2007, being the rates necessary to fully cover current service funding requirements on a minimum funding valuation basis. However, action on the increase was not taken pending results of this valuation as at December 31, 2008. The valuation results in this report reflect this recommended increase.

These contribution rates exceed the minimum funding current service cost in this valuation, providing an excess available to fund about 90% of the solvency deficiency. On the basis of this valuation, and assuming a stable population, we estimate the present value of the excess of the matching contributions over the current service cost for the years 2011 to 2018 to be \$50.029 million. This is \$5.6 million short of the present value of the special payments that would be required in the years 2014 to 2018 to fund the solvency deficiency revealed in this valuation (taking advantage of the 3-year moratorium on funding payments).

The actual financial position at December 31, 2010 and the solvency payments that would be required will be affected by financial returns in the interim, demographic changes, and changes in market based solvency assumptions. Leaving the next filed valuation to that date allows the maximum time for some return to better economic and investment conditions before further contribution rate changes may need to be considered, since funding requirements for a solvency deficiency existing at that valuation will not be required until January 1, 2014.

Under the Funding Policy, the existence of a shortfall on the solvency basis excluding future additional allowances requires the Commission to consider reducing additional allowances already granted, increasing contributions, or other benefit changes as may be necessary to satisfy regulatory solvency funding requirements. The following actions have already been taken (or are under consideration) and have been taken into account in this valuation:

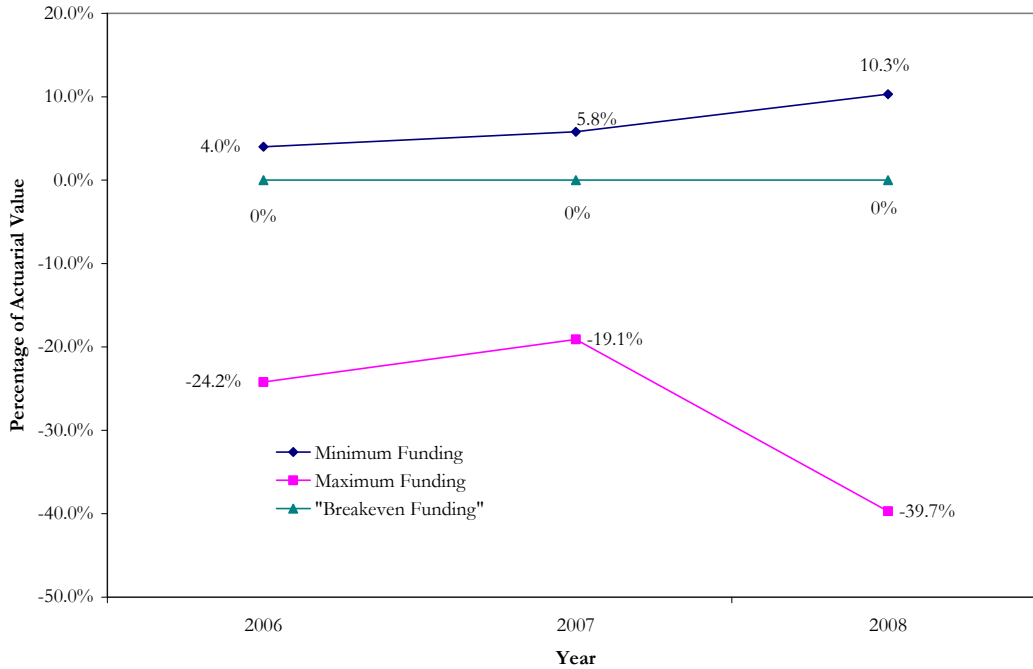
1. contribution increases are planned for January 1, 2010 and January 1, 2011, and
2. future additional allowances have been cancelled effective June 1, 2009.

While these changes are not quite sufficient to meet the regulatory solvency funding requirements that would be required if this valuation is filed, they may prove to be sufficient as market conditions improve. Accordingly, we recommend that no further action be considered at this time but that monitoring of the situation continue.

Additional comments may be found in Section 6, Current Funding Adequacy.

The relationship between the results of the minimum and maximum funding valuations is presented in the following chart for this and the previous two valuations. For this valuation, the results do not include the effect of future additional allowances, while they are included in the previous two valuations. Surplus or shortfall generated under each of minimum or maximum funding is shown as a percentage of the actuarial value of the fund. The "breakeven funding" scenario is that set of assumptions and reserves which would produce no surplus or deficit.

Surplus (Shortfall)



SUBSEQUENT EVENTS

In this valuation we have taken into consideration an increase in member and employer contributions which has been recommended to the Minister of Finance to be effective January 1, 2010, as well as a subsequent increase recommended for January 1, 2011. In addition, a decision by the Commission to suspend future additional allowances effective June 1, 2009 has also been taken into consideration. We are not aware of any other subsequent events that are relevant to the valuation.

NEXT VALUATION

The last valuation report filed with the regulatory authorities was effective December 31, 2007. We recommend that the next valuation to be filed with the regulatory authorities be effective December 31, 2010. The Funding Policy indicates valuations are to be done annually.

ANNUITY FUND

The pension fund also provides annuities in respect of money-purchase accounts under the former municipal employees' pension plan. As required by the Canada Revenue Agency, the part of the fund which supports these annuities is separately accounted for and the liabilities have been valued separately in our report dated August 19, 2009. On a going-concern basis, there is a deficit of \$2.702 million in the Annuity Fund on the minimum funding basis; on a solvency basis, there is a shortfall of \$6.215 million.

We look forward to discussing the contents of this report with you at your convenience.

Respectfully submitted,

ECKLER LTD.

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August 19, 2009

Section 2 Asset Data

1. Assets at December 31, 2008

At December 31, 2008, based on the draft financial statements prepared by PEBA, the assets of the plan measured at market value were as follows:

(thousands of dollars)	
Investments	
Short Term	\$11,607
Bonds	222,222
Equities	304,841
Pooled Funds	485,508
Infrastructure	32,416
Real Estate	<u>86,225</u>
	\$1,142,819
Cash	440
Accrued Income	2,806
Net Receivables	5,976
Assets attributable to annuity fund*	<u>(25,661)</u>
	 \$1,126,380

* The fund assets include those which support self-insured annuities provided under the former municipal plan. The Canada Revenue Agency required that, with effect from January 1, 2002, these assets should be accounted for separately with annuities being charged to that account. In the period up to December 31, 2001, such annuities were paid from the fund. The amount attributable to the annuity fund at December 31, 2001 was determined by a report prepared by us and dated November 26, 2002, and this has been updated to the valuation date by adding interest and the purchase price of new annuities and debiting annuities paid and expenses.

2. Summary of Change in Net Assets

The following summarizes the changes in net assets for the full year 2008 based on the audited statements prepared by the Public Employees Benefits Agency (PEBA) for 2008.

	2008 (thousands of dollars)
At start	\$1,379,120
Employee contributions	20,905
Employer contributions	20,766
Transfers-in	1,544
Transfer to annuity fund ¹	(337)
Prior year transfers to annuity fund ²	(328)
Investment income	49,189
Change in market value	(267,522)
Pensions paid	(37,047)
Transfers, refunds etc.	(31,003)
Administration costs	(2,845)
Investment & custodial fees	<u>(6,062)</u>
At end	\$1,126,380
Rate of return ³	(16.44%)

Notes:

1. This amount is in respect of plan members who had some defined contribution liabilities under the former municipal plan. On retirement, these amounts were transferred to the Retirement Annuity portion of the fund.
2. At the previous valuation we decreased the asset value by \$328,000 for pending transfer amounts at December 31, 2007. These amounts have now been recognized in the financial statements.
3. The rate of return is net of investment expenses and assumes that all cash flows, except prior year transfers to the annuity fund, occur on July 1. The transfer for prior year annuities is assumed to have occurred at the beginning of the year.

Section 3 Minimum Funding Valuation

1. Funding Policy

In accordance with the Funding Policy, actuarial assumptions for minimum funding are to be determined by the actuary as best estimate assumptions, modified to include the minimum margins or provision for adverse deviations that may be required by any relevant regulatory or professional body. The best estimate assumptions will include an assumption about the future investment return on plan assets, net of investment-related expenses, used to discount future liabilities. The future investment return assumption will be determined with due consideration to the investment policy.

2. Actuarial Assumptions, Methods and Reserves

In this section we describe the actuarial assumptions, methods and reserves that are specific to the minimum funding valuation. All other assumptions and methods used in the minimum funding valuation are described in Section 8.

a. Actuarial Assumptions

For the minimum funding valuation we have assumed that future investment returns will be 6.5%.

This rate is based on our analysis of expected investment returns, reduced by investment related expenses of 0.25% and by a minimum margin for adverse deviations of 0.25%. Expected investment returns were determined to be approximately 7.1% gross, based on current market yields on fixed income investments and recognizing appropriate risk premiums for the equity and real estate components of the current investment mix. The current investment policy fund benchmark investment mix is shown below. New investment guidelines are expected to reflect a 5% allocation to infrastructure to be phased in over a period of two to three years.

Investment Mix

Bonds and Mortgages	36%
Equity	
Canada	21%
U.S.	18%
Global/EAFE	18%
Real Estate	5%
Money Market	<u>2%</u>
	100%

In the previous funding valuation we assumed that the investment return would be 6.0%.

b. Methods

For the asset value we use a method which smoothes out the investment returns over a period of 5 years. We calculate the investment return assuming that the fund earned 6.5% each year net of investment fees (the investment return assumption for minimum funding) and the balance of the actual investment income is smoothed over 5 years. In 2008, for example, an investment return of 6.5% would have required investment earnings of \$90.852 million. In 2008 the fund lost \$229.811 million net of investment fees. The shortfall of \$320.663 million is recognized at the rate of 20% over the 5 years 2008 to 2012.

The actuarial value expressed as a percentage of market value for the total fund is therefore determined as follows:

			(thousands of dollars)
Market value of total fund (including annuity fund)			\$1,152,041
2008 excess over 6.5%	(\$320,663)	Unrecognized (80%)	256,531
2007 excess over 6.5%	(\$34,357)	Unrecognized (60%)	20,614
2006 excess over 6.5%	\$83,413	Unrecognized (40%)	(33,365)
2005 excess over 6.5%	\$60,123	Unrecognized (20%)	<u>(12,025)</u>
Actuarial value of total fund (incl. annuity fund)			\$1,383,796
			or 120.117% of market value

Under the Funding Policy the actuarial value of assets is limited to not more than 105%, nor less than 95%, of the corresponding market value of assets. Applying this percentage to the part of the fund other than that supporting the annuities we have

Market value		\$1,126,380
Investment Reserve	5%	<u>56,319</u>
Actuarial Value	105%	\$1,182,699

c. Reserves

In accordance with the Funding Policy, reserves under the minimum funding valuation will be established as follows (in lieu of an explicit assumption where relevant):

- i) Administration expenses – the present value of full administration expenses for a 3-year period following the valuation date.

The total administration expenses in the last 3 years were \$8.064 million or an average of \$2.688 million per year. The expense reserve for the minimum funding valuation is the present value at 6.5% of the expenses assumed to be \$2.688 million per year for the next 3 year period, or \$7.563 million including a component for future inflation.

- ii) Excess normal cost – the present value of the excess, if any, of normal costs over the fixed contributions at current rates, for a 3-year period following the valuation date. We have established a reserve of \$2.445 million for general members and \$0.215 million for emergency members.

- iii) Accruals for disabled members – the present value of all future accruals of presently disabled members. We have established a reserve of \$4.860 million to cover all the future accruals of the currently disabled members.

3. Financial Position under Minimum Funding Valuation

Based on the asset information from Section 2, the Plan provisions summarized in Section 7, the membership data summarized in Section 9, and the actuarial assumptions, methods and reserves outlined in this section, the results of the minimum funding valuation at December 31, 2008 compared with the results of the funding valuation at December 31, 2007 (the effective date of the last full valuation) were as follows:

	(thousands of dollars)		
	<u>Dec. 31, 2008</u>	<u>Dec. 31, 2008</u>	<u>Dec. 31, 2007</u>
	(no indexing)	(including indexing)	
Assets at market value	\$1,126,380	\$1,126,380	\$1,378,792
Adjustment*	<u>56,319</u>	<u>56,319</u>	<u>(67,133)</u>
Adjusted assets (actuarial value)	\$1,182,699	\$1,182,699	\$1,311,659
General members	\$538,865	\$580,524	\$604,705
Emergency members	40,300	44,694	44,582
Disabled members	9,384	10,179	9,724
Pensioners	355,760	410,783	406,586
Survivors	29,860	33,978	32,523
Deferred pensioners	44,133	49,185	50,146
Pending	27,361	29,241	42,103
Former Plan accounts and AVCs	<u>171</u>	<u>171</u>	<u>206</u>
Liabilities	\$1,045,834	\$1,158,755	\$1,190,575
Liability reserve	7,520	7,137	38,071
Expense reserve	<u>7,563</u>	<u>7,563</u>	<u>7,080</u>
Liabilities and reserves	\$1,060,917	\$1,173,455	\$1,235,726
Surplus/(Deficit)	\$121,782	\$9,244	\$75,933

*The adjustment to the assets is the effect of the asset smoothing in accordance with the Funding Policy.

4. Summary of Changes in Financial Position

At the previous valuation, the surplus reported was \$75,933,000. At this valuation there is a surplus of \$121,782,000 under the minimum funding valuation. The changes in financial position may be summarized as follows:

	\$000's
Surplus at the previous valuation	\$75,933
Interest on surplus at 6.0% for one year	4,556
Fund earning less than 6.0% ¹	(178,814)
Change in assumptions ²	100,813
Demographic experience ³	(7,023)
Salary loss ⁴	(3,213)
Interest credits on contributions less than assumed ⁵	17,995
Pensioner mortality gain ⁶	679
New entrants ⁷	709
Expense reserve ⁸	(2,988)
Liability reserve ⁹	(14,692)
Increase in contributions ¹⁰	12,158
Removal of indexing ¹¹	112,538
Change in 50% rule attribution ¹²	5,105
Balancing item ¹³	<u>(1,974)</u>
Surplus at this valuation	\$121,782

Notes:

1. In 2008, the fund earned, on the basis of the “actuarial” asset values used in the minimum funding valuation, a rate of return net of investment expenses of -7.78% compared with the 6.0 % assumed in the previous valuation. This has produced an investment loss of \$178,814,000.
2. The valuation interest rate has been increased to 6.5% from 6.0%. In addition, the assumed annual inflation rate has been reduced from 2.2% at the previous valuation to 2.0%. The salary increase assumption for the four years following the valuation date continues at 2% above inflation reducing to 1% above inflation thereafter. The effect of these changes is a reduction in the liabilities of \$100,813,000.
3. We reran the previous valuation for the active members assuming that we had correctly forecast all the decrements and resulting benefit payments. We also considered the impact on the liabilities for those who moved from pending back to active status. On that basis we determined that the liabilities determined at December 31, 2007 were less than the required amount. The difference amounts to \$7,023,000 at December 31, 2008.
4. We reran the 2008 valuation for the active members common to both this valuation and the previous valuation, using the actual 2007 salaries and the 2008 YMPE, increased by the assumed rates for one year. The liabilities were less than those produced using actual 2008 salaries and the 2009 YMPE. The difference amounts to a loss of \$3,213,000 at December 31, 2008.
5. In the previous valuation, we assumed that interest credited to member contribution accounts would be 6.0% per annum in the future. In 2008 the actual rate credited was -16.23%. Therefore, contribution accounts were lower than expected as were liabilities under the 50% rule. We estimated the gain to be \$17,995,000 at December 31, 2008.
6. There was a small gain on pensioner and survivor mortality of \$679,000 in 2008.
7. New entrants in the period who are still active at the valuation date accrued fewer benefits than the accumulated matching contributions and amounts from the reserve to fund excess current service costs. We estimate the excess to be \$709,000 at December 31, 2008.
8. At December 31, 2007, we established a reserve for expenses of \$7.080 million. If we add interest to this amount at 6.0% and debit the result by the expenses actually paid, the remaining reserve is \$4.575 million while the required reserve is \$7.563 million. The difference of \$2.988 million is a reduction to the surplus.
9. Similarly, we established a reserve of \$38.071 for the shortfall in contributions for the years 2008 through 2010. Adding interest at 6.0% and debiting the result by the amount required to fund the shortfall in 2008, the amount remaining at December 31, 2008 is \$26.132 million. But under the minimum funding valuation, before the change in the interest and salary assumptions, the reserve required (before considering the increase in contributions) is now \$40.824 million – a difference of \$14.692 million.
10. Due to the increase in contributions effective January 1, 2010, and the increase recommended for January 1, 2011, the reserve required for the shortfall in contributions for 2009 through 2011 is decreased by \$12.158 million.

11. Due to the existence of a shortfall on the solvency valuation, the Commission has cancelled future additional allowances effective June 1, 2009. The change in assumptions to reflect this reduces the liabilities by \$112.538 million.
12. We changed our method of attributing the additional liability determined under the 50% rule. This has the effect of increasing the accrued liabilities and of decreasing the current service cost. The net effect on accrued liabilities, due to a reduction in the reserve held for the excess of current service cost over contributions is a reduction in liabilities of \$5.105 million.
13. This reconciliation involves a number of approximations and the balancing item of (\$1,974,000) represents less than 0.2% of liabilities and reserves.

5. Current Service Cost

In 2009, general members contribute 5.4% and emergency members 7.3% of earnings with employers matching these contributions. Based on the results of the previous valuation, the Commission has recommended to the Minister that these be increased to 6.4% and 8.75%, respectively, effective January 1, 2010. In addition, the Commission had contemplated a further increase to 7.4% and 10.2%, respectively, effective January 1, 2011, pending the results of this December 31, 2008 valuation. Based on the results of this valuation, we recommend a further increase to 7.4% and 10.2%, respectively, effective January 1, 2011 as contemplated based on the previous valuation. Under the minimum funding valuation the cost of future benefit accruals is somewhat higher than those matching contributions in the three years following this valuation. The excess is the “excess normal cost” referred to in the Funding Policy, and the value of the excess normal cost for 3 years after the valuation date is included within the liability reserve shown in the financial position of the plan. After the recommended increase January 1, 2011, the member contributions and matching employer contributions will be more than sufficient to cover the current service cost. The excess would go towards the solvency deficiency payments that would be required if this valuation were filed.

The following tables show the current service cost as a percentage of salary and as a dollar amount and compares these with the total matching contributions expected in 2009:

	% of Salary		
	General	Emergency	Total
Current service cost	12.6	17.6	12.9
Expected member contributions	5.4	7.3	5.5
Expected employer contributions	5.4	7.3	5.5
Excess normal cost	1.8	3.0	1.9

	Thousands of Dollars		
	General	Emergency	Total
Current service cost	\$45,618	\$2,886	\$48,504
Expected member contributions	19,473	1,199	20,672
Expected employer contributions	19,473	1,199	20,672
Excess normal cost	6,672	488	7,160

The following tables show the current service cost as a percentage of salary and as a dollar amount and compares these with the total matching contributions expected after the increase in contributions January 1, 2010:

	% of Salary		
	General	Emergency	Total
Current service cost	12.8	17.74	13.0
Expected member contributions	6.4	8.75	6.5
Expected employer contributions	6.4	8.75	6.5
Excess normal cost	0.0	0.24	0.0

	Thousands of Dollars		
	General	Emergency	Total
Current service cost	\$46,259	\$2,913	\$49,172
Expected member contributions	23,079	1,437	24,516
Expected employer contributions	23,079	1,437	24,516
Excess normal cost	101	39	140

The following tables show the current service cost as a percentage of salary and as a dollar amount and compares these with the total matching contributions expected after the increase in contributions January 1, 2010 and 2011:

	% of Salary		
	General	Emergency	Total
Current service cost	13.1	18.0	13.3
Expected member contributions	7.4	10.2	7.5
Expected employer contributions	7.4	10.2	7.5
Excess normal cost/(contributions)	(1.7)	(2.4)	(1.7)

	Thousands of Dollars		
	General	Emergency	Total
Current service cost	\$47,056	\$2,949	\$50,005
Expected member contributions	26,686	1,676	28,362
Expected employer contributions	26,686	1,676	28,362
Excess normal cost/(contributions)	(6,316)	(403)	(6,719)

Section 4 Maximum Funding Valuation

1. Funding Policy

In accordance with the Funding Policy actuarial assumptions and reserves for the maximum funding valuation are to be the same as for the minimum funding valuation, with two exceptions:

- i. Administration expenses – may be established as a target reserve amount necessary to cover all administration expenses applicable to benefits earned to date.
- ii. The assumed rate of return on plan assets, net of investment-related expenses, will be determined as the effective interest rate equivalent to the market yield on Canada bonds, 10-years and over, plus 0.50%.

2. Actuarial Assumptions, Methods and Reserves

In this section we describe the actuarial assumptions, methods and reserves that are specific to the maximum funding valuation. All other assumptions and methods used in the maximum funding valuation are described in Section 8.

a. Actuarial Assumptions

As of the date of the valuation the nominal market yield on Canada bonds, 10-years and over was 3.45% or 3.48% annualized. Thus for the maximum funding valuation we have assumed that future investment returns will be 4.0% (3.48% + 0.50% rounded to nearest 0.25%). In the previous valuation we assumed the return would be 4.75%.

b. Methods

For the asset value we use a method which smoothes out the investment returns over a period of 5 years. We calculate the investment return assuming that the fund earned 4.0% each year net of investment fees (the investment return assumption for maximum funding) and the balance of the actual investment income is smoothed over 5 years. In 2008, for example, an investment return of 4.0% would have required investment earnings of \$55.909 million. In 2008 the fund lost \$229.811 million net of investment fees. The shortfall of \$285.720 million is recognized at the rate of 20% over the 5 years 2008 to 2012.

The actuarial value expressed as a percentage of market value for the total fund is therefore determined as follows

			(thousands of dollars)
Market value of total fund (including annuity fund)			\$1,152,041
2008 excess over 4.0%	(\$285,720)	Unrecognized (80%)	228,576
2007 excess over 4.0%	\$12	Unrecognized (60%)	(7)
2006 excess over 4.0%	\$114,465	Unrecognized (40%)	(45,786)
2005 excess over 4.0%	\$88,507	Unrecognized (20%)	<u>(17,701)</u>
Actuarial value of total fund (incl. annuity fund)			\$1,317,122
			Or 114.329% of market value

Under the Funding Policy the actuarial value of assets is limited to not more than 105%, nor less than 95%, of the corresponding market value of assets. Applying this percentage to the part of the fund other than that supporting the annuities, we have

Market value		\$1,126,380
Investment Reserve 5%		<u>56,319</u>
Actuarial Value 105%		\$1,182,699

c. Reserves

In accordance with the Funding Policy, reserves for the maximum funding valuation are to be the same as for the minimum funding valuation, with the exception that the administration expense reserve may be established as a target amount necessary to cover all administration expenses applicable to benefits earned to date. The reserves under the maximum funding valuation are established as follows:

- i) The total administration expenses in the last 3 years were \$8.064 million or an average of \$2.688 million per year – about 4.2% of benefits paid. Thus our target reserve is established at 4.2% of benefits (liabilities) or \$70.325 million.
- ii) Excess normal cost – the present value of the excess, if any, of normal costs over the fixed contributions at current rates, for a 3-year period following the valuation date. We have established a reserve of \$82.532 million for general members and \$5.527 million for emergency members.
- iii) Accruals for disabled members – the present value of all future accruals of presently disabled members. We have established a reserve of \$8.550 million to cover all the future accruals of the currently disabled members.

3. Financial Position under Maximum Funding Valuation

Based on the asset information from Section 2, the Plan provisions summarized in Section 7, the membership data summarized in Section 9, and the actuarial assumptions, methods and reserves outlined in this section, the results of the maximum funding valuation at December 31, 2008 compared with the results of the funding valuation at December 31, 2007 (the effective date of the last full valuation) were as follows:

	(thousands of dollars)		
	<u>Dec 31, 2008</u> (no indexing)	<u>Dec. 31, 2008</u> (including indexing)	<u>Dec. 31, 2007</u>
Assets at market value	\$1,126,380	\$1,126,380	\$1,378,792
Adjustment*	<u>56,319</u>	<u>56,319</u>	<u>(68,940)</u>
Adjusted assets (actuarial value)	\$1,182,699	\$1,182,699	\$1,309,852
General members	\$823,073	\$903,507	\$744,369
Emergency members	61,557	69,673	55,417
Disabled members	13,300	14,634	11,675
Pensioners	442,893	524,539	459,386
Survivors	35,547	41,281	35,862
Deferred pensioners	65,594	74,755	60,215
Pending	43,532	46,831	53,589
Former Plan accounts and AVCs	<u>171</u>	<u>171</u>	<u>206</u>
Liabilities	\$1,485,667	\$1,675,391	\$1,420,719
Liability reserve	96,609	96,586	78,980
Expense reserve	<u>70,325</u>	<u>70,325</u>	<u>60,033</u>
Total liabilities and reserves	\$1,652,601	\$1,842,302	\$1,559,732
Surplus/(Deficit)	(\$469,902)	(\$659,603)	(\$249,880)

*The adjustment to the assets is the effect of the asset smoothing in accordance with the Funding Policy..

4. Current Service Cost

General members contribute 5.4% and emergency members 7.3% of earnings with employers matching these contributions. The Commission has recommended to the Minister that these be increased to 6.4% and 8.75%, respectively, effective January 1, 2010. Based on the results of this valuation a further increase to 7.4% and 10.2%, respectively, effective January 1, 2011 is recommended. Under the maximum funding valuation the cost of future benefit accruals is higher than those matching contributions. The excess is the “excess normal cost” referred to in the Funding Policy, and the value of the excess normal cost for 3 years after the valuation date is included within the liability reserve shown in the financial position of the plan.

The following tables show the current service cost as a percentage of salary and as a dollar amount and compares these with the total matching contributions expected in 2009:

	% of Salary		
	General	Emergency	Total
Current service cost	20.7	29.2	21.1
Expected member contributions	5.4	7.3	5.5
Expected employer contributions	5.4	7.3	5.5
Excess normal cost	9.9	14.6	10.1

	Thousands of Dollars		
	General	Emergency	Total
Current service cost	\$74,658	\$4,802	\$79,460
Expected member contributions	19,473	1,199	20,672
Expected employer contributions	19,473	1,199	20,672
Excess normal cost	35,712	2,404	38,116

The following tables show the current service cost as a percentage of salary and as a dollar amount and compares these with the total matching contributions expected after the increase effective January 1, 2010:

	% of Salary		
	General	Emergency	Total
Current service cost	20.8	29.30	21.1
Expected member contributions	6.4	8.75	6.5
Expected employer contributions	6.4	8.75	6.5
Excess normal cost	8.0	11.80	8.1

	Thousands of Dollars		
	General	Emergency	Total
Current service cost	\$74,977	\$4,809	\$79,786
Expected member contributions	23,079	1,437	24,516
Expected employer contributions	23,079	1,437	24,516
Excess normal cost	28,819	1,935	30,754

The following tables show the current service cost as a percentage of salary and as a dollar amount and compares these with the total matching contributions expected after the increase effective January 1, 2010 and 2011:

	% of Salary		
	General	Emergency	Total
Current service cost	20.9	29.4	21.2
Expected member contributions	7.4	10.2	7.5
Expected employer contributions	7.4	10.2	7.5
Excess normal cost	6.1	9.0	6.2

	Thousands of Dollars		
	General	Emergency	Total
Current service cost	\$75,340	\$4,824	\$80,164
Expected member contributions	26,686	1,676	28,362
Expected employer contributions	26,686	1,676	28,362
Excess normal cost	21,968	1,472	23,440

Section 5 Solvency Valuation

1. Funding Policy

A solvency valuation assumes that the plan is terminated and wound-up on the valuation date and that benefits are settled through the purchase of annuities and the transfer-out of commuted values.

In accordance with the Funding Policy, solvency valuation results will be prepared on a basis consistent with the requirements of *The Pension Benefits Act, 1992* and accepted actuarial practice, and on two alternative bases:

1. Reflecting all benefits and terms as provided in the Act and regulations, including benefits and future benefits established by policies adopted by the Commission (e.g. "additional allowances").
2. As in point 1. above, but excluding any future additional allowances that would be granted solely as a result of existing policies adopted by the Commission.

2. Actuarial Assumptions, Methods and Reserves

In this section we describe the actuarial assumptions, methods and reserves that are specific to the solvency valuation.

a. Assumptions

- i. Salary Projection - A salary projection is not required as the accrued benefits are based on the salary history as of the wind-up date.
- ii. Commuted Value - We assume that all members not eligible to retire immediately would transfer the lump sum commuted value out of the Plan. The lump sum commuted values are calculated based on the Canadian Institute of Actuaries (CIA) Standards of Practice for Commuted Values effective April 2009 as they apply to calculations made in December 2008 (specifically by assuming mortality in accordance with UP94@2020, and using a discount rate of 4.2% for the first ten years following the valuation date and 5.7% thereafter). Though the revised standard is effective April 2009, its use is permitted for the purpose of solvency valuations performed as at December 31, 2008.
- iii. Annuity Purchase - We assume that annuities would be purchased for all current pensioners and all other members eligible to retire immediately. The purchase price for annuities is approximated by assuming mortality in accordance with the UP94@2015 mortality table and a discount rate of 4.85%. This is the basis recommended by the Canadian Institute of Actuaries for the valuation of immediate pensions for solvency valuations performed as at December 31, 2008.
- iv. For both commuted value and annuity purchase liability calculations we assume 90% of male members and 70% of female members are married and that the female spouse is four years younger than the male spouse, if marital status and age of spouse are unknown.

b. Methods

Our postulated scenario on wind-up of the pension plan is that members would be eligible for subsidized early retirement benefits etc. based on service accrued to the date of wind-up only. This is in keeping with the terms of the pension plan which provide for eligibility based on credited or contributory service. Previously, our postulated scenario provided for continuing employment service after wind-up of the pension plan to be taken into consideration when determining eligibility for subsidized early retirement. The liability under the solvency valuation is determined to be the present value at the valuation date of future pension payments. The value of the member's accrued benefits is compared to the accumulated contributions with interest. If the contributions with interest are greater than 50% of the liability, the liability is increased by the difference.

c. Reserves

No reserves are required, other than for the expenses required for plan wind-up which are assumed to be \$300 per member (in all categories).

3. Financial Position under the Solvency Valuation

Based on the assumptions and methods described in this section, the Plan provisions summarized in Section 7, and the membership data summarized in Section 8, the results of the solvency valuation are as follows:

	(thousands of dollars)	
	2% indexing for pre-1999 service	no indexing for pre-1999 service*
Assets at market value	\$1,126,380	\$1,126,380
Expenses of plan wind-up	<u>(6,310)</u>	<u>(6,310)</u>
Net assets for solvency purposes	\$1,120,070	\$1,120,070
General members	\$656,142	\$592,118
Emergency members	45,577	40,133
Disabled members	11,422	10,320
Pensioners	480,261	409,294
Survivors	38,496	33,397
Deferred pensioners	61,930	55,001
Pending	37,830	35,265
Former Plan accounts and AVCs	<u>171</u>	<u>171</u>
Total	\$1,331,829	\$1,175,699
Excess/(Shortfall)	(\$211,759)	(\$55,629)
Solvency ratio	0.84	0.95

* other than the 2% indexing that occurred January 1, 2009

At the previous valuation, we determined that an assumption of 1.55% for future indexing in respect of pre-1999 service would produce a small surplus on a solvency basis (including the results of the solvency valuation in respect of the annuities underwritten by the Plan). At this valuation there is a solvency shortfall even when no future indexing is assumed in respect of pre-1999 service.

If this valuation were filed with the Saskatchewan Financial Services Commission, special payments of \$14.2 million would be required in each of the years 2012 – 2016 (taking advantage of the three year moratorium on solvency deficiency payments), to amortize the solvency deficiency.

4. **Recommended Commuted Value Basis**

We recommend that commuted values be determined in accordance with the Standards of Practice of the Canadian Institute of Actuaries with respect to commuted values as of the date of calculation (the “Standards”) and where the Standards are not specific, effective January 1, 2010 with an exception noted below, the assumptions used to determine the commuted value of a pension would be as follows:

1. Mortality on a unisex basis: 51% male.
2. Probability of eligible spouse at retirement: 80%*
3. Age of spouse: 0.58 years younger than member*
4. Discount rates: As specified in the Standards for non-indexed pensions.
5. Future increases, where applicable (effective June 1, 2009): There will be no allowance made in the calculations for future pension increases.

* where the pension is assumed to commence immediately, the actual marital status and age of spouse would be used.

Lump sum values will apply for 120 days after the calculation date. After 120 days a recalculation will be made using the then current basis. For transfers within 120 days of the calculation date, the commuted value will be increased with interest at the discount rate used to calculate the commuted value for the period between the calculation date and the transfer date.

Section 6 Current Funding Adequacy

1. Funding Requirements

a. Comparison of Minimum and Maximum Funding

A comparison of the financial position under the minimum and maximum funding valuations as at December 31, 2008 is as follows:

	(thousands of dollars)	
	Minimum Funding	Maximum Funding
Assets at market value	\$1,126,380	\$1,126,380
Adjustment*	<u>56,319</u>	<u>56,319</u>
Adjusted assets (actuarial value)	\$1,182,699	\$1,182,699
Liabilities	\$1,045,834	\$1,485,667
Liability reserve	7,520	96,609
Expense reserve	<u>7,563</u>	<u>70,325</u>
	\$1,060,917	\$1,652,601
Surplus/(Deficit)	\$121,782	(\$469,902)
As a percentage of actuarial value	10.3%	(39.7%)

*The adjustment to the assets is due to the delayed recognition of investment returns for the actuarial value.

b. Solvency Valuation

The results of the solvency valuation as at December 31, 2008 are as follows:

	(thousands of dollars)	
	2% indexing for pre-1999 service	no indexing for pre-1999 service*
Assets at market value	\$1,126,380	\$1,126,380
Expenses of plan wind-up	<u>(6,310)</u>	<u>(6,310)</u>
Net assets for solvency purposes	\$1,120,070	\$1,120,070
Total solvency liabilities	\$1,331,829	\$1,175,699
Excess/(Shortfall)	(\$211,759)	(\$55,629)

c. Current Service Cost

A comparison of the current service cost as a percentage of salary and as dollar amounts under the minimum and maximum funding valuations in 2009 is as follows:

	(% of Salary)	
	Minimum Funding	Maximum Funding
Current service cost	12.9	21.1
Expected contributions	11.0	11.0
Excess normal cost	1.9	10.1

	(thousands of dollars)	
	Minimum Funding	Maximum Funding
Current service cost	\$48,504	\$79,460
Expected contributions	41,344	41,344
Excess normal cost	7,160	38,116

A comparison of the current service cost as a percentage of salary and as dollar amounts under the minimum and maximum funding valuations after the increase effective January 1, 2010 is as follows:

	(% of Salary)	
	Minimum Funding	Maximum Funding
Current service cost	13.0	21.1
Expected contributions	13.0	13.0
Excess normal cost	0.0	8.1

	(thousands of dollars)	
	Minimum Funding	Maximum Funding
Current service cost	\$49,172	\$79,786
Expected contributions	49,032	49,032
Excess normal cost	140	30,754

A comparison of the current service cost as a percentage of salary and as dollar amounts under the minimum and maximum funding valuations after the increases effective January 1, 2010 and 2011 is as follows:

	(% of Salary)	
	Minimum Funding	Maximum Funding
Current service cost	13.3	21.2
Expected contributions	15.0	15.0
Excess normal cost/(contributions)	(1.7)	6.2

	(thousands of dollars)	
	Minimum Funding	Maximum Funding
Current service cost	\$50,005	\$80,164
Expected contributions	56,724	56,724
Excess normal cost/(contributions)	(6,719)	23,440

2. Comments

Poor financial returns in 2008 have contributed to a deterioration of the financial position of the plan on the minimum and maximum funding bases, as well as on a solvency basis.

1. There is a shortfall on a solvency basis whether 2% indexing on pre-1999 benefits is included or not. At the previous valuation there was a surplus of \$132.135 million when indexing on pre-1999 benefits was excluded; at this valuation there is a shortfall of \$55.629 million due mainly to the decline in the market value of assets.

This led to the Commission cancelling future additional allowances effective June 1, 2009.

2. The surplus on a minimum funding basis has increased from \$75.933 million at December 31, 2007 to \$121.782 million (from 5.8% to 10.3% of the actuarial value of assets). The decline in asset value due to poor financial returns was more than offset by a decrease in the liabilities due to an increase in the assumption for future market returns from 6.0% to 6.5%, a decrease in the assumed rate of inflation from 2.2% to 2.0% and the elimination of future additional allowances. Under the Funding Policy, the assumptions used for the minimum funding valuation are intended to be best estimate assumptions of future market returns.
3. The deficit on a maximum funding basis has increased from \$249.880 million at December 31, 2007 to \$469.902 (from 19.1% to 39.7% of the actuarial value of assets). This is due to poor market returns and to a reduction in the valuation interest rate from 4.75% to 4.0%, offset somewhat by the elimination of future additional allowances. Under the Funding Policy, the interest assumption for the maximum funding valuation is based on the market yields on long-term government bonds. Market turmoil has led to a "flight to quality" which has depressed the yields on government bonds.

The solvency and minimum funding valuation determine the funding required under *The Pension Benefits Act, 1992*, and *The Pension Benefits Regulations, 1993*. If this valuation is filed with the Saskatchewan Financial Services Commission, the following would apply:

- Annual special payments, in addition to regular employer/member contributions, of \$14.2 million, or 3.8% of salary, would be required to fund the solvency deficiency in each of the years 2012-2016.

This takes advantage of solvency relief measures announced in 2009. To take full advantage of those measures, however, we do not recommend that either this valuation or the one at December 31, 2009 be filed. A valuation must be filed at December 31, 2010. The actual financial position at December 31, 2010 and the solvency payments that would be required will be affected by financial returns in the interim, demographic changes, and changes in market based solvency assumptions. Leaving the next filed valuation to that date allows the maximum time for some return to better economic and investment conditions before further contribution rate changes may need to be considered, since funding requirements for a solvency deficiency existing at that valuation will not be required until January 1, 2014. On the basis of this valuation, however, and assuming a stable population, we estimate the present value of the excess of the matching contributions over the current service cost for the years 2011 to 2018 to be \$50.029 million. This is \$5.6 million short of the present value of the special payments that would be required in the years 2014 to 2018 to fund the solvency deficiency revealed in this valuation (taking advantage of the 3-year moratorium on funding payments).

- As there is a surplus under the minimum funding valuation, no additional funding is required on that basis.

As has been the case in past years, current contributions of 5.4% of salary for general members and 7.3% for emergency members, matched by the employers, are insufficient to fund benefits accruing in each year. This excess of the cost of benefits accruing each year over the contributions is referred to as the excess normal cost.

Under minimum funding, a reserve to cover the excess normal cost for the next 3 years is established.

The increase in contributions effective January 1, 2010, which the Commission has recommended to the Minister of Finance and a further increase recommended for January 1, 2011 should eliminate the need for this reserve in future.

Under the Funding Policy (excerpts of which are reproduced in this section), action is required in situations where there is either:

- a. a shortfall (i.e. deficit) on the minimum funding basis,
 - b. an excess surplus, as defined under the *Income Tax Act*, on the maximum funding basis, or
 - c. where a solvency deficiency exists when future additional allowances are excluded from the liabilities.
- As there is a shortfall on both solvency bases, in accordance with the Funding Policy, the Commission must consider reducing additional allowances previously granted, increasing contributions, or other benefit changes. In particular, no further increases may be granted to retirees for pre-1999 benefits until a subsequent valuation indicates sufficient surplus to support an increase. To address the shortfall on a solvency basis, the Commission must consider increasing contributions beyond what is needed to address the imbalance between the matching contributions and the current service cost, **or**, existing allowances must be suspended, cancelled or reduced to the extent necessary to eliminate the shortfall.

The following actions have already been taken (or are under consideration) and have been taken into account in this valuation:

1. contribution increases are planned for January 1, 2010 and January 1, 2011, and
2. future additional allowances have been cancelled effective June 1, 2009.

While these changes are not quite sufficient to meet the regulatory solvency funding requirements that would be required if this valuation is filed, they may prove to be sufficient as market conditions improve. Accordingly, we recommend no further action be considered at this time but that monitoring of the situation continue.

3. Funding Policy

The Funding Policy indicates that in certain situations action must or may be taken as follows:

Minimum Funding Valuation

If the results of a minimum funding valuation indicate that a shortfall exists in the funding of the plan (i.e. liabilities and reserves exceed the assets of the plan), then some action is required to either increase contributions to the plan or decrease benefits. The actions to be taken in this event can include any combination of:

- a. Change existing policy regarding granting future additional allowances.
- b. Suspend, cancel or reduce existing additional allowances that have been granted in accordance with policies previously adopted by the Commission.

- c. Cause contributions to the fund to be increased, by way of existing provisions in the Act and by making a recommendation to the Lieutenant Governor in Council regarding the manner of determining the amount of member contributions.
- d. Make recommendations to the Legislature regarding benefit reductions appropriate to the financial circumstances of the plan.

The Commission may also determine that any of the above actions should be taken when a minimum funding valuation does not have a shortfall, but where the surplus is small or where the excess of normal cost over current contributions is large.

Maximum Funding Valuation

If the results of a maximum funding valuation indicate that a surplus exists, the Commission should consider actions to eliminate or reduce the surplus. Some action must be taken if the surplus is sufficient that an excess surplus situation under the *Income Tax Act* cannot be avoided. The actions to be taken can include any combination of:

1. Fund excess normal costs beyond three years to the extent allowed under the *Income Tax Act*.
2. Change policy or grant additional allowances, as allowed under the Act.
3. Cause contributions to the fund to be decreased, by way of existing provisions in the Act and by making a recommendation to the Lieutenant Governor in Council regarding the manner of determining the amount of member contributions.
4. Make recommendations to the Legislature regarding benefit improvements appropriate to the financial circumstances of the plan.

The Commission may also determine that any of the above actions should be taken when a maximum funding valuation does not have a surplus, but where the shortfall on a maximum funding basis is small or where the excess of current contributions over normal cost is large.

Solvency Valuation

If a solvency valuation indicates a solvency deficiency exists when future additional allowances are excluded from the liabilities, then action must be taken. The action to be taken in this event can include any combination of the following as may be necessary to satisfy regulatory solvency funding requirements:

1. Suspend, cancel or reduce existing additional allowances that have been granted in accordance with policies previously adopted by the Commission.
2. Cause contributions to the fund to be increased, by way of existing provisions in the Act and by making a recommendation to the Lieutenant Governor in Council regarding the manner of determining the amount of member contributions.
3. Make recommendations to the Legislature regarding benefit changes appropriate to the financial circumstances of the plan.

Section 7 Summary of Principal Plan Provisions

The following is a brief summary of the provisions of the plan which are of importance in determining the actuarial liabilities. This summary includes all plan amendments up to December 31, 2008.

Eligibility

Permanent employees, who are employees employed on an ongoing basis (full-time, part-time and seasonal) and who are expected to work 700 hours or more in a year, join the plan on the date they become an employee.

Non-permanent employees may join the plan on the date of hire and must join the plan if the employee works at least 700 hours in two consecutive years. Once an employee has joined the plan, he/she remains a member even though the hours of work reduce to less than 700 hours in a year.

Plan members who move from one participating employer to another, must immediately participate with the second employer regardless of the terms of employment with the second employer.

Emergency members are those designated by their employers.

Members' Contributions

General members are required to contribute an amount equal to 5.4% of their earnings. Emergency members contribute 7.3% of their earnings. The Commission has recommended to the Minister of Finance that these rates should increase to 6.4% and 8.75%, respectively, effective January 1, 2010. A further increase to 7.4% and 10.2%, respectively, effective January 1, 2011 is recommended. Earnings include regular remuneration and commissions, but exclude overtime pay and bonuses.

The interest rate credited on members' contributions is the net fund rate of return smoothed over a period of four years.

Employers' Contributions

The plan provides that employers are obligated to contribute an amount equal to the required employee contributions.

Normal Retirement Date

The normal retirement date for general members is the first day of the month immediately following the attainment of age 65. The normal retirement date of emergency members is the first day of the month immediately following the attainment of age 60.

Early Retirement Date*General Members*

General members can retire any time after satisfying the rule of 80 (age plus years of continuous service = 80) with an unreduced pension. They can also retire having attained age 55 with a minimum of 15 years of continuous service but in that event, the pension is reduced by 3% for each year prior to the date when the member would satisfy the rule of 80 assuming service had continued, or would reach normal retirement age, if earlier.

Emergency Members

Emergency members can retire at any time after satisfying any of the age of 55, the rule of 75 or 25 years of continuous service with an unreduced pension. They can also retire after age 45 on satisfying the rule of 70 but in that event, the pension in respect of service after 1991 is reduced by 3% for each year prior to the date when the member would satisfy the rule of 75 assuming that service had continued, or would reach normal retirement age, if earlier.

Retirement Income

Upon retirement, a member is entitled to a retirement benefit based on the member's average highest salary and contributory service, where the average highest salary is the total salary of the member during the three years of highest salary divided by three, as follows:

1. For benefits payable before age 65:

All members are entitled to a pension of 2% of the average highest salary multiplied by the number of years of contributory service.

2. For benefits payable on and after age 65:

a) general members with a date of entry on or after January 1, 1993:

- are entitled to a pension of 1.5% of the average highest salary multiplied by the number of years of contributory service, excluding the years 2001 to 2005; plus
- a pension of 1.8% of the average highest salary multiplied by the number of years of contributory service between January 1, 2001 and December 31, 2005.

b) emergency members with a date of entry on or after January 1, 1993:

- are entitled to a pension of 1.7% of the average highest salary multiplied by the number of years of contributory service excluding the years 2001 to 2005; plus
- a pension of 2% of the average highest salary multiplied by the number of years of contributory service between January 1, 2001 and December 31, 2005.

c) general members with a date of entry prior to January 1, 1993:

- with respect to service prior to January 1, 1990 and service between January 1, 2001 and December 31, 2005, are entitled to a pension for each year of contributory service equal to the greater of:

- (a) 1.3% times the average highest salary not in excess of the three year average YMPE plus 2% times the average highest salary in excess of the three year average YMPE, and
 - (b) 1.8% times the average highest salary.
- with respect to service on or after January 1, 1990, but excluding years 2001 to 2005, are entitled to a pension for each year of contributory service equal to the greater of:
 - (a) 1.3% times the average highest salary not in excess of the three year average YMPE plus 2% times the average highest salary in excess of the three year average YMPE, and
 - (b) 1.5% times the average highest salary.
- d) emergency members with a date of entry prior to January 1, 1993:
- with respect to service prior to January 1, 1990 and service between January 1, 2001 and December 31, 2005 are entitled to a pension for each year of contributory service equal to 2% times the average highest salary:
 - with respect to service on or after January 1, 1990, but excluding years 2001 to 2005, are entitled to a pension for each year of contributory service equal to the greater of:
 - (a) 1.3% times the average highest salary not in excess of the three year average YMPE plus 2% times the average highest salary in excess of the three year average YMPE, and
 - (b) 1.7% times the average highest salary.

Pre-retirement Death Benefits

Upon the death of a member prior to retirement, an amount equal to the sum of the member's additional contribution account, the member's annuity and annuity surplus account, the employer additional contribution account and the employer annuity account, plus the commuted value of the defined benefit pension is paid to the member's spouse, beneficiary or estate.

Post-retirement Death Benefits

If a retired member who has a spouse at retirement dies, 100% of the pension payable to the member is guaranteed to be paid for five years from the retired member's date of retirement. After the guaranteed payments are made, 60% of the pension to which the retired member was entitled shall be paid to the surviving spouse for life. In the event of the death of both the retired member and the retired member's spouse, the 60% allowance will be payable to designated dependents named at retirement (up to age 18).

If the member does not have a spouse at retirement, a single life annuity with a guarantee period of 15 years is payable.

Optional forms of pension are provided on an actuarial equivalent basis.

Termination Benefits

An employee who has been a member of the plan or employed by an employer participating in the plan for a continuous period of at least 2 years, on termination of employment prior to retirement, would receive an immediate or deferred pension. In lieu of part of the pension an

employee may elect to receive a lump sum that does not exceed one half of the member's accumulated contributions with interest as at December 31, 1993.

Upon termination, the pension benefit may be commuted.

Indexation Benefits

For pensions in respect of service accrued before 1999, and subject to there being funds available to provide it, the plan provides for future indexation equivalent to the lesser of 2% per year or the increase in the Consumer Price Index with the excess of 2% over the increases in the CPI carried forward on a cumulative basis. Indexing on post-1998 benefits may also be provided if funds permit, but this is a decision of the Commission and does not happen automatically. The 2% increase for benefits in respect of pre-1999 service was paid at January 1, 2007 and 2008 – no increase was provided for benefits in respect of post-1998 service at these times.

In light of the solvency position revealed in this valuation, the Commission has cancelled the automatic provision of 2% indexing on pre-1999 benefits effective June 1, 2009.

Disability

A member who is totally and permanently disabled and who has been away from work for a 2 year period may, on application, continue to accrue credited service without employee or employer contribution. In this event, the salary on which the pension is based will be increased from the date of disability based on the increase in the average Canadian salaries and wages, and the member must retire on his or her unreduced retirement date.

Section 8 Actuarial Assumption and Methods

1. Economic Assumptions

The economic assumptions used in the minimum and maximum funding valuations are as follows. The assumptions are the same as used in the previous valuation, except where noted.

- a) *Inflation = 2.0% per annum.* This long-term assumption reflects long-term expectations in the marketplace at the valuation date, rounded to the nearest 0.1%. At the previous valuation we assumed inflation of 2.2% per annum.
- b) *Investment Return = 6.5%*, minimum funding valuation
Investment Return = 4.0%, maximum funding valuation
 The derivation of these assumptions is described in Sections 3 and 4, respectively.

At the previous valuation we assumed a rate of 6.0% for minimum funding and 4.75% for maximum funding.

- c) *Rate of salary increase*

We have assumed there will be general salary increases of 4.0% per annum for four years and 3.0% per annum thereafter. The 3.0% provides for market-implied future inflation plus real salary increases at 1% above inflation. The 4.0% for the next four years recognizes that salary increases are expected to be higher than the Canadian average, at least in the short-term, due to the active Saskatchewan economy. For the previous valuation the assumed rate of general salary increases was 4.2% for the first five years and 3.2% thereafter (2% and 1% over inflation, respectively).

We have also allowed for promotional and merit increases as follows:

<u>Years of Service</u>	<u>General Members</u>	<u>Emergency Members</u>
1-5	2.0% per year	3.0% per year
6-10	1.5% per year	2.0% per year
11-15	1.0% per year	1.0% per year
16-20	0.5% per year	0.5% per year

- d) *Increase in CPP earnings ceiling and maximum pension*

We assumed that the CPP earnings ceiling (YMPE) would increase from \$46,300 in 2009 by 3.0% per year, which is consistent with the long-term assumption for salary increases. We have also assumed that the maximum pension per year of service permitted under the Income Tax Act would increase from \$2,444 in 2009 at 3.0% per annum, also consistent with the long-term assumption for salary increases. The assumed rate of increase for the YMPE and maximum pension at the previous valuation was 3.2% per year.

e) *Indexing of pensions*

We assume no indexing for pensions due to the cancellation in 2009 of the policy of automatic indexing for pensions earned for service prior to 1999. Previously, we assumed that pensions earned for service prior to 1999 would continue to be indexed at 2% per year in the future. No provision is made for future indexing of pensions for post-1998 service. This assumption is consistent with the terms of the Act and policies adopted by the Commission, and the inflation assumption used for the valuation.

2. Demographic assumptions

The demographic assumptions are the same as used at the previous two valuations. Gain and loss analysis does not indicate any need to revise the demographic assumptions.

a) *Retirement*

General Members

We have assumed that there is a 50% probability that general members will retire on first becoming entitled to an unreduced pension and a 50% probability that they will not retire until age 65. For those already entitled to an unreduced pension at December 31, 2008, we have assumed that there is a 50% probability that they will retire at June 30, 2009 and a 50% probability that they will retire at age 65.

Emergency Members

For the emergency members, we have assumed that 100% will retire when they are first entitled to an unreduced pension.

b) *Termination of Membership*

For the general members we have assumed terminations in accordance with a table of estimates, excerpts of which are as follows:

<u>Age</u>	<u>Annual Rate</u>
20	20.5%
25	15.5%
30	10.5%
35	6.5%
40	4.8%
45	4.3%
50	3.2%
55	1.2%

For the emergency members, we have used an assumption of 75% of the termination rates for the general members to recognize their generally lower turnover rates.

c) *Mortality*

We have used the 1994 Uninsured Pensioner mortality table with projection for mortality improvement to 2015. This table is a commonly used table for pension valuation purposes and there is no reason to expect that mortality experience for members of this plan will be materially different from this table.

d) *Proportion married and age of spouse*

We have assumed that 90% of male members and 70% of female members will be married at retirement and the male spouse will be 4 years older.

e) *Disability*

In this valuation, we have valued the disabled members separately – assumed that they will all stay disabled to their unreduced retirement date, retire at that date and that their imputed salary will increase at 4.2% per year for 5 years and at 3.2% per year thereafter, consistent with the assumption for general salary increases. Salaries were assumed to increase by 3.5% for all years at the previous valuation. We have also provided them with full service credit, if not already included in the data, from July 1, 1988, or the date of disability if later, to December 31, 2008.

We have not made any allowance for future disabilities.

3. **Actuarial Method**

a) **Liabilities**

For both the minimum and maximum funding valuations, we have used the unit credit method to determine the plan's financial position. This was the method used at the previous valuation. Under this method, the actuarial value of the plan assets is compared with the actuarial present value of the pensions accrued in respect of service to the valuation date.

For pensioners and survivors, as well as for deferred and pending members, pension amounts were provided by the administrator and the actuarial liabilities were determined based on these amounts. For deferred and pending members, the liabilities also include any excess contributions each member is entitled to. These amounts were also provided by the administrator.

For active and disabled members, we take each individual, project his or her salary to retirement, determine the value of the pension and bridge benefit in respect of service to the valuation date and discount this back to the valuation date. We discount for interest but also for pre-retirement termination and death and the value of the termination and death benefits are determined in a manner consistent with the retirement benefit. The value of the member's benefits is compared to the contributions with interest. If the contributions with interest are greater than 50% of the value of the benefit, a pro-rata amount (on service) of the difference is allocated to the accrued liability. Previously, the additional liability due to the 50% rule was determined by comparing the value of the benefits earned for service accrued to the valuation date to the accumulated value of contributions made before the valuation date.

Also under this method, the current service cost is the value of the benefits, which will be earned in respect of the year of service following the valuation date. Similarly, an additional liability due to the "50% rule" is allocated pro-rata on service to the current service cost. Previously, the current service cost for the 50% rule was determined by comparing the value of the benefits earned in the year following the valuation to the accumulated value of the contributions made in the year following the valuation. Aside from experience different from assumed or changes in assumptions that may affect cost, an increase (or decrease) in the average age of the membership will increase (or decrease) the current service of cost.

The objectives of this cost method are the systematic accumulation over time of dedicated assets which, without recourse to the employers' assets, secure the Plan's benefits in respect of members' service already rendered, and the orderly and rational allocation of contributions among time periods.

Section 9 Membership Data Summary

Membership data were obtained from the Public Employees Benefits Agency, the administrator of the plan. The data were gathered and compiled as of December 31, 2008. They were reconciled and checked for consistency with the previous valuation data.

The data included pensionable salary and in-year credited service amounts for 2006, 2007 and 2008. We annualized the salary amounts by dividing the pensionable salary by the credited service in the year. If the 2008 salary was zero as it was for 266 of the active members, we assumed that it should be \$20,000.

1. Membership Reconciliation

A. ACTIVES

	<u>General</u>	<u>LTD</u>	<u>Emergency</u>	<u>Total</u>
At December 30, 2007	11,944	133	231	12,308
Retired	(137)	(3)	(3)	(143)
Termination & Deaths				
Deferred	(19)	0	(1)	(20)
Pending	(725)	(8)	(5)	(738)
Paid Out	(541)	(10)	(4)	(555)
Status Change				
General to LTD	(61)	61	0	0
LTD to General	38	(38)	0	0
General to Emergency	(3)	0	3	0
Emergency to General	<u>1</u>	<u>0</u>	<u>(1)</u>	<u>0</u>
Members at December 31, 2008 who were active at December 31, 2007	10,497	135	220	10,852
New Members	1,746	1	18	1,765
Reinstatements from Pending	262	15	0	277
At December 31, 2008	12,505	151	238	12,894

B. PENSIONERS AND SURVIVORS

	Pensioners	Survivors
At December 31, 2007	3,167	759
Data adjustments	1	(1)
Deaths – with continuing payments to spouse	(65)	65
- with continuing payments to beneficiaries*	(8)	15
- with no further payments	(34)	(34)
- marriage split where member died	(1)	
New pensioners		
from general members	137	
from disabled members	3	
from emergency members	3	
from deferred pensioners	24	
from pending members	18	
from marriage split	2	
Other		
Members with two deferred pensions became one pensioner	(2)	
Members with an active and deferred pension became one pensioner	(1)	
Beneficiary guaranteed period expired		(1)
At December 31, 2008	3,244	803

* A number of pensioners who died had designated more than one beneficiary.

C. DEFERRED PENSIONERS

At December 31, 2007	1,750
Retired	(24)
Termination or death – paid-out	(260)
Transfer to pending members	0
Reinstated to general members	0
Transfer from general members	19
Transfer from emergency members	1
Transfer from pending members	353
At December 31, 2008	1,839

D. PENDING MEMBERS

At December 31, 2007	2,528
Retired	(18)
Termination or death – paid-out	(630)
Transfer to general members	(262)
to emergency members	0
to disabled members	(15)
to deferred pensioners	(353)
Transfer from general members	725
from emergency members	5
from disabled members	8
from deferred pensioners	0
Members who joined plan since Dec 31, 2007	266
At December 31, 2008	2,254

2. Membership Summary – Active General Males

Age		0-5	5-10	10-15	Service 15-20	20-25	25-30	30+	Total
16-24	Number	127	-	-	-	-	-	-	127
	Salary	3,951,735	-	-	-	-	-	-	3,951,735
	Avg Salary	31,116	-	-	-	-	-	-	31,116
25-29	Number	170	32	1	-	-	-	-	203
	Salary	6,268,039	1,366,839	31,440	-	-	-	-	7,666,315
	Avg Salary	36,871	42,714	31,440	-	-	-	-	37,765
30-34	Number	178	64	18	2	-	-	-	262
	Salary	7,035,455	2,744,826	786,777	93,527	-	-	-	10,660,590
	Avg Salary	39,525	42,888	43,710	46,763	-	-	-	40,689
35-39	Number	162	81	34	17	2	-	-	296
	Salary	6,144,252	3,471,186	1,566,065	821,898	88,711	-	-	12,092,110
	Avg Salary	37,927	42,854	46,061	48,347	44,356	-	-	40,852
40-44	Number	188	92	62	55	37	5	-	439
	Salary	6,722,753	3,651,625	2,822,823	2,520,597	1,953,883	231,520	-	17,903,210
	Avg Salary	35,759	39,692	45,529	45,829	52,808	46,304	-	40,782
45-49	Number	268	152	87	70	87	78	4	746
	Salary	9,540,690	5,983,419	3,664,779	3,162,216	4,585,287	3,740,280	208,466	30,885,130
	Avg Salary	35,600	39,365	42,124	45,175	52,704	47,952	52,117	41,401
50-54	Number	263	131	92	98	86	83	34	787
	Salary	9,025,018	4,679,444	3,920,339	4,227,387	4,499,725	4,402,649	1,666,462	32,421,040
	Avg Salary	34,316	35,721	42,612	43,137	52,322	53,044	49,014	41,196
55-59	Number	195	149	76	97	52	52	37	658
	Salary	6,985,997	5,595,728	3,213,274	4,053,113	2,591,739	2,601,598	2,006,217	27,047,670
	Avg Salary	35,826	37,555	42,280	41,785	49,841	50,031	54,222	41,106
60-69	Number	197	158	56	56	38	26	43	574
	Salary	6,312,663	4,704,660	2,545,181	2,077,546	1,595,309	1,301,882	1,850,864	20,388,100
	Avg Salary	32,044	29,776	45,450	37,099	41,982	50,072	43,043	35,519
Total	Number	1,748	859	426	395	302	244	118	4,092
	Salary	61,986,580	32,197,740	18,550,670	16,956,280	15,314,650	12,277,940	5,732,009	163,016,200
	Avg Salary	35,461	37,483	43,546	42,927	50,711	50,319	48,576	39,838

3. Membership Summary – Active General Females

Age	Service							Total	
	0-5	5-10	10-15	15-20	20-25	25-30	30+		
16-24	Number	265	-	-	-	-	-	-	265
	Salary	6,704,383	-	-	-	-	-	-	6,704,383
	Avg Salary	25,300	-	-	-	-	-	-	25,300
25-29	Number	441	52	-	-	-	-	-	493
	Salary	12,542,850	1,734,442	-	-	-	-	-	14,277,290
	Avg Salary	28,442	33,355	-	-	-	-	-	28,960
30-34	Number	525	166	25	-	-	-	-	716
	Salary	15,128,090	5,501,838	884,180	-	-	-	-	21,514,100
	Avg Salary	28,815	33,144	35,367	-	-	-	-	30,048
35-39	Number	614	252	74	17	-	-	-	957
	Salary	16,096,320	7,311,630	2,614,472	570,143	-	-	-	26,592,580
	Avg Salary	26,216	29,014	35,331	33,538	-	-	-	27,787
40-44	Number	668	411	115	57	54	3	-	1,308
	Salary	17,631,130	10,938,260	3,767,062	2,212,573	2,129,434	163,229	-	36,841,730
	Avg Salary	26,394	26,614	32,757	38,817	39,434	54,410	-	28,166
45-49	Number	642	581	237	170	83	57	3	1,773
	Salary	16,705,970	15,250,180	7,337,829	5,800,236	3,593,779	2,495,276	171,782	51,355,100
	Avg Salary	26,022	26,248	30,961	34,119	43,299	43,777	57,261	28,965
50-54	Number	427	350	208	194	142	47	25	1,393
	Salary	11,707,480	9,340,805	6,352,440	6,232,033	5,219,273	2,007,669	1,157,905	42,017,620
	Avg Salary	27,418	26,688	30,541	32,124	36,755	42,716	46,316	30,163
55-59	Number	232	248	121	157	132	65	25	980
	Salary	6,460,769	6,677,371	3,644,212	5,008,498	4,402,975	2,455,326	1,002,687	29,651,860
	Avg Salary	27,848	26,925	30,117	31,901	33,356	37,774	40,107	30,257
60-69	Number	130	129	64	72	60	42	31	528
	Salary	3,818,453	3,184,954	1,920,830	2,221,232	1,993,756	1,286,578	1,054,927	15,480,730
	Avg Salary	29,373	24,690	30,013	30,850	33,229	30,633	34,030	29,320
Total	Number	3,944	2,189	844	667	471	214	84	8,413
	Salary	106,795,500	59,939,510	26,521,020	22,044,720	17,339,210	8,408,077	3,387,301	244,435,100
	Avg Salary	27,078	27,382	31,423	33,051	36,814	39,290	40,325	29,054

4. Membership Summary – Active Emergency Males

Age	0-5	5-10	10-15	Service 15-20	20-25	25-30	30+	Total
16-24	Number	4	-	-	-	-	-	4
	Salary	192,665	-	-	-	-	-	192,665
	Avg Salary	48,166	-	-	-	-	-	48,166
25-29	Number	20	7	-	-	-	-	27
	Salary	1,083,147	470,709	-	-	-	-	1,553,855
	Avg Salary	54,157	67,244	-	-	-	-	57,550
30-34	Number	15	21	7	-	-	-	43
	Salary	823,160	1,469,576	503,217	-	-	-	2,795,953
	Avg Salary	54,877	69,980	71,888	-	-	-	65,022
35-39	Number	8	8	21	3	-	-	40
	Salary	445,792	513,039	1,614,005	259,754	-	-	2,832,590
	Avg Salary	55,724	64,130	76,857	86,585	-	-	70,815
40-44	Number	2	5	8	10	6	-	31
	Salary	107,619	323,804	604,175	665,456	525,639	-	2,226,694
	Avg Salary	53,810	64,761	75,522	66,546	87,607	-	71,829
45-49	Number	7	3	2	4	9	3	28
	Salary	436,789	148,653	112,318	273,332	794,903	241,231	2,007,226
	Avg Salary	62,398	49,551	56,159	68,333	88,323	80,410	71,687
50-54	Number	2	-	1	7	1	8	24
	Salary	135,275	-	75,759	496,976	62,447	629,665	1,841,952
	Avg Salary	67,637	-	75,759	70,997	62,447	78,708	76,748
55-59	Number	3	3	1	1	1	2	11
	Salary	180,664	155,830	56,886	55,783	55,546	160,019	664,728
	Avg Salary	60,221	51,943	56,886	55,783	55,546	80,009	60,430
60-69	Number	1	-	-	1	1	1	5
	Salary	95,917	-	-	67,711	73,884	61,903	384,769
	Avg Salary	95,917	-	-	67,711	73,884	61,903	76,954
Total	Number	62	47	40	26	18	14	213
	Salary	3,501,026	3,081,610	2,966,360	1,819,011	1,512,420	1,092,817	14,500,430
	Avg Salary	56,468	65,566	74,159	69,962	84,023	78,058	68,077

5. Membership Summary – Active Emergency Females

Age	0-5	5-10	10-15	Service 15-20	20-25	25-30	30+	Total
16-24	Number	-	-	-	-	-	-	-
	Salary	-	-	-	-	-	-	-
	Avg Salary	-	-	-	-	-	-	-
25-29	Number	2	-	-	-	-	-	2
	Salary	114,534	-	-	-	-	-	114,534
	Avg Salary	57,267	-	-	-	-	-	57,267
30-34	Number	2	2	1	-	-	-	5
	Salary	93,327	115,341	75,015	-	-	-	283,683
	Avg Salary	46,663	57,670	75,015	-	-	-	56,737
35-39	Number	1	2	1	-	-	-	4
	Salary	43,449	130,288	91,384	-	-	-	265,122
	Avg Salary	43,449	65,144	91,384	-	-	-	66,280
40-44	Number	2	2	1	-	1	-	6
	Salary	88,399	126,096	48,029	-	81,318	-	343,842
	Avg Salary	44,199	63,048	48,029	-	81,318	-	57,307
45-49	Number	2	1	1	-	-	1	5
	Salary	84,844	77,512	84,938	-	-	78,727	326,021
	Avg Salary	42,422	77,512	84,938	-	-	78,727	65,204
50-54	Number	-	1	1	1	-	-	3
	Salary	-	55,951	51,335	93,075	-	-	200,360
	Avg Salary	-	55,951	51,335	93,075	-	-	66,787
55-59	Number	-	-	-	-	-	-	-
	Salary	-	-	-	-	-	-	-
	Avg Salary	-	-	-	-	-	-	-
60-69	Number	-	-	-	-	-	-	-
	Salary	-	-	-	-	-	-	-
	Avg Salary	-	-	-	-	-	-	-
Total	Number	9	8	5	1	1	1	25
	Salary	424,552	505,188	350,701	93,075	81,318	78,727	1,533,561
	Avg Salary	47,172	63,148	70,140	93,075	81,318	78,727	61,342

6. Disabled Members

<u>Age</u>	<u>Males</u>			<u>Females</u>		
	<u>Number</u>	<u>Pensionable Service</u>	<u>Average Salary</u>	<u>Number</u>	<u>Pensionable Service</u>	<u>Average Salary</u>
25-29	1	2.93	33,992	2	9.57	25,969
30-34	1	2.50	31,153	3	12.57	32,302
35-39	1	10.53	37,864	4	12.85	33,434
40-44	5	26.88	35,014	9	56.11	26,322
45-49	9	86.09	31,228	19	144.50	23,731
50-54	10	147.12	39,265	17	220.56	26,447
55-59	13	181.62	37,811	21	251.28	26,061
60-64	18	147.37	34,249	12	173.73	28,492
65+	4	58.39	34,198	2	24.67	23,368
	62	663.42	35,429	89	905.84	26,471

7. Pensioners (including the 2% Jan 1, 2009 increase for pre-1999 pensions)

<u>Age</u>	<u>Males</u>			<u>Females</u>		
	<u>Number</u>	<u>Monthly Pension</u>	<u>Monthly Bridge</u>	<u>Number</u>	<u>Monthly Pension</u>	<u>Monthly Bridge</u>
0-49	7	11,598	1,642	3	4,716	715
50-54	54	102,547	16,347	22	33,339	6,499
55-59	132	230,947	37,881	115	109,506	23,022
60-64	207	322,178	55,712	252	169,576	37,318
65-69	414	436,653	7,020	292	168,670	3,042
70-74	390	341,126	0	229	109,527	0
75-79	378	300,790	0	158	72,446	0
80-84	233	156,468	0	110	50,475	0
85-89	132	68,185	0	52	17,244	0
90-94	39	16,270	0	17	3,610	0
95+	6	958	0	2	521	0
	1,992	1,987,720	118,603	1,252	739,629	70,596

8. Survivors (including the 2% Jan 1, 2009 increase for pre-1999 pensions)

<u>Age</u>	<u>Males</u>			<u>Females</u>		
	<u>Number</u>	<u>Monthly Pension</u>	<u>Monthly Bridge</u>	<u>Number</u>	<u>Monthly Pension</u>	<u>Monthly Bridge</u>
0-49	16	5,638	0	23	12,426	968
50-54	4	1,361	0	8	3,655	0
55-59	3	920	161	7	6,624	727
60-64	6	3,434	146	31	23,187	888
65-69	8	5,301	413	72	43,756	598
70-74	9	4,216	0	96	42,972	0
75-79	12	2,855	0	157	71,331	0
80-84	13	2,875	0	144	38,743	0
85-89	11	2,342	0	122	31,831	0
90-94	5	674	0	48	7,279	0
95+	0	0	0	8	1,203	0
	87	29,614	719	716	283,007	3,181

9. Deferreds

<u>Age</u>	<u>Males</u>			<u>Females</u>		
	<u>Number</u>	<u>Monthly Pension</u>	<u>Monthly Bridge</u>	<u>Number</u>	<u>Monthly Pension</u>	<u>Monthly Bridge</u>
0-24	4	358	0	3	469	0
25-29	22	3,831	0	25	3,286	0
30-34	59	14,869	136	64	11,280	0
35-39	70	24,697	0	113	25,447	0
40-44	115	39,817	818	162	35,463	872
45-49	177	59,932	4,060	196	43,761	2,964
50-54	168	61,637	4,918	202	53,729	3,898
55-59	116	36,811	1,971	125	28,444	847
60-64	94	27,566	841	80	16,389	742
65+	27	5,061	0	17	2,869	0
	852	274,578	12,743	987	221,135	9,324

10. Pending

<u>Age</u>	<u>Males</u>			<u>Females</u>		
	<u>Number</u>	<u>Monthly Pension</u>	<u>Monthly Bridge</u>	<u>Number</u>	<u>Monthly Pension</u>	<u>Monthly Bridge</u>
0-24	79	3,127	0	76	1,526	0
25-29	92	12,773	0	179	12,463	0
30-34	87	16,581	3	209	34,847	0
35-39	86	18,251	466	162	23,039	0
40-44	112	24,520	1,400	146	26,439	577
45-49	170	43,420	3,751	163	23,813	1,660
50-54	156	33,820	3,378	138	29,684	3,070
55-59	144	27,436	2,596	65	12,290	992
60-64	113	30,209	3,429	30	4,373	458
65+	41	10,791	0	6	607	0
	1,080	220,929	15,022	1,174	169,083	6,756

Section 10 Actuarial Opinion (draft – to be completed if valuation is filed)

with respect to the Saskatchewan Municipal Employees Pension Plan forming part of the actuarial report dated August 19, 2009 on a valuation of the plan as at December 31, 2008.

In my opinion:

- a) the plan has a surplus of \$121.782 million at December 31, 2008, while on a solvency basis the plan has a shortfall, as solvency liabilities exceed solvency assets by \$55.629 million.
- b) annual special payments of \$14.191 million (\$1.183 million monthly) are required in each of the years 2012 through 2016 to amortize the solvency deficiency.
- c) the pension fund also provides annuities in respect of money-purchase accounts under the former municipal employees' pension plan. As required by the Canada Revenue Agency to ensure that no additional funding is made in respect of these benefits, the part of the fund which supports these annuities is separately accounted for and the liabilities have been valued separately in our report dated August 19, 2009. On a going-concern minimum funding basis, there is a deficit of \$2.702 million; on a solvency basis, there is a shortfall of \$6.215 million.
- d) the rule for computing the employer normal cost contribution for each year from January 1, 2009 to December 31, 2011 is that employers should match the contributions made by the members. Estimated member contributions in 2009 are \$20.672 million, in 2010 are \$24.516 million and in 2011 are \$28.362 million. Total employer and employee contributions are not sufficient to meet the full costs of the benefits accruing in these years but a reserve of \$2.660 million has been established to fund the shortfall for the three years from the valuation date and the financial position of the plan was determined after the establishment of this reserve.
- e) the value of the plan assets would be less than the actuarial liabilities if the plan were to be wound-up on the valuation date.
- f) the plan has a solvency deficiency at the valuation date and the solvency ratio is 0.95.
- g) the next valuation must be prepared no later than December 31, 2011.

Notwithstanding the above, emerging experience which differs from the assumptions on which this opinion is based will result in gains or losses which will be revealed in future valuations.

In my opinion:

- a) the data on which the valuation is based are sufficient and reliable for the purposes of the valuation,
- b) the assumptions used are, in aggregate, appropriate for the purposes of the valuation, and
- c) the methods employed in the valuation are appropriate for the purposes of this valuation.

This report has been prepared and my opinion given in accordance with accepted actuarial practice.

August 19, 2009

Date

A. Douglas Poapst
Fellow of the Society of Actuaries
Fellow of the Canadian Institute of Actuaries

Section 11 Administrator's Certification

of the membership data submitted to Eckler Ltd. in connection with the actuarial valuation of the Saskatchewan Municipal Employees' Pension Plan as at December 31, 2008.

I hereby certify that, to the best of my knowledge and belief,

- a) The summary of plan provisions contained in this report is a complete and accurate summary of the terms of the plan.
- b) The membership data supplied to the actuary provides a complete and accurate description of all persons who are entitled to benefits under the terms of the plan in respect of service up to the date of the valuation.
- c) All events including those subsequent to the date of the valuation that may affect the results of the valuation have been communicated to the actuary.

August 19, 2009



Date

Public Employees Benefits Agency
Plan Administrator