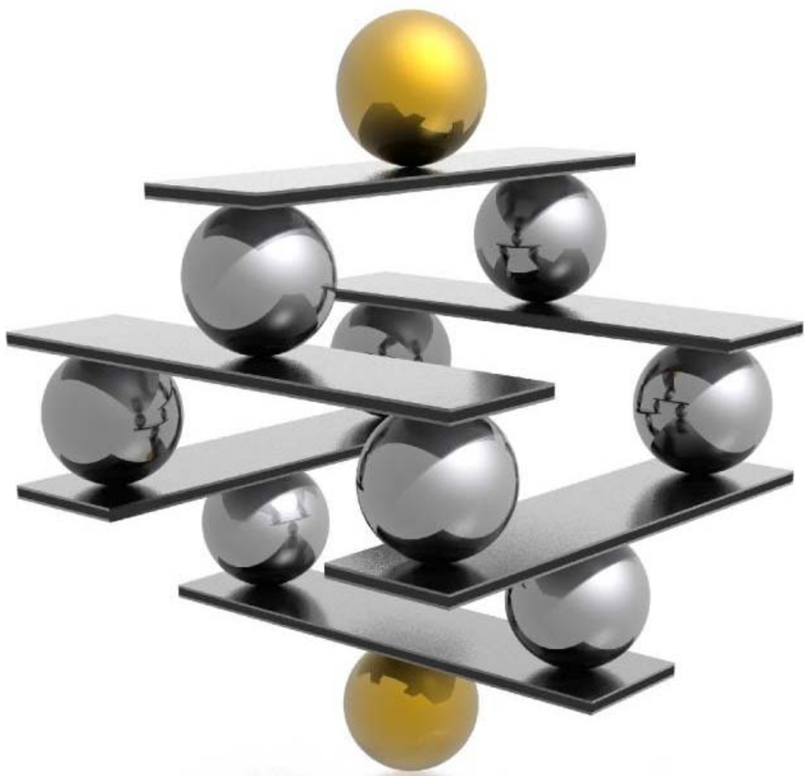
Aon Hewitt

Actuarial Valuation Report on the Supplementary Retirement Plan for the Public Service Managers as at December 31, 2009

Supplementary Retirement Plan for Public Service Managers

February 8, 2011



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Executive Summary

An actuarial valuation has been prepared as at December 31, 2009 for the purposes of determining the contribution requirements of the Supplementary Retirement Plan for Public Service Managers (the "Plan") on a going concern basis and determining the financial position of the Plan and the current service cost on the accounting basis. This section provides an overview of the important results and the key inputs to the valuation process.

Summary of Valuation Results

Contribution Requirements

	December 31, 2009	December 31, 2008
Member Contribution Rate – to RCA	11.16%	10.5%
Matching Employer Contribution Rate – to RTA	11.16%	10.5%
Employer Contribution Rate to Reserve Fund	22.6%*	11.4%**

**Effective April 1, 2011*

*** Effective April 1, 2007. Calculated rate as of December 31, 2008 was 26.8%*

Financial Position on Accounting Basis

	December 31, 2009	December 31, 2008
Actuarial value of assets	$ 64,962,000	$ 51,565,000
Actuarial value of liabilities	86,492,000	95,067,000
Surplus/(Unfunded Liability)	$ (21,530,000)	$ (43,502,000)
Accounting Current Service Cost	$10,519,000 or 402.8% of participant contributions	$12,061,000 or 471.0% of participant contributions

Membership

	December 31, 2009	December 31, 2008
Number of active participants	1,117	998
Number of active MEPP participants expected to become Plan participants	2,140	2,109
Number of pensioners and survivors	451	412
Number of deferred pensioners	81	58
Number of inactive (held on deposit) participants	37	16
Total	3,826	3,593

Executive Summary

Summary of Actuarial Assumptions

Summary of Assumptions				
Demographic				
Mortality	UP 1994 Projected to 2023			
Termination of employment	Nil			
Retirement	Age	Rate	Age	Rate
	Under 55	0.0%	61-62	22.5%
	55	20.0%	63	30.0%
	56 – 58	15.0%	64	40.0%
	59 – 60	20.0%	65 +	100.0%
Disability	Nil			
Economic				
Rate of return on assets	6.25% per annum			
Discount rate for accounting purposes	4.7% per annum			
Inflation rate	2.25% per annum			
Interest credited on participant contributions	4.25% per annum			
Salary increase – base	0% for two years, then 3.5% per annum thereafter			
Salary increase – merit and promotion	1.25% per annum			
Increase in ITA maximum pension benefit	3.5% per annum			
Other				
Non-investment expenses	2009 dollar expenses increased by 60% of inflation to 2033, then proportional to benefits paid thereafter			
Proportion with pension partner of opposite gender	90%			
Age of female pension partner	Three years younger than male pension partner			
Proportion with no pension partner	10%			

Respectfully submitted,

[original signed by]

Robert Thiessen, FSA, FCIA
Vice President

February 8, 2011

Section 1: Introduction

Purpose and Terms of Engagement

We have been engaged by the Supplementary Retirement Plan for Public Service Managers Advisory Committee (the “Committee”) to conduct an actuarial valuation of the Supplementary Retirement Plan for Public Service Managers (the "Plan") as at December 31, 2009 for the purposes of:

- determining the financial position of the Plan on the accounting basis as at December 31, 2009;
- determining the accounting current service cost as at December 31, 2009;
- determining the contribution rate to be made by employers to the Reserve Fund; and
- providing the required actuarial funding recommendation under the terms of the Plan.

As per our engagement, we have summarized the results of this actuarial valuation along with the ensuing opinions and recommendations in this report to the Committee.

While we have been engaged by the Committee to conduct this actuarial valuation, we note that the users of our work may well extend to parties external to the Committee, notably the participating employers and the plan members. Out of respect for the Committee’s confidentiality, however, we shall not undertake to communicate the terms of our engagement or results of our work with such other users unless so directed by the Committee.

Section 1: Introduction

Summary of Changes since the Last Valuation

The previous actuarial valuation report and corresponding funding recommendation was prepared as at December 31, 2008 and dated December 14, 2009. The results in this report have been reconciled with the actuarial opinion and cost certificate contained in that report and with the extrapolation of the liabilities disclosed in the Plan's 2009 annual financial statements.

Since the time of the last valuation, there were no Plan amendments affecting benefits.

For this funding valuation, changes were made to the following assumptions:

- Rate of return on assets changed from 6.5% per annum to 6.25% per annum,
- Discount rate for accounting purposes changed from 4.5% per annum to 4.7% per annum,
- Inflation rate changed from 3.5% for 2009 and 2.5% per annum thereafter to 2.25% per annum,
- Salary increase changed from 4.0% for 2009 and 3.5% per annum thereafter to 0% for 2010 and 2011 and 3.5% per annum thereafter,
- Mortality table changed from UP94@2022 to UP94@2023,
- Interest on participant contributions changed from 4.5% per annum to 4.25% per annum.

Section 1: Introduction

Information and Inputs

In order to prepare our valuation, we have relied upon the following information:

- Asset data as at December 31, 2008 through December 31, 2009 obtained from the Plan's audited financial statements, as summarized in Appendix A;
- Membership data as at December 31, 2009 obtained from Alberta Pensions Services Corporation (APS), as summarized in Appendix B;
- Plan provisions as summarized in Appendix D including an increase in the contribution rate to the RCA/RTA from 10.5% to 11.16% of pay, effective January 1, 2011;
- Information concerning events subsequent to the effective date of the valuation and prior to the date of this report as identified below.

Furthermore, our actuarial assumptions and methods for the funding of the Plan have been chosen to reflect our understanding of the Plan's funding objectives that have been established for the Plan with due respect to accepted actuarial practice and regulatory constraints. It is our understanding that the actuarial assumptions and methods used to determine the financial position of the Plan and the Plan's current service cost for accounting purposes used management's best estimate.

Subsequent Events

As of the date of this report, we have not been made aware of any subsequent events which would have an effect on the results of this valuation. However, the following points should be noted in this regard:

- Actual experience deviating from expected since December 31, 2009 to the date of this report, will result in gains or losses.
- To the best of our knowledge, the results contained in this report are based on the regulatory and legal environment in effect at the date of this report and do not take into consideration any potential changes that are currently the subject of debate, review and/or court appeal. To the extent that actual changes in the regulatory and legal environment transpire, any financial affect on the Plan as a result of such changes will be reflected in future valuations.

Section 1: Introduction

Summary of Recommended Action

The following summarizes the specific action for the Committee that is recommended in this report:

- It is recommended that the contribution rate for employers to the Reserve Fund be implemented as recommended in this report.
- The next actuarial valuation for the purpose of developing a funding recommendation should be performed no later than as at December 31, 2012.

Section 2: Results

Financial Position of the Plan

The financial position of the Plan on the accounting basis is measured by comparing the actuarial value of assets to the actuarial value of liabilities assuming the Plan continues indefinitely. The difference between the actuarial value of assets and liabilities is a funding excess or surplus if positive and an unfunded liability if negative.

The financial position of the Plan on the accounting basis as at December 31, 2009 using the projected accrued benefit actuarial cost method prorated on service is summarized in the following table. For comparison purposes, the results as at December 31, 2008 are also shown. Further information concerning the asset data, membership data, assumptions and methods used to determine the financial position, and the plan provisions that have been valued, is contained in the Appendices.

	December 31, 2009	December 31, 2008
Assets		
Retirement Compensation Arrangement	$ 14,342,000	$ 11,205,000
Refundable Tax Account	16,348,000	13,778,000
Reserve Fund	34,272,000	26,582,000
Actuarial value of assets	$ 64,962,000	$ 51,565,000
Actuarial Liabilities		
Active participants	$ 61,963,000	$ 78,385,000
Pensioners and survivors	20,114,000	15,613,000
Deferred pensioners	3,970,000	997,000
Amounts held on deposit	445,000	72,000
Actuarial value of liabilities	$ 86,492,000	$ 95,067,000
Surplus/(Unfunded Liability)	**$ (21,530,000)**	**$ (43,502,000)**

Section 2: Results

Change in Actuarial Liabilities

The change in the actuarial liabilities of the Plan on the accounting basis are reconciled as follows:

Liabilities at December 31, 2008	**$**	**95,067,000**
• Interest accrued on benefits		4,515,000
• Benefits earned		11,825,000
• Change in actuarial assumptions		(5,622,000)
• Benefits paid		(1,307,000)
Expected Liabilities at December 31, 2009	**$**	**104,478,000**
Experience (gains)/losses		
• New hires	$	168,000
• Emerging potential members		3,724,000
• Unexpected members (primarily due to salary changes)		180,000
• Other experience items (primarily salary changes)		(5,678,000)
• Changes in actuarial assumptions		(16,380,000)
Liabilities at December 31, 2009	**$**	**86,492,000**

The change in actuarial assumptions of $5,622,000 is due to the change in the accounting assumptions for inflation (to 2.25%) and in the discount rate (to 4.7%) and demographic assumptions (mortality, retirement and merit and promotional salary increases) made in preparing the extrapolation of the liabilities for the Plan's 2009 annual financial statements. The change in actuarial assumptions of $16,380,000 is due to the change in assumptions made for this valuation report, including the mortality table, future earnings increases and the interest rate on employee contributions.

Current Service Cost

The current service cost for 2010 on the accounting basis is estimated to be $10,519,000 or 402.8% of participant contributions assuming participant contributions of 10.5% of earnings over the maximum pensionable earnings limit.

Section 3: Projections and Contribution Requirements

The assets of the Plan are held in three separate vehicles, the Retirement Compensation Account Fund, the Refundable Tax Account and the Reserve Fund. The following tables outline the projections of each of these accounts based on the actuarial assumptions and methods described in the Appendices. The years 2007 through 2009 represent actual results.

The methodology used to determine the contribution rate to the Reserve Fund is described in Appendix C.

Section 3: Projections and Contribution Requirements

RCA Fund

Year	RCA Assets Beginning of Year ($)	Net Contributions ($)	Total Benefit Payments ($)	Expenses ($)	Investment income ($)	Transfer To/From RTA ($)	RCA Assets End of Year ($)
2007	7,070,000	2,218,000	610,000	238,000	122,000	532,000	9,094,000
2008	9,094,000	3,067,000	846,000	304,000	(191,000)	385,000	11,205,000
2009	11,205,000	3,264,000	1,307,000	414,000	979,000	615,000	14,342,000
2010	14,342,000	2,611,232	1,606,864	419,589	914,649	346,108	16,187,536
2011	16,187,536	2,317,295	2,096,568	425,253	1,005,330	545,619	17,533,959
2012	17,533,959	1,883,309	2,560,238	430,994	1,061,250	749,494	18,236,780
2013	18,236,780	1,844,813	3,019,525	436,812	1,089,439	965,043	18,679,738
2014	18,679,738	1,804,840	3,520,749	442,709	1,100,027	1,210,361	18,831,509
2015	18,831,509	1,764,111	3,984,327	448,686	1,093,566	1,445,380	18,701,553
2016	18,701,553	1,721,367	4,441,560	454,743	1,069,630	1,685,965	18,282,212
2017	18,282,212	1,686,474	4,904,929	460,882	1,027,659	1,938,635	17,569,169
2018	17,569,169	1,644,986	5,401,452	467,104	966,087	2,217,682	16,529,369
2019	16,529,369	1,632,774	5,895,202	473,410	885,091	2,505,055	15,183,677
2020	15,183,677	1,617,889	6,436,864	479,801	783,393	2,826,735	13,495,030
2021	13,495,030	1,573,143	7,042,409	486,278	657,329	3,192,540	11,389,355
2022	11,389,355	1,523,162	7,660,332	492,843	504,647	3,577,843	8,841,831
2023	8,841,831	1,467,348	8,285,424	499,496	323,940	3,980,742	5,828,941
2024	5,828,941	1,383,357	6,706,059	506,239	182,154	3,261,953	3,444,107
2025	3,444,107	1,322,060	4,253,094	513,073	107,628	2,072,733	2,180,361
2026	2,180,361	1,263,835	2,924,197	519,999	68,136	1,428,030	1,496,166
2027	1,496,166	1,187,435	2,156,582	527,019	46,755	1,054,914	1,101,669
2028	1,101,669	1,105,828	1,673,363	534,134	34,427	819,468	853,895
2029	853,895	1,014,715	1,327,265	541,345	26,684	650,290	676,974
2030	676,974	907,930	1,036,251	548,653	21,155	507,548	528,703
2031	528,703	790,833	763,476	556,060	16,522	373,477	389,999
2032	389,999	698,650	525,082	563,567	12,187	256,448	268,635
2033	268,635	612,707	310,167	571,175	8,395	150,886	159,281
2034	159,281	526,134	96,452	588,963	4,978	45,737	50,715
2035	50,715	445,100	-	495,815	1,585	(793)	793
2036	793	363,177	-	363,970	25	(13)	13
2037	13	281,528	-	281,541	-	-	-
2038	-	213,484	-	213,484	-	-	-
2039	-	153,467	-	153,467	-	-	-
2040	-	94,737	-	94,737	-	-	-
2041	-	60,123	-	60,123	-	-	-
2042	-	34,573	-	34,573	-	-	-
2043	-	5,311	-	5,311	-	-	-
2044							

Section 3: Projections and Contribution Requirements

Refundable Tax Account

Year	RTA Assets Beg of Year ($)	Contributions to RTA ($)	Transfer To/From RCA ($)	RTA Asset at End of Year ($)
2007	9,404,000	2,212,000	(527,000)	11,089,000
2008	11,089,000	3,070,000	(381,000)	13,778,000
2009	13,778,000	3,185,000	(615,000)	16,348,000
2010	16,348,000	2,611,232	(346,108)	18,613,125
2011	18,613,125	2,317,295	(545,619)	20,384,801
2012	20,384,801	1,883,309	(749,494)	21,518,616
2013	21,518,616	1,844,813	(965,043)	22,398,386
2014	22,398,386	1,804,840	(1,210,361)	22,992,866
2015	22,992,866	1,764,111	(1,445,380)	23,311,596
2016	23,311,596	1,721,367	(1,685,965)	23,346,998
2017	23,346,998	1,686,474	(1,938,635)	23,094,837
2018	23,094,837	1,644,986	(2,217,682)	22,522,141
2019	22,522,141	1,632,774	(2,505,055)	21,649,859
2020	21,649,859	1,617,889	(2,826,735)	20,441,013
2021	20,441,013	1,573,143	(3,192,540)	18,821,616
2022	18,821,616	1,523,162	(3,577,843)	16,766,935
2023	16,766,935	1,467,348	(3,980,742)	14,253,541
2024	14,253,541	1,383,357	(3,261,953)	12,374,946
2025	12,374,946	1,322,060	(2,072,733)	11,624,273
2026	11,624,273	1,263,835	(1,428,030)	11,460,077
2027	11,460,077	1,187,435	(1,054,914)	11,592,599
2028	11,592,599	1,105,828	(819,468)	11,878,959
2029	11,878,959	1,014,715	(650,290)	12,243,383
2030	12,243,383	907,930	(507,548)	12,643,765
2031	12,643,765	790,833	(373,477)	13,061,121
2032	13,061,121	698,650	(256,448)	13,503,324
2033	13,503,324	612,707	(150,886)	13,965,145
2034	13,965,145	526,134	(45,737)	14,445,542
2035	14,445,542	445,100	793	14,891,434
2036	14,891,434	363,177	13	15,254,624
2037	15,254,624	281,528	-	15,536,152
2038	15,536,152	213,484	-	15,749,636
2039	15,749,636	153,467	-	15,903,103
2040	15,903,103	94,737	-	15,997,840
2041	15,997,840	60,123	-	16,057,963
2042	16,057,963	34,573	-	16,092,536
2043	16,092,536	5,311	-	16,097,847
2044				

Section 3: Projections and Contribution Requirements

Reserve Fund

Year	Reserve Fund at Beginning of Year ($)	Total Contributions ($)	Transfer From RCA/RTA ($)	Total Benefit Payments ($)	Expenses ($)	Investment Income ($)	Reserve Fund at End of Year ($)
2007	27,370,000	2,167,000	0	0	0	252,000	29,789,000
2008	29,789,000	3,364,000	0	0	0	(6,571,000)	26,582,000
2009	26,582,000	3,358,000	0	0	0	4,332,000	34,272,000
2010	34,272,000	2,835,052	0	0	0	2,230,595	39,337,647
2011	39,337,647	4,117,033	0	0	0	2,587,260	46,041,941
2012	46,041,941	3,820,050	0	0	0	2,996,998	52,858,988
2013	52,858,988	3,741,966	0	0	0	3,420,623	60,021,577
2014	60,021,577	3,660,886	0	0	0	3,865,751	67,548,213
2015	67,548,213	3,578,272	0	0	0	4,333,584	75,460,069
2016	75,460,069	3,491,571	0	0	0	4,825,366	83,777,007
2017	83,777,007	3,420,795	0	0	0	5,342,963	92,540,765
2018	92,540,765	3,336,642	0	0	0	5,888,068	101,765,475
2019	101,765,475	3,311,872	0	0	0	6,463,838	111,541,185
2020	111,541,185	3,281,679	0	0	0	7,073,877	121,896,742
2021	121,896,742	3,190,918	0	0	0	7,718,263	132,805,923
2022	132,805,923	3,089,538	0	0	0	8,396,918	144,292,379
2023	144,292,379	2,976,326	0	0	0	9,111,284	156,379,989
2024	156,379,989	2,805,962	0	2,238,432	0	9,791,485	166,739,004
2025	166,739,004	2,681,628	0	5,332,287	0	10,338,355	174,426,700
2026	174,426,700	2,563,527	0	7,305,383	0	10,753,486	180,438,330
2027	180,438,330	2,408,559	0	8,731,649	0	11,079,799	185,195,040
2028	185,195,040	2,243,030	0	9,874,925	0	11,336,193	188,899,337
2029	188,899,337	2,058,219	0	10,891,373	0	11,530,173	191,596,356
2030	191,596,356	1,841,619	0	11,858,513	0	11,661,744	193,241,206
2031	193,241,206	1,604,103	0	12,818,274	0	11,727,133	193,754,168
2032	193,754,168	1,417,122	0	13,611,306	0	11,728,567	193,288,550
2033	193,288,550	1,242,797	0	14,313,626	0	11,672,071	191,889,793
2034	191,889,793	1,067,195	0	14,982,766	0	11,558,250	189,532,472
2035	189,532,472	902,828	0	15,445,758	107,464	11,387,955	186,270,033
2036	186,270,033	736,658	0	15,793,122	252,877	11,163,460	182,124,152
2037	182,124,152	571,043	0	15,798,825	335,529	10,896,406	177,457,248
2038	177,457,248	433,025	0	16,302,599	423,261	10,581,927	171,746,340
2039	171,746,340	311,288	0	16,407,475	487,374	10,215,910	165,378,689
2040	165,378,689	192,162	0	16,486,951	549,208	9,809,793	158,344,485
2041	158,344,485	121,952	0	16,402,709	580,532	9,369,615	150,852,811
2042	150,852,811	70,127	0	16,248,684	600,066	8,903,969	142,978,157

Section 3: Projections and Contribution Requirements

Reserve Fund

Year	Reserve Fund at Beginning of Year ($)	Total Contributions ($)	Transfer From RCA/RTA ($)	Total Benefit Payments ($)	Expenses ($)	Investment Income ($)	Reserve Fund at End of Year ($)
2043	142,978,157	10,773	16,097,847	16,028,946	620,746	8,416,169	150,853,253
2044	150,853,253	2,791	0	15,739,607	614,756	8,917,342	143,419,023
2045	143,419,023	0	0	15,395,928	601,333	8,463,775	135,885,537
2046	135,885,537	0	0	15,038,683	587,380	8,004,532	128,264,007
2047	128,264,007	0	0	14,607,544	570,541	7,542,185	120,628,107
2048	120,628,107	0	0	14,144,047	552,438	7,079,992	113,011,614
2049	113,011,614	0	0	13,617,368	531,867	6,621,062	105,483,441
2050	105,483,441	0	0	13,105,755	511,884	6,167,164	98,032,967
2051	98,032,967	0	0	12,570,663	490,984	5,718,884	90,690,204
2052	90,690,204	0	0	12,011,676	469,151	5,278,112	83,487,489
2053	83,487,489	0	0	11,429,981	446,431	4,846,830	76,457,907
2054	76,457,907	0	0	10,827,403	422,896	4,427,047	69,634,655
2055	69,634,655	0	0	10,206,250	398,635	4,020,763	63,050,532
2056	63,050,532	0	0	9,569,436	373,762	3,629,933	56,737,267
2057	56,737,267	0	0	8,922,448	348,492	3,256,362	50,722,690
2058	50,722,690	0	0	8,269,187	322,977	2,901,663	45,032,189
2059	45,032,189	0	0	7,614,041	297,388	2,567,280	39,688,040
2060	39,688,040	0	0	6,962,626	271,945	2,254,422	34,707,891
2061	34,707,891	0	0	6,320,677	246,872	1,964,007	30,104,348
2062	30,104,348	0	0	5,693,103	222,360	1,696,664	25,885,550
2063	25,885,550	0	0	5,085,103	198,613	1,452,731	22,054,564
2064	22,054,564	0	0	4,501,990	175,838	1,232,228	18,608,964
2065	18,608,964	0	0	3,948,535	154,221	1,034,849	15,541,057
2066	15,541,057	0	0	3,428,659	133,916	859,986	12,838,469
2067	12,838,469	0	0	2,945,317	115,038	706,768	10,484,882
2068	10,484,882	0	0	2,501,250	97,694	574,088	8,460,025
2069	8,460,025	0	0	2,099,122	81,988	460,592	6,739,508
2070	6,739,508	0	0	1,739,342	67,936	364,742	5,296,971
2071	5,296,971	0	0	1,421,579	55,525	284,901	4,104,769

Section 3: Projections and Contribution Requirements

Reserve Fund

Year	Reserve Fund at Beginning of Year ($)	Total Contributions ($)	Transfer From RCA/RTA ($)	Total Benefit Payments ($)	Expenses ($)	Investment Income ($)	Reserve Fund at End of Year ($)
2072	4,104,769	0	0	1,145,576	44,745	219,351	3,133,799
2073	3,133,799	0	0	909,610	35,528	166,327	2,354,988
2074	2,354,988	0	0	710,875	27,766	124,104	1,740,451
2075	1,740,451	0	0	546,261	21,336	91,041	1,263,895
2076	1,263,895	0	0	412,350	16,106	65,604	901,042
2077	901,042	0	0	305,635	11,938	46,391	629,860
2078	629,860	0	0	222,180	8,678	32,152	431,154
2079	431,154	0	0	158,023	6,172	21,816	288,775
2080	288,775	0	0	109,916	4,293	14,479	189,045
2081	189,045	0	0	74,758	2,920	9,388	120,756
2082	120,756	0	0	49,580	1,937	5,937	75,175
2083	75,175	0	0	31,975	1,249	3,660	45,611
2084	45,611	0	0	20,075	784	2,199	26,952
2085	26,952	0	0	12,253	479	1,287	15,507
2086	15,507	0	0	7,256	284	734	8,701
2087	8,701	0	0	4,173	163	408	4,773
2088	4,773	0	0	2,333	91	223	2,572
2089	2,572	0	0	1,271	50	119	1,369
2090	1,369	0	0	678	27	64	728
2091	728	0	0	356	14	34	392
2092	392	0	0	183	7	19	221
2093	221	0	0	93	4	11	135
2094	135	0	0	47	2	7	93
2095	93	0	0	24	1	5	73
2096	73	0	0	12	1	4	64
2097	64	0	0	6	1	4	61
2098	61	0	0	2	0	4	63
2099	63	0	0	2	0	4	65
2100	65	0	0	0	0	4	69

Section 3: Projections and Contribution Requirements

Required Contributions

Effective January 1, 2011, participants are required to contribute 11.16% (10.5% in 2010) of their regular earnings in excess of the maximum earnings level as determined from the maximum defined benefit pension limit for each year of service under the *Income Tax Act*. This limit is $127,611 in 2011, ($124,722 in 2010). These contributions are remitted to the RCA Fund.

Employers make matching contributions. These matching contributions are remitted to the Refundable Tax Account.

Employers are required to make additional contributions to the Reserve Fund. The Reserve Fund was established to meet the liabilities of the Plan not covered by the assets in the RCA Fund and the RTA. Based on the December 31, 2005 actuarial valuation, contributions to the Reserve Fund were set at 11.4% (effective April 1, 2007) of participant earnings in excess of the maximum earnings level.

As a result of this valuation, the recommended employer contribution rate for the Reserve Fund is 22.6%, to be effective April 1, 2011. This assumes the participant contribution rate to the RCA Fund and the matching employer contribution rates to the RTA increase from 10.5% to 11.16% effective January 1, 2011.

Section 4: Actuarial Opinion and Certification

Actuarial Opinion, Recommendations and Certification for the Supplementary Retirement Plan for Public Service Managers as at December 31, 2009

Opinion

This actuarial certification forms an integral part of this actuarial valuation report as at December 31, 2009. I confirm that I have prepared an actuarial valuation for the Plan as at December 31, 2009 for the purposes outlined in the Introduction section to this report and consequently:

I Hereby Recommend That:

1. Contributions to the Plan be determined as follows:

Employee contributions to RCA	10.5% of excess earnings increasing to 11.16% effective January 1, 2011
Employer contributions to RTA	10.5% of excess earnings increasing to 11.16% effective January 1, 2011
Employer contributions to Reserve Fund	11.4% of excess earnings increasing to 22.6% effective April 1, 2011

2. The next actuarial valuation for the purpose of developing a funding recommendation be performed no later than as at December 31, 2012.

I Hereby Certify That, In My Opinion:

1. With respect to the purposes of determining the Plan's financial position on the accounting basis as at December 31, 2009 and determining the accounting current service cost as at December 31, 2009:

   (a) The Plan has an unfunded liability of $21,530,000 as at December 31, 2009, based on total assets of $64,962,000 and total liabilities of $86,492,000.

Section 4: Actuarial Opinion and Certification

(b) The Plan's current service cost for the Plan year commencing January 1, 2010 is estimated to be $10,519,000 (402.8% of participant contributions).

(c) For the plan years 2010 to 2013 or, if earlier, until the next actuarial valuation is certified, the Plan's current service cost is determined as 402.8% of participant contributions.

2. With respect to determining the employer contribution rate required for the Reserve Fund:

(a) The employer contribution rate for 2010 continues at 11.4% of participants' excess earnings and changes to 22.6% of participants' excess earnings effective April 1, 2011.

(b) The contributions as recommended in this report are adequate to satisfy the Plan's funding requirements.

3. For the purposes of this report:

- the data on which this report is based are sufficient and reliable;
- the assumptions used for the purpose of determining the contribution rate to be made by employers to the Reserve Fund are, in aggregate, appropriate;
- the economic assumptions used to determine the financial position of the Plan and the current service cost on the accounting basis have been adopted as management's best estimates for accounting purposes and consequently I have not rendered an opinion on them; however, in my opinion, the economic assumptions are, in aggregate not unreasonable, when considering the circumstances of the Plan and the purpose of the valuation,
- the demographic assumptions used to determine the financial position of the Plan and the current service cost on the accounting basis have been adopted as management's best estimates for accounting purposes and are, in aggregate, appropriate for that purpose, and
- the actuarial cost methods and the asset valuation methods employed are appropriate.

Section 4: Actuarial Opinion and Certification

4. This report and its associated work have been prepared and these opinions and recommendations given in accordance with accepted actuarial practice.

5. Notwithstanding the above certifications, emerging experience differing from the assumptions will result in gains or losses that will be revealed in subsequent valuations.

[original signed by]

Robert Thiessen
Fellow, Society of Actuaries
Fellow, Canadian Institute of Actuaries February 8, 2011

Appendix A: Assets

Employee contributions to the Plan are deposited into the Retirement Compensation Arrangement (RCA) trust fund. Matching employer contributions must be remitted to the Canada Revenue Agency (CRA) to be held in a Refundable Tax Account (RTA). Employers also make additional contributions which are held in the government's Reserve Fund.

The assets in the RCA are invested. However, 50% of the realized investment income each year must be remitted to the RTA. This is offset by 50% of any benefits paid by the RCA. The amounts held in the RTA receive no investment income. The assets in the Reserve Fund are invested and no tax is paid on the investment income.

The assets in the RCA and the Reserve Fund are invested in a diversified portfolio in accordance with the Plan's Statement of Investment Policies and Goals.

The following table shows the development of the assets in each of the investment vehicles for the years 2007 to 2009:

	RCA Fund		
	2007	**2008**	**2009**
Value at January 1	**$ 7,070,000**	**$ 9,094,000**	**$ 11,205,000**
Employee contributions	2,218,000	3,067,000	3,264,000
Investment income	122,000	(191,000)	979,000
Benefit payments	(610,000)	(846,000)	(1,307,000)
Expenses	(238,000)	(304,000)	(414,000)
Transfer to RTA	532,000	385,000	615,000
Value at December 31	**$ 9,094,000**	**$ 11,205,000**	**$ 14,342,000**

	RTA		
	2007	**2008**	**2009**
Balance at January 1	**$ 9,404,000**	**$ 11,089,000**	**$ 13,778,000**
Employer contributions	2,212,000	3,070,000	3,185,000
Transfer from RCA	(527,000)	(381,000)	(615,000)
Balance at December 31	**$ 11,089,000**	**$ 13,778,000**	**$ 16,348,000**

	Reserve Fund		
	2007	**2008**	**2009**
Value at January 1	**$ 27,370,000**	**$ 29,789,000**	**$ 26,582,000**
Employer contributions	2,167,000	3,364,000	3,358,000
Investment income	252,000	(6,571,000)	4,332,000
Value at December 31	**$ 29,789,000**	**$ 26,582,000**	**$ 34,272,000**

The total of all assets is $64,962,000 as at December 31, 2009

Appendix A: Assets

Asset Mix

The actual asset mix and the Plan's target asset mix are shown in the following table:

	Actual Asset Mix	Target Asset Mix
Cash & Short Term	1.7%	0.5%
Bonds and Mortgages	37.5%	36.0%
Real return bonds	5.1%	4.5%
Canadian Equity	14.6%	16.0%
Foreign Equity	35.0%	30.0%
Private Equity	0.5%	2.0%
Private income	1.7%	4.0%
Timberland	0.4%	2.0%
Real Estate	3.5%	5.0%
Total	100.0%	100.0%

Appendix B: Membership Data

Source of Data and Data Checks

Data for Plan participants as at December 31, 2009, was supplied by APS. This data included dates of birth, gender, full/part-time status, service ratio, pensionable service, pensionable earnings, pension amounts and joint pension status. Contribution information was also provided.

Numerous tests were performed on the data, reconciling the December 31, 2009 data to the December 31, 2005 data (which was used in the previous valuation) and testing the validity of the December 31, 2008 data. Any outstanding questions were sent to APS and adjustments made according to the responses received. The results of these tests were satisfactory.

Current Plan Participants as at December 31, 2009

Membership Reconciliation

	Active	Potential Active	Deferred Pensioners	HOD	Pensioners & Survivors	Total
December 31, 2008	998	2,109	58	16	412	3,593
New hires	39	288	-	-	-	327
Terminations						
- Paid out	(17)	(188)	(8)	(1)	-	(214)
- Deferred/HOD	(60)	-	44	16	-	-
Retirements	(34)	-	(7)	-	41	-
Deaths	-	- - -			(2)	(2)
New						
- From Potential	169	(169)	-	-	-	-
- From Unexpected	29	407	-	-	-	436
- To Potential	(3)	3	-	-	-	-
- - To Unexpected	(4)	(310)	-	-	-	(314)
- Adjustments	0	-	(6)	6	-	-
December 31, 2009	1,117	2,140	81	37	451	3,826

Appendix B: Membership Data

Summary of Membership Data

	December 31, 2009	December 31, 2008
Active Members		
Number	1,117	998
Average age	52.3	52.6
Average service	7.1 years	7.3 years
Average earnings	$147,907	$146,835
Percentage female	36.9%	34.8%
Potential Members		
Number	2,140	2,109
Average age	43.9	45.0
Average earnings	$109,278	$105,718
Percentage female	46.0%	46.8%
Pensioners and Survivors		
Number	451	412
Average age	62.5	61.9
Average annual pension	$2,345	$2,058
Percentage female	20.2%	18.5%
Deferred Pensioners		
Number	81	58
Average age	50.8	49.7
Average annual pension	$1,955	$1,124
Percentage female	45.6%	46.6%
Held on Deposit		
Number	37	16
Average age	50.1	51.7
Average amount	$12,028	$4,482

Appendix B: Membership Data

Active Membership Distribution by Age and Pensionable Service

Age Nearest		Under 5	5 - 9.99	10-14.99	Total
25-29	Number	1	0	0	1
	Average Earnings $	*	0	0	*
30-34	Number	6	0	0	6
	Average Earnings $	121,784	0	0	121,784
35-39	Number	42	20	0	62
	Average Earnings $	143,133	140,945	0	142,427
40-44	Number	60	58	13	131
	Average Earnings $	142,182	146,831	143,944	144,415
45-49	Number	63	93	22	178
	Average Earnings $	140,030	147,190	160,637	146,318
50-54	Number	62	129	70	261
	Average Earnings $	147,215	153,845	142,842	149,319
55-59	Number	50	123	110	283
	Average Earnings $	150,852	150,033	146,168	148,675
60-64	Number	28	65	70	163
	Average Earnings $	143,678	163,092	142,502	150,915
Over 64	Number	4	13	15	32
	Average Earnings $	162,911	150,340	145,546	149,664
Total	Number	316	501	300	1,117
	Average Earnings $	144,594	151,456	145,470	147,907

* Not shown for confidentiality reasons to comply with Section 17, Protection of Personal Privacy under the *Freedom of Information and Protection of Privacy Act*

Appendix C: Actuarial Assumptions and Cost Methods

Actuarial Assumptions

Assumptions have been for the determination of the Reserve Fund contribution rate. As well, these assumptions have been adopted as management's best estimate for Section 4100 purposes except where specifically noted otherwise.

Asset Rate of Return

The asset rate of return assumption is used only for funding purposes. The previous valuation assumed that the assets would earn 6.5% per annum. For this valuation, it was assumed that the assets would earn 6.25% per annum. The assumed rate of return has been determined as the mean return over the period resulting from a Monte Carlo simulation applied to Aon Hewitt's proprietary multi-variate asset model using the target asset mix policy of the Plan. The best estimate asset return is expected to be 7.15%. A margin for adverse deviation of 0.90% results in a discount rate of 6.25%. For the RCA fund, it is assumed that 100% of the investment income is realizable. Investment management expenses are assumed to be offset by value added from active management.

Discount Rate

The discount rate used to determine the actuarial liabilities and the current service cost for accounting purposes only is 4.7% per annum. This rate reflects the taxation implications of the RCA on the actuarial liabilities and current service cost and is based on the asset rate of return assumption. This is unchanged from the previous valuation. This is derived based on an assumed rate of return of 6.25% on the accounting basis.

Consumer Price Index Increases

It was assumed that the Consumer Price Index for Alberta will increase at the rate of 2.25% per annum. The assumption is based on anticipated future economic and financial market conditions. The previous valuation used 3.5% for 2009 and 2.5% per annum thereafter for funding purposes. For accounting purposes, the previous valuation used 3.5% for 2009 and 2.25% per annum thereafter.

Appendix C: Actuarial Assumptions and Cost Methods

Future Earnings Increases

It was assumed that future earnings would increase at the rate of 0% for 2010 and 2011 and 3.5% per annum thereafter in addition to increases for merit and promotion described below. The salary scale for funding purposes is determined as inflation plus 1.25% for general productivity and is based on anticipated future economic and financial market conditions. The salary scale for accounting purposes is determined as inflation plus 1.25% for general productivity. The previous valuation assumed that future earnings would increase at the rate of 4.0% for 2009 and 3.5% per annum thereafter.

Income Tax Act Maximum Pension Benefit

The *Income Tax Act* Maximum Pension Benefit for each year of service is $2,552.22 for 2011 ($2,494.44 for 2010) and was assumed to increase from that level at the rate of increase assumed for future earnings for 2012 and later years, that is, 3.5% per annum. This assumption is based on future anticipated economic and financial market conditions. The previous valuation also used 3.5% per annum.

Interest Rate Credited to Participant Contributions

Participant contributions were assumed to be credited with interest at the assumed inflation rate plus 2.0% (that is, 4.25% per annum) to approximate the expected five year GIC rates over the long term. For the previous valuation, the assumed asset return rate reduced by 2% was used.

Expenses

Administrative expenses are assessed to the Plan as a charge on a per member basis. The total expenses assessed for 2009 amounted to $414,000. It was assumed that expenses will increase each year in absolute dollar terms at 60% of the assumed rate of increase in the Consumer Price Index for Alberta until 2033. Each year thereafter, expenses are assumed to be a constant percentage of the total benefit payments (3.91%). The previous valuation assumed expenses would increase until 2033 and then be a constant percentage (2.25%) of total benefit payments.

Appendix C: Actuarial Assumptions and Cost Methods

Merit and Promotion Salary Increases

For this valuation, an adjustment of 1.25% per annum at all ages was used. This was based on recent Plan experience. The previous valuation used the same assumption.

Termination of Employment

Termination rates were assumed to be nil as was done in the previous valuation.

Retirement

The following table shows the retirement rates used for this valuation and the previous valuation. The retirement rates are based on the 2006 experience study for MEPP.

Age	Probability of retirement in year following age
Under 55	0%
55	20.0%
56	15.0%
57	15.0%
58	15.0%
59	20.0%
60	20.0%
61	22.5%
62	22.5%
63	30.0%
64	40.0%
Over 64	100.0%

Appendix C: Actuarial Assumptions and Cost Methods

Mortality

We have utilized the Uninsured Pensioner 1994 Mortality Table projected to 2023 (UP94@2023) using Scale AA. Based on the 2006 experience study, this assumption is considered to be best estimate. The previous valuation used the UP94@2022 table. Rates at selected ages are shown in the table below:

	Annual Mortality Rate Per 1000			
	UP94@2022		UP94@2023	
Age	**Male**	**Female**	**Male**	**Female**
45	1.2	0.7 1.2 0.7		
50	1.7	1.0 1.6 0.9		
55	2.8	2.0 2.7 2.0		
60	5.5	4.1 5.4 4.1		
65	10.5	8.1	10.4	8.0
70	16.7	12.8	16.5	12.8
75	27.0	19.5	26.6	19.3
80	50.3	34.8	49.8	34.6
85	85.9	61.5	85.3	61.2
90	147.0	114.9	146.4	114.6
95	237.5	189.3	237.0	188.9
100	331.7	289.0	331.4	288.7

Disability Rates

Based on the number of employees in approved LTD plans and the very small number of disability claims experienced by the Plan, we believe it is appropriate to ignore the contingency of disability. Such action is conservative since the resulting liabilities are slightly higher than would be the case if an appropriate disability assumption was used. The difference is not believed to be material. The same treatment was used for the previous valuation.

Appendix C: Actuarial Assumptions and Cost Methods

Pension Partner and Age of Partner

For this valuation, it was assumed that 90% of participants will have a pension partner of the opposite sex. The male partner is assumed to be three years older than the female partner. 10% of participants are assumed to have no pension partner. This assumption was based on the 2006 MEPP experience study. The same assumption was used for the previous valuation.

Actuarial Cost Method

In order to determine the employer contributions required to be made to the Reserve Fund, a forecast actuarial cost method has been employed. Under this method, projections of the expected future cash flows, expected future earnings of both existing and potential members and expected future investment income for the RCA Fund and the Reserve Fund are determined. A closed group model is used. That is, no new hires are considered to occur. The employer contribution rate is then determined as the constant percentage of excess earnings which will exhaust all the assets at the time the last benefit is expected to be paid.

The RCA Fund receives all required employee contributions and pays all Plan expenses and benefits. At the end of each year, a transfer is made to the RTA in an amount equal to 50% of the difference between net investment income and benefits paid. Administrative expenses cannot be included in this calculation. If this difference is negative, a transfer from the RTA to the RCA Fund is made. The RCA Fund will receive contributions as long as the projections indicate that there are active members. In this projection, the last active member retires in 2043. It is assumed that the RCA Fund will pay all expenses and benefits for as long as it has sufficient funds to do so. In the year in which the RCA Fund can no longer pay all expected expenses and benefits, the shortfall will be paid by the Reserve Fund. Consequently, in this projection, the Reserve Fund commences to pay the balance of the expected benefits in 2024 and all of the expected benefits and the balance of the expected expenses in 2035.

Appendix C: Actuarial Assumptions and Cost Methods

It is assumed that the RCA Fund will be wound-up when the last remaining active member retires. At that time, any remaining assets in the RCA and the entire balance of the RTA is transferred to the Reserve Fund. This occurs at the end of 2043 in this projection. The Reserve Fund is then responsible for the payment of all remaining benefits and expenses. As there are no active members, no further contributions occur.

With respect to the accrued benefit liability and the current service cost of the Plan, the projected accrued benefit method prorated on service has been used.

Actuarial Asset Method

The actuarial value of assets consists of the value of the assets contained in the RCA and the Reserve Fund, determined at market value plus the amount held by the federal government in the RTA. The same methodology was used in the previous valuation.

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Appendix D: Summary of Plan Provisions

The following is a summary of the major provisions of the Plan which have a material affect on Plan costs. References should be made to the actual plan documents to determine specific benefit entitlements.

Membership

All Alberta government employees who are part of the Management Employees Pension Plan (MEPP) and earn more than the amount as determined from the maximum defined benefit pension limit under the *Income Tax Act* from time to time, are members of the Plan effective July 1, 1999 or the date of participation in MEPP, if later. Agencies, boards and commissions associated with the Alberta government have the option of participating in the Plan, if their employees are contributing members of MEPP and their application is approved by the Minister of Finance.

Pensionable Service

Pensionable Service parallels pensionable service in the MEPP, commencing upon the later of July 1, 1999 and the date of employment except that optional service cannot be bought back under the Plan and service transferred into MEPP under a reciprocal transfer agreement is not counted under the Plan. Up to one year of unpaid leave may be bought back under the Plan provided the same period of service is also bought back under MEPP.

Contributions

Participating employees must contribute on their regular earnings in excess of the maximum earnings level as determined from the maximum defined benefit pension limit for each year of service under the *Income Tax Act*, based upon the employee contribution rate to the MEPP. These contributions are remitted to the RCA Fund. The employee contribution rate in effect up to March 31, 2003 was 7.75% of excess earnings. Effective April 1, 2003, the contribution rate increased to 9.5%. Effective July 1, 2005, the employee contribution rate increased to 10.5%. Effective January 1, 2011, the employee contribution rate increased to 11.16%.

Appendix D: Summary of Plan Provisions

Participating employers make matching contributions to the Plan, which are remitted to the RTA. In addition, participating employers make contributions to the Reserve Fund, with the contribution rate established by actuarial valuations at least once every three years. The employer contribution rate was initially set at 42.5% of participating employee earnings in excess of the maximum earnings level as determined from the maximum defined benefit pension limit for each year of service under the *Income Tax Act*. The employer contribution rate was changed to 6.8% effective July 1, 2003 and to 5.8% effective July 1, 2005. Effective April 1, 2007, the employer contribution rate was set at 11.4%. Effective April 1, 2011, the employer contribution rate will be set at 22.6%.

Retirement Age

Participants are eligible to retire under the Plan if they have attained age 55 and have at least five years of pensionable service under MEPP.

Retirement Benefit

The annual pension payable at retirement is determined as follows:

- 2.0% of highest average salary, multiplied by years of pensionable service, less
- 2.0% of highest average pensionable salary, multiplied by years of pensionable service.

Highest average pensionable salary is the participant's average annual salary in the five consecutive years of pensionable service in which such average is the highest. Pensionable salary is limited each year to the amount as determined from the maximum defined benefit pension limit under the *Income Tax Act*.

Early Retirement

If the participant has accrued 80 points under MEPP (that is, age plus MEPP pensionable service is greater than or equal to 80) or has attained age 60, no reduction is applied. Otherwise, the retirement pension is reduced by 3% for each year that the participant's early retirement age precedes the earlier of age 60 and the age at which 80 points would be reached.

Appendix D: Summary of Plan Provisions

Normal Form of Pension

The normal form of pension for a participant who does not have a pension partner at retirement is a lifetime pension guaranteed for 120 months. If the participant dies before 120 monthly payments are made, the balance of the 120 payments are payable to the participant's beneficiary or estate. The normal form of pension for a participant, who has a pension partner at retirement, is a joint and 2/3 survivor pension. If the participant dies and the pension partner is still alive, the pension partner receives a pension that is 2/3 of the participant's pension. Other optional forms are available on an actuarially equivalent basis.

Termination Benefit

Participating employees with less than five years of MEPP pensionable service who terminate from the Plan are eligible to receive a refund of their contributions with interest. Participating employees with five or more years of MEPP pensionable service are eligible to receive a deferred pension, payable upon commencement of the MEPP pension.

Cost-of-Living-Increases

Increases to deferred pensions and pensions in payment are based upon 60% of the change in the Alberta CPI.