

Actuarial Report

University of Toronto

University of Toronto
Supplemental Retirement Arrangement

As of July 1, 2014

Preparation of this Actuarial Valuation

University of Toronto Supplemental Retirement Arrangement (SRA)

This material has been prepared primarily to present the current obligations of the University of Toronto Supplemental Retirement Arrangement as of July 1, 2014.

In conducting the valuation, we have used personnel information provided by the University of Toronto as of July 1, 2014, and the actuarial assumptions and methods described in the actuarial assumptions section of this report.

For the purposes of this valuation, it is our opinion that:

- the data upon which the valuation is based are sufficient and reliable;
- the assumptions used are adequate and appropriate; emerging experience differing from the assumptions will result in gains or losses which will be revealed in future valuations;
- the actuarial methods used are appropriate.

This report has been prepared, and our opinions given, in accordance with accepted actuarial practice.

Aon Hewitt



Andrew M. Hamilton
Fellow of the Canadian Institute of Actuaries



Allan H. Shapira
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Valuation Results

The going concern actuarial valuation of the SRA is prepared based on the same actuarial assumptions and methods used for the actuarial valuation of the Registered Pension Plan.

(Thousands of Dollars)	As of July 1, 2011	As of July 1, 2014
Going Concern Valuation Results		
Past Service¹		
Accrued Liability for SRA		
Active Participants	\$ 14,858	\$ 186
Retired Participants	<u>125,522</u>	<u>139,979</u>
Total	\$ 140,380	\$ 140,165
Current Service		
Current Service Cost for SRA	\$ 474	\$ -
As a % of Participant Salary Base (Capped at \$150,000)	0.07%	N/A
Participant Salary Base (Capped at \$150,000)	\$ 713,809	N/A

¹ Includes participants in both the University of Toronto Pension Plan and University of Toronto (OISE) Pension Plan

Personnel Information

Personnel Characteristics

The valuation was based on personnel data for members of the University of Toronto Pension Plan and University of Toronto (OISE) Pension Plan, supplied by the University as of July 1, 2014. The average characteristics of active participants is shown as of July 1, 2011 and July 1, 2014.

	July 1, 2011	July 1, 2014
Number of Participants¹		
Males	4,081	4,247
Females	<u>4,869</u>	<u>5,221</u>
Total	8,950	9,468
Average Present Age		
Males	48.6	48.5
Females	46.8	46.8
Total	47.6	47.5
Average Years of Service		
Males	13.0	12.8
Females	11.7	11.5
Total	12.3	12.1
Average Age at Hire		
Males	35.5	35.7
Females	35.1	35.3
Total	35.3	35.4
Average Salary²	\$91,716	\$ 96,859

¹ Includes participants in both the University of Toronto Pension Plan and University of Toronto (OISE) Pension Plan

² Without \$150,000 cap on salary; full-time equivalent for part-time members

Personnel Information (continued)

Retired Participants

Following are some pertinent characteristics of the retired participants who are receiving an SRA benefit as of July 1, 2014. Corresponding data for prior valuations is shown for comparison.

	Number	Average Age	Average Annual SRA Benefit
July 1, 2014	1,110	75.4	\$ 10,336
July 1, 2013	1,064	74.8	\$ 10,298
July 1, 2012	1,041	74.1	\$ 10,544
July 1, 2011	964	73.8	\$ 10,760
July 1, 2010	935	73.2	\$ 10,685
July 1, 2009	893	72.8	\$ 10,678
July 1, 2008	823	72.6	\$ 10,520
July 1, 2007	829	71.9	\$ 10,411
July 1, 2006	799	71.4	\$ 10,047
July 1, 2005	767	70.9	\$ 9,338
July 1, 2004	679	70.8	\$ 8,772
July 1, 2003	620	71.1	\$ 6,718

Plan Provisions

Plan Establishment

The Supplemental Retirement Arrangement (“SRA”) was established effective July 1, 1996, to provide eligible members of the University of Toronto Pension Plan (“Pension Plan”) with additional retirement income to compensate for the limitations prescribed under the regulations to the *Income Tax Act (Canada)* on the amount of lifetime retirement benefits payable from a registered pension plan.

The SRA also applies to eligible members of the University of Toronto (OISE) Pension Plan. Although the provisions of the SRA reference the provisions of the Pension Plan, the provisions of the SRA shall be read *mutatis mutandis* in respect of the provisions of the University of Toronto (OISE) Pension Plan.

The SRA is not required to be, and shall not be, registered with the federal government or any provincial government.

Plan Provisions (continued)

Effective Date

July 1, 1996.

Eligibility

All members of the University staffs who participate in the Pension Plan and whose benefits payable from the Pension Plan, before application of the maximum benefit limits, exceed the maximum benefit limitations prescribed in the *Income Tax Act*, shall be a Member.

Retirement Benefits

Eligibility

Retirement under the Pension Plan on Normal Retirement Date, Early Retirement Date, or Postponed Retirement Date.

Benefit

Annual benefit from the SRA equal to (a) minus (b) minus (c) below:

- (a) Amount of pension payable from the Pension Plan without application of the maximum limitations prescribed under the *Income Tax Act* on the maximum benefit payable from a registered pension plan.
- (b) Amount of pension actually payable from the Pension Plan (after application of the maximum benefit limitations).
- (c) Amount of pension that may be provided by an amount equal to the Member's Cumulative Notional Amount.

Plan Provisions (continued)

Form of Payment of Retirement Benefits

The retirement pension payable from the SRA commences to be paid in the same manner and in the same form of payment as the annual pension payable to the Member from the Pension Plan.

Cost-of-Living Adjustments

The retirement pension payable from the SRA shall be adjusted at the same time, and in the same manner and in the same percentage as the cost-of-living adjustments and other augmentations that are applied to the Member's pension payable from the Pension Plan.

Termination Benefits

Each member who terminates prior to Early Retirement Date for any reason other than death, and who does not elect a cash refund of participant contributions under the Pension Plan, shall be entitled to a future vested pension determined in the same manner as described under Retirement Benefits. However, if the Member elects a locked-in transfer from the Pension Plan, then the Member shall receive a lump-sum payment from the SRA equal to the excess, if any, of the Commuted Value of the pension payable from the Pension Plan without application of the maximum benefit limits prescribed under the *Income Tax Act* minus the Cumulative Notional Amount, over the transfer amount received from the Pension Plan.

Preretirement Death Benefits

Eligibility

- (a) Before Eligibility for Early Retirement
- (b) After Eligibility for Early Retirement

Benefit

- (a) Commuted value of the pension payable under the Termination Benefits section if the Member had terminated service immediately prior to the date of death.
- (b) Commuted value of the pension payable under the Retirement Benefits section if the Member had retired immediately prior to the date of death.

The death benefits payable from the SRA shall be paid to the same person, in the same form, and on the same dates as the death benefits payable from the Pension Plan.

Plan Provisions (continued)

Definitions

Cumulative Notional Amount

The Notional Amount is an amount determined upon the Member's termination of continuous service, retirement or death in respect of each University Year on and after July 1, 1986, equal to the difference between the amount the Member contributed to the Pension Plan in each such University Year (which was capped to reflect the *Income Tax Act* maximum pension) and the amount the Member would have contributed had the Member's contributions been based on the Member's salary to the maximum salary applicable to that year.

The Cumulative Notional Amount is the sum of the Notional Amount in each such University Year, with interest at the rate credited on participant contributions under the Pension Plan.

Actuarial Assumptions

Going Concern Valuation

The actuarial assumptions and methods used for this actuarial valuation are the same as those used for the actuarial valuation as of July 1, 2014 for the University of Toronto Pension Plan. The rationale for the assumptions below is described in the July 1, 2014 actuarial valuation report for the University of Toronto Pension Plan.

Demographic Assumptions

Retirement Age

Academic Staff and Librarians

In accordance with Table A following, but no earlier than one year after valuation date, subject to early retirement provisions. July 1, 2011 valuation used different rates outlined in Table A.

Administrative Staff, Unionized Administrative Staff, Unionized Staff and Research Associates

Age 63, subject to early retirement provisions

Terminated Vested Participants

Age 65½¹.

Mortality Rates

CPM2014 Public Sector Mortality Table with Improvement Scale CPM-B. July 1, 2011 valuation used 1994 Uninsured Pensioner Mortality Table, with fully generational mortality improvements using projection Scale AA.

Withdrawal Rates

Table B following.

Disability Rates

None assumed.

Percentage With Spouse

Male participants: 85% of participants have a spouse at retirement with spouse four years younger.

Female participants: 70% of participants have a spouse at retirement with spouse two years older.

July 1, 2011 valuation used 86.7% with female spouse four years younger than male spouse

¹ Reflects that Normal Retirement Date is June 30th coincident with or following age 65

Actuarial Assumptions (continued)

Economic Assumptions

Increase in Consumer Price Index (CPI)	2.00% per year. July 1, 2011 valuation used 2.50% per year.
Cost-of-Living Adjustments	1.50% per year. July 1, 2011 valuation used 1.875% per year (75% of increase in CPI).
Increase in CPP Maximum Salary	2.75% per year (2.00% increase in CPI + 0.75% real wage growth). July 1, 2011 valuation used 3.50% per year.
Increase in <i>Income Tax Act</i> Maximum Pension	\$2,770.00 in 2014; increasing by 2.75% per year thereafter. July 1, 2011 valuation was \$2,552.22 in 2011 increasing by 3.50% per year thereafter.
Increase in Salaries	4.00% per year (2.00% increase in CPI + 2.00% merit and promotion/progression). July 1, 2011 valuation was 4.50% per year (2.50% increase in CPI + 2.00% merit and promotion/progression).
Discount Rate	5.75% per year (2.00% increase in CPI + 3.75% real return, net of all fees). July 1, 2011 valuation was 6.25% per year (2.50% increase in CPI + 3.75% real return, net of all fees).
Loading for Administrative Expenses	Implicit in interest rate.

Methods

Valuation of Assets	N/A
Actuarial Cost Method	Projected unit credit cost method.

Actuarial Assumptions (continued)

Table A
Retirement Rates for Academic Staff and Librarians

Age	July 1, 2011 Valuation		July 1, 2014 Valuation	
	10 or More Years of Pensionable Service	Less Than 10 Years of Pensionable Service	10 or More Years of Pensionable Service	Less Than 10 Years of Pensionable Service
60	10% ¹	-	5% ¹	-
61	5%	-	5%	-
62	5%	-	5%	-
63	5%	-	5%	-
64	5%	-	5%	-
65	50%	50%	30%	30%
66	25%	25%	30%	30%
67	50%	50%	30%	30%
68	50%	50%	30%	30%
69	75%	75%	50%	50%
70	100%	100%	50%	50%
71	N/A	N/A	100%	100%

¹ Applies at age 60 or, if later, first age at which participant is eligible for an unreduced pension

Actuarial Assumptions (continued)

Table B
Withdrawals per 1,000 Participants

Present Age	Rates	Present Age	Rates
20	100	45	17
21	100	46	16
22	100	47	15
23	100	48	14
24	100	49	13
25	100	50	12
26	90	51	11
27	80	52	10
28	71	53	9
29	63	54	8
30	56		
31	50		
32	45		
33	40		
34	36		
35	32		
36	30		
37	28		
38	26		
39	24		
40	22		
41	21		
42	20		
43	19		
44	18		