



# Actuarial Valuation as at July 1, 2016 for University of Toronto Supplemental Retirement Arrangement

November 2016

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## Preparation of this Actuarial Valuation

### University of Toronto Supplemental Retirement Arrangement

This material has been prepared primarily to present the current obligations of the University of Toronto Supplemental Retirement Arrangement (the "SRA") as of July 1, 2016.

In conducting the valuation, we have used personnel information provided by the University of Toronto as of July 1, 2016, 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 appropriate; emerging experience differing from the assumptions will result in gains or losses which will be revealed in subsequent valuations; and
- The actuarial methods used are appropriate.

This report and its associate work have been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada.



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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 University of Toronto Pension Plan (the "Pension Plan").

	As of July 1, 2016	As of July 1, 2015
<b>Going Concern Valuation Results</b>		
<b>Past Service</b>		
Accrued liability for SRA		
Active members	\$ - <sup>1</sup>	\$ 47,000
Retirees and spouses	<u>132,085,000</u>	<u>136,176,000</u>
Total	<u>\$ 132,085,000</u>	<u>\$ 136,223,000</u>
<b>Current Service Cost</b>		
Current service cost for SRA	\$ - <sup>1</sup>	\$ -

<sup>1</sup> As of July 1, 2016, the maximum salary recognized for the purpose of determining benefits under the Pension Plan does not result in pension benefits which exceed the *Income Tax Act* maximum pension. As such, active members no longer accrue benefits under the SRA.

## Personnel Information

### Source of Data

The valuation was based on personnel data for members of the Pension Plan, supplied by the University as of July 1, 2016.

### Personnel Characteristics—Retirees and Spouses

Following are some pertinent characteristics of the retirees and spouses who are receiving an SRA benefit as of July 1, 2016. Corresponding data for prior valuations is shown for comparison.

	<b>Number</b>	<b>Average Age</b>	<b>Average Monthly Benefit</b>
July 1, 2016	1,092	77.1	\$ 879
July 1, 2015	1,103	76.3	\$ 869
July 1, 2014	1,110	75.4	\$ 861
July 1, 2013	1,064	74.8	\$ 858
July 1, 2012	1,041	74.1	\$ 879
July 1, 2011	964	73.8	\$ 897
July 1, 2010	935	73.2	\$ 890
July 1, 2009	893	72.8	\$ 890
July 1, 2008	823	72.6	\$ 877
July 1, 2007	829	71.9	\$ 868
July 1, 2006	799	71.4	\$ 837
July 1, 2005	767	70.9	\$ 778
July 1, 2004	679	70.8	\$ 731
July 1, 2003	620	71.1	\$ 560

## Plan Provisions

### Plan Establishment

The SRA was established effective July 1, 1996, to provide eligible members of the 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 is not required to be, and shall not be, registered with the federal government or any provincial government.

<b>Effective Date</b>	July 1, 1996
<b>Eligibility</b>	<p>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 <i>Income Tax Act</i>, shall be a member.</p> <p>As of July 1, 2016, the maximum salary recognized for the purpose of determining benefits under the Pension Plan does not result in pension benefits which exceed the <i>Income Tax Act</i> maximum pension. As such, active members no longer accrue benefits under the SRA.</p>
<b>Retirement Benefits Eligibility</b>	Retirement under the Pension Plan on normal retirement date, early retirement date, or postponed retirement date.
<b>Benefit</b>	<p>Annual benefit from the SRA equal to (a) minus (b) minus (c) below:</p> <ul style="list-style-type: none"> <li>(a) Amount of pension payable from the Pension Plan without application of the maximum limitations prescribed under the <i>Income Tax Act</i> on the maximum benefit payable from a registered pension plan.</li> <li>(b) Amount of pension actually payable from the Pension Plan (after application of the maximum benefit limitations).</li> <li>(c) Amount of pension that may be provided by an amount equal to the member's cumulative notional amount.</li> </ul>
<b>Form of Payment of Retirement Benefits</b>	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.
<b>Cost-of-Living Adjustments</b>	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.
<b>Termination Benefits</b>	Each member who terminates prior to early retirement date for any reason other than death, and who does not elect a cash refund of member 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.

### 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 member contributions under the Pension Plan.

## Going Concern Assumptions and Methods

The actuarial assumptions and methods used for this actuarial valuation are the same as those used for the actuarial valuation as of July 1, 2016 for the Pension Plan. The rationale for the assumptions below is described in the July 1, 2016 actuarial valuation report for the Pension Plan.

	July 1, 2016	July 1, 2015
<b>Economic Assumptions</b>		
Increase in Consumer Price Index ("CPI")	2.00% per year	Same
Cost-of-living adjustment	1.50% per year (75% of increase in CPI)	Same
Discount rate	5.75% per year (2.00% increase in CPI + 3.75% real return, net of all fees)	Same
Investment and non-investment expenses	Taken into account in the discount rate assumption	Same
<b>Demographic Assumptions</b>		
Mortality table	2014 Canadian Public Sector Pensioners' Mortality Table, combined with mortality improvement scale CPM-B	Same
Retires marital status	Actual marital status and ages are used	Same
<b>Methods</b>		
Actuarial cost method	Unit credit cost method	Same
Asset valuation method	Not applicable	Same

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