ATTACHMENT “A” TO REPORT NUMBER 1 OF THE
PENSION COMMITTEE – March 9, 2011

University of Toronto

Pension Matters

Presentation to Pension Committee
March 9, 2011

UNIVERSITY OF TORONTO

1. How are the Roles and Responsibilities Allocated?

Summary of Roles and Responsibilities

- The Governing Council of the University of Toronto:
  - plan sponsor.
  - plan administrator.
- Business Board:
  - approves benefit provisions and member contributions.
  - approves University funding.
- Pension Committee:
  - approves actuarial reports and assumptions.
  - approves audited financial statements.
  - approves investment policy and asset allocation (SIP&P).
  - approves appointment of plan actuary.
- Collective Bargaining:
  - benefit provisions.
  - member contributions.

2. What is the Pension Promise under the U of T Pension Plan?

Plan Structure

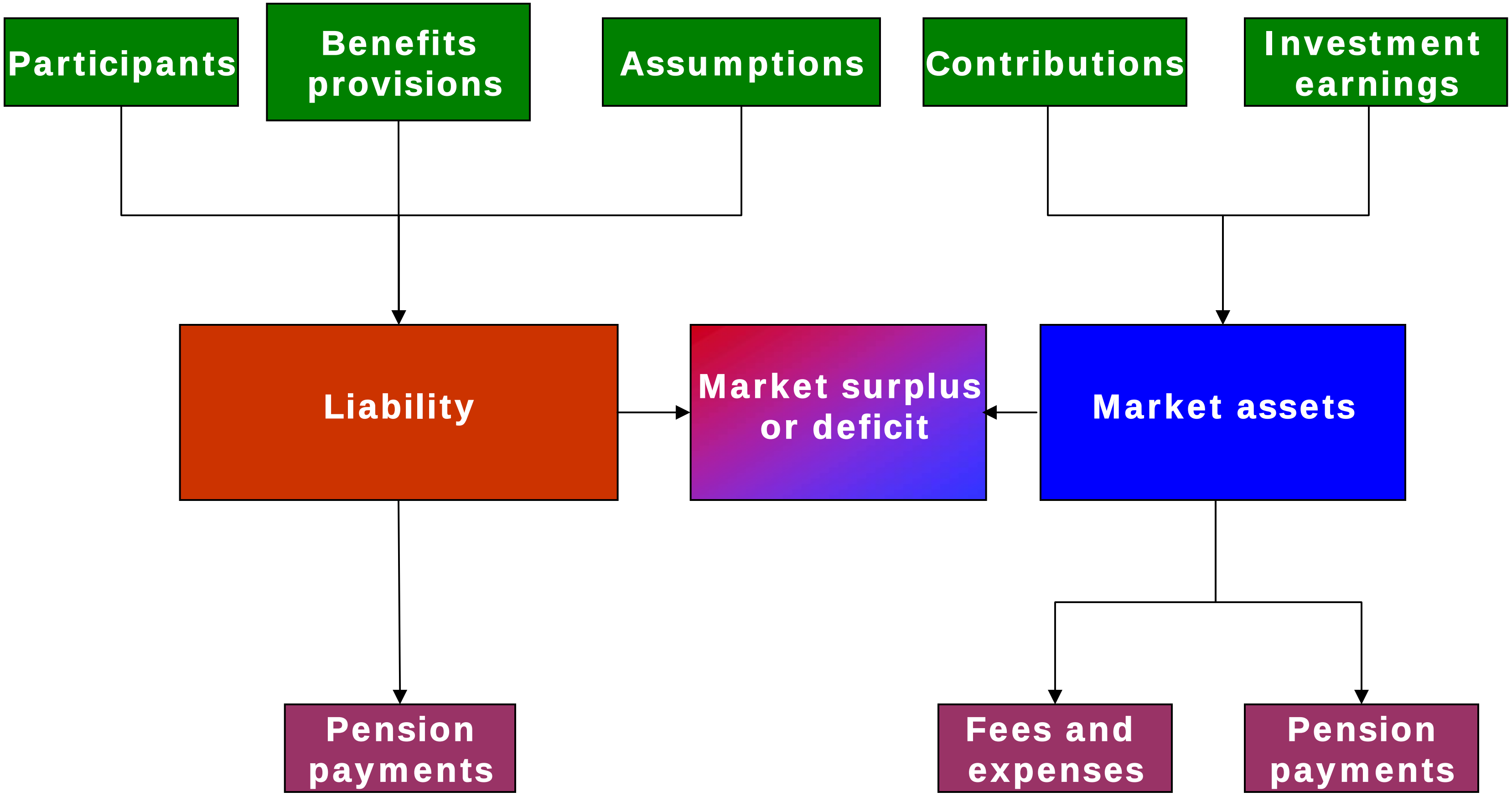
– Defined benefit (DB) pension plan covering faculty and staff of he University of Toronto.

– Funded by contributions from members and university.

– There are two registered plans –RPP and RPP (OISE) and one unregistered plan (Supplemental Retirement Arrangement).

3. What are the Pension Plan Liabilities and Assets?

How a Defined Benefit Plan Works



The Liabilities

Components are:

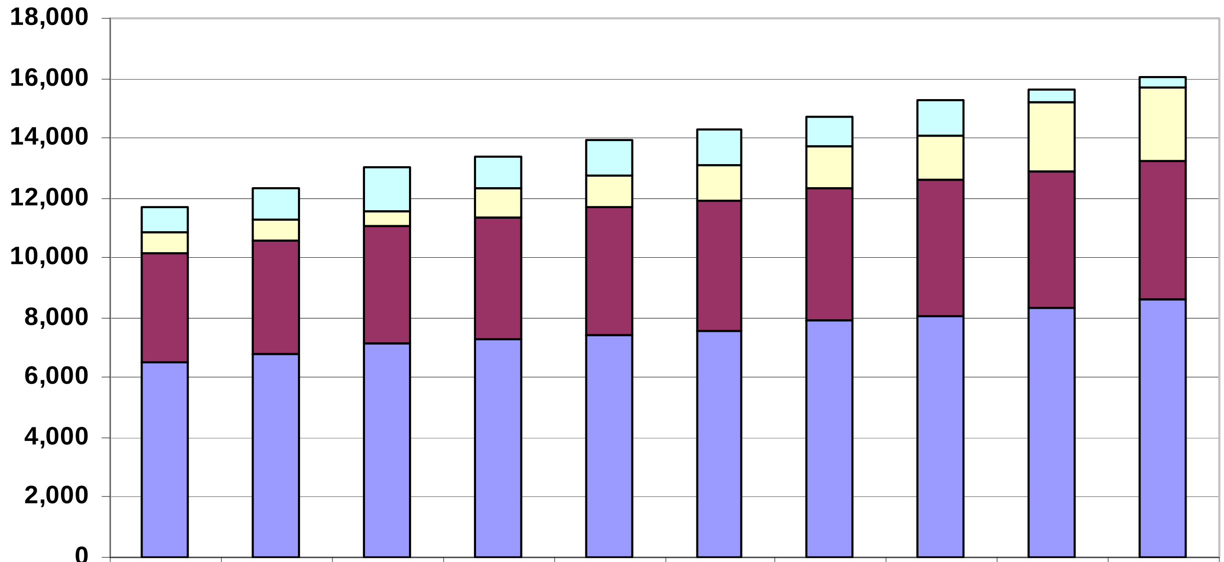
- Number of members.
- Plan benefits.
- Assumptions used to calculate liabilities.

Minus

- Pension payments.

Member Participation (RPP)

RPP
Member Participation
at July 1



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Suspended, exempt, pending	868	1,033	1,447	1,076	1,164	1,178	999	1,168	374	382
Terminated, vested	677	724	489	961	1,072	1,154	1,413	1,493	2,326	2,402
Retired members	3,642	3,813	3,942	4,078	4,246	4,323	4,421	4,514	4,569	4,670
Active members	6,504	6,759	7,141	7,288	7,452	7,599	7,894	8,078	8,326	8,587

Members belong to 10 unions, UTFA, and PM&C.

Key Benefit Provisions

- Benefit accrual:
  - 1.5% or 1.6% of salary to CPP maximum salary.
  - 2.0% of salary above CPP maximum salary up to $150,000.
- Retirement dates:
  - No requirement to retire at age 65.
  - Normal is June 30th following 65th birthday.
  - Early retirement possible within 10 years of normal retirement, 5% annual reduction. No reduction after age 60 under certain conditions (varies by employee group).
- Cost-of-living adjustment which is the greater of:
  - a) 75% of CPI increase to maximum CPI increase of 8% plus 60% of CPI in excess of 8% and b) increase in CPI minus 4%.
- 60% survivor pension for members with spouses.

Benefit provisions are negotiated with employee groups and approved by Business Board.

Assumptions used to Calculate Liabilities

Demographic assumptions:

- Retirement age.
- Mortality rates.
- Withdrawal rates.
- Disability rates.
- Percentage with spouse.

Assumptions are approved by the Pension Committee.

Assumptions used to Calculate Liabilities

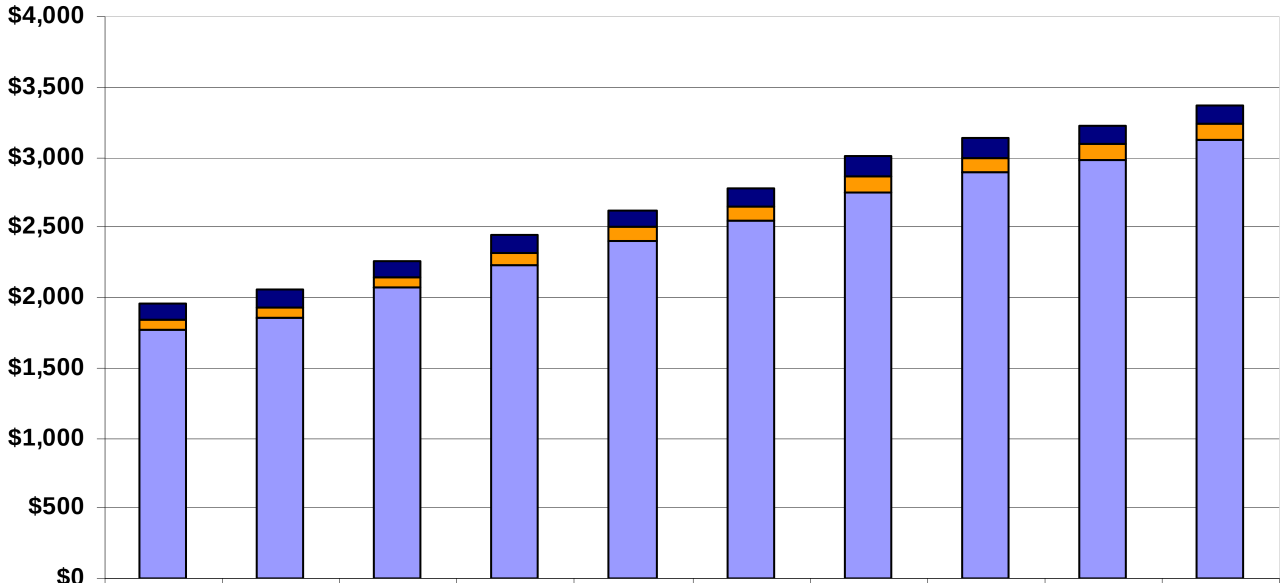
Economic assumptions:

- Increase in consumer price index.
- Cost of living adjustments.
- Increase in CPP maximum salary.
- Increase in Income Tax Act maximum benefit limit.
- Increase in salaries.
- Investment return.
- Interest rate on participant contributions.
- Loading for administrative expenses.

Assumptions are approved by the Pension Committee.

Going Concern Liabilities

Going Concern Pension Liabilities [1]
at July 1
(millions of dollars)



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
SRA liabilities	116.8	131.8	108.6	122.7	112.9	122.1	145.4	139.8	136.1	138.3
RPP(OISE) liabilities	73.8	77.9	83.4	97.6	103.7	108.6	115.3	104.2	106.6	109.0
RPP liabilities	1,770.5	1,852.9	2,066.7	2,225.0	2,407.0	2,540.6	2,745.8	2,889.6	2,983.8	3,126.0

[1] Including partial wind-up members in RPP(OISE) liabilities in years up to 2007

The Assets

Components:

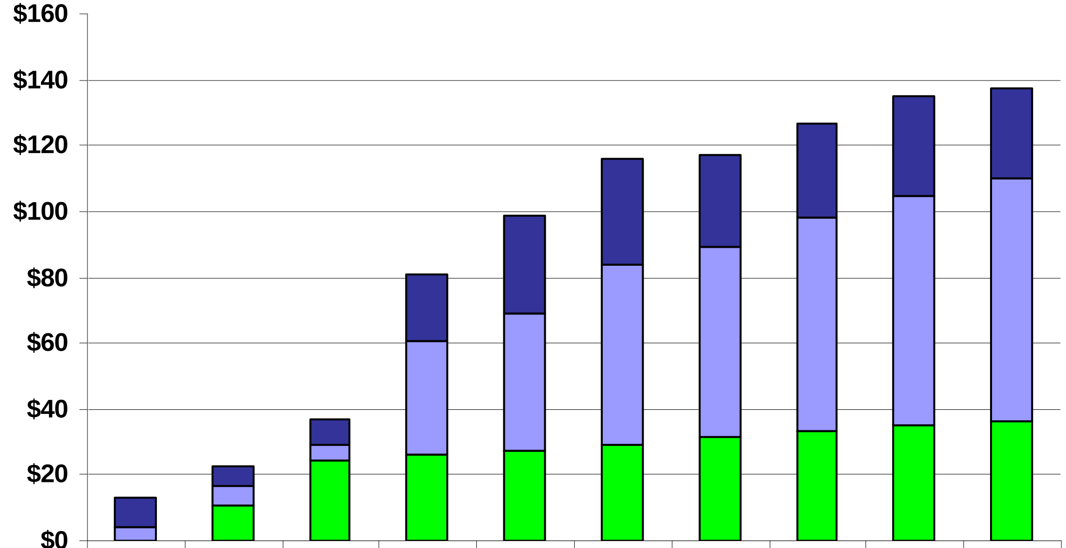
- Contributions by members and University.
- Investment earnings.

Minus

- Pension payments.
- Fees and expenses.

Contributions

Contributions by Source (Employee and Employer) Across All Plans [1]
for the year ended June 30
(millions of dollars)



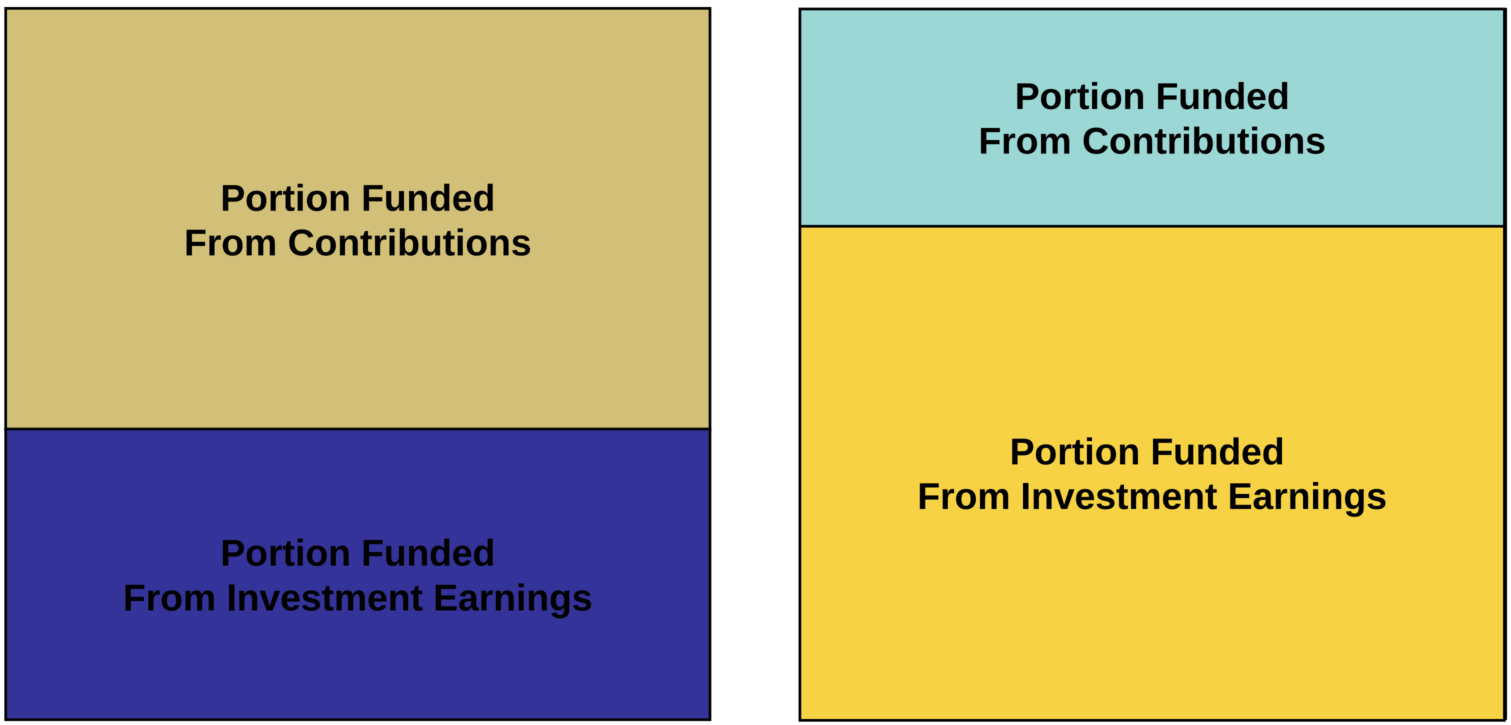
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
ER special payments	8.8	6.2	8.1	19.9	29.8	32.4	28.1	28.1	30.2	27.6
ER current service contribution	4.2	5.5	4.4	34.7	41.3	54.6	57.6	65.1	69.6	73.3
EE current service contribution	0.0	11.0	24.5	26.2	27.5	29.2	31.4	33.2	35.1	36.5

[1] Voluntary Early Academic Retirement Program (VEARP) contributions included in ER special payments

Member contributions are negotiated with employee groups and approved by Business Board. University funding is approved by Business Board.

Balancing Contributions and Investment Earnings

Take Less Investment Risk Target Lower Expected Returns Target Higher Expected Contributions	Take More Investment Risk Target Higher Expected Returns Target Lower Expected Contributions
Cost of Pension Plan	Cost of Pension Plan



Investment Earnings

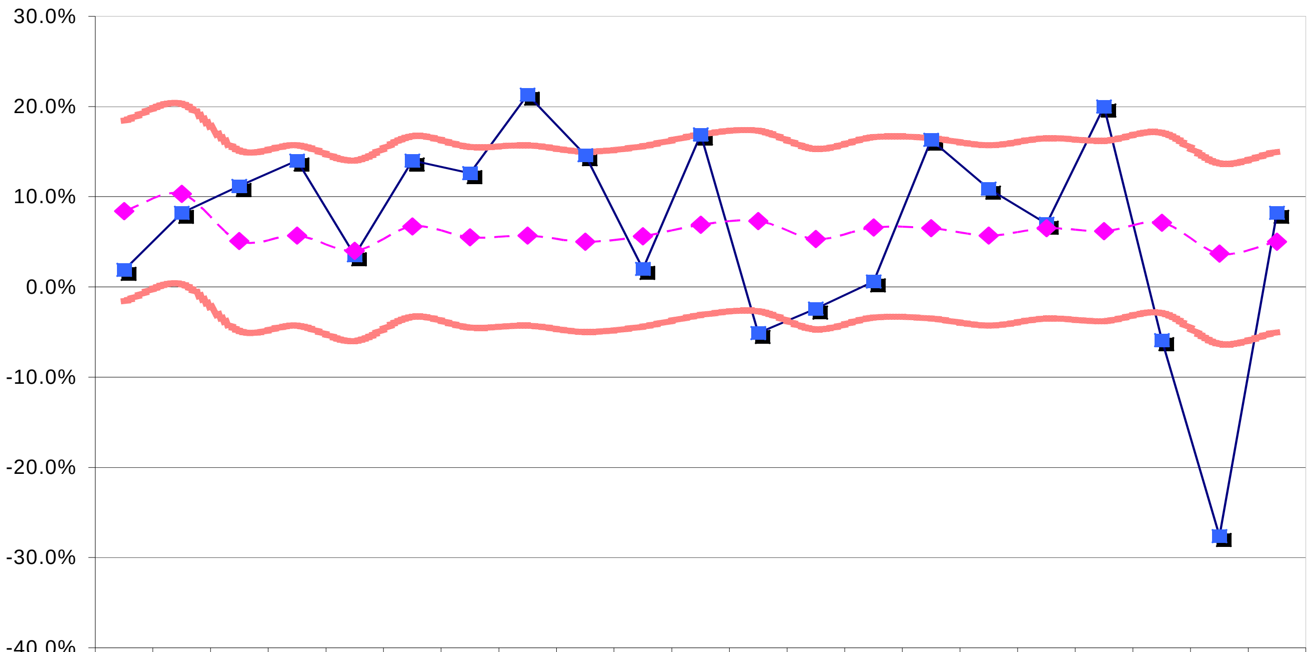
Pension Master Trust
Ten-Year Rolling Average Return

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Ten-Year rolling average return	10.2%	11.7%	10.2%	8.8%	7.5%	8.7%	8.4%	7.9%	7.7%	5.6%	2.1%	1.3%
Ten-Year rolling target return	6.2%	6.1%	5.8%	5.8%	5.9%	6.1%	6.0%	6.1%	6.2%	6.4%	6.2%	6.0%
Ten-Year rolling Standard deviation +10%	16.2%	16.1%	15.8%	15.8%	15.9%	16.1%	16.0%	16.1%	16.2%	16.4%	16.2%	16.0%
Ten-Year rolling Standard deviation -10%	-3.8%	-4.0%	-4.3%	-4.2%	-4.1%	-3.9%	-4.0%	-3.9%	-3.8%	-3.6%	-3.8%	-4.0%

Investment targets and asset mix are approved by the Pension Committee.

Investment Earnings

Pension Master Trust
1-Year Annual Rates of Return



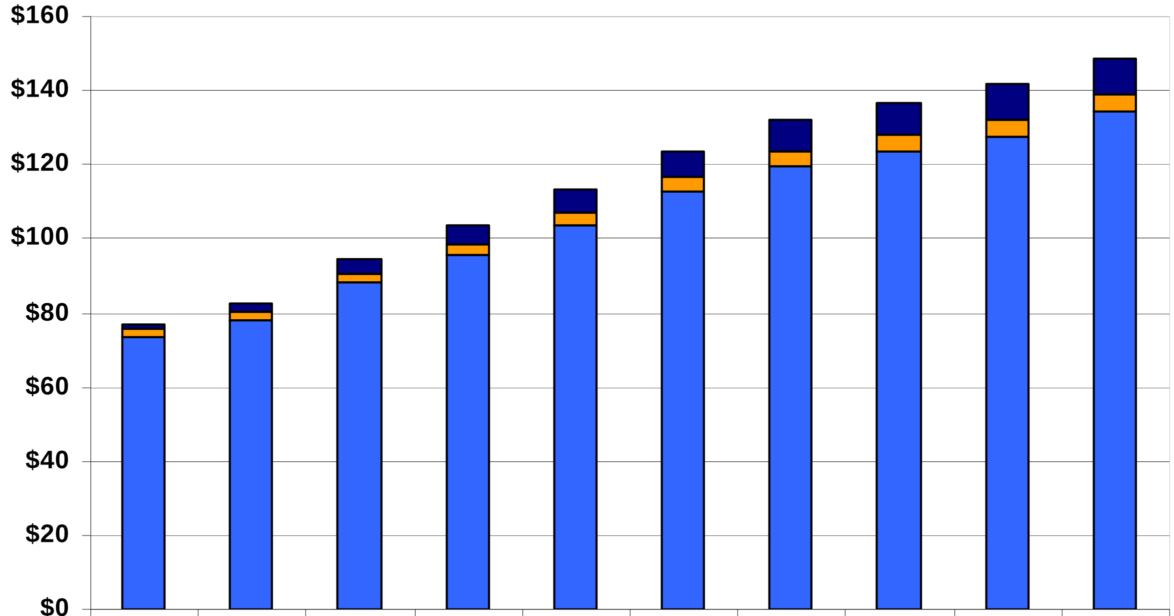
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Actual investment return *	1.9%	8.2%	11.2%	14.0%	3.5%	14.0%	12.6%	21.3%	14.6%	2.0%	16.9%	-5.1%	-2.4%	0.6%	16.3%	10.9%	7.0%	20.0%	-5.9%	-27.6	8.2%
Target return **	8.4%	10.3%	5.1%	5.7%	4.0%	6.7%	5.5%	5.7%	5.0%	5.6%	6.9%	7.3%	5.3%	6.6%	6.5%	5.7%	6.5%	6.2%	7.1%	3.7%	5.0%
Standard deviation +10%	18.4%	20.3%	15.1%	15.7%	14.0%	16.7%	15.5%	15.7%	15.0%	15.6%	16.9%	17.3%	15.3%	16.6%	16.5%	15.7%	16.5%	16.2%	17.1%	13.7%	15.0%
Standard deviation -10%	-1.6%	0.3%	-4.9%	-4.3%	-6.0%	-3.3%	-4.5%	-4.3%	-5.0%	-4.4%	-3.1%	-2.7%	-4.7%	-3.4%	-3.5%	-4.3%	-3.5%	-3.8%	-2.9%	-6.3%	-5.0%

* Returns are time-weighted, calculated in accordance with industry standards, are net of investment fees and expenses, and exclude returns on private investment interests prior to 2008.

** 4% plus CPI.

Pension Payments

University of Toronto Pension Plans
Retirement Payments for the year ended June 30
(millions of dollars)

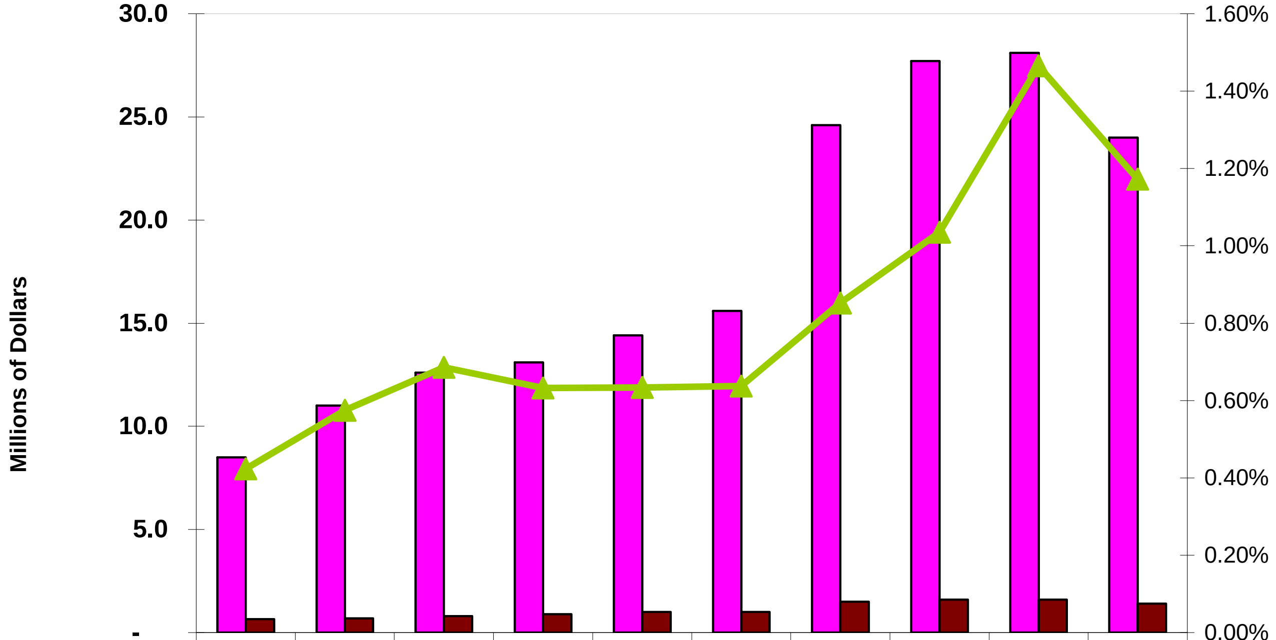


	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
SRA retirement payments	1.3	2.6	3.6	5.1	6.5	7.3	8.6	8.5	9.2	9.8
RPP(OISE) retirement payments	2.0	1.9	2.6	2.9	3.6	3.9	4.1	4.5	4.7	4.9
RPP retirement payments	73.5	78.2	88.1	95.4	103.4	112.6	119.4	123.4	127.6	134.1

Pension payments reflect benefit provisions which are negotiated, and approved by Business Board, together with actual salaries and years of service.

Fees and Expenses

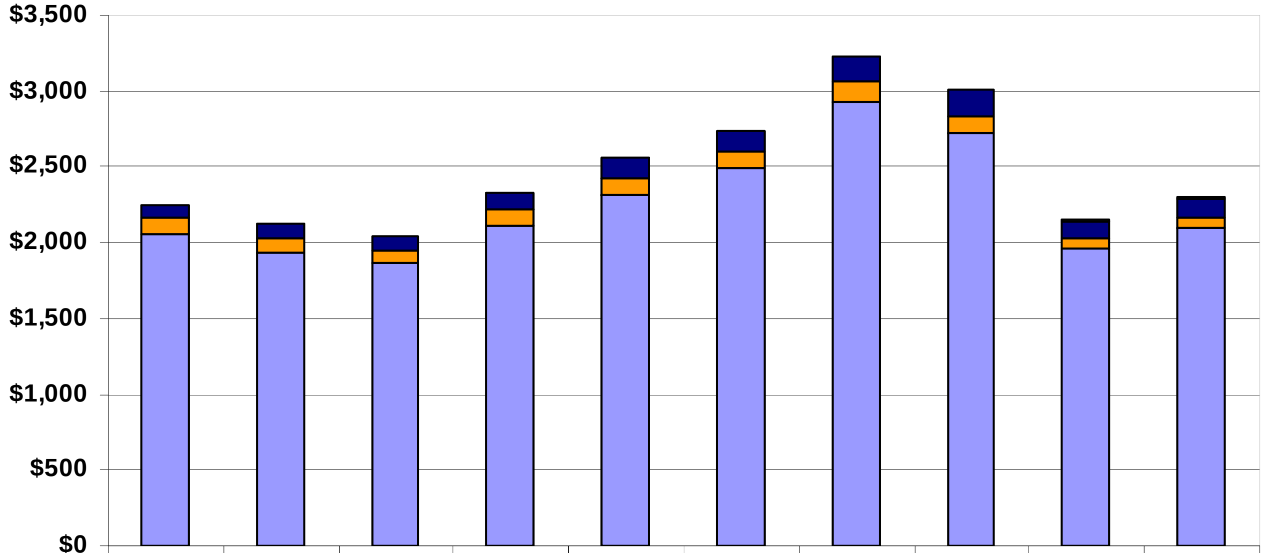
University of Toronto Registered Pension Plans
Fees and Expenses as a Percent of Assets
(excluding SRA)
for the Year Ended June 30



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
RPP fees and expenses	8.5	11.0	12.6	13.1	14.4	15.6	24.6	27.7	28.1	24.0
RPP(OISE) fees and expenses	0.7	0.7	0.8	0.9	1.0	1.0	1.5	1.6	1.6	1.4
As percent of assets	0.42%	0.58%	0.69%	0.63%	0.63%	0.64%	0.85%	1.04%	1.47%	1.17%

Market Value of Assets

Market Value of Pension Assets [1]
at June 30
(millions of dollars)



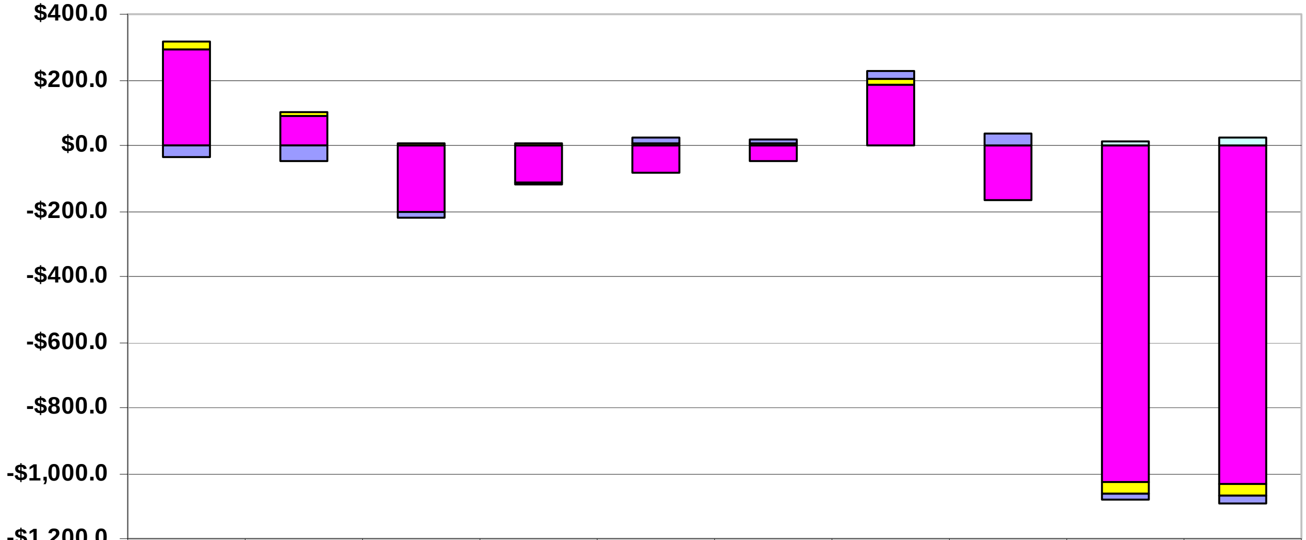
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Pension reserve assets	-	-	-	-	-	-	-	-	12.4	24.9
SRA assets	82.2	85.5	91.2	115.8	130.6	136.2	170.0	174.2	117.0	115.8
RPP(OISE) assets	100.2	94.7	90.5	101.8	109.0	113.8	131.6	105.9	71.5	72.8
RPP assets	2,062.9	1,940.0	1,863.2	2,111.8	2,320.6	2,489.9	2,929.7	2,724.2	1,954.8	2,093.9

[1] Including partial wind-up members in RPP(OISE) assets in years up to 2007

4. What is the current Pension Plan financial status?

Going Concern
Market Surpluses and Deficits

Going Concern Market Surplus (Deficit)
as at July 1
(millions of dollars)



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Pension reserve	-	-	-	-	-	-	-	-	12.4	24.9
SRA	(34.6)	(46.3)	(17.4)	(6.9)	17.7	14.1	24.6	34.4	(19.1)	(22.5)
RPP(OISE)	26.4	16.8	7.1	4.2	5.3	5.2	16.3	1.7	(35.1)	(36.2)
RPP	292.4	87.1	(203.5)	(113.2)	(86.4)	(50.7)	183.9	(165.4)	(1,029.0)	(1,032.1)

Solvency Valuation Assumptions Compared

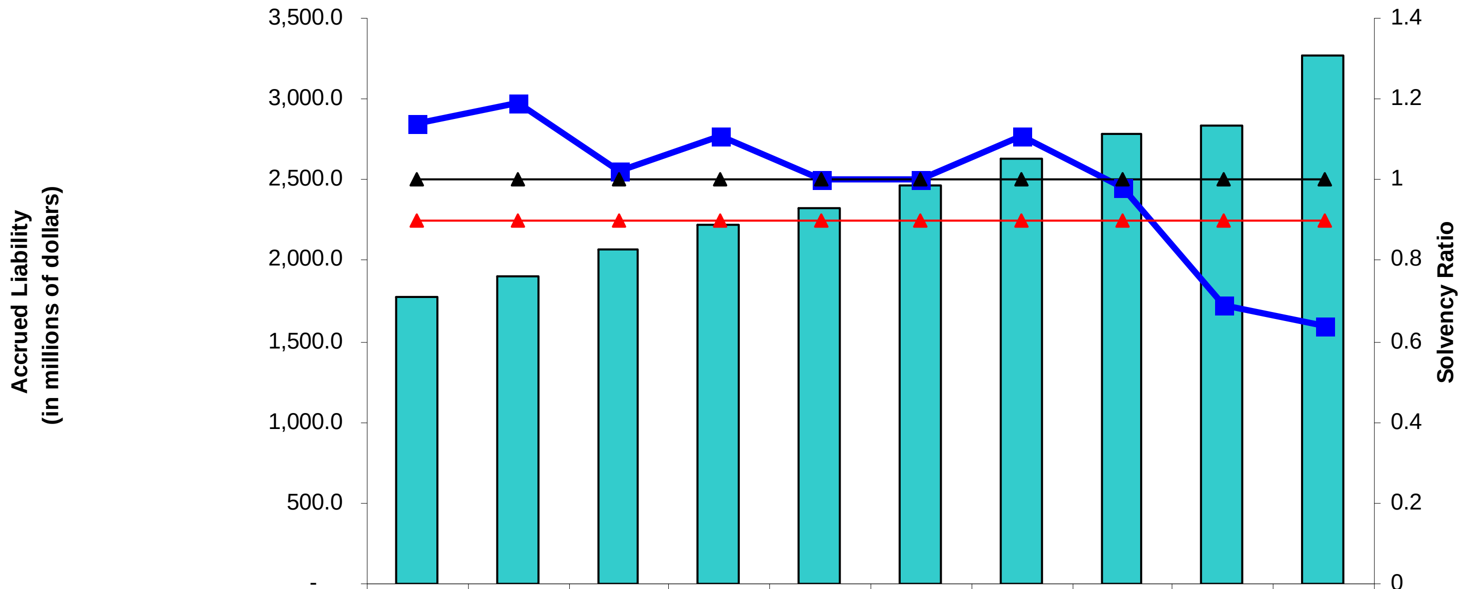
Actuarial Assumptions

	Going Concern as of July 1, 2010	Solvency	Wind-Up
Basis For Valuation	Plan continuing	Plan winding up (with indexation benefits **excluded**)	Plan winding up (with indexation benefits **included**)
Discount Rate Basis	Expected long-term rate of return on pension fund based on asset mix	Annuity purchase rates and market interest rates for commuted values based on **nominal** Government of Canada bonds	Annuity purchase rates[1] and market interest rates for commuted values based on **real** Government of Canada bonds
Discount Rate	6.50% per year	Annuity purchase: 4.29% per year Commuted values: 3.70% per year for 10 years; 5.10% per year thereafter	Annuity purchase: 2.01% per year Commuted values: 2.40% per year for 10 years; 3.20% per year thereafter
Future Salary Increases (including merit and promotion)	4.50% per year	Not applicable	Not applicable
Inflation	2.50% per year	Not applicable (since indexation not valued)	Rates above are net of 75% of inflation
Retirement Ages	Range of retirement ages based on plan experience which reflects plan provisions and elimination of mandatory retirement	Earliest possible retirement age which generates the highest value based on plan provisions and legislated “grow-in” provisions	Earliest possible retirement age which generates the highest value based on plan provisions and legislated “grow-in” provisions
Morality Rates	1994 Uninsured Pensioner Mortality Table, with mortality improvements under Scale AA to 2015	1994 Uninsured Pensioner Mortality Table, with mortality improvements under Scale AA to 2020	1994 Uninsured Pensioner Mortality Table, with mortality improvements under Scale AA to 2020

[1] Limited market available for the purchase of indexed annuities especially for a pension plan of this size

Solvency Ratio

RPP
Solvency Ratio and Accrued Liability
as at July 1



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Accrued Liabilities	1,770.5	1,904.9	2,066.7	2,225.0	2,330.2	2,467.6	2,628.4	2,788.7	2,833.8	3,264.2
Solvency Ratio	1.14	1.19	1.02	1.11	1.00	1.00	1.11	0.98	0.69	0.64
Solvency Ratio of 1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Solvency Ratio of 0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9

The deficit calculated on a solvency basis was $1.17 billion at July 1, 2010.

Reasons for the Problem – A Confluence of Factors

– The “perfect storm” that keeps returning

Market meltdown that created unprecedented negative rates of return

Lower interest rates driving up liabilities

Continually increasing longevity driving up liabilities

– Market cycles that have created long periods of favourable returns (the 1990’s) leading to funding excesses and long periods of unfavourable returns (the 2000’s) leading to funding shortfalls.

– Funding excesses in “good times” spent on, university contribution holidays, member contribution holidays and benefit improvements for active and retired members.

– Most DB plans, including those in the university sector and the broader public sector face significant funding problems.

5. What is the funding and financing strategy to deal with the problem?

Legal requirements regarding Deficits

- Normal Provision Regulations
  - 5 years to clear Solvency Deficit (beginning July 1, 2011 for U of T).
  - approx $200m per year for five years.

- Special Provisions for Ontario Universities
  - 10 years to clear Solvency Deficit (beginning July 1, 2014 for U of T) provided certain metrics are met.

Our assumption in preparing a funding and financing strategy is that the University of Toronto will be eligible for the special provisions.

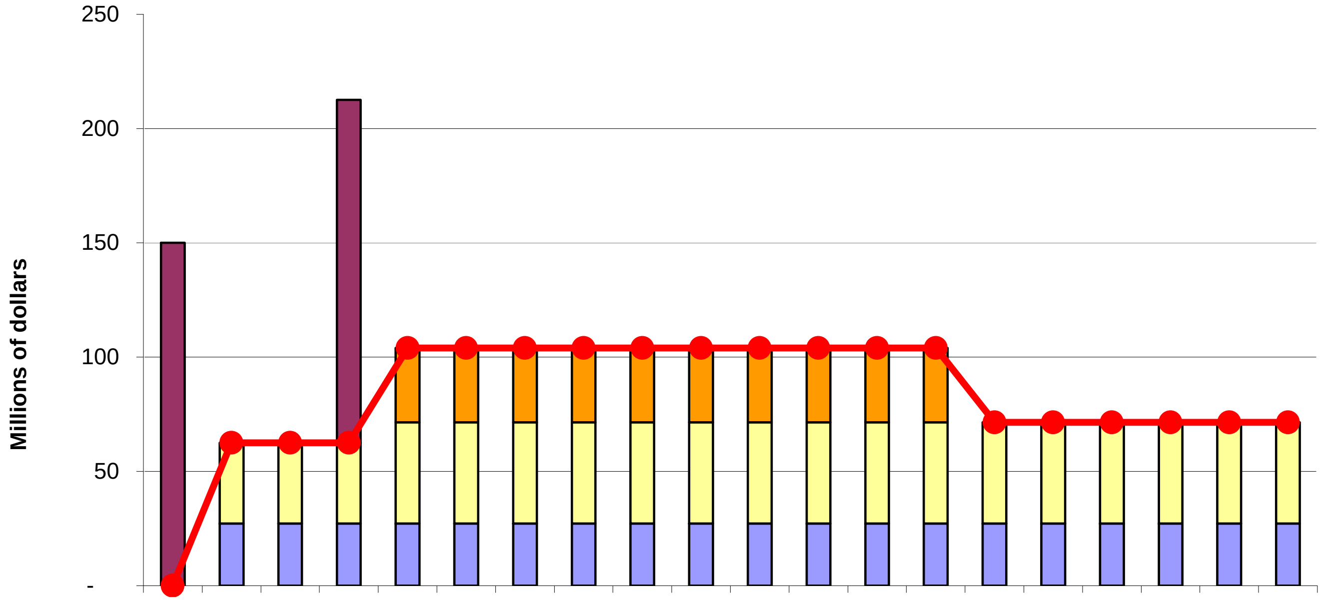
Funding and Financing Strategy for dealing with the Deficit

- Generate large lump sum payments to put into the plans, to generate positive growth in assets and help protect the University’s core mission.
- Potential short-term and long-term funding and financing sources:
  - Pension reserve.
  - Borrowing.
  - Utilizing some or all of the assets supporting SRA.
  - Increased annual special payments budget.
  - Selling/leasing capital assets not needed for current operations.
  - Issuing letters of credit.

Pension funding is approved by Business Board.

Sample Projection
Funding and Financing

Funding and Financing of Required Special Payments
Stage 1 and Stage 2 Solvency Relief
Year beginning July 1

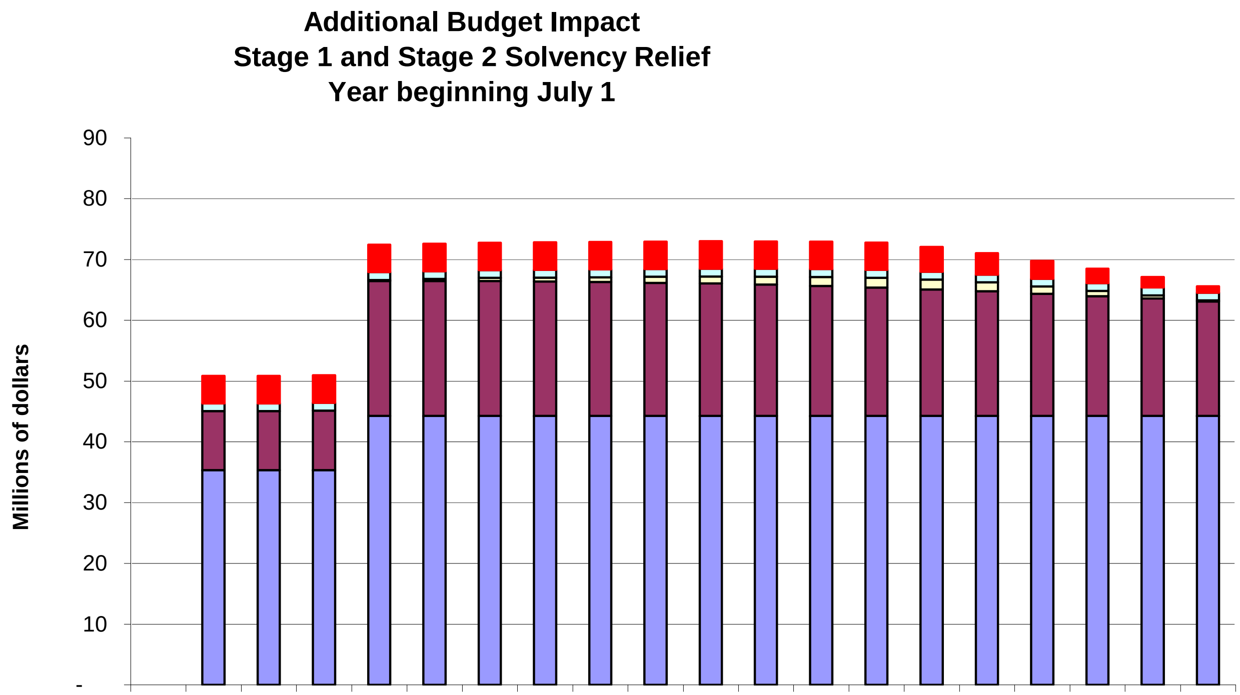


	Jul-10	Jul-11	Jul-12	Jul-13	Jul-14	Jul-15	Jul-16	Jul-17	Jul-18	Jul-19	Jul-20	Jul-21	Jul-22	Jul-23	Jul-24	Jul-25	Jul-26	Jul-27	Jul-28	Jul-29
Total funding and financing	150	63	63	213	104	104	104	104	104	104	104	104	104	104	71	71	71	71	71	71
Letter of credit					33	33	33	33	33	33	33	33	33	33						
Lumpsum payments	150			150																
Additional special payments budget		35	35	35	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
Current special payments budget		27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
Total special payment required	-	63	63	63	104	104	104	104	104	104	104	104	104	104	71	71	71	71	71	71

Data table amounts may not add precisely due to rounding.

Strategy is to generate large lump sum payments to improve pension health as soon as possible to generate positive growth in assets and help protect core mission.

Sample Projection
Additional Budget Impact



	Jul-10	Jul-11	Jul-12	Jul-13	Jul-14	Jul-15	Jul-16	Jul-17	Jul-18	Jul-19	Jul-20	Jul-21	Jul-22	Jul-23	Jul-24	Jul-25	Jul-26	Jul-27	Jul-28	Jul-29
Additional budget impact		51	51	51	72	73	73	73	73	73	73	73	73	73	72	71	70	68	67	66
PBGF fee		5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	3	2	2	1
OISE current service cost		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Letter of credit fee at 0.5%					0	0	0	1	1	1	1	1	1	2	2	1	1	1	1	0
Budget cost of lumpsum payments		10	10	10	22	22	22	22	22	22	22	22	21	21	21	21	20	20	19	19
Additional special payments budget		35	35	35	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44

Data table amounts may not add precisely due to rounding.

$30 million per annum base funding allocated in 2011-12 operating budget.

6. How Does the U of T Pension Plan Compare to Other Public Sector Pension Plans?

Comparison to Other Public Sector Pension Plans

	U of T	University of Waterloo	McMaster University	Ontario Teachers' Pension Plan	HOOPP
Averaging Period For Earnings (yrs)	3	3	**4**	**5**	**5**
Benefit Rate					
⊳ Below CPP Wage Base	1.60%	**1.40%**	**1.40%**	**1.55%**	**1.55%**
⊳ Above CPP Wage Base	**2.00%**	**2.00%**	**2.00%**	**2.00%**	**2.00%**
Bridge Benefit to Age 65	**no**	**no**	**no**	yes	yes
Subsidized Payment Form					
⊳ With Spouse	60% J&S	**LG10**	**50% J&S**	**50% J&S**	60% J&S
⊳ Without Spouse	**LG5**	**LG10**	**LG7**	**LG10**	LG15
Earliest Age For Unreduced Early Retirement Pension	**age 60 + 80 points**	**age 62**	**age 60 + 80 points**	85 points	**age 60 or age 55 + 30 years**
Automatic Indexation of Pension Benefits	**75% of CPI (first payment indexed)**	100% of CPI	**excess investment earnings only (threshold at 4.5%)**	**100% of CPI for pre-2010 benefits; 50% of CPI for post-2009 benefits plus top-up to 100% based on plan's funded status**	**75% of CPI for pre-2006 benefits only; no guaranteed indexing for post-2005 benefits**
Member Contribution Rates (Ultimate Rate)					
⊳ Below CPP Wage Base	5.00%	**5.80%**	**6.50%**	**10.40%**	**6.90%**
⊳ Above CPP Wage Base	6.00%	**8.30%/9.65%**	**8.75%**	**12.00%**	**9.20%**