

### The University of Western Ontario

### Joint Pension Board Retreat Retirement Plan Analysis

Martin Bélanger, Director, Investments August 30, 2012



- Plan Overview
- Members' Decisions
- Members' Experience
- Members' Servicing
- Governance
- Retirement Trends



### **Plan Overview**

- Assets
- Membership trend
- Age



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# **DC Plan Ranking**

10 Largest Defined	Contribution	<b>Plans in</b>	Canada <sup>1</sup>
--------------------	--------------	-----------------	---------------------

Plan	Assets as at December 31, 2010 (in millions)
The Public Employees' Pension Plan	\$4,788
Co-Operative Superannuation Pension Plan	\$2,534
University of British Columbia Faculty Pension Plan	\$1,381
University of Western Ontario	\$1,103
Capital Pension & Benefits Administration	\$965
Co-operators Group Ltd.	\$744
Sobeys Inc.	\$668
ArcelorMittal Dofasco	\$612
Hudson's Bay Company	\$582
Manulife Financial	\$570

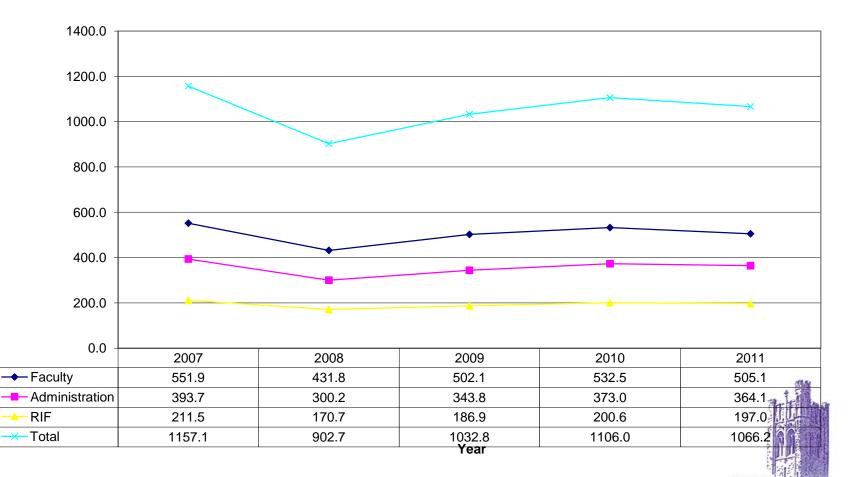
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<sup>1</sup> Source: Benefits Canada

#### Plan Assets (As at December 31)

**Total Assets Under Administration** 



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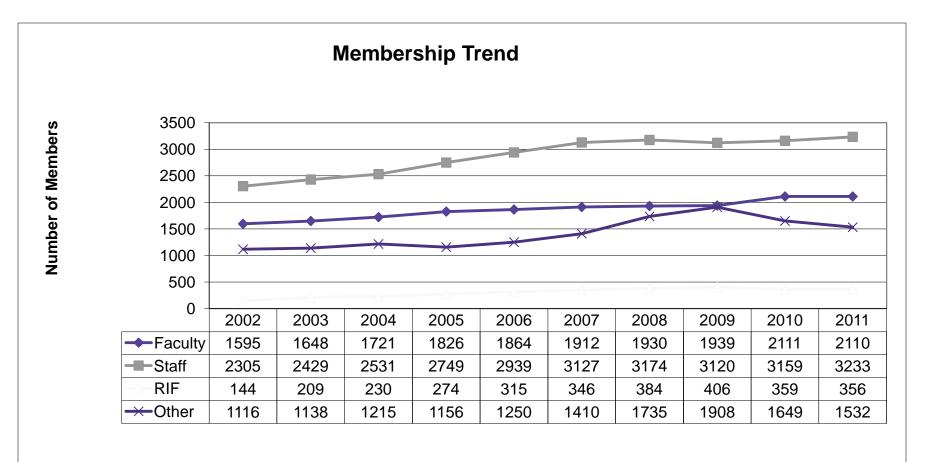
### Plan Assets (As at December 31)

	2011	2010	2009	2008	2007
Faculty	47.4%	48.2%	48.6%	47.8%	47.7%
Administration	34.1%	33.7%	33.3%	33.3%	34.0%
RIF	18.5%	18.1%	18.1%	18.9%	18.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%



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# **Membership Trend**



**Calendar Year** 

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# Members' Age

Category	2011	2010	2009	2008	2007
Faculty Plan	51.3	51.1	51.3	51.0	50.7
Staff Plan	47.8	47.3	47.4	46.6	46.4
RIF	70.9	70.2	69.4	68.6	68.1



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## Members' Decisions

- Participation rates
  Part-time and RIF
- Investment decisions
  - Equity exposure
  - No election, default option
  - Voluntary contributions
  - Fund selection
  - Monthly trading



# **Part-Time Participation Rates**

Year	Participation Rate
2007	18%
2008	34%
2009	30%
2010	26%
2011	23%
2012 (Preliminary)	14%

- Potential reasons for not joining the plan:
  - higher take home pay
  - foreign grad students
  - lack of understanding about the plans
  - enrollment package late or didn't reach people
  - too much information to sort through
  - investments are losing money
  - inertia?

#### 2012 Joint Pension Board Retreat

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## **Retirees Decisions**

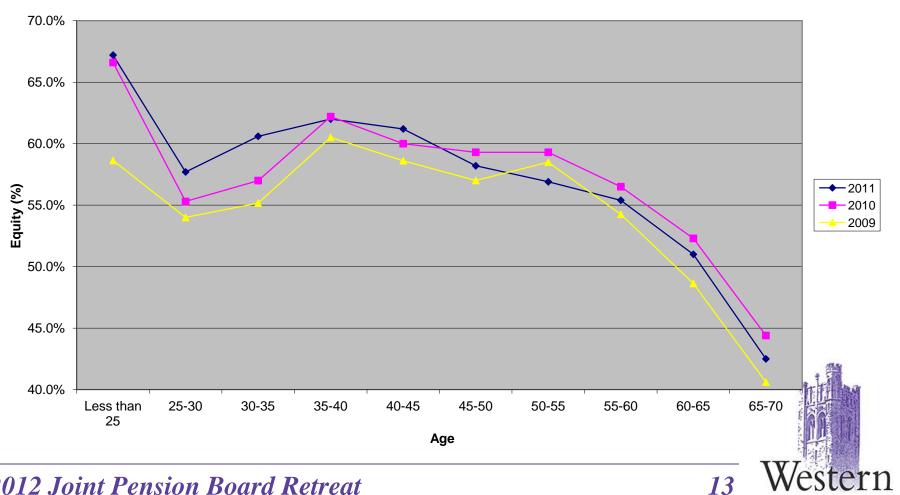
	2011	2010	2009	2008
Establish UWO RIF at retirement	8%	10%	8%	13%
Buy annuity	6%	7%	7%	7%
Transfer money out of the plan	31%	30%	29%	20%
Do nothing	23%	24%	39%	28%
Postpone retirement	32%	30%	17%	3294
2012 Joint Pension Board	Retreat			Wester

# **Reasons for Taking Money Out**

- Looking for daily valuation (ability to make changes more frequently)
- Looking for investment advice from a financial advisor
- External funds have done better
- Consolidation of assets with spouse
- Better selection (global fixed income, international without U.S.)
- Fees too high for small accounts

# **RPP Equity Exposure**

**RPP Equity Exposure** 



# **RPP Equity Exposure**

	-	•	Membersh	nip, Service	Distributi	on and Ave	erage Equit	ty of Active	Members	5		
			1	1		Age (	Group			1	1	
Member Service	Less than 25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	70-75	Grand Total
0-5	38	156	272	286				104	87	55	5	1573
	67.2%	58.2%	62.2%	63.4%	60.6%	55.9%	55.0%	57.3%	50.2%	34.6%	62.7%	58.5%
5-10	1	68	248			329	252	173	110			1857
	70.0%	56.0%	59.1%	59.9%	59.8%	58.3%	54.9%	55.9%	55.1%	52.7%	22.8%	57.8%
10-15		5	34	131	215	244	240	182	85	29	2	1167
		66.6%	59.4%	61.6%	61.1%	58.4%	58.6%	53.8%	51.6%	49.5%	0.0%	57.8%
15-20			1	27		116	139				1	521
			70.0%	71.3%		61.4%	57.1%	58.0%	49.6%	42.5%	100.0%	58.4%
20-25				1	34	89	168		102		2	623
				72.8%	60.3%	56.7%	55.2%	49.4%	40.4%	90.4%	55.6%	72.8%
25-30					2	58			120	34		468
					98.0%	53.5%	60.7%	57.8%	50.4%	36.3%		54.6%
30-35						7	74					356
						65.7%	57.8%	52.1%	50.5%	45.1%	47.5%	51.7%
35-40							6				9	192
							60.0%	45.3%	50.4%	38.0%	31.2%	44.5%
40-45								8				93
								54.4%	49.4%	46.0%	30.4%	47.2%
45-50									1	3		4
									66.8%	58.5%		60.5%
Total												
Count	39	229	555	744	864	1029	1130	1043	788	404	29	6854
Total												
Average												
of												
Percenta	67 <b>0</b> 0/	<b>FT TO</b> (	60.60	62.00/	64.00/	50.00/	50.00/	== 40/	54.00/	40 50/	40.50	= 6 00
ge Equity	67.2%	57.7%	60.6%	62.0%	61.2%	58.2%	56.9%	55.4%	51.0%	42.5%	42.5%	56.8%
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## **RPP Market Comparison**

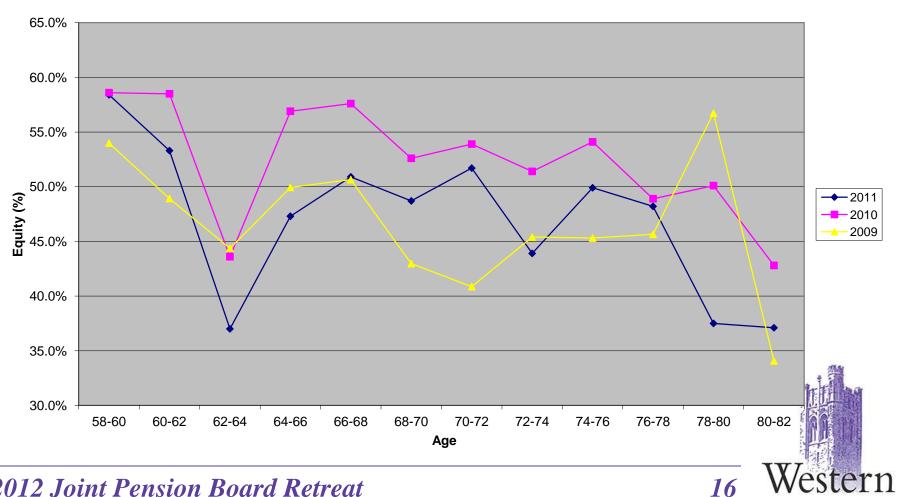
Years to Retirement	BlackRock LifePath Portfolios	Fidelity ClearPath	McLean Budden LifePlans	S cotia Vision Cons	S cotia Vision Aggr	London Life Profile	Alliance Bernstein Retirement	Franklin Templeton LifeSmart	Average <sup>1</sup>	UWO Pension Plans
40	N/A	84%	89%	N/A	N/A	94%	95%	N/A	92%	67%
35	100%	84%	82%	N/A	N/A	90%	95%	N/A	90%	55%
30	97%	82%	76%	N/A	N/A	86%	95%	80%	87%	57%
25	92%	80%	70%	N/A	N/A	81%	94%	76%	83%	62%
20	86%	72%	64%	72%	84%	75%	90%	75%	78%	60%
15	79%	64%	58%	63%	75%	67%	85%	70%	70%	59%
10	71%	53%	52%	54%	67%	58%	78%	64%	62%	59%
5	61%	45%	47%	48%	59%	50%	71%	45%	51%	57%

<sup>1</sup>The average is based on a sample of 24 lifecycle fund families, including Canadian and U.S. providers.



# **RIF Equity Exposure**

**RIF Equity Exposure** 



# **RIF Equity Exposure**

Average				Memb	ership, T	ime in Pl	an and A	verage E	quity of l	RIF Annu	itants				
Average %															
Equity							Age G	Group							
# of	Less														
Years in	than														
Plan	60	60-62	62-64	64-66	66-68	68-70	70-72	72-74	74-76	76-78	78-80	80-82	82-84	84-86	Total
Less				1		2	3								
than 1				28.9%		62.2%	81.5%								66.3
			2	1	12	5	1	2	2						2
1-2			48.3%	25.9%	40.7%	29.6%	46.8%	49.9%	65.5%						41.5
	2		3	5	7	6	1	7							3
2-3	54.3%		39	0	1	0	0	0							41.6
		1			4	8	3	1							1
3-4		17.4%			51.9%	45.8%	33.6%	0.0%							40.7
	2		1	4	5	12	5	3	1						3
4-5	48.0%		0.0%	37.0%	52.3%	49.2%	50.6%	41.3%	62.6%						46.5
	1		1	5	4	5	9	2	9						3
5-6	49.4%		86.3%	51.5%	60.1%	37.5%	49.9%	41.1%	42.6%						48.2
6-7		4 62.2%	2 40.3%	1 58.3%	2 56.1%	4 41.0%	11 48.9%	6 40.4%	3 63.8%	1 27.0%					3 48.9
0-7		62.2%	40.3%	58.3% 2	50.1%	41.0%	48.9%	40.4%	63.8% 4	27.0%					48.9
7-8				2 58.0%	_	62.6%	5 64.1%	44.1%	45.9%	2 75.3%					52.1
7-0				38.0%	32.478	3	3	44.1%	45.9%	75.5%	1				JZ.1 4
8-9				48.8%	56.8%	69.3%	41.7%	48.8%	53.5%	43.4%	54.8%				50.9
	1		2	1	3	1	1	4	9	1	2		1	1	2
9-10	96.7%		14.0%	57.7%	59.1%	52.0%	96.4%	52.0%	51.8%	42.6%	47.8%		38.6%	62.5%	52.7
				2	4	4	3	3	7	8	4	1		/ -	3
10-11				80.8%	61.9%	53.1%	47.5%	56.5%	39.0%	62.8%	38.8%	39.1%			52.9
				2	4	6		5	4	12	2	1			3
11-12				45.0%	37.9%	60.0%		51.0%	50.6%	39.3%	16.0%	35.2%			44.4
Grand	6	5	11	25	49	58	43	61	54	32	9	2	1	1	35
Total	58.4%	53.3%	37.0%	47.3%	50.9%	48.7%	51.7%	43.9%	49.9%	48.2%	37.5%	37.1%	38.6%	62.5%	48.1

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### **RIF Market Comparison**

	BlackRock LifePath Portfolios	Fidelity ClearPath	McLean Budden LifePlans	LifePoints Target Date	London Life Profile	Alliance Bernstein	Franklin Templeton	Average	UWO Plan
				Funds	Funds				
Fixed Income	60.0%	70.0%	65.0%	68.5%	65.4%	65.0%	69.6%	66.2%	51.8%
Cash	0.0%	17.5%	10.0%	0.0%	5.4%	0.0%	0.0%	4.7%	7.1%
Short-Term Bonds	0.0%	17.5%	0.0%	8.0%	4.4%	27.5%	0.0%	8.2%	9.1%
Bonds	60.0%	35.0%	55.0%	60.5%	55.6%	37.5%	69.6%	53.3%	35.6%
Equity	40.0%	30.0%	35.0%	31.5%	34.6%	35.0%	30.4%	33.8%	48.2%
Domestic	8.4%	15.0%	17.5%	12.8%	14.4%	11.0%	15.2%	13.5%	19.5%
Foreign	24.2%	15.0%	17.5%	12.4%	12.2%	4.5%	15.2%	14.4%	28.7%
Other	7.4%	0.0%	0.0%	6.3%	8.0%	19.5%	0.0%	5.9%	0.0%



# **Voluntary Contributions**

	2011	2010	2009
% of members making voluntary contributions	22.0%	23.5%	24.8%
% of pay	1.2% (5.1%)	1.2% (4.6%)	1.1% (4.3%)
# of transfers in	46	32	44
Value of transfers in	\$1,985,000	\$1,029,000	\$2,065,000



### **Fund Selection – RPP**

		20	010		2011						
Fund	Number of Investors	\$ Invested (\$millions)	Average Allocation	# investors at 100%*	Number of Investors	\$ Invested (\$millions)	Average Allocation	# investors at 100%*			
Tier One											
Balanced Income	781	\$30.8	46%	135	826	\$32.8	48%	152			
Balanced Growth	2094	\$78.7	70%	1,063	2340	\$83.8	71%	1,220			
Tier Two											
Diversified Bond	3044	\$207.5	34%	65	3017	\$218.1	36%	74			
Diversified Equity	3702	\$339.8	53%	373	3601	\$291.9	50%	338			
Tier Three											
Money Market	1447	\$56.9	42%	332	1334	\$57.5	42%	289			
Target Date Funds	306	\$26.6	31%	20	317	\$29.7	34%	25			
Canadian Bond	564	\$17.6	24%	18	591	\$18.9	26%	22			
Long Term Bond	478	\$16.8	21%	7	519	\$22.5	25%	14			
Canadian Equity	1532	\$72.8	34%	64	1534	\$59.8	31%	64			
US Equity Hedged	671	\$13.1	15%	8	665	\$14.1	15%	8			
US Equity Unhedged	438	\$7.6	16%	11	436	\$7.4	17%	11			
Non North American	866	\$16.7	16%	9	819	\$13.0	15%	9			
SRI Global Equity	207	\$2.4	19%	8	232	\$2.8	20%	10			
Liquidating Trust	4927	\$12.1	6%	233	4508	\$11.0	4%	99			

\* Excluding any Liquidating Trust holdings.

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# **Monthly Trading**

Investment Changes by Month										
Month	2006	2007	2008	2009	2010	2011	Funds Attracting most \$ in month	performing	Best performing Fund Month of transaction	Negative Equity Returns
January	61	244	81	51	63	62	CEF	USH	NNA	NO
February	79	127	56	63	64	85	MMF	NNA	USH	NO
March	74	70	54	54	71	92	DBF	USH	TDF 2012	NO
April	114	106	84	70	69	103	MMF	TDF 2012	NNA	YES
May	303	91	366	72	331	284	TDF 2014	NNA	LTBF	NO
June	74	90	95	57	162	64	CBF	LTBF	TDF 2016	YES
July	63	73	71	52	75	75	TDF 2016	TDF 2016	LTBF	YES
August	69	69	52	62	100	84	LTBF	LTBF	LTBF	YES
September	61	50	67	5163	74	48	MMF	LTBF	LTBF	YES
October	60	55	80	4714	89	71	LTBF	LTBF	USH	YES
November	51	41	71	77	81	60	DBF	USH	LTBF	NO
December	72	15	59	64	63	38	LTBF	LTBF	LTBF	YES
Total	1081	1031	1136	10,499	1242	1066				
Adjusted total	849	859	840	746	994	1066				
# Members	6368	6795	7223	7373	7278	7231				
% of Members Trading	13.30%	12.60%	11.60%	10.10%	13.70%	14.70%				

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# Members' Experience

- Rates of return
  - Overall plan
  - Individual
- Fees
- Replacement rates
  - Current
  - Target
  - Assumptions



### **Return Comparison with Public Plans** (Year Ending December 31, 2011)

	UWO	Teachers	OMERS	La Caisse	НООРР
Overall	-1.05%	11.20%	3.17%	4.00%	12.19%
Public Equity	-8.23%	-6.24%*	-6.07%*	-7.20%	-3.30%*
Canadian Equity	-9.72%	-8.84%*	-11.29%	-10.60%	-9.55%
Intl Equity	-13.11% (-7.66% <sup>1</sup> )	-5.58%*	-4.96%	-5.05%*	-1.57%
Fixed Income	8.95%	19.90% <sup>2</sup>	9.13%	10.40%	15.79%*
* Estimate					

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<sup>1</sup> Non-Canadian equity component of the Diversified Equity Fund

<sup>2</sup> Includes bonds, hedge funds, absolute return strategies and money market

### **Return Comparison with CAUBO** (As of December 31, 2011)

CAUBO COMPARISON (Assets > \$500 million)									
	1-Year	2-Year	3-Year	4-Year	5-Year	10-Year			
Plans' average	1.8%	6.1%	8.9%	1.7%	1.9%	5.6%			
Maximum annual return	10.7%	11.5%	12.0%	4.7%	4.3%	7.1%			
Minimum annual return	-2.5%	3.8%	5.9%	-4.2%	-2.2%	3.2%			
1st quartile	10.7%	11.5%	12.0%	4.7%	4.3%	7.1%			
	3.2%	6.7%	9.4%	2.5%	2.4%	6.1%			
2nd quartile									
MEDIAN	1.5%	6.0%	8.8%	2.1%	2.2%	5.7%			
3rd quartile									
	0.3%	5.0%	8.3%	1.4%	1.3%	5.2%			
4th quartile									
	-2.5%	3.8%	5.9%	-4.2%	-2.2%	3.2%			
Western	-1.0%	3.8%	7.8%	0.0%	0.3%	4.8%			
Rank	20/22	21/22	20/22	21/22	21/22	18/21			

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### **CAUBO Survey Attribution Analysis**

		One-Year Return								
	Cdn Equities	U.S. Equities	<b>EAFE Equities</b>	Total Equities	Bonds	Cash	Alternatives			
						DEX 91-				
					DEX	Day T-		Passive	Total	Active
	S&P/TSX	Russell 3000	MSCI EAFE		Universe	Bills	Blend	Return	Return	Return
Benchmark	-8.71%	3.53%	-9.55%		9.67%	1.33%	5.52%	0.65%	1.50%	0.85%
UWO	-9.79%	1.01%	-13.56%		9.15%	1.33%	0.00%	0.55%	-1.05%	-1.60%
	Asset Allocation									
	Cdn Equities	U.S. Equities	EAFE Equities	Total Equities	Bonds	Cash	Alternatives			
CAUBO (Plans greater than \$500 Million)	29.2%	16.8%	13.2%	59.2%	34.1%	1.8%	9.9%			
UWO	21.7%	15.4%	19.1%	56.2%	37.7%	6.0%	0.0%			
	Attribution Analysis									
Asset allocation contribution	0.70%	-0.04%	-0.60%		0.32%	0.03%	-0.48%	-0.10%		
Active management contribution (UWO)	-0.23%	-0.39%	-0.77%		-0.20%	0.00%	0.00%	-1.60%		



### **CAUBO Survey Attribution Analysis**

Attribution Analysis Summary:	
Overweight Cash	0.03%
Underweight Cdn Equities	0.70%
Underweight U.S. Equities	-0.04%
Overweight EAFE Equities	-0.60%
Overweight Bonds	0.32%
Underweight Alternatives	-0.48%
Total asset allocation	-0.07%
Active management (UWO)	-1.60%
Active management (Median Asset Mix)	-0.85%
Active management difference	-2.45%
Total Value Added	-2.52%
Cdn equity return with small cap	-10.45%
No Canadian equity small cap	0.14%



### **Individual Rates of Return**

#### INDIVIDUAL ACCOUNT RETURNS (Includes RPP and RIF)

	2011	2010
Plans' average	-1.9%	8.5%
Maximum annual return	29.9%	26.6%
Minimum annual return	-24.1%	-31.0%

	2010	2010
1st quartile	29.9%	26.6%
2nd quartile	0.9%	11.0%
MEDIAN 3rd quartile	-2.4%	8.9%
4th quartile	-4.2%	7.3%
	-24.1%	-31.0%



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	Management Expense Ratio									
	2011	2010	2009	2008	2007					
Expenses paid outside RPP	19 bps	18 bps	17 bps	20 bps	14 bps					
Expenses paid from RPP	35 bps	35 bps	34 bps	33 bps	29 bps					
Total Management Expenses	54 bps	53 bps	51 bps	53 bps	43 bps					

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### **Replacement Rates**

	2011	2010	2009	2008	2007
Faculty	34%	40%	40%	43%	52%
Staff	34%	42%	41%	45%	52%
Total	34%	41%	40%	44%	52%



# **Target Replacement Rate**

<b>2</b> Joint Pension Board Retreat	30 West
Net replacement rate	70%
Net (after taxes) Retirement Income	\$36,981
Net (after taxes) Western Salary	\$53,112
Adjusted Replacement Rate	60%
Adjusted Income	\$42,528
OAS Clawback	-\$0
CPP	\$11,840
OAS	\$6,481
Retirement income	\$24,207
Average Replacement Rate	34%
Average Western Salary	\$71,197

# **Replacement Rate Assumptions**

Variable	2011	2010		
Investment return	5.50%	5.75%		
Increase in salary	2%	2%		
Annuity type	Joint-Life 60% to survivor	Joint-Life 60% to survivor		
Annuity rate	3.00%	4.25%		
Indexation	No	No		
Mortality table	UP94 Generational (2012)	UP94 Generational (2011)		
Projected salary	Final year	Final year		
Voluntary contributions	Included	Included		

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# Members' Servicing

	2011		2010		2009		2008		20	007
	# of Sessions	%	# of Sessions	%	# of Sessions	%	# of Sessions	%	# of Sessions	6 %
Acad	302	30%	325	31%	358	32%	368	30%	447	38%
Admin	470	47%	463	44%	528	46%	607	50%	603	52%
RIF	235	23%	262	25%	250	22%	239	20%	120	10%
Total	1007	100%	1050	100%	1136	100%	1214	100%	1170	100%
2012	2012 Joint Pension Board Retreat 32 Wester								stern	

# **Members Servicing**

Year	Number of Full-Time Equivalent per Member	Number of Members per FTE (Including RIF Members)
2011	9.5	761
2010	11.3	644
2009	10.1	730
2008	11.2	645
2007	8.5	799
2012 Join	nt Pension Board Retreat	33 Western

# **Top 5 Counseling Sessions**

Staff	Faculty	RIF
Investments	Retirement Planning	RIF Maintenance
Retirement Planning	Investments	Unlocking
Pregnancy / Parental Leave	Orientation	Investments
Retirement	Retirement	Planning
Benefits	Transfer in/out	LIF Application

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# **Retirement Trends**

- RIF assets reaching a plateau as a % of total assets?
- RIF members are getting older
- Part-time employees still have a low participation rate
- Low equity levels at younger ages but the trend is improving
- Most members are postponing retirement
- Some members are not rebalancing despite education efforts on the importance of re-balancing
- Low level of voluntary contributions
- Some evidence of return chasing (or running away from)
- Expected RoR compared to large public pension plans?
- Fees are increasing
- Replacement ratios going down
  - Lower expected rates of return
- Number of RIF members has stabilized
  - RIF members still require more counseling
- Need for investment advice/education

