

# MERCER

Consulting. Outsourcing. Investments.



MARSH MERCER KROLL  
GUY CARPENTER OLIVER WYMAN



April 30, 2010

## Metropolitan Toronto Police Benefit Fund

Anil Narale  
Frank Dekeyser

# Metropolitan Toronto Police Benefit Fund

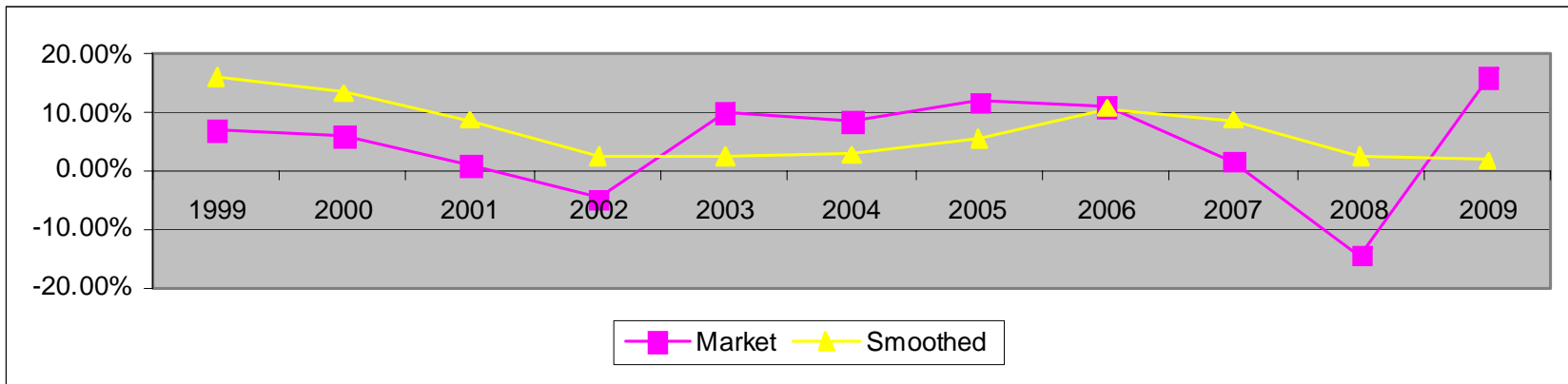
## General Statistics at Dec 31

	2009	2008	2007	2006
<b>Membership</b>				
<b>Actives and Disableds</b>	8	10	12	15
<b>Pensioners</b>	1,391	1,445	1,496	1,544
<b>Survivors</b>	710	684	671	654
<b>Total</b>	2,109	2,139	2,179	2,213
<b>Average Monthly Pension Payment</b>	2,634	2,678	2,733	2,781
<b>Average Monthly Survivor Payment</b>	1,456	1,440	1,423	1,394
<b>Total Benefits Paid in Year (\$000)</b>	57,501	59,664	61,683	63,608

# Metropolitan Toronto Police Benefit Fund

## Rates of Return

	2009	2008	2007	2006
<b>Market Value (\$000)</b>	<b>549,657</b>	522,040	673,066	719,666
<b>Rate of Return, net of IMF</b>	<b>16.03%</b>	-14.47%	1.54%	10.86%
<b>Rate of Return, gross</b>	<b>16.33%</b>	-14.26%	1.77%	
<b>Actuarial Value (\$000)</b>	<b>582,273</b>	624,022	665,248	666,841
<b>Rate of Return, net of IMF</b>	<b>1.73%</b>	2.56%	8.71%	10.78%



## Metropolitan Toronto Police Benefit Fund

### Actuarial Assets (\$000)

	2009	2008	2007	2006
<b>Assets at Jan. 1</b>	<b>624,022</b>	665,248	666,841	651,137
Employee Contributions	-	-	-	-
Employer Contributions	5,880	2,881	4,045	12,306
Pensioner Pensions	(45,401)	(48,149)	(50,468)	(52,738)
Survivor Pensions	(12,100)	(11,515)	(11,215)	(10,870)
Non Investment Expenses	(385)	(365)	(356)	(419)
Investment Income (Market) net of fees	79,747	(93,446)	10,686	73,003
Transfer (to)/from Smoothing Account	(69,366)	109,800	45,007	(5,578)
Change in in-transits	(124)	(432)	708	
<b>Assets at Dec. 31</b>	<b>582,273</b>	624,022	665,248	666,841
<b>Smoothing Account - Jan. 1</b>	<b>(101,982)</b>	7,818	52,825	47,247
Transfer to/(from) Smoothing Account	69,366	(109,800)	(45,007)	5,578
<b>Smoothing Account - Dec. 31</b>	<b>(32,616)</b>	(101,982)	7,818	52,825

## Metropolitan Toronto Police Benefit Fund

### Going Concern at Dec 31 (\$000)

	2009	2008	2007	2006
<b>Assets</b>				
Market Value	549,657	522,040	673,066	719,666
Actuarial Value	582,273	624,022	665,248	666,841
<b>Liabilities</b>				
Active and Disabled Members	7,896	10,061	11,338	14,117
Pensioners and Surviving Spouses	562,870	587,845	614,887	639,128
Total Liabilities	570,766	597,906	626,225	653,245
Prior Year Credit Balance	-	-	4,923	7,355
<b>Going Concern Excess/(Deficiency)</b>	<b>11,507</b>	<b>26,116</b>	<b>34,100</b>	<b>6,241</b>
<b>Actuarial Assumptions</b>				
Discount Rate	5.50%	5.50%	5.50%	5.50%
Salary Increases	4.50%	4.50%	4.50%	4.50%
YMPE Increases	3.50%	3.50%	3.50%	3.50%
Mortality Table (post retirement only)	UP94, gen	UP94, gen	UP94, gen	UP94, gen
Retirement Date/Age	31-Dec-10	31-Dec-09	31-Dec-08	58



# Metropolitan Toronto Police Benefit Fund

## Assumption Changes, Data Estimates

### Assumption Changes

- No material changes other than discount rates for wind-up and solvency valuations.

### Data Estimates

- Stepped Pension:
  - Surviving spouse's pension payable on member's death is roughly estimated by performing somewhat complex calculations on available data
  - Information required to calculate spouse's pension is not available on computer files

## Metropolitan Toronto Police Benefit Fund

### Actuarial Going Concern Gain & Loss (\$000)

	2009	2008	2007	2006
<b>Funding Excess - Jan. 1 (before upgrades)</b>	<b>26,116</b>	34,100	6,241	(37,830)
<b>Prior year credit balance</b>	-	4,923	7,355	6,449
<b>Pensioner Upgrade (This Year)</b>	-	-	-	-
<b>Actuarial assumptions, data changes</b>	<b>628</b>	(250)	490	1,036
<b>Actuarial method changes</b>				6,840
<b>Employer Contributions for Deficiency</b>	<b>5,998</b>	2,483	5,043	12,644
<b>Salaries</b>	<b>24</b>	16	287	(260)
<b>Investment Returns</b>	<b>(21,165)</b>	(16,482)	21,171	24,463
<b>Retirements</b>	<b>813</b>	346	(625)	1,005
<b>Mortality</b>	<b>(616)</b>	1,281	(927)	(326)
<b>Expenses (non-investment)</b>	<b>(385)</b>	(365)	(356)	(419)
<b>Miscellaneous</b>	<b>94</b>	64	344	(6)
<b>Prior year credit balance</b>	-	-	(4,923)	(7,355)
<b>Funding Excess - Dec. 31</b>	<b>11,507</b>	26,116	34,100	6,241

## Metropolitan Toronto Police Benefit Fund

### Wind-Up/Solvency at Dec 31 (\$000)

	2009	2008	2007	2006
<b>Wind-Up Assets</b>				
<b>Market Value</b>	<b>549,657</b>	522,040	673,066	719,666
<b>Expenses of Wind-Up of Plan</b>	<b>(317)</b>	(322)	(328)	(333)
<b>Total Wind-Up Assets</b>	<b>549,340</b>	521,718	672,738	719,333
<b>Wind-Up Liabilities</b>				
<b>Active and Disabled Members</b>	<b>8,854</b>	10,588	12,290	14,994
<b>Pensioners and Surviving Spouses</b>	<b>612,936</b>	617,130	666,677	688,518
<b>Total Wind-Up Liabilities</b>	<b>621,790</b>	627,718	678,967	703,512
<b>Wind-Up Excess/(Deficit)</b>	<b>(72,450)</b>	(106,000)	(6,229)	15,821
<b>Solvency Asset smoothing adjustment</b>	<b>26,062</b>	96,408	(11,212)	(54,325)
<b>Solvency Liability smoothing adjustment</b>	<b>7,057</b>	(11,987)	14,470	23,874
<b>Solvency Surplus/(Shortfall)</b>	<b>(39,331)</b>	(21,579)	(2,971)	(14,630)



# Metropolitan Toronto Police Benefit Fund

## Assumptions and Contributions

	2009	2008	2007	2006
<b>Discount Rate - Solvency</b>	<b>4.625%</b>	4.625%	4.75%	5.00%
<b>Discount Rate - Wind-Up</b>	<b>4.49%</b>	4.85%	4.50%	4.60%
<b>Mortality Table (post retirement only)</b>	<b>UP94, P2020</b>	UP94, P2015	UP94, P2015	UP94, P2015
<b>Retirement Age</b>	<b>immediate</b>	immediate	immediate	immediate
<b>Funding Requirements for next year</b>	<b>2010</b>	2009	2008	2007
<b>Current Service Cost</b>	-	-	-	-
<b>Funding Deficiency Payments</b>	-	-	-	-
<b>Solvency Deficiency Payments</b>	<b>9,637,200</b>	5,425,800	7,339,200	7,339,200
<b>Total Contribution - Per Year</b>	<b>9,637,200</b>	5,425,800	7,339,200	7,339,200
<b>Total Contribution - Per Month</b>	<b>803,100</b>	458,000	611,600	611,600
<b>Contribution reduces in Dec 2009 to</b>	<b>n/a</b>	387,800		
<b>Prior Year Credit Balance</b>	-	-	4,923	7,355
<b>Minimum contribution for the year</b>	<b>9,637,200</b>	5,425,800	2,416,200	
<b>Maximum contribution for the year</b>	<b>72,450,000</b>	106,000,000	6,229,000	

## Metropolitan Toronto Police Benefit Fund COLA and Indexation Reserve (\$000)

	2009	2008	2007	2006
<b>Change in CPI (September to September)</b>	<b>-0.86%</b>	3.40%	2.47%	0.74%
<b>COLA recommendation for Jan 1 of next year</b>	<b>0.00%</b>	0.00%	0.00%	0.00%
<b>Going Concern Excess after upgrade @ Dec 31</b>	<b>11,507</b>	26,116	34,100	6,241
<b>Solvency Excess after upgrade @ Dec 31</b>	<b>(39,331)</b>	(21,579)	(2,971)	(14,630)
<b>Indexation Reserve before upgrade @ Dec 31</b>	-	-	-	-
<b>Indexation Reserve after upgrade @ Dec 31</b>	-	-	-	-

# Metropolitan Toronto Police Benefit Fund

## Going Concern Projection

Discount Rate: 5.50%  
 Going Concern Excess/(Deficit): 12 \$million

### Projected Going Concern Excess/(Deficit) at December 31, 2010

\$million

Discount Rate/ Asset Return	5.00%	5.50%	6.00%
-5.50%	(41)	(19)	3
0.00%	(34)	(12)	10
5.50%	(27)	(5)	17
11.00%	(19)	3	24

## Metropolitan Toronto Police Benefit Fund Solvency Projection

Discount Rate (actual): 4.490%  
 Discount Rate (smoothed): 4.625%  
 Solvency Excess/(Deficit): (39) \$million

**Projected Solvency Excess/(Deficit) at:** **31-Dec-10**  
 \$million

Actual Discount Rate/ Asset Return	4.50%	5.00%	5.50%
-5.50%	(66)	(60)	(54)
0.00%	(58)	(52)	(47)
5.50%	(51)	(45)	(39)
11.00%	(44)	(38)	(32)

## Metropolitan Toronto Police Benefit Fund Contribution Projection

Contributions shown below are inclusive of Going Concern special payments, if any

2010 required contributions are \$9.6 million

### Projected Contributions for:

2011

\$million

Actual Discount Rate/ Asset Return	4.50%	5.00%	5.50%
-5.50%	14.6	13.4	12.1
0.00%	13.0	11.7	10.5
5.50%	11.4	10.1	8.8
11.00%	9.8	8.5	7.2

# MERCER



MARSH MERCER KROLL  
GUY CARPENTER OLIVER WYMAN