

CITY OF GROSSE POINTE WOODS RETIREE HEALTH CARE PLAN
ACTUARIAL VALUATION REPORT
AS OF JUNE 30, 2007



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February 27, 2009

Ms. Dee Ann Irby
City of Grosse Pointe Woods
20025 Mack Plaza
Grosse Pointe Woods, Michigan 48236

Dear Ms. Irby:

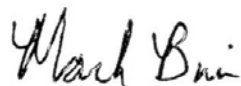
Submitted in this report are the results of an Actuarial Valuation of the assets and liabilities associated with the employer financed retiree health benefits provided by the City of Grosse Pointe Woods. The date of the valuation was June 30, 2007. The annual required contributions have been calculated for the fiscal years beginning July 1, 2008, July 1, 2009 and July 1, 2010.

The actuarial calculations were prepared for purposes of complying with the requirements of Statements No. 43 and No. 45 of the Governmental Accounting Standards Board (GASB). The calculations reported herein have been made on a basis consistent with our understanding of these accounting standards. Determinations of the liability associated with the benefits described in this report for purposes other than satisfying the City of Grosse Pointe Woods' financial reporting requirements may be significantly different than the values shown in this report. This report may be provided to parties other than the City of Grosse Pointe Woods only in its entirety and only with the permission of the City of Grosse Pointe Woods.

The valuation was based upon information furnished by the City of Grosse Pointe Woods concerning retiree health benefits, individual members, and plan finances. Data was checked for internal consistency, but was not otherwise audited.

To the best of our knowledge, this report is complete and accurate and was prepared in accordance with generally recognized actuarial methods. The undersigned are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Mark Buis, FSA, MAAA



Curt Powell, EA, MAAA



Brian Morris, FSA, MAAA

MB/CP/BM:lr

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Annual Required Contribution and OPEB Cost

This report presents the Annual Required Contribution (ARC), one component of the annual Other Postemployment Benefits (OPEB) cost required to be recognized by the plan sponsor for purposes of complying with the accounting requirements of the Governmental Accounting Standards Board (GASB) Statement No. 45. In addition, the plan may need to comply with GASB Statement No. 43. Please consult with legal counsel and your auditors to determine whether you have a plan for GASB Statement No. 43 purposes.

We have calculated the Annual Required Contribution (ARC) for the fiscal years beginning July 1, 2008, July 1, 2009 and July 1, 2010 under one interest rate assumption. Below is a summary of the results. In the first year GASB Statement No. 45 is adopted, the annual OPEB cost is equal to the ARC. In subsequent years, if there is a net OPEB obligation (NOO, see below), the annual OPEB cost is equal to the ARC for the fiscal year plus one year's interest on the net OPEB Obligation plus an adjustment to the ARC. Actual claims paid on behalf of retirees may be treated as employer contributions in relation to the ARC and act to reduce the NOO. The ARCs and estimated retiree claims shown below include an adjustment for any implicit rate subsidy present in your pre-65 rates.

Annual Required Contribution	4.50% Interest	Estimated Claims Paid for Retirees
Fiscal Year Beginning 2008	\$4,664,057	\$1,547,982
Fiscal Year Beginning 2009	4,873,940	1,725,178
Fiscal Year Beginning 2010	5,093,267	1,911,790

For additional details please see the Section titled "Valuation Results."

Additional OPEB Reporting Requirements – Net OPEB Obligation

In addition to the annual cost described above, employers will have to disclose a Net OPEB Obligation (or asset). The NOO is the cumulative difference between annual OPEB cost and annual employer contributions in relation to the ARC accumulated from the implementation of Statement No. 45. The NOO is zero as of the beginning of the fiscal year that Statement No. 45 is implemented, unless the employer chooses to recognize a beginning balance. The requirements for determining the employer's contributions in relation to the ARC are described in paragraph 13 g. of Statement No. 45.

EXECUTIVE SUMMARY

Additional information required to be disclosed in the employer's financial statements is detailed in paragraphs 24 through 27 of Statement No. 45.

Liabilities and Assets

	<u>4.50% Interest</u>
1. Present Value of Future Benefit Payments	\$93,269,868
2. Actuarial Accrued Liability	60,894,963
3. Plan Assets	0
4. Unfunded Actuarial Accrued Liability (3) – (2)	60,894,963
5. Funded Ratio (3)/(2)	0.0%

The Present Value of Future Benefit Payments (PVFB) is the present value of all benefits projected to be paid from the plan for past and future service. The Actuarial Accrued Liability is the portion of the PVFB allocated to past service by the Plan's funding method (see the Section titled "Actuarial Cost Method and Actuarial Assumptions").

SECTION A

VALUATION RESULTS

**CITY OF GROSSE POINTE WOODS - TOTAL
DEVELOPMENT OF THE ANNUAL REQUIRED CONTRIBUTIONS**

Contributions for	Development of the Annual Required Contribution
	<u>Fiscal Year Beginning 2008</u>
	<u>4.50% Interest</u>
Employer Normal Cost	\$2,542,883
Amortization of Unfunded Actuarial Accrued Liability	<u>2,121,174</u>
Annual Required Contribution (ARC)	\$4,664,057
	<u>Fiscal Year Beginning 2009</u>
Annual Required Contribution (ARC)	\$4,873,940
	<u>Fiscal Year Beginning 2010</u>
Annual Required Contribution (ARC)	\$5,093,267

The ARC shown in this report has been calculated to increase at the same rate as the projected increase in active member payroll (4.50% per year). The unfunded actuarial accrued liabilities were amortized as a level percent of active member payroll over a period of 30 years. A 30-year amortization period for unfunded actuarial accrued liabilities is the maximum period that complies with the GASB requirements.

**CITY OF GROSSE POINTE WOODS - TOTAL
DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
AS OF JUNE 30, 2007**

	<u>4.50% Interest</u>
A. Present Value of Future Benefits	
i) Retirees and Beneficiaries	\$32,184,272
ii) Vested Terminated Members	1,823,381
iii) Active Members	59,262,215
Total Present Value of Future Benefits	\$93,269,868
B. Present Value of Future Normal Costs	32,374,905
C. Actuarial Accrued Liability (A.-B.)	60,894,963
D. Actuarial Value of Assets	0
E. Unfunded Actuarial Accrued Liability (C.-D.)	\$60,894,963
F. Funded Ratio (D./C.)	0.0%

The Unfunded Actuarial Accrued Liability (UAAL) is not booked as an expense all in one year and does not appear in the Employer's Statement of Net Assets. Nevertheless, it is reported in the Notes to the Financial Statements and in the Required Supplementary Information. These are information sections within the employer's financial statements.

**ANNUAL REQUIRED CONTRIBUTIONS
COMPARISON BY OPEB REPORT GROUP
AS OF JUNE 30, 2007**

OPEB Report Group	Annual Required Contribution for July 01, 2008 - June 30, 2008
	<u>4.50% Interest</u>
General	\$2,601,981
Police/Fire	2,062,076
Total	\$4,664,057

OPEB Report Group	Annual Required Contribution for July 01, 2009 - June 30, 2010
	<u>4.50% Interest</u>
General	\$2,719,070
Police/Fire	2,154,870
Total	\$4,873,940

OPEB Report Group	Annual Required Contribution for July 01, 2010 - June 30, 2010
	<u>4.50% Interest</u>
General	\$2,841,428
Police/Fire	2,251,839
Total	\$5,093,267

**CITY OF GROSSE POINTE WOODS - GENERAL
DEVELOPMENT OF THE ANNUAL REQUIRED CONTRIBUTION**

Contributions for	Development of the Annual Required Contribution
	<u>Fiscal Year Beginning 2008</u>
	<u>4.50% Interest</u>
Employer Normal Cost	\$1,570,866
Amortization of Unfunded Actuarial Accrued Liability	<u>1,031,115</u>
Annual Required Contribution (ARC)	\$2,601,981
	<u>Fiscal Year Beginning 2009</u>
Annual Required Contribution (ARC)	\$2,719,070
	<u>Fiscal Year Beginning 2010</u>
Annual Required Contribution (ARC)	\$2,841,428

The ARC shown in this report has been calculated to increase at the same rate as the projected increase in active member payroll (4.50% per year). The unfunded actuarial accrued liabilities were amortized as a level percent of active member payroll over a period of 30 years. A 30-year amortization period for unfunded actuarial accrued liabilities is the maximum period that complies with the GASB requirements.

**CITY OF GROSSE POINTE WOODS - GENERAL
DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
AS OF JUNE 30, 2007**

	<u>4.50% Interest</u>
A. Present Value of Future Benefits	
i) Retirees and Beneficiaries	\$12,319,518
ii) Vested Terminated Members	1,823,381
iii) Active Members	<u>34,712,769</u>
Total Present Value of Future Benefits	\$48,855,668
B. Present Value of Future Normal Costs	19,254,285
C. Actuarial Accrued Liability (A.-B.)	29,601,383
D. Actuarial Value of Assets	0
E. Unfunded Actuarial Accrued Liability (C.-D.)	\$29,601,383
F. Funded Ratio (D./C.)	0.0%

The Unfunded Actuarial Accrued Liability (UAAL) is not booked as an expense all in one year and does not appear in the Employer's Statement of Net Assets. Nevertheless, it is reported in the Notes to the Financial Statements and in the Required Supplementary Information. These are information sections within the employer's financial statements.

**CITY OF GROSSE POINTE WOODS – POLICE/FIRE
DEVELOPMENT OF THE ANNUAL REQUIRED CONTRIBUTION**

Contributions for	Development of the Annual Required Contribution
	<u>Fiscal Year Beginning 2008</u>
	<u>4.50% Interest</u>
Employer Normal Cost	\$972,017
Amortization of Unfunded Actuarial Accrued Liability	<u>1,090,059</u>
Annual Required Contribution (ARC)	\$2,062,076
	<u>Fiscal Year Beginning 2009</u>
Annual Required Contribution (ARC)	\$2,154,870
	<u>Fiscal Year Beginning 2010</u>
Annual Required Contribution (ARC)	\$2,251,839

The ARC shown in this report has been calculated to increase at the same rate as the projected increase in active member payroll (4.50% per year). The unfunded actuarial accrued liabilities were amortized as a level percent of active member payroll over a period of 30 years. A 30-year amortization period for unfunded actuarial accrued liabilities is the maximum period that complies with the GASB requirements.

**CITY OF GROSSE POINTE WOODS – POLICE/FIRE
DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
AS OF JUNE 30, 2007**

	<u>4.50% Interest</u>
A. Present Value of Future Benefits	
i) Retirees and Beneficiaries	\$19,864,754
ii) Vested Terminated Members	0
iii) Active Members	<u>24,549,446</u>
Total Present Value of Future Benefits	\$44,414,200
B. Present Value of Future Normal Costs	13,120,620
C. Actuarial Accrued Liability (A.-B.)	31,293,580
D. Actuarial Value of Assets	0
E. Unfunded Actuarial Accrued Liability (C.-D.)	\$31,293,580
F. Funded Ratio (D./C.)	0.0%

The Unfunded Actuarial Accrued Liability (UAAL) is not booked as an expense all in one year and does not appear in the Employer’s Statement of Net Assets. Nevertheless, it is reported in the Notes to the Financial Statements and in the Required Supplementary Information. These are information sections within the employer’s financial statements.

COMMENTS

COMMENT A: One of the key assumptions used in any valuation of the cost of postemployment benefits is the rate of return on the assets that will be used to pay Plan benefits. Higher assumed investment returns will result in a lower ARC. Lower returns will tend to increase the computed ARC. As requested by the Plan Sponsor we have calculated the liability and the resulting ARC using an assumed rate of investment return of 4.50%. The 4.50% assumed long term rate of investment return may be appropriate for developing the liabilities of the plan in the case that the Plan Sponsor chooses not to pre-fund the ARC and pay only the current retiree premiums. If the Plan Sponsor chooses to pre-fund with contributions equal to the ARC (or partially fund future liabilities), GASB allows the use of a higher rate of return assumption. If the Plan Sponsor chose to pre-fund and used an interest rate of 8.0%, the 2008-2009 ARC would be approximately \$3.1 million.

COMMENT B: Based on the number of plan members as of this valuation, the plan sponsor is required by GASB to perform actuarial valuations at least triennially unless there are significant changes in the OPEB.

COMMENT C: The contribution rates shown include amortization of the unfunded actuarial accrued liability over 30 years. This is the maximum time period permitted by the GASB Statement No. 45. A shorter amortization period would result in a higher ARC.

COMMENT D: The liabilities and computed contribution rates are significantly higher than those reported in our June 30, 2004 post-retirement healthcare study (prior study). The primary reasons for the increases are discussed below:

- The prior study utilized an expected return on assets assumption of 8.0% compared to 4.5% this valuation. This change increased the valuation of plan liabilities by about 66% and the ARC by about \$1.57M, or 51%.
- Certain clarifications have been made regarding the benefits provided. In particular, it was reported this year that pension terminated vested members are also eligible for deferred OPEB, In addition, spouses of deceased vested members are eligible for OPEB. This adds cost, particularly to the general group which is considered to have higher rates of pre-retirement termination.
- The assumed rate of inflation was lowered to 4.5%
- Age/sex adjusted premiums are somewhat higher than predicted by the healthcare cost increase trend assumption used in the prior study.
- Active and retired headcounts are up about 4% from the prior study.

SECTION B

RETIREE PREMIUM RATE DEVELOPMENT

RETIREE PREMIUM RATE DEVELOPMENT

Initial premium rates were developed separately for each class (pre-65 and post-65). The rates were calculated by using actual paid claims and exposure data for the period of September 2005 to July 2008 adjusted for catastrophic claims, plus the load for administration and stop loss fees. The self-insured Medical and prescription drug data were provided by Grosse Pointe Woods. The Medical data was analyzed for the pre-65 and post-65 participants separately since Medicare is available for the post-65 participants and has a significant impact on the claim experience. Furthermore, since the prescription drug claims and the medical claims exhibit different trends and claim payment patterns, we analyzed these claims separately as well.

Age graded and sex distinct premiums are utilized in this valuation. The premiums developed by the preceding process are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process “distributes” the average premium over all age/sex combinations and assigns a unique premium for each specific age/sex combination. The age/sex specific premiums more accurately reflect the health care utilization and cost at that age.

RETIREE PREMIUM RATE DEVELOPMENT

The tables below show the resulting medical and prescription drug one-person monthly premiums at select ages. The premium (or per capita costs) rates shown below reflect the use of age grading.

For Those Not Eligible for Medicare (Pre-65)		
Age	Current and Future Retirees	
	Male	Female
40	\$ 341.07	\$ 534.37
50	626.96	710.38
60	1,029.43	989.51
64	1,198.20	1,110.62

For Those Eligible for Medicare (Post-65)		
Age	Current and Future Retirees	
	Male	Female
65	\$ 721.67	\$ 664.56
75	924.15	820.16
85	1,030.50	904.73

The dental and vision premium rates were not “age graded” for this valuation since dental and vision claims do not vary significantly by age. The monthly 1st person dental premium used in this valuation is \$34.57, the monthly 2nd person dental premium used in this valuation is \$29.37, and the monthly per contract vision premium used in this valuation is \$11.50.

SECTION C
SUMMARY OF BENEFITS

SUMMARY OF THE BENEFIT PROVISIONS FOR THE RETIREE HEALTH CARE PLAN

Group Name General and Police & Fire

Leaving Employment as a Result of	Eligibility for Benefit	Coverage Provided by Employer		Retiree Health Care Provider(s)	Type of Insurance	Retiree Share of Cost	
		Retiree	Spouse			Retiree	Spouse
Normal Retirement	Age 50 with 25 years of service	Medical	Medical	BCBS	SELF-FUNDED	NONE	NONE
	Age 55 with 20 years of service	Prescription drug	Prescription drug	EXPRESS SRIPTS	SELF-FUNDED		
	Age 60 with 10 years of service	Dental	Dental	DELTA DENTAL	SELF-FUNDED		
		Vision	Vision	CO-OP OPTICAL	FULLY-INSURED		
		Life Insurance		AMERICAN UNITED LIFE	FULLY-INSURED		
Early Retirement		Medical	Medical	BCBS	SELF-FUNDED	NONE	NONE
		Prescription drug	Prescription drug	EXPRESS SRIPTS	SELF-FUNDED		
		Dental	Dental	DELTA DENTAL	SELF-FUNDED		
		Vision	Vision	CO-OP OPTICAL	FULLY-INSURED		
		Life Insurance		AMERICAN UNITED LIFE	FULLY-INSURED		
Deferred Vested Termination	10 YEARS OF SERVICE	Medical	Medical	BCBS	SELF-FUNDED	NONE	NONE
		Prescription drug	Prescription drug	EXPRESS SRIPTS	SELF-FUNDED		
		Dental	Dental	DELTA DENTAL	SELF-FUNDED		
		Vision	Vision	CO-OP OPTICAL	FULLY-INSURED		
		Life Insurance		AMERICAN UNITED LIFE	FULLY-INSURED		
Non-Duty Disability	10 YEARS OF SERVICE	Medical	Medical	BCBS	SELF-FUNDED	NONE	NONE
		Prescription drug	Prescription drug	EXPRESS SRIPTS	SELF-FUNDED		
		Dental	Dental	DELTA DENTAL	SELF-FUNDED		
		Vision	Vision	CO-OP OPTICAL	FULLY-INSURED		
		Life Insurance		AMERICAN UNITED LIFE	FULLY-INSURED		
Duty Disability	NO AGE OR SERVICE REQUIREMENT	Medical	Medical	BCBS	SELF-FUNDED	NONE	NONE
		Prescription drug	Prescription drug	EXPRESS SRIPTS	SELF-FUNDED		
		Dental	Dental	DELTA DENTAL	SELF-FUNDED		
		Vision	Vision	CO-OP OPTICAL	FULLY-INSURED		
		Life Insurance		AMERICAN UNITED LIFE	FULLY-INSURED		
Non-Duty Death-in-Service	10 YEARS OF SERVICE		Medical	BCBS	SELF-FUNDED		NONE
			Prescription drug	EXPRESS SRIPTS	SELF-FUNDED		
			Dental	DELTA DENTAL	SELF-FUNDED		
			Vision	CO-OP OPTICAL	FULLY-INSURED		
Duty Death-in-Service	NO AGE OR SERVICE REQUIREMENT		Medical	BCBS	SELF-FUNDED		NONE
			Prescription drug	EXPRESS SRIPTS	SELF-FUNDED		
			Dental	DELTA DENTAL	SELF-FUNDED		
			Vision	CO-OP OPTICAL	FULLY-INSURED		

SECTION D

SUMMARY OF PARTICIPANT DATA

**CITY OF GROSSE POINTE WOODS - TOTAL
TOTAL ACTIVE MEMBERS AS OF JUNE 30, 2007
BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Age	Years of Service to Valuation Date							Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.
20-24	1							1
25-29	11							11
30-34	4	9						13
35-39	7	10	2					19
40-44		1	7	1	4			13
45-49	1	4	3	1	6			15
50-54	2	2	1	2	2	1	3	13
55-59	3	3	3		3		1	13
60-64			1				1	2
65 & Over			1					1
Totals	29	29	18	4	15	1	5	101

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 42.6 years
Service: 11.2 years

**CITY OF GROSSE POINTE WOODS - GENERAL
ACTIVE MEMBERS AS OF JUNE 30, 2007
BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Age	Years of Service to Valuation Date							Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.
20-24	1							1
25-29	2							2
30-34	2	5						7
35-39	6	7	2					15
40-44			4		3			7
45-49		3	3	1				7
50-54	2	2	1	2	1		1	9
55-59	3	3	3		2			11
60-64			1					1
65 & Over			1					1
Totals	16	20	15	3	6		1	61

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 44.5 years
Service: 10.1 years

**CITY OF GROSSE POINTE WOODS – POLICE/FIRE
ACTIVE MEMBERS AS OF JUNE 30, 2007
BY ATTAINED AGE AND YEARS OF SERVICE**

Attained Age	Years of Service to Valuation Date							Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.
20-24								
25-29	9							9
30-34	2	4						6
35-39	1	3						4
40-44		1	3	1	1			6
45-49	1	1			6			8
50-54					1	1	2	4
55-59					1		1	2
60-64							1	1
65 & Over								
Totals	13	9	3	1	9	1	4	40

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 39.8 years
Service: 12.8 years

CITY OF GROSSE POINTE WOODS
TOTAL INACTIVE MEMBERS AS OF JUNE 30, 2007
BY ATTAINED AGE

Number of Retiree and Beneficiary Contracts

	Opt-Out/ Ineligible	One Person Coverage	Two Person Coverage*	Total
Male	1	14	41	56
Female	1	22	6	29
Total	2	36	47	85

* Includes family coverage

Age	Current Retirees		
	Number of Those Covered		
	General	Police/ Fire	Total
0-44		2	2
45-49		1	1
50-54	4	1	5
55-59	3	10	13
60-64	1	8	9
65-69	8	8	16
70-74	6	1	7
75-79	4	6	10
80-84	8	3	11
85-89	5	1	6
90-94	2	1	3
95 +			0
Totals	41	42	83

There are 3 terminated members eligible for deferred Plan benefits. The average age of these members is 48.4.

SECTION E

ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS

**VALUATION METHODS FOR
CITY OF GROSSE POINTE WOODS
AS OF JUNE 30, 2007**

Actuarial Cost Method. Normal cost and the allocation of benefit values between service rendered before and after the valuation date was determined using an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

- (i) the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains (losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

Financing of Unfunded Actuarial Accrued Liabilities. Unfunded actuarial accrued liabilities (UAAL) (full funding credit if assets exceed liabilities) were amortized as a level percent of payroll if the divisions are open to new hires and as a level dollar if the divisions are closed to new hires. The UAAL was determined using the actuarial value of assets and actuarial accrued liability calculated as of the valuation date and projected to the beginning of the fiscal year at the assumed rate of investment return.

Actuarial Value Assets. The Actuarial Value of Assets is set equal to the reported market value of assets.

The following amortization factor(s) was/were used in developing the Annual Required Contribution for the fiscal years shown:

4.50% Interest	Fiscal Year Beginning July 01,		
	2008	2009	2010
General (Level Percent of Pay)	30.0000	29.0000	28.0000
Police/Fire (Level Percent of Pay)	30.0000	29.0000	28.0000

**ACTUARIAL ASSUMPTIONS FOR
CITY OF GROSSE POINTE WOODS
AS OF JUNE 30, 2007**

The rate of investment return was 4.50% a year, compounded annually net after investment expenses.

The rates of salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which future contributions will be based.

Sample Ages	% Increase in Salary at Sample Ages				
	Merit and Seniority		Base (Economic)	Increase Next Year	
	General	Police/Fire		General	Police/Fire
20	3.84%	3.00%	4.50%	8.34%	7.50%
25	3.12%	3.00%	4.50%	7.62%	7.50%
30	2.68%	2.60%	4.50%	7.18%	7.10%
35	2.37%	1.10%	4.50%	6.87%	5.60%
40	2.14%	0.20%	4.50%	6.64%	4.70%
45	1.68%	0.20%	4.50%	6.18%	4.70%
50	1.14%	0.20%	4.50%	5.64%	4.70%
55	0.66%	0.10%	4.50%	5.16%	4.60%
60	0.16%	0.00%	4.50%	4.66%	4.50%
Ref	5	100	0.045		

The payroll growth rate for financing Unfunded Actuarial Accrued Liabilities for open divisions was assumed to be 4.50% per year.

**ACTUARIAL ASSUMPTIONS FOR
CITY OF GROSSE POINTE WOODS
AS OF JUNE 30, 2007**

The rates of post retirement mortality used for individual members are in accordance with the following tables.

For healthy retirees, mortality rates are based on the 1994 Group Annuity Mortality Tables. Sample rates are as follows:

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
45	0.158%	0.097%	35.38	39.68
50	0.258%	0.143%	30.69	34.89
55	0.442%	0.229%	26.15	30.17
60	0.798%	0.444%	21.83	25.59
65	1.453%	0.864%	17.84	21.28
70	2.373%	1.373%	14.29	17.30
75	3.721%	2.269%	11.12	13.60
80	6.203%	3.940%	8.37	10.31
Ref	#261x1sb0yrs	#262x1sb0yrs		

For disabled retirees, mortality rates are based on the healthy life table above, but set forward ten years.

The same mortality tables are used for active members with 75% of active deaths assumed non-duty and 25% assumed duty related for Police/Fire members and 100% of active deaths assumed non-duty related for General members.

**ACTUARIAL ASSUMPTIONS FOR
CITY OF GROSSE POINTE WOODS
AS OF JUNE 30, 2007 (CONTINUED)**

Retirement Rates

A schedule of retirement rates is used to measure the probability of eligible members retiring during the next year.

Retirement Ages	Percent of Eligible Active Members Retiring Within Next Year	
	General	Police/Fire
50	15%	20%
51	10%	10%
52	10%	10%
53	10%	10%
54	10%	10%
55	10%	20%
56	10%	10%
57	10%	10%
58	10%	10%
59	10%	10%
60	15%	25%
61	15%	15%
62	30%	30%
63	15%	15%
64	15%	15%
65	60%	60%
66	30%	30%
67	40%	40%
68	50%	50%
69	90%	90%
70	100%	100%
Ref	203	1,032

**ACTUARIAL ASSUMPTIONS FOR
CITY OF GROSSE POINTE WOODS
AS OF JUNE 30, 2007 (CONTINUED)**

Rates of separation from active membership were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

Sample Ages	Service Index	Percent of Active Members Separating Within Next Year			
		General		Police/Fire	
		Males	Females	Males	Females
ALL	1	20.00%	20.00%	15.00%	15.00%
	2	15.00%	15.00%	10.00%	10.00%
	3	12.00%	12.00%	9.00%	9.00%
	4	10.00%	10.00%	8.00%	8.00%
	5	7.00%	7.00%	7.00%	7.00%
20	6 & Over	6.00%	6.00%	4.50%	4.50%
25		6.00%	6.00%	4.50%	4.50%
30		5.50%	5.50%	3.90%	3.90%
35		4.40%	4.40%	2.30%	2.30%
40		1.85%	1.85%	0.90%	0.90%
45		1.25%	1.25%	0.50%	0.50%
50		1.25%	1.25%	0.50%	0.50%
55		1.25%	1.25%	0.50%	0.50%
60		1.25%	1.25%	0.50%	0.50%
65		1.25%	1.25%	0.50%	0.50%
Ref		87 #59x1	87 #59x1	51 #53x1	51 #53x1

**ACTUARIAL ASSUMPTIONS FOR
CITY OF GROSSE POINTE WOODS
AS OF JUNE 30, 2007 (CONTINUED)**

Disability Rates

Disability rates are used in the valuation to estimate the incidence of member disability in future years.

The assumed rates of disablement at various ages are shown below.

Sample Ages	General		Police/Fire	
	Males	Females	Males	Females
20	0.08%	0.08%	0.11%	0.11%
25	0.08%	0.08%	0.18%	0.18%
30	0.08%	0.08%	0.37%	0.37%
35	0.08%	0.08%	0.61%	0.61%
40	0.20%	0.20%	0.85%	0.85%
45	0.26%	0.26%	1.09%	1.09%
50	0.49%	0.49%	1.33%	1.33%
55	0.89%	0.89%	1.58%	1.58%
60	1.41%	1.41%	1.83%	1.83%
65	1.66%	1.66%	0.00%	0.00%
Ref	#9x1	#9x1	#4x1	#4x1

25% of the disabilities are assumed to be non-duty and 75% of the disabilities are assumed to be duty related for Police/Fire members and 100% are assumed to be non-duty related for General members.

**ACTUARIAL ASSUMPTIONS FOR
CITY OF GROSSE POINTE WOODS
AS OF JUNE 30, 2007 (CONCLUDED)**

Health care cost trend rates are displayed in the following table:

Year After Valuation	Health Care Trend Inflation Rates		
	Medical/Drug	Dental	Vision
1	10.00%	4.50%	4.50%
2	9.50	4.50	4.50
3	9.00	4.50	4.50
4	8.50	4.50	4.50
5	8.00	4.50	4.50
6	7.50	4.50	4.50
7	6.75	4.50	4.50
8	6.00	4.50	4.50
9	5.25	4.50	4.50
10	4.50	4.50	4.50
11	4.50	4.50	4.50
12	4.50	4.50	4.50
13	4.50	4.50	4.50
14	4.50	4.50	4.50
15	4.50	4.50	4.50
16 +	4.50	4.50	4.50

**MISCELLANEOUS AND TECHNICAL ASSUMPTIONS FOR
CITY OF GROSSE POINTE WOODS
AS OF JUNE 30, 2007**

- Administrative Expenses** No explicit assumption has been made for administrative expenses.
- Decrement Operation** Disability and mortality decrements do not operate during the first 5 years of service. Disability also does not operate during retirement eligibility.
- Decrement Timing** Decrements of all types are assumed to occur mid-year.
- Eligibility Testing** Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
- Incidence of Contributions** Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
- Marriage Assumption** 90% of males and 90% of females are assumed to be married at time of decrement. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.
- Medicare Coverage** Assumed to be available for all covered employees on attainment of age 65. Disabled retirees were assumed to be eligible for Medicare coverage at age 65.
- Health Care Coverage at Retirement** The table below shows the assumed portion of future retirees electing one-person or two-person/family coverage, or opting out of coverage entirely.

	One-Person	Two-Person/Family		Opt-Out
		Electing	Continuing	
General				
Male	10%	90%	100%	0%
Female	10%	90%	100%	0%
Police/Fire				
Male	10%	90%	100%	0%
Female	10%	90%	100%	0%

APPENDIX A

OVERVIEW

GASB BACKGROUND

The purpose of this valuation is to provide information on the cost associated with providing postemployment benefits other than pensions, or OPEB, to current and former employees. OPEB benefits are most often associated with postemployment health care, but cover almost any benefit not provided through a pension plan, including life insurance, dental and vision benefits. It is important to note that OPEB benefits, by definition, do not include benefits *currently* being provided to active employees – however, this report includes the liabilities for benefits expected to be paid to current active employees when they terminate employment at a future date.

The rising cost of health care has been a cause of concern to both individuals and employers who sponsor health care plans. The accounting community became concerned that many sponsors of public plans were accounting for the cost of their OPEB plans solely on the basis of benefits paid and that this method did not accurately reflect the ultimate cost of benefits promised to current and former employees. In 1988, the Governmental Accounting Standards Board (GASB) began working on a project to develop comprehensive standards for financial reporting of OPEB plans.

The GASB determined that an OPEB plan was similar to a pension plan in that benefits are earned during an active employee's working lifetime but paid out at a future date. In the GASB's view, accounting for OPEB should follow the same basic principle as accounting for public plan pension cost. These benefits are compensation for employees' services and should be accounted for during the period of time that services are performed.

GASB BACKGROUND (CONCLUDED)

GASB Statements No. 43 and No. 45 were released in the spring of 2004. GASB Statement No. 43 covers the accounting rules for OPEB *plans* while GASB Statement No. 45 describes the rules for *employers* sponsoring OPEB plans. The effective dates follow the schedule below:

Total Annual Revenue In the First Fiscal Year Ending After June 15, 1999	GASB Statement No. 43 OPEB Standards for the Plan's Financial Statements will be Effective for Periods Beginning After	GASB Statement No. 45 OPEB Standards for the Employer's Financial Statements will be Effective for Periods Beginning After
Phase 1 Govts. - \$100 million or more	December 15, 2005	December 15, 2006
Phase 2 Govts. - \$10 million or more, but less than \$100 million	December 15, 2006	December 15, 2007
Phase 3 Govts. - Less than \$10 million	December 15, 2007	December 15, 2008

GASB STANDARDS

Unlike pension plans, OPEB plans often do not have a formal document detailing the specific terms of the plan. Under GASB Statements No. 43 and No. 45 the benefits to be accounted for are those provided by the *substantive plan* – loosely defined as the benefits covered by the plan as understood by the employer and plan members at the time of the actuarial valuation. The substantive plan provisions used in this valuation are summarized in the Summary of Benefits.

GASB also requires that the calculations assume the terms of the substantive plan continue indefinitely. While it may be reasonable to assume future changes in the OPEB plan for other purposes, recognition of anticipated changes is not allowed for purposes of GASB Statements No. 43 and No. 45.

The specific items required to be disclosed on an OPEB sponsor's financial statements are described in detail in GASB Statements No. 43 and No. 45. In general terms though, the plan sponsor is required to disclose an annual OPEB cost, the funded status of the plan and the funding progress on the valuation date. Although GASB does not require OPEB contributions, it has chosen to call the base component of the annual OPEB cost the Annual Required Contribution, or ARC. The ARC consists of the cost of benefits accruing in a year plus an amount calculated to amortize any unfunded actuarial accrued liability over a period of not more than 30 years.

The funded status of the plan is a ratio of the plan's assets (if any) to the actuarial accrued liability on the valuation date. The plan is also required to disclose the cumulative difference between the annual OPEB cost and the employer's actual contribution to the plan. This amount is known as the Net OPEB Obligation (NOO). Each year, the NOO accumulates with interest, plus the difference between the ARC and actual contributions for the year, plus some technical adjustments. **For most plans, the NOO is set to zero as of the effective date of the GASB OPEB standard. It is the NOO, and not the actuarial accrued liability, that will be disclosed on the employer's Statement of Net Assets.**

OPEB SPECIFIC ASSUMPTIONS

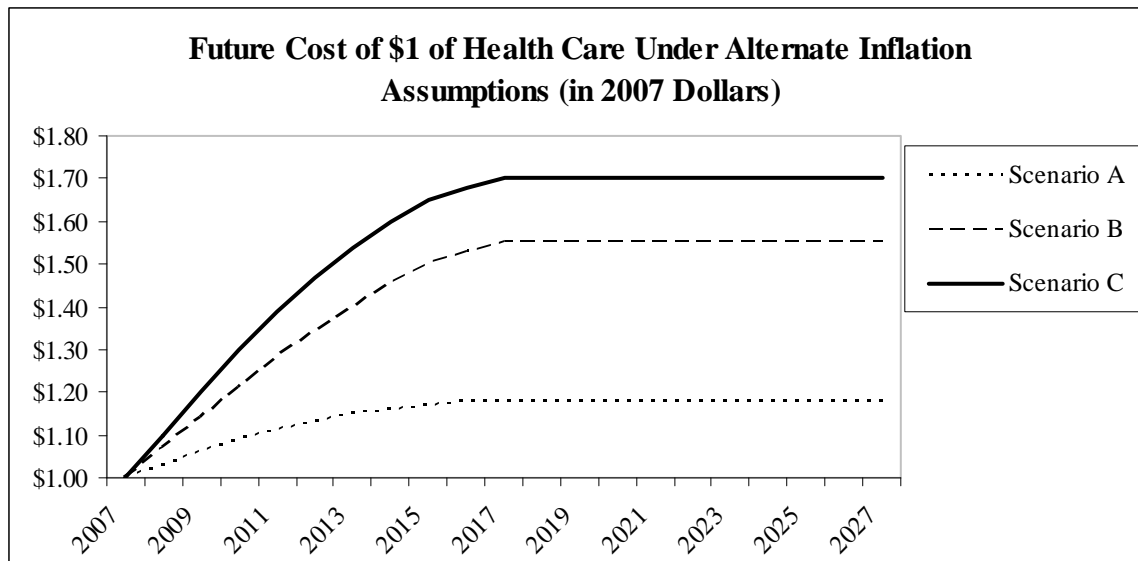
In any long-term actuarial valuation (such as for pensions and OPEB) certain demographic, economic and behavioral assumptions must be made concerning the population, invested assets and the benefits provided. These actuarial assumptions form the basis for the actuarial model which is used to project the future population, benefits to be provided, and contributions to be collected. The rate of investment return assumption is used to discount the future benefits to a present value on the valuation date. While assumptions such as future rates of retirement and mortality are similar for both OPEB and pension plans, there are some additional assumptions required when projecting benefits for a health care plan. All actuarial assumptions used in the valuation are described in the section titled “Actuarial Cost Method and Actuarial Assumptions”.

The cost of providing medical services has been increasing more rapidly than overall consumer prices for many years. During the period from 1957 to 2007, general inflation averaged 4.0%, while health expenditures increased by an average of about 10% per year. If this trend is projected to continue indefinitely, the implication is that years from now virtually all our expenditures will be for health care. The seemingly more reasonable alternative is that in the not too distant future medical expense inflation will stabilize at a level at or near general inflation. It is on this basis that we project that retiree health care costs will continue to exceed general inflation in the near term, but by less each year until leveling off at an ultimate rate that is similar to general price increases.

Health care cost trend rates used in this valuation are recommended by a qualified GRS health care actuary and lie within a range of reasonable assumptions. These are described in the section titled “Actuarial Cost Method and Actuarial Assumptions”. The health care cost increase assumption has a major effect on the size of calculated plan liabilities. To illustrate the effect of differing future medical inflation rates, the chart on the following page projects the growth of \$1 of health care benefit under three sets of assumptions.

In this illustration, each set of assumptions trends smoothly to an assumed long term rate of inflation over the next ten years. The assumption set labeled “Scenario A” begins at a rate of 3% in excess of general inflation, the “Scenario B” assumption begins at a rate of 7% in excess of general inflation, while the “Scenario C” assumption begins at a rate of 10% in excess of general inflation.

OPEB SPECIFIC ASSUMPTIONS (CONCLUDED)



The chart above shows that the cost of providing health care is expected to increase over 50% in inflation-adjusted dollars over the next 20 years, using the “Scenario B” health care increase assumption set. To put this in perspective, assuming health care increases settle down to general inflation almost immediately, as in the “Scenario A” assumption set, future per capita health care costs will be expected to increase less than 20% over current levels. In addition to the per capita health care inflation, projected costs rise as the retiree population grows.

The selection of an investment return rate also has a major impact on the calculation of the reported GASB OPEB expense.

It is important to note that GASB Statements No. 43 and No. 45 require the selection of an investment return assumption to be based on the expected long-term rate of return on the assets expected to pay the OPEB when due. GASB states that the return should be based on expected returns of:

- Plan assets – if the sponsor has been contributing the ARC on a regular basis;
- The employer’s general assets – where no OPEB assets have been accumulated;
- A blend of plan and employer assets – in cases where OPEB assets exist but the plan is contributing amounts less than the ARC.

ACTUARIAL COST METHOD

GASB Statement No. 45 allows some flexibility to governmental employers (and their actuaries) in the use of various actuarial cost methods. It should be noted that an actuarial cost method determines a contribution or expense by assigning portions of the present value of projected benefits to various years with the general goal of accruing the cost of benefits over the working lifetime of the employees. The choice of a particular method changes the pattern of contributions, but does not change the ultimate cost of the promised benefits.

The Entry Age Normal actuarial cost method has been used to calculate the GASB ARC for this valuation. Using the substantive plan benefit provisions, actual health premium rates and a set of actuarial assumptions, the future benefit payments are projected. The entry age method then provides a systematic funding progression for these anticipated payments. The yearly ARC is computed to cover the cost of benefits being earned by covered members as well as to amortize a portion of the unfunded actuarial accrued liability.

OPEB PRE-FUNDING

Many employers fund retiree health care benefits using the pay-as-you-go (or cash disbursement) method. Under this method, the employer's annual contribution is equal to the actual disbursements during the year for OPEB for retired employees. This method of funding will result in increasing contributions over time. First, per capita cash disbursements will tend to increase from year to year as the cost of health care services, or the utilization of these services, increases. Second, the number of retired members is likely to increase for years to come. The more retirees, the greater the disbursements as a percentage of employee payroll.

A retiree health care plan is similar to a defined benefit pension plan in that promises are made to employees to provide them with a benefit payable at some future date. For defined benefit pension plan sponsors, a common funding objective is to contribute to a fund, annual amounts which will i) remain level as a percentage of active member payroll, and ii) when combined with present assets and future investment return be sufficient to meet the financial obligations of the Plan to current and future retirees.

The GASB statements are not funding requirements. They are accounting standards that require plan sponsors to calculate the annual expense associated with OPEB using certain methods.

The ultimate determination as to the level of pre-funding will be the result of decisions made in an attempt to support benefit security for members and the fiscal management needs of the employer.

APPENDIX B

GLOSSARY

Accrued Service. The service credited under the plan which was rendered before the date of the actuarial valuation.

Actuarial Accrued Liability. The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability".

Actuarial Assumptions. Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method".

Actuarial Equivalent. A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

Actuarial Present Value. The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Amortization. Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

GLOSSARY

Annual Required Contribution (ARC). The ARC is the normal cost plus the portion of the unfunded actuarial accrued liability to be amortized in the current period. The ARC is an amount that is actuarially determined in accordance with the requirements so that, if paid on an ongoing basis, it would be expected to provide sufficient resources to fund both the normal cost for each year and the amortized unfunded actuarial accrued liability.

Governmental Accounting Standards Board (GASB). GASB is the private, nonpartisan, nonprofit organization that works to create and improve the rules U.S. state and local governments follow when accounting for their finances and reporting them to the public.

Implicit Rate Subsidy. It is common practice for employers to allow retirees to continue in the employer's group health insurance plan (which also covers active employees), often charging the retiree some portion of the premium charged for active employees. Under the theory that retirees have higher utilization of services, the difference between the true cost of providing retiree coverage and what the retiree is being charged is known as the implicit rate subsidy.

Medical Trend Rate (Health Care Inflation). The increase in the cost of providing health care benefits over time. Trend includes such elements as pure price inflation, changes in utilization, advances in medical technology, and cost shifting.

Normal Cost. The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Other Postemployment Benefits (OPEB). OPEB are postemployment benefits other than pensions. OPEB generally takes the form of health insurance, dental, vision, prescription drugs, life insurance or other health care benefits.

Reserve Account. An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

GLOSSARY

Unfunded Actuarial Accrued Liability. The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded actuarial accrued liability."

Valuation Assets. The value of current plan assets recognized for valuation purposes.

February 27, 2009

Ms. Dee Ann Irby
City of Grosse Pointe Woods
20025 Mack Plaza
Grosse Pointe Woods, Michigan 48236

Re: City of Grosse Pointe Woods Retirement Health Care Plan

Dear Ms. Irby:

Enclosed are 10 copies of our report of the actuarial valuation of the City of Grosse Pointe Woods Retiree Health Care Plan.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Curt Powell". The signature is fluid and cursive, with the first name "Curt" and last name "Powell" clearly distinguishable.

Curt Powell

CP:lr
Enclosures