

**CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
ACTUARIAL VALUATION REPORT  
AS OF DECEMBER 31, 2008**

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August 10, 2010

Mr. William Twietmeyer  
Finance Director  
City of Traverse City  
400 Boardman Avenue  
City of Traverse City, MI 49684

Dear Mr. Twietmeyer:

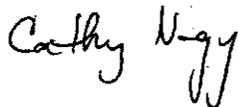
Submitted in this report are the results of an Actuarial Valuation of the assets and liabilities associated with the employer financed retiree health benefits provided by the City of Traverse City. The date of the valuation was December 31, 2008. The annual required contributions have been calculated for the fiscal years beginning 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 Traverse City's 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 Traverse City only in its entirety and only with the permission of the City of Traverse City.

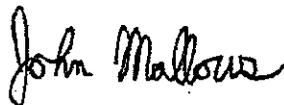
The valuation was based upon information furnished by the City of Traverse City concerning retiree health benefits, individual members, and plan finances. Data was checked for internal consistency, but was not otherwise audited.

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 (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Cathy Nagy, FSA, MAAA



John Mallows, FSA, MAAA



Brian Morris, FSA, MAAA

CN/JM/BM:sc

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## **EXECUTIVE SUMMARY**

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## EXECUTIVE SUMMARY

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### **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, 2009 and July 1, 2010 under the interest rate assumption of 8.0%. 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 premiums 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 premiums shown below include an adjustment for any implicit rate subsidy present in your pre-65 rates.

<b>Annual Required Contribution</b>	<b>8.00% Interest</b>	<b>Estimated Premiums Paid for Retirees (out of Retiree Contributions)</b>
Fiscal Year Beginning 2009	\$303,667	\$338,237
Fiscal Year Beginning 2010	317,334	383,629

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

## EXECUTIVE SUMMARY

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### 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. 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

	<b><u>8.00% Interest</u></b>
1. Present Value of Future Benefit Payments	\$5,653,373
2. Actuarial Accrued Liability	5,055,539
3. Plan Assets	1,488,166
4. Unfunded Actuarial Accrued Liability (2) – (3)	3,567,373
5. Funded Ratio (3)/(2)	29.4%

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").

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**SECTION A**  
**VALUATION RESULTS**

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**CITY OF TRAVERSE CITY - TOTAL  
DEVELOPMENT OF THE ANNUAL REQUIRED CONTRIBUTION**

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Contributions for	Development of the Annual Required Contribution
	<b><u>Fiscal Year Beginning 2009</u></b>
	<b><u>8.00% Interest</u></b>
Employer Normal Cost	\$ 96,468
Amortization of Unfunded Actuarial Accrued Liability	<u>207,199</u>
Annual Required Contribution (ARC)	\$303,667
	<b><u>Fiscal Year Beginning 2010</u></b>
Annual Required Contribution (ARC)	\$317,334

The ARC shown in this report has been calculated to increase at 4.50% per year. The unfunded actuarial accrued liabilities were amortized as a level percent of active member payroll over a period of 28 years. A 30-year amortization period for unfunded actuarial accrued liabilities is the maximum period that complies with the GASB requirements.

**CITY OF TRAVERSE CITY - TOTAL  
DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY  
AS OF DECEMBER 31, 2008**

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	<u>8.00% Interest</u>
A. Present Value of Future Benefits	
i) Retirees and Beneficiaries	\$2,960,156
ii) Vested Terminated Members	0
iii) Active Members	<u>2,693,217</u>
Total Present Value of Future Benefits	\$5,653,373
B. Present Value of Future Normal Costs	597,834
C. Actuarial Accrued Liability (A.-B.)	5,055,539
D. Actuarial Value of Assets	1,488,166
E. Unfunded Actuarial Accrued Liability (C.-D.)	\$3,567,373
F. Funded Ratio (D./C.)	29.4%

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 DECEMBER 31, 2008**

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OPEB Report Group	Annual Required Contribution for July 01, 2009 - June 30, 2010
	<u><b>8.00% Interest</b></u>
City Administrative	\$ 69,869
Light and Power	201,470
City GME	25,738
City GME-Clerical	<u>6,590</u>
<b>Total</b>	<b>\$303,667</b>

OPEB Report Group	Annual Required Contribution for July 01, 2010 - June 30, 2011
	<u><b>8.00% Interest</b></u>
City Administrative	\$ 73,014
Light and Power	210,535
City GME	26,897
City GME-Clerical	<u>6,888</u>
<b>Total</b>	<b>\$317,334</b>

**CITY OF TRAVERSE CITY - CITY ADMINISTRATIVE  
DEVELOPMENT OF THE ANNUAL REQUIRED CONTRIBUTION**

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Contributions for	Development of the Annual Required Contribution
	<b><u>Fiscal Year Beginning 2009</u></b>
	<b><u>8.00% Interest</u></b>
Employer Normal Cost	\$31,477
Amortization of Unfunded Actuarial Accrued Liability	<u>38,392</u>
Annual Required Contribution (ARC)	\$69,869
	<b><u>Fiscal Year Beginning 2010</u></b>
Annual Required Contribution (ARC)	\$73,014

The ARC shown in this report has been calculated to increase at 4.50% per year. The unfunded actuarial accrued liabilities were amortized as a level percent of active member payroll over a period of 28 years. A 30-year amortization period for unfunded actuarial accrued liabilities is the maximum period that complies with the GASB requirements.

**CITY OF TRAVERSE CITY - CITY ADMINISTRATIVE  
DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY  
AS OF DECEMBER 31, 2008**

---

	<u>8.00% Interest</u>
A. Present Value of Future Benefits	
i) Retirees and Beneficiaries	\$105,550
ii) Vested Terminated Members	0
iii) Active Members	<u>776,889</u>
Total Present Value of Future Benefits	\$882,439
B. Present Value of Future Normal Costs	172,918
C. Actuarial Accrued Liability (A.-B.)	709,521
D. Actuarial Value of Assets	48,522
E. Unfunded Actuarial Accrued Liability (C.-D.)	\$660,999
F. Funded Ratio (D./C.)	6.8%

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 TRAVERSE CITY - LIGHT AND POWER**  
**DEVELOPMENT OF THE ANNUAL REQUIRED CONTRIBUTION**

Contributions for	Development of the Annual Required Contribution
	<b><u>Fiscal Year Beginning 2009</u></b>
	<b><u>8.00% Interest</u></b>
Employer Normal Cost	\$ 36,235
Amortization of Unfunded Actuarial Accrued Liability	<u>165,235</u>
Annual Required Contribution (ARC)	\$201,470
	<b><u>Fiscal Year Beginning 2010</u></b>
Annual Required Contribution (ARC)	\$210,535

The ARC shown in this report has been calculated to increase at 4.50% per year. The unfunded actuarial accrued liabilities were amortized as a level percent of active member payroll over a period of 28 years. A 30-year amortization period for unfunded actuarial accrued liabilities is the maximum period that complies with the GASB requirements.

**CITY OF TRAVERSE CITY - LIGHT AND POWER  
DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY  
AS OF DECEMBER 31, 2008**

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	<u><b>8.00% Interest</b></u>
A. Present Value of Future Benefits	
i) Retirees and Beneficiaries	\$2,103,185
ii) Vested Terminated Members	0
iii) Active Members	<u>1,119,801</u>
Total Present Value of Future Benefits	\$3,222,986
B. Present Value of Future Normal Costs	228,518
C. Actuarial Accrued Liability (A.-B.)	2,994,468
D. Actuarial Value of Assets	149,600
E. Unfunded Actuarial Accrued Liability (C.-D.)	\$2,844,868
F. Funded Ratio (D./C.)	5.0%

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 TRAVERSE CITY – CITY GME**  
**DEVELOPMENT OF THE ANNUAL REQUIRED CONTRIBUTION**

Contributions for	Development of the Annual Required Contribution
	<b><u>Fiscal Year Beginning 2009</u></b>
	<b><u>8.00% Interest</u></b>
Employer Normal Cost	\$22,680
Amortization of Unfunded Actuarial Accrued Liability	<u>3,058</u>
Annual Required Contribution (ARC)	\$25,738
	<b><u>Fiscal Year Beginning 2010</u></b>
Annual Required Contribution (ARC)	\$26,897

The ARC shown in this report has been calculated to increase at 4.50% per year. The unfunded actuarial accrued liabilities were amortized as a level percent of active member payroll over a period of 28 years. A 30-year amortization period for unfunded actuarial accrued liabilities is the maximum period that complies with the GASB requirements.

**CITY OF TRAVERSE CITY – CITY GME**  
**DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY**  
**AS OF DECEMBER 31, 2008**

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	<u><b>8.00% Interest</b></u>
A. Present Value of Future Benefits	
i) Retirees and Beneficiaries	\$ 660,060
ii) Vested Terminated Members	0
iii) Active Members	<u>651,193</u>
Total Present Value of Future Benefits	\$1,311,253
B. Present Value of Future Normal Costs	154,263
C. Actuarial Accrued Liability (A.-B.)	1,156,990
D. Actuarial Value of Assets	1,104,338
E. Unfunded Actuarial Accrued Liability (C.-D.)	\$52,652
F. Funded Ratio (D./C.)	95.4%

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 TRAVERSE CITY – CITY GME-CLERICAL  
DEVELOPMENT OF THE ANNUAL REQUIRED CONTRIBUTION**

<b>Contributions for</b>	<b>Development of the Annual Required Contribution</b>
	<b><u>Fiscal Year Beginning 2009</u></b>
	<b><u>8.00% Interest</u></b>
Employer Normal Cost	\$6,076
Amortization of Unfunded Actuarial Accrued Liability	514
Annual Required Contribution (ARC)	\$6,590
	<b><u>Fiscal Year Beginning 2010</u></b>
Annual Required Contribution (ARC)	\$6,888

The ARC shown in this report has been calculated to increase at 4.50% per year. The unfunded actuarial accrued liabilities were amortized as a level percent of active member payroll over a period of 28 years. A 30-year amortization period for unfunded actuarial accrued liabilities is the maximum period that complies with the GASB requirements.

**CITY OF TRAVERSE CITY – CITY GME-CLERICAL  
DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY  
AS OF DECEMBER 31, 2008**

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	<u>8.00% Interest</u>
A. Present Value of Future Benefits	
i) Retirees and Beneficiaries	\$91,361
ii) Vested Terminated Members	0
iii) Active Members	<u>145,334</u>
Total Present Value of Future Benefits	\$236,695
B. Present Value of Future Normal Costs	42,135
C. Actuarial Accrued Liability (A.-B.)	194,560
D. Actuarial Value of Assets	185,706
E. Unfunded Actuarial Accrued Liability (C.-D.)	\$8,854
F. Funded Ratio (D./C.)	95.4%

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

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**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 the assumed rate of return of 8.00%. This return assumption may be appropriate to develop the liabilities of the plan in the case that the Plan Sponsor chooses to pre-fund the entire ARC and invests the resulting assets in such a way as to anticipate 8.00% return. If the Plan Sponsor chooses to pre-fund with contributions less than the ARC (or not pre-fund at all), GASB requires the use of a lower rate of return assumption.

**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 biennially unless there are significant changes in the OPEB.

**COMMENT C:** The contribution rates shown include amortization of the unfunded actuarial accrued liability over 28 years. The maximum time period permitted by the GASB Statements No. 43 and No. 45 is 30 years. A shorter amortization period results in a higher ARC. When a plan is prefunding we suggest dropping the amortization period in order to promote progress in funding.

**COMMENT D:** Recently enacted health care reform legislation has had no impact on the December 31, 2008 valuation. However, there may be an impact on future valuations as the provisions of the new law are implemented.

**COMMENT E:** Please note that health care premiums increased less than expected since the last actuarial valuation. In addition, current retirees moved to a less expensive plan.

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**SECTION B**

**RETIREE PREMIUM RATE DEVELOPMENT**

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## RETIREE PREMIUM RATE DEVELOPMENT

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Initial premium rates were developed for the two classes of retirees (pre-65 and post-65). The fully-insured rates provided by Traverse City were utilized to determine the appropriate premium rates. The pre-65 fully-insured premiums are blended rates based on the combined experience of active and pre-65 retired members; therefore, there is an implicit employer subsidy for the non-Medicare eligible retirees since the average costs of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees. The true per capita cost for the pre-65 retirees is developed by adjusting for demographic differences between the active employees and retirees to reflect this implicit rate subsidy for the retirees. For the post-65 retirees, the fully-insured premium rate is used as the basis of the initial per capita cost without adjustments since the rate reflects the actual claims experience of the post-65 retiree group.

For the current active employees, different retiree health benefit options are available when they retire. We have developed separate premium rates for these two groups in order to reflect the benefit differences.

Age graded and sex distinct premiums are utilized by 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 combination. The age/sex specific premiums more accurately reflect the health care utilization and cost at that age.

## RETIREE PREMIUM RATE DEVELOPMENT

The combined monthly one-person medical and drug premiums at select ages are shown below:

<b>For Those Not Eligible for Medicare (Pre-65)</b>				
<b>Age</b>	<b>Future Retirees</b>		<b>Current Retirees</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
40	\$ 235.35	\$ 368.73	\$ 222.22	\$ 348.17
50	432.61	490.17	408.49	462.84
60	710.32	682.77	670.71	644.70
64	826.78	766.34	780.68	723.61

<b>For Those Eligible for Medicare (Post-65)</b>				
<b>Age</b>	<b>Future Retirees</b>		<b>Current Retirees</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
65	\$ 235.51	\$ 216.87	\$ 230.51	\$ 212.27
75	301.58	267.65	295.19	261.98
85	336.29	295.24	329.16	288.99

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**SECTION C**  
**SUMMARY OF BENEFITS**

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**CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN**  
**CITY ADMINISTRATIVE**  
**SUMMARY OF THE BENEFIT PROVISIONS AS OF DECEMBER 31, 2008**

Leaving Employment as a Result of	Eligibility for Benefit	Benefit Provided by Employer		Retiree Share of Cost	
		Retiree	Spouse	Retiree	Spouse
<b>Normal Retirement</b>	Age 55 with 25 years of service Age 60 with 6 years of service	Medical and Prescription Drug	Medical and Prescription Drug	100% of single Priority #1 premium is deposited into the Retiree Health Savings account for the first three years of retirement. After three years the retiree pays 100% of the premium.	100%
<b>Early Retirement</b>	Age 55 with 15 years of service Age 50 with 25 years of service	Medical and Prescription Drug	Medical and Prescription Drug	100% of single Priority #1 premium is deposited into the Retiree Health Savings account for the first three years of retirement. After three years the retiree pays 100% of the premium.	100%
<b>Deferred Vested Termination</b>	Not Offered	None	None	N/A	N/A
<b>Non-Duty Disability</b>	6 years of service	Medical and Prescription Drug	Medical and Prescription Drug	100% of single Priority #1 premium is deposited into the Retiree Health Savings account for the first three years of retirement. After three years the retiree pays 100% of the premium.	100%
<b>Duty Disability</b>	Any Time	Medical and Prescription Drug	Medical and Prescription Drug	100% of single Priority #1 premium is deposited into the Retiree Health Savings account for the first three years of retirement. After three years the retiree pays 100% of the premium.	100%
<b>Non-Duty Death-in-Service</b>	6 years of service	N/A	Medical and Prescription Drug	N/A	100%
<b>Duty Death-in-Service</b>	Any Time	N/A	Medical and Prescription Drug	N/A	100%

**CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
LIGHT AND POWER**

**SUMMARY OF THE BENEFIT PROVISIONS AS OF DECEMBER 31, 2008**

Leaving Employment as a Result of	Eligibility for Benefit	Benefit Provided by Employer		Retiree Share of Cost	
		Retiree	Spouse	Retiree	Spouse
Normal Retirement	Division 10 Age 55 with 25 years of service Age 60 with 10 years of service	Medical and Prescription Drug	Medical and Prescription Drug	None	100%
	Division 12 Age 50 with 25 years of service Age 60 with 6 years of service	Medical and Prescription Drug	Medical and Prescription Drug	None	100%
Early Retirement	Age 55 with 15 years of service Age 50 with 25 years of service	Medical and Prescription Drug	Medical and Prescription Drug	None	100%
Deferred Vested Termination	Not Offered	None	None	N/A	N/A
Non-Duty Disability	10 years of service	Medical and Prescription Drug	Medical and Prescription Drug	None	100%
Duty Disability	Any Time	Medical and Prescription Drug	Medical and Prescription Drug	None	100%
Non-Duty Death-in-Service	10 years of service	N/A	Medical and Prescription Drug	N/A	100%
Duty Death-in-Service	Any Time	N/A	Medical and Prescription Drug	N/A	100%

**CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
CITY GME**

**SUMMARY OF THE BENEFIT PROVISIONS AS OF DECEMBER 31, 2008**

Leaving Employment as a Result of	Eligibility for Benefit	Benefit Provided by Employer		Retiree Share of Cost	
		Retiree	Spouse	Retiree	Spouse
<b>Normal Retirement</b>	Age 55 with 25 years of service Age 60 with 6 years of service	Medical and Prescription Drug	Medical and Prescription Drug	Each month \$225 is deposited into the Retiree Health Savings account. Retiree pays any amount over \$225.	100%
<b>Early Retirement</b>	Age 55 with 15 years of service Age 50 with 25 years of service	Medical and Prescription Drug	Medical and Prescription Drug	Each month \$225 is deposited into the Retiree Health Savings account. Retiree pays any amount over \$225.	100%
<b>Deferred Vested Termination</b>	Not Offered	None	None	N/A	N/A
<b>Non-Duty Disability</b>	6 years of service	Medical and Prescription Drug	Medical and Prescription Drug	Each month \$225 is deposited into the Retiree Health Savings account. Retiree pays any amount over \$225.	100%
<b>Duty Disability</b>	Any Time	Medical and Prescription Drug	Medical and Prescription Drug	Each month \$225 is deposited into the Retiree Health Savings account. Retiree pays any amount over \$225.	100%
<b>Non-Duty Death-in-Service</b>	6 years of service	N/A	Medical and Prescription Drug	N/A	100%
<b>Duty Death-in-Service</b>	Any Time	N/A	Medical and Prescription Drug	N/A	100%

**CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
CITY GME-CLERICAL**

**SUMMARY OF THE BENEFIT PROVISIONS AS OF DECEMBER 31, 2008**

Leaving Employment as a Result of	Eligibility for Benefit	Benefit Provided by Employer		Retiree Share of Cost	
		Retiree	Spouse	Retiree	Spouse
<b>Normal Retirement</b>	Age 55 with 25 years of service Age 60 with 6 years of service	Medical and Prescription Drug	Medical and Prescription Drug	Each month \$225 is deposited into the Retiree Health Savings account. Retiree pays any amount over \$225.	100%
<b>Early Retirement</b>	Age 55 with 15 years of service Age 50 with 25 years of service	Medical and Prescription Drug	Medical and Prescription Drug	Each month \$225 is deposited into the Retiree Health Savings account. Retiree pays any amount over \$225.	100%
<b>Deferred Vested Termination</b>	Not Offered	None	None	N/A	N/A
<b>Non-Duty Disability</b>	6 years of service	Medical and Prescription Drug	Medical and Prescription Drug	Each month \$225 is deposited into the Retiree Health Savings account. Retiree pays any amount over \$225.	100%
<b>Duty Disability</b>	Any Time	Medical and Prescription Drug	Medical and Prescription Drug	Each month \$225 is deposited into the Retiree Health Savings account. Retiree pays any amount over \$225.	100%
<b>Non-Duty Death-in-Service</b>	6 years of service	N/A	Medical and Prescription Drug	N/A	100%
<b>Duty Death-in-Service</b>	Any Time	N/A	Medical and Prescription Drug	N/A	100%

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**SECTION D**  
**SUMMARY OF PARTICIPANT DATA**

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**CITY OF TRAVERSE CITY - TOTAL  
TOTAL ACTIVE MEMBERS AS OF DECEMBER 31, 2008  
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	4							4
25-29	10	2	1					13
30-34	7	5	1					13
35-39	3	1	2	2				8
40-44	4	4	3	2				13
45-49	3	2	4	5	3			17
50-54	2	8	1	1	12	9	4	37
55-59	4	2	1	5	5	3	4	24
60-64	2	2	2	1	1	1	2	11
65 & Over		1	1			3		5
<b>Totals</b>	<b>39</b>	<b>27</b>	<b>16</b>	<b>16</b>	<b>21</b>	<b>16</b>	<b>10</b>	<b>145</b>

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

Age:                   46.9   years  
Service:               14.0   years

**CITY OF TRAVERSE CITY - CITY ADMINISTRATIVE  
ACTIVE MEMBERS AS OF DECEMBER 31, 2008  
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			1					1
30-34	1	1						2
35-39				1				1
40-44		1		1				2
45-49	2	1	1	1				5
50-54		2	1		5	4		12
55-59	1	1		2		1	1	6
60-64	1	2			1			4
65 & Over		1	1			1		3
<b>Totals</b>	<b>5</b>	<b>9</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>36</b>

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

**Age:** 51.5 years  
**Service:** 15.3 years

**CITY OF TRAVERSE CITY - LIGHT AND POWER  
ACTIVE MEMBERS AS OF DECEMBER 31, 2008  
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	3							3
25-29	2							2
30-34	2	1						3
35-39			1	1				2
40-44	2	1		1				4
45-49			1	2	3			6
50-54		1		1	4	4	1	11
55-59	2			1	2		1	6
60-64	1					1		2
65 & Over								
<b>Totals</b>	<b>12</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>9</b>	<b>5</b>	<b>2</b>	<b>39</b>

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

**Age:** 45.8 years  
**Service:** 14.5 years

**CITY OF TRAVERSE CITY - CITY GME  
ACTIVE MEMBERS AS OF DECEMBER 31, 2008  
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	6	1						7
30-34	1	2	1					4
35-39	3	1	1					5
40-44	1	2	3					6
45-49	1	1	2	2				6
50-54		5			3	1	1	10
55-59	1		1	2	3	2	1	10
60-64			2				2	4
65 & Over						2		2
<b>Totals</b>	<b>14</b>	<b>12</b>	<b>10</b>	<b>4</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>55</b>

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

**Age:** 45.9 years  
**Service:** 13.6 years

**CITY OF TRAVERSE CITY - CITY GME-CLERICAL  
ACTIVE MEMBERS AS OF DECEMBER 31, 2008  
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	2	1						3
30-34	3	1						4
35-39								
40-44	1							1
45-49								
50-54	2						2	4
55-59		1					1	2
60-64				1				1
65 & Over								
<b>Totals</b>	<b>8</b>	<b>3</b>		<b>1</b>			<b>3</b>	<b>15</b>

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:               10.7 years

**CITY OF TRAVERSE CITY**  
**TOTAL INACTIVE MEMBERS AS OF DECEMBER 31, 2008**  
**BY ATTAINED AGE**

---

**Number of Retiree and Beneficiary Contracts**

	<b>Opt-Out/ Ineligible</b>	<b>One Person Coverage</b>	<b>Two Person Coverage*</b>	<b>Total</b>
Male	34	32	21	87
Female	35	19	0	54
<b>Total</b>	<b>69</b>	<b>51</b>	<b>21</b>	<b>141</b>

*\* Includes family coverage*

<b>Age</b>	<b>Current Retirees</b>				
	<b>Number of Those Covered</b>				
	<b>City Administrative</b>	<b>Light and Power</b>	<b>City GME</b>	<b>City GME-Clerical</b>	<b>Total</b>
0-44					
45-49		1			1
50-54		4	1		5
55-59	1	5	4		10
60-64	4	5	4	1	14
65-69		7	7	2	16
70-74		4	4		8
75-79	2	4	2		8
80-84	2	1	1	1	5
85-89		4	1		5
90-94					
95 +					
<b>Totals</b>	<b>9</b>	<b>35</b>	<b>24</b>	<b>4</b>	<b>72</b>

There are 0 terminated members eligible for deferred Plan benefits.

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**SECTION E**

**ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS**

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**ACTUARIAL METHODS FOR  
CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
AS OF DECEMBER 31, 2008**

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**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. Assets were allocated among the City GME and City GME-Clerical groups shown in this report in proportion to each group's Actuarial Accrued Liability on the valuation date.

**ACTUARIAL METHODS FOR  
CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
AS OF DECEMBER 31, 2008**

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The following amortization factors were used in developing the Annual Required Contribution for the fiscal years shown:

<b>8.00% Interest</b>	<b>Fiscal Year Beginning July 01,</b>	
	<b>2009</b>	<b>2010</b>
Level Percent of Pay	17.8926	17.4971

**ACTUARIAL ASSUMPTIONS FOR  
CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
AS OF DECEMBER 31, 2008**

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*The rate of investment return* was 8.00% 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 & Seniority	Base (Economic)	Increase Next Year
20	8.40 %	4.50 %	12.90 %
25	5.33	4.50	9.83
30	3.26	4.50	7.76
35	2.05	4.50	6.55
40	1.30	4.50	5.80
45	0.81	4.50	5.31
50	0.52	4.50	5.02
55	0.30	4.50	4.80

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 TRAVERSE CITY RETIREE HEALTH CARE PLAN  
AS OF DECEMBER 31, 2008 (CONTINUED)**

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*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 blended 50% male/50% female. Sample rates are as follows:

<b>Sample Attained Ages</b>	<b>Probability of Dying Next Year (Healthy)</b>	<b>Future Life Expectancy (years)</b>
50	0.20%	32.60
55	0.34	27.98
60	0.62	23.53
65	1.16	19.40
70	1.87	15.66
75	2.99	12.24
80	5.07	9.25

**ACTUARIAL ASSUMPTIONS FOR  
CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
AS OF DECEMBER 31, 2008 (CONTINUED)**

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

<b>Sample Attained Ages</b>	<b>Probability of Dying Next Year (Disabled)</b>	<b>Future Life Expectancy (years)</b>
50	0.62%	23.53
55	1.16	19.40
60	1.87	15.66
65	2.99	12.24
70	5.07	9.25
75	8.25	6.81
80	13.46	4.85

These assumptions are used to measure the probabilities of each benefit payment being made after retirement.

The same mortality tables are used for active members with 90% of active deaths assumed non-duty and 10% assumed duty related.

**ACTUARIAL ASSUMPTIONS FOR  
CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
AS OF DECEMBER 31, 2008 (CONTINUED)**

**Retirement Rates**

A schedule of retirement rates is used to measure the probability of eligible members retiring during the next year. To reflect the impact plan design may have on retirement experience, separate retirement rates apply to valuation divisions without Benefits F50, F55 or F(N), to those divisions that have adopted F55, to those that have adopted F50, and to those that have adopted F(N). The retirement rates in use for each category are shown below and on the next page.

**Normal Retirement - Age Based Benefit Provisions - F(N) Not Adopted**

Retirement Ages	Percent of Eligible Active Members Retiring Within Next Year		
	Without F50 or F55 or F(N)	With F55	With F50
50			22%
51			22
52			22
53			22
54			24
55		18%	18
56		15	14
57		10	16
58		15	18
59		20	18
60	20%	20	20
61	24	24	24
62	24	24	24
63	24	24	24
64	27	27	27
65	30	30	30
66	30	30	30
67	30	30	30
68	30	30	30
69	30	30	30
70	100	100	100

**ACTUARIAL ASSUMPTIONS FOR  
CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
AS OF DECEMBER 31, 2008 (CONTINUED)**

**Normal Retirement - Service Based Benefit Provision - F(N) Adopted**

Age	Percent of Eligible Active Members Retiring Within Next Year	Age	Percent of Eligible Active Members Retiring Within Next Year	Age	Percent of Eligible Active Members Retiring Within Next Year
40	22%	51	22%	61	24%
41	22	52	22	62	24
42	22	53	22	63	24
43	22	54	24	64	27
44	22	55	18	65	30
45	22	56	14	66	30
46	22	57	16	67	30
47	22	58	18	68	30
48	22	59	18	69	30
49	22	60	20	70	100
50	22				

Municipalities that have adopted a non-standard benefit multiplier, for pension plan benefits, after December 31, 1996 that is in excess of the B-4, 2.5% multiplier, will have a retirement rate equal to 75% at the first age at which unreduced pension plan benefits are available.

**ACTUARIAL ASSUMPTIONS FOR  
CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
AS OF DECEMBER 31, 2008 (CONTINUED)**

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**Early Retirement - Reduced Pension Benefit**

<b>Retirement Ages</b>	<b>Percent of Eligible Active Members Retiring Within Next Year</b>
50	2%
51	2
52	3
53	5
54	8
55	4
56	4
57	4
58	6
59	8

**ACTUARIAL ASSUMPTIONS FOR  
CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
AS OF DECEMBER 31, 2008 (CONTINUED)**

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*Rates of separation from active membership* are used to estimate the number of employees at each age that are expected to terminate employment before qualifying for retirement benefits. The rates of separation from active membership do not apply to members eligible to retire, and do not include separation on account of death or disability. The assumed rates of separation applied in the current valuation are based on years of service, and scaled up or down according to each group's experience.

<b>Group</b>	<b>Separation Rate Scaling Factor</b>
All Divisions	90%

The base separation rates (see the table below) are multiplied by the scaling factor to obtain the assumed withdrawal rates. Sample rates of separation from active employment, before application of the scaling factor, are shown below.

<b>Sample Years of Service</b>	<b>% of Active Members Separating Within the Next Year</b>
0	20.00%
1	17.00
2	14.00
3	11.00
4	9.00
5	6.50
10	5.00
15	3.70
20	3.00
25	2.70
30	2.60
34 and over	2.40

**ACTUARIAL ASSUMPTIONS FOR  
CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
AS OF DECEMBER 31, 2008 (CONTINUED)**

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**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	Percent Becoming Disabled Within the Next Year
20	0.02%
25	0.02
30	0.02
35	0.06
40	0.06
45	0.11
50	0.24
55	0.41
60	0.41
65	0.41

85% of the disabilities are assumed to be non-duty and 15% of the disabilities are assumed to be duty related. For those plans which have adopted disability provision D-2, for pension benefit purposes, 70% of the disabilities are assumed to be non-duty and 30% are assumed to be duty related.

**ACTUARIAL ASSUMPTIONS FOR  
CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
AS OF DECEMBER 31, 2008 (CONCLUDED)**

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

Year After Valuation	Health Care Trend Inflation Rates
	Medical/Drug
1	9.00%
2	8.50
3	8.00
4	7.50
5	7.00
6	6.50
7	6.00
8	5.50
9	5.00
10	4.50
11	4.50
12	4.50
13	4.50
14	4.50
15	4.50
16 +	4.50

**MISCELLANEOUS AND TECHNICAL ASSUMPTIONS FOR  
CITY OF TRAVERSE CITY RETIREE HEALTH CARE PLAN  
AS OF DECEMBER 31, 2008**

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- Administrative Expenses**      No explicit assumption has been made for administrative expenses.
- Decrement Operation**      Disability and withdrawal do 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 contribution in this report.
- Marriage Assumption**      70% of males and 70% 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	
<b>City Administrative</b>				
<b>Male</b>	50%	50%	100%	0%
<b>Female</b>	50%	50%	100%	0%
<b>Light and Power</b>				
<b>Male</b>	65%	15%	100%	20%
<b>Female</b>	65%	15%	100%	20%
<b>City GME</b>				
<b>Male</b>	45%	15%	100%	40%
<b>Female</b>	45%	15%	100%	40%
<b>City GME-Clerical</b>				
<b>Male</b>	45%	15%	100%	40%
<b>Female</b>	45%	15%	100%	40%

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**APPENDIX A**  
**OVERVIEW**

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## **GASB BACKGROUND**

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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)

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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
<b>Phase 1 Govts.</b> - \$100 million or more	December 15, 2005	December 15, 2006
<b>Phase 2 Govts.</b> - \$10 million or more, but less than \$100 million	December 15, 2006	December 15, 2007
<b>Phase 3 Govts.</b> - Less than \$10 million	December 15, 2007	December 15, 2008

## GASB STANDARDS

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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**

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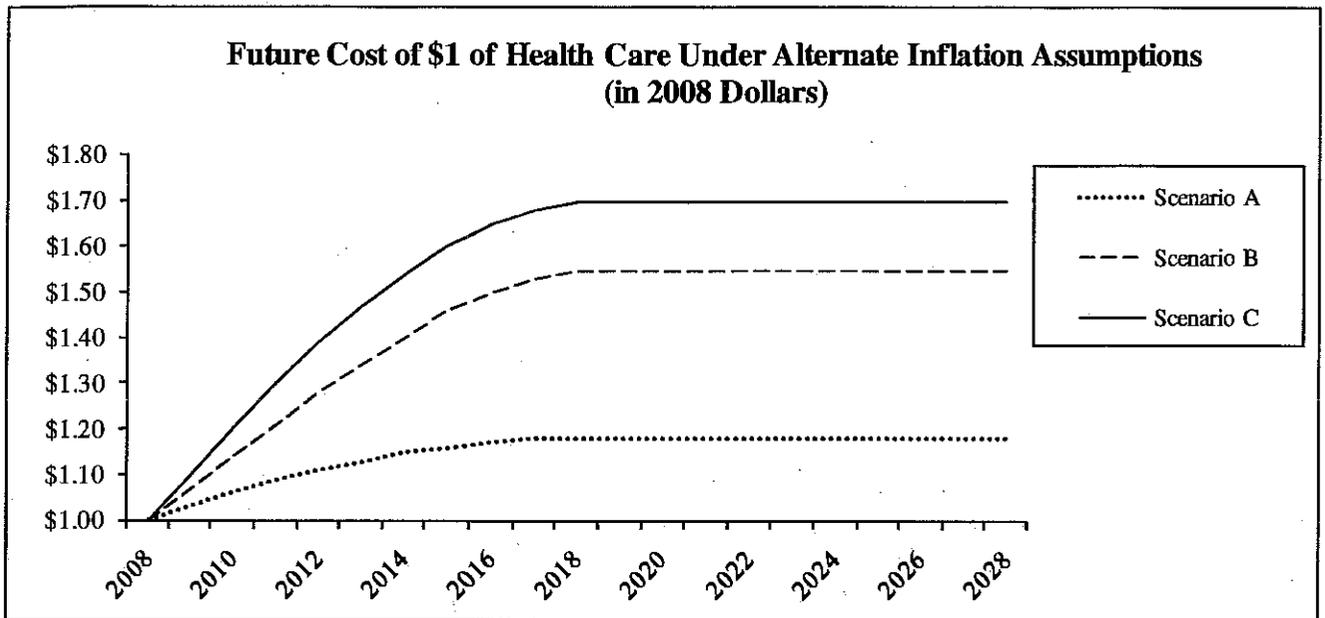
In any long-term actuarial valuation (such as for pensions and OPEB) certain demographic, economic and behavioral assumptions must be made concerning the population, invested assets and the benefits provided. These actuarial assumptions form the basis for the actuarial model which is used to project 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 1960 to 2007, general inflation averaged about 4.5%, while health expenditures per person increased by an average of close to 9% 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 increases 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

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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

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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.

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**APPENDIX B**

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## GLOSSARY

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**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

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**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

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**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.