

May 2011

Actuarial Valuation Report as
of January 1, 2010 for the 2010
Fiscal Year

City of Kalamazoo Postretirement Welfare
Benefits Plan

MERCER

Contents

Cover letter

1. Report highlights.....	1
2. Important notices	3
3. Valuation results	6
4. GASB disclosures.....	8
5. Plan assets	11
6. Participant data.....	12
7. Actuarial methods and policies	14
8. Summary of actuarial assumptions.....	16
9. Summary of plan provisions.....	21

600 Renaissance Center, Suite 1800
Detroit, MI 48243
313 259-5500
www.mercer.com

Mr. Thomas C. Skrobola
Director of Management Services / CFO
City of Kalamazoo
241 W. South Street
Kalamazoo, MI 49007

May 17, 2011

Subject: Actuarial valuation report

Dear Tom:

Submitted in this report are the January 1, 2010 actuarial valuation results for The City of Kalamazoo. The purposes of this report are to:

- Present Mercer's actuarial estimates of the Plan's liabilities and expenses for the City of Kalamazoo to incorporate, as the City of Kalamazoo deems appropriate, in its financial statements; and
- Provide projected estimated Plan liabilities and expenses on both an open and closed participant basis to assist the City of Kalamazoo in budget preparation

We are available to answer any questions on the material in this report or to provide explanations or further details as appropriate. The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. We are not aware of any direct or material indirect financial interest or relationship, including investments or other services that could create a conflict of interest, that would impair the objectivity of our work.

Respectfully submitted,


James C. Fries, ASA, MAAA
Enrollment No.: 11-06416


Bonita J. Wurst, ASA, MAAA
Enrollment No.: 11-05462


Marcie S. Gunnell, ASA, MAAA

1. Report highlights

Below are highlights of the results from the January 1, 2010 valuation and a comparison to the last actuarial valuation as of January 1, 2008. The effects of these changes are shown on page 2 of this report.

Changes in plan provisions

Health care reform legislation will be impacting employer sponsored medical plans over the next few years. One aspect of health care reform is the Excise Tax on High-Cost Employer Health Plans. Beginning in 2018, the legislation imposes a nondeductible 40 percent excise tax on the "excess benefit" provided to a retiree in any month under any employer-sponsored health plan. The 2010 valuation and GASB results were updated to reflect anticipated future excise tax obligations.

Significant uncertainties exist regarding the excise tax on high cost plans. Because of those uncertainties, calculation of a precise liability for this tax is impossible at this time. We discussed with the City of Kalamazoo potential approaches to estimate the potential range of liabilities and they concluded that their best estimate of the effect of the tax is a 1.25% change in the January 1, 2010 accrued liability and a 1.25% to 3.25% increase on the projected accrued liability. As such, this report includes these increases in liability to reflect the excise tax.

Changes in actuarial assumptions

There were numerous changes to actuarial assumptions since the previous valuation.

The retirement, withdrawal and disability rates, as well as the salary increase assumption, were changed to be consistent with those utilized in the City of Kalamazoo Employees Retirement System valuation report as of December 31, 2009 produced by Gabriel Roeder Smith & Company dated May 11, 2010.

The mortality assumption was changed to reflect future improvements in life expectancies.

Claims costs, medical cost trend rates and aging factors were updated to reflect plan experience and expected future experience.

Changes in actuarial methods

There were no changes in actuarial methods since the prior valuation.

Impact of changes

The impact on the actuarial accrued liability, normal cost and ARC as of January 1, 2010 are detailed below:

	Actuarial Accrued Liability	Normal Cost	Annual Required Contribution (ARC)
As of prior valuation (2008)	\$ 206,855,000	\$ 5,196,000	\$ 18,129,000
Expected increase to 2010	17,365,000	553,000	1,644,000
Expected as of current valuation (2010)	\$ 224,220,000	\$ 5,749,000	19,773,000
Increase/(decrease) due to change in:			
census update	(780,000)	(136,000)	(190,000)
mortality assumption	10,859,000	333,000	1,015,000
salary increase assumption	509,000	13,000	45,000
disability incidence assumption	(323,000)	(14,000)	(34,000)
withdrawal assumption	(841,000)	124,000	78,000
retirement assumption	1,120,000	57,000	128,000
starting claims cost	(5,147,000)	(285,000)	(614,000)
medical trend assumption	30,318,000	739,000	2,633,000
recognition of excise tax obligations	3,247,000	82,000	285,000
Total change	\$ 38,962,000	\$ 913,000	\$ 3,346,000
As of current valuation (2010)	\$ 263,182,000	\$ 6,662,000	\$ 23,119,000

The census update reflects the impact of the change in census projected from 2008 to actual in 2010. The mortality assumption is the expected rates of death for both current retirees and current employees (potential future retirees). The salary increase rate is used to project future salaries for current employees. The rates of disability incidence, withdrawal (employee turnover) and retirement are used to project the probability of receipt and expected retiree medical and life insurance benefit commencement dates for the current employee population. The starting claims cost is the assumed average cost of annual 2010 benefits. The 2010 claims costs are projected to future years based on the assumed medical trend rates. Please refer to Section 8 for a detailed summary of the actuarial assumptions.

2. Important notices

Mercer has prepared this report exclusively for the City of Kalamazoo; Mercer is not responsible for reliance upon this report by any other party. Subject to this limitation, the City of Kalamazoo may direct that this report be provided to its auditors in connection with audits of the Plan or its sponsoring entities.

The only purposes of this report are to:

- Present Mercer's actuarial estimates of the Plan's liabilities and expenses for the City of Kalamazoo to incorporate, as the City of Kalamazoo deems appropriate, in its financial statements; and
- Provide projected estimated Plan liabilities and expenses on both an open and closed participant basis to assist the City of Kalamazoo in budget preparation

This report may not be used for any other purpose; Mercer is not responsible for the consequences of any unauthorized use.

All projections are based on the information and data available at a point in time. Many variables will affect the projected results and could result in major deviations due to unforeseen and random events or actuarial experience that is more or less favorable than assumed. Projected future liability should be interpreted as having a range of variability from the estimate.

Further, the estimates set forth in this report have been prepared before regulations needed to implement the PPACA and Reconciliation Act have been issued, including clarifications and technical correction, and without comprehensive financial calculations that may be required. (For example, some Health Care Reform provisions will likely involve calculations at the individual employee level.) Accordingly, these estimates are not an actuarial opinion. Financial and design decisions should be made only after the City of Kalamazoo's careful consideration of alternative future conditions and legislative scenarios, and not on the basis of the estimates illustrated here.

Decisions about benefit changes, granting new benefits, investment policy, funding policy, benefit security and/or benefit-related issues should not be made on the basis of this valuation, but only after careful consideration of alternative economic, financial, demographic and societal factors, including financial scenarios that assume future sustained investment losses.

The City of Kalamazoo is solely responsible for selecting the plan's investment policies, asset allocations and individual investments. Mercer's actuaries have not provided any investment advice to the City of Kalamazoo.

A valuation report is only a snapshot of a Plan's estimated financial condition at a particular point in time; it does not predict the Plan's future financial condition or its ability to pay benefits in the future and does not provide any guarantee of future financial soundness of the Plan. Over time, a plan's total cost will depend on a number of factors, including the amount of benefits the plan pays, the number of people paid benefits, the period of time over which benefits are paid, plan expenses and the amount earned on

any assets invested to pay benefits. These amounts and other variables are uncertain and unknowable at the valuation date.

Because modeling all aspects of a situation is not possible or practical, we may use summary information, estimates, or simplifications of calculations to facilitate the modeling of future events in an efficient and cost-effective manner. We may also exclude factors or data that are immaterial in our judgment. Use of such simplifying techniques does not, in our judgment, affect the reasonableness of valuation results for the plan.

To prepare the valuation report, actuarial assumptions, as described in Section 8, are used in a forward looking financial and demographic model to present a single scenario from a wide range of possibilities; the results based on that single scenario are included in the valuation. The future is uncertain and the plan's actual experience will differ from those assumptions; these differences may be significant or material because these results are very sensitive to the assumptions made and, in some cases, to the interaction between the assumptions.

Different assumptions or scenarios within the range of possibilities may also be reasonable and results based on those assumptions would be different. As a result of the uncertainty inherent in a forward looking projection over a very long period of time, no one projection is uniquely "correct" and many alternative projections of the future could also be regarded as reasonable. Two different actuaries could, quite reasonably, arrive at different results based on the same data and different views of the future. A "sensitivity analysis" shows the degree to which results would be different if you substitute alternative assumptions within the range of possibilities for those utilized in this report. We have not been engaged to perform such a sensitivity analysis and thus the results of such an analysis are not included in this report. At the City of Kalamazoo's request, Mercer is available to perform such a sensitivity analysis.

Actuarial assumptions may also be changed from one valuation to the next because of changes in mandated requirements, plan experience, changes in expectations about the future and other factors. A change in assumptions is not an indication that prior assumptions were unreasonable when made.

Because valuations are a snapshot in time and are based on estimates and assumptions that are not precise and will differ from actual experience, contribution calculations are inherently imprecise. There is no uniquely "correct" level of contributions for the coming plan year.

Valuations do not affect the ultimate cost of the Plan, only the timing of contributions into the Plan. Plan funding occurs over time. Contributions not made this year, for whatever reason, including errors, remain the responsibility of the Plan sponsor and can be made in later years. If the contribution levels over a period of years are lower or higher than necessary, it is normal and expected practice for adjustments to be made to future contribution levels to take account of this with a view to funding the plan over time.

Data, computer coding and mathematical errors are possible in the preparation of a valuation involving complex computer programming and thousands of calculations and data inputs. Errors in a valuation discovered after its preparation may be corrected by amendment to the valuation or in a subsequent year's valuation.

The retirement, withdrawal and disability rates, as well as the salary increase assumption, are consistent with those utilized in the City of Kalamazoo Employees Retirement System valuation report as of December 31, 2009 produced by Gabriel Roeder Smith & Company dated May 11, 2010. We are unable to judge the reasonableness of these assumptions without performing a substantial amount of additional work beyond the scope of the assignment. The City of Kalamazoo is responsible for selecting the plan's funding policy, actuarial valuation methods, asset valuation methods, and assumptions. The policies, methods and assumptions used in this valuation are those that have been so prescribed and are described in Sections 7 and 8. The City of Kalamazoo is solely responsible for communicating to Mercer any changes required thereto.

To prepare this report Mercer has used and relied on financial data and participant data supplied by the City of Kalamazoo and summarized in the valuation report in Section 6. The City of Kalamazoo is responsible for ensuring that such participant data provides an accurate description of all persons who are participants under the terms of the plan or otherwise entitled to benefits as of January 1, 2010 that is sufficiently comprehensive and accurate for the purposes of this report. Although Mercer has reviewed the data in accordance with Actuarial Standards of Practice No. 23, Mercer has not verified or audited any of the data or information provided.

Mercer has also used and relied on the plan summaries and interpretations of plan provisions, supplied by the City of Kalamazoo as summarized in the valuation report in Section 9. We have assumed for purposes of this valuation that copies of any official plan information and collective bargaining agreements as well as any interpretations of any such information have been provided to Mercer along with a written summary of any other substantive commitments. The City of Kalamazoo is solely responsible for the validity, accuracy and comprehensiveness of this information. If any data or plan provisions supplied are not accurate and complete, the valuation results may differ significantly from the results that would be obtained with accurate and complete information; this may require a later revision of this report. Moreover, plan information may be susceptible to different interpretations, each of which could be reasonable, and that the different interpretations could lead to different valuation results.

The City of Kalamazoo should notify Mercer promptly after receipt of this report if the City of Kalamazoo disagrees with anything contained in the report or is aware of any information that would affect the results of the report that has not been communicated to Mercer or incorporated therein. The report will be deemed final and acceptable to the City of Kalamazoo unless the City of Kalamazoo promptly provides such notice to Mercer.

The information contained in this document (including any attachments) is not intended by Mercer to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

3. Valuation results Closed Group Projection

Calendar Year	Actuarial Accrued Liability			Normal Cost			Pay-As-You-Go Cost			
	Medical With Excise Tax	Death	Total	Medical With Excise Tax	Death	Total	Gross Medical Cost	Retiree Contributions	Death Costs	Total Net Cost
2010	\$ 262,810,916	\$ 371,015	\$ 263,181,931	\$ 6,656,671	\$ 5,184	\$ 6,661,855	\$ 7,601,371	\$ (462,522)	\$ 25,000	\$ 7,163,849
2011	274,764,447	379,860	275,144,307	6,630,462	4,986	6,635,448	7,450,778	(219,630)	13,587	7,244,735
2012	286,580,048	388,275	286,968,323	6,590,418	4,777	6,595,195	8,137,838	(248,901)	14,200	7,903,137
2013	298,213,434	396,223	298,609,657	6,565,098	4,544	6,569,642	8,970,947	(291,330)	14,868	8,694,485
2014	309,535,552	403,603	309,939,155	6,437,254	4,191	6,441,445	9,789,939	(348,798)	15,573	9,456,714
2015	320,456,196	410,225	320,866,421	6,187,393	3,818	6,191,211	10,724,783	(408,370)	16,271	10,332,684
2016	330,714,919	416,042	331,130,961	5,971,638	3,524	5,975,162	11,701,943	(470,839)	16,953	11,248,057
2017	340,276,633	421,116	340,697,749	5,690,180	3,207	5,693,387	12,662,310	(539,921)	17,647	12,140,036
2018	349,065,955	425,377	349,491,332	5,421,921	2,921	5,424,842	13,726,350	(616,760)	18,327	13,127,917
2019	356,963,560	428,837	357,392,397	5,058,442	2,630	5,061,072	14,658,456	(676,137)	18,988	14,001,307
2020	363,948,319	431,473	364,379,792	4,907,230	2,428	4,909,658	15,645,345	(743,925)	19,636	14,921,056
2021	370,153,059	433,353	370,586,412	4,664,272	2,183	4,666,455	16,645,265	(809,413)	20,259	15,856,111
2022	375,438,955	434,426	375,873,381	4,463,872	1,994	4,465,866	17,594,433	(870,594)	20,874	16,744,713
2023	379,855,479	434,721	380,290,200	4,281,014	1,829	4,282,843	18,542,903	(948,544)	21,468	17,615,827
2024	383,399,381	434,248	383,833,629	3,892,268	1,598	3,893,866	19,576,227	(1,025,414)	22,036	18,572,849
2025	385,731,968	432,932	386,164,900	3,383,773	1,322	3,385,095	20,497,519	(1,092,868)	22,575	19,427,226
2026	386,779,504	430,719	387,210,223	3,047,160	1,135	3,048,295	21,278,400	(1,147,363)	23,092	20,154,129
2027	386,792,429	427,681	387,220,110	2,732,593	977	2,733,570	21,939,697	(1,187,463)	23,584	20,775,818
2028	385,855,342	423,839	386,279,181	2,541,284	861	2,542,145	22,520,030	(1,220,105)	24,050	21,323,975
2029	384,126,618	419,226	384,545,844	2,423,877	782	2,424,659	23,136,635	(1,269,438)	24,522	21,891,719
2030	381,626,336	413,841	382,040,177	2,036,882	629	2,037,511	23,675,968	(1,304,474)	24,993	22,396,487
2031	378,106,615	407,573	378,514,188	1,810,045	542	1,810,587	24,184,814	(1,334,390)	25,421	22,875,845
2032	373,712,425	400,494	374,112,919	1,508,637	435	1,509,072	24,781,990	(1,376,515)	25,835	23,431,310
2033	368,252,043	392,561	368,644,604	1,051,284	313	1,051,597	25,176,544	(1,396,796)	26,196	23,805,944
2034	361,702,097	383,775	362,085,872	739,343	227	739,570	25,555,562	(1,413,248)	26,501	24,168,815
2035	354,175,481	374,191	354,549,672	445,003	146	445,149	25,763,436	(1,413,275)	26,731	24,376,892
2036	345,807,972	363,855	346,171,827	268,774	92	268,866	25,762,562	(1,403,755)	26,878	24,385,685
2037	336,883,255	352,850	337,236,105	158,776	58	158,834	25,759,032	(1,387,925)	26,958	24,398,065
2038	327,440,018	341,231	327,781,249	103,332	41	103,373	25,674,897	(1,362,920)	26,928	24,338,905
2039	317,584,068	329,101	317,913,169	66,562	28	66,590	25,536,417	(1,334,674)	26,819	24,228,562
2040	307,367,185	316,523	307,683,708	48,865	21	48,886	25,291,511	(1,300,067)	26,603	24,018,047
2041	296,886,908	303,565	297,190,473	-	-	-	25,057,515	(1,260,174)	26,297	23,823,638
2042	286,091,514	290,337	286,381,851	-	-	-	24,702,638	(1,217,042)	25,893	23,511,489
2043	275,134,099	276,926	275,411,026	-	-	-	24,344,085	(1,171,322)	25,408	23,198,171
2044	264,009,192	263,408	264,272,600	-	-	-	23,956,322	(1,121,836)	24,837	22,859,323
2045	252,733,180	249,866	252,983,046	-	-	-	23,529,661	(1,070,866)	24,202	22,482,997
2046	241,340,694	236,363	241,577,058	-	-	-	23,080,251	(1,019,395)	23,501	22,084,357
2047	229,846,307	222,970	230,069,276	-	-	-	22,605,231	(966,423)	22,750	21,661,558
2048	218,269,357	209,742	218,479,099	-	-	-	22,040,263	(912,949)	21,946	21,149,260
2049	206,697,979	196,740	206,894,719	-	-	-	21,481,302	(859,881)	21,110	20,642,531

Not all numbers may add due to rounding

Open Group Projection

Calendar Year	Actuarial Accrued Liability			Normal Cost			Pay-As-You-Go Cost			
	Medical With Excise Tax	Death	Total	Medical With Excise Tax	Death	Total	Gross Medical Cost	Retiree Contributions	Death Costs	Total Net Cost
2010	\$ 262,810,916	\$ 371,015	\$ 263,181,931	\$ 6,656,671	\$ 5,184	\$ 6,661,855	\$ 7,601,371	\$ (462,522)	\$ 25,000	\$ 7,163,849
2011	274,764,447	379,860	275,144,307	6,847,877	5,084	6,852,961	7,451,347	(219,744)	13,587	7,245,190
2012	286,806,780	388,378	287,195,158	7,042,226	4,972	7,047,198	8,139,686	(249,261)	14,201	7,904,626
2013	298,921,005	396,532	299,317,537	7,263,763	4,851	7,268,614	8,975,090	(292,097)	14,869	8,697,862
2014	311,001,700	404,246	311,405,946	7,465,295	4,634	7,469,929	9,797,811	(350,190)	15,575	9,463,196
2015	323,056,224	411,360	323,467,584	7,639,805	4,409	7,644,214	10,738,203	(410,666)	16,273	10,343,810
2016	334,938,883	417,844	335,356,727	7,888,726	4,275	7,893,001	11,723,012	(474,349)	16,956	11,265,619
2017	346,677,145	423,781	347,100,926	8,108,000	4,112	8,112,112	12,693,478	(544,990)	17,653	12,166,141
2018	358,256,342	429,103	358,685,445	8,393,697	3,990	8,397,687	13,770,525	(623,790)	18,334	13,165,069
2019	369,638,259	433,840	370,072,099	8,658,947	3,876	8,662,823	14,719,116	(685,595)	18,998	14,052,519
2020	380,908,616	437,993	381,346,609	9,052,509	3,826	9,056,335	15,726,401	(756,286)	19,648	14,989,763
2021	392,145,240	441,617	392,586,857	9,427,128	3,737	9,430,865	16,756,554	(825,807)	20,278	15,951,025
2022	403,309,669	444,665	403,754,334	9,865,008	3,700	9,868,708	17,741,196	(891,573)	20,900	16,870,523
2023	414,506,625	447,176	414,953,801	10,319,927	3,679	10,323,606	18,738,215	(975,466)	21,506	17,784,255
2024	425,761,183	449,159	426,210,342	10,731,529	3,607	10,735,136	19,829,429	(1,059,415)	22,087	18,792,101
2025	436,939,059	450,562	437,389,621	11,086,682	3,495	11,090,177	20,818,568	(1,134,877)	22,641	19,706,332
2026	448,075,809	451,345	448,527,154	11,600,130	3,453	11,603,583	21,681,035	(1,199,085)	23,178	20,505,128
2027	459,451,295	451,570	459,902,865	12,114,212	3,435	12,117,647	22,432,948	(1,249,766)	23,692	21,206,874
2028	471,176,960	451,262	471,628,222	12,702,648	3,443	12,706,091	23,125,469	(1,295,077)	24,185	21,854,577
2029	483,399,069	450,444	483,849,513	13,371,998	3,483	13,375,481	23,868,185	(1,358,672)	24,688	22,534,201
2030	496,191,210	449,116	496,640,326	13,919,685	3,464	13,923,149	24,551,862	(1,409,405)	25,193	23,167,650
2031	509,506,559	447,192	509,953,751	14,576,227	3,485	14,579,712	25,237,772	(1,458,669)	25,665	23,804,768
2032	523,476,462	444,721	523,921,183	15,214,512	3,492	15,218,004	26,030,634	(1,521,655)	26,127	24,535,106
2033	538,021,289	441,674	538,462,963	15,830,986	3,490	15,834,476	26,656,784	(1,565,999)	26,544	25,117,329
2034	553,343,167	438,066	553,781,233	16,523,464	3,509	16,526,973	27,291,520	(1,609,128)	26,913	25,709,305
2035	569,536,321	433,939	569,970,260	17,252,384	3,535	17,255,919	27,793,349	(1,638,842)	27,213	26,181,720
2036	586,795,102	429,348	587,224,450	18,005,959	3,562	18,009,521	28,303,728	(1,686,623)	27,454	26,644,559
2037	605,190,946	424,334	605,615,280	18,685,592	3,564	18,689,156	28,885,415	(1,735,171)	27,641	27,177,885
2038	624,627,803	418,907	625,046,710	19,402,542	3,574	19,406,116	29,423,661	(1,775,746)	27,727	27,675,642
2039	645,253,239	413,163	645,666,402	20,149,095	3,589	20,152,684	30,012,364	(1,824,914)	27,750	28,215,200
2040	667,102,808	407,158	667,509,966	20,856,517	3,597	20,860,114	30,668,951	(1,886,567)	27,684	28,810,068
2041	689,535,459	425,480	689,960,939	21,670,389	4,416	21,674,805	31,445,055	(1,952,668)	27,545	29,519,932
2042	713,087,810	444,627	713,532,437	22,500,294	5,393	22,505,687	32,223,578	(2,026,325)	27,327	30,224,580
2043	737,829,401	464,635	738,294,036	23,344,976	6,558	23,351,534	33,091,407	(2,103,724)	27,044	31,014,727
2044	763,735,185	485,543	764,220,729	24,221,248	7,948	24,229,196	34,061,656	(2,190,234)	26,694	31,898,116
2045	790,789,124	507,393	791,296,517	25,128,367	9,606	25,137,974	34,946,744	(2,260,160)	26,290	32,712,874
2046	819,131,858	530,226	819,662,084	26,065,952	11,584	26,077,536	35,952,844	(2,339,445)	25,839	33,639,238
2047	848,740,305	554,086	849,294,391	27,048,672	13,263	27,061,935	37,023,639	(2,419,812)	25,357	34,629,184
2048	879,642,318	579,020	880,221,338	28,062,791	15,110	28,077,901	38,048,865	(2,495,795)	24,838	35,577,908
2049	911,962,840	605,076	912,567,915	29,110,943	17,128	29,128,072	39,322,167	(2,599,447)	24,310	36,747,030

Not all numbers may add due to rounding

4. GASB disclosures

2010 GASB 45 Annual OPEB Cost

Actuarial Cost Method:		Entry Age Normal (Level Percent)		
Discount Rate:		4.50%		
Amortization of unfunded amount		30 years		
Items Derived from Plan Valuation		Medical	Death	Total
1.	Pay-as-you go cost	7,138,849	25,000	7,163,849
2.	Normal Cost at beginning of year			
	a). Normal Cost at beginning of year	6,656,671	5,184	6,661,855
	b). With interest at 4.50% to end of year	6,956,222	5,417	6,961,639
3.	Actuarial Accrued Liability (AAL)	262,810,916	371,015	263,181,931
4.	Amortizations of UAAL (over 30 years, at 4.50% interest)	16,134,368	22,777	16,157,145
5.	Net OPEB Obligation at end of Prior Year	\$ 24,451,057	\$ 32,828	\$ 24,483,885
ARC and OPEB Cost		Medical	Death	Total
6.	Annual Required Contribution (ARC) (2b. + 4.)	23,090,590	28,194	23,118,784
7.	Interest on Net OPEB Obligation at end of Prior Year (5. x .045)	1,100,298	1,477	1,101,775
8.	ARC Adjustment (5. amortized over 30 yrs, at 4.50% interest)	1,501,088	2,015	1,503,103
9.	2010 Annual OPEB Cost (6. + 7. - 8.)	\$ 22,689,800	\$ 27,656	\$ 22,717,456

2011 GASB 45 Annual OPEB Cost*(based on roll-forward of January 1, 2010 results assuming Open Group)*

Actuarial Cost Method:		Entry Age Normal (Level Percent)		
Discount Rate:		4.50%		
Amortization of unfunded amount		30 years		
Items Derived from Plan Valuation		Medical	Death	Total
1.	Pay-as-you go cost	7,231,603	13,587	7,245,190
2.	Normal Cost at beginning of year			
	a). Normal Cost at beginning of year	6,847,877	5,084	6,852,961
	b). With interest at 4.50% to end of year	7,156,031	5,313	7,161,344
3.	Actuarial Accrued Liability (AAL)	274,764,447	379,860	275,144,307
4.	Amortizations of UAAL (over 30 years, at 4.50% interest)	16,868,213	23,320	16,891,533
5.	Net OPEB Obligation at end of Prior Year	\$ 40,002,008	\$ 35,484	\$ 40,037,492
ARC and OPEB Cost		Medical	Death	Total
6.	Annual Required Contribution (ARC) (2b. + 4.)	24,024,244	28,633	24,052,877
7.	Interest on Net OPEB Obligation at end of Prior Year (5. x .045)	1,800,090	1,597	1,801,687
8.	ARC Adjustment (5. amortized over 30 yrs, at 4.50% interest)	2,455,785	2,178	2,457,963
9.	2011 Annual OPEB Cost (6. + 7. - 8.)	\$ 23,368,549	\$ 28,052	\$ 23,396,601

Development of Net OPEB Obligation

Fiscal Year Ended	Annual OPEB Cost	Employer Contribution	Percentage Contributed	Net OPEB Obligation
<i>Medical Benefits</i>				
12/31/2008	\$ 18,100,780	\$ 6,198,989	34.25%	\$ 11,901,791
12/31/2009	18,930,284	6,381,018	33.71%	24,451,057
12/31/2010	22,689,800	7,138,849	31.46%	40,002,008
12/31/2011	23,368,549			
<i>Death Benefits</i>				
12/31/2008	\$ 28,466	\$ 10,000	35.13%	\$ 18,466
12/31/2009	29,362	15,000	51.09%	32,828
12/31/2010	27,656	25,000	90.40%	35,484
12/31/2011	28,052			
<i>Total Benefits</i>				
12/31/2008	\$ 18,129,246	\$ 6,208,989	34.25%	\$ 11,920,257
12/31/2009	18,959,646	6,396,018	33.73%	24,483,885
12/31/2010	22,717,456	7,163,849	31.53%	40,037,492
12/31/2011	23,396,601			

5. Plan assets

No assets have been segregated and restricted to provide postretirement benefits within the definition of Plan Assets under GASB Statement No. 45.

6. Participant data

Census as of 1/1/2010								
	KMEA	AFSCME	NBU	ATU	KPOA	KPSA	IAFF	Total
Employees								
Count	116	138	158	75	214	56	0	757
Average Age	49.1	49.1	49.2	48.9	37.8	43.2	0	45.5
Average years service	17.0	17.4	15.7	11.4	11.6	16.8	0	14.7
Retirees								
Pre 65	18	28	38	7	89	43	13	236
Post 65	26	65	70	11	66	25	41	304
Total	44	93	108	18	155	68	54	540
Average Age	69.4	70.3	71.0	67.8	63.8	62.6	71.2	67.5
Spouses								
Pre 65	8	31	30	4	83	36	16	208
Post 65	7	31	42	4	35	20	25	164
Total	15	62	72	8	118	56	41	372
Average Age	68.5	65.8	67.6	64.8	61.4	60.6	68.4	64.3

Active Age Service Distribution – 1/1/2010

Age Group	<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20										0
20-24	14									14
25-29	36	11								47
30-34	13	26	17	2						58
35-39	19	21	44	19	1					104
40-44	10	18	31	53	18					130
45-49	7	18	18	28	47	9	1			128
50-54	6	14	15	34	25	32	14			140
55-59	6	13	10	16	21	15	9	4		94
60-64	5	10	6	5	4	4	1			35
65-69	1	2	1	1			1	1		7
70-74										0
Total	117	133	142	158	116	60	26	5	0	757

Inactive Summary by Age – 1/1/2010

Age	Retirees	Spouses	Total
<50	13	20	33
50-54	37	41	78
55-59	68	63	131
60-64	118	84	202
65-69	103	64	167
70-74	70	44	114
75-79	70	32	102
80-84	34	16	50
85-89	22	6	28
90+	5	2	7
Total	540	372	912

7. Actuarial methods and policies

Actuarial cost method

Liabilities and contributions in this report are computed using the Individual Entry Age Normal Cost Method.

The objective under this method is to fund each member's benefits under the Plan as payments which are level as a percentage of salary, starting at original participation date (or employment date), and continuing until the assumed date of retirement, termination, disability or death.

At any given date, a liability is calculated equal to the contributions which would have been accumulated if this method of funding had always been used, the current plan provisions had always been in place, and all assumptions had been precisely accurate. The difference between this liability and the assets (if any) which are held in the fund is the unfunded liability. The unfunded liability is typically funded over a chosen period in accordance with the amortization schedule.

A detailed description of the calculation follows:

The normal cost for each active member under the assumed retirement age is determined by applying to earnings the level percentage of salary which, if contributed each year from date of entry into the Plan until the assumed retirement (termination, disability or death) date, is sufficient to provide the full value of the benefits expected to be payable.

- The present value of future normal costs is the total of the discounted values of all active members' normal cost, assuming these to be paid in each case from the valuation date until retirement (termination, disability or death) date.
- The present value of projected benefits is calculated as the value of all benefit payments expected to be paid to the Plan's current members, including active and retired members and beneficiaries.
- The accrued liability is the excess of the present value of projected benefits over the present value of future normal costs.
- The unfunded liability is the excess of the accrued liability over the assets of the fund (if any), and represents that part of the accrued liability which has not been funded by accumulated past contributions.

Amortization of unfunded actuarial accrued liability

The unfunded actuarial accrued liability (UAAL) is amortized over a 30 year open period in level dollar amounts. Cumulative gains and losses are amortized over the same 30 year period as other UAAL. Because the UAAL is being amortized by an open or rolling amortization period (with re-amortization of the UAAL in each valuation), the amortization amounts will never fully eliminate the UAAL.

Funding policy

The plan is funded on a pay-as-you-go basis.

Changes in actuarial methods since prior valuation

None

Development of health care cost trend rates

- The trend assumptions are comprised of three elements: the initial trend rate, the ultimate trend rate, and the grade-down period. Trend rates exclude the expected impact of aging since this impact is explicitly reflected elsewhere in the valuation. As with any assumption, each trend rate assumption reflects a single scenario chosen from a wide range of possibilities. The Plan's actual experience will differ from these assumptions since the future is uncertain and nobody can predict with any measure of certainty how much health care costs will rise next year or in the future.
- The initial trend rate is the expected increase in health care costs into the second year of the valuation (i.e., the first assumed annual increase in starting per capita rates). Initial rates are established separately for pre-Medicare medical claims, Medicare-eligible medical claims, prescription drug claims and administrative expenses. These expected trend rates are based on market assessments and surveys and take into account actual historical experience, expected unit cost information, changes in utilization, plan design leveraging, cost shifting, and new technology. For valuation purposes, these trend rates are blended together based on a cost-weighted average basis.
- The assumed ultimate trend rate and grade-down period are based on macroeconomic principles. These assumptions reflect assumed long term general information, nominal gross domestic product growth rates, and the excess of national health expenditures over other goods and services, and an adjustment for an assumed impact of population growth.

8. Summary of actuarial assumptions

The following assumptions were used in valuing the liabilities and benefits under the plan. The plan sponsor is responsible for selecting the assumptions used for this valuation.

The retirement, withdrawal and disability rates, as well as the salary increase assumption, are consistent with those utilized in the City of Kalamazoo Employees Retirement System valuation report as of December 31, 2009 produced by Gabriel Roeder Smith & Company dated May 11, 2010. We are unable to judge the reasonableness of these assumptions without performing a substantial amount of additional work beyond the scope of the assignment.

Discount Rate	4.5%
Measurement Date	January 1, 2010
Participation	90% of future retirees eligible for medical coverage will elect medical coverage. Active employees are assumed to elect the Community Blue plan upon retirement.
Spouse Participation	80% of male and 60% of female future retirees are assumed to be married. Actual current retiree spouse election information was provided and utilized.
Spousal Age Difference	The female spouse is assumed to be three years younger than the male spouse.
Administrative Costs	Included in claims cost
Mortality	RP 2000 combined annuitant and nonannuitant, projected 17 years, no collar adjustment.
Turnover	

		% of Active Members Separating within Next Year					
Sample Age	Years of Service	KMEA	AFSCME	NBU	ATU	KPOA	KPSA
	0	15.0%	15.0%	15.0%	15.0%	6.0%	6.0%
	1	14.0%	14.0%	14.0%	14.0%	4.0%	4.0%
	2	9.0%	9.0%	9.0%	9.0%	3.0%	3.0%
	3	8.0%	8.0%	8.0%	8.0%	2.5%	2.5%
	4	7.0%	7.0%	7.0%	7.0%	2.5%	2.5%
25	5+	7.4%	7.4%	7.4%	7.4%	2.2%	2.2%
30	5+	5.8%	5.8%	5.8%	5.8%	2.0%	2.0%
35	5+	5.0%	5.0%	5.0%	5.0%	1.4%	1.4%
40	5+	4.0%	4.0%	4.0%	4.0%	1.1%	1.1%
45	5+	3.3%	3.3%	3.3%	3.3%	.8%	.8%
50	5+	2.5%	2.5%	2.5%	2.5%	.5%	.5%
55	5+	2.0%	2.0%	2.0%	2.0%	.4%	.4%
60	5+	2.0%	2.0%	2.0%	2.0%	.4%	.4%

Disability (assumed to be Duty related when applicable)

% of Active Members Becoming Disabled Within New Year			
Age	KPOA	KPSA	KMEA
	ATU	AFSCME	NBU
20	0.19%		0.04%
25	0.23%		0.04%
30	0.26%		0.04%
35	0.33%		0.04%
40	0.46%		0.10%
45	0.63%		0.13%
50	1.21%		0.25%
55	2.36%		0.45%
60	0.00%		0.71%

Retirement Rates (applied when participant satisfies Retirement Eligibility)

Retiring within Next Year							
Age	KMEA	AFSCME	NBU	ATU	Years of Service	KPOA	KPSA
55	2.00%	6.00%	10.00%	10.00%	20	2.0%	2.0%
56	2.00%	7.00%	10.00%	10.00%	21	4.0%	4.0%
57	5.00%	10.00%	25.00%	25.00%	22	4.0%	4.0%
58	5.00%	7.00%	25.00%	25.00%	23	2.0%	2.0%
59	7.00%	6.00%	20.00%	20.00%	24	2.0%	2.0%
60	15.00%	30.00%	25.00%	25.00%	25	70.0%	70.0%
61	15.00%	20.00%	30.00%	30.00%	26	30.0%	30.0%
62	50.00%	60.00%	30.00%	30.00%	27	45.0%	45.0%
63	15.00%	25.00%	15.00%	15.00%	28	25.0%	25.0%
64	10.00%	25.00%	15.00%	15.00%	29	25.0%	25.0%
65	100.00%	100.00%	100.00%	100.00%	30	100.0%	100.0%

Salary Scale

Years of Service	Salary Increase					
	KMEA	AFSCME	NBU	ATU	KPOA	KPSA
0	10.0%	12.0%	10.0%	11.0%	16.0%	16.0%
1	9.0%	7.0%	10.0%	11.0%	16.0%	16.0%
2	8.0%	7.0%	4.5%	4.0%	12.0%	12.0%
3	6.0%	6.0%	4.5%	4.0%	9.0%	9.0%
4	5.0%	6.0%	4.5%	4.0%	9.0%	9.0%
5	5.0%	5.0%	4.3%	4.0%	9.0%	9.0%
6	5.0%	4.0%	4.3%	4.0%	9.0%	9.0%
7	5.0%	4.0%	4.3%	4.0%	9.0%	9.0%
8	4.0%	4.0%	4.3%	4.0%	5.0%	5.0%
9	4.0%	4.0%	4.3%	4.0%	5.0%	5.0%
10	4.0%	4.0%	4.3%	4.0%	5.0%	5.0%
11	4.0%	4.0%	4.3%	4.0%	5.0%	5.0%
12	4.0%	4.0%	4.3%	4.0%	4.5%	4.5%
13+	4.0%	4.0%	4.3%	4.0%	4.5%	4.5%

Medical Trend

Year	
2010	8.20%
2011	8.00%
2012	7.80%
2013	7.50%
2014	7.30%
2015	7.10%
2016	6.80%
2017	6.60%
2018	6.40%
2019	6.20%
2020	6.00%
2021	5.80%
2022	5.50%
2023	5.30%
2024	5.10%
2025	4.90%
2026	4.70%
2027+	4.50%

**Starting Claims Cost at Age 65 for
Future Retirees (2010)**

Valuation Date	Pre 65	Post 65 with Medicare Part A and Part B	Post 65 with Medicare Part A only ¹
January 1, 2010	7,592	4,667	7,580

Aging Adjustment to Claims Costs

Age	Percentage Per Year
<65	3.5%
65-69	2.5%
70-74	2.0%
75-79	1.5%
80+	0.0%

**Starting Claims Cost at Age 65 for
Current Retirees (2010)**

	Drug Co-pay	Pre 65	Post 65 with Medicare Part A and Part B	Post 65 with Medicare Part A only ²
BCBS 900	n/a	7,631	2,662	n/a
BCBS 901, BCBS 903, BCBS 930, BCBS 990, BCBS 991	Integrated	10,172	4,932	8,010
CB 902, CB 904, CB 920, CB 921, CB 940	\$4	9,808	6,530	10,607
CB 905, CB 906,	\$5	9,677	6,305	n/a
CB 907, CB 970, CB 971, CB 972	\$10	9,254	5,570	9,048
CB 933, CB 934, CB 944, CB 945, CB 966, CB 967, CB 974, CB 975, CB 984, CB 985	3 tier	7,592	4,667	7,580
CB 950, CB 960	\$5	9,672	6,055	9,835

¹ Applies to KPOA, KPSA and IAFF

² Applies to KPOA, KPSA and IAFF

Future New Entrant Assumptions

All future new entrants are assumed to be male. The chart below details the assumed starting salary and allocation of age at hire for future new entrants.

	KMEA		AFSCME		NBU		ATU		KPOA		KPSA		
	Age	%	Salary	%	Salary	%	Salary	%	Salary	%	Salary	%	Salary
25	30		35,000	30	32,000	25	50,000	10	32,000	50	50,000	60	70,000
30	20		35,000	10	32,000	20	50,000	15	32,000	35	50,000	35	70,000
35	15		35,000	25	32,000	20	50,000	15	32,000	10	50,000	5	70,000
40	15		35,000	20	32,000	10	50,000	10	32,000	5	50,000		
45	10		41,000	10	38,000	10	50,000	20	38,000				
50	5		41,000	5	38,000	10	50,000	15	38,000				
55	5		41,000			5	50,000	15	38,000				

* Future KMEA and NBU hires are not eligible for defined benefit retiree medical benefits.

Changes in assumptions since prior valuation

Mortality, turnover, disability, retirement, and salary scale rates were updated to reflect plan experience. Claim costs, medical cost trend rates, and aging factors were updated to reflect plan experience and expected future experience.

9. Summary of plan provisions

Following is a summary of the major plan provisions used in the valuation of this report. The City of Kalamazoo is solely responsible for the validity, accuracy and comprehensiveness of this information. If any of the plan provisions shown below are not accurate and complete, the valuation results may differ significantly from those shown in this report and may require a revision of this report. Moreover, these plan provisions may be susceptible to different interpretations, each of which could be reasonable, and the different interpretations could lead to different valuation results.

Retirement Eligibility (eligibilities that were valued)

KMEA ³	AFSCME	NBU	ATU	KPOA	KPSA	IAFF
Age 57 with 25 years of service or age 60 with 8 years of service	Age 57 with 25 years of service or age 62 with 9 years of service	Age 55 with 15 years of service or age 60 with 5 years of service. Hires after 6/1/2006 receive retiree only medical	Age 57 with 25 years of service or age 62 with 10 years of service	Age 50 with 10 years of service or any age with 25 years of service	Age 50 with 10 years of service or any age with 25 years of service	Age 50 with 10 years of service or any age with 25 years of service

KMEA and NBU employees hired after June 1, 2009 are not eligible for defined benefit retiree medical benefits, but participate in a Retirement Health Savings Account.

Disability Eligibility

All groups are immediately eligible for disability benefits, disability rate is assumed to be duty related when applicable.

Disability Benefit for Covered Participants

KMEA	AFSCME	NBU	ATU	KPOA	KPSA	IAFF
Disability prior to age 57: Employee only. Disability on or after age 57: Employee and spouse	Duty Disability: Employee and spouse	Employee and spouse	Duty Disability: Employee and spouse			

³ KMEA participants are eligible for retiree coverage only at age 55 with 15 years of service, but we have not assumed retirement elections until the eligibility stated above (when retiree and spouse coverage becomes available).

Coverage Options for
Current Retirees

Medical Coverage							
Retirement Date	KMEA	AFSCME	NBU	ATU	KPOA	KPSA	IAFF
Grandfathered	BCBS 900	BCBS 900					BCBS 900
Before 1/1/1991	BCBS 903/930	BCBS 903/930	BCBS 930/990/991	BCBS 903/930	BCBS 901/990/991	BCBS 901/990/991	BCBS 901/990/ 991
1/1/1991 – 1/1/1996	BCBS 903/930	BCBS 903/930	CB 904/940	BCBS 903/930	CB 902/920/921	CB 902/920/921	CB 902/920
1/1/1996 – 1/1/2003	BCBS 903/930	BCBS 903/930	CB 906/907/960/ 970	BCBS 903/930	CB 905/950	CB 905/950	CB 905/950
1/1/2003 – 1/1/2006	BCBS 903/930	BCBS 903/930	CB 907/970	BCBS 903/930	CB 971/972	CB 972	CB 905/950
1/1/2006 – 1/1/2010	CB 944/945	CB 966/967	CB 933/934		CB 972/974	CB 972/974	

Retiree Contributions

KMEA	AFSCME	NBU	ATU	KPOA	KPSA	IAFF
All: Active rate at retirement increasing up to 50%*	Less than 25 years of service: Active rate at retirement increasing up to 50%* 25 years of service or more: Active rate at retirement	All: Active rate at retirement increasing up to 50%*	All: Active rate at retirement	Retiree Pre 2008 Less than 25 years of service: Active rate at retirement 25 years of service or more: \$25.00 Retiree Post 2007 All: Active rate at retirement increasing up to 50%* for retiree and spouse	Retiree Pre 2008 All: Active rate at retirement Retiree Post 2007 All: Active rate at retirement increasing up to 50%* for retiree and spouse	All: \$25.00

* The retiree pays the active contribution rate in the year they retire. The retiree will continue to pay the increasing active contribution rate in future years until their contribution amount is 150% of the amount the retiree paid in the year of retirement, at which point the retiree contribution amount is frozen.

Active Contribution Rate (2010)

	KMEA	AFSCME	NBU	ATU	KPOA	KPSA	IAFF
Single	\$50.00	\$50.00	\$50.00	\$41.00	\$46.00	\$46.00	N/A
Two-Party	\$113.00	\$113.00	\$113.00	\$91.00	\$103.00	\$103.00	N/A

Retiree Death Benefit

Upon the death of a retiree, a \$1,000 death benefit is payable to his beneficiary (or estate if no beneficiary has been designated).

Changes in plan provisions since prior valuation

Health care reform legislation will be impacting employer sponsored medical plans over the next few years. One aspect of health care reform is the Excise Tax on High-Cost Employer Health Plans. Beginning in 2018, the legislation imposes a nondeductible 40 percent excise tax on the "excess benefit" provided to a retiree in any month under any employer-sponsored health plan. The 2010 valuation and GASB results were updated to reflect anticipated future excise tax obligations.

Benefits are now only available through Blue Cross Blue Shield Traditional and Community Blue PPO Plans.

MERCER

Mercer (US) Inc.
600 Renaissance Center, Suite 1800
Detroit, MI 48243
313 259 5500

Consulting. Outsourcing. Investments.