



**City of Lansing
Employees' Retirement System**

**Actuarial Valuation of Retiree Healthcare Benefits
as of December 31, 2011**

December 24, 2012

EFI ACTUARIES | EFI ASSET/LIABILITY MANAGEMENT SERVICES, INC.

The nation's leader in plan-specific, interactive asset allocation optimization counseling

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Executive Summary

This report presents the results of an actuarial review and analysis of the City of Lansing Employees' Retirement System Retiree Healthcare Plan (the Plan) as of December 31, 2011. The actuarial liabilities and costs have been determined using actual demographic and healthcare information as of December 31, 2011, as supplied by City staff. The last valuation was conducted as of December 31, 2009 by the Plan's prior actuary.

Purpose of the Report

The purposes of this Report are:

- To compute annual contributions required to fund the Plan in accordance with actuarial principles;
- To discuss issues associated with the determination of Plan costs and future cost implications, including considerations relating to the method of funding the benefits; and
- To present those items required for disclosure under Statement No. 45 of the Governmental Accounting Standards Board (GASB).

A summary of the current status of the Plan is as follows:

Table 1: Summary of Valuation	December 31, 2009 (Prior Actuary)	December 31, 2011 (EFI)
Plan Membership		
Active	570	481
<u>Retirees/Beneficiaries and Inactive</u>	<u>765</u>	<u>863</u>
Total	1,335	1,344
Actuarial Accrued Liability (\$ millions)		
AAL – Active	\$ 50.5	\$ 64.3
<u>AAL – Retirees/Beneficiaries and Inactive</u>	<u>152.9</u>	<u>162.6</u>
AAL – Total*	\$ 203.4	\$ 226.9
<i>AAL under pay-as-you-go funding</i>		\$ 383.9
Plan Assets (\$ millions)		
	\$ 24.4	\$ 28.7
Unfunded AAL*	179.0	198.2
Funding Progress (Assets / AAL)	12.0%	12.6%
Annual Required Contribution (ARC, \$ millions)		
Employer Normal Cost	\$ 3.5	\$ 3.7
<u>Amortization of Unfunded AAL</u>	<u>9.8</u>	<u>11.5</u>
Total ARC (% of Payroll)*	\$ 13.3 (42.7%)	\$ 15.2 (61.3%)
<i>ARC under pay-as-you-go funding</i>		\$ 23.1 (93.0%)

* Long term funding policy to be established

Actuarial Certification

In this study, we conducted an examination of all participant data for reasonableness and consistency. Actuarial funding is based on the Entry Age Normal Cost Method. Under this method, the employer contribution provides for current cost (normal cost) plus an amount to amortize the unfunded actuarial accrued liability (UAAL). As of the valuation date, the remaining amortization period is 30 years.

The plan provisions were updated to reflect benefit and eligibility changes that occurred in 2010 and later. Section 1 provides summaries of the plan provisions. Actuarial assumptions have changed based on the recent experience study completed by EFI.

We certify that the valuation was performed in accordance with generally accepted actuarial principles and practices. In particular, the assumptions and methods used for funding purposes meet the parameters of the Governmental Accounting Standards Board Statements No. 43 and 45 and applicable Actuarial Standards of Practice.

The signing actuaries are members of the American Academy of Actuaries and are qualified to provide the actuarial opinions provided in this Report.

This report has been prepared for use by the City of Lansing (the City). Accordingly, this report may not be distributed to any third party outside the City without EFI's written consent. If distribution of the report is made outside of the City, the report must be provided in its entirety. This report is a complex analysis that assumes a high level of technical knowledge concerning the City's operations, and uses the City's data, which EFI has not audited, as described above.

Respectfully Submitted,



Gregory M. Stump, FSA, MAAA



Karen T. Earley, FSA, MAAA

Section 1:

Summary of Plan Provisions

1.1: Brief Outline of Plan Provisions – Teamsters 580

Participation

Retirees of the International Brotherhood of Teamster, Chauffeurs, and Warehousemen, Local 580 who belong to the Supervisory, Clerical, Technical and Professional Bargaining Units are eligible to receive retiree health care benefits.

Reciprocal retirement act does not provide credit service for health care eligibility. All service must be with the City of Lansing.

HEALTH CARE - NORMAL RETIREMENT

Eligibility

Members hired before July 1, 1987:

- 1) Age 58 with 8 years of service, or
- 2) Age 50 with 25 years of service, or
- 3) Rule of 65 with a minimum of 8 years of service

Members hired on or after July 1, 1987 and before October 29, 1990:

- 1) Age 58 with 15 years of service, or
- 2) Age 50 with 25 years of service, or
- 3) Rule of 65 with a minimum of 15 years of service.

Members hired on or after October 29, 1990 and before February 1, 2010 are eligible to receive retiree health care benefits upon reaching age 55 with 15 years of service.

Members hired on or after February 1, 2010 are eligible to receive retiree health care benefits upon reaching 25 years of service.

Benefit

Retirements before February 1, 2010:

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

Retirements on or after February 1, 2010: Retirees contribute a maximum of 1% of pension benefit or \$200, Single/\$500, 2-Party/\$650, Family, whichever is less.

HEALTH CARE - DEFERRED RETIREMENT BENEFITS

Eligibility

Members hired before July 1, 1987: Any age with at least 8 years of service

Members hired after July 1, 1987 but before February 1, 2010: Any age with at least 15 years of service

Members hired on or after February 1, 2010: Any age, with at least 25 years of service.

Benefits are payable upon termination or at age 55, whichever occurs later.

Benefit

Retirements before February 1, 2010:

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

Retirements after February 1, 2010: Retirees contribute a maximum of 1% of pension benefit or \$200, Single/\$500, 2-Party/\$650, Family, whichever is less.

HEALTH CARE - DISABILITY AND DEATH RETIREMENT (DUTY RELATED)

Eligibility

No age or service requirements.

Benefit

Retirements before February 1, 2010:

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

Retirements after February 1, 2010: Retirees contribute a maximum of 1% of pension benefit or \$200, Single/\$500, 2-Party/\$650, Family, whichever is less.

HEALTH CARE - DISABILITY AND DEATH RETIREMENT (NON-DUTY RELATED)

Eligibility

Members hired before July 1, 1987: Any age with at least 8 years of service

Members hired after July 1, 1987 but before February 1, 2010: Any age with at least 15 years of service

Members hired on or after February 1, 2010: Any age, with at least 25 years of service.

Benefits are payable upon termination or at age 55, whichever occurs later.

Benefit

Retirements before February 1, 2010:

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

Retirements on or after February 1, 2010: Retirees contribute a maximum of 1% of pension benefit or \$200, Single/\$500, 2-Party/\$650, Family, whichever is less.

DENTAL COVERAGE

Eligibility

City pays 100% of dental coverage and dental eligibility conditions are the same as health care eligibility conditions.

MEDICARE – ELIGIBILITY

City provides Medicare complementary retiree health care benefits at age 65 when retiree becomes Medicare eligible.

HEALTH CARE - RETIREE OPT-OUT

City does not provide Opt-Out Coverage for this group.

CHANGES IN PLAN PROVISIONS

The benefit provisions relating to members hired and those retiring on or after February 1, 2010 are the only changes in Plan provisions since the prior valuation.

1.2: Brief Outline of Plan Provisions - UAW

Participation

Retirees of the Lansing City Unit Local No. 2256, U.A.W. are eligible to receive retiree health care benefits.

HEALTH CARE - NORMAL RETIREMENT

Eligibility

Members hired before December 1, 1989 and retiring after November 1, 1995:

- 4) Age 58 with 8 years of service, or
- 5) Age 50 with 25 years of service, or

Members hired after December 1, 1989 and before March 9, 2010:

- 4) Age 58 with 15 years of service, or
- 5) Age 50 with 25 years of service, or

Members hired on or after March 9, 2010 are eligible to receive retiree health care benefits upon reaching 25 years of service.

Benefit

Retirements after July 1, 2010: Retirees contribute \$125 for Single coverage, \$225 for 2-Party coverage, and \$325 for Family coverage.

Retirements before July 1, 2010:

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

HEALTH CARE - DEFERRED RETIREMENT BENEFITS

Eligibility

Members hired before December 1, 1989: Any age with at least 8 years of service

Members hired on or after December 1, 1989 but before March 9, 2010: Any age with at least 15 years of service

Members hired on or after March 9, 2010: Any age, with at least 25 years of service.

Benefit commences when retiree would have been eligible for Normal Retirement.

Benefit

Retirements before July 1, 2010:

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

Retirements on or after July 1, 2010: Retirees contribute \$125 for Single coverage, \$225 for 2-Party coverage, and \$325 for Family coverage.

HEALTH CARE - DISABILITY AND DEATH RETIREMENT (DUTY RELATED)

Eligibility

No age or service requirements.

Benefit

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

HEALTH CARE - DISABILITY AND DEATH RETIREMENT (NON-DUTY RELATED)

Eligibility

Members hired before December 1, 1989: Any age with at least 8 years of service

Members hired on or after December 1, 1989 but before March 9, 2010: Any age with at least 15 years of service

Members hired on or after March 9, 2010: Any age, with at least 25 years of service.

Benefit commences when retiree would have reached Normal Retirement eligibility.

Benefit

Retirements before July 1, 2010:

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

Retirements on or after July 1, 2010: Retirees contribute \$125 for Single coverage, \$225 for 2-Party coverage, and \$325 for Family coverage.

DENTAL COVERAGE

Eligibility and Benefits

City pays 100% of dental coverage and dental eligibility conditions are the same as health care eligibility conditions.

MEDICARE – ELIGIBILITY

City provides Medicare complementary retiree health care benefits at age 65 when retiree becomes Medicare eligible.

HEALTH CARE - RETIREE OPT OUT

City does not provide Opt-Out Coverage for this group.

CHANGES IN PLAN PROVISIONS

The benefit provisions relating to members hired on or after March 9, 2010 and those retiring July 1, 2010 are the only changes in Plan provisions since the prior valuation.

1.3: Brief Outline of Plan Provisions – Teamsters 214

Participation

Retirees of the Michigan Teamster Local No. 214 State, County, and Municipal Workers are eligible to receive retiree health care benefits.

HEALTH CARE - NORMAL RETIREMENT

Eligibility

Members hired before October 29, 1990:

- 1) Age 58 with 8 years of service, or
- 2) Age 55 with 25 years of service, or
- 3) Rule of 65 with a minimum of 8 years of service

Members hired on or after October 29, 1990 and before August 1, 2012 are eligible to receive retiree healthcare benefits upon reaching age 55 with 15 years of service.

Members hired on or after August 1, 2012 are eligible at age 55 with at least 25 years of service.

Benefit

Members hired before December 8, 2008:

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

Members hired on or after December 8, 2008: City pays retiree coverage for the life of the retiree only, subject to active employee premium sharing capped at 5% of pension benefit (spouse/dependent coverage paid 100% by retiree). All retirees pay same premium sharing as active employees.

HEALTH CARE - DEFERRED RETIREMENT BENEFITS

Eligibility

Members hired before October 29, 1990: Any age with at least 8 years of service. Benefit commences when retiree would have been eligible for Normal Retirement.

Members hired on or after October 29, 1990 and before August 1, 2012: Any age with at least 15 years of service. Benefit is payable upon termination or age 55, whichever is later.

Members hired on or after August 1, 2012: Age 55 with 25 years of service.

Benefit

Members hired before December 8, 2008:

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

Members hired on or after December 8, 2008: City pays retiree coverage for the life of the retiree only, subject to active employee premium sharing capped at 5% of pension benefit (spouse/dependent coverage paid 100% by retiree). All retirees pay same premium sharing as active employees.

HEALTH CARE - DISABILITY AND DEATH RETIREMENT (DUTY RELATED)

Eligibility

No age or service requirements.

Benefit

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

HEALTH CARE - DISABILITY AND DEATH RETIREMENT (NON-DUTY RELATED)

Eligibility

Members hired before October 29, 1990: Any age with at least 8 years of service. Benefit commences when retiree would have been eligible Normal Retirement.

Members hired on or after October 29, 1990 and before August 1, 2012: Any age with at least 15 years of service. Benefit commences when retiree would have been eligible Normal Retirement.

Members hired on or after August 1, 2012 are eligible at age 55 with at least 25 years of service.

Benefit

Members hired before December 8, 2008:

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

Members hired on or after December 8, 2008: City pays retiree coverage for the life of the retiree only, subject to active employee premium sharing capped at 5% of pension benefit (spouse/dependent coverage paid 100% by retiree). All retirees pay same premium sharing as active employees.

DENTAL COVERAGE

Eligibility

City pays 100% of dental coverage and dental eligibility conditions are the same as health care eligibility conditions.

MEDICARE - ELIGIBILITY

City of Lansing provides Medicare complementary retiree health care benefits at age 65 when retiree becomes Medicare eligible.

HEALTH CARE - RETIREE OPT-OUT

The City provides payment in lieu of retiree health care benefits of up to \$1,800 per year.

CHANGES IN PLAN PROVISIONS

There have been no changes in the benefit provisions since the last valuation performed as of December 31, 2009.

The plan provisions in this section are assumed to apply to all members not identified as Teamsters 580, UAW, or 911 Operators.

1.4: Brief Outline of Plan Provisions – 911 Operators

Participation

Retirees of the Lansing Capitol City Lodge No. 141 Fraternal Order of Police 911 Operators are eligible to receive retiree health care benefits.

HEALTH CARE - NORMAL RETIREMENT

Eligibility

Members hired before July 1, 1992: Rule of 65 with a minimum of 8 years of service

Members hired on or after July 1, 1992 are eligible to receive retiree healthcare benefits upon reaching age 55 with 15 years of service.

Benefit

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

HEALTH CARE - DEFERRED RETIREMENT BENEFITS

Eligibility

Any age with at least 15 years of service. Benefit commences when retiree reaches eligible retirement age.

Benefit

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

HEALTH CARE - DISABILITY AND DEATH RETIREMENT (DUTY RELATED)

Eligibility

No age or service requirements. Benefit payable when member begins to receive duty-disability or death retirement member benefits.

Benefit

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

HEALTH CARE - DISABILITY AND DEATH RETIREMENT (NON-DUTY RELATED)

Eligibility

Members hired before July 1, 1992: Rule of 65 with at least 8 years of service.

Members hired on or after July 1, 1992: Age 55 with at least 15 years of service.

Benefit

Retiree Coverage: City pays 100% of retiree health care base coverage for the life of the retiree.

Spouse Coverage: City pays 100% of retiree health care coverage for the life of the spouse if Joint and Survivor Pension option is elected. If Straight Life Pension option is chosen, spousal health care benefit will cease upon death of the retiree.

Health care benefits payable to surviving spouse when member would have attained eligible age and service retirement conditions.

DENTAL COVERAGE

Eligibility

City pays 100% of dental coverage and dental eligibility conditions are the same as health care eligibility conditions.

MEDICARE - ELIGIBILITY

City of Lansing provides Medicare complementary retiree health care benefits at age 65 when retiree becomes Medicare eligible.

HEALTH CARE - RETIREE OPT-OUT

The City does not provide payment in lieu of retiree health care.

CHANGES IN PLAN PROVISIONS

FOP 911 employees are no longer City employees effective June 27, 2012. The City is not responsible for retiree healthcare for future retirees. The City will continue to assume responsibility for current FOP 911 retirees.

Section 2:

Actuarial Methods and Assumptions

2.1: Actuarial Methods

Actuarial Cost Method

The annual cost of the Plan is computed under the Entry Age Normal Actuarial Cost Method. Under this Cost Method, the Normal Cost for each member is calculated as the amount necessary to fund their projected benefits as a level dollar amount over their expected working lifetime.

At each valuation date, the Actuarial Accrued Liability for each member is equal to the difference between the liability for the member's total projected benefit and the present value of future Normal Cost contributions.

The excess of the Actuarial Accrued Liability (AAL) over Plan assets is the Unfunded Actuarial Accrued Liability (UAAL). The UAAL is amortized, as a level percentage of payroll, over 30 years.

Plan Assets

The Plan is funded by a trust agreement established pursuant to Section 501(c)(9) of the Internal Revenue Code that allows for the formation of a VEBA (Voluntary Employees Beneficiary Association). In addition, Plan assets are available in a separate reserve of the Employees' Retirement System pension trust.

Changes in Actuarial Methods since Prior Valuation

There have been no changes in actuarial methods since the prior valuation, except that the work was performed by a different actuarial firm under a different valuation system.

2.2: Actuarial Assumptions

Valuation Date	All assets and liabilities are computed as of January 1, 2012.
Rate of Return	<p>The annual rate of return on all Plan assets is assumed to be 4.30% for City funded benefits, representing the long-term expected return on the City's general fund assets.</p> <p>For fully prefunded calculations, the expected return is 7.80%.</p>
Inflation	The rate of general inflation, as measured by the Consumer Price Index (CPI), is assumed to increase at the rate of 3.30% per year.
Basis for Demographic Assumptions	An Experience Study was conducted by EFI in 2012. This Study serves as the basis for the demographic assumptions below.
Increases in Pay	Increases in salary are assumed to be 3.3% annually, plus an additional amount that varies based on the service of the member as shown below:

Years of Service	UAW	All Others
0-8	2.00%	1.50%
9-10	2.00%	0.25%
11+	1.00%	0.25%

Member Mortality	<p>Rates of mortality for Plan members are specified by the RP2000 Combined Healthy Tables, set back one year for females. For Disabled members, the disabled versions of these tables are assumed. Each of these tables is projected to 2008 using Scale BB.</p> <p>Projected improvements in mortality for non-disabled members have been accounted for by projected the table to 2023 using 50% of Scale BB.</p>
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Service Retirement

Retirement is assumed to occur among eligible members in accordance with the table below:

Age	UAW	All Others
45-49	0%	10%*
50-54	40%	10%
55-56	40%	15%
57	20%	15%
58	10%	25%
59	10%	10%
60	20%	15%
61	35%	15%
62-64	20%	15%
65-69	100%	50%
70+	100%	100%

* Applies to Old Plan members only

Disability

Rates of disability vary based on the age of the member as shown below. 50% of disabilities are assumed to be duty-related.

Representative Assumed Rates of Disability

Age	Rate
20	.0004
30	.0004
40	.0013
50	.0041
60	.0090

Termination

Rates of termination vary based on the service of the member as shown below.

Representative Assumed Rates of Termination

All Ages		
Service	UAW	Others
0	10.0%	20.0%
1	7.0%	10.0%
2	5.0%	4.0%
3	5.0%	4.0%
4	5.0%	4.0%
5	4.0%	3.0%
10	1.0%	1.0%
15	1.0%	1.0%
20+	0.5%	0.5%

Deferred vested members are assumed to retire at age 55. Deferred vested members who have already attained age 55 but are currently receiving benefits are assumed to retire two years beyond the valuation date.

Participation and Coverage Elections

100% of Plan members are assumed to elect coverage upon retirement. 90% are assumed to have a covered spouse. Male spouses are assumed to be three years older than their wives.

Healthcare Claims

The following represents expected medical and pharmacy claims for 2012.

Age	Retiree		Spouse	
	Male	Female	Male	Female
50	6,281	7,813	6,281	7,937
55	8,442	9,421	8,442	9,486
60	11,682	10,907	11,682	10,935
65	4,920	4,674	4,753	4,526
70	5,300	5,035	5,120	4,876
75	5,710	5,424	5,516	5,253
80	6,151	5,844	5,942	5,659
85	6,627	6,295	6,401	6,096

Dental and vision claims for 2012 are assumed to be \$30 and \$4 per person, respectively, with no assumed aging. Family coverage is assumed to result in 25% higher dependent claims.

Projected Post-Retirement
 Benefit Cost Increases:

Annual increases in the premium equivalents and expected claims for post-retirement benefits are assumed to be as follows (representative rates):

Year	Medical/Rx, Pre-65	Medical/Rx, Post-65
2012	8.5%	6.5%
2013	7.0%	6.0%
2014	9.0%	6.0%
2015	8.0%	6.0%
2020	6.6%	6.0%
2025	5.6%	5.0%
2030+	5.0%	5.0%

The prior medical trend assumption was 8% in 2012, grading down to a 4% ultimate rate.

Vision and Dental trend are each assumed to be 4% per year.

Change in Actuarial Assumptions since Prior Valuation

Actuarial assumptions were updated based on an experience study conducted in 2012, covering January 1, 2005 through December 31, 2010. Medical and pharmacy claims were updated based on analysis of recent claim experience. Future medical inflation assumptions were updated based on the Getzen Model and higher expected near-term (2014 – 2015) costs due to the recent national healthcare legislation.

Section 3:

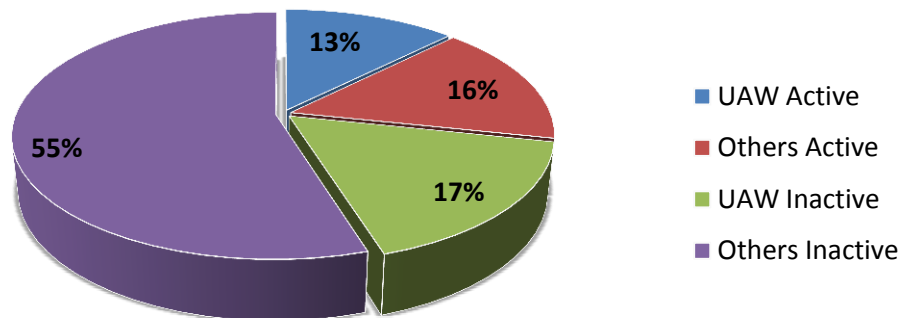
Actuarial Computations

3.1: Summary of Actuarial Accrued Liability (AAL) and Normal Cost

	December 31, 2009	December 31, 2011
<i>(from prior report)</i>		
Active Members AAL		
UAW	23,142,892	28,398,984
Others:		
Hired Prior to October 29,1990	11,288,796	10,007,881
Hired on or after October 29, 1990	<u>16,020,196</u>	<u>25,873,987</u>
Total Active AAL	50,451,884	64,280,852
Retired Members/Beneficiaries and Inactive AAL		
UAW	39,861,266	38,151,766
Others	<u>113,086,483</u>	<u>124,482,525</u>
Total Inactive AAL	152,947,749	162,634,291
Employer Normal Cost		
UAW	1,309,850	1,385,649
Others:		
Hired Prior to October 29,1990	431,128	259,080
Hired on or after October 29, 1990	<u>1,793,569</u>	<u>2,087,729</u>
Total Normal Cost	3,534,547	3,732,458

(full pre-funding assumed for comparative purposes)

Breakdown of Actuarial Accrued Liability

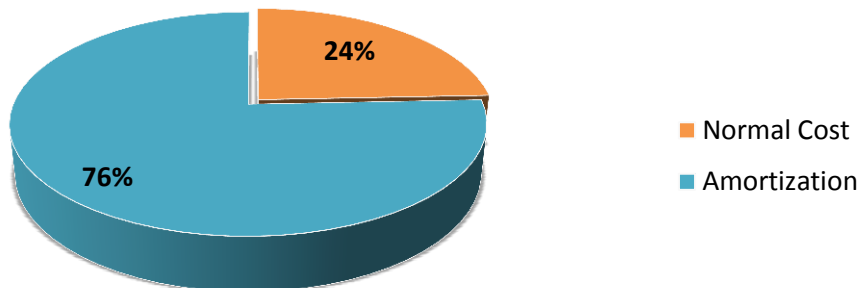


3.2: Computation of Annual Required Contribution (ARC) – Full Funding

	December 31, 2009	December 31, 2011
(1) Total Actuarial Accrued Liability	\$ 203,399,633	\$ 226,915,143
(2) Actuarial Value of Plan Assets	24,363,831	28,680,151
(3) Unfunded Actuarial Accrued Liability (UAAL): (1) – (2)	179,035,802	198,234,992
(4) Amortization of UAAL: (3) ÷ Amort Factor	9,785,374	11,465,468
(5) Employer Normal Cost	3,534,547	3,732,458
(6) Total Annual Required Contribution: (4) + (5)	\$ 13,319,921	\$ 15,197,926
Percent of Payroll	42.68%	61.25%
Following Fiscal Year Cost	\$ 13,852,718	\$ 15,667,542
Funding Policy Contribution		\$ 15,667,542

The assets in this plan are comprised of VEBA assets for New Plan members, plus the healthcare reserve balance.

Breakdown of Actuarial Cost

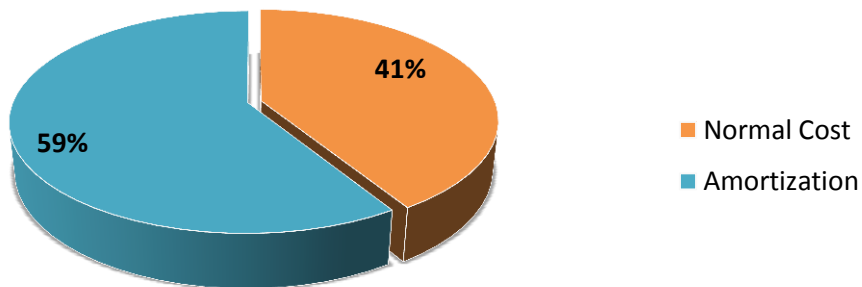


3.3: Computation of Annual Required Contribution (ARC) – Pay-as-you-go

December 31, 2011

(1)	Total Actuarial Accrued Liability	\$ 383,941,679
(2)	Actuarial Value of Plan Assets	28,680,151
(3)	Unfunded Actuarial Accrued Liability (UAAL): (1) – (2)	355,261,528
(4)	Amortization of UAAL: (3) ÷ Amort Factor	13,570,189
(5)	Employer Normal Cost	9,504,738
(6)	Total Annual Required Contribution: (4) + (5)	\$ 23,074,927
	Percent of Payroll	92.99%
	Fiscal Year 2013 Cost	\$ 23,787,943
	Funding Policy Contribution (including benefit payments)	\$ 10,550,441

Breakdown of Actuarial Cost



3.4: Computation of Annual Required Contribution (ARC) – Partial Funding

	50% Pre-Funding	Statutory Pre-Funding
<i>Discount Rate</i>	6.05%	4.86%
(1) Total Actuarial Accrued Liability	\$ 289,429,043	\$ 349,079,564
(2) Actuarial Value of Plan Assets	28,680,151	28,680,151
(3) Unfunded Actuarial Accrued Liability (UAAL): (1) – (2)	260,748,892	320,399,413
(4) Amortization of UAAL: (3) ÷ Amort Factor	12,398,793	13,161,640
(5) Employer Normal Cost	5,846,114	8,099,543
(6) Total Annual Required Contribution: (4) + (5)	\$ 18,244,906	\$ 21,261,183
Percent of Payroll	73.53%	85.68%
Fiscal Year 2013 Cost	\$ 18,808,674	\$ 21,918,154
Funding Policy Contribution (including benefit payments)	\$ 13,108,991	\$ 11,317,846

50% pre-funding: Benefit payments + 50% of difference between pay-as-you-go cost and full pre-funding cost

Statutory Prefunding: 4% of pay contributions for New Plan members, 2.5% for Old Plan members (in addition to benefit payments), per City ordinance. A 3% of total payroll weighted average rate is assumed.

Section 4:

Disclosure Information

4.1: GASB Schedules

GASB Statement No. 45 requires preparation of schedules of funding status and employer contributions, as well as the disclosure of plan provisions, actuarial assumptions, and other information. The required schedules are shown below. In each case, we have relied upon information from our files and contained in the reports of other actuaries employed by the employer in completing the schedules.

Schedule of Funding Status

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percent of Payroll
12/31/2009	\$ 24,363,831	\$203,399,633	\$179,035,802	12.0%	\$31,207,892	574%
12/31/2011 Fully funded	\$ 28,680,151	\$226,915,143	\$198,234,992	12.6%	\$24,813,423	799%
12/31/2011 Partial Funding (Statutory)	\$ 28,680,151	\$349,079,564	\$320,399,413	8.2%	\$24,813,423	1,291%

Net OPEB Obligation

	Fiscal 2011	Fiscal 2012
Annual Required Contribution (ARC)~	8,866,588	15,197,926
Interest on Net OPEB Obligation/(Asset)	(180,813)	(250,750)
<u>Adjustment to ARC</u>	<u>133,243</u>	<u>185,933</u>
Annual OPEB cost	8,819,018	15,133,109
Contributions Made*	<u>(9,773,601)</u>	<u>(9,723,909)</u>
Increase in Net OPEB Obligation	(954,583)	5,409,200
Net OPEB Obligation/(Asset) – Beginning of Year	(2,260,157)	(3,214,740)
Net OPEB Obligation/(Asset) –End of Year	(3,214,740)	2,194,460

~ This is based on a full pre-funding scenario. Pay-as-you-go funding will entail a higher ARC and Net OPEB Obligation. The City will need to finalize the above based on their specific funding policy.

Fiscal 2011 information is as shown in the City's Financial Statements.

* Amounts should be based on actual contributions = Total claims paid on behalf of retirees, less retiree contributions. The amounts above are based on the actuary's estimates of such payments. Any changes in these amounts will also impact the total Net OPEB Obligation.

4.2: Summary of Valuation Information

The table below summarizes certain information about this actuarial report.

Valuation date	December 31, 2011
Actuarial cost method	Entry Age Normal, Level percent of pay
Amortization method	Level percentage of payroll
Remaining amortization period	30 years
Asset valuation method	N/A
Actuarial assumptions:	
Investment rate of return*	4.30% for pay-as-you-go 7.80% for prefunded scenarios
*Includes inflation at	3.00%

Projected Post-Retirement Benefit Cost Increases:

Annual increases in the premium equivalents and expected claims for post-retirement benefits are assumed to be as follows (representative rates):

Year	Medical/Rx, Pre-65	Medical/Rx, Post-65
2012	8.5%	6.5%
2013	7.0%	6.0%
2014	9.0%	6.0%
2015	8.0%	6.0%
2020	6.6%	6.0%
2025	5.6%	5.0%
2030+	5.0%	5.0%

Vision and Dental trend are each assumed to be 4% per year.

Section 5:

Summary of Participant Data

Data Summary

Data on active and inactive employees and their beneficiaries as of December 31, 2011 was supplied by the City on electronic media. Participant data was reviewed for reasonableness and consistency but was neither verified nor audited.

A summary of data for the prior and current valuations is shown below.

	December 31, 2009	December 31, 2011		
Active Participants	Total	UAW	Others	Total
Number of Active Members	570	160	321	481
Average Age	47.5	49.3	47.1	47.8
Average Service	11.1	14.0	9.8	11.2
Inactive Participants	Total	UAW	Others	Total
Number of Retired Participants	717	151	524	675
Average Age	Not shown	64.9	66.6	66.2
Number of Disabled Participants	(included above)	7	12	19
Average Age	Not shown	60.1	63.3	62.1
Number of Surviving/EDRO Beneficiaries	(included above)	27	77	104
Average Age	Not shown	69.1	77.2	75.1
Number of Terminated Vested	48			65
Average Age	Not shown			51.5

The following table is a summary of the current healthcare coverage for the above inactive participants who have elected retiree healthcare benefits from the City.

Retired Members and Beneficiaries as of December 31, 2011

Healthcare Coverage	UAW	Others	Total
Single Coverage	80	292	372
Dual Coverage	81	235	316
Family Coverage	18	62	80
No Coverage or Opt Out	6	24	30
Total Retirees/Beneficiaries	185	613	798

Appendix:

Additional Information and Sensitivity Analysis

Background

In 2004, the Governmental Accounting Standards Board (GASB) issued a new set of accounting rules, referred to as Statements 43 and 45, for how public sector employers must measure and report the cost of retiree benefit obligations on their financial statements. These statements cover what are known as "Other Post-Employment Benefits" (OPEB) and include such non-pension benefits as life insurance, dental care coverage and long-term care, as well as retiree health benefits.

The accounting statements require the use of using accrual-basis accounting methods, which will generally result in a higher current annual cost being reported on the employers' financial statements. The new statements do not require that these benefits be paid for on a similar basis (i.e. using pre-funding methods). However, governments that elect to pre-fund these benefits will generally be able to report a smaller annual cost for these benefits on their financial statements than if they did not pre-fund.

Funding Policy and Implications

To demonstrate the effects of pre-funding benefits, we have determined Plan cost based on two scenarios:

1. Full pre-funding of benefits – This implies that the City will consistently contribute an amount equal to the Annual Required Contribution (ARC) as defined by GASB 45.
2. Pay-as-you-go funding (current financing method) – This entails no intended pre-funding, and that all future benefits will be paid from the City's general assets.

Partial prefunding is another option, which would entail a consistent contribution greater than the pay-as-you-go cost, but less than the full pre-funding ARC.

GASB Statement 43 has particular requirements pertaining to the legal structure of a trust fund when determining whether assets can be considered to be accumulated for the purposes of pre-funding the OPEB benefits, specifically:

- Contributions to the plan are irrevocable
- Plan assets are dedicated to providing benefits to their retirees and their beneficiaries in accordance with the terms of the plan
- Plan assets are legally protected from creditors of the employer or plan administrator

Pay-as-you-Go Funding:

A method for funding benefits whereby the employer pays the current year's benefits from the operating funds of the employer

Accrual-basis Accounting:

A method that recognizes costs when an employee earns a benefit, not when the benefit is actually paid

Pre-Funding:

A method for funding whereby the employer sets aside (and generally invests) assets to pay for future benefits

The Plan must satisfy these requirements if it wishes to use dedicated assets to offset the retiree healthcare liabilities for GASB purposes.

The valuation of the plan must take into account the funding policy. The key difference between the funding strategies described above is in the selection of the discount rate (or investment return assumption) used to determine liabilities and costs. As required by GASB Statements 43 and 45, the return assumption must correspond with the assets used to support the benefits. For a plan with a full pre-funding policy, the expected return on plan assets may be used. For an unfunded plan (i.e. pay-as-you-go), the expected rate of return on general funds will be required.

For a plan with a partial-funding policy, those liabilities which are being pre-funded can be discounted at the expected return on plan assets, while those liabilities which are not being pre-funded must be discounted at the expected rate of return on the general fund.

The discount rate is a key economic assumption, and has a substantial impact on the determination of liabilities and costs. A lower discount rate leads to a higher present value of future benefits, and subsequently higher calculated liabilities and actuarial costs.

Sections 3.2 through 3.4 show the determination of actuarial liabilities and the ARC under several funding policies. All other actuarial assumptions and methods are consistent between the two scenarios. Table A-1 below demonstrates the impact of various investment returns.

Discount Rate:
 The interest rate used to calculate the value today of money that will be needed in the future.

Unfunded Actuarial Accrued Liability:
 The value in today's dollars of future benefits that workers have earned based on the service to the current date.

Annual Required Contribution (ARC): The amount of money that should be set aside during the year to cover both the value of benefits accrued by active workers during the year (Normal Cost) and the portion of the unfunded actuarial liability that is being paid that year.

Table A-1: Summary of Liabilities and Cost (ARC) Under Various Return Scenarios

(\$ millions)	Expected Basis	Lower Return	Higher Return
<i>Pre-funded Scenario</i>			
Annual rate of return (discount rate)	7.80%	6.80%	8.80%
Actuarial Accrued Liability	\$ 226.9	\$ 259.6	\$ 200.4
Employer Normal Cost	3.7	4.8	2.9
Annual Required Contribution (ARC)	\$ 15.2	\$ 16.8	\$ 13.9

Uncertainties in OPEB Projections: Healthcare Inflation

As shown above, the decision to pre-fund post-retirement benefits has a large impact on the determination of the OPEB liabilities and costs.

Also, unlike pension plans, which have a relatively predictable pattern of benefits, post-retirement healthcare benefits are much more difficult – if not impossible – to forecast accurately. Pension benefits are based on service and salary, which can be reasonably anticipated. Post-retirement medical benefits are much more variable, as they depend heavily on medical inflation.

In order to calculate future medical benefits, it is common to use relatively high expected medical inflation rates for the next few years, which gradually decrease over time. One explanation for the downward trend in medical inflation rates is that if medical inflation is not controlled, then expenditures in the health-related sectors will constitute an unacceptably large portion of the overall national economy.

Even if medical inflation decreases to the level of general inflation, long-term rates of medical premium rate increases may still exceed the general inflation rate. Medical care premiums often increase faster than medical inflation due to the particulars of the medical coverage, such as the leveraging effect of employee cost-sharing (co-pays, deductibles, etc.) on premium rates. For this reason, a long-term medical inflation assumption is set at a level higher than assumed general inflation.

Table A-2 below demonstrates the impact of medical inflation on costs, showing liabilities and costs under three scenarios. The baseline scenario applies the valuation assumption of initial annual medical inflation. The alternate scenarios assume medical costs increase at rates 1% higher and 1% lower each year versus valuation assumptions. All other valuation methods and assumptions are maintained for these scenarios.

Table A-2: Summary of Liabilities and Cost (ARC) Under Various Medical Inflation Scenarios

(\$ millions)	Valuation Assumptions	Increased Medical Inflation	Decreased Medical Inflation
<i>Pre-funded Scenario Only</i>			
Initial Medical/Rx Inflation (first three years)	8.5% - 9.0%	9.5% - 10.0%	7.5% - 8.0%
Ultimate Medical/Rx Inflation (Dental/Vision Inflation – all years)	5.0% (4.0%)	6.0% (5.0%)	4.0% (3.0%)
Actuarial Accrued Liability	\$ 226.9	\$ 260.7	\$ 199.5
Employer Normal Cost	3.7	4.7	3.0
Annual Required Contribution (ARC)	\$ 15.2	\$ 18.1	\$ 12.9