UNITED STATES BANKRUPTCY COURT EASTERN DISTRICT OF MICHIGAN SOUTHERN DIVISION

| | | Chapter 9 |
|-----------------------------------|---|-----------------------|
| In re: | | Case No. 13-53846 |
| City of Detroit, Michigan, Debtor | | Hon. Steven W. Rhodes |
| | / | |

REPORT OF SUZANNE TARANTO

Pursuant to Federal Rule of Civil Procedure 26(a)(2)(B), made applicable to this proceeding by Federal Rule of Bankruptcy Procedure 7026, debtor the City of Detroit ("City") submits this report with respect to the expected expert testimony of Suzanne Taranto

I. Introduction

Suzanne Taranto is a Principal and Consulting Actuary at Milliman. It is the City's intention to call Ms. Taranto to testify about matters pertaining to other postemployment benefits ("OPEB") called for in the Plan of Adjustment of the Debts of the City of Detroit ("POA").

II. Opinions:

Ms. Taranto will offer the following opinions:

- The EPBO of the Retiree Health Plans provided by the City prior to its Chapter 9 filing;
- The projected annual cash obligations of the Retiree Health Plans provided by the City prior to its Chapter 9 filing; and
- The range of possible discount rates to calculate the OPEB claim.

III. Basis and Reasons for Opinions

A. <u>Background</u>

In June 2012, Jack Martin, the then Chief Financial Officer for the City of Detroit (the "City"), formally engaged Milliman to provide health and pension

consulting support to the City. Ms. Taranto took the lead for the Milliman team in connection with analyzing the health insurance arrangements provided by the City to its retired employees and participated in a process to design new retiree health insurance arrangements that would comport with the City's limited cash availability.

B. The City's Pre-Filing Health Care Benefit Plans

1. The Actuarial Value of the Pre-Filing Retiree Health Plans

In 2013, the City contracted for, or self-insured, approximately 24 different retiree health plan programs for its retired population (10 of the plans were for Medicare-eligible retirees; 14 were for non-Medicare-eligible retirees) ("2013 Retiree Health Plan"). The 2013 Retiree Health Plan was similar in design to the retiree health plans for prior years. The City provided benefits under the 2013 Retiree Health Plan to approximately 17,000 retirees (and with the retirees' spouses and other dependents, approximately 25,400 individuals in total). Of these 17,000 retirees, approximately 11,000 retirees are eligible for Medicare; approximately 6,000 are not eligible for Medicare ("non-Medicare"). Among the dependents of City retirees, approximately 2,700 are eligible for Medicare; approximately 5,700 are not. The City has not pre-funded any of its retiree health obligations. Accordingly, the City's liabilities for benefits under the 2013 Retiree Health Plan were unfunded liabilities.

In evaluating a health care program, one important measure is its "actuarial value." The actuarial value of health insurance coverage represents the portion of total projected health care claims costs that are paid, on average, by the health care program directly or by insurance carrier, compared to the portion paid, on average, by the retiree through out-of-pocket deductibles, coinsurance and other cost sharing features. Actuarial value assessments do not reflect how much a participant pays monthly to participate in the plan, but rather the relative value of the plan design. At the request of the City, Ms. Taranto determined the actuarial value of the 2013 Plan. It did so using Milliman's Health Cost GuidelinesTM, a proprietary pricing and analytical tool relied on by over 100 risk-bearing entities. Ms. Taranto determined that each one of the City's retiree health programs for Medicareeligible retirees that were included in the 2013 Retiree Health Plan had an actuarial value (including Medicare) in excess of 90%. That is, on average, 90% of the health care claims are covered by the City's supplemental retiree health benefit programs and Medicare, and the participant contributes 10% through cost sharing. Ms. Taranto determined that the City's retiree health programs for non-Medicareeligible retirees had actuarial values that ranged from 83% to 90%. In Ms.

Taranto's opinion, these retiree health benefit program options were very generous to retirees, and extremely expensive for the City, even when compared to other collectively bargained retiree health programs negotiated by employers and unions.

2. The Present Value of the Pre-Filing Retiree Health Plans

Ms. Taranto also determined the present value of the City's retiree medical obligations. Ms. Taranto did so in several steps. First, she replicated the City's retiree health liability as of July 1, 2011 – under the retiree health plan as of that date – which liability amount had been previously calculated by the Retirement System's actuary, Gabriel Roeder Smith & Company ("Gabriel Roeder"). In performing the replication, Ms. Taranto used July 1, 2011 census data provided by Gabriel Roeder, and the same assumptions and benefit design provisions outlined in Gabriel Roeder's City of Detroit Retiree Health Care Plan Actuarial Report as of July 1, 2011. *See* POA00606243-302. Ms. Taranto was able to independently replicate the total present value of future benefits (Expected Postretirement Benefit Obligation or EPBO) to within 1% of the Gabriel Roeder Actuarial Report EPBO, and the expected net 2011-12 cash benefit payments to within 2.5% of Gabriel Roeder Smith's projected payments. *See* POA00260853-856.

Second, Ms. Taranto undertook and completed an independent valuation of the City's liabilities as of July 1, 2012, using July 1, 2012 valuation data and actuarial assumptions, as well as 2013 Retiree Health Plan provisions as outlined in Appendix A, including a 4% discount rate. Ms. Taranto projected that as of July 1, 2012, the then-existing retiree health plan would have a total present value, or EPBO, of approximately \$6.5 billion. This EPBO liability includes \$3.2 billion for then-current retirees, and \$3.3 billion for future retirees. The \$6.5 billion liability represented the present value of all future benefits to be paid under the retiree health plan based on both the current retirees (and their covered dependents) and the benefits payable in retirement for all active employees then employed by the City; individuals hired by the City after July 1, 2012 were not included in this figure.

The 4% discount rate that Ms. Taranto employed in calculating the July 1, 2012 EPBO was derived from the Citigroup yield curve, as a proxy for a bond matched portfolio. Ms. Taranto selected a 4% discount rate because she was seeking to value the liabilities, and she believed that measuring unfunded liabilities by reference to a high quality corporate bond portfolio as of June 30, 2012 was a reasonable measure by which to assess such unfunded liability. Use of high quality corporate bonds was not the only reasonable measure by which to assess

the City's unfunded retiree health plan liabilities. Liabilities can be assessed using an expectation of the investment return assumption for the assets used to pay benefits, which would vary based on the portfolio strategy selected by the payor. For example, a strategy used by an employer to settle the liabilities primarily through an annuity purchase from an insurance company during 2014 would probably reflect an effective discount rate lower than 4%, although there are very few insurance or annuity products available to permanently settle retiree health liabilities.

3. The Projected Cash Obligations of the Pre-Filing Retiree Health Plans.

Ms. Taranto also modeled the projected retiree health cash costs for the City for the next several fiscal years, assuming that the 2013 Retiree Health Plan had continued in effect. For the fiscal year ending June 30, 2014, Ms. Taranto projected that such 2013 Retiree Health Plan would cost the City \$164.5 million in cash to provide the promised health coverage. The projected cash payout obligations of the City for each of the fiscal years from July 1, 2013 through June 30, 2023 are as follows (in millions):

| Fiscal Year Ending | Expected Net City Payment |
|--------------------|---------------------------|
| 2014 | \$164.5 |
| 2015 | \$173.6 |
| 2016 | \$179.4 |
| 2017 | \$187.6 |
| 2018 | \$195.5 |
| 2019-2023 | \$1,145.5 |

C. Cost of Post-Filing, 2014 Health Care Benefit Plan

Effective March 1, 2014, the City significantly modified its retiree health program ("2014 Retiree Health Plan"), and Ms. Taranto modeled the cash cost of the 2014 Program for current retirees (for both Medicare Advantage Plans and non-Medicare payments), and determined that it cost approximately \$3.00 million per month. These estimates are based on the participant data, assumptions and methods described in the attached Appendices, and excludes any claims associated with the 2013 Retiree Health Plan that will be paid by the City during calendar 2014.

Ms. Taranto also calculated the present value of benefits associated with the new 2014 Retiree Health Plan. Using the same assumptions as were used to calculate the July 1, 2012 EPBO, including continued use of the 4% discount rate, the present value of benefits for retirees as of July 1, 2012 was \$751 million. These estimates are based on the participant data, assumptions and methods described in the attached Appendices.

D. <u>Calculation of OPEB Claim in Bankruptcy.</u>

In connection with the City's negotiations with the Retiree Committee to settle the OPEB claim (Class 12 in the POA), Ms. Taranto was asked to model the present value of the City's liabilities to current retirees under a variety of different discount rates.

In undertaking this analysis, Ms. Taranto was asked to include in the present value calculation two additional categories of retirees who had either not previously been included in the prior EPBO analyses, or who were included with a limited liability.

First, Ms. Taranto was asked to include not only those retirees then enrolled and receiving medical benefits, but also to include the approximately 1,000 retirees and 440 dependents in the July 1, 2012 valuation data who had elected only dental and vision coverage as of that date, but who were not then electing medical coverage.

Second, Ms. Taranto also was asked to include current retirees who were eligible to receive retiree health benefits from the City, but who had opted out of receiving any City sponsored retiree health benefits. Ms. Taranto was advised that under the terms of the 2013 Retiree Health Plan, as well as the retiree health plans that preceded it, retirees who were receiving pensions but who had chosen to opt out of retiree health had a contractual right on an annual basis to opt back in and receive retiree health benefits for themselves and for their dependents. There were 1,829 retirees who were eligible for and had not elected any health benefits under the 2013 Retiree Health Plan.

The present value using July 1, 2012 census data of health benefits for retirees under the 2013 Retiree Health Plan, including the adjustments discussed above for dental and vision only participants and retirees who had opted out, varied as follows (in billions):

| Discount Rate | Present Value of Benefits |
|--|---------------------------|
| 4.5% | \$3.59 |
| 4.0% | \$3.71 |
| 3.5% | \$4.00 |
| 3.47% for first 20 years, 3.64% thereafter | \$4.00 |
| 2.60% for first 20 years. 3.43% thereafter | \$4.49 |

Ms. Taranto will testify that the discount rate option of 3.47% for the first 20 years of liability and 3.64% thereafter is the discount rate that the Pension Benefit Guaranty Corporation ("PBGC") used to value long term pension liabilities for pension plans that terminated during the second quarter of 2014, and that the rate of 2.60% for the first 20 years and 3.43% thereafter is the discount rate that the PBGC used to value long term pension liabilities on pension plans that terminated as of July 1, 2013, and as of the date of the Chapter 9 filing in this case (collectively, the "PBGC Rates"). She also will testify that these PBGC Rates generally reflect the results of a survey of insurance companies regarding the cost to issue immediate and deferred annuities at a range of ages, net of administrative expenses. In that regard, Ms. Taranto will testify that there are a range of potential discount rates that one could use to value retiree health liabilities reasonably, depending upon the situation for which liabilities are being valued. In a situation where an employer wishes to defease those liabilities and turn over to retirees a sum of money sufficient to pay the promised health benefits for the retirees' lives, it is reasonable to expect that the retirees would assess the liabilities - and thus seek a sum of money to pay the promised benefits - assuming the assets they received were held in a very low risk portfolio. The discount rate would be set based on the investment return that such low risk assets would expect to earn, and is likely to be based on a mix of high quality corporate bonds and risk-free Treasury instruments, such as Treasury strips. Ms. Taranto will testify that while such a discount rate is difficult to predict with precision, rates over the past six months suggest the rate to be around 3% or lower.

IV. Materials Considered in Reaching Opinions

Documents and other materials supporting Ms. Taranto's opinions have been produced by the City.

V. Qualifications

Ms. Taranto is an Enrolled Actuary and a Member of the American Academy of Actuaries. She is also a Fellow of the Conference of Consulting Actuaries. Ms. Taranto has expertise in the area of health benefit plans. Her job is to provide advice on the design and delivery of health and benefit plans, and she has significant experience in the area of accounting for postemployment benefits, with particular expertise in the area of retiree health benefits. Ms. Taranto has also advised unions with respect to establishing Voluntary Employee Benefit Association ("VEBAs").

In the past five years, Ms. Taranto has been a featured speaker on the topic of employer active and retiree health benefits at, among others, the June 2014 Society of Actuaries Health Section Meeting, the 2012 and 2010 Conference of Consulting Actuaries Annual Meeting, the Financial Executives International (FEI) Committee on Benefits Finance (Fall 2012), the 2013 Teamster Service Center Annual Summit, and the 2009 International Foundation of Employee Benefit Plans Annual Meeting.

Her biography is attached.

VI. Prior Expert Testimony

Ms. Taranto has offered expert testimony in the following matters:

- International Union, United Automobile, Aerospace, and Agricultural Implement Workers of America (UAW) v. Ford Motor Company, Case No. 05-74730 (E.D. Mich. July 13, 2006);
- International Union, United Automobile, Aerospace, and Agricultural Implement Workers of America v. General Motors Company, Case No: 05-73991 (E.D. Mich. Dec. 22, 2005);
- Rachilla et al. v. Mack Trucks Inc et al., Case No. 07-03737 (E.D. Pa. May 12, 2011); and
- In re Dana Corporation, et al., Case No. 06-10354 (Bankr. S.D.N.Y. Dec. 15, 2011).

VII. Compensation

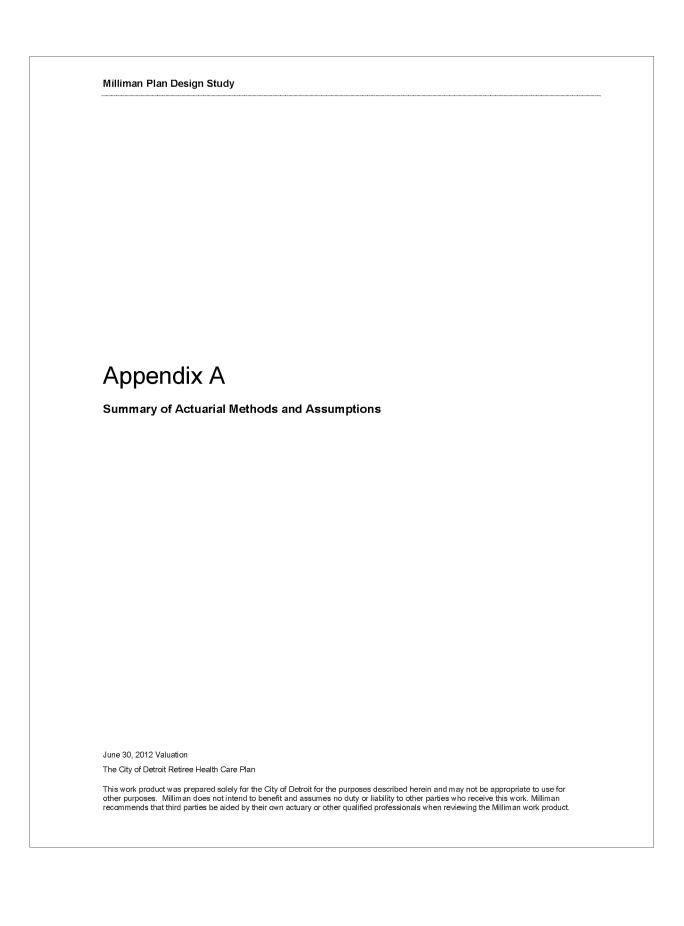
Ms. Taranto is not being compensated individually for this expert report. Rather, her compensation is part of Milliman's engagement with the City. Her billable rate is \$615 per hour.

July 8, 2014

Respectfully Submitted,

Singame Tarant

Suzanne Taranto, E.A., MA.A.A. Principal and Consulting Actuary



Appendix A - Summary of Actuarial Methods

Actuarial Methods

Liability: Expected Post Retirement Benefit Obligation (EPBO), which is the economic future value of all benefits expected to be made from the plan has been used in this analysis.

Asset Valuation Method: Not applicable. The plan is not funded.

Financial Assumptions

Discount Rate: 4.00%

Healthcare Assumptions - Baseline

Annual Gross Per-Capita Claim Costs:

The City of Detroit provides its retirees medical and prescription drug coverage primarily through Blue Cross Blue Shield, as well as health coverage through Health Alliance Plan, Caremark and other carriers. The City also provides dental and vision benefits to its retirees. The July 1, 2012 through June 30, 2013 per capita costs were developed independently for pre-Medicare and Medicare retirees and independently for Uniform and Non-Uniform retirees using premium and premium equivalent rates effective for the 2012 and 2013 calendar years. Individual participant data provided by the City of Detroit was used to reflect the average demographic distribution of lives for the plan. Factors based on Milliman's Health Cost Guidelines the August of Ages, separately by gender and status (retiree and dependent). Active participant experience and demographics were included when determining the costs over a range of ages. The number and age of active dependents were calculated using the HCGs. The HCGs are developed by Milliman health actuaries from an extensive amount of data, which is updated regularly. The cost models consider utilization and average charge levels for roughly 60 benefit categories, and can provide relative value factors in per capita plan costs between programs of different design, demographics, or geography.

The baseline per capita costs reflect the plan design changes effective January 1, 2013 and alternative dates associated with the Financial Advisory Board recommendations approved in 2012.

Sample July 1, 2012 through June 30, 2013 per capita claim costs are shown below.

Medical/Rx for Uniform Retirees:

| Age | Male Retiree | Female Retiree | Male Spouse | Female Spouse |
|-----|--------------|----------------|-------------|---------------|
| 45 | \$9,591 | \$10,214 | \$5,126 | \$6,093 |
| 50 | 8,326 | 8,980 | 5,935 | 6,712 |
| 55 | 8,822 | 8,829 | 7,033 | 7,441 |
| 60 | 10,706 | 9,954 | 8,559 | 8,522 |

June 30, 2012 Valuation A-1 The City of Detroit Retiree Health Care Plan

Appendix A - Summary of Actuarial Methods

| Age | Male Retiree | Female Retiree | Male Spouse | Female Spouse |
|-----|--------------|----------------|-------------|---------------|
| 64 | \$13,209 | \$11,859 | \$10,530 | \$10,107 |
| 65 | 4,748 | 4,634 | 4,748 | 4,634 |
| 70 | 5,366 | 5,232 | 5,366 | 5,232 |
| 75 | 5,992 | 5,847 | 5,992 | 5,847 |
| 80 | 6,533 | 6,395 | 6,533 | 6,395 |
| 85 | 7,000 | 6,884 | 7,000 | 6,884 |
| 90 | 7,372 | 7,277 | 7,372 | 7,277 |

Medical/Rx for Non-Uniform:

| Age | Male Retiree | Female Retiree | Male Spouse | Female Spouse |
|-----|--------------|----------------|-------------|---------------|
| 45 | \$7,501 | \$7,988 | \$4,009 | \$4,765 |
| 50 | 6,512 | 7,023 | 4,641 | 5,249 |
| 55 | 6,900 | 6,904 | 5,500 | 5,819 |
| 60 | 8,373 | 7,784 | 6,693 | 6,665 |
| 64 | 10,330 | 9,275 | 8,235 | 7,904 |
| 65 | 5,243 | 5,117 | 5,243 | 5,117 |
| 70 | 5,925 | 5,777 | 5,925 | 5,777 |
| 75 | 6,617 | 6,457 | 6,617 | 6,457 |
| 80 | 7,214 | 7,062 | 7,214 | 7,062 |
| 85 | 7,730 | 7,601 | 7,730 | 7,601 |
| 90 | 8,140 | 8,036 | 8,140 | 8,036 |

Vision and dental costs were based on premium rates provided by the City of Detroit. Costs were created on a per retiree basis. The following chart shows the annual per retiree claim costs.

June 30, 2012 Valuation A-2 The City of Detroit Retiree Health Care Plan

Appendix A - Summary of Actuarial Methods

| Vision | Dental |
|--------|--------|
| \$118 | \$467 |

Medicare Part D Subsidy claim costs were based on the expectation that the City of Detroit would receive a subsidy equal to 29% of prescription drug costs. Sample July 1, 2012 through June 30, 2013 per capita claim costs are shown below.

| Age | Male Retiree | Female Retiree | Male Spouse | Female Spouse |
|-----|--------------|----------------|-------------|---------------|
| 65 | \$736 | \$737 | \$761 | \$713 |
| 70 | 832 | 832 | 860 | 805 |
| 75 | 929 | 930 | 960 | 900 |
| 80 | 1,013 | 1,017 | 1,047 | 984 |
| 85 | 1,086 | 1,095 | 1,122 | 1,059 |
| 90 | 1,143 | 1,158 | 1,181 | 1,120 |

Increase in Claim Costs by Year ("Trend"):

The Society of Actuaries (SOA) developed and regularly updates a long-term medical trend model based on detailed research performed by a committee of economists and actuaries, which included a representative from Milliman. Milliman uses this model, with certain adjustments, as the foundation for the trend that it recommends for employer plans. These adjustments include incorporating assumed administrative cost trend and removing the impact of aging (since aging assumptions are applied separately in the valuation when applicable).

Adjustments have been made to reflect an anticipation of fees and surcharges effective in future calendar years, including fees associated with Patient-Centered Outcomes Research Trust Fund, Reinsurance fees, and insured plan fees, to the extent applicable as well as for the expectation of the excise tax on high cost health plans effective for plan years after 2017.

Ultimate rates were determined considering historic and projected rates of real growth, long-term inflation and additional growth attributable to technology, and medical costs as a component of gross domestic product (GDP).

The dental and vision inflation rates were based on recent history and expected changes for the near future.

June 30, 2012 Valuation A-3
The City of Detroit Retiree Health Care Plan

Milliman Plan Design Study Appendix A - Summary of Actuarial Methods and Assumptions

| | Pre-Medicare Trend with Excise Tax | | | |
|-------------|---------------------------------------|-------|-------|-------|
| 2012 - 2013 | 8.00% | 8.00% | 5.00% | 8.00% |
| 2013 - 2014 | 7.60% | 7.60% | 5.00% | 7.60% |
| 2014 - 2015 | 6.00% | 6.00% | 5.00% | 6.00% |
| 2015 - 2016 | 5.70% | 5.70% | 5.00% | 5.70% |
| 2016 - 2022 | 5.60% | 5.60% | 5.00% | 5.60% |
| 2022 - 2026 | 5.50% | 5.50% | 5.00% | 5.50% |
| 2026 - 2027 | 5.60% | 6.00% | 5.00% | 5.50% |
| 2027 - 2028 | 5.60% | 6.10% | 5.00% | 5.50% |
| 2028 - 2032 | 5.60% | 6.00% | 5.00% | 5.50% |
| 2032 - 2033 | 5.60% | 6.00% | 5.00% | 5.40% |
| 2033 - 2034 | 5.60% | 5.90% | 5.00% | 5.40% |
| 2034 - 2035 | 6.00% | 5.90% | 5.00% | 5.30% |
| 2035 - 2036 | 5.80% | 5.80% | 5.00% | 5.20% |
| 2036 - 2037 | 5.70% | 5.70% | 5.00% | 5.20% |
| 2037 - 2038 | 5.60% | 5.60% | 5.00% | 5.10% |
| 2038 - 2039 | 5.60% | 5.70% | 5.00% | 5.10% |
| 2039 - 2041 | 5.50% | 5.90% | 5.00% | 5.10% |
| 2041 - 2042 | 5.70% | 5.80% | 5.00% | 5.00% |
| 2042 - 2043 | 5.90% | 5.80% | 5.00% | 5.00% |
| 2043 - 2045 | 5.80% | 5.70% | 5.00% | 5.00% |
| 2045 - 2046 | 5.80% | 5.60% | 5.00% | 5.00% |
| 2046 - 2048 | 5.70% | 5.60% | 5.00% | 5.00% |
| 2048 - 2050 | 5.60% | 5.50% | 5.00% | 5.00% |
| 2050 - 2052 | 5.60% | 5.50% | 4.90% | 4.90% |
| 2052 - 2056 | 5.50% | 5.40% | 4.90% | 4.90% |
| 2056 - 2058 | 5.40% | 5.40% | 4.90% | 4.90% |
| 2058 - 2062 | 5.40% | 5.30% | 4.90% | 4.90% |
| 2062 - 2063 | 5.30% | 5.30% | 4.90% | 4.90% |
| 2063 - 2066 | 5.30% | 5.20% | 4.90% | 4.90% |
| 2066 - 2069 | 5.20% | 5.20% | 4.80% | 4.80% |
| 2069 - 2071 | 5.20% | 5.10% | 4.80% | 4.80% |
| 2071 - 2073 | 5.10% | 5.10% | 4.80% | 4.80% |
| 2073 - 2074 | 5.10% | 5.00% | 4.80% | 4.80% |
| 2074 - 2075 | 5.00% | 5.00% | 4.70% | 4.70% |
| 2075 - 2076 | 5.00% | 4.90% | 4.70% | 4.70% |
| 2076 - 2077 | 4.90% | 4.90% | 4.60% | 4.60% |
| 2077 - 2078 | 4.80% | 4.80% | 4.60% | 4.60% |
| 2078 - 2079 | 4.80% | 4.70% | 4.50% | 4.50% |
| 2079 - 2080 | 4.70% | 4.70% | 4.50% | 4.50% |
| 2080 - 2081 | 4.70% | 4.60% | 4.40% | 4.40% |
| 2080 - 2081 | 4.60% | 4.60% | 4.40% | 4.40% |
| 2081 - 2082 | | | | |
| | 4.60% | 4.50% | 4.40% | 4.40% |
| 2083 + | 4.50% | 4.50% | 4.30% | 4.30% |

June 30, 2012 Valuation A-4 The City of Detroit Retiree Health Care Plan

Data Assumptions Used to Develop Claims Cost

Several assumptions were made about the data.

- The total active population is representative of the demographics of the active lives with medical coverage. Modifications were made to the active demographics based on our understanding of the number of active contracts in each plan.
- 2. There are approximately 600 retirees in the data missing dates of birth. We assumed all of these members who are Medicare-eligible are post-65 and all others are under age 65. We have also assumed their ages are consistent with the demographics of each of the known pre-65 and post-65 populations.
- 3. There are some retirees in Single plus Spouse contracts and Family contracts that do not have a spouse date of birth in the data. For these contracts we have assumed female spouses are 3 years younger than the retiree on the contract and male spouses are 3 years older than the retiree.
- 4. All participants in the COPS Trust are assumed to not be eligible for Medicare.

Demographic Assumptions

General

Turnover: Rates are based on service for the first four years and age thereafter as follows:

Select period based on service only:

| Years of | EMS | D.O.T. | Ott | ners |
|----------|--------|--------|--------|--------|
| Service | | | Male | Female |
| 0 | 11.00% | 18.00% | 18.00% | 20.00% |
| 1 | 10.00% | 16.00% | 15.00% | 16.00% |
| 2 | 8.00% | 14.00% | 13.00% | 14.00% |
| 3 | 8.00% | 11.00% | 11.00% | 12.00% |
| 4 | 7.00% | 9.00% | 10.00% | 10.00% |

Ultimate Rates (Five or more years of service):

| Age | EMS | D.O.T. | Off | iers |
|-----|-------|--------|-------|--------|
| Age | Line | | Male | Female |
| 25 | 6.70% | 8.00% | 7.60% | 7.60% |
| 30 | 5.90% | 7.60% | 7.22% | 7.22% |
| 35 | 5.20% | 5.56% | 5.28% | 5.28% |
| 40 | 4.40% | 4.26% | 4.05% | 4.05% |
| 45 | 3.40% | 3.69% | 3.51% | 3.51% |
| 50 | 2.40% | 3.50% | 3.33% | 3.33% |
| 55 | 2.00% | 3.50% | 3.33% | 3.33% |
| 60 | 0.00% | 3.50% | 3.33% | 3.33% |

June 30, 2012 Valuation A-5 The City of Detroit Retiree Health Care Plan

Retirement Rates:

Participants eligible for unreduced retirement benefits are assumed to retire at the following ages:

| | | Rate | |
|-----|------|--------|--------|
| Age | | | |
| | EMS | D.O.T. | Others |
| 45 | 25% | | |
| 46 | 25% | | |
| 47 | 25% | | |
| 48 | 22% | | |
| 49 | 20% | | |
| 50 | 18% | 55% | 50% |
| 51 | 15% | 50% | 50% |
| 52 | 15% | 50% | 45% |
| 53 | 15% | 50% | 45% |
| 54 | 15% | 55% | 40% |
| 55 | 15% | 50% | 30% |
| 56 | 15% | 50% | 30% |
| 57 | 15% | 50% | 30% |
| 58 | 15% | 50% | 30% |
| 59 | 15% | 55% | 40% |
| 60 | 40% | 40% | 25% |
| 61 | 30% | 30% | 25% |
| 62 | 30% | 30% | 25% |
| 63 | 30% | 30% | 25% |
| 64 | 30% | 30% | 25% |
| 65 | 30% | 30% | 35% |
| 66 | 30% | 30% | 30% |
| 67 | 30% | 30% | 25% |
| 68 | 30% | 50% | 25% |
| 69 | 30% | 50% | 25% |
| 70 | 100% | 100% | 20% |
| 71 | | | 20% |
| 72 | | | 20% |
| 73 | | | 20% |
| 74 | | | 20% |
| 75 | | | 20% |
| 76 | | | 20% |
| 77 | | | 20% |
| 78 | | | 20% |
| 79 | | | 20% |
| 80 | | | 100% |

June 30, 2012 Valuation A-6 The City of Detroit Retiree Health Care Plan

Appendix A - Summary of Actuarial Methods

Participants eligible for reduced retirement benefits:

| Age | Rate |
|-----|------|
| 55 | 7% |
| 56 | 8% |
| 57 | 9% |
| 58 | 10% |
| 59 | 12% |
| 60 | 12% |
| 61 | 12% |
| 62 | 12% |
| 63 | 12% |
| 64 | 12% |

Rates of Disability:

| | | R | ate | |
|-----|----------|-------|----------|-------|
| Age | DOT | | Others | |
| | Ordinary | Duty | Ordinary | Duty |
| 25 | 0.02% | 0.03% | 0.01% | 0.25% |
| 30 | 0.05% | 0.08% | 0.04% | 0.29% |
| 35 | 0.14% | 0.21% | 0.11% | 0.34% |
| 40 | 0.27% | 0.42% | 0.21% | 0.39% |
| 45 | 0.51% | 0.79% | 0.40% | 0.45% |
| 50 | 0.66% | 1.03% | 0.51% | 0.52% |
| 55 | 0.76% | 1.18% | 0.59% | 0.60% |
| 60 | 0.86% | 1.34% | 0.67% | 0.70% |

Mortality:

Pre-Retirement: Based on rates provided by Gabriel Roeder Smith, which follow. These rates are not projected to improve.

June 30, 2012 Valuation A-7 The City of Detroit Retiree Health Care Plan

Appendix A - Summary of Actuarial Methods

| | Rate of Death | | | |
|-----|---------------|---------|--------|--------|
| Age | Non-Dut | y Death | Duty I | Death |
| | Male | Female | Male | Female |
| 25 | 0.03% | 0.02% | 0.01% | 0.01% |
| 30 | 0.03% | 0.02% | 0.01% | 0.01% |
| 35 | 0.06% | 0.04% | 0.02% | 0.01% |
| 40 | 0.08% | 0.05% | 0.03% | 0.02% |
| 45 | 0.11% | 0.08% | 0.04% | 0.03% |
| 50 | 0.16% | 0.13% | 0.05% | 0.04% |
| 55 | 0.27% | 0.20% | 0.09% | 0.07% |
| 60 | 0.51% | 0.38% | 0.17% | 0.13% |

Post-Retirement:

Healthy

110% of the RP-2000 Combined Table for males and 110% of the RP-2000 Combined Table set back 2 years for females. Both tables are projected with Scale AA on a generational basis starting in 2011. Prior assumption by Gabriel Roeder Smith & Company used the same tables with no projection.

Disabled

Healthy rates set forward ten years

Police and Fire

Withdrawal

Rates are based on service for the first four years and age thereafter as follows:

Select period based on service only:

| Service | Rate | | | |
|---------|--------|-------|--|--|
| | Police | Fire | | |
| 0 | 8.50% | 5.00% | | |
| 1 | 7.50% | 4.00% | | |
| 2 | 6.00% | 3.00% | | |
| 3 | 5.00% | 2.00% | | |
| 4 | 4.50% | 2.00% | | |

June 30, 2012 Valuation A-8 The City of Detroit Retiree Health Care Plan

Milliman Plan Design Study Appendix A - Summary of Actuarial Methods and Assumptions

Ultimate Rates (based on five or more years of service):

| Age | 5 | ₹ate |
|-----|--------|-------|
| | Police | Fire |
| 25 | 4.50% | 1.96% |
| 30 | 3.30% | 1.62% |
| 35 | 2.30% | 1.11% |
| 40 | 1.70% | 0.77% |
| 45 | 1.50% | 0.60% |
| 50 | 1.10% | 0.51% |
| 55 | 0.80% | 0.51% |
| 60 | 0.80% | 0.51% |

Retirement:

| Service | | 7- | ite | |
|---------|------|------|------|------|
| | Po | lice | Fi | re |
| 19 | 25% | | 15% | |
| 20 | 18% | | 12% | |
| 21 | 18% | | 12% | |
| 22 | 18% | | 12% | |
| 23 | 18% | | 12% | |
| 24 | 18% | 35% | 12% | 15% |
| 25 | 18% | 25% | 12% | 15% |
| 26 | 18% | 20% | 12% | 12% |
| 27 | 18% | 20% | 12% | 12% |
| 28 | 18% | 20% | 12% | 12% |
| 29 | 18% | 18% | 15% | 12% |
| 30 | 18% | 18% | 15% | 12% |
| 31 | 18% | 18% | 15% | 12% |
| 32 | 20% | 20% | 15% | 12% |
| 33 | 25% | 25% | 20% | 20% |
| 34 | 30% | 30% | 25% | 20% |
| 35 | 30% | 30% | 30% | 30% |
| 36 | 30% | 30% | 30% | 35% |
| 37 | 30% | 30% | 30% | 35% |
| 38 | 30% | 30% | 30% | 35% |
| 39 | 30% | 30% | 30% | 35% |
| 40 | 100% | 100% | 100% | 100% |

June 30, 2012 Valuation A-9
The City of Detroit Retiree Health Care Plan

Appendix A - Summary of Actuarial Methods

Disability

| Rate | | | | |
|------|----------|-------|----------|-------|
| Age | Police | | Fire | |
| | Ordinary | Duty | Ordinary | Duty |
| 25 | 0.06% | 0.13% | 0.07% | 0.34% |
| 30 | 0.07% | 0.19% | 0.08% | 0.52% |
| 35 | 0.08% | 0.34% | 0.09% | 0.90% |
| 40 | 0.11% | 0.49% | 0.12% | 1.30% |
| 45 | 0.16% | 0.73% | 0.18% | 1.92% |
| 50 | 0.47% | 1.16% | 0.53% | 3.06% |
| 55 | 0.73% | 1.96% | 0.82% | 5.18% |
| 60 | 0.83% | 2.82% | 0.94% | 7.47% |

Mortality

Pre-Retirement

Based on rates provided by Gabriel Roeder Smith, which follow. These rates are not projected to improve. Death-in-Service assumed to be 50% Non-Duty and 50% Duty.

| Age | Ra | ite |
|-----|-------|--------|
| . 9 | Male | Female |
| 25 | 0.03% | 0.01% |
| 30 | 0.03% | 0.02% |
| 35 | 0.06% | 0.03% |
| 40 | 0.08% | 0.04% |
| 45 | 0.11% | 0.07% |
| 50 | 0.16% | 0.11% |
| 55 | 0.27% | 0.17% |
| 60 | 0.51% | 0.29% |
| 65 | 0.96% | 0.57% |
| 70 | 1.67% | 1.01% |

Post Retirement

Healthy

95% of the RP-2000 Combined Table for males and 100% of the RP-2000 Combined Table set back 2 years for females. Both tables are projected with Scale AA on a generational basis starting in 2011. Prior assumption by Gabriel Roeder Smith & Company used the same tables with no projection.

June 30, 2012 Valuation A-10 The City of Detroit Retiree Health Care Plan

Appendix A - Summary of Actuarial Methods

Disabled:

10 year set forward of the healthy rates.

Coverage Assumptions General and Police and Fire

Baseline Assumption for the Election of Coverage in Retirement:

| | Individual | Two- Person/Family | No Coverage | Probability of Continuing non- Single Coverage |
|-------------|------------|-----------------------|-------------|--|
| General | | | | |
| Male | 40% | 40% | 20% | 75% |
| Female | 40% | 40% | 20% | 75% |
| Police/Fire | | | | |
| Male | 30% | 65% | 5% | 100% |
| Female | 30% | 65% | 5% | 100% |

We have assumed that retirees who currently waive coverage continue to elect to decline coverage.

Alternative Plan Designs:

| | Individual | Two- Person/Family | No Coverage | Probability of Continuing non- Single Coverage |
|-------------|------------|-----------------------|-------------|--|
| General | | | | |
| Male | 60% | 40% | 0% | 75% |
| Female | 60% | 40% | 0% | 75% |
| Police/Fire | | | | |
| Male | 35% | 65% | 0% | 100% |
| Female | 35% | 65% | 0% | 100% |

We have assumed that all retirees who currently do not have coverage will reinstate coverage for themselves and their spouses.

Future Terminated Vested

Members

We assumed that future General terminated vested would not receive retiree medical benefits. Prior assumption by Gabriel Roeder Smith & Company assumed all future General terminated vested are eligible for retiree coverage.

Decrement Operation

Disability and mortality decrements do not operate during the first 5 years of service. Disability and withdrawal decrements also do not operate during retirement eligibility.

June 30, 2012 Valuation A-11 The City of Detroit Retiree Health Care Plan

Appendix A - Summary of Actuarial Methods

Marriage Assumption

100% of General and Police & Fire employees are assumed to be married in the event of death-in-service. Male spouses are assumed

to be three years older than female spouses.

Retiree Contribution - Current

Plan

Future retirees from the General group are projected to contribute 25% toward the health care premium. Future retirees from the Public Safety group are projected to contribute 10% toward the health care premium. Current retiree contributions were based on the amounts in

the data.

Retiree Contribution - Proposed

Plans

Current and future retirees are projected to not contribute toward the

health care premium.

Dependent Coverage We assumed that coverage for non-spouse dependents of current

and future retirees would be concurrent with the projected lifetime of

the spouse

Spouse Data Spouse information was not always available for persons identified as

having health care coverage for multiple people. In these cases

spouses were imputed.

Service Police and Fire employees were assumed to buy one year of service

at retirement.

Loads Alternative Plan Design 1:

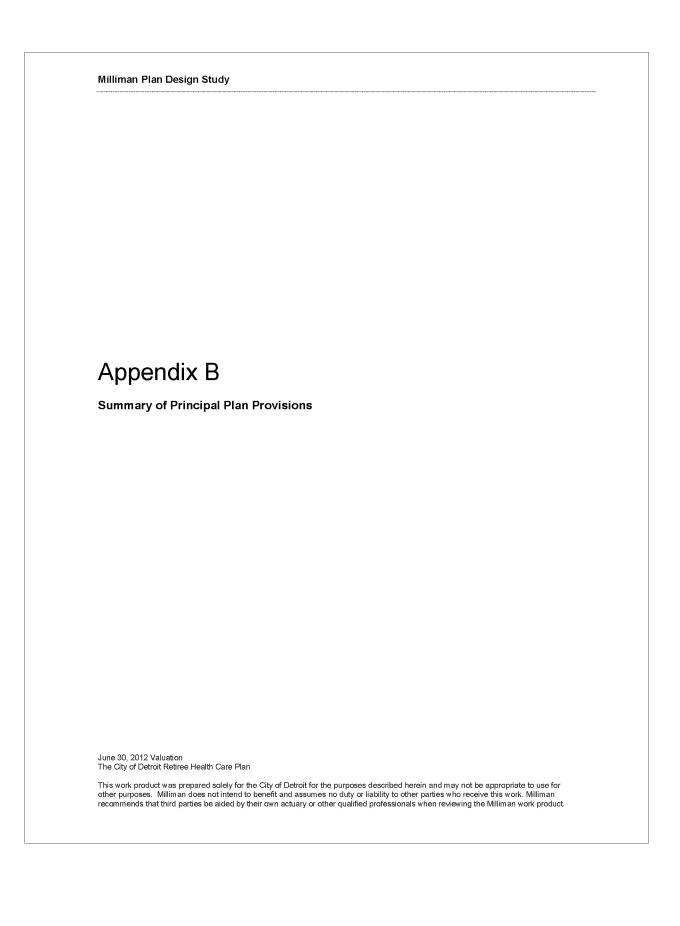
2% load on actives and retirees, 50% load (for sensitivity) on the over

65 non-Medicare eligible retirees.

Alternative Plan Design 2 and 3:

2% load on actives and retirees.

June 30, 2012 Valuation A-12 The City of Detroit Retiree Health Care Plan



Summary of Plan Provisions

Members of the City of Detroit General and Police/Fire pension plans are eligible to receive retiree health care.

Normal Retirement

Police and Fire

Eligibility Any age with 25 years of service, or any age with 20 years of service for DPOA members

effective March 8, 2007 and allied DFFA members effective March 8, 2008.

Benefit Member: City pays up to 90% (80% for certain unions subject to plan design changes in

2013) of health care coverage for retiree and spouse, only.

Spouse: City pays up to 90% (80% for certain unions subject to plan design changes in 2013) of health care coverage as long as the spouse continues to receive a pension. The City does not pay for coverage for a new non-City-retiree spouse. Spouses (widows or widowers) of Straight Life Option retirees who retired prior to July 1, 1987 continue to

receive hospitalization coverage.

Dental and Vision insurance is provided for retiree and spouse.

General

Eligibility Hired before 1995:

30 years of service (25 for EMS members), age 60 with 10 years, or age 65 and 8 years.

Hired on or after 1995:

Age 55 and 30 years, age 60 with 10 years, or age 65 and 8 years.

Benefit

Member: City pays up to 100% of health care coverage if retired prior to January 1, 1984, except for the Master Medical benefit that was added on to the coverage after that date. City pays up to 90% (80% for certain unions subject to plan design changes in 2013) of health coverage if retired after January 1, 1984; however, for retirees who retired between January 1, 1984 and June 30, 1994, the retiree share has been reduced by 50% by appropriations from City Council.

Spouse: City pays health coverage, under the formula above, as long as the spouse continues to receive a pension. The City does not pay for coverage for a new non-City-retiree spouse.

Dental and Vision insurance is provided for retiree and spouse.

June 30, 2012 Valuation B-1 The City of Detroit Retiree Health Care Plan

Early Retirement

Police and Fire

Police and Fire members have the option to elect an early reduced retirement benefit at date of termination if they qualify for a vested benefit.

Eligibility

Health care coverage begins when the early retiree reaches the date they would have attained twenty-five years of credited service, or when they would have attained 20 years of credited service for DPOA members and Allied DFFA members, effective March 8, 2007.

Benefit

Member: City pays up to 90% (80% for certain unions subject to plan design changes in 2013) of health care coverage for retiree and spouse, only.

Spouse: City pays up to 90% (80% for certain unions subject to plan design changes in 2013) of health care coverage as long as the spouse continues to receive a pension. The City does not pay for coverage for a new non-City-retiree spouse. Spouses (widows or widowers) of Straight Life Option retirees who retired prior to July 1, 1987 continue to receive hospitalization coverage.

Dental and Vision insurance is provided for retiree and spouse.

General

Eligibility Hired before 1995:

25 years of service – Coverage begins when retiree would have been eligible for normal retirement

Hired on or after 1995:

Age 55 and 25 years – Coverage begins when retiree would have been eligible for normal retirement.

Benefit

Member: City pays up to 90% (80% for certain unions subject to plan design changes in 2013) of health care coverage for retiree and spouse, only.

Spouse: City pays up to 90% (80% for certain unions subject to plan design changes in 2013) of health care coverage as long as the spouse continues to receive a pension. The City does not pay for coverage for a new non-City-retiree spouse.

Dental and Vision insurance is provided for retiree and spouse.

June 30, 2012 Valuation B-2 The City of Detroit Retiree Health Care Plan

Deferred Retirement Benefits (Vested)

Police and Fire

Eligibility

Health care coverage begins when the early retirement retiree reaches the date they would have attained twenty-five years of credited service.

Benefit

Member: City pays up to 90% (80% for certain unions subject to plan design changes in 2013) of health care coverage for those who retire prior to August 28, 2003. For those who retired on August 28, 2003 and after, the City's portion of the payment will be 4% times their years and fraction of years.

Spouse: City pays up to 90% (80% for certain unions subject to plan design changes in 2013) of health care coverage as long as the spouse continues to receive a pension. The City does not pay for coverage for a new non-City-retiree spouse. Spouses (widows or widowers) of Straight Life Option retirees who retired prior to July 1, 1987 continue to receive hospitalization coverage.

Dental and Vision insurance is provided for retiree and spouse.

General

Eligibility

Members who terminate employment without fulfilling the requirements for an "age and service retirement" from the City are not eligible to receive retiree health care benefits if excluded by the collective bargaining contract. Non-Union members are eligible for coverage when they reach what would have been their 30 th year of service (30 years and age 55 for non-union hired after 1995).

Benefit

Member: City pays up to 90% (80% for certain unions subject to plan design changes in 2013) of health care coverage for retiree and spouse, only.

Spouse: City pays up to 90% (80% for certain unions subject to plan design changes in 2013) of health care coverage as long as the spouse continues to receive a pension. The City does not pay for coverage for a new non-City-retiree spouse.

Dental and Vision insurance is provided for retiree and spouse.

June 30, 2012 Valuation B-3 The City of Detroit Retiree Health Care Plan

Death-In-Service Retirement Benefits Duty Related

City pays up to 90% (80% for certain unions subject to plan design changes in 2013) of health care coverage as long as the spouse continues to receive a pension and does not remarry. No age or service requirements for both General and Police & Fire groups. Dental and Vision Insurance is provided for spouse.

Death-In-Service Retirement Benefits Non-Duty Related

Police and Fire

Eligibility No age or service conditions.

Benefit Spouse: City pays up to 90% (80% for certain unions subject to plan design changes in

2013) of health care coverage as long as spouse continues to receive a pension and does

not remarry.

Dental and Vision insurance is provided for retiree and spouse.

General

Eligibility 15 years of service, age 60 with 10 years, or age 65 and 8 years.

Benefit Spouse: City pays up to 90% (80% for certain unions subject to plan design changes in

2013) of health care coverage as long as spouse continues to receive a pension and does

not remarry.

Dental and Vision insurance is provided for retiree and spouse.

June 30, 2012 Valuation B-4 The City of Detroit Retiree Health Care Plan

Disability Retirement Benefits Duty Related

Eligibility No age or service conditions.

Benefit Member: City pays up to 90% (80% for certain unions subject to plan design changes in

2013) of health care coverage.

Spouse: City pays up to 90% (80% for certain unions subject to plan design changes in 2013) of health care coverage as long as spouse continues to receive a pension and does

not remarry.

Dental and Vision insurance is provided for retiree and spouse.

Disability Retirement Benefits Non-Duty Related

Police and Fire

Eligibility 5 years of service.

Benefit Member: City pays up to 90% (80% for certain unions subject to plan design changes in

2013) of health care coverage.

Spouse: City pays up to 90% (80% for certain unions subject to plan design changes in 2013) of health care coverage as long as spouse continues to receive a pension and does

not remarry.

Dental and Vision insurance is provided for retiree and spouse.

General

Eligibility 10 years of service.

Benefit Member: City pays up to 90% (80% for certain unions subject to plan design changes in

2013) of health care coverage.

Spouse: City pays up to 90% (80% for certain unions subject to plan design changes in 2013) of health care coverage as long as spouse continues to receive a pension and does

not remarry.

Dental and Vision insurance is provided for retiree and spouse.

Medicare-Eligible

City of Detroit will provide complementary retiree health coverage. Once eligible, member and spouse are required to enroll and pay Medicare parts A&B.

June 30, 2012 Valuation B-5 The City of Detroit Retiree Health Care Plan

Opt-Out

Retirees who terminate City of Detroit paid retiree health care coverage after retirement may return to coverage at a later time.

Medical Benefits

Medical plan designs vary slightly by carrier and option. The following chart displays common plan characteristics, although they are not representative of every plan offered by the City of Detroit.

| | Option III | Other Plans (including Weiler) |
|----------------------------|-----------------|-----------------------------------|
| Deductible | (In-Network Be | enefits Shown) |
| Individual | \$250 | \$175 |
| Family | \$500 | \$350 |
| Coinsurance | 80% | 80% |
| Annual Out-of-Pocket Limit | | |
| Individual | \$1,500 | \$825 |
| Family | \$3,000 | \$1,650 |
| Office Visits | \$25 Copayment | \$10 Copayment |
| Emergency Room | \$100 Copayment | \$75 Copayment |

The following chart shows common plan characteristics for the Medicare Advantage plans offered by the City of Detroit.

| | In-Network | Out-of-Network |
|----------------------------|----------------|----------------|
| Deductible | \$175 | \$425 |
| Coinsurance | 80% | 60% |
| Annual Out-of-Pocket Limit | \$825 | \$1,575 |
| Emergency Room | \$50 Copayment | \$50 Copayment |

June 30, 2012 Valuation B-6 The City of Detroit Retiree Health Care Plan

Prescription Drug Benefits

Prescription drug copayments vary by carrier and plan. The following charts display common plan characteristics, although they are not representative of every plan offered by the City of Detroit.

| Modified Option | = |
|--|---------------------|
| Prescription Drugs - Retail (Generic / Formulary / Non-Formulary) | \$10 / \$35 / \$50 |
| Prescription Drugs - Mail Order (Generic / Formulary / Non-Formulary) | \$20 / \$70 / \$100 |

| Non-Union Desig | n III |
|--|--------------------|
| Prescription Drugs - Retail (Generic / Formulary / Non-Formulary) | \$10 / \$20 / \$30 |
| Prescription Drugs - Mail Order (Generic / Formulary / Non-Formulary) | \$20 / \$40 / \$60 |

| Other Retirees and Medica | re Advantage |
|--|--------------|
| Prescription Drugs - Retail (Generic / Brand) | \$5 / \$15 |
| Prescription Drugs - Mail Order (Generic / Brand) | \$10 / \$30 |

Medicare Part B reimbursement - Not valued in this analysis

June 30, 2012 Valuation B-7 The City of Detroit Retiree Health Care Plan

Alternative Plan Design for 2014

Medicare Retirees

Provide participant and either a prescription drug only benefit or a medical and prescription plan with a target monthly per member per month cost of \$120 in 2014.

Sample Design Options are shown below for illustrative purposes

| Sample Rx only Plan | Design |
|---|-----------------|
| Prescription Drugs - Retail (Generic / Brand) | \$10 / \$40 |
| Prescription Drugs - Mail Order (Generic / Brand) | \$20/\$80 |
| Specialty | 20% Coinsurance |
| Sample Medical and Rx Be | enefit Design |
| Deductible | \$750 |
| Coinsurance | 20% |
| Annual Out-of-Pocket Limit | \$2,500 |
| Office Visit | \$25 copayment |
| Specialist | \$35 copayment |
| Non-Emergency ER | \$65 copayment |
| Prescription Drugs - Retail (Generic /Preferred Brand) | \$25 / \$60 |
| Non preferred brands Specialty | 50% Coinsurance |

Non-Medicare Retirees

Provide a flat dollar stipend for the following classes of retirees to be used toward the purchase of coverage, but not through City-sponsored health plans:

- Retirees currently ages 55 to 64 (without regard to date of retirement)
- All duty-disabled retirees
- Over age 65 non-Medicare eligible retirees

June 30, 2012 Valuation B-8 The City of Detroit Retiree Health Care Plan

Plan Benefit Values - Alternative Plan Design 1

Annual Subsidy:

| Age | Duty Disabled Retirees | Non-Medicare Eligible Retirees Over age 65 | All other Retirees | Spouses |
|--------------------|---------------------------|--|-----------------------|-------------|
| Prior to age 55 | \$250 | N/A | \$O | \$ O |
| 55-64 | \$250 | N/A | \$125 | \$O |
| 65+ | \$120 | \$250 | \$120 | \$120 |

Plan Benefit Values - Alternative Plan Design 2 and 3

| Age | Duty Disabled Retirees | Non-Medicare Eligible Retirees Over age 65 | All other Retirees | Spouses of Current Retirees |
|--------------------|---------------------------|--|-----------------------|-----------------------------------|
| Prior to age 55 | \$200 | N/A | \$0 | \$0 |
| 55-64 | \$200 | N/A | \$120 | \$ O |
| 65+ | \$120 | \$120 | \$120 | \$120 |

Alternative Plan Design 2 and 3 - Coverage Categories

Alternative Design 2

Eliminate Coverage for spouses of all active participants not retired as of February 1, 2013.

Alternative Design 3

Eliminate Coverage for all active participants not yet eligible to retire, as well as all spouses of active participants not retired as of February 1, 2013.

June 30, 2012 Valuation B-9 The City of Detroit Retiree Health Care Plan

Appendix C

Summary of Participant Data

June 30, 2012 Valuation The City of Detroit Retiree Health Care Plan

Summary of Participant Data

Below is a summary of participant data for the June 30, 2012 valuation.

Number of Active Members as of June 30, 2012*

| Age Years of Service to Valuation Date | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|-----|--------|
| | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30+ | Totals |
| 15-19 | 4 | | | | | | | 4 |
| 20-24 | 75 | 4 | | | | | | 79 |
| 25-29 | 214 | 89 | 6 | | | | | 309 |
| 30-34 | 182 | 207 | 327 | 11 | | | | 727 |
| 35-39 | 185 | 188 | 545 | 265 | 3 | | | 1,186 |
| 40-44 | 154 | 146 | 664 | 618 | 136 | 14 | | 1,732 |
| 45-49 | 137 | 143 | 399 | 523 | 395 | 261 | 3 | 1,861 |
| 50-54 | 94 | 113 | 307 | 334 | 374 | 457 | 72 | 1,751 |
| 55-59 | 67 | 81 | 207 | 237 | 227 | 395 | 155 | 1,369 |
| 60-64 | 36 | 46 | 81 | 59 | 44 | 75 | 65 | 406 |
| 65+ | 11 | 15 | 36 | 20 | 20 | 13 | 33 | 148 |
| Totals | 1,159 | 1,032 | 2,572 | 2,067 | 1,199 | 1,215 | 328 | 9,572 |

^{*}Excludes 249 participants that were retired as of February 1, 2013.

Number of General Active Members as of June 30, 2012*

| Age Years of Service to Valuation Date | | | | | | | | |
|--|-----|-----|-------|-------|-------|-------|-----|--------|
| | 0-4 | 6-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30+ | Totals |
| 15-19 | 4 | | | | | | | 4 |
| 20-24 | 45 | 4 | | | | | | 49 |
| 25-29 | 96 | 55 | 3 | | | | | 154 |
| 30-34 | 101 | 111 | 118 | 5 | | | | 335 |
| 35-39 | 146 | 122 | 170 | 93 | 3 | | | 534 |
| 40-44 | 129 | 120 | 305 | 225 | 64 | 12 | | 855 |
| 45-49 | 127 | 128 | 266 | 330 | 236 | 134 | 2 | 1,223 |
| 50-54 | 89 | 110 | 254 | 263 | 284 | 278 | 58 | 1,336 |
| 55-59 | 67 | 78 | 200 | 216 | 201 | 275 | 79 | 1,116 |
| 60-64 | 36 | 44 | 79 | 58 | 40 | 51 | 25 | 333 |
| 65+ | 10 | 15 | 36 | 20 | 19 | 13 | 23 | 136 |
| Totals | 850 | 787 | 1,431 | 1,100 | 847 | 763 | 187 | 6,075 |

June 30, 2012 Valuation C-1 The City of Detroit Retiree Health Care Plan

Milliman Plan Design Study Appendix C - Summary of Participant Data

Number of Police/Fire Active Members as of June 30, 2012*

| Age | | | Years of Se | rvice to Val | uation Date | | | |
|--------|-----|-----|-------------|--------------|-------------|-------|-----|--------|
| ť | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30+ | Totals |
| 15-19 | | | | | | | | |
| 20-24 | 30 | | | | | | | 30 |
| 25-29 | 118 | 34 | 3 | | | | | 155 |
| 30-34 | 81 | 96 | 209 | 6 | | | | 392 |
| 35-39 | 39 | 66 | 375 | 172 | | | | 652 |
| 40-44 | 25 | 26 | 359 | 393 | 72 | 2 | | 877 |
| 45-49 | 10 | 15 | 133 | 193 | 159 | 127 | 1 | 638 |
| 50-54 | 5 | 3 | 53 | 71 | 90 | 179 | 14 | 415 |
| 55-59 | | 3 | 7 | 21 | 26 | 120 | 76 | 253 |
| 60-64 | | 2 | 2 | 1 | 4 | 24 | 40 | 73 |
| 65+ | 1 | | | | 1 | | 10 | 12 |
| Totals | 309 | 245 | 1141 | 857 | 352 | 452 | 141 | 3,497 |

^{*}Excludes 73 participants that were retired as of February 1, 2013.

Number of Terminated Vested Members as of June 30, 2012

| | General | Police | Total |
|-------|---------|--------|-------|
| <25 | | | |
| 25-29 | | | |
| 30-34 | 3 | 4 | 7 |
| 35-39 | 48 | 28 | 76 |
| 40-44 | 122 | 36 | 158 |
| 45-49 | 270 | 38 | 308 |
| 50-54 | 411 | 22 | 433 |
| 55-59 | 430 | 12 | 442 |
| 60-64 | 289 | 15 | 304 |
| 65-69 | 157 | 14 | 171 |
| 70+ | 144 | 6 | 150 |
| Total | 1,874 | 175 | 2,049 |

June 30, 2012 Valuation C-2 The City of Detroit Retiree Health Care Plan

^{*}Excludes 176 participants that were retired as of February 1, 2013.

Number of Retiree and Beneficiary Contracts as of February 1, 2013

| | One Person Coverage | Two Person Coverage | Total |
|--------|---------------------------|---------------------------|--------|
| Male | 3,630 | 6,723 | 10,353 |
| Female | 5,546 | 855 | 6,401 |
| Total | 9,176 | 7,578 | 16,754 |

| | Retirees With Medical Coverage | | | | | |
|-------|--------------------------------|--------|--------|--|--|--|
| Age | General | Police | Total | | | |
| 0-44 | 55 | 169 | 224 | | | |
| 45-49 | 89 | 191 | 280 | | | |
| 50-54 | 329 | 284 | 613 | | | |
| 55-59 | 909 | 608 | 1,517 | | | |
| 60-64 | 1,687 | 1,498 | 3,185 | | | |
| 65-69 | 1,590 | 1,565 | 3,155 | | | |
| 70-74 | 1,151 | 958 | 2,109 | | | |
| 75-79 | 892 | 484 | 1,376 | | | |
| 80-84 | 1,019 | 572 | 1,591 | | | |
| 85-89 | 997 | 646 | 1,643 | | | |
| 90-94 | 551 | 268 | 819 | | | |
| 95+ | 183 | 59 | 242 | | | |
| Total | 9,452 | 7,302 | 16,754 | | | |

We also included 1,013 retirees with dental and vision only coverage who were in the June 30, 2011 data we received and were also in the June 30, 2012 Pension data that we received.

Library members were excluded from the June 30, 2011 GRS valuation, but are included in this valuation.

Data Issues

There were 661 retirees in the February 1, 2013 data who were not included in the July 1, 2011 data. 330 of these retirees were excluded because the data did not include a date of birth for them.

There were 364 of the retirees who had spouse coverage did not have a date of birth for the spouse and we assumed a date of birth based on our assumptions.

June 30, 2012 Valuation C-3 The City of Detroit Retiree Health Care Plan

Milliman Plan Design Study Appendix C - Summary of Participant Data

There were 249 participants were included in both the active and retiree data and we assumed they were retired.

There 62 retirees who were reported as not having medical coverage as of July 1, 2011 were reported with coverage in the February 1, 2013 data.

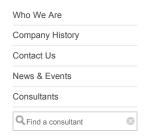
There were 134 retirees who were reported with individual medical coverage as of July 1, 2011 were reported with covered spouses as of February 1, 2013 and 28 were reported with a different dependent date of birth. We used the information from the February data.

30 participants were reported with a different date of birth in the July 1, 2012 Pension data than in the July 1, 2011 data. We used July 1, 2012 data unless the change was not material or the new date of birth was not reasonable.

A few actives were reported with a different date of hire than in the July 1, 2011 data.

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Our Company



Suzanne Taranto, EA, MAAA



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Biography | Publications | Videos

Professional Designations

- Enrolled Actuary
- Member, American Academy of Actuaries

Education

■ BA (magna cum laude), Biology and Mathematics, Stonehill College

Current Responsibility

Sue is a principal and consulting actuary with the NY Region of Milliman. She joined the firm in 2005 and leads the NY Region Employer Health Practice.

Experience

Sue has more than 25 years of employee benefits consulting experience. She provides advice in the design and delivery of comprehensive health welfare plans to both corporate and union plans. Sue is an expert in the areas of accounting for postemployment benefits and specializes in financial analysis and benchmarking of health plans. She is responsible for negotiating and supporting a number of retiree medical VEBA trusts, and she has significant healthcare bargaining and design experience. She has done extensive analysis on the impact of the Affordable Care Act on employer-sponsored plans.

Sue has experience as a consulting actuary in a major consulting firm. She has also held senior positions leading compensation and benefits units of major (Fortune 500) U.S. companies.

Recent presentations

- Conference of Consulting Actuaries Annual Meeting (Actuarial Assumptions under Health Care Reform)
- CFO Rising Conference (Employer Issues under Health Care Reform)
- TSC Health and Benefits Expo (Plan Sponsor Exchange Considerations)