Gabriel Roeder Smith & Company
Consultants & Actuaries

# CITY OF TYLER RETIREE HEALTH CARE PLAN

ACTUARIAL VALUATION REPORT

AS OF DECEMBER 31, 2011

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GRS

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December 26, 2012

Mr. Keidric Trimble
City of Tyler
Director of Finance/CFO
304 N. Border, P.O. Box 2039
Tyler, TX 75702

Dear Mr. Trimble:

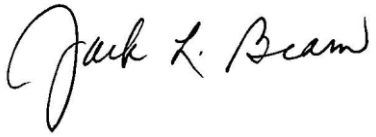
Submitted in this report are the results of an Actuarial Valuation of the assets and benefit values associated with the employer financed retiree health benefits provided by City of Tyler. The date of the valuation was December 31, 2011. The annual required contribution has been calculated for the fiscal year beginning October 1, 2012.

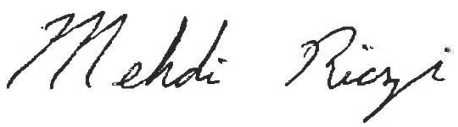
The actuarial calculations were prepared for purposes of complying with the requirements of Statements No. 43 and No. 45 of the Governmental Accounting Standards Board (GASB). The calculations reported herein have been made on a basis consistent with our understanding of these accounting standards. Determinations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

The valuation was based upon information, furnished by City of Tyler, concerning retiree health benefits and individual employees, and financial data. Data was checked for internal consistency but was not otherwise audited.

The signing actuaries are independent of the plan sponsor. To the best of our knowledge, this report is complete and accurate and was made in accordance with generally recognized actuarial methods. One or more of the undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the Academy of Actuaries to render the actuarial opinion herein.

Respectfully submitted,





Jack L. Beam, ASA, EA, MAAA

Mehdi Riazi, ASA, EA, MAAA

# EXECUTIVE SUMMARY

# EXECUTIVE SUMMARY

**Annual Required Contribution**

This report presents the annual expense required to be recognized by the plan sponsor for purposes of complying with the accounting requirements of Government Accounting Standards Board Statement No. 45. In addition, the plan may also need to comply with GASB Statement No. 43. Please consult with legal counsel and the auditors to determine whether you have a plan for GASB Statement No. 43 purposes.

The Annual Required Contribution (ARC) for the fiscal year beginning October 1, 2012 has been calculated. In the first year GASB Statement No. 45 is adopted, the annual OPEB cost required to be disclosed on the employer's financial statements is equal to the ARC. Actual claims/premiums paid on behalf of retirees may be treated as employer contributions in relation to the ARC and act to reduce the Net OPEB Obligation (NOO).

| Annual Required Contribution | Full Funding Policy | Partial Funding Policy |
|---|---|---|
| Fiscal Year Beginning 2012 | $3,147,795 | $3,361,496 |

For additional details please see Section B of the report. As requested, we used the assets in calculating the ARC. However, these assets can only be used in calculation if they are held in a qualified trust as defined by GASB Statements No. 43 and 45. If the assets are not in a qualified trust, then those amounts cannot be used in the calculation of the ARC and the ARC will be higher than the results shown in this report.

**Additional OPEB Reporting Requirements**

In addition to the annual OPEB cost described above, employers will have to disclose a Net OPEB Obligation (or asset). The Net OPEB Obligation is the cumulative difference between annual OPEB costs and annual employer contributions in relation to the ARC, accumulated from the implementation of Statement No. 45. The requirements for determining the employer's contributions in relation to the ARC are described in paragraph 13 g. of Statement No. 45. Additional information required to be disclosed in the employer's financial statements is detailed in paragraphs 24 through 27 of Statement No. 45.

**Liabilities and Assets**

Full Funding Policy Assumptions

This scenario assumes the employer has set up an irrevocable trust and will make annual employer contributions that are equal to the ARC. Under this funding policy, GASB 45 allows the use of a discount rate consistent with the investment return earned on the plan's assets. This rate should be based on the expected long-term investment return. In this valuation, the discount rate is 7.50%.

The present value of all benefits expected to be paid to current plan members as of December 31, 2011 is $47,142,573. The actuarial accrued liability, which is the portion of the $47,142,573 attributable to service accrued by plan members as of December 31, 2011, is $42,067,510. As of December 31, 2011, there is $4,209,405 in valuation assets available to offset the liabilities of the plan.

The funded status of the plan, which is the ratio of plan assets to actuarial accrued liability, as of December 31, 2011 is 10.01%.

Partial Funding Assumption

This scenario assumes the employer has set up an irrevocable trust and will make annual employer contributions that are less than the ARC. Under this funding policy, GASB 45 requires the discount rate to be based on a blend of the expected investment return earned on the plan's assets and the investment return on the employer's general assets. In this valuation, the discount rate is 6.00%.

The present value of all benefits expected to be paid to current plan members as of December 31, 2011 is $56,167,808. The actuarial accrued liability, which is the portion of the $56,167,808 attributable to service accrued by plan members as of December 31, 2011, is $49,466,760. As of December 31, 2011, there is $4,209,405 in valuation assets available to offset the liabilities of the plan.

The funded status of the plan, which is the ratio of plan assets to actuarial accrued liability, as of December 31, 2011 is 8.51%.

# SECTION A
## OVERVIEW

# GASB BACKGROUND

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

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

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

# GASB BACKGROUND (CONCLUDED)

The GASB worked on comprehensive standards for OPEB accounting for more than a decade, culminating with the release of GASB Statements No. 43 and No. 45 in the Spring of 2004. GASB Statement No. 43 covers the accounting rules for OPEB *plans* while GASB Statement No. 45 describes the rules for *employers* sponsoring OPEB plans. The effective dates of the Statements are based on the implementation of GASB Statement No. 34, based on the sponsor's annual revenue for the first fiscal year ending on or after June 15, 1999, and follow the schedule below:

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

# GASB STANDARDS

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

GASB also requires that the calculations assume the terms of the substantive plan continue indefinitely. It has been argued that there is a likelihood future OPEB plan provisions would be different than the current substantive plan (due to rising health care costs or social changes) and therefore liabilities based on the current substantive plan may overstate what will actually occur. However, the GASB Statement is designed to measure liabilities for the plan as it currently exists. While it may be reasonable to assume future changes in the OPEB plan for other purposes, recognition of anticipated changes is not allowed for purposes of accounting for OPEB.

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

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

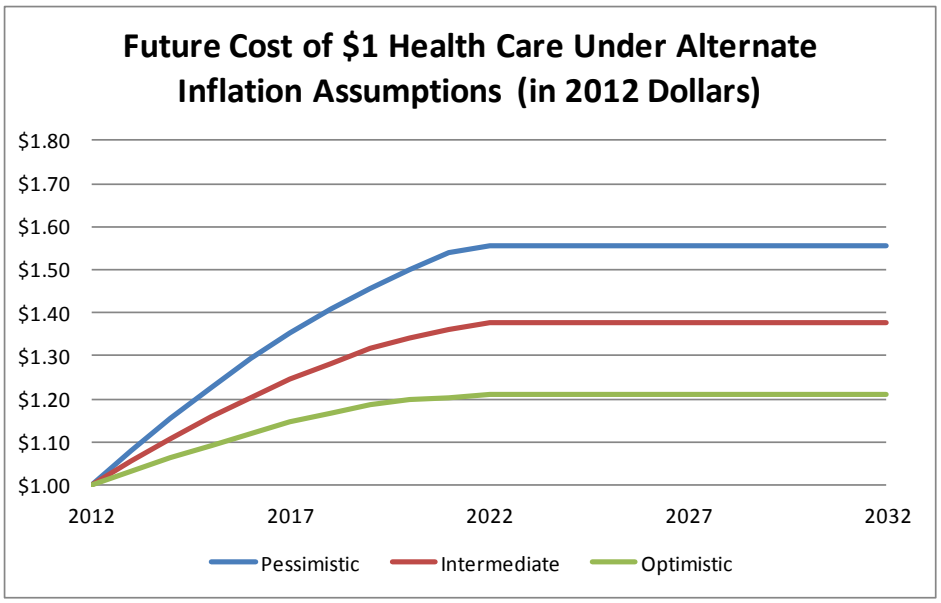
# OPEB SPECIFIC ASSUMPTIONS

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

The cost of providing medical services has been increasing more rapidly than prices in general for many years. During the period from 1955 to 2005 general inflation averaged 4.0%, while health expenditures increased by an average of about 10% per year. If this trend is projected to continue for years to come, it implies that years from now virtually all our expenditures will be for health care. The seemingly more reasonable alternative is that in the not too distant future medical expense inflation will stabilize at a level at or near general inflation. It is on this basis that we project that retiree health care costs will continue to exceed general inflation in the near term, but by less each year until leveling off at an ultimate rate that is similar to general price increases.

Health care increase rates used in this valuation lie within a range of reasonable assumptions, and are described in Section G of this report. The health care increase rate assumption has a major effect on the calculation of plan liabilities. To illustrate the effect of differing future medical inflation rates, the following chart projects the growth of $1 of health care benefit under three sets of assumptions.

In this illustration, each set of assumptions trends smoothly to an assumed long term rate of inflation over the next ten years: The assumption set labeled “Pessimistic” begins at a rate of 7.75% in excess of general inflation, the “Intermediate” assumption begins at a rate of 5.50% in excess of general inflation, while the “Optimistic” assumption begins at a rate of 3.25% in excess of general inflation.




The chart above shows that the cost of providing health care is expected to increase by approximately 40% in inflation-adjusted dollars over the next 20 years, using the "Intermediate" health care increase assumption set. To put this in perspective, assuming health care increases are brought under control almost immediately, as in the "Optimistic" assumption set, implies future per capita health care costs will be expected to increase by roughly 20% over current levels. In addition to the per capita health care inflation, costs are expected to rise as the retiree population increases.

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

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

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

# ACTUARIAL COST METHOD

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

The Projected Unit Credit, Level Percent of Payroll actuarial cost method has been used to calculate the GASB ARC for this valuation. Using the plan benefits, the present health premiums and a set of actuarial assumptions, the anticipated future payments are projected. The projected unit credit method then provides for a systematic funding for these anticipated payments. The yearly ARC is computed to cover the cost of benefits being earned by covered members as well as to amortize a portion of the unfunded accrued liability. This is both an acceptable and reasonable cost method. The use of another actuarial cost method would produce different results.

# OPEB PREFUNDING

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

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

The ultimate determination as to the level of pre-funding will be the result of decisions made in an attempt to reconcile the often conflicting needs of benefit security for members and fiscal responsibility for the employer. The GASB accounting standards noted in the previous section of the report can factor into decisions concerning the level of pre-funding.

# SECTION B
## VALUATION RESULTS

# CITY OF TYLER
# DEVELOPMENT OF THE ANNUAL REQUIRED CONTRIBUTION

| Contributions for | Development of the Annual Required Contribution | | |
|---|---|---|---|
| | Fiscal Year Beginning 2012 | | Fiscal Year Beginning 2010 |
| | Full Funding | Partial Funding | Full Funding |
| Employer Normal Cost | $823,945 | $1,026,668 | $776,195 |
| Amortization of UAAL* | $2,323,850 | $2,334,828 | $2,523,581 |
| Annual Required Contribution (ARC) | $3,147,795 | $3,361,496 | $3,299,776 |
| ARC Per Active Participant | $4,004 | $4,276 | $4,151 |

* Unfunded Actuarial Accrued Liabilities (UAAL) were amortized over 30 years.

The ARC shown in this report has been calculated to increase at the same rate as the projected increase in active member payroll (3.00% per year). The unfunded actuarial accrued liabilities were amortized as a level percent of active member payroll over a period of 30 years. A 30-year amortization period for unfunded actuarial accrued liabilities is the maximum period that complies with the GASB requirements.

# CITY OF TYLER
# DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY
# AS OF DECEMBER 31, 2011

| | Fiscal Year Beginning 2012 | | Fiscal Year Beginning 2010 |
|---|---|---|---|
| | **Full Funding** | **Partial Funding** | **Full Funding** |
| A. Present Value of Future Benefits | | | |
| i) Retirees and Beneficiaries | $25,456,073 | $28,941,321 | $29,772,341 |
| ii) Vested Terminated Members | $0 | $0 | $0 |
| iii) Active Members | $21,686,500 | $27,226,487 | $19,759,845 |
| Total Present Value of Future Benefits | $47,142,573 | $56,167,808 | $49,532,186 |
| B. Present Value of Future Normal Costs | $5,075,063 | $6,701,048 | $5,168,027 |
| C. Actuarial Accrued Liabilities (A.-B.) | $42,067,510 | $49,466,760 | $44,364,159 |
| D. Actuarial Value of Assets | $4,209,405 | $4,209,405 | $3,252,222 |
| E. Unfunded Actuarial Accrued Liability (C.-D.) | $37,858,105 | $45,257,355 | $41,111,937 |
| F. Funded Ratio (D./C.) | 10.01% | 8.51% | 7.33% |

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

# COMMENTS

**COMMENT A:** One of the key assumptions used in any valuation of the cost of post-employment benefits is the rate of return on Plan assets. Higher assumed investment returns will result in a lower ARC. Lower returns will tend to increase the computed ARC. Under the Funding Policy, the assumed asset allocation is a mix of equities and bonds and therefore a 7.50% discount rate is assumed.

**COMMENT B:** Based on the number of plan members as of this valuation, the plan sponsor is required by GASB to perform actuarial valuations at least biennially.

**COMMENT C:** The contribution rates shown include amortization of the unfunded actuarial accrued liability over 30 years. This is the maximum time period permitted by the Governmental Accounting Standards Board Statement No. 43 and No. 45. A shorter amortization period would result in a higher ARC.

**COMMENT D:** Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

# SECTION C
## SENSITIVITY ANALYSIS

# POSTEMPLOYMENT HEALTH INSURANCE -- SENSITIVITY TESTS

Actuarial valuations deal with the cost of benefits to be paid in the future. The payments considered will range from one month in the future to decades from the valuation date (for a young, newly hired employee who may retire many years from now and live many years after that). In order to establish a present day cost for these future benefit obligations, the actuary bases the valuation on a number of assumptions about future occurrences. The occurrences that must be considered include employee turnover, pay increases, disablement, retirements, deaths and investment income on anticipated plan assets.

When the benefits being valued are health care benefits, a key factor is the future cost of the medical benefits being promised. This is projected using the current cost of the System's health care benefits and assumed future health care cost increases. The final cost of providing retiree health care benefits will depend upon how the charges for health care services actually increase in the future.

In order to demonstrate how the cost of these benefits can vary depending upon future health care cost increases, we have performed additional valuations based upon alternative health care cost increase assumptions. The schedules on page C-2 compare (i) the computed cost of the retiree health care benefits using the valuation (Intermediate) assumptions to (ii) results of alternate valuations. One of the alternate valuations is based upon a pessimistic health care cost increase assumption. The other is based upon a more optimistic health care cost increase assumption. The schedule on page C-3 exhibits the health care cost increase assumptions used in each of the valuations.

# CITY OF TYLER
# SENSITIVITY ANALYSIS

The selection of future health care cost increases is one of the key assumptions in determining plan liabilities. If the health care cost trend rates upon which the calculation of the Annual Required Contribution is based were changed to either the pessimistic or optimistic trends noted on page C-3, the annual contribution for the combined groups (illustrated using the projected unit credit method) would change as follows.

| Contributions for | Development of the Annual Required Contribution | | |
|---|---|---|---|
| | Fiscal Year Beginning 2012 | | |
| | Pessimistic | Intermediate | Optimistic |
| Employer Normal Cost | $971,435 | $823,945 | $702,997 |
| Amortization of UAAL* | $2,623,177 | $2,323,850 | $2,068,288 |
| Annual Required Contribution (ARC) | $3,594,612 | $3,147,795 | $2,771,285 |
| ARC Per Active Participant | $4,573 | $4,004 | $3,525 |

* Unfunded Actuarial Accrued Liabilities (UAAL) were amortized over 30 years.
All three scenarios above based on an unfunded 7.50% discount rate

| | Determination of Unfunded Actuarial Accrued Liability | | |
|---|---|---|---|
| | Pessimistic | Intermediate | Optimistic |
| A. Present Value of Future Benefits | | | |
| i) Retirees and Beneficiaries | $27,595,362 | $25,456,073 | $23,562,970 |
| ii) Vested Terminated Members | $0 | $0 | $0 |
| iii) Active Members | $25,553,799 | $21,686,500 | $18,518,898 |
| Total Present Value of Future Benefits | $53,149,161 | $47,142,573 | $42,081,868 |
| B. Present Value of Future Normal Costs | $6,205,284 | $5,075,063 | $4,177,756 |
| C. Actuarial Accrued Liabilities (A.-B.) | $46,943,877 | $42,067,510 | $37,904,112 |
| D. Actuarial Value of Assets | $4,209,405 | $4,209,405 | $4,209,405 |
| E. Unfunded Actuarial Accrued Liability (C.-D.) | $42,734,472 | $37,858,105 | $33,694,707 |
| F. Funded Ratio (D./C.) | 8.97% | 10.01% | 11.11% |

# CITY OF TYLER
# SENSITIVITY ANALYSIS

***Health care trend rates*** used in the sensitivity analysis are shown below.

| Year | Medical and Prescription Drugs | | |
|---|---|---|---|
| | **Pessimistic** | **Intermediate** | **Optimistic** |
| 2012 | 10.75% | 8.50% | 6.25% |
| 2013 | 10.00 | 8.00 | 6.00 |
| 2014 | 9.25 | 7.50 | 5.75 |
| 2015 | 8.50 | 7.00 | 5.50 |
| 2016 | 7.75 | 6.50 | 5.25 |
| 2017 | 7.00 | 6.00 | 5.00 |
| 2018 | 6.50 | 5.50 | 4.50 |
| 2019 | 6.00 | 5.00 | 4.00 |
| 2020 & Later | 5.50 | 4.50 | 3.50 |

Because of the cap on post-65 medical subsidies, no inflation is applied to the post-65 medical benefit.

# SECTION D

## RETIREE PREMIUM RATE DEVELOPMENT

# RETIREE PREMIUM RATE DEVELOPMENT

For the Core Plan, the Buy-up Plan and the post-65 Rx-Card, the initial per capita costs were developed using claims experience from January 2009 through December 2011 in conjunction with census data for the retired members of the retiree health care program. These claims were projected on an incurred claim basis, adjusted for plan design changes, large claims, and loaded for administrative expenses. For the Medicare Supplement benefits, no adjustments were made to the age-specific premiums shown on page E-3.

The costs developed based on the actual experience are used for both current and future retirees for all plans combined. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type to the current retirees.

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

The monthly one-person premium including medical and prescription drug benefits at select ages are shown below:

| FOR THOSE NOT ELIGIBLE FOR MEDICARE | | |
|---|---|---|
| AGE | MALE | FEMALE |
| 40 | $309.94 | $485.60 |
| 50 | 569.73 | 645.54 |
| 60 | 935.46 | 899.19 |
| 64 | 1,088.84 | 1,009.25 |

The age-specific Medicare Supplement premiums are shown on page E-3. The table below illustrates the age-adjusted claims for the post-65 Rx Drug Card.

| FOR THOSE ELIGIBLE FOR MEDICARE | | |
|---|---|---|
| AGE | MALE | FEMALE |
| 65 | $229.03 | $210.91 |
| 75 | 293.29 | 260.29 |
| 85 | 327.04 | 287.13 |

# RETIREE PREMIUM RATE DEVELOPMENT

Based on the guidance provided by GASB on issues related to Medicare Part D payments to State and Local Governments effective June 30, 2006, an employer should apply the measurement requirements of GASB Statement No. 45 to determine the actuarial accrued liabilities, the annual required contribution of the employer, and the annual OPEB cost without reduction for Retiree Drug Subsidy (RDS) payments. Therefore, the impact of the RDS that is part of the Medicare Prescription Drug Improvement and Modernization Act of 2003 is not reflected in this report.

# SECTION E
SUMMARY OF BENEFITS

# CITY OF TYLER
# SUMMARY OF BENEFITS AS OF DECEMBER 31, 2011

## Plan Participants

Retirees of the Municipality are eligible to receive full retiree health care benefits.

## Normal Retirement Benefits

For General Employees (TMRS) - 5 years of service with TMRS and age 60 or 20 years of service at any age.
For Firefighters – age 50 with at least 25 years of service or age 55 with at least 20 years of service.

## Health Care benefit Eligibility Conditions

**Extension** of **Coverage for Retirees Not Eligible for Medicare**
If an Employee is working for the City at the time of his retirement and is not eligible for Medicare (i.e. he is a "Non-Medicare Retiree"), then the Non-Medicare Retiree is eligible to continue Plan coverage for himself and his eligible Dependents. Retiree must inform the Finance Department not later than the date of his retirement if coverage is to be continued. Later election of extended coverage will not be permitted.

An Employee who elects to remain in the Plan as a Non-Medicare Retiree must continue to pay the portion of the cost of coverage for themselves and any eligible dependents covered at the time of retirement, and abide by other conditions of the Plan. Employees hired after January 1, 1997 must pay the blended cost of coverage.

**Employee Coverage Termination**

An Employee's coverage under the Plan (including a retired Employee's coverage, as applicable) will terminate upon the earliest of the following:

On the date a retired Employee becomes eligible for Medicare.

## Deferred Retirement Benefits

Members who terminate employment and choose to retire at a later date, are not eligible for retiree health care benefits.

## Duty and Non-Duty Death in Service Retirement Benefits

Survivors of employees who die while actively employed are not eligible for retiree health care benefits, unless the employee was eligible to retire at the time they passed away, then the spouse may choose to retire in his place, draw monthly benefits, and stay on the insurance plan in the employee's place if they were covered at the time of the employee's death.

# CITY OF TYLER
# SUMMARY OF BENEFITS AS OF DECEMBER 31, 2011

**Duty and Non-Duty Disabled Retirement Benefits**

Employees who retire under a disability retirement are eligible for retiree health care benefits if they are approved for a monthly annuity, but if they are issued a lump sum retirement benefit they will not be eligible for continued City of Tyler retiree insurance.

**Benefits for Spouses of Retired Employees**

Spouses of retired employees are eligible to receive retiree health care benefits if they are currently covered at the time of the retiree's death. Coverage continues to non-Medicare eligible surviving spouses of deceased retirees (they move into the retirees spot) or if Medicare eligible the spouse may continue on the Medicare Supplement, prescription plan and dental if also covered either in the City Health Plan or Medicare Supplement at the time of the retiree's death.

**Medicare – Eligibility Provisions**

Retirees are required to enroll in Medicare once eligible. The City pays 70% (Retiree) 40% (Spouse) of their Medicare Supplement Plan Premium. Those hired after January 1, 1997 will be required to pay the full cost of the Medicare supplement. Effective January 1, 2013, the Medicare Supplement subsidies provided by City will be capped at the 2013 rates.

**Prescription Drug Card – Medicare Retirees**

Retirees participating in Medicare are eligible at enrollment for a Prescription Drug Card provided by the City's Health Plan. The Prescription Drug plan is Medicare Part D equivalent. The City pays 70% (Retiree) 40% (Spouse) for the Prescription Drug Card premiums. Those hired after January 1, 1997 will be required to pay the full cost of the premium. A spouse may enroll in the plan independent of the retiree as long as the retiree participates in the Medicare Supplement. If a retiree or spouse opts-out of the program they will not be eligible to opt back in at a future date.

**Dental Coverage**

Employees who retire are eligible for dental coverage for the retiree and their dependents if covered at the time of their retirement. Coverage continues when the retiree becomes eligible for Medicare.

**Life Insurance Coverage**

Retirees are covered for life insurance in the amount of $5,000.

**Retiree Opt-Out**

Retirees who decide to opt-out of the health care plan will not be eligible to opt back in for both non-Medicare and Medicare retirees. They also are not allowed to add dependents after retirement.

## Employee/Retiree 2012 Monthly Health Care Premiums

| 2012 Health/Dental Retiree Rates | | |
|---|---|---|
| **Date of Hire** | **Before 01/01/1997** | **On and After 01/01/1997** |
| **Core Plan (Pre-65)** | | |
| Employee Only | $10.30 | $431.23 |
| Employee + Spouse | $144.20 | $726.16 |
| Employee +Child(ren) | $118.50 | $629.31 |
| Employee + Family | $175.10 | $885.50 |
| **Buy-up Plan (Pre-65)** | | |
| Employee Only | $117.84 | $538.77 |
| Employee + Spouse | $362.12 | $944.08 |
| Employee +Child(ren) | $304.36 | $815.22 |
| Employee + Family | $438.36 | $1,148.76 |
| **Dental (All ages)** | | |
| Employee Only | $6.54 | $18.30 |
| Employee + Spouse | $24.06 | $37.18 |
| Employee +Child(ren) | $23.30 | $33.88 |
| Employee + Family | $36.22 | $50.42 |
| **Drug Card (Post-65)** | | |
| Employee Only | $62.64 | $208.80 |
| Employee + Spouse | $187.92 | $417.60 |

| 2012 Medicare Supplement Rates (Employees or Spouses)* | | | |
|---|---|---|---|
| **Attained Age** | **Area 1** | **Area 2** | **Area 3** |
| 65-66 | $132.00 | $143.00 | $160.00 |
| 67-69 | $164.00 | $181.00 | $199.00 |
| 70-74 | $193.00 | $212.00 | $234.00 |
| 75-79 | $217.00 | $240.00 | $263.00 |
| 80-84 | $244.00 | $271.00 | $299.00 |
| 85+ | $264.00 | $292.00 | $324.00 |

*Premiums may differ for retirees who live out-of-area, are disabled, or reached 65 before January 1, 2005.

**Area Definitions by 3-Digit Zip Code:**
Area 1: 754-759, 763-769, 778-792, 795-799, 885; Area 2: 750-753, 760-762, 774, 776-777, 793-794
Area 3: 770-773, 775, all out of state zip codes

**City Contributions for Medicare Supplement**

| | |
|---|---|
| Hired before 01/01/1997 | 70% of retiree 1/1/2013 premium and 40% of spouse 1/1/2013 premium |
| Hired on and after 01/01/1997 | 0% of all premiums |

Effective January 1, 2013, the Medicare Supplement subsidies provided by the City will be capped at the 2013 rates. Retiree will receive larger subsidies as they age into higher premium age-bands. However, the amount of city subsidy for each age-band will be fixed at the 2013 level.

# SECTION F

SUMMARY OF PARTICIPANT DATA

# CITY OF TYLER
# TOTAL ACTIVE MEMBERS AS OF DECEMBER 31, 2011
# BY ATTAINED AGE AND YEARS OF SERVICE

| Attained Age | Years of Service to Valuation Date | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|
| | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 Plus | |
| Under 20 | | | | | | | | |
| 20-24 | 37 | 1 | | | | | | 38 |
| 25-29 | 77 | 17 | 1 | | | | | 95 |
| 30-34 | 40 | 32 | 8 | | | | | 80 |
| 35-39 | 28 | 21 | 32 | 12 | 1 | | | 94 |
| 40-44 | 14 | 19 | 38 | 39 | 19 | | | 129 |
| 45-49 | 26 | 12 | 14 | 18 | 27 | 9 | | 106 |
| 50-54 | 16 | 13 | 18 | 15 | 23 | 17 | 9 | 111 |
| 55-59 | 23 | 9 | 4 | 7 | 16 | 8 | 18 | 85 |
| 60-64 | 4 | 13 | 5 | 4 | 3 | 4 | 7 | 40 |
| 65 & Over | 1 | 1 | 1 | 2 | 1 | | 2 | 8 |
| **Totals** | **266** | **138** | **121** | **97** | **90** | **38** | **36** | **786** |

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

| | | |
|---|---|---|
| **Age:** | 43.1 | years |
| **Service:** | 11.6 | years |

# CITY OF TYLER
# TOTAL RETIRED MEMBERS AS OF DECEMBER 31, 2011
# BY ATTAINED AGE

| Attained Age | Number of Retirees | | |
|---|---|---|---|
| | Male | Female | Total |
| Under 55 | 37 | 12 | 49 |
| 55-59 | 36 | 10 | 46 |
| 60-64 | 44 | 14 | 58 |
| 65 & Over | 152 | 62 | 214 |
| **Totals** | **269** | **98** | **367** |

The number counts above only include those retirees who have elected to receive retiree health care coverage through the City of Tyler Retiree Health Care Plan or are eligible for the $5,000 life insurance benefit. The counts above include 89 retirees who do not have medical coverage through the city's plan. These 89 retirees have dental coverage and/or life insurance coverage only.

# SECTION G

## ACTUARIAL COST METHOD AND ACTUARIAL ASSUMPTIONS

# VALUATION METHODS FOR
# CITY OF TYLER
# AS OF DECEMBER 31, 2011

***Actuarial Cost Method.*** The **Projected Unit Credit Cost Method** was used in the valuation. The actuarial present value of benefits allocated to the valuation year is the Normal Cost. The actuarial present value of benefits allocated to all prior periods is the Actuarial Accrued Liability. Actuarial gains (losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

***Financing of Unfunded Actuarial Accrued Liabilities.*** Unfunded actuarial accrued liabilities (UAAL) (full funding credit if assets exceed liabilities) were amortized by level (principal & interest combined) percent-of-payroll contributions. The UAAL was determined using the funding value of assets and actuarial accrued liability calculated as of the valuation date. The UAAL amortization payment (one component of the contribution requirement), is the level percent-of-payroll required to fully amortize the UAAL over a 30 year period.

***Actuarial Value of System Assets.*** The Actuarial Value of Assets is set equal to the reported market value of assets. The assets may not be allowed for consideration as GASB assets, but are shown for illustrative purposes.

# ACTUARIAL ASSUMPTIONS FOR
# CITY OF TYLER
# AS OF DECEMBER 31, 2011

***General inflation*** is assumed to be 3.00% per year.

***The rate of investment return*** for the Funding Policy scenario was 7.50% a year, compounded annually net after investment expenses. The assumed real return is the rate of return in excess of price inflation. Considering other assumptions used in the valuation, the nominal rates translate to a net real return of 3.50% a year on the Funding Policy basis.

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

## Firefighters:

| Years of Service | % Increase in Salary at Sample Ages | | |
|---|---|---|---|
| | Merit & Seniority | Inflation | Increase Next Year |
| 1-5 | 6.24% | 4.00 | 10.24% |
| 6-10 | 2.60 | 4.00 | 6.60 |
| 11-15 | 2.08 | 4.00 | 6.08 |
| 16&Over | 0.00 | 4.00 | 4.00 |

## TMRS:

| Years of Service | % Increase in Salary at Sample Ages | | |
|---|---|---|---|
| | Service Based Rates | Sample Ages | Age Based Rates |
| 0 | 12.00% | 20 | 5.25% |
| 1 | 9.00 | 25 | 5.25 |
| 2 | 7.00 | 30 | 5.25 |
| 3 | 7.00 | 35 | 5.00 |
| 4 | 6.00 | 40 | 4.50 |
| 5 | 6.00 | 45 | 4.50 |
| 6 | 5.50 | 50 | 4.00 |
| 7 | 5.50 | 55 | 4.00 |
| 8 | 5.50 | 60 | 3.75 |
| 9 | 5.50 | 65 | 3.50 |

The number of active members is assumed to remain constant in the future.

The payroll growth rate for financing Unfunded Actuarial Accrued Liabilities was assumed to be 3.00% per year.

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

For normal retirees, the probabilities of dying at sample attained ages were as follows:

**Firefighters:**

| Sample Attained Ages | Probability of Dying Next Year (Healthy) | | Future Life Expectancy (years) | |
|---|---|---|---|---|
| | Men | Women | Men | Women |
| 50 | 0.17% | 0.13% | 32.20 | 34.33 |
| 55 | 0.28 | 0.24 | 27.50 | 29.59 |
| 60 | 0.54 | 0.47 | 22.97 | 25.04 |
| 65 | 1.05 | 0.90 | 18.71 | 20.75 |
| 70 | 1.80 | 1.56 | 14.83 | 16.82 |
| 75 | 3.11 | 2.51 | 11.28 | 13.25 |
| 80 | 5.59 | 4.16 | 8.22 | 10.07 |

**TMRS:**

| Sample Attained Ages | Probability of Dying Next Year (Healthy) | | Future Life Expectancy (years) | |
|---|---|---|---|---|
| | Men | Women | Men | Women |
| 50 | 0.20% | 0.16% | 31.11 | 33.75 |
| 55 | 0.34 | 0.27 | 26.47 | 29.06 |
| 60 | 0.64 | 0.50 | 22.01 | 24.52 |
| 65 | 1.22 | 0.96 | 17.85 | 20.26 |
| 70 | 2.12 | 1.65 | 14.08 | 16.36 |
| 75 | 3.63 | 2.74 | 10.72 | 12.85 |
| 80 | 6.25 | 4.49 | 7.85 | 9.76 |

The mortality table for healthy retirees was the RP 2000 Combined Healthy Mortality Table for males and females projected, using scale AA, to the year 2014 for Firefighters and to the year 2003 for TMRS employees. Mortality rates were adjusted as described above to include margin for future mortality improvement. No additional provision is made for future improvements in mortality after the measurement date other than the margins described above.

For disabled retirees, the probabilities of dying at sample attained ages were as follows:

**Firefighters:**

| Sample Attained Ages | Probability of Dying Next Year | |
|---|---|---|
| | Men | Women |
| 50 | 0.17% | 0.13% |
| 55 | 0.28 | 0.24 |
| 60 | 0.54 | 0.47 |
| 65 | 1.05 | 0.90 |
| 70 | 1.80 | 1.56 |
| 75 | 3.11 | 2.51 |
| 80 | 5.59 | 4.16 |

**TMRS:**

| Sample Attained Ages | Probability of Dying Next Year | |
|---|---|---|
| | Men | Women |
| 50 | 2.32% | 0.92% |
| 55 | 2.84 | 1.32 |
| 60 | 3.36 | 1.75 |
| 65 | 4.01 | 2.24 |
| 70 | 5.01 | 3.01 |
| 75 | 6.57 | 4.18 |
| 80 | 8.75 | 5.79 |

The mortality table for TMRS disabled retirees was the RP 2000 Disabled Retiree Mortality table for males and females; multiplied by 80%. Mortality rates were adjusted as described above to include margin for future mortality improvement. No provision is currently made for future improvements in disabled mortality after the measurement date. For Firefighters, the mortality table for disabled retirees was the RP 2000 Combined Healthy Mortality Table for males and females projected to the year 2014 using Scale AA.

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

***The rates of mortality for active members***

Firefighters:

| Sample Attained Ages | Probability of Ordinary Death Next Year | |
|---|---|---|
| | Men | Women |
| 20 | 0.01% | 0.01% |
| 25 | 0.02 | 0.01 |
| 30 | 0.02 | 0.01 |
| 35 | 0.04 | 0.02 |
| 40 | 0.05 | 0.03 |
| 45 | 0.06 | 0.04 |
| 50 | 0.08 | 0.07 |
| 55 | 0.14 | 0.12 |
| 60 | 0.27 | 0.24 |
| 65 | 0.52 | 0.45 |

TMRS:

| Sample Attained Ages | Probability of Ordinary Death Next Year | |
|---|---|---|
| | Men | Women |
| 20 | 0.03% | 0.02% |
| 25 | 0.03 | 0.02 |
| 30 | 0.04 | 0.02 |
| 35 | 0.04 | 0.03 |
| 40 | 0.08 | 0.05 |
| 45 | 0.11 | 0.07 |
| 50 | 0.15 | 0.11 |
| 55 | 0.20 | 0.16 |
| 60 | 0.34 | 0.27 |
| 65 | 0.64 | 0.50 |

The Firefighter mortality table for active members was the RP 2000 Combined Healthy Mortality Table for males and females projected to the year 2014 by Scale AA. Mortality rates were adjusted as described above to include margin for future mortality improvement. No provision is currently made for future improvements in employee mortality after the measurement.

The TMRS mortality table used for active members was the RP 2000 Combined Healthy Mortality Table for males and females projected to the year 2003 by Scale AA, with a 5 year setback for both males and females. Mortality rates were adjusted as described above to include margin for future mortality improvement. No provision is currently made for future improvements in employee mortality after the measurement.

***The rates of retirement*** used to measure the probability of eligible members retiring during the next year.

**Firefighters:** The rates of retirement used for this valuation for Firefighters are 15% per year of those eligible to retire at ages 50 – 53, 25% per year for ages 54 – 58, 50% per year at ages 59-60, and 100% at age 65.

***The rates of retirement (con't)***

**TMRS:** The base table rates vary by gender, entry age group, and age. These rates are adjusted then multiplied by 2 factors based on 1) employee contribution rate and employer match and 2) if the city has a recurring COLA. The base retirement rates shown in the table below do not include the employer specific plan design adjustments.

| | Males | | | Females | | |
|---|---|---|---|---|---|---|
| | Entry Age Groups | | | Entry Age Groups | | |
| Age | Ages 32 & Under | Ages 33 - 47 | Ages 48 & Over | Ages 32 & Under | Ages 33 - 47 | Ages 48 & Over |
| 40-44 | 0.06 | - | - | 0.06 | - | - |
| 45-49 | 0.06 | - | - | 0.06 | - | - |
| 50-52 | 0.08 | - | - | 0.08 | - | - |
| 53 | 0.08 | 0.10 | - | 0.08 | 0.10 | - |
| 54 | 0.08 | 0.10 | - | 0.11 | 0.10 | - |
| 55-59 | 0.14 | 0.10 | - | 0.11 | 0.10 | - |
| 60 | 0.20 | 0.15 | 0.10 | 0.14 | 0.15 | 0.10 |
| 61 | 0.25 | 0.30 | 0.20 | 0.28 | 0.26 | 0.20 |
| 62 | 0.32 | 0.25 | 0.12 | 0.28 | 0.17 | 0.12 |
| 63 | 0.32 | 0.23 | 0.12 | 0.28 | 0.17 | 0.12 |
| 64 | 0.32 | 0.35 | 0.20 | 0.28 | 0.22 | 0.20 |
| 65 | 0.32 | 0.32 | 0.20 | 0.28 | 0.27 | 0.20 |
| 66-69 | 0.22 | 0.22 | 0.17 | 0.22 | 0.22 | 0.17 |
| 70-74 | 0.20 | 0.22 | 0.25 | 0.22 | 0.22 | 0.25 |
| 75 and over | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

Note: For cities without a 20-year/any age retirement provision, the rates for entry ages 32 and under are multiplied by 20% for ages below 60.

Plan Design Factors Applied to Base Retirement Rates

| | Employee Contribution Rate | | |
|---|---|---|---|
| **Employer Match** | 5% | 6% | 7% |
| 1 - 1 | 0.75 | 0.80 | 0.84 |
| 1.5 - 1 | 0.81 | 0.86 | 0.92 |
| 2 - 1 | 0.86 | 0.93 | 1.00 |

Recurring COLA: 1.00
No Recurring COLA: 0.90

The plan design factors are applied to the base retirement rates for ages less than 62.

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

## Firefighters:

| Years of Service | % of Active Members Separating Within Next Year | |
|---|---|---|
| | Male | Female |
| 0 | 3.00% | 3.00% |
| 1 | 2.70 | 2.70 |
| 2 | 2.40 | 2.40 |
| 3 | 2.10 | 2.10 |
| 4 | 1.80 | 1.80 |
| 5 | 1.60 | 1.60 |
| 6 | 1.40 | 1.40 |
| 7 | 1.20 | 1.20 |
| 8 | 1.10 | 1.10 |
| 9 | 1.00 | 1.00 |
| 10 | 0.80 | 0.80 |
| 11 | 0.70 | 0.70 |
| 12 | 0.60 | 0.60 |
| 13-16 | 0.50 | 0.50 |
| 17-19 | 0.40 | 0.40 |
| 20&Over | 0.00 | 0.00 |

**TMRS:**

1. For the first 10 years of service, the base table rates vary by gender, entry age, and length of service. For each city, the base table is then multiplied by a factor from 75% to 125% based on the experience of the individual city in comparison to the group as a whole. A further multiplier is applied depending on an employee's classification: 1) Fire – 64%, 2) Police – 92%, or 3) Other – 105%. Sample base rates are shown below:

| Male | SERVICE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Age | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 20 | 0.3298 | 0.2707 | 0.2229 | 0.1876 | 0.1620 | 0.1426 | 0.1249 | 0.1094 | 0.0979 | 0.0867 |
| 25 | 0.3123 | 0.2485 | 0.2020 | 0.1701 | 0.1479 | 0.1308 | 0.1152 | 0.1013 | 0.0906 | 0.0810 |
| 30 | 0.2930 | 0.2235 | 0.1775 | 0.1490 | 0.1305 | 0.1163 | 0.1033 | 0.0914 | 0.0818 | 0.0744 |
| 35 | 0.2778 | 0.2089 | 0.1632 | 0.1356 | 0.1186 | 0.1059 | 0.0946 | 0.0842 | 0.0757 | 0.0696 |
| 40 | 0.2641 | 0.1987 | 0.1538 | 0.1264 | 0.1099 | 0.0980 | 0.0880 | 0.0789 | 0.0713 | 0.0661 |
| 45 | 0.2506 | 0.1900 | 0.1470 | 0.1199 | 0.1035 | 0.0922 | 0.0832 | 0.0752 | 0.0685 | 0.0635 |
| 50 | 0.2364 | 0.1811 | 0.1410 | 0.1149 | 0.0987 | 0.0880 | 0.0799 | 0.0730 | 0.0669 | 0.0616 |
| 55 | 0.2215 | 0.1718 | 0.1356 | 0.1110 | 0.0950 | 0.0854 | 0.0781 | 0.0720 | 0.0662 | 0.0601 |
| 60 | 0.2057 | 0.1623 | 0.1307 | 0.1082 | 0.0926 | 0.0844 | 0.0777 | 0.0723 | 0.0666 | 0.0591 |
| 65 | 0.1899 | 0.1530 | 0.1262 | 0.1058 | 0.0905 | 0.0839 | 0.0778 | 0.0731 | 0.0674 | 0.0584 |
| 70 | 0.1725 | 0.1427 | 0.1211 | 0.1031 | 0.0881 | 0.0832 | 0.0778 | 0.0739 | 0.0681 | 0.0575 |

| Female | SERVICE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Age | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 20 | 0.3289 | 0.2849 | 0.2465 | 0.2162 | 0.1941 | 0.1780 | 0.1621 | 0.1446 | 0.1274 | 0.1114 |
| 25 | 0.3079 | 0.2623 | 0.2252 | 0.1972 | 0.1774 | 0.1633 | 0.1496 | 0.1346 | 0.1191 | 0.1037 |
| 30 | 0.2837 | 0.2343 | 0.1976 | 0.1718 | 0.1549 | 0.1434 | 0.1330 | 0.1214 | 0.1084 | 0.0938 |
| 35 | 0.2664 | 0.2138 | 0.1761 | 0.1512 | 0.1360 | 0.1264 | 0.1185 | 0.1094 | 0.0984 | 0.0851 |
| 40 | 0.2532 | 0.1977 | 0.1585 | 0.1335 | 0.1192 | 0.1110 | 0.1048 | 0.0978 | 0.0887 | 0.0770 |
| 45 | 0.2427 | 0.1856 | 0.1449 | 0.1194 | 0.1051 | 0.0973 | 0.0921 | 0.0865 | 0.0792 | 0.0696 |
| 50 | 0.2337 | 0.1765 | 0.1352 | 0.1088 | 0.0936 | 0.0854 | 0.0802 | 0.0755 | 0.0698 | 0.0629 |
| 55 | 0.2250 | 0.1699 | 0.1294 | 0.1020 | 0.0849 | 0.0753 | 0.0692 | 0.0647 | 0.0606 | 0.0569 |
| 60 | 0.2166 | 0.1659 | 0.1277 | 0.0992 | 0.0793 | 0.0671 | 0.0590 | 0.0541 | 0.0515 | 0.0516 |
| 65 | 0.2082 | 0.1629 | 0.1275 | 0.0979 | 0.0749 | 0.0596 | 0.0493 | 0.0437 | 0.0426 | 0.0467 |
| 70 | 0.1990 | 0.1593 | 0.1270 | 0.0962 | 0.0697 | 0.0512 | 0.0384 | 0.0322 | 0.0327 | 0.0412 |

The rates shown above do not include the employer and employee specific loads.

## TMRS:

2. After 10 years of service, separation rates vary by gender and by the number of years remaining until first retirement eligibility. For each city, the base table is then multiplied by a factor from 75% to 125% based on the experience of the individual city in comparison to the group as a whole (same factor as above). A further multiplier is applied depending on an employee's classification: 1) Fire – 54%, 2) Police – 80%, or 3) Other – 109%. Sample base rates are shown below:

| Years from Retirement | Male | Female |
|---|---|---|
| 1 | 0.0171 | 0.0219 |
| 2 | 0.0244 | 0.0307 |
| 3 | 0.0300 | 0.0374 |
| 4 | 0.0348 | 0.0431 |
| 5 | 0.0390 | 0.0480 |
| 6 | 0.0429 | 0.0525 |
| 7 | 0.0464 | 0.0566 |
| 8 | 0.0497 | 0.0604 |
| 9 | 0.0528 | 0.0640 |
| 10 | 0.0557 | 0.0674 |
| 11 | 0.0585 | 0.0706 |
| 12 | 0.0612 | 0.0737 |
| 13 | 0.0637 | 0.0766 |
| 14 | 0.0662 | 0.0794 |
| 15 | 0.0686 | 0.0822 |

***Rates of disability*** among active members.

## Firefighters:

| Sample Ages | % Becoming Disabled within Next Year | |
|---|---|---|
| | Male | Female |
| 20 | 0.01% | 0.01% |
| 25 | 0.02 | 0.02 |
| 30 | 0.03 | 0.03 |
| 35 | 0.05 | 0.05 |
| 40 | 0.09 | 0.09 |
| 45 | 0.21 | 0.21 |
| 50 | 0.38 | 0.38 |

**TMRS:**

| Ordinary Disability | | |
|---|---|---|
| | % Becoming Disabled within Next Year | |
| Sample Ages | Male | Female |
| 20 | 0.00% | 0.00% |
| 25 | 0.00 | 0.00 |
| 30 | 0.01 | 0.00 |
| 35 | 0.03 | 0.01 |
| 40 | 0.07 | 0.04 |
| 45 | 0.13 | 0.08 |
| 50 | 0.21 | 0.13 |
| 55 | 0.31 | 0.22 |
| 60 | 0.38 | 0.30 |
| 65 | 0.38 | 0.30 |

***Health cost increases*** are displayed in the following table:

| | Health Care Trend Inflation Rates |
|---|---|
| Year | Medical and Drug |
| 2012 | 8.50% |
| 2013 | 8.00 |
| 2014 | 7.50 |
| 2015 | 7.00 |
| 2016 | 6.50 |
| 2017 | 6.00 |
| 2018 | 5.50 |
| 2019 | 5.00 |
| 2020&Later | 4.50 |

Because of the cap on post-65 medical subsidies, no health care trend assumption was applied to the post-65 medical benefit. Except for 2012, the trend rates shown above were also applied to the post-65, Rx-card benefit. The plan experienced no increase in the Rx-card costs during 2012.

Except for 2012, the trend rates shown above were also applied to retiree premiums. The 2013 retiree premiums were known at the time of the valuation and were used to model the increase during 2012.

The cost of dental benefits is assumed to increase at 4.50% per year.

# MISCELLANEOUS AND TECHNICAL ASSUMPTIONS FOR CITY OF TYLER AS OF DECEMBER 31, 2011

**Administrative Expenses** The age-rated costs shown on page D-1 include administrative expenses.

**Decrement Operation** Disability does not operate during retirement eligibility.

**Decrement Timing** Decrements of all types are assumed to occur mid-year.

**Eligibility Testing** Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

**Medicare Coverage** Assumed to be available for all covered employees on attainment of age 65. Disabled retirees were assumed to be eligible for Medicare coverage at age 65.

**Election Percentage** It was assumed that 75% of retirees who were hired before 1/1/1997 and 15% of retirees who were hired after 1/1/1997 would choose to receive retiree health care benefits through the city. Of those assumed to elect coverage, 50% of males and 20% of females were assumed to elect two-person coverage. For those that elect two-person coverage, it was assumed that coverage would continue to the spouse upon death of the retiree. 80% of retirees who are assumed to elect health coverage after the age of 65 were assume to elect the Post-65 Prescription Drug Card.

**Demographic Assumptions**

This report has used the same demographic assumptions used to value the defined benefit retirement plan(s) in which the members participate. We are reliant upon the retirement plan actuary to develop the demographic assumptions. Based on our experience, the assumptions appear reasonable.

**Excise Tax and Health Care Reform**

This report has not incorporated any additional liabilities associated with the excise tax on high-cost employer health plans effective January 1, 2018. The "Cadillac" tax is a 40% excise tax paid by the coverage provider (employer and/or insurer) on the value of health plan costs in excess of legislated thresholds. The thresholds in 2018 are $10,200 for single coverage and $27,500 for family coverage. Many plans that are below the thresholds today are likely to exceed them in the next decade. The thresholds will be indexed at CPI-U plus 1%, which is lower than the medical inflation rates affecting the cost of the plans. We believe any future costs associated with the excise tax are minor for the city. Therefore, we have not included any additional cost or savings which may result from Health Care Reform legislation. As with all our assumptions, we will monitor them with each valuation and make adjustments as needed.

# MISCELLANEOUS AND TECHNICAL ASSUMPTIONS FOR CITY OF TYLER AS OF DECEMBER 31, 2011 (CONTINUED)

**Assumption, Method and Plan Changes**

1. The participation assumption for male employees hired before 1997 was increased from 60% to 75%. The participation assumption for female employees was increased from 50% for pre-65 retirees and 60% for post-65 retirees to 75% for pre and post-65 retirees.
2. In the prior valuation, it was assumed that all retirees who elect the Medicare Supplement coverage would also elect the Rx-Card coverage. In the current valuation, 80% of retirees with health coverage after the age of 65 were assume to elect the Post-65 Prescription Drug Card.
3. The percentage of female retirees who cover a spouse was increased from 10% to 20%.
4. The initial trend rate was reset to equal 8.5%. Based on the trend assumption in the prior report, the initial trend for the December 31, 2011 valuation would have been 8.0%.
5. The demographic assumptions regarding retirement, termination, death, etc. have been updated to match the changes adopted by TMRS in 2011. The Firefighter mortality assumption and retirement rates were updated to those used in the December 31, 2011 actuarial report.
6. Effective January 1, 2013, the Medicare Supplement subsidies provided by City will be capped at the 2013 rates. Retirees will receive larger subsidies as they age into higher premium age-bands. However, the amount of city subsidy for each age-band will be fixed at the 2013 level.

# APPENDIX

# GLOSSARY

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

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

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

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

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

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

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

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

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

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

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

**Other Post-Employment Employee Benefits (OPEB).** OPEB are post-employment benefits other than pensions. OPEB generally takes the form of health insurance and dental, vision, prescription drugs or other health care benefits.

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

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

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