

**RETIREMENT PLAN FOR THE EMPLOYEES' RETIREMENT
FUND OF THE CITY OF DALLAS**

ACTUARIAL VALUATION REPORT

AS OF DECEMBER 31, 2013

May 13, 2014

Board of Trustees
Employees' Retirement Fund of the City of Dallas, Texas
600 North Pearl Street
Suite 2450
Dallas, Texas 75201

Dear Members of the Board:

We are pleased to present our report of the actuarial valuation of the Employees' Retirement Fund of the City of Dallas, Texas ("ERF" or the "Fund") as of December 31, 2013.

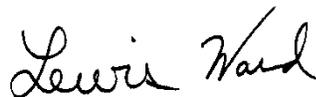
This valuation provides information on the funding status of ERF. It includes a determination of the actuarially calculated contribution rates for the 2014 calendar year. In addition, it also contains the information necessary to determine the current total obligation rate and the current adjusted total obligation rate for the fiscal year beginning October 1, 2014 per City Ordinance. This rate is a function of the previous year's adjusted total obligation rate, this year's actuarially calculated contribution rate, and the rate necessary to make the debt service payment on the previously issued pension obligation bonds for fiscal year 2015.

This valuation is based on the provisions of ERF in effect as of the valuation date, data on the ERF membership and information on the asset values of the Fund as of December 31, 2013. The member, annuitant and asset data used in the valuation were all prepared and furnished by ERF staff. While certain checks for reasonableness were performed, the data used was not audited.

There were no changes in the actuarial assumptions or methods since the prior valuation. All actuarial assumptions and methods are described under Section O of this report and meet the parameters of Governmental Accounting Standards Board Statement No. 25. We believe the actuarial assumptions individually and collectively represent reasonable expectations of experience over the long-term future.

To the best of our knowledge, this report is complete and accurate and was conducted in accordance with the Actuarial Standards of Practice as set forth by the Actuarial Standards Board and in compliance with the provisions of the City Ordinance. The undersigned are independent actuaries and consultants. Mr. Randall is an Enrolled Actuary and a Member of the American Academy of Actuaries and he meets the Qualification Standards of the American Academy of Actuaries. Both Mr. Randall and Mr. Ward have significant experience in performing valuations for large public retirement systems.

Respectfully submitted,



Lewis Ward
Consultant



Mark R. Randall, MAAA, FCA, EA
Executive Vice President & Senior Consultant

<u>Section</u>	<u>Page</u> <u>Number</u>	
		COVER LETTER
A	2	EXECUTIVE SUMMARY
B	3	PURPOSES OF THE ACTUARIAL VALUATION
C	4	REPORT HIGHLIGHTS
D	5	FUNDING PROCESS
E	6	ACTUARIAL CONTRIBUTIONS
F	7	ACTUARIAL ASSUMPTIONS
G	8	ERF BENEFITS
H	9	EXPERIENCE DURING PREVIOUS YEARS
I	10	ASSET INFORMATION
J	11	FUNDED STATUS
K	12	GASB DISCLOSURE
L	13	CLOSING COMMENTS
M	14	ACTUARIAL TABLES
N	33	EXPERIENCE TABLES
O	41	ACTUARIAL METHOD AND ASSUMPTIONS
P	48	SUMMARY OF BENEFIT PROVISIONS

EXECUTIVE SUMMARY

(\$ in 000's)

The key results from the actuarial valuation of the Employees' Retirement Fund of the City of Dallas as of December 31, 2013, may be summarized as follows:

	<u>December 31, 2012</u>	<u>December 31, 2013</u>
	(1)	(2)
• Members		
- Actives	6,864	6,993
- Benefit recipients	6,320	6,447
- Deferred vested*	722	744
- Other terminated*	<u>321</u>	<u>308</u>
- Total	14,227	14,492
• Covered payroll (including overtime)	\$ 330,536	\$ 342,219
• Normal cost	\$ 56,252	\$ 59,158
as % of expected payroll	17.30%	17.57%
• Actuarial accrued liability	\$ 3,518,356	\$ 3,610,845
• Actuarial value of assets	\$ 2,846,124	\$ 3,074,284
• Market value of assets	\$ 2,979,766	\$ 3,325,440
• Unfunded actuarial accrued liability (UAAL)	\$ 672,232	\$ 536,561
• Estimated yield on assets (market value basis)	14.29%	16.75%
• Estimated yield on assets (actuarial value basis)	2.82%	13.48%
• Contribution Rates		
- Prior Adjusted Total Obligation Rate	32.08%	35.29%
- Current Total Obligation Rate	40.47%	37.74%
- Current Adjusted Total Obligation Rate	35.29%	35.29%
• Actuarial gains/(losses)		
- Assets	\$ (154,400)	\$ 144,952
- Actuarial liability experience	\$ (3,462)	\$ 19,699
- Assumption and method changes	\$ (9,110)	\$ -
• 30-year level % of pay funding cost	\$ 103,402	\$ 97,792
as % of payroll (Employee + City)	31.18%	28.53%
• Funded ratio		
- Based on actuarial value of assets	80.9%	85.1%
- Based on market value of assets	84.7%	92.1%

* *Deferred vested are members who have applied for a deferred pension. Other terminations are other members who have terminated and still have contribution balances in the Fund.*

PURPOSES OF THE ACTUARIAL VALUATION

At your request, we have performed the actuarial valuation of the Employees' Retirement Fund of the City of Dallas ("ERF" or the "Fund") as of December 31, 2013.

The purposes of an actuarial valuation are as follows:

- To determine the funding status of ERF as of the valuation date;
- To develop the actuarially determined level of contributions for ERF for the 2014 calendar year; and
- To develop the current total obligation rate and the current adjusted total obligation rate for the fiscal year beginning October 1, 2014.

REPORT HIGHLIGHTS

The following is a set of key actuarial results from the prior year's valuation as compared to the current year:

	<u>2013</u>	<u>2014</u>
Contribution Rates (% of Payroll)		
Normal Cost (including administrative expense)	18.33%	18.62%
Total Actuarial Contribution Rate	31.18%	28.53%
Total Projected Actuarial Contribution	\$103,402	\$97,792
	<u>December 31, 2012</u>	<u>December 31, 2013</u>
Actuarial Accrued Liability	\$3,518,356	\$3,610,845
Actuarial Value of Assets	2,846,124	3,074,284
Unfunded Actuarial Accrued Liability	\$672,232	\$536,561
Funded Ratio	80.89%	85.14%

FUNDING PROCESS

Based on the previous work of the Employees' Retirement Fund Study Committee, which was ratified by both the City Council and the voters of Dallas, a new funding process commenced October 1, 2005. From this date forward, a new "current adjusted total obligation rate" will be contributed jointly by the City (63%) and the Membership (37%). This current adjusted total obligation rate will cover both the debt service tied to the pension obligation bonds issued in 2005 and the contributions to the ERF. In subsequent years, the contribution rate changes only if the actuarial valuation develops a "current total obligation rate" which differs from the "prior adjusted total obligation rate" by more than 3.00%.

As shown in Table 3 (under Section M) and discussed later in this report, the "current total obligation rate" (Item 4 in Table 3) differs from the "prior adjusted total obligation rate" (Item 1 in Table 3) by less than 3.00% as of December 31, 2013. This means that the "current adjusted total obligation rate" will remain the same at 35.29% of active member payroll for the fiscal year beginning October 1, 2014.

ACTUARIAL CONTRIBUTIONS

The Actuarially Required Contribution Rate developed in this actuarial valuation is 28.53% of active member payroll. This rate excludes the amount needed to make the City's debt service payment on the pension obligation bonds in fiscal year 2015. As shown in Section M -Table 3 of this report, the debt service payment is determined to be 9.21% of projected payroll. The sum of these rates is 37.74% (the Current Total Obligation Rate) which is 2.45% more than the Prior Adjusted Total Obligation Rate of 35.29%. Because the difference is less than 3.00%, the total contribution rate in fiscal year 2015 (the Current Adjusted Total Obligation Rate) to fund the ERF and make the debt service payment on the pension obligation bonds will remain the same at 35.29%, which is 100% of Prior Adjusted Total Obligation Rate of 35.29%.

The members contribute 37% of the Current Adjusted Total Obligation Rate and the City contributes 63%. Hence, the members portion of the 35.29% total contribution rate will be 13.06% and the City portion will be 22.23%. All of the member contribution rate will be contributed to the ERF. As noted above, 9.21% of the City's contribution rate will go towards the debt service on the pension obligation bonds and the remaining 13.02% will be contributed towards the ERF. This means a total contribution rate of 26.08% will be contributed to the ERF, which compares to the actuarially calculated rate of 28.53%.

ACTUARIAL ASSUMPTIONS

Section O of this report includes a summary of the actuarial assumptions and methods used in this valuation. In short, costs are determined using the Entry Age Normal actuarial cost method. The assumed annual investment return rate is 8.25% including an annual assumed rate of inflation of 3.00%.

There were no changes in the actuarial assumptions since the prior valuation report. Please see Section O for a complete description of the actuarial assumptions and methods currently being employed in the actuarial valuation.

ERF BENEFITS

There were no changes in the benefit provisions of ERF since the prior valuation. Please see Section P for a summary description of the ERF benefits.

EXPERIENCE DURING 2013

An Actuarial (Gain)/Loss Analysis [(G)/L] reviews the effects of the actual experience that differs from the assumed experience based on the actual results for the year. If any difference increases assets or reduces liabilities, we have an actuarial gain. The reverse is an actuarial loss.

On a market value return basis, the Fund gained approximately 16.75% (calculated on a dollar-weighted basis, net of investment expenses). Given this outstanding return, the actual investment income was more than the expected investment income on the actuarial value of assets; therefore, an investment income gain is being partially recognized this year (1/5) and partially deferred into the near future (4/5). After recognizing prior years' deferred investment gains and losses (years 2012 - 2009), there was an overall actuarial gain of \$145 million on the actuarial value of assets as of December 31, 2013. The rate of return on the actuarial value of assets for 2013 was 13.48% (calculated on a dollar-weighted basis, net of investment expenses). This result was greater than the current investment return assumption of 8.25%.

During 2013 there was an aggregate actuarial gain of about -\$19.7 million derived from demographic assumptions and non-investment economic assumptions (cost-of-living-adjustment). As seen below, ERF experienced an overall actuarial gain in calendar year 2013. This year's overall actuarial experience gain amounted to approximately -\$164.7 million.

The total (G)/L for the prior 4 years is broken down as follows (\$ in millions):

	2010	2011	2012	2013
1) Actuarial (Gain)/Loss on Assets	\$146.94	\$117.40	\$209.96	(\$144.95)
2) Actuarial (Gain)/Loss on Liabilities	(23.70)	(101.31)	(6.04)	(19.70)
3) Total Actuarial (Gain) or Loss (1+2)	123.24	16.09	203.92	(164.65)

The unfunded actuarial accrued liability (UAAL) also increased \$19.1 million due to the difference between the calculated contribution rate and the actual contributions during 2013.

ASSET INFORMATION

The assets of the Fund (on a market value basis) increased from \$2,980 million as of December 31, 2012 to \$3,325 million as of December 31, 2013.

The assets recognized for actuarial valuation purposes (known as “the actuarial value of assets”) are the product of a five-year market smoothing asset method. The purpose of such a smoothing method is to allow the use of market values, but to dampen the effect of the typical year-to-year market fluctuations. See Table 6 in Section M of this report for the determination of the actuarial value of assets as of December 31, 2013.

The actuarial value of assets has increased from \$2,846 million to \$3,074 million during 2013. This increase is due to four positive investment years out of the five year averaging period.

The rate of return on investments for 2013 on the actuarial value of assets was 13.48% compared to 2.82% in 2012. The detailed determinations of asset values utilized in this valuation and the change in assets in the last year are exhibited in Tables 4 and 5 of Section M of this report.

FUNDED STATUS

The funded status of ERF is measured by the Funded Ratio and the Unfunded Actuarial Accrued Liability (UAAL). The Funded Ratio is the ratio of the actuarial value of assets available for benefits to the actuarial accrued liability (AAL) of the Fund on the valuation date. Therefore, it reflects the portion of the AAL that is covered by ERF assets. The UAAL is the difference between these two amounts.

A Funded Ratio of 100% means that the funding of ERF is precisely on schedule as of the particular valuation date. In addition, an increasing funded ratio from year-to-year may also mean that the funding of ERF is on schedule. By monitoring changes in the Funding Ratio each year we can determine whether or not funding progress is being made.

Based on the actuarial value of assets, the Funded Ratio of ERF increased significantly from 80.9% as of December 31, 2012 to 85.1% as of December 31, 2013.

In turn, the UAAL dramatically decreased from \$672.2 million as of December 31, 2012 to \$536.6 million as of December 31, 2013. Since the UAAL is positive, this implies the actuarial accrued liabilities exceed the actuarial assets of the Fund as of December 31, 2013.

GASB DISCLOSURE

Governmental Accounting Standards Board (GASB) Statement Numbers 25 and 27 detail the current accounting standards for ERF and the Fund's sponsor, the City of Dallas, TX. Tables 10a, 10b, and 10c located in Section M of this report provide footnotes and/or Required Supplemental Information tables required to be disclosed by these statements.

Note on Table 10b that for the past five years the City has contributed less than 100% of the actuarially determined GASB Annual Required Contribution (ARC). This follows four straight years in which the City contributed significantly more than the ARC. Differences between the ARC and the actual contribution must be recognized each year on the City's financial statements. Depending upon whether the cumulative total is a shortfall or excess, then the City would recognize a Net Pension Obligation or Net Pension Asset.

This difference between the ARC and the actual City contribution rate is a function of the corridor funding method in Chapter 40-A of the City Charter. This corridor funding method restricts when and how fast the contribution rate can increase or decrease in a given year.

CLOSING COMMENTS

Overall, the results of this actuarial valuation are extremely positive. The funded status, calculated contribution rates, and the unfunded actuarial accrued liability of the Fund have all improved significantly since the prior valuation. In fact, this is the first such improvement in these three metrics since the collapse of the financial markets in 2008.

The 2013 experience of the Fund continued a trend that began last year, with an increase in the active membership and covered payroll growing faster than assumed. The increase in payroll combined with actuarial gains on both assets and liabilities has resulted in a 2.73% of payroll decrease in the Current Total Obligation Rate from 2012 to 2013. Due to the contribution rate corridor, this has caused no change in the actual contribution rates by the members and the City.

Of late, the Fund continues to generate outstanding investment performance. In addition to the favorable results in this valuation, the Fund is still deferring \$251 million in investment gains to be recognized in future valuations. In the absence of offsetting actuarial losses, these deferred gains should improve the funded status of the Fund over the next several years. Even with this recent improvement, however, ERF still has more progress it needs to make to return to the lower contribution rates and 100%+ funded status it enjoyed prior to the “market meltdown” in 2008.

ACTUARIAL TABLES

Table Number	Content of Tables	Page
1	Summary of Actuarial Values	15
2	Development of Actuarially Required Contribution for FY 2012	16
3	Information for City Ordinance 25695	17
4	Net Assets Available for Benefits	21
5	Change in Assets Available for Benefits	22
6	Development of Actuarial Value of Assets	23
7	Historical Investment Performance	24
8	Analysis of Change in Unfunded Actuarial Accrued Liability	25
9	Analysis of Actuarial Gains and Losses for 2012	26
10a	Schedule of Funding Status	27
10b	Schedule of Employer Contributions	28
10c	Notes to Required Supplementary Information	29
11	Summary of Data Characteristics	30
12	Distribution of Active Members and Payroll by Age and Years of Service	31
13	Distribution of Benefit Recipients	32

Summary of Actuarial Values
As of December 31, 2013
(\$ in 000's)

	Entry Age Actuarial Values			
	APV* of Projected Benefits	Actuarial Accrued Liability (AAL)	Normal Cost \$	Normal Cost % of Pay**
1 Active Members				
a. Retirement	\$ 1,379,134	\$ 1,133,271	\$ 38,863	11.56%
b. Death	30,076	20,107	1,630	0.48%
c. Disability	17,179	7,675	1,528	0.45%
d. Termination	103,456	6,033	14,832	4.41%
e. Health Subsidy	46,102	33,425	2,305	0.67%
Total	1,575,947	1,200,511	59,158	17.57%
2 Benefit Recipients	2,319,424	2,319,424		
3 Other Inactive	90,910	90,910		
4 Total Actuarial Values of Benefits	3,986,281	3,610,845	59,158	17.57%
5 Actuarial Value of Assets		3,074,284		
6 Unfunded Actuarial Accrued Liability (4 - 5)		536,561		
7 Funding Ratio		85.14%		
funded ratio MV		92.10%		
uaal - MV		285,405		

* APV – Actuarial Present Value

** Percentage of expected payroll for continuing active members.

Development of Actuarially Required Contribution for FY 2015
(\$ in 000's)

	<u>\$</u>	<u>% of Pay</u>
Actuarial Requirement		
a. Payment to Amortize UAAL over 30 years*	\$ 34,931	9.91%
b. Normal Cost	59,158	17.57%
c. Administrative Expense	<u>3,703</u>	<u>1.05%</u>
Total	\$ 97,792	28.53%

* Amortization is determined as a level percentage of projected payroll

**Information for Ordinance 25695
For the Fiscal Year Commencing October 1, 2014**

1 Prior Adjusted Total Obligation Rate	35.29%
2 Actuarially Required Contribution Rate	28.53%
3 Debt Service	
a Scheduled Debt Service Payment for FY 2015	32,477,655
b Projected Payroll	352,485,776
c Pension Obligation Bond Credit Rate (a/b)	9.21%
4 Current Total Obligation Rate (2 + 3c)	37.74%
5 Current Adjusted Total Obligation Rate	35.29% *
6 Allocation of Contribution Rates for FY 2014	
a Employee (5 x .37)	13.06%
b City (5 x .63)	22.23%

* If the absolute value of the difference between the Prior Adjusted Total Obligation Rate (PATOR) and the Current Total Obligation Rate (CTOR) is less than or equal to 3.0% then:
Current Adjusted Total Obligation Rate (CATOR) = PATOR
otherwise:
1) If $PATOR - CTOR > 3.00\%$ then the CATOR is set equal to the greater of:
a) the average of the Prior Adjusted Total Obligation Rate and the Current Total Obligation Rate; or
b) 90% of the Prior Adjusted Total Obligation Rate
or
2) If $PATOR - CTOR < -3.00\%$ then the CATOR is set equal to the lesser of:
a) the average of the Prior Adjusted Total Obligation Rate and the Current Total Obligation Rate; or
b) 110% of the Prior Adjusted Total Obligation Rate

Excerpts from City Ordinance 25695

ACTUARIALLY REQUIRED CONTRIBUTION RATE – means, for any fiscal year, a rate of contribution to the fund, expressed as a percentage of members' projected wages for such fiscal year, which is the sum of the following as determined in the actuarial valuation report for the preceding plan year:

- (A) the actuarial present value of the pension plan benefits and expenses that are allocated to a valuation period by the actuarial cost method; and
- (B) the contribution that will amortize the difference between the actuarial accrued liability of the fund and the actuarial value of the assets of the fund over the period of years required by generally accepted accounting principles.

CITY CONTRIBUTIONS – means, for each pay period ending during a transition year, the city shall contribute to the retirement fund an amount equal to:

- (A) 63% times the current total obligation rate for that fiscal year times the members' wages for the pay period, minus
- (B) The pension obligation bond credit rate for that fiscal year times the members' wages for the pay period;

and, for each pay period ending during each fiscal year, except for a transition year, the city shall contribute to the retirement fund an amount equal to:

- (C) 63% times the current adjusted total obligation rate for that fiscal year times the members' wages for the pay period, minus
- (D) The pension obligation bond credit rate for that fiscal year times the members' wages for the pay period.

EMPLOYEE CONTRIBUTIONS – means, for each pay period ending during a transition year, each member shall contribute to the retirement fund an amount equal to:

- (A) 37% times the current total obligation rate for that fiscal year times the member's wages for the pay period;

and, for each pay period ending during each fiscal year, except for a transition year, the member shall contribute to the retirement fund an amount equal to:

- (B) 37% times the current adjusted total obligation rate for that fiscal year times the member's wages for the pay period.

CURRENT ADJUSTED TOTAL OBLIGATION RATE – means, for any fiscal year, the rate determined by the board as follows, using whichever formula is applicable:

(A) If the current total obligation rate minus the prior adjusted total obligation rate is greater than three, then the current adjusted total obligation rate for such fiscal year is equal to the lesser of:

- (i) the prior adjusted total obligation rate plus one-half times the difference of the current total obligation rate minus the prior adjusted total obligation rate; or
- (ii) 110 percent times the prior adjusted total obligation rate; or
- (iii) 36 percent.

(B) If the difference between the current total obligation rate and the prior adjusted total obligation rate is less than three, then the current adjusted total obligation rate for such fiscal year is equal to the prior adjusted total obligation rate.

(C) If the prior adjusted total obligation rate minus the current total obligation rate is greater than three, then the current adjusted total obligation rate for such fiscal year is equal to the greater of:

- (i) the prior adjusted total obligation rate minus one-half times the difference of the prior adjusted total obligation rate minus the current total obligation rate; or
- (ii) 90 percent times the prior adjusted total obligation rate.

CURRENT TOTAL OBLIGATION RATE – means, for any fiscal year, the rate adopted by the board that is equal to the sum of the pension obligation bond credit rate for such fiscal year plus the actuarially required contribution rate for such fiscal year.

PENSION OBLIGATION BOND CREDIT RATE – means, for any fiscal year, the rate adopted by the board that is a percentage calculated by dividing:

(A) the debt service due during such fiscal year on any pension obligation bonds, the proceeds of which have been deposited in the fund, by:

(B) the total members' projected wages for such fiscal year, as reported in the relevant actuarial valuation report.

PRIOR ADJUSTED TOTAL OBLIGATION RATE – means:

(A) for the fiscal year commencing October 1, 2006, the current total obligation rate that was effective for the prior fiscal year; and

(B) for each fiscal year commencing on or after October 1, 2007, the current adjusted total obligation rate that was effective for the prior fiscal year.

PROJECTED PAYROLL – means the covered payroll for the valuation proceeding the fiscal year multiplied by the payroll growth assumption.

TRANSITION YEAR – means each of the following:

- (A) the first fiscal year in which debt service payments related to pension obligation bonds are due from the city;
- (B) the first fiscal year in which no debt service payments related to pension obligation bonds are due from the city; and
- (C) the fiscal year beginning October 1, 2005.

	<u>December 31, 2012</u>	<u>December 31, 2013</u>
Net Assets Available for Benefits		
(\$ in 000's)		
1 Assets		
a. Cash & Short-Term	\$87,644	\$97,778
2 Receivables		
a. Accrued Investment Income	13,227	16,593
b. Securities Sold	8,713	13,949
c. Employer Contribution	521	834
d. Employee Contribution	604	851
e. Pending Contracts	1,539	0
	<u>24,604</u>	<u>32,227</u>
3 Investments		
a. Index Funds	74,337	80,972
b. Fixed Income	885,604	880,753
c. Equities	1,697,131	1,952,613
d. Real Estate	191,565	218,110
e. Private Equity	60,177	86,981
	<u>2,908,814</u>	<u>3,219,429</u>
4 Total Assets	3,021,062	3,349,434
5 Liabilities		
a. Accounts Payable	4,715	4,782
b. Investment Transactions	36,581	19,212
	<u>41,296</u>	<u>23,994</u>
6 Net Assets Available For Benefits	<u>2,979,766</u>	<u>3,325,440</u>

Change in Assets Available for Benefits
Fiscal Year Ending December 31, 2013
(\$ in 000's)

	<u>2012</u>	<u>2013</u>
1 Assets Available at Beginning of Year	\$ 2,747,654	\$ 2,979,766
Adjustment *	807	3,905
	<u>2,748,461</u>	<u>2,983,671</u>
2 Revenues		
a. Employer Contributions	30,363	37,823
b. Employee Contributions	35,648	41,730
c. Investment Income	103,916	103,768
d. Investment Expense	(15,523)	(15,847)
e. Realized and Unrealized Gains (Losses)	292,137	398,098
f. Other (Security Lending)	1,533	1,456
Total Revenues	<u>448,074</u>	<u>567,028</u>
3 Expenses		
a. Benefits	209,097	216,989
b. Refunds	4,369	4,675
c. Administration Expense	3,303	3,595
Total Expense	<u>216,769</u>	<u>225,259</u>
4 Assets Available at End of Year (1 + 2 - 3)	<u><u>2,979,766</u></u>	<u><u>3,325,440</u></u>

* Change due to difference between unaudited asset value used for prior valuation and audited asset value reported the following year.

Development of Actuarial Value of Assets

As of December 31, 2013

(\$ in 000's)

	<u>Market Value</u>	<u>Actuarial Value</u>
1 Value of Assets @ 12-31-2012	\$ 2,979,766	\$ 2,846,124
2 Non-Investment Cash Flows during 2013		
a. Employer Contributions	37,823	37,823
b. Employee Contributions	41,730	41,730
c. Benefits (including refunds)	(221,664)	(221,664)
d. Administrative Expenses	(3,595)	(3,595)
Total	<u>(145,706)</u>	<u>(145,706)</u>
3 Expected Investment Returns @ 8.25%	228,914	228,914
4 Expected Assets @ 12-31-2013 (1 + 2 + 3)	3,062,974	2,929,332
5 Actual Assets Available for Benefits	3,325,440	
6 Gain/ (Loss) From Investment Returns (5 - 4)	262,466	
7 Recognition of Gains / (Losses)		
a. One-fifth of Current Year Gain/(Loss) (one-fifth of 6)		52,493
b. One-fifth of 2012 Gain/(Loss)		29,667
c. One-fifth of 2011 Gain/(Loss)		(43,962)
d. One-fifth of 2010 Gain/(Loss)		30,928
e. One-fifth of 2009 Gain/(Loss)		75,826
Total		<u>144,952</u>
8 Actuarial Value of Assets @ 12-31-2013 (4 + 7)		3,074,284

Historical Investment Performance
Dollar Weighted Basis Net of Investment Expenses

<u>Calendar Year</u>	<u>On Market Value</u>	<u>On Actuarial Value</u>
1998	16.99%	15.17%
1999	16.74%	17.69%
2000	-3.45%	9.59%
2001	-5.46%	2.76%
2002	-9.81%	-5.37%
2003	27.05%	2.03%
2004	15.22%	9.38%
2005	7.93%	13.71%
2006	16.90%	13.03%
2007	3.56%	9.58%
2008	-31.31%	-3.76%
2009	30.35%	6.79%
2010	15.77%	4.30%
2011	0.86%	1.15%
2012	14.29%	2.82%
2013	16.75%	13.48%
5-year average ending in 2013	15.22%	5.62%
10-year average ending in 2013	7.70%	6.90%

**Analysis of Change in Unfunded
Actuarial Accrued Liability
For the Year Ending December 31, 2013
(\$ in 000's)**

1 UAAL as of December 31, 2012		\$ 672,232
2 Expected Change in UAAL during 2013		
a. Expected Amortization Payment for CY 2013	(43,748)	
b. Interest adjustments on 1 & 2a to Year End @ 8.25%	<u>53,655</u>	
c. Expected change in UAAL		9,907
3 Increase/(Decrease) in UAAL Due to Difference Between Calculated Contribution Rate and Actual Contribution Rate		19,073
4 Net Actuarial Experience (Gains) & Losses		(164,651)
5 Assumption and Method Changes		0
6 UAAL as of December 31, 2013		\$ 536,561

Analysis of Actuarial (Gains) and Losses
For 2013
(\$ in 000's)

	<u>2013</u>
Investment Return	\$(144,952)
Salary Increase	(7,924)
Age and Service Retirement	(7,932)
General Employment Termination	4,814
Disability Incidence	(363)
Active Mortality	(519)
Benefit Recipient Mortality	11,599
Actual vs. Expected Cost of Living Adjustment (COLA)*	(23,194)
Other	<u>3,820</u>
Total Actuarial (Gain)/ Loss	\$ (164,651)

* Actual COLA of 1.442% versus expected COLA of 3.00%

Schedule of Funding Status
(As Required by GASB #25)
(\$ in 000's)

End of Year	Actuarial Value of Assets (a)	AAL (b)	UAAL (b-a)	Funding Ratio (a/b)	Payroll* (c)	UAAL as % of Payroll ((b-a)/c)
1992	\$854,000	\$1,107,000	\$253,000	77.15%	\$200,000	126.50%
1993	945,000	1,123,000	178,000	84.15%	200,000	89.00%
1994	991,000	1,199,000	208,000	82.65%	208,000	100.00%
1995	1,176,000	1,459,000	283,000	80.60%	243,357	116.30%
1996	1,310,081	1,585,081	275,000	82.65%	257,169	106.90%
1997	1,437,533	1,673,761	236,228	85.89%	261,799	90.20%
1998	1,617,468	1,750,430	132,962	92.40%	275,547	48.30%
1999	1,862,644	1,873,998	11,353	99.39%	282,127	4.00%
2000	1,997,828	2,038,078	40,250	98.03%	298,355	13.50%
2001	2,017,041	2,276,488	259,447	88.60%	332,842	77.90%
2002	1,863,701	2,399,569	535,868	77.67%	324,615	165.08%
2003	1,843,099	2,489,071	645,972	74.05%	318,492	202.82%
2004	2,482,082	2,488,270	6,188	99.75%	331,201	1.87%
2005	2,739,269	2,606,173	(133,096)	105.11%	332,446	-40.04%
2006	2,998,099	2,761,404	(236,695)	108.57%	344,997	-68.61%
2007	3,183,260	2,915,164	(268,096)	109.20%	370,150	-72.43%
2008	2,957,506	3,075,385	117,879	96.17%	389,362	30.27%
2009	3,031,652	3,192,120	160,468	94.97%	375,164	42.77%
2010	3,027,439	3,282,126	254,687	92.24%	332,045	76.70%
2011	2,916,946	3,391,652	474,906	86.00%	318,972	148.89%
2012	2,846,124	3,518,356	672,232	80.89%	340,452	197.45%
2013	3,074,284	3,610,845	536,561	85.14%	352,486	152.22%

* Projected to following year.

Schedule of Employer Contributions
(As Required by GASB #25)
(\$ in 000's)

Year	Total ARC*	Member Contributions	Net City ARC	Actual City Contributions	City Cont. as Percent of Net ARC
1997	\$58,095	\$13,193	\$44,902	\$22,404	49.90 %
1998	61,339	14,001	47,338	23,762	50.20 %
1999	57,159	14,932	42,227	25,217	59.72 %
2000	50,142	16,460	33,682	27,847	82.68 %
2001	52,535	20,814	31,728	35,182	110.91 %
2002	71,246	21,771	49,475	36,606	73.99 %
2003	86,429	20,580	65,849	34,729	52.74 %
2004	92,278	20,896	71,382	35,251	49.38 %
2005	51,290	23,392	27,898	565,569	2027.29 %
2006	44,503	30,123	14,380	23,000	159.94 %
2007	41,079	31,692	9,387	23,413	249.42 %
2008	42,637	31,839	10,798	22,720	210.41 %
2009	71,615	32,229	39,386	25,232	64.06 %
2010	72,765	31,666	41,099	27,323	66.48 %
2011	72,797	31,748	41,049	27,302	66.51 %
2012	85,941	35,648	50,293	30,363	60.37 %
2013	103,402	41,730	61,672	37,823	61.33 %
2014	97,792	46,035 **	51,757 **		

* ARC – Annual Required Contribution as defined in GASB Statements No. 25 and No. 27.

** Estimated.

Note 1: Data for years prior to 1998 are based on prior actuarial work product.

Note 2: GASB Statements 25 and 27 are standards for accounting for public retirement systems and employers. They are not designed to limit the funding decisions of plan sponsors.

Notes to Required Supplementary Information

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the dates indicated. Additional information as of the latest actuarial valuation for GASB 25 purposes is as follows:

Valuation Date	December 31, 2013
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percent Open
Payroll Growth Rate for Amortization	3.00%
Remaining Amortization Period	30 years
Asset Valuation Method	5-Year Smoothed Market
Actuarial Assumptions:	
Investment Rate of Return*	8.25%
Projected Salary Increases*	3.0% - 7.0%
*Includes Inflation at	3.00%
Cost-of-Living Adjustments	3.00%

Note: GASB Annual Required Contribution determined with 30-year funding period.
Actual contribution rate set by City Ordinance No. 25695.

Summary of Data Characteristics

	<u>December 31, 2011</u>	<u>December 31, 2012</u>	<u>December 31, 2013</u>
Active Members			
Number	6,745	6,864	6,993
Total Annualized Earnings of Members as of 12/31 (000's)	\$309,682	\$330,536	\$342,219
Average Earnings	45,913	48,155	48,937
Benefit Recipients			
Number	6,199	6,320	6,447
Total Annual Retirement Income (000's)	\$193,851	\$202,121	\$210,028
Total Annual Health Supplement (000's)	\$9,066	\$9,193	\$9,391
Average Total Annual Benefit	\$32,734	\$33,436	\$34,034
Inactive Members			
Number	1,047	1,043*	1,052**

* The number of inactives on 12/31/2012 includes 722 members who have applied for a deferred pension and 321 other members who have terminated and still have contribution balances in the Fund.

** The number of inactives on 12/31/2013 includes 744 members who have applied for a deferred pension and 308 other members who have terminated and still have contribution balances in the Fund.

Distribution of Active Members and Payroll by Age and Years of Service

Age	Years of Service								Totals
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30 & Over	
Under 20	3	-	-	-	-	-	-	-	3
	62,057	-	-	-	-	-	-	-	62,057
20-24	53	52	1	-	-	-	-	-	106
	1,573,996	1,696,698	23,545	-	-	-	-	-	3,294,239
25-29	124	187	107	1	-	-	-	-	419
	4,329,040	7,122,744	4,228,595	61,922	-	-	-	-	15,742,301
30-34	122	224	220	31	3	-	-	-	600
	4,396,264	9,613,651	9,909,957	1,447,950	132,744	-	-	-	25,500,566
35-39	103	192	263	128	59	1	-	-	746
	4,113,296	9,010,397	12,170,140	6,373,844	2,793,732	86,637	-	-	34,548,046
40-44	74	185	243	155	157	48	3	-	865
	2,874,557	8,515,421	11,577,362	7,200,695	7,928,164	2,566,374	172,759	-	40,835,332
45-49	93	177	293	194	200	150	101	8	1,216
	3,248,103	7,332,096	13,985,025	9,904,980	10,779,829	8,772,616	6,254,376	512,108	60,789,133
50-54	74	142	317	206	231	160	139	42	1,311
	2,885,491	6,203,529	14,692,035	10,589,200	12,294,937	9,609,210	9,178,036	2,614,720	68,067,158
55-59	47	109	207	163	178	100	81	64	949
	1,911,525	5,252,939	9,395,444	8,354,900	9,382,522	6,296,536	4,961,580	4,588,969	50,144,415
60-64	13	60	133	103	119	51	46	30	555
	416,756	2,847,674	6,455,046	5,823,086	6,274,708	3,012,168	3,064,538	2,074,040	29,968,016
65&Over	3	17	50	44	33	31	24	21	223
	156,008	855,143	2,551,655	2,374,886	1,997,867	2,079,999	1,729,358	1,523,021	13,267,937
Totals	709	1,345	1,834	1,025	980	541	394	165	6,993
	25,967,093	58,450,292	84,988,804	52,131,463	51,584,503	32,423,540	25,360,647	11,312,858	342,219,200

**Distribution of Benefit Recipients
as of December 31, 2013**

Age	Number	Annual Benefit*	Annual Average Benefit*
Under 50	62	\$ 939,124	\$ 15,147
50-54	356	14,522,432	40,793
55-59	745	32,013,120	42,971
60-64	1,398	52,276,181	37,394
65-69	1,382	48,086,215	34,795
70-74	914	25,641,762	28,054
75-79	622	16,478,988	26,494
80-84	479	10,710,745	22,361
85-89	296	6,262,398	21,157
90 & Over	193	3,096,547	16,044
Total	6,447	\$ 210,027,512	\$ 32,578

* Does not include Health Benefit Supplement.

EXPERIENCE TABLES

Table Number	Content of Tables	Page
14	Analysis of Pay Experience (Valuation Pay)	34
15a	Analysis of Retirement Experience – Each Age	35
15b	Analysis of Retirement Experience - Age Groups	36
16	Analysis of Turnover Experience	37
17	Analysis of Active Mortality Experience	38
18	Analysis of Disability Experience	39
19	Analysis of Retiree Mortality Experience	40

**Pay Experience for Employees who are Active at
 Beginning and End of Year
 Valuation Pay Analysis
 Analyzed by Years of Service**

Service Beginning of Year	Experience for 2013			
	Number	Expected Pay	Actual Pay	Ratio A/E
Under 5	1,189	49,460,644	51,816,336	104.76%
5-9	1,826	83,061,834	84,326,934	101.52%
10-14	998	48,994,180	49,779,429	101.60%
15-19	1,067	56,223,811	56,205,176	99.97%
20-24	543	32,173,076	32,047,947	99.61%
25-29	413	26,620,546	26,483,347	99.48%
30 & Over	206	14,098,288	13,859,914	98.31%
Total	6,242	\$ 310,632,379	\$ 314,519,083	101.25%
Over 10 Years	3,227	\$ 178,109,901	\$ 178,375,813	100.15%

Service Beginning of Year	Experience for 2011/2013			
	Number	Expected Pay	Actual Pay	Ratio A/E
Under 5	3,523	140,940,399	146,966,628	104.28%
5-9	5,289	230,522,764	234,541,647	101.74%
10-14	3,330	158,863,688	160,300,019	100.90%
15-19	2,917	150,720,121	150,674,123	99.97%
20-24	1,655	97,244,440	97,152,510	99.91%
25-29	1,316	81,895,645	81,458,540	99.47%
30 & Over	542	35,881,054	35,603,016	99.23%
Total	18,572	\$ 896,068,111	\$ 906,696,483	101.19%
Over 10 Years	9,760	\$ 524,604,948	\$ 525,188,208	100.11%

Analysis of Retirement Experience

Age	2013 Retirement			2011/2013 Retirement		
	Actual	Expected	Ratio A/E	Actual	Expected	Ratio A/E
46	-	-	N/A	-	-	N/A
47	-	-	N/A	-	-	N/A
48	-	0.50	0.00%	2	1.60	125.00%
49	1	0.90	111.11%	3	3.10	96.77%
50	13	18.30	71.04%	53	49.10	107.94%
51	18	16.27	110.63%	50	47.95	104.28%
52	8	14.99	53.37%	42	46.92	89.51%
53	11	14.85	74.07%	39	45.81	85.13%
54	12	16.94	70.84%	33	47.26	69.83%
55	11	16.88	65.17%	34	50.63	67.15%
56	9	12.55	71.71%	30	43.25	69.36%
57	12	15.12	79.37%	34	40.46	84.03%
58	9	13.80	65.22%	21	35.79	58.68%
59	9	12.03	74.81%	30	33.68	89.07%
60	18	25.21	71.40%	54	66.77	80.87%
61	9	18.02	49.94%	43	54.50	78.90%
62	18	17.92	100.45%	43	52.84	81.38%
63	6	19.32	31.06%	39	51.84	75.23%
64	7	11.09	63.12%	26	34.41	75.56%
65	14	17.50	80.00%	43	44.35	96.96%
66	6	11.15	53.81%	23	28.90	79.58%
67	3	7.75	38.71%	15	17.75	84.51%
68	3	3.15	95.24%	7	10.50	66.67%
69	1	1.55	64.52%	8	7.25	110.34%
70 & Over	11	53.00	20.75%	26	134.00	19.40%
Total	209	338.79	61.69%	698	948.66	73.58%
Total Under 70	198	285.79	69.28%	672	814.66	82.49%

Analysis of Retirement Experience
Age Groups

Age Group	2013 Retirements			2011/2013 Retirements		
	Actual	Expected	Ratio A/E	Actual	Expected	Ratio A/E
Under 55	63	82.75	76.13%	222	241.74	91.83%
55-59	50	70.38	71.04%	149	203.81	73.11%
60-64	58	91.56	63.35%	205	260.36	78.74%
65-69	27	41.10	65.69%	96	108.75	88.28%
70 & Over	11	53.00	20.75%	26	134.00	19.40%
Total	209	338.79	61.69%	698	948.66	73.58%
Total Under 70	198	285.79	69.28%	672	814.66	82.49%

Analysis of Turnover Experience

Years of Service	2013 Quits			2011/2013 Quits		
	Actual	Expected	Ratio A/E	Actual	Expected	Ratio A/E
0-4	218	215.96	100.95%	725	591.68	122.53%
5-9	131	117.72	111.28%	433	356.39	121.50%
10-14	28	35.07	79.84%	99	116.10	85.27%
15-19	16	24.36	65.67%	52	68.25	76.19%
20-24	7	6.77	103.43%	22	20.99	104.83%
25-29	1	0.88	113.38%	3	2.46	121.75%
Total	401	400.76	100.06%	1,334	1,155.86	115.41%

Analysis of Active Mortality Experience

Age	2013 Deaths			2011/2013 Deaths		
	Actual	Expected	Ratio A/E	Actual	Expected	Ratio A/E
20-24	-	0.03	0.00%	-	0.08	0.00%
25-29	-	0.15	0.00%	1	0.43	231.99%
30-34	-	0.31	0.00%	1	0.91	109.91%
35-39	-	0.60	0.00%	2	1.77	112.98%
40-44	1	0.99	100.58%	4	3.21	124.74%
45-49	-	2.18	0.00%	3	6.75	44.43%
50-54	1	3.39	29.49%	5	10.22	48.93%
55-59	3	4.12	72.82%	5	11.86	42.17%
60 and Over	2	5.58	35.83%	3	15.90	18.86%
Total	7	17.34	40.37%	24	51.13	46.94%

Analysis of Disability Experience

Age	2013 Disabilities			2011/2013 Disabilities		
	Actual	Expected	Ratio A/E	Actual	Expected	Ratio A/E
20-24	-	0.01	0.00%	-	0.04	0.00%
25-29	-	0.09	0.00%	-	0.28	0.00%
30-34	-	0.19	0.00%	-	0.56	0.00%
35-39	-	0.34	0.00%	-	1.04	0.00%
40-44	1	0.72	138.57%	1	2.29	43.58%
45-49	-	2.04	0.00%	3	6.35	47.21%
50-54	-	3.34	0.00%	4	10.11	39.58%
55-59	1	3.56	28.12%	4	10.35	38.64%
60 and Over	-	1.21	0.00%	-	3.31	0.00%
Total	2	11.51	17.38%	12	34.33	34.95%

Analysis of Retiree Mortality Experience*

Age	2013 Experience			2011/2013 Experience		
	Actual	Expected	Ratio A/E	Actual	Expected	Ratio A/E
Under 60	4	3.56	112.44%	24	11.43	210.06%
60-64	13	11.28	115.26%	38	33.76	112.55%
65-69	29	17.57	165.08%	53	47.59	111.37%
70-74	8	19.18	41.72%	43	54.30	79.19%
75-79	16	22.55	70.94%	60	64.88	92.47%
80-84	20	27.96	71.52%	69	84.06	82.09%
85-89	28	26.76	104.65%	70	78.90	88.72%
90 & over	23	22.17	103.73%	63	61.98	101.65%
Total	141	151.03	93.36%	420	436.90	96.13%

**This analysis does not include beneficiary, QDRO, or disabled deaths.*

ACTUARIAL METHOD AND ASSUMPTIONS ENTRY AGE NORMAL METHOD

The Entry Age Normal actuarial cost method is the actuarial valuation method used for all purposes under ERF.

The concept of this method is that funding of benefits for each member should be effected as a, theoretically, level contribution (as a level percentage of pay) from entry into ERF to termination of active status.

The Normal Cost (NC) for a fiscal year under this method is determined as described in the prior paragraph for each member. The ERF NC for the year is the total of individual normal costs determined for each active member.

The Actuarial Accrued Liability (AAL) under this method is the theoretical asset balance of the normal costs that would have accumulated to date based upon current actuarial assumptions. To the extent that the assets of the fund are insufficient to cover the AAL, an Unfunded Actuarial Accrued Liability (UAAL) develops.

The actuarially calculated contribution for a year is the Normal Cost for that year plus an amount to amortize the UAAL over 30 years as a level percentage of pay.

ACTUARIAL VALUE OF ASSET METHOD

The actuarial value of assets is equal to the expected actuarial value of assets adjusted for a five-year phase-in of actual investment return in excess of (or less than) expected investment return. The actual return is calculated net of investment expenses, and the expected investment return is equal to the assumed investment return rate multiplied by the prior year's actuarial value of assets, adjusted for contributions, benefits paid, and refunds.

ACTUARIAL ASSUMPTIONS
(AS OF DECEMBER 31, 2013)

Annual Rate of Investment Return. For all purposes under the Fund, the rate of investment return is assumed to be 8.25% per annum, net of investment expenses. This rate includes an annual assumed rate of inflation of 3.00%. In addition, annual cost-of-living adjustments are assumed to occur on average at the rate of 3.00% per annum.

Annual Compensation Increases. Each member's compensation is assumed to increase in accordance with a table based on actual ERF experience. Sample rates follow.

<u>Years of Service</u>	<u>Merit, Promotion, Longevity</u>		<u>General</u>		<u>Total</u>	
0	3.50	%	3.50	%	7.00	%
1	3.25		3.50		6.75	
2	2.75		3.50		6.25	
3	1.50		3.50		5.00	
4	1.25		3.50		4.75	
5	1.00		3.50		4.50	
6	0.75		3.50		4.25	
7	0.50		3.50		4.00	
8	0.25		3.50		3.75	
9 & Over	0.00		3.50		3.50	

Actuarial Assumptions (cont.)

Mortality:

Disabled Lives: RP-2000 Disabled Mortality Table for male annuitants, set forward one year.

Sample rates follow (rate per 1,000):

Age	Disability Mortality Rate	
	Male	Female
20	23	23
30	23	23
40	23	23
50	30	30
60	43	43
70	66	66
80	116	116
90	200	200

Other Benefit Recipients:

- a. Males – RP-2000 Healthy Mortality Table for male annuitants, projected to 2007 using scale AA, set forward two years.
- b. Females – RP-2000 Healthy Mortality Table for female annuitants.

Sample rates follow (rate per 1,000).

Age	Mortality Rate	
	Male	Female
30	0.5	0.3
40	1.1	0.7
50	2.3	1.7
60	7.9	5.1
70	24.5	16.7
80	76.1	45.9
90	212.1	131.7

Actuarial Assumptions (cont.)

Mortality:

Active Members:

- a. Males – RP2000 Healthy Mortality Table for male employees, set forward 4 years.
- b. Females – RP2000 Healthy Mortality Table for female employees, set back 5 years.

Sample rates follow (rate per 1,000).

Age	Mortality Rate	
	Male	Female
30	0.7	0.2
40	1.4	0.5
50	2.8	1.1
60	7.0	2.5
70	33.9	5.8
80	99.8	28.1
90	250.7	77.4

10% of active deaths are assumed to be service related.

Disability: A client-specific table of disability incidence with sample rates follows (rate per 1,000).

Age	Disability Rate
30	0.3
40	0.6
50	2.4
60	6.0

35% of disabilities are assumed to be service related. There is a 0.00% assumption of disability for members who have over 10 years of service and are eligible for retirement.

Actuarial Assumptions (cont.)

Retirement: Upon eligibility, active members are assumed to retire as follows (rate per 1,000).

Age	Male		Female	
	<u>First Year Eligible</u>	<u>Thereafter</u>	<u>First Year Eligible</u>	<u>Thereafter</u>
48-49	100	100	100	100
50	550	550	350	350
51	450	450	430	430
52	450	330	430	430
53	380	330	300	300
54	380	330	300	300
55	380	330	300	300
56	350	300	250	250
57	350	300	220	220
58-59	330	280	220	220
	<u>Service < 18 yrs.</u>	<u>Service 18 yrs.+</u>	<u>Service < 18 yrs.</u>	<u>Service 18 yrs. +</u>
60	80	250	100	350
61	90	250	150	220
62	130	250	150	200
63	150	280	150	150
64	160	250	100	100
65	200	350	200	250
66	250	250	250	350
67	250	200	250	350
68	150	200	150	350
69	150	200	150	150
70	1,000	1,000	1,000	1,000

Actuarial Assumptions (cont.)

General Turnover: A table of termination rates based on ERF experience. A sample of the ultimate rates follows.

<u>Years of Service</u>	<u>Terminations (per 1,000)</u>
0	210.0
1	160.0
2	130.0
3	105.0
4	85.0
5	67.5
6	62.5
7	57.5
8	49.0
9	46.0
10-14	37.0
15-19	22.0
20 & Over	14.0

There is 0.00% assumption of termination for members eligible for retirement.

Mortality Improvement: To account for future mortality improvement, the post-retirement mortality rates were chosen so that the assumed mortality rates are smaller than the rates observed in the most recent experience study (dated 4-29-2011). The margin at the time of the study was 7%-14% for non-disabled annuitants. The margin for disabled annuitants is 17%-19%. No future mortality improvement after the measurement date is assumed except as described above.

Refunds of Contributions: Members are assumed to choose the most valuable termination benefit.

Operational Expenses: The amount of estimated administrative expenses expected in the next year is assumed to be equal to the prior year's expenses and is incorporated in the Normal Cost.

Marital Status: 75% of active male members and 50% of active female employees are assumed to be married.

Actuarial Assumptions (cont.)

Vacation Leave Conversions: Members with 20 or more years of service are assumed to convert unused vacation leave to 1.7 months of service. Members with 10 to 19 years of service are assumed to convert unused vacation leave to 1 month of service. Members with less than 10 years of service are assumed to convert unused vacation leave to 0.5 months of service. No vacation leave conversion is assumed for disability retirement.

Spouse Age: The female spouse is assumed to be 3 years younger than the male spouse.

Payroll Growth Rate: In determining the level percent amortization of UAAL rate, the payroll of the entire system is assumed to increase at 3% each year.

Member's Pay: In determining the member's valuation salary, the greater of the prior calendar year's gross pay and the member's rate of compensation is used.

Form of Payment: It is assumed that 60% of married active male members and 75% of married active female employees will elect a Joint & 50% Survivor form of payment. Taking into consideration the marriage assumption and the inherent subsidy in the System's Joint & 50% Survivor factors, the male employees are valued with Joint and 30.5% Survivor annuities and the female employees are valued with Joint and 15.0% Survivor annuities.

Changes in Assumptions and Methods Since Prior Valuation: None.

SUMMARY OF BENEFIT PROVISIONS

Employees' Retirement Fund of the City of Dallas as of December 31, 2013

Membership	An employee becomes a member upon permanent employment and contributes to the Fund.
Contributions	Member: 37% of the current adjusted total obligation rate. New rates effective October 1 after the valuation date. City: 63% of the current adjusted total obligation rate. New rates effective October 1 after the valuation date.
Definitions	Final Average Salary: Average monthly salary over the member's highest three years of service. Credited Service: Length of time as an employee of the City of Dallas and while making contributions to the Fund.
Retirement Pension	Eligibility: a. Attainment of age 60; or b. Attainment of age 55 (if credited service began before May 9, 1972); or c. At any age after completion of 30 years of credited service with a reduced benefit before age 50; or d. Attainment of age 50, if the sum of an active member's age and credited service is at least equal to 78.

Summary of Benefit Provisions (cont.)

Retirement Benefits: The retirement benefit equals 2-3/4% multiplied by average monthly earnings multiplied by credited service limited to a maximum of 36.3636 years plus a monthly \$125 health supplement (prorated for service less than 5 years).

Form of Payment: An unreduced pension benefit under a joint and one-half survivor option or a ten-year certain and life option. An actuarially equivalent joint and full survivor option is also available.

Deferred Retirement

Eligibility: Deferred retirement pension benefit commencing at age 60 or at age 55, if employment commenced prior to May 9, 1972, with at least five (5) years of credited service, and accumulated contributions are left on deposit with the Fund.

Monthly Benefit: The deferred retirement benefit is equal to the retirement pension based on earnings and credited service at the time of termination.

Disability Retirement Pension

Non-Service Disability:

1. Eligibility: Five (5) years of service and totally and permanently incapacitated for duty.
2. Monthly Benefit: Computed based on average monthly earnings and credited service at time of disability but not less than 10 times the percentage multiplier multiplied by the average monthly earnings.

Summary of Benefit Provisions (cont.)

Service Disability:

1. Eligibility: Totally and permanently incapacitated from the further performance of duty as a result of injury while in the course of employment for the City.
2. Monthly Benefit: Calculated as a non-service disability pension but not less than \$500 per month.

Death Benefits

Form: Benefit paid in accordance with the option on file, or the eligible option, or if no eligible beneficiary, a lump sum equivalent of 10 years of benefit payments to the member's estate.

Monthly Benefit: Based on average monthly earnings and credited service at death but not less than 10 times the percentage multiplier multiplied by the average monthly earnings.

Minimum Service Death Benefit: Not less than \$500 per month if death resulted from a service related injury.

Return of Accumulated Contributions

A member at the time of termination is entitled to be paid accumulated contributions without interest.

Cost-of-Living Adjustments

An annual cost-of-living adjustment to the base pension benefit shall be made based on the greater of:

- a. The percentage of change in the price index for October of the current year over October of the previous year, up to 5%, or
- b. The percentage of annual average change in the price index for the 12-month period ending with the effective date of the adjustment, up to 5%.