

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

ACTUARIAL VALUATION REPORT AS OF DECEMBER 31, 2011



May 8, 2012

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, 2011.

This valuation provides information on the funding status of ERF. It includes a determination of the actuarially calculated contribution rates for the 2012 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, 2012 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 2013.

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, 2011. 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

Lewis Ward Consultant Mark R. Randall, MAAA, FCA, EA

Mark R. Randall

Executive Vice President & Senior Consultant

Page

	· ·	
Section	Number	
		COVER LETTER
A	2	EXECUTIVE SUMMARY
В	3	PURPOSES OF THE ACTUARIAL VALUATION
C	4	REPORT HIGHLIGHTS
D	5	FUNDING PROCESS
${f E}$	6	ACTUARIAL CONTRIBUTIONS
${f F}$	7	ACTUARIAL ASSUMPTIONS
G	8	ERF BENEFITS
Н	9	EXPERIENCE DURING PREVIOUS YEARS
I	10	ASSET INFORMATION
J	11	FUNDED STATUS
K	12	GASB DISCLOSURE
L	13	CLOSING COMMENTS
M	15	ACTUARIAL TABLES
N	34	EXPERIENCE TABLES
0	42	ACTUARIAL METHOD AND ASSUMPTIONS
P	49	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, 2011, may be summarized as follows:

	Dece	mber 31, 2010	Dece	mber 31, 2011
		(1)		(2)
 Members 				
- Actives		7,034		6,745
- Benefit recipients		5,993		6,199
- Deferred vested*		702		698
- Other terminated*		<u>409</u>		<u>349</u>
- Total		14,138		13,991
• Covered payroll (including overtime)	\$	322,374	\$	309,682
Normal cost	\$	52,993	\$	51,587
as % of expected payroll		16.82%		17.09%
 Actuarial accrued liability 	\$	3,282,126	\$	3,391,652
 Actuarial value of assets 	\$	3,027,439	\$	2,916,746
 Market value of assets 	\$	2,868,196	\$	2,747,654
Unfunded actuarial accrued liability (UAAL)	\$	254,687	\$	474,906
• Estimated yield on assets (market value basis)		15.77%		0.86%
• Estimated yield on assets (actuarial value basis)		4.30%		1.15%
Contribution Rates				
- Prior Adjusted Total Obligation Rate		26.51%		29.16%
- Current Total Obligation Rate		31.99%		37.62%
- Current Adjusted Total Obligation Rate		29.16%		32.08%
Actuarial gains/(losses)				
- Assets	\$	(117,398)	\$	(209,960)
- Actuarial liability experience	\$	101,313	\$	6,042
- Assumption and method changes	\$	(66,634)	\$	-
• 30-year level % of pay funding cost	\$	72,797	\$	85,941
as % of payroll (Employee + City)		22.81%		27.89%
Funded ratio				
- Based on actuarial value of assets		92.2%		86.0%
- Based on market value of assets		87.4%		81.0%

^{*} 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, 2011.

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 2012 calendar year; and
- To develop the current total obligation rate and the current adjusted total obligation rate for the fiscal year beginning October 1, 2012.

REPORT HIGHLIGHTS

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

(\$ in	000's)
--------	--------

	(ψ 111 (, o o b ,
	2011	2012
Contribution Rates (% of Payroll)		
Normal Cost (including administrative expense)	17.82%	18.20%
Total Actuarial Contribution Rate	22.81%	27.89%
Total Projected Actuarial Contribution	\$72,797	\$85,941
Funded Status	12/31/10	12/31/11
Actuarial Accrued Liability	\$3,282,126	\$3,391,652
Actuarial Value of Assets	3,027,439	2,916,746
Unfunded Actuarial Accrued Liability	\$254,687	\$474,906
Funded Ratio	92.24%	86.00%

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 more than 3.00% as of December 31, 2011. This means that the "current adjusted total obligation rate" will increase from 29.16% to 32.08% of active member payroll effective October 1, 2012.

ACTUARIAL CONTRIBUTIONS

The Actuarially Required Contribution Rate developed in this actuarial valuation is 27.89% 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 2013. As shown in Section M -Table 3 of this report, the debt service payment is determined to be 9.73% of projected payroll. The sum of these rates is 37.62% (the Current Total Obligation Rate) which is 8.46% more than the Prior Adjusted Total Obligation Rate of 29.16%. Because the difference is more than 3.00%, the total contribution rate in fiscal year 2013 (the Current Adjusted Total Obligation Rate) to fund the ERF and make the debt service payment on the pension obligation bonds will increase to 32.08% which is the 110% of Prior Adjusted Total Obligation Rate of 29.16%.

The members contribute 37% of the Current Adjusted Total Obligation Rate and the City contributes 63%. Hence, the members portion of the 32.08% total contribution rate will be 11.87% and the City portion will be 20.21%. All of the member contribution rate will be contributed to the ERF. As noted above, 9.73% of the City's contribution rate will go towards the debt service on the pension obligation bonds and the remaining 10.48% will be contributed towards the ERF. This means a total contribution rate of 22.35% will be contributed to the ERF, which compares to the actuarially calculated rate of 27.89%.

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 2011

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 0.86% (calculated on a dollar-weighted basis, net of investment expenses). Given this low return, the actual investment income was less than the expected investment income on the actuarial value of assets; therefore, an investment income loss is being partially recognized this year (1/5) and partially deferred into the near future (4/5). After recognizing this year's loss and prior years' deferred investment gains and losses (years 2010, 2009, 2008 and 2007), there was an overall actuarial loss of \$210 million on the actuarial value of assets as of December 31, 2011. The rate of return on the actuarial value of assets for 2011 was 1.15% (calculated on a dollar-weighted basis, net of investment expenses). This result was less than the current investment return assumption of 8.25%.

During 2011 there was an aggregate actuarial gain of about \$6.0 million derived from demographic assumptions and non-investment economic assumptions (salary increases). As seen below, ERF experienced an overall actuarial loss in calendar year 2011. This year's overall actuarial experience loss amounted to approximately \$203.9 million.

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

		2008	2009	2010	2011
1)	Actuarial (Gain)/Loss on Assets	\$375.99	\$146.94	\$117.40	\$209.96
2)	Actuarial (Gain)/Loss on Liabilities	29.25	(23.70)	(101.31)	(6.04)
3)	Total Actuarial (Gain) or Loss (1+2)	405.24	123.24	16.09	203.92

In addition to the actuarial loss for 2011 shown above, the unfunded actuarial accrued liability (UAAL) increased \$12.5 million because of the difference between the calculated contribution rate and the actual contributions to the Fund during 2011.

ASSET INFORMATION

The assets of the Fund (on a market value basis) decreased from \$2,868 million as of December 31, 2010 to \$2,748 million as of December 31, 2011.

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, 2011.

The actuarial value of assets has decreased from \$3,027 million to \$2,917 million during 2011. This decrease is due primarily to the continued recognition of the 2008 investment loss.

The rate of return on investments for 2011 on the actuarial value of assets was 1.15% compared to 4.30% in 2010. 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 decreased from 92.2% as of December 31, 2010 to 86.0% as of December 31, 2011. This decrease is due to the continued recognition of the significant downturn in the investment markets during 4th quarter of 2008 and also to the less than expected return on assets during 2011.

The UAAL increased from \$254.7 million as of December 31, 2010 to \$474.9 million as of December 31, 2011. Since the UAAL is positive, this implies the actuarial accrued liabilities exceed the actuarial assets of the Fund as of December 31, 2010 and 2011.

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 few 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

The funded status and contributions rates of the Fund continue to be impacted by the significant financial market downturn experienced by all retirement systems in 2008. The funded status has declined by more than 20% and the Current Total Obligation Rate has increased from 20.21% of pay as of December 31, 2007 to 37.62% of pay as of December 31, 2011. While most of the change in the funded status and increased contribution rates is due to the 2008 market meltdown, the decline in covered payroll resulting in so many less active members today as compared to 2008 has also had a negative effect.

The contribution rate is comprised of several pieces, the normal cost, the administrative expenses, the amortization payment of the unfunded actuarial accrued liability (UAAL) and the debt service payment on the Pension Obligation Bonds. The last three of the items are specified dollar costs that are converted to percentages of payroll. When the amount of payroll available to pay for these items decreases, then the percentage of payroll necessary to pay the amounts increases. For example, if a fixed payment of \$1,000,000 is required and the payroll is \$10,000,000 then the payment is 10% of pay. However, if the payroll is only \$8,000,000 million then the payment is now 12.5% of pay.

The amortization of the UAAL assumes that the payroll will grow at 3% per year. When the Pension Obligation Bonds were issued, their repayment schedule was designed to be an increasing payment schedule that approximated the payroll growth assumption of 3%. At December 31, 2008 the projected payroll for the following year was \$389.4 million. If payroll had grown as assumed (3% per year) then the projected payroll for the upcoming year (2012) would be expected to be \$425.5 million. However, the City has experienced severe budget issues due to the recent recession and as a result has reduced the active membership of the Fund by almost 20% over the past three years. This has resulted in a projected payroll for 2012 of only \$319.0 million (or 75% of what was expected as of three years ago).

CLOSING COMMENTS (CONTINUED)

As a result, the portion of the contribution rate that pays for the administrative expenses, amortization of the UAAL and the debt service payment on the Pension Obligation Bonds, has increased by more than 5% of pay. In other words, if payroll had grown as expected (since December 31, 2008) the calculated contribution rates would be 32.48% of pay instead of 37.62% of pay. If the payroll continues to decrease (or remain flat) the calculated contribution rate will continue to increase even if there are no actuarial losses.

ACTUARIAL TABLES

Table

Number	Content of Tables	Page
1	Summary of Actuarial Values	16
2	Development of Actuarially Required Contribution for FY 2011	17
3	Information for City Ordinance 25695	18
4	Net Assets Available for Benefits	22
5	Change in Assets Available for Benefits	23
6	Development of Actuarial Value of Assets	24
7	Historical Investment Performance	25
8	Analysis of Change in Unfunded Actuarial Accrued Liability	26
9	Analysis of Actuarial Gains and Losses for 2011	27
10a	Schedule of Funding Status	28
10b	Schedule of Employer Contributions	29
10c	Notes to Required Supplementary Information	30
11	Summary of Data Characteristics	31
12	Distribution of Active Members and Payroll by Age and Years of Service	32
13	Distribution of Benefit Recipients	33



Summary of Actuarial Values As of December 31, 2011 (\$ in 000's)

		Entr	y Age Actuarial Va	alues
		Actuarial		
	APV* of	Accrued		
	Projected	Liability	Normal Cost	Normal Cost
_	Benefits	(AAL)	\$	% of Pay**
1 Active Members				
a. Retirement	\$ 1,271,205	\$ 1,053,351	\$ 34,621	11.47%
b. Death	27,096	18,333	1,434	0.48%
c. Disability	16,038	7,668	1,348	0.45%
d. Termination	92,031	13,996	11,993	3.97%
e. Health Subsidy	45,431	33,154	2,191	0.72%
Total	1,451,801	1,126,502	51,587	17.09%
2 Benefit Recipients	2,181,731	2,181,731		
3 Other Inactive	83,419	83,419		
4 Total Actuarial Values				
of Benefits	3,716,951	3,391,652	51,587	17.09%
5 Actuarial Value of Assets		2,916,746		
6 Unfunded Actuarial				
Accrued Liability (4 - 5)		474,906		
7 Funding Ratio		86.00%		

^{*} APV – Actuarial Present Value

^{**} Percentage of expected payroll for continuing active members.

Development of Actuarially Required Contribution for FY 2013 (\$ in 000's)

	\$	% of Pay
1 Actuarial Requirement		
a. Payment to Amortize UAAL over 30 years*	\$ 30,908	9.69%
b. Normal Cost	51,587	17.09%
c. Administrative Expense	 3,446	1.11%
Total	\$ 85,941	27.89%

^{*} Amortization is determined as a level percentage of projected payroll

Information for Ordinance 25695 For the Fiscal Year Commencing October 1, 2012

1 Prior Adjusted Total Obligation Rate	29.16%
2 Actuarially Required Contribution Rate	27.89%
3 Debt Service	
a Scheduled Debt Service Payment for FY 2013	31,029,255
b Projected Payroll	318,972,037
c Pension Obligation Bond Credit Rate (a/b)	9.73%
4 Current Total Obligation Rate (2 + 3c)	37.62%
5 Current Adjusted Total Obligation Rate	32.08% *
6 Allocation of Contribution Rates for FY 2013	
a Employee (5 x .37)	11.87%
b City (5 x .63)	20.21%

* 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.



Net Assets Available for Benefits (\$ in 000's)

	December 31, 2010	December 31, 2011
1 Assets		
a. Cash & Short-Term	\$99,101	\$105,794
2 Receivables		
a. Accrued Investment Income	12,102	14,287
b. Securities Sold	3,891	3,837
c. Employer Contribution	307	325
d. Employee Contribution	351	382
e. Pending Contracts	1,844	77
	18,495	18,908
3 Investments		
a. Index Funds	255,126	106,288
b. Fixed Income	785,328	846,706
c. Equities	1,599,408	1,488,774
d. Real Estate	135,049	175,489
e. Private Equity	16,434	35,561
f. Venture Capital	4	0
	2,791,349	2,652,818
4 Total Assets	2,908,945	2,777,520
5 Liabilities		
a. Accounts Payable	3,836	4,582
b. Investment Transactions	36,913	25,284
	40,749	29,866
6 Net Assets Available For Benefits	2,868,196	2,747,654



Change in Assets Available for Benefits Fiscal Year Ending December 31, 2011 (\$ in 000's)

	 2010	 2011
1 Assets Available at Beginning of Year Adjustment *	\$ 2,600,373 (173)	\$ 2,868,196
	2,600,200	2,868,196
2 Revenues		
a. Employer Contributions	27,323	27,302
b. Employee Contributions	31,666	31,748
c. Investment Income	79,003	98,163
d. Investment Expense	(10,892)	(12,148)
e. Realized and Unrealized Gains (Losses)	330,364	(63,178)
f. Other (Security Lending)	1,126	1,269
Total Revenues	458,590	83,156
3 Expenses		
a. Benefits	182,883	195,270
b. Refunds	4,476	4,982
c. Administration Expense	3,235	3,446
Total Expense	190,594	203,698
4 Assets Available at End of Year (1 + 2 - 3)	 2,868,196	 2,747,654

^{*} 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, 2011 (\$ in 000's)

	Ma	arket Value	Act	uarial Value
1 Value of Assets @ 12-31-2010	\$	2,868,196	\$	3,027,439
2 Non-Investment Cash Flows during 2011				
a. Employer Contributions		27,302		27,302
b. Employee Contributions		31,748		31,748
c. Benefits (including refunds)		(200,252)		(200,252)
d. Administrative Expenses		(3,446)		(3,446)
Total		(144,648)		(144,648)
3 Expected Investment Returns @ 8.25%		243,915		243,915
4 Expected Assets @ 12-31-2011 (1 + 2 + 3)		2,967,463		3,126,706
5 Actual Assets Available for Benefits		2,747,654		
6 Gain/ (Loss) From Investment Returns (5 - 4)		(219,809)		
7 Recognition of Gains / (Losses)				
a. One-fifth of Current Year Gain/(Loss) (one-fifth of 6)				(43,962)
b. One-fith of 2010 Gain/(Loss)				30,928
c. One-fifth of 2009 Gain/(Loss)				75,826
d. One-fifth of 2008 Gain/(Loss)				(246,859)
e. One-fifth of 2007 Gain/(Loss)				(25,893)
Total				(209,960)
8 Actuarial Value of Assets @ 12-31-2011 (4 + 7)				2,916,746

Historical Investment Performance Dollar Weighted Basis Net of Investment Expenses

Calendar Year	On Market Value	On Actuarial Value
1997	20.48%	12.49%
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%
5-year average ending in 2011	1.60%	3.51%
10-year average ending in 2011	6.07%	4.90%

Analysis of Change in Unfunded Actuarial Accrued Liability For the Year Ending December 31, 2011 (\$ in 000's)

1 UAAL as of December 31, 2010		\$ 254,687
2 Expected Change in UAAL during 2011		
a. Expected Amortization Payment for CY 2011	(16,569)	
b. Interest adjustments on 1 & 2a to Year End @ 8.25%	20,328	
c. Expected change in UAAL		3,759
3 Increase/(Decrease) in UAAL Due to Difference Between Calculated Contribution Rate and Actual Contribution Rate		12,542
4 Net Actuarial Experience (Gains) & Losses		203,918
5 Assumption and Method Changes		0
6 UAAL as of December 31, 2011		\$ 474,906

Analysis of Actuarial (Gains) and Losses For 2011 (\$ in 000's)

	2011
Investment Return	\$ 209,960
Salary Increase	(20,905)
Age and Service Retirement	(2,328)
General Employment Termination	3,680
Disability Incidence	(395)
Active Mortality	309
Benefit Recipient Mortality	(5,031)
Actual vs. Expected Cost of Living Adjustment (COLA)*	12,723
Other	5,905
Total Actuarial (Gain) Loss	\$ 203,918

^{*}Actual COLA of 3.923% versus expected COLA of 3.00%

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

	Actuarial					UAAL
End	Value of			Funding		as % of
of	Assets	AAL	UAAL	Ratio	Payroll*	Payroll
Year	(a)	<u>(b)</u>	(b-a)	(a/b)	(c)	((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	2,916,746	3,391,652	474,906	86.00%	318,972	148.89%

^{*} Projected to following year.

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

City Cont.

					City Cont.
	Total	Member	Net City	Actual City	as Percent
<u>Year</u>	ARC*	Contributions	ARC	Contributions	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	34,417 **	51,524 **	*	

^{*} 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, 2011
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%

Summary of Data Characteristics

	December 31, 2009	December 31, 2010	December 31, 2011
Active Members			
Number	7,654	7,034	6,745
Total Annualized Earnings of Members			
as of 12/31 (000's)	\$364,237	\$322,374	\$309,682
Average Earnings	47,588	45,831	45,913
Benefit Recipients			
Number	5,706	5,993	6,199
Total Annual Retirement Income (000's)	\$165,826	\$179,730	\$193,851
Total Annual Health Supplement (000's)	\$8,317	\$8,741	\$9,066
Average Total Annual Benefit	\$30,519	\$31,449	\$32,734
Inactive Members			
Number	1,219	1,111	1,047*

^{*} The number of inactives on 12/31/2011 includes 698 members who have applied for a deferred pension and 349 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 as of December 31, 2011

Years of Service									
Age	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30 & Over	Totals
Under 20	3		_	-	_	-	-	_	3
	63,388	-	-	-	-	-	-	-	63,388
20-24	47	53	-	-	-	-	-	-	100
	1,286,828	1,538,288	_	-	-	-	-	_	2,825,110
25-29	82	226	88	1	-	-	-	_	39
	2,687,457	7,825,251	3,144,602	35,831	-	-	-	-	13,693,14 ⁻
30-34	85	225	162	54	2	-	-	-	52
	3,131,752	8,570,691	6,351,222	2,144,823	89,011	-	-	-	20,287,499
35-39	66	230	205	169	57	-	-	-	72
	2,621,641	9,312,531	8,675,335	7,228,992	2,472,562	-	-	-	30,311,06
40-44	47	215	203	214	160	52	4	-	89
	1,573,766	8,643,652	8,900,370	9,891,959	7,926,762	2,827,370	194,021	-	39,957,90
45-49	62	236	253	237	204	138	142	12	1,28
	2,103,308	9,290,064	11,040,826	10,723,278	10,471,241	7,931,558	8,021,980	724,947	60,307,20
50-54	46	187	206	265	176	184	167	34	1,26
	1,764,443	7,895,351	9,437,248	11,917,033	9,321,611	10,837,913	10,090,356	2,036,422	63,300,37
55-59	35	145	142	206	162	89	92	44	91
	1,435,172	6,061,673	6,254,510	9,899,261	8,337,008	5,251,756	5,541,783	2,710,694	45,491,85
60-64	8	66	110	116	63	43	45	24	47
	257,103	2,799,006	5,202,687	5,888,136	3,318,034	2,746,805	2,890,402	1,511,646	24,613,81
65&Over	1	15	26	42	24	21	14	13	15
	90,000	660,485	1,436,736	2,286,094	1,334,509	1,146,097	979,719	896,589	8,830,22
Totals	482	1,598	1,395	1,304	848	527	464	127	6,74
	17,014,858	62,596,992	60,443,536	60,015,407	43,270,738	30,741,499	27,718,261	7,880,298	309,681,58



Distribution of Benefit Recipients as of December 31, 2011

Age	Number	Annual Benefit*	Annı Avera Benef	age
Under 50	85	\$ 1,482,877	\$ 17	7,446
50-54	398	16,239,703	40),803
55-59	826	34,217,533	41	,426
60-64	1,449	53,981,716	37	7,254
65-69	1,128	34,188,719	30),309
70-74	786	21,307,244	27	7,108
75-79	589	14,102,621	23	3,943
80-84	460	9,877,137	21	,472
85-89	309	6,027,000	19	,505
90 & Over	169	2,426,620	14	1,359
Total	6,199	\$ 193,851,170	\$ 31	,271

^{*} Does not include Health Benefit Supplement.

EXPERIENCE TABLES

Table		
Number	Content of Tables	Page
14	Analysis of Pay Experience (Valuation Pay)	35
15a	Analysis of Retirement Experience – Each Age	36
15b	Analysis of Retirement Experience - Age Groups	37
16	Analysis of Turnover Experience	38
17	Analysis of Active Mortality Experience	39
18	Analysis of Disability Experience	40
19	Analysis of Retiree Mortality Experience	41



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

		Experience 1	Experience for 2011				
Service Beginning of Year	Number	Expected Pay	Actual Pay	Ratio A/E			
Under 5	1,288	50,382,381	50,603,539	100.44%			
5-9	1,630	69,806,227	68,827,094	98.60%			
10-14	1,225	57,486,879	56,429,744	98.16%			
15-19	893	46,050,544	44,992,438	97.70%			
20-24	550	32,525,659	31,712,638	97.50%			
25-29	478	29,146,295	28,375,106	97.35%			
30 & Over	158	10,158,253	9,826,358	96.73%			
Total	6,222	\$ 295,556,238	\$ 290,766,917	98.38%			
Over 10 Years	3,304	\$ 175,367,630	\$ 171,336,284	97.70%			

		Experience for	2011/2011	
Service Beginning of Year	Number	Expected Pay	Actual Pay	Ratio A/E
Under 5	1,288	50,382,381	50,603,539	100.44%
5-9	1,630	69,806,227	68,827,094	98.60%
10-14	1,225	57,486,879	56,429,744	98.16%
15-19	893	46,050,544	44,992,438	97.70%
20-24	550	32,525,659	31,712,638	97.50%
25-29	478	29,146,295	28,375,106	97.35%
30 & Over	158	10,158,253	9,826,358	96.73%
Total	6,222	\$ 295,556,238	\$ 290,766,917	98.38%
Over 10 Years	3,304	\$ 175,367,630	\$ 171,336,284	97.70%



Analysis of Retirement Experience

	2011 Retirement		2011	/2011 Retire	ment	
Age	Actual	Expected	Ratio A/E	Actual	Expected	Ratio A/E
46	-	-	N/A	-	-	N/A
47	-	-	N/A	-	-	N/A
48	2	0.90	222.22%	2	0.90	222.22%
49	2	1.20	166.67%	2	1.20	166.67%
50	25	17.35	144.09%	25	17.35	144.09%
51	18	15.39	116.96%	18	15.39	116.96%
52	15	13.87	108.15%	15	13.87	108.15%
53	19	17.36	109.45%	19	17.36	109.45%
54	10	13.35	74.91%	10	13.35	74.91%
55	12	17.41	68.93%	12	17.41	68.93%
56	11	15.10	72.85%	11	15.10	72.85%
57	10	12.10	82.64%	10	12.10	82.64%
58	7	11.11	63.01%	7	11.11	63.01%
59	13	9.83	132.25%	13	9.83	132.25%
60	19	21.93	86.64%	19	21.93	86.64%
61	22	19.06	115.42%	22	19.06	115.42%
62	16	16.44	97.32%	16	16.44	97.32%
63	21	18.08	116.15%	21	18.08	116.15%
64	10	10.74	93.11%	10	10.74	93.11%
65	15	13.15	114.07%	15	13.15	114.07%
66	10	7.80	128.21%	10	7.80	128.21%
67	8	4.75	168.42%	8	4.75	168.42%
68	3	5.25	57.14%	3	5.25	57.14%
69	4	2.10	190.48%	4	2.10	190.48%
70 & Over	9	42.00	21.43%	9	42.00	21.43%
Total	281	306.27	91.75%	281	306.27	91.75%
Total Under 70	272	264.27	102.93%	272	264.27	102.93%



Analysis of Retirement Experience Age Groups

Age	2011 Retirements				
Group	Actual Expected Ratio A/E				
Under 55	91	79.42	114.58%		
55-59	53	65.55	80.85%		
60-64	88	86.25	102.03%		
65-69	40	33.05	121.03%		
70 & Over	9 42.00 21		21.43%		
Total	281	306.27	91.75%		
Total Under 70	272	264.27	102.93%		

2011/2011 Retirements						
Actual	Expected	Ratio A/E				
91	79.42	114.58%				
53	65.55	80.85%				
88	86.25	102.03%				
40	33.05	121.03%				
9	42.00	21.43%				
281	306.27	91.75%				
272	264.27	102.93%				

Analysis of Turnover Experience

Years of	2011 Quits					
Service	Actual Expected Ratio A/E					
0-4	298	199.88	149.09%			
5-9	139	114.23	121.69%			
10-14	45	43.07	104.48%			
15-19	20	21.82	91.67%			
20-24	8	7.12	112.30%			
25-29	-	0.92	0.00%			
Total	510	387.04	131.77%			

2011/2011 Quits						
Actual Expected Ratio A						
298	199.88	149.09%				
139	114.23	121.69%				
45	43.07	104.48%				
20	21.82	91.67%				
8	7.12	112.30%				
-	0.92	0.00				
510	387.04	131.77%				

Analysis of Active Mortality Experience

· ·					
	2011 Deaths				
Age	Actual	Expected	Ratio A/E		
20-24	_	0.03	0.00%		
25-29	1	0.14	694.16%		
30-34	1	0.31	322.83%		
35-39	1	0.60	166.28%		
40-44	3	1.17	256.08%		
45-49	2	2.35	85.28%		
50-54	3	3.44	87.26%		
55-59	2	3.79	52.83%		
60 and Over	1_	5.14	19.47%		
Total	14	16.96	82.55%		

2011/2011 Deaths					
Actual	Actual Expected				
-	0.03	0.00%			
1	0.14	694.16%			
1	0.31	322.83%			
1	0.60	166.28%			
3	1.17	256.08%			
2	2.35	85.28%			
3	3.44	87.26%			
2	3.79	52.83%			
1	5.14	19.47%			
14	16.96	82.55%			

Analysis of Disability Experience

	2011 Disabilities					
Age	Actual	Expected	Ratio A/E			
20-24	-	0.01	0.00%			
25-29	-	0.10	0.00%			
30-34	-	0.19	0.00%			
35-39	-	0.36	0.00%			
40-44	-	0.83	0.00%			
45-49	3	2.22	135.30%			
50-54	3	3.41	87.97%			
55-59	1	3.37	29.71%			
60 and Over		0.95	0.00%			
Total	7	11.44	61.19%			

2011/2011 Disabilities					
Actual Expected Ratio					
-	0.01	0.00%			
-	0.10	0.00%			
-	0.19	0.00%			
-	0.36	0.00%			
-	0.83	0.00%			
3	2.22	135.30%			
3	3.41	87.97%			
1	3.37	29.71%			
-	0.95	0.00%			
7	11.44	61.19%			

Analysis of Retiree Mortality Experience*

	2011 Experience			201	11/2011 Expe	rience
Age	Actual	Expected	Ratio A/E	Actual	Expected	Ratio A/E
Under 60	10	4.00	249.74%	10	4.00	249.74%
60-64	13	11.12	116.88%	13	11.12	116.88%
65-69	13	14.32	90.77%	13	14.32	90.77%
70-74	17	16.96	100.23%	17	16.96	100.23%
75-79	23	20.72	111.00%	23	20.72	111.00%
80-84	21	28.15	74.60%	21	28.15	74.60%
85-89	25	25.69	97.30%	25	25.69	97.30%
90 & over	20	19.50	102.54%	20	19.50	102.54%
Total	142	140.48	101.08%	142	140.48	101.08%

^{*}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, 2011)

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.

Years of Service	Merit, Promotion, Longevity		General		Total	_
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	

The schedule shown above is assumed for calendar years after 2014. Active employee salaries are assumed to increase by 3.00% for calendar years 2012 - 2014.

Mortality:

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

Sample rates follow (rate per 1,000):

	Disability Mortality Rate	
Age	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).

	Mortality Rate		
Age	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	



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).

	Mortality Rate		
Age	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.

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

Age	Male		Female	
	First Year Eligible	Thereafter	First Year Eligible	Thereafter
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
	Service < 18 yrs.	Service 18 yrs.+	Service < 18 yrs.	Service 18 yrs. +
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

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

	Terminations	
Years of Service	(per 1,000)	
0	210.0	
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.

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 & 100% 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: No change since last valuation.

SUMMARY OF BENEFIT PROVISIONS

Employees' Retirement Fund of the City of Dallas as of December 31, 2011

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%.