
**The Report of the
December 31, 2004 Actuarial Valuation
of the Employees' Retirement Fund
of the City of Dallas**



Gabriel, Roeder, Smith & Company



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April 15, 2005

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

Dear Members of the Board:

We are pleased to present the report of the actuarial valuation of the Employees' Retirement Fund of the City of Dallas ("ERF") as of December 31, 2004.

This valuation provides information on the funding status of ERF. It includes a determination of the actuarially calculated contribution level for the 2005 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, 2005. This rate is comprised of the actuarially calculated contribution rate and the rate necessary to make the debt service payment on the pension obligation bonds.

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 value of the trust fund as of that date (including the proceeds from the pension obligation bonds as a receivable). All member data and asset information were provided by ERF staff. While certain checks for reasonableness were performed, the data used was not audited.

The actuarial assumptions and cost method are those that the Board of Trustees requested be used for this valuation.

To the best of our knowledge, this report is complete and accurate and was conducted in accordance with standards of practice by the Actuarial Standards Board and in compliance with the provisions of the ordinance. The actuarial assumptions used for the valuation produce results which, in the aggregate, are reasonable. The valuation was produced under the supervision of a Member of the American Academy of Actuaries with significant experience valuing public employee retirement systems.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Norman S. Losk'.

Norman S. Losk, F.S.A.
Senior Consultant

A handwritten signature in black ink, appearing to read 'Lewis Ward'.

Lewis Ward
Consultant

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Summary of the Valuation

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") as of December 31, 2004.

The purposes of an actuarial valuation are as follows:

- To determine the funding status of ERF as of the valuation date, and
- To develop the actuarially determined level of contributions for ERF for the calendar year 2005, and
- To develop the current total obligation rate and the current adjusted total obligation rate for the fiscal year beginning October 1, 2005.

Report Highlights

The following is a set of key results for the prior year valuation and for the current year:

	(\$ in 000's)	
	2004	2005
Contribution Rates (% of Payroll)		
Normal Cost (including administrative expense)	17.37%	15.90%
Total Actuarial Contribution Rate	29.55%	16.02%
Total Support Rate	17.50%	N/A
Shortfall of Actuarial Contribution under Support Rate	12.05%	N/A
Total Projected Actuarial Contribution	\$92,278	\$51,290
 Funding Status	12/31/03	12/31/04
Actuarial Accrued Liability	\$2,489,071	\$2,488,270
Actuarial Value of Assets	1,843,099	2,482,082
Unfunded Actuarial Accrued Liability	645,972	6,188

Actuarial Contribution

The Actuarially Required Contribution Rate developed in this actuarial valuation is 16.02% 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 2006. The debt service payment has been determined to be 8.39% of projected payroll. The sum of these rates is 24.41% (the Current Total Obligation Rate) and is the total contribution rate necessary in fiscal year 2006 to fund the contributions to the pension plan and make the debt service payment on the pension obligation bonds.

Funding Process

Based on the work of the Employees' Retirement Fund Study Committee that has been ratified by both the City Council and the voters a new funding process commences October 1, 2005. As of that date, 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 pension obligation bonds issued in February of 2005 and the contributions to the Employees' Retirement Fund.

The actuarial value of assets for the December 31, 2004 valuation include a contribution receivable of \$533,397,000 to represent the proceeds from the sale of the pension obligation bonds.

Actuarial Assumptions

During early 2004, the Employees' Retirement Fund Study Committee reviewed the operations of ERF. Among its recommendations is a change in the economic assumptions used in the actuarial valuations of the system. Those changes have been incorporated into this valuation. Changes include decreasing the investment return assumption from 8.5% to 8.25%, decreasing the inflation assumption from 4% to 3%, and decreasing the assumed rate of general wage increases from 4.5% to 3.5%. The inflation assumption is used to project future payroll growth, individual salary increases, and cost of living adjustments for benefits payable. All other methods and assumptions are unchanged since the last valuation report.

ERF Benefits

There have been no changes in the benefit provisions of ERF since the prior valuation.

Experience During 2004

Actuarial Gain and Loss Analysis reviews the effects of experience that differs from that assumed on actuarial results. If such a difference increases assets or reduces liabilities, we have an actuarial gain. The reverse is an actuarial loss.

ERF experienced an overall actuarial gain in 2004. This year's overall ERF actuarial gain amounted to about \$43.3 million.

The total actuarial gain is the net of the gain from assets and the gain from liabilities. The total gain is broken down as follows (\$ in millions):

	2001	2002	2003	2004
1) Actuarial (Gain)/Loss on Assets	\$113.80	\$279.54	\$118.79	(\$15.80)
2) Actuarial (Gain)/Loss on Liabilities	109.90	(21.08)	(51.16)	(27.52)
3) Total Actuarial (Gain) or Loss (1+2)	223.70	258.46	67.63	(43.32)

There was an actuarial gain of nearly \$16 million from investment return. For the second consecutive year the fund earned positive returns at market value. The rate of return at actuarial value for 2004 was 9.38%. This result was more than both the prior investment return assumption of 8.50% and the new investment return assumption of 8.25%.

In addition, during 2004, there was an actuarial gain of about \$27.5 million from demographic assumptions and non-investment economic assumptions. This gain includes a gain of over \$28 million from lower than expected salary increases.

It should be noted that the actuarial gain from liabilities amounts to only about 1.11% of actuarial accrued liabilities at the end of the year.

Asset Information

The market value of the assets of the fund, which are available for benefits, increased from \$1,910 million as of December 31, 2003 to \$2,130 million as of December 31, 2004 (before recognition of the proceeds of the pension obligation bond). The investment markets, which turned downward significantly in the first three years of the 21st century, have reversed themselves to produce significant investment gains in the last two calendar years. After recognition of the pension obligation bonds' proceeds the market value of assets is equal to \$2,668 million.

The assets recognized for actuarial purposes (actuarial value of assets) are the product of a smoothing technique. The purpose of such a technique is to allow the use of market values, but to dampen the effect of market volatility. See Table 3 for the determination of the actuarial value of assets.

The actuarial value of assets has been increased from \$1,843 million to \$2,482 million during 2004. Most of the large increase was due to the addition of the proceeds from the pension obligation bonds as a contribution receivable. The rate of return on investments for 2004 on the actuarial value of assets was 9.34% compared to 2.03% in 2003. The detailed determinations of asset values utilized in this valuation and asset growth in the last year are set out in Appendix A.

Funding Status

The funding status of ERF is measured by the Funding Ratio and the Unfunded Actuarial Accrued Liability (UAAL). The Funding Ratio is the ratio of the actuarial value of assets available for benefits to the actuarial accrued liability (AAL) of the Fund. Thus, it reflects the portion of the AAL that is covered by ERF assets. The UAAL is the difference between these items.

A funding ratio of 100% means that the funding of ERF is precisely 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 ERF funding ratio would have increased from 74.05% as of December 31, 2003 to 74.73% as of December 31, 2004 had the assumptions not been changed and

the proceeds from the pension obligation bonds not been added to the actuarial value of assets as a contribution receivable. The assumption change increased the funded ratio to 78.31%. The funded ratio after the additional receivable is 99.75%.

The UAAL increased from \$646 million at December 31, 2003 to \$657 million at December 31, 2004 with no assumption changes and no receivables added. The UAAL as of December 31, 2004 after the assumption changes and after recognition of the pension obligation bond proceeds is \$6.2 million.

GASB Disclosure

GASB Statements Numbers 25 and 27 set out the current accounting standards for ERF. Tables 11, 12, and 13 in Appendix D provide footnotes and/or Required Supplemental Information tables required to be disclosed by those statements.

Appendices

Appendix A

Asset Information

TABLE 1
Net Assets Available for Benefits
(\$ in 000's)

	<u>December 31, 2003</u>	<u>December 31, 2004</u>
Assets		
Cash & Short-Term	\$58,783	\$80,366
Receivables		
Accrued Investment Income	8,858	8,449
Securities Sold	16,595	4,201
Employer Contribution	997	1,060
Employee Contribution	589	626
Pension Obligaion Bond Proceeds	N/A	533,397
	<u>27,039</u>	<u>547,733</u>
Investments		
Index Funds	495,721	555,808
Fixed Income	543,411	536,057
Equities	857,730	1,023,616
Real Estate	0	0
Venture Capital	354	289
	<u>1,897,216</u>	<u>2,115,770</u>
Total Assets	1,983,038	2,743,869
Liabilities		
Accounts Payable	5,029	3,790
Investment Transactions	68,260	72,321
	<u>73,289</u>	<u>76,111</u>
Net Assets Available For Benefits	<u>1,909,749</u>	<u>2,667,758</u>

TABLE 2
Change in Assets Available for Benefits
Fiscal Year Ending December 31, 2004
(\$ in 000's)

	<u>2003</u>	<u>2004</u>
1 Assets Available at Beginning of Year	\$ 1,554,793	\$ 1,909,749
Adjustment	<u>1</u>	<u>-</u>
	1,554,794	1,909,749
 2 Revenues		
a. Employer Contributions	34,729	35,251
b. Employee Contributions	20,580	20,896
c. Investment Income (includes realized gains)	42,729	47,100
d. Investment Expense	(5,502)	(6,514)
e. Unrealized Capital Gains (Losses)	374,416	249,189
f. Other	1,129	523
Total Revenues	<u>468,081</u>	<u>346,445</u>
 3 Expenses		
a. Benefits	108,402	116,675
b. Refunds	2,605	2,976
c. Administration Expense	2,119	2,182
Total Expense	<u>113,126</u>	<u>121,833</u>
 4 Pension Obligation Bond Proceeds	N/A	533,397
 5 Assets Available at End of Year (1 + 2 - 3 + 4)	<u>1,909,749</u>	<u>2,667,758</u>

TABLE 3
Development of Actuarial Value of Assets
As of December 31, 2004
(\$ in 000's)

	<u>Market Value</u>	<u>Actuarial Value</u>
1 Value of Assets @ 12/31/2003	\$ 1,909,749	\$ 1,843,099
2 Non-Investment Cash Flows during 2004		
a. Employer Contributions	35,251	35,251
b. Employee Contributions	20,896	20,896
c. Benefits (including refunds)	(119,651)	(119,651)
d. Administrative Expenses	(2,182)	(2,182)
Total	<u>(65,686)</u>	<u>(65,686)</u>
3 Expected Investment Returns @ 8.5%	153,929	153,929
4 Recievable Contribution from POB Sale	533,397	533,397
5 Expected Assets @ 12-31-2004 (1 + 2 + 3 + 4)	2,531,389	2,464,739
6 Actual Assets Available for Benefits	2,667,758	
7 Gain/ (Loss) From Investment Returns (6 - 5)	136,369	
8 Recognition of Gains / (Losses)		
a. One-third of Gain/(Loss) (33% of 7)		45,456
b. One-third of 2003 Gain/(Loss)		85,588
c. One-third of 2002 Gain/(Loss)		(113,701)
Total		<u>17,343</u>
9 Actuarial Value of Assets @ 12-31-2004 (5 + 8)		<u>2,482,082</u>

Appendix B

Membership Data

TABLE 4
Summary of Data Characteristics

	<u>December 31, 2002</u>	<u>December 31, 2003</u>	<u>December 31, 2004</u>
Active Members			
Number	7,588	7,538	7,825
Total Annualized Earnings of Members as of 12/31 (000's)	\$312,130	\$306,243	\$321,554
Average Earnings	41,135	40,627	41,093
Benefit Recipients			
Number	4,608	4,805	4,926
Total Annual Retirement Income (000's)	\$94,670	\$103,762	\$112,934
Total Annual Health Supplement (000's)	\$6,829	\$7,092	\$7,268
Average Total Annual Benefit	\$22,027	\$23,071	\$24,402
Inactive Members			
Number	457	501	489

TABLE 5
Distribution of Active Members and Payroll by Age and Years of Service
as of December 31, 2004

Age	Years of Service								Totals
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30 & Over	
Under20	16	-	-	-	-	-	-	-	16
	300,898	-	-	-	-	-	-	-	300,898
20-24	111	36	5	-	-	-	-	-	152
	2,634,153	1,011,158	151,480	-	-	-	-	-	3,796,791
25-29	166	188	116	5	-	-	-	-	475
	4,815,573	6,050,399	3,686,742	175,815	-	-	-	-	14,728,529
30-34	138	222	287	75	1	-	-	-	723
	4,345,838	7,173,663	9,947,381	2,766,386	48,945	-	-	-	24,282,213
35-39	185	235	323	165	92	10	-	-	1,010
	6,050,263	8,123,351	12,256,790	6,781,830	4,086,639	445,429	-	-	37,744,302
40-44	118	226	392	176	232	187	15	-	1,346
	3,748,049	8,259,585	14,902,110	7,725,776	11,209,825	8,696,739	695,555	-	55,237,639
45-49	93	188	307	183	251	313	165	14	1,514
	2,881,699	7,201,879	11,930,810	8,022,776	12,806,990	15,776,099	8,123,096	778,771	67,522,120
50-54	72	134	252	166	185	290	151	48	1,298
	2,344,692	5,502,486	10,250,781	7,343,803	9,005,091	14,788,587	7,868,726	2,532,579	59,636,745
55-59	54	86	163	123	156	157	74	47	860
	1,859,624	3,527,109	6,917,666	5,565,569	7,697,263	7,876,947	3,940,465	2,734,767	40,119,410
60-64	17	37	85	62	62	43	21	13	340
	539,700	1,422,766	3,432,113	2,701,420	2,724,870	1,911,887	903,277	720,528	14,356,561
65&Over	9	11	19	14	10	10	11	7	91
	309,715	523,197	676,752	677,057	504,259	410,059	407,681	320,352	3,829,072
Totals	979	1,363	1,949	969	989	1,010	437	129	7,825
	29,830,204	48,795,593	74,152,625	41,760,432	48,083,882	49,905,747	21,938,800	7,086,997	321,554,280

TABLE 6
Distribution of Benefit Recipients
as of December 31, 2004

Age	Number	Annual Benefit*	Annual Average Benefit
Under 50	155	2,745,059	17,710
50-54	515	18,299,117	35,532
55-59	771	25,711,715	33,349
60-64	776	19,082,949	24,591
65-69	696	15,097,346	21,692
70-74	659	12,449,090	18,891
75-79	551	9,519,237	17,276
80-84	446	6,404,304	14,359
85-89	264	2,920,617	11,063
90 & Over	93	705,036	7,581
Total	4,926	112,934,469	22,926

* Does not include Health Supplement.

Appendix C

Actuarial Determinations

TABLE 7
Summary of Actuarial Values
As of December 31, 2004
(\$ in 000's)

	APV* of Projected Benefits	Entry Age Actuarial Values		
		Actuarial Accrued Liability (AAL)	Normal Cost \$	Normal Cost % of Pay**
1 Active Members				
a. Retirement	\$ 1,280,380	\$ 1,055,436	\$ 34,331	10.72%
b. Death	43,542	27,469	2,516	0.79%
c. Disability	15,277	7,467	1,186	0.37%
d. Termination	80,926	21,635	8,833	2.76%
e. Health Subsidy	44,673	33,919	1,845	0.58%
Total	<u>1,464,798</u>	<u>1,145,926</u>	<u>48,711</u>	<u>15.22%</u>
2 Benefit Recipients	1,292,139	1,292,139		
3 Other Inactive	50,205	50,205		
4 Total Actuarial Values of Benefits	2,807,142	2,488,270	48,711	15.22%
5 Actuarial Value of Assets		2,482,082		
6 Unfunded Actuarial Accrued Liability (4 - 5)		6,188		
7 Funding Ratio		99.75%		

* APV – Actuarial Present Value

** Percentage of expected payroll for continuing active participants

TABLE 8
Development of Actuarially Required Contribution for FY 2006
(\$ in 000's)

	\$	% of Pay
1 Actuarial Requirement		
a. Payment to Amortize UAAL over 30 years	\$397	0.12%
b. Normal Cost	48,711	15.22%
c. Administrative Expense	2,182	0.68%
Total	\$51,290	16.02%

** Amortization is determined as a level percentage of payroll*

TABLE 9
Analysis of Change in Unfunded
Actuarial Accrued Liability
For the Year Ending December 31, 2004
(\$ in 000's)

1 UAAL as of December 31, 2003		\$ 645,972
2 Expected Change in UAAL during 2004		
a. Normal Cost for 2004 based on actual payroll	\$ 55,671	
b. Contributions 2004	(56,147)	
c. Interest adjustments on 1, 2a, & 2b to Year End @ 8.5%	54,887	
d. Expected change in UAAL		54,411
3 Net Actuarial Experience (Gains) & Losses		(43,317)
4 Assumption Change		(117,481)
5 POB Contributions		(533,397)
6 UAAL as of December 31, 2004		\$ 6,188

TABLE 10
Analysis of Actuarial Gains and Losses
For 2004
(\$ in 000's)

	2004
Investment Return	\$(15,797)
Salary Increase	(28,281)
Age and Service Retirement	5,129
General Employment Termination	2,936
Disability Incidence	270
Active Mortality	(872)
Benefit Recipient Mortality	(3,200)
Other	(3,501)
Total Actuarial (Gain) Loss	\$(43,317)

Appendix D
INFORMATION REQUIRED FOR CITY ORDINANCE
25695

TABLE 11
Information for Ordinance 25695
For the Fiscal Year Commencing October 1, 2005

1 Prior Adjusted Total Obligation Rate	N/A
2 Actuarially Required Contribution Rate	16.02%
3 Debt Service	
a Scheduled Debt Service Payment for FY 2006	\$ 27,802,966
b Projected Payroll	331,200,908
c Pension Obligation Bond Credit Rate (a/b)	8.39%
4 Current Total Obligation Rate (2 + 3c)	24.41%
5 Current Adjusted Total Obligation Rate	24.41%
6 Allocation of Contribution Rates for FY 2006	
a Employee (4 x .37)	9.03%
b City (4 x .63)	15.38%

Fiscal year commencing October 1, 2005 is a transition year

Definitions for 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, that 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, minus

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 preceding 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.

Appendix E
Information for GASB No. 25 & 27

TABLE 12
Schedule of Funding Status
(\$ 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%

* Projected to following year.

Note: Data for years prior to 1997 are based on prior actuarial work product.

TABLE 13
Schedule of Employer Contributions
(\$ 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	20,811 **	30,479 **		

* 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 retirement systems.

They are not designed to limit the funding decisions of plan sponsors.

TABLE 14
Information for Trend Data Notes

Actuarial Cost Method	Entry Age
Amortization Method	Level Percent Open
Remaining Amortization Period (Years)	30
Asset Valuation Method	3-Year Smoothed Market
Actuarial Assumptions:	
Investment Rate of Return*	8.25%
Projected Salary Increases*	3.5% - 10.5%
Cost-of-Living Adjustments	3.00%

** Includes Inflation at 3.0%.*

Appendix F

Analysis of 2004 Experience

TABLE 15

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

Service Beginning of Year	Experience for 2004			
	Number	Expected Pay	Actual Pay	Ratio A/E
Under 5	1,893	\$ 66,422,339	\$ 68,328,103	102.87%
5-9	1,654	64,921,260	63,785,461	98.25%
10-14	940	43,005,980	42,123,599	97.95%
15-19	1,070	53,538,224	52,060,449	97.24%
20-24	890	45,904,950	44,184,218	96.25%
25-29	323	17,259,856	16,459,545	95.36%
30 & Over	91	5,292,811	5,086,437	96.10%
Total	6,861	\$ 296,345,420	\$ 292,027,812	98.54%
Over 10 Years	3,314	\$ 165,001,821	\$ 159,914,248	96.92%

Service Beginning of Year	Experience for 2001/2004			
	Number	Expected Pay	Actual Pay	Ratio A/E
Under 5	8,841	\$ 302,018,417	\$ 304,020,656	100.66%
5-9	5,978	\$ 235,818,432	\$ 233,047,289	98.82%
10-14	3,783	\$ 175,587,571	\$ 173,122,664	98.60%
15-19	4,870	237,965,064	234,974,505	98.74%
20-24	3,432	175,004,823	171,369,592	97.92%
25-29	1,371	72,667,928	71,824,655	98.84%
30 & Over	329	18,658,223	18,374,679	98.48%
Total	28,604	\$ 1,217,720,457	\$ 1,206,734,039	99.10%
Over 10 Years	13,785	\$ 679,883,609	\$ 669,666,094	98.50%

TABLE 16a
Analysis of Retirement Experience

Age	2004 Retirement			2001/2004 Retirement		
	Actual	Expected	Ratio A/E	Actual	Expected	Ratio A/E
46	0	-	N/A	1	-	N/A
47	0	-	N/A	3	-	N/A
48	1	2.82	35.50%	6	10.33	58.11%
49	0	2.88	0.00%	29	18.28	158.66%
50	19	19.50	97.44%	94	74.13	126.81%
51	22	18.63	118.09%	70	60.81	115.12%
52	11	12.53	87.79%	60	59.01	101.68%
53	18	19.18	93.85%	70	73.50	95.24%
54	11	18.04	60.98%	79	75.27	104.95%
55	18	19.59	91.88%	82	66.40	123.50%
56	14	19.35	72.34%	47	60.13	78.17%
57	12	17.60	68.17%	46	52.19	88.14%
58	17	18.90	89.97%	47	50.18	93.67%
59	6	13.32	45.06%	55	45.74	120.24%
60	12	22.03	54.47%	65	90.71	71.66%
61	9	13.73	65.57%	39	42.98	90.75%
62	4	9.90	40.40%	32	32.56	98.30%
63	9	8.03	112.15%	32	24.23	132.09%
64	4	4.05	98.77%	26	15.38	169.05%
65	4	3.30	121.21%	23	15.64	147.04%
66	3	1.71	175.44%	22	11.97	183.87%
67	2	1.52	131.58%	9	7.60	118.42%
68	0	0.95	0.00%	1	4.98	20.08%
69	0	1.33	0.00%	2	4.37	45.77%
70 & Over	0	7.00	0.00%	20	82.00	24.39%
Total	196	255.88	76.60%	960	978.35	98.12%
Total Under 70	196	248.88	78.75%	940	896.35	104.87%

TABLE 16b
Analysis of Retirement Experience
Age Groups

Age Group	2004 Retirements			2001/2004 Retirements		
	Actual	Expected	Ratio A/E	Actual	Expected	Ratio A/E
Under 55	82	93.58	87.62%	412	371.31	110.96%
55-59	67	88.76	75.49%	277	274.63	100.86%
60-64	38	57.73	65.82%	194	205.84	94.25%
65-69	9	8.81	102.16%	57	44.56	127.92%
70 & Over	0	7.00	0.00%	20	82.00	24.39%
Total	196	255.88	76.60%	960	978.35	98.12%
Total Under 70	196	248.88	78.75%	940	896.35	104.87%

TABLE 17
Analysis of Turnover Experience

Years of Service	2004 Quits			2001/2004 Quits		
	Actual	Expected	Ratio A/E	Actual	Expected	Ratio A/E
0-4	302	279.21	108.16%	1,143	1,221.13	93.60%
5-9	82	101.17	81.05%	302	325.00	92.92%
10-14	32	31.58	101.32%	123	127.62	96.38%
15-19	24	24.54	97.79%	111	114.95	96.56%
20-24	9	8.33	107.99%	63	33.60	187.53%
25-29	5	1.82	274.21%	28	8.88	315.16%
Total	454	446.67	101.64%	1,770	1,831.18	96.66%

TABLE 18
Analysis of Active Mortality Experience

<u>Age</u>	2004 Deaths			2001/2004 Deaths		
	Actual	Expected	Ratio A/E	Actual	Expected	Ratio A/E
20-24	-	0.03	0.00%	-	0.29	0.00%
25-29	-	0.18	0.00%	1	0.99	100.59%
30-34	-	0.35	0.00%	-	1.69	0.00%
35-39	-	0.71	0.00%	1	3.51	28.47%
40-44	-	1.50	0.00%	3	7.05	42.56%
45-49	2	2.80	0.00%	8	12.35	64.77%
50-54	3	4.08	73.45%	12	16.82	71.34%
55-59	3	4.07	73.70%	10	14.37	69.57%
60 and Over	-	3.13	0.00%	4	10.66	37.52%
Total	8	16.86	47.46%	39	67.73	57.58%

TABLE 19
Analysis of Disability Experience

Age	2004 Disabilities			2001/2004 Disabilities		
	Actual	Expected	Ratio A/E	Actual	Expected	Ratio A/E
20-24	-	0.01	0.00%	-	0.06	0.00%
25-29	-	0.07	0.00%	-	0.34	0.00%
30-34	-	0.19	0.00%	-	0.84	0.00%
35-39	-	0.41	0.00%	-	1.91	0.00%
40-44	2	1.02	196.09%	6	4.76	126.13%
45-49	2	2.30	86.86%	4	10.19	39.24%
50-54	-	3.21	0.00%	11	13.65	80.57%
55-59	5	2.61	191.50%	11	9.90	111.08%
60 and Over	-	0.00	N/A	2	0.00	N/A
Total	9	9.81	91.73%	34	41.66	81.62%

TABLE 20
Analysis of Retiree Mortality Experience

Age	2004 Experience			2001/2004 Experience		
	Actual	Expected	Ratio A/E	Actual	Expected	Ratio A/E
Under 60	19	21.61	87.92%	53	49.06	108.02%
60-64	15	15.69	95.59%	49	45.13	108.56%
65-69	17	21.86	77.78%	85	68.70	123.73%
70-74	20	26.92	74.30%	97	89.66	108.18%
75-79	36	34.40	104.65%	134	115.47	116.04%
80-84	39	32.04	121.72%	147	114.61	128.26%
85-89	22	16.29	135.04%	89	71.56	124.38%
90 & over	10	5.31	188.44%	55	35.96	152.93%
Total	178	174.12	102.23%	709	590.16	120.14%

Appendix G

Actuarial Method and Assumptions

Entry Age Method

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

The concept of this method is that funding of benefits for each employee should be effected as a, theoretically, level contribution (as a 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 employee. The ERF NC for the year is the total of individual normal costs determined for each active employee.

The Actuarial Accrued Liability (AAL) under this method is the theoretical asset balance such normal costs would have accumulated to date based on current 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 NC for that year plus an amount to amortize the UAAL over 30 years as a level percentage of pay.

ACTUARIAL ASSUMPTIONS (MAY, 2005)

Rate of Investment Return. For all purposes under the system the rate of investment return is assumed to be 8.25% per annum, net of investment expenses.

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

Years of Service	Merit, Promotion, Longevity		General		Total	
0	7.50	%	3.50	%	11.00	%
1	6.50		3.50		10.00	
2	5.00		3.50		8.50	
3	3.00		3.50		6.50	
4	2.75		3.50		6.25	
5	2.50		3.50		6.00	
6	1.50		3.50		5.00	
7-8	0.50		3.50		4.00	
9 & Over	0.00		3.50		3.50	

For the purpose of amortizing the UAAL, the payroll of the entire system is assumed to increase at 3% each year.

Mortality:

Disabled Lives: 85% of the 1965 Railroad Retirement Board Disabled Annuitants Mortality Table (ultimate rates). A sample follows (rate per 1,000):

Age	Disability Mortality Rate
20	37
30	37
40	37
50	39
60	45
70	63
80	110
90	204

ACTUARIAL ASSUMPTIONS

Other Benefit Recipients: A table based on the Unisex Pension Mortality Table for 1984 with female ages set back 4 years with the following adjustments:

Age	Male	Female
0-55	0.750	0.700
56-59	Grade to .900	0.700
60-77	0.900	0.850
78-80	Grade to .825	0.850
80-99	0.825	1.000
100 and Over	1.000	1.000

Sample Rates follow (rate per 1,000):

Age	Mortality Rate	
	Male	Female
30	0.80	0.80
40	1.60	1.10
50	4.20	2.60
60	12.40	8.40
70	31.30	21.10
80	67.00	57.80
90	150.50	132.20

Active Members: A table based on the Unisex Pension Mortality Table for 1984 with female ages set back 4 years. The following adjustments apply to those rates:

Age	Male	Female
0-69	70%	50%
70-99	85	75
100+	100	100

Actuarial Assumptions

Sample rates follow (rate per 1,000):

Age	Mortality Rate	
	Male	Female
30	0.8	0.6
40	1.5	0.8
50	3.9	1.9
60	9.9	4.9
70	29.5	18.6
80	69.1	43.3
90	155.1	99.1

Disability: A 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

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

Age	First Year Eligible	Thereafter
48-49	313	188
50	500	375
51-54	500	313
55-59	438	313
60	263	250
61-64	225	150
65-69	225	188
70	1,000	1,000

Actuarial Assumptions

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	192
1	145
2	130
3	120
4	112
5	75
6	70
7	62
8-9	52
10-14	35
15-19	25
20 and Over	10

Refunds of Contributions: Vested members terminating before retirement who elect a refund of contributions (per 1,000).

<u>Age</u>	<u>Service</u>			
	<u>5 – 9</u>	<u>10 – 14</u>	<u>15 – 19</u>	<u>20+</u>
20-30	1,000	1,000	N/A	N/A
31-40	950	900	600	0
41-50	800	650	400	0
51-60	700	450	0	0

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: 80% of members are assumed to be married.

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

APPENDIX H
Summary of Benefit Provisions

SUMMARY OF KEY PROVISIONS
Employees' Retirement Fund of the City of Dallas
as of December 31, 2004

Membership	An employee becomes a member upon permanent employment and contributes to the Retirement 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 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 78.

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 \$125 health supplement (prorated for service less than 5 years).

Form of Payment: An unreduced pension 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 commencing at age 60 or at age 55, if employment commenced prior to May 9, 1972, with at least five years of credited service, and accumulated contributions are left on deposit with the Fund.

Monthly Benefit: The deferred retirement 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 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.

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 terminations is entitled to be paid accumulated contributions without interest.

Cost-of-Living Adjustments

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

The percentage of change in the price index for October of the current year over October of the previous year up to 5%, or

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%.

April 14, 2005

Ms. Cheryl Clemmons
Employees' Retirement Fund
of the City of Dallas
600 North Pearl Street
Suite 2450
Dallas, Texas 75201

Dear Ms. Clemmons:

We are forwarding under separate cover 25 copies of the report of the December 31, 2004 Annual Actuarial Valuation for the Employees' Retirement Fund of the City of Dallas.

Sincerely yours,

Lewis Ward
Consultant

NSL:cml