

Actuarial Report



DALLAS POLICE AND FIRE PENSION SYSTEM
ACTUARIAL VALUATION
AS OF JANUARY 1, 2012

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May 31, 2012

Mr. Richard L. Tettamant
Administrator
Dallas Police & Fire Pension System
4100 Harry Hines Blvd., Suite 100
Dallas, TX 75219

Re: Dallas Police and Fire Pension System Actuarial Valuation as of January 1, 2012

Dear Mr. Tettamant:

We certify that the information contained in this report is accurate and fairly presents the actuarial position of the Dallas Police and Fire Pension System (the System) as of January 1, 2012.

Actuarial Valuation

The primary purpose of the valuation report is to determine the adequacy of the current City's contribution rate, to describe the current financial condition of the System, and to analyze changes in the System's condition. In addition, the report provides information required by the City of Dallas in connection with Governmental Accounting Standards Board Statements Number 25 and Number 27.

Basis for Funding

The member and City contribution rates are established by statute. The City's and the members' contributions are intended to be sufficient to pay the normal cost and to amortize the System's unfunded actuarial accrued liability.

Funding Progress

As of January 1, 2012, the employer contribution rate for GASB 27 purposes to pay the normal cost and fund the Unfunded Actuarial Accrued Liability over 30 years is 33.06%. This amount is more than the 29.54% employer contribution rate calculated as of January 1, 2011.

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The funding period has been calculated in accordance with the Texas Pension Review Board (Texas PRB) Guidelines for Actuarial Soundness, which allow funding the Unfunded Actuarial Accrued Liability (UAAL) as a level percentage of payroll. In calculating the funding period, we have determined the level percentage of pay available to fund the UAAL as the excess of the fixed contribution rates over the normal cost rate. In order for this excess to be level, the normal cost rate must be level and, as such, has been determined using the entry age normal cost rate for the benefits available to members hired after February 28, 2011. Based on this method, the current contribution rate covers the normal cost and the amortization of the UAAL over 30 years.

Benefit Provisions

The actuarial valuation reflects the benefit and contribution provisions set forth in the System's statutes. There are no significant benefits which were not taken into account in this valuation. The valuation is based on the same benefit provisions as the previous valuation.

Assumptions and Methods

The actuarial assumptions and methods used in the valuation are presented in Schedule C. New actuarial standards require actuaries to consider the effect of mortality improvement both prior to and subsequent to the valuation date. The mortality assumption for healthy retirees and active members was changed to the RP-2000 Combined Healthy Mortality Table projected to the year 2022 using Scale AA. In addition, the mortality table for disabled members was changed to the RP-2000 Combined Healthy Mortality Table with a one-year set forward.

In addition, the assumption for terminations prior to retirement for Police members was changed in order to better reflect the actual experience of the System and to better anticipate future expectations.

Otherwise, the valuation is based on the same assumptions and methods adopted by the Board of Trustees as the previous valuation.

The assumptions used are individually reasonable and reasonable in the aggregate.

Data

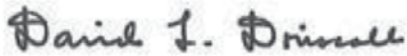
Asset information and member data for retired, active, and inactive members was supplied as of January 1, 2012 by the Administrator. We have not subjected this data to any auditing procedures, but have examined the data for reasonableness and consistency with the prior year's data.

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We are Enrolled Actuaries, Fellows of the Society of Actuaries, and Members of the American Academy of Actuaries. We meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. To the best of our knowledge, this report is complete and accurate and has been prepared in accordance with generally accepted actuarial principles and practice, and we are available to answer questions about it.

Respectfully submitted,



David L. Driscoll, FSA, EA, MAAA
Principal, Consulting Actuary



David Kent, FSA, EA, MAAA
Director, Retirement

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Enclosures

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Dallas Police and Fire Pension System
 Actuarial Valuation - January 1, 2012

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Dallas Police and Fire Pension System
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Section 1

Summary of Principal Results

	January 1, 2012	January 1, 2011
Membership		
Active	5,376	5,482
Terminated with refunds due	75	68
Terminated with deferred benefits	128	135
Retired members and beneficiaries	3,669	3,535
Compensation		
Total	\$ 349,494,994	\$ 365,126,229
Average	\$ 65,010	\$ 66,605
Assets		
Market value	\$ 2,990,943,353	\$ 3,112,686,542
Actuarial value	\$ 3,378,481,222	\$ 3,430,818,823
Valuation Results		
Unfunded actuarial accrued liability	\$ 1,190,369,365	\$ 885,530,459
Funding period*	30	21
GASB No. 25		
Actuarial accrued liability (AAL)	\$ 4,568,850,587	\$ 4,316,349,282
Assets (actuarial)	\$ 3,378,481,222	\$ 3,430,818,823
GASB ratio	73.9%	79.5%
Unfunded AAL	\$ 1,190,369,365	\$ 885,530,459

* The funding period has been calculated in accordance with the Texas PRB Guidelines for Actuarial Soundness, which allow funding the UAAL as a level percentage of payroll. In calculating the funding period, we have determined the level percentage of pay available to fund the UAAL as the excess of the fixed contribution rates over the normal cost rate. In order for this excess to be level, the normal cost rate must be level and, as such, has been determined using the entry age normal cost rate for the benefits available to members hired after February 28, 2011.

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Comments on the Valuation

Overview

The current contribution rates are sufficient to fund the System over a finite time period, based on the current membership data, the current financial data, the current benefit provisions and the actuarial assumptions and methods used to determine liabilities and costs.

The overall funding of the Plan remains sound. The funding period increased to 30 years from 21 years. This increase was primarily due to losses on the actuarial value of assets and a decrease in expected future member contributions due to lower salaries than expected.

Section 3 shows in more detail the changes to the 30-year funding cost and the funding period based on the current contribution rates.

Funding status

There are two significant measures of the funding status of the System. The first is the 30-year funding cost. This is the City contribution rate required by GASB 27 to pay the normal cost and to amortize the UAAL over a 30-year period. This rate is currently 33.06% of payroll compared with the City's actual contribution rate of 27.50% of payroll and the 30-year funding cost in 2011 of 29.54% of payroll. Section 3 shows a reconciliation of the changes between the 2011 and 2012 figures.

The other measure is the funding period. This is the length of time in years that will be required to amortize the current UAAL based on the current contribution rate. The funding period has been calculated consistent with the Texas PRB Guidelines for Actuarial Soundness, which allow funding the UAAL over a level percentage of payroll. In calculating the funding period, we have determined the level percentage of pay available to fund the UAAL as the excess of the fixed contribution rates over the normal cost rate. In order for this excess to be level, the normal cost rate must be level and, as such, has been determined using the entry age normal cost rate for the benefits available to members hired after February 28, 2011. Based on this method, the current contribution rate covers the normal cost and the amortization of the UAAL over 30 years.

The UAAL is the excess of the liability assigned to prior years (the actuarial accrued liability) over the value of assets. Section 3 shows a reconciliation of this amount between 2011 and 2012.

Dallas Police and Fire Pension System
Actuarial Valuation - January 1, 2012

Section 2
(continued)

GASB Statements

Section 4 provides the information required for reporting under GASB No. 25.

Benefit Provisions

Schedule B summarizes all the benefit provisions of the System. There are no significant benefits which were not taken into account in this valuation. The valuation is based on the same benefit provisions as the previous valuation.

Actuarial Assumptions and Methods

The actuarial assumptions and methods used in the valuation are presented in Schedule C. New actuarial standards require actuaries to consider the effect of mortality improvement both prior to and subsequent to the valuation date. The mortality assumption for healthy retirees and active members was changed to the RP-2000 Combined Healthy Mortality Table projected to the year 2022 using Scale AA. In addition, the mortality table for disabled members was changed to the RP-2000 Combined Healthy Mortality Table with a one-year set forward.

In addition, the assumption for terminations prior to retirement for Police members was changed in order to better reflect the actual experience of the System and to better anticipate future expectations.

The assumptions used are individually reasonable and reasonable in the aggregate.

Schedule D compares the assumptions to the recent experience of the System and describes the adequacy of the assumptions.

Dallas Police and Fire Pension System
Actuarial Valuation - January 1, 2012

Section 2
(continued)

GASB Statement No. 27

Initially, under GASB Statement No. 27, employers were required to determine a pension expense based on a 40-year amortization of the UAAL for fiscal years beginning after June 15, 1996. After the 10-year transition period, the required amortization period is now 30 years. The amortization can assume payroll growth due to inflation, but no membership growth. If the actual contribution rate is less than the rate required by GASB No. 27, the excess must be expensed. This will result in the employer showing an accrued but unpaid liability for pension benefits on its financial statements.

A City Contribution rate of 33.06% of payroll will be required for the City to avoid showing an additional pension liability on its financial statements for the fiscal year beginning in 2012. At the current rate of contribution, and assuming no other changes, the City will be required to show an accrued but unpaid pension liability for the System on its financial statements in the future.

Financial Data

The financial data used in this report was supplied by the System.

Section 5 reconciles the System's assets between 2011 and 2012 and shows the development of the actuarial value of assets (AVA). Rather than using the market value for cost calculations, an adjusted market value, which phases in gains and losses (compared to the assumed investment return rate) over five years, is used. The estimated rate of return for 2011 is (1.78)% for the market value of assets, and 0.43% for the actuarial value of assets.

Membership Statistics

Data on active members and on retired members was supplied by the Administrator. Active membership and total payroll for active members remained fairly level during the last year. The active membership decreased from 5,482 members as of January 1, 2011 to 5,376 members as of January 1, 2012, a 2% decrease. The total active payroll decreased from \$365,126,229 to \$349,494,994 over the same period, a 4.3% decrease. Schedule A shows a summary of the membership data.

Experience

Schedule D compares the actual experience of the system with the actuarial expectations.

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Dallas Police and Fire Pension System
Actuarial Valuation - January 1, 2012

Section 3

Actuarial Cost, Margin and Funding Period

	<u>January 1, 2012</u>	<u>January 1, 2011</u>
1. Covered Payroll		
a. Active members excluding DROP	226,996,912	236,127,391
b. DROP members	<u>122,498,082</u>	<u>128,998,838</u>
c. Total	349,494,994	365,126,229
2. Actuarial present value of future pay		
a. Active members excluding DROP	1,948,525,200	2,123,253,500
b. DROP members	<u>1,389,151,600</u>	<u>1,486,205,000</u>
c. Total	3,337,676,800	3,609,458,500
3. Current contribution rates		
a. City	27.50%	27.50%
b. Member*	<u>8.50%</u>	<u>8.50%</u>
c. Total	36.00%	36.00%
4. Actuarial present value of future benefits	5,353,464,083	5,193,430,871
5. Actuarial present value of future normal costs		
a. Total	784,613,496	877,081,589
b. Member (3b x 2a)*	276,318,997	290,132,373
c. City (5a - 5b)	508,294,499	586,949,216
6. Actuarial accrued liability (4 - 5a)	4,568,850,587	4,316,349,282
7. Actuarial value of assets	3,378,481,222	3,430,818,823
8. Unfunded actuarial accrued liability (UAAL) (6 - 7)	1,190,369,365	885,530,459
9. Normal cost		
a. Normal cost percentage (5a ÷ 2c)	23.51%	24.30%
b. Total normal cost (1c x 9a)	82,166,273	88,725,674
c. Member normal cost (1a x 3b)*	23,388,416	21,038,320
d. City normal cost (9b - 9c)	58,777,857	67,687,354
e. City normal rate (9d ÷ [1c x 1.11])	15.02%	16.70%

* Active DROP members contribute 3.0% of pay for pay periods ending on or after October 1, 2011, 6.0% of pay for pay periods ending on or after October 1, 2012, and 8.5% of pay for pay periods ending on or after October 1, 2013. Present value of future member contributions (line 5b) as of January 1, 2011 and January 1, 2012 was increased by \$109,655,825 and \$110,694,355, respectively and member normal cost (line 9c) as of January 1, 2011 and January 1, 2012 was increased by \$967,491 and \$4,593,678, respectively to account for these changes.

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Dallas Police and Fire Pension System
Actuarial Valuation - January 1, 2012

Section 3
(continued)

Actuarial Cost, Margin and Funding Period

	<u>January 1, 2012</u>	<u>January 1, 2011</u>
10. 30-year funding cost*		
a. City normal cost rate**	15.02%	16.70%
b. Amortization rate	<u>18.04%</u>	<u>12.84%</u>
c. Total	33.06%	29.54%
11. Margin over/(under) 30-year cost* (3a - 10c)	(5.56)%	(2.04)%
12. Funding period to amortize UAAL***	30	21

* 30-year funding cost is necessary for accounting purposes only.

** The city normal cost rate shown is for current active employees only. This rate will decrease over time as more active members become subject to the plan amendment that eliminates the Automatic Adjustment and the plan modifications approved by the membership in 2011.

*** The funding period has been calculated in accordance with the Texas PRB Guidelines for Actuarial Soundness, which allow funding the UAAL as a level percentage of payroll. In calculating the funding period, we have determined the level percentage of pay available to fund the UAAL as the excess of the fixed contribution rates over the normal cost rate. In order for this excess to be level, the normal cost rate must be level and, as such, has been determined using the entry age normal cost rate for the benefits available to members hired after February 28, 2011.

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Dallas Police and Fire Pension System
Actuarial Valuation - January 1, 2012

Section 3
(continued)

Analysis of Change in UAAL

1. UAAL as of January 1, 2011	\$ 885,530,459
2. Changes due to:	
a. Expected increase/(amortization)	\$ 28,692,037
b. Assumption change	32,211,093
c. Actual contributions (greater)/less than expected	13,994,494
d. Liability experience	(44,273,801)
e. Asset experience	<u>274,215,083</u>
f. Total changes	\$ 304,838,906
3. UAAL as of January 1, 2012	\$1,190,369,365

Analysis of Change in Funding Cost

1. 30-year funding cost* as of January 1, 2011	29.54%
2. Changes due to:	
a. Resetting of amortization from prior year**	(1.26)
b. Assumption change	0.20
c. Actual contributions (greater)/less than expected	0.19
d. Liability experience	0.56
e. Asset experience	<u>3.83</u>
f. Total	3.52
3. 30-year funding cost* as of January 1, 2012	33.06%

* 30-year funding cost is necessary for accounting purposes only.

** Includes decrease in employer normal cost percentage due to increased employee DROP contribution.

Dallas Police and Fire Pension System
Actuarial Valuation - January 1, 2012

Section 3
(continued)

Analysis of Change in Funding Period

1. Funding period as of January 1, 2011	21 years
2. Changes due to:	
a. Passage of time	(1)
b. Assumption change	0
c. Actual contributions (greater)/less than expected	0
d. Liability experience	3
e. Asset experience	<u>7</u>
f. Total changes	9
3. Funding period as of January 1, 2012	30 years

The funding period has been calculated consistent with the Texas PRB Guidelines for Actuarial Soundness, which allow funding the UAAL over a level percentage of payroll. In calculating the funding period, we have determined the level percentage of pay available to fund the UAAL as the excess of the fixed contribution rates over the normal cost rate. In order for this excess to be level, the normal cost rate must be level and, as such, has been determined using the entry age normal cost rate for the benefits available to members hired after February 28, 2011.

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Historical Trend Information

(As required by GASB #25 - Amounts are in millions of dollars)

	Actuarial Value of <u>Assets</u>	Actuarial Accrued Liability (AAL) <u>Entry Age</u>	Unfunded AAL (UAAL)	Funded <u>Ratio</u>	Covered <u>Payroll</u>	UAAL as a Percentage of Covered <u>Payroll</u>
January 1, 2007	2,962	3,371	409	87.9%	306	133.7%
January 1, 2008	3,259	3,644	385	89.4%	321	119.9%
January 1, 2009	3,040	3,878	838	78.4%	348	240.8%
January 1, 2010	3,383	4,133	750	81.8%	367	204.4%
January 1, 2011	3,431	4,316	885	79.5%	365	242.5%
January 1, 2012	3,379	4,569	1,190	73.9%	349	341.0%

**GASB #25 Schedule of Employer Contributions
for Year Ending December 31, 2011**

<u>Annual Required Contribution</u>	<u>Percentage Contributed</u>
29.54% of Pay	93.1%

Dallas Police and Fire Pension System
Actuarial Valuation - January 1, 2012

Section 4
(continued)

**Summary of Accumulated Benefits
(FASB ASC 960)**

Accumulated Benefits at January 1, 2012

Vested benefits of participants and beneficiaries currently receiving payments		\$ 2,360,234,159
Other vested benefits		2,038,584,500
Nonvested benefits		<u>132,212,579</u>
Total benefits		\$ 4,531,031,238

ASC 960 Reconciliation

Accumulated benefits at January 1, 2011		\$ 4,277,790,175
Benefits accumulated	\$ 65,368,276	
Interest	355,750,564	
Benefits paid	(188,829,489)	
Assumption change	20,951,712	
Plan amendments	<u>0</u>	
Total Change		<u>253,241,063</u>
Accumulated benefits at January 1, 2012		\$ 4,531,031,238

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Reconciliation of Fund Assets

	<u>Year Ending December 31, 2011</u>
1. Value of fund at beginning of year	\$ 3,112,686,542
2. Contributions	
a. City	102,437,115
b. Member	<u>19,493,460</u>
c. Total	\$ 121,930,575
3. Benefit payments (including DROP payments)	(188,093,019)
4. Refunds	(736,470)
5. Gross earnings	(48,351,107)
6. Expenses	(6,493,168)
7. Value of assets at end of year	\$ 2,990,943,353
8. Estimated rate of return	(1.78)%

Dallas Police and Fire Pension System
Actuarial Valuation - January 1, 2012

Section 5
(continued)

Determination of Excess Earnings To Be Deferred

	Year Ending December 31, 2011
1. Market value at beginning of year	\$ 3,112,686,542
2. Net new investments	
a. Contributions	\$ 121,930,575
b. Benefit payments (including DROP payments)	(188,093,019)
c. Refunds	<u>(736,470)</u>
d. Total	\$ (66,898,914)
3. Market value at end of year	\$ 2,990,943,353
4. Yield, net of expenses (3 - 1 - 2d)	\$ (54,844,275)
5. Average balance $[1 + \frac{1}{2} \times (2d)]$	3,079,237,085
6. Assumed investment return rate	8.50%
7. Expected net return (5 x 6)	\$ 261,735,152
8. Gains/(losses) subject to deferral (4 - 7)	\$ (316,579,427)

Dallas Police and Fire Pension System
Actuarial Valuation - January 1, 2012

Section 5
(continued)

Calculation of Actuarial Value of Assets

1.	Market value of assets as of January 1, 2012			\$2,990,943,353	
2.	Deferral amounts				
		<u>Year</u>	<u>Total Gain/(Loss)</u>	<u>Percent Deferred</u>	<u>Deferral Amount</u>
a.		2011	\$ (316,579,427)	80%	\$ (253,263,542)
b.		2010	62,874,951	60%	37,724,971
c.		2009	132,954,038	40%	53,181,615
d.		2008	(1,125,904,567)	20%	(225,180,913)
e.		Total			\$ (387,537,869)
3.	Preliminary actuarial value of assets (1 - 2e)			3,378,481,222	
4.	80% of Market value			2,392,754,682	
5.	120% of Market value			3,589,132,023	
6.	Actuarial value of assets (3, not less than 4 or more than 5)			3,378,481,222	
7.	Rate of return on actuarial value of assets			0.43%	

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Dallas Police and Fire Pension System
Actuarial Valuation - January 1, 2012

Schedule A

Membership Data

	<u>January 1, 2012</u>	<u>January 1, 2011</u>
1. Active members (excluding DROP)		
a. Police and Fire		
1. Number	3,995	4,085
2. Covered payroll	\$226,996,912	\$236,127,391
3. Average annual pay	\$ 56,820	\$ 57,804
4. Average age	36.80	36.58
5. Average service (years)	9.85	9.68
b. Police		
1. Number	2,689	2,867
2. Covered payroll	\$153,304,969	\$164,267,163
3. Average annual pay	\$ 57,012	\$ 57,296
4. Average age	37.02	36.43
5. Average service (years)	10.11	9.49
c. Fire		
1. Number	1,306	1,218
2. Covered payroll	\$ 73,691,943	\$ 71,860,228
3. Average annual pay	\$ 56,426	\$ 58,999
4. Average age	36.34	36.94
5. Average service (years)	9.30	10.13

Dallas Police and Fire Pension System
Actuarial Valuation - January 1, 2012

Schedule A
(continued)

Membership Data
(continued)

	<u>January 1, 2012</u>	<u>January 1, 2011</u>
2. Active members (DROP only)		
a. Police and Fire		
1. Number	1,381	1,397
2. Covered payroll	\$ 122,498,082	\$ 128,998,838
3. Average annual pay	\$ 88,702	\$ 92,340
4. Average age	54.14	54.21
5. Average total service (years)	28.06	28.27
6. Average time in DROP (years)	4.65	4.66
7. DROP account balance	\$415,259,441	\$416,749,719
b. Police		
1. Number	805	801
2. Covered payroll	\$ 69,874,323	\$ 73,402,057
3. Average annual pay	\$ 86,800	\$ 91,638
4. Average age	53.67	53.72
5. Average total service (years)	27.30	27.50
6. Average time in DROP (years)	4.12	4.13
7. DROP account balance	\$208,655,908	\$206,566,146
c. Fire		
1. Number	576	596
2. Covered payroll	\$ 52,623,759	\$ 55,596,781
3. Average annual pay	\$ 91,361	\$ 93,283
4. Average age	54.80	54.88
5. Average service (years)	29.13	29.30
6. Average time in DROP (years)	5.39	5.36
7. DROP account balance	\$206,603,533	\$210,183,573

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Dallas Police and Fire Pension System
Actuarial Valuation - January 1, 2012

Schedule A
(continued)

Membership Data
(continued)

	<u>January 1, 2012</u>	<u>January 1, 2011</u>
3. Active members (including DROP)		
a. Police and Fire		
1. Number	5,376	5,482
2. Covered payroll	\$ 349,494,994	\$ 365,126,229
3. Average annual pay	65,010	66,605
4. Average age	41.25	41.08
5. Average service (years)	14.53	14.42
6. DROP account balance	\$ 415,259,441	\$ 416,749,719
b. Police		
1. Number	3,494	3,668
2. Covered payroll	\$ 223,179,292	\$ 237,669,220
3. Average annual pay	\$ 63,875	\$ 64,795
4. Average age	40.85	40.21
5. Average service (years)	14.07	13.42
6. DROP account balance	\$ 208,655,908	\$ 206,566,146
c. Fire		
1. Number	1,882	1,814
2. Covered payroll	\$ 126,315,702	\$ 127,457,009
3. Average annual pay	\$ 67,118	\$ 70,263
4. Average age	41.99	42.83
5. Average service (years)	15.37	16.43
6. DROP account balance	\$ 206,603,533	\$ 210,183,573

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Dallas Police and Fire Pension System
Actuarial Valuation - January 1, 2012

Schedule A
(continued)

Membership Data
(continued)

	<u>January 1, 2012</u>	<u>January 1, 2011</u>
4. Inactive members eligible for annuity		
a. Retired members	2,767	2,644
b. Beneficiaries	902	891
c. Number entitled to deferred benefits	<u>128</u>	<u>135</u>
d. Total number of inactive members	3,797	3,670
e. Total annual benefit	\$153,990,654	\$143,188,147
f. Average annual benefit	\$ 40,556	\$ 39,016
5. Inactive members with refunds due		
a. Number	75	68
b. Accumulated contribution balance	\$ 470,719	\$ 225,527

Dallas Police and Fire Pension System
Actuarial Valuation - January 1, 2012

Schedule B

**Summary of Benefit Provisions
As of January 1, 2012
For Actuarial Calculations**

Group A

Definitions

Base Pay: The annualized maximum monthly civil service pay established by the City for a police officer or fire fighter exclusive of any and all other forms of compensation.

City Service Incentive Pay: Additional annualized salary granted to Member under the authority of the City Charter.

Longevity Pay (Service Pay): Additional annualized salary granted to Member under provisions of Section 141.032, Local Government Code, for each year of service completed by such Member.

Pension Service: Time in years (prorated for fractional years) that Member made contributions under the terms of the Combined Pension Plan or under any Pension Plan within the Pension System.

Pension System: The Dallas Police and Fire Pension System

Qualified Surviving Spouse: The Member's legal spouse at time of death providing the marriage occurred prior to the Member's termination of employment (entering DROP is not considered termination of employment) and continued until the member's death.

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Qualified Surviving Children: All surviving unmarried children under 19 years of age and children that become handicapped before age 23 provided they were born or adopted before Member terminated his employment.

Contribution Rates

The Member contribution rate is 6.5%.

The City's contribution rate is a function of the highest Member contribution rate of any pension plan within the Pension System (currently Group B) as follows:

<u>City</u>	<u>Member</u>
28.5%	9.0%
27.5	8.5
26.0	8.0
24.5	7.5
23.0	7.0
21.5	6.5

Service Retirement Benefits

Annual Normal Retirement Pension

Greater of I or II:

I. Condition for Retirement: Age 50 with 20 years of Pension Service.

Amount of Pension Benefit: 50% of Base Pay, plus 50% of Longevity Pay, plus 50% City Service Incentive Pay. Pension is increased annually to reflect changes in the rate of

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Longevity Pay and City Service Incentive Pay based on Member's Pension Service and status at date of retirement.

Member may retire as early as age 45 with 20 years of Pension Service. Pension benefit will be reduced by 2/3 of 1% per month of retirement prior to age 50.

II. Condition for Retirement: Age 55 with 20 years of Pension Service.

Amount of Pension Benefit: 3% of Base Pay for each year of Pension Service (maximum of 32 years), plus 50% of Longevity Pay, plus 50% of City Service Incentive Pay. Pension is increased annually by 4% of the original pension benefit.

Member may retire as early as age 50 with 20 years of Pension Service. Pension benefit will be reduced by 2/3 of 1% for each month of retirement prior to age 55.

Disability Retirement Benefits

Condition for Retirement: Disability preventing Member from performing his or her duties with his or her department and lasting for a period of not less than 90 days.

Annual Amount of Pension

Greater of I or II:

I. Same as Normal Retirement Pension (I).

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II. Depending on Source of Disability

- a. Service Related Disability: 3% of Base Pay for each year of Pension Service (minimum of 20 years, maximum of 32 years), plus 50% of Longevity Pay, plus 50% of City Service Incentive Pay. Benefit is increased annually by 4% of the original amount, or
- b. Non-Service Related Disability: 3% of Base Pay for each year of Pension Service (maximum 32 years), plus 50% of Longevity Pay, plus 50% of City Service Incentive Pay. Benefit is increased annually by 4% of the original amount.

Survivor Benefits

Survivor Benefits for Qualified Surviving Spouse: Death in Active Service: 50% of Service Retirement Pension calculated with a minimum of 20 years of Pension Service.

Survivor Benefits when no Qualified Surviving Spouse: Death in Active Service: 50% of Service Retirement Pension calculated with a minimum of 20 years of Pension Service. The benefit will be paid as a lump sum equal to the value of the lesser of a 10-year benefit or the remainder of the 10-year period if Qualified Surviving Children receive benefit.

Survivor Benefits After Retirement: The Qualifying Surviving Spouse shall receive 50% of any benefits paid to the Member. The percentage is increased if the Qualified Surviving Spouse has attained age 55, there are no Qualified Surviving Children who are eligible for death benefits, the member retired after age 55 with 20 years of Pension Service or the Member's age plus Pension Service at retirement was at least 78 and the Member was receiving a benefit based on the former Plan A formulas.

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Survivor Benefits After Retirement or Termination for a Non-Qualifying Surviving Spouse: The Surviving Spouse shall receive 50% of any benefits paid to the Member. However, the Member's benefit will be reduced for this coverage.

Survivor Benefits for Qualified Surviving Children: An amount equal to the amount paid to the Qualified Surviving Spouse divided among the Qualified Surviving Children. Amount paid as long as one or more children continue to qualify.

Survivor Benefits After December 17, 2001: For Members leaving active service after December 17, 2001, a Member may elect to receive an actuarially reduced benefit in order to provide a greater survivor percentage to the qualified spouse. Minimum benefits do not apply.

Minimum Benefits

The minimum benefit is \$2,200 monthly for 20 years of Pension Service at retirement, and \$1,200 monthly for Qualified Surviving Spouses, if there are no Qualified Surviving Children receiving benefits. The minimum benefit is \$1,100 monthly for Qualified Surviving Children and Qualified Surviving Spouses if Qualified Surviving Children are receiving benefits. This minimum does not affect the base benefit. The benefit will not increase until the base retirement benefit with annual increases exceeds the minimum.

Benefit Supplement

If a Member retires with 20 years of Pension Service or if a Member is receiving a service related disability the Member or the Member's Qualified Surviving Spouse is entitled to receive the greater of \$75 or 3% of the monthly benefit payable to the member when the Member or the Qualified Surviving Spouse attains age 55. This supplement is also available for both the

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Member or the Member's Non-Qualifying Surviving Spouse for a member who has elected a reduced benefit to obtain coverage for a Non-Qualifying Surviving Spouse.

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Group B

Generally applicable to Members hired on or before February 28, 2011.

Definitions

Computation Pay: The annualized monthly rate of pay for the highest civil service rank held by a Member plus Educational Incentive Pay plus Longevity Pay plus City Service Incentive Pay.

Average Computation Pay: Computation Pay averaged over 36 months.

City Service Incentive Pay: Additional annualized salary granted to Member under the authority of the City Charter.

Longevity Pay: Additional annualized salary granted to Members under a provision of Section 141.032, Local Government Code, for each year of service completed by such Member.

Pension Service: The period, in years, months, and days, during which the Member made contributions under the terms of the Combined Plan or any Pension Plan within the Pension System.

Qualified Surviving Spouse: The Member's legal spouse at the time of death providing the marriage occurred prior to the Member's termination of employment (entering DROP is not considered termination of employment).

Pension System: The Dallas Police and Fire Pension System.

Qualified Surviving Children: All surviving unmarried children under 19 years of age and children that become handicapped before age 23 provided they were born or adopted before the Member terminated his employment.

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Educational Incentive Pay: Additional annualized salary granted to reward completion of college credits.

Contribution Rates

The City's contribution percentage is a function of the Member's contribution percentage as shown below:

<u>City</u>	<u>Member</u>
28.5%	9.0%
27.5	8.5
26.0	8.0
24.5	7.5
23.0	7.0
21.5	6.5

The contribution rate for Members not participating in DROP is currently 8.5%. The contribution rate for Members participating in DROP will be 3.0% for pay periods ending on or after October 1, 2011, 6.0% for pay periods ending on or after October 1, 2012, and 8.5% for pay periods ending on or after October 1, 2013.

Service Retirement Benefits

Annual Normal Retirement Pension

Condition for Retirement: Attainment of age 50 and five years of Pension Service.

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Amount for Allowance: 3% of Average Computation Pay for each year of Pension Service to a maximum of 32 such years.

Early Retirement Pension

Condition for Retirement:

- a. Attainment of age 45 and five years of Pension Service.

Amount of Pension: 3% of Average Computation Pay for each year of Pension Service reduced 2/3 of 1% for each month by which retirement precedes age 50.

- b. 20 years of Pension Service

Amount of Pension: 20 & Out multiplier of Average Compensation Pay for each year of Pension Service.

<u>Age</u>	<u>20 & Out Multiplier</u>
50 & above	3.00%
49	3.00% reduced by 2/3 of 1% for each month prior to age 50
48	2.75%
47	2.50
46	2.25
45 & below	2.00

Special Rule for Members of former Old Plan or Plan A

Group B Members who formerly were Members of either the former Old Plan or Plan A may elect to receive Group A benefits and receive a reimbursement of the additional

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contributions paid under Group B provisions in excess of the contributions that would have been made under Group A.

Disability Retirement Benefits

Service-Related Disability

Condition for Retirement: Disability preventing the Member from performing his or her duties with his or her department and lasting for a period of not less than 90 days.

Amount of Pension: 60% plus 3% for each year of Pension Service (maximum of 32 years) over 20, of Average Computation Pay.

Non-Service Related Disability

Condition for Retirement: Disability preventing the Member from performing his or her duties with his or her department and lasting for a period of not less than 90 days.

Amount of Pension: 3% of Average Computation Pay for each year of Pension Service (maximum 32 years).

Survivor Benefits

Survivor Benefits for Qualified Surviving Spouse: Death in Active Service: 1.50% of the Member's Average Computation Pay for each year of Pension Service with a minimum of 20 such years and a maximum of 32 such years.

Survivor Benefits when no Qualified Surviving Spouse: Death in Active Service: 50% of Service Retirement Pension calculated with a minimum of 20 years of Pension Service. The benefit will

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be paid as a lump sum equal to the value of the lesser of a 10-year benefit or the remainder of the 10-year period if Qualifying Surviving Children receive benefit.

Survivor Benefits After Retirement: The Qualified Surviving Spouse shall receive 50% of any benefits paid to the Member. The percentage is increased if the Qualified Surviving Spouse has attained age 55, there are no Qualified Surviving Children who are eligible for death benefits and the Member retired after age 55 with 20 years of Pension Service or if the Member's age plus Pension Service at retirement was at least 78.

Survivor Benefits After Retirement or Termination for a Non-Qualifying Surviving Spouse: The Surviving Spouse shall receive 50% of any benefits paid to the Member. However, the Member's benefit will be reduced for this coverage.

Survivor Benefits for Qualified Surviving Children: An amount equal to the amount paid to a Qualified Surviving Spouse is divided among the Qualified Surviving Children and continues to be paid as long as one or more of the children continue to qualify.

Survivor Benefits After December 17, 2001: For Members leaving active service after December 17, 2001, a Member may elect to receive an actuarially reduced benefit in order to provide a greater survivor percentage to the qualified spouse. Minimum benefits do not apply.

Post-Retirement Adjustments

Annually, on the first day of October, benefits in pay status will be increased by an amount equal to 4% of the original pension amount. New Members hired after December 31, 2006 will not be eligible for an automatic increase.

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Minimum Benefits

The minimum benefit for normal retirement is \$2,200 monthly (prorated if less than 20 years at retirement) and \$1,200 monthly for Qualified Surviving Spouses, if there are no Qualified Surviving Children receiving benefits. The minimum benefit is \$1,100 monthly for Qualified Surviving Children and Qualified Surviving Spouses if Qualified Surviving Children are receiving benefits. This benefit does not affect the base benefit. The benefit will not increase until the base retirement benefit with annual increases exceeds the minimum.

Benefit Supplement

If a Member retires with 20 years of Pension Service or if a Member is receiving a service related disability the Member or the Member's Qualified Surviving Spouse is entitled to receive the greater of \$75 or 3% of the monthly benefit payable to the Member when the Member or the Qualified Surviving Spouse attains age 55. This supplement is also available for both the Member or the Member's Non-Qualifying Surviving Spouse for a member who has elected a reduced benefit to obtain coverage for a Non-Qualifying Surviving Spouse.

Deferred Retirement Option Plan

As of January 1, 1993, at normal retirement age, a Member may elect to enter the Deferred Retirement Option Plan (DROP). As of January 1, 1999, a member may also elect to enter DROP after 20 years of Pension Service. Retirement benefits will be calculated as if the Member retired on that date. As of October 1, 2011, Members continue making contributions to the Combined Pension Plan while active and participating in DROP. Each month, the retirement benefit will be accumulated in an account earning interest based on a ten-year weighted average of the System's actual market return. Upon termination of employment, the

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Member will have the balance in account in addition to the monthly benefit payable as though the Member retired at the date the Member entered DROP.

Group B

For Members hired after February 28, 2011

Definitions

Computation Pay: The annualized monthly rate of pay for the highest civil service rank held by a Member plus Educational Incentive Pay plus Longevity Pay plus City Service Incentive Pay.

Average Computation Pay: Computation Pay averaged over 60 months.

City Service Incentive Pay: Additional annualized salary granted to Member under the authority of the City Charter.

Longevity Pay: Additional annualized salary granted to Members under a provision of Section 141.032, Local Government Code, for each year of service completed by such Member.

Pension Service: The period, in years, months, and days, during which the Member made contributions under the terms of the Combined Plan or any Pension Plan within the Pension System.

Qualified Surviving Spouse: The Member's legal spouse at the time of death providing the marriage occurred prior to the Member's termination of employment (entering DROP is not considered termination of employment).

Pension System: The Dallas Police and Fire Pension System.

Qualified Surviving Children: All surviving unmarried children under 19 years of age and children that become handicapped before age 23 provided they were born or adopted before the Member terminated his employment.

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Educational Incentive Pay: Additional annualized salary granted to reward completion of college credits.

Contribution Rates

The City's contribution percentage is a function of the Member's contribution percentage as shown below:

<u>City</u>	<u>Member</u>
28.5%	9.0%
27.5	8.5
26.0	8.0
24.5	7.5
23.0	7.0
21.5	6.5

The contribution rate for Members not participating in DROP is currently 8.5%. The contribution rate for Members participating in DROP will be 3.0% for pay periods ending on or after October 1, 2011, 6.0% for pay periods ending on or after October 1, 2012, and 8.5% for pay periods ending on or after October 1, 2013.

Service Retirement Benefits

Annual Normal Retirement Pension

Condition for Retirement: Attainment of age 55 and 20 years of Pension Service.

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Amount for Allowance: 2.0% of Average Computation Pay for the first 20 years of Pension Service, 2.5% of Average Computation Pay for the next five years of Pension Service, and 3.0% of Average Computation Pay for every year of Pension Service after 25 years.

Disability Retirement Benefits

Service-Related Disability

Condition for Retirement: Disability preventing the Member from performing his or her duties with his or her department for the first two years. After the initial two years, the disability must prevent the Member from performing any gainful employment for which he or she is qualified by reason of training, education or experience.

Amount of Pension: The greater of 50% of Average Computation Pay and the Normal Retirement Allowance.

Non-Service Related Disability

Condition for Retirement: Disability preventing the Member from performing his or her duties with his or her department and lasting for a period of not less than 90 days.

Amount of Pension: Normal Retirement Allowance.

Survivor Benefits

Survivor Benefits for Qualified Surviving Spouse: Death in Active Service: The greater of 50% of: (1) the benefit amount that the deceased Member would have received if the Member had left

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active service and had attained age 55, assuming a benefit based on a minimum of 50% of Average Computation Pay; or (2) as calculated using the benefit calculation formula and actual years of Pension Service.

Survivor Benefits when no Qualified Surviving Spouse: Death in Active Service: The greater of 50% of: (1) the benefit amount that the deceased Member would have received if the Member had left active service and had attained age 55, assuming a benefit based on a minimum of 50% of Average Computation Pay; or (2) as calculated using the benefit calculation formula and actual years of Pension Service. The benefit will be paid as a lump sum equal to the value of the lesser of a 10-year benefit or the remainder of the 10-year period if Qualifying Surviving Children receive benefit.

Survivor Benefits After Retirement: The Qualified Surviving Spouse shall receive 50% of any benefits paid to the Member. The percentage is increased if the Qualified Surviving Spouse has attained age 55, there are no Qualified Surviving Children who are eligible for death benefits and the Member retired after age 55 with 20 years of Pension Service or if the Member's age plus Pension Service at retirement was at least 78. A Member may elect to receive an actuarially reduced benefit in order to provide a greater survivor percentage to the qualified spouse. Minimum benefits do not apply.

Survivor Benefits After Retirement or Termination for a Non-Qualifying Surviving Spouse: The Surviving Spouse shall receive 50% of any benefits paid to the Member. However, the Member's benefit will be reduced for this coverage.

Survivor Benefits for Qualified Surviving Children: An amount equal to the amount paid to a Qualified Surviving Spouse is divided among the Qualified Surviving Children and continues to be paid as long as one or more of the children continue to qualify.

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Post-Retirement Adjustments

Not eligible for an automatic increase.

Minimum Benefits

The minimum benefit for normal retirement is \$2,200 monthly and \$1,200 monthly for Qualified Surviving Spouses, if there are no Qualified Surviving Children receiving benefits. The minimum benefit is \$1,100 monthly for Qualified Surviving Children and Qualified Surviving Spouses if Qualified Surviving Children are receiving benefits.

Benefit Supplement

If a Member retires or if a Member is receiving a service related disability the Member or the Member's Qualified Surviving Spouse is entitled to receive the greater of \$75 or 3% of the monthly benefit payable to the Member when the Member or the Qualified Surviving Spouse attains age 55. This supplement is also available for both the Member or the Member's Non-Qualifying Surviving Spouse for a member who has elected a reduced benefit to obtain coverage for a Non-Qualifying Surviving Spouse.

Deferred Retirement Option Plan

At normal retirement age, a member may elect to enter the DROP. Retirement benefits will be calculated as if the Member retired on that date. Each month, the retirement benefit will be deposited in an account while the active Member is participating in DROP. Upon termination of employment, the Member will have the balance in the account in addition to the monthly benefit payable as though the Member retired at the date the Member entered DROP.

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Schedule C

**Summary of Actuarial Methods and Assumptions
(Effective as of January 1, 2012)**

Investment Return: 8.50% per annum, compounded annually, net all expenses including administrative expenses. This rate reflects an underlying inflation rate of 4.00% and a real rate of return of 4.50%.

DROP balances are assumed to earn 8.5% per annum for Members eligible to receive interest accumulation in their DROP account.

Separations Before Normal Retirement: Representative values of the assumed annual rates of withdrawal, death, and disability are as follows:

Age	Annual Rate per 1,000 Members			
	<u>Withdrawal</u>		<u>Disability</u>	
	Police	Fire	Police	Fire
20	70.0	23.0	.35	.70
25	70.0	23.0	.37	.75
30	70.0	18.0	.42	.84
35	40.0	18.0	.48	.96
40	30.0	18.0	.57	1.15
45	20.0	18.0	.79	1.58

Salary Increases: Representative values of the assumed annual rates of future salary increase attributable to seniority and promotion are as follows:

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Years of Service	Annual Rate of Salary Increase
0	9.64%
5	9.19
10	7.72
15	5.82
20	4.56
25	4.08
30	4.00

Total payroll is assumed to increase 4.00% per year. New hires are assumed to replace terminations.

Overtime and other non-computation pay are assumed to be 11% of base pay. The City contributes on total pay including non-computation pay. This assumption is based on the revised compensation package adopted by the City Council in 2007.

Retirement Rates: The percentage of population assumed to retire at various ages is as follows:

Age	Rate	Age	Rate	Age	Rate
38	2%	48	2%	58	20%
39	2	49	2	59	20
40	2	50	4	60	20
41	2	51	3	61	20
42	2	52	3	62	20
43	2	53	3	63	20
44	2	54	3	64	20
45	2	55	25	65	100
46	2	56	20		
47	2	57	20		

Rates are applied when a member is eligible to retire.

Mortality: According to the RP-2000 Combined Healthy Mortality Table projected to the year 2022 using Scale AA, for healthy retirees and active members. The RP-2000 Combined Healthy Mortality Table with a one-year set forward for disabled members.

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DROP Election: Members are assumed to elect DROP at age 50 with five years for Plan B if hired on or before February 28, 2011, age 55 with 20 years for Plan B if hired after February 28, 2011, age 55 with 20 years for Plan A, and age 50 with 20 years for Old Plan. Any active members who satisfy this criteria and have not entered DROP are assumed to never join DROP.

Spouses: 80% of active members are assumed to be married with the male three years older than the female. The age of the youngest child is assumed to be one year.

Assumption as to Choice of Plan Provisions: Those Members eligible to elect between Plan B and the Old Plan are assumed to elect in a manner which maximizes the benefit they receive.

Assumed Postretirement Cost of Living:

Plan A and Plan B: 4% of original pension annually for eligible Members
Old Plan: 4% compounded annually

Future Expenses: All expenses, investment and administration, are paid from the Fund. The 8.50% assumed rate of return is net of these expenses.

Valuation Method: The method used to determine Normal Cost and Accrued Actuarial Liability is the Entry Age Normal Cost Method. Under the Entry Age Normal Cost Method, an annual Normal Cost is determined for each covered active Member which is the contribution required to provide all the projected pension benefits assuming this contribution is payable over a period ending on the date of retirement (separation from active service) and expressed as a level percentage of compensation. The Actuarial Accrued Liability is determined as the excess of the total present value of all pension benefits over the total present value of future Normal Costs.

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The Unfunded Actuarial Accrued Liability as of the valuation date is determined as the excess of the Actuarial Accrued Liability over the assets of the Fund.

The Normal Cost and Accrued Actuarial Liability are derived by making certain assumptions as to the rates of interest, mortality, turnover, etc., which are assumed to reflect experience for many years into the future. Since actual experience will differ from the assumptions, the costs determined must be regarded as estimates of the true costs of the Plan. The effects of any actuarial gains or losses are immediately reflected in the Unfunded Actuarial Accrued Liability and the Normal Cost.

Actuarial Value of Assets: The actuarial value of assets is calculated based on the following formula.

The actuarial value of assets is calculated based on the following formula:

$$MV - (4/5) \times G/(L)_1 - (3/5) \times G/(L)_2 \\ - (2/5) \times G/(L)_3 - (1/5) \times G/(L)_4$$

where:

MV = the market value of assets as of the valuation date

$G/(L)_i$ = the asset gain or (loss) (i.e., actual return on assets less expected return on assets) for the i-th year preceding the valuation date.

In no event is the actuarial value of assets less than 80% nor more than 120% of the market value of assets.

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Schedule D

Comparison of Actual Experience and Actuarial Expectations

Demographic Assumptions

The demographic assumptions used to value the liabilities of the System are used to estimate the timing and duration of the member contributions and benefit payments of the System. The main demographic assumptions used to value the liabilities of the System consist of termination prior to retirement, disability, retirement, death and DROP age. A comparison of the actual experience of the System to each of these assumptions follows.

Terminations Prior to Retirement

This assumption was changed as of January 1, 2012 in order to better reflect the actual experience of the System and to better anticipate future expectations.

Disability

This assumption was last changed as of January 1, 1999 to better reflect the actual experience of the System and to better anticipate future expectations. The ratio of actual disability retirements to the expected disability retirements for the period January 1, 2007 through December 31, 2011 shows that during this period there have been about 9% less of disability retirements as expected. Since the actual number of disablements is so small, we do not feel that any change in this assumption is necessary at this time.

January 1, 2007 through December 31, 2011

	<u>Actual</u>	<u>Expected</u>	<u>Actual/Expected</u>
Disability Retirements	10	11	91%

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Schedule D
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Retirement (Leaving Active Service)			
<p>This assumption was changed as of January 1, 2005 to better reflect the actual experience of the System and to better anticipate future expectations. The ratio of actual retirements to the expected retirements using the new retirement rates for the period January 1, 2007 through December 31, 2011 shows that during this period there have been about 18% less retirements than expected. Due to the changes in DROP interest rates and Member contributions during the DROP period, we feel that no change is needed at this time due to the expectation that these changes will create an increase in retirement rates.</p>			
January 1, 2007 through December 31, 2011			
	<u>Actual</u>	<u>Expected</u>	<u>Actual/Expected</u>
Retirement	660	801	82%

Death
<p>This assumption was changed as of January 1, 2012 in order to meet current actuarial standards and to take into account mortality improvement.</p>

Age at DROP			
<p>This assumption has not changed since the implementation of DROP in 1993. The actual age at DROP is virtually the same as the assumed age of 50. We do not feel any change in assumption is necessary at this time since there is very little difference in the assumed age at DROP and the actual age at DROP.</p>			
Through December 31, 2011			
	<u>Actual</u>	<u>Expected</u>	<u>Actual/Expected</u>
Age at DROP (from January 1, 1996)	49.8	50.0	100%
Age at DROP (from January 1, 2007)	49.3	50.0	99%

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Economic Assumptions

The economic assumptions used to value the liabilities of the System are used to estimate the amount and cost of the benefit payments of the System. Economic assumptions are generally based on a building block approach with the inflation rate used as the initial basis. For example, in setting the long-term rate of return, the expected inflation rate is added to the expected real-rate of return to determine the nominal rate of return. This nominal rate of return is then used to determine the present value of future benefit payment amounts. The main economic assumptions used to value the liabilities of the System consist of inflation, long-term rate of return and salary increase rate. A discussion of these assumptions follows.

Inflation			
The inflation assumption used to value the liabilities of the System is 4%. This assumption was last changed as of January 1, 1999 to better anticipate future expectations. The average annual inflation rate (as measured by CPI-U) over the 60 years ending December 31, 2011 has been 3.65%. We feel that given the history of inflation rates and reasonable expectations of the future that the 4% inflation rate assumption is reasonable.			
January 1, 1951 through December 31, 2011			
	<u>Actual</u>	<u>Expected</u>	<u>Actual/Expected</u>
Inflation	3.65%	4.00%	91%

Salary Increases			
The salary increase assumption used to value the liabilities of the System varies by the service of the Member. This assumption was last changed as of January 1, 2007 to reflect the expected change in future pay increases. Based on our expectations of future promotional and merit salary increases and the assumed rate of inflation, we feel that the current salary increase rates are reasonable. A summary of the actual valuation earnings to the expected valuation earnings over the period January 1, 2007 through December 31, 2011 follows.			
January 1, 2007 through December 31, 2011			
	<u>Actual</u>	<u>Expected</u>	<u>Actual/Expected</u>
Valuation Compensation	\$1,673,917,742	\$1,722,002,609	97%

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Schedule D
(continued)

Long-Term Rate of Return on Plan Assets

The long-term rate of return on plan assets used to value the liabilities of the System is 8.5%. This assumption was last changed as of January 1, 1999 to better anticipate future expectations and to reflect the change in the inflation rate. Based on the asset allocation policy, expectations of future real rates of return and the expected administrative expenses of the System, we feel that an 8.5% long-term rate of return is reasonable. A summary of the nominal rates of return over the period October 1, 1988 through December 31, 2011 follows.

Period			Annualized Rate of Return
10/1/1988	through	9/30/1989	25.40%
10/1/1989	through	9/30/1990	(6.53)
10/1/1990	through	12/31/1991	20.73
1/1/1992	through	12/31/1992	2.94
1/1/1993	through	12/31/1993	14.06
1/1/1994	through	12/31/1994	2.78
1/1/1995	through	12/31/1995	24.33
1/1/1996	through	12/31/1996	16.69
1/1/1997	through	12/31/1997	13.84
1/1/1998	through	12/31/1998	13.68
1/1/1999	through	12/31/1999	24.39
1/1/2000	through	12/31/2000	(1.52)
1/1/2001	through	12/31/2001	(7.76)
1/1/2002	through	12/31/2002	(12.26)
1/1/2003	through	12/31/2003	31.65
1/1/2004	through	12/31/2004	13.96
1/1/2005	through	12/31/2005	10.81
1/1/2006	through	12/31/2006	14.64
1/1/2007	through	12/31/2007	8.85
1/1/2008	through	12/31/2008	(24.80)
1/1/2009	through	12/31/2009	13.78
1/1/2010	through	12/31/2010	10.72
1/1/2011	through	12/31/2011	(1.78)
10/1/1988	through	12/31/2011	9.25%

Effective for years beginning on October 1, 2011 and each October 1 thereafter, the DROP interest rate will be determined at a daily rate based on the arithmetic average of the annual market return on the System's investments for the preceding ten calendar years. However, the rate shall not be less than 8% nor more than 10%. The ten-year arithmetic average of the annual market return on the System's investments for the preceding ten calendar years is 6.56%. Therefore, the annual DROP interest rate for October 1, 2012 is 8.00%.

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TABLE 1
 THE NUMBER AND ANNUAL AVERAGE COMPENSATION OF ACTIVE
 (excluding DROP) MEMBERS DISTRIBUTED BY FIFTH AGE AND SERVICE
 AS OF JANUARY 1, 2012

POLICE

ATTAINED AGE	YEARS OF SERVICE																			
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 & up	
	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp
Under 25	5	42,743	64	44,301	2	43,034	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	8	42,743	457	44,797	90	49,455	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	2	42,696	237	44,854	232	52,329	56	58,505	2	56,893	0	0	0	0	0	0	0	0	0	0
35 to 39	1	44,724	113	44,677	124	53,978	208	60,937	38	67,386	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	59	46,252	71	54,391	126	61,171	176	69,758	135	75,815	2	70,857	0	0	0	0	0	0
45 to 49	0	0	16	44,634	31	54,099	30	62,140	80	71,336	224	77,127	48	80,779	0	0	0	0	0	0
50 to 54	0	0	3	62,878	6	52,564	5	61,931	11	67,644	9	78,382	6	84,517	1	85,173	0	0	0	0
55 to 59	0	0	4	66,642	2	53,381	0	0	1	78,007	1	78,738	1	78,780	0	0	0	0	0	0
60 to 64	0	0	1	46,406	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	1	57,273	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 1

THE NUMBER AND ANNUAL AVERAGE COMPENSATION OF ACTIVE
(excluding DROP) MEMBERS DISTRIBUTED BY FIFTH AGE AND SERVICE
AS OF JANUARY 1, 2012

FIRE

ATTAINED AGE	YEARS OF SERVICE																			
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 & up	
	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp
Under 25	37	41,699	18	44,003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	66	41,690	171	44,696	18	48,945	1	46,982	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	40	41,690	119	44,694	88	53,319	31	61,295	1	46,014	0	0	0	0	0	0	0	0	0	0
35 to 39	7	41,690	47	44,713	88	54,264	130	62,477	20	68,646	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	3	44,528	27	54,408	70	63,229	95	71,952	19	78,588	1	96,962	0	0	0	0	0	0
45 to 49	0	0	2	24,979	12	54,860	17	60,263	52	72,248	57	78,562	51	81,284	0	0	0	0	0	0
50 to 54	0	0	0	0	5	52,384	0	0	2	66,596	4	74,895	3	82,011	1	70,465	0	0	0	0
55 to 59	0	0	2	48,672	0	0	0	0	1	70,664	0	0	0	0	0	0	0	0	0	0
60 to 64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 1
 THE NUMBER AND ANNUAL AVERAGE COMPENSATION OF ACTIVE
 (excluding DROP) MEMBERS DISTRIBUTED BY FIFTH AGE AND SERVICE
 AS OF JANUARY 1, 2012

POLICE AND FIRE

ATTAINED AGE	YEARS OF SERVICE																				
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 & up		
	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	
Under 25	42	41,823	82	44,236	2	43,034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	74	41,804	628	44,769	108	49,370	1	46,982	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	42	41,738	356	44,801	320	52,601	87	59,499	3	53,267	0	0	0	0	0	0	0	0	0	0	0
35 to 39	8	42,069	160	44,688	212	54,097	338	61,529	58	67,821	0	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	62	46,168	98	54,396	196	61,906	271	70,527	154	76,157	3	79,559	0	0	0	0	0	0	0
45 to 49	0	0	18	42,450	43	54,311	47	61,461	132	71,695	281	77,418	99	81,039	0	0	0	0	0	0	0
50 to 54	0	0	3	62,878	11	52,482	5	61,931	13	67,482	13	77,309	9	83,682	2	77,819	0	0	0	0	0
55 to 59	0	0	6	60,652	2	53,381	0	0	2	74,336	1	78,738	1	78,780	0	0	0	0	0	0	0
60 to 64	0	0	1	46,406	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	1	57,273	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 2

THE NUMBER AND ANNUAL AVERAGE COMPENSATION OF ACTIVE
(including DROP) MEMBERS DISTRIBUTED BY FIFTH AGE AND SERVICE
AS OF JANUARY 1, 2012

POLICE

ATTAINED AGE	YEARS OF SERVICE																			
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 & up	
	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp
Under 25	5	42,743	64	44,301	2	43,034	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	8	42,743	457	44,797	90	49,455	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	2	42,696	237	44,854	232	52,329	56	58,505	2	56,893	0	0	0	0	0	0	0	0	0	0
35 to 39	1	44,724	113	44,677	124	53,978	208	60,937	38	67,386	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	59	46,252	71	54,391	126	61,171	176	69,758	145	76,826	2	70,857	0	0	0	0	0	0
45 to 49	0	0	16	44,634	31	54,099	30	62,140	83	71,410	291	78,695	86	82,615	0	0	0	0	0	0
50 to 54	0	0	3	62,878	10	57,424	15	67,156	31	73,095	123	83,542	188	89,005	101	89,937	0	0	0	0
55 to 59	0	0	4	66,642	4	70,233	0	0	5	75,244	30	83,564	45	88,044	76	88,803	33	91,508	0	0
60 to 64	0	0	1	46,406	1	95,892	1	70,508	0	0	14	85,939	12	87,119	8	87,092	17	90,452	9	88,945
65 to 69	0	0	0	0	1	57,273	0	0	0	0	0	0	1	89,185	1	93,211	1	98,534	4	85,474
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 2

THE NUMBER AND ANNUAL AVERAGE COMPENSATION OF ACTIVE
(including DROP) MEMBERS DISTRIBUTED BY FIFTH AGE AND SERVICE
AS OF JANUARY 1, 2012

FIRE

ATTAINED AGE	YEARS OF SERVICE																				
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 & up		
	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	
Under 25	37	41,699	18	44,003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	66	41,690	171	44,696	18	48,945	1	46,982	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	40	41,690	119	44,694	88	53,319	31	61,295	1	46,014	0	0	0	0	0	0	0	0	0	0	0
35 to 39	7	41,690	47	44,713	88	54,264	130	62,477	20	68,646	0	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	3	44,528	27	54,408	70	63,229	95	71,952	20	79,222	1	96,962	0	0	0	0	0	0	0
45 to 49	0	0	2	24,979	12	54,860	17	60,263	54	72,214	78	80,558	84	84,697	0	0	0	0	0	0	0
50 to 54	0	0	0	0	6	54,398	1	78,072	22	81,205	46	88,793	153	92,466	60	92,298	1	76,748	0	0	0
55 to 59	0	0	2	48,672	0	0	0	0	2	87,591	20	88,950	45	93,395	71	93,614	28	90,696	2	90,117	0
60 to 64	0	0	0	0	0	0	1	77,361	3	97,528	1	71,084	2	105,124	18	89,682	33	91,153	12	92,507	0
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	2	78,325	2	99,255	4	99,401	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 2
 THE NUMBER AND ANNUAL AVERAGE COMPENSATION OF ACTIVE
 (including DROP) MEMBERS DISTRIBUTED BY FIFTH AGE AND SERVICE
 AS OF JANUARY 1, 2012

POLICE AND FIRE

ATTAINED AGE	YEARS OF SERVICE																			
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 & up	
	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp	#	Avg Comp
Under 25	42	41,823	82	44,236	2	43,034	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	74	41,804	628	44,769	108	49,370	1	46,982	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	42	41,738	356	44,801	320	52,601	87	59,499	3	53,267	0	0	0	0	0	0	0	0	0	0
35 to 39	8	42,069	160	44,688	212	54,097	338	61,529	58	67,821	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	62	46,168	98	54,396	196	61,906	271	70,527	165	77,116	3	79,559	0	0	0	0	0	0
45 to 49	0	0	18	42,450	43	54,311	47	61,461	137	71,727	369	79,089	170	83,644	0	0	0	0	0	0
50 to 54	0	0	3	62,878	16	56,289	16	67,838	53	76,462	169	84,971	341	90,558	161	90,817	1	76,748	0	0
55 to 59	0	0	6	60,652	4	70,233	0	0	7	78,772	50	85,718	90	90,719	147	91,127	61	91,135	2	90,117
60 to 64	0	0	1	46,406	1	95,892	2	73,935	3	97,528	15	84,949	14	89,691	26	88,885	50	90,915	21	90,981
65 to 69	0	0	0	0	1	57,273	0	0	0	0	0	0	1	89,185	3	83,287	3	99,014	8	92,438
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 3
 THE NUMBER AND ANNUAL RETIREMENT
 ALLOWANCE OF RETIRED MEMBERS
 BY AGE AS OF JANUARY 1, 2012

POLICE AND FIRE			
AGE	NUMBER	BENEFIT	AVERAGE BENEFIT
Less than 50	37	1,104,459	29,850
50 to 54	118	4,671,682	39,591
55 to 59	301	16,873,313	56,058
60 to 64	672	35,981,252	53,544
65 to 69	533	26,160,222	49,081
70 to 74	380	18,959,312	49,893
75 to 79	262	11,687,647	44,609
80 to 84	195	7,461,900	38,266
85 to 89	71	2,720,175	38,312
Greater than or equal to 90	22	808,283	36,740
TOTAL	2,591	126,428,245	48,795
POLICE	1,517	\$ 71,457,613	\$ 47,105
FIRE	1,074	\$ 54,970,632	\$ 51,183

TABLE 4

THE NUMBER AND ANNUAL RETIREMENT
ALLOWANCE OF DISABLED MEMBERS
BY AGE AS OF JANUARY 1, 2012

POLICE AND FIRE

AGE	NUMBER	BENEFIT	AVERAGE BENEFIT
Less than 40	5	152,467	30,493
40 to 44	9	329,752	36,639
45 to 49	12	451,148	37,596
50 to 54	9	285,370	31,708
55 to 59	15	507,712	33,847
60 to 64	30	1,279,469	42,649
65 to 69	18	643,545	35,753
70 to 74	31	1,392,236	44,911
75 to 79	17	663,653	39,038
Greater than or equal to 80	30	1,099,862	36,662
TOTAL	176	6,805,214	38,666
POLICE	68	\$ 2,333,471	\$ 34,316
FIRE	108	\$ 4,471,743	\$ 41,405

TABLE 5
 THE NUMBER AND ANNUAL RETIREMENT
 ALLOWANCE OF BENEFICIARIES
 BY AGE AS OF JANUARY 1, 2012

POLICE AND FIRE			
AGE	NUMBER	BENEFIT	AVERAGE BENEFIT
Less than 50	69	1,084,086	15,711
50 to 54	44	985,563	22,399
55 to 59	51	1,115,730	21,877
60 to 64	95	2,189,654	23,049
65 to 69	110	2,539,028	23,082
70 to 74	130	3,216,296	24,741
75 to 79	130	2,699,759	20,767
80 to 84	128	2,627,425	20,527
85 to 89	102	1,957,783	19,194
Greater than or equal to 90	43	794,760	18,483
TOTAL	902	19,210,084	21,297
POLICE	525	\$ 10,926,866	\$ 20,813
FIRE	377	\$ 8,283,218	\$ 21,971

TABLE 6

THE NUMBER AND ANNUAL RETIREMENT
ALLOWANCE OF RETIRED MEMBERS,
DISABLED MEMBERS AND BENEFICIARIES
BY AGE AS OF JANUARY 1, 2012

POLICE AND FIRE

AGE	NUMBER	BENEFIT	AVERAGE BENEFIT	
Less than 50	132	3,121,912	23,651	
50 to 54	171	5,942,615	34,752	
55 to 59	367	18,496,755	50,400	
60 to 64	797	39,450,375	49,499	
65 to 69	661	29,342,795	44,392	
70 to 74	541	23,567,844	43,563	
75 to 79	409	15,051,059	36,800	
80 to 84	339	10,716,657	31,613	
85 to 89	184	5,052,624	27,460	
Greater than or equal to 90	68	1,700,907	25,013	
	TOTAL	3,669	152,443,543	41,549
POLICE	2,110	\$ 84,717,950	\$ 40,151	
FIRE	1,559	\$ 67,725,593	\$ 43,442	

TABLE 7

THE NUMBER AND FUTURE ANNUAL
ALLOWANCE OF TERMINATED MEMBERS
ENTITLED TO A FUTURE BENEFIT
BY AGE AS OF JANUARY 1, 2012

POLICE AND FIRE

AGE	NUMBER	BENEFIT	AVERAGE BENEFIT
Less than 40	30	258,934	8,631
40 to 44	40	490,371	12,259
45 to 49	41	593,674	14,480
Greater than or equal to 50	17	204,096	12,006
Total	128	1,547,075	12,087
POLICE	107	\$ 1,336,395	\$ 12,490
FIRE	21	\$ 210,680	\$ 10,032



