

DALLAS POLICE AND FIRE PENSION SYSTEM

ACTUARIAL VALUATION

AS OF JANUARY 1, 2014

May 15, 2014

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, 2014

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, 2014.

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, 2014, the employer contribution rate for GASB 27 purposes to pay the normal cost and fund the Unfunded Actuarial Accrued Liability over 30 years is 29.03%. This amount is more than the 28.35% employer contribution rate calculated as of January 1, 2013.

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 26 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. 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.

Please note future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. An analysis of the potential range of such future differences is beyond the scope of this valuation.

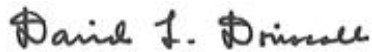
Data

Asset information and member data for retired, active, and inactive members was supplied as of January 1, 2014 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. The accuracy of the results of this valuation are dependent on the accuracy of the data.

Mr. Richard Tettamant
May 15, 2014
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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 am 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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Summary of Principal Results

	January 1, 2014	January 1, 2013
Membership		
Active	5,397	5,400
Terminated with refunds due	106	86
Terminated with deferred benefits	122	96
Retired members and beneficiaries	3,890	3,783
Compensation		
Total	\$ 377,943,454	\$ 361,043,989
Average	\$ 70,028	\$ 66,860
Assets		
Market value	\$ 3,362,750,503	\$ 3,206,364,971
Actuarial value	\$ 3,877,321,261	\$ 3,795,024,584
Valuation Results		
Unfunded actuarial accrued liability	\$ 1,251,874,626	\$ 1,063,181,047
Funding period*	26	23
GASB No. 25		
Actuarial accrued liability (AAL)	\$ 5,129,195,887	\$ 4,858,205,631
Assets (actuarial)	\$ 3,877,321,261	\$ 3,795,024,584
GASB ratio	75.6%	78.1%
Unfunded AAL	\$ 1,251,874,626	\$ 1,063,181,047

* 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.

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 26 years from 23 years. This increase was primarily due to returns on the actuarial value of assets in 2013 that were below the long-term expectations.

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 29.03% of payroll compared with the City's actual contribution rate of 27.50% of payroll and the 30-year funding cost in 2013 of 28.35% of payroll. Section 3 shows a reconciliation of the changes between the 2013 and 2014 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 26 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 2013 and 2014.

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.

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.

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

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 29.03% 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 2014. 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 2013 and 2014 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 ten years, is used. The estimated rates of return for 2013 were 7.70% on the market value of assets, and 4.52% on 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 5,400 members as of January 1, 2013 to 5,397 members as of January 1, 2014. The total active payroll increased from \$361,043,989 to \$377,943,454 over the same period, a 4.7% increase. Schedule A shows a summary of the membership data.

Experience

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

GASB 67 and 68

Plan sponsors will be transitioning to new financial statement disclosure requirements which are set forth in GASB Statement 67 (for plans' financial statements) and GASB Statement 68 (for plan sponsors' financial statements) over the next two years. Some key requirements and implications are:

- A Net Pension Liability (NPL, equal to plan liability minus plan assets as defined by the new standards as described below) will be added to the balance sheet for all employers
- Assets will be reported at Fair Value (not Actuarial value)
- Liabilities will be based on the following methods and assumptions:
 - Individual Entry Age Normal cost method
 - A discount rate (used to discount expected future benefits) equal to the expected investment rate of return except for benefit payments not expected to be funded by assets on hand, which are to be discounted at a high quality 20-year tax-exempt municipal bond index rate
 - "Run-out date" cash projections must be used to determine the cross-over point between benefits expected to be covered by assets and those that must be discounted using the municipal bond index rates.

A key element of this change is that the NPL will reflect the market value funded position of the plan and will likely differ materially from the previously disclosed Net Pension Obligation, which represented the difference between the amounts contributed and the Actuarially Required Contribution (ARC) which represented the anticipated contribution. Moreover, plans which are less well funded may be subject to a discount rate modified by the Municipal Bond Rate Index, which would generally have the effect of increasing the NPL.

Actuarial Cost, Margin and Funding Period

	<u>January 1, 2014</u>	<u>January 1, 2013</u>
1. Covered Payroll		
a. Active members excluding DROP	241,738,643	227,581,470
b. DROP members	<u>136,204,811</u>	<u>133,462,519</u>
c. Total	377,943,454	361,043,989
2. Actuarial present value of future pay		
a. Active members excluding DROP	2,981,547,669	2,800,679,183
b. DROP members	<u>596,403,988</u>	<u>590,037,954</u>
c. Total	3,577,951,657	3,390,717,137
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	5,889,448,642	5,603,126,940
5. Actuarial present value of future normal costs		
a. Total	760,252,755	744,921,309
b. Member (3b x 2c)*	304,125,891	285,808,555
c. City (5a - 5b)	456,126,864	459,112,754
6. Actuarial accrued liability (4 - 5a)	5,129,195,887	4,858,205,631
7. Actuarial value of assets	3,877,321,261	3,795,024,584
8. Unfunded actuarial accrued liability (UAAL) (6 - 7)	1,251,874,626	1,063,181,047
9. Normal cost		
a. Normal cost percentage (5a ÷ 2c)	21.25%	21.97%
b. Total normal cost (1c x 9a)	80,312,984	79,321,364
c. Member normal cost (1c x 3b)*	32,125,194	28,186,317
d. City normal cost (9b - 9c)	48,187,790	51,135,047
e. City normal rate (9d ÷ [1c x 1.11])	11.49%	12.76%

* 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, 2013 was decreased by \$2,402,402 and member normal cost (line 9c) as of January 1, 2013 was decreased by \$2,502,422 to account for these changes.

Actuarial Cost, Margin and Funding Period

	<u>January 1, 2014</u>	<u>January 1, 2013</u>
10. 30-year funding cost*		
a. City normal cost rate**	11.49%	12.76%
b. Amortization rate	<u>17.54%</u>	<u>15.59%</u>
c. Total	29.03%	28.35%
11. Margin over/(under) 30-year cost* (3a - 10c)	(1.53)%	(0.85)%
12. Funding period to amortize UAAL***	26	23

* 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.

Analysis of Change in UAAL

1. UAAL as of January 1, 2013	\$1,063,181,047
2. Changes due to:	
a. Expected increase/(amortization)	\$ 27,503,212
b. Method change	0
c. Actual contributions (greater)/less than expected	10,040,886
d. Liability experience	1,700,508
e. Asset experience	<u>149,448,973</u>
f. Total changes	\$ 188,693,579
3. UAAL as of January 1, 2014	\$1,251,874,626

Analysis of Change in Funding Cost

1. 30-year funding cost* as of January 1, 2013	28.35%
2. Changes due to:	
a. Resetting of amortization from prior year	(0.83)
b. Assumption change	0.00
c. Actual contributions (greater)/less than expected	0.14
d. Liability experience**	(0.74)
e. Asset experience	<u>2.11</u>
f. Total	0.68
3. 30-year funding cost* as of January 1, 2014	29.03%

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

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

Analysis of Change in Funding Period

1. Funding period as of January 1, 2013	23 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	0
e. Asset experience	<u>4</u>
f. Total changes	3
3. Funding period as of January 1, 2014	26 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.

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, 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%
January 1, 2013	3,795	4,858	1,063	78.1%	361	294.5%
January 1, 2014	3,877	5,129	1,252	75.6%	378	331.2%

**GASB #25 Schedule of Employer Contributions
 for Year Ending December 31, 2013**

<u>Annual Required Contribution</u>	<u>Percentage Contributed</u>
28.35% of Pay	97.0%

Reconciliation of Fund Assets

	<u>Year Ending December 31, 2013</u>
1. Value of fund at beginning of year	\$ 3,206,364,971
2. Contributions	
a. City	105,711,435
b. Member	<u>26,044,579</u>
c. Total	\$ 131,756,014
3. Benefit payments (including DROP payments)	(218,884,493)
4. Gross earnings	251,396,329
5. Expenses	(7,882,318)
6. Value of assets at end of year	\$ 3,362,750,503
7. Estimated rate of return	7.70%

Determination of Excess Earnings To Be Deferred

	Year Ending December 31, 2013
1. Market value at beginning of year	\$ 3,206,364,971
2. Net new investments	
a. Contributions	\$ 131,756,014
b. Benefit payments (including DROP payments)	<u>(218,884,493)</u>
c. Total	\$ (87,128,479)
3. Market value at end of year	\$ 3,362,750,503
4. Yield, net of expenses (3 - 1 - 2c)	\$ 243,514,011
5. Average balance [1 + ½ x (2d)]	3,162,800,731
6. Assumed investment return rate	8.50%
7. Expected net return (5 x 6)	\$ 268,838,062
8. Gains/(losses) subject to deferral (4 - 7)	\$ (25,324,051)

Calculation of Actuarial Value of Assets

1.	Market value of assets as of January 1, 2014			\$3,362,750,503	
2.	Deferral amounts				
		<u>Year</u>	<u>Total Gain/(Loss)</u>	<u>Percent Deferred</u>	<u>Deferral Amount</u>
a.		2013	\$ (25,324,051)	90%	\$ (22,791,646)
b.		2012	41,774,976	80%	33,419,981
c.		2011	(316,579,427)	70%	(221,605,599)
d.		2010	62,874,951	60%	37,724,971
e.		2009	132,954,038	50%	66,477,019
f.		2008	(1,125,904,567)	40%	(450,361,827)
g.		2007	10,785,809	30%	3,235,743
h.		2006	168,016,769	20%	33,603,354
i.		2005	57,272,457	10%	5,727,246
j.		Total			\$ (514,570,758)
3.	Preliminary actuarial value of assets (1 – 2j)			3,877,321,261	
4.	80% of Market value			2,690,200,402	
5.	120% of Market value			4,035,300,604	
6.	Actuarial value of assets (3, not less than 4 or more than 5)			3,877,321,261	
7.	Rate of return on actuarial value of assets			4.52%	

Membership Data

	<u>January 1, 2014</u>	<u>January 1, 2013</u>
1. Active members (excluding DROP)		
a. Police and Fire		
1. Number	3,983	3,974
2. Covered payroll	\$241,738,643	\$227,581,470
3. Average annual pay	\$ 60,693	\$ 57,268
4. Average age	36.65	36.63
5. Average service (years)	9.64	9.70
b. Police		
1. Number	2,661	2,631
2. Covered payroll	\$161,784,235	\$151,312,498
3. Average annual pay	\$ 60,798	\$ 57,511
4. Average age	36.85	36.90
5. Average service (years)	9.92	10.06
c. Fire		
1. Number	1,322	1,343
2. Covered payroll	\$ 79,954,408	\$ 76,268,972
3. Average annual pay	\$ 60,480	\$ 56,790
4. Average age	36.26	36.11
5. Average service (years)	9.08	8.99

Membership Data
 (continued)

	<u>January 1, 2014</u>	<u>January 1, 2013</u>
2. Active members (DROP only)		
a. Police and Fire		
1. Number	1,414	1,426
2. Covered payroll	\$136,204,811	\$133,462,519
3. Average annual pay	\$ 96,326	\$ 93,592
4. Average age	54.21	54.14
5. Average total service (years)	27.78	27.94
6. Average time in DROP (years)	4.73	4.70
7. DROP account balance	\$436,857,660	\$432,840,550
b. Police		
1. Number	845	851
2. Covered payroll	\$ 81,385,780	\$ 78,183,319
3. Average annual pay	\$ 96,315	\$ 91,872
4. Average age	53.67	53.59
5. Average total service (years)	26.98	27.12
6. Average time in DROP (years)	4.21	4.15
7. DROP account balance	\$224,874,668	\$220,682,041
c. Fire		
1. Number	569	575
2. Covered payroll	\$ 54,819,031	\$ 55,279,200
3. Average annual pay	\$ 96,343	\$ 96,138
4. Average age	55.01	54.96
5. Average service (years)	28.98	29.16
6. Average time in DROP (years)	5.51	5.53
7. DROP account balance	\$211,982,992	\$212,158,509

Membership Data
 (continued)

	<u>January 1, 2014</u>	<u>January 1, 2013</u>
3. Active members (including DROP)		
a. Police and Fire		
1. Number	5,397	5,400
2. Covered payroll	\$377,943,454	\$361,043,989
3. Average annual pay	\$ 70,028	\$ 66,860
4. Average age	41.25	41.26
5. Average service (years)	14.39	14.52
6. DROP account balance	\$436,857,660	\$432,840,550
b. Police		
1. Number	3,506	3,482
2. Covered payroll	\$243,170,015	\$229,495,817
3. Average annual pay	\$ 69,358	\$ 65,909
4. Average age	40.90	40.98
5. Average service (years)	14.03	14.23
6. DROP account balance	\$224,874,668	\$220,682,041
c. Fire		
1. Number	1,891	1,918
2. Covered payroll	\$134,773,439	\$131,548,172
3. Average annual pay	\$ 71,271	\$ 68,586
4. Average age	41.90	41.76
5. Average service (years)	15.07	15.04
6. DROP account balance	\$211,982,992	\$212,158,509

Membership Data
 (continued)

	<u>January 1, 2014</u>	<u>January 1, 2013</u>
4. Inactive members eligible for annuity		
a. Retired members	2,956	2,854
b. Beneficiaries	934	929
c. Number entitled to deferred benefits	<u>122</u>	<u>96</u>
d. Total number of inactive members	4,012	3,879
e. Total annual benefit	\$170,573,194	\$159,592,548
f. Average annual benefit	\$ 42,516	\$ 41,143
5. Inactive members with refunds due		
a. Number	106	86
b. Accumulated contribution balance	\$ 924,778	\$ 948,715

**Summary of Benefit Provisions
As of January 1, 2014
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.

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

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).

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.

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

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.

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.

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 is 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.

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	2.75%
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

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

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.

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 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.

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 is 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.

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

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.

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.

**Summary of Actuarial Methods and Assumptions
 (Effective as of January 1, 2014)**

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:

Years of Service	Annual Rate of Salary Increase
0	9.64%
5	9.24
10	8.05
15	6.17
20	4.74
25	4.12
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 ten years beyond the valuation date 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.

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

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. 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:

$$MV - (9/10) \times G/(L)_1 - (8/10) \times G/(L)_2 - (7/10) \times G/(L)_3 - (6/10) \times G/(L)_4 - (5/10) \times G/(L)_5 - (4/10) \times G/(L)_6 - (3/10) \times G/(L)_7 - (2/10) \times G/(L)_8 - (1/10) \times G/(L)_9$$

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.

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. The ratio of actual terminations prior to retirement to the expected terminations prior to retirement for the period January 1, 2012 through December 31, 2013 shows that during this period there have been about 5% fewer terminations than expected.			
January 1, 2012 through December 31, 2013			
	<u>Actual</u>	<u>Expected</u>	<u>Actual/Expected</u>
Terminations prior to Retirement	235	248	95%

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, 2009 through December 31, 2013 shows that during this period there have been about 55% fewer disability retirements than 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, 2009 through December 31, 2013			
	<u>Actual</u>	<u>Expected</u>	<u>Actual/Expected</u>
Disability Retirements	5	11	45%

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, 2009 through December 31, 2013 shows that during this period there have been about 14% fewer 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 from their recent levels.</p>			
January 1, 2009 through December 31, 2013			
	<u>Actual</u>	<u>Expected</u>	<u>Actual/Expected</u>
Retirement	736	853	86%

Death
<p>This assumption was changed as of January 1, 2012 in order to reflect strengthened actuarial standards and to take into account mortality improvement. It is updated each year to project mortality improvements to ten years beyond the valuation date.</p>

Age at DROP			
<p>This assumption has not changed since the implementation of DROP in 1993. The average 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, 2013			
	<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, 2009)	49.4	50.0	99%

Economic Assumptions

The economic assumptions selected for valuing 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, 2013 has been 3.67%. 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, 1953 through December 31, 2013			
	<u>Actual</u>	<u>Expected</u>	<u>Actual/Expected</u>
Inflation	3.67%	4.00%	92%

Salary Increases			
The assumed rates of salary increase used to value the liabilities of the System vary 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 assumed salary increase rates are reasonable. A summary of the actual valuation earnings to the expected valuation earnings over the period January 1, 2009 through December 31, 2013 follows.			
January 1, 2009 through December 31, 2013			
	<u>Actual</u>	<u>Expected</u>	<u>Actual/Expected</u>
Valuation Compensation	\$1,757,621,159	\$1,816,969,792	97%

Long-Term Rate of Return on Plan Assets			
<p>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, 2013 follows.</p>			
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)
1/1/2012	through	12/31/2012	9.92
1/1/2013	through	12/31/2013	7.70

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 6.38%. Therefore, the annual DROP interest rate for October 1, 2014 is 8.00%.

TABLE 1

THE NUMBER AND ANNUAL AVERAGE COMPENSATION OF ACTIVE
(excluding DROP) MEMBERS DISTRIBUTED BY FIFTH AGE AND SERVICE
AS OF JANUARY 1, 2014

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	64	43,295	58	50,199	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	93	43,131	259	50,460	149	53,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	28	43,025	136	50,399	334	55,589	56	63,425	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	13	43,249	60	50,265	174	55,247	188	65,401	52	71,066	0	0	0	0	0	0	0	0	0	0
40 to 44	4	43,018	38	49,841	87	54,961	148	66,036	178	74,947	54	81,888	0	0	0	0	0	0	0	0
45 to 49	2	43,500	10	54,890	34	56,885	43	65,066	91	74,017	213	83,384	40	89,266	0	0	0	0	0	0
50 to 54	0	0	2	82,179	11	56,464	6	62,270	10	75,104	12	79,736	4	90,111	1	85,697	0	0	0	0
55 to 59	0	0	1	83,201	3	64,234	1	61,029	1	67,751	0	0	0	0	1	87,733	0	0	0	0
60 to 64	0	0	0	0	2	66,350	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, 2014

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	10	42,944	25	50,021	1	49,033	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	32	43,222	161	50,944	60	51,476	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	23	43,328	137	50,443	137	54,131	17	64,463	1	61,221	0	0	0	0	0	0	0	0	0	0
35 to 39	3	42,941	52	50,915	107	55,928	120	68,198	27	72,439	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	3	51,083	29	56,503	90	67,143	93	77,142	27	85,223	0	0	0	0	0	0	0	0
45 to 49	0	0	0	0	12	58,949	29	66,165	39	74,752	44	82,853	28	92,125	0	0	0	0	0	0
50 to 54	0	0	0	0	4	61,102	2	63,362	3	74,076	3	86,443	2	82,460	0	0	0	0	0	0
55 to 59	0	0	0	0	0	0	0	0	0	0	1	77,382	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, 2014

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	74	43,247	83	50,146	1	49,033	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	125	43,155	420	50,645	209	52,605	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	51	43,162	273	50,421	471	55,165	73	63,667	1	61,221	0	0	0	0	0	0	0	0	0	0
35 to 39	16	43,191	112	50,567	281	55,506	308	66,490	79	71,535	0	0	0	0	0	0	0	0	0	0
40 to 44	4	43,018	41	49,932	116	55,346	238	66,455	271	75,700	81	83,000	0	0	0	0	0	0	0	0
45 to 49	2	43,500	10	54,890	46	57,424	72	65,508	130	74,237	257	83,293	68	90,443	0	0	0	0	0	0
50 to 54	0	0	2	82,179	15	57,701	8	62,543	13	74,867	15	81,077	6	87,561	1	85,697	0	0	0	0
55 to 59	0	0	1	83,201	3	64,234	1	61,029	1	67,751	1	77,382	0	0	1	87,733	0	0	0	0
60 to 64	0	0	0	0	2	66,350	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 2

THE NUMBER AND ANNUAL AVERAGE COMPENSATION OF ACTIVE
(including DROP) MEMBERS DISTRIBUTED BY FIFTH AGE AND SERVICE
AS OF JANUARY 1, 2014

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	64	43,295	58	50,199	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	93	43,131	259	50,460	149	53,060	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	28	43,025	136	50,399	334	55,589	56	63,425	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	13	43,249	60	50,265	174	55,247	188	65,401	52	71,066	0	0	0	0	0	0	0	0	0	0
40 to 44	4	43,018	38	49,841	87	54,961	148	66,036	178	74,947	63	83,390	0	0	0	0	0	0	0	0
45 to 49	2	43,500	10	54,890	34	56,885	44	65,179	93	74,162	278	86,136	89	93,461	0	0	0	0	0	0
50 to 54	0	0	2	82,179	14	57,668	21	72,923	38	85,762	133	91,327	194	99,261	93	99,417	0	0	0	0
55 to 59	0	0	1	83,201	5	68,225	4	65,492	7	82,317	28	91,715	64	98,447	83	101,100	18	96,389	2	96,575
60 to 64	0	0	0	0	4	76,631	0	0	1	81,013	7	96,185	15	99,366	9	87,115	18	102,900	3	100,578
65 to 69	0	0	0	0	1	101,717	1	75,227	0	0	1	99,944	1	93,633	1	81,668	0	0	5	105,049
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, 2014

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	10	42,944	25	50,021	1	49,033	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	32	43,222	161	50,944	60	51,476	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	23	43,328	137	50,443	137	54,131	17	64,463	1	61,221	0	0	0	0	0	0	0	0	0	0
35 to 39	3	42,941	52	50,915	107	55,928	120	68,198	27	72,439	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	3	51,083	29	56,503	90	67,143	93	77,142	28	85,446	0	0	0	0	0	0	0	0
45 to 49	0	0	0	0	12	58,949	29	66,165	39	74,752	64	86,334	52	95,053	0	0	0	0	0	0
50 to 54	0	0	0	0	8	63,193	9	75,461	13	87,368	48	91,806	152	97,740	50	99,244	0	0	0	0
55 to 59	0	0	0	0	1	65,533	0	0	1	84,121	14	85,718	57	96,562	82	98,365	28	97,218	0	0
60 to 64	0	0	0	0	1	65,006	1	78,809	1	95,015	5	86,482	6	110,151	13	95,546	27	97,017	10	97,374
65 to 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	92,435	5	103,747
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	151,030

TABLE 2

THE NUMBER AND ANNUAL AVERAGE COMPENSATION OF ACTIVE
(including DROP) MEMBERS DISTRIBUTED BY FIFTH AGE AND SERVICE
AS OF JANUARY 1, 2014

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	74	43,247	83	50,146	1	49,033	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25 to 29	125	43,155	420	50,645	209	52,605	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	51	43,162	273	50,421	471	55,165	73	63,667	1	61,221	0	0	0	0	0	0	0	0	0	0
35 to 39	16	43,191	112	50,567	281	55,506	308	66,490	79	71,535	0	0	0	0	0	0	0	0	0	0
40 to 44	4	43,018	41	49,932	116	55,346	238	66,455	271	75,700	91	84,023	0	0	0	0	0	0	0	0
45 to 49	2	43,500	10	54,890	46	57,424	73	65,571	132	74,336	342	86,173	141	94,048	0	0	0	0	0	0
50 to 54	0	0	2	82,179	22	59,677	30	73,684	51	86,171	181	91,454	346	98,593	143	99,357	0	0	0	0
55 to 59	0	0	1	83,201	6	67,777	4	65,492	8	82,542	42	89,716	121	97,559	165	99,741	46	96,893	2	96,575
60 to 64	0	0	0	0	5	74,306	1	78,809	2	88,014	12	92,142	21	102,447	22	92,097	45	99,370	13	98,113
65 to 69	0	0	0	0	1	101,717	1	75,227	0	0	1	99,944	1	93,633	1	81,668	6	92,435	10	104,398
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	151,030

TABLE 3

THE NUMBER AND ANNUAL RETIREMENT
ALLOWANCE OF RETIRED MEMBERS
BY AGE AS OF JANUARY 1, 2014

POLICE AND FIRE

AGE	NUMBER	BENEFIT	AVERAGE BENEFIT
Less than 50	34	\$ 1,058,724	\$ 31,139
50 to 54	155	6,512,508	42,016
55 to 59	341	20,087,916	58,909
60 to 64	648	37,542,647	57,936
65 to 69	628	31,350,138	49,921
70 to 74	426	21,453,766	50,361
75 to 79	259	12,285,505	47,434
80 to 84	203	8,298,772	40,881
85 to 89	80	3,018,276	37,728
Greater than or equal to 90	20	767,084	38,354
 TOTAL	 2,794	 \$ 142,375,336	 \$ 50,958
 POLICE	 1,651	 \$ 81,611,144	 \$ 49,431
 FIRE	 1,143	 \$ 60,764,192	 \$ 53,162

TABLE 4

THE NUMBER AND ANNUAL RETIREMENT
ALLOWANCE OF DISABLED MEMBERS
BY AGE AS OF JANUARY 1, 2014

POLICE AND FIRE

AGE	NUMBER	BENEFIT	AVERAGE BENEFIT
Less than 40	5	\$ 150,060	\$ 30,012
40 to 44	5	182,352	36,470
45 to 49	10	392,352	39,235
50 to 54	14	513,120	36,651
55 to 59	15	508,656	33,910
60 to 64	22	958,848	43,584
65 to 69	21	802,318	38,206
70 to 74	25	1,130,610	45,224
75 to 79	17	673,420	39,613
Greater than or equal to 80	28	1,061,576	37,913
 TOTAL	 162	 \$ 6,373,312	 \$ 39,341
 POLICE	 65	 \$ 2,266,238	 \$ 34,865
 FIRE	 97	 \$ 4,107,074	 \$ 42,341

TABLE 5

THE NUMBER AND ANNUAL RETIREMENT
ALLOWANCE OF BENEFICIARIES
BY AGE AS OF JANUARY 1, 2014

POLICE AND FIRE

AGE	NUMBER	BENEFIT	AVERAGE BENEFIT
Less than 50	86	\$ 1,528,870	\$ 17,778
50 to 54	45	1,035,084	23,002
55 to 59	48	1,179,977	24,583
60 to 64	92	2,159,766	23,476
65 to 69	114	2,654,994	23,289
70 to 74	133	3,171,589	23,847
75 to 79	136	3,283,976	24,147
80 to 84	114	2,285,567	20,049
85 to 89	115	2,168,498	18,857
Greater than or equal to 90	51	926,879	18,174
 TOTAL	 934	 \$ 20,395,200	 \$ 21,836
 POLICE	 547	 \$ 11,588,771	 \$ 21,186
 FIRE	 387	 \$ 8,806,429	 \$ 22,756

TABLE 6

THE NUMBER AND ANNUAL RETIREMENT
ALLOWANCE OF RETIRED MEMBERS,
DISABLED MEMBERS AND BENEFICIARIES
BY AGE AS OF JANUARY 1, 2014

POLICE AND FIRE

AGE	NUMBER	BENEFIT	AVERAGE BENEFIT
Less than 50	140	\$ 3,312,358	\$ 23,660
50 to 54	214	8,060,712	37,667
55 to 59	404	21,776,549	53,902
60 to 64	762	40,661,261	53,361
65 to 69	763	34,807,450	45,619
70 to 74	584	25,755,965	44,103
75 to 79	412	16,242,901	39,425
80 to 84	330	11,114,411	33,680
85 to 89	206	5,593,358	27,152
Greater than or equal to 90	75	1,818,883	24,252
 TOTAL	 3,890	 \$ 169,143,848	 \$ 43,482
 POLICE	 2,263	 \$ 95,466,153	 \$ 42,186
 FIRE	 1,627	 \$ 73,677,695	 \$ 45,284

TABLE 7

THE NUMBER AND FUTURE RETIREMENT
ALLOWANCE OF TERMINATED MEMBERS
ENTITLED TO A FUTURE BENEFIT
BY AGE AS OF JANUARY 1, 2014

POLICE AND FIRE

AGE	NUMBER	BENEFIT	AVERAGE BENEFIT
Less than 40	45	\$ 469,783	\$ 10,440
40 to 44	38	404,865	10,654
45 to 49	28	405,341	14,476
Greater than or equal to 50	11	149,357	13,578
 TOTAL	 122	 \$ 1,429,346	 \$ 11,716
 POLICE	 102	 \$ 1,214,352	 \$ 11,905
FIRE	20	\$ 214,994	\$ 10,750