

**DALLAS POLICE AND FIRE PENSION SYSTEM  
SUPPLEMENTAL PLAN**

**ACTUARIAL VALUATION**

**AS OF JANUARY 1, 2008**



May 16, 2008

Mr. Richard L. Tettamant  
Administrator  
Dallas Police and Fire Pension System  
2301 N. Akard Street, Suite 200  
Dallas, TX 75201

**Re: Dallas Police and Fire Pension System Supplemental Plan Actuarial Valuation as of  
January 1, 2008**

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 Supplemental Plan (the Plan) as of January 1, 2008.

#### *Actuarial Valuation*

The primary purpose of the valuation report is to determine the City's contribution rate, to describe the current financial condition of the Plan, and to analyze changes in the Plan'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 contribution rates are established by statute. The City's contribution rate is intended to be sufficient to amortize the unfunded actuarial accrued liability over five years, including the normal cost. The contribution is also limited to be within \$100,000 of the previous year's contribution. However, in no event will the City's contribution be less than the amount necessary to satisfy GASB 27. For 2008, the contribution is \$1,243,717.

#### *Funding Progress*

As of January 1, 2008, the City's contribution rate needed in order to meet the funding goal is 132.57% of covered payroll. This amount is lower than the 154.79% employer rate calculated as of January 1, 2007. The current contribution rate of 132.57% of covered payroll covers the normal cost and the amortization of the Unfunded Actuarial Accrued Liability (UAAL).

*Benefit Provisions*

The actuarial valuation reflects the benefit and contribution provisions set forth in the System's statutes. The valuation is based on the same benefit provisions as the previous valuation.

*Assumptions and Methods*

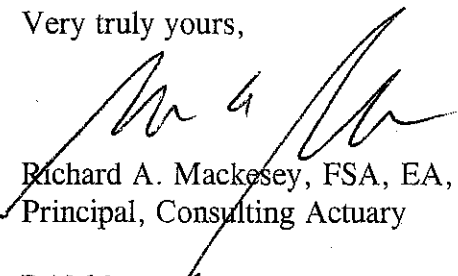
The actuarial assumptions and methods used in the valuation are presented in Schedule C. The mortality assumption was changed to the 1994 Group Annuity Mortality Table for males and females, set back one year for males and females. All other assumptions are consistent with the last actuarial valuation.

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, 2008, 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.

Very truly yours,

  
Richard A. Mackesey, FSA, EA, MAAA  
Principal, Consulting Actuary

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Enclosures

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**Summary of Principal Results**

	January 1, 2008	January 1, 2007
<b>Membership</b>		
Active	40	41
Retired and terminated members and beneficiaries	111	109
<b>Compensation</b>		
Total	\$ 938,160	\$ 865,975
Average	\$ 23,454	\$ 21,121
<b>Assets</b>		
Market value	\$ 25,254,016	\$ 23,313,933*
<b>Valuation Results</b>		
Unfunded actuarial accrued liability (UAAL)	\$ 4,843,565	\$ 5,348,659
City's normal cost contribution	\$ 191,249	\$ 178,193
Funding Policy contribution	\$ 1,243,717	\$ 1,340,414
<b>GASB No. 25</b>		
Actuarial accrued liability (AAL)	\$ 30,097,581	\$ 28,662,592
Assets	\$ 25,254,016	\$ 23,313,933*
GASB ratio	83.9%	81.3%
Unfunded AAL	\$ 4,843,565	\$ 5,348,933

\* Includes \$1,300,000 contribution for the 2006 plan year that was contributed in January 2007.

## Comments on the Valuation

### *Overview*

The current valuation indicates that a total contribution of \$1,243,717 should be contributed during 2008.

The contribution requirements are calculated to be sufficient to pay the City's portion of each year's normal cost and an amount calculated to amortize the UAAL.

### *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 Plan. There are no significant benefits which were not taken into account in this valuation. The actuarial valuation reflects the benefit and contribution provisions set forth in the System's statutes. 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 mortality assumption was changed to the 1994 Group Annuity Mortality Table for males and females, set back one year for males and females. All other assumptions are consistent with the last actuarial valuation.

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

***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 50.16% will be required for the City to avoid showing an accrued pension liability on its financial statements for the fiscal year beginning in 2008, assuming no other changes are made. Under the current funding arrangement, the City would not be required to show an accrued but unpaid pension liability for the Supplemental Plan.

***Financial Data***

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

Section 5 reconciles the Plan's assets between 2007 and 2008. The estimated rate of return for 2007 was 8.04%.

***Membership Statistics***

Data on active members and on retired members was supplied by the Administrator. The number of active members decreased over the last year. The active membership decreased from 41 members as of January 1, 2007, to 40 members as of January 1, 2008. The payroll increased from January 1, 2007 to January 1, 2008 (\$865,975 for 2007 and \$938,160 for 2008). Schedule A shows a summary of the membership data.

**Actuarial Cost**

	<u>January 1, 2008</u>	<u>January 1, 2007</u>
1. Covered Payroll	\$ 938,160	\$ 865,975
2. Actuarial present value of future benefits	\$ 31,344,735	\$ 29,808,862
3. Actuarial present value of future normal costs	\$ 1,247,154	\$ 1,146,270
4. Actuarial accrued liability (2 - 3)	\$ 30,097,581	\$ 28,662,592
5. Actuarial value of assets	\$ 25,254,016	\$ 23,313,933*
6. Unfunded actuarial accrued liability (UAAL) (4 - 5)	\$ 4,843,565	\$ 5,348,659
7. City's normal cost contribution	\$ 191,249	\$ 178,193
8. Funding Policy contribution	\$ 1,243,717	\$ 1,340,414
9. Total contribution as a percentage of covered payroll (8 ÷ 1)	132.57%	154.79%

\* Includes \$1,300,000 contribution for the 2006 plan year that was contributed in January 2007.

### Analysis of Change in UAAL

1. UAAL as of January 1, 2007	\$ 5,348,659
2. Changes due to:	
a. Expected decrease	\$ (806,374)
b. Actual contributions greater than expected	0
c. Liability experience	(183,715)
d. Asset experience	107,072
e. Assumption changes	<u>377,923</u>
f. Total Changes	\$ (505,094)
3. UAAL as of January 1, 2008	\$ 4,843,565

**Historical Trend Information**

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

<u>Date</u>	<u>Actuarial Value of Assets</u>	<u>Actuarial Liability (AAL) Entry Age</u>	<u>Unfunded AAL (UAAL)</u>	<u>Funded Ratio</u>	<u>Covered Payroll</u>	<u>UAAL as a Percentage of Covered Payroll</u>
January 1, 2003	14.081	22.398	8.317	62.9%	0.858	969.3%
January 1, 2004	16.950	23.325	6.375	72.7%	0.730	873.3%
January 1, 2005	18.720	24.496	5.776	76.4%	0.818	706.1%
January 1, 2006	19.961	26.370	6.409	75.7%	0.928	690.6%
January 1, 2007	23.314	28.663	5.349	81.3%	0.866	617.7%
January 1, 2008	25.254	30.098	4.844	83.9%	0.938	516.4%

**GASB #25 Schedule of Employer Contributions  
 for Year Ending December 31, 2007**

<u>Annual Required Contribution</u>	<u>Percentage Contributed</u>
\$1,340,414	100%

**Summary of Accumulated Benefits  
(FASB #35)**

**Accumulated Benefits at January 1, 2008**

Vested benefits of participants and beneficiaries currently receiving payments		\$ 21,983,188
Other vested benefits		8,145,294
Nonvested benefits		<u>180,517</u>
Total benefits		\$ 30,308,999

**FASB #35 Reconciliation**

<b>Accumulated benefits at January 1, 2007</b>		\$ 28,752,197
Benefits accumulated and actuarial gains/losses	\$ 99,598	
Interest	2,389,193	
Benefits paid	(1,314,911)	
Assumption changes	<u>382,922</u>	
Total change	1,556,802	
<b>Accumulated benefits at January 1, 2008</b>		\$ 30,308,999

**Reconciliation of Fund Assets**

	<u>Year Ending December 31, 2007</u>
1. Value of fund at beginning of year	\$ 23,313,933*
2. Contributions	
a. City	1,340,414
b. Member	<u>37,299</u>
c. Total	\$ 1,377,713
3. Benefit payments	(1,314,911)
4. Refunds	0
5. Earnings	1,919,808
6. Expenses	(42,527)
7. Value of assets at end of year	25,254,016
8. Estimated rate of return	8.04%

\* Includes \$1,300,000 contribution for the 2006 plan year that was contributed in January 2007.

**Membership Data**

	<u>January 1, 2008</u>	<u>January 1, 2007</u>
1. Active members (excluding DROP)		
a. Number	17	18
b. Compensation	\$ 334,922	\$ 359,932
c. Average compensation	\$ 19,701	\$ 19,996
d. Average age	46.24	47.00
e. Average service (years)	22.06	21.83
2. Active members (DROP only)		
a. Number	23	23
b. Compensation	\$ 603,238	\$ 506,043
c. Average Compensation	\$ 26,228	\$ 22,002
d. Average age	54.78	53.74
e. Average total service	30.39	30.35
f. DROP account balance	\$ 1,778,725	\$ 1,422,068
3. Inactive members		
a. Number	111	109
b. Total annual benefit	\$ 1,549,559	\$ 1,510,941
c. Average annual benefit	\$ 13,960	\$ 13,862

**Summary of Benefit Provisions  
As of January 1, 2008  
For Actuarial Calculations**

The Supplemental Plan was adopted and effective on March 1, 1973. Contributing Group B members who hold a permanent rank higher than the highest Civil Service rank held as a result of competitive examination are allowed to join the Supplemental Plan within 60 days of attaining such higher rank, or within 60 days of the effective date, if later.

**Definitions**

**Computation Pay:** The difference between the monthly base pay for the rank currently held and the monthly rate of pay due for the highest Civil Service rank held as a result of competitive examination.

**Average Computation Pay:** Computation Pay averaged over 36 months.

**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 Plan.

**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 Plan:** The Dallas Police and Fire Pension System Supplemental Plan.

Qualified Surviving Children: All surviving unmarried children under 19 years of age (23 for a disabled child) provided they were born or adopted before the Member terminated his employment.

Contribution Rates

The City's contributions are made in accordance with actuarial requirements.

The Member contribution rate is currently 8.50%. Members contribute for a maximum of 32 years.

Service Retirement Benefits

Annual Normal Retirement Pension

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

Amount for Pension: 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 &amp; 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 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 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: 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 Qualified 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.

#### *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 on or after January 1, 2007 will not be eligible for an automatic increase.

#### *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 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. Employee contributions made under the Combined Pension Plan will cease, as will accruals under the Combined Pension Plan. Each month, the retirement

benefit will be accumulated in an account earning interest based on a ten-year 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.

**Statement of Actuarial Methods and Assumptions  
 (Effective as of January 1, 2008)**

*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 9.00% per annum.

*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							
	Withdrawal		Mortality - Disableds		Mortality - Other		Disability	
	Police	Fire	Male	Female	Male	Female	Police	Fire
20	47.0	23.0	48.30	26.30	.48	.28	.35	.70
25	47.0	23.0	48.30	26.30	.62	.29	.37	.75
30	35.0	18.0	36.20	23.70	.78	.33	.42	.84
35	25.0	18.0	27.80	21.40	.85	.45	.48	.96
40	25.0	18.0	28.20	20.90	1.00	.65	.57	1.15
45	25.0	18.0	32.20	22.40	1.46	.92	.79	1.58
50	NA	NA	38.30	25.70	2.33	1.31	NA	NA
60	NA	NA	60.30	33.10	7.09	3.86	NA	NA
70	NA	NA	73.90	41.10	21.73	12.71	NA	NA
75	NA	NA	84.20	49.20	34.05	20.38	NA	NA

*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	9.19
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 contribution rate is determined as a percentage of total pay. This assumption is based on the revised compensation package adopted by the city council in 2007.

**Retirement Rates:** To determine the value of future normal cost, the percentage of population assumed to retire at various ages is as follows:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
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. That is, age 50 with five years or 20 years.

**Postretirement Mortality:** According to the 1994 Group Annuity Mortality Table for males and females, set back one year for males and females.

**DROP Election:** Members are assumed to elect DROP at age 50 with five years. 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.

**Assumed Post Retirement Cost of Living:** 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. Since there are currently no members hired after January 1, 2007, the amendment lifting the automatic increase for members hired on or after January 1, 2007 was not reflected in this valuation.

**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 the market value of assets.