

**DALLAS POLICE AND FIRE PENSION SYSTEM
SUPPLEMENTAL PLAN
ACTUARIAL VALUATION
AS OF JANUARY 1, 2002**

May 2, 2002

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, 2002

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, 2002.

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 2002, the contribution is \$900,000.

Funding Progress

As of January 1, 2002, the City's contribution rate needed in order to meet the funding goal is 122.17% of covered payroll. This amount is higher than the 122.11% employer rate calculated as of January 1, 2001. The current contribution rate of 122.17% of covered payroll covers the normal cost and the amortization of the Unfunded Actuarial Accrued Liability (UAAL).

The main reason for the increase in the City's contribution is the poor return on assets. The investment return on the market value of assets was (6.18)% compared to the assumed return of 8.50%.

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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 plan provisions as the previous valuation with one exception. The DROP interest rate basis was changed from a five-year weighted average of the 30-year U.S. Treasury bond rates to a ten-year average of the System's actual market return. Effective January 1, 2002, the rate was set to 9.00%. However, this had no effect on the valuation results as the actuarial assumption for the rate was not changed.

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 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, 2002, 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,

Signed (RICHARD A. MACKESEY)

Richard A. Mackesey, F.S.A.
Principal, Consulting Actuary

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Enclosures

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Summary of Principal Results

	January 1, 2002	January 1, 2001
Membership		
Active	36	40
Retired and terminated members and beneficiaries	94	89
Compensation		
Total	\$ 736,669	\$ 655,158
Average	\$ 20,463	\$ 16,379
Assets		
Market value	\$ 15,495,548	\$ 16,626,033
Valuation Results		
Unfunded actuarial accrued liability (UAAL)	\$ 5,718,423	\$ 2,939,717
City's normal cost contribution	\$ 129,023	\$ 122,069
Funding Policy contribution	\$ 900,000	\$ 800,000
GASB No. 25		
Actuarial accrued liability (AAL)	\$ 21,213,971	\$ 19,565,750
Assets	\$ 15,495,548	\$ 16,626,033
GASB ratio	73.0%	85.0%
Unfunded AAL	\$ 5,718,423	\$ 2,939,717

Comments on the Valuation

Overview

The current valuation indicates that a total contribution of \$900,000 should be contributed during 2002.

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 plan provisions as the previous valuation with one exception. The DROP interest rate basis was changed from a five-year weighted average of the 30-year U.S. Treasury bond rates to a ten-year average of the System's actual market return. Effective January 1, 2002, the rate was set to 9.00%. However, this had no effect on the valuation results as the actuarial assumption for the rate was not changed.

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 as the previous valuation. The assumptions used are individually reasonable and reasonable in the aggregate.

GASB Statement No. 27

Under GASB Statement No. 27, which became effective for fiscal years beginning after June 15, 1997, employers must determine a pension expense based on a 40-year amortization of the UAAL. The amortization can assume payroll growth due to inflation, but no membership growth. After a 10-year transition period, the required amortization period will drop to 30 years. 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 56.95% will be required for the City to avoid showing an accrued pension liability on its financial statements for the fiscal year beginning in 2002, 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 2001 and 2002. The estimated rate of return for 2001 was (6.18)%.

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 40 members as of January 1, 2001, to 36 members as of January 1, 2002. The payroll increased from January 1, 2001 to January 1, 2002 (\$655,158 for 2001 and \$736,669 for 2002). Schedule A shows a summary of the membership data.

Actuarial Cost

	<u>January 1, 2002</u>	<u>January 1, 2001</u>
1. Covered Payroll	\$ 736,669	\$ 655,158
2. Actuarial present value of future benefits	\$ 21,964,353	\$ 20,203,819
3. Actuarial present value of future normal costs	\$ 750,382	\$ 638,069
4. Actuarial accrued liability (2 - 3)	\$ 21,213,971	\$ 19,565,750
5. Actuarial value of assets	\$ 15,495,548	\$ 16,626,033
6. Unfunded actuarial accrued liability (UAAL) (4 - 5)	\$ 5,718,423	\$ 2,939,717
7. City's normal cost contribution	\$ 129,023	\$ 122,069
8. Funding Policy contribution	\$ 900,000	\$ 800,000
9. Total contribution as a percentage of covered payroll (8 ÷ 1)	122.17%	122.11%

Analysis of Change in UAAL

1. UAAL as of January 1, 2001	\$	2,939,717
2. Changes due to:		
a. Expected decrease	\$	(485,679)
b. Actual contributions greater than expected		0
c. Liability experience		831,907
d. Asset experience		<u>2,432,478</u>
e. Total changes	\$	2,778,706
3. UAAL as of January 1, 2002	\$	5,718,423

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, 1997	10.490	14.414	3.924	72.8%	0.795	493.6%
January 1, 1998	12.685	15.278	2.593	83.0%	0.852	304.3%
January 1, 1999	15.506	17.106	1.600	90.6%	0.851	188.0%
January 1, 2000	17.628	18.146	0.518	97.1%	0.934	55.5%
January 1, 2001	16.626	19.566	2.940	85.0%	0.655	448.9%
January 1, 2002	15.496	21.214	5.718	73.0%	0.737	775.8%

**GASB #25 Schedule of Employer Contributions
 for Year Ending December 31, 2001**

<u>Annual Required Contribution</u>	<u>Percentage Contributed</u>
\$900,000	100%

Summary of Accumulated Benefits
(FASB #35)

Accumulated Benefits at January 1, 2002

Vested benefits of participants and beneficiaries currently receiving payments		\$ 14,378,411
Other vested benefits		5,944,958
Nonvested benefits		<u>184,835</u>
Total benefits		\$ 20,508,204

FASB #35 Reconciliation

Accumulated benefits at January 1, 2001		\$ 19,082,522
Benefits accumulated	\$ 790,388	
Interest	1,582,576	
Benefits paid	<u>(947,282)</u>	
Total change		1,425,682
Accumulated benefits at January 1, 2002		\$ 20,508,204

Reconciliation of Fund Assets

	<u>Year Ending December 31, 2001</u>
1. Value of fund at beginning of year	\$ 16,626,033
2. Contributions	
a. City	800,000
b. Member	<u>40,596</u>
c. Total	\$ 840,596
3. Benefit payments	(947,282)
4. Refunds	0
5. Earnings	(989,874)
6. Expenses	(33,925)
7. Value of assets at end of year	15,495,548
8. Estimated rate of return	(6.18)%

Membership Data

	<u>January 1, 2002</u>	<u>January 1, 2001</u>
1. Active members (excluding DROP)		
a. Number	22	26
b. Compensation	\$ 471,089	\$ 338,215
c. Average compensation	\$ 21,413	\$ 13,008
d. Average age	46.23	46.50
e. Average service (years)	21.86	22.54
2. Active members (DROP only)		
a. Number	14	14
b. Compensation	\$ 265,580	\$ 316,943
c. Average Compensation	\$ 18,970	\$ 22,639
d. Average age	53.00	52.28
e. Average service	29.93	28.86
f. DROP account balance	\$ 500,508	\$ 376,908
3. Inactive members		
a. Number	94	89
b. Total current annual benefit	\$ 1,081,649	\$ 986,330
c. Average current annual benefit	\$ 11,507	\$ 11,082

**Summary of Benefit Provisions
As of January 1, 2002
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 & Out Multiplier</u>
50 – above	3.00%
49	3.00% reduced by 2/3 of 1/3% 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 Cost of Living 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.

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, 2002)**

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	<u>Annual Rate per 1,000 Members</u>							
	<u>Withdrawal</u>		<u>Mortality - Disableds</u>		<u>Mortality - Other</u>		<u>Disability</u>	
	<u>Police</u>	<u>Fire</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Police</u>	<u>Fire</u>
20	43.0	21.0	48.30	26.30	.51	.28	.35	.70
25	43.0	21.0	48.30	26.30	.66	.29	.37	.75
30	32.0	16.0	36.20	23.70	.80	.35	.42	.84
35	23.0	16.0	27.80	21.40	.85	.48	.48	.96
40	23.0	16.0	28.20	20.90	1.07	.71	.57	1.15
45	23.0	16.0	32.20	22.40	1.58	.97	.79	1.58
50	NA	NA	38.30	25.70	2.58	1.43	NA	NA
60	NA	NA	60.30	33.10	7.98	4.44	NA	NA
70	NA	NA	73.90	41.10	23.73	13.73	NA	NA
75	NA	NA	84.20	49.20	37.21	22.69	NA	NA

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

	Annual Rate of Salary Increase
20	10.00%
30	5.23
40	4.57
50	4.37
60	4.33

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

Overtime is assumed to be 7% of base pay. The city contributes on total pay including overtime. This assumption is consistent with past experience and the city's budget.

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	15%	48	15%	58	20%
39	15	49	15	59	30
40	15	50	20	60	40
41	15	51	15	61	50
42	15	52	15	62	60
43	15	53	15	63	70
44	15	54	15	64	80
45	15	55	20	65	100
46	15	56	20		
47	15	57	20		

Rates are only applied when 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.

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

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.

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.