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CITY OF ROBBINSDALE
Fire Department Relief Association
Actuarial Valuation for Plan Year 1988

INTRODUCTION

We present in this report the results of the actuarial valuation as of January 1, 1988 of the City of Robbinsdale Fire Department Relief Association.

This report is divided into sections which:

. Show the plans current financial and actuarial status

. Develop contribution requirements for 1988

. Supply information required for financial statement disclosures

The principal results of the valuation are summarized and compared to prior results on page 1.

This valuation is based on census data and asset information furnished by the Association. To the best of our knowledge this report presents fairly the actuarial condition of said Plan as of January 1, 1988. It is our considered opinion that the actuarial method and assumptions used herein are resonable in aggregate.

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CITY OF ROBBINSDALE
FIRE DEPARTMENT RELIEF ASSOCIATION

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I. Summary and Comparison of Results*

	1/1/88	1/1/85
Participants		
. Active	29	30
. Retired	24	24
. Beneficiaries	1	1
. Terminated vested	1	-
	55	55
Normal Cost	$ 20,107	$17,663
Actuarial Liability	$1,242,257	$1,002,860
Asset Values	$831,114	$643,462
Funded Percentage	67%	64%
Unfunded Actuarial Liability	$411,143	$359,398
Contribution	$110,549	$52,241
Pension Benefit Obligation (GASB #5)	$1,135,382	N/A
Unfunded Pension Benefit Obligation (GASB #5)	$304,268	N/A

* When comparing the results of the current valuation to those of the prior valuation, it should be noted that the service retirement benefit was increased from a minimum $200 per month to $225, and the maximum was increased from $240 per month to $270. This resulted in an increase in the estimated liabilities.

Another factor behind the contribution increase was a revised target date for fully funding the Unfunded Actuarial Liability. See the note on page 4.

II. Actuarial and Financial Status at 1/1/88

Assets

Market value of plan assets on 12/31/87 as reported by the Association:	$831,114

Normal Cost

Service Retirement Benefit	$19,167
Termination Benefit	852
Death Benefit	49
Temporary Disability Benefit	39
Dismemberment Benefit	-
Total	$20,107

Actuarial Liability

A. Active Participants	
(1) Service Retirement Benefit	$490,467
(2) Termination Benefit	11,290
(3) Death Benefit	940
(4) Temporary Disability Benefit	702
(5) Dismemberment Benefit	-
(6) Total for Active Participants	$503,399
B. Inactive Participants	
(1) Retired Members	$722,868
(2) Deferred Vested Members	3,508
(3) Beneficiaries of Retired Members	12,482
(4) Total for Inactive Participants	$738,858
C. Total Actuarial Liability	$1,242,257
D. Plan Assets	$831,114
E. Funded Percentage (D)/(C)	67%
F. Unfunded Actuarial Liability (C) - (D)	$411,143

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III. Contribution Requirements

The contribution level for any given year is a combination of the normal cost for that year and an amount to reduce the unfunded actuarial liabilities. This plan has committed to fully amortize the unfunded actuarial liability by January 1, 1993. The contribution needed to accomplish this is shown below:

Normal Cost	$ 20,107
Amortization Needed to Fully Fund Actuarial Liability by 1/1/93	90,442
Total Annual Payment	$110,549

Prior valuation reports assumed the full funding target date was 1999. For comparison purposes only, the following shows the contribution that would be needed to accomplish this:

Normal cost	$ 20,107
Amortization Needed to Fully Fund Actuarial Liability by 1/1/99	47,140
Total Annual Payment	$ 67,247

IV. Financial Statement Disclosures

In November of 1986, the Governmental Accounting Standards Board (GASB) issued its Statement No. 5. This statement establishes standards for disclosure of pension information by state and local governmental employers in notes to financial statements. It also requires the computation and disclosure of a standardized measure called "Pension Benefit Obligation". This measure is the actuarial present value of credited projected benefits, prorated on service. In other words, it is the value of all future expected benefits that can be attributed to service earned to date. This differs from the measure that was produced by the actuarial funding method used to determine contribution requirements.

Pension Benefit Obligation * 1/1/88

Retirees, Terminated Vested and Beneficiaries		$ 738,858
Actives		
Vested	$218,185	
Non-Vested	178,339	
		$ 396,524
		$1,135,382
Market Assets 1/1/88		$ 831,114
Unfunded Pension Benefit Obligation * 1/1/88		$ 304,268

* Based upon 5% investment return assumption; benefits not related to pay.

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V. Participant Data

CITY OF ROBBINSDALE FIRE RELIEF ASSOCIATION

AGE-SERVICE DISTRIBUTION

ALL ACTIVE PARTICIPANTS

	COMPLETED YEARS OF SERVICE							
AGE	00-01	02-04	05-09	10-14	15-19	20-24	25+	TOTAL
15-19	-	-	-	-	-	-	-	0
20-24	-	-	-	-	-	-	-	0
25-29	2	-	1	-	-	-	-	3
30-34	-	3	2	1	-	-	-	6
35-39	-	-	5	-	1	-	-	6
40-44	-	-	-	3	1	-	-	4
45-49	-	1	-	1	3	4	-	9
50-54	-	-	-	-	-	-	-	0
55-59	-	-	-	-	-	-	1	1
60-64	-	-	-	-	-	-	-	0
65+	-	-	-	-	-	-	-	0
TOTAL	2	4	8	5	5	4	1	29

AVERAGE AGE: 40.12 AVERAGE SERVICE: 11.66

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VI. Summary of Plan Provisions

Retirement Benefit *

1. Requirements for retirement:

   (a) 50 years of age, and

   (b) 20 years of service

2. Benefit:

   $225 per month plus $4.50 per year of service after 20 years (maximum $270)

Termination Benefit

Deferred annuity payable at normal retirement age, based on retirement formula and vested according to following schedule:

Years of Service	Vesting %
0-10	0.0%
10	25.0%
11	32.5%
12	40.0%
13	47.5%
14	55.0%
15	62.5%
16	70.0%
17	77.5%
18	85.0%
19	92.5%
20	100.0%

Temporary Disability Benefit:

(a) Requirement: Accident or sickness arising from service with the Fire Department.

(b) Benefit: $50 per week following the first week, maximum of 12 weeks.

Spouse's Benefit (Monthly Annuity):

(a) Before retirement of member: $2,500

(b) After retirement of member: 1/2 of retirement benefit paid to member.

Dismemberment Benefit:

(a) Requirement: Service related

(b) Benefit: According to a schedule, maximum benefit is $2,000.

* At retirement, participants can choose to receive a lump sum distribution rather than an annuity. With 20 years of service the lump sum equals $25,000. This increases $625 for each year of service credited after 20, to a maximum of $31,250.

VII. Actuarial Assumptions and Funding Method

This set of assumptions was used to calculate the Normal Cost, Actuarial Liability, and the Pension Benefit Obligation required for disclosure purposes.

Investment Return:	5% per year
Mortality:	1971 Group Anuity Table
Termination:	7% rate from age 20 to 30, grading to no terminations after age 45.
Disability:	75% of the Railroad Retirement Board Disability Rates
Dismemberment:	None assumed
Entry Age:	Age on employment date
Retirement Age:	Later of age 53 or 20 years of service
Normal Form of Payment:	Joint and 50% to survivor
Asset Basis:	Market Value
Actuarial Cost Method:	
Normal Cost and Actuarial Liability:	Entry Age Normal
Pension Benefit Obligation:	Projected Unit Credit

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