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**OSSEO VOLUNTEER FIRE
RELIEF ASSOCIATION**

Actuarial Valuation as of January 1, 1991



May, 1991

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OSSEO VOLUNTEER FIRE RELIEF ASSOCIATION

Actuarial Valuation as of January 1, 1991

In this report, we present the results of the actuarial valuation of the Osseo Volunteer Fire Relief Association as of January 1, 1991.

This report is divided into sections which:

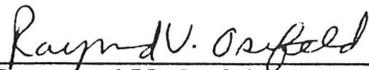
- Show the current financial and actuarial status of the plan
- Develop contribution requirements for 1991
- Supply information required for financial statement disclosures

The principal results of the valuation are summarized on page 1.

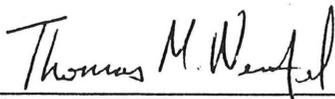
Our results include the effect of a proposed change in the normal retirement benefit from the current level of \$90.00 per month to \$125.00 per month for currently retired employees and for active employees with 20 years of service. The impact of this proposed change is to increase the actuarial liability for the currently retired member. These results are displayed in the proposed results included throughout this report.

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 the Plan as of January 1, 1991. It is considered our opinion that the actuarial methods and assumptions used here are as required by Minnesota Statutes.

DELOITTE & TOUCHE



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OSSEO VOLUNTEER FIRE
RELIEF ASSOCIATION

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I. SUMMARY AND COMPARISON OF RESULTS

Below summarizes the results of the actuarial valuation as of January 1, 1991.

Participants	<u>January 1, 1991</u>	
Actives	25	
Retirees	25	
Beneficiaries	0	
Disableds	0	
Deferred vesteds	<u>0</u>	
	50	
	<u>Current</u>	<u>Proposed</u>
Normal cost	\$ 9,382	\$ 12,980
Actuarial liability	\$367,698	\$510,242
Plan assets	\$431,972	\$431,972
Funded percentage	117%	85%
Unfunded actuarial liability	\$ (64,274)	\$ 78,270
Required contribution	\$ 9,851	\$ 18,962
Pension benefit obligation (GASB #5)	\$343,200	\$475,921
Unfunded pension benefit obligation (GASB #5)	\$(88,772)	\$ 43,949



II. FINANCIAL AND ACTUARIAL STATUS AS OF JANUARY 1, 1991

Assets

Market value of plan assets as of January 1, 1991 as reported by the Association is \$431,972. The breakdown is as follows:

(1) State of Minnesota	\$ 31,985
(2) Voyageur U.S. Government Securities Fund	193,821
(3) Keystone	24,297
(4) Norwest Bank	36,248
(5) First National Bank	51,617
(6) Kemper Investment Portfolio	25,336
(7) T.C.F. Investment Certificate	30,154
(8) Marquette Bank	<u>38,514</u>
(9) Total	<u>\$431,972</u>

Normal Cost Payable January 1, 1991

	<u>Current</u>	<u>Proposed</u>
(1) Service retirement benefits	\$9,251	\$12,849
(2) Death benefits	87	87
(3) Disability benefits	<u>44</u>	<u>44</u>
(4) Total	<u>\$9,382</u>	<u>\$12,980</u>



Actuarial Liability

	<u>Current</u>	<u>Proposed</u>
A. Active participants		
(1) Service retirement benefits	\$116,286	\$161,508
(2) Death benefits	918	918
(3) Temporary and permanent disability benefits	<u>237</u>	<u>237</u>
(4) Total for active participants	<u>\$117,441</u>	<u>\$162,663</u>
B. Inactive participants		
(1) Retired members	\$250,257	\$347,579
(2) Beneficiaries of retired members	0	0
(3) Disabled members	0	0
(4) Deferred vested members	<u>0</u>	<u>0</u>
(5) Total for inactive participants	<u>\$250,257</u>	<u>\$347,579</u>
C. Total actuarial liability	<u>\$367,698</u>	<u>\$510,242</u>
D. Plan assets	\$431,972	\$431,972
E. Funded percentage (D)/(C)	117%	85%
F. Unfunded actuarial liability (C) - (D)	\$(64,274)	\$ 78,270

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 liability. Per Minnesota statutes, the minimum obligation is the normal cost plus the amount needed to amortize fully the unfunded actuarial liability over 20 years. Of course, a quicker amortization schedule can be used if desired. The minimum obligation is shown below, including the state aid amount.

	<u>Current</u>	<u>Proposed</u>
Normal cost	\$9,382	\$ 12,980
Twenty-year amortization of unfunded actuarial liability	<u> 0</u>	<u> 5,982</u>
Total annual payment payable January 1, 1991	<u>\$9,382</u>	<u>\$18,962</u>
Total annual payment payable December 31, 1991	<u>\$9,851</u>	<u>\$19,910</u>



IV. FINANCIAL STATEMENT DISCLOSURES

In November of 1986, the Governmental Accounting Standards Board (GASB) issued Statement No. 5, which established standards for disclosure of pension information by state and local governmental employers. It requires such employers to compute and disclose a standardized measure of accrued pension liability 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 measure differs from the measure of accrued pension liability used to determine contribution requirements.

Pension Benefit Obligation as of January 1, 1991

	<u>Current</u>	<u>Proposed</u>
Retirees	\$250,257	\$347,579
Actives		
Vested	\$ 71,227	\$ 98,636
Nonvested	<u>21,716</u>	<u>29,706</u>
Total	<u>\$343,200</u>	<u>\$475,921</u>
Plan assets as of January 1, 1991	\$431,972	\$431,972
Unfunded pension benefit obligation as of January 1, 1991	\$(88,772)	\$ 43,949



**OSSEO VOLUNTEER FIRE
RELIEF ASSOCIATION**

AGE-SERVICE DISTRIBUTION OF ACTIVE PARTICIPANTS

<u>Age Group</u>	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25+</u>	<u>Total</u>
15-19	-	-	-	-	-	-	0
20-24	2	-	-	-	-	-	2
25-29	1	2	-	-	-	-	3
30-34	2	2	2	-	-	-	6
35-39	1	3	4	1	-	-	9
40-44	-	-	2	2	-	-	4
45-49	-	-	-	-	-	-	0
50-54	-	-	-	1	-	-	1
55-59	-	-	-	-	-	-	0
60-64	-	-	-	-	-	-	0
65+	-	-	-	-	-	-	0
TOTAL	6	7	8	4	0	0	25

AVERAGE AGE: 35.5

AVERAGE SERVICE: 9.3

VI. SUMMARY OF PLAN PROVISIONS AS OF JANUARY 1, 1991

Retirement Benefit	Normal retirement date is age 50 with 20 years of service in the Osseo Volunteer Fire Relief Association. Normal retirement benefit equals \$4.50 per month per year of service up to 30 years. Members who retired prior to adoption of current by-laws will have their benefit based on only 20 years of service.
Termination Benefit	Lump sum equal to \$100.00 multiplied by years of service, provided the member has at least 10 but less than 20 years of service.
Disability Benefit	Payable due to accident or sickness causing inability to perform duties of employment. Benefit equals \$20.00 per day to a maximum of 100 days in any one year period.
Survivors Benefit - Active Members	Benefit equals \$200.00 per year of service, to a maximum of \$4,000.00. Payable only upon death prior to retirement.
Survivors Benefit - Retired Members	Benefit equals \$500.00 plus the difference between \$4,000.00 and the pension amount already received by the member. If the member has received more than \$4,000.00, benefit equals \$500.00



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 Annuity Table.
Termination:	None.
Disability:	75% of the Railroad Retirement Board Disability Rates.
Entry Age:	Age on employment date.
Retirement Age:	Later of age 50 and 20 years of service.
Normal Form of Payment:	Life annuity.
Asset Basis:	Market value.



Actuarial Cost Method:

1. Normal Cost and Actuarial Liability:

Entry Age Actuarial Cost Method

Projected pension and ancillary benefits were determined for all active participants under the assumed retirement age. Cost factors designed to produce annual costs as a constant amount in each year from the assumed entry age to the assumed retirement age were applied to the projected benefits to determine the normal cost (the portion of the total cost of the plan allocated to the current year). The actuarial assumptions shown below for normal cost and actuarial accrued liability were used to determine the projected benefits and cost factors. The actuarial accrued liability for active participants (the portion of the total cost of the plan allocated to prior years) was determined as the excess of the actuarial present value of projected benefits over the actuarial present value of future normal costs.

The actuarial accrued liability for retired participants and their beneficiaries currently receiving benefits, active participants past the assumed retirement age, terminated vested participants and disabled participants was determined as the actuarial present value of the benefits expected to be paid. No normal costs are now payable for these participants.

2. Projected Benefit Obligation:

Projected Unit Credit Actuarial Cost Method

Pension benefits accrued to the valuation date and payable from the assumed retirement age were estimated for active participants under that age. Accrued pension benefits for active participants over the assumed retirement age and inactive participants were either supplied by the Association or estimated. The actuarial present value of accumulated plan benefits was determined by multiplying the accumulated pension benefits by single premium cost factors based on the applicable actuarial assumptions.