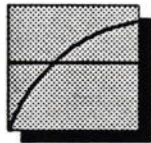


**Fairmont  
Policemen's Benefit Association**



**Annual Actuarial Valuation**

**December 31, 1990**

**Gabriel, Roeder, Smith & Company  
Actuaries and Consultants**



**FILE COPY**

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JUN 10 1991 LCP&R

June 3, 1991

Board of Trustees  
Fairmont Policemen's Benefit Association  
Fairmont, Minnesota

Submitted in this report are the results of the December 31, 1990 actuarial valuation of the assets, actuarial values and contribution requirements associated with the benefits provided by the Fairmont Policemen's Benefit Association.

The valuation results contained in Section A provide the actuarial information needed to determine the employer's "minimum obligation" effective January 1, 1992. Section A also contains comments regarding the valuation results.

The valuation was based upon information furnished by the Association concerning benefits, financial transactions, active members, terminated members, retirants and beneficiaries. Data was checked for year to year consistency but was not otherwise audited by us. This information is summarized in Section B.

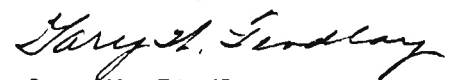
A description of the actuarial funding method and the risk experience assumptions used is contained in Section C. The economic risk experience assumptions, as well as the actuarial funding method to be used, are established by state law.

Information needed to comply with Statement No. 5 of the Governmental Accounting Standards Board is contained in Section D.

The actuarial valuation was prepared using generally accepted actuarial principles and practices based upon the methods, assumptions, summary of plan provisions and the member and financial data described in this report.

Respectfully submitted,

  
J. Daniel Petersen

  
Gary W. Findlay

**Section A**

**Valuation Results**

## COMMENTS

### Economic Assumptions and Financing Method

The economic assumptions of 5% annual investment return and 3-1/2% annual salary increases are established by state law. State law also specifies that the annual minimum obligation of the municipality shall be determined by adding (i) the employer normal cost percent times covered payroll to (ii) the level dollar amount required to amortize the unfunded actuarial accrued liability by December 31, 2010.

It is worth noting that when the same assumptions and methods are applied to plans which differ in nature, the valuation results may not be comparable. Caution should be exercised when attempting to assess the financial condition of one Association relative to another on the basis of valuation results produced using the assumptions and methods mandated by state law.

Fairmont Policemen's Benefit Association

CONTRIBUTION RATE TO PROVIDE BENEFITS

Member portion & Employer portion  
Effective January 1, 1992

Contributions for	If Paid Equally Throughout Year Normal Cost % of Active Payroll for 1992	+	UAAL Dollars
Normal cost of annuities:			
Age & service: to members	27.80%		
Age & service: to survivors	4.41		
Disability	2.21		
Death before retirement	1.65		
Refunds of member contributions	<u>0.33</u>		
Total Normal Cost	36.40%		
Amortization of unfunded actuarial accrued liabilities (UAAL) (19 year level dollar payment)			
Retired lives			\$ 44,457
Active members			<u>156,609</u>
Total			201,066
 Total Cost of Benefits	 36.40%	 +	 \$201,066
 Member contributions	 8.00%		
 COMPUTED EMPLOYER RATE:			
(a) If Paid Equally Throughout Year	28.40%	+	\$201,066
(b) IF PAID AT CALENDAR YEAR END	29.10%	+	\$206,031

Fairmont Policemen's Benefit Association  
Present Actuarial Condition

The Association's accrued actuarial assets were in excess of \$3.1 million on December 31, 1990 -- a considerable sum of money if unencumbered and allocated among a small group of persons. This is not the case with the Association's assets.

The following schedule puts the \$3.1 million into perspective by showing the relationship between accrued actuarial assets, actuarial accrued liabilities, and the number of persons with actual and potential claims on the Association's assets.

	<u>Accrued Actuarial Assets</u>	<u>Actuarial Accrued Liabilities</u>	<u>Unfunded Actuarial Accrued Liabilities</u>	<u>Percent Funded</u>
Retirants and Beneficiaries				
Retired Members (11)		\$3,268,944		
Surviving Spouses (3)		257,868		
Surviving Children (0)		<u>0</u>		
Total (14)	\$2,976,206	\$3,526,812	\$ 550,606	84.4%
Deferred Members (0)	0	0	0	0.0
Active Members (6)	<u>160,546</u>	<u>2,100,148</u>	<u>1,939,602</u>	7.6
Total	\$3,136,752	\$5,626,960	\$2,490,208	55.7%

Actuarial accrued liabilities represent the value, computed as of December 31, 1990 of:

- (i) retirement allowances likely to be paid the 14 retirants and beneficiaries; and
- (ii) the contributions assumed to have been made for the 6 active members from entry into the plan until December 31, 1990.

The value of retirement allowances likely to be paid the 14 retirants and beneficiaries, discounted for investment earnings and mortality, was computed to be \$3,526,812 as of December 31, 1990. To put this amount in perspective, the \$3,526,812, together with investment earnings, will just be sufficient to pay the 14 retirants and beneficiaries their allowances for their remaining lifetimes. This assumes the 14 retirants and beneficiaries live and die according to the assumed mortality and the \$3,526,812 is invested to yield an average annual return of 5.0% over the remaining lifetimes of the retirants and beneficiaries.

With respect to the active members, the actuarial accrued liability of \$2,100,148 represents the amount that would have been accumulated by December 31, 1990. This assumes the normal cost (which is expressed as a level percentage of pay) had been contributed from the date of hire until December 31, 1990 for the 6 actives, and that these amounts had earned 5.0% interest. It also assumes that the members in the past have lived, died, withdrawn, retired and received salary increases according to the actuarial assumptions shown in this report.

Historical Funding Ratio Schedule  
(\$ in thousands)

<u>Valuation Date December 31</u>	<u>Actuarial Accrued Liabilities</u>	<u>Accrued Actuarial Assets</u>	<u>Percent Funded</u>
1981	\$2,571	\$ 751	29.2%
1982	2,746	960	35.0
1983*	3,100	1,225	39.5
1984	3,214	1,623	50.5
1985	3,365	1,902	56.5
1986	3,528	2,185	61.9
1987	3,660	2,455	67.1
1988	4,055	2,656	65.5
1989#	5,474	2,981	54.5
1990	5,627	3,137	55.7

\* After change in assumptions.

# After court ruling on definition of prevailing pay.



Fairmont Policemen's Benefit Association  
 Computed Contributions - Comparative Schedule

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<u>Year Ended December 31</u>		<u>Total Normal Cost as a Percent of Valuation Payroll*</u>	<u>Contribution For Unfunded Actuarial Accrued Liabilities</u>
<u>Valuation</u>	<u>Fiscal</u>		
1981	1983	35.01%	\$119,191
1982	1984	34.85	119,063
1983	1985**	38.23	127,267
1984	1986	38.21	110,179
1985	1987	37.67	103,487
1986	1988	37.69	97,143
1987	1989	37.31	89,312
1988	1990	36.54	106,509
1989	1991#	36.55	195,178
1990	1992	36.40	201,066

\* Includes employee contributions.

\*\* After change in assumptions.

# After court ruling on definition of prevailing pay.

Fairmont Policemen's Benefit Association  
 CONTRIBUTION FOR CALENDAR YEAR EFFECTIVE JANUARY 1, 1992

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For any period of time the percent-of-payroll contribution rate is converted to dollars. The amount of dollars for any calendar year depends upon the results of the last actuarial valuation, and the timing of contributions within the year. The later the contribution date, the greater the dollar amount will be.

The municipality's dollar contribution for the year may be determined as follows:

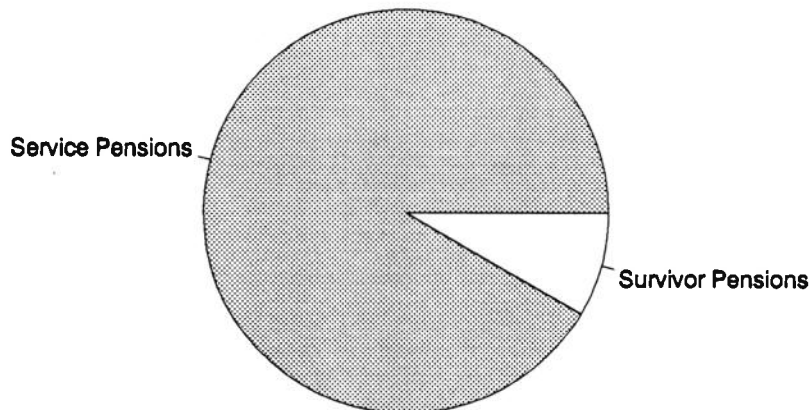
(1)	Estimated covered payroll for 1992		\$ _____
(2)	Total normal cost % from page A-2		36.40%
(3)	Total normal cost (Line 1 times line 2)		\$ _____
(4)	_____ x 1.035 1990 Administrative expenses paid from the Special Fund		_____
(5)	Amortization payment on UAAL from page A-2		201,066
(6)	Total contributions required (Line 3 plus line 4 plus line 5)		_____
(7)	Employee contributions (Line 1 times 8%)		\$ _____
(8)	(a) State amortization aid based on 12/31/78 UAAL of \$1,161,771	\$17,485	
	(b) State amortization aid based on 1984 legislation	<u>3,015</u>	
	(c) Total State amortization aid		20,500
(9)	Estimated insurance premium aid		_____
(10)	Estimated total contributions from other sources (Line 7 plus line 8 plus line 9)		_____
(11)	Employer's Minimum Obligation if payment is made in equal installments throughout the year (Line 6 minus line 10)		\$ _____
(12)	EMPLOYER'S MINIMUM OBLIGATION IF PAYMENT IS MADE IN TWO EQUAL INSTALLMENTS, JULY 30 & DECEMBER 30 (Line 11 times 1.0247)		\$ _____

**Section B**  
**Valuation Data**  
**and**  
**Summary of Benefit Provisions**

Fairmont Policemen's Benefit Association  
 Retirants and Beneficiaries December 31, 1990  
 By Type of Annuity Being Paid

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<u>Type of Annuity Being Paid</u>	<u>No.</u>	<u>Monthly Amounts</u>	<u>Computed Actuarial Accrued Liabilities</u>
Retirants receiving:			
Age & Service	11	\$19,280.77	\$3,268,944
Disability	<u>0</u>	<u>0.00</u>	<u>0</u>
Totals	11	19,280.77	3,268,944
Beneficiaries receiving:			
Spouse	3	1,754.00	257,868
Child	<u>0</u>	<u>0.00</u>	<u>0</u>
Totals	3	1,754.00	257,868
Totals	14	\$21,034.77	\$3,526,812



Monthly Amount Paid by Benefit

Fairmont Policemen's Benefit Association  
 Retirants and Beneficiaries December 31, 1990  
 By Attained Ages

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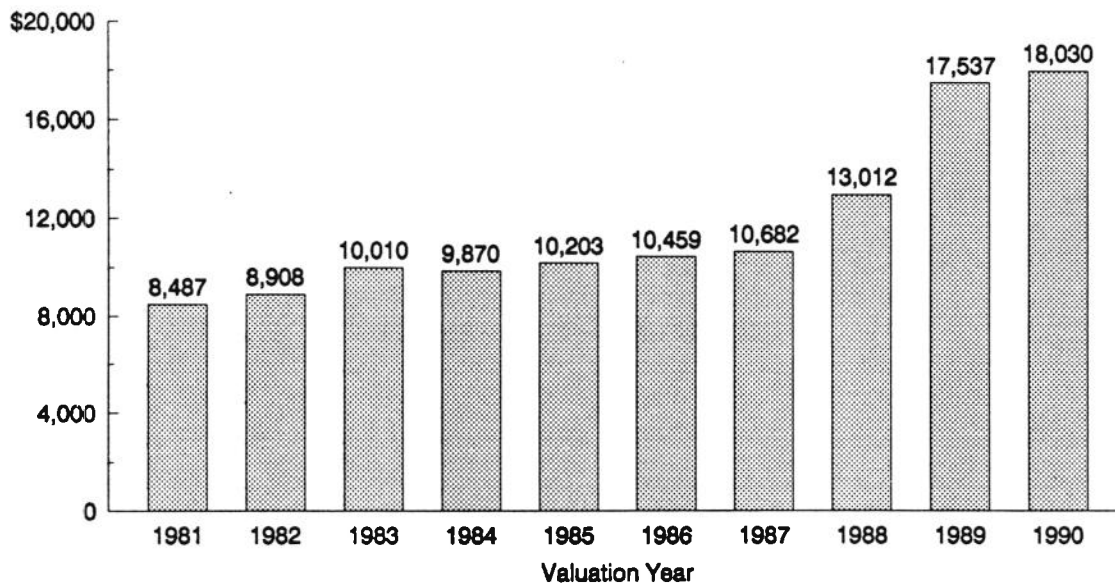
<u>Attained Ages</u>	<u>Number</u>		
	<u>Age &amp; Service</u>	<u>Disability</u>	<u>Death Before Retirement</u>
50-54	3		
55-59			1
60-64	1		
65-69	5		
70-74	2		
75-79	<u>2</u>		<u>—</u>
Totals	13		1

**Fairmont Policemen's Benefit Association**  
**Retirants and Beneficiaries Added to and Removed from Rolls**  
**Comparative Statement**

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<u>Valuation Date</u> <u>December 31</u>	<u>No. Added to Rolls</u>	<u>No. Removed from Rolls</u>	<u>Rolls End of Year</u>		<u>Discounted Value of Total Allowances</u>
			<u>No.</u>	<u>Annual Allowances</u>	
1981			10	\$ 84,870	\$1,294,526
1982			10	89,079	1,311,860
1983	1		11	110,106	1,740,007
1984	1	1	11	108,571	1,586,676
1985			11	112,238	1,582,140
1986			11	115,051	1,559,976
1987			11	117,507	1,534,608
1988	3		14	182,167	2,732,532
1989			14	245,520	3,553,860
1990			14	252,417	3,526,812

**Average Annual Allowances**



Fairmont Policemen's Benefit Association  
 Active Members December 31, 1990  
 By Attained Age and Years of Service

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Attained Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
40-44				2				2	\$ 83,341
45-49				<u>1</u>	<u>3</u>			<u>4</u>	<u>163,498</u>
Totals				3	3			6	\$246,839

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 45.5 years.

Service: 19.8 years.

Annual Pay: \$41,140.