Virginia
Fire Department Relief Association

Annual Actuarial Valuation
December 31, 1998

Gabriel, Roeder, Smith & Company

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GABRIEL, ROEDER, SMITH & COMPANY
Consultants & Actuaries

1000 Town Center • Suite 1000 • Southfield, Michigan 48075 • 248-799-9000 • 800-521-0498 • fax 248-799-9020

April 20, 1999

Board of Trustees
Virginia Fire Department Relief Association
Virginia, Minnesota

Submitted in this report are the results of the December 31, 1998 actuarial valuation of the assets, actuarial values and contribution requirements associated with the benefits provided by the Virginia Fire Department Relief Association.

The valuation results contained in Section A provide the actuarial information needed to determine the employer's "minimum obligation" effective January 1, 2000. 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.

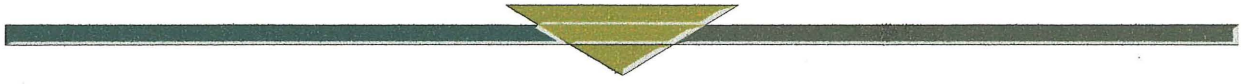
Information needed to comply with Statement No. 25 of the Governmental Accounting Standards Board is contained in Section D.

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,

Norman S. Losk Mary Ann Vitale

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.

CONTRIBUTION RATE TO PROVIDE BENEFITS

Member portion & Employer portion

Effective January 1, 2000

Contributions for	If Paid Equally Throughout Year Normal Cost % of Active Payroll for 2000	+	UAAL Dollars
Normal cost of annuities:			
Age & service: to members			
Age & service: to survivors			
Disability			
Death before retirement			
Refunds of member contributions			
Total Normal Cost	N.A.		
Amortization of unfunded actuarial accrued liabilities (UAAL) (11 year level dollar payment)			
Retired lives			$132,241
Active members			0
Total			132,241
Total Cost of Benefits	N.A	+	$132,241
Member contributions	N.A.		
COMPUTED EMPLOYER RATE:			
(a) If Paid Equally Throughout Year	N.A.	+	$132,241
(B) IF PAID AT CALENDAR YEAR END	N.A.	+	$135,507

Present Actuarial Condition

The Association's accrued actuarial assets were in excess of $2.6 million on December 31, 1998 -- 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 $2.6 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.

	Accrued Actuarial Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities	Percent Funded
Retirants and Beneficiaries				
Retired Members (16)		$3,492,600		
Surviving Spouses (4)		271,716		
Surviving Children (0)		0		
Total (20)	$2,638,631	$3,764,316	$1,125,685	70.1%
Deferred Members (0)		0	0	0.0
Active Members (0)		0	0	0.0
Total	$2,638,631	$3,764,316	$1,125,685	70.1%

Actuarial accrued liabilities represent the value of retirement allowances likely to be paid the 20 retirants and beneficiaries, discounted for investment earnings and mortality, and was computed to be $3,764,316 as of December 31, 1998. To put this amount in perspective, the $3,764,316, together with investment earnings, will just be sufficient to pay the 20 retirants and beneficiaries their allowances for their remaining lifetimes. This assumes the 20 retirants and beneficiaries live and die according to the assumed mortality and the $3,764,316 is invested to yield an average annual return of 5.0% over the remaining lifetimes of the retirants and beneficiaries.

Historical Funding Ratio Schedule

($ in thousands)

Valuation Date December 31	Actuarial Accrued Liabilities	Accrued Actuarial Assets	Percent Funded
1989	$4,206	$1,877	44.6%
1990	4,215	1,954	46.4
1991	4,336	2,062	47.5
1992#	4,355	2,097	48.2
1993	4,404	2,201	50.0
1994	4,359	2,127	48.8
1995	4,107	2,282	55.6
1996	4,002	2,326	58.1
1997	3,954	2,551	64.5
1998	3,764	2,639	70.1

After change in benefit provisions.

Computed Contributions - Comparative Schedule

Year Ended December 31		Total Normal Cost as a Percent of Valuation Payroll*	Contribution for Unfunded Actuarial Accrued Liabilities
Valuation	Fiscal		
1989	1991	26.58%	$182,363
1990	1992	26.62	182,565
1991	1993	22.48	189,888
1992	1994 #	22.56	195,416
1993	1995	N.A.	198,386
1994	1996	N.A.	209,769
1995	1997	N.A.	179,938
1996	1998	N.A.	174,195
1997	1999	N.A.	154,443
1998	2000	N.A.	132,241

* *Includes employee contributions.*

\# *After change in benefit provisions.*

Contribution for Calendar Year Effective January 1, 2000

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:

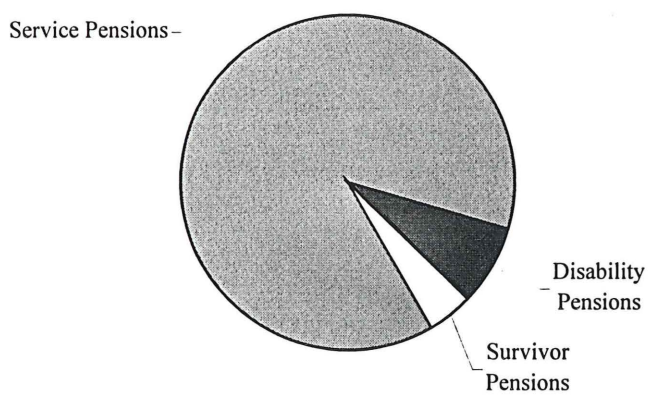
(1)	Estimated covered payroll for 2000		$_____	
(2)	Total normal cost % from page A-2		N.A.	
(3)	Total normal cost (Line 1 times line 2)			$ 0
(4)	_____ x 1.035 1998 Administrative expenses paid from the Special Fund			_____
(5)	Amortization payment on UAAL from page A-2			132,241
(6)	Total contributions required (Line 3 plus line 4 plus line 5)			_____
(7)	Employee contributions (Line 1 times 8%)		$ 0	
(8)	(a) State amortization aid based on 12/31/78 UAAL of $1,045,949	$14,841		
	(b) State amortization aid based on 1984 legislation	3,845		
	(c) Total State amortization aid		18,686	
(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 AT YEAR END (LINE 11 TIMES 1.0247)			$_____

Section B

Valuation Data and Summary of Benefit Provisions

Retirants and Beneficiaries December 31, 1998
By Type of Annuity Being Paid

Type of Annuity Being Paid	No.	Monthly Amounts	Computed Actuarial Accrued Liabilities
Retirants receiving:			
Age & service	15	$26,137	$3,230,244
Disability	1	1,348	262,356
Totals	16	27,485	3,492,600
Beneficiaries receiving:			
Spouse	4	2,317	271,716
Child	0	0	0
Totals	4	2,317	271,716
Totals	20	$29,802	$3,764,316



Monthly Amount Paid by Benefit

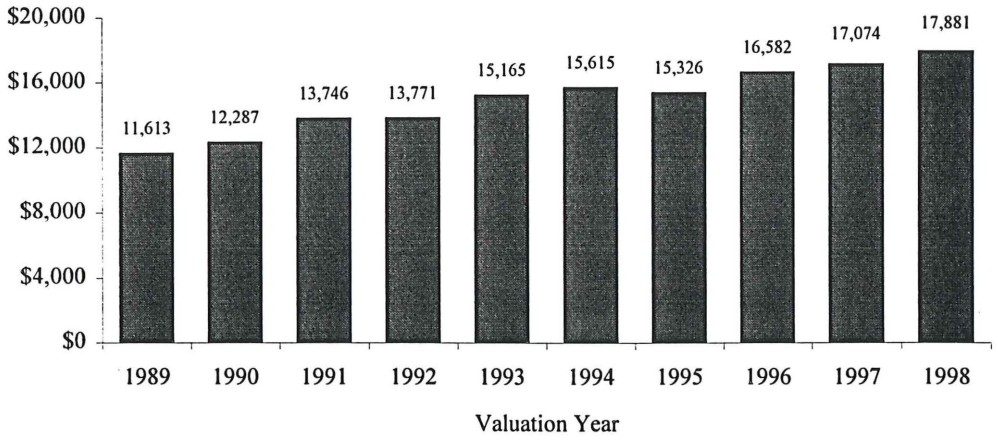
Retirants and Beneficiaries December 31, 1998
By Attained Ages

Attained Ages	Number		
	Age & Service	Disability	Death Before Retirement
55-59	1		
60-64		1	
65-69	5		
70-74	3		
75-79	5		
80-84	5	—	—
Totals	19	1	0

Retirants and Beneficiaries Added to and Removed from Rolls
Comparative Statement

Valuation Date December 31	No. Added to Rolls	No. Removed from Rolls	Rolls End of Year		Discounted Value of Total Allowances
			No.	Annual Allowances	
1989		2	26	$301,944	$3,782,928
1990		1	25	307,176	3,747,156
1991	1	3	23	316,160	4,125,444
1992			23	316,727	4,124,717
1993	1	1	23	348,792	4,404,024
1994			23	359,148	4,358,508
1995	2	2	23	352,505	4,107,420
1996		2	21	348,216	4,002,396
1997			21	358,548	3,954,324
1998		1	20	357,624	3,764,316

Average Annual Allowances



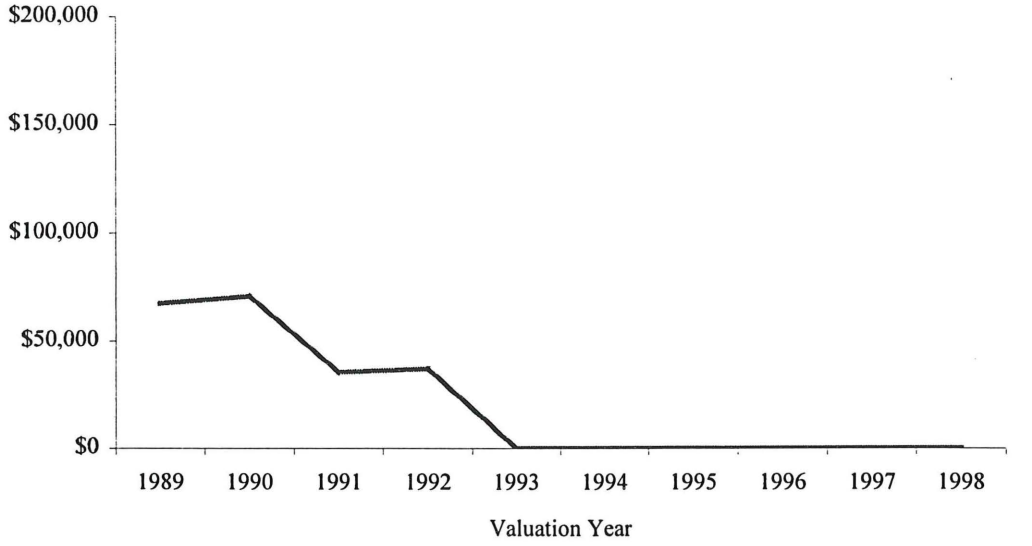
Active Members December 31, 1998
By Attained Age and Years of Service

At the end of 1998, the Association had no active members.

Comparative Schedule
Of Active Members

Valuation Date December 31	Active Members	Valuation Payroll	Average Age	Average Service	Average Pay	Average % Incr.
1989	2	$67,452	52.0 yrs.	22.0 yrs.	$33,726	7.1%
1990	2	70,724	53.0	23.0	35,362	4.9
1991	1	35,408	50.0	24.0	35,408	0.1
1992	1	36,931	51.0	25.0	36,931	4.3
1993	0	0	N.A.	N.A.	N.A.	N.A.
1994	0	0	N.A.	N.A.	N.A.	N.A.
1995	0	0	N.A.	N.A.	N.A.	N.A.
1996	0	0	N.A.	N.A.	N.A.	N.A.
1997	0	0	N.A.	N.A.	N.A.	N.A.
1998	0	0	N.A.	N.A.	N.A.	N.A.

Valuation Payroll



Brief Summary (12/31/98) of Benefit Provisions Evaluated and/or Considered

Age & Service Retirement

Eligibility. 20 years of service and 50 years of age.

Amount. For the first 20 years of service, 45% of final year's salary. For each year in excess of 20, an additional 1% is added to a maximum of 50% of final year's salary for 25 or more years of service. For each year over 25, an additional 1/2% of base pay is added to the benefit. (The latter additional benefit is not subject to the post-retirement provisions).

Disability Retirement

Eligibility. Totally or partially disabled to the extent that no longer able to perform duties of a fireman before being eligible for age & service retirement.

Amount.

Total Disability. 50% of final year's salary.

Partial Disability. 35% of final year's salary.

Member's Death While Active, Or In Deferred Status, Or Retired

Eligibility.

Spouse. Legally married to member before separation from service and residing with member at time of death. Benefits are payable for life.

Child. Younger than age 18.

Amount.

Spouse. 50% of benefit deceased was receiving or would have been eligible to receive. Based on minimum of 20 years of service.

Child. $300 per child per year.

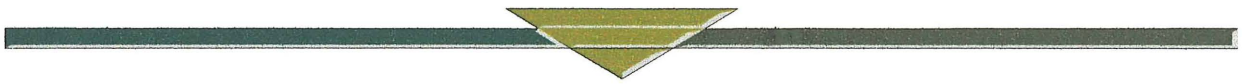
Maximum Family Benefit. Amount deceased was receiving or would have been eligible to receive.

Vested Deferred. 20 years of service and separated before age 50. Payment beginning is deferred to attainment of age 50.

POST-RETIREMENT ADJUSTMENTS ("ESCALATOR"). Benefit payments to retired members at age 55 and eligible surviving spouses are increased each January by the lesser of the following percentages: (1) 3-1/2% or (2) the preceding year's percentage increase in the salary of a first grade firefighter.

MEMBER CONTRIBUTIONS. 8% of salary. Total contributions are refundable, without interest, if no monthly benefit is payable upon separation from service. Upon the death of an active or retired member with no surviving spouse or dependent children, any unused remaining member contributions shall be paid to a surviving designated beneficiary or estate in monthly amounts equal to the surviving spouse's benefit.

Section C



Valuation Methods and Assumptions

Valuation Methods and Assumptions

The Entry Age Normal Cost method was used to determine the normal cost of all benefits. The rate of investment return (interest) as required by state law used in making the valuation was 5.0 percent per annum, compounded annually.

Mortality Table*

Sample Ages	Single Life Values: Present Value of $1 Monthly				Future Life Expectancy (Years)	
	Level For Life		Increasing 3.5% Yearly			
	Men	Women	Men	Women	Men	Women
45	$177.21	$189.58	$280.82	$314.75	29.50	34.00
50	163.12	177.21	246.55	280.82	25.20	29.50
55	147.50	163.12	212.60	246.55	21.16	25.20
60	130.52	147.50	179.49	212.60	17.42	21.16
65	112.87	130.52	148.28	179.49	14.05	17.42
70	95.20	112.87	119.70	148.28	11.09	14.05
75	77.77	95.20	93.83	119.70	8.52	11.09
80	61.71	77.77	71.69	93.83	6.39	8.52

* *UP-1984 Table set forward 2 years for males and set back 3 years for females.*

Section D

Financial Reporting

Statement Of Plan Net Assets
Market Value
As Of December 31, 1997 And 1998

	1998	1997
Assets:		
Cash and short-term investments	$150,073	$224,008
Receivables:		
Accrued interest	-	-
Accounts Payable:	-	-
Investments, at fair value:		
Common Stocks	830,198	937,031
Mutual Funds	-	-
Mortgages	-	-
Bonds	1,818,620	1,630,566
Real Estate	-	-
Total	$2,648,818	$2,567,597
Net assets held in trust for pension benefits*	$2,798,891	$2,791,605

* *A schedule of funding progress for the plan is presented on page D-4.*

Statement Of Changes In Plan Net Assets
For The Fiscal Years Ended December 31, 1997 and December 31, 1998

	December 31, 1998	December 31, 1997
Additions:		
Contributions		
Employer	$ 259,234	$ 348,408
Plan members	-	-
Total	259,234	348,408
Investment Income	216,091	328,592
Total Additions	$ 475,325	$ 677,000
Deductions:		
Benefits Paid	352,084	347,302
Refund of Contributions	-	-
Expenses	28,063	31,767
Total Deductions	$ 380,147	$ 379,069
Net Increase	$ 95,178	$ 279,931
Net assets held in Trust Fund:		
Beginning of year	$2,791,605	$2,493,674
End of year	$2,886,783	$2,791,605

Plan Description. The Virginia Fire Department Relief Association is a single-employer defined benefit pension plan that covers the fire department employees of the City of Virginia.

The plan provides retirement, disability, and death benefits to plan members and their beneficiaries.

Contributions. Plan members contributions as specified on page B-7.

The employer's funding policy provides for periodic employer contributions based upon a ***fundamental financial objective of having rates of contribution which remain relatively level from generation to generation of the City of Virginia citizens.*** To determine the employer contribution rates and to assess the extent to which the fundamental financial objective is being achieved, the System has actuarial valuations prepared annually. In preparing those valuations, the entry age actuarial cost method is used to determine normal cost and actuarial accrued liabilities.

Unfunded actuarial accrued liabilities (full funding credit) are amortized by level percent-of-payroll contributions over a period of future years as outlined on page A-2.

On the basis of the December 31, 1998 actuarial valuation, the employer rates were determined to be as follows:

Contributions for	
Normal Cost as a Percent of Active Member Payroll	**Unfunded Actuarial Accrued Liabilities**
N.A.	$132,241

Required Supplementary Information
Schedule of Funding Progress
(Dollar amounts in thousands)

Actuarial Valuation Date	(a) Actuarial Value of Assets	(b) Entry Age Actuarial Accrued Liability (AAL)	(b)-(a) Unfunded AAL (UAAL)	(a)/(b) Funded Ratio	(c) Covered Payroll	[(b-a)/c] UAAL as a Percent of Covered Payroll
12/31/92*	$2,097	$4,355	$2,258	48.2%	$37	6,102.7%
12/31/93	2,201	4,404	2,203	50.0	0	N.A.
12/31/94	2,127	4,359	2,232	48.8	0	N.A.
12/31/95	2,282	4,107	1,825	55.6	0	N.A.
12/31/96	2,326	4,002	1,676	58.1	0	N.A.
12/31/97	2,551	3,954	1,403	64.5	0	N.A.
12/31/98	2,638	3,764	1,126	70.1	0	N.A.

* After change in benefit provisions.

Schedule of Employer Contributions

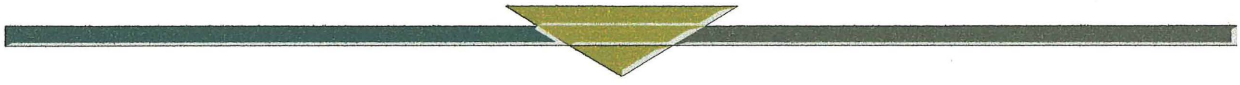
Year Ended December 31	Annual Employer Contributions
1992	$292,945
1993	207,517
1994	207,870
1995	212,478
1996	145,670
1997	348,408
1998	259,234

Summary of Actuarial Methods and Assumptions

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation date	December 31, 1998
Actuarial cost method	Entry age actuarial cost method
Amortization method	Level percent of payroll
Remaining amortization period	See page A-2
Asset valuation method	Mandated by state law
Actuarial assumptions:	
Investment rate of return (net)	5.0%
Projected salary increases	3.5%
Assumed rate of payroll growth	3.5%
Assumed rate of membership growth	0%
Cost-of-living adjustments	3.5%

Appendices



Appendix I

Financial Principles and Operational Techniques

Promises Made, and Eventually Paid. As each year is completed, the plan in effect hands an "IOU" to each member then acquiring a year of service credit -- the "IOU" says: "The Pension Plan owes you a portion of your retirement benefits, payments to be made in cash, commencing when you qualify for retirement."

The related key financial questions are: Which generation of taxpayers contributes the money to cover the IOU? The present taxpayers, who receive the benefit of the member's present year of service? Or the future taxpayers, who happen to be in town paying taxes at the later time when the IOU becomes a cash demand?

A sound principle of sound retirement plan financing is to have this year's taxpayers contribute the money to cover the IOUs being handed out this year. By following this principle, THE CONTRIBUTION RATE WILL REMAIN APPROXIMATELY LEVEL FROM GENERATION TO GENERATION -- our children and grandchildren will contribute the same percents of active payroll we contribute now.

A Pension Plan Becomes Closed

The diagram in this appendix shows two important activities which occur after a plan has been closed to employees hired in the future.

Cash benefits paid continue to increase for decades, while active member payroll begins to decrease to zero.

Funding Method. A funding method is the long-term, planned pattern for employer contributions.

For an open plan (a plan covering future employees), the level-percent-of-active-member payroll funding method is the basic funding method.

The level-percent funding method can also be applied to a closed plan. However, the resulting contribution percent usually jumps to a high rate, because the number of covered active members is decreasing.

A preferred funding method for a closed plan consists of: level-percent funding for normal cost (the cost of members' service now being rendered); plus a level dollar contribution for unfunded actuarial accrued liabilities over a limited period of years. The period of years must be limited so that plan assets don't become zero while benefits are still payable.

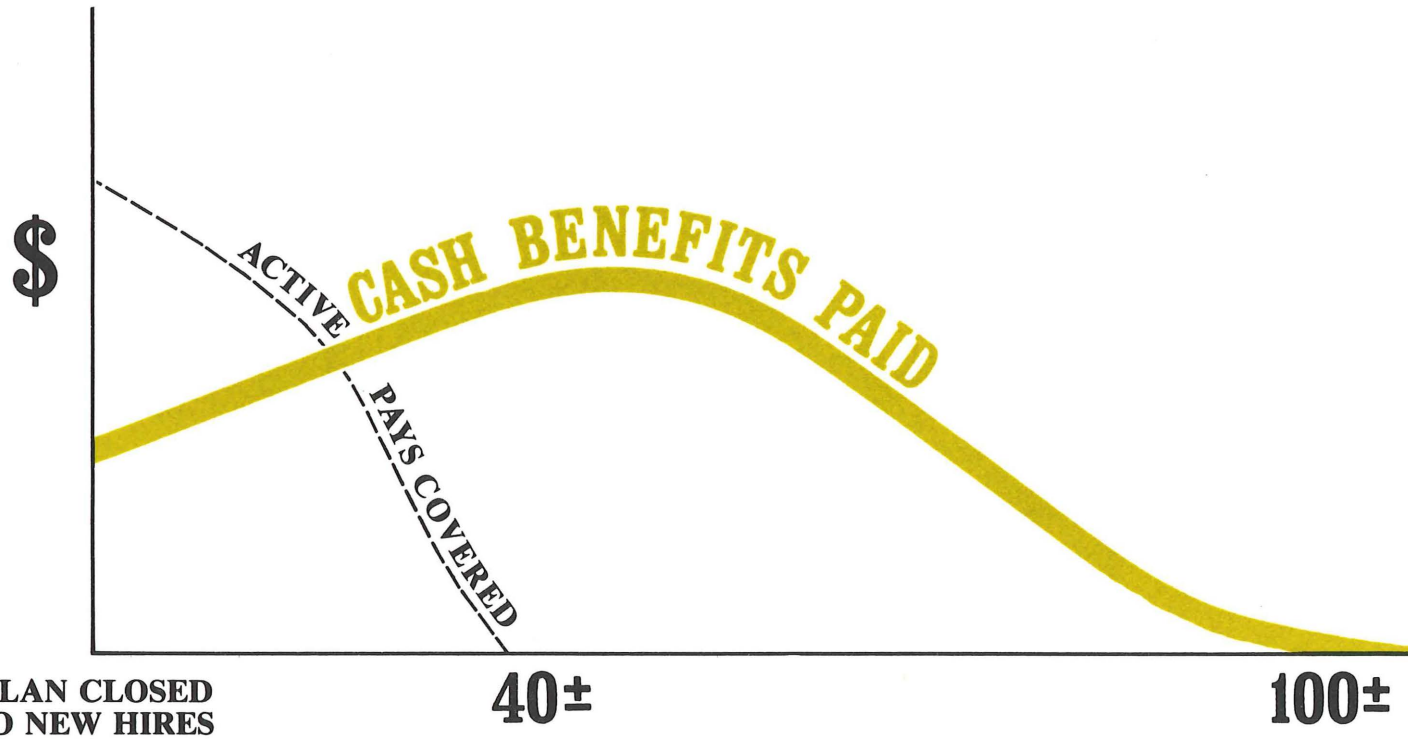
Computing Contributions To Support Plan Benefits. From a given schedule of benefits and from the employee data and asset data furnished him, the actuary determines the contribution rates to support the benefits by means of an actuarial valuation and a funding method.

In making an actuarial valuation, assumptions must be made regarding anticipated financial experiences for the next year and for decades in the future. Only the subsequent actual experience of the plan can indicate the degree of accuracy of the assumptions.

Reconciling Differences Between Assumed Experience and Actual Experience. Once actual experience has occurred and been observed, it will not coincide exactly with assumed experience, regardless of the wisdom of the assumptions or the skill of the actuary and the millions of calculations he made. The future can be predicted with considerable but not 100% precision, except for inflation which seems to defy reliable prediction.

A well-managed plan copes with these continually changing differences by having periodic actuarial valuations. Each actuarial valuation is a complete recalculation of assumed future experience, taking into account all past differences between assumed and actual experience. The result is continuing adjustment in financial position.

A CLOSED PENSION PLAN



A plan becomes closed when no new hires are admitted to active membership. The persons covered by the plan at the time of closing continue their normal activities and continue to be covered by the plan, until the last survivor dies.

CASH BENEFITS LINE. After a pension plan becomes closed, the usual pattern is for cash benefits to continue to increase for decades of time. Eventually the cash benefits will peak, and then gradually decrease over more decades of time, ultimately to zero. The last cash benefit is likely to occur a century after the time the plan is closed.

The precise amounts of cash benefits cannot be known now, and must be estimated by assumptions of future experiences in a variety of financial risk areas.

Appendix II

Meaning of Unfunded Accrued Liabilities

Almost every pension plan (public or private) has "unfunded accrued liabilities," so whatever they are, they aren't rare. Since the term is not part of everyday conversation, it needs some definition.

"Accrued liabilities" are the present value $ of plan promises to pay benefits in the future based upon service already rendered - - - a liability has been established ("accrued") because the service has been rendered, but the resulting monthly cash benefit may not be payable until years in the future. Accrued liabilities $ are the result of complex mathematical calculations, which are made by the plan's actuary (which is the name given to the specialist who makes such calculations).

If "accrued liabilities" at any time exceed the plan's accrued assets (cash & investments), the difference is "unfunded accrued liabilities." This is the common condition. If the plan's assets equalled the plan's "accrued liabilities," the plan would be termed "fully funded." This is a rare condition.

Each time a plan adds a new benefit which applies to service already rendered, an "accrued liability" is created, which is also an "unfunded accrued liability" because the plan can't print instant cash to cover the accrued liability. Payment for such unfunded accrued liabilities is spread over a period of years, commonly in the 20-40 year range.

Unfunded accrued liabilities can occur in another way: If actual financial experience is less favorable than assumed financial experience, the difference is added to unfunded accrued liabilities. In plans where plan benefits are directly related to an employee's pay near time of retirement (a common plan provision) rather than his average pay throughout his working career, unfunded accrued liabilities have been increasing in recent years because unexpected rates of pay increase have created additional accrued liabilities which could not be matched by reasonable investment results. Some of these unexpected pay increases are the direct result of inflation, which is a very destructive force on financial stability.

The existence of unfunded accrued liabilities is not bad, then (any more than a mortgage on your house is "bad"), but the changes from year to year in amount of unfunded accrued liabilities are important - - - "bad" or "good" or somewhere in between.

Nor are unfunded accrued liabilities a bill payable immediately (your food costs are payable immediately), but it is important that policy-makers prevent the amount from becoming unreasonably high and it is vital that your plan have a sound method for making payments toward them so that they are controlled.

The existence of large amounts of unfunded accrued liabilities indicates that total contributions in past years were less than level - - - an almost certain history if retired life liabilities are not fully funded now.