# Albert Lea
# Firemen's Relief Association

## Annual Actuarial Valuation

**December 31, 1988**



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

AU00049-03 (11/15/88)

# Office of the State Auditor
# Firefighters Relief Association
# Reporting Form


**Office of the State Auditor**

**525 Park Street**
**St. Paul, Minnesota 55103**
**(612) 297-3685**

## Firefighters Relief Association

**Name** ALBERT LEA

**County of** FREEBORN

## For the Year Ended December 31, 1988

1. *For associations with assets or liabilities of less than $200,000, please complete this form, per Minnesota Statute Section 69.051 subdivision 1a, and return it by March 31.*
2. *For associations with assets or liabilities of* ***at least $200,000*** *per Minnesota Statutes Section 69.051 subdivision return this form along with an audited financial statement by June 30.*

MS 69.77

# Firefighters Relief Association Reporting Form
## Year Ended December 31, 1988

Name of Relief Association: Albert Lea Firemen's Relief Association

Mailing Address: 221 East Clark Street

City/State: Albert Lea, MN  Zip Code: 56007

TYPE OF SERVICE PENSION BENEFIT PROVIDED IN BYLAWS:

☐ Lump sum ☒ Monthly or other annuity ☐ Defined contribution (split-the-pie)

☐ None ☐ Other (specify) _____

### FIRE DEPARTMENT REPORT

1. The Fire Department your Relief Association is associated with is:
   ☒ Municipal Fire Department ☐ Independent Nonprofit Firefighting Corporation
2. The Fire Department is:
   ☒ Salaried (career) ☐ Volunteer ☐ Salaried and Volunteer
3. Number of active firefighters:

| | |
|---|---|
| Salaried (career) | 24 |
| Volunteer | |
| Total number of members | 24 |

### RELIEF ASSOCIATION MEMBERSHIP REPORT

| | |
|---|---|
| 4. Number of active members | 17 |
| 5. Number of retired and/or disabled members receiving benefits | 17 |
| 6. Number of retired members on deferred pension rolls | - |

### BOND REPORT

7. Is the Secretary of the Relief Association bonded?
   ☒ Yes ☐ No  Amount of bond $ 5,000
8. Is the Treasurer of the Relief Association bonded?
   ☒ Yes ☐ No  Amount of bond $ 25,000

**NOTE:** No treasurer of a relief association governed by sections 69.77 (career or paid) shall enter upon his duties until he has given the association a bond in a reasonable amount acceptable to the municipality for faithful discharge of his duties.

No treasurer of a relief association governed by sections 69.771 to 69.776 shall enter upon the duties of the office until the treasurer has given the association a faithful performance bond in the amount equal to ten percent of the assets of the relief association; however, the bond need not exceed $500,000.

# Firefighters Relief Association Reporting Form
# As of December 31, 1988

## BYLAWS REPORT

| TYPE AND AMOUNT OF OTHER BENEFITS | | AMOUNT (enter N/A if not applicable) |
|---|---|---|
| 1. **Sick:** ☐ Lump Sum ☐ Weekly ☐ Monthly ☐ Year of Service | 1 | $ N/A |
| 2. **Disability:** ☐ Lump Sum ☐ Weekly ☒ Monthly ☐ Year of Service | 2 | $ 50% of salary |
| 3. **Funeral:** ☐ Lump Sum ☐ Year of Service ☐ Other _____ | 3 | $ N/A |
| 4. Accident and Health Insurance (Volunteer Firemans Benefit Association or other) | 4 | ☐ Yes ☒ No |
| **MINIMUM REQUIREMENTS FOR SERVICE PENSION** | | |
| 5. Minimum Retirement Age | 5 | 50 |
| 6. Minimum Years as an Active Member of Fire Department | 6 | 20 |
| 7. Minimum Years as an Active Member of Relief Association | 7 | 20 |

**COMPLETE SECTION WHICH APPLIES**
(Lump Sum, Monthly Annuity, or Defined Contribution)

**LUMP SUM PENSION BENEFITS (or lump sum paid in installments)**

**Requirements for full vesting**

| | | |
|---|---|---|
| 8. Number of Years of Service | 8 | |
| 9. Amount per Year of Service | 9 | $ |
| 10. Do Bylaws Provide for Early Vesting? | 10 | ☐ Yes ☐ No |
| **Benefit payable for each year of service** | | (check one) |
| 11. $1.00 or more but less than $50.00 | 11 | |
| 12. $50.00 or more but less than $100.00 | 12 | |
| 13. $100.00 or more but less than $200.00 | 13 | |
| 14. $200.00 or more but less than $300.00 | 14 | |
| 15. $300.00 or more but less than $600.00 | 15 | |
| 16. $600.00 or more but less than $1,000.00 | 16 | |
| 17. $1,000.00 or more but less than $2,000.00 | 17 | |
| 18. $2,000.00 or more | 18 | |

**MONTHLY ANNUITY PENSION BENEFIT**

| | | |
|---|---|---|
| 19. Date of Most Recent Actuarial Valuation | 19 | Dec. 1988 |
| 20. Date Filed with State Auditor* | 20 | June, 1989 |
| **Requirements for full vesting** | | |
| 21. Number of Years of Service | 21 | 20 |
| 22. Amount per Month per Year of Service (1) 50% of salary after | 22 | $ (1) |
| 23. Do Bylaws Provide for Early Vesting? 20 years of service | 23 | ☐ Yes ☒ No |
| **Benefit payable for each month of service** | | (check one) |
| 24. Less than $2.00 (2) 1% of final salary after | 24 | N/A - Amount |
| 25. $2.00 or more but less than $4.00 20 years and an additional ½% | 25 | based on % |
| 26. $4.00 or more of base pay per year over | 26 | of salary |
| 27. Benefits after 20 years (amount per month of service) 25 years | 27 | $ (2) |

**DEFINED CONTRIBUTION (split-the-pie)**

| | | |
|---|---|---|
| 28. Please submit a schedule of total assets accrued to each member's account and current year's calculation. Attach schedule. | 28 | ☐ Yes ☐ No |

**NOTE:** *All relief associations associated with a volunteer fire department and paying a monthly annuity must submit an actuarial survey every four years by July 1 of the year following the date of which the survey is prepared to the parties listed below. All relief associations associated with a salaried (career) fire department must submit an actuarial survey annually by July 1 to the parties listed below.

a) State Auditor
b) Your Municipality
c) Legislative Commission on Pensions and Retirement
d) Legislative Reference Library

If your relief association bylaws provide lump sum benefits, information for questions 7, 10 and 11 may be obtained by completing Schedules I, II, and III. If your bylaws provide monthly annuity benefits, refer to your most recent actuarial survey. If your bylaws provide defined contribution benefits (split-the-pie), complete questions 1-9.

| FINANCIAL CONDITION | | SPECIAL FUND | | GENERAL FUND |
|---|---|---|---|---|
| **December 31, 1988** | | **AMOUNT** (Omit Cents) | | **AMOUNT** (Omit Cents) |
| **ASSETS** | | | | |
| 1. Cash | 1 | 23,595 | 1 | |
| 2. Investments | 2 | 4,097,084 | 2 | |
| 3. Accrued Interest Receivable | 3 | 34,836 | 3 | |
| 4. Other Receivables | 4 | | 4 | |
| 5. TOTAL ASSETS | 5 | 4,155,515 | 5 | |
| **LIABILITIES AND FUND BALANCE** | | | | |
| 6. Payables | 6 | 10 | 6 | |
| 7. Required Reserves (Accrued Liability — Schedule 1 line B) | 7 | 8,003,821 | 7 | xxxxxxxxxxxxx |
| 8. Surplus or (Unfunded Accrued Liability)/Fund Balance | 8 | ( 3,848,316) | 8 | |
| 9. Funding Ratio (line 5 — line 6 ÷ line 7) | 9 | 51.9% | 9 | xxxxxxxxxxxxx |
| 10. Normal Cost — 1988 (see schedule 1, line C, filed by August 1, 1987 | 10 | 173,438 | 10 | xxxxxxxxxxxxx |
| 11. Required Contribution to Amortize Unfunded Accrued Liability | 11 | 156,021 | 11 | xxxxxxxxxxxxx |
| 12. CASH & INVESTMENTS DECEMBER 31, 1987 | 12 | 3,219,493 | 12 | |

| REVENUES 1988 | | AMOUNT | | AMOUNT |
|---|---|---|---|---|
| 13. State Fire Aid | 13 | 76,847 | 13 | xxxxxxxxxxxxx |
| 14. City Contributions | 14 | 234,861 | 14 | xxxxxxxxxxxxx |
| 15. Members' Salary Deductions or Contributions | 15 | 41,065 | 15 | xxxxxxxxxxxxx |
| 16. Members' Dues | 16 | | 16 | |
| 17. Interest Earned | 17 | 152,853 | 17 | |
| 18. Dividends Increase in Acc. Int. Rec. (7,777) | 18 | 18,171 | 18 | |
| 19. Transfers In Misc. 702 | 19 | | 19 | |
| 20. Other (Identify) Gain on investments 662,659 | 20 | 655,584 | 20 | |
| 21. TOTAL REVENUES (lines 13 through 20) | 21 | 1,179,381 | 21 | |

| EXPENSES/EXPENDITURES 1988 | | AMOUNT | | AMOUNT |
|---|---|---|---|---|
| **SERVICE PENSIONS** | Number | | | |
| 22. Retired (Number and Amount) (List names and amounts paid below) | 13 | 214,172 | * 22 | xxxxxxxxxxxxx |
| 23. Survivors—Spouses and Children (Number and Amount) | 4 | 42,793 | 23 | xxxxxxxxxxxxx |
| 24. Permanent Disability (Number and Amount) | | | 24 | xxxxxxxxxxxxx |
| **OTHER BENEFITS** | | | | |
| 25. Sick or Temporary Disability (Number and Amount) | | | 25 | xxxxxxxxxxxxx |
| 26. Death and Funeral (Number and Amount) | | | 26 | xxxxxxxxxxxxx |
| **ADMINISTRATIVE EXPENSES** | | | | |
| 27. Salaries | 27 | 1,200 | 27 | |
| 28. Conventions and Meetings | 28 | | 28 | |
| 29. Dues | 29 | 100 | 29 | |
| 30. Actuarial Valuation and Audit | 30 | 3,153 | 30 | |
| 31. Faithful Performance Bond | 31 | 350 | 31 | xxxxxxxxxxxxx |
| 32. Other (Identify) Inv. Mgmt. Fee 15,728 Other Admin. Exp 499 | 32 | 16,227 | 32 | |
| **OTHER** | | | | |
| 33. Transfers Out | 33 | xxxxxxxxxxxxxxx | 33 | |
| 34. Other (Identify) | 34 | | 34 | |
| 35. TOTAL EXPENSES/EXPENDITURES (lines 22 through 34) | 35 | 278,195 | 35 | |
| 36. CASH AND INVESTMENTS DECEMBER 31, 1988 (line 12 + line 21 − line 35) | 36 | 4,120,679 | 36 | |

37. Was the Certification of Special Fund Financial Requirements for 1989 (Schedules I, II, III) certified to your municipal governing body (for municipal fire department) or fire department (for independent nonprofit firefighting corporation) by August 1, 1988, in accordance with appropriate general law or special law? ☐ Yes ☐ No ☐ N/A Please attach a copy of Schedules I, II, III to this report.

| * Pensions Paid in 1988 | Names | Amount Paid |
|---|---|---|
| | Schedule Attached | $ 214,746 |
| | | $ |
| | | $ |

ALBERT LEA FIREFIGHTERS RELIEF ASSOCIATION
STATE REPORTING FORM SCHEDULES
December 31, 1988

Page 3 PENSIONS PAID IN 1988

| | |
|---|---|
| A. BIEDERMAN | $ 16,399 |
| R. DAHL | 19,833 |
| G. DOTY | 20,118 |
| D. DUDLEY | 16,304 |
| K. FRANTUM | 14,009 |
| E. GRINOLDS | 30,091 |
| P. HAGEN | 17,108 |
| J. HANSON | 18,124 |
| R. HAUKOOS | 15,671 |
| J. NELSON | 14,289 |
| R. PETERSON | 15,222 |
| J. SPARK | 16,766 |
| C. THROLSON | 240 |
| TOTAL | $ 214,174 |

# Firefighters Relief Association Reporting Form
## As of December 31, 1988

### INVESTMENT REPORT

| | PURCHASE DATE | INTEREST RATE | INSTRUMENT NUMBER | NUMBER OF SHARES | TYPE OF INVESTMENT | NAME OF INVESTMENT | AMOUNT 12-31-88 |
|---|---|---|---|---|---|---|---|
| 1 | A | A | A | A | A | Short Term Inv. Fund | $ 407,562 |
| 2 | A | A | A | A | A | U.S. Gov't Agencies | $ 1,072,371 |
| 3 | A | A | A | A | A | Corporate Bonds | $ 50,000 |
| 4 | A | A | A | A | A | Managed Bond Fund | $ 299,989 |
| 5 | A | A | A | A | A | Corporate Stock | $ 518,714 |
| 6 | B | B | B | B | B | St. of MN Trust Income | $ 733,928 |
| 7 | B | B | B | B | B | State of Minnesota Guaranteed Return Account | $ 1,014,520 |
| 8 | | | | | | | $ |
| 9 | | A - | These investments are included in trust account | | | | $ |
| 10 | | | 1-30684-00-4 at Norwest Bank - Minneapolis, MN | | | | $ |
| 11 | | B - | These investments are included in Minnesota State | | | | $ |
| 12 | | | Board of Investments Trust Account. | | | | $ |
| 13 | | | | | | | $ |
| 14 | | | | | | | $ |
| 15 | | | | | | | $ |
| 16 | | | | | | | $ |
| 17 | | | | | | | $ |
| 18 | | | | | | | $ |
| 19 | | | | | | | $ |
| 20 | | | | | | TOTAL | $ 4,097,084 |

Explanation of column headings:

| | |
|---|---|
| Purchase Date | The date the purchase was made |
| Interest Rate | The interest rate (if applicable) |
| Instrument Number | The identifying number of the investment certificate |
| Number of Shares | For common and preferred stock investments/for bonds and CD's use face value |
| Type of Investment | Certificate of deposit, common stock, bond, etc. |
| Name of Investment | Such as U.S. Treasury, or the name of the company in which stock was purchased |
| Amount | The purchase price including commissions, fees and any other applicable costs incurred when buying the investment. Include reinvested interest. |

## CERTIFICATION BY SECRETARY AND TREASURER OF RELIEF ASSOCIATION AND MUNICIPAL FIRE DEPARTMENT OR INDEPENDENT NONPROFIT FIREFIGHTING CORPORATION

We certify that to the best of our knowledge and belief, the facts presented in this report are true and correct.

| | | |
|---|---|---|
| William A. Streets<br>Signature of Secretary of Relief Association | 377-4340<br>Business Phone | June 28, 1989<br>Dated |
| John Eisterhold<br>Signature of Treasurer of Relief Association | 377-4340<br>Business Phone | June 28, 1989<br>Dated |
| Sandi Behrens<br>Signature of Municipal Clerk OR if Independent Nonprofit Firefighting Corporation the Municipal Clerk of largest municipality in population contracting with Independent Nonprofit Firefighting Corporation | (507) 377-4320<br>Business Phone | June 21, 1989<br>Dated |
| Signature of Secretary of Independent Nonprofit Firefighting Corporation (if applicable) | Business Phone | Dated |

## CERTIFICATION BY INDEPENDENT PUBLIC ACCOUNTANT

Pursuant to Minnesota Statutes Section 69.051 subdivision 1a(b), we have examined the preceding statements of revenues, expenditure/expenses and fund balances of the Special Fund and the General Fund (page 3) and hereby certify that this is the financial condition of the Special Fund and the General Fund except as noted below:

| | |
|---|---|
| Larry D. Trampel<br>PRINT NAME OF AUDITOR/ACCOUNTANT | Bertram Cooper & Co.<br>PRINT NAME OF FIRM |

115 N. Newton Albert Lea, MN 56007
PRINT ADDRESS OF FIRM

| | | |
|---|---|---|
| Larry D. Trampel<br>SIGNATURE OF AUDITOR/ACCOUNTANT | (507) 373-7432<br>PHONE NUMBER | 6-21-89<br>DATED |

1. If an audit or a financial statement is available, please submit it along with this report.
2. Are the additional required schedules attached?

TABLE OF CONTENTS

GABRIEL, ROEDER, SMITH & COMPANY
Actuaries & Consultants

200 Globe Building • 407 East Fort • Detroit, Michigan 48226 • 313-961-3346

May 31, 1989

Board of Trustees
Albert Lea Firemen's Relief Association
Albert Lea, Minnesota

Submitted in this report are the results of the December 31, 1988 actuarial valuation of the assets, actuarial values and contribution requirements associated with the benefits provided by the Albert Lea Firemen's Relief Association.

The valuation results contained in Section A provide the actuarial information needed to determine the employer's "minimum obligation" effective January 1, 1990. 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 M. 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.

Albert Lea Firemen's Relief Association

CONTRIBUTION RATE TO PROVIDE BENEFITS

Member portion & Employer portion
Effective January 1, 1990

| Contributions for | If Paid Equally Throughout Year<br>Normal Cost % of Active Payroll for 1990 | + | UAAL Dollars |
|---|---|---|---|
| Normal cost of annuities: | | | |
| Age & service: to members | 22.70% | | |
| Age & service: to survivors | 5.29 | | |
| Disability | 2.75 | | |
| Death before retirement | 2.62 | | |
| Refunds of member contributions | 0.30 | | |
| Total Normal Cost | 33.66% | | |
| Amortization of unfunded actuarial accrued liabilities (UAAL) (21 year level dollar payment) | | | |
| Retired lives | | | $ 0 |
| Active members | | | 156,021 |
| Total | | | 156,021 |
| Total Cost of Benefits | 33.66% | + | $156,021 |
| Member contributions | 8.00% | | |
| COMPUTED EMPLOYER RATE: | | | |
| (a) If Paid Equally Throughout Year | 25.66% | + | $156,021 |
| (b) IF PAID AT CALENDAR YEAR END | 26.29% | + | $159,874 |

## Albert Lea Firemen's Relief Association

## Present Actuarial Condition

The Association's accrued actuarial assets were in excess of $5.9 million on December 31, 1988 -- 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 $5.9 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 (13) | | $3,297,392 | | |
| Surviving Spouses (4) | | 509,002 | | |
| Surviving Children (0) | | 0 | | |
| Total (17) | $3,806,394 | $3,806,394 | $ 0 | 100.0% |
| Deferred Members (0) | 0 | 0 | 0 | 0.0 |
| Active Members (17) | 2,147,452 | 4,197,427 | 2,049,975 | 51.2 |
| Total | $5,953,846 | $8,003,821 | $2,049,975 | 74.4% |

Actuarial accrued liabilities represent the value, computed as of December 31, 1988 of:

(i) retirement allowances likely to be paid the 17 retirants and beneficiaries; and

(ii) the contributions assumed to have been made for the 17 active members from entry into the plan until December 31, 1988.

The value of retirement allowances likely to be paid the 17 retirants and beneficiaries, discounted for investment earnings and mortality, was computed to be $3,806,394 as of December 31, 1988. To put this amount in perspective, the $3,806,394, together with investment earnings, will just be sufficient to pay the 17 retirants and beneficiaries their allowances for their remaining lifetimes. This assumes the 17 retirants and beneficiaries live and die according to the assumed mortality and the $3,806,394 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 $4,197,427 represents the amount that would have been accumulated by December 31, 1988. 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, 1988 for the 17 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)

| Valuation Date December 31 | Actuarial Accrued Liabilities | Accrued Actuarial Assets | Percent Funded |
|---|---|---|---|
| 1979 | $ N/A | $ N/A | N/A% |
| 1980 | 4,618 | 1,808 | 39.2 |
| 1981 | 5,540 | 2,098 | 37.9 |
| 1982 | 6,133 | 2,630 | 42.9 |
| 1983 | 6,315 | 3,005 | 47.6 |
| 1983* | 6,682 | 3,005 | 45.0 |
| 1984 | 7,011 | 3,502 | 49.9 |
| 1985 | 7,271 | 4,339 | 59.7 |
| 1986 | 7,414 | 4,908 | 66.2 |
| 1987 | 7,739 | 5,269 | 68.1 |
| 1988 | 8,004 | 5,954 | 74.4 |

* After change in assumptions.

Albert Lea Firemen's Relief Association

Computed Contributions - Comparative Schedule

| Year Ended December 31 | | Total Normal Cost as a Percent of | Contribution For Unfunded Actuarial Accrued Liabilities |
|---|---|---|---|
| Valuation | Fiscal | Valuation Payroll* | $ or % |
| 1979 | 1981 | N/A% | $ N/A |
| 1980 | 1982 | 30.80 | 181,102 |
| 1981 | 1983 | N/A | N/A |
| 1982 | 1984 | 31.00 | 233,447 |
| 1983 | 1985 | 30.58 | 224,693 |
| 1983 | 1985** | 33.39 | 249,637 |
| 1984 | 1986 | 33.31 | 242,979 |
| 1985 | 1987 | 33.69 | 207,360 |
| 1986 | 1988 | 33.68 | 181,305 |
| 1987 | 1989 | 33.67 | 183,133 |
| 1988 | 1990 | 33.66 | 156,021 |

* Includes employee contributions.

** After change in assumptions.

Albert Lea Firemen's Relief Association

CONTRIBUTION FOR CALENDAR YEAR EFFECTIVE JANUARY 1, 1990

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 1990 | | $_____ | |
| (2) | Total normal cost % from page A-2 | | 33.66% | |
| (3) | Total normal cost (Line 1 times line 2) | | | $_____ |
| (4) | _____ x 1.035<br>1988 Administrative expenses paid from the Special Fund | | | _____ |
| (5) | Amortization payment on UAAL from page A-2 | | | 156,021 |
| (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 $1,910,374 | $28,751 | | |
| | (b) State amortization aid based on 1984 legislation | 5,913 | | |
| | (c) Total State amortization aid | | 34,664 | |
| (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

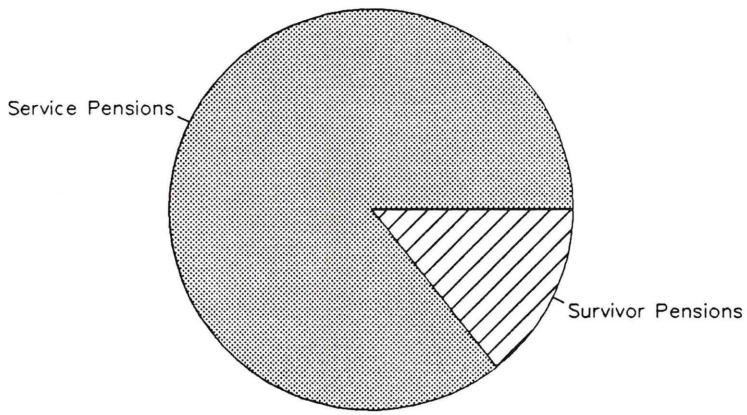
# Valuation Data and Summary of Benefit Provisions

Albert Lea Firemen's Relief Association

Retirants and Beneficiaries December 31, 1988

By Type of Annuity Being Paid

| Type of Annuity Being Paid | No. | Monthly Amounts | Computed Actuarial Accrued Liabilities |
|---|---|---|---|
| Retirants receiving: | | | |
| Age & Service | 13 | $18,035.98 | $3,297,392 |
| Disability | 0 | 0.00 | 0 |
| Totals | 13 | 18,035.98 | 3,297,392 |
| Beneficiaries receiving: | | | |
| Spouse | 4 | 3,020.61 | 509,002 |
| Child | 0 | 0.00 | 0 |
| Totals | 4 | 3,020.61 | 509,002 |
| Totals | 17 | $21,056.59 | $3,806,394 |




Monthly Amount Paid by Benefit

Albert Lea Firemen's Relief Association

Retirants and Beneficiaries December 31, 1988

By Attained Ages

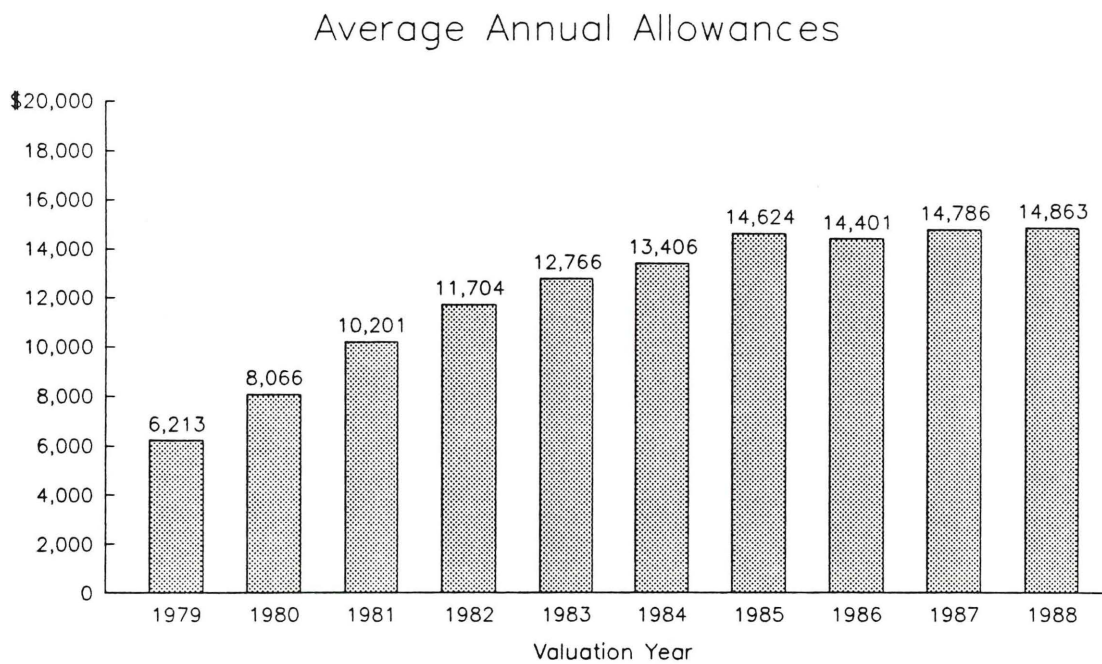
| Attained Ages | Number | | |
|---|---|---|---|
| | Age & Service | Disability | Death Before Retirement |
| 50-54 | 1 | | |
| 55-59 | 4 | | |
| 60-64 | 5 | | |
| 65-69 | 1 | | 1 |
| 70-74 | 1 | | |
| 75-79 | 2 | | |
| 80-84 | 1 | | |
| 85-89 | 1 | — | — |
| Totals | 16 | | 1 |

## Albert Lea Firemen's Relief Association

## 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 No. | Rolls End of Year Annual Allowances | Discounted Value of Total Allowances |
|---|---|---|---|---|---|
| 1979 | | | 9 | $ 55,914 | $1,061,959 |
| 1980 | 1 | | 10 | 80,663 | 1,269,535 |
| 1981 | 3 | | 13 | 132,616 | 2,325,638 |
| 1982 | 2 | | 15 | 175,562 | 3,014,808 |
| 1983 | 2 | 1 | 16 | 204,254 | 3,685,244 |
| 1984 | | | 16 | 214,492 | 3,691,183 |
| 1985 | 1 | | 17 | 248,603 | 4,134,908 |
| 1986 | 1 | 1 | 17 | 244,820 | 3,950,327 |
| 1987 | | | 17 | 251,367 | 3,932,285 |
| 1988 | 1 | 1 | 17 | 252,679 | 3,806,394 |



## Albert Lea Firemen's Relief Association

## Active Members December 31, 1988

## By Attained Age and Years of Service

| 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 |
| 35-39 | | 1 | | | | | | 1 | $ 28,345 |
| 40-44 | | | 2 | 1 | 1 | | | 4 | 114,217 |
| 45-49 | | | | 1 | 7 | | | 8 | 244,718 |
| 50-54 | | | | | 2 | 2 | | 4 | 136,454 |
| Totals | | 1 | 2 | 2 | 10 | 2 | | 17 | $523,734 |

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

Age: 46.6 years.

Service: 20.5 years.

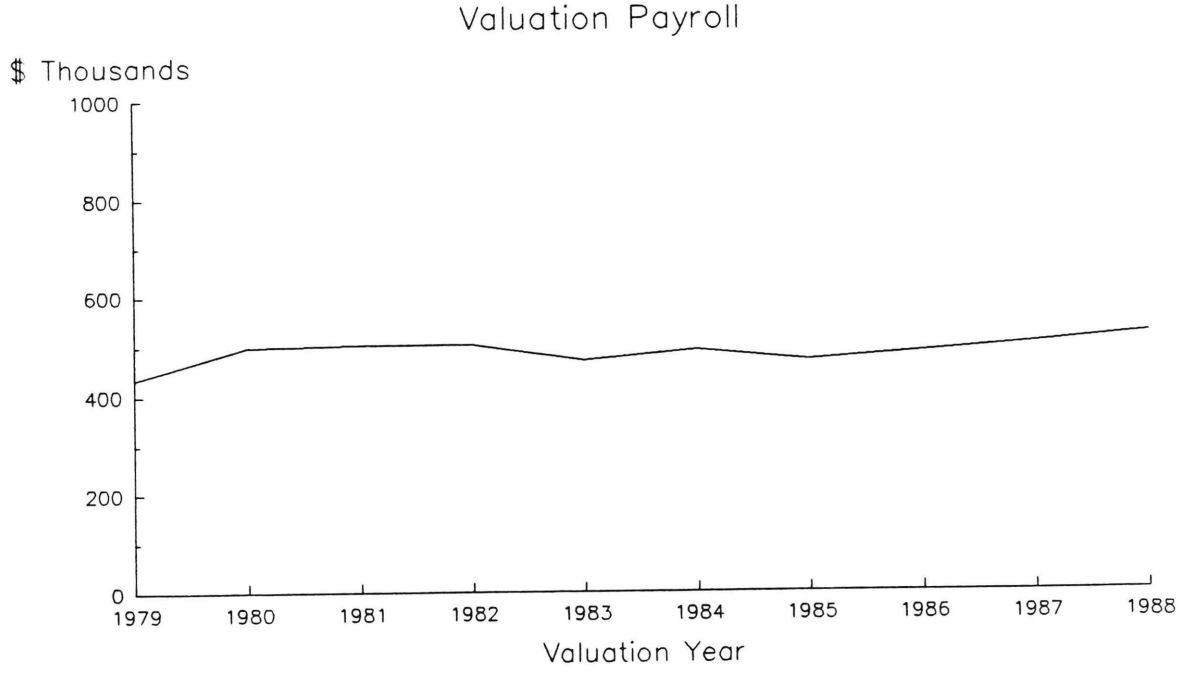
Annual Pay: $30,808.

## Albert Lea Firemen's Relief Association

## Comparative Schedule

## Of Active Members

| Valuation Date December 31 | Active Members | Valuation Payroll | Average Age | Average Service | Average Pay | % Incr. |
|---|---|---|---|---|---|---|
| 1978 | 25 | $392,584 | 42.2 yrs. | 16.4 yrs. | $15,703 | - % |
| 1979 | 25 | 433,500 | 42.3 | 16.5 | 17,340 | 10.4 |
| 1980 | 24 | 498,152 | 42.8 | 16.9 | 20,756 | 19.7 |
| 1981 | 22 | 502,524 | 43.0 | 16.9 | 22,842 | 10.1 |
| 1982 | 20 | 501,619 | 43.0 | 16.6 | 26,081 | 9.8 |
| 1983 | 18 | 469,233 | 42.6 | 16.6 | 26,069 | 3.9 |
| 1984 | 18 | 490,732 | 43.6 | 17.6 | 27,263 | 4.6 |
| 1985 | 17 | 469,624 | 43.6 | 17.5 | 27,625 | 1.3 |
| 1986 | 17 | 486,615 | 44.6 | 18.5 | 28,624 | 3.6 |
| 1987 | 17 | 503,802 | 45.6 | 19.5 | 29,635 | 3.5 |
| 1988 | 17 | 523,734 | 46.6 | 20.5 | 30,808 | 4.0 |



Albert Lea Firemen's Relief Association

Brief Summary (12/31/88) of Benefit Provisions Evaluated and/or Considered

Age & Service Retirement

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

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

Disability Retirement

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

Amount. Same as regular retirement.

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

Eligibility.

Spouse. Legally married to member at least 1 year before separation from service and residing with member at time of death. Benefits terminate upon remarriage. If that marriage is terminated, the widow's pension benefits can be reinstated at the appropriate level without backpay.

Child. Age 18 or younger.

Amount.

Spouse. 30% of final salary.

Child. 10% of final salary per child. Children's maximum is 20% if spouse is receiving or 50% if no spouse is receiving.

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

Post-Retirement Adjustments ("Escalator"). Each time active firemen's salaries are changed, payments to all benefit recipients are simultaneously changed by the same percent that active pay is changed.

Member Contributions. 8% of base pay. Total member contributions are refundable, without interest, if no benefit is payable upon separation from service.

SECTION C

# Valuation Methods and Assumptions

## Albert Lea Firemen's Relief Association

## 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. Age & service retirement was assumed to occur at age 56, attained age if older.

### Mortality Table*

| Sample Ages | Single Life Values: Present Value of $1 Monthly Level For Life Men | Level For Life Women | Increasing 3.5% Yearly Men | Increasing 3.5% Yearly Women | Future Life Expectancy (Years) Men | Future Life Expectancy (Years) 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.

### Sample Rates of Separation from Active Employment Before Retirement, Death or Disability

| Sample Ages | % of Active Members Separating within Next Year |
|---|---|
| 20 | 1.50% |
| 25 | 1.25 |
| 30 | 1.00 |
| 35 | 0.75 |
| 40 | 0.50 |
| 45 | 0.25 |
| 50+ | 0.00 |

## Pay Adjustment Factor Used To Project Current Pays

| Sample Ages | Present Pay Resulting in Pay of $1,000 at Age 60 | Present Increase in Pay During Next Year |
|---|---|---|
| 20 | $ 253 | 3.5% |
| 25 | 300 | 3.5 |
| 30 | 356 | 3.5 |
| 35 | 423 | 3.5 |
| 40 | 503 | 3.5 |
| 45 | 597 | 3.5 |
| 50 | 709 | 3.5 |
| 55 | 842 | 3.5 |
| 60 | 1,000 | 3.5 |

Use of the pay adjustment factor illustrated above is required by state law.

## Anticipated Disability Retirements

| Sample Ages | % of Active Members Becoming Disabled within Next Year |
|---|---|
| 20 | 0.08% |
| 25 | 0.08 |
| 30 | 0.08 |
| 35 | 0.08 |
| 40 | 0.20 |
| 45 | 0.26 |
| 50 | 0.49 |
| 55 | 0.89 |

## SECTION D

# The Pension Benefit Obligation and Certain Other Disclosures Required by Statement No. 5 of the Governmental Accounting Standards Board

## PENSION BENEFIT OBLIGATION

The amount shown below as the "pension benefit obligation" is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date. The measure is the actuarial present value of credited projected benefits and is intended to (i) help users assess the plan's funding status on a going-concern basis, (ii) assess progress being made in accumulating sufficient assets to pay benefits when due, and (iii) allow for comparisons among public employee retirement plans. The measure is independent of the actuarial funding method used to determine contributions to the plan.

The pension benefit obligation was determined as part of an actuarial valuation of the plan as of December 31, 1988. Significant actuarial assumptions used in determining the pension benefit obligation include (a) a rate of return on the investment of present and future assets of 5.0% per year compounded annually, (b) projected salary increases of 3.5% per year compounded annually, attributable to inflation, (c) the assumption that benefits will increase 3.5% per year after retirement.

At December 31, 1988, the unfunded pension benefit obligation was $1,871,775 determined as follows:

| | |
|---|---|
| Pension Benefit Obligation: | |
| Retirants and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits | $3,806,394 |
| Current employees -- | |
| Accumulated employee contributions including allocated investment income | 402,052 |
| Employer financed | 3,582,602 |
| Total Pension Benefit Obligation | $7,791,048 |
| Net assets available for benefits, at cost (market value was $6,022,991) | 5,919,273 |
| Unfunded Pension Benefit Obligation | $1,871,775 |

The total pension benefit obligation as of January 1, 1988 was $7,523,718. During the year, the plan experienced a net change of $267,330 in the pension benefit obligation.

## CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE

The Association's funding policy provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are designed to accumulate sufficient assets to pay benefits when due. The normal cost and actuarial accrued liability are determined using an entry age actuarial funding method. Unfunded actuarial accrued liabilities are being amortized as a level dollar amount over a period of 21 years.

During the year ended December 31, 1988, contributions totaling $354,517 -- $311,708 employer and $42,809 employee -- were made in accordance with contribution requirements determined by an actuarial valuation of the plan as of December 31, 1986. The employer contributions consisted of $124,963 for normal cost and $186,745 for amortization of the unfunded actuarial accrued liability. Employer contributions represented 64.06% of covered payroll.

Significant actuarial assumptions used to compute contribution requirements were the same as those used to compute the standardized measure of the pension benefit obligation.

### Computed Contribution Comparative Schedule

| Fiscal Year December 31 | Valuation Date December 31 | Contribution Rates: Normal Cost % of Valuation Payroll | Contribution Rates: UAAL Dollars | Valuation Payroll | Dollar Contribution For Fiscal Year: Computed | Dollar Contribution For Fiscal Year: Actual |
|---|---|---|---|---|---|---|
| 1987 | 1985 | 25.69% | $207,360 | $469,624 | $328,006 | $339,912 |
| 1988 | 1986 | 25.68 | 181,305 | 486,615 | 306,268 | 311,708 |
| 1989 | 1987 | 25.67 | 183,133 | 503,802 | 312,459 | |
| 1990 | 1988 | 25.66 | 156,021 | 523,734 | 290,411 | |

REQUIRED SUPPLEMENTARY INFORMATION

ANALYSIS OF FUNDING PROGRESS

| Valuation Date December 31 | (1) Net Assets Available for Benefits | (2) Pension Benefit Obligation (PBO) | (3) Percent Funded (1)/(2) | (4) Unfunded PBO (2)-(1) | (5) Annual Covered Payroll | (6) Unfunded PBO as a Percentage of Covered Payroll (4)/(5) |
|---|---|---|---|---|---|---|
| 1987 | $5,255,215 | $7,523,718 | 69.8% | $2,268,503 | $503,802 | 450.3% |
| 1988 | 5,919,273 | 7,791,048 | 76.0 | 1,871,775 | 523,734 | 357.4 |

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of the plan's funded status on a going-concern basis. Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the plan. The unfunded pension benefit obligation and annual covered payroll are both affected by inflation. Expressing the unfunded pension benefit obligation as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of the progress being made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the plan.

# 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.

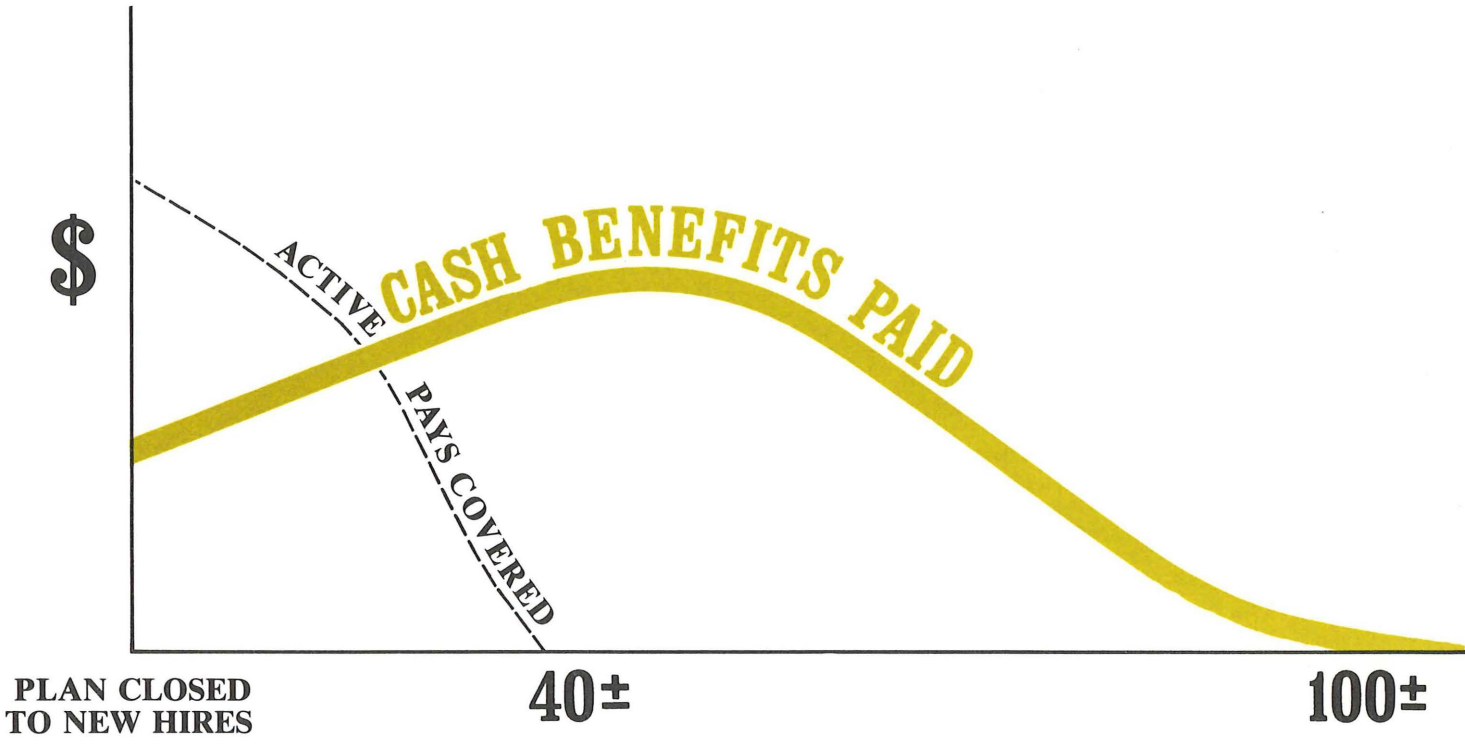
Computing Contributions To Support Plan Benefits. From a given schedule of benefits and from the employee data and asset data furnished him, the actuary determines the contribution rates to support the benefits by means of an actuarial valuation and a funding method.

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.