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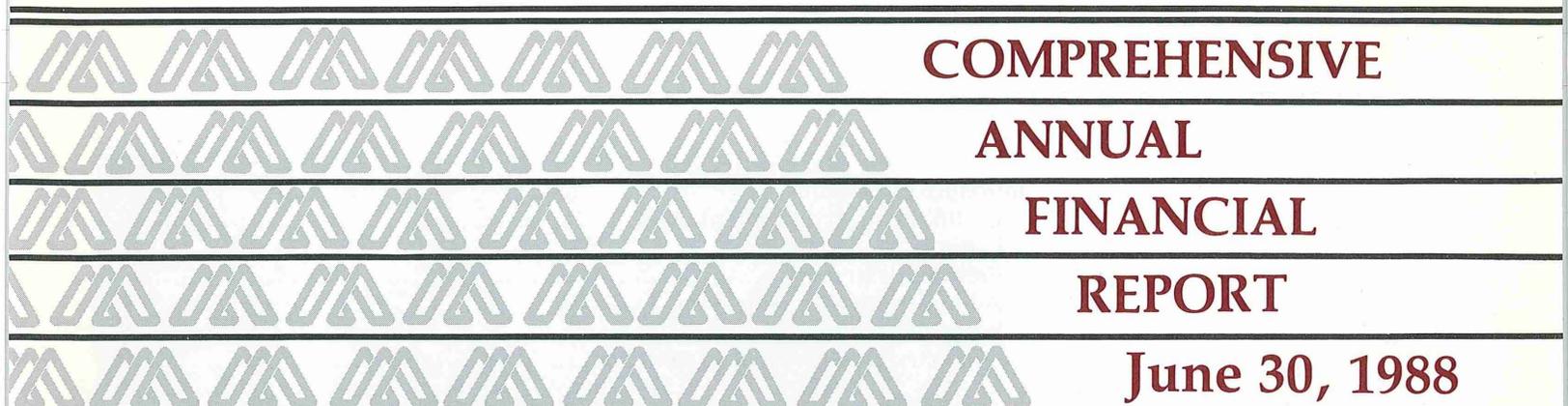
June 30, 1988

Public Employees Retirement Association of Minnesota



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Pursuant to Mn Stat 356.20



**COMPREHENSIVE**

**ANNUAL**

**FINANCIAL**

**REPORT**

**June 30, 1988**

**Public Employees Retirement Association of Minnesota**

**BOARD OF TRUSTEES**

Gary A. McCloud — Board President, Membership Representative

Patricia A. Jilk — Board Vice President,

School Boards Representative

Arne H. Carlson — Board Treasurer, State Auditor

Edward G. Bayuk, Annuitant Representative

Judith L. Lindquist, Public Sector Representative

Robert D. McCubbin, Membership Representative

Gary R. Norstrom, Cities Representative

Lois E. Riecken, Counties Representative

Eldred J. Schreifels, Membership Representative

James M. Hacking

Executive Director

Prepared by:

PERA Finance Department

# INTRODUCTORY SECTION

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# Certificate of Achievement

## Certificate of Achievement for Excellence in Financial Reporting

Presented to

Public Employees Retirement  
Association of Minnesota

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

June 30, 1987

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to governmental units and public employee retirement systems whose comprehensive annual financial reports (CAFR's) achieve the highest standards in government accounting and financial reporting.

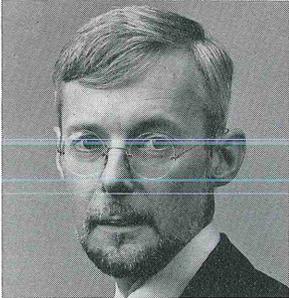


President

Executive Director

# INTRODUCTORY SECTION

## Letter of Transmittal



**James M. Hacking**  
Executive Director

Public Employees Retirement Association of Minnesota  
Suite 200 — Skyway Level  
514 St. Peter Street  
St. Paul, Minnesota 55102  
612-296-7460



December 5, 1988

Board of Trustees  
Public Employees Retirement Association of Minnesota  
Suite 200 — Skyway Level  
514 St. Peter Street  
St. Paul, Minnesota 55102

Dear Trustee:

As chief executive officer of the Public Employees Retirement Association (PERA), I am pleased to submit this fifty-seventh Comprehensive Annual Financial Report for the fiscal year which ended June 30, 1988. This report includes a summary of the membership and contribution requirements and benefit structures of PERA's Funds. It also contains the fiscal year-end financial statements and actuarial report and the supporting statistical tables. I trust you will find this report to be a full and complete disclosure of the structure and financial status of PERA and its Funds, including the new Police and Fire Consolidation Fund which became operational December 31, 1987.

### ACCOUNTING SYSTEMS AND REPORTS

All financial statements are prepared in accordance with generally accepted accounting principles as prescribed by the Governmental Accounting Standards Board. Financial statements also comply with Minnesota Statutes, Section 356.20.

PERA's internal accounting controls are designed to provide reasonable assurance for the safekeeping of assets and the reliability of all financial records. Transactions of the Public Employees Retirement Fund, the Public Employees Police and Fire Fund, and the Police and Fire Consolidation Fund are reported on the accrual basis of accounting.

### REVENUE

Employer and employee contributions, as well as income from investments, provide the funds needed to cover the liability for present and future benefits. In the case of the Public Employees Retirement Fund, contributions and investment income for the fiscal year totaled \$396,971,000. Contributions and investment income for the Public Employees Police and Fire Fund totaled \$75,006,000. For the Police and Fire Consolidation Fund, total contributions and investment income for that portion of the fiscal year during which the fund was operational were \$3,097,000. For these three PERA-administered funds, the aggregate revenue from contributions and investments for FY'88 represents a decline of 13.4 percent from the aggregate revenue level of the year before.

Although aggregate revenue declined, employer and employee contributions to the Public Employees Retirement Fund increased by 4.9 percent while contributions to the Public Employees Police and Fire Fund increased by 11.3 percent. These contribution increases were attributable to increases in average annual earnings (see schedule on page 43) and in the number of members contributing (see schedule on page 43). Employer and employee contributions to the Police and Fire Consolidation Fund

amounted to \$1,789,000. Statutory contribution rates for both employers and employees remain unchanged from the prior year.

#### EXPENSES

The annual expenses of PERA reflect the aggregate cost of monthly annuity and benefit payments to retired or disabled members and their survivors, refunds of employee contributions (plus interest) to terminated former members, and the cost of administration. The increase in expenses reported for the fiscal year resulted mainly from growth in the number of benefits paid and in the amount of the average annuity/benefit payment. The Public Employees Retirement Fund's expenses during the fiscal year totaled \$168,561,000, an increase of 15.1 percent over such expenses for FY'87. Outlays from the Public Employees Police and Fire Fund totaled \$15,400,000, an increase of 17.1 percent over that for the preceding fiscal year.

Expenses from the Police and Fire Consolidation Fund totaled \$1,076,000. Since this was the first year of operations for the Police and Fire Consolidation Fund, there is, of course, no previous year's data with which to compare FY'88 expenses, contributions or investment income.

#### INVESTMENTS

In accordance with Minnesota Statutes, Section 353.06, assets of the PERA funds are managed and invested in accordance with the decisions of the Minnesota State Board of Investment (SBI). All investments undertaken by the SBI are governed by the common law prudent person rule and other standards codified in Chapter 11A of the Minnesota Statutes. Pension assets of the currently working members of the Association (currently \$1,223,695,000 in the Public Employees Retirement Fund, \$404,819,000 in the Public Employees Police and Fire Fund, and \$6,222,000 in the Police and Fire Consolidation Fund) are invested entirely by professional investment management firms. Assets of retired members of the Association and their survivors that are pooled in the Minnesota Post-Retirement Investment Fund (currently \$1,476,424,000 for the Public Employees Retirement Fund, \$145,187,000 for the Public Employees Police and Fire Fund, and \$16,405,000 for the Police and Fire Consolidation Fund) are invested solely by SBI staff.

The SBI appoints a 17-member Investment Advisory Council to advise the State Board on asset allocation and other policy matters relating to investments, and to advise the State Board on methods to improve the rate of return while assuring adequate security of the assets under management. The SBI also employs an investment consultant to monitor and evaluate the investment management firms' performance and to evaluate or suggest various alternatives pertaining to asset allocation or other investment policy matters.

The investment return of the PERA Funds accounted for the largest share of total fund income. Income from investments of the Public Employees Retirement Fund totaled \$244,981,000 for the fiscal year and accounted for 61.7 percent of total income. In the case of the Public Employees Police and Fire Fund, income from investments totaled

\$39,747,000 and was 53.0 percent of total income. Investment income to the Police and Fire Consolidation Fund totaled \$1,308,000 and was 42.2 percent of the fund's income.

When compared with the investment income level for FY'87, the investment income to the Public Employees Retirement Fund for FY'88 declined by 21.4 percent. In the Public Employees Police and Fire Fund, the decline in investment income was 34.3 percent. These decreases were primarily due to a decrease in capital gains on the sale of investments.

#### CURRENT FUNDING RATIOS

A pension fund is fully funded when it has present and projected assets sufficient to cover the liabilities for present and future annuities, benefits and refunds, and the cost of fund administration. Minnesota Statutes, Section 356.215, subd. 4(g), provides a formula for determining a date certain for full funding for the Public Employees Retirement Fund and the Public Employees Police and Fire Fund. Minnesota Statutes, Section 353A.09, subd. 5(b)(1) requires full funding for the Police and Fire Consolidation Fund by the year 2010. The actuarial funding method followed by PERA is the entry age normal, level contribution as a percent of payroll method.

At the end of FY'88, the ratio of assets to liabilities of the Public Employees Retirement Fund was 71 percent. For the Public Employees Police and Fire Fund and the Police and Fire Consolidation Fund, the ratios were 97 percent and 64 percent, respectively. In the case of the Public Employees Retirement Fund and the Public Employees Police and Fire Fund, the funding ratios at fiscal year-end were significantly less than those reported for the preceding fiscal year; these funding ratio declines are primarily attributable to the significant increase in liability that resulted from the July 1, 1988 change to a new mortality table.

#### ASSOCIATION'S STATUS REPORT

A major development in FY'88 was the creation of the Police and Fire Consolidation Fund. This new fund, mandated by a 1987 state law, allows 46 existing local police or fire relief associations to consolidate with PERA. During the past fiscal year, two local relief associations exercised their option to consolidate and are now group participants in the new fund. Currently, a number of other relief associations are moving through the procedural steps necessary to effect consolidation.

In terms of the financial status of the PERA Funds, FY'88 was marked by the PERA Board of Trustees' decision to change to a new mortality table (the 1971 Group Annuity Mortality Table projected to 1984 for males and females) in order to reflect more accurately the PERA covered group's actual death rate experience. This change to a new mortality table, which took effect July 1, 1988, coupled with last fiscal year's change to a new and less generous joint and survivor annuity option calculation table should greatly reduce, if not eliminate, in the future the series of very large, annually recurring mortality losses that have been identified through the fiscal year-end actuarial valuation process for the past four years.

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INTRODUCTORY SECTION

## Letter of Transmittal

(Continued)

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The only other demographic assumption that may be a cause for concern in the future is the assumed rate of termination among active PERA members. In FY'88, the Public Employees Retirement Fund experienced an actuarial loss of \$64.5 million because of fewer than expected terminations among active members. PERA's annual experience studies will provide the basis for decision-making as to whether or not the assumed rate of termination among active members is so at variance with actual experience as to require a change in assumption.

### PROFESSIONAL SERVICES

The FY'88 actuarial valuation of the PERA Funds was conducted by The Wyatt Company and completed in November of 1988. Actuarial consulting services during the fiscal year were provided by Gabriel, Roeder, Smith & Company of Detroit. In addition to providing a thorough review of The Wyatt Company's FY'88 actuarial valuation, Gabriel, Roeder also developed cost estimates for a variety of legislative proposals and suggested the use of a different mortality table in order to strengthen the mortality assumptions and reduce or eliminate the recurring, large, year-end mortality losses.

With respect to other professional services, the State's Attorney General continued to provide PERA with legal counsel. The State Board of Investment continued to manage and invest the assets of the PERA Funds. Finally, the State's Legislative Auditor continued to provide professional financial auditing services. The comments of the Legislative Auditor are found on page 14 of this report.

### REPORTS TO THE MEMBERSHIP

This report is complemented by an annual financial newsletter that discloses, in summary form, the contents of this report. This financial newsletter is mailed in December or January of each year to all PERA members and annuity and benefit recipients.

### CERTIFICATE OF ACHIEVEMENT FOR EXCELLENCE IN FINANCIAL REPORTING

The Government Finance Officers Association of the United States and Canada (GFOA) awarded the Certificate of Achievement for Excellence in Financial Reporting to PERA for its Comprehensive Annual Financial Report for the fiscal year that ended June 30, 1987. In order to be awarded a certificate, which is valid for one year, a governmental unit must publish an easily readable and efficiently organized report, the contents of which conform to the Certificate of

Achievement Program's standards. Such reports must satisfy both generally accepted accounting principles and applicable legal requirements.

I believe the current report for FY'88 continues to conform to the program's standards. I am, therefore, submitting it to the GFOA so that they may determine its eligibility for a certificate.

### ACKNOWLEDGEMENTS

As a compendium of financial, actuarial, and other statistical information, PERA's Comprehensive Annual Financial Report provides complete and reliable information on which management decisions may be based and through which compliance with statutory requirements may be assessed. In addition, the report serves as the primary source through which the effectiveness of the Trustees' management and administration of PERA and its funds may be judged.

I am sure you join with me in expressing gratitude and appreciation to the staff and PERA's advisors for their efforts in producing this report and for their loyal and dedicated service to the Association and its members, annuitants, and beneficiaries.

Respectfully submitted,



James M. Hacking  
Executive Director

# INTRODUCTORY SECTION

## President's Report



Gary A. McCloud  
Board President

Public Employees Retirement Association of Minnesota  
Suite 200 — Skyway Level  
514 St. Peter Street  
St. Paul, Minnesota 55102  
612-296-7460



December 5, 1988

TO ALL MEMBERS, ANNUITANTS, AND BENEFICIARIES OF THE PUBLIC EMPLOYEES RETIREMENT ASSOCIATION

This fifty-seventh annual report of the Public Employees Retirement Association (PERA) is designed and intended to disclose financial, actuarial, and other relevant statistical information with respect to PERA and the funds it administers. At the June 30, 1988 fiscal year-end, the Public Employees Retirement Fund, the Public Employees Police and Fire Fund and a new PERA fund, the Police and Fire Consolidation Fund, had a combined total of \$3.3 billion in assets under management by the State Board of Investment (SBI). This reflected a \$395 million or 13.7 percent increase over total assets at the beginning of the fiscal year. The rate of return on the investment of the assets of active employees covered by the PERA funds was a negative 3/10's of 1 percent (-.3 percent). This rate of return was especially disappointing when compared with an inflation rate for the period of 3.9 percent.

The Minnesota Post-Retirement Investment Fund (MPRIF), in which PERA has a "pooled" interest along with other Minnesota statewide pension funds, had assets at fiscal year-end of \$4.4 billion. Not only does the MPRIF support the annuities payable to PERA retirees and their survivors (except for those retirees and survivors from the Police and Fire Consolidation Fund who have not elected to have their post-retirement adjustments determined by the MPRIF adjustment formula), it also finances annual post-retirement increases from earnings in excess of 5 percent. Given this fiscal year's rate of return for the MPRIF, the Fund will be able to finance a 6.9 percent increase for PERA annuitants and their survivors as of January 1, 1989.

Overall, the financial condition of the PERA Funds deteriorated last fiscal year — largely as a result of a necessary change to a new mortality table (effective July 1, 1988), the adoption of which significantly increased pension liability for the PERA Funds. The effects of the adoption of this new table are reflected in the valuation results for the fiscal year. For example, the reserve ratio (i.e., assets divided by liabilities) of the Public Employees Retirement Fund declined from 77 percent at the end of FY'87 to 70.75 percent at the end of FY'88. The reserve ratio of the Public Employees Police and Fire Fund declined from 104 percent at the end of FY'87 to 97 percent at the end of FY'88.

Compounding the effect of the mortality table change on the financial condition of the PERA funds were two other factors. First, the October 1987 stock market decline dampened investment return so that the total portfolio for PERA's active members underperformed the statutory 8 percent interest assumption. Second, a lower than expected termination rate among active PERA members covered by the Public Employees Retirement Fund resulted in an actuarial loss to that fund of some \$64.5 million for FY'88. Given the 60 percent common stock target allocation for the assets of active employees covered by the PERA funds and given the effects of the October 1987 stock market decline, the investment return underperformance of the 8 percent interest assumption does not come as a surprise and is not a cause for immediate alarm. With respect to the lower than anticipated rate of termination among active PERA-covered employees, the annual

experience studies over the next few years will be closely monitored and should indicate whether or not a change is needed in the current actuarial assumption.

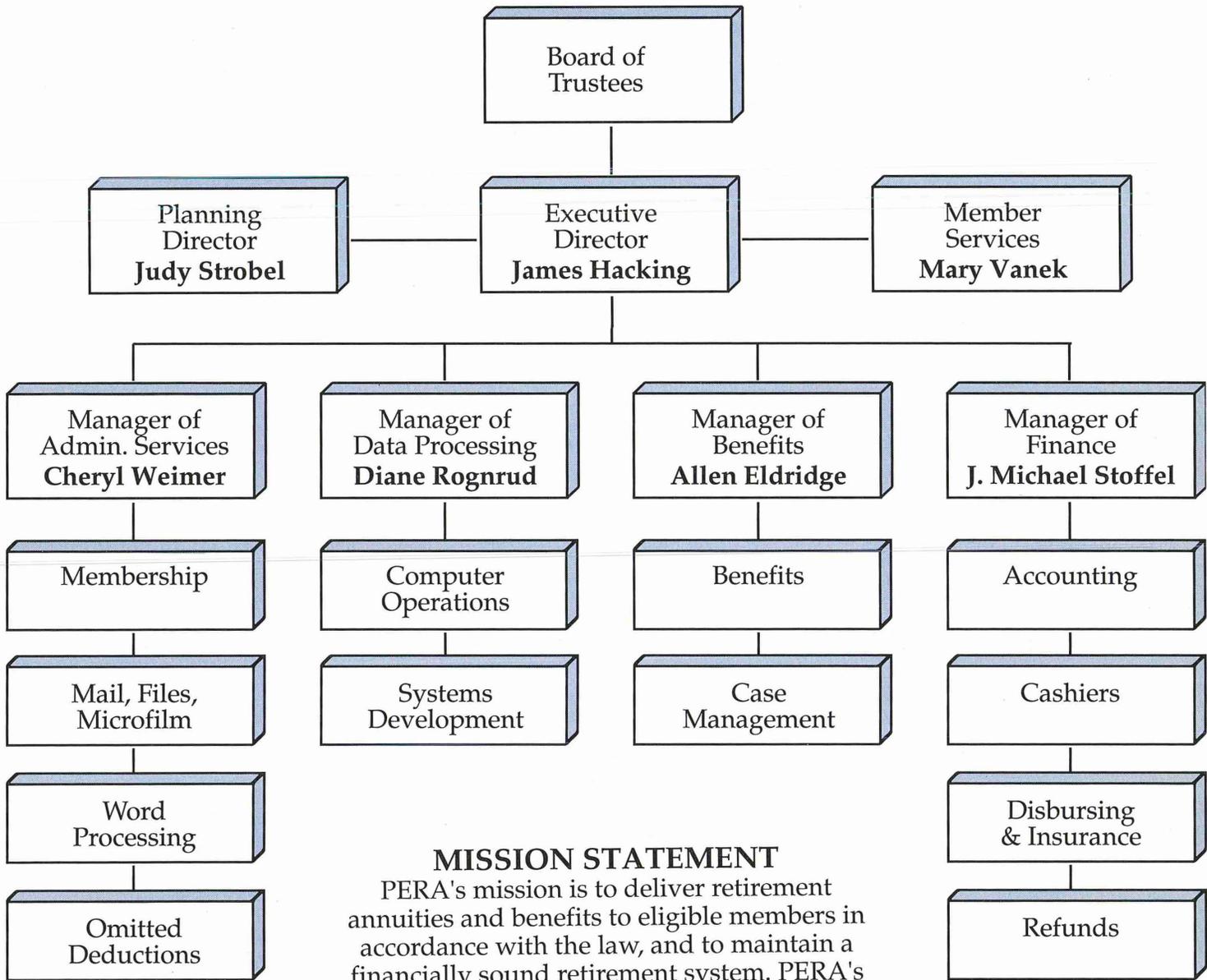
There is one other cloud on the financial horizon of the PERA Funds that deserves mention. That cloud arises from the adoption by the SBI in October 1985 of a plan requiring a four-stage divestment of SBI holdings in companies doing business in South Africa. Over 260 U.S. companies are potential investment targets under the plan which is to be fully implemented by August of 1989. If the SBI's holdings in these firms are eliminated, even in the ordinary course of business through a "divestment through attrition" strategy, and if future investments in these companies are prohibited, the universe for SBI investments will be substantially restricted and will be limited to companies the securities of which may tend to be lower in quality, more volatile, less liquid, and lower yielding. That could translate into hundreds of millions of dollars in unnecessary losses and increased transaction costs for the pension funds.

In closing, I wish to express the Trustees' continuing commitment to the preservation and growth of the assets of the PERA Funds and to the protection and furtherance of the interests of PERA's members, annuitants and beneficiaries, as well as the interests of the governmental employer units, the State of Minnesota and its taxpayers.

Sincerely,

Gary A. McCloud, President  
PERA Board of Trustees

# Administrative Organization



## MISSION STATEMENT

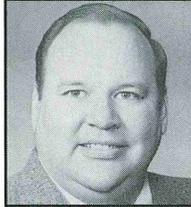
PERA's mission is to deliver retirement annuities and benefits to eligible members in accordance with the law, and to maintain a financially sound retirement system. PERA's success in carrying out its mission depends upon its employees, for through their development, training, and efforts, PERA achieves its goals, which are:

- Providing quality services that are appropriate, personalized, informative, accessible, and timely.
- Obtaining and disseminating accurate and complete information.
- Influencing legislation that is beneficial to our members and beneficiaries, while maintaining PERA's financial soundness.

## INTRODUCTORY SECTION

# Board of Trustees

### Board President



**Gary A. McCloud**  
Elected Membership Representative  
2005 - 68th Street East  
Inver Grove Heights, MN 55075

### Board Vice President

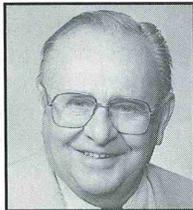


**Patricia A. Jilk**  
School Boards Representative  
5899 Deer Trail  
Woodbury, MN 55125

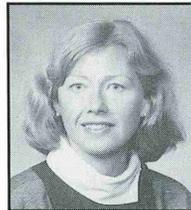
### Board Treasurer



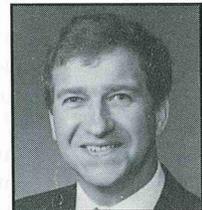
**Arne H. Carlson**  
State Auditor  
Suite 400 - 525 Park Street  
St. Paul, MN 55155



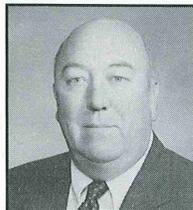
**Edward G. Bayuk**  
Annuitant Representative  
1663 Fourth Street  
White Bear Lake, MN 55110



**Judith L. Lindquist**  
Public Sector Representative  
295 Woodlawn Avenue  
St. Paul, MN 55105



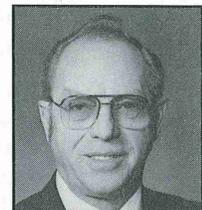
**Robert D. McCubbin**  
Elected Membership Representative  
583 West Winona Street  
Duluth, MN 55803



**Gary R. Norstrom**  
Cities Representative  
2080 Western Avenue  
Roseville, MN 55113



**Lois E. Riecken**  
Counties Representative  
Route 2, Box 91  
Clear Lake, MN 55319



**Eldred J. Schreifels**  
Elected Membership Representative  
732 - 32nd Avenue North  
St. Cloud, MN 56301

The PERA Board consists of nine trustees, as follows: The State Auditor is a trustee by virtue of office. Five trustees are appointed by the Governor to represent counties, cities, school boards, retired annuitants, and the general public. One trustee was elected by the PERA membership in January 1986 and two additional trustees were elected by the membership in January of 1987 to fill positions held by transitional appointees of the Governor.

INTRODUCTORY SECTION

# Summary of Retirement System Plan

## Public Employees Retirement Association of Minnesota

### Purpose

Established by the Minnesota Legislature, the Minnesota Public Employees Retirement Association (PERA) administers pension funds that serve approximately 130,000 county and local public employees, their survivors, and dependents.

The funds provide a variety of retirement annuities, and survivor and disability benefits. In the case of Coordinated Fund members, these annuities and benefits are in addition to those provided by Social Security.

The Board of Trustees of PERA is responsible for administering these funds in accordance with statutes passed by the Legislature and has a fiduciary obligation to PERA's members, the governmental employer units, the state, and the taxpayers.

### Administration

The PERA Board of Trustees consists of nine members. The State Auditor is automatically a member. Five members are appointed by the Governor. Serving four-year terms, these five members represent, respectively, cities, counties, school boards, retired annuitants, and the general public. The remaining three members are elected by the PERA membership at large. One was elected to a four-year term in January 1986; the other two were elected to four-year terms in January 1987.

The Board appoints an Executive Director to serve as chief administrative officer. With approval of the Board, the Director develops the annual administrative budget, determines staffing requirements, contracts for actuarial and other services, and directs the day-to-day operations of the Association. The Director also serves as a member of the State Investment Advisory Council, which advises the State Board of Investment on the management and investment of pension funds and other assets.

## Multi-employer Participation

Approximately 2,250 separate units of government at the county and local level in Minnesota participate in the PERA-administered retirement system. These units include cities, counties, townships, and school districts.

### Employee Membership

With certain statutory exceptions, any person who performs personal services for a governmental unit and whose salary is paid in whole or in part from revenues derived from taxation, fees, assessments, or other sources, is a member of PERA. The type of membership depends upon which PERA plan covers the individual member's employment position. PERA has over 102,000 active members.

### Funds

Three funds are administered by PERA. Each has a specific membership as well as different contribution, benefit, and annuity provisions.

The **Public Employees Retirement Fund** actually consists of two plans — the PERA Basic plan, which is not coordinated with Social Security, and the PERA Coordinated plan, which is so coordinated.

The **Public Employees Police and Fire Fund**, originally established for police officers and firefighters not covered by a local relief association, now also includes all police officers and firefighters hired since 1980.

Also administered by PERA is the **Police and Fire Consolidation Fund**. This Fund is for members of local police and fire relief associations which have elected to merge with and transfer their assets and administrative duties to PERA.

### Contributions

The table below shows the contributions made by employees and employers under the various plans administered by PERA. Rates are applied to total salary and are set by statute.

Fund	Employee Contribution	Employer Contribution
Public Employees Retirement Fund		
Coordinated	4%	4¼%
Basic	8%	10½%

Public Employees		
Police and Fire Fund	8%	12%
Police and Fire		
Consolidation Fund	8%*	12%

## Retirement Benefits

### A. Eligibility

#### 1. Basic and Coordinated Members

A full (unreduced) retirement annuity is payable to members when they meet the following conditions:

- (a) Age plus years of service equal 90;
- (b) Age 65 with a minimum of one year of service; and
- (c) Age 62 with a minimum of 30 years of service.

A reduced early retirement annuity is payable to members when they meet these conditions:

- (a) Any age with 30 or more years of service (reduced ¼ percent for each month under age 62); or
- (b) Age 55 or over, with five or more but less than 30 years of service (reduced ¼ percent for each month under age 65).

#### 2. Police and Fire Members

A full retirement annuity is payable to members when they meet the following conditions:

- (a) Age 55 with a minimum of five years of service; or
- (b) Age plus years of service equal 90.

An early retirement annuity is payable to members at any age with 30 or more years of service (reduced ¼ percent for each month under age 62).

#### 3. Police and Fire Consolidation Members

Members of the Police and Fire Consolidation Fund are covered by the benefit provisions of their local plans, unless they choose to be covered by provisions identical with those of the PERA Police and Fire Fund. Members may elect

PERA Police and Fire Fund-type benefits:

- (a) Within 180 days of the effective date for the consolidation of the local relief association with PERA;
- (b) At the time a member is between ages 49½ and 50; or
- (c) At the time the member retires and submits an application for an annuity.

### B. Annuity Formula

Annuity payments are based upon a member's age, years of public service under PERA, and average salary\*\*. The following formulas are used to determine annuities for PERA members under the various plans:

1. **Basic Member** — Two percent of average salary for each of the first ten years of service and 2½ percent for each year thereafter.
2. **Coordinated Member** — One percent of average salary for each of the first ten years of service and 1½ percent for each year thereafter.
3. **Police and Fire Member** — Two and one-half percent of average salary for each of the first 25 years of service and 2 percent for each year thereafter.
4. **Police and Fire Consolidation Fund Member** — Formula of the local relief association for members who are covered under the benefit provisions of the local plan or the annuity formula for the Police and Fire Fund if that type of benefit coverage is chosen.

### C. Types of Annuities Available

PERA members who are covered by the PERA Basic or Coordinated plans, the Police and Fire Fund, and members who are covered by the Police and Fire Consolidation Fund who have elected PERA Police and Fire-type benefits, may select from several types of retirement annuities.

1. **Normal Annuity** — A normal annuity is a lifetime annuity that ceases upon the death of the retiree. No survivor annuity is payable.

\*NOTE: For members of the Police and Fire Consolidation Fund who are covered by benefit provisions of the local relief associations, the 8 percent employee contribution is applied to the base pay of the local association or to total salary, whichever is greater. If an individual has elected coverage under the benefit provisions of the Public Employees Police and Fire Fund, however, the 8 percent contribution is applied to total salary.

\*\*NOTE: Average salary is the average of the highest five consecutive years of salary. This highest five years is a period of 60 consecutive months.

## Summary (Continued)

\*NOTE: Both joint and survivor annuity options are also available with a "bounce back" feature. This feature provides a return (bounce back) to the normal annuity amount should the joint annuitant predecease the retiree. Under the regular joint and survivor annuity options without the bounce back feature, the amount of the monthly payment remains the same if the joint annuitant dies before the retiree.

Selection of a 50 percent or 100 percent joint and survivor option will result in a reduction in what would have been the normal annuity monthly amount. This reduction is made because the annuity will be payable over joint lives. The amount of the reduction depends on the age of both the retiring member and the joint annuitant. Selection of a bounce back option will further reduce the monthly annuity. This further reduction is made to reflect the probability that the joint annuitant will predecease the retiree.

2. **50 Percent Joint and Survivor Annuity\*** — This annuity option is payable for the lifetime of the retiree; 50 percent of the annuity amount at the time of the retiree's death is payable to the designated joint annuitant for his or her lifetime.
3. **100 Percent Joint and Survivor Annuity\*** — This option is payable for the lifetime of the retiree; 100 percent of the annuity amount at the time of the retiree's death is payable for the lifetime of the joint annuitant.
4. **Level Income Annuity** — A member who retires before age 62 may select a retirement annuity option that provides for a greater monthly payment until eligible for Social Security at age 62. The annuity amount is then reduced when those benefits begin.
5. **Deferred Annuity** — A member who terminates public service with five or more years of credit may leave his or her contributions in the fund or funds in which he or she participated to qualify for an annuity at retirement age. The annuity amount, calculated as of the time of termination, will increase at a rate of 5 percent per year compounded annually through December 31, 1980, and at a rate of 3 percent per year compounded annually from January 1, 1981, to the date payments begin.
6. **Combined Service and Proportionate Annuities** — Members with five or more years of credited service, covered by any of fourteen retirement funds designated by statute and with six or more months of service in the last fund and who have not begun to receive an annuity from any of the designated funds, may receive retirement benefits from each fund. This is called a combined service annuity. Benefits are based upon the formula of each fund and the

member's average, high five consecutive years of salary, regardless of the fund under which the member was covered when that average salary was earned.

A public employee age 65 or older with credit for at least one but less than five years of service at time of termination in one or more of eleven funds designated in statute is entitled to a proportionate annuity from each applicable fund in which the employee has credit. The proportionate annuity is based upon the formula of each fund and the member's average salary during the period of service covered by that fund.

### D. Maximum Annuity

A retiring member's monthly normal annuity amount may not exceed 100 percent of his or her regular base salary for the final month of employment.

### Survivor Benefits

PERA provides survivor annuities or survivor (death) benefits\*\* for the families of members who meet certain eligibility qualifications. These qualifications and the types of benefits vary with each fund.

Under the Basic and Coordinated plans and the Police and Fire Fund, a surviving spouse of a member who is 50 years of age or older with five or more years of service may elect to receive a 100 percent joint and survivor annuity. In the case of surviving spouses of Basic and Police and Fire members, this optional 100 percent joint and survivor annuity would be in lieu of any survivor benefits otherwise payable.

Survivors of Basic and Police and Fire Fund members may also be eligible for the following benefits:

The surviving spouse of a Basic plan member who has a minimum of 18 months of credited service may receive 50 percent of the member's average salary earned during the last six months of service. Each dependent child is eligible to receive 10 percent of that average salary. The family survivor benefit maximum may not exceed \$1,000 per month.

The surviving spouse of a Police and Fire Fund member may receive 30

percent of the member's average salary for the last six months of service, while each child may receive 10 percent of that salary. The family survivor benefit maximum may not exceed 50 percent of the member's average six month's salary just prior to death.

A refund of any of the member's contributions remaining in the member's account plus 5 percent interest compounded annually is another option available to those survivors.

Survivors of members of the Police and Fire Consolidation Fund are eligible for survivor benefits under the provisions or guidelines of the individual relief association funds if the deceased member had not elected Public Employees Police and Fire Fund-type benefit coverage.

## Disability Benefits\*\*\*

Members may be eligible for disability benefits from PERA if they are unable to work because of physical or mental disability. Disability benefits are payable without reduction on account of age. Listed below are the qualifications for disability benefits:

**Basic and Coordinated Members** — Any age with five years of service and found to be disabled within the statutory definition.

**Police and Fire Members** — Any age with five years of service or immediately if disabled in the line of duty and found to be disabled within the statutory definition.

Benefits are determined in the same way as retirement benefits for Basic and Coordinated members and for Police and Fire members disabled outside the line of duty. In addition, for Police and Fire Fund members disabled outside the line of duty, there is a minimum benefit of 25 percent of average salary.

Police and Fire members disabled in the line of duty receive 50 percent of their average salary for the first 20 years of service, plus 2½ percent for each year of service over 20 but under 26, and 2 percent for each year of service after 25.

**Police and Fire Consolidation Fund Members** — Members of the Police and Fire Consolidation Fund may receive

disability benefits under the provisions or guidelines of their individual relief association plans unless Public Employees Police and Fire Fund-type benefits were chosen. If such an election had been made, disability benefits would be the same as those for Police and Fire Fund members.

## Refunds

Refunds of contributions are available at any time to members who leave public service but before retirement benefits begin. The refund includes employee contributions plus 5 percent interest compounded annually.

A refund of member contributions plus interest may also be elected by the designated beneficiary of a member or former member who dies before reaching retirement. If there is no beneficiary, payment would be made to the surviving spouse, or if none, payment would be made to the estate of the deceased member or former member.

If a retiree and any designated joint annuitant die before all employee contributions are paid in the form of annuities and benefits, the remaining balance would be paid to the same succession of recipients as for members who die before retirement.

\*\*NOTE: Survivor benefits payable to spouses of deceased Basic and Police and Fire members end upon the spouse's remarriage. Survivor annuities, however, are payable for life.

\*\*\*NOTE: Survivor benefits are also available to the spouse and children of disabled Basic and Police and Fire Fund members but not to the survivors of disabled Coordinated members. Any contribution balance is payable to the designated beneficiary of a disabled deceased Coordinated member. Survivor benefits payable on the death of disabled Basic and Police and Fire Fund members are determined in the same way as regular survivor benefits.

# FINANCIAL SECTION

## Legislative Auditor's Report



STATE OF MINNESOTA  
OFFICE OF THE LEGISLATIVE AUDITOR  
VETERANS SERVICE BUILDING, ST. PAUL, MN 55155 • 612/296-4708  
JAMES R. NOBLES, LEGISLATIVE AUDITOR

December 1, 1988

Board of Trustees  
and  
Executive Director  
Public Employees Retirement Association

We have audited the combined financial statements of the Public Employees Retirement Association and the combining and individual fund financial statements of the association as of and for the year ended June 30, 1988, as listed in the Table of Contents. These financial statements are the responsibility of the association's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the general purpose financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the general purpose financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

As explained in Note B3, investments are valued at cost or amortized cost as required by generally accepted accounting principles. Minnesota statutes require valuation of all securities at cost plus one-third of unrealized capital gains or losses. Since the statutory provision deviates from generally accepted accounting principles, the basic statements are not in compliance with the statute. Note C1 contains the disclosures which must be considered together with the basic financial statements to achieve statutory reporting requirements.

In our opinion, the combined financial statements referred to above present fairly, in all material respects, the financial position of the Public Employees Retirement Association at June 30, 1988, and the results of its operations and changes in its financial position for the year then ended in conformity with generally accepted accounting principles. Also, in our opinion, the combining and individual fund financial statements referred to above present fairly, in all material respects, the financial position of the individual funds of the Public Employees Retirement Association at June 30, 1988, and the results of operations and changes in financial position of such funds for the year then ended, in conformity with generally accepted accounting principles. In addition, except for the valuation of securities, as discussed in the preceding paragraph, the aforementioned financial statements are in compliance with the reporting requirements of Minn. Stat. Section 356.20.

Our audit was made for the purpose of forming an opinion on the combined financial statements taken as a whole and on the combining and individual fund financial statements. The supplemental financial information, which is the

responsibility of the association's management, is presented for purposes of additional analysis and is not a required part of the combined financial statements of the Public Employees Retirement Association. The information has been subjected to the auditing procedures applied in the audit of the combined, combining, and individual fund financial statements and, in our opinion, is fairly stated in all material respects in relation to the combined financial statements taken as a whole.

James R. Nobles  
Legislative Auditor

John Asmussen, CPA  
Deputy Legislative Auditor

FINANCIAL SECTION  
**Combined Balance Sheet**

FOR FISCAL YEAR ENDED JUNE 30, 1988 (IN THOUSANDS)

<b>Assets</b>	
Cash (F.1.)	\$ 296
Accounts Receivable	1,110
Due From Other Funds	249
Investments (B.2.,3.)	
Minnesota Outside Managed	
Pooled Accounts (Market Value \$1,738,234)	1,558,834
Short-term Pooled Cash	75,902
Equity in Minnesota Post-Retirement Investment Fund (Market Value \$1,660,456)	1,638,016
Fixed Assets, Net of Accumulated Depreciation (F.4.b.)	247
Other	25
<b>Total Assets</b>	<b><u>\$3,274,679</u></b>
<b>Liabilities and Reserves Required</b>	
Liabilities:	
Current —	
Accounts Payable	\$ 96,677
Accrued Compensated Absences (F.5.)	199
Payable to Other Funds	249
<b>Total Liabilities</b>	<b><u>\$ 97,125</u></b>
Fund Balance:	
Member Reserves (F.3.a.)	\$ 582,781
Minnesota Post-Retirement Investment Fund Reserve (F.2.)	1,638,016
Benefit Reserves (F.3.b.)	2,144,165
<b>Total Reserves</b>	<b><u>\$4,364,962</u></b>
Unreserved Fund Balance —	
Unfunded Actuarial Accrued Liability (C.1.,2.)	(1,187,408)
<b>Total Fund Balances</b>	<b><u>\$3,177,554</u></b>
<b>Total Liabilities and Fund Balances</b>	<b><u>\$3,274,679</u></b>

The accompanying notes are an integral part of the financial statements.

FINANCIAL SECTION  
**Combined Statement**  
of Revenues, Expenses, and Changes in  
Fund Balance  
FOR FISCAL YEAR ENDED JUNE 30, 1988 (IN THOUSANDS)

<b>Operating Revenues:</b>	
Member Contribution	\$ 85,045
Employer Contribution	98,377
Investment Income	117,428
Distributed Income of the Minnesota Post-Retirement Investment (MPRI) Fund (F.2.c.)	168,608
State Appropriations	1,863
Police State Aid	1,570
Other	2,183
<b>Total Operating Revenues</b>	<b><u>\$ 475,074</u></b>

<b>Operating Expenses:</b>	
Benefits Paid	\$ 163,254
Refunds	14,868
Administrative Expenses	3,651
Investment Management Fees (B.3.c.)	2,213
Interest on Late Transfer to MPRI Fund	1,023
Other	28
<b>Total Operating Expenses</b>	<b><u>\$ 185,037</u></b>

<b>Other Changes in Reserves:</b>	
Local Relief Association Mergers (F.6.)	\$ 20,552
<b>Total Changes in Reserves</b>	<b><u>\$ 20,552</u></b>

Net Fund Balance Additions	\$ 310,589
<b>Fund Balance, July 1, 1987</b>	<b><u>2,866,965</u></b>
<b>Fund Balance, June 30, 1988</b>	<b><u><u>\$3,177,554</u></u></b>

FINANCIAL SECTION

**Combined Statement  
of Changes in Financial Position**  
FOR FISCAL YEAR ENDED JUNE 30, 1988 (IN THOUSANDS)

**Cash Provided:**

From Operations —	
Net Income	\$ 310,589
Items Added to (Deducted from) Net Income:	
Decrease (Increase) in Current Assets:	
Accounts Receivable	\$ (766)
Due From Other Funds	(27)
Other Current Assets	(5)
Increase (Decrease) in Current Liabilities:	
Accounts Payable	85,326
Accrued Compensated Absences	32
Payable to Other Funds	27
Proceeds From Disposal of Fixed Assets	4
Depreciation	139
<b>Total Items Added (Deducted)</b>	<b>\$ 84,730</b>
<b>Total Cash Provided from Operations</b>	<b>\$ 395,319</b>

**Cash Applied:**

Investments in Fixed Assets	\$ 50
<b>Total Cash Applied</b>	<b>\$ 50</b>

Net Increase (Decrease) in Cash and Investments \$ 395,269

**Cash Investments, July 1, 1987** **2,877,779**

**Cash Investments, June 30, 1988** **\$3,273,048**

The accompanying notes are an integral part of the financial statements.

**Notes to the Financial Statements**  
**Year Ended June 30, 1988**

with and transfer assets and administration to PERA. (See note F.6)

At June 30, 1988, membership in PERA consisted of:

**A. PLAN DESCRIPTION**

**1. Organization**

The Public Employees Retirement Association (PERA) is the administrator of two cost-sharing multiple-employer retirement plans, the Public Employees Retirement Fund (PERF) and the Public Employees Police and Fire Fund (PEPFF), and one agent multiple-employer retirement plan, the Police and Fire Consolidation Fund (PFCF). The plans are established and administered in accordance with Minnesota Statutes, Chapters 353, 353A, 353B, and 356. PERA is considered part of the State of Minnesota financial reporting entity and is included in the State's Comprehensive Annual Financial Report as a pension trust fund.

**2. Participating Employers**

PERA serves approximately 2,250 separate units of government, including cities, counties, townships, school districts, and generally other units of government whose revenues are derived from taxation, fees or assessments.

**3. Participating Members**

The PERF covers employees of counties, cities and townships and employees of schools in non-certified positions throughout the State of Minnesota. The PEPFF, originally established for police officers and firefighters not covered by a local relief association, now covers all police officers and firefighters hired since 1980. The PFCF, which was established effective December 31, 1987, covers police officers and firefighters belonging to a local relief association that elects to merge

	PERF	PEPFF	PFCF
Retirees and beneficiaries receiving benefits	26,700	1,363	126
Terminated employees entitled to benefits/refunds but not yet receiving them			
Vested	2,094	105	5
Non-Vested	6,621	107	0
Current, Active Employees			
Vested	53,371	3,856	93
Non-Vested	41,853	1,755	0
Total	130,639	7,186	224

**4. Benefit Provisions and Contribution Rates**

a) PERA provides retirement benefits as well as disability benefits to members, and benefits to survivors upon death of eligible members. All benefits vest after five years of credited service. The defined retirement benefits are based on a member's average salary for any five successive years of allowable service, age, and years of credit at termination of service. PERF members belong to either the Basic or Coordinated Plan. Coordinated members are covered by Social Security and Basic members are not. All new members must participate in the Coordinated Plan. The annuity accrual rate for a Basic member is 2 percent for each of the first 10 years of service and 2.5 percent for each remaining year. For a Coordinated member, the annuity accrual rate is 1 percent for each of the first 10 years and 1.5 percent for each remaining year. For PEPFF members, the annuity accrual rate is 2.5 percent for each of the first 25 years and 2 percent for each remaining year. For both PERF and PEPFF, members are eligible for a full annuity when age plus years of service equal 90. Members of the PFCF have the

option to choose benefits identical to those of the PEPFF; otherwise, they are covered by the benefit provisions of the local relief association of which they were members at the time of consolidation. Of the 126 members receiving benefits in the PFCF, only three are covered by the benefit provisions of the local relief association.

- b) Pension benefits are funded from member and employer contributions and income from investment of fund assets. Current contribution rates for the funds are set by Minnesota Statutes, Chapters 353, 353A, and 353B, and are shown below.

**B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND PLAN ASSET MATTERS**

**1. Basis of Accounting**

PERA financial statements are prepared using the accrual basis of accounting. Employee and employer contributions are recognized as revenues in the period in which they are earned and become measurable. Expenses are recorded when the liability is incurred.

**2. Investment Policies**

- a) Pursuant to Minnesota Statutes, Section 11A.04, the state's retirement fund assets are commingled in various pooled investment accounts administered by the State Board of Investment. As of June 30, 1988, the participation shares in the pooled accounts, excluding the Minnesota Post-Retirement Investment Fund, totaled 24.25 percent for the PERF, 7.91 percent for the PEPFF and 0.10

percent for the PFCF. The funds' shares of net assets of the Minnesota Post-Retirement Investment Fund totaled 36.39 percent, 3.58 percent, and 0.40 percent, respectively.

- b) Minnesota Statutes, Section 11A.24, broadly restricts retirement fund investments to obligations and stocks of United States and Canadian governments, their agencies, and their registered corporations; short-term obligations of specified high quality; restricted participation as a limited partner in venture capital, real estate or resource equity investments; restricted participation in registered mutual funds; and some qualified foreign instruments.
- c) PERA's investments are categorized to give an indication of the level of risk assumed by the funds at year end. Risk category 1 includes investments that are insured, or for which the securities are held by the state or its agent in the state's name. Risk category 2 includes uninsured and unregistered investments for which the securities are held by the broker's or dealer's trust department or agent in the state's name. Risk category 3 includes uninsured and unregistered investments for which the securities are held by the broker or dealer or by its trust department or agent but not in the state's name.

All PERA investments are included in Risk category 1, except for approximately \$8 million in repurchase agreements of the Short-Term Investment Pool and Minnesota

Retirement Plan Contribution Rates

	Employee	Employer	Additional Employer
Public Employees Retirement Fund:			
Basic Plan	8%	8%	2½%
Coordinated Plan	4%	4%	¼%
Public Employees Police and Fire Fund	8%	12%	—
Police and Fire Consolidation Fund	8%	12%	*

\*NOTE: An additional lump sum municipal contribution is required and calculated each year in order to eliminate the unfunded liability in each plan by the year 2010, and to amortize any actuarial losses over a 15-year period.

## FINANCIAL SECTION

### Notes (Continued)

Post-Retirement Investment Fund which are included in Risk category 3, because the underlying securities are held by the broker dealer.

- d) Information on investment activity and a listing of specific investments owned by the pooled accounts can be obtained from the Minnesota State Board of Investment.

#### 3. Method Used to Value Investments

- a) Investments in the pooled accounts are valued at cost for equity securities and amortized cost for fixed income securities, subject to adjustments for market declines judged to be other than temporary. The carrying amount and market value of PERA's investments as of June 30, 1988, are shown below.
- b) Investment income is recognized as earned. Accrued investment income of the pooled investment accounts is included in participation in the accounts. Gains and losses on sales or exchanges are

recognized on the transaction date.

- c) The cost of security transactions is included in the transaction price. Administrative expenses of the State Board of Investment and investment management fees of the external money managers and the state's master custodian for pension fund assets are allocated to the funds participating in the pooled investment accounts. PERA's share of these expenses totaled \$1,669,000 for PERF, \$540,000 for PEPFF, and \$4,000 for PFCF.

#### C. FUNDING STATUS AND PROGRESS

##### 1. Actuarial Valuation of Plan Benefits

Minnesota Statutes, Section 356.215, Subd. 4, provides that annual actuarial valuations of plan benefits be computed in accordance with the entry age normal cost method. Actuarial assumptions used are the same as discussed in note C.2. The unfunded actuarial accrued liabilities are the amounts by which reserves required to fund plan benefits exceed the assets of the funds, calculated in accordance with generally accepted accounting principles, as explained in note B.3. These amounts differ from the

Investment Pool	PERA Investments (In Thousands)	
	Carrying Amount	Market Value
Short-Term	\$ 75,902	\$ 75,902
Fixed Income	417,409	407,033
Active Equity	295,398	315,413
Passive Equity	633,099	779,942
Real Estate	134,478	161,023
Resource	30,770	27,063
Venture Capital	47,680	47,760
Subtotal — Pools	\$1,634,736	\$1,814,136
Post-Retirement Investment Fund	1,638,016	1,660,456
Total	\$3,272,752	\$3,474,592

unfunded accrued liabilities reported in the actuarial section, because the actuarial calculation of net assets includes cost plus one third of unrealized capital gains or losses, as shown below.

The unfunded actuarial accrued liabilities also differ from the pension benefit obligation discussed in note C.2, because of differing actuarial methods used for determining the value of benefits accrued.

## 2. Pension Benefit Obligation

The amount shown on the following page as "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 help users assess PERA's funding status on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among public employee retirement systems. The measure is independent of the actuarial funding method used to determine required contributions, discussed in Note D, also on the following page.

The pension benefit obligation was determined as part of an actuarial valuation at July 1, 1988. Significant actuarial assumptions used in the calculation of the pension benefit obligation for the PERF and the

PEPFF include: (a) a rate of return on the investment of present and future assets of 8 percent per year compounded annually prior to retirement, and 5 percent per year compounded annually following retirement; (b) projected salary increases of 6.5 percent per year, compounded annually, attributable to the effects of inflation and seniority/merit; (c) post-retirement benefit increases that are accounted for by the 5 percent rate of return assumption following retirement; and (d) mortality rates based on the 1971 Group Annuity Mortality Table projected to 1984 for males and females. The actuarial assumptions used for the PFCF are the same for members who select benefit provisions identical to those of the PEPFF. For those PFCF members selecting benefit provisions of the local relief association, some actuarial assumptions used may vary, based on the provisions in the particular plans.

As shown on the following page, the unfunded pension benefit obligation at June 30, 1988, was \$723,510,000 in the PERF and \$15,835,000 in the PFCF. In the PEPFF, assets in excess of the pension benefit obligation totaled \$31,147,000.

## 3. Change in Actuarial Methods

Prior to fiscal year 1988, the mortality table used was the UP-1984 Unisex set forward one year for males and set back four years for females. For fiscal year 1988, the Board of Trustees approved the use of the 1971 Group Annuity Mortality Table

Unfunded Actuarial Accrued Liability (In Thousands)			
	PERF	PEPFF	PFCF
Net Assets on 6/30/88 Balance Sheet	\$2,610,913	\$544,068	\$22,573
Plus 1/3 of unrealized capital gains or losses	46,125	13,601	75
Net assets at actuarial cost	<u>\$2,657,038</u>	<u>\$557,669</u>	<u>\$22,648</u>
Total required reserves	\$3,755,608	\$574,133	\$35,221
Less net assets at actuarial cost	<u>2,657,038</u>	<u>557,669</u>	<u>22,648</u>
Unfunded accrued liability (surplus assets) — actuarial section	<u>\$1,098,570</u>	<u>\$ 16,464</u>	<u>\$12,573</u>

## FINANCIAL SECTION

### Notes (Continued)

projected to 1984 for males and females. The change was made in order to reduce, if not eliminate, the series of large, annually recurring mortality losses that have been realized in the last four years. The PERF had an \$89,124,371 mortality loss, of which \$72,390,000 was attributable to the change in mortality tables. The PEPFF had a net mortality loss of \$5,854,077, of which \$5,932,000 was due to the change in mortality tables. The PFCF had a mortality loss of \$849,682, of which \$711,505 was due to the change in tables.

With the adoption of the new mortality table the projected benefit obligation increased \$179,670,000 in the PERF, \$18,805,000 in the PEPFF, and \$2,459,942 in the PFCF.

Additionally, vesting eligibility for Duluth Police Pension Association members in the PFCF has been reduced from 20 years to 5 years. This change increased the projected benefit obligation by \$888,223.

respectively. Minnesota Statutes Chapter 353A.09 Subd. 5(b)(1) requires full funding for the PFCF by December 31, 2010. As part of the annual actuarial valuation, PERA's actuary determines the sufficiency of the statutory contribution rates toward meeting the required full funding deadline. The actuary compares the actual contribution rate to a "required" contribution rate. The required contribution rate consists of (a) normal costs based on entry age normal cost methods, (b) a supplemental contribution for amortizing any unfunded actuarial accrued liability, and (c) an allowance for expenses.

As shown on the next page, the funding surplus at June 30, 1988, was \$13,378,000 in the PERF and \$6,755,000 in the PEPFF. In the PFCF, contributions actuarially required are equal to contributions actually made, due to the additional municipal contribution paid each year and included in the employer share. Significant actuarial assumptions used to compute contribution requirements are the same as those used to compute the standardized measure of the pension obligation discussed in note C on the preceding page.

#### D. CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE

Minnesota Statutes, Chapters 353, 353A, and 353B set the rates for employer and employee contributions. (See note A.4.b. for statutory rates.) Minnesota Statutes Chapter 356.215, Subd. 4(g) provides the formula for determining the date of full funding for the PERF and the PEPFF. Those dates are 2010 and 2018

#### E. TEN-YEAR HISTORICAL TREND INFORMATION

Ten-year historical trend information designed to provide information about PERA's progress made in accumulating sufficient assets to pay benefits when due is presented on pages 25 to 27.

	Pension Benefit Obligation (In Thousands)		
	PERF	PEPFF	PFCF
Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	\$1,633,391	\$174,131	\$19,685
Current Employees:			
Accumulated employee contributions including allocated investment income	637,855	124,176	3,225
Employer-Financed Vested	867,278	145,928	15,498
Employer-Financed Non-Vested	195,899	68,686	0
Total Pension Benefit Obligation	\$3,334,423	\$512,921	\$38,408
Net Assets available for benefits, at cost (Market Value is \$3,356,956)	2,610,913	544,068	22,573
Unfunded (assets in excess of) pension benefit obligation	\$ 723,510	\$(31,147)	\$15,835

## F. OTHER NOTES

### 1. Cash

Cash on deposit consists of the year-end receipts not processed as of the investment cutoff deadline on June 30. PERA cash funds are held in the state treasury, commingled with other state funds. Minnesota Statutes, Section 9.031, requires that deposits be secured by depository insurance or a combination of depository insurance and collateral securities held in the state's name by an agent of the state. Such insurance and collateral shall be in amounts sufficient to ensure that deposits do not exceed 90 percent of the sum of the insured amount and the market value of the collateral. Throughout fiscal year 1988, the combined depository insurance and collateral were sufficient to meet legal requirements and secure all PERA deposits.

### 2. Minnesota Post-Retirement Investment Fund (MPRIF) Reserve

- a) For all retiring members, except those in the Police and Fire Consolidation Fund who have not elected to have their post-retirement adjustments determined by MPRIF formula, the reserves required to pay the cost of member annuities are transferred to the MPRIF where the funds are invested. Increases in annuities are based upon earnings of the MPRIF, as defined in Minnesota Statutes, Section 11A.18, Subd. 9.
- b) Participation in the MPRIF is shown at the required reserves level in accordance with

Minnesota Statutes, Section 11A.18, Subd. 7. The Public Employees Retirement Fund's share of net assets of the MPRIF at June 30, 1988, is \$1,476,424,000. The Public Employees Police and Fire Fund's share of net assets of the MPRIF is \$145,187,000. The Police and Fire Consolidation Fund's share of net assets of the MPRIF is \$16,405,000.

- c) The distributed MPRIF income represents the 5 percent earnings on required reserves for fiscal year 1988, plus fiscal year 1987 income used to pay the January 1, 1988, post-retirement increase. In accordance with Minnesota Statutes, Section 11A.18, Subd. 9, the excess investment income of MPRIF for fiscal year 1988 will be used to increase retirement benefits for eligible annuitants, effective January 1, 1989.

### 3. Other Reserves

- a) Accumulated member contributions, without interest, less the amounts refunded, transferred to the Minnesota Post-Retirement Investment Fund for current retirees, or paid for disability and survivor benefits, are recorded in the Member Reserve.
- b) Employer contributions and investment income are recorded in the Benefit Reserve with administrative expenses and survivor and disability benefits paid therefrom.

	Funding Surplus (In Thousands)		
	PERF	PEPFF	PFCF
Contributions actually made			
Employer share	\$ 78,092	\$20,126	\$1,458
Percent of current year covered payroll	4.71%	12.0%	12.0% *
Employee share	\$ 71,504	\$13,436	\$ 105
Percent of current year covered payroll	4.31%	8.0%	8.0%
Subtotal — Actual	\$149,596	\$33,562	\$1,563
Contributions actuarially required	136,218	26,807	1,563
Funding surplus	\$ 13,378	\$ 6,755	\$ 0

\*NOTE: The 12 percent employer rate in the PFCF does not include the additional municipal contribution, totaling \$1,299,000 in fiscal year 1988.

## Notes

(Continued)

#### 4. Administrative Expenses

- a) Administrative expenses of the Public Employees Retirement Association are paid from the Public Employees Retirement Fund. At year-end, a portion of the expenses are allocated to the Public Employees Police and Fire Fund and the Police and Fire Consolidation Fund, based on the percentage of transactions processed for each fund during the year. The applicable amounts are reported as expenses of the three funds.
- b) Fixed assets are capitalized at the time of acquisition at cost. Depreciation is computed on a straight-line method over the useful life of the related assets. The estimated useful lives are three to six years for furniture and equipment, and three years for automobiles.

#### 5. Accrued Compensated Absences

Employees accrue vacation leave, sick leave, and compensatory leave at various rates within limits specified in collective bargaining agreements. Such leave is liquidated in cash primarily at the time of termination of employment.

#### 6. Reporting Changes

The Police and Fire Consolidation Fund (PFCF) was created by the 1987 Legislature to authorize, on a voluntary basis, any local police or salaried firefighters' relief association and the respective municipality to effect the consolidation of the local relief association with PERA. As of June 30, 1988, two local relief associations, the Duluth Police Pension Association and the Buhl Police Relief Association, have elected to consolidate with PERA, effective December 31, 1987. All investment securities of the two relief associations were transferred to PERA, and actuarial valuations

were completed for each of the relief associations prior to the effective date of consolidation. Members of the PFCF may elect to have benefits identical with those available under the provisions of the Public Employees Police and Fire Fund benefit plan or retain the benefits that were provided under the relief association's benefit provisions and guidelines on the effective date of consolidation.

#### 7. South Africa Divestment Plan

On October 2, 1985, the Minnesota State Board of Investment (SBI) adopted a resolution to carry out, within four years, a total divestment of its holding in companies doing business in South Africa. The resolution also prohibits new investments in these same companies. The divestment plan includes four phases, the last of which is to be completed by August 3, 1989. However, action to divest under any phase of the plan may only be taken if, on the advice of SBI's financial/legal advisors, such action would be consistent with SBI's members' obligations as fiduciaries for the management and investment of the funds under their control.

To date, no securities have been liquidated as a result of the resolution. At the suggestion of legal counsel, SBI chose not to proceed immediately with the divestment action called for by the plan. Instead, SBI instructed its active equity portfolio managers not to purchase in the future any securities in companies that fail to meet requirements of the plan, unless such "nonpurchase" action would place SBI's members in jeopardy of violating their fiduciary responsibilities.

Should the "divestment by attrition" pattern that the SBI is following continue, active portfolio managers will have a dwindling number of companies in which to invest over time. That could significantly alter the risk/return characteristics of SBI's total portfolio.

FINANCIAL SECTION

**Required Supplementary Information  
Analysis of Funding Progress\***

(IN THOUSANDS)  
Unaudited

**Public Employees Retirement Fund**

Fiscal Year	(1)	(2)	(3)	(4)	(5)	(6)
	Net Assets Available for Benefits**	Pension Benefit Obligation	Percentage Funded (1) ÷ (2)	Unfunded Pension Benefit Obligation (2) - (1)	Annual Covered Payroll	Unfunded Pension Benefit Obligation as a Percentage of Covered Payroll (4) ÷ (5)
1985	\$1,812,025	\$2,310,374	78.4%	\$498,349	\$1,337,535	37.3%
1986	2,076,864	2,590,445	80.2	513,581	1,457,848	35.2
1987	2,382,503	2,839,047	83.9	456,544	1,546,296	29.5
1988***	2,610,913	3,334,423	78.3	723,510	1,659,171	43.6

**Public Employees Police and Fire Fund**

Fiscal Year	(1)	(2)	(3)	(4)	(5)	(6)
	Net Assets Available for Benefits**	Pension Benefit Obligation	Percentage Funded (1) ÷ (2)	Unfunded (assets in excess of) Pension Benefit Obligation (2) - (1)	Annual Covered Payroll	Unfunded Pension Benefit Obligation as a Percentage of Covered Payroll (4) ÷ (5)
1985	\$ 330,662	\$ 352,356	93.8%	\$ 21,694	\$ 130,725	16.6%
1986	405,825	402,314	100.9	(3,511)	144,392	N/A
1987	484,462	437,229	110.8	(47,233)	154,906	N/A
1988***	544,068	512,921	106.1	(31,147)	167,857	N/A

**Police and Fire Consolidation Fund**

Fiscal Year	(1)	(2)	(3)	(4)	(5)	(6)
	Net Assets Available for Benefits**	Pension Benefit Obligation	Percentage Funded (1) ÷ (2)	Unfunded Pension Benefit Obligation (2) - (1)	Annual Covered Payroll	Unfunded Pension Benefit Obligation as a Percentage of Covered Payroll (4) ÷ (5)
1988	\$ 22,574	\$ 38,408	58.8%	\$ 15,834	\$ 2,554	620.0%

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 PERA's funding 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 retirement system. Trends in 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 PERA's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the retirement system.

\*Ten-year historical trend information is unavailable for years prior to 1985.

\*\*At cost (See Note B.3.a.).

\*\*\*In fiscal year 1988, a new mortality table was used that more closely reflects mortality experience of PERA membership. This change increased the projected benefit obligation by \$179,670,000 in the PERF, \$18,805,000 in the PEPFF, and \$2,460,000 in the PFCF.

FINANCIAL SECTION

**Required Supplementary Information**  
**Revenue by Source**  
 (IN THOUSANDS)

**Public Employees Retirement Fund**

FISCAL YEAR	MEMBER CONTRIBUTION	EMPLOYER CONTRIBUTION	INVESTMENT INCOME*	OTHER	TOTAL
1979	\$39,777	\$53,639	\$ 50,326	\$18,808**	\$162,550
1980	44,051	59,581	69,172	3,019	175,823
1981	48,714	65,985	109,798	287	224,784
1982	52,277	70,913	117,583	2,712	243,485
1983	66,181	74,005	149,413	2,691	292,290
1984	58,348	78,967	132,373	412	270,100
1985	60,564	68,375	172,045	668	301,652
1986	64,778	71,434	251,461	2,642	390,315
1987	67,945	74,391	311,530	2,572	456,438
1988	71,504	78,092	244,981	2,394	396,971

**Public Employees Police and Fire Fund**

FISCAL YEAR	MEMBER CONTRIBUTION	EMPLOYER CONTRIBUTION	INVESTMENT INCOME*	OTHER	TOTAL
1979	\$ 6,235	\$ 8,434	\$ 7,491	\$ 3,875**	\$ 26,035
1980	6,305	9,460	11,317	634	27,716
1981	7,109	10,660	17,345	638	35,752
1982	7,973	11,946	19,038	750	39,707
1983	9,702	12,953	25,391	540	48,586
1984	9,671	14,473	21,546	354	46,044
1985	10,530	15,747	29,946	394	56,617
1986	11,583	17,341	50,537	6,538	85,999
1987	12,416	18,596	60,542	675	92,229
1988	13,436	20,126	39,747	1,697	75,006

**Police and Fire Consolidation Fund**

FISCAL YEAR	MEMBER CONTRIBUTION	EMPLOYER CONTRIBUTION	INVESTMENT INCOME*	OTHER	TOTAL
1988	\$ 105	\$ 159	\$ 1,308	\$ 1,525	\$ 3,097

\*Includes Distributed Income of the Minnesota Post-Retirement Investment Fund.

\*\*Includes Gain or Loss from Statutory Valuation of the Minnesota Post-Retirement Investment Fund.

FINANCIAL SECTION

**Required Supplementary Information**  
**Expense by Type**  
 (IN THOUSANDS)

**Public Employees Retirement Fund**

FISCAL YEAR	BENEFIT	REFUND	ADMINISTRATION	OTHER	TOTAL
1979	\$ 35,511	\$10,241	\$1,256	\$ 5,113	\$ 52,121
1980	41,338	10,962	1,463	23	53,786
1981	45,921	10,092	1,776	156	57,945
1982	52,744	11,869	2,357	146	67,116
1983	62,588	10,471	2,506	20,900	96,465
1984	74,237	23,756	2,792	26,608	127,393
1985	90,389	13,158	2,888	60	106,495
1986	108,133	12,566	2,868	1,909	125,476
1987	128,009	13,356	3,189	6,245	150,799
1988	148,587	14,175	3,412	2,387	168,561

**Public Employees Police and Fire Fund**

FISCAL YEAR	BENEFIT	REFUND	ADMINISTRATION	OTHER	TOTAL
1979	\$ 2,750	\$ 719	\$ 77	\$ 77	\$ 3,623
1980	3,289	1,022	76	—	4,387
1981	3,717	788	93	15	4,613
1982	4,500	728	130	34	5,392
1983	5,358	825	141	1,935	8,259
1984	6,352	2,043	164	3,793	12,352
1985	7,616	1,032	175	363	9,186
1986	9,197	906	176	529	10,808
1987	11,314	1,055	208	1,017	13,594
1988	13,821	693	233	653	15,400

**Police and Fire Consolidation Fund**

FISCAL YEAR	BENEFIT	REFUND	ADMINISTRATION	OTHER	TOTAL
1988	\$ 846	\$ 0	\$ 6	\$ 224	\$ 1,076

FINANCIAL SECTION

**Combining Balance Sheet**

FOR FISCAL YEAR ENDED JUNE 30, 1988 (IN THOUSANDS)

	Public Employees Retirement Fund	Public Employees Police and Fire Fund	Police and Fire Consolidation Fund	Total
<b>Assets</b>				
Cash	\$ 212	\$ 83	\$ 1	\$ 296
Accounts Receivable	157	154	799	1,110
Due from Other Funds	231	18	0	249
Investments				
Minnesota Outside Managed Pooled Accounts (Market Value \$1,738,234)	1,168,491	385,220	5,123	1,558,834
Short-term Pooled Cash	55,204	19,599	1,099	75,902
Equity in Minnesota Post-Retirement Investment Fund (Market Value \$1,660,456)	1,476,424	145,187	16,405	1,638,016
Fixed Assets, Net of Accumulated Depreciation	247	0	0	247
Other	25	0	0	25
<b>Total Assets</b>	<b>\$2,700,991</b>	<b>\$ 550,261</b>	<b>\$ 23,427</b>	<b>\$3,274,679</b>
<b>Liabilities and Reserves Required</b>				
Liabilities:				
Current —				
Accounts Payable	\$ 89,862	\$ 5,965	\$ 850	\$ 96,677
Accrued Compensated Absences Payable to Other Funds	199	0	0	199
	17	228	4	249
<b>Total Liabilities</b>	<b>\$ 90,078</b>	<b>\$ 6,193</b>	<b>\$ 854</b>	<b>\$ 97,125</b>
<b>Fund Balance:</b>				
Member Reserves	\$ 484,819	\$ 95,440	\$ 2,522	\$ 582,781
Minnesota Post-Retirement Investment Fund Reserve	1,476,424	145,187	16,405	1,638,016
Benefit Reserves	1,794,365	333,506	16,294	2,144,165
<b>Total Reserves</b>	<b>\$3,755,608</b>	<b>\$ 574,133</b>	<b>\$ 35,221</b>	<b>\$4,364,962</b>
Unreserved Fund Balance —				
Unfunded Actuarial Accrued Liability	(1,144,695)	(30,065)	(12,648)	(1,187,408)
<b>Total Fund Balance</b>	<b>\$2,610,913</b>	<b>\$ 544,068</b>	<b>\$ 22,573</b>	<b>\$3,177,554</b>
<b>Total Liabilities and Fund Balance</b>	<b>\$2,700,991</b>	<b>\$ 550,261</b>	<b>\$ 23,427</b>	<b>\$3,274,679</b>

The accompanying notes are an integral part of the financial statements.

FINANCIAL SECTION

**Combining Statement  
of Revenues, Expenses, and Changes  
in Fund Balance**

FOR FISCAL YEAR ENDED JUNE 30, 1988 (IN THOUSANDS)

	Public Employees Retirement Fund	Public Employees Police and Fire Fund	Police and Fire Consolidation Fund	Total
<b>Operating Revenues:</b>				
Member Contribution	\$ 71,504	\$ 13,436	\$ 105	\$ 85,045
Employer Contribution	78,092	20,126	159	98,377
Investment Income	91,155	25,153	1,120	117,428
Distributed Income of the Minnesota Post-Retirement Investment Fund	153,826	14,594	188	168,608
State Appropriations	1,786	77		1,863
Police State Aid		1,570		1,570
Other	608	50	1,525	2,183
<b>Total Operating Revenues</b>	<b>\$ 396,971</b>	<b>\$ 75,006</b>	<b>\$ 3,097</b>	<b>\$ 475,074</b>
<b>Operating Expenses:</b>				
Benefits Paid	\$ 148,587	\$ 13,821	\$ 846	\$ 163,254
Refunds	14,175	693		14,868
Administrative Expenses	3,412	233	6	3,651
Investment Management Fees	1,669	540	4	2,213
Interest On Late Transfer to MPRI Fund	700	103	220	1,023
Other	18	10		28
<b>Total Operating Expenses</b>	<b>\$ 168,561</b>	<b>\$ 15,400</b>	<b>\$ 1,076</b>	<b>\$ 185,037</b>
<b>Other Changes in Reserves:</b>				
Local Relief Association Mergers	\$ 0	\$ 0	\$ 20,552	\$ 20,552
<b>Total Changes in Reserves</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 20,552</b>	<b>\$ 20,552</b>
Net Fund Balance Additions	\$ 228,410	\$ 59,606	\$ 22,573	\$ 310,589
<b>Fund Balance, July 1, 1987</b>	<b>2,382,503</b>	<b>484,462</b>	<b>0</b>	<b>2,866,965</b>
<b>Fund Balance, June 30, 1988</b>	<b>\$2,610,913</b>	<b>\$ 544,068</b>	<b>\$ 22,573</b>	<b>\$3,177,554</b>

The accompanying notes are an integral part of the financial statements.

FINANCIAL SECTION

**Combining Statement  
of Changes in Financial Position**

FOR FISCAL YEAR ENDED JUNE 30, 1988 (IN THOUSANDS)

	Public Employees Retirement Fund	Public Employees Police and Fire Fund	Police and Fire Consolidation Fund	Total
<b>Cash Provided:</b>				
From Operations —				
Net Income	\$ 228,410	\$ 59,606	\$ 22,573	\$ 310,589
Items Added to (Deducted from) Net Income:				
Decrease (Increase) in Current Assets:				
Accounts Receivable	\$ (29)	\$ 62	\$ (799)	\$ (766)
Due From Other Funds	(26)	(1)	0	(27)
Other Current Assets	(5)	0	0	(5)
Increase (Decrease) in Current Liabilities:				
Accounts Payable	79,672	4,804	850	85,326
Accrued Compensated Absences	32	0	0	32
Payable to Other Funds	0	23	4	27
Proceeds From Disposal of Fixed Assets	4	0	0	4
Depreciation	139	0	0	139
<b>Total Items Added (Deducted)</b>	<b>\$ 79,787</b>	<b>\$ 4,888</b>	<b>\$ 55</b>	<b>\$ 84,730</b>
<b>Total Cash Provided from Operations</b>	<b>\$ 308,197</b>	<b>\$ 64,494</b>	<b>\$ 22,628</b>	<b>\$ 395,319</b>
<b>Cash Applied:</b>				
Investments in Fixed Assets	\$ 50	\$ 0	\$ 0	\$ 50
<b>Total Cash Applied</b>	<b>\$ 50</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 50</b>
Net Increase (Decrease) in Cash and Investments	\$ 308,147	\$ 64,494	\$ 22,628	\$ 395,269
<b>Cash and Investments, July 1, 1987</b>	<b>2,392,184</b>	<b>485,595</b>	<b>0</b>	<b>2,877,779</b>
<b>Cash and Investments, June 30, 1988</b>	<b>\$2,700,331</b>	<b>\$ 550,089</b>	<b>\$ 22,628</b>	<b>\$3,273,048</b>

FINANCIAL SECTION  
**Statement of Revenues**  
**Expenses, and Changes in Fund Balance**  
**Public Employees Retirement Fund**  
 FOR FISCAL YEAR ENDED JUNE 30, 1988 (IN THOUSANDS)

	Member	Minnesota Post- Retirement Investment Fund	Benefit	Unreserved Fund Balance	Total
<b>Operating Revenue:</b>					
Member Contribution	\$ 71,504	\$	\$	\$	\$ 71,504
Employer Contribution			78,092		78,092
Investment Income			91,155		91,155
Distributed Income of the Minnesota Post-Retirement Investment Fund		153,826			153,826
State Appropriations			1,786		1,786
Other	2		606		608
<b>Total Operating Revenues</b>	<b>\$ 71,506</b>	<b>\$ 153,826</b>	<b>\$ 171,639</b>	<b>\$</b>	<b>\$ 396,971</b>
<b>Operating Expenses:</b>					
Benefits Paid	\$ 1,250	\$ 134,682	\$ 12,655	\$	\$ 148,587
Refunds	11,239		2,936		14,175
Administrative Expenses			3,412		3,412
Investment Management Fee			1,669		1,669
Interest on Late Transfer to MPRI Fund			700		700
Other	7		11		18
<b>Total Operating Expenses</b>	<b>\$ 12,496</b>	<b>\$ 134,682</b>	<b>\$ 21,383</b>	<b>\$</b>	<b>\$ 168,561</b>
<b>Other Changes in Reserves:</b>					
Annuities Awarded	\$ (23,324)	\$ 157,127	\$ (133,803)	\$	\$ 0
Mortality Loss		89,125	(89,125)		0
Transfer Between Reserves	(3,427)		3,427		0
<b>Total Other Changes</b>	<b>\$ (26,751)</b>	<b>\$ 246,252</b>	<b>\$ (219,501)</b>	<b>\$</b>	<b>\$ 0</b>
Net Fund Balance Additions	\$ 32,259	\$ 265,396	\$ (69,245)	\$	\$ 228,410
Change in Unfunded Accrued Liability			338,236	(338,236)	0
<b>Fund Balance, July 1, 1987</b>	<b>452,560</b>	<b>1,211,028</b>	<b>1,525,374</b>	<b>(806,459)</b>	<b>2,382,503</b>
<b>Fund Balance, June 30, 1988</b>	<b>\$ 484,819</b>	<b>\$1,476,424</b>	<b>\$1,794,365</b>	<b>\$(1,144,695)</b>	<b>\$2,610,913</b>

The accompanying notes are an integral part of the financial statements.

FINANCIAL SECTION

**Statement of Revenues  
Expenses, and Changes in Fund Balance  
Public Employees Police and Fire Fund**

FOR FISCAL YEAR ENDED JUNE 30, 1988 (IN THOUSANDS)

	Member	Minnesota Post- Retirement Investment Fund	Benefit	Unreserved Fund Balance	Total
<b>Operating Revenue:</b>					
Member Contribution	\$ 13,436	\$	\$	\$	\$ 13,436
Employer Contribution			20,126		20,126
Investment Income			25,153		25,153
Distributed Income of the Minnesota Post-Retirement Investment Fund		14,594			14,594
State Appropriations			77		77
Police State Aid			1,570		1,570
Other	7		43		50
<b>Total Operating Revenues</b>	<b>\$ 13,443</b>	<b>\$ 14,594</b>	<b>\$ 46,969</b>	<b>\$</b>	<b>\$ 75,006</b>
<b>Operating Expenses:</b>					
Benefits Paid	\$ 354	\$ 11,808	\$ 1,659	\$	\$ 13,821
Refunds	547		146		693
Administrative Expenses			233		233
Investment Management Fee			540		540
Interest on Late Transfer to MPRI Fund			103		103
Other	2		8		10
<b>Total Operating Expenses</b>	<b>\$ 903</b>	<b>\$ 11,808</b>	<b>\$ 2,689</b>	<b>\$</b>	<b>\$ 15,400</b>
<b>Other Changes in Reserves:</b>					
Annuities Awarded	\$ (2,378)	\$ 20,536	\$ (18,158)	\$	\$ 0
Mortality Loss		5,854	(5,854)		0
Transfer Between Reserves	(264)		264		0
<b>Total Other Changes</b>	<b>\$ (2,642)</b>	<b>\$ 26,390</b>	<b>\$ (23,748)</b>	<b>\$</b>	<b>\$ 0</b>
Net Fund Balance Additions	\$ 9,898	\$ 29,176	\$ 20,532	\$	\$ 59,606
Change in Unfunded Accrued Liability			27,853	(27,853)	0
<b>Fund Balance, July 1, 1987</b>	<b>85,542</b>	<b>116,011</b>	<b>285,121</b>	<b>(2,212)</b>	<b>484,462</b>
<b>Fund Balance, June 30, 1988</b>	<b>\$ 95,440</b>	<b>\$ 145,187</b>	<b>\$ 333,506</b>	<b>\$ (30,065)</b>	<b>\$ 544,068</b>

FINANCIAL SECTION

**Statement of Revenues  
Expenses, and Changes in Fund Balance  
Police and Fire Consolidation Fund  
FOR FISCAL YEAR ENDED JUNE 30, 1988 (IN THOUSANDS)**

	Member	Minnesota Post- Retirement Investment Fund	Benefit	Unreserved Fund Balance	Total
<b>Operating Revenue:</b>					
Member Contribution	\$ 105	\$	\$	\$	\$ 105
Employer Contribution			159		159
Investment Income			1,120		1,120
Distributed Income of the Minnesota Post-Retirement Investment Fund		188			188
Other	145		1,380		1,525
<b>Total Operating Revenues</b>	<b>\$ 250</b>	<b>\$ 188</b>	<b>\$ 2,659</b>	<b>\$</b>	<b>\$ 3,097</b>
<b>Operating Expenses:</b>					
Benefits Paid	\$ 5	\$ 789	\$ 52	\$	\$ 846
Administrative Expenses			6		6
Investment Management Fee			4		4
Interest on Late Transfer to MPRI Fund			220		220
<b>Total Operating Expenses</b>	<b>\$ 5</b>	<b>\$ 789</b>	<b>\$ 282</b>	<b>\$</b>	<b>\$ 1,076</b>
<b>Other Changes in Reserves:</b>					
Annuities Awarded	\$ (114)	\$ 16,156	\$ (16,042)	\$	\$ 0
Mortality Loss		850	(850)		0
Local Relief Association Mergers	2,391		18,161		20,552
<b>Total Other Changes</b>	<b>\$ 2,277</b>	<b>\$ 17,006</b>	<b>\$ 1,269</b>	<b>\$</b>	<b>\$ 20,552</b>
Net Fund Balance Additions	\$ 2,522	\$ 16,405	\$ 3,646	\$	\$ 22,573
Change in Unfunded Accrued Liability			12,648	(12,648)	0
<b>Fund Balance, July 1, 1987</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Fund Balance, June 30, 1988</b>	<b>\$ 2,522</b>	<b>\$ 16,405</b>	<b>\$ 16,294</b>	<b>\$ (12,648)</b>	<b>\$ 22,573</b>

The accompanying notes are an integral part of the financial statements.

FINANCIAL SECTION

**Schedule of Administrative Expenses**

FOR FISCAL YEAR ENDED JUNE 30, 1988 (IN THOUSANDS)

<b>Personal Services:</b>	
Staff Salaries	\$1,729
Social Security	108
Retirement	84
Insurance and Workers' Compensation	170
<b>Total Personal Services</b>	<b>\$2,091</b>
<b>Professional Services:</b>	
Actuarial	\$ 161
Audit	53
Legal	63
Investment Consultants	41
Management Consultants	74
<b>Total Professional Services</b>	<b>392</b>
<b>Communication:</b>	
Printing	\$ 132
Telephone	25
Postage	219
Travel	24
Mailing Services	18
<b>Total Communications</b>	<b>418</b>
<b>Rentals:</b>	
Office Space	\$ 282
Equipment Leasing	39
<b>Total Rentals</b>	<b>321</b>
<b>Other:</b>	
Medical Examinations	\$ 36
Stationery and Office Supplies	59
Maintenance Service Contracts	60
Depreciation	139
Education (Employees)	5
Publications and Subscriptions	12
Meeting Expense	9
Vehicle Expense	4
Equipment (\$500 and Under)	4
Fees and Other Fixed Charges	8
Indirect Cost from State	85
Miscellaneous	8
<b>Total Other</b>	<b>429</b>
<b>Total Administrative Expense</b>	<b>\$3,651</b>
<b>Allocation of Administrative Expense:</b>	
Public Employee Retirement Fund	\$3,412
Public Employee Police and Fire Fund	233
Police and Fire Consolidation Fund	6
<b>Total</b>	<b>\$3,651</b>

## FINANCIAL SECTION

### Summary Schedules

FOR FISCAL YEAR ENDED JUNE 30, 1988 (IN THOUSANDS)

#### Summary Schedule of Cash Receipts and Disbursements

	Public Employees Retirement Fund	Public Employees Police and Fire Fund	Police and Fire Consolidation Fund	Total
<b>Cash Balance at Beginning of Year:</b>	\$ 199	\$ 53	\$ 0	\$ 252
<b>Add Receipts:</b>				
Member Contributions	\$ 71,543	\$ 13,431	\$ 106	\$ 85,080
Employer Contributions	78,005	20,189	159	98,353
Investment Income	89,724	31,171	1,393	122,288
Investments Redeemed	425,101	81,943	46,235	553,279
Minnesota Post-Retirement Investment Fund	134,682	11,808	789	147,279
Local Relief Association Mergers	0	0	3,075	3,075
Other	4,229	1,742	916	6,887
<b>Total Cash Receipts</b>	<b>\$ 803,284</b>	<b>\$ 160,284</b>	<b>\$ 52,673</b>	<b>\$1,016,241</b>
<b>Less Disbursements:</b>				
Benefit Payments	\$ 149,072	\$ 13,879	\$ 849	\$ 163,800
Administrative Expense	4,460	0	3	4,463
Investments Purchased	467,611	117,161	35,254	620,026
Refunds	14,406	693	0	15,099
Minnesota Post-Retirement Investment Fund	157,127	27,013	16,345	200,485
Other	10,595	1,508	221	12,324
<b>Total Cash Disbursements</b>	<b>\$ 803,271</b>	<b>\$ 160,254</b>	<b>\$ 52,672</b>	<b>\$1,016,197</b>
<b>Cash Balance at End of Year: June 30, 1988</b>	<b>\$ 212</b>	<b>\$ 83</b>	<b>\$ 1</b>	<b>\$ 296</b>

#### Summary Schedule of Commissions and Payments to Consultants

Individual or Firm Name	Nature of Services	Fee and Commissions Paid
Gabriel, Roeder, Smith & Co.	Actuary	\$ 42
Wyatt Co.	Actuary	119
Best & Flanagan	Legal	6
Collins, Buckley, Sauntry & Haugh	Legal	3
Richards & Tierney	Investment	41
McGladrey, Hendrickson & Pullen	Management	10
Pension Benefit Information	Management	2
Computer Chrome, Inc.	Communication	3
State of Minnesota —		
Attorney General	Legal	44
Administrative Hearings Office	Legal	10
Rehabilitation Services Division	Management	2
Information Management Bureau	Temporary Help	49
Legislative Auditor	Auditor	50
State Auditor	Auditor	3
Management Analysis Division	Management	8
		<u>\$392</u>

The accompanying notes are an integral part of the financial statements.

FINANCIAL SECTION  
**Investment Summaries**  
 FOR FISCAL YEAR ENDED JUNE 30, 1988 (IN THOUSANDS)

Public Employees Retirement Fund			
	Market Value June 30, 1987	Cost June 30, 1987	Acquisitions
Pooled Accounts			
Venture Capital	\$ 25,565	\$ 25,470	\$ 11,971
External Active Managed	305,154	258,689	34,880
Indexed Fund	567,258	391,205	104,327
Real Estate Fund	110,743	95,153	10,993
Resources Fund	18,505	21,445	2,968
Fixed Income Pool	298,123	307,198	24,702
<b>Total Pooled Accounts</b>	<b>\$1,325,348</b>	<b>\$1,099,160</b>	<b>\$ 189,841</b>

Public Employees Police and Fire Retirement Fund			
	Market Value June 30, 1987	Cost June 30, 1987	Acquisitions
Pooled Accounts			
Venture Capital	\$ 7,823	\$ 7,799	\$ 3,933
External Active Managed	93,383	80,072	8,957
Indexed Fund	173,727	122,624	35,986
Real Estate Fund	33,889	29,558	3,948
Resources Fund	5,663	6,574	1,010
Fixed Income Pool	91,231	94,017	8,777
<b>Total Pooled Accounts</b>	<b>\$ 405,716</b>	<b>\$ 340,644</b>	<b>\$ 62,611</b>

Police and Fire Consolidation Fund			
	Market Value June 30, 1987	Cost June 30, 1987	Acquisitions
Pooled Accounts			
Venture Capital	\$ 0	\$ 0	\$ 550
External Active Managed	0	0	4,173
Indexed Fund	0	0	7,977
Real Estate Fund	0	0	1,881
Resources Fund	0	0	326
Fixed Income Pool	0	0	15,220
<b>Total Pooled Accounts</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 30,127</b>

The above summaries do not include short-term pooled cash.  
 The accompanying notes are an integral part of the financial statements.

Dispositions	Cost June 30, 1988	Market Value June 30, 1988
\$ 1,594	\$ 35,847	\$ 35,911
71,858	221,711	237,138
22,313	473,219	586,386
5,461	100,685	121,063
1,267	23,146	20,347
18,017	313,883	306,021
<b>\$ 120,510</b>	<b>\$1,168,491</b>	<b>\$1,306,866</b>

Dispositions	Cost June 30, 1988	Market Value June 30, 1988
\$ 53	\$ 11,679	\$ 11,701
16,200	72,829	77,305
954	157,656	191,158
198	33,308	39,465
44	7,540	6,633
586	102,208	99,761
<b>\$ 18,035</b>	<b>\$ 385,220</b>	<b>\$ 426,023</b>

Dispositions	Cost June 30, 1988	Market Value June 30, 1988
\$ 396	\$ 154	\$ 148
3,315	858	970
5,753	2,224	2,398
1,396	485	495
242	84	83
13,902	1,318	1,251
<b>\$ 25,004</b>	<b>\$ 5,123</b>	<b>\$ 5,345</b>

# ACTUARIAL SECTION

## Certification Letter



AN INDEPENDENT WORLDWIDE BENEFITS  
AND COMPENSATION CONSULTING FIRM

ACTUARIAL SERVICES  
COMPENSATION PROGRAMS  
ADMINISTRATIVE SYSTEMS  
INTERNATIONAL SERVICES  
ORGANIZATION SURVEYS

SUITE 1525  
8400 NORMANDALE LAKE BOULEVARD  
MINNEAPOLIS, MINNESOTA 55437

(612) 921-8700

EMPLOYEE BENEFITS  
EMPLOYEE COMMUNICATIONS  
RISK MANAGEMENT  
INSURANCE CONSULTING  
HEALTH CARE CONSULTING

December 5, 1988

Board of Trustees  
Public Employees Retirement  
Association of Minnesota  
514 St. Peter Street  
St. Paul, MN 55102

Members of the Board:

We have completed our annual actuarial valuation of the Public Employees Retirement Association of Minnesota, for the purpose of determining the actuarial status of the Public Employees Retirement Fund (PERF), the Public Employees Police and Fire Fund (PEPFF), and the Police and Fire Consolidation Fund (PFCF) as of July 1, 1988.

The actuarial valuation was based upon applicable statutory provisions and the Standards for Actuarial Work in effect on July 1, 1988. The basic financial and employee data used in the actuarial valuation are those submitted to us by the association office.

The three valuations were performed by using the actuarial cost methods and actuarial assumptions that are described in a separate table of this report. The actuarial cost method and the assumptions related to asset valuation, investment return, earnings progression and active member payroll growth are set by Statute. All other assumptions are based on actual experience with changes recommended by the actuary, adopted by the PERA Board and approved by the Legislative Commission on Pensions and Retirement.

A new mortality table was adopted for this valuation to reflect longer life expectancies. The new mortality table increased the actuarial accrued liabilities of PERF by \$217,298,000 and for PEPFF by \$24,688,000. The actuarial present value of projected benefits for PFCF increased by \$2,736,000.

The only significant change in benefits since the prior valuation involved the Duluth Police Relief Association. The actuarial present value of projected benefits for Duluth Police increased by \$1,065,000.

The following table shows the date for funding for each of the three plans and the funding percentage for the 1988 valuation. The funding percentage expresses current

assets as a percentage of the actuarial accrued liability determined on the entry age normal cost method.

Fund	Funding Date	Funded Percentage
PERF	2010	71%
PEPFF	2018	97
PFCF	2010	64

We certify that to the best of our knowledge and belief this actuarial valuation was performed in accordance with the requirements of Section 356.215, Minnesota Statutes, and the requirements of the Standards for Actuarial Work.

Very truly yours,

Robert E. Perkins  
Fellow, Society of  
Actuaries

# ACTUARIAL SECTION

## Cost Method and Assumptions

JUNE 30, 1988

### Public Employees Retirement Fund

**Actuarial Cost Method** - Entry Age Normal. Actuarial gains and losses are recognized as they occur and are amortized in accordance with state law.

**Actuarial Assumptions**

- |                                 |   |
|---------------------------------|---|
| 1. a. Retirement                | - Age 64. In addition, 50% utilization of retirement when age plus service totals 90. |
| b. Mortality                    | - 1971 Group Annuity Mortality Table projected to 1984 for males and females.         |
| c. Mortality-Disabled           | - 1965 Railroad Workers Select Mortality.   |
| d. Disability                   | - Graduated rates. See following table for sample values.                             |
| e. Separation                   | - Graduated rates. Following page shows sample values.                                |
| 2. Loading for Expense          | - .33% of payroll.  |
| 3. Asset Valuation              | - Cost plus 1/3 unrealized gains or losses.   |
| 4. Investment Return            | - 8% compounded annually preretirement; 5% compounded annually post-retirement.       |
| 5. Earnings Progression         | - 6.5% per year.  |
| 6. Active Member Payroll Growth | - 6.5% per year.  |

### Public Employees Police and Fire Fund

**Actuarial Cost Method** - Entry Age Normal. Actuarial gains and losses are recognized as they occur and are amortized in accordance with state law.

**Actuarial Assumptions**

- |                                 |   |
|---------------------------------|---|
| 1. a. Retirement                | - Age 60.   |
| b. Mortality                    | - 1971 Group Annuity Mortality Table projected to 1984 for males and females.   |
| c. Mortality-Disabled           | - 1965 Railroad Workers Select Mortality.                                       |
| d. Disability                   | - Graduated rates. Following table shows sample values.                         |
| e. Separation                   | - Graduated rates. See following page for sample values.                        |
| 2. Loading for Expense          | - .50% of payroll.  |
| 3. Asset Valuation              | - Cost plus 1/3 unrealized gains or losses.                                     |
| 4. Investment Return            | - 8% compounded annually preretirement; 5% compounded annually post-retirement. |
| 5. Earnings Progression         | - 6.5% per year.  |
| 6. Active Member Payroll Growth | - 6.5% per year.  |

### Police and Fire Consolidation Fund

For members selecting benefit provisions of the Public Employees Police and Fire Fund, the actuarial cost method and actuarial assumptions are the same as those indicated above. For members selecting benefit provisions of the local relief association, the actuarial assumptions used may vary depending upon the provisions of the particular relief association.

ACTUARIAL SECTION  
**Actuarial Tables**  
 JUNE 30, 1988

**Schedule of Recommended vs. Actual Contributions**

	Actual Contribution Rate			Recommended
	Member	Employer	Total	Rate
<b>Public Employees Retirement Fund</b>	4.27	4.67	8.94	9.42
<b>Public Employees Police and Fire Fund</b>	8.00	12.00	20.00	16.69
<b>Police and Fire Consolidation Fund</b>	8.00	12.00	20.00	20.00*

\*Plus addition dollar amount determined annually to amortize the Unfunded Accrued Liability (UAL) by the year 2010.

**Annual Rate per 100 Employees**

Public Employees Retirement Fund						Public Employees Police and Fire Fund & Police and Fire Consolidation Fund				
Age	Mortality		Disability	Separation		Age	Mortality		Disability	Separation
	Male	Female	All Employees	Male	Female		Male	Female	All Employees	All Employees
20	.05	.02	.09	27.50	38.32	20	.05	.02	.11	7.00
25	.06	.03	.10	21.60	33.56	25	.06	.03	.13	6.97
30	.07	.04	.11	16.10	28.05	30	.07	.04	.16	6.58
35	.10	.05	.12	11.70	21.60	35	.10	.05	.19	5.11
40	.15	.08	.15	8.18	13.40	40	.15	.08	.26	2.45
45	.27	.12	.22	5.80	9.00	45	.27	.12	.36	1.18
50	.49	.18	.33	3.85	6.63	50	.49	.18	.69	.50
55	.78	.27	.58	1.95	4.78	55	.78	.27	1.35	.11
60	1.21	.46	1.18	—	—	60	1.21	.46	—	—
65	1.95	.81	—	—	—	65	1.95	.81	—	—

ACTUARIAL SECTION

**Summary of Accrued and  
Unfunded Accrued Liabilities**

LAST TEN YEARS  
(IN THOUSANDS)

**Public Employees Retirement Fund**

VALUATION DATE	AGGREGATE ACCRUED LIABILITIES	VALUATION ASSETS	ASSETS AS A % OF ACCRUED LIABILITIES	UNFUNDED ACCRUED LIABILITIES (UAL)	ANNUAL ACTIVE MEMBER PAYROLL	UAL AS A % OF ANNUAL ACTIVE MEMBER PAYROLL
6-30-79	\$1,137,905	\$ 812,972	71%	\$ 324,934	\$ 817,579	40%
6-30-80	1,262,499	923,153	73	339,347	930,299	36
6-30-81	1,435,641	1,101,848	77	333,793	1,037,048	32
6-30-82	1,646,988	1,278,463	78	368,525	1,079,973	34
6-30-83	1,875,560	1,474,041	79	401,519	1,135,785	35
6-30-84	2,228,361	1,599,674	72	628,688	1,225,625	51
6-30-85	2,457,725	1,842,957	75	614,768	1,295,674	47
6-30-86	2,925,006	2,148,114	73	776,892	1,457,848	53
6-30-87	3,188,962	2,457,899	77	731,063	1,546,296	47
6-30-88	3,755,608	2,657,038	71	1,098,570	1,659,171	66

**Public Employees Police and Fire Fund**

VALUATION DATE	AGGREGATE ACCRUED LIABILITIES	VALUATION ASSETS	ASSETS AS A % OF ACCRUED LIABILITIES	UNFUNDED ACCRUED LIABILITIES (UAL)	ANNUAL ACTIVE MEMBER PAYROLL	UAL AS A % OF ANNUAL ACTIVE MEMBER PAYROLL
6-30-79	\$ 139,340	\$ 120,428	86%	\$ 18,912	\$ 68,126	28
6-30-80	161,723	143,125	89	18,599	78,851	24
6-30-81	187,934	174,896	93	13,038	85,810	15
6-30-82	222,472	209,225	94	13,247	97,296	14
6-30-83	250,280	249,540	100	740	105,153	1
6-30-84	306,817	279,757	91	27,060	117,881	23
6-30-85	357,742	338,400	95	19,342	128,518	15
6-30-86	447,742	424,936	95	22,806	144,392	16
6-30-87	486,674	506,153	104	-0-	154,906	-0-
6-30-88	574,133	557,669	97	16,464	167,857	10

**Police and Fire Consolidation Fund**

VALUATION DATE	AGGREGATE ACCRUED LIABILITIES	VALUATION ASSETS	ASSETS AS A % OF ACCRUED LIABILITIES	UNFUNDED ACCRUED LIABILITIES (UAL)	ANNUAL ACTIVE MEMBER PAYROLL	UAL AS A % OF ANNUAL ACTIVE MEMBER PAYROLL
6-30-88	\$ 35,221	\$ 22,648	64%	\$ 12,573	\$ 2,554	492%

ACTUARIAL SECTION

**Solvency Test**

LAST TEN YEARS  
(IN THOUSANDS)

**Public Employees Retirement Fund**

AGGREGATE ACCRUED LIABILITIES FOR							
VALUATION DATE	(1)	(2)	(3)	VALUATION ASSETS	PORTION OF ACCRUED LIABILITIES COVERED BY VALUATION ASSETS		
	ACTIVE MEMBER CONTRIBUTIONS	RETIRANTS AND BENEFICIARIES	ACTIVE MEMBERS (EMPLOYER FINANCED) PORTION		(1)	(2)	(3)
6-30-79	\$ 226,948	\$ 345,873	\$ 565,085	\$ 812,972	100%	100%	42.5%
6-30-80	258,891	367,547	636,062	923,152	100	100	46.6
6-30-81	288,843	433,833	712,964	1,101,848	100	100	53.2
6-30-82	319,169	513,219	814,600	1,278,463	100	100	54.8
6-30-83	348,904	623,703	902,952	1,474,041	100	100	55.5
6-30-84	367,381	743,815	1,117,165	1,599,674	100	100	43.7
6-30-85	391,294	936,995	1,129,435	1,842,957	100	100	45.6
6-30-86	421,678	1,153,359	1,349,969	2,148,114	100	100	42.5
6-30-87	452,560	1,370,653	1,365,749	2,457,899	100	100	46.5
6-30-88	484,819	1,633,391	1,637,398	2,657,038	100	100	20.3

**Public Employees Police and Fire Fund**

AGGREGATE ACCRUED LIABILITIES FOR							
VALUATION DATE	(1)	(2)	(3)	VALUATION ASSETS	PORTION OF ACCRUED LIABILITIES COVERED BY VALUATION ASSETS		
	ACTIVE MEMBER CONTRIBUTIONS	RETIRANTS AND BENEFICIARIES	ACTIVE MEMBERS (EMPLOYER FINANCED) PORTION		(1)	(2)	(3)
6-30-79	\$ 28,293	\$ 34,617	\$ 76,430	\$ 120,428	100%	100%	75.3%
6-30-80	33,388	38,873	89,462	143,124	100	100	79.2
6-30-81	39,000	44,502	104,433	174,896	100	100	87.5
6-30-82	45,913	59,879	120,931	209,225	100	100	85.5
6-30-83	52,234	65,633	132,413	249,540	100	100	99.4
6-30-84	58,690	75,351	172,277	279,757	100	100	84.3
6-30-85	66,628	92,676	198,438	338,400	100	100	90.3
6-30-86	76,534	118,926	252,282	424,936	100	100	91.0
6-30-87	85,542	141,324	259,808	506,153	100	100	107.5
6-30-88	95,440	\$ 174,131	304,562	557,669	100	100	94.6

**Police and Fire Consolidation Fund**

AGGREGATE ACCRUED LIABILITIES FOR							
VALUATION DATE	(1)	(2)	(3)	VALUATION ASSETS	PORTION OF ACCRUED LIABILITIES COVERED BY VALUATION ASSETS		
	ACTIVE MEMBER CONTRIBUTIONS	RETIRANTS AND BENEFICIARIES	ACTIVE MEMBERS (EMPLOYER FINANCED) PORTION		(1)	(2)	(3)
6-30-88	\$ 2,522	\$ 18,204	\$ 17,017	\$ 22,648	100%	100%	11.3%

ACTUARIAL SECTION

**Schedule of Active Member  
Valuation Data**

LAST TEN YEARS

**Public Employees Retirement Fund**

VALUATION DATE	NUMBER	ANNUAL PAYROLL	ANNUAL AVERAGE PAY	% INCREASE IN AVERAGE PAY
6-30-79	81,665	\$ 817,578,613	\$10,011	6.6%
6-30-80	85,860	930,299,069	10,835	8.2
6-30-81	87,857	1,037,047,955	11,804	8.9
6-30-82	85,438	1,079,973,418	12,640	7.1
6-30-83	83,351	1,135,784,941	13,626	7.8
6-30-84	83,702	1,225,624,802	14,643	7.5
6-30-85	86,344	1,295,674,181	15,006	2.5
6-30-86	89,336	1,457,848,000	16,319	8.7
6-30-87	92,497	1,546,296,000	16,717	2.4
6-30-88	95,224	1,659,171,000	17,424	4.2

**Public Employees Police and Fire Fund**

VALUATION DATE	NUMBER	ANNUAL PAYROLL	ANNUAL AVERAGE PAY	% INCREASE IN AVERAGE PAY
6-30-79	4,092	\$ 68,125,873	\$16,649	10.3%
6-30-80	4,185	75,851,475	18,125	8.9
6-30-81	4,356	85,810,155	19,699	8.7
6-30-82	4,508	97,295,847	21,583	9.6
6-30-83	4,596	105,153,394	22,879	6.0
6-30-84	4,744	117,880,783	24,848	8.6
6-30-85	4,928	128,518,325	26,079	5.0
6-30-86	5,127	144,392,000	28,163	8.0
6-30-87	5,385	154,906,000	28,766	2.1
6-30-88	5,611	167,857,000	29,916	4.0

**Police and Fire Consolidation Fund**

VALUATION DATE	NUMBER	ANNUAL PAYROLL	ANNUAL AVERAGE PAY	% INCREASE IN AVERAGE PAY
6-30-88	93	\$ 2,553,569	\$27,458	—

ACTUARIAL SECTION

**Schedule of  
Retirants and Beneficiaries**

LAST TEN YEARS

**Public Employees Retirement Fund**

YEAR ENDED	ADDED TO ROLLS NO.	REMOVED FROM ROLLS NO.	ROLLS END OF YEAR		% INCREASE IN ANNUAL ALLOWANCES	AVERAGE ANNUAL ALLOWANCES
			NO.	ANNUAL ALLOWANCES		
6-30-79	1,415	749	14,749	\$ 36,163,202	9.0%	\$ 2,452
6-30-80	1,670	803	15,616	39,887,823	10.3	2,554
6-30-81	1,808	809	16,615	45,556,533	14.2	2,742
6-30-82	1,746	832	17,529	52,708,964	15.7	3,007
6-30-83	2,170	823	18,876	64,156,295	21.7	3,399
6-30-84	2,125	880	20,121	76,064,731	18.6	3,780
6-30-85	2,534	865	21,790	93,826,168	23.4	4,306
6-30-86	2,505	949	23,322	109,613,000	16.8	4,700
6-30-87	2,750	1,057	25,015	130,745,000	19.3	5,227
6-30-88	2,780	1,095	26,700	150,527,000	15.1	5,638

**Public Employees Police and Fire Fund**

YEAR ENDED	ADDED TO ROLLS NO.	REMOVED FROM ROLLS NO.	ROLLS END OF YEAR		% INCREASE IN ANNUAL ALLOWANCES	AVERAGE ANNUAL ALLOWANCES
			NO.	ANNUAL ALLOWANCES		
6-30-79	133	46	813	\$ 2,931,102	21.0%	\$ 3,605
6-30-80	101	71	843	3,378,785	15.3	4,008
6-30-81	120	74	889	3,874,616	14.7	4,358
6-30-82	94	76	907	4,691,766	21.1	5,173
6-30-83	84	41	950	5,576,067	18.8	5,870
6-30-84	102	39	1,013	6,592,773	18.2	6,508
6-30-85	120	46	1,087	8,004,954	21.4	7,364
6-30-86	150	47	1,198	9,554,000	19.4	7,975
6-30-87	143	70	1,271	11,788,000	23.4	9,275
6-30-88	152	60	1,363	14,090,000	19.5	10,337

**Police and Fire Consolidation Fund**

YEAR ENDED	ADDED TO ROLLS NO.	REMOVED FROM ROLLS NO.	ROLLS END OF YEAR		% INCREASE IN ANNUAL ALLOWANCES	AVERAGE ANNUAL ALLOWANCES
			NO.	ANNUAL ALLOWANCES		
6-30-88	138	12	126	\$ 1,681,943	—	\$13,349

# STATISTICAL SECTION

## Revenue By Source

LAST TEN YEARS  
(IN THOUSANDS)

### Public Employees Retirement Fund

FISCAL YEAR	MEMBER CONTRIBUTION	EMPLOYER CONTRIBUTION	INVESTMENT INCOME*	OTHER	TOTAL
1979	\$39,777	\$53,639	\$ 50,326	\$18,808**	\$162,550
1980	44,051	59,581	69,172	3,019	175,823
1981	48,714	65,985	109,798	287	224,784
1982	52,277	70,913	117,583	2,712	243,485
1983	66,181	74,005	149,413	2,691	292,290
1984	58,348	78,967	132,373	412	270,100
1985	60,564	68,375	172,045	668	301,652
1986	64,778	71,434	251,461	2,642	390,315
1987	67,945	74,391	311,530	6,875	460,741
1988	71,504	78,092	244,981	2,394	396,971

### Public Employees Police and Fire Fund

FISCAL YEAR	MEMBER CONTRIBUTION	EMPLOYER CONTRIBUTION	INVESTMENT INCOME*	OTHER	TOTAL
1979	\$ 6,235	\$ 8,434	\$ 7,491	\$ 3,875**	\$ 26,035
1980	6,305	9,460	11,317	634	27,716
1981	7,109	10,660	17,345	638	35,752
1982	7,973	11,946	19,038	750	39,707
1983	9,702	12,953	25,391	540	48,586
1984	9,671	14,473	21,546	354	46,044
1985	10,530	15,747	29,946	394	56,617
1986	11,583	17,341	50,537	6,538	85,999
1987	12,416	18,596	60,542	1,116	92,670
1988	13,436	20,126	39,747	1,697	75,006

### Police and Fire Consolidation Fund

FISCAL YEAR	MEMBER CONTRIBUTION	EMPLOYER CONTRIBUTION	INVESTMENT INCOME*	OTHER	TOTAL
1988	\$ 105	\$ 159	\$ 1,308	\$ 1,525	\$ 3,097

\*Includes Distributed Income of the Minnesota Post-Retirement Investment Fund.

\*\*Includes Gain or Loss from Statutory Valuation of the Minnesota Post-Retirement Investment Fund.

STATISTICAL SECTION  
**Revenue Ratios**  
**by Source of Revenue**  
 EXCLUDING OTHER INCOME  
 LAST TEN YEARS

**Public Employees Retirement Fund**

FISCAL YEAR	MEMBER CONTRIBUTION	EMPLOYER CONTRIBUTION	INVESTMENT INCOME	TOTAL REVENUES
1979	27.7%	37.3%	35.0%	100.0%
1980	25.5	34.5	40.0	100.0
1981	21.7	29.4	48.9	100.0
1982	21.7	29.5	48.8	100.0
1983	22.8	25.6	51.6	100.0
1984	21.6	29.3	49.1	100.0
1985	20.1	22.7	57.2	100.0
1986	16.7	18.4	64.9	100.0
1987	14.9	16.4	68.7	100.0
1988	18.1	19.8	62.1	100.0

**Public Employees Police and Fire Fund**

FISCAL YEAR	MEMBER CONTRIBUTION	EMPLOYER CONTRIBUTION	INVESTMENT INCOME	TOTAL REVENUES
1979	28.1%	38.1%	33.8%	100.0%
1980	23.3	34.9	41.8	100.0
1981	20.2	30.4	49.4	100.0
1982	20.5	30.7	48.8	100.0
1983	20.2	27.0	52.8	100.0
1984	21.2	31.7	47.1	100.0
1985	18.7	28.0	53.3	100.0
1986	14.6	21.8	63.6	100.0
1987	13.6	20.3	66.1	100.0
1988	18.3	27.5	54.2	100.0

**Police and Fire Consolidation Fund**

FISCAL YEAR	MEMBER CONTRIBUTION	EMPLOYER CONTRIBUTION	INVESTMENT INCOME	TOTAL REVENUES
1988	6.7%	10.1%	83.2%	100.0%

STATISTICAL SECTION  
**Expense By Type**  
 LAST TEN YEARS  
 (IN THOUSANDS)

**Public Employees Retirement Fund**

FISCAL YEAR	BENEFIT	ADMINISTRATION	OTHER	TOTAL
1979	\$ 45,752	\$1,256	\$ 5,113	\$ 52,121
1980	52,300	1,463	23	53,786
1981	56,013	1,776	156	57,945
1982	64,613	2,357	146	67,116
1983	73,059	2,506	20,900	96,465
1984	97,993	2,792	26,608	127,393
1985	103,547	2,888	60	106,495
1986	120,699	2,868	1,909	125,476
1987	141,365	3,189	1,942	146,496
1988	162,762	3,412	2,387	168,561

**Public Employees Police and Fire Fund**

FISCAL YEAR	BENEFIT	ADMINISTRATION	OTHER	TOTAL
1979	\$ 3,469	\$ 77	\$ 77	\$ 3,623
1980	4,311	76	—	4,387
1981	4,505	93	15	4,613
1982	5,228	130	34	5,392
1983	6,183	141	1,935	8,259
1984	8,395	164	3,793	12,352
1985	8,648	175	363	9,186
1986	10,103	176	529	10,808
1987	12,369	208	1,017	13,594
1988	14,514	233	653	15,400

**Police and Fire Consolidation Fund**

FISCAL YEAR	BENEFIT	ADMINISTRATION	OTHER	TOTAL
1988	\$ 846	\$ 6	\$ 224	\$ 1,076

STATISTICAL SECTION  
**Benefit Expense by Type**  
 LAST TEN YEARS  
 (IN THOUSANDS)

**Public Employees Retirement Fund**

FISCAL YEAR	RETIREMENT	SURVIVOR	DISABILITY	REFUND	TOTAL
1979	\$ 28,742	\$ 4,745	\$2,024	\$10,241	\$ 45,752
1980	33,458	5,618	2,262	10,962	52,300
1981	37,584	5,851	2,486	10,092	56,013
1982	48,865	6,213	2,666	11,869	64,613
1983	52,963	6,669	2,956	10,471	73,059
1984	64,011	7,161	3,065	23,756	97,993
1985	79,476	7,631	3,281	13,158	103,546
1986	96,584	8,174	3,375	12,566	120,699
1987	115,903	8,712	3,394	13,356	141,365
1988	135,602	9,302	3,683	14,175	162,762

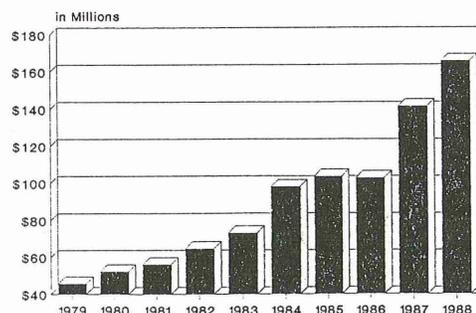
**Public Employees Police and Fire Fund**

FISCAL YEAR	RETIREMENT	SURVIVOR	DISABILITY	REFUND	TOTAL
1979	\$ 2,231	\$ 379	\$ 140	\$ 719	\$ 3,469
1980	2,710	451	127	1,022	4,310
1981	3,073	486	157	788	4,504
1982	3,656	568	276	728	5,228
1983	4,377	680	300	825	6,182
1984	5,210	771	371	2,043	8,395
1985	6,328	860	427	1,032	8,647
1986	7,750	943	504	906	10,103
1987	9,662	1,023	629	1,055	12,369
1988	11,842	1,115	864	693	14,514

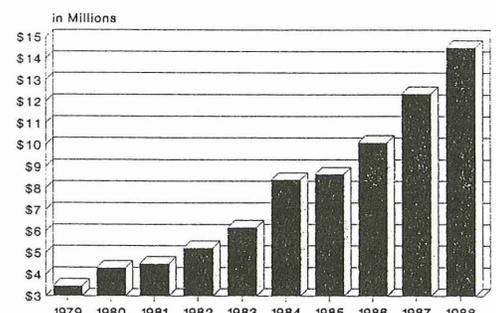
**Police and Fire Consolidation Fund**

FISCAL YEAR	RETIREMENT	SURVIVOR	DISABILITY	REFUND	TOTAL
1988	\$ 655	\$ 155	\$ 36	\$ 0	\$ 846

**Public Employees Retirement Fund**  
Total Benefit Expense



**Public Employees Police and Fire Fund**  
Total Benefit Expense



STATISTICAL SECTION

**Investment Results**

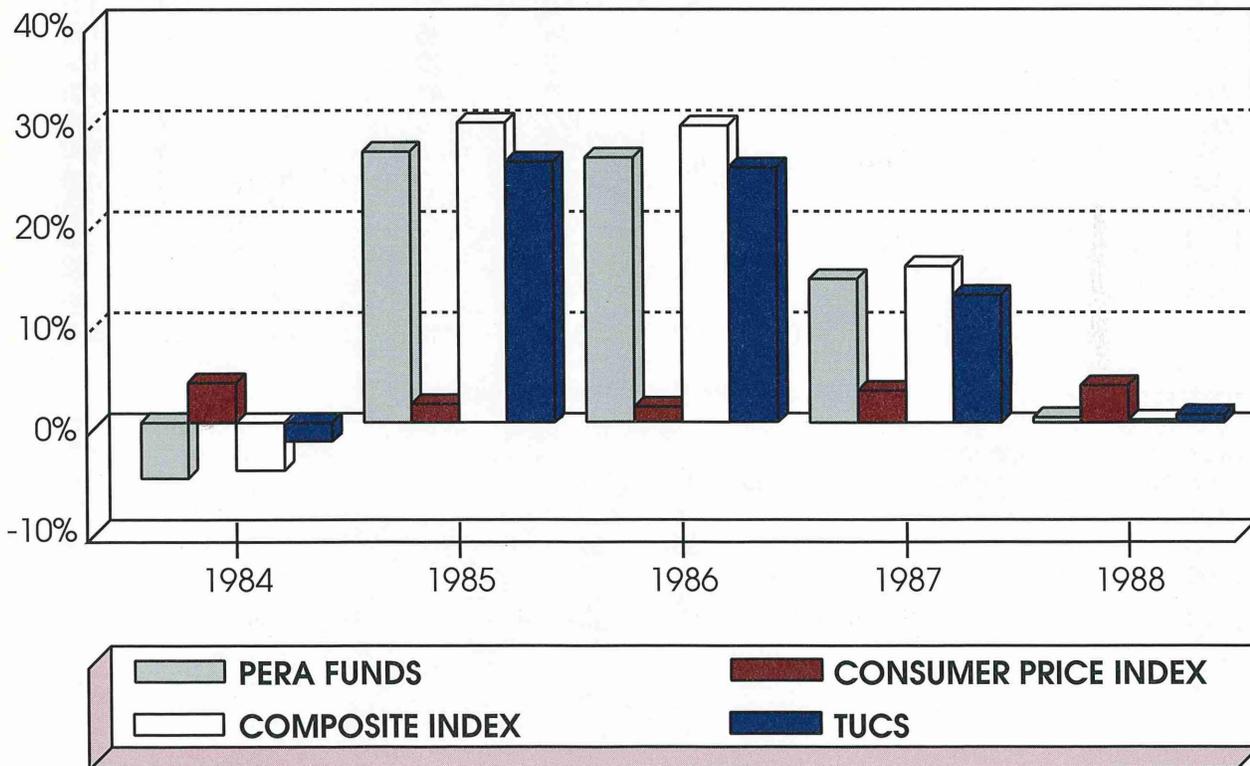
LAST FIVE YEARS

**Investment Results Last 5 Years**

	Fiscal Year					5 Year Average
	1984	1985	1986	1987	1988	
Rate of Return — Time Weighted*						
PERA Funds	-5.5	26.8	26.2	14.5	-.3	11.6
Inflation Rate — Consumer Price Index	4.3	3.7	1.7	3.7	3.9	3.4
Market Indicator						
Stock/Bond Composite Index	-4.7	29.8	29.2	15.4	-.2	12.9
Trust Universe Comparison Service (TUCS)	-2.3	26.2	25.1	13.1	1.1	13.1

\*The time-weighted performance measure includes the effect of income earned as well as realized and unrealized portfolio market value changes. In addition, the time-weighted total rate of return nets out the influence of contributions made to and distributions taken from the manager or fund.

**INVESTMENT RESULTS**



STATISTICAL SECTION  
**Schedule of Retired Members**  
 by Amount and Type of Benefit

**Public Employees Retirement Fund**

Amount of Monthly Benefit	Type I				Type II				Total
	Annuitant	Optional Annuitant	Disabilitant	Survivor	Annuitant	Optional Annuitant	Disabilitant	Survivor	
\$ 1 – 200	1,179	56	8	1,431	6,523	495	223	37	9,952
201 – 400	637	26	3	666	4,307	329	172	92	6,232
401 – 600	558	12	4	2	2,325	187	65	211	3,364
601 – 800	114	6			1,671	134	50	207	2,182
801 – 1,000	27	1			1,230	76	36	55	1,425
1,001 – 1,200	2	1			927	45	36	25	1,036
1,201 – 1,400	2				761	28	17	3	811
1,401 – 1,600	3				547	12	13		575
1,601 – 1,800					362	11	10		383
1,801 – 2,000					261	6	7	2	276
Over 2,000					446	12	6		464
	2,522	102	15	2,099	19,360	1,335	635	632	26,700

**Public Employees Police and Fire Fund**

Amount of Monthly Benefit	Type I				Type II				Total
	Annuitant	Optional Annuitant	Disabilitant	Survivor	Annuitant	Optional Annuitant	Disabilitant	Survivor	
\$ 1 – 200	17	4		60	50	14	1	1	147
201 – 400	24	9		51	76	15	2	5	182
401 – 600	34	2		1	92	22	9	23	183
601 – 800	15				87	43	7	33	185
801 – 1,000	7	1			102	6	15	17	148
1,001 – 1,200		1			107	3	15	4	130
1,201 – 1,400	1				121	1	16	2	141
1,401 – 1,600					73	4	5	1	83
1,601 – 1,800					57	1			58
1,801 – 2,000					50	1	1		52
Over 2,000					52		2		54
	98	17	0	112	867	110	73	86	1,363

**Police and Fire Consolidation Fund**

Amount of Monthly Benefit	Annuitant	Optional Annuitant	Disabilitant	Survivor	Total
\$ 401 – 600				1	1
601 – 800	6			33	39
801 – 1,000	1			1	2
1,001 – 1,200	12			6	18
1,201 – 1,400	59				59
1,401 – 1,600	3				3
1,601 – 1,800	4				4
	85	0	0	41	126

Type I = Benefits Prior to 7/1/73 Calculated on Career Average Salary

Type II = Benefits on or After 7/1/73 Calculated on Highest Five Years' Average Salary

## STATISTICAL SECTION

# Participating Employers

### Cities and Townships

Ada	Bird Island	Clarissa	Dunnell	Garvin	Hinckley
Adams	Biscay	Clarkfield	Eagan	Gary	Hifferdal
Adrian	Biwabik	Clarks Grove	Eagle Bend	Gaylord	Hoffman
Aitkin	Blackduck	Clear Lake	Eagle Lake	Ghent	Hokah
Akeley	Blaine	Clearbrook	East Bethel	Gibbon	Holding
Albany	Blooming Prairie	Clearwater	East Grand Forks	Gilbert	Holdingford
Albert Lea	Bloomington	Clements	Easton	Gilman	Holland
Albertville	Blue Earth	Cleveland	Echo	Glencoe	Holloway
Albion	Bovey	Clinton	Eden Prairie	Glenville	Hollywood
Alden	Boyd	Clontarf	Eden Valley	Glenwood	Home
Alexandria	Braham	Cloquet	Edgerton	Glyndon	Hopkins
Alpha	Brainerd	Cokato	Edina	Gnesen	Houston
Altura	Branch	Cold Spring	Eitzen	Golden Valley	Howard Lake
Alvarado	Brandon	Coleraine	Elbow Lake	Gonvick	Hoyt Lakes
Amboy	Breckenridge	Cologne	Elgin	Good Thunder	Hugo
Andover	Breezy Point	Columbia Heights	Elizabeth	Goodhue	Hutchinson
Annandale	Breitung	Columbus	Elk River	Goodridge	Ideal
Anoka	Brewster	Comfrey	Elko	Goodview	Independence
Antrim	Bricelyn	Concord	Ellendale	Graceville	International Falls
Appleton	Bristol	Conger	Ellsworth	Grand Marais	Inver Grove Heights
Apple Valley	Brook Park	Cook	Elmdale	Grand Meadow	Iona
Arden Hills	Brooklyn Center	Coon Rapids	Elmore	Grand Rapids	Iron Range
Argyle	Brooklyn Park	Corcoran	Ely	Granada	Irondale
Arlington	Brooten	Corinna	Elysian	Granite Falls	Ironton
Ashby	Browerville	Cosmos	Embarrass	Grant	Isanti
Ashland	Browns Valley	Cottage Grove	Emily	Grasston	Isle
Askov	Brownsdale	Cottonwood	Emmons	Great Scott	Ivanhoe
Atwater	Brownton	Courtland	Empire	Green Isle	Jackson
Audubon	Buffalo	Cromwell	Erhard	Greenbush	Janesville
Aurora	Buffalo Lake	Crookston	Erskine	Greenfield	Jasper
Austin	Buhl	Crosby	Evansville	Greenway	Jeffers
Avoca	Burns	Crosslake	Eveleth	Greenwood	Jenkins
Avon	Burnsville	Crow River	Excelsior	Grey Eagle	Johnsonville
Babbitt	Butterfield	Crystal	Eyota	Grove City	Jordan
Backus	Byron	Crystal Bay	Fair Haven	Grygla	Kandiyohi
Badger	Caledonia	Currie	Fairfax	Hackensack	Karlstad
Bagley	Callaway	Cyrus	Fairmont	Hadley	Kasota
Balaton	Calumet	Dahlgren	Falcon Heights	Hallock	Kasson
Balkan	Cambridge	Dalton	Fall Lake	Halstad	Keewatin
Barnesville	Camden	Danube	Faribault	Ham Lake	Kelliher
Barnum	Campbell	Danvers	Farmington	Hamburg	Kellogg
Barrett	Canby	Darwin	Fayal	Hancock	Kennedy
Bashaw	Cannon Falls	Dassel	Felton	Hanley Falls	Kensington
Bassbrook	Canosia	Dawson	Fergus Falls	Hanover	Kenyon
Battle Lake	Canton	Dayton	Ferile	Hanska	Kerkhoven
Baudette	Carlos	Deephaven	Fifty lakes	Harmony	Kettle River
Baxter	Carlton	Deer Creek	Finlayson	Harris	Kiester
Bayport	Carroiton	Deer River	Fish Lake	Hartland	Kimball
Beardsley	Carver	Deerwood	Fisher	Hasson	Kinney
Beaver Bay	Cass Lake	DeGraff	Flensburg	Hastings	Krain
Beaver Creek	Cedar Mills	Delano	Floodwood	Hawley	La Crescent
Becker	Center City	Delavan	Foley	Hayfield	Lafayette
Belgrade	Centerville	Dellwood	Forest Lake	Hazelton	La Grande
Belle Creek	Ceylon	Dent	Foreston	Hector	Lake Benton
Belle Plaine	Champlin	Detroit Lakes	Fosston	Henderson	Lake Bronson
Bellingham	Chandler	Dewald	Fountain	Hendricks	Lake City
Belview	Chanhassen	Dexter	Franconia	Hendrum	Lake Crystal
Bemidji	Chaska	Dilworth	Frankfort	Henning	Lake Edward
Benson	Chatfield	Dodge Center	Franklin	Herman	Lake Elmo
Benton	Chisago City	Donnelly	Frazee	Hermantown	Lake Hanska
Bertha	Chisago Lake	Dovray	Freeborn	Heron Lake	Lake Lillian
Big Falls	Chisholm	Duluth	Freeport	Hewitt	Lake Park
Big Lake	Chokio	Dumont	French Lake	Hibbing	Lake St. Croix Beach
Bigelow	Circle Pines	Dundas	Fridley	Hill City	Lake Shore
Bigfork	Clara City	Dundee	Fulda	Hills	Lake View
Birchwood	Claremont	Dunn		Hilltop	Lake Wilson

Lakefield	Miltona	Perham	Shetek	Watkins	Lake of the Woods
Lakeland	Minneapolis	Pierz	Shoreview	Watson	Le Sueur
Laketown	Minneota	Pilot Mound	Shorewood	Waubun	Lincoln
Lakeville	Minnesota Lake	Pine City	Silver Bay	Waverly	Lyon
Lakin	Minnetonka	Pine Island	Silver Creek	Wayzata	Mahnomen
Lamberton	Minnetonka Beach	Pine River	Silver Lake	Welcome	Marshall
Lancaster	Minnetrista	Pipestone	Slayton	Wells	Martin
Landfall	Montevideo	Plainview	Sleepy Eye	Wendell	McLeod
Lanesboro	Montgomery	Plato	South International Falls	West Concord	Meeker
LaPrairie	Monticello	Plummer	South St. Paul	West St. Paul	Mille Lacs
Lauderdale	Montrose	Plymouth	South Bend	Westbrook	Morrison
Le Center	Moorhead	Powers	South Branch	Wheaton	Mower
Le Roy	Moose Lake	Preble	South Haven	White	Murray
Le Sueur	Mora	Preston	Southside	White Bear	Nicollet
Lengby	Morgan	Princeton	Spencer	White Bear Lake	Nobles
Leon	Morris	Prinsburg	Spicer	Willernie	Norman
Lester Prairie	Morristown	Prior Lake	Spring Grove	Williams	Olmsted
Lewiston	Morse	Proctor	Spring Lake Park	Willmar	Ottertail
Lewisville	Morton	Quincy	Spring Park	Wilmont	Pennington
Lexington	Motley	Ramsey	Spring Valley	Windom	Pine
Linden	Mound	Randall	Springfield	Winger	Pipestone
Lindstrom	Mounds View	Randolph	Stacy	Winnebago	Polk
Lino Lakes	Mountain Iron	Ranier	Stanford	Winona	Pope
Linwood	Mountain Lake	Raymond	Staples	Winsted	Ramsey
Lismore	Murdock	Red Lake Falls	Star Lake	Winthrop	Red Lake
Litchfield	Nashwauk	Red Wing	Starbuck	Winton	Redwood
Little Canada	Nessel	Redwood Falls	Stephen	Wolf Lake	Renville
Little Falls	Nevis	Remer	Stewart	Wolverton	Rice
Littlefork	New Brighton	Renville	Stewartville	Wood Lake	Rock
Livonia	New Germany	Rice Lake	Stillwater	Woodbury	Roseau
Long Lake	New Hope	Richfield	Stockholm	Woodland	St. Louis
Long Prairie	New London	Richmond	Storden	Worthington	Scott
Longville	New Munich	Robbinsdale	Sverdrup	Wrenshall	Sherburn
Lonsdale	New Prague	Rochester	Swanville	Wuori	Sibley
Lucan	New Richland	Rock Creek	Sylvan	Wyanett	Stearns
Luverne	New Scandia	Rockford	Taconite	Wykoff	Steele
Lyle	New Ulm	Rogers	Taylor Falls	Wyoming	Stevens
Lynd	New York Mills	Rollingstone	Thief River Falls	York	Swift
Mabel	Newburg	Roosevelt	Thomson	Young America	Todd
Madelia	Newfolden	Rose Creek	Tintah	Yucatan	Traverse
Madison	Newport	Roseau	Tonka Bay	Zimmerman	Wabasha
Madison Lake	Nicollet	Rosemount	Tower	Zumbrota	Wadena
Magnolia	Nisswa	Roseville	Tracy		Waseca
Mahnomen	Nordland	Rothsay	Trimont	<b>COUNTIES</b>	Washington
Mahtomedi	North Branch	Round Lake	Truman	Aitkin	Watsonwan
Mankato	North Hero	Royalton	Twin Lakes	Anoka	Wilkin
Mantorville	North Mankato	Rush City	Twin Valley	Becker	Winona
Maple Grove	North Oaks	Rushford	Two Harbors	Beltrami	Wright
Maple Lake	North St. Paul	Rushmore	Tyler	Benton	Yellow Medicine
Maple Plain	Northfield	Russell	Ulen	Big Stone	
Mapleton	Northome	Ruffton	Underwood	Blue Earth	<b>SCHOOL DISTRICTS</b>
Mapleview	Northrop	Rutland	Upsala	Brown	Ada #521
Maplewood	Norway	Sacred Heart	Vadnais Heights	Carlton	Adrian #511
Marble	Norwood	St. Anthony	Vasa	Carver	Aitkin #1
Marietta	Oak Grove	St. Bonifacius	Vergas	Cass	Akeley #301
Marine on St. Croix	Oak Lawn	St. Charles	Vermillion	Chippewa	Albany #745
Marshall	Oak Park Heights	St. Clair	Verndale	Chisago	Albert Lea #241
Martin	Oakdale	St. Cloud	Vernon	Clay	Alden #242
Marysville	Odessa	St. Francis	Vernon Center	Clearwater	Alexandria #206
May	Ogema	St. Hilaire	Vesta	Cook	Alvarado #436
Mayer	Ogilvie	St. James	Victor	Cottonwood	Amboy-Good Thunder #79
Maynard	Okabena	St. Joseph	Victoria	Crow Wing	Annandale #876
Mazeppa	Oklee	St. Leo	Villard	Dakota	Anoka-Hennepin #11
McKinley	Olivia	St. Louis Park	Virginia	Dodge	Anoka-Isanti #15
McGrath	Onamia	St. Michael	Wabasha	Douglas	Appleton #784
McGregor	Orono	St. Paul	Wabasso	Faribault	Argyle #437
McIntosh	Oronoco	St. Paul Park	Waconia	Fillmore	Arlington-Green Isle #731
Medford	Orr	St. Peter	Wadena	Freeborn	Ashby #261
Medina	Ortonville	Sanborn	Wahkon	Goodhue	Askov #566
Melrose	Osakis	Sandstone	Waite Park	Grant	Atwater #341
Menhaga	Oslo	Sargeant	Waldorf	Hennepin	Audubon #21
Mendota Heights	Osseo	Sartell	Walker	Houston	Aurora-Hoyt Lakes #691
Mentor	Otsego	Sauk Centre	Walnut Grove	Hubbard	Austin #492
Midway	Ostrander	Sauk Rapids	Waltham	Isanti	Babbitt #692
Middle River	Owatonna	Savage	Wanamingo	Itasca	Backus #114
Middleville	Palisade	Scandia Valley	Wanda	Jackson	Badger #676
Milaca	Park Rapids	Scanlon	Warren	Kanabec	Bagley #162
Milan	Parkers Prairie	Sebeka	Warroad	Kandiyohi	Balaton #411
Millerville	Paynesville	Shafer	Warsaw	Kittson	Barnesville #146
Millville	Pelican	Shakopee	Waseca	Koochiching	Barnum #91
Milroy	Pelican Rapids	Shamrock	Watertown	Lacqui Parle	Barrett #262
Milton	Pequot Lakes	Sherburn	Waterville	Lake	Battle Lake #542

Beardsley #57  
 Becker #726  
 Belgrade #736  
 Belle Plaine #716  
 Bellingham #371  
 Belview #631  
 Bemidji #31  
 Benson #777  
 Bertha-Hewitt #786  
 Big Lake #727  
 Bird Island #646  
 Biwabik #693  
 Blackduck #32  
 Blooming Prairie #756  
 Bloomington #271  
 Blue Earth #240  
 Borup #522  
 Braham #314  
 Brainerd #181  
 Brandon #207  
 Breckenridge #846  
 Brewster #513  
 Brice Lynn #217  
 Brooklyn Center #286  
 Brooten #737  
 Browerville #787  
 Browns Valley #801  
 Brownton #421  
 Buffalo #877  
 Buffalo Lake #647  
 Buhl #694  
 Buhl-Mountain Iron #713  
 Burnsville #191  
 Butterfield #836  
 Byron #531  
 Caledonia #299  
 Cambridge #911  
 Cambell-Tintah #852  
 Canby #891  
 Cannon Falls #252  
 Carlton #93  
 Cass Lake #115  
 Ceylon #451  
 Chaska #112  
 Chatfield #227  
 Chisholm #695  
 Chokio #771  
 Circle Pines #12  
 Clara City #126  
 Claremont #201  
 Clarissa #789  
 Clarkfield #892  
 Clearbrook #161  
 Cleveland #391  
 Climax #592  
 Clinton #58  
 Cloquet #94  
 Cold Spring #750  
 Coleraine #316  
 Columbia Heights #13  
 Comfrey #81  
 Cosmos #461  
 Cottonwood #412  
 Cromwell #95  
 Crockston #593  
 Crosby-Ironton #182  
 Cyrus #611  
 Dakota County Vo Tech  
 Danube #648  
 Dassel-Cokato #466  
 Dawson #378  
 Deer Creek #543  
 Deer River #317  
 Delano #879  
 Delavan #218  
 Detroit Lakes #22  
 Dilworth #147  
 Dodge Center #202  
 Duluth #709  
 Eagle Bend #790  
 East Chain #453  
 East Grand Forks #595  
 Echo #893  
 Eden Prairie #272  
 Eden Valley-Watkins #463  
 Edgerton #581  
 Edina #273  
 Elbow Lake-Wendell #263  
 Elgin #806  
 Elk River #728  
 Ellendale #762  
 Ellsworth #514  
 Elmore #219  
 Ely #696  
 Emmons #243  
 Erskine #597  
 Esko #99  
 Evansville #208  
 Eveleth #697  
 Eyota-Dover #533  
 Fairfax #649  
 Fairmont #454  
 Faribault #656  
 Farmington #192  
 Fergus Falls #544  
 Fergus Falls #935  
 Fertile #599  
 Finlayson #570  
 Fisher #600  
 Floodwood #698  
 Foley #51  
 Forest Lake #831  
 Fosston #601  
 Franklin #650  
 Frazee #23  
 Freeborn #244  
 Fridley #14  
 Fulda #505  
 Garden City #78  
 Gary #523  
 Gaylord #732  
 Gibbon #733  
 Gilbert #699  
 Glencoe #422  
 Glenview #245  
 Glenwood #612  
 Glyndon-Felton #145  
 Gonvick #158  
 Goodhue #253  
 Goodridge #561  
 Graceville #60  
 Granada-Huntley #460  
 Grand Marais #166  
 Grand Meadow #495  
 Grand Rapids #318  
 Granite Falls #894  
 Greenbush #678  
 Grey Eagle #791  
 Grove City #464  
 Grygla #447  
 Hendricks #351  
 Halstad #524  
 Hancock #768  
 Harmony #228  
 Hastings #200  
 Hawley #150  
 Hayfield #203  
 Hector #651  
 Henderson #734  
 Hendricks #402  
 Hendrum #525  
 Hennepin Vo Tech #287  
 Henning #545  
 Herman #264  
 Hermantown #700  
 Heron Lake-Okabena #330  
 Hibbing #701  
 Hill City #2  
 Hills-Beaver Creek #671  
 Hinckley #573  
 Hoffman #265  
 Holdingford #738  
 Hopkins #270  
 Houston #294  
 Howard Lake #880  
 Humboldt #352  
 Hutchinson #423  
 International Falls #361  
 Inver Grove Heights #199  
 Isle #473  
 Ivanhoe #403  
 Jackson #324  
 Janesville #830  
 Jasper #582  
 Jeffers-Storden #178  
 Jordan #717  
 Karstad #353  
 Kasson #204  
 Kelliher #36  
 Kennedy #354  
 Kensington #209  
 Kenyon #254  
 Kerkhoven-Murdock-Sunburg #775  
 Kiester #222  
 Kimball #739  
 Koosiching Co. #363  
 La Crescent #300  
 Lake County #381  
 Lake Benton #404  
 Lake City #813  
 Lake Crystal #70  
 Lake Park #24  
 Lake Wilson-Chandler #918  
 Lake of the Woods #390  
 Lakefield #325  
 Lakeville #194  
 Lambertson #633  
 Lancaster #356  
 Lanesboro #229  
 Laporte #306  
 LeCenter #392  
 LeRoy-Ostrander #499  
 LeSueur #393  
 Lester Prairie #424  
 Lewiston #857  
 Lindstrom-Chisago Lakes #141  
 Litchfield #465  
 Little Falls #482  
 Littlefork-Big Falls #362  
 Long Prairie #792  
 Lyle #497  
 Lynd #415  
 Mabel-Canton #238  
 Madelia #837  
 Madison #377  
 Magnolia #669  
 Mahnomen #432  
 Mahtomedi #832  
 Mankato #77  
 Maple Lake #881  
 Mapleton #72  
 Marietta #376  
 Marshall #413  
 Maynard #127  
 Mazepa #809  
 McGregor #4  
 McIntosh #603  
 Medford #763  
 Melrose #740  
 Menahga #821  
 Mentor #604  
 Middle River #440  
 Milaca #912  
 Milan #128  
 Milroy #635  
 Minneapolis #15  
 Minnesota #414  
 Minnesota Lake #233  
 Minnesota River Valley #993  
 Minnetonka #276  
 Montevideo #129  
 Montgomery #394  
 Monticello #882  
 Moorhead #152  
 Moose Lake #97  
 Mora #332  
 Morgan #636  
 Morris #769  
 Morristown #657  
 Morton #652  
 Motley #483  
 Mound #277  
 Mounds View #621  
 Mountain Iron #703  
 Mountain Lake #173  
 Nashwauk-Keewatin #319  
 Neff Lake #707  
 Nevis #308  
 New London-Spicer #345  
 New Prague #721  
 New Richland #827  
 New Ulm-Hanska #88  
 New York Mills #553  
 Newfordsville #441  
 Nicollet #507  
 North Branch #138  
 North St. Paul-Maplewood #622  
 Northfield #659  
 Norwood-Young America #108  
 Ogilvie #333  
 Oklee #627  
 Olivia #653  
 Onamia #480  
 Orono #278  
 Ortonville #62  
 Osakis #213  
 Oslo #442  
 Osseo #279  
 Owatonna #761  
 Park Rapids #309  
 Parkers Prairie #547  
 Paynesville #741  
 Pelican Rapids #548  
 Pequot Lakes #186  
 Perham #549  
 Peterson #232  
 Pierz #484  
 Pillager #116  
 Pine City #578  
 Pine City Vo Tech  
 Pine Island #255  
 Pine River #117  
 Pipestone #583  
 Plainview #810  
 Plummer #628  
 Preston #233  
 Princeton #477  
 Prior Lake #719  
 Proctor #704  
 Randolph #195  
 Raymond #346  
 Red Lake #38  
 Red Lake Falls #630  
 Red Wing #256  
 Redwood Falls #637  
 Remer #118  
 Renville #654  
 Richfield #280  
 Robbinsdale #281  
 Rochester #535  
 Rock County #670  
 Rockford #883  
 Roseau #682  
 Rosemount #196  
 Roseville #623  
 Rothsay #850  
 Round Lake #516  
 Royalton #485  
 Rush City #139  
 Rushford #234  
 Russell #418  
 Ruthon #584  
 Sacred Heart #655  
 St. Anthony #282  
 St. Charles #858  
 St. Clair #75  
 St. Cloud #742  
 St. James #840  
 St. Louis County #710  
 St. Louis Park #283  
 St. Michael-Albertville #885  
 St. Paul #625  
 St. Peter #508  
 Sanborn #638  
 Sandstone #576  
 Sartell #748  
 Sauk Centre #743  
 Sauk Rapids #47  
 Sebeka #820  
 Shakopee #720  
 Sherburn #456  
 Silver Lake #425  
 Sioux Valley #328  
 Slayton #504  
 Sleepy Eye #84  
 South Koochiching County-Rainy River  
 Southland #500  
 South St. Paul #6  
 South Washington County #833  
 Spring Grove #297  
 Spring Lake Park #16  
 Spring Valley #237  
 Springfield #85  
 Staples #793  
 Starbuck #614  
 Stephen #443  
 Stewart #426  
 Stewartville #534  
 Stillwater #834  
 Strandquist #444  
 Suburban Hennepin Vo Tech  
 Swanville #486  
 Taylors Falls #140  
 Thief River Falls #564  
 Tower-Soudan #708  
 Tracy #417  
 Trimont #457  
 Truman #458  
 Twin Valley #526  
 Tyler #409  
 Ulen-Hitterdal #914  
 Underwood #550  
 Upsala #487  
 Verdi #408  
 Verdale #818  
 Villard #615  
 Virginia #706  
 Wabasha-Kellogg #811  
 Wabasso #640  
 Waconia #110  
 Wadena #819  
 Wadena Vo Tech  
 Waldorf-Pemberton #913  
 Walker #119  
 Walnut Grove #641  
 Wanamingo #258  
 Warren #446  
 Warroad #690  
 Waseca #829  
 Watertown-Mayer #111  
 Waterville-Elysian #395  
 Waubun-Ogema-White Earth #435  
 Wayzata #284  
 Welcome #459  
 Wellcome Memorial-Garden City #78  
 Wells #224  
 West Concord #205  
 West St. Paul #197  
 Westbrook #175  
 Wheaton #803  
 White Bear Lake Vo Tech #916  
 Willmar #347  
 Willow River #577  
 Windom #177  
 Winnebago #225  
 Winona #861  
 Winsted #427  
 Winthrop #735  
 Wood Lake #896  
 Worthington #518  
 Wrenshall #100  
 Wykoff #236  
 Zumbrota #260

## MISCELLANEOUS

Adams Health Care Center  
Agassiz Valley Vocational Center  
Aitkin County Soil and Water  
Alexandria Lake Area Sanitary District  
Ambulatory Care Center of Lamberton  
Anoka County Soil and Water  
Arrowhead Library System  
Arrowhead Regional Development  
Association of Minnesota Counties  
Battle Lake Area Landfill Association  
Battle Lake Motor  
Becker Water and Soil  
Beltrami County Water and Soil  
Bemidji Regional Interdistrict Council  
Benton County Water and Soil  
Benton-Stearns Special Education Co-op  
Big Stone Water and Soil  
Blue Earth County Water and Soil  
Blue Mound Co-op Center #9  
Bonanza Valley Co-op Center  
Boundary Water Special Education Co-op  
Bovey-Coleraine Joint Tri Plant Commission  
Brown County Water and Soil  
Brown Nicollet Human Service Board  
Burns-Homer-Pleasant Water and Soil  
Carlton County Water and Soil  
Carver County Water and Soil  
Carver-Scott Co-op Center  
Cass County Water and Soil  
Central Minnesota ERDC  
Central Minnesota Libraries Extension  
Central Minnesota Regional Development  
Central St. Croix Valley Cable Commission  
Chisago Water and Soil  
Circle Pines-Lexington Joint Police Commission  
Clay County Vocational Center  
Clay County Water and Soil  
Clearwater County Nursing Service  
Clearwater County Water and Soil  
Coon Creek Watershed District  
Cottonwood County Water and Soil  
Cottonwood River Vocational Center  
Crow River Recreational Department  
Crow River Regional Library  
Crow Wing County Water and Soil  
Dakota County Water and Soil  
Des Moines Valley Nursing Service  
Dodge Center Water and Soil  
Douglas County Water and Soil  
Dover-Eyota St. Charles Sanitation  
East Agassiz Water and Soil  
East Central Co-op Center  
East Central Regional Development Commission  
East Central Regional Library  
East Ottertail Water and Soil  
East Polk Water and Soil  
East Range Vocational Center  
Educational Co-op Service  
Educational Co-op Service Unit  
Faribault County Water and Soil  
Faribault Martin Watonwan Human Service Bd.  
Fergus Falls Special Education Co-op  
Freeborn County Water and Soil  
Glacial Ridge Co-op Center  
Goodhue County Water and Soil  
Government Training Service  
Governor's Office State Central Payroll  
Grant County Water and Soil  
Great River Regional Library  
Greenway Joint Recreation Association  
Headwater Nutrition Project  
Headwaters Regional Development Commission  
Hennepin County Park Reserve  
Highland Vocational Co-op Center #1  
Hubbard County Water and Soil  
Hudson Sanitary Landfill Authority  
Inter County Nursing Service  
Interdistrict Special Ed. Co-op  
Interdistrict Vocational Center  
International Union Operating Engineers  
Itasca County Water and Soil

Joint Powers Board  
Kanabec County Water and Soil  
Kandiyohi Water and Soil  
Kitchigami Regional Library  
Kittson County Water and Soil  
Kittson-Marshall Rural Water System  
Koochiching County Water and Soil  
Lac qui Parle County Water and Soil  
Lake Agassiz Regional Library  
Lake Agassiz Special Ed. Co-op  
Lake County Water and Soil  
Lake Minnetonka Conservation District  
Lake of the Woods Water and Soil  
Leaf River Valley Vo Tech Center  
League of Minnesota Cities  
Lincoln County Joint Cities Committee  
Lincoln County Water and Soil  
Local Government Information Systems  
Long Lake Conservation Center  
Low Income Energy Assistance  
Lyon County Water and Soil  
Mahnommen County Water and Soil  
Marshall-Beltrami Water and Soil  
Marshall County Water and Soil  
Marshall-Polk Water System  
Martin County Water and Soil  
McLeod County Water and Soil  
Meeker County Water and Soil  
Meeker-Wright County Special Ed. Co-op  
Metronet  
Metropolitan Airports Commission  
Metropolitan Council  
Metropolitan Inter County Association  
Metropolitan Library Service Agency  
Metropolitan Mosquito District  
Metropolitan Sports Facility Commission  
Metropolitan Transit Commission  
Metropolitan Water Control Commission  
Middle River-Snake River Watershed District  
Mid-Range Special Ed. Co-op  
Midwest Special Ed. Co-op District 5  
Mille Lacs Vocational Center  
Mille Lacs County Water and Soil  
Minneapolis Community Development Agency  
Minnesota Municipal Utilities Association  
Minnesota School District Data Processing Jt. Bd.  
Minnesota Valley Co-op  
Minnesota Valley Regional Library  
Minnesota Valley Vocational Center  
Moose Lake-Windemere Sewer District  
Morrison County Water and Soil  
Motor Patrol  
Mower County Water and Soil  
Mower Education Service Co-op  
Multi County Nursing Service  
New Richland Care Center  
Nicollet County Water and Soil  
Nobles County Water and Soil  
North Central Suburban Cable Commission  
North Country Vocation Co-op Center  
North Country Library Co-op  
Northeast Ed. Co-op Service Unit  
North Kittson Rural Water System  
North St. Louis Water and Soil  
North Suburban Cable Commission  
Northwest ECSU  
Northwest Hennepin Human Services  
Northwest Migrant Region  
Northwest Regional Development Commission  
Northwest Regional Interdistrict Council  
Northwest Suburban Cable Community Comm.  
Oak Terrace Nursing Home  
Olmsted County Water and Soil  
Ottertail Lakes Area Sewer District  
Pelican Valley Health Center  
Pennington County Water and Soil  
Pine County Water and Soil  
Pine Point Exp. School  
Pine River Sanitary District  
Pine to Prairie Co-op Center  
Pioneerland Library System  
Pipestone County Water and Soil  
Plum Creek Library System  
Pope County Water and Soil  
Prior Lake-Spring Lake Watershed District

Public Employees Retirement Association  
Range Association of Municipalities  
Red Lake County Water and Soil  
Red Lake Falls Special Ed. Co-op  
Red Lake Watershed District  
Red River Co-op Center  
Redwood County Water and Soil  
Redwood-Cottonwood Control Area Recreation  
Region Eight N. Welfare Board  
Region Five Computer Service  
Region Five Development Commission  
Region Nine Regional Development Commission  
Region One Elementary Secondary Vocational  
Region Three Comp. Employees and Train Cons.  
Renville County Water and Soil  
Rice County Water and Soil  
Rice Creek Watershed District  
River Bend Special Service Co-op  
Rock County Rural Water System  
Rock County Water and Soil  
Roseau County Energy Assistance Program  
Roseau County Water and Soil  
Rum River Co-op Center  
Runestone Co-op Center  
Runestone Community Center  
Rural Fire Association  
Scott County Water and Soil  
Sherburne Water and Soil  
Sibley County Co-op Center  
Sibley Water and Soil  
Six East Regional Development Commission  
South Central Ed. Co-op Service  
Southeast Minnesota Ed. Co-op Service Unit  
Southern Minnesota Municipal Power Agency  
South Lake Minnetonka Public Safety Dept.  
South St. Louis County Water and Soil  
Southwest and West Central Ed. Service  
Southwest Multi-County Interlibrary Ex.  
Southwest Regional Development Commission  
Spring Grove Ambulance Corp.  
State Community Colleges  
State Court Administration Judicial Districts  
St. Bonifacius-Minnetrista Police Commission  
St. Cloud Area Planning Organization  
St. Cloud Metro Transit Commission  
St. Louis County Northwoods Landfill Authority  
Stearns County Water and Soil  
Steele County Water and Soil  
Stevens County Water and Soil  
Suburban School Employees #284  
Sunnyside Nursing Home  
Swift County Water and Soil  
Todd County Water and Soil  
Township Main Association  
Traverse County Water and Soil  
Traverse Des Sioux Regional Library  
Tri County Co-op Center  
United Auto Workers  
University of Minnesota Police Officers  
Upper Minnesota Valley Reg. Dev. Commission  
Upper Minnesota Valley RV Watershed District  
Viking Library System  
Viking Vocational Center  
Wabasha County Water and Soil  
Wadena County Water and Soil  
Waseca County Water and Soil  
Washington County Water and Soil  
Watonwan Water and Soil  
West Central Area on Aging  
West Central ECSU  
West Central Migrant Region  
West Central Regional Development  
Western Plains Library System  
West Hennepin County Human Services  
West Hennepin Public Safety Department  
West Lake Superior Sanitation District  
West Ottertail County Water and Soil  
West Polk Water and Soil  
Wilkin County Water and Soil  
Windom Area Hospital Inc.  
Winona County Water and Soil  
Woodland Co-op Center  
Wright County Water and Soil  
Wright Vo Tech Center  
Yellow Medicine Water and Soil

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# NOTES