Public Employees Retirement Association of Minnesota
Actuarial Valuation and Review
as of July 1, 2005

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## Y SEGAL

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November 30, 2005

## Ms. Mary Most Vanek

Public Employees Retirement Association of Minnesota
60 Empire Drive, Suite 200
St. Paul, Minnesota 55103-2088
Dear Ms. Most Vanek:
We are pleased to submit this Actuarial Valuation and Review as of July 1, 2005. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2006 and analyzes the preceding year's experience.

The census and financial information on which our calculations were based was prepared by the Fund. That assistance is gratefully acknowledged. The actuarial calculations were completed under our supervision.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions used in the valuation are consistent with those in the statute, and reasonably represent the experience of the plan.

We look forward to reviewing this report at your next meeting and to answering any questions.
Sincerely,
THE SEGAL COMPANY

By:

[^0]Susan M. Hogarth, EA, MAAA
Consulting Actuary
cc: Legislative Commission on Pensions and Retirement (3 copies)
Minnesota Legislative Reference Library (6 copies)
Minnesota Department of Finance (2 copies)
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## SECTION 1: Valuation Summary for the Public Employees Retirement Association of Minnesota

## Purpose

This report has been prepared by The Segal Company to present a valuation of the Public Employees Retirement Association of Minnesota as of July 1, 2005. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:
> Section 356.215 of the Minnesota Statutes;
> The benefit provisions of the Retirement Association; as administered by the PERA;
> The data as provided and confirmed by the PERA staff;
> The characteristics of covered active members, inactive vested members, pensioners and beneficiaries as of July 1, 2005, provided by the Association;
> The assets of the Association as of June 30, 2005, provided by the Association;
> Economic assumptions regarding future salary increases and investment earnings; and
> Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

## Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:
> The statutory contribution rate under Chapter 353 is equal to $11.07 \%$ of payroll compared to the required contribution rate under Chapter 356 of $12.74 \%$ of payroll. Therefore, the contribution deficiency is expected to be $1.67 \%$ of payroll or \$75,349,042.
> The actuarial accrued liability funded ratio based on the actuarial value of assets over the actuarial accrued liability as of July 1,2005 is $74.53 \%$ compared to $76.73 \%$ as of July 1,2004 . This ratio is a measure of funding status, and its history is a measure of funding progress, and is the ratio required to be reported under GASB 25. This ratio decreased, in part due to the smoothing of prior asset losses.
> As indicated on page 4 of this report, the total unrecognized investment gain as of June 30,2005 is $\$ 57,346,641$. This investment gain will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent it is not offset by recognition of investment losses derived from future experience.
> The Coordinated member and employer contribution rates (as a percentage of salary) will change as shown in the schedule below:

| Date of Increase | $\underline{\text { Member }}$ | Employer |
| :--- | :---: | :---: |
| Current | $5.10 \%$ | $5.53 \%$ |
| January 2006 | $5.50 \%$ | $6.00 \%$ |
| January 2007 | $5.75 \%$ | $6.25 \%$ |
| January 2008 | $6.00 \%$ | $6.50 \%$ |
| January 2009 | $6.00 \%$ | $6.75 \%$ |
| January 2010 | $6.00 \%$ | $7.00 \%$ |

In addition, the 2009 and/or 2010 rate increases will not be implemented if the July 1, 2008 or July 1, 2009 actuarial valuations result in full funding or a contribution sufficiency has occurred.

The effective dates of the rates increases are January $1^{\text {st }}$ of each year, however, benefits are valued as of the July $1^{\text {st }}$ valuation date prior to each corresponding increase date.
> There were no changes in plan provisions, actuarial assumptions or actuarial cost methods since the prior valuation.

| Summary of Key Valuation Results |  |  |
| :---: | :---: | :---: |
|  | 2005 | 2004 |
| Contributions (\% of payroll) for plan year beginning July 1: |  |  |
| Statutory - Chapter 353* | 11.07\% | 10.64\% |
| Required - Chapter 356 | 12.74\% | 12.24\% |
| Sufficiency/(Deficiency) | -1.67\% | -1.60\% |
| Funding elements for plan year beginning July 1: |  |  |
| Normal cost | \$352,964,350 | \$328,196,111 |
| Market value of assets | 11,901,282,333 | 11,140,745,713 |
| Actuarial value of assets (AVA) | 11,843,935,692 | 11,477,960,861 |
| Actuarial accrued liability (AAL) | 15,892,554,615 | 14,959,464,879 |
| Unfunded/(Overfunded) actuarial accrued liability | 4,048,618,923 | 3,481,504,018 |
| Funded ratios: |  |  |
| Accrued Benefit Funded Ratio | 79.72\% | 82.25\% |
| Current assets (AVA) | \$11,843,935,692 | \$11,477,960,861 |
| Current benefit obligations | 14,857,712,393 | 13,955,493,543 |
| Projected Benefit Funded Ratio | 92.42\% | 92.63\% |
| Current and expected future assets | \$17,461,138,168 | \$16,479,821,271 |
| Current and expected future benefit obligations (Present Value of Benefits) | 18,892,427,972 | 17,791,571,212 |
| GASB 25/27 for plan year beginning July $\mathbf{1}$ : |  |  |
| Annual required employer contributions | \$304,328,146 | \$270,387,510 |
| Accrued Liability Funded Ratio (AVA/AAL) | 74.53\% | 76.73\% |
| Covered actual payroll | \$4,096,138,282 | \$3,968,034,367 |
| Demographic data for plan year beginning July 1: |  |  |
| Number of pensioners and beneficiaries | 56,650 | 54,780 |
| Number of vested terminated members | 35,768 | 33,915 |
| Number of other non-vested terminated members | 100,369 | 102,265 |
| Number of active members | 142,303 | 138,164 |
| Total projected payroll** | \$4,530,882,628 | \$4,220,502,712 |
| Average projected payroll** | 31,840 | 30,547 |

## SECTION 2: Valuation Results for the Public Employees Retirement Association of Minnesota

## A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, pensioners and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, C, D, E and F.

| A historical perspective of how the member population has changed over the past four valuations can be seen in this chart. | CHART 1 <br> Member Population: 2002-2005 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Year Ended June 30 | Active Members | Vested Terminated Members* | Pensioners and Beneficiaries | Ratio of Non-Actives to Actives |
|  | 2002 | 137,817 | 29,353 | 50,878 | 0.58 |
|  | 2003 | 140,066 | 32,128 | 52,563 | 0.60 |
|  | 2004 | 138,164 | 33,915 | 54,780 | 0.64 |
|  | 2005 | 142,303 | 35,768 | 56,650 | 0.65 |

[^1]These graphs show a distribution of active members by age and by years of service.

## Active Members

Plan costs are affected by the age, years of service and payroll of active members. In this year's valuation, there were 142,303 active members with an average age of 45.8 , average years of service of 9.9 years and average projected payroll of $\$ 31,840$. The 138,164 active members in the prior valuation had an average age of 45.6 , average service of 9.9 years and average projected payroll of $\$ 30,547$.

## CHART 2 <br> Distribution of Active Members by Age as of June 30, 2005



## Inactive Members

In this year's valuation, there were 35,768 members with a vested right to a deferred or immediate vested benefit.

In addition there were 100,369 other non-vested terminated members entitled to a return of their employee contributions.

## CHART 3

Distribution of Active Members by Years of Service as of June 30, 2005


These graphs show a distribution of the current pensioners and beneficiaries based on their monthly amount and age, by type of pension.

Survivor

- Disability
$\square$ Service


## Pensioners and Beneficiaries

As of June 30, 2005, 50,000 pensioners (48,147 retired and 1,853 disableds) and 6,650 beneficiaries were receiving monthly benefits of $\$ 60,080,908$. For comparison, in the previous valuation, there were 48,230 pensioners ( 46,470 retired and 1,760 disableds) and 6,550 beneficiaries receiving monthly benefits of $\$ 57,691,435$.

## CHART 4

Distribution of Pensioners and Beneficiaries by Type and by Monthly Amount as of June 30, 2005


CHART 5
Distribution of Pensioners and Beneficiaries by Type and by Age as of June 30, 2005


## SECTION 2: Valuation Results for the Public Employees Retirement Association of Minnesota

## B. FINANCIAL INFORMATION

It is desirable to have level and predictable plan costs from one year to the next. For this reason, Minnesota Statutes require an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Both the actuarial value and market value of assets are representations of the Association's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the Association's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

The chart shows the determination of the actuarial value of assets as of the valuation date.

## CHART 6

Determination of Actuarial Value of Assets for Year Ended June 30, 2005

| 1. Market value of assets available for benefits |  |  | \$11,901,282,333 |
| :---: | :---: | :---: | :---: |
|  | Original Amount | \% Not Recognized |  |
| 2. Calculation of unrecognized return |  |  |  |
| (a) Year ended June 30, 2005 | \$131,918,065 | 80\% | \$105,534,452 |
| (b) Year ended June 30, 2004 | 346,876,315 | 60\% | 208,125,789 |
| (c) Year ended June 30, 2003 | -267,368,000 | 40\% | -106,947,200 |
| (d) Year ended June 30, 2002 | -746,832,000 | 20\% | -149,366,400 |
| (e) Total unrecognized return |  |  | \$57,346,641 |
| 3. Actuarial value of assets ("Current Assets"): (1) - (2e) |  |  | \$11,843,935,692 |

This chart provides a summary of the actuarial experience during the past year.

## C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions.

For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

For the year ended June 30, 2005, the total loss is \$383,869,021, including a loss of \$280,695,109 from investments and loss of $\$ 103,173,912$ from all other sources. The net experience variation from individual sources other than investments was $0.65 \%$ of the actuarial accrued liability, which is less than $1.00 \%$ of the total actuarial accrued liability, and includes age/service retirements, disability, mortality (pre and post-retirement), withdrawal and salary increases.

| CHART 7 |
| :--- |
| Actuarial Experience for Year Ended June 30, 2005 |
| 1. Net gain/(loss) from investments |
| 2. Net gain/(loss) from other experience |
| 3. Net experience gain/(loss): $(1)+(2)$ |

CHART 7
Actuarial Experience for Year Ended June 30, 2005

## D. INFORMATION REQUIRED BY THE GASB

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes of governmental pension plans. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms.

Critical information to GASB is the historical comparison of the GASB required contribution to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements. Section 4, Exhibit III presents a schedule of this information of the Association.

The other critical piece of information regarding the Association's financial status is the funded ratio. This ratio compares the actuarial value of assets to the actuarial accrued liabilities of the plan as calculated under GASB. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other changes.

GASB requires that the actuarial value of assets be used to determine the funded ratio, as shown in Section 4, Exhibit IV.

## SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT A

## Table of Plan Coverage

| Category | Year Ended June 30 |  | Change From Prior Year |
| :---: | :---: | :---: | :---: |
|  | 2005 | 2004 |  |
| Active members in valuation: |  |  |  |
| Number | 142,303 | 138,164 | 3.0\% |
| Average age | 45.8 | 45.6 | N/A |
| Average service | 9.9 | 9.9 | N/A |
| Total projected payroll | \$4,530,882,628 | \$4,220,502,712 | 7.4\% |
| Average projected payroll | 31,840 | 30,547 | 4.2\% |
| Total active vested members | 105,504 | 102,642 | 2.8\% |
| Vested terminated members | 35,768 | 33,915 | 5.5\% |
| Retired participants: |  |  |  |
| Number in pay status | 48,147 | 46,470 | 3.6\% |
| Average age | 72.1 | 72.0 | N/A |
| Average monthly benefit | \$1,060 | \$1,055 | 0.5\% |
| Disabled members: |  |  |  |
| Number in pay status | 1,853 | 1,760 | 5.3\% |
| Average age | 56.6 | 56.4 | N/A |
| Average monthly benefit | \$829 | \$816 | 1.6\% |
| Beneficiaries: |  |  |  |
| Number in pay status | 6,650 | 6,550 | 1.5\% |
| Average age | 75.8 | 75.6 | N/A |
| Average monthly benefit | \$1,129 | \$1,102 | 2.5\% |
| Other non-vested terminated members | 100,369 | 102,265 | -1.9\% |

## SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT B-1

Members in Active Service as of June 30, 2005
By Age, Years of Service, and Average Projected Payroll - Total

| Age | Years of Service |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over |
| Under 25 | 6,412 | 6,280 | 132 | -- | -- | -- | -- | -- |
|  | \$15,577 | \$15,341 | \$26,812 | -- | -- | -- | -- | -- |
| 25-29 | 9,490 | 7,859 | 1,600 | 31 | -- | -- | -- | -- |
|  | 25,358 | 23,475 | 34,417 | \$35,172 | -- | -- | -- | -- |
| 30-34 | 10,518 | 6,169 | 3,540 | 786 | 23 | -- | -- | - |
|  | 31,062 | 25,335 | 39,023 | 39,885 | \$40,334 | -- | -- | -- |
| 35-39 | 14,441 | 6,968 | 4,122 | 2,337 | 963 | 51 | -- | - |
|  | 31,392 | 22,285 | 36,816 | 43,339 | 44,575 | \$40,775 | -- | -- |
| 40-44 | 21,116 | 8,306 | 5,676 | 3,174 | 2,624 | 1,209 | 127 | -- |
|  | 31,540 | 20,714 | 31,462 | 40,394 | 47,556 | 46,888 | \$44,761 | - |
| 45-49 | 25,966 | 7,951 | 6,126 | 4,448 | 3,379 | 2,191 | 1,740 | 131 |
|  | 32,763 | 20,381 | 29,303 | 34,743 | 44,866 | 50,804 | 49,021 | \$48,911 |
| 50-54 | 24,388 | 4,980 | 4,660 | 4,446 | 3,931 | 2,388 | 2,706 | 1,277 |
|  | 36,531 | 23,360 | 30,952 | 32,388 | 40,497 | 48,036 | 53,674 | 52,623 |
| 55-59 | 17,849 | 3,115 | 2,688 | 2,851 | 3,241 | 2,150 | 2,072 | 1,732 |
|  | 37,199 | 21,449 | 30,936 | 32,886 | 37,460 | 43,960 | 50,722 | 57,281 |
| 60-64 | 8,247 | 1,712 | 1,291 | 1,176 | 1,420 | 1,091 | 926 | 631 |
|  | 32,185 | 17,463 | 27,204 | 31,412 | 35,867 | 37,333 | 41,751 | 52,536 |
| 65-69 | 2,377 | 848 | 466 | 342 | 291 | 153 | 153 | 124 |
|  | 22,064 | 11,133 | 19,516 | 26,469 | 32,621 | 33,343 | 33,278 | 41,713 |
| 70 \& Over | 1,499 | 628 | 412 | 198 | 121 | 50 | 38 | 52 |
|  | 13,916 | 7,967 | 13,541 | 18,047 | 23,353 | 26,558 | 28,533 | 28,201 |
| Total | 142,303 | 54,816 | 30,713 | 19,789 | 15,993 | 9,283 | 7,762 | 3,947 |
|  | \$31,840 | \$21,052 | \$32,031 | \$35,565 | \$41,524 | \$45,940 | \$49,750 | \$53,865 |

SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT B-2

Members in Active Service as of June 30, 2005
By Age, Years of Service, and Average Projected Payroll - Basic

| Age | Years of Service |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over |
| Under 25 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 25-29 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 30-34 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 35-39 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 40-44 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 45-49 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 50-54 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 55-59 | 20 | -- | -- | -- | -- | -- | -- | 20 |
|  | \$44,631 | -- | -- | -- | -- | -- | -- | \$44,631 |
| 60-64 | 32 | -- | -- | -- | -- | -- | -- | 32 |
|  | 55,003 | -- | -- | -- | - | -- | -- | 55,003 |
| 65-69 | 10 | -- | -- | -- | - | - | -- | 10 |
|  | 45,958 | -- | -- | -- | -- | -- | -- | 45,958 |
| 70 \& Over | 4 | -- | -- | -- | -- | - | -- | 4 |
|  | 50,901 | -- | -- | -- | - | -- | -- | 50,901 |
| Total | 66 | -- | -- | -- | -- | -- | -- | 66 |
|  | \$50,241 | -- | -- | -- | -- | -- | -- | \$50,241 |

SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT B-3

Members in Active Service as of June 30, 2005
By Age, Years of Service, and Average Projected Payroll - Coordinated

| Age | Years of Service |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over |
| Under 25 | 6,412 | 6,280 | 132 | -- | -- | -- | -- | -- |
|  | \$15,577 | \$15,341 | \$26,812 | -- | -- | -- | -- | -- |
| 25-29 | 9,490 | 7,859 | 1,600 | 31 | -- | -- | -- | -- |
|  | 25,358 | 23,475 | 34,417 | \$35,172 | -- | -- | -- | -- |
| 30-34 | 10,518 | 6,169 | 3,540 | 786 | 23 | -- | -- | -- |
|  | 31,062 | 25,335 | 39,023 | 39,885 | \$40,334 | -- | -- | -- |
| 35-39 | 14,441 | 6,968 | 4,122 | 2,337 | 963 | 51 | -- | -- |
|  | 31,392 | 22,285 | 36,816 | 43,339 | 44,575 | \$40,775 | -- | -- |
| 40-44 | 21,116 | 8,306 | 5,676 | 3,174 | 2,624 | 1,209 | 127 | -- |
|  | 31,540 | 20,714 | 31,462 | 40,394 | 47,556 | 46,888 | \$44,761 | -- |
| 45-49 | 25,966 | 7,951 | 6,126 | 4,448 | 3,379 | 2,191 | 1,740 | 131 |
|  | 32,763 | 20,381 | 29,303 | 34,743 | 44,866 | 50,804 | 49,021 | \$48,911 |
| 50-54 | 24,388 | 4,980 | 4,660 | 4,446 | 3,931 | 2,388 | 2,706 | 1,277 |
|  | 36,531 | 23,360 | 30,952 | 32,388 | 40,497 | 48,036 | 53,674 | 52,623 |
| 55-59 | 17,829 | 3,115 | 2,688 | 2,851 | 3,241 | 2,150 | 2,072 | 1,712 |
|  | 37,190 | 21,449 | 30,936 | 32,886 | 37,460 | 43,960 | 50,722 | 57,428 |
| 60-64 | 8,215 | 1,712 | 1,291 | 1,176 | 1,420 | 1,091 | 926 | 599 |
|  | 32,096 | 17,463 | 27,204 | 31,412 | 35,867 | 37,333 | 41,751 | 52,404 |
| 65-69 | 2,367 | 848 | 466 | 342 | 291 | 153 | 153 | 114 |
|  | 21,963 | 11,133 | 19,516 | 26,469 | 32,621 | 33,343 | 33,278 | 41,341 |
| 70 \& Over | 1,495 | 628 | 412 | 198 | 121 | 50 | 38 | 48 |
|  | 13,817 | 7,967 | 13,541 | 18,047 | 23,353 | 26,558 | 28,533 | 26,310 |
| Total | 142,237 | 54,816 | 30,713 | 19,789 | 15,993 | 9,283 | 7,762 | 3,881 |
|  | \$31,832 | \$21,052 | \$32,031 | \$35,565 | \$41,524 | \$45,940 | \$49,750 | \$53,927 |

## SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT C-1

Retired Participants as of June 30, 2005
By Age, Years Retired and Average Annual Benefit - Total

| Age | Years Retired |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35 \& Over |
| Under 45 | 1 | 1 | -- | -- | -- | -- | -- | -- | -- |
|  | \$35,019 | \$35,019 | -- | -- | -- | -- | -- | -- | -- |
| 45-49 | 1 | 1 | -- | -- | -- | -- | -- | -- | -- |
|  | 11,937 | 11,937 | -- | -- | -- | -- | -- | -- | -- |
| 50-54 | 86 | 83 | 3 | -- | -- | -- | -- | -- | -- |
|  | 12,569 | 12,443 | \$16,078 | -- | -- | -- | -- | -- | -- |
| 55-59 | 2,852 | 2,803 | 47 | 2 | -- | -- | -- | -- | -- |
|  | 11,043 | 10,937 | 17,319 | \$12,298 | -- | -- | -- | -- | -- |
| 60-64 | 7,467 | 4,648 | 2,807 | 11 | 1 | -- | -- | -- | -- |
|  | 11,002 | 11,155 | 10,663 | 31,966 | \$20,344 | -- | -- | -- | -- |
| 65-69 | 11,088 | 4,276 | 4,997 | 1,736 | 71 | 6 | 2 | -- | -- |
|  | 11,242 | 8,792 | 11,451 | 16,256 | 20,213 | \$26,081 | \$13,117 | -- | -- |
| 70-74 | 9,696 | 868 | 4,136 | 3,642 | 1,012 | 29 | 9 | -- | -- |
|  | 12,831 | 5,842 | 10,293 | 16,214 | 16,652 | 24,932 | 16,173 | -- | -- |
| 75-79 | 7,862 | 341 | 763 | 3,556 | 2,665 | 516 | 18 | 1 | 2 |
|  | 14,727 | 4,327 | 7,008 | 13,595 | 16,235 | 32,981 | 15,980 | \$18,565 | \$12,202 |
| 80-84 | 5,234 | 113 | 208 | 658 | 2,677 | 1,502 | 63 | 12 | 1 |
|  | 14,985 | 3,418 | 5,231 | 10,728 | 13,117 | 22,268 | 19,229 | 9,807 | 8,765 |
| 85-89 | 2,718 | 21 | 29 | 106 | 393 | 1,786 | 368 | 15 | -- |
|  | 14,396 | 4,505 | 2,776 | 8,220 | 9,609 | 15,069 | 19,358 | 17,878 | -- |
| 90 \& Over | 1,142 | 1 | 4 | 15 | 35 | 211 | 692 | 172 | 12 |
|  | 13,339 | 2,949 | 1,424 | 3,516 | 6,321 | 9,972 | 15,169 | 12,963 | 9,982 |
| Total | 48,147 | 13,156 | 12,994 | 9,726 | 6,854 | 4,050 | 1,152 | 200 | 15 |
|  | \$12,720 | \$9,745 | \$10,551 | \$14,803 | \$14,690 | \$19,842 | \$16,746 | \$13,171 | \$10,196 |

## SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT C-2

Retired Participants as of June 30, 2005
By Age, Years Retired and Average Annual Benefit - Basic

| Age | Years Retired |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35 \& Over |
| Under 45 | 1 | 1 | -- | -- | -- | -- | -- | -- | -- |
|  | \$35,019 | \$35,019 | -- | -- | -- | -- | -- | -- | -- |
| 45-49 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 50-54 | 2 | 1 | 1 | -- | -- | -- | -- | -- | -- |
|  | 29,856 | 37,542 | \$22,170 | -- | -- | -- | -- | -- | -- |
| 55-59 | 133 | 115 | 17 | 1 | -- | -- | -- | -- | -- |
|  | 34,336 | 36,119 | 22,978 | \$22,466 | - | -- | -- | -- | -- |
| 60-64 | 598 | 172 | 416 | 9 | 1 | -- | -- | -- | -- |
|  | 33,695 | 30,902 | 34,964 | 29,884 | \$20,344 | -- | -- | -- | -- |
| 65-69 | 1,162 | 114 | 550 | 466 | 27 | 4 | 1 | -- | -- |
|  | 35,865 | 23,645 | 35,216 | 39,767 | 34,902 | \$29,964 | \$17,502 | -- | -- |
| 70-74 | 1,538 | 22 | 279 | 831 | 382 | 18 | 6 | -- | -- |
|  | 34,393 | 30,187 | 24,911 | 37,826 | 34,261 | 35,293 | 20,877 | -- | -- |
| 75-79 | 1,936 | 8 | 48 | 633 | 865 | 369 | 11 | 1 | 1 |
|  | 32,546 | 28,107 | 25,204 | 29,244 | 31,470 | 42,156 | 22,849 | \$18,565 | \$16,765 |
| 80-84 | 1,789 | 3 | 10 | 88 | 760 | 868 | 49 | 10 | 1 |
|  | 28,495 | 15,349 | 32,776 | 28,978 | 25,763 | 31,367 | 23,041 | 10,960 | 8,765 |
| 85-89 | 1,309 | -- | 1 | 12 | 82 | 915 | 286 | 13 | -- |
|  | 22,432 | -- | 7,050 | 22,719 | 24,518 | 22,269 | 22,536 | 19,391 | -- |
| 90 \& Over | 700 | -- | -- | 1 | 3 | 72 | 462 | 150 | 12 |
|  | 17,826 | -- | -- | 6,356 | 43,785 | 20,477 | 18,841 | 13,615 | 9,982 |
| Total | 9,168 | 436 | 1,322 | 2,041 | 2,120 | 2,246 | 815 | 174 | 14 |
|  | \$30,019 | \$30,211 | \$32,391 | \$35,079 | \$29,714 | \$29,113 | \$20,458 | \$13,922 | \$10,379 |

## SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT C-3

Retired Participants as of June 30, 2005
By Age, Years Retired and Average Annual Benefit - Coordinated

| Age | Years Retired |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35 \& Over |
| Under 45 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 45-49 | 1 | 1 | -- | -- | -- | -- | - | - | -- |
|  | \$11,937 | \$11,937 | -- | -- | -- | -- | -- | -- | -- |
| 50-54 | 84 | 82 | 2 | -- | -- | -- | - | - | -- |
|  | 12,158 | 12,137 | \$13,033 | -- | -- | -- | -- | -- | -- |
| 55-59 | 2,719 | 2,688 | 30 | 1 | -- | -- | -- | -- | -- |
|  | 9,903 | 9,859 | 14,112 | \$2,130 | -- | -- | -- | -- | -- |
| 60-64 | 6,869 | 4,476 | 2,391 | 2 | -- | -- | -- | -- | -- |
|  | 9,026 | 10,396 | 6,435 | 41,336 | -- | -- | -- | -- | -- |
| 65-69 | 9,926 | 4,162 | 4,447 | 1,270 | 44 | 2 | 1 | -- | -- |
|  | 8,360 | 8,385 | 8,512 | 7,629 | \$11,199 | \$18,314 | \$8,732 | -- | -- |
| 70-74 | 8,158 | 846 | 3,857 | 2,811 | 630 | 11 | 3 | -- | -- |
|  | 8,766 | 5,209 | 9,235 | 9,825 | 5,976 | 7,977 | 6,765 | -- | -- |
| 75-79 | 5,926 | 333 | 715 | 2,923 | 1,800 | 147 | 7 | -- | 1 |
|  | 8,905 | 3,755 | 5,786 | 10,206 | 8,915 | 9,950 | 5,187 | -- | \$7,638 |
| 80-84 | 3,445 | 110 | 198 | 570 | 1,917 | 634 | 14 | 2 | -- |
|  | 7,969 | 3,093 | 3,840 | 7,910 | 8,103 | 9,811 | 5,889 | \$4,040 | -- |
| 85-89 | 1,409 | 21 | 28 | 94 | 311 | 871 | 82 | 2 | -- |
|  | 6,930 | 4,505 | 2,623 | 6,369 | 5,678 | 7,505 | 8,272 | 8,048 | -- |
| 90 \& Over | 442 | 1 | 4 | 14 | 32 | 139 | 230 | 22 | -- |
|  | 6,233 | 2,949 | 1,424 | 3,314 | 2,809 | 4,531 | 7,795 | 8,521 | -- |
| Total | 38,979 | 12,720 | 11,672 | 7,685 | 4,734 | 1,804 | 337 | 26 | 1 |
|  | \$8,651 | \$9,044 | \$8,078 | \$9,418 | \$7,962 | \$8,300 | \$7,771 | \$8,140 | \$7,638 |

SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

EXHIBIT D-1
Disabled Members as of June 30, 2005
By Age, Years Disabled and Average Annual Benefit - Total

| Age | Years Disabled |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35 \& Over |
| Under 45 | 75 | 56 | 11 | 8 | -- | -- | -- | -- | -- |
|  | \$5,578 | \$5,817 | \$4,494 | \$5,390 | -- | -- | -- | -- | -- |
| 45-49 | 205 | 122 | 51 | 28 | 4 | -- | -- | -- | -- |
|  | 7,011 | 7,842 | 5,781 | 5,829 | \$5,612 | -- | -- | -- | -- |
| 50-54 | 364 | 194 | 113 | 47 | 8 | 2 | -- | -- | -- |
|  | 9,209 | 9,787 | 8,950 | 8,050 | 7,026 | \$3,704 | -- | -- | -- |
| 55-59 | 565 | 339 | 163 | 42 | 18 | 2 | 1 | -- | -- |
|  | 10,586 | 10,775 | 10,905 | 9,026 | 8,301 | 5,767 | \$10,850 | -- | -- |
| 60-64 | 636 | 286 | 243 | 85 | 15 | 5 | 2 | -- | -- |
|  | 11,359 | 10,508 | 11,853 | 12,623 | 12,360 | 13,813 | 5,718 | -- | -- |
| 65-69 | 5 | 4 | 1 | -- | -- | -- | -- | -- | -- |
|  | 4,149 | 4,587 | 2,401 | -- | -- | -- | -- | -- | -- |
| 70-74 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 75-79 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 80-84 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 85-89 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 90 \& Over | 3 | 3 | -- | -- | -- | -- | -- | -- | -- |
|  | 2,804 | 2,804 | -- | -- | -- | -- | -- | -- | -- |
| Total | 1,853 | 1,004 | 582 | 210 | 45 | 9 | 3 | -- | -- |
|  | \$9,953 | \$9,827 | \$10,337 | \$9,699 | \$9,188 | \$9,779 | \$7,429 | -- | -- |

SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

EXHIBIT D-2
Disabled Members as of June 30, 2005
By Age, Years Disabled and Average Annual Benefit - Basic

| Age | Years Disabled |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35 \& Over |
| Under 45 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 45-49 | -- | -- | - | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | - | -- | -- | -- |
| 50-54 | -- | -- | -- | - | - | - | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 55-59 | 7 | 2 | 4 | -- | -- | -- | 1 | -- | -- |
|  | \$39,458 | \$30,253 | \$51,213 | -- | -- | -- | \$10,850 | -- | -- |
| 60-64 | 20 | 3 | 7 | 7 | 2 | 1 | -- | -- | - |
|  | 37,206 | 35,862 | 43,386 | \$35,472 | \$29,874 | \$24,786 | -- | -- | -- |
| 65-69 |  | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 70-74 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 75-79 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 80-84 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 85-89 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 90 \& Over | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 27 | 5 | 11 | 7 | 2 | 1 | 1 | -- | -- |
|  | \$37,790 | \$33,618 | \$46,232 | \$35,472 | \$29,874 | \$24,786 | \$10,850 | -- | -- |

SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

EXHIBIT D-3
Disabled Members as of June 30, 2005
By Age, Years Disabled and Average Annual Benefit - Coordinated

| Age | Years Disabled |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35 \& Over |
| Under 45 | 75 | 56 | 11 | 8 | - | -- | -- | -- | - |
|  | \$5,578 | \$5,817 | \$4,494 | \$5,390 | -- | -- | -- | -- | -- |
| 45-49 | 205 | 122 | 51 | 28 | 4 | -- | -- | -- | -- |
|  | 7,011 | 7,842 | 5,781 | 5,829 | \$5,612 | -- | -- | -- | -- |
| 50-54 | 364 | 194 | 113 | 47 | 8 | 2 | -- | -- | -- |
|  | 9,209 | 9,787 | 8,950 | 8,050 | 7,026 | \$3,704 | -- | -- | -- |
| 55-59 | 558 | 337 | 159 | 42 | 18 | 2 | -- | -- | -- |
|  | 10,224 | 10,659 | 9,891 | 9,026 | 8,301 | 5,767 | -- | -- | -- |
| 60-64 | 616 | 283 | 236 | 78 | 13 | 4 | 2 | -- | -- |
|  | 10,520 | 10,240 | 10,918 | 10,573 | 9,665 | 11,070 | \$5,718 | -- | - |
| 65-69 | 5 | 4 | 1 | -- | -- | -- | -- | -- | -- |
|  | 4,149 | 4,587 | 2,401 | -- | -- | -- | -- | -- | -- |
| 70-74 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 75-79 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 80-84 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 85-89 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 90 \& Over | 3 | 3 | -- | -- | -- | -- | -- | -- | -- |
|  | 2,804 | 2,804 | -- | -- | -- | -- | -- | -- | -- |
| Total | 1,826 | 999 | 571 | 203 | 43 | 8 | 2 | -- | -- |
|  | \$9,541 | \$9,708 | \$9,645 | \$8,810 | \$8,226 | \$7,903 | \$5,718 | -- | -- |

## SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT E-1

Beneficiaries as of June 30, 2005
By Age, Years Since Death and Average Annual Benefit - Total

| Age | Years Since Death |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35 \& Over |
| Under 45 | 156 | 74 | 46 | 24 | 11 | 1 | -- | -- | -- |
|  | \$7,179 | \$6,520 | \$7,356 | \$7,294 | \$9,606 | \$18,389 | -- | -- | -- |
| 45-49 | 101 | 58 | 23 | 13 | 7 | -- | -- | -- | -- |
|  | 8,112 | 7,792 | 7,452 | 9,704 | 9,982 | -- | -- | -- | -- |
| 50-54 | 179 | 102 | 42 | 21 | 9 | 3 | 2 | -- | -- |
|  | 9,808 | 8,912 | 8,463 | 12,864 | 14,550 | 13,700 | \$24,424 | -- | -- |
| 55-59 | 286 | 168 | 71 | 30 | 15 | 1 | -- | 1 | -- |
|  | 10,793 | 8,833 | 12,925 | 16,992 | 9,999 | 5,586 | -- | \$19,759 | -- |
| 60-64 | 429 | 191 | 119 | 67 | 29 | 11 | 9 | 2 | 1 |
|  | 12,205 | 11,079 | 11,763 | 13,251 | 15,168 | 16,559 | 17,356 | 24,486 | \$5,110 |
| 65-69 | 652 | 252 | 186 | 105 | 59 | 27 | 16 | 5 | 2 |
|  | 13,372 | 10,589 | 14,270 | 13,653 | 16,209 | 22,377 | 20,925 | 11,705 | 4,318 |
| 70-74 | 4,847 | 1,227 | 1,079 | 915 | 672 | 385 | 217 | 115 | 237 |
|  | 14,314 | 15,061 | 14,802 | 14,716 | 14,733 | 15,401 | 15,053 | 9,659 | 5,304 |
| 75-79 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 80-84 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 85-89 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 90 \& Over | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 6,650 | 2,072 | 1,566 | 1,175 | 802 | 428 | 244 | 123 | 240 |
|  | \$13,551 | \$12,834 | \$13,926 | \$14,355 | \$14,655 | \$15,843 | \$15,600 | \$10,066 | \$5,295 |

## SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT E-2

Beneficiaries as of June 30, 2005
By Age, Years Since Death and Average Annual Benefit - Basic

| Age | Years Since Death |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35 \& Over |
| Under 45 | 8 | 1 | 1 | 4 | 1 | 1 | -- | -- | -- |
|  | \$15,221 | \$1,965 | \$3,951 | \$17,386 | \$27,918 | \$18,389 | -- | -- | -- |
| 45-49 | 6 | 2 | 1 | 1 | 2 | -- | -- | -- | -- |
|  | 14,914 | 6,752 | 13,408 | 7,617 | 27,476 | -- | -- | -- | -- |
| 50-54 | 16 | 3 | 4 | 2 | 4 | 1 | 2 | - | -- |
|  | 19,557 | 9,039 | 10,014 | 45,713 | 24,502 | 7,454 | \$24,424 | -- | -- |
| 55-59 | 33 | 10 | 6 | 10 | 6 | -- | -- | 1 | -- |
|  | 25,430 | 24,551 | 32,330 | 28,492 | 15,839 | -- | -- | \$19,759 | -- |
| 60-64 | 96 | 27 | 17 | 20 | 12 | 9 | 8 | 2 | 1 |
|  | 23,645 | 23,837 | 23,855 | 26,016 | 26,860 | 18,876 | 19,273 | 24,486 | \$5,110 |
| 65-69 | 208 | 56 | 49 | 34 | 23 | 23 | 16 | 5 | 2 |
|  | 26,171 | 25,275 | 30,642 | 24,978 | 30,278 | 25,179 | 20,925 | 11,705 | 4,318 |
| 70-74 | 2,683 | 520 | 499 | 468 | 380 | 270 | 196 | 113 | 237 |
|  | 19,562 | 24,557 | 23,027 | 20,890 | 20,306 | 19,402 | 15,982 | 9,781 | 5,304 |
| 75-79 |  | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 80-84 | -- | -- | -- | -- | -- | -- | -- | -- | - |
|  | - | -- | -- | -- | -- | -- | -- | -- | -- |
| 85-89 | - | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 90 \& Over | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 3,050 | 619 | 577 | 539 | 428 | 304 | 222 | 121 | 240 |
|  | \$20,185 | \$24,421 | \$23,654 | \$21,520 | \$21,054 | \$19,781 | \$16,533 | \$10,186 | \$5,295 |

SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT E-3 <br> Beneficiaries as of June 30, 2005 <br> By Age, Years Since Death and Average Annual Benefit - Coordinated

| Age | Years Since Death |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35 \& Over |
| Under 45 | 148 | 73 | 45 | 20 | 10 | -- | -- | -- | -- |
|  | \$6,744 | \$6,582 | \$7,431 | \$5,276 | \$7,775 | -- | -- | -- | -- |
| 45-49 | 95 | 56 | 22 | 12 | 5 | -- | -- | -- | -- |
|  | 7,683 | 7,829 | 7,181 | 9,878 | 2,985 | -- | -- | -- | -- |
| 50-54 | 163 | 99 | 38 | 19 | 5 | 2 | -- | -- | -- |
|  | 8,851 | 8,909 | 8,300 | 9,406 | 6,589 | \$16,823 | -- | -- | -- |
| 55-59 | 253 | 158 | 65 | 20 | 9 | 1 | -- | -- | -- |
|  | 8,883 | 7,838 | 11,134 | 11,242 | 6,106 | 5,586 | -- | -- | -- |
| 60-64 | 333 | 164 | 102 | 47 | 17 | 2 | 1 | -- | -- |
|  | 8,907 | 8,979 | 9,748 | 7,820 | 6,915 | 6,130 | \$2,015 | -- | -- |
| 65-69 | 444 | 196 | 137 | 71 | 36 | 4 | -- | -- | -- |
|  | 7,376 | 6,393 | 8,414 | 8,230 | 7,221 | 6,267 | -- | -- | -- |
| 70-74 | 2,164 | 707 | 580 | 447 | 292 | 115 | 21 | 2 | -- |
|  | 7,806 | 8,076 | 7,726 | 8,251 | 7,479 | 6,007 | 6,383 | \$2,794 | -- |
| 75-79 | -- | -- | -- | -- | -- | -- | -- | - | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 80-84 | -- | -- | -- | -- | -- | -- | -- | - | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 85-89 | -- | -- | -- | -- | -- | -- | -- | - | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 90 \& Over | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 3,600 | 1,453 | 989 | 636 | 374 | 124 | 22 | 2 | -- |
|  | \$7,931 | \$7,897 | \$8,250 | \$8,283 | \$7,331 | \$6,189 | \$6,185 | \$2,794 | -- |

SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT F

## Reconciliation of Member Data

|  | Active Members | Vested Terminated Members | Other NonVested Terminated Members | Disableds | Retired Participants | Beneficiaries | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. Number as of July 1, 2004 | 138,164 | 33,915 | 102,265 | 1,760 | 46,470 | 6,550 | 329,124 |
| B. Data Adjustments | 1,891 | -475 | -5,090 | -18 | -169 | 25 | -3,836 |
| C. Additions | 16,924 | 4,380 | 7,002 | 280 | 3,147 | 441 | 32,174 |
| D. Deletions: |  |  |  |  |  |  |  |
| 1. Terminated - Nonvested | -7,890 | -60 | - | - | - | - | -7,950 |
| 2. Terminated - Vested | -4,230 | - | - | - | - | - | -4,230 |
| 3. Retirements | -2,163 | -924 | - | -60 | - | - | -3,147 |
| 4. Disability | -215 | -47 | - | - | - | - | -262 |
| 5. Died with Beneficiary | -57 | -9 | - | - | - | - | -66 |
| 6. Died without Beneficiary | -121 | -34 | -94 | -55 | -1,300 | -363 | -1,967 |
| 7. Return to Active | - | -978 | -1,216 | - | - | - | -2,194 |
| 8. Other Deletions | $=$ | $=$ | -2,498 | -54 | -1 | - 3 | -2,556 |
| E. Number as of July 1, 2005 | 142,303 | 35,768 | 100,369 | 1,853 | 48,147 | 6,650 | 335,090 |

## SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT G

Summary Statement of Income and Expenses on a Market Value Basis for Year Ended June 30, 2005

|  | Non-MPRIF Assets | MPRIF <br> Reserve | Market Value |
| :---: | :---: | :---: | :---: |
| A. Assets available at beginning of period | \$4,832,002,751 | \$6,308,742,962 | \$11,140,745,713 |
| B. Operating revenues: |  |  |  |
| 1. Member contributions | \$216,700,643 | - | \$216,700,643 |
| 2. Employer contributions | 232,963,374 | - | 232,963,374 |
| 3. MPRIF income | - | \$519,352,576 | 519,352,576 |
| 4. Net investment income |  |  |  |
| (a) Interest and dividends | \$150,325,349 | - | \$150,325,349 |
| (b) Net appreciation/(depreciation) | 398,907,587 | - | 398,907,587 |
| (c) Securities lending income | 3,654,018 | - | 3,654,018 |
| (d) Investment expenses | $\underline{-14,523,789}$ | - | -14,523,789 |
| (e) Net subtotal | \$538,363,165 | - | \$538,363,165 |
| 5. Other | 4,309,629 | - | 4,309,629 |
| 6. Total additions | \$992,336,811 | \$519,352,576 | \$1,511,689,387 |
| C. Operating expenses: |  |  |  |
| 1. Benefits | \$32,028,405 | \$683,014,774 | \$715,043,179 |
| 2. Refunds | 24,952,033 | - | 24,952,033 |
| 3. Administrative expenses | 9,117,813 | - | 9,117,813 |
| 4. Other | 2,039,742 | - - | 2,039,742 |
| 5. Total operating expenses | \$68,137,993 | \$683,014,774 | \$751,152,767 |
| D. Other changes in reserves: |  |  |  |
| 1. Annuities awarded | -\$380,714,371 | \$380,714,371 | - |
| 2. Mortality gain/(loss) | 12,738,334 | -12,738,334 | - |
| 3. Change in MPRIF assumptions | - - | - - | - |
| 4. Total other changes | -\$367,976,037 | \$367,976,037 | - |
| E. Assets available at end of period | \$5,388,225,532 | \$6,513,056,801 | \$11,901,282,333 |

F. Determination of current year unrecognized asset return (UAR)

1. Average balance:
(a) Non-MPRIF Assets available at BOY: (A) \$4,832,002,751
(b) Non-MPRIF Assets available at EOY:* (E) - (D.2)
(c) Average balance: [(F.1.(a)) + (F.1.(b)) - (B.4.(e)) - (B.5)]/2
2. Expected return: $8.50 \% \times$ (F.1.(c))
3. Actual return: (B.4.(e)) + (B.5) 542,672,794
4. Current year UAR: (F.3) - (F.2)

* Before adjustment for MPRIF Mortality Gain (Loss).

SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT H

Table of Financial Information for Year Ended June 30, 2005

|  | Market Value | Cost Value |
| :--- | ---: | ---: |
| Assets in trust |  |  |
| Cash, equivalents, short-term securities: | $\$ 68,397,600$ | $\$ 68,397,600$ |
| Fixed income | $1,262,537,810$ | $1,278,883,879$ |
| Equity | $3,522,790,887$ | $3,461,715,249$ |
| Real estate | $11,655,792$ | $11,655,792$ |
| Equity in MPRIF | $6,513,056,801$ | $6,513,056,801$ |
| Invested securities lending collateral | $1,302,021,272$ | $1,302,021,272$ |
| SBI alternative | $517,344,421$ | $487,358,783$ |
| Other | 125,109 | 125,109 |
| Total assets in trust | $\$ 13,197,929,692$ | $\$ 13,123,214,485$ |
| Assets receivable | $\$ 20,775,680$ | $\$ 20,775,680$ |
| Total assets | $\$ 13,218,705,372$ | $\$ 13,143,990,165$ |
| Amounts currently payable | $-\$ 1,302,021,272$ | $-15,401,767$ |
| Securities lending collateral | $-\$ 1,317,423,039$ | $-\$ 1,302,021,272$ |
| Other | $\$ 6,513,056,801$ | $-15,401,767$ |
| Total amounts currently payable | $1,721,747,764$ | $-\$ 1,317,423,039$ |
| Assets available for benefits | $\underline{3,666,477,768}$ | $\underline{\$ 11,901,282,333}$ |
| MPRIF reserves | $\underline{\$ 11,901,282,333}$ | $\$ 6,513,056,801$ |
| Member reserves |  | $1,721,747,764$ |
| Other non-MPRIF reserves | $\underline{\$ 11,591,762,561}$ |  |
| Total Assets Available for Benefits | $\underline{\$ 11,826,567,126}$ |  |
| Net Assets at Market/Cost Value |  |  |

SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT I

Development of the Fund Through June 30, 2005

| Year Ended <br> June 30 | Employer <br> Contributions | Member <br> Contributions | Investment <br> Return* | Net <br> Administrative <br> Expenses | Benefit <br> Payments | Actuarial <br> Value of <br> Assets at <br> End of Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2002 | $\$ 206,982,000$ | $\$ 191,422,000$ | $\$ 11,288,400,000$ | $\$ 8,680,000$ | $\$ 660,710,000$ | $\$ 11,017,414,000$ |
| 2003 | $221,689,000$ | $205,963,000$ | $442,165,000$ | $8,628,000$ | $682,701,000$ | $11,195,902,000$ |
| 2004 | $225,744,509$ | $215,696,700$ | $559,127,828$ | $8,830,215$ | $709,679,961$ | $11,477,960,861$ |
| 2005 | $232,963,374$ | $216,700,643$ | $665,423,839$ | $9,117,813$ | $739,995,212$ | $11,843,935,692$ |

[^2]
## SECTION 3: Supplemental Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT J

## Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended June 30, 2005

| 1. Unfunded/(Overfunded) actuarial accrued liability at beginning of year |  | \$3,481,504,018 |
| :---: | :---: | :---: |
| 2. Normal cost at beginning of year |  | 328,196,111 |
| 3. Total contributions |  | 449,664,017 |
| 4. Interest |  | 304,713,790 |
| 5. Expected unfunded/(overfunded) actuarial accrued liability (1) + (2) - (3) + (4) |  | \$3,664,749,902 |
| 6. Changes due to (gain)/loss from: |  |  |
| (a) Investments | \$280,695,109 |  |
| (b) MPRIF mortality | -12,738,334 |  |
| (c) Other demographics* | 115,912,246 |  |
| (d) Total changes due to (gain)/loss |  | 383,869,021 |
| 7. Unfunded/(Overfunded) actuarial accrued liability at end of year |  | \$4,048,618,923 |

* Includes (gain)/loss due to age/service retirements, disability, mortality (pre and post-retirement), withdrawal and salary increases.


## EXHIBIT K <br> Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

| Assumptions or Actuarial Assumptions: |  |
| :---: | :---: |
|  | The estimates on which the cost of the Association is calculated including: |
|  | (a) Investment return - the rate of investment yield that the Association will |
|  | earn over the long-term future; |
|  | (b) Mortality rates - the death rates of employees and pensioners; life |
|  | expectancy is based on these rates; |
|  | (c) Retirement rates - the rate or probability of retirement at a given age; |
|  | (d) Turnover rates - the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement. |
| Normal Cost: | The amount of contributions required to fund the benefit allocated to the current year of service. |
| Actuarial Accrued Liability |  |
| For Actives: | The equivalent of the accumulated normal costs allocated to the years before the valuation date. |
| Actuarial Accrued Liability |  |
| For Pensioners: | The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits. |
| Unfunded Actuarial Accrued |  |
| Liability: | The extent to which the actuarial accrued liability of the Association exceeds the assets of the Association. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time. |

Amortization of the Unfunded<br>Actuarial Accrued Liability: Payments made over a period of years equal in value to the Association's unfunded actuarial accrued liability.<br>\section*{Investment Return:}<br>\section*{Accrued Benefit Funded Ratio:}<br>\section*{Projected Benefit Funded Ratio:}<br>The rate of earnings of the Association from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.<br>A current year funded status that measures the percent of benefits covered by Current Assets. This ratio is based on benefits earned to the valuation date (accrued service) and includes future salary increases to retirement. The liability for these benefits is defined as the Current Benefit Obligations. The Accrued Benefit Funded Ratio is calculated as the Actuarial Value of Assets (Current Assets) divided by the Current Benefit Obligations.<br>A projected funded status that measures contribution sufficiency/deficiency, which is based on a present value of all plan benefits for the lifetime of all plan Members. The liability for these benefits is defined as the Current and Expected Future Benefit Obligations, or Present Value of Benefits. The Current and Expected Future Assets are determined as the sum of the Actuarial Value of Assets (Current Assets), the Present Value of Expected Future Statutory Supplemental Contributions and the Present Value of Future Normal Costs. The Projected Benefit Funded Ratio is calculated as the Current and Expected Future Assets divided by the Current and Expected Future Benefit Obligations. If the ratio is equal to or more than $100 \%$, there is a contribution sufficiency, and if it is less than $100 \%$ there is a contribution deficiency.

## SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT I

## Summary of Actuarial Valuation Results

| 1. Pensioners as of the valuation date (including 6,650 beneficiaries in pay status) |  | 56,650 |
| :---: | :---: | :---: |
| 2. Members inactive during year ended June 30,2005 with vested rights |  | 35,768 |
| 3. Members active during the year ended June 30, 2005 |  | 142,303 |
| Fully vested | 105,504 |  |
| Not vested | 36,799 |  |
| 4. Other non-vested terminated members as of June 30, 2005 |  | 100,369 |

SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT I (continued)

Summary of Actuarial Valuation Results

B. Determination of Unfunded Actuarial Accrued Liability

| 1. | Actuarial Accrued Liability | $\$ 15,892,554,615$ |
| :--- | :--- | ---: |
| 2. | Actuarial Value of Assets | $\underline{11,843,935,692}$ |
| 3. | Unfunded Actuarial Accrued Liability: (B.1) - (B.2) | $\$ 4,048,618,923$ |

C. Determination of Supplemental Contribution Rate

1. Present value of future payrolls through the amortization date of June 30, 2031 \$85,533,631,352
2. Supplemental contribution rate: (B.3) / (C.1)
D. Determination of GASB Amortization Rate
3. Present value of future payrolls through the amortization date of June 30, 2031 \$77,111,044,245
4. Supplemental contribution rate: (B.3) / (D.1)

## SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT II <br> Actuarial Balance Sheet

| A. Current Assets |  |  | \$11,843,935,692 |
| :---: | :---: | :---: | :---: |
| B. Expected Future Assets |  |  |  |
| 1. Present Value of Expected Future Statutory Supplemental Contributions |  |  | \$2,617,329,119 |
| 2. Present Value of Future Normal Costs |  |  | 2,999,873,357 |
| 3. Total Expected Future Assets |  |  | \$5,617,202,476 |
| C. Total Current and Expected Future Assets |  |  | \$17,461,138,168 |
| D. Current Benefit Obligations | Non-Vested | Vested | Total |
| 1. Benefit recipients: |  |  |  |
| (a) Retirement annuities | - | \$5,856,178,519 | \$5,856,178,519 |
| (b) Disability benefits | - | 222,816,577 | 222,816,577 |
| (c) Beneficiaries | - | 749,582,664 | 749,582,664 |
| 2. Vested terminated members | - | 1,551,260,454 | 1,551,260,454 |
| 3. Other non-vested terminated members | - | 54,952,288 | 54,952,288 |
| 4. Active members | \$64,703,841 | 6,358,218,050 | 6,422,921,891 |
| 5. Total Current Benefit Obligations | \$64,703,841 | \$14,793,008,552 | \$14,857,712,393 |
| E. Expected Future Benefit Obligations |  |  | 4,034,715,579 |
| F. Total Current and Expected Future Benefit Obligations Present Value of Benefits: (D. $5+$ E) |  |  | \$18,892,427,972 |
| G. Current Unfunded Actuarial Liability (D.5-A) |  |  | \$3,013,776,701 |
| H. Current and Future Unfunded Actuarial Liability (F-C) |  |  | \$1,431,289,804 |

## EXHIBIT III

Supplementary Information Required by the GASB - Schedule of Employer Contributions

| Plan <br> Year <br> Ended June 30 | Actuarially Required Contribution Rate ${ }^{(1)}$ <br> (a) | Actual Covered Payroll (b) | Actual Member Contributions (c) | Annual <br> Required Employer Contributions $[(\mathrm{a}) \times(\mathrm{b})]-(\mathrm{c})=(\mathrm{d})$ | Actual Employer Contributions ${ }^{(2)}$ <br> (e) | Percentage Contributed <br> (e) I (d) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1991 | 10.04\% | \$2,124,409,000 | \$94,413,000 | \$118,878,000 | \$101,907,000 | 85.72\% |
| 1992 | 9.44\% | 2,299,532,000 | 101,655,000 | 115,421,000 | 109,203,000 | 94.61\% |
| 1993 | 9.95\% | 2,403,558,000 | 106,359,000 | 132,795,000 | 113,183,000 | 85.23\% |
| 1994 | 9.58\% | 2,557,522,000 | 112,940,000 | 132,071,000 | 119,390,000 | 90.40\% |
| 1995 | 9.76\% | 2,679,069,000 | 115,986,000 | 145,491,000 | 123,984,000 | 85.22\% |
| 1996 | 9.61\% | 2,814,126,000 | 121,525,000 | 148,913,000 | 129,738,000 | 87.12\% |
| 1997 | 9.75\% | 2,979,260,000 | 128,234,000 | 162,244,000 | 136,686,000 | 84.25\% |
| 1998 | $9.62 \%{ }^{(3)}$ | 3,271,737,000 | 140,385,000 | 174,356,000 | 151,499,000 | 86.89\% |
| 1999 | 9.63\% ${ }^{(3)}$ | 3,302,808,000 | 158,475,000 | 159,585,000 | 173,370,000 | 108.64\% |
| 2000 | 9.22\% ${ }^{(3)}$ | 3,437,954,000 | 171,073,000 | 145,906,000 | 186,637,000 | 127.92\% |
| 2001 | $11.84 \%{ }^{(3),(4)}$ | 3,466,587,000 | 173,380,000 | 237,064,000 | 188,208,000 | 79.39\% |
| 2002 | $11.85 \%{ }^{(3)}$ | 3,809,864,000 | 191,422,000 | 260,047,000 | 206,982,000 | 79.59\% |
| 2003 | $11.52 \%{ }^{(3),(5)}$ | 4,387,649,000 | 205,963,000 | 299,494,000 | 221,689,000 | 74.02\% |
| 2004 | $12.25 \%{ }^{(3)}$ | 3,968,034,367 | 215,696,700 | 270,387,510 | 225,744,509 | 83.49\% |
| 2005 | $12.72 \%{ }^{(3)}$ | 4,096,138,282 | 216,700,643 | 304,328,146 | 232,963,374 | 76.55\% |
| 2006 | $13.26 \%{ }^{(3)}$ |  |  |  |  |  |

(1) Actuarially Required Contributions determined for years ended 1995, 1996, 1997 did not comply with the parameters of GASB Statement No. 25 since a one percent growth in covered population is assumed in the amortization calculation.
${ }^{(2)}$ Includes contributions from other sources (if applicable).
(3) Actuarially Required Contributions calculated according to parameters of GASB 25 with no assumption for growth of covered population.
(4) Actuarially Required Contribution Rate prior to change in Actuarial Assumptions and Asset Valuation Method is $11.41 \%$.
${ }^{(5)}$ Actuarially Required Contribution Rate prior to change in Actuarial Assumptions is 11.86\%.

SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT IV

Supplementary Information Required by the GASB - Schedule of Funding Progress
$\left.\begin{array}{ccccccc}\hline & \begin{array}{c}\text { Actuarial } \\ \text { Actuarial } \\ \text { Valuation } \\ \text { Date }\end{array} & \begin{array}{c}\text { Value of } \\ \text { Assets } \\ \text { (a) }\end{array} & \begin{array}{c}\text { Actuarial } \\ \text { Accrued } \\ \text { Liability } \\ \text { (AAL) } \\ \text { (b) }\end{array} & \begin{array}{c}\text { Unfunded } \\ \text { AAL (UAAL) } \\ \text { (b) - (a) }\end{array} & \begin{array}{c}\text { Funded } \\ \text { Ratio } \\ \text { (a) } / \text { (b) }\end{array} & \begin{array}{c}\text { Actual } \\ \text { Covered } \\ \text { Payroll } \\ \text { (Previous FY) } \\ \text { (c) }\end{array}\end{array} \begin{array}{c}\text { UAAL as a } \\ \text { Percentage } \\ \text { of Covered } \\ \text { Payroll } \\ \text { [(b) - (a)] / (c) }\end{array}\right]$

## SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT V

## Determination of Contribution Sufficiency - Total

| Statutory Contributions* - Chapter 353 | July 1, 2005 |  |
| :---: | :---: | :---: |
|  | Percent of Payroll | Dollar Amount |
| 1. Member Contributions | 5.30\% | \$240,262,784 |
| 2. Employer Contributions | 5.77\% | 261,631,214 |
| 3. Total | $\underline{\underline{11.07 \%}}$ | \$501,893,998 |
| B. Required Contributions - Chapter 356 |  |  |
| 1. Normal Cost |  |  |
| (a) Retirement benefits | 6.08\% | \$275,476,782 |
| (b) Disability benefits | 0.35\% | 15,917,366 |
| (c) Death | 0.14\% | 6,510,071 |
| (d) Withdrawal benefits | 1.22\% | 55,060,131 |
| (e) Total | 7.79\% | \$352,964,350 |
| 2. Amortization of Supplemental Contribution UAAL | 4.73\% | 214,310,748 |
| 3. Allowance for Administrative Expenses | 0.22\% | 9,967,942 |
| 4. Total | 12.74\% | \$577,243,040 |
| C. Contribution Sufficiency (Deficiency) (A.3-B.4) | -1.67\% | -\$75,349,042 |

Projected annual payroll** for fiscal year beginning on the valuation date
\$4,530,882,628

* The statutory contribution rates as of July 1, 2005 are shown as a blended rate of $1 / 2$ of the current rate and $1 / 2$ of the rate increase effective January 1, 2006.
** Calculated as covered actual payroll, projected one year with salary scale.


## SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT VI

## Determination of Contribution Sufficiency - Basic

| Statutory Contributions - Chapter 353 | July 1, 2005 |  |
| :---: | :---: | :---: |
|  | Percent of Payroll | Dollar Amount |
| 1. Member Contributions | 9.10\% | \$301,748 |
| 2. Employer Contributions | 11.78\% | 390,614 |
| 3. Total | $\underline{\underline{20.88 \%}}$ | \$692,362 |
| B. Required Contributions - Chapter 356 |  |  |
| 1. Normal Cost |  |  |
| (a) Retirement benefits | 7.70\% | \$255,403 |
| (b) Disability benefits | 0.37\% | 12,241 |
| (c) Death | 0.17\% | 5,474 |
| (d) Withdrawal benefits | 2.73\% | 90,435 |
| (e) Total | $\underline{\underline{10.97 \%}}$ | \$363,553 |

* Calculated as covered actual payroll, projected one year with salary scale.


## SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota

## EXHIBIT VII

## Determination of Contribution Sufficiency - Coordinated

| A. | Statutory Contributions* - Chapter 353 | July 1, 2005 |  |
| :---: | :---: | :---: | :---: |
|  |  | Percent of Payroll | Dollar Amount |
| 1. | Member Contributions | 5.30\% | \$239,961,036 |
| 2. | Employer Contributions | 5.77\% | 261,240,600 |
| 3. | Total | $\underline{\underline{11.07 \%}}$ | \$501,201,636 |
| B. Required Contributions - Chapter 356 |  |  |  |
| 1. Normal Cost |  |  |  |
|  | (a) Retirement benefits | 6.08\% | \$275,221,379 |
|  | (b) Disability benefits | 0.35\% | 15,905,125 |
|  | (c) Death | 0.14\% | 6,504,597 |
|  | (d) Withdrawal benefits | 1.21\% | 54,969,696 |
|  | (e) Total | $\underline{\underline{7.78 \%}}$ | \$352,600,797 |
| Projected annual payroll** for fiscal year beginning on the valuation date |  |  | \$4,527,566,718 |
|  | The statutory contribution rates as of July 1, 2005 are shown as a blended rate of $1 / 2$ anuary 1, 2006. <br> Calculated as covered actual payroll, projected one year with salary scale. | rrent rate and $1 / 2$ of the | effective |

## EXHIBIT VIII

## Supplementary Information Required by the GASB

| Valuation date | July 1, 2005 |
| :---: | :---: |
| Actuarial cost method | Entry Age Normal |
| Amortization method | Level percentage of payroll, assuming payroll increases at 5.00\% per annum |
| Remaining amortization period | 26 years remaining as of July 1, 2005 |
| Asset valuation method | Market Value, adjusted for amortization obligations receivable at the end of each fiscal year, less a percentage of the Unrecognized Asset Return determined at the close of each of the four preceding fiscal years. Unrecognized Asset Return is the difference between actual net return on Market Value of Assets and the asset return expected during that fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year). |
| Actuarial assumptions: |  |
| Investment rate of return: |  |
| Pre-retirement | 8.50\% per annum |
| Post-retirement | 8.50\% per annum (payment of earnings on retired reserves in excess of $6.00 \%$ accounted for by $6.00 \%$ post-retirement assumption) |
| Plan membership: |  |
| Pensioners and beneficiaries receiving benefits | 56,650 |
| Terminated vested members entitled to, but not yet receiving benefits | 35,768 |
| Other non-vested terminated members | 100,369 |
| Active members | 142,303 |
| Total | 335,090 |

## EXHIBIT IX

## Actuarial Assumptions and Actuarial Cost Method

| Net Investment Return: |  |  |
| :---: | :---: | :---: |
| Pre-Retirement: | 8.50\% per annum |  |
| Post-Retirement: | 8.50\% per annum |  |
| Benefit Increases After Retirement: | Payment of earnings on retired reserves in excess of 6.00\% accounted for by 6.00\% post-retirement assumption. |  |
| Salary Increases: | Reported salary for prior fiscal year, with new hires annualized, increased to current fiscal year and annually for each future year according to the ultimate rate table. During a ten year select period, $0.30 \% \mathrm{x}(10-\mathrm{T})$ where T is completed years of service is added to the ultimate rate. |  |
| Mortality Rates: |  |  |
| Healthy Pre-Retirement: | Male: | 1983 |
|  | Female: | $1983$ <br> years |
| Healthy Post-Retirement: | Male: | 1983 |
|  | Female: | 1983 |
| Disabled: | Male: | $\begin{aligned} & 1965 \\ & 1965 \\ & 65 \text { an } \end{aligned}$ |
|  | Female: | $\begin{aligned} & 1965 \\ & 1965 \\ & 65 \text { an } \end{aligned}$ |

## SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota

## Retirement Rates: <br> Graded rates beginning at age 55 as shown in below. Members who have attained the highest assumed retirement age are assumed to retire in one year.

|  | Retirement |  |
| :---: | :---: | :---: |
| Age | Rule of 90 Eligible | $\underline{\text { Other }}$ |
| 55 | $40.00 \%$ | $7.00 \%$ |
| 56 | 40.00 | 7.00 |
| 57 | 40.00 | 7.00 |
| 58 | 40.00 | 7.00 |
| 59 | 40.00 | 9.00 |
| 60 | 40.00 | 9.00 |
| 61 | 40.00 | 20.00 |
| 62 | 40.00 | 20.00 |
| 63 | 40.00 | 20.00 |
| 64 | 40.00 | 20.00 |
| 65 | 40.00 | 40.00 |
| 66 | 25.00 | 25.00 |
| 67 | 25.00 | 25.00 |
| 68 | 25.00 | 25.00 |
| 69 | 25.00 | 25.00 |
| 70 | 25.00 | 25.00 |
| 71 | 100.00 | 100.00 |


| Withdrawal Rates: | Select and ultimate rates are based on recent plan experience. Ultimate rates after the third year are shown in the rate table. Select rates are as follows: |  |  |
| :---: | :---: | :---: | :---: |
|  | First year: $40.00 \%$ <br> Second year: $15.00 \%$ <br> Third year: $10.00 \%$ |  |  |
|  |  |  |  |
|  |  |  |  |
| Disability Rates: | Rates as shown in the rate table. |  |  |
| Allowance for Combined | Liabilities for active Members are increased by $0.80 \%$ and liabilities for former Members not currently receiving payments are increased by $60.00 \%$ to account for the effect of some participants having eligibility for a combined service annuity. |  |  |
|  |  |  |  |
| Return of Contributions: | All employees withdrawing after becoming eligible for a deferred benefit were assumed to take the larger of their contributions accumulated with interest or the value of their deferred benefit. |  |  |
| Percent Married: | 85\% of male Members and 65\% of female Members are assumed to be married. |  |  |
| Age of Spouse: | Females are assumed to be four years younger than males. |  |  |
| Eligible Children: | Assume Members have no children. |  |  |
| Special Consideration: | Married Members are assumed to elect subsidized joint and survivor form of annuity as follows: |  |  |
|  |  | Males | Females |
|  | 25\% J \& S option | 10.00\% | 5.00\% |
|  | $50 \%$ J \& S option | 20.00\% | 5.00\% |
|  | $75 \%$ J \& S option | 10.00\% | 5.00\% |
|  | 100\% J \& S option | 30.00\% | 15.00\% |


| Actuarial Cost Method: | Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the <br> participant commenced employment. Normal Cost and Actuarial Accrued Liability <br> are calculated on an individual basis and are expressed as a level percentage of <br> payroll, with Normal Cost determined as if the current benefit accrual rate had always <br> been in effect. |
| :--- | :--- |
| Asset Valuation Method: | On and after July 1, 2000, Market Value, adjusted for amortization obligations <br> receivable at the end of each fiscal year, less a percentage of the Unrecognized Asset <br> Return determined at the close of each of the four preceding fiscal years. <br> Unrecognized Asset Return is the difference between actual net return on Market <br> Value of Assets and the asset return expected during the fiscal year (based on the <br> assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year). <br> Transition rules apply between July 1, 2000 and July 1, 2003, when the method is <br> fully in effect. |
| Payment on the Unfunded | A level percentage of payroll each year to the statutory amortization date assuming <br> payroll increases of 6.00\% per annum. If there is a negative Unfunded Actuarial <br> Accrued Liability, the surplus amount shall be amortized over 30 years as a level <br> percentage of payroll. |

## SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota

| Summary of Rates: |  | : Shown for selected ages: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rate(\%) |  |  |  |  |  |  |  |
|  |  |  | Wit | awal |  |  | Ultimate Rate of |
| Age | Male | Female | Male | Female | Male | Female | Increases |
| 20 | 0.03\% | 0.01\% | 8.40\% | 8.40\% | 0.01\% | 0.01\% | 6.40\% |
| 25 | 0.03 | 0.02 | 6.90 | 6.90 | 0.01 | 0.01 | 6.40 |
| 30 | 0.04 | 0.02 | 5.40 | 5.40 | 0.02 | 0.02 | 6.20 |
| 35 | 0.05 | 0.03 | 3.90 | 4.20 | 0.05 | 0.04 | 6.00 |
| 40 | 0.07 | 0.04 | 3.00 | 3.50 | 0.09 | 0.06 | 5.80 |
| 45 | 0.10 | 0.06 | 2.50 | 3.00 | 0.14 | 0.09 | 5.60 |
| 50 | 0.15 | 0.08 | 2.00 | 2.50 | 0.23 | 0.16 | 5.40 |
| 55 | 0.28 | 0.14 | 0.00 | 0.00 | 0.49 | 0.26 | 5.20 |
| 60 | 0.48 | 0.21 | 0.00 | 0.00 | 0.82 | 0.46 | 5.00 |
| 65 | 0.71 | 0.35 | 0.00 | 0.00 | 0.00 | 0.00 | 5.00 |
| 70 | 1.11 | 0.58 | 0.00 | 0.00 | 0.00 | 0.00 | 5.00 |

## Changes in Actuarial Assumptions and Actuarial Cost Methods:

There have been no changes made to the actuarial assumptions or actuarial cost methods since the prior valuation.

## EXHIBIT X

## Summary of Plan Provisions (Basic)

This summary of provisions reflects the interpretation of applicable Statutes for purposes of preparing this valuation. This interpretation is not intended to create or rescind any benefit rights in conflict with Minnesota Statutes.

| Plan Year: | July 1 through June 30 |
| :--- | :--- |
| Eligibility: | A public employee who is not covered under the Social Security Act. General <br> exceptions are employees covered by other public funds, certain part-time employees <br> and full-time students under age 23. |

## Contributions:

| Member: | $9.10 \%$ of salary. |
| :--- | :--- |
| Employer: | $9.10 \%$ of total salary. Additional $2.68 \%$ is repealed at full funding. |


| Allowable Service: | Service during which Member contributions were deducted. May also include certain <br> leaves of absence and military service. Does not include pro-rated service credit for <br> part-time employment for post December 31, 2001 hires. |
| :--- | :--- |
| Salary: | Includes amounts deducted for deferred compensation or supplemental retirement <br> plans, net income from fees and sick leave payments funded by the employer. <br> Excludes unused annual leave and sick leave payments, severance payments, <br> Workers' Compensation benefits and employer-paid flexible spending accounts, <br> cafeteria plans, healthcare expense accounts, day-care expenses, fringe benefits and <br> the cost of insurance coverage. |
| Average Salary: | Average of the five highest successive years of annual salary. Average salary is based <br> on all Allowable Service if less than five years. |

## Retirement:

Normal Retirement Benefit:
Age/Service Requirement:

Amount:

Early Retirement Benefit:
Age/Service Requirement:

Amount:

Age 65 and three years of Allowable Service. Proportionate Retirement Annuity is available at age 65 and one year of Allowable Service.
The greater of (a) or (b):
(a) $2.20 \%$ of Average Salary for each of the first 10 years of Allowable Service and 2.70\% of Average Salary for each subsequent year;
(b) $2.70 \%$ of Average Salary for each year of Allowable Service.
(a) Age 55 and three years of Allowable Service.
(b) Any age with 30 years of Allowable Service.
(c) Rule of 90: age plus Allowable Service totals 90 .

The greater of (a) or (b):
(a) $2.20 \%$ of Average Salary for each of the first 10 years of Allowable Service and $2.70 \%$ of Average Salary for each subsequent year with reduction of $0.25 \%$ for each month the Member is under age 65 at time of retirement or age 62 if 30 years of Allowable Service. No reduction if age plus years of Allowable service totals 90;
(b) $2.70 \%$ of Average Salary for each year of Allowable Service assuming augmentation to age 65 at $3.00 \%$ per year and actuarial reduction for each month the Member is under age 65.

Life annuity with return on death of any balance of contributions over aggregate monthly payments. Actuarially equivalent options are:
$25 \%, 50 \% 75 \%$ or $100 \%$ joint and survivor with bounce back feature without additional reduction (option canceled if Member is pre-deceased by beneficiary).
Benefit Increases:

Benefits may be increased each January 1 depending on the investment performance of the Minnesota Post Retirement Investment Fund (MPRIF). A benefit recipient who has been receiving a benefit for at least 12 full months as of June 30 will receive a full increase. Members receiving benefits for at least one full month but less than 12 full
months will receive a partial increase.

Members retired under laws in effect before July 1, 1973 receive an additional lump sum payment each year. In 1989, this lump sum payment is the greater of $\$ 25$ times each full year of Allowable Service or the difference between $\$ 400$ times each full year of Allowable Service and the sum of the benefits paid from any Minnesota public pension plan plus cash payments from the Social Security Administration for the preceding fiscal year July 1, 1988 through June 30, 1989. In each following year, the lump sum payment will increase by the same percentage increase that is applied to regular annuities paid from MPRIF. Effective January 1, 2002, annual lump sum payment is divided by 12 and paid as a monthly life annuity in the annuity form elected.

## Disability:

Disability Benefit:
Age/Service Requirement:

Amount:

Total and permanent disability before normal retirement age with three years of Allowable Service.
Normal Retirement Benefit based on Allowable Service and average salary at disability without reduction for commencement before normal retirement age. Supplemental benefit of $\$ 25$ per month payable to the later of the normal retirement age or the five-year anniversary at commencement of disability. The disability benefit is reduced to that amount which, when added to Workers' Compensation, does not exceed the salary the disabled Member received as of the date of the disability or the salary currently payable for the same employment position substantially similar to the one the person held as of the date of the disability, whichever is greater.
If a Member became disabled prior to July 1, 1997 but did not commence their benefit before July 1, 1997, the benefit payable is calculated under the laws in effect at the time the Member became disabled, and an actuarial increase shall be made for the change in the post-retirement interest rates from $5.00 \%$ to $6.00 \%$.
Payments stop if disability ceases. If death occurs prior to age 65 or within five years of disability, the surviving spouse can receive a refund or a survivor benefit. Dependent children are entitled to dependent child benefits subject to the 70.00\%

Form of Payment:
Benefit Increases:
Retirement After Disability:
Age/Service Requirement:
Amount:

Benefit Increases:

## Death:

Surviving Spouse Benefit:
Age/Service Requirement:
Amount:
family maximum. Payments change to a retirement annuity at normal retirement age. Benefits may be reduced on resumption of partial employment.
Same as for retirement.
Adjusted by PERA to provide same increase as MPRIF.

Normal retirement age.
Any optional annuity continues. Otherwise the larger of the disability benefit paid before normal retirement age or the normal retirement benefit available at normal retirement age, or an actuarially equivalent optional annuity.
Same as for retirement.

Active Member with 18 months of Allowable Service or Member receiving a disability benefit.
$50.00 \%$ of salary averaged over last six months. Family benefit is maximum of $70.00 \%$ and minimum of $50.00 \%$ of average salary. Benefit paid until spouse's death but no payments while spouse is remarried prior to July 1, 1991.
If a Member became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from $5.00 \%$ to $6.00 \%$. Surviving spouse optional annuity may be elected in lieu of this benefit.
Surviving Dependent Child Benefit:
Age/Service Requirement:
Amount:

Active Member with 18 months of Allowable Service or Member receiving a disability benefit.
$10.00 \%$ of salary averaged over last six months for each child. Family benefit minimum (including spouse's benefit) of $50.00 \%$ of salary and maximum of $70.00 \%$ of average salary. Benefits paid until child marries, dies, or attains age 18 (age 22 if full-time student).

If a Member became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from $5.00 \%$ to $6.00 \%$.
Surviving Spouse Optional Annuity:

Age/Service Requirement:

Amount:

Benefit Increases:
Refund of Contributions:
Age/Service Requirement:

Amount:

Member or former Member who dies before retirement benefits commence and other survivor annuity is waived by spouse.

Survivor's payment of the $100 \%$ joint and survivor benefit the Member could have elected if terminated or an actuarial equivalent term certain annuity. If commencement is prior to age 65 (age 62 if 30 years of service), the benefit is reduced same as early retirement with half the applicable reduction factor used from age 55 to the actual commencement age. If no surviving spouse, then an actuarial equivalent dependent child benefit is paid to age 20 or for five years if longer.
If a Member became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from $5.00 \%$ to $6.00 \%$.
Adjusted by PERA to provide same increase as MPRIF.

Member dies before receiving any retirement benefits and survivor benefits are not payable.
The excess of the Member's contributions with $6.00 \%$ interest over any disability or survivor benefits paid.

## Termination:

Refund of Contributions:

Age/Service Requirement:
Amount:

Deferred Benefit:
Age/Service Requirement:
Amount:

Termination of public service.
Member's contributions with $5.00 \%$ interest compounded annually if termination occurred before May 16, 1989 and $6.00 \%$ interest if termination occurred on or after May 16, 1989. A deferred annuity may be elected in lieu of a refund if three or more years of Allowable Service.

Three years of Allowable Service.
Benefit computed under law in effect at termination and increased by the following percentage compounded annually:
(a) $0.00 \%$ before July 1,1971 ;
(b) $5.00 \%$ from July 1, 1971 to January 1, 1981;
(c) $3.00 \%$ thereafter until January 1 of the year following attainment of age 55 ; and
(d) $5.00 \%$ thereafter until the annuity begins.

Members active with a public employer the day prior to the privatization of the employer become vested immediately and receive augmentation at the rate of 5.50\% compounded annually through the year the Member turns age 55 and $7.50 \%$ thereafter until the annuity begins. Amount is payable at a normal or early retirement.
If a Member terminated employment prior to July 1, 1997 but was not eligible to commence their pension before July 1, 1997, an actuarial increase shall be made for the change in the post-retirement interest rates from $5.00 \%$ to $6.00 \%$.

[^3]
## EXHIBIT XI

## Summary of Plan Provisions (Coordinated)

This summary of provisions reflects the interpretation of applicable Statutes for purposes of preparing this valuation. This interpretation is not intended to create or rescind any benefit rights in conflict with Minnesota Statutes.

| Plan Year: | July 1 through June 30 |  |  |
| :---: | :---: | :---: | :---: |
| Eligibility: | A public employee who is covered under the Social Security Act. General exceptions are employees covered by other public funds, certain part-time employees and fulltime students under age 23. City managers and persons holding elective office may choose to become Members. |  |  |
| Contributions: | Shown as a percent of salary: |  |  |
|  | Date of Increase | Member | Employer |
|  | Current | 5.10\% | 5.53\% |
|  | January 2006 | 5.50\% | 6.00\% |
|  | January 2007 | 5.75\% | 6.25\% |
|  | January 2008 | 6.00\% | 6.50\% |
|  | January 2009 | 6.00\% | 6.75\% |
|  | January 2010 | 6.00\% | 7.00\% |

In addition, the 2009 and/or 2010 rate increases will not be implemented if the July 1, 2008 or July 1, 2009 actuarial valuations result in full funding or a contribution sufficiency has occurred.

Allowable Service:
Service during which Member contributions were deducted. May also include certain leaves of absence and military service. Does not include pro-rated service credit for part-time employment for post December 31, 2001 hires.

| Salary: | Includes amounts deducted for deferred compensation or supplemental retirement <br> plans, net income from fees and sick leave payments funded by the employer. <br> Excludes unused annual leave and sick leave payments, severance payments, <br> Workers' Compensation benefits and employer-paid flexible spending accounts, <br> cafeteria plans, healthcare expense accounts, day-care expenses, fringe benefits and <br> the cost of insurance coverage. |
| :--- | :--- |
| Average Salary: | Average of the five highest successive years of salary. Average salary is based on all <br> Allowable Service if less than five years. |

## Retirement: <br> Normal Retirement Benefit: <br> Age/Service Requirement:

Amount:

Age/Service Requirement:

Amount:
Early Retirement Benefit:
Age/Service Requirement:

Amount:

First hired before July 1, 1989:
(a) Age 65 and three years of Allowable Service.
(b) Proportionate Retirement Annuity is available at age 65 and one year of Allowable Service.
The greater of (a) or (b):
(a) $1.20 \%$ of Average Salary for each of the first 10 years of Allowable Service and $1.70 \%$ of Average Salary for each subsequent year;
(b) $1.70 \%$ of Average Salary for each year of Allowable Service.

First hired after June 30, 1989:
(a) The greater of age 65 or the age eligible for full Social Security retirement benefits but no later than age 66 and three years of Allowable Service.
(b) Proportionate Retirement Annuity is available at normal retirement age and one year of Allowable Service.
$1.70 \%$ of Average Salary for each year of Allowable Service.

First hired before July 1, 1989:
(a) Age 55 and three years of Allowable Service.
(b) Any age with 30 years of Allowable Service.
(c) Rule of 90: age plus Allowable Service totals 90.

First hired after June 30, 1989:
(a) Age 55 with three years of Allowable Service.

First hired before July 1, 1989:
The greater of (a) or (b):
(a) $1.20 \%$ of Average Salary for each of the first 10 years of Allowable Service and $1.70 \%$ of Average Salary for each subsequent year with reduction of $0.25 \%$ for

Form of Payment:

Benefit Increases:
each month the Member is under age 65 at time of retirement or age 62 if 30 years of Allowable Service. No reduction if age plus years of Allowable Service totals 90;
(b) $1.70 \%$ of Average Salary for each year of Allowable Service assuming augmentation to age 65 at 3.00\% per year and actuarial reduction for each month the Member is under age 65.

First hired after June 30, 1989:
(a) $1.70 \%$ of Average Salary for each year of Allowable Service assuming augmentation to the age eligible for full Social Security retirement benefits at $3.00 \%$ per year and actuarial reduction for each month the Member is under the Social Security retirement age, but no later than age 66.
Life annuity with return on death of any balance of contributions over aggregate monthly payments. Actuarially equivalent options are:
$25 \%, 50 \%, 75 \%$ or $100 \%$ joint and survivor with bounce back feature without additional reduction (option canceled if Member is pre-deceased by beneficiary).

Benefits may be increased each January 1 depending on the investment performance of the Minnesota Post Retirement Investment Fund (MPRIF). A benefit recipient who has been receiving a benefit for at least 12 full months as of June 30 will receive a full increase. Benefit recipients receiving benefits for at least one full month but less than 12 full months will receive a partial increase.
Members retired under laws in effect before July 1, 1973 receive an additional lump sum payment each year. In 1989, this lump sum payment is $\$ 25$ times each full year of Allowable Service. In each following year, the lump sum payment will increase by the same percentage increase that is applied to regular annuities paid from MPRIF.

| Disability: |  |
| :---: | :---: |
| Disability Benefit: |  |
| Age/Service Requirement: | Total and permanent disability before normal retirement age with three years of Allowable Service. |
| Amount: | Normal Retirement Benefit based on Allowable Service and average salary at disability without reduction for commencement before normal retirement age. The disability benefit is reduced to that amount which, when added to Workers' Compensation, does not exceed the salary the disabled Member received as of the date of the disability or the salary currently payable for the same employment position substantially similar to the one the person held as of the date of the disability, whichever is greater. |
|  | If a Member became disabled prior to July 1, 1997 but did not commence their benefit before July 1,1997 , the benefit payable is calculated under the laws in effect before July 1, 1997, and an actuarial increase shall be made for the change in the postretirement interest rates from $5.00 \%$ to $6.00 \%$. |
|  | Payments stop if disability ceases or death occurs. Payments change to a retirement annuity at normal retirement age. Benefits may be reduced on resumption of partial employment. |
| Form of Payment: | Same as for retirement. |
| Benefit Increases: | Adjusted by PERA to provide same increase as MPRIF. |
| Retirement After Disability: |  |
| Age/Service Requirement: | Normal retirement age. |
| Amount: | Any optional annuity continues. Otherwise, the larger of the disability benefit paid before normal retirement age or the normal retirement benefit available at normal retirement age, or an actuarial equivalent optional annuity. |
| Benefit Increases: | Same as for retirement. |


| Death: |  |
| :---: | :---: |
| Surviving Spouse Optional Annuity: |  |
| Age/Service Requirement: | Member or former Member who dies before retirement or disability benefits commence. |
| Amount: | Survivor's payment of the $100 \%$ joint and survivor benefit the Member could have elected if terminated or an actuarial equivalent term certain annuity. If commencement is prior to age 65 (age 62 if 30 years of service), the benefit is reduced same as early retirement with half the applicable reduction factor used from age 55 to the actual commencement age. If no surviving spouse, then an actuarial equivalent dependent child benefit is paid to age 20 or for five years if longer. |
|  | If a Member became deceased prior to July 1, 1997 and the beneficiary was not eligible to commence their survivor benefits before July 1, 1997, the benefit payable is calculated under the laws in effect before July 1 1997, and an actuarial increase shall be made for the change in the post-retirement interest rates from $5.00 \%$ to $6.00 \%$. |
| Benefit Increases: | Adjusted by PERA to provide same increase as MPRIF. |
| Refund of Member's Contributions: |  |
| Age/Service Requirement: | Member dies before receiving any retirement benefits and survivor benefits are not payable. |
| Amount: | The excess of the Member's contributions with $6.00 \%$ interest over any disability or survivor benefits paid. |
| Termination: |  |
| Refund of Contributions: |  |
| Age/Service Requirement: | Termination of public service. |
| Amount: | Member's contributions with $5.00 \%$ interest compounded annually if termination occurred before May 16, 1989 and $6.00 \%$ interest if termination occurred on or after May 16, 1989. A deferred annuity may be elected in lieu of a refund if three or more years of Allowable Service. |
| Deferred Benefit: |  |
| Age/Service Requirement: | Three years of Allowable Service. |

## SECTION 4: Reporting Information for the Public Employees Retirement Association of Minnesota

Amount:
Benefit computed under law in effect at termination and increased by the following
percentage compounded annually:
(a) $0.00 \%$ before July 1, 1971;
(b) $5.00 \%$ from July 1, 1971 to January 1, 1981;
(c) $3.00 \%$ thereafter until January 1 of the year following attainment of age 55; and
(d) $5.00 \%$ thereafter until the annuity begins.
Members active with a public employers the day prior to the privatization of the
employer become vested immediately and receive augmentation at the rate of $5.50 \%$
compounded annually through the year the member turns age 55 and $7.50 \%$ thereafter
until the annuity begins. Amount is payable at normal or early retirement.
If a Member terminated employment prior to July 1,1997 but was not eligible to
commence their pension before July 1, 1997, the benefit payable is calculated under
the laws in effect before July 1, 1997, and an actuarial increase shall be made for the
change in the post-retirement interest rates from $5.00 \%$ to $6.00 \%$.

## Changes in Plan Provisions:

There have been no changes in plan provisions since the prior valuation.


[^0]:    Leslie L. Thompson, FSA, MAAA, EA
    Senior Vice President and Consulting Actuary

[^1]:    * Excludes terminated members due a refund of employee contributions.

[^2]:    * Net Investment Return on an Actuarial Value of Assets basis and net of investment fees.

[^3]:    Changes in Plan Provisions:
    There have been no changes in plan provisions since the prior valuation.

