Teachers Retirement Association Fund
Actuarial Valuation and Review
as of July 1, 2006

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## ٪ SEGAL

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November 28, 2006

## Ms. Laurie Hacking

Teachers Retirement Association Fund
60 Empire Drive, Suite 400
St. Paul, Minnesota 55103-1855
Dear Ms. Hacking:
We are pleased to submit this Actuarial Valuation and Review as of July 1, 2006. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2007 and analyzes the preceding year's experience.

The census information on which our calculations were based was prepared by the Fund and the financial information was provided 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.

## Sincerely

## THE SEGAL COMPANY

By:

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Cc: Legislative Commission on Pensions and Retirement (3 copies)
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Minnesota Department of Finance (2 copies)
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## SECTION 1: Valuation Summary for the Teachers Retirement Association Fund

## Purpose

This report has been prepared by The Segal Company to present a valuation of the Teachers Retirement Association Fund as of July 1, 2006. 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 Fund, as administered by the Fund;
> The characteristics of covered active members, inactive vested members, pensioners and beneficiaries as of July 1, 2006, provided by the Fund;
> The assets of the Fund as of June 30, 2006, provided by the Fund;
> Economic assumptions regarding future salary increases and investment earnings; and
> Other actuarial assumptions regarding employee terminations, retirement, death, etc.

## SECTION 1: Valuation Summary for the Teachers Retirement Association Fund

## Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:
> The actuarial accrued liability funded ratio based on the actuarial value of assets over the actuarial accrued liability as of July 1,2006 is $92.05 \%$ compared to $98.51 \%$ as of July 1, 2005. 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.
> The statutory contribution rate under Chapter 354 is equal to $11.31 \%$ of payroll compared to the required contribution rate under Chapter 356 of $12.11 \%$ of payroll. Therefore the contribution deficiency is $0.80 \%$ of payroll as of July 1,2006 . Each year that there is a contribution deficiency leads to an increased deficiency in all future years.
> There were no changes in actuarial cost methods since the prior valuation.
> Effective June 30, 2006 the Minneapolis Teachers' Retirement Fund Association (MTRFA) merged into the Teachers Retirement Association (TRA) Fund.
> Changes in plan provisions include:

- The benefit multiplier is increased by $0.2 \%$ for all years of service after June 30,2006 for all TRA (non-MTRFA and former MTRFA) Coordinated members.
- The Coordinated employee contribution rates increased from $5.00 \%$ to $5.50 \%$ of payroll for the non-MTRFA members, effective July 1, 2006.
- The former MTRFA Basic employee contribution rates increased from $8.50 \%$ to $9.00 \%$ of payroll effective July 1, 2006.
- The deferred annuity benefit increase rate for post June 30,2006 hires is reduced to $2.50 \%$ for all years. This change does not impact the results stated in this July 1, 2006 actuarial valuation.
> The changes in actuarial assumptions are as follows:
- All non-MTRFA and former MTRFA members use the TRA actuarial assumptions, except former MTRFA Basic members continue to use prior MTRFA Basic Retirement Rates.
- The payment on the unfunded actuarial accrued liability is amortized over the reinstated statutory amortization date of July 1, 2037 (31 years as of July 1, 2006). The amortization period is 30 years for GASB purposes.


## SECTION 1: Valuation Summary for the Teachers Retirement Association Fund

> The cost impact to the TRA plan due to the plan merger effective June 30, 2006, and the changes stated above is shown below:

- The increase in actuarial accrued liability (AAL) equals $\$ 1,985,200,427$ ( $\$ 20,679,110,879$ (post-merger) minus \$18,693,910,452 (non-MTRFA members only)).
- The increase in normal cost (NC) equals \$56,181,160 (\$349,678,399 (post-merger) minus \$293,497,239 (non-MTRFA members only))


## SECTION 1: Valuation Summary for the Teachers Retirement Association Fund

| Summary of Key Valuation Results |  |  |
| :---: | :---: | :---: |
|  | 2006* | 2005 |
| Contributions (\% of payroll) for plan year beginning July 1: |  |  |
| Statutory - Chapter 354 | 11.31\% | 10.00\% |
| Required - Chapter 356 | 12.11\% | 9.05\% |
| Sufficiency/(Deficiency) | -0.80\% | 0.95\% |
| Funding elements for plan year beginning July 1: |  |  |
| Normal cost | \$349,678,399 | \$271,801,325 |
| Market value of assets | 19,785,671,584 | 17,806,012,464 |
| Actuarial value of assets (AVA) | 19,035,611,839 | 17,752,917,313 |
| Actuarial accrued liability (AAL) | 20,679,110,879 | 18,021,410,061 |
| Unfunded/(Overfunded) actuarial accrued liability | 1,643,499,040 | 268,492,748 |
| Funded ratios: |  |  |
| Accrued Benefit Funded Ratio | 95.64\% | 103.31\% |
| Current assets (AVA) | \$19,035,611,839 | \$17,752,917,313 |
| Current benefit obligations | 19,902,652,650 | 17,184,241,402 |
| Projected Benefit Funded Ratio | 97.63\% | 101.82\% |
| Current and expected future assets | \$23,163,841,989 | \$20,807,440,232 |
| Current and expected future benefit obligations (Present Value of Benefits) | 23,726,317,592 | 20,435,323,407 |
| GASB 25/27 for plan year beginning July 1: |  |  |
| Annual required employer contributions | \$133,388,506 | \$103,102,940 |
| Accrued Liability Funded Ratio (AVA/AAL) | 92.05\% | 98.51\% |
| Covered actual payroll | \$3,430,645,420 | \$3,121,571,447 |
| Demographic data for plan year beginning July 1: |  |  |
| Number of pensioners and beneficiaries | 44,683 | 38,957 |
| Number of vested terminated members | 11,773 | 9,880 |
| Number of other non-vested terminated members | 21,956 | 19,151 |
| Number of active members | 79,164 | 74,552 |
| Total projected payroll** | \$3,707,900,584 | \$3,389,066,754 |
| Average annual compensation (projected dollars)** | 46,838 | 45,459 |

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## SECTION 2: Valuation Results for the Teachers Retirement Association Fund

## 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.

For the year ended June 30, 2006, the MTRFA plan was merged into the TRA plan. This merger increased the TRA member population by the following counts for former MTRFA members:

Active members: 4,381 (includes 56 on leave of absence)
Vested terminated members: 1,548
Pensioners and Beneficiaries: 3,958

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 five valuations can be seen in this chart.

## CHART 1

Member Population: 2002-2006

| Year Ended <br> June 30 | Active <br> Members | Vested Terminated <br> Members* | Pensioners <br> and Beneficiaries | Ratio of Non-Actives <br> to Actives |
| :---: | :---: | :---: | :---: | :---: |
| 2002 | 71,690 | 8,680 | 34,974 | 0.61 |
| 2003 | 71,916 | 9,304 | 36,199 | 0.63 |
| 2004 | 72,008 | 10,767 | 37,649 | 0.67 |
| 2005 | 74,552 | 9,880 | 38,957 | 0.66 |
| $2006^{* *}$ | 79,164 | 11,773 | 44,683 | 0.71 |

*Excludes terminated members due a refund of employee contributions
**May include duplicate records due to the MTRFA merger effective June 30, 2006.

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 projected payroll of active members. In this year's valuation, there were 79,164 active members with an average age of 43.3 , average years of service of 11.6 years and average projected compensation of $\$ 46,838$. This includes 74,783 non-MTRFA active members with an average age of 43.1, average years of service of 11.6 years and average projected compensation of $\$ 46,702$. This also includes 4,381 former MTRFA active members with an average age of 45.8 , average years of service of 10.7 years and average projected compensation of $\$ 49,166$.

## CHART 2 <br> Distribution of Active Members by Age as of June 30, 2006 (Total)



## Inactive Members

In this year's valuation, there were 11,773 ( 10,225 nonMTRFA and 1,548 former MTRFA) members with a vested right to a deferred or immediate vested benefit.
In addition, there were 21,956 (18,060 non-MTRFA and 3,896 former MTRFA) 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, 2006 (Total)


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

Survivor
■ Disability
Service

## Pensioners and Beneficiaries

As of June 30, 2006, 41,639 pensioners (including 630 disabled participants) and 3,044 beneficiaries were receiving total monthly benefits of $\$ 103,972,036$. This includes 37,971 non-MTRFA pensioners (including 598 disabled participants) and 2,754 beneficiaries receiving total monthly benefits of $\$ 93,398,278$. This also includes 3,668 former MTRFA pensioners (including 32 disableds) and 290 beneficiaries receiving total monthly benefits of \$10,573,758.

## CHART 4

Distribution of Pensioners and Beneficiaries by Type and by Monthly Amount as of June 30, 2006 (Total)


CHART 5
Distribution of Pensioners and Beneficiaries by Type and by Age as of June 30, 2006 (Total)


## SECTION 2: Valuation Results for the Teachers Retirement Association Fund

## B. FINANCIAL INFORMATION

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the 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 Fund'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 Fund'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, 2006

| 1. Market value of assets available for benefits |  |  | \$19,785,671,584 |
| :---: | :---: | :---: | :---: |
|  | Original Amount | \% Not Recognized |  |
| 2. Calculation of unrecognized return |  |  |  |
| (a) Year ended June 30, 2006 | \$653,165,303 | 80\% | \$522,532,242 |
| (b) Year ended June 30, 2005 | 179,823,045 | 60\% | 107,893,827 |
| (c) Year ended June 30, 2004 | 499,642,191 | 40\% | 199,856,876 |
| (d) Year ended June 30, 2003 | -401,116,000 | 20\% | -80,223,200 |
| (e) Total unrecognized return |  |  | \$750,059,745 |
| 3. Actuarial value of assets: (1) - (2e) ("Current Assets") |  |  | \$19,035,611,839 |
| 4. Actuarial value as a percent of market value |  |  | 96.2\% |

## SECTION 2: Valuation Results for the Teachers Retirement Association Fund

## 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

## CHART 7

Actuarial Experience for Year Ended June 30, 2006

| 1. | Net gain/(loss) from investments | $-\$ 146,446,633$ |
| :--- | :--- | ---: |
| 2. | Net gain/(loss) from other experience | $-41,724,091$ |
| 3. | Net experience gain/(loss): $(1)+(2)$ | $-\$ 104,722,542$ |

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 plan year ended June 30, 2006, the total loss is $\$ 104,722,542$, including a loss of $\$ 146,446,633$ from investments and a gain of $\$ 41,724,091$ from all other sources. The net experience variation from individual sources other than investments was $0.2 \%$ of the actuarial accrued liability, which is under $1.0 \%$ of the total actuarial accrued liability, and includes age/service retirements, disability, mortality (pre and post-retirement), withdrawal, and salary increases.

## Actuarial Experience for Year Ended June 30, 2006

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

## 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 within the range of the GASB reporting requirements. Section 4, Exhibit III presents a schedule of this information for the Fund.

The other critical piece of information regarding the Fund'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 factors.

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 Teachers Retirement Association Fund

## EXHIBIT A

## Table of Plan Coverage*

| Category | Year Ended June 30 |  | Change From Prior Year |
| :---: | :---: | :---: | :---: |
|  | 2006 | 2005 |  |
| Active members in valuation: |  |  |  |
| Number | 79,164 | 74,552 | 6.2\% |
| Average age | 43.3 | 43.1 | N/A |
| Average service | 11.6 | 11.7 | N/A |
| Total projected payroll | \$3,707,900,584 | \$3,389,066,754 | 9.4\% |
| Average projected compensation | 46,838 | 45,459 | 3.0\% |
| Total active vested members | 61,741 | 57,941 | 6.6\% |
| Vested terminated members | 11,773 | 9,880 | 19.2\% |
| Retired participants: |  |  |  |
| Number in pay status | 41,009 | 35,779 | 14.6\% |
| Average age | 70.3 | 70.0 | N/A |
| Average monthly benefit | \$2,353 | \$2,313 | 1.7\% |
| Disabled members: |  |  |  |
| Number in pay status | 630 | 581 | 8.4\% |
| Average age | 57.5 | 57.5 | N/A |
| Average monthly benefit | \$1,656 | \$1,620 | 2.2\% |
| Beneficiaries: |  |  |  |
| Number in pay status | 3,044 | 2,597 | 17.2\% |
| Average age | 76.6 | 76.5 | N/A |
| Average monthly benefit | \$2,113 | \$2,029 | 4.1\% |
| Other non-vested terminated members | 21,956 | 19,151 | 14.6\% |

*For the year ended June 30, 2006, information reflects the MTRFA merger effective June 30, 2006, and may include duplicate records due to the merger.

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT B-1

## Members in Active Service as of June 30, 2006

By Age, Years of Service, and Average Projected Compensation - Total

| Age | Years of Service |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 \& Over |
| Under 25 | 2,665 | 2,665 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | \$24,902 | \$24,902 | -- | -- | -- | -- | -- | -- | -- | -- |
| 25-29 | 10,061 | 8,085 | 1,976 | -- | -- | -- | -- | -- | -- | -- |
|  | \$32,670 | \$29,940 | \$43,838 | -- | -- | -- | -- | -- | -- | -- |
| 30-34 | 9,747 | 3,350 | 5,431 | 965 | 1 | -- | -- | -- | -- | -- |
|  | \$41,189 | \$30,512 | \$45,401 | \$54,527 | \$56,252 | -- | -- | -- | -- | -- |
| 35-39 | 10,349 | 2,509 | 3,022 | 4,138 | 680 | -- | -- | -- | -- | -- |
|  | \$46,412 | \$28,602 | \$45,371 | \$55,311 | \$62,599 | -- | -- | -- | -- | -- |
| 40-44 | 9,490 | 2,288 | 1,808 | 2,234 | 2,486 | 673 | 1 | -- | -- | -- |
|  | \$48,729 | \$25,674 | \$45,745 | \$55,306 | \$61,823 | \$64,927 | \$44,616 | -- | -- | -- |
| 45-49 | 10,363 | 2,450 | 1,743 | 1,637 | 1,754 | 1,950 | 828 | 1 | -- | -- |
|  | \$48,855 | \$21,744 | \$44,837 | \$54,917 | \$60,578 | \$64,350 | \$64,227 | \$44,687 | -- | -- |
| 50-54 | 11,832 | 1,692 | 1,402 | 1,650 | 1,601 | 1,408 | 2,686 | 1,393 | -- | -- |
|  | \$55,193 | \$23,670 | \$43,879 | \$53,816 | \$60,686 | \$64,937 | \$66,883 | \$67,798 | -- | -- |
| 55-59 | 10,882 | 1,352 | 934 | 1,230 | 1,330 | 1,188 | 1,634 | 2,701 | 513 | -- |
|  | \$57,550 | \$21,382 | \$41,609 | \$52,653 | \$60,475 | \$65,322 | \$68,683 | \$69,446 | \$69,964 | -- |
| 60-64 | 3,009 | 613 | 325 | 357 | 430 | 394 | 379 | 232 | 249 | 30 |
|  | \$52,467 | \$14,981 | \$37,451 | \$50,137 | \$60,565 | \$65,788 | \$70,532 | \$79,424 | \$77,424 | \$73,950 |
| 65 \& Over | 766 | 398 | 90 | 51 | 49 | 57 | 37 | 29 | 38 | 17 |
|  | \$32,856 | \$8,681 | \$27,342 | \$47,531 | \$62,360 | \$70,902 | \$71,047 | \$81,617 | \$89,667 | \$8,099 |
| Total | 79,164 | 25,402 | 16,731 | 12,262 | 8,331 | 5,670 | 5,565 | 4,356 | 800 | 47 |
|  | \$46,838 | \$26,613 | \$44,599 | \$54,545 | \$61,128 | \$64,934 | \$67,289 | \$69,526 | \$73,222 | \$75,451 |

[^1]
## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT B-2

Members in Active Service as of June 30, 2006
By Age, Years of Service, and Average Projected Compensation - Non-MTRFA

| Age | Years of Service |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 \& Over |
| Under 25 | 2,601 | 2,601 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | \$25,359 | \$25,359 | -- | -- | -- | -- | -- | -- | -- | -- |
| 25-29 | 9,801 | 7,861 | 1,940 | -- | -- | -- | -- | -- | -- | -- |
|  | \$33,052 | \$30,309 | \$44,164 | -- | -- | -- | -- | -- | -- | -- |
| 30-34 | 9,316 | 3,223 | 5,169 | 923 | 1 | -- | -- | -- | -- | -- |
|  | \$41,289 | \$30,790 | \$45,439 | \$54,696 | \$56,252 | -- | -- | -- | -- | -- |
| 35-39 | 9,805 | 2,414 | 2,828 | 3,893 | 670 | -- | -- | -- | -- | -- |
|  | \$46,241 | \$28,627 | \$45,252 | \$55,088 | \$62,478 | -- | -- | -- | -- | -- |
| 40-44 | 8,908 | 2,205 | 1,677 | 1,987 | 2,395 | 643 | 1 | -- | -- | -- |
|  | \$48,339 | \$25,551 | \$45,335 | \$54,703 | \$61,714 | \$64,842 | \$44,616 | -- | -- | -- |
| 45-49 | 9,432 | 2,090 | 1,593 | 1,431 | 1,646 | 1,853 | 818 | 1 | -- | -- |
|  | \$49,619 | \$23,285 | \$44,881 | \$53,822 | \$60,357 | \$64,106 | \$64,362 | \$44,687 | -- | -- |
| 50-54 | 11,199 | 1,627 | 1,298 | 1,470 | 1,464 | 1,309 | 2,647 | 1,384 | -- | -- |
|  | \$54,927 | \$23,453 | \$43,357 | \$52,793 | \$60,336 | \$64,307 | \$66,812 | \$67,720 | -- | -- |
| 55-59 | 10,272 | 1,300 | 865 | 1,053 | 1,206 | 1,091 | 1,572 | 2,678 | 507 | -- |
|  | \$57,146 | \$21,261 | \$40,433 | \$51,037 | \$59,357 | \$64,497 | \$68,402 | \$69,368 | \$69,838 | -- |
| 60-64 | 2,758 | 594 | 293 | 278 | 383 | 360 | 368 | 216 | 237 | 29 |
|  | \$51,601 | \$14,964 | \$35,696 | \$47,428 | \$59,387 | \$65,285 | \$70,466 | \$79,459 | \$77,199 | \$73,911 |
| 65 \& Over | 691 | 381 | 78 | 41 | 34 | 49 | 33 | 27 | 32 | 16 |
|  | \$31,109 | \$8,436 | \$27,106 | \$45,867 | \$63,209 | \$70,032 | \$69,911 | \$80,665 | \$92,745 | \$78,392 |
| Total | 74,783 | 24,296 | 15,741 | 11,076 | 7,799 | 5,305 | 5,439 | 4,306 | 776 | 45 |
|  | \$46,702 | \$26,978 | \$44,462 | \$53,906 | \$60,762 | \$64,460 | \$67,165 | \$69,409 | \$73,031 | \$75,504 |

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

EXHIBIT B-3
Members in Active Service as of June 30, 2006
By Age, Years of Service, and Average Projected Compensation - MTRFA Basic

| Age | Years of Service |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 \& Over |
| Under 25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 25-29 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 30-34 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 35-39 | -- | -- | -- | -- | -- | -- | -- | -- | -- | - |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 40-44 | -- | -- | -- | -- | -- | -- | - | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 45-49 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 50-54 | 41 | -- | -- | 3 | 4 | 6 | 19 | 9 | -- | -- |
|  | \$75,269 | -- | -- | \$74,921 | \$64,824 | \$73,880 | \$75,825 | \$79,777 | -- | -- |
| 55-59 | 97 | -- | -- | 2 | 9 | 22 | 36 | 22 | 6 | -- |
|  | \$76,605 | -- | -- | \$73,896 | \$66,779 | \$79,476 | \$75,444 | \$78,818 | \$80,578 | -- |
| 60-64 | 48 | -- | -- | 2 | 3 | 10 | 6 | 14 | 12 | 1 |
|  | \$72,547 | -- | -- | \$61,207 | \$58,935 | \$65,713 | \$67,331 | \$76,029 | \$81,868 | \$75,093 |
| 65 \& Over | 12 | -- | -- | -- | 1 | 1 | 2 | 2 | 5 | 1 |
|  | \$76,152 | -- | -- | -- | \$63,881 | \$65,567 | \$83,152 | \$94,470 | \$71,144 | \$73,413 |
| Total | 198 | -- | -- | 7 | 17 | 39 | 63 | 47 | 23 | 2 |
|  | \$75,317 | -- | -- | \$70,710 | \$64,764 | \$74,729 | \$75,031 | \$78,837 | \$79,200 | \$74,253 |

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT B-4

Members in Active Service as of June 30, 2006
By Age, Years of Service, and Average Projected Compensation - MTRFA Coordinated

| Age | Years of Service |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40 \& Over |
| Under 25 | 64 | 64 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | \$6,332 | \$6,332 | -- | -- | -- | -- | -- | -- | -- | -- |
| 25-29 | 260 | 224 | 36 | -- | -- | -- | -- | -- | -- | -- |
|  | \$18,283 | \$16,998 | \$26,284 | -- | -- | -- | -- | -- | -- | -- |
| 30-34 | 431 | 127 | 262 | 42 | -- | -- | -- | -- | -- | -- |
|  | \$39,008 | \$23,463 | \$44,650 | \$50,824 | -- | -- | -- | -- | -- | -- |
| 35-39 | 544 | 95 | 194 | 245 | 10 | -- | -- | -- | -- | -- |
|  | \$49,495 | \$27,952 | \$47,113 | \$58,867 | \$70,731 | -- | -- | -- | -- | -- |
| 40-44 | 582 | 83 | 131 | 247 | 91 | 30 | -- | -- | -- | -- |
|  | \$54,694 | \$28,936 | \$50,995 | \$60,161 | \$64,699 | \$66,753 | -- | -- | -- | -- |
| 45-49 | 931 | 360 | 150 | 206 | 108 | 97 | 10 | -- | -- | -- |
|  | \$41,107 | \$12,796 | \$44,366 | \$62,519 | \$63,937 | \$69,010 | \$53,129 | -- | -- | -- |
| 50-54 | 592 | 65 | 104 | 177 | 133 | 93 | 20 | -- | -- | -- |
|  | \$58,836 | \$29,097 | \$50,395 | \$61,954 | \$64,418 | \$73,219 | \$67,789 | -- | -- | -- |
| 55-59 | 513 | 52 | 69 | 175 | 115 | 75 | 26 | 1 | -- | -- |
|  | \$62,031 | \$24,400 | \$56,354 | \$62,131 | \$71,711 | \$73,173 | \$76,344 | \$71,945 | -- | -- |
| 60-64 | 203 | 19 | 32 | 77 | 44 | 24 | 5 | 2 | -- | -- |
|  | \$59,487 | \$15,518 | \$53,523 | \$59,633 | \$70,930 | \$73,367 | \$79,239 | \$99,347 | -- | -- |
| 65 \& Over | 63 | 17 | 12 | 10 | 14 | 7 | 2 | - | 1 | -- |
|  | \$43,765 | \$14,175 | \$28,878 | \$54,353 | \$60,188 | \$77,761 | \$77,686 | - | \$83,799 | -- |
| Total | 4,183 | 1,106 | 990 | 1,179 | 515 | 326 | 63 | 3 | 1 | -- |
|  | \$47,929 | \$18,582 | \$46,776 | \$60,449 | \$66,559 | \$71,470 | \$70,216 | \$90,213 | \$83,799 | -- |

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT C-1

Retired Participants as of June 30, 2006
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 \& Over |
| Under 45 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 45-49 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 50-54 | 30 | 30 | -- | -- | -- | -- | -- | -- |
|  | \$29,870 | \$29,870 | -- | -- | -- | -- | -- | -- |
| 55-59 | 4,624 | 4,247 | 377 | -- | -- | -- | -- | -- |
|  | \$32,091 | \$31,475 | \$39,026 | -- | -- | -- | -- | -- |
| 60-64 | 9,329 | 4,106 | 5,118 | 104 | 1 | -- | -- | -- |
|  | \$28,652 | \$27,294 | \$29,727 | \$29,537 | \$11,133 | -- | -- | -- |
| 65-69 | 8,998 | 1,562 | 4,995 | 2,373 | 65 | 2 | 1 | -- |
|  | \$23,312 | \$16,921 | \$23,949 | \$26,263 | \$20,783 | \$5,597 | \$20,831 | -- |
| 70-74 | 6,938 | 195 | 1,729 | 3,690 | 1,287 | 35 | 2 | -- |
|  | \$28,874 | \$14,129 | \$24,533 | \$31,593 | \$29,132 | \$30,158 | \$15,584 | -- |
| 75-79 | 5,020 | 41 | 171 | 1,570 | 2,070 | 1,132 | 35 | 1 |
|  | \$31,148 | \$14,505 | \$24,057 | \$29,476 | \$31,454 | \$34,830 | \$23,511 | \$16,987 |
| 80-84 | 3,057 | 9 | 27 | 147 | 1,013 | 1,519 | 327 | 15 |
|  | \$31,418 | \$10,771 | \$21,518 | \$32,485 | \$28,879 | \$35,081 | \$23,937 | \$14,736 |
| 85 \& Over | 3,013 | 2 | -- | 7 | 108 | 956 | 1,210 | 730 |
|  | \$26,184 | \$2,023 | -- | \$9,477 | \$30,946 | \$29,763 | \$27,425 | \$18,962 |
| Total | 41,009 | 10,192 | 12,417 | 7,891 | 4,544 | 3,644 | 1,575 | 746 |
|  | \$28,237 | \$27,131 | \$26,866 | \$29,539 | \$30,053 | \$33,544 | \$26,596 | \$18,875 |

[^2]
## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT C-2

Retired Participants as of June 30, 2006
By Age, Years Retired, and Average Annual Benefit - Non-MTRFA

| Age | Years Retired |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over |
| Under 45 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 45-49 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 50-54 | 18 | 18 | -- | -- | -- | -- | -- | -- |
|  | \$21,479 | \$21,479 | -- | -- | -- | -- | -- | -- |
| 55-59 | 4,203 | 3,970 | 233 | -- | -- | -- | -- | -- |
|  | \$31,585 | \$31,266 | \$37,033 | -- | -- | -- | -- | -- |
| 60-64 | 8,526 | 3,802 | 4,685 | 38 | 1 | -- | -- | -- |
|  | \$28,347 | \$27,556 | \$29,042 | \$22,067 | \$11,133 | -- | -- | -- |
| 65-69 | 8,271 | 1,426 | 4,670 | 2,145 | 28 | 2 | -- | -- |
|  | \$22,649 | \$16,792 | \$23,564 | \$24,675 | \$14,297 | \$5,597 | -- | -- |
| 70-74 | 6,383 | 171 | 1,597 | 3,431 | 1,174 | 8 | 2 | -- |
|  | \$28,457 | \$13,169 | \$24,418 | \$31,251 | \$27,960 | \$39,363 | \$15,584 | -- |
| 75-79 | 4,559 | 38 | 146 | 1,456 | 1,861 | 1,050 | 8 | -- |
|  | \$30,841 | \$14,250 | \$22,875 | \$29,445 | \$30,853 | \$34,547 | \$20,116 | -- |
| 80-84 | 2,737 | 5 | 23 | 130 | 920 | 1,392 | 264 | 3 |
|  | \$31,137 | \$15,536 | \$17,812 | \$31,539 | \$28,397 | \$35,196 | \$20,524 | \$33,045 |
| 85 \& Over | 2,676 | 2 | -- | 7 | 93 | 874 | 1,069 | 631 |
|  | \$26,238 | \$2,023 | -- | \$9,477 | \$30,132 | \$29,901 | \$27,388 | \$18,905 |
| Total | 37,373 | 9,432 | 11,354 | 7,207 | 4,077 | 3,326 | 1,343 | 634 |
|  | \$27,823 | \$27,152 | \$26,201 | \$28,865 | \$29,331 | \$33,592 | \$25,984 | \$18,973 |

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT C-3

Retired Participants as of June 30, 2006
By Age, Years Retired, and Average Annual Benefit - MTRFA Basic

| Age | Years Retired |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over |
| Under 45 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 45-49 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | - | -- |
| 50-54 | 11 | 11 | -- | -- | -- | -- | -- | -- |
|  | \$45,117 | \$45,117 | -- | -- | -- | -- | -- | -- |
| 55-59 | 342 | 201 | 141 | -- | -- | -- | -- | -- |
|  | \$42,712 | \$42,549 | \$42,945 | -- | -- | -- | -- | -- |
| 60-64 | 654 | 194 | 399 | 61 | -- | -- | -- | -- |
|  | \$36,531 | \$30,796 | \$39,459 | \$35,618 | -- | -- | -- | -- |
| 65-69 | 594 | 54 | 284 | 218 | 37 | -- | 1 | -- |
|  | \$35,132 | \$26,134 | \$32,376 | \$42,646 | \$25,691 | -- | \$15,213 | -- |
| 70-74 | 498 | 9 | 107 | 244 | 111 | 27 | -- | -- |
|  | \$36,340 | \$35,953 | \$29,482 | \$37,801 | \$41,938 | \$27,431 | -- | -- |
| 75-79 | 441 | 1 | 20 | 104 | 206 | 82 | 27 | 1 |
|  | \$35,349 | \$39,182 | \$35,412 | \$32,062 | \$37,261 | \$38,445 | \$24,517 | \$16,987 |
| 80-84 | 317 | 3 | 3 | 16 | 93 | 127 | 63 | 12 |
|  | \$34,081 | \$3,550 | \$55,049 | \$42,009 | \$33,654 | \$33,819 | \$38,238 | \$10,159 |
| 85 \& Over | 337 | -- | -- | -- | 15 | 82 | 141 | 99 |
|  | \$25,757 | -- | -- | -- | \$35,991 | \$28,291 | \$27,710 | \$19,325 |
| Total | 3,194 | 473 | 954 | 643 | 462 | 318 | 232 | 112 |
|  | \$35,390 | \$35,535 | \$36,711 | \$38,413 | \$36,691 | \$33,044 | \$30,143 | \$18,322 |

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT C-4

Retired Participants as of June 30, 2006
By Age, Years Retired, and Average Annual Benefit - MTRFA Coordinated

| Age | Years Retired |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over |
| Under 45 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 45-49 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 50-54 | 1 | 1 | -- | -- | -- | -- | -- | -- |
|  | \$13,191 | \$13,191 | -- | -- | -- | -- | -- | -- |
| 55-59 | 79 | 76 | 3 | -- | -- | -- | -- | -- |
|  | \$13,002 | \$13,134 | \$9,680 | -- | -- | -- | -- | -- |
| 60-64 | 149 | 110 | 34 | 5 | -- | -- | -- | -- |
|  | \$11,530 | \$12,036 | \$9,805 | \$12,125 | -- | -- | -- | -- |
| 65-69 | 133 | 82 | 41 | 10 | -- | -- | -- | -- |
|  | \$11,707 | \$13,093 | \$9,441 | \$9,625 | -- | -- | -- | -- |
| 70-74 | 57 | 15 | 25 | 15 | 2 | -- | -- | -- |
|  | \$10,368 | \$11,972 | \$10,693 | \$8,812 | \$5,949 | -- | -- | -- |
| 75-79 | 20 | 2 | 5 | 10 | 3 | -- | -- | -- |
|  | \$8,366 | \$7,008 | \$13,135 | \$7,182 | \$5,270 | -- | -- | -- |
| 80-84 | 3 | 1 | 1 | 1 | -- | -- | -- | -- |
|  | \$5,933 | \$8,613 | \$6,148 | \$3,038 | -- | -- | -- | -- |
| 85 \& Over | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 442 | 287 | 109 | 41 | 5 | -- | -- | -- |
|  | \$11,519 | \$12,583 | \$9,987 | \$8,876 | \$5,542 | -- | -- | -- |

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT D-1

Disabled Members as of June 30, 2006
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 \& Over |
| Under 45 | 29 | 19 | 8 | 2 | -- | -- | -- | -- |
|  | \$6,298 | \$7,012 | \$5,370 | \$3,226 | -- | -- | -- | -- |
| 45-49 | 23 | 13 | 7 | 3 | -- | -- | -- | -- |
|  | \$11,324 | \$11,839 | \$10,077 | \$11,999 | -- | -- | -- | -- |
| 50-54 | 90 | 46 | 29 | 13 | 2 | -- | -- | -- |
|  | \$14,110 | \$15,233 | \$12,418 | \$15,038 | \$6,802 | -- | -- | -- |
| 55-59 | 269 | 136 | 91 | 30 | 9 | 2 | 1 | -- |
|  | \$20,596 | \$20,349 | \$20,460 | \$24,468 | \$13,676 | \$23,769 | \$6,403 | -- |
| 60-64 | 212 | 63 | 78 | 53 | 13 | 3 | 2 | -- |
|  | \$24,301 | \$18,577 | \$27,542 | \$27,246 | \$18,196 | \$45,522 | \$8,044 | -- |
| 65-69 | 7 | 7 | -- | -- | -- | -- | -- | -- |
|  | \$16,168 | \$16,168 | -- | -- | -- | -- | -- | -- |
| 70-74 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 75-79 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 80-84 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 85 \& Over | -- | -- | -- | -- | - | -- | - | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 630 | 284 | 213 | 101 | 24 | 5 | 3 | -- |
|  | \$19,871 | \$17,742 | \$21,050 | \$23,921 | \$15,551 | \$36,821 | \$7,496 | -- |

[^3]
## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

EXHIBIT D-2
Disabled Members as of June 30, 2006
By Age, Years Disabled, and Average Annual Benefit - Non-MTRFA

| Age | Years Disabled |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over |
| Under 45 | 27 | 17 | 8 | 2 | -- | -- | - | -- |
|  | \$6,392 | \$7,246 | \$5,370 | \$3,226 | -- | -- | -- | -- |
| 45-49 | 22 | 12 | 7 | 3 | -- | -- | -- | -- |
|  | \$11,651 | \$12,483 | \$10,077 | \$11,999 | -- | -- | -- | -- |
| 50-54 | 85 | 45 | 26 | 12 | 2 | -- | -- | -- |
|  | \$14,173 | \$15,210 | \$13,639 | \$12,668 | \$6,802 | -- | -- | -- |
| 55-59 | 254 | 128 | 87 | 28 | 9 | 1 | 1 | -- |
|  | \$19,781 | \$19,819 | \$19,805 | \$22,339 | \$13,676 | \$9,596 | \$6,403 | -- |
| 60-64 | 203 | 60 | 76 | 50 | 12 | 3 | 2 | -- |
|  | \$23,457 | \$18,341 | \$27,490 | \$24,701 | \$15,370 | \$45,522 | \$8,044 | -- |
| 65-69 | 7 | 7 | -- | -- | -- | -- | -- | -- |
|  | \$16,168 | \$16,168 | -- | -- | -- | -- | -- | -- |
| 70-74 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 75-79 | - | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 80-84 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 85 \& Over | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 598 | 269 | 204 | 95 | 23 | 4 | 3 | -- |
|  | \$19,286 | \$17,502 | \$20,982 | \$21,632 | \$13,962 | \$36,540 | \$7,496 | -- |

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT D-3

Disabled Members as of June 30, 2006
By Age, Years Disabled, and Average Annual Benefit - MTRFA Basic

| Age | Years Disabled |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over |
| Under 45 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 45-49 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 50-54 | 2 | -- | 1 | 1 | -- | -- | -- | -- |
|  | \$22,668 | -- | \$1,865 | \$43,470 | -- | -- | -- | -- |
| 55-59 | 8 | 3 | 2 | 2 | -- | 1 | -- | -- |
|  | \$52,881 | \$52,526 | \$59,493 | \$54,270 | -- | \$37,942 | -- | -- |
| 60-64 | 5 | -- | 1 | 3 | 1 | -- | -- | -- |
|  | \$62,508 | -- | \$51,462 | \$69,659 | \$52,102 | -- | -- | -- |
| 65-69 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 70-74 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 75-79 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 80-84 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 85 \& Over | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 15 | 3 | 4 | 6 | 1 | 1 | -- | -- |
|  | \$52,061 | \$52,526 | \$43,078 | \$60,164 | \$52,102 | \$37,942 | -- | -- |

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT D-4

Disabled Members as of June 30, 2006
By Age, Years Disabled, and Average Annual Benefit - MTRFA Coordinated

| Age | Years Disabled |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over |
| Under 45 | 2 | 2 | -- | -- | -- | -- | -- | -- |
|  | \$5,019 | \$5,019 | -- | -- | -- | -- | -- | -- |
| 45-49 | 1 | 1 | -- | -- | -- | -- | -- | -- |
|  | \$4,113 | \$4,113 | -- | -- | -- | -- | -- | -- |
| 50-54 | 3 | 1 | 2 | -- | -- | -- | -- | -- |
|  | \$6,634 | \$16,265 | \$1,819 | -- | -- | -- | -- | -- |
| 55-59 | 7 | 5 | 2 | -- | -- | -- | -- | -- |
|  | \$13,276 | \$14,613 | \$9,933 | -- | -- | -- | -- | -- |
| 60-64 | 4 | 3 | 1 | -- | -- | -- | -- | -- |
|  | \$19,367 | \$23,284 | \$7,614 | -- | -- | -- | -- | -- |
| 65-69 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 70-74 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 75-79 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 80-84 | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 85 \& Over | -- | -- | -- | -- | -- | -- | -- | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 17 | 12 | 5 | -- | -- | -- | -- | -- |
|  | \$12,026 | \$14,445 | \$6,223 | -- | -- | -- | -- | -- |

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT E-1

Beneficiaries as of June 30, 2006
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 \& Over |
| Under 45 | 42 | 29 | 12 | -- | -- | 1 | -- | -- |
|  | \$11,088 | \$9,096 | \$13,844 | -- | -- | \$35,809 | -- | - |
| 45-49 | 27 | 15 | 8 | 2 | -- | 2 | -- | -- |
|  | \$11,537 | \$12,289 | \$13,524 | \$2,357 | -- | \$7,137 | -- | - |
| 50-54 | 60 | 41 | 12 | 6 | -- | 1 | -- | -- |
|  | \$14,223 | \$15,935 | \$8,612 | \$14,902 | -- | \$7,292 | -- | - |
| 55-59 | 164 | 110 | 33 | 19 | 2 | - - | -- | -- |
|  | \$17,527 | \$19,421 | \$14,617 | \$12,663 | \$7,560 | -- | -- | - |
| 60-64 | 256 | 148 | 84 | 24 | -- | -- | -- | -- |
|  | \$22,236 | \$23,274 | \$21,119 | \$19,741 | -- | -- | - | -- |
| 65-69 | 350 | 153 | 112 | 59 | 25 | -- | 1 | -- |
|  | \$20,665 | \$21,263 | \$20,195 | \$22,435 | \$15,024 | -- | \$18,333 | - |
| 70-74 | 600 | 205 | 184 | 130 | 58 | 12 | 6 | 5 |
|  | \$26,230 | \$28,449 | \$25,341 | \$26,263 | \$21,834 | \$27,500 | \$29,663 | \$10,927 |
| 75-79 | 535 | 198 | 140 | 92 | 62 | 27 | 10 | 6 |
|  | \$28,650 | \$30,139 | \$28,110 | \$29,687 | \$26,117 | \$27,597 | \$26,532 | \$10,604 |
| 80-84 | 508 | 176 | 127 | 68 | 64 | 46 | 19 | 8 |
|  | \$28,720 | \$30,088 | \$28,686 | \$28,510 | \$27,265 | \$27,401 | \$30,829 | \$15,160 |
| 85 \& Over | 502 | 134 | 117 | 81 | 65 | 45 | 35 | 25 |
|  | \$28,094 | \$32,763 | \$27,071 | \$23,908 | \$26,974 | \$31,970 | \$27,340 | \$18,410 |
| Total | 3,044 | 1,209 | 829 | 481 | 276 | 134 | 71 | 44 |
|  | \$25,358 | \$25,989 | \$24,493 | \$25,266 | \$24,546 | \$28,594 | \$28,229 | \$15,905 |

[^4]
## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT E-2

## Beneficiaries as of June 30, 2006

By Age, Years Since Death, and Average Annual Benefit - Non-MTRFA

| Age | Years Since Death |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over |
| Under 45 | 23 | 18 | 5 | -- | -- | -- | -- | -- |
|  | \$6,150 | \$6,977 | \$3,174 | -- | -- | -- | -- | -- |
| 45-49 | 17 | 10 | 5 | 2 | -- | -- | -- | -- |
|  | \$7,557 | \$9,670 | \$5,411 | \$2,357 | -- | -- | -- | -- |
| 50-54 | 56 | 39 | 11 | 6 | -- | -- | -- | -- |
|  | \$13,831 | \$15,052 | \$8,919 | \$14,902 | -- | -- | -- | -- |
| 55-59 | 156 | 106 | 32 | 17 | 1 | -- | -- | -- |
|  | \$17,271 | \$18,916 | \$14,956 | \$11,879 | \$8,551 | -- | -- | -- |
| 60-64 | 238 | 132 | 82 | 24 | -- | -- | -- | -- |
|  | \$21,958 | \$23,051 | \$20,848 | \$19,741 | -- | -- | -- | -- |
| 65-69 | 329 | 142 | 107 | 55 | 25 | -- | -- | -- |
|  | \$20,178 | \$20,760 | \$20,526 | \$20,345 | \$15,024 | -- | -- | - |
| 70-74 | 492 | 189 | 146 | 88 | 50 | 10 | 5 | 4 |
|  | \$25,659 | \$27,613 | \$25,726 | \$25,053 | \$20,483 | \$25,294 | \$26,630 | \$8,582 |
| 75-79 | 494 | 179 | 133 | 91 | 55 | 24 | 6 | 6 |
|  | \$28,506 | \$30,517 | \$28,287 | \$29,211 | \$24,235 | \$25,528 | \$31,611 | \$10,604 |
| 80-84 | 480 | 160 | 125 | 66 | 63 | 44 | 15 | 7 |
|  | \$28,776 | \$29,961 | \$28,721 | \$28,458 | \$27,560 | \$27,698 | \$32,445 | \$15,541 |
| 85 \& Over | 469 | 122 | 112 | 76 | 64 | 42 | 31 | 22 |
|  | \$28,346 | \$32,983 | \$27,092 | \$24,092 | \$27,090 | \$33,041 | \$28,501 | \$18,182 |
| Total | 2,754 | 1,097 | 758 | 425 | 258 | 120 | 57 | 39 |
|  | \$25,206 | \$25,801 | \$24,628 | \$24,614 | \$24,075 | \$28,934 | \$29,702 | \$15,557 |

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT E-3

## Beneficiaries as of June 30, 2006

By Age, Years Since Death, and Average Annual Benefit - MTRFA Basic

| Age | Years Since Death |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over |
| Under 45 | 13 | 5 | 7 | -- | -- | 1 | -- | -- |
|  | \$20,794 | \$16,853 | \$21,465 | -- | -- | \$35,809 | -- | -- |
| 45-49 | 9 | 4 | 3 | -- | -- | 2 | -- | -- |
|  | \$18,221 | \$17,145 | \$27,045 | -- | -- | 0\$7,137 | -- | -- |
| 50-54 | 4 | 2 | 1 | -- | -- | 1 | -- | -- |
|  | \$19,705 | \$33,145 | \$5,237 | -- | -- | \$7,292 | -- | -- |
| 55-59 | 6 | 2 | 1 | 2 | 1 | -- | -- | -- |
|  | \$18,981 | \$32,448 | \$3,774 | \$19,323 | \$6,570 | -- | -- | -- |
| 60-64 | 16 | 14 | 2 | -- | -- | -- | -- | -- |
|  | \$25,666 | \$24,725 | \$32,253 | -- | -- | -- | -- | -- |
| 65-69 | 17 | 8 | 4 | 4 | -- | -- | 1 | -- |
|  | \$29,920 | \$27,833 | \$15,731 | \$51,180 | -- | -- | \$18,333 | -- |
| 70-74 | 106 | 14 | 38 | 42 | 8 | 2 | 1 | 1 |
|  | \$28,636 | \$38,207 | \$23,859 | \$28,797 | \$30,278 | \$38,526 | \$44,825 | \$20,307 |
| 75-79 | 38 | 16 | 7 | 1 | 7 | 3 | 4 | -- |
|  | \$31,175 | \$27,746 | \$24,752 | \$73,053 | \$40,903 | \$44,146 | \$18,913 | - |
| 80-84 | 21 | 9 | 2 | 2 | 1 | 2 | 4 | 1 |
|  | \$28,199 | \$35,181 | \$26,512 | \$30,234 | \$8,724 | \$20,877 | \$24,769 | \$12,497 |
| 85 \& Over | 32 | 11 | 5 | 5 | 1 | 3 | 4 | 3 |
|  | \$24,918 | \$32,246 | \$26,602 | \$21,111 | \$19,526 | \$16,978 | \$18,345 | \$20,087 |
| Total | 262 | 85 | 70 | 56 | 18 | 14 | 14 | 5 |
|  | \$27,313 | \$29,447 | \$23,339 | \$30,213 | \$31,298 | \$25,682 | \$22,233 | \$18,613 |

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT E-4

Beneficiaries as of June 30, 2006
By Age, Years Since Death, and Average Annual Benefit - MTRFA Coordinated

| Age | Years Since Death |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Under 5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30 \& Over |
| Under 45 | 6 | 6 | -- | -- | -- | -- | - | -- |
|  | \$8,987 | \$8,987 | -- | -- | -- | -- | -- | -- |
| 45-49 | 1 | 1 | -- | -- | -- | -- | - | -- |
|  | \$19,060 | \$19,060 | -- | -- | -- | -- | -- | -- |
| 50-54 | -- | -- | -- | -- | -- | -- | - | -- |
|  | -- | -- | -- | -- | -- | -- | -- | -- |
| 55-59 | 2 | 2 | -- | -- | -- | -- | -- | -- |
|  | \$33,130 | \$33,130 | -- | -- | -- | -- | -- | -- |
| 60-64 | 2 | 2 | -- | -- | -- | -- | -- | -- |
|  | \$27,854 | \$27,854 | -- | -- | -- | -- | -- | -- |
| 65-69 | 4 | 3 | 1 | -- | - | -- | -- | -- |
|  | \$21,344 | \$27,553 | \$2,718 | -- | -- | -- | -- | -- |
| 70-74 | 2 | 2 | -- | -- | -- | -- | -- | -- |
|  | \$39,205 | \$39,205 | -- | -- | -- | -- | -- | -- |
| 75-79 | 3 | 3 | -- | -- | -- | -- | -- | -- |
|  | \$20,387 | \$20,387 | -- | -- | -- | -- | -- | -- |
| $80-84$ | 7 | 7 | -- | -- | -- | -- | -- | -- |
|  | \$26,455 | \$26,455 | -- | -- | -- | -- | -- | -- |
| 85 \& Over | 1 | 1 | -- | -- | -- | -- | -- | -- |
|  | \$11,604 | \$11,604 | -- | -- | -- | -- | -- | -- |
| Total | 28 | 27 | 1 | -- | -- | -- | -- | -- |
|  | \$22,024 | \$22,739 | \$2,718 | -- | -- | -- | -- | -- |

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT F-1

Reconciliation of Member Data - Total*

|  |  | Active Members | Leave of Absence | Inactive Vested Members | Other NonVested Members | Retired Participants | Disableds | Beneficiarie | Other <br> Beneficiaries | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. | Number in June 30, 2005 report | 79,254 | 54 | 11,257 | 22,755 | 39,282 | 606 | 2,874 | 34 | 156,116 |
| B. | Adjustments | -28 | $\underline{0}$ | $\underline{17}$ | -193 | -47 | $\underline{6}$ | 34 | $\underline{0}$ | -211 |
| C. | Number as of June 30, 2005 | 79,226 | 54 | 11,274 | 22,562 | 39,235 | 612 | 2,908 | 34 | 155,905 |
| D. | Additions | 7,777 | 12 | 1,674 | 3,691 | 2,548 | 88 | 272 | 2 | 16,064 |
| E. Deletions: |  |  |  |  |  |  |  |  |  |  |
|  | 1. Retirements from Active/Inactive | -2,076 | -7 | -339 | -81 | 0 | 0 | 0 | 0 | -2,503 |
|  | 2. Disability Retirements from Active | -103 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -104 |
|  | 3. Retirements from Disability | 0 | 0 | 0 | 0 | 0 | -49 | 0 | 0 | -49 |
|  | 4. Active Disability from Inactive | 0 | 0 | -21 | -3 | 0 | 0 | 0 | 0 | -24 |
|  | 5. Died with beneficiary | -1 | 0 | 0 | 0 | -218 | -9 | 0 | 0 | -228 |
|  | 6. Died without beneficiary | -48 | 0 | -23 | -20 | -575 | -7 | -60 | 0 | -733 |
|  | 7. Terminated - deferred | -1,644 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1,644 |
|  | 8. Terminated other non-vested | -3,542 | 0 | -63 | 0 | 0 | 0 | 0 | 0 | -3,605 |
|  | 9. Refunds | -471 | -1 | -33 | -891 | 0 | 0 | 0 | 0 | -1,396 |
|  | 10. Contributions written off | 0 | 0 | 0 | -1,942 | 0 | 0 | 0 | 0 | -1,942 |
|  | 11. Rehired as active | 0 | -1 | -694 | -1,360 | 0 | 0 | 0 | 0 | -2,055 |
|  | 12. Expired benefits | 0 | 0 | 0 | 0 | -17 | -5 | -76 | 0 | -98 |
|  | 13. Leave of absence | -10 | $\underline{0}$ | -2 | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | -12 |
| F. | Number as of June 30, 2006 | 79,108 | 56 | 11,773 | 21,956 | 40,973 | 630 | 3,044 | 36 | 157,576 |

*May include duplicate records due to the MTRFA merger effective June 30, 2006.

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT F-2

## Reconciliation of Member Data - Non-MTRFA

|  |  | Active Members | Leave of Absence | Inactive Vested Members | Other NonVested Members | Retired Participants | Disableds | Beneficiaries | Other <br> Beneficiaries | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. | Number in June 30, 2005 report | 74,552 | 0 | 9,880 | 19,151 | 35,779 | 581 | 2,597 | 0 | 142,540 |
| B. | Adjustments | -28 | $\underline{0}$ | $\underline{17}$ | -193 | -43 | $\underline{3}$ | 34 | $\underline{0}$ | -210 |
| C. | Number as of June 30, 2005 | 74,524 | 0 | 9,897 | 18,958 | 35,736 | 584 | 2,631 | 0 | 142,330 |
| D. | Additions | 7,293 | 0 | 1,387 | 3,277 | 2,366 | 81 | 242 | 0 | 14,646 |
| E. Deletions: |  |  |  |  |  |  |  |  |  |  |
|  | 1. Retirements from Active/Inactive | -1,956 | 0 | -286 | -76 | 0 | 0 | 0 | 0 | -2,318 |
|  | 2. Disability Retirements from Active | -102 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -102 |
|  | 3. Retirements from Disability | 0 | 0 | 0 | 0 | 0 | -49 | 0 | 0 | -49 |
|  | 4. Active Disability from Inactive | 0 | 0 | -21 | -3 | 0 | 0 | 0 | 0 | -24 |
|  | 5. Died with beneficiary | 0 | 0 | 0 | 0 | -190 | -9 | 0 | 0 | -199 |
|  | 6. Died without beneficiary | -48 | 0 | -21 | -18 | -522 | -4 | -51 | 0 | -664 |
|  | 7. Terminated - deferred | -1,368 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1,368 |
|  | 8. Terminated other non-vested | -3,131 | 0 | -63 | 0 | 0 | 0 | 0 | 0 | -3,194 |
|  | 9. Refunds | -429 | 0 | 0 | -822 | 0 | 0 | 0 | 0 | -1,251 |
|  | 10. Contributions written off | 0 | 0 | 0 | -1,942 | 0 | 0 | 0 | 0 | -1,942 |
|  | 11. Rehired as active | 0 | 0 | -668 | -1,314 | 0 | 0 | 0 | 0 | -1,982 |
|  | 12. Expired benefits | 0 | 0 | 0 | 0 | -17 | -5 | -68 | 0 | -90 |
|  | 13. Leave of absence | $\underline{\square}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ |
| F. | Number as of June 30, 2006 | 74,783 | 0 | 10,225 | 18,060 | 37,373 | 598 | 2,754 | 0 | 143,793 |

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT F-3

## Reconciliation of Member Data - MTRFA

|  |  | Active Members | Leave of Absence | Inactive Vested Members | Other <br> NonVested Members | Retired Participants | Disableds | Beneficiaries | Other Beneficiaries | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A. | Number in June 30, 2005 report | 4,702 | 54 | 1,377 | 3,604 | 3,503 | 25 | 277 | 34 | 13,576 |
| B. | Adjustments | $\underline{0}$ | $\underline{0}$ | $\underline{\square}$ | $\underline{0}$ | -4 | 3 | $\underline{0}$ | $\underline{0}$ | -1 |
| C. | Number as of June 30, 2005 | 4,702 | 54 | 1,377 | 3,604 | 3,499 | 28 | 277 | 34 | 13,575 |
| D. | Additions | 484 | 12 | 287 | 414 | 182 | 7 | 30 | 2 | 1,418 |
|  | Deletions: |  |  |  |  |  |  |  |  |  |
|  | 1. Retirements from Active/Inactive | -120 | -7 | -53 | -5 | 0 | 0 | 0 | 0 | -185 |
|  | 2. Disability Retirements from Active | -1 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | -2 |
|  | 3. Retirements from Disability | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 4. Active Disability from Inactive | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 5. Died with beneficiary | -1 | 0 | 0 | 0 | -28 | 0 | 0 | 0 | -29 |
|  | 6. Died without beneficiary | 0 | 0 | -2 | -2 | -53 | -3 | -9 | 0 | -69 |
|  | 7. Terminated - deferred | -276 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -276 |
|  | 8. Terminated - other nonvested | -411 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -411 |
|  | 9. Refunds | -42 | -1 | -33 | -69 | 0 | 0 | 0 | 0 | -145 |
|  | 10. Contributions written off | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | 11. Rehired as active | 0 | -1 | -26 | -46 | 0 | 0 | 0 | 0 | -73 |
|  | 12. Expired benefits | 0 | 0 | 0 | 0 | 0 | 0 | -8 | 0 | -8 |
|  | 13. Leave of absence | -10 | $\underline{0}$ | -2 | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | $\underline{0}$ | -12 |
| F. | Number as of June 30, 2006 | 4,325 | 56 | 1,548 | 3,896 | 3,600 | 32 | 290 | 36 | 13,783 |

## EXHIBIT G

## Statement of Change in Net Plan Assets for Year Ended June 30, 2006

|  | Non-MPRIF Assets | MPRIF Reserve | Market Value |
| :---: | :---: | :---: | :---: |
| A. Assets available at beginning of period |  |  |  |
| 1. TRA as of July 1, 2005 | \$7,367,961,106 | \$10,438,051,358 | \$17,806,012,464 |
| 2. MTRFA as of July 1,2005 | 745,214,858 | - | 745,214,858 |
| B. Additions: |  |  |  |
| 1. Member contributions | \$177,084,905 | - | \$177,084,905 |
| 2. Employer contributions | 179,021,626 | - | 179,021,626 |
| 3. Contributions from other sources | 3,182,223 | - | 3,182,223 |
| 4. MPRIF income | - | \$865,479,866 | 865,479,866 |
| 5. Net investment income: |  |  |  |
| (a) Interest and dividends | \$680,655,345 | - | \$680,655,345 |
| (b) Net appreciation/(depreciation) | 562,492,562 | - | 562,492,562 |
| (c) Investment expenses | -13,112,860 | - - | -13,112,860 |
| (d) Net subtotal | \$1,230,035,047 | - | \$1,230,035,047 |
| 6. Other | 29,494,099 | - | 29,494,099 |
| 7. Total additions | \$1,618,817,900 | \$865,479,866 | \$2,484,297,766 |
| C. Operating expenses: |  |  |  |
| 1. Service retirements | \$119,169,297 | \$1,067,733,747 | \$1,186,903,044 |
| 2. Disability benefits | 13,118,722 | - | 13,118,722 |
| 3. Survivor benefits | 8,976,762 | 15,213,496 | 24,190,258 |
| 4. Refunds | 11,872,504 | - | 11,872,504 |
| 5. Administrative expenses | 11,912,701 | - | 11,912,701 |
| 6. Other | 1,856,275 | - | 1,856,275 |
| 7. Total operating expenses | \$166,906,261 | \$1,082,947,243 | \$1,249,853,504 |
| D. Other changes in reserves: |  |  |  |
| 1. Annuities awarded |  |  |  |
| (a) Non-MTRFA members | -\$1,174,768,874 | \$1,174,768,874 | - |
| (b) Former MTRFA members | -712,586,000 | 712,586,000 | - |
| (c) Shortfall due to MTRFA merger | -263,995,000 | 263,995,000 | - |
| 2. Mortality gain/(loss) | 728,728 | -728,728 | - |
| 3. Change in MPRIF assumptions | - | - | - |
| 4. Total other changes | -\$2,150,621,146 | \$2,150,621,146 | - |
| E. Assets available at end of period | \$7,414,466,457 | \$12,371,205,127 | \$19,785,671,584 |

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT G (Continued)

Statement of Change in Net Plan Assets for Year Ended June 30, 2006

|  | Non-MPRIF Assets | MPRIF Reserve | Market Value |
| :---: | :---: | :---: | :---: |
| F. Determination of current year unrecognized asset return |  |  |  |
| 1. Average balance: |  |  |  |
| (a) Non-MPRIF Assets available at BOY: (A.1) + (A.2) |  |  | \$8,113,175,964 |
| (b) Non-MPRIF Assets available at EOY*: (E) |  |  | 7,413,737,729 |
| (c) Average balance [(a) + (b) - Net Investment Income] / 2 <br> Net Investment Income: (B.5.(d)) + (B.6) |  |  | 7,133,692,274 |
| 2. Expected return: $8.50 \% \mathrm{x}$ (F.1. (c)): |  |  | 606,363,843 |
| 3. Actual return: (B.5.(d)) + (B.6) |  |  | 1,259,529,146 |
| 4. Current year unrecognized asset return: (F.3) - (F.2) |  |  | \$653,165,303 |

*Before adjustment for MPRIF mortality gain (loss) and new MPRIF assumptions.

## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT H

Statement of Plan Net Assets for Year Ended June 30, 2006

|  | Market Value | Cost Value |
| :---: | :---: | :---: |
| Assets in trust |  |  |
| Cash, equivalents, short-term securities | \$83,230,595 | \$83,230,595 |
| Fixed income | 1,679,142,236 | 1,781,009,388 |
| Equity | 5,642,284,536 | 5,403,884,944 |
| Real estate | - | - |
| Equity in Minnesota Post-Retirement Investment Fund* | 12,371,205,127 | 12,371,205,127 |
| Invested securities lending collateral | 2,114,270,243 | 2,114,270,243 |
| Other assets | 11,469,647 | 11,469,647 |
| Total assets in trust | \$21,901,602,384 | \$21,765,069,944 |
| Assets receivable | \$18,820,662 | \$18,820,662 |
| Liabilities |  |  |
| Invested securities lending collateral | -\$2,114,270,243 | -\$2,114,270,243 |
| Other | -20,481,221 | -20,481,221 |
| Total liabilities | -\$2,134,751,464 | -\$2,134,751,464 |
| Net assets held in trust for pension benefits |  |  |
| MPRIF reserves | \$12,371,205,127 | \$12,371,205,127 |
| Member reserves | 1,765,117,058 | 1,765,117,058 |
| Other non-MPRIF reserves | 5,649,349,399 | 5,512,816,958 |
| Total assets available for benefits | \$19,785,671,584 | \$19,649,139,143 |
| Net Assets at Market/Cost Value | \$19,785,671,584 | \$19,649,139,143 |

* The number shown is the full MPRIF reserve amount. The actual MPRIF market value of $\$ 10,350,059,985$ is not used for funding purposes because this deficiency is accounted for separately and is expected to be recovered from future excess earnings on MPRI funds.


## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT I

Development of the Fund Through June 30, 2006

| Year Ended June 30 | Employer Contributions and Other Sources | Employee Contributions | Net Investment Return* | Administrative Expenses | Benefit Payments | Actuarial Value of Assets at End of Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2002 | -- | -- | -- | -- | -- | \$17,378,994,000 |
| 2003 | \$150,971,000 | \$155,577,000 | \$696,917,000 | \$13,158,000 | \$985,122,000 | 17,384,179,000 |
| 2004 | 154,394,908 | 159,139,548 | 849,647,285 | 12,179,212 | 1,015,272,179 | 17,519,909,350 |
| 2005 | 160,678,168 | 160,982,004 | 977,415,580 | 10,883,151 | 1,055,184,638 | 17,752,917,313 |
| 2006 | 182,203,849 | 177,084,905 | 2,171,403,001 | 11,912,701 | 1,236,084,528 | 19,035,611,839 |

* Net Investment Return on an Actuarial Value of Assets basis, and net of investment fees.


## SECTION 3: Supplemental Information for the Teachers Retirement Association Fund

## EXHIBIT J

## Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended June 30, 2006

| 1. Unfunded/(Overfunded) actuarial accrued liability at beginning of year* |  | \$1,241,051,585 |
| :---: | :---: | :---: |
| 2. Normal cost at beginning of year, including expenses* |  | 305,695,299 |
| 3. Total contributions |  | 356,106,531 |
| 4. Interest: |  |  |
| (a) For whole year on (1) + (2) | \$131,473,485 |  |
| (b) For half year on (3) | 15,134,527 |  |
| (c) Total interest: (4a) - (4b) |  | 116,338,958 |
| 5. Expected unfunded/(overfunded) actuarial accrued liability: $(1)+(2)-(3)+(4)$ |  | \$1,306,979,311 |
| 6. Changes due to (gain)/loss from: |  |  |
| (a) Investments | \$146,446,633 |  |
| (b) Other demographics** | -41,724,091 |  |
| (c) Total changes due to (gain)/loss |  | \$104,722,542 |
| 7. Changes to plan provision and assumptions due to the MTRFA merger |  | \$231,797,187 |
| 8. Unfunded/(Overfunded) actuarial accrued liability at end of year |  | \$1,643,499,040 |

*Equals the sum of TRA and former MTRFA results stated in the July 1, 2005 actuarial valuation.
**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:


Amortization of the Unfunded<br>Actuarial Accrued Liability: Payments made over a period of years equal in value to the Fund'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 Fund 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 often 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 Teachers Retirement Association Fund

## EXHIBIT I

## Summary of Actuarial Valuation Results

| 1. Pensioners as of the valuation date (including 3,044 beneficiaries in pay status) |  | 44,683 |
| :---: | :---: | :---: |
| 2. Members inactive during year ended June 30,2006 with vested rights |  | 11,773 |
| 3. Members active during the year ended June 30, 2006 |  | 79,164 |
| Fully vested | 61,741 |  |
| Not vested | 17,423 |  |
| 4. Other non-vested terminated members as of June 30, 2006 |  | 21,956 |

## EXHIBIT I (continued)

Summary of Actuarial Valuation Results - Total
$\left.\begin{array}{llrl}\hline & & \begin{array}{c}\text { Actuarial Present } \\ \text { Value of } \\ \text { Projected } \\ \text { Benefits }\end{array} & \begin{array}{c}\text { Actuarial } \\ \text { Present Value of } \\ \text { Future Normal } \\ \text { Costs }\end{array}\end{array} \begin{array}{c}\text { Actuarial } \\ \text { Accrued } \\ \text { Liability }\end{array}\right]$

## SECTION 4: Reporting Information for the Teachers Retirement Association Fund

## EXHIBIT I (continued)

Summary of Actuarial Valuation Results - Non-MTRFA

|  |  | Actuarial Present <br> Value of <br> Projected <br> Benefits | Actuarial <br> Present Value of <br> Future Normal <br> Costs |
| :--- | :--- | ---: | :--- | | Actuarial |
| :---: |

## SECTION 4: Reporting Information for the Teachers Retirement Association Fund

## EXHIBIT I (continued)

Summary of Actuarial Valuation Results - MTRFA


## EXHIBIT II <br> Actuarial Balance Sheet - Total

| A. Current Assets |  |  | \$19,035,611,839 |
| :---: | :---: | :---: | :---: |
| B. Expected Future Assets |  |  |  |
| 1. Present Value of Expected Future Statutory Supplemental Contributions |  |  | \$1,081,023,437 |
| 2. Present Value of Future Normal Costs |  |  | 3,047,206,713 |
| 3. Total Expected Future Assets |  |  | \$4,128,230,150 |
| C. Total Current and Expected Future Assets |  |  | \$23,163,841,989 |
| D. Current Benefit Obligations | Non-Vested | Vested | Total |
| 1. Benefit recipients: |  |  |  |
| (a) Retirement annuities | - | \$11,791,747,113 | \$11,791,747,113 |
| (b) Disability benefits | - | 158,375,802 | 158,375,802 |
| (c) Beneficiaries | - | 576,464,967 | 576,464,967 |
| 2. Vested terminated members | - | 345,169,495 | 345,169,495 |
| 3. Other non-vested terminated members | - | 35,164,455 | 35,164,455 |
| 4. Active members: |  |  |  |
| (a) Retirement benefits | \$30,002,940 | \$6,405,754,683 | \$6,435,757,623 |
| (b) Disability benefits | 1,075,706 | 107,810,430 | 108,886,136 |
| (c) Death benefits | 469,292 | 49,640,233 | 50,109,525 |
| (d) Withdrawal benefits | 14,523,962 | 386,453,572 | 400,977,534 |
| 5. Total Current Benefit Obligations | \$46,071,900 | \$19,856,580,750 | \$19,902,652,650 |
| E. Expected Future Benefit Obligations |  |  | 3,823,664,942 |
| F. Total Current and Expected Future Benefit Obligations Present Value of Benefits: (D. $5+$ E) |  |  | \$23,726,317,592 |
| G. Current Unfunded Actuarial Liability (D.5-A) |  |  | \$867,040,811 |
| H. Current and Future Unfunded Actuarial Liability (F-C) |  |  | \$562,475,603 |

## EXHIBIT III

Supplementary Information Required by the GASB - Schedule of Employer Contributions

| Plan <br> Year Ended June 30 | Actuarially Required Contribution Rate (a) | Actual Covered Payroll (b) | Actual Member Contributions (c) | Annual Required Contributions [(a) $\times(b)]-(c)$ | Actual Employer Contributions ${ }^{(1)}$ | Percentage Contributed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1991 | 13.11\% | \$1,943,375,000 | \$89,313,000 | \$165,463,000 | \$159,439,000 | 96.36\% |
| 1992 | 13.04 | 1,989,624,000 | 91,506,000 | 167,941,000 | 162,370,000 | 96.68 |
| 1993 | 13.13 | 2,065,881,000 | 94,709,000 | 176,541,000 | 168,071,000 | 95.20 |
| 1994 | 12.75 | 2,150,300,000 | 100,803,000 | 173,360,000 | 171,855,000 | 99.13 |
| 1995 | 14.73 | 2,204,693,000 | 143,536,000 | 181,215,000 | 179,672,000 | 99.15 |
| 1996 | 14.30 | 2,268,390,000 | 148,051,000 | 176,329,000 | 184,495,000 | 104.63 |
| 1997 | 12.78 | 2,359,011,000 | 154,161,000 | 147,321,000 | 191,670,000 | 130.10 |
| $1998{ }^{(2)}$ | 9.55 | 2,422,957,000 | 124,096,000 | 107,296,000 | 151,323,000 | 141.03 |
| $1999{ }^{(2)}$ | 8.39 | 2,625,254,000 | 132,040,000 | 88,219,000 | 130,526,000 | 147.96 |
| $2000{ }^{(2)}$ | 8.36 | 2,704,575,000 | 138,696,000 | 87,406,000 | 134,419,000 | 153.79 |
| $2001{ }^{(2), ~(3)}$ | 7.92 | 2,812,000,000 | 145,075,000 | 77,635,000 | 139,799,000 | 180.07 |
| $2002{ }^{(2)}$ | 7.85 | 2,873,771,000 | 152,331,000 | 73,260,000 | 142,222,000 | 194.13 |
| $2003{ }^{(2), ~(4)}$ | 7.57 | 2,952,887,000 | 155,577,000 | 67,957,000 | 149,481,000 | 219.96 |
| $2004{ }^{(2)}$ | 8.37 | 3,032,483,365 | 159,139,548 | 94,679,310 | 151,028,911 | 159.52 |
| $2005{ }^{(2)}$ | 8.46 | 3,121,571,447 | 160,982,004 | 103,102,940 | 157,693,090 | 152.95 |
| $2006{ }^{(5)}$ | 9.05 | 3,430,645,420 | 177,084,905 | 133,388,506 | 179,021,626 | 134.21 |
| $2007{ }^{(6)}$ | 12.16 |  |  |  |  |  |

(1) Includes contributions from other sources (if applicable).
${ }^{(2)}$ Actuarially Required Contributions calculated according to parameters of GASB 25 using a 30-year amortization of the negative unfunded actuarial accrued liability.
(3) Actuarially Required Contribution Rate prior to change in Actuarial Assumptions and Asset Valuation Method is $7.31 \%$
${ }^{(4)}$ Actuarially Required Contribution Rate prior to change in Actuarial Assumptions is $8.11 \%$.
(5) Actuarially Required Contribution Rate shown is the contribution rate stated in the TRA July 1, 2005 actuarial valuation.
(6) Actuarially Required Contributions calculated according to parameters of GASB 25 (30-year amortization period), and post-merger of the Minneapolis Teachers' Retirement Fund Association.

## EXHIBIT IV

Supplementary Information Required by the GASB - Schedule of Funding Progress

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial <br> Accrued <br> Liability <br> (AAL) <br> (b) | Unfunded/ (Overfunded) AAL (UAAL) (b) - (a) | Funded Ratio <br> (a) I (b) | Actual Covered Payroll (Previous FY) (c) | UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 07/01/1991 | \$5,614,924,000 | \$7,213,720,000 | \$1,598,796,000 | 77.84\% | \$1,943,375,000 | 82.27\% |
| 07/01/1992 | 6,324,733,000 | 7,662,522,000 | 1,337,789,000 | 82.54 | 1,989,624,000 | 67.24 |
| 07/01/1993 | 7,045,937,000 | 8,266,059,000 | 1,220,122,000 | 85.24 | 2,065,881,000 | 59.06 |
| 07/01/1994 | 7,611,936,000 | 9,115,266,000 | 1,503,330,000 | 83.51 | 2,150,300,000 | 69.91 |
| 07/01/1995 | 8,348,124,000 | 9,717,623,000 | 1,369,499,000 | 85.91 | 2,204,693,000 | 62.12 |
| 07/01/1996 | 9,541,221,000 | 10,366,168,000 | 824,947,000 | 92.04 | 2,268,390,000 | 36.37 |
| 07/01/1997 | 11,103,759,000 | 10,963,637,000 | -140,122,000 | 101.28 | 2,359,011,000 | -5.94 |
| 07/01/1998 | 12,727,546,000 | 12,046,312,000 | -681,234,000 | 105.66 | 2,422,957,000 | -28.12 |
| 07/01/1999 | 14,011,247,000 | 13,259,569,000 | -751,678,000 | 105.67 | 2,625,254,000 | -28.63 |
| 07/01/2000 | 15,573,151,000 | 14,802,441,000 | -770,710,000 | 105.21 | 2,704,575,000 | -28.50 |
| 07/01/2001 | 16,834,024,000 | 15,903,984,000 | -930,040,000 | 105.85 | 2,812,000,000 | -33.07 |
| 07/01/2002 | 17,378,994,000 | 16,503,099,000 | -875,895,000 | 105.31 | 2,873,771,000 | -30.48 |
| 07/01/2003 | 17,384,179,000 | 16,856,379,000 | -527,800,000 | 103.13 | 2,952,887,000 | -17.87 |
| 07/01/2004 | 17,519,909,350 | 17,518,783,700 | -1,125,650 | 100.01 | 3,032,483,365 | -0.04 |
| 07/01/2005 | 17,752,917,313 | 18,021,410,061 | 268,492,748 | 98.51 | 3,121,571,447 | 8.60 |
| 07/01/2006 | 19,035,611,839 | 20,679,110,879 | 1,643,499,040 | 92.05 | 3,430,645,420 | 47.91 |

## Exhibit V

Determination of Contribution Sufficiency - Total

|  |  | July 1, 2006 |  |
| :--- | :--- | :---: | ---: |
| A. Statutory Contributions - Chapter 354 | Percent of Payroll | Dollar Amount |  |
| 1. | Member contributions | $5.51 \%$ | $\$ 204,456,479$ |
| 2. | Employer contributions | 5.23 | $193,832,020$ |
| 3. | Supplemental contributions* |  |  |
| (a) 1993 Legislation | 0.13 | $5,000,000$ |  |
| (b) 1996 Legislation | 0.08 | $3,005,110$ |  |
| (c) 1997 Legislation | $\underline{0.36}$ | $\underline{13,314,000}$ |  |
| 4.Total $\underline{11.31 \%}$ | $\underline{\$ 419,607,609}$ |  |  |

B. Required Contributions - Chapter 356

| 1. Normal Cost: |  |  |
| :---: | :---: | :---: |
| (a) Retirement | 7.68\% | \$284,803,369 |
| (b) Disability | 0.21 | 7,729,157 |
| (c) Death | 0.10 | 3,530,985 |
| (d) Withdrawal | 1.45 | 53,614,888 |
| (e) Total | 9.44\% | \$349,678,399 |
| 1. Supplemental contribution amortization | 2.34\% | \$86,764,874 |
| 2. Allowance for administrative expenses | 0.33\% | 12,236,072 |
| 3. Total | $\underline{\underline{12.11 \%}}$ | \$448,679,345 |
| C. Contribution Sufficiency I (Deficiency): (A.3) - (B.4) | -0.80\% | -\$29,071,736 |
| Projected annual payroll** for fiscal year beginning on the valuation date |  | \$3,707,900,584 |

[^5]
## SECTION 4: Reporting Information for the Teachers Retirement Association Fund

## Exhibit V (continued)

Determination of Contribution Sufficiency - Non-MTRFA

|  |  | July 1, 2006 |
| :--- | :---: | ---: |
| A. Statutory Contributions - Chapter 354 | Percent of Payroll | Dollar Amount |
| Member contributions | $5.50 \%$ | $\$ 192,087,654$ |
| Employer contributions | 5.00 | $174,625,140$ |
| Supplemental contributions* |  |  |
| (a) 1993 Legislation | 0.13 | $4,540,254$ |
| (b) 1996 Legislation | 0.08 | $2,794,002$ |
| (c) 1997 Legislation | $\underline{0.36}$ | $\underline{12,573,010}$ |
| Total | $\underline{11.07 \%}$ | $\underline{\$ 386,620,060}$ |
| B. Required Contributions - Chapter 356 |  |  |


| Normal Cost: |  |  |
| :--- | :--- | ---: | ---: |
| (a) Retirement | $7.63 \%$ | $\$ 266,380,764$ |
| (b) Disability | 0.21 | $7,233,696$ |
| (c) Death | 0.10 | $3,319,794$ |
| (d) Withdrawal | $\underline{1.45}$ | $\underline{50,797,381}$ |
| (e) Total | $\underline{\underline{9.39 \%}}$ | $\underline{\$ 327,731,635}$ |


| Projected annual payroll** for fiscal year beginning on the valuation date | \$3,492,502,804 |
| :--- | :--- |

*Includes contributions from School District \#1, the City of Minneapolis, and matching State contributions.
**Calculated as covered actual payroll, projected one year with salary scale.

## SECTION 4: Reporting Information for the Teachers Retirement Association Fund

## Exhibit V (continued)

Determination of Contribution Sufficiency - MTRFA Basic

| A. Statutory Contributions - Chapter 354 | July 1, 2006 |  |
| :---: | :---: | :---: |
|  | Percent of Payroll | Dollar Amount |
| Member contributions | 9.00\% | \$1,342,150 |
| Employer contributions | 12.64 | 1,884,976 |
| Supplemental contributions* |  |  |
| (a) 1993 Legislation | 0.13 | 19,387 |
| (b) 1996 Legislation | 0.08 | 11,930 |
| (c) 1997 Legislation | $\underline{0.36}$ | 53,686 |
| Total | $\underline{\underline{22.21 \%}}$ | \$3,312,129 |
| B. Required Contributions - Chapter 356 |  |  |
| 1. Normal Cost: |  |  |
| (a) Retirement | 11.83\% | \$1,763,778 |
| (b) Disability | 0.26 | 39,116 |
| (c) Death | 0.12 | 18,486 |
| (d) Withdrawal | $\underline{2.25}$ | 335,572 |
| (e) Total | 14.46\% | \$2,156,952 |
| Projected annual payroll** for fiscal year beginning on the valuation date |  | \$14,912,783 |

*Includes contributions from School District \#1, the City of Minneapolis, and matching State contributions.
**Calculated as covered actual payroll, projected one year with salary scale.

## SECTION 4: Reporting Information for the Teachers Retirement Association Fund

## Exhibit V (continued)

Determination of Contribution Sufficiency - MTRFA Coordinated

|  |  | July 1, 2006 |
| :--- | ---: | ---: |
| A. Statutory Contributions - Chapter 354 | Percent of Payroll | Dollar Amount |
| Member contributions | $5.50 \%$ | $\$ 11,026,675$ |
| Employer contributions | 8.64 | $17,321,904$ |
| Supplemental contributions* |  |  |
| (a) 1993 Legislation | 0.13 | 260,630 |
| (b) 1996 Legislation | 0.08 | 160,388 |
| (c) 1997 Legislation | $\underline{0.36}$ | $\underline{721,746}$ |
| Total | $\underline{14.71 \%}$ | $\underline{\$ 29,491,343}$ |
| B. Required Contributions - Chapter 356 |  |  |


| 1. Normal Cost: |  |  |
| :--- | :--- | ---: |
| (a) Retirement | $8.31 \%$ | $\$ 16,658,827$ |
| (b) Disability | 0.23 | 456,345 |
| (c) Death | 0.10 | 192,705 |
| (d) Withdrawal | $\underline{1.24}$ | $\underline{2,481,935}$ |
| (e) Total | $\underline{\underline{9.88 \%}}$ | $\underline{\underline{\$ 19,789,812}}$ |

## Projected annual payroll** for fiscal year beginning on the valuation date

\$200,484,997

[^6]
## SECTION 4: Reporting Information for the Teachers Retirement Association Fund

## EXHIBIT VI

Supplementary Information Required by the GASB

| Valuation date | July 1, 2006 |
| :---: | :---: |
| Actuarial cost method | Entry Age Normal |
| Amortization method | Level percentage of payroll, assuming payroll increases of 5.00\% per annum |
| Remaining amortization period | 30 years remaining as of July 1, 2006 (changed from prior valuation) |
| 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 | 6.00\% per annum |
| Projected salary increases | Select and ultimate rates by age, with ultimate rates of 5.00\%-6.00\% |
| Plan membership: |  |
| Pensioners and beneficiaries receiving benefits | 44,683 |
| Terminated vested members entitled to, but not yet receiving benefits | 11,773 |
| Other terminated non-vested members | 21,956 |
| Active members | 79,164 |
| Total | 157,576 |

## EXHIBIT VII

## Actuarial Assumptions and Actuarial Cost Method

## Mortality Rates:

Healthy Pre-Retirement:

| Male: | 1983 Group Annuity Mortality Table for males set back 12 years |
| :--- | :--- |
| Female: | 1983 Group Annuity Mortality Table for females set back 10 years |

Healthy Post-Retirement:

| Male: | 1983 Group Annuity Mortality Table for males set back 6 years |
| :--- | :--- |
| Female: | 1983 Group Annuity Mortality Table for females set back 3 years |

Disabled:

| Male: | 1965 Railroad Retirement Board (RRB) rates through age 54. For ages 55 to 64, graded rates between 1965 RRB rates and the Healthy Post-Retirement mortality table. For ages 65 and later, the Healthy Post-Retirement mortality table. |
| :---: | :---: |
| Female: | 1965 Railroad Retirement Board (RRB) rates through age 54. For ages 55 to 64, graded rates between 1965 RRB rates and the Healthy Post-Retirement mortality table. For ages 65 and later, the Healthy Post-Retirement mortality table. |

## SECTION 4: Reporting Information for the Teachers Retirement Association Fund

| Summary of Rates: |  | Shown below for selected ages: |  |  |  |  | Salary Increases |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rate (\%) |  |  |  |  |  |  |
|  | Pre-Retirement Mortality |  | Withdrawal |  | Disability |  |  |
| Age | Male | Female | Male | Female | Male | Female |  |
| 20 | 0.03 | 0.01 | 3.70 | 4.50 | 0.00 | 0.00 | 6.00 |
| 25 | 0.03 | 0.01 | 3.20 | 4.50 | 0.00 | 0.00 | 6.00 |
| 30 | 0.04 | 0.02 | 2.70 | 4.50 | 0.00 | 0.00 | 6.00 |
| 35 | 0.04 | 0.03 | 2.50 | 3.90 | 0.01 | 0.01 | 6.00 |
| 40 | 0.05 | 0.03 | 2.35 | 2.75 | 0.03 | 0.03 | 5.70 |
| 45 | 0.07 | 0.05 | 2.10 | 2.10 | 0.05 | 0.05 | 5.20 |
| 50 | 0.10 | 0.07 | 1.85 | 1.85 | 0.11 | 0.10 | 5.00 |
| 55 | 0.17 | 0.10 | 0.00 | 0.00 | 0.22 | 0.16 | 5.00 |
| 60 | 0.31 | 0.16 | 0.00 | 0.00 | 0.33 | 0.25 | 5.30 |
| 65 | 0.52 | 0.25 | 0.00 | 0.00 | 0.00 | 0.00 | 5.70 |
| 70 | 0.77 | 0.42 | 0.00 | 0.00 | 0.00 | 0.00 | 5.70 |
| 71 | 0.84 | 0.47 | 0.00 | 0.00 | 0.00 | 0.00 | 5.70 |



| Percent Married: | 85\% of male members and 65\% of female members are assumed to be married. <br> Assume members have no children. <br> Age of Spouse: <br> Females three years younger than males. |
| :--- | :--- |
| Pre-Retirement: <br> Post-Retirement: | 8.50\% per annum <br> $6.00 \%$ per annum |
| Administrative Expenses: | Prior year administrative expenses expressed as percentage of prior year payroll. |
| Allowance for Combined | Liabilities for active members are increased by 1.40\% and liabilities for former <br> members are increased by $4.00 \%$ to account for the effect of some Participants having <br> eligibility for a Combined Service Annuity. |
| Return of Contributions: | All employees withdrawing after becoming eligible for a deferred benefit were <br> assumed to take the larger of their contributions accumulated with interest or the value <br> of their deferred benefit. |
| Interest on Member Contributions: | Members and former members who are eligible for the money purchase annuity are <br> assumed to receive interest credits equal to the Pre-Retirement interest rate. All other <br> members and former members receive the interest crediting rate as specified in |
| statutes. |  |


| Benefit Increases After Retirement: | Payment of earnings on retired reserves in excess of $6.00 \%$ accounted for by $6.00 \%$ post-retirement assumptions. |
| :---: | :---: |
| 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 the fiscal year (based on the assumed interest rate employed in the July 1 Actuarial Valuation of the fiscal year). |
| Actuarial Cost Method: | Entry Age Normal Cost Method. Entry age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are expressed as a level percentage of payroll, with Normal Cost determined as if the current benefit accrual rate had always been in effect. |
| Payment on the Unfunded Actuarial Accrued Liability: | A level percentage of payroll each year to the statutory amortization date assuming payroll increases of $5.00 \%$ per annum. |
| Changes in Actuarial Assumptions and Cost Methods: | There have been no changes made to the actuarial cost methods since the prior valuation. <br> Effective June 30, 2006, the Minneapolis Teachers’ Retirement Fund Association (MTRFA) merged into the Teachers Retirement Association Fund. All members follow the TRA actuarial assumptions, except former MTRFA Basic members continue to use prior MTRFA Basic retirement rates. |

## EXHIBIT VIII

## Summary of Plan Provisions - Basic (Non-MTRFA Members)

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 any Minnesota Statutes.

| Plan Year: | July 1 through June 30 |
| :--- | :--- |
| Eligibility: | A public school or MNSCU teacher who is not covered by the Social Security Act, <br> except for teachers employed by St. Paul or Duluth public schools or by the <br> University of Minnesota. Effective July 1, 2002, charter school teachers employed by <br> St. Paul or Duluth public schools are covered by this fund. <br>  <br> No MNSCU teacher is a Member if that person elected coverage under Chapter 354B. |
| Contributions: | Member: $\quad 9.00 \%$ of Salary. <br> Employer: $\quad 9.00 \%$ of Salary. |
| Allowable Service: | A day of credit is earned if five hours are taught that day. A year is earned if 170 days <br> of service are credited. Credit may also be provided for certain leaves if contributions <br> are paid into the fund. |
| Salary: | Compensation used for contribution purposes excluding lump sum annual or sick <br> leave payments, severance payments, any payments made in lieu of employer paid <br> fringe benefits or expenses, and employer contributions to a Section 457 deferred <br> compensation plan. |
| Average of the five highest successive years of Salary. Average Salary is based on all <br> Allowable Service if less than five years. |  |

## Retirement:

Normal Retirement:
Age/Service Requirement:

## Early Retirement:

Age/Service Requirement:

Amount:
(a) Age 65 and three years of Allowable Service.
(b) Age 62 and 30 years of Allowable Service.

Proportionate Retirement Annuity is available at age 65 and one 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), (b) or (c):
(a) $2.20 \%$ of Average Salary for each of the first ten 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 under 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.
(c) For eligible members, money purchase annuity equal to the actuarial equivalent of $220.00 \%$ of the member's accumulated deductions plus interest thereon.

Life annuity. Actuarially equivalent options are:
(a) $50 \%, 75 \%$ or $100 \%$ Joint and Survivor with bounce back feature without additional reduction.
(b) 15-year Certain and Life.
(c) Guaranteed Refund.

Benefit Increases:

Disability:

Age/Service Requirement:

Amount:

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

Amount:

Benefit Increases:

Benefits may be increased each January 1 based on a formula in the Minnesota Statute consisting of both an inflation component and an investment based component of the Minnesota Post Retirement Investment Fund (MPRIF). A member who has been receiving a benefit for a 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 pro rata increase.

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 unless an optional annuity plan is selected. Supplemental benefit of $\$ 25$ per month.

Payments stop at normal retirement age or the five year anniversary of the effective date of the disability benefit, whichever is later. Payments stop earlier if disability ceases or death occurs. Benefits may be reduced on resumption of partial employment. If death occurs before retirement status, the surviving spouse and dependent children are eligible for survivor benefits.

Same as for retirement.
Adjusted by TRA to provide same increase as MPRIF.

Normal Retirement Age or the five year anniversary of the effective date of the disability benefit, whichever is later.
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.

## Death:

Surviving Spouse Benefit:

Age/Service Requirement:
Amount:

Active member with 18 months of Allowable Service or member receiving a disability benefit.
$50 \%$ of salary for the last full fiscal year preceding death. Maximum family benefit is $\$ 1,000$ per month. Benefits paid until spouse's death.

Surviving spouse optional annuity or refund of contributions may be elected in lieu of this benefit.

Surviving Dependent Child Benefit:
Age/Service Requirement: Active member with 18 months of Allowable Service or member receiving a disability benefit.
$10 \%$ of salary for the last full fiscal year preceding death. Family benefit minimum (including spouse's benefit) of $50 \%$ of salary and maximum $\$ 1,000$ per month. Benefits paid until child marries, dies, or attains age 18 (age 22 if full-time student).

Surviving Spouse Optional Annuity:
Age/Service Requirement:
Amount:

Benefit Increases:

Member or former member with three years of Allowable Service who dies before retirement or disability benefits commence.
Survivor's payment of the $100 \%$ Joint and Survivor benefit 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.

Adjusted by TRA to provide same increase as MPRIF except surviving spouse optional annuity benefit increases which are paid from MPRIF.

Refund of Contributions:
Age/Service Requirement:

Amount:
Member dies before receiving any retirement benefits and survivor benefits are not elected.

The excess of the member's contributions over any disability benefits paid plus $6.00 \%$ interest compounded annually if death occurred on or after May 16, 1989.

| Withdrawal: |  |
| :---: | :---: |
| Refund of Contributions: |  |
| Age/Service Requirement: | Thirty days following termination of teaching service. |
| Amount: | Member's contributions with $6.00 \%$ interest compounded annually if termination occurred on or after May 16, 1989. A deferred annuity may be elected in lieu of a refund. |
| Deferred Annuity: |  |
| Age/Service Requirement: | Vested at date of termination. Current requirement is three years of Allowable Service. |
| Amount: | The benefit computed under law in effect at termination and increased by the following percentage compounded annually: |
|  | (a) 3.00\% until January 1 of the year following attainment of age 55; and |
|  | (b) $5.00 \%$ thereafter until the annuity begins. |
|  | Amount is payable as a normal or early retirement. |
|  | A member who terminated service before July 1, 1997 whose benefit does not commence until after June 30, 1997 shall receive an actuarially equivalent increase to reflect the change from $5.00 \%$ to $6.00 \%$ in the post-retirement interest assumption; or |
|  | For eligible former members, money purchase annuity equal to the actuarial equivalent of $220.00 \%$ of the former member's accumulated deductions plus interest thereon. |
| Changes in Plan Provisions: | There have been no changes made to the plan provisions since the prior valuation. |

## EXHIBIT IX

Summary of Plan Provisions - Basic (MTRFA Members)

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 any Minnesota Statutes.

| Plan Year: | July 1 through June 30 |
| :--- | :--- |
| Eligibility: | A teacher who is employed by the Board of Education of Special School District No. <br>  <br>  <br>  <br>  <br>  <br> 1, other than a charter school, and who is not covered by the Social Security Act. <br> Certain part-time licensed employees are covered as well as employees of the <br> Minneapolis Teachers Retirement Fund. |
| Contributions: | Member: $\quad 9.00 \%$ of Salary. |
|  | Employer: $\quad 12.64 \%$ of Salary for July 1, 2006 through June 30, 2007; and |
|  |  |
| Teaching Service: | A year is earned during a calendar year if the member is employed in a covered <br>  <br>  <br> position and employee contributions are deducted. Certain part-time service and <br> military service is also included. |
| Salary: | Total compensation. Excludes lump sum payments for unused vacation leave or <br>  <br> unused sick leave at separation. |
| Average Salary: | Average of the five highest consecutive years of Salary. |

## Retirement:

Normal Retirement:
Age/Service Requirement:
Amount:
Early Retirement:
Age/Service Requirement:
Amount:

Form of Payment:

Benefit Increases:

Age 60, or any age with 30 years of Teaching Service.
$2.50 \%$ of Average Salary for each year of Teaching Service.

Age 55 with less than 30 years of Teaching Service.
The greater of (a) or (b):
(d) $2.25 \%$ of Average Salary for each year of Teaching Service with reduction of $0.25 \%$ for each month the Member is under age first eligible for a normal retirement benefit.
(e) $2.50 \%$ of Average Salary for each year of Teaching Service assuming augmentation to the age first eligible for a normal retirement benefit at $3.00 \%$ per year and actuarial reduction for each month the member is under the age first eligible for a normal retirement benefit.
An alternative benefit is available to members who are at least age 50 and have seven years of Teaching Service. The benefit is based on the accumulation of the $6.50 \%$ "city deposits" to the Retirement Fund. Other benefits are also provided under this alternative depending on the member's age and Teaching Service.
Life annuity. Actuarially equivalent options are:
(d) 10 or 15 -year Certain and Life.
(e) $50 \%, 75 \%$, or $100 \%$ Joint and Survivor with bounce back feature without additional reduction (option is canceled if member is predeceased by beneficiary).
Benefits may be increased each January 1 based on a formula in the Minnesota Statute consisting of both an inflation component and an investment based component of the Minnesota Post Retirement Investment Fund (MPRIF). A member who has been receiving a benefit for a 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 pro rata increase.

## Disability:

Age/Service Requirement:
Amount:

Form of Payment:
Benefit Increases:

## Death:

Benefit A:
Age/Service Requirement:
Amount:

## Benefit B:

Total and permanent disability with three years of Teaching Service.
An annuity based on the continued accumulation of member and city contributions at the current rate for a period of 15 years (but not beyond age 65) plus an additional benefit equal to the smaller of $100 \%$ of the annuity provided by city contributions only or $\$ 150$ per month. A member with 20 years of Teaching Service also receives an additional $\$ 7.50$ per month.
Payments stop if disability ceases or death occurs. Benefits may be reduced on resumption of partial employment.
Same as for retirement.
Same as for retirement.
Choice of Benefit A, Benefit B or Benefit C.

Death before retirement.
The accumulation of member and city contributions plus $5.00 \%$ interest if death occurred before May 16, 1989, or $6.00 \%$ interest if death occurred on or after May 16, 1989. Paid as a life annuity, 15 -year Certain and Life, or lump sum. If an annuity is chosen the beneficiary also receives additional benefits.

Age/Service Requirement:

Amount:

Benefit C:

An active member with seven years of Teaching Service. A former member age 60 with seven years of Teaching Service who dies before retirement or disability benefits begin.
The actuarial equivalent of any benefits the member could have received if he had resigned on the date of death.

Age/Service Requirement: An active member who dies and leaves surviving children.

| Amount: | A monthly benefit of $\$ 248.30$ to the surviving widow while caring for a child and an <br> additional $\$ 248.30$ per month for each surviving dependent child. The maximum <br> family benefit is $\$ 579.30$ per month. These benefits may be increased by the Board of <br> Trustees. |
| :--- | :--- |
| Benefits to the widow cease upon death or when no longer caring for an eligible child. <br> Benefits for dependent children cease upon marriage or age 18 (age 22 if a full time <br> student). |  |
| Benefit Increases: | Same as retirement. |


| Withdrawal: |  |
| :---: | :---: |
| Deferred Annuity: |  |
| Age/Service Requirement: | Seven years of Teaching Service. |
| Amount: | Benefit computed under law in effect at termination and increased by the following annual percentage: |
|  | (a) $3.00 \%$ until January 1 of the year following the attainment of 55, and |
|  | (b) $5.00 \%$ thereafter until the annuity begins. |
|  | In addition, the interest earned on the member and city contributions between termination and age 60 can be applied to provide an additional annuity. |
| Refund of Contributions: |  |
| Age/Service Requirement: | Termination of Teaching Service. |
| Amount: | Member's contributions with $6.00 \%$ interest. A deferred annuity may be elected in lieu of a refund. |
| Changes in Plan Provisions: | The only change in plan provisions since the prior MTRFA valuation is the increase in the employee contribution rate of $0.50 \%$ of payroll beginning July 1, 2006. |

## EXHIBIT X

## 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 any Minnesota Statutes.

| Plan Year: | July 1 through June 30 |
| :--- | :--- |
| Eligibility: | A public school or MNSCU teacher who is covered by the Social Security Act, <br> except for teachers employed by St. Paul or Duluth public schools or by the <br> University of Minnesota. Effective July 1, 2002, charter school teachers employed by <br> St. Paul or Duluth public schools are covered by this fund. <br> No MNSCU teacher will become a new Member unless that person elects coverage as <br> defined by Minnesota Statutes under Chapter 354B. |
| Contributions: | Member: $\quad 5.50 \%$ of Salary. <br> Employer: $\quad 8.64 \%$ of Salary. |
| Allowable Service: | A day of credit is earned if five hours are taught that day. A year is earned if 170 <br> days of service are credited. Credit may also be provided for certain leaves if <br> contributions are paid into the fund. |
| Salary: | Compensation used for contribution purposes excluding lump sum annual or sick <br> leave payments, severance payments, any payments made in lieu of employer paid <br> fringe benefits or expenses, and employer contributions to a Section 457 deferred <br> compensation plan. |
| 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:

Normal Retirement:
Age/Service Requirement: First hired before July 1, 1989:
(a) Age 65 and three years of Allowable Service.
(b) Age 62 and 30 years of Allowable Service.

Proportionate Retirement Annuity is available at age 65 and one year of Allowable Service.
First hired after June 30, 1989:
The greater of (a) or (b):
(a) Age 65.
(b) The age eligible for full Social Security retirement benefits (but not to exceed age 66) and three years of Allowable Service.
Proportionate Retirement Annuity is available at normal retirement age and one year of Allowable Service.

## Early Retirement:

Age/Service Requirement:

Amount:

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), (b) or (c):
(a) $1.20 \%$ of Average Salary for each of the first ten years of Allowable Service, 1.70\% of Average Salary for each subsequent year prior to July 1, 2006, and $1.90 \%$ of Average Salary for years of Allowable Service July 1, 2006 and after. No actuarial reduction if age plus years of service totals 90 . Otherwise

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 years of Allowable Service) at time of retirement.(b) $1.70 \%$ of Average Salary for each year of Allowable Service prior to July 1, 2006 and $1.90 \%$ for each year of Allowable Service beginning July 1, 2006, assuming augmentation to age 65 at $3.00 \%$ per year and actuarial reduction for each month the member is under age 65.
(c) For eligible members, money purchase annuity equal to the actuarial equivalent of $220.00 \%$ of the member's accumulated deductions plus interest thereon.

First hired after June 30, 1989:
$1.70 \%$ of Average Salary for each year of Allowable Service prior to July 1, 2006 and
$1.90 \%$ for each year of Allowable Service beginning July 1, 2006, assuming augmentation to age eligible for full Social Security retirement benefits at $3.00 \%$ per year and actuarial reduction for each month the member is under the full Social Security benefit retirement age but not to exceed age 66.

Form of Payment:

Benefit Increases:

Life annuity. Actuarially equivalent options are:
(a) $50 \%, 75 \%$ or $100 \%$ Joint and Survivor with bounce back feature without additional reduction.
(b) 15-year Certain and Life.
(c) Guaranteed Refund.

Benefits may be increased each January 1 depending on the investment performance of the Minnesota Post Retirement Investment Fund (MPRIF). A member who has been receiving a benefit for a least 12 full months as of the previous 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 pro rata increase.

## Disability:

Age/Service Requirement:
Amount:

Form of Payment:
Benefit Increases:

Retirement After Disability:
Age/Service Requirement:
Amount:

Benefit Increases:

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 unless an optional annuity plan is selected.
Payments stop at Normal Retirement Age or the five year anniversary of the effective date of the disability benefit, whichever is later. Payments stop earlier if disability ceases or death occurs. Benefits may be reduced on resumption of partial employment.
Same as for retirement.
Adjusted by TRA to provide same increase as MPRIF.

Normal Retirement Age or the five year anniversary of the effective date of the disability benefit, whichever is later.
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.

## Death:

Surviving Spouse Optional Annuity:

Age/Service Requirement:

Amount:

Member or former member with three years of Allowable Service who dies before retirement benefits commence.
Survivor's payment of the $100 \%$ Joint and Survivor benefit 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.

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Benefit Increases:

Refund of Contributions:
Age/Service Requirement:

Amount:

Same as for normal retirement.

Member dies before receiving any retirement benefits and the surviving spouse optional annuity is not elected.
The excess of the member's contributions over any disability benefits paid plus 6.00\% interest compounded annually if death occurred on or after May 16, 1989.

## Withdrawal:

Refund of Contributions:

Age/Service Requirement:
Amount:

Deferred Annuity:
Age/Service Requirement:

Amount:

Thirty days following termination of teaching service.
Member's contributions with 6.00\% interest compounded annually if termination occurred on or after May 16, 1989. A deferred annuity may be elected in lieu of a refund.

Vested at date of termination. Current requirement is three years of Allowable Service.

For members first hired prior to July 1, 2006, the benefit is computed under law in effect at termination and increased by the following percentage compounded annually:
(a) $3.00 \%$ thereafter until January 1 of the year following attainment of age 55; and
(b) $5.00 \%$ thereafter until the annuity begins.

For members hired after June 30, 2006, the benefit is computed under law in effect at termination and increased by $2.50 \%$ for all years.
Amount is payable as a normal or early retirement.
A member who terminated service before July 1, 1997 whose benefit does not commence until after June 30, 1997 shall receive an actuarially equivalent increase to reflect the change from $5.00 \%$ to $6.00 \%$ in the post-retirement interest assumption; or

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For eligible former members, money purchase annuity equal to the actuarial equivalent of $220 \%$ of the former member's accumulated deductions plus interest thereon.
For members first hired July 1, 2006 and after, the greater of the benefit computed under law in effect at termination and increased by $2.50 \%$ compounded annually until the annuity begins.

## Changes in Plan Provisions:

The changes in plan provisions since the prior valuation are as follows:
The Laws of Minnesota (2006) Chapter 277 authorized the merger of the Minneapolis Teachers Retirement Association Fund (MTRFA) into TRA. All assets, liabilities, active, inactive and retired MTRFA members were transferred to TRA as of June 30, 2006.

As part of Chapter 277, all TRA Coordinated members received a formula multiplier improvement ( $1.70 \%$ per year to $1.90 \%$ per year) for years of service worked beginning after July 1, 2006. TRA Coordinated employee contribution rates were increased $0.50 \%$ of payroll beginning July $1,2006$.
All TRA members hired after June 30, 2006 receive deferred annuity benefit increases of $2.50 \%$ per year between the date of termination and effective date of retirement. TRA members hired prior to July 1, 2006 receive deferred annuity benefit increases of $3.00 \%$ per year prior to age 55 and $5.00 \%$ per year from age 55 until date of retirement. This change does not impact the results of the July 1, 2006 actuarial valuation.


[^0]:    *The results of the July 1, 2006 actuarial valuation reflect the MTRFA merger effective June 30, 2006.
    **Calculated as covered actual payroll, projected one year with salary scale.

[^1]:    *May include duplicate records due to the MTRFA merger effective June 30, 2006.

[^2]:    *May include duplicate records due to the MTRFA merger effective June 30, 2006.

[^3]:    *May include duplicate records due to the MTRFA merger effective June 30, 2006.

[^4]:    *May include duplicate records due to the MTRFA merger effective June 30, 2006.

[^5]:    *Includes contributions from School District \#1, the City of Minneapolis, and matching State contributions.
    ** Calculated as covered actual payroll, projected one year with salary scale.

[^6]:    *Includes contributions from School District \#1, the City of Minneapolis, and matching State contributions
    **Calculated as covered actual payroll, projected one year with salary scale.

