2007 Overview Materials

Informational Items

concerning the

Legislative Commission on Pensions and Retirement

and

Minnesota Public Pensions Generally

Presented to the House State Government Finance Division Committee January 18, 2007

Table of Contents

Legislative Commission on Pensions and Retirement	1-8
 ? Function, and Creation ? Composition ? Operation and Resources ? Level of Proposed Public Pension Legislation ? Principles of Pension Policy 	2 3 4
Minnesota Public Pension Plans	9-18
 ? Growth and Development	11 12 16
Plan Demographics	19-25
Actuarial and Related Information	26-57
9. Actuarial Departing on Minnesota Dublic Denaion Diana	20
? Actuarial Reporting on Minnesota Public Pension Plans	
Nature of Actuarial Funding Pattern of Recognizing Pension Costs Over Time	
? 2006 Minnesota Public Pension Plan Actuarial Valuation Results	
? Minnesota Public Pension Plans Funding Progress of 1957-2006	
? Charts	
- Funding Ratio Over Time	-55
- Normal Cost as a Percentage of Payroll	
- Employee and Employer Contribution Rates Over Time 43-44	
- Total Requirements vs. Total Support	
- Total Requirements and Total Contributions Over Time 47-49	
- Contribution Deficiency/Surplus Over Time 50-51	
- Administrative Expenses Over Time 52-53	
? Actuarial Gains and Losses (1986-2003)54	1-56
? Post-Retirement Increases	
State Funding Programs (State Aid) for Minnesota Public Pension Plans Total Portfolio Time-Weighted Rates of Investment Return	
Total Fortions Time Weighted Nates of investment Netari	
Problem/Issue Areas Related to Minnesota Public Pension Plans	62-77
A. Deficit in the Minnesota Post Retirement Investment Fund (MPRIF)	
B. Appropriate Approach to Providing Public Sector Pension Benefits	
C. Inadequate Defined Benefit Plan Contribution Rates	. 66
D. Disparity in Defined Benefit Plan Accrual Rates and Normal Retirement Ages	
E. Future of Minnesota Local Retirement Plans	
F. Actuarial Value of Assets	
G. Unfunded Actuarial Accrued Liability Level Percentage of Pay Amortization	
H. Appropriateness of Current Actuarial Assumption, Especially Economic Assumptions	
I. Extent of Active versus Passive Investment Strategies	
J. State Aid Programs Dedicated to Pension Funding	
K. Appropriate Manner for the State to Obtain Actuarial Information	. 11
Glossary of Minnesota Public Pension Terminology	79-83

Minnesota Legislative Commission on Pensions and Retirement Function and Creation

✗ Function of the Pension Commission

- ? The Pension Commission is a joint agency of the Minnesota Legislature.
- ? The Pension Commission performs four major functions:
 - i) reviews and makes recommendations to standing legislative committees on pending proposed public pension legislation;
 - ii) conducts ongoing research on pension policy issues;
 - iii) provides legislative oversight for Minnesota's system of over 700 public employee pension plans; and
 - iv) assesses the sufficiency of current public pension plan funding and recommends required modifications.
- ? The Minnesota Pension Commission is one of almost two dozen state pension commissions nationwide.

? Initially established as an Interim Commission

```
1943 (Laws 1943, Chapter 449)
1955 (Laws 1955, Chapter 829)
1957 (Extra Session Laws 1957, Chapter 13)
1959 (Extra Session Laws 1959, Chapter 82)
1963 (Laws 1963, Chapter 888, Section 9)
1965 (Laws 1965, Chapter 888, Section 5)
```

- ? No Pension Commission was established during the 1961-1963 Biennium
- Pension Commission established as a permanent entity in 1967
 (Laws 1967, Chapter 549; coded as Minnesota Statutes, Section 3.85)
- ? Pension Commission is the oldest extant Minnesota Legislative Commission

Legislative Commission on Pensions and Retirement Composition

∠ Composition of the Pension Commission

- ? The Commission consists of five members of the House of Representatives and five members of the Senate
- ? The House members of the Commission are appointed by the Speaker of the House
- ? The Senate members of the Commission are appointed by the Subcommittee on Committees of the Senate Rules Committee
- ? 105 legislators have served on the Commission 1943-2006, during 259 two-year terms (including mid-term vacancies that were filled)
- ? Length of service by Commission members 1943-2006:

Total Years	Number of	Percent
of Service	Members	of Total
1 Year	4	3.81%
2 Years	40	38.10%
3 Years	1	0.95%
4 Years	20	19.05%
6 Years	21	20.00%
7 Years	1	0.95%
8 Years	3	2.86%
10 Years	6	5.71%
11 Years	2	1.90%
12 Years	3	2.86%
16 Years	1	0.95%
18 Years	1	0.95%
20 Years	1	0.95%
22 Years	1	0.95%

? Geographical distribution of Commission members, by membership number and by Commission membership term 1943-2006

	Number of	Percent of	Total	Percent of
	Members	Total Membership	Terms	Total Terms
Duluth	1	1.0%	1	0.4%
St. Paul	15	14.3%	32.5	12.5%
Minneapolis	23	21.9%	63.5	24.5%
Suburban Twin Cities	19	18.1%	49	18.9%
Greater Minnesota	47	44.8%	113	43.6%

Legislative Commission on Pensions and Retirement Operation and Resources

✓ Operation of the Pension Commission

- ? The Commission Chair sets the general direction of the Commission.
- ? The Commission Chair has a two-year term.
- ? The Commission Chair alternates between the House and Senate membership; the Chair and other Commission officers are elected from and by the Commission membership.
- ? After appointment, the Commission typically meets weekly during the Legislative Session until the initial committee bill hearing deadline.
- ? During the Interim, the Commission typically meets monthly.
- ? By longstanding agreement, the House and Senate committees with jurisdiction over pensions refrain from hearing proposed pension legislation until receiving a recommendation from the Commission.
- ? The Commission recommendation of proposed pension legislation requires a majority vote of the total commission membership of both the House and the Senate; all other Commission actions require simple majority vote of Commission members in attendance.
- ? The Commission recommendation on proposed pension legislation is typically accompanied by Commission-approved amendments.
- ? Commission recommended proposed pension legislation is typically consolidated into one or a small number of "Omnibus" Pension Bills.
- ? Commission recommended proposed pension legislation affecting pension benefits is typically accompanied by an actuarial cost estimate, generally prepared by the actuary retained jointly by the statewide and major local retirement administrations.

? The Commission employs a permanent staff of 3.5 full-time equivalent positions.

Actuarial Resources

- ? The actuarial work for most Minnesota defined benefit plans is prepared by a consulting actuarial firm retained jointly by the seven largest retirement systems.
- ? The Commission can utilize the services of the jointly retained actuary.

Legislative Commission on Pensions and Retirement Level of Proposed Public Pension Legislation

- ? Historically, an average of 78 public pension bills are introduced annually
- ? Commission typically reviews 85 percent of proposed pension legislation introduced
- ? Typically, 40 introduced public pension bills annually are ultimately heard in some form by standing committees
- ? Proposed pension legislation typically covers a broad range of plans and circumstances:
 - 25 percent related to major statewide plans
 - 13 percent related to minor statewide plans
 - 6 percent related to local general employee plans
 - 15 percent related to police and paid fire pension plans
 - 8 percent related to volunteer fire relief associations
 - 20 percent related to individual or small group requests
 - 13 percent related to miscellaneous pension topics

Preamble

The Legislative Commission on Pensions and Retirement recommends the following statement of principles, which have been developed since 1955, as the basis for evaluating proposed public pension legislation. Problems can be avoided or minimized if a sound set of principles is used as a guideline in developing the various public pension funds and plans.

II. Substantive Principles

A. Purpose of Minnesota Public Pension Plans

- Minnesota public pension plans exist to augment the Minnesota public employer's personnel and compensation system by assisting in the recruitment of new qualified public employees, the retention of existing qualified public employees, and the systematic outtransitioning of existing public employees at the normally expected conclusion of their working careers by providing, in combination with federal Social Security coverage, personal savings and other relevant financial sources, retirement income that is adequate and affordable.
- 2. Minnesota public pension plans should play their appropriate role in providing financial security to public employees in retirement.
- 3. As Minnesota public employee workforce trends develop, Minnesota public pension plans should be sufficiently flexible to make necessary adaptations.

B. Structure of Minnesota Public Pension Coverage

Creation of New Pension Plans

- Minnesota public employers, on their own initiative, without legislative authorization, should not be permitted to establish or maintain new public pension plans, except for volunteer firefighter relief associations.
- b. New pension plans for volunteer firefighters should be organized on a county or comparable regional basis if possible.

2. Mandatory Public Pension Plan Membership

To the extent possible, membership in a public pension plan should be mandatory for the personnel employed on a recurring or regular basis.

3. Consolidation of Public Pension Plans by a Minnesota Public Employer.

- a. The State, with the second largest number of public employee pension plans in the nation, would benefit from a more rational public pension plan structure.
- b. The voluntary consolidation of smaller public pension plans should be encouraged, with the development of county or comparable regional public employee pension plans in place of a large number of small local plans to assist in this consolidation if a statewide public pension plan is deemed to be inappropriate.

C. Pension Benefit Coverage

1. <u>General Preference for Defined Benefit Plans Over Defined</u> <u>Contribution Plans</u>

- Defined benefit plans, where they currently exist, should remain as the primary retirement coverage for Minnesota public employees.
- b. Defined contribution plans are particularly appropriate where interstate portability or private sector-public sector portability is a primary consideration of the public employee group, where the public employee group lacks civil service or analogous employment protections, or where the defined contribution plan is a supplemental pension plan.

2. Social Security Coverage

Except for public employees who are police officers or firefighters, coverage by the federal Old Age, Survivors, Disability and Health Insurance (Social Security) Program should be part of the retirement coverage for Minnesota public employees.

3. Equal Treatment Within Pension Plans

There should be equal pension treatment of public employees in terms of the relationship between benefits and contributions.

4. <u>Appropriate Normal Retirement Ages</u>

The normal retirement age should be set in a reasonable relationship to the employability limits of the average public employee and should differentiate between regular public employees and protective and public safety employees.

5. <u>Appropriate Early Retire</u>ment Reductions

Public employee pension plans should not subsidize early retirement benefits and, except for appropriately designed early retirement incentive programs, retirement benefits should be actuarially reduced for retirement before any applicable normal retirement age.

6. Uniformity and Equal Benefit Treatment Among Plans

There should be equal pension treatment in terms of the relationship between benefits and contributions among the various plans and, as nearly as practicable, within the confines of plan demographics, retirement benefits and member contributions should be uniform.

7. Adequacy of Benefits at Retirement

- a. Benefit adequacy requires that retirement benefits respond to changes in the economy.
- The retirement benefit should be adequate at the time of retirement.
- c. Except for local police or firefighter relief associations, the retirement benefit should be related to an individual's final average salary, determined on the basis of the highest five successive years average salary unless a different averaging period is designated by the Legislature.

- d. Except for local police or firefighter relief associations, the measure of retirement benefit adequacy should be at a minimum of thirty years service, which would be a reasonable public employment career, and at the generally applicable normal retirement age.
- e. Retirement benefit adequacy must be a function of the Minnesota public pension plan benefit and any Social Security benefit payable on account of Minnesota public employment.

8. Postretirement Benefit Adequacy

- The retirement benefit should be adequate during the period of retirement.
- b. Postretirement benefit adequacy should function to replace the impact of economic inflation over time in order to maintain a retirement benefit that was adequate at the time of retirement.
- c. The system of periodic post retirement increases should be funded on an actuarial basis.
- In order to replace inflation, the post retirement adjustment system should follow a valid recognized economic indicator.

9. Portability

To the extent feasible, portability should be established as broadly as possible for employment mobile public employees.

10. Purchases of Prior Service Credit

Purchases of public pension plan credit for periods of prior service should be permitted only if, on a case-by-case basis, it is determined that the period to be purchased is public employment or substantially akin to public employment, that the prior service period must have a significant connection to Minnesota, that the purchase payment from the member or from a combination of the member and the employer must equal the actuarial liability to be incurred by the pension plan for the benefit associated with the purchase, appropriately calculated, without the provision of a subsidy from the pension plan, and that the purchase must not violate notions of equity.

11. Deadline Extensions and Waivers

Deadline extensions or waivers should be permitted only if, on a case-by-case basis, it is determined that there is a sufficient equitable basis for the extension or waiver, the extension or waiver does not involve broader applicability than the pension plan members making the request, and that the extension or waiver is unlikely to constitute an inappropriate precedent for the future.

12. Vesting Requirement Waivers

Waivers of vesting requirements should be permitted only if, on a case-by-case basis, it is determined that there is a strong equitable argument to grant the waiver for the requesting public employees.

13. Reopening Optional Annuity Elections

Reopenings of optional annuity elections should not be permitted.

14. Benefit Increase Retroactivity

Retroactivity of benefit increases for retirees and other benefit recipients should not be permitted.

Repayment of Previously Paid Benefits and Resumptions of Active Member Status

Repayments of previously paid benefits and resumptions of active member status should not be permitted.

16. <u>Duplicate Public Pension Coverage for the Same Employment</u>

Unless supplemental pension plan coverage is involved, public employees should not have coverage by more than one Minnesota public pension plan for the same period of service with the same public employer.

17. Reemployed Annuitant Earnings Limitations

- a. Limitations on the earnings by reemployed annuitants should apply only to the reemployment of an annuitant by an employing unit that is a participating employer in the same public pension plan from which the annuitant is receiving a pension benefit.
- Reemployed annuitant earnings limitations should be standardized to the extent possible among the various Minnesota public pension plans.

18. <u>Disability Definitions</u>

The definitions of what constitutes a disability giving rise to a disability benefit should be standardized to the extent possible, recognizing the differences in the hazards inherent in various types of employment.

19. Design of Early Retirement Incentive Programs

- Early retirement incentive programs can have a valid role to play in the public sector personnel system.
- Early retirement incentive programs should be targeted to situations when a public employer needs to reduce staffing levels beyond normal attrition.
- c. Early retirement incentive programs should be financed appropriately, with the cost of the benefits provided under the early retirement incentive program borne wholly by the same public employer that gains any compensation savings from a staffing level reduction, without any subsidy from the affected public pension plan.

20. Future Pension Coverage for Privatized Public Employees

Because of applicable federal regulation, employees of public employers that are privatized should not be allowed to continue public pension plan coverage in the future. Privatized public employees should receive adequate replacement pension coverage and a better resolution of this topic should be raised with appropriate federal government officials.

21. Supplemental Pension Plans

- a. Public employees should be encouraged to engage in personal savings for their retirement.
- The State should assist this process by making personal retirement savings opportunities available to public employees.
- c. Public employers should have an opportunity to elect to provide financial support to established supplemental pension arrangements for their employees.

22. No Intended Ultimate Benefit Diminutions

- a. In recommending benefit plan modifications, the imposition of reductions in overall benefit coverage for existing pension plan members should not be recommended.
- The imposition of a reduction in overall benefit coverage may be imposed for new pension plan members in order to achieve sound pension policy goals.
- c. A reduction in some aspect or aspects of benefit coverage may be recommended in combination with a proposed benefit increase or benefit increases in implementing sound pension policy goals.

D. Pension Plan Funding

1. Equal Pension Financing Burden for Generations of Taxpayers

There should be utilized a financing method that will distribute total pension costs fairly among the current and future generations of taxpayers and that will discourage unreasonable benefit demands.

2. Actuarial Funding of Pension Benefits

- Retirement benefits in Minnesota defined benefit plans should be funded on an actuarial basis.
- b. Currently earned pension plan service credit, as measured by the actuarially determined entry age normal cost of the defined benefit pension plan, should be funded on a current basis.
- c. The administrative expenses of the defined benefit pension plan should be funded on a current basis.
- d. Existing unfunded actuarial accrued liabilities of the defined benefit pension plan should be amortized over a reasonable period of time, and that amortization period should be related to the average working career of the membership of the pension plan, but not to exceed forty years.

3. <u>Allocation of Funding Burden Between Members and Employers</u>

- a. Retirement benefits should be financed on a shared basis between the public employee and the public employer.
- b. For general public employees, the employee and employer should make matching contributions to meet the normal cost and the administrative expenses of the defined benefit pension plan and both the employee and the employer may be required to share some financial

- responsibility for funding the amortization requirement of the defined benefit pension plan.
- c. For protective and public safety employees covered by a statewide public pension plan, the employee should pay forty percent of the total actuarial costs of the defined benefit pension plan and the employer should pay sixty percent of the total actuarial costs of the defined benefit pension plan.
- d. For protective and public safety employees covered by a local relief association, employee and employer contributions should be considered in light of the special circumstances and history unique to that association. Employees should pay an appropriate portion of the normal cost and administrative expenses of the relief association.

4. Funding of Postretirement Adjustments

- a. Ad hoc postretirement adjustments should be funded separately from the regular defined benefit public pension plan financing and should not be added to the unfunded actuarial accrued liability of the defined benefit public pension plan.
- Automatic postretirement adjustment mechanisms should be funded on an actuarial basis as part of the actuarial requirements and contribution structure of the defined benefit public pension plan.

5. Appropriate Basis for Actuarial Assumption Changes

- Actuarial assumption changes should only be based on the results of the gain and loss analyses in the regular actuarial valuation reports and the results of a periodic experience study.
- Actuarial assumption changes should stand on their own merit, and should not be changed solely to improve benefits or to lower contribution rates.

6. Appropriate Basis for Modifying Contribution Rates

Member and employer contribution rates should only be modified based on the trend in total support rate deficiency or sufficiency revealed in the regular actuarial valuation reports.

E. Pension Plan Investments

1. Appropriate Investment of Public Pension Assets

- a. Public pension plan investment authority should be as uniform as is practicable.
- b. Public pension plan investments should be made in accord with the prudent person rule.
- c. Public pension plan investment authority should be further regulated by a list of authorized investment types, which should appropriately differentiate between pension plans based on asset size and investment expertise.
- Written investment policies should be maintained for the investment of public pension plan assets.
- Public pension plans should regularly report on their investments, including performance.

2. Sole Membership Benefit Dedication of Plan Assets

Recognizing that public pension plan assets exist to defray current and future pension benefit payments, public pension plan assets should be dedicated to the sole benefit of the plan membership in their investment and expenditure.

F. Compliance With Federal Pension Plan Regulation

Consistent with the principles of federalism, dual sovereignty, and comity among governmental entities, public pension plan provisions and administrative operations and activities should attempt to comply with applicable federal pension plan regulation in order to maintain the tax qualified status of public pension plans.

G. Public Pension Plan Fiduciary Responsibility

1. <u>Strong Fiduciary Responsibility Standards</u>

Public pension plan activities should be conducted in accord with strong fiduciary responsibility standards and regulation.

2. Remedies for Fiduciary Breach

Failures to conduct public pension plan activities in accord with the applicable fiduciary responsibility standards and regulation should be subject to appropriate fiduciary breach remedies.

III. Procedural Principles of Pension Policy

A. Adequate Pension Funding

1. Pre-Existing Funding

No proposed increase in pension benefits for any public pension plan should be recommended by the Legislative Commission on Pension and Retirement until there is established adequate financing to cover the pre-increase normal cost, administrative expense, and amortization contribution requirements of the defined benefit public pension plan calculated according to the applicable actuarial reporting law.

2. Funding Increase

No proposed increase in pension benefits for any defined benefit public pension plan should be recommended by the Legislative Commission on Pensions and Retirement unless there is included, in the proposal, adequate financing to meet any resulting increase in the normal cost and amortization contribution requirements of the defined benefit public pension plan that are estimated by the applicable actuary to result from adopting the proposed benefit increase.

B. Preference for General Legislation

No pension legislation of local or special limited application should be recommended by the Legislative Commission on Pensions and Retirement if the purpose and the intent of the proposed legislation would be better served by legislation of general statutory application or if the proposed legislation constitutes a significant departure from previously established uniform pension policy. Pension legislation affecting local police or salaried firefighters may be recommended by the Legislative Commission on Pensions and Retirement in light of any special circumstances that are unique to the relief association.

C. Explicit Application of Principles of Pension Policy

1. Measurement Against Principles

Each proposed change in retirement benefits or financing should be measured by the Legislative Commission on Pension and Retirement against the current principles of pension policy as part of its consideration to insure that there is adherence to sound pension policy.

2. Formal Reporting of Consistency

The Commission's determination concerning compliance with the principles of pension policy should be a part of the Commission's formal report of its recommendations on proposed public pension legislation.

Revised 12/6/96

Minnesota Public Pension Plans **Growth and Development**

- ? The earliest Minnesota public pension plan was the Minneapolis Fire Departmental Relief Association, established in 1868.
- ? All Minnesota public pension plans established before 1900 were public safety plans (except firefighters relief associations, including the Duluth and St. Paul fire plans, and one police relief association, the Minneapolis Police Relief Association).
- ? Minnesota public pension plans were created on patchwork basis, generally covering uncovered groups rather than reorganizing existing plan coverage.
- ? The first general employee retirement plans were teacher retirement plans (Duluth Teachers Retirement Fund Association (DTRFA) in 1910, Minneapolis Teachers Retirement Fund Association (MTRFA) in 1910, St. Paul Teachers Retirement Fund Association (SPTRFA) in 1910, and the Teachers Insurance and Retirement Fund in 1915).
- ? The first statewide retirement plans were the Teachers Insurance and Retirement Fund in 1915, the State Employees Retirement Association (now MSRS-General) in 1929, and the Public Employees Retirement Association (PERA) in 1931.
- ? The first retirement plan to default was the Teachers Insurance and Retirement Fund. Plan was replaced by the Teachers Retirement Association (TRA) in 1931.
- ? The latest retirement plans were established in 1999 (State Fire Marshal Arson Investigator Retirement Plan and the local Government Correctional Retirement Plan).
- ? Retirement plan creation, count by decade:

1860's	1	1930's	11
1870's	0	1940's	23
1880's	3	1950's	11
1890's	6	1960's	12
1900's	6	1970's	3
1910's	8	1980's	5
1920's	2	1990's	2

? Some retirement plans have been closed to new entrants, with replacement coverage by another public pension plan or benefit program (Minneapolis Employees Retirement Fund (MERF), St. Paul Teachers Retirement Fund Association (SPTRFA)-Basic Program, Duluth Teachers Retirement Fund Association (DTRFA)-Old Law Program, Minneapolis Firefighters Relief Association, Minneapolis Police Relief Association, Fairmont Police Relief Association, Virginia Fire Department Relief Association).

Minnesota Public Pension Plans **Growth and Development**

- ? Many retirement plans have been merged into another plan:
 - ? Game Wardens Retirement Plan and State Police Retirement Plan into State Patrol Retirement Plan;
 - ? County and Probate Court Judges Retirement Plan, District Court Judges Retirement Plan, and Supreme Court Justices Retirement Plan into Uniform Judicial Retirement Plan;
 - ? Attorney General Retirement Plan and State Auditor Retirement Plan into Elected State Officers Retirement Plan:
 - ? Supreme Court Clerk Retirement Plan into MSRS-Unclassified State Employees Retirement Program;
 - ? 48 local police or paid firefighter relief associations into PERA-Police & Fire;
 - ? Minneapolis Teachers Retirement Fund Association (MTRFA) into Teachers Retirement Association (TRA).

Minnesota Public Pension Plans Defined Benefit Plans and Defined Contribution Plans

Minnesota Defined Benefit Plans

A. Statewide Plans

- 1. General State Employees Retirement Plan of the Minnesota State Retirement System (MSRS-General)
- 2. Correctional Employees Retirement Plan of the Minnesota State Retirement System (MSRS-Correctional)
- 3. State Patrol Retirement Plan
- 4. Judges Retirement Plan
- 5. Legislators Retirement Plan
- 6. Elected State Officers Retirement Plan
- 7. Military Affairs Personnel Retirement Plan
- 8. Department of Transportation Pilots Retirement Plan
- 9. State Fire Marshal Division Arson Investigators Retirement Plan
- 10. General Employee Retirement Plan of the Public Employees Retirement Association (PERA-General)
- 11. Public Employees Police and Fire Plan (PERA-P&F)
- 12. PERA-Local Government Correctional Service Retirement Plan (PERA-Correctional)
- 13. Teachers Retirement Association (TRA)

B. Local Plans

- 1. Minneapolis Employees Retirement Fund (MERF)
- 2. Duluth Teachers Retirement Fund Association (DTRFA)
- 3. St. Paul Teachers Retirement Fund Association (SPTRFA)
- 4. Fairmont Police Relief Association
- 5. Minneapolis Firefighters Relief Association
- 6. Minneapolis Police Relief Association
- 7. Virginia Fire Department Relief Association
- 8. Various volunteer firefighter relief associations

Minnesota Defined Contribution Plans

A. Statewide Plans

- 1. MSRS-Unclassified Employees Retirement Plan
- 2. Higher Education Individual Retirement Account Plan (MnSCU-IRAP)
- 3. Higher Education Supplemental Retirement Plan (MnSCU-Supplemental)
- 4. PERA-Defined Contribution Retirement Plan
- 5. Ambulance Service Personnel Longevity Plan

B. Local Plans

- 1. Hennepin County Supplemental Retirement Plan
- 2. Various volunteer firefighter relief associations

Statewide Pension Plans	Establishment Date
General State Employees Retirement Plan (MSRS-General)	1929
Correctional Employees Retirement Plan (MSRS-Correctional) 1	1973
Game Wardens Retirement Plan ²	1955
State Police Retirement Plan ³	1961
State Patrol Retirement Plan	1943
Legislators Retirement Plan ⁴	1965
Attorney General Retirement Plan ⁵	1953
State Auditor Retirement Plan 5	1955
Elective State Officers Retirement Plan (ESO) 53	1967
Supreme Court Justices Retirement Plan 6	1943
District Court Judges Retirement Plan ⁶	1949
Probate and County Court Judges Retirement Plan ⁶	1931
Uniform Judicial Retirement Plan 54	1973
Supreme Court Clerk Retirement Plan 7	1953
Military Affairs Department Personnel Retirement Plan 8	1980
Transportation Department Pilots Retirement Plan 8	1982
State Fire Marshal Division Arson Investigator Retirement Plan 8	1999
Unclassified State Employees Retirement Program (MSRS-Unclassified) 9	1971
Metropolitan Transit Commission-Transit Operating Division Retirement Plan 10	1944
Public Employees Retirement Plan (PERA-General)	1931
Public Employees Police and Fire Retirement Plan (PERA-P&F) 11	1959
Local Government Correctional Employees Retirement Plan 12	1987/1999
PERA Defined Contribution Retirement Plan 13	1987
University of Minnesota Police Retirement Plan 14	1969
Teachers Insurance and Retirement Plan 15	1915
Teachers Retirement Plan (TRA)	1931
State University and Community College Supplemental Retirement Plan	1965
Individual Retirement Account Plan (IRAP) 16	1988
Local General Employee Pension Plans	Establishment Date
Minneapolis Employees Retirement Plan (MERF) 17	1919
St. Paul Bureau of Health Relief Association 18	1919
Hennepin County Supplemental Retirement Plan 19	1969
Duluth Teachers Retirement Plan (DTRFA) 20	1910
Minneapolis Teachers Retirement Plan (MTRFA) 58	1910
St. Paul Teachers Retirement Plan (SPTRFA) 20	1910
Local Police and Salaried Firefighters Pension Plans	Establishment Date
_	
Albert Lea Firefighters Relief Association 21	1895
Albert Lea Police Relief Association 22	1943
Anoka Police Relief Association ²³	1948
Austin Firefighters Relief Association ²⁴	1909
Austin Police Relief Association 49	1943
Bloomington Firefighters Relief Association 55	1947
Bloomington Police Relief Association ²¹	1960
Brainerd Police Relief Association 47	1952
Brooklyn Center Police Relief Association ²⁵	1967

Local Police and Salaried Firefighters Pension Plans	Establishment Date
Buhl Police Relief Association ²⁶	1957
Chisholm Firefighters Relief Association ²⁷	1907
Chisholm Police Relief Association ²⁷	1931
Cloquet Fire Department Relief Association 28	1941
Columbia Heights Fire Department Relief Association 29	1923
Columbia Heights Police Relief Association 30	1957
Crookston Fire Department Relief Association 31	1902
Crookston Police Relief Association 56	1948
Crystal Police Relief Association 32	1961
Duluth Firefighters Relief Association 32	1887
Duluth Police Relief Association ³³	1905
Eveleth Firefighters Relief Association 34	1935
Eveleth Police Relief Association 34	1935
Fairmont Police Relief Association 48	1949
Faribault Fire Department Relief Association ²²	1897
Faribault Police Relief Association ⁴⁷	1948
Fridley Firefighters Relief Association 35	N/A
Fridley Police Relief Association 50	1966
Gilbert Supplemental Police Pension Plan 36	1957
Hibbing Firefighters Relief Association ³⁷	1914
Hibbing Police Relief Association ³⁷	1930
Mankato Fire Department Relief Association 38	1895
Mankato Police Relief Association ⁵⁷	1947
Minneapolis Fire Department Relief Association 52	1868
Minneapolis Police Relief Association 52	1890
Moorhead Firefighters Relief Association 39	1955
Moorhead Police Relief Association 39	1945
Nashwauk Police Relief Association 40	1943
New Ulm Police Relief Association 41	1949
Red Wing Fire Department Relief Association ²³	1892
Red Wing Police Relief Association ²⁷	1948
Richfield Fire Department Relief Association 57	1942
Richfield Police Relief Association ²²	1965
Rochester Fire Department Relief Association 42	1891
Rochester Police Relief Association 38	1939
St. Cloud Fire Department Relief Association 43	1906
St. Cloud Police Relief Association 44	1939
St. Louis Park Fire Department Relief Association 37	1948
St. Louis Park Police Relief Association 42	1955
St. Paul Fire Department Relief Association 32	1885
St. Paul Police Relief Association ²¹	1903
South St. Paul Firefighters Relief Association ²¹	1943
South St. Paul Police Relief Association 57	1941
Thief River Falls Police Relief Association 45	1941
Virginia Fire Department Relief Association 51	1931
Virginia Police Relief Association 47	1935
West St. Paul Fire Department Relief Association 46	1947
West St. Paul Police Relief Association ²¹	1967

Local Police and Salaried Firefighters Pension Plans	Establishment Date
Winona Fire Department Relief Association 37	1887
Winona Police Relief Association 42	1914

Local Volunteer Firefighters Pension Plans

692 volunteer firefighter relief associations as of 12/31/2001

Establishment Date various years

Employer-Funded Deferred Compensation and Related Plans	Establishment Date
State Deferred Compensation Plan	1971
Prior Lake School District Supplemental Retirement Plan	1967
Bloomington School District Supplemental Retirement Plan	N/A
Edina School District Supplemental Retirement Plan	N/A
Hopkins School District Supplemental Retirement Plan	N/A
Minnetonka School District Supplemental Retirement Plan	N/A
Richfield School District Supplemental Retirement Plan	N/A
St. Louis Park School District Supplemental Retirement Plan	N/A
Wayzata School District Supplemental Retirement Plan	N/A

N/A means establishment year is not available

Notes:

- ¹ Before the 1973 creation of the Correctional Employees Retirement Plan, coverage was provided by the General State Employees Retirement Plan.
- ² Game Wardens Retirement Plan was replaced by the State Police Retirement Plan in 1961.
- ³ State Police Retirement Plan consolidated with the State Patrol Retirement Plan in 1969.
- Before the 1965 creation of the Legislators Retirement Plan, coverage was provided by the Public Employees Retirement Plan. The plan was closed to new interests as of July 1, 1997, and existing members were permitted to elect coverage by the Unclassified State Employees Retirement Program.
- ⁵ Coverage was shifted to the Elective State Officers Retirement in 1967.
- ⁶ Coverage limited to judges who first assumed judicial office before January 1, 1974.
- Plan was repealed in 1980. Coverage for the membership of the prior plan was transferred to the Unclassified State Employees Retirement Program in 1981, retroactive to the date of initial appointment to employment position.
- 8 Before creation of the plan, coverage was provided by the General State Employees Retirement Plan.
- 9 Before creation of the program, coverage was provided by the General State Employees Retirement Plan. Program members retain the option to select General State Employees Retirement Plan benefits if the member has at least ten years of state service.
- ¹⁰ The plan was acquired by the Metropolitan Transit Commission from the prior employer, the Twin City Rapid Transit Co. in 1970. The plan consolidated with the General State Employees Retirement Plan in 1978.
- Before creation of the Public Employees Police and Fire Retirement Plan in 1959, coverage was provided by the Public Employees Retirement Plan. In 1999, the various police and salaried firefighter consolidation accounts were merged into this plan.
- ¹² The 1987 plan was not implemented by any of the counties authorized to do so by 1997 and was repealed. A replacement plan was enacted in 1999.
- ¹³ For local government elected officials added to eligibility for coverage by the plan in 1990, coverage is optional and prior coverage, if any, was by the Public Employees Retirement Plan.
- Before creation of the plan, prior coverage was by the General State Employees Retirement Plan. Plan consolidated into the Public Employees Police and Fire Retirement Plan in 1978.
- ¹⁵ Plan was replaced by the Teachers Retirement Plan.

- ¹⁶ Before creation of the Individual Retirement Account Plan in 1988, coverage was provided by the Teachers Retirement Plan.
- Plan was closed to new entrants as of June 30, 1979. Coverage for applicable employees initially hired after June 30, 1979 is provided by the Public Employees Retirement Plan.
- ¹⁸ Plan was closed to new entrants as of December 31, 1969, in favor of the Public Employees Retirement Plan, and short service members and members opting for Social Security coverage were transferred to the Public Employees Retirement Plan. Plan was consolidated into the Public Employees Retirement Plan in 1973.
- ¹⁹ Plan was closed to new entrants and reemployed former members as of April 14, 1982.
- ²⁰ Plan was authorized in 1909, but not implemented until 1910.
- ²¹ Plan was closed to new entrants as of June 15, 1980 and consolidated into the Public Employees Police and Fire Plan in 1993.
- ²² Plan was closed to new entrants as of June 15, 1980 and consolidated into the Public Employees Police and Fire Plan in 1991.
- ²³ Plan was closed to new entrants in 1973 and consolidated into the Public Employees Police and Fire Plan in 1989.
- ²⁴ Plan was closed to new entrants in 1976 and consolidated into the Public Employees Police and Fire Plan in 1998.
- ²⁵ Plan consolidated into the Public Employees Police and Fire Plan in 1978.
- ²⁶ Plan was closed to new entrants in 1976 and consolidated into the Public Employees Police and Fire Plan in 1987.
- ²⁷ Plan was closed to new entrants in 1973, and consolidated into the Public Employees Police and Fire Plan in 1990.
- ²⁸ Plan consolidated into the Public Employees Police and Fire Plan in 1973.
- ²⁹ Plan was closed to new entrants in 1975 and consolidated into the Public Employees Police and Fire Plan in 1994.
- ³⁰ Plan was closed to new entrants in 1977 and consolidated into the Public Employee Police and Fire Plan in 1994.
- ³¹ Plan consolidated into the Public Employees Police and Fire Plan in 1990.
- ³² Plan was closed to new entrants as of June 15, 1980 and consolidated into the Public Employees Police and Fire Plan in 1992.
- ³³ Plan was closed to new entrants as of June 15, 1980 and consolidated into the Public Employees Police and Fire Plan in 1987.
- 34 Coverage for active members was transferred to the Public Employees Police and Fire Plan in 1977 and plan was converted to city-operated trust fund for benefit recipients.
- 35 Coverage for salaried firefighters was transferred to the Public Employees Police and Fire Plan in 1973; Plan continues as volunteer firefighters relief association.
- ³⁶ Plan coverage was terminated in 1973.
- ³⁷ Plan was closed to new entrants as of June 15, 1980 and consolidated into the Public Employees Police and Fire Plan in 1989.
- ³⁸ Plan was closed to new entrants in 1971 and consolidated into the Public Employees Police and Fire Plan in 1990.
- ³⁹ Plan was closed to new entrants as of June 15, 1980 and consolidated into the Public Employees Police and Fire Plan in 1985.
- 40 Coverage for active members was transferred to the public Employees Police and Fire Plan in 1969 and plan operates as trust fund for benefit recipients.
- ⁴¹ Plan was closed to new entrants in 1974 and consolidated into the Public Employee Police and Fire Plan in 1994.
- ⁴² Plan was closed to new entrants as of June 15, 1980 and consolidated into the Public Employees Police and Fire Plan in 1990.
- ⁴³ Plan was closed to new entrants in 1974 and consolidated into the Public Employees Police and Fire Plan in 1989.
- ⁴⁴ Plan was closed to new entrants in 1973 and consolidated into the Public Employees Police and Fire Plan in 1997.
- ⁴⁵ Coverage for active members was transferred to the Public Employees Police and Fire Plan in 1978 and plan was converted to city-operated trust fund for benefit recipients.
- ⁴⁶ Plan was closed to new entrants as of June 15, 1980, and consolidated into the Public Employees Police and Fire Plan in 1988.
- ⁴⁷ Plan was closed to new entrants as of June 15, 1980 and consolidated into the Public Employees Police and Fire Plan in 1996.
- ⁴⁸ Plan was closed to new entrants in 1977.
- ⁴⁹ Plan was closed to new entrants in 1976 and consolidated into the Public Employees Police and Fire Plan in 1993.
- ⁵⁰ Plan was closed to new entrants in 1977 and consolidated into the Public Employees Police and Fire Plan in 1993.
- ⁵¹ Plan was closed to new entrants in 1974.
- ⁵² Plan was closed to new entrants as of June 15, 1980.
- Plan was closed to new entrants as of July 1, 1997. Existing members were permitted to elect coverage by the Unclassified State Employees Retirement Program.
- Judges who reach the service credit maximum in the Judges Retirement Plan are covered by the Unclassified State Employees Retirement Program for future service (employee contribution only).
- The plan covers volunteer firefighters, but because it provides benefits based on the salary of a top grade Bloomington police officer, with post-retirement escalation, the plan is considered to be a salaried firefighter pension plan.
- ⁵⁶ The plan was closed to new entrants in 1980 and consolidated into the Public Employees Police and Fire Plan in 1998.
- ⁵⁷ The plan was closed to new entrants in 1980 and consolidated into the Public Employees Police and Fire Plan in 1997.
- The plan was authorized in 1909, but not implemented until 1910, and the plan was consolidated into the Teachers Retirement Association in June/July 2006.

Minnesota Public Pension Plans Local Police and Paid Fire Relief Associations Phase-out or Consolidation into the Public Employees Police and Fire Fund (PERA-P&F)

Updated Through December 31, 2000

Relief Association		Phase-Out Into PERA-P&F	Consolidation Into PERA-P&F	Merged Into PERA-P&F
Albert Lea	Fire Police	MN Statutes, Sec. 423A.01 (1980) MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1993) MN Statutes, Chap. 353A (1991)	Laws 1999, Chap. 222, Art. 4 Laws 1999, Chap. 222, Art. 4
Anoka	Police	Laws 1973, Chap. 587	MN Statutes, Chap. 353A (1989)	Laws 1999, Chap. 222, Art. 4
Austin	Fire Police	Laws 1976, Chap. 36 Laws 1976, Chap. 36	MN Statutes, Chap. 353A (1998) MN Statutes, Chap. 353A (1993)	Laws 1999, Chap. 222, Art. 4 Laws 1999, Chap. 222, Art. 4
Bloomington	Police	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1993)	Laws 1999, Chap. 222, Art. 4
Brainerd	Police	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1996)	Laws 1999, Chap. 222, Art. 4
Brooklyn Center	Police		Laws 1978, Chap. 684	Laws 1978, Chap. 684
Buhl	Police	Laws 1976, Chap. 247	MN Statutes, Chap. 353A (1987)	Laws 1999, Chap. 222, Art. 4
Chisholm	Fire Police	Laws 1973, Chap. 433 Laws 1973, Chap. 433	MN Statutes, Chap. 353A (1990) MN Statutes, Chap. 353A (1990)	Laws 1999, Chap. 222, Art. 4 Laws 1999, Chap. 222, Art. 4
Cloquet	Fire		Laws 1973, Chap. 563	Laws 1973, Chap. 563
Columbia Heigh	ts Fire Police	Laws 1975, Chap. 424 Laws 1977, Chap. 374	MN Statutes, Chap. 353A (1994) MN Statutes, Chap. 353A (1994)	Laws 1999, Chap. 222, Art. 4 Laws 1999, Chap. 222, Art. 4
Crookston	Fire Police	 MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1990) MN Statutes, Chap. 353A (1998)	Laws 1999, Chap. 222, Art. 4 Laws 1999, Chap. 222, Art. 4
Crystal	Police	Ordinance, Ratified by Laws 1980, Chap. 607, Art. XV, Sec. 23	MN Statutes, Chap. 353A (1992)	Laws 1999, Chap. 222, Art. 4
Duluth	Fire Police	MN Statutes, Sec. 423A.01 (1980) MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1992) MN Statutes, Chap. 353A (1987)	Laws 1999, Chap. 222, Art. 4 Laws 1999, Chap. 222, Art. 4
Eveleth	Fire Police	 	Laws 1977, Chap. 61 Laws 1977, Chap. 61	
Fairmont	Police	Laws 1977, Chap. 100		
Faribault	Fire Police	Laws 1985, Chap. 259, Sec. 5 Laws 1985, Chap. 259, Sec. 5	MN Statutes, Chap. 353A (1991) MN Statutes, Chap. 353A (1996)	Laws 1999, Chap. 222, Art. 4 Laws 1999, Chap. 222, Art. 4
Fridley	Fire Police	Laws 1977, Chap. 83	Laws 1973, Chap. 594 MN Statutes, Chap. 353A (1993)	Laws 1973, Chap. 594 Laws 1999, Chap. 222, Art. 4
Gilbert	Police	Laws 1973, Chap. 382		
Hibbing	Fire Police	MN Statutes, Sec. 423A.01 (1980) MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1989) MN Statutes, Chap. 353A (1989)	Laws 1999, Chap. 222, Art. 4 Laws 1999, Chap. 222, Art. 4

Minnesota Public Pension Plans Local Police and Paid Fire Relief Associations Phase-out or Consolidation into the Public Employees Police and Fire Fund (PERA-P&F)

Updated Through December 31, 2000

Relief Association		Phase-Out Into PERA-P&F	Consolidation Into PERA-P&F	Merged Into PERA-P&F
Mankato	Fire	Laws 1971, Chap. 407	MN Statutes, Chap. 353A (1990)	Laws 1999, Chap. 222, Art. 4
	Police	Laws 1971, Chap. 407	MN Statutes, Chap. 353A (1997)	Laws 1999, Chap. 222, Art. 4
Minneapolis	Fire	MN Statutes, Sec. 423A.01 (1980)		
	Police	MN Statutes, Sec. 423A.01 (1980)		
Moorhead	Fire Police	MN Statutes, Sec. 423A.01 (1980) MN Statutes, Sec. 423A.01 (1980)	Laws 1985, Chap. 261, Secs. 25- 31 Laws 1985, Chap. 261, Secs. 25- 31	Laws 1985, Chap. 261, Secs. 25-31 Laws 1985, Chap. 261, Secs. 25-31
Nashwauk	Police	Laws 1969, Chap. 569		
New Ulm	Police	Laws 1974, Chap. 251	MN Statutes, Chap. 353A (1994)	Laws 1999, Chap. 222, Art. 4
Red Wing	Fire	Laws 1973, Chap. 359	MN Statutes, Chap. 353A (1989)	Laws 1999, Chap. 222, Art. 4
	Police	Laws 1973, Chap. 346	MN Statutes, Chap. 353A (1990)	Laws 1999, Chap. 222, Art. 4
Richfield	Fire	Ordinance, Ratified by Laws 1980, Chap. 607, Art. XV, Sec. 23	MN Statutes, Chap. 353A (1997)	Laws 1999, Chap. 222, Art. 4
	Police	Ordinance, Ratified by Laws 1980, Chap. 607, Art. XV, Sec. 23	MN Statutes, Chap. 353A (1991)	Laws 1999, Chap. 222, Art. 4
Rochester	Fire	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1990)	Laws 1999, Chap. 222, Art. 4
	Police	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1989)	Laws 1999, Chap. 222, Art. 4
St. Cloud	Fire	Laws 1974, Chap. 382	MN Statutes, Chap. 353A (1989)	Laws 1999, Chap. 222, Art. 4
	Police	Laws 1973, Chap. 432	MN Statutes, Chap. 353A (1997)	Laws 1999, Chap. 222, Art. 4
St. Louis Park	Fire	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1989)	Laws 1999, Chap. 222, Art. 4
	Police	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1990)	Laws 1999, Chap. 222, Art. 4
St. Paul	Fire	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1992)	Laws 1999, Chap. 222, Art. 4
	Police	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1993)	Laws 1999, Chap. 222, Art. 4
South St. Paul	Fire	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1993)	Laws 1999, Chap. 222, Art. 4
	Police	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1997)	Laws 1999, Chap. 222, Art. 4
Thief River Falls	Police		Laws 1978, Chap. 689	
Virginia	Fire	Laws 1974, Chap. 183		
	Police	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1996)	Laws 1999, Chap. 222, Art. 4
West St. Paul	Fire	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1988)	Laws 1999, Chap. 222, Art. 4
	Police	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1993)	Laws 1999, Chap. 222, Art. 4
Winona	Fire	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1989)	Laws 1999, Chap. 222, Art. 4
	Police	MN Statutes, Sec. 423A.01 (1980)	MN Statutes, Chap. 353A (1990)	Laws 1999, Chap. 222, Art. 4

Minnesota Public Pension Plans Major and Statewide Plans, Fund and Administration

Benefit Plan General State Employees Retirement	Benefit Plan Administration Minnesota State Retirement System	Pension Fund State Employees Retirement Fund	Investment Authority State Board of Investment
Plan	,		
Military Affairs Personnel Retirement Plan	Minnesota State Retirement System	State Employees Retirement Fund	State Board of Investment
Transportation Dept. Pilots Retirement Plan	Minnesota State Retirement System	State Employees Retirement Fund	State Board of Investment
State Fire Marshal Division Arson Investigators Retirement Plan	Minnesota State Retirement System	State Employees Retirement Fund	State Board of Investment
Correctional Employees Retirement Plan	Minnesota State Retirement System	Correctional Employees Retirement Fund	State Board of Investment
State Patrol Retirement Plan	Minnesota State Retirement System	State Patrol Retirement Fund	State Board of Investment
Elective State Officers Retirement Plan	Minnesota State Retirement System	None (State General Fund)	N/A
Unclassified State Employees Retirement Program	Minnesota State Retirement System	Minnesota Supplemental Investment Fund	State Board of Investment
Legislators Retirement Plan	Minnesota State Retirement System	None (Minnesota Post Retirement Investment Fund; State General Fund)	State Board of Investment
Judges Retirement Plan	Minnesota State Retirement System	Judges Retirement Fund	State Board of Investment
Public Employees Retirement Plan	Public Employees Retirement Association	Public Employees Retirement Fund	State Board of Investment
Public Employees Police and Fire Plan	Public Employees Retirement Association	Public Employees Police and Fire Fund	State Board of Investment
Public Employees Local Government Correctional Service Retirement Plan	Public Employees Retirement Association	Local Government Correctional Service Retirement Fund	State Board of Investment
Ambulance Service Personnel Longevity Plan	Emergency Medical Services Regulatory Board	Minnesota Supplemental Investment Fund	State Board of Investment
Teachers Retirement Plan	Teachers Retirement Association	Teachers Retirement Fund	State Board of Investment
MnSCU Supplemental Retirement Plan	Minnesota State Colleges and Universities Board	Minnesota Supplemental Investment Fund and outside investment vehicles	State Board of Investment/ Outside Vendors
MnSCU Individual Retirement Account Plan	Minnesota State Colleges and Universities Board	Minnesota Supplemental Investment Fund and outside investment vehicles	State Board of Investment/ Outside Vendors
Duluth Teachers Retirement Plan	Duluth Teachers Retirement Fund Association	Duluth Teachers Retirement Fund	Duluth Teachers Retirement Fund Association Board
St. Paul Teachers Retirement Plan	St. Paul Teachers Retirement Fund Association	St. Paul Teachers Retirement Fund	St. Paul Teachers Retirement Fund Association Board
Minneapolis Employees Retirement Plan	Minneapolis Employees Retirement Fund	Minneapolis Employees Retirement Fund	Minneapolis Employees Retirement Fund Board

A. ACTIVE MEMBERSHIP

MERF

DTRFA

MTRFA

SPTRFA

Group Average

1.	Number						
••	Plan	1985	1990	1995	2000	2005	2006
	MSRS-General	45,590	49,576	49,705	47,920	47,125	48,000
	PERA-General	86,312	102,664	126,612	135,560	142,303	144,244
	TRA	58,533	64,324	67,558	70,508	74,552	79,164
	Subtotal						
	Subiolai	190,435	216,564	243,875	253,988	263,980	271,408
	MSRS-Correctional	1,191	1,416	2,117	3,098	3,607	3,910
	State Patrol	764	788	803	830	831	851
	PERA-P&F	4,928	6,136	7,380	9,627	10,235	10,591
	P&F Consolidation Accounts	, 	287	1,061	,	,	,
	Local Govt. Correctional				2,781	3,352	3,531
	Subtotal	6,883	8,627	11,361	16,336	18,025	18,883
					, , , , , ,		
	Legislators	201	201	198	173	78	76
	Elected State Officers	6	6	6	0	0	0
	Judges	<u>240</u>	<u> 262</u>	<u>271</u>	<u>282</u>	<u>295</u>	<u>303</u>
	Subtotal	447	469	475	455	373	379
	MERF	3,812	2,730	2,036	1,152	462	335
	DTRFA	1,182	1,553	1,512	1,441	1,164	1,174
	MTRFA	2,758	3,252	4,686	5,777	4,756	
	SPTRFA	2,888	3,343	3,742	4,445	4,349	4,202
	Subtotal	6,828	8,148	9,940	11,663	10,269	5,376
2.	Average Covered Salary						
۷.	Plan	<u>1985</u>	1990	<u>1995</u>	2000	2005	<u>2006</u>
	MSRS-General	\$23,667	\$30,529	\$32,425	\$39,652	\$44,235	\$44,950
	PERA-General		. ,	23,149			
		16,497	20,203	,	26,577	31,840	32,611
	TRA	23,811	30,030	34,416	39,906	45,459	46,838
	Group Average	\$20,462	\$25,486	\$28,161	\$32,744	\$37,899	\$38,943
	MSRS-Correctional	\$26,075	\$33,245	\$33,549	\$41,174	\$40,861	\$41,623
	State Patrol	33,830	43,684	49,611	62,627	66,356	67,879
	PERA-P&F	28,251	35,206	42,532	51,328	61,144	63,081
	P&F Consolidation Accounts		37,928	50,216			
	Local Govt. Correctional				29,061	38,554	39,956
	Group Average	\$28,494	\$35,749	\$42,076	\$46,186	\$53,124	\$54,524
	Legislators	\$22,423	\$31,987	\$36,326	\$34,932	\$40,573	\$40,506
	Elected State Officers	61,000	71,270	75,374	φ34,932	Ψ+0,575	ψ+υ,υυυ
		64,671	71,270 78,862			121,832	120 550
	Judges			86,453	99,949 \$75,229		120,558 \$104,505
	Group Average	\$45,624	\$58,676	\$65,418	\$75,228	\$104,840	\$104,505

\$33,949

\$26,109

38,064

32,869

\$33,654

\$40,986

\$32,054

37,233

39,610

\$37,340

\$47,068

\$36,851

44,225

42,283

\$42,574

\$26,165

\$26,415

31,778

26,265

\$28,518

\$57,608

\$48,314

48,614

52,384

\$50,177

\$58,300

\$48,963

55,739

\$54,259

A. ACTIVE MEMBERSHIP

2 Average Age							
3. Average Age Plan MSRS-General PERA-General TRA Group Average	1985 39.6 42.2 41.5 41.4	1990 40.9 42.6 42.8 42.3	1995 42.7 43.3 42.9 43.1	2000 44.3 44.4 42.6 43.9	2005 46.0 45.8 43.1 45.1	2006 46.2 46.0 43.3 45.2	
MSRS-Correctional State Patrol PERA-P&F P&F Consolidation Accounts Local Govt. Correctional Group Average	36.0 40.5 37.2 37.4	37.5 40.6 37.6 45.9 38.1	38.0 42.3 38.4 48.1 39.5	40.3 40.8 38.7 37.5 38.9	40.5 41.1 39.2 38.8 39.5	40.2 41.0 39.3 38.7 39.5	
Legislators Elected State Officers Judges <i>Group Average</i>	45.6 46.2 <u>53.2</u> 49.7	49.4 52.1 <u>52.9</u> 51.4	49.3 52.0 <u>53.0</u> 51.4	53.8 <u>54.4</u> 54.2	58.9 <u>56.2</u> 56.8	60.3 <u>56.1</u> 56.9	
MERF	47.6	48.8	51.0	52.9	55.6	56.5	
DTRFA MTRFA SPTRFA <i>Group Average</i>	43.5 44.0 42.9 43.4	43.2 44.7 <u>43.3</u> 43.8	43.9 43.3 <u>43.9</u> 43.6	44.1 42.6 <u>43.1</u> 43.0	46.4 44.5 <u>44.1</u> 44.5	46.3 <u>44.6</u> 45.0	
4. Average Service Plan MSRS-General PERA-General TRA Group Average	1985 8.9 8.1 11.5 9.3	1990 9.6 8.3 12.3 9.8	1995 11.1 8.2 12.5 10.0	2000 11.7 9.0 11.7 10.3	2005 12.7 9.9 11.7 10.9	2006 12.5 10.0 11.6 10.9	
MSRS-Correctional State Patrol PERA-P&F P&F Consolidation Accounts Local Govt. Correctional Group Average	7.0 13.7 9.4 9.5	8.1 13.8 10.1 19.7 10.4	7.2 15.1 10.5 22.0 ——————————————————————————————————	7.8 12.9 11.0 0.9 8.8	7.7 12.6 11.3 3.9 9.3	7.4 12.3 11.3 4.2 9.2	
Legislators Elected State Officers Judges Group Average	5.9 5.9 <u>11.5</u> 8.9	8.7 10.2 <u>10.7</u> 9.8	8.0 10.3 <u>10.6</u> 9.5	11.8 <u>10.9</u> 11.2	16.9 <u>11.4</u> 12.6	17.9 <u>11.3</u> 12.6	
MERF	15.1	19.0	23.0	26.7	30.1	31.1	
DTRFA MTRFA SPTRFA <i>Group Average</i>	12.0 14.4 <u>11.6</u> 12.8	10.2 13.7 <u>11.3</u> 12.0	10.5 9.6 <u>11.2</u> 10.3	10.5 8.4 <u>10.8</u> 9.6	12.4 10.1 <u>10.9</u> 10.7	12.0 <u>11.4</u> 11.5	

A. ACTIVE MEMBERSHIP

5.	Average Member Contribution	n					
	<u>Plan</u>	<u> 1985</u>	<u> 1990</u>	<u> 1995</u>	<u>2000</u>	<u> 2005</u>	<u> 2006</u>
	MSRS-General	\$891	\$1,267	\$1,320	\$1,586	\$1,769	\$1,798
	PERA-General	732	897	998	1,268	1,688	1,836
	TRA	<u>1,113</u>	<u>1,375</u>	2,240	<u>1,996</u>	2,273	<u>2,581</u>
	Group Average	\$887	\$1,124	\$1,408	\$1,530	\$1,868	\$2,047
	MSRS-Correctional	\$1,278	\$1,629	\$1,644	\$2,343	\$2,325	\$2,368
	State Patrol	2,876	3,713	4,426	5,260	5,574	5,702
	PERA-P&F	2,260	2,816	3,232	3,182	4,036	4,668
	P&F Consolidation Accounts		2,849	3,816			
	Local Govt. Correctional				<u>1,694</u>	<u>2,248</u>	<u>2,329</u>
	Group Average	\$2,158	\$2,704	\$3,075	\$2,875	\$3,432	\$3,802
	Legislators	\$2,020	\$2,881	\$3,268	\$3,145	\$3,652	\$3,746
	Elected State Officers	5,500	6,333	6,833	0		
	Judges	<u>2,671</u>	<u>3,401</u>	<u>5,498</u>	<u>7,996</u>	<u>9,747</u>	<u>9,645</u>
	Group Average	\$2,416	\$3,216	\$4,585	\$6,152		
	MERF	\$2,551	\$3,310	\$3,996	\$4,773	\$5,617	\$5,684
	DTRFA	\$1,188	\$1,175	\$1,763	\$2,027	\$2,657	\$2,696
	MTRFA	2,517	2,704	2,295	2,699	2,790	
	SPTRFA	<u>1,870</u>	<u>2,136</u>	2,338	2,708	3,002	3,172
	Group Average	\$2,013	\$2,180	\$2,230	\$2,619	\$2,865	\$3,066

6.	Average	Employer	Contribution
----	---------	-----------------	--------------

<u>Plan</u>	<u> 1985</u>	<u> 1990</u>	<u> 1995</u>	<u>2000</u>	<u> 2005</u>	<u> 2006</u>
MSRS-General	\$956	\$1,310	\$1,362	\$1,586	\$1,769	\$1,798
PERA-General	813	972	1,066	1,385	1,837	1,999
TRA	<u>2,180</u>	<u>2,468</u>	<u>2,804</u>	<u>1,996</u>	<u>2,273</u>	2,450 ³
Group Average	\$1,267	\$1,494	\$1,608	\$1,593	\$1,949	\$2,095
MSRS-Correctional	\$2,269	\$2,085	\$2,103	\$3,286	\$3,261	\$3,322
State Patrol	6,394	6,500	7,382	7,892	8,361	8,553
PERA-P&F	3,390	4,225	4,849	4,773	6,053	7,002
P&F Consolidation Accounts		14,924	5,725			
Local Govt. Correctional				<u>2,543</u>	<u>3,373</u>	<u>3,496</u>
Group Average	\$3,529	\$4,437	\$4,598	\$4,270	\$5,102	\$5,654
Legislators	1	1	1	1	2	2
Elected State Officers	2	2	2	2	2	2
Judges	1	\$ <u>14,393</u>	\$ <u>19,018</u>	\$ <u>20,489</u>	\$24,976	\$24,714
Group Average		ф <u>т 1,000</u> 	φ <u>το;στο</u> 	φ <u>20; .00</u> 	<u> </u>	φ= .,
MERF	¢4	\$6,010	\$9,102 ³	\$10,457 ³	\$18,147 ³	\$23,023 ³
WERF	\$4,575	\$6,010	Φ9,10∠	\$10,457	Ф10,147	\$23,023
DTRFA	\$1,530	\$1,512	\$1,856 ³	\$2,134 ³	\$2,797	\$2,835
MTRFA	3,835	3,905	3,650 ³	3,956 ³	4,113 ³	³
SPTRFA	2,781	3,004	3,780 ³	4,058 ³	4,531 ³	4,788 ³
Group Average	\$2,990	\$3,079	\$3,426	\$3,770	\$4,139	\$4,225

¹ Plan is terminally funded, meaning that the State contribution is made only upon the retirement of each participant.

² Plan is funded on a current disbursements or "pay-as-you-go" basis, meaning that the State funds the retirement annuities or benefits monthly when they are done.

³ Plan is funded also with a direct State appropriation, excluded from this calculation, which would increase the total employer contribution amount. As part of the 2006 consolidation of MTRFA into TRA, the MTRFA direct State appropriation transferred to TRA.

B. SERVICE RETIREES

1.	Number						
	Plan	1985	1990	1995	2000	2005	2006
	MSRS-General	10,464	11,810	14,004	16,276	19,202	19,903
	PERA-General	17,277	24,314	31,487	39,940	48,147	50,302
	TRA	12,798	<u>16,133</u>	21,458	29,525	35,779	41,009
	Subtotal	40,539	52,257	66,949	85,741	103,128	111,214
	MSRS-Correctional	309	340	399	616	1,025	1,101
	State Patrol	285	346	401	531	612	626
	PERA-P&F	765	1,057	1,435	3,991	4,668	4,756
	P&F Consolidation Accounts		248	1,349			
	Local Govt. Correctional				9	<u>113</u>	<u> 144</u>
	Subtotal	1,359	1,991	3,584	5,147	6,418	6,627
	Legislators	108	126	155	210	251	256
	Elected State Officers	6	3	5	8	11	11
	Judges	<u>83</u>	<u>105</u>	<u>131</u>	<u>153</u> 371	<u>163</u>	<u>169</u>
	Subtotal	197	234	291	371	425	436
	MERF	3,459	3,688	3,657	3,757	3,737	3736
	DTRFA	562	634	788	937	1,164	1,174
	MTRFA	2,153	2,254	2,482	3,033	3,537	
	SPTRFA	<u>963</u>	<u>1,111</u>	<u>1,334</u>	<u>1,728</u>	<u>2,214</u>	<u>2319</u>
	Subtotal	3,678	3,999	4,604	5,698	6,915	3,493
2.	Average Benefit						
	<u>Plan</u>	1985	1990	1995	2000	2005	2006
	MSRS-General	\$3,784	\$5,891	\$7,898	\$13,103	\$15,624	\$15,876
	PERA-General	4,617	6,493	7,696	11,458	12,720	12,744
	TRA	6,680	10,781	15,952	26,617	27,756	28,236
	Group Average	\$5,053	\$7,681	\$10,381	\$16,990	\$18,477	\$19,017

Average benefit						
<u>Plan</u>	<u> 1985</u>	<u> 1990</u>	<u> 1995</u>	<u>2000</u>	<u> 2005</u>	<u> 2006</u>
MSRS-General	\$3,784	\$5,891	\$7,898	\$13,103	\$15,624	\$15,876
PERA-General	4,617	6,493	7,696	11,458	12,720	12,744
TRA	<u>6,680</u>	<u>10,781</u>	<u>15,952</u>	<u> 26,617</u>	<u>27,756</u>	<u>28,236</u>
Group Average	\$5,053	\$7,681	\$10,381	\$16,990	\$18,477	\$19,017
	_	_				
MSRS-Correctional	\$4,966	\$7,306	\$11,592	\$15,619	\$20,496	\$17,484
State Patrol	11,745	19,066	25,865	43,808	51,456	52,668
PERA-P&F	8,271	13,592	18,613	35,115	41,928	42,804
P&F Consolidation Accounts		17,107	23,377			
Local Govt. Correctional				427	<u>2,568</u>	<u>3,216</u>
Group Average	\$8,248	\$13,908	\$20,447	\$33,618	\$38,721	\$38,669
	#0.500	# 0.004		* • • • • • • • • • • • • • • • • • • •	***	400.004
Legislators	\$6,568	\$8,884	\$11,751	\$17,864	\$20,424	\$20,664
Elected State Officers	13,836	21,009	20,070	26,612	29,088	29,796
Judges	<u>19,880</u>	<u>27,410</u>	<u>35,855</u>	<u>55,729</u>	<u>61,404</u>	<u>61,992</u>
Group Average	\$12,398	\$17,352	\$22,745	\$33,668	\$36,365	\$36,914
MEDE	#0.500	#40.050	# 40.400	004440	# 00.000	#04.000
MERF	\$8,598	\$13,258	\$16,463	\$24,148	\$30,396	\$31,296
DTRFA	\$4,044	\$5,027	\$9,581	\$13,853	\$16,740	\$17,016
MTRFA	7,384	14,462	18,737	27,928	32,820	
SPTRFA	9,422	12,384	16,523	26,874	31,440	31,884
Group Average	\$7,407	\$12,389	\$16,528	\$25,294	\$29,671	\$26,887
Group Average	Ψ1,401	ψ12,309	ψ10,320	Ψ25,234	Ψ23,011	Ψ20,001

C. SURVIVORS

1.	Number						
	<u>Plan</u>	<u> 1985</u>	<u> 1990</u>	<u> 1995</u>	<u>2000</u>	<u>2005</u>	<u>2006</u>
	MSRS-General	537	899	1,313	1,955	2,731	2,793
	PERA-General	3,854	4,414	5,260	6,010	6,650	6,818
	TRA	<u>781</u>	929	<u>1,331</u>	<u>1,912</u>	2,597	3,044
	Subtotal	5,172	6,242	7,904	9,877	11,978	12,655
	MSRS-Correctional	8	15	25	56	104	106
	State Patrol	109	105	121	157	178	179
	PERA-P&F	279	347	426	1,205	1,261	1,280
	P&F Consolidation Accounts		129	580			
	Local Govt. Correctional				<u>0</u> 1,418	8	9
	Subtotal	396	596	1,152	1,418	1,551	1,574
	Legislators	41	37	61	70	70	63
	Elected State Officers	3	5	6	5	4	4
	Judges	<u>52</u> 96	<u>64</u>	<u>77</u> 144	<u>82</u> 157	<u>85</u>	<u>83</u> 150
	Subtotal	96	106	144	157	159	150
	MERF	938	942	987	1,056	986	974
	DTRFA	23	29	46	53	94	97
	MTRFA	140	204	225	254	277	
	SPTRFA	<u>112</u>	<u>129</u>	<u>170</u>	<u>213</u>	<u>259</u>	<u>280</u>
	Subtotal	275	362	441	520	630	377

2. <i>I</i>	Average	Benefit
-------------	---------	---------

Average belieft						
<u>Plan</u>	<u>1985</u>	<u>1990</u>	<u> 1995</u>	<u>2000</u>	<u> 2005</u>	<u>2006</u>
MSRS-General	\$2,828	\$4,645	\$6,601	\$11,405	\$14,196	\$14,100
PERA-General	2,574	4,475	6,856	11,382	13,548	13,884
TRA	<u>5,594</u>	9,150	12,990	<u>21,623</u>	24,348	<u>25,356</u>
Group Average	\$3,056	\$5,195	\$7,847	\$13,369	\$16,037	\$16,691
MSRS-Correctional	\$5,078	\$4,501	\$5,948	\$8,877	\$10,932	\$10,632
State Patrol	4,454	7,875	13,493	22,137	25,452	27,144
PERA-P&F	3,886	6,770	10,864	18,867	23,496	24,288
P&F Consolidation Accounts		8,453	11,854			
Local Govt. Correctional				0	4,188	4,680
Group Average	\$4,066	\$7,272	\$11,532	\$18,835	\$22,778	\$23,581
Legislators	\$2,437	\$4,242	\$5,537	\$9,539	\$12,708	\$13,296
Elected State Officers	7,451	9,874	11,107	20,446	n/r	n/r
Judges	9,888	14,502	20,148	33,899	38,772	<u>39,636</u>
Group Average	\$6,630	\$10,702	\$13,582	\$22,609	\$27,001	\$28,270
MERF	\$5,143	\$8,454	\$11,453	\$17,586	n/r	n/r
DTRFA	\$2,638	\$3,308	\$7,521	\$11,528	\$13,068	\$13,692
MTRFA	5,959	10,046	13,672	21,587	27,048	
SPTRFA	5,501	7,376	10,075	<u> 19,865</u>	24,984	25,248
Group Average	\$5,495	\$8,555	\$11,644	\$19,856	\$24,114	\$22,275

D. DISABILITANTS

1.	Number						
	<u>Plan</u>	<u> 1985</u>	<u>1990</u>	<u> 1995</u>	<u>2000</u>	<u> 2005</u>	<u>2006</u>
	MSRS-General	695	676	824	1,070	1,434	1,508
	PERA-General	654	708	959	1,397	1,853	1,940
	TRA	223	<u>257</u>	<u>379</u>	<u>509</u>	<u> 581</u>	<u>630</u>
	Subtotal	1,572	1,641	2,162	2,976	3,868	4,078
	MSRS-Correctional	12	9	25	75	150	168
	State Patrol	13	14	18	22	35	41
	PERA-P&F	54	89	146	482	686	765
	P&F Consolidation Accounts		16	53			
	Local Govt. Correctional				<u>3</u> 582	<u>59</u>	<u>70</u>
	Subtotal	79	128	242	582	930	1044
	Legislators						
	Elected State Officers						
	Judges	<u>4</u> 4	<u>9</u> 9	<u>7</u> 7	<u>4</u> 4	<u>7</u> 7	<u>9</u> 9
	Subtotal	4	9	7	4	7	9
	MERF	261	258	240	213	185	172
	DTRFA	8	11	7	6	16	17
	MTRFA	47	40	49	20	25	
	SPTRFA	<u>28</u> 83	<u>30</u> 81	<u>35</u> 91	<u>23</u> 49	<u>32</u> 73	<u>25</u> 42
	Subtotal	83	81	91	49	73	42

2.	Average Benef	it
	<u>Plan</u>	

<u>Plan</u>	<u>1985</u>	<u>1990</u>	<u> 1995</u>	2000	<u>2005</u>	<u>2006</u>
MSRS-General	\$2,924	\$4,159	\$5,613	\$9,434	\$11,268	\$11,640
PERA-General	4,911	5,487	6,712	9,077	9,948	10,008
TRA	7,834	<u>10,759</u>	12,743	<u> 19,553</u>	19,440	<u> 19,872</u>
Group Average	\$4,447	\$5,766	\$7,350	\$10,997	\$11,863	\$12,135
MSRS-Correctional	\$5,879	\$5,018	\$11,946	\$13,865	\$16,176	\$16,452
State Patrol	10,397	14,228	20,528	31,589	38,100	39,384
PERA-P&F	9,030	13,743	17,535	33,378	40,380	40,968
P&F Consolidation Accounts		15,379	21,871			
Local Govt. Correctional				10,419	<u> 13,608</u>	13,728
Group Average	\$8,776	\$13,387	\$18,130	\$30,677	\$34,692	\$35,134
Legislators						
Elected State Officers						
Judges	\$19,669	<u>\$25,781</u>	\$35,158	\$68,229	\$69,576	\$68,340
Group Average	\$19,669	\$25,781	\$35,158	\$68,229	\$69,576	\$68,340
MERF	\$6,503	\$9,617	\$12,378	\$18,179	\$22,356	\$23,388
DTRFA	\$3,956	\$6,478	\$11,925	\$11,024	\$15,168	\$15,228
MTRFA	7,436	11,832	16,485	35,032	33,816	
SPTRFA	<u>16,640</u>	<u>19,280</u>	23,764	<u>33,018</u>	<u>32,676</u>	30,300
Group Average	\$10,206	\$13,863	\$18,934	\$31,147	\$29,229	\$24,199

E. DEFERRED MEMBERS AND INACTIVE MEMBERS

1. De	eferred	Retirees
-------	---------	----------

<u>Plan</u>	<u> 1985</u>	<u> 1990</u>	<u> 1995</u>	<u>2000</u>	<u>2005</u>	<u>2006</u>
MSRS-General	940	1,824	5,518	11,125	13,592	14,217
PERA-General	1,863	2,699	7,156	21,495	35,768	37,476
TRA	<u>2,191</u>	<u>1,955</u>	5,103	7,375	9,808	<u>11,773</u>
Subtotal	4,994	6,478	17,777	39,995	59,168	63,466
MSRS-Correctional	30	113	296	419	738	817
State Patrol	21	23	19	24	34	33
PERA-P&F	163	128	250	470	927	999
P&F Consolidation Accounts		3	32			
Local Govt. Correctional				<u>0</u> 913	<u>915</u>	<u>1,100</u>
Subtotal	214	267	597	913	2,614	2,949
Legislators	111	101	141	90	118	115
Elected State Officers	5	6	5	4	1	1
Judges	7	2	7	<u>9</u> 103	<u>21</u> 140	<u>16</u> 132
Subtotal	123	109	153	103	140	132
MERF	101	97	86	233	174	172
DTRFA	50	42	122	172	313	312
MTRFA	562	519	628	756	1,377	
SPTRFA	<u>36</u>	<u>36</u>	<u>107</u>	243	<u>1,368</u>	<u>1,447</u>
Subtotal	648	597	857	1,171	3,058	1,759

2. Inactive Members

<u>Plan</u>	<u> 1985</u>	<u>1990</u>	<u> 1995</u>	2000	<u>2005</u>	<u>2006</u>
MSRS-General	4,957	4,638	5,242	7,772	7,702	6,828
PERA-General	38,986	7,695	9,683	79,362	100,369	105,590
TRA	<u>13,628</u>	<u>15,356</u>	<u>16,411</u>	17,833	<u> 19,151</u>	21,956
Subtotal	57,271	27,689	31,336	104,967	127,222	134,374
MSRS-Correctional	79	45	74	163	351	388
State Patrol	9	4	5	10	14	8
PERA-P&F	350	121	141	626	729	757
P&F Consolidation Accounts		1	0			
Local Govt. Correctional				0	<u>906</u>	<u>1,086</u>
Subtotal	438	171	220	799	2,000	2,239
Legislators	15	3	9	3	2	2
Elected State Officers	1	0	0	0	0	0
Judges	<u>0</u> 16	<u>1</u> 4	<u>1</u> 10	<u>2</u> 5	<u>0</u> 2	<u>0</u> 2
Subtotal	16	4	10	5	2	2
MERF	197	184	181	0	0	0
DTRFA	0	435	561	575	638	570
MTRFA	60	134	895	1,815	3,604	
SPTRFA	<u>1,770</u>	<u>888</u>	<u>1,066</u>	<u>1,697</u>	<u>1,687</u>	<u>1,671</u>
Subtotal	1,830	1,457	2,522	4,087	5,929	2,241

Actuarial Reporting on Minnesota Public Pension Plans

- ? Before 1957, no state law required any actuarial reporting regarding Minnesota public pension plans.
- ? Regular Minnesota public pension plan actuarial and financial reporting was first required in 1965, with the actuarial valuations prepared by the consulting actuaries retained by the plans.
- ? Since 1984, actuarial reporting on the major and statewide Minnesota public pension plans has been required to be prepared by a single consulting actuary initially retained by the Legislative Commission on Pensions and Retirement (1984-2003) and subsequently retained jointly by the statewide and major local retirement plan administrations.
- ? Actuarial reporting requirements and major economic assumptions are largely prescribed in statute. The statutory regulation of actuarial work is augmented by the Standards for Actuarial Work adopted by the Commission. Additional demographic actuarial assumptions are adopted by the plan governing boards, subject to Commission approval.
- ? Actuarial reporting prepared by the jointly-retained actuary is reviewed or supplemented by the consulting actuaries retained by the various plans.
- ? The cost for the regular pension plan actuarial reporting prepared by jointly-retained actuary is allocated between the various statewide and major pension plans.
- ? Actuarial reporting is intended to assess the adequacy of the total non-investment revenue financial support of the pension plan compared with calculated annual actuarial funding requirements of the pension plan, to assess the extent of conformance with the selected budgetary actuarial method for accumulating financial reserves for pension liabilities, and to provide required actuarial disclosure for governmental accounting purposes.

Nature of Actuarial Funding

- ? Actuarial funding is a mechanism for:
 - 1. Determining the magnitude of pension liabilities previously undertaken by a defined benefit pension plan;
 - 2. Comparing the current pension plan assets reserved for pension purposes with the accrued pension liabilities amassed by a defined benefit pension plan; and
 - 3. Assessing the adequacy of total annual contribution support to meet the total annual funding requirements of a defined benefit pension plan.
- ? Actuarial funding differs from non-actuarial pension funding, which is typically represented by current disbursements (pay-as-you-go) funding, as used by the Social Security System historically.
- ? Many different actuarial funding methods exist and were developed primarily to meet the budgetary needs of a plan sponsor.
- ? Minnesota utilizes the Entry Age Actuarial Cost Method (or Entry Age Normal Cost Actuarial Cost Method), which emphasizes the determination of a level actuarial cost as a percentage of covered payroll over a plan member's working career.
- ? Minnesota actuarial reporting produces:
 - 1. A measure of the magnitude of accrued pension liability:

Actuarial Accrued Liability

2. A pension reserve comparison:

Current Assets (actuarial value of assets)
Unfunded Actuarial Accrued Liability
Funding Ratio (assets expressed as a percentage of

liabilities)

3. Measure of contribution adequacy:

Funding Requirement

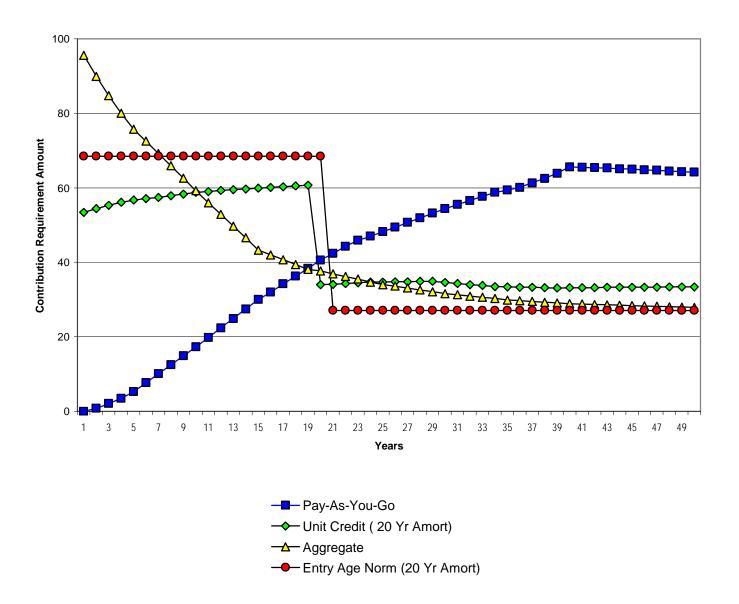
- 1. Normal Cost
- 2. Administrative Expenses
- 3. Supplementary (Amortization) Contribution Total Actuarial Requirement (1. + 2. + 3.)

Contributions

- 4. Member Contributions
- 5. Employer Contributions
- 6. State Aid or Other Regular Funding

Total Contributions (4. + 5. + 6.)

Pattern of Recognizing Pension Costs Over Time Under Various Funding Methods



Source: Robert Tilove, Public Employee Pension Funds, N. Y., Columbia University Press, 1976, pp. 144-145, as adapted from Charles L. Trowbridge, "Fundamentals of Pension Funding," Transactions, Society of Actuaries, Vol. 4, 1952

2006 Actuarial Valuation Results All Plans

	General	al Statewide Employee Plans 2006	Public	l Statewide Safety Plans 2006	Spec	Total Statewide Specialty Plans 2006		Total First Class City Plans 2006		Total Local Police & Paid Fire Plans 2005		Volunteer Fire Plans 2005***		TOTAL LL PLANS
<u>Membership</u>														
Active Members		271,444		18,883		379		5,728		186		16,673		313,293
Service Retirees		111,196		6,627		436		7,114		1,198		1,185		127,756
Disabilitants		4,078		1,044		9		214		60		0		5,405
Survivors		12,655		1,574		150		1,351		427		0		16,157
Deferred Retirees		63,466		2,949		132		1,931		8		3,027		71,513
Nonvested Former Members		<u>134,374</u>		2,239		<u>2</u>		<u>2,241</u>		<u>0</u>		<u>0</u>		<u>138,856</u>
Total Membership		597,213		33,316		1,108		18,579		1,879		20,885		672,980
Funded Status														
Accrued Liability		\$46,236,028,554		\$6,682,829,157		\$287,632,382		\$3,298,502,385		\$872,239,831		\$366,290,782		\$57,743,523,091
Current Assets		\$40,017,575,003		\$6,298,073,804		\$200,561,208		\$2,700,124,757		\$742,885,227		\$374,254,109		\$50,333,474,108
Unfunded Accrued Liability		\$6,218,453,551		\$384,755,353		\$87,071,174		\$598,377,628		\$129,354,604		(\$7,963,327)		\$7,410,048,983
Funding Ratio	86.55%		94.24%		69.73%		81.86%		85.17%		102.17%		87.17%	
Financing Requirements														
Covered Payroll		\$10,569,374,745		\$1,029,681,209		\$39,607,505		\$311,226,609		\$13,691,057		\$0		\$11,963,581,125
Benefits Payable		\$2,339,399,560		\$331,216,882		\$20,763,387		\$241,549,770		\$61,163,380		\$20,415,077		\$3,014,508,056
Normal Cost	8.51%	\$899,343,042	20.31%	\$209,116,992	17.88%	\$7,080,722	9.76%	\$30,383,429	23.93%	\$3,276,715		\$20,905,590	9.78%	\$1,170,106,490
Administrative Expenses	0.25%	<u>\$26,174,778</u>	0.13%	<u>\$1,378,155</u>	0.24%	<u>\$94,807</u>	0.60%	\$1,870,381	0.95%	\$130,480		\$2,454,628	0.27%	\$32,103,229
Normal Cost & Expense	8.76%	\$925,517,820	20.44%	\$210,495,147	18.12%	\$7,175,529	10.36%	\$32,253,810	24.89%	\$3,407,195		\$23,360,218	10.05%	\$1,202,209,719
Normal Cost & Expense	8.76%	\$925,517,820	20.44%	\$210,495,147	18.12%	\$7,175,529	10.36%	\$32,253,810	24.89%	\$3,407,195		\$23,360,218	10.05%	\$1,202,209,719
Amortization	3.29%	\$347,971,104	3.07%	\$31,594,573	20.07%	\$7,947,809	17.25%	\$53,698,001	94.58%	\$12,949,045		\$2,396,127	3.82%	\$456,556,65 <u>9</u>
Total Requirements	12.05%	\$1,273,488,924	23.51%	\$242,089,720	38.18%	\$15,123,338	27.62%	\$85,951,811	119.47%	\$16,356,240		\$25,756,345	13.87%	\$1,658,766,378
Employee Contributions	5.26%	\$555,691,290	6.97%	\$71,776,127	7.70%	\$3,049,257	5.91%	\$18,385,315	0.09%	\$12,010		\$0	5.42%	\$648,913,999
Employer Contributions	5.38%	\$568,650,610	10.37%	\$106,768,011	18.91%	\$7,488,460	9.89%	\$30,789,006	250.65%	\$34,316,353		\$6,552,942	6.31%	\$754,565,382
Employer Add'l Cont.	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.12%	\$362,680	0.00%	\$0		\$0	0.00%	\$362,680
Direct State Funding	0.18%	\$18,819,110	0.00%	\$0	0.00%	\$0	4.44%	\$13,803,000	52.29%	\$7,159,548		\$22,074,813	0.52%	\$61,856,471
Other Govt. Funding	0.02%	\$2,500,000	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0		\$0	0.02%	\$2,500,000
Administrative Assessment	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>		<u>\$0</u>	0.00%	<u>\$0</u>
Total Contributions	10.84%	\$1,145,661,010	17.34%	\$178,544,138	26.61%	\$10,537,717	20.35%	\$63,340,001	303.03%	\$41,487,911		\$28,627,755	12.27%	\$1,468,198,532
Total Requirements	12.05%	\$1,273,488,924	23.51%	\$242,089,720	38.18%	\$15,123,338	27.62%	\$85,951,811	119.47%	\$16,356,240		\$25,756,345	13.87%	\$1,658,766,378
Total Contributions	10.84%	<u>\$1,145,661,010</u>	17.34%	<u>\$178,544,138</u>	26.61%	\$10,537,717	20.35%	<u>\$63,340,001</u>	303.03%	<u>\$41,487,911</u>		<u>\$28,627,755</u>	12.27%	\$1,468,198,532
Deficiency (Surplus)	1.21%	\$127,827,914	6.17%	\$63,545,582		\$4,585,621	7.27%	\$22,611,810		(\$25,131,671)		(\$2,871,410)	1.59%	\$190,567,846

Page 29 1/18/07 Pensions Overview

2006 Actuarial Valuation Results Statewide General Employee Retirement Plans

	MSRS-General 2006			PERA 2006		TRA 2006	Total Statewide General Employee Plans 2006		
<u>Membership</u>									
Active Members		48,000		144,244		79,200		271,444	
Service Retirees		19,903		50,320		40,973		111,196	
Disabilitants		1,508		1,940		630		4,078	
Survivors		2,793		6,818		3,044		12,655	
Deferred Retirees		14,217		37,476		11,773		63,466	
Nonvested Former Members		<u>6,828</u>		<u>105,590</u>		<u>21,956</u>		134,374	
Total Membership		93,249		346,388		157,576		597,213	
Funded Status									
Accrued Liability		\$8,819,160,917		\$16,737,756,758		\$20,679,110,879		\$46,236,028,554	
Current Assets		<u>\$8,486,756,016</u>		<u>\$12,495,207,148</u>		<u>\$19,035,611,839</u>		<u>\$40,017,575,003</u>	
Unfunded Accrued Liability		\$332,404,901		\$4,242,549,610		\$1,643,499,040		\$6,218,453,551	
Funding Ratio	96.23%		74.65%		92.05%		86.55%		
Financing Requirements									
Covered Payroll		\$2,157,579,057		\$4,703,895,104		\$3,707,900,584		\$10,569,374,745	
Benefits Payable		\$366,797,030		\$748,390,506		\$1,224,212,024		\$2,339,399,560	
Normal Cost	8.52%	\$183,605,603	7.78%	\$366,059,040	9.43%	\$349,678,399	8.51%	\$899,343,042	
Administrative Expenses	<u>0.21%</u>	<u>\$4,530,916</u>	0.20%	<u>\$9,407,790</u>	0.33%	\$12,236,072	0.25%	\$26,174,778	
Normal Cost & Expense	8.73%	\$188,136,519	7.98%	\$375,466,830	9.76%	\$361,914,471	8.76%	\$925,517,820	
Normal Cost & Expense	8.73%	\$188,136,519	7.98%	\$375,466,830	9.76%	\$361,914,471	8.76%	\$925,517,820	
Amortization	<u>1.38%</u>	<u>\$29,774,591</u>	4.92%	<u>\$231,431,639</u>	2.34%	<u>\$86,764,874</u>	3.29%	<u>\$347,971,104</u>	
Total Requirements	10.11%	\$217,911,110	12.90%	\$606,898,469	12.11%	\$448,679,345	12.05%	\$1,273,488,924	
Employee Contributions	4.00%	\$86,303,162	5.63%	\$264,931,649	5.51%	\$204,456,479	5.26%	\$555,691,290	
Employer Contributions	4.00%	\$86,303,162	6.13%	\$288,515,428	5.23%	\$193,832,020	5.38%	\$568,650,610	
Employer Add'l Cont.	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	
Direct State Funding	0.00%	\$0	0.00%	\$0	0.51%	\$18,819,110	0.18%	\$18,819,110	
Other Govt. Funding	0.00%	\$0	0.00%	\$0	0.07%	\$2,500,000	0.02%	\$2,500,000	
Administrative Assessment	<u>0.00%</u>	<u>\$0</u>	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>	
Total Contributions	8.00%	\$172,606,324	11.76%	\$553,447,077	11.31%	\$419,607,609	10.84%	\$1,145,661,010	
Total Requirements	10.11%	\$217,911,110	12.90%	\$606,898,469	12.11%	\$448,679,345	12.05%	\$1,273,488,924	
Total Contributions	<u>8.00%</u>	\$172,606,324	<u>11.76%</u>	<u>\$553,447,077</u>	<u>11.31%</u>	<u>\$419,607,609</u>	<u>10.84%</u>	<u>\$1,145,661,010</u>	
Deficiency (Surplus)	2.11%	\$45,304,786	1.14%	\$53,451,392	0.80%	\$29,071,736	1.21%	\$127,827,914	

Page 30 1/18/07 Pensions Overview

2006 Actuarial Valuation Results Statewide Public Safety Plans

				te Patrol	PE	ERA-P&F	PERA-0	Correctional	Total Statewide Public Safety Plans			
	2	2006	:	2006		2006	:	2006		2006		
<u>Membership</u>												
Active Members		3,910		851		10,591		3,531		18,883		
Service Retirees		1,101		626		4,756		144		6,627		
Disabilitants		168		41		765		70		1,044		
Survivors		106		179		1,280		9		1,574		
Deferred Retirees		817		33		999		1,100		2,949		
Nonvested Former Members		<u>388</u>		<u>8</u>		<u>757</u>		<u>1,086</u>		<u>2,239</u>		
Total Membership		6,490		1,738		19,148		5,940		33,316		
Funded Status												
Accrued Liability		\$647,480,269		\$641,479,078		\$5,260,564,020		\$133,305,790		\$6,682,829,157		
Current Assets		<u>\$535,356,819</u>		<u>\$618,990,349</u>		<u>\$5,017,950,719</u>		<u>\$125,775,917</u>		<u>\$6,298,073,804</u>		
Unfunded Accrued Liability		\$112,123,450		\$22,488,729		\$242,613,301		\$7,529,873		\$384,755,353		
Funding Ratio	82.68%		96.49%		95.39%		94.35%		94.24%			
Financing Requirements												
Covered Payroll		\$162,744,640		\$57,765,450		\$668,088,065		\$141,083,054		\$1,029,681,209		
Benefits Payable		\$26,506,726		\$38,767,492		\$264,601,229		\$1,341,435		\$331,216,882		
Normal Cost	17.69%	\$28,786,714	24.41%	\$14,098,467	22.32%	\$149,097,708	12.14%	\$17,134,103	20.31%	\$209,116,992		
Administrative Expenses	0.21%	<u>\$341,764</u>	0.18%	<u>\$103,978</u>	0.11%	<u>\$734,897</u>	0.14%	<u>\$197,516</u>	0.13%	<u>\$1,378,155</u>		
Normal Cost & Expense	17.90%	\$29,128,478	24.59%	\$14,202,445	22.43%	\$149,832,605	12.28%	\$17,331,619	20.44%	\$210,495,147		
Normal Cost & Expense	17.90%	\$29,128,478	24.59%	\$14,202,445	22.43%	\$149,832,605	12.28%	\$17,331,619	20.44%	\$210,495,147		
Amortization	<u>5.44%</u>	<u>\$8,853,309</u>	2.10%	<u>\$1,213,075</u>	3.14%	<u>\$20,977,965</u>	0.39%	<u>\$550,224</u>	3.07%	<u>\$31,594,573</u>		
Total Requirements	23.34%	\$37,981,787	26.69%	\$15,415,520	25.57%	\$170,810,570	12.68%	\$17,881,843	23.51%	\$242,089,720		
Employee Contributions	5.69%	\$9,260,170	8.40%	\$4,852,298	7.40%	\$49,438,517	5.83%	\$8,225,142	6.97%	\$71,776,127		
Employer Contributions	7.98%	\$12,987,022	12.60%	\$7,278,447	11.10%	\$74,157,775	8.75%	\$12,344,767	10.37%	\$106,768,011		
Employer Add'l Cont.	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0		
Direct State Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0		
Other Govt. Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0		
Administrative Assessment	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>		
Total Contributions	13.67%	\$22,247,192	21.00%	\$12,130,745	18.50%	\$123,596,292	14.58%	\$20,569,909	17.34%	\$178,544,138		
Total Requirements	23.34%	\$37,981,787	26.69%	\$15,415,520	25.57%	\$170,810,570	12.68%	\$17,881,843	23.51%	\$242,089,720		
Total Contributions	<u>13.67%</u>	<u>\$22,247,192</u>	21.00%	<u>\$12,130,745</u>	<u>18.50%</u>	<u>\$123,596,292</u>	14.58%	<u>\$20,569,909</u>	17.34%	<u>\$178,544,138</u>		
Deficiency (Surplus)	9.67%	\$15,734,595	5.69%	\$3,284,775	7.07%	\$47,214,278	(1.90%)	(\$2,688,066)	6.17%	\$63,545,582		

Page 31 1/18/07 Pensions Overview

2006 Actuarial Valuation Results Statewide Specialty Retirement Plans

	Elective State Officers 2006		udges 2006	_	islators 2006	Total Statewide Specialty Plans 2006		
<u>Membership</u>								
Active Members	0		303		76		379	
Service Retirees	11		169		256		436	
Disabilitants	0		9		0		9	
Survivors	4		83		63		150	
Deferred Retirees	1		16		115		132	
Nonvested Former Members	<u>0</u>		<u>0</u>		<u>2</u>		<u>2</u>	
Total Membership	16		580		512		1,108	
Funded Status								
Accrued Liability	\$3,969,766		\$202,301,170		\$81,361,446		\$287,632,382	
Current Assets	<u>\$207,099</u>		<u>\$151,850,386</u>		<u>\$48,503,723</u>		\$200,561,208	
Unfunded Accrued Liability	\$3,762,667		\$50,450,784		\$32,857,723		\$87,071,174	
Funding Ratio	5.22% \$0	75.06%		59.62%		69.73%		
Financing Requirements								
Covered Payroll	\$0		\$36,529,039		\$3,078,466		\$39,607,505	
Benefits Payable	\$409,095		\$14,260,083		\$6,094,209		\$20,763,387	
Normal Cost	\$0	17.91%	\$6,538,362	17.61%	\$542,360	17.88%	\$7,080,722	
Administrative Expenses	<u>\$1,000</u>	0.17%	<u>\$62,099</u>	<u>1.03%</u>	<u>\$31,708</u>	0.24%	<u>\$94,807</u>	
Normal Cost & Expense	\$1,000	18.08%	\$6,600,461	18.64%	\$574,068	18.12%	\$7,175,529	
Normal Cost & Expense	\$1,000	18.08%	\$6,600,461	18.64%	\$574,068	18.12%	\$7,175,529	
Amortization	<u>\$476,221</u>	<u>12.65%</u>	<u>\$4,620,928</u>	92.60%	<u>\$2,850,660</u>	<u>20.07%</u>	<u>\$7,947,809</u>	
Total Requirements	\$477,221	30.73%	\$11,221,389	111.24%	\$3,424,728	38.18%	\$15,123,338	
Employee Contributions	\$0	7.59%	\$2,772,195	9.00%	\$277,062	7.70%	\$3,049,257	
Employer Contributions	\$0	20.50%	\$7,488,460	0.00%	\$0	18.91%	\$7,488,460	
Employer Add'l Cont.	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	
Direct State Funding	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	
Other Govt. Funding	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	
Administrative Assessment	<u>\$0</u>	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>	
Total Contributions	\$0	28.09%	\$10,260,655	9.00%	\$277,062	26.61%	\$10,537,717	
Total Requirements	\$477,221	30.73%	\$11,221,389	111.24%	\$3,424,728	38.18%	\$15,123,338	
Total Contributions	<u>\$0</u>	28.09%	<u>\$10,260,655</u>	9.00%	<u>\$277,062</u>	<u>26.61%</u>	<u>\$10,537,717</u>	
Deficiency (Surplus)	\$477,221	2.64%	\$960,734	102.24%	\$3,147,666	11.58%	\$4,585,621	

Page 32 1/18/07 Pensions Overview

2006 Actuarial Valuation Results First Class City Retirement Plans

		TRFA 2006	s	PTRFA 2006		MERF 2006	Total 1st Class City Plans 2006		
<u>Membership</u>									
Active Members		1,174		4,219		335		5,728	
Service Retirees		1,076		2,302		3,736		7,114	
Disabilitants		17		25		172		214	
Survivors		97		280		974		1,351	
Deferred Retirees		312		1,447		172		1,931	
Nonvested Former Members		<u>570</u>		<u>1,671</u>		<u>0</u>		<u>2,241</u>	
Total Membership		3,246		9,944		5,389		18,579	
Funded Status									
Accrued Liability		\$322,229,167		\$1,358,619,906		\$1,617,653,312		\$3,298,502,385	
Current Assets		<u>\$270,925,689</u>		<u>\$938,919,005</u>		<u>\$1,490,280,063</u>		\$2,700,124,757	
Unfunded Accrued Liability		\$51,303,478		\$419,700,901		\$127,373,249		\$598,377,628	
Funding Ratio	84.08%		69.11%		92.13%		81.86%		
Financing Requirements									
Covered Payroll		\$57,482,791		\$234,213,344		\$19,530,474		\$311,226,609	
Benefits Payable		\$19,229,911		\$78,420,222		\$143,899,637		\$241,549,770	
Normal Cost	9.19%	\$5,281,712	9.21%	\$21,575,645	18.05%	\$3,526,072	9.76%	\$30,383,429	
Administrative Expenses	<u>0.76%</u>	<u>\$436,869</u>	0.26%	<u>\$608,955</u>	4.22%	<u>\$824,557</u>	0.60%	<u>\$1,870,381</u>	
Normal Cost & Expense	9.95%	\$5,718,581	9.47%	\$22,184,600	22.28%	\$4,350,629	10.36%	\$32,253,810	
Normal Cost & Expense	9.95%	\$5,718,581	9.47%	\$22,184,600	22.28%	\$4,350,629	10.36%	\$32,253,810	
Amortization	<u>5.24%</u>	<u>\$3,012,098</u>	<u>15.55%</u>	<u>\$36,420,175</u>	73.04%	<u>\$14,265,728</u>	<u>17.25%</u>	<u>\$53,698,001</u>	
Total Requirements	15.19%	\$8,730,679	25.02%	\$58,604,775	95.32%	\$18,616,357	27.62%	\$85,951,811	
Employee Contributions	5.50%	\$3,161,554	5.69%	\$13,319,540	9.75%	\$1,904,221	5.91%	\$18,385,315	
Employer Contributions	5.79%	\$3,328,254	8.59%	\$20,111,296	37.63%	\$7,349,456	9.89%	\$30,789,006	
Employer Add'l Cont.	0.00%	\$0	0.00%	\$0	1.86%	\$362,680	0.12%	\$362,680	
Direct State Funding	0.00%	\$0	2.05%	\$4,803,000	46.08%	\$9,000,000	4.44%	\$13,803,000	
Other Govt. Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	
Administrative Assessment	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>	
Total Contributions	11.29%	\$6,489,808	16.32%	\$38,233,836	95.33%	\$18,616,357	20.35%	\$63,340,001	
Total Requirements	15.19%	\$8,730,679	25.02%	\$58,604,775	95.32%	\$18,616,357	27.62%	\$85,951,811	
Total Contributions	<u>11.29%</u>	<u>\$6,489,808</u>	16.32%	\$38,233,836	95.33%	<u>\$18,616,357</u>	20.35%	<u>\$63,340,001</u>	
Deficiency (Surplus)	3.90%	\$2,240,871	8.70%	\$20,370,939	(0.01%)	\$0	7.27%	\$22,611,810	

Page 33 1/18/07 Pensions Overview

2006 Actuarial Valuation Results Local Police and Paid Fire Plans

	Bloomington Fire 2005		_			Minneapolis Fire Mi 2005			linneapolis Police Virginia Fire 2005 2005			Total Local Police and Paid Fire Plans 2005	
<u>Membership</u>													
Active Members		132		0		37		17	0		186		
Service Retirees		126		10		385		664	13		1,198		
Disabilitants		9		0		50		0	1		60		
Survivors		14		4		166		240	3		427		
Deferred Retirees		8		0		0		0	0		8		
Nonvested Former Members		<u>0</u>		<u>0</u>		_==		<u>0</u>	Ω		<u>0</u>		
Total Membership		289		14		638		921	17		1,879		
Funded Status													
Accrued Liability		\$84,681,811		\$7,733,819		\$312,563,011		\$464,221,542	\$3,039,648		\$872,239,831		
Current Assets		<u>\$105,139,140</u>		<u>\$6,480,110</u>		<u>\$269,425,963</u>		<u>\$359,031,868</u>	<u>\$2,808,146</u>		<u>\$742,885,227</u>		
Unfunded Accrued Liability		(\$20,457,329)		\$1,253,709		\$43,137,048		\$105,189,674	\$231,502		\$129,354,604		
Funding Ratio	124.16%		83.79%		86.20%		77.34%		92.38%	85.17%			
Financing Requirements													
Covered Payroll		\$9,465,706		\$0		\$2,821,419		\$1,403,932	\$0		\$13,691,057		
Benefits Payable		\$2,941,783		\$518,434		\$23,543,793		\$33,789,746	\$369,624		\$61,163,380		
Normal Cost	25.04%	\$2,369,920	0.00%	\$0	23.22%	\$655,070	17.93%	\$251,725	\$0	23.93%	\$3,276,715		
Administrative Expenses	0.71%	<u>\$67,114</u>	0.00%	<u>\$28,143</u>	0.00%		0.00%		<u>\$35,223</u>	0.95%	<u>\$130,480</u>		
Normal Cost & Expense	25.75%	\$2,437,034	0.00%	\$28,143	23.22%	\$655,070	17.93%	\$251,725	\$35,223	24.89%	\$3,407,195		
Normal Cost & Expense	25.75%	\$2,437,034	0.00%	\$28,143	23.22%	\$655,070	17.93%	\$251,725	\$35,223	24.89%	\$3,407,195		
Amortization	<u>(21.61%)</u>	(\$2,045,539)	0.00%	<u>\$336,725</u>	<u>138.86%</u>	<u>\$3,917,905</u>	<u>760.45%</u>	<u>\$10,676,247</u>	<u>\$63,707</u>	94.58%	<u>\$12,949,045</u>		
Total Requirements	4.14%	\$391,495	0.00%	\$364,868	162.08%	\$4,572,975	778.38%	\$10,927,972	\$98,930	119.47%	\$16,356,240		
Employee Contributions	0.00%	\$0	0.00%	\$0	0.43%	\$12,010	0.00%	\$0	\$0	0.09%	\$12,010		
Employer Contributions	16.65%	\$1,576,139	0.00%	\$323,808	250.74%	\$7,074,309	1779.06%	\$24,976,747	\$365,350	250.65%	\$34,316,353		
Employer Add'l Cont.	0.00%	\$0	0.00%	\$0					\$0	0.00%	\$0		
Direct State Funding	6.19%	\$585,966	0.00%	\$0			468.23%	\$6,573,582	\$0	52.29%	\$7,159,548		
Other Govt. Funding	0.00%	\$0	0.00%	\$0					\$0	0.00%	\$0		
Administrative Assessment	0.00%	<u>\$0</u>	0.00%	<u>\$0</u>					<u>\$0</u>	0.00%	<u>\$0</u>		
Total Contributions	22.84%	\$2,162,105	0.00%	\$323,808	251.16%	\$7,086,319	2247.28%	\$31,550,329	\$365,350	303.03%	\$41,487,911		
Total Requirements	4.14%	\$391,495	0.00%	\$364,868			778.38%	\$10,927,972	\$98,930	119.47%	\$16,356,240		
Total Contributions	22.84%	<u>\$2,162,105</u>	0.00%	<u>\$323,808</u>			2247.28%	\$31,550,329	<u>\$365,350</u>	303.03%	<u>\$41,487,911</u>		
Deficiency (Surplus)	(18.71%)	(\$1,770,610)	0.00%	\$41,060			(1468.90%)	(\$20,622,357)	(\$266,420)	(183.56%)	(\$25,131,671)		

Page 34 1/18/07 Pensions Overview

2006 Actuarial Valuation Results Minneapolis Retirement Plans

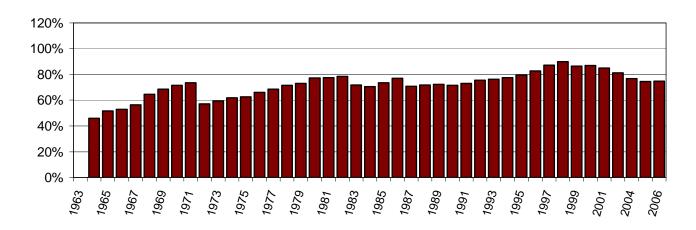
	MERF 2006			Minneapolis Fire 2005		Minneapolis Police 2005		Total Mpls Plans 2005	
<u>Membership</u>									
Active Members		335		37		17		389	
Service Retirees		3,736		385		664		4,785	
Disabilitants		172		50		0		222	
Survivors		974		166		240		1,380	
Deferred Retirees		172		0		0		172	
Nonvested Former Members		<u>0</u>				<u>0</u>		<u>0</u>	
Total Membership		5,389		638		921		6,948	
Funded Status									
Accrued Liability		\$1,617,653,312		\$312,563,011		\$464,221,542		\$2,394,437,865	
Current Assets		<u>\$1,490,280,063</u>		<u>\$269,425,963</u>		<u>\$359.031.868</u>		\$2,118,737,894	
Unfunded Accrued Liability		\$127,373,249		\$43,137,048		\$105,189,674		\$275,699,971	
Funding Ratio	92.13%		86.20%		77.34%		88.49%		
Financing Requirements									
Covered Payroll		\$19,530,474		\$2,821,419		\$1,403,932		\$23,755,825	
Benefits Payable		\$143,899,637		\$23,543,793		\$33,789,746		\$201,233,176	
Normal Cost	18.05%	\$3,526,072	23.22%	\$655,070	17.93%	\$251,725	18.66%	\$4,432,867	
Administrative Expenses	4.22%	<u>\$824,557</u>	0.00%		0.00%		3.47%	<u>\$824,557</u>	
Normal Cost & Expense	22.28%	\$4,350,629	23.22%	\$655,070	17.93%	\$251,725	22.13%	\$5,257,424	
Normal Cost & Expense	22.28%	\$4,350,629	23.22%	\$655,070	17.93%	\$251,725	22.13%	\$5,257,424	
Amortization	73.04%	<u>\$14,265,728</u>	138.86%	\$3,917,905	<u>760.45%</u>	<u>\$10,676,247</u>	121.49%	\$28,859,880	
Total Requirements	95.32%	\$18,616,357	162.08%	\$4,572,975	778.38%	\$10,927,972	143.62%	\$34,117,304	
Employee Contributions	9.75%	\$1,904,221	0.43%	\$12,010	0.00%	\$0	8.07%	\$1,916,231	
Employer Contributions	37.63%	\$7,349,456	250.74%	\$7,074,309	1779.06%	\$24,976,747	165.86%	\$39,400,512	
Employer Add'l Cont.	1.86%	\$362,680					1.53%	\$362,680	
Direct State Funding	46.08%	\$9,000,000			468.23%	\$6,573,582	65.56%	\$15,573,582	
Other Govt. Funding	0.00%	\$0					0.00%	\$0	
Administrative Assessment	0.00%	<u>\$0</u>					0.00%	<u>\$0</u>	
Total Contributions	95.33%	\$18,616,357	251.16%	\$7,086,319	2247.28%	\$31,550,329	241.01%	\$57,253,005	
Total Requirements	95.32%	\$18,616,357			778.38%	\$10,927,972	143.62%	\$29,544,329	
Total Contributions	95.33%	<u>\$18,616,357</u>	_ _		2247.28%	<u>\$31,550,329</u>	241.01%	\$50,166,686	
Deficiency (Surplus)	(0.01%)	\$0			(1468.90%)	(\$20,622,357)	(97.39%)	(\$20,622,357)	

Page 35

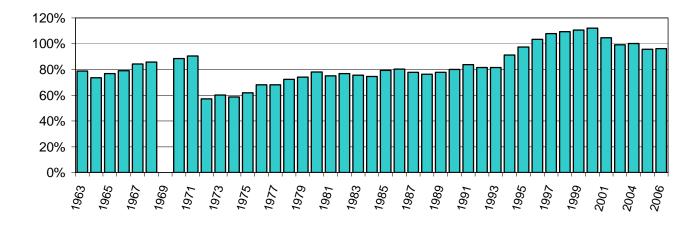
Minnesota Public Pension Plans Funding Progress 1957-2006

		General State Employees Retirement Plan (MSRS)		Sta	MN Three Major Statewide Plans (MSRS, PERA, TRA)		aul Teachers Fund Assoc. SPTRFA)	All Minnesota Public Employee Pension Plans	
<u>1957:</u>	Actuarial Accrued Liability Assets Unfunded Accrued Liability Funding Ratio	61.30%	\$69,000,000 <u>\$42,300,000</u> \$26,700,000	36.71%	\$291,738,421 <u>\$107,088,150</u> \$4,341,687,953	8.94%	\$25,190,245 <u>\$2,252,483</u> \$22,937,762	87.17%	\$564,829,533 <u>\$177,900,430</u> \$386,929,103
	Normal Cost	6.29%	\$5,289,890	9.03%	\$26,414,703	14.00%	\$1,394,057	9.37%	\$34,192,946
	Expenses			0.07%	\$193,895	0.00%	\$0	0.05%	\$193,895
	Amortization	1.37%	<u>\$1,152,170</u>	<u>2.51%</u>	<u>\$7,345,006</u>	10.10%	<u>\$1,005,713</u>	<u>3.92%</u>	<u>\$14,306,194</u>
	Financial Requirements	7.66%	\$6,442,060	11.61%	\$33,953,604	24.10%	\$2,399,770	13.34%	\$48,693,035
	Employee Contributions	3.00%	\$2,523,000	5.14%	\$15,024,358	5.00%	\$497,878	5.17%	\$18,881,196
	Employer Contributions	<u>5.00%</u>	<u>\$4,205,000</u>	<u>6.69%</u>	<u>\$19,557,757</u>	<u>8.00%</u>	<u>\$796,604</u>	<u>7.38%</u>	<u>\$26,931,655</u>
	Total Contributions	8.00%	\$6,728,000	11.82%	\$34,582,115	13.00%	\$1,294,482	12.55%	\$45,812,851
<u>1975:</u>	Actuarial Accrued Liability Assets Unfunded Accrued Liability Funding Ratio	58.68%	\$420,764,087 <u>\$246,896,093</u> \$173,867,994	57.18%	\$2,277,884,654 <u>\$1,302,569,785</u> \$975,314,869	38.42%	\$121,897,799 \$46,833,545 \$75,064,254	52.80%	\$3,406,858,458 <u>\$1,799,398,021</u> \$1,607,460,437
	Normal Cost	6.91%	\$26,486,233	8.54%	\$139,154,967	10.99%	\$4,644,825	9.92%	\$196,674,000
	Expenses	0.14%	\$536,624	0.13%	\$2,082,370	0.26%	\$111,362	1.50%	\$2,916,000
	Amortization	<u>3.11%</u>	<u>\$11,920,721</u>	<u>4.47%</u>	<u>\$72,838,336</u>	<u>13.49%</u>	<u>\$5,702,656</u>	<u>5.97%</u>	<u>\$118,440,000</u>
	Financial Requirements	10.16%	\$38,943,578	13.14%	\$214,075,672	24.75%	\$10,458,843	17.39%	\$318,030,000
	Employee Contributions	4.00%	\$15,332,117	4.62%	\$75,222,248	8.00%	\$3,381,005	5.02%	\$99,459,000
	Employer Contributions	6.00%	<u>\$22,998,176</u>	6.76%	<u>\$110,080,687</u>	<u>11.34%</u>	<u>\$4,794,011</u>	<u>8.78%</u>	<u>\$174,017,000</u>
	Total Contributions	10.00%	\$38,330,293	11.37%	<u>\$185,302,935</u>	19.34%	\$8,175,016	13.80%	\$273,476,000
<u>1992:</u>	Actuarial Accrued Liability Assets Unfunded Accrued Liability Funding Ratio	83.62%	\$3,125,299,000 <u>\$2,613,472,000</u> \$511,827,000	79.59%	\$16,227,774,000 <u>\$12,916,315,000</u> \$3,311,459,000	66.68%	\$533,865,000 <u>\$355,998,000</u> \$177,867,000	74.59%	\$21,696,883,910 \$16,182,748,253 \$5,514,135,657
	Normal Cost	6.58%	\$109,148,514	7.78%	\$484,353,340	12.11%	\$14,869,000	8.95%	\$635,565,597
	Expenses	0.23%	\$3,815,222	0.31%	\$19,385,489	0.75%	\$921,000	0.42%	\$29,673,009
	Amortization	<u>1.46%</u>	<u>\$24,218,363</u>	<u>2.49%</u>	<u>\$155,113,921</u>	<u>6.88%</u>	<u>\$8,446,000</u>	<u>3.37%</u>	<u>\$239,396,412</u>
	Financial Requirements	8.27%	\$137,182,098	10.58%	\$658,852,749	19.74%	\$24,236,000	12.74%	\$904,635,018
	Employee Contributions	4.07%	\$67,512,834	4.38%	\$270,962,404	6.33%	\$7,776,000	4.72%	\$335,020,692
	Employer Contributions	<u>4.20%</u>	<u>\$69,669,264</u>	<u>4.72%</u>	\$358,358,593	<u>8.76%</u>	<u>\$10,755,000</u>	<u>7.28%</u>	\$517,346,923
	Total Contributions	8.27%	\$137,182,098	9.10%	\$629,320,997	15.09%	\$18,531,000	12.00%	\$852,367,615
<u>2006:</u>	Actuarial Accrued Liability Assets Unfunded Accrued Liability Funding Ratio	96.23%	\$8,819,160,917 \$8,486,756,016 \$332,404,901	86.55%	\$46,236,028,554 \$40,017,575,003 \$6,218,453,551	69.11%	\$1,358,619,906 <u>\$938,919,005</u> \$419,700,901	87.17%	\$57,743,523,091 \$50,333,474,108 \$7,410,048,983
	Normal Cost	8.52%	\$183,605,603	8.51%	\$899,343,042	9.21%	\$21,575,645	9.78%	\$1,170,106,490
	Expenses	0.21%	\$4,530,916	0.25%	\$26,174,778	0.26%	\$608,955	0.27%	\$32,103,229
	Amortization	<u>1.38%</u>	<u>\$29,774,591</u>	3.29%	\$347,971,104	<u>15.55%</u>	<u>\$36,420,175</u>	<u>3.82%</u>	<u>\$456,556,659</u>
	Financial Requirements	10.11%	\$217,911,110	12.05%	\$1,273,488,924	25.02%	\$58,604,775	13.87%	\$1,658,766,378
	Employee Contributions Employer Contributions Employer Add'l Cont. Direct State Funding Other Govt. Funding Administrative Assessment Total Contributions	4.00% 4.00% 0.00% 0.00% 0.00% <u>0.00%</u> 8.00%	\$86,303,162 \$86,303,162 \$0 \$0 \$0 \$172,606,324	5.26% 5.38% 0.00% 0.18% 0.02% <u>0.00%</u> 10.84%	\$555,691,290 \$568,650,610 \$0 \$18,819,110 \$2,500,000 \$0 \$1,145,661,010	5.69% 8.59% 0.00% 2.05% 0.00% <u>0.00%</u> 16.32%	\$13,319,540 \$20,111,296 \$0 \$4,803,000 \$0 <u>\$0</u> \$38,233,836	5.42% 6.31% 0.00% 0.52% 0.02% <u>0.00%</u> 12.27%	\$648,913,999 \$754,565,382 \$362,680 \$61,856,471 \$2,500,000 \$0 \$1,468,198,532

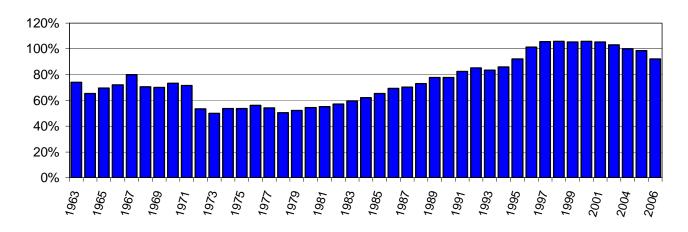
PERA-General



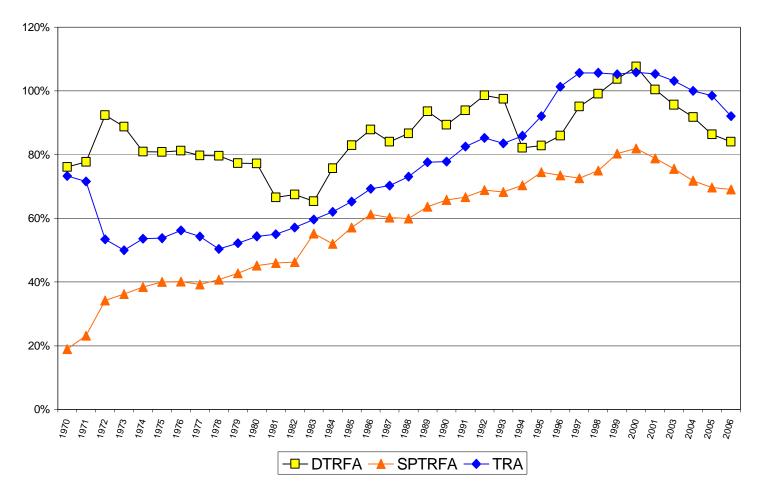
MSRS-General

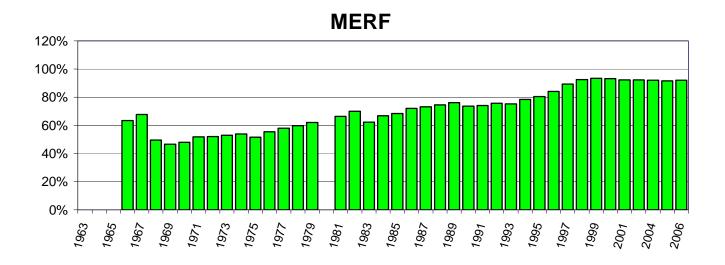


TRA

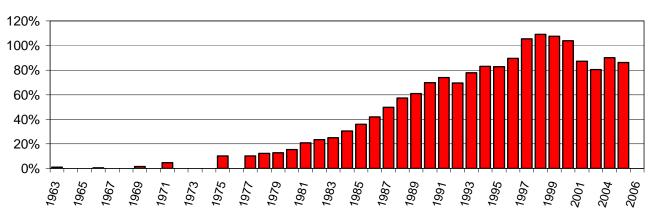


TRA, DTRFA, and SPTRFA

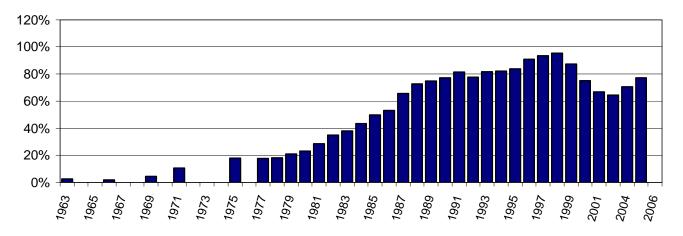




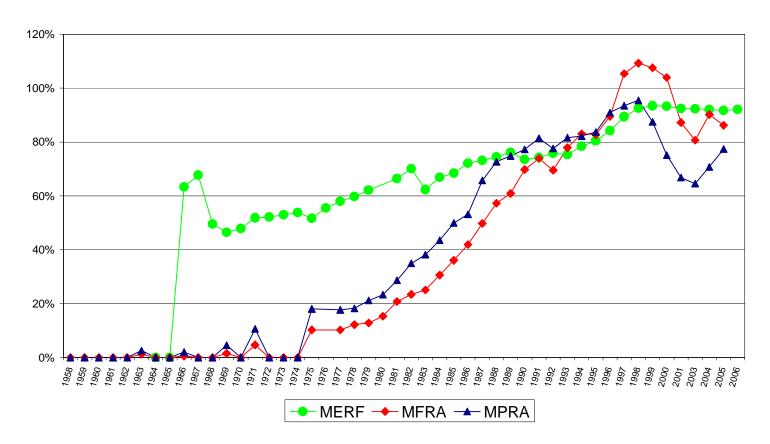
MFRA



MPRA

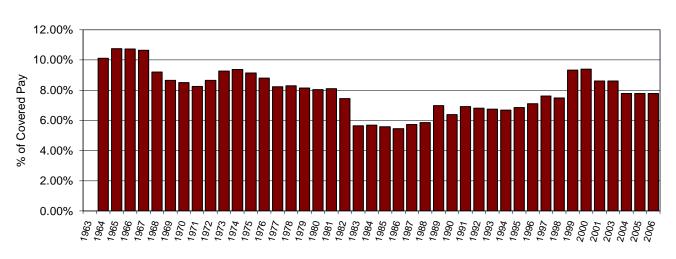


Minneapolis Plans

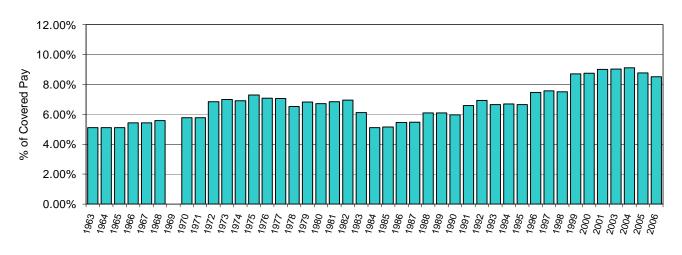


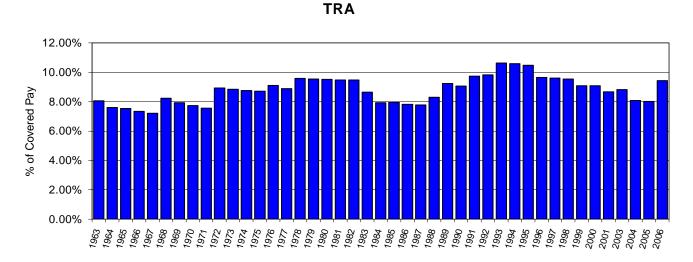
Normal Cost as a Percentage of Payroll

PERA

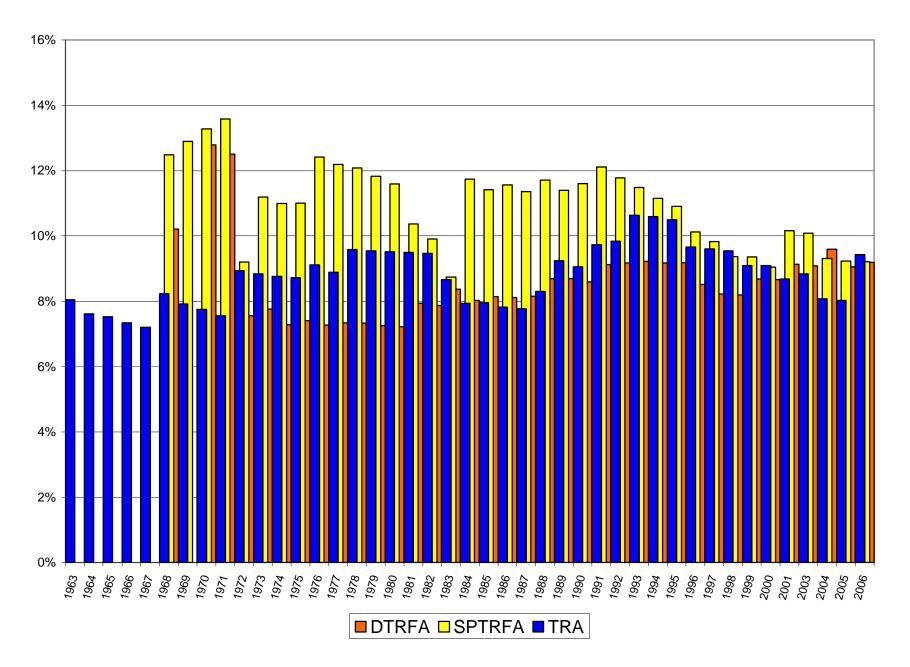


MSRS



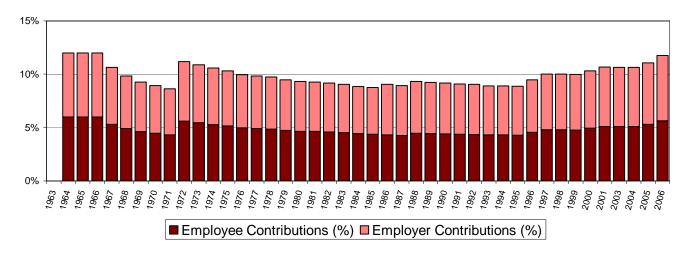


Normal Cost as a Percentage of Payroll TRA, DTRFA, and SPTRFA

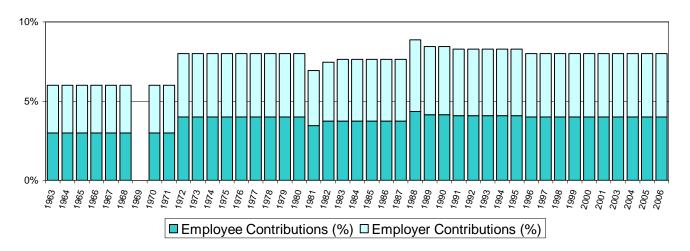


Employee and Employer Contribution Rates Over Time

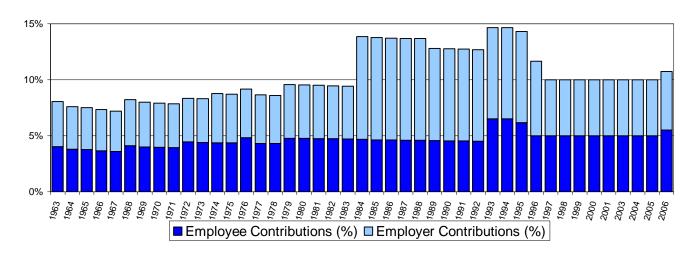
PERA-General



MSRS-General

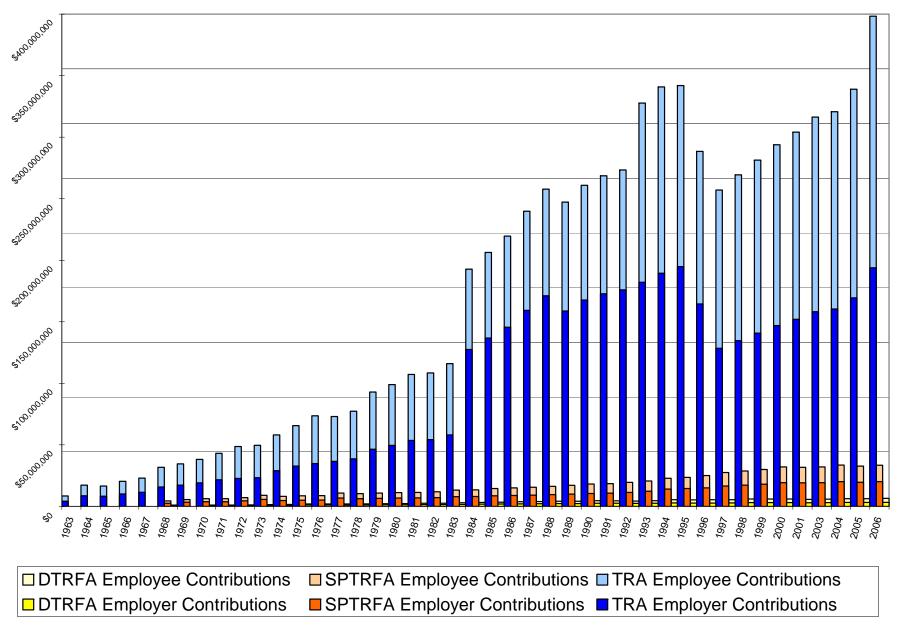


TRA



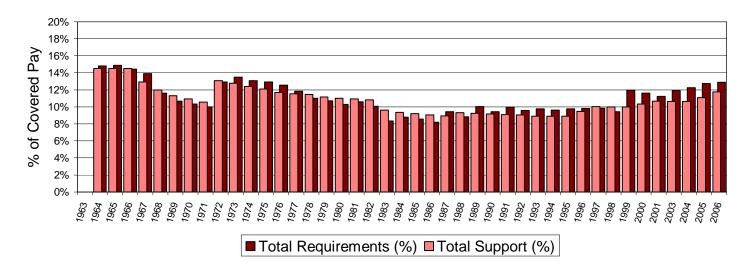
Employee and Employer Contribution Rates Over Time

DTRFA, SPTRFA, and TRA

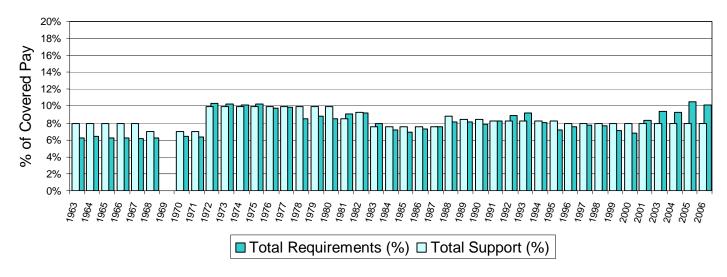


Total Requirements vs. Total Support

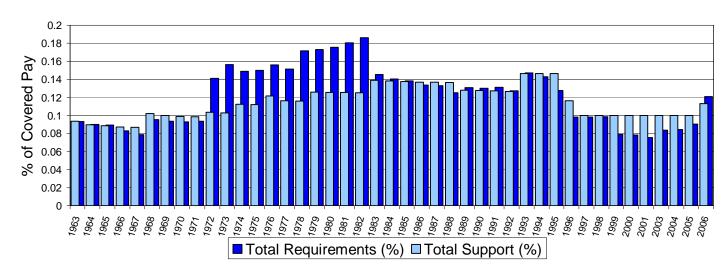
PERA



MSRS-General

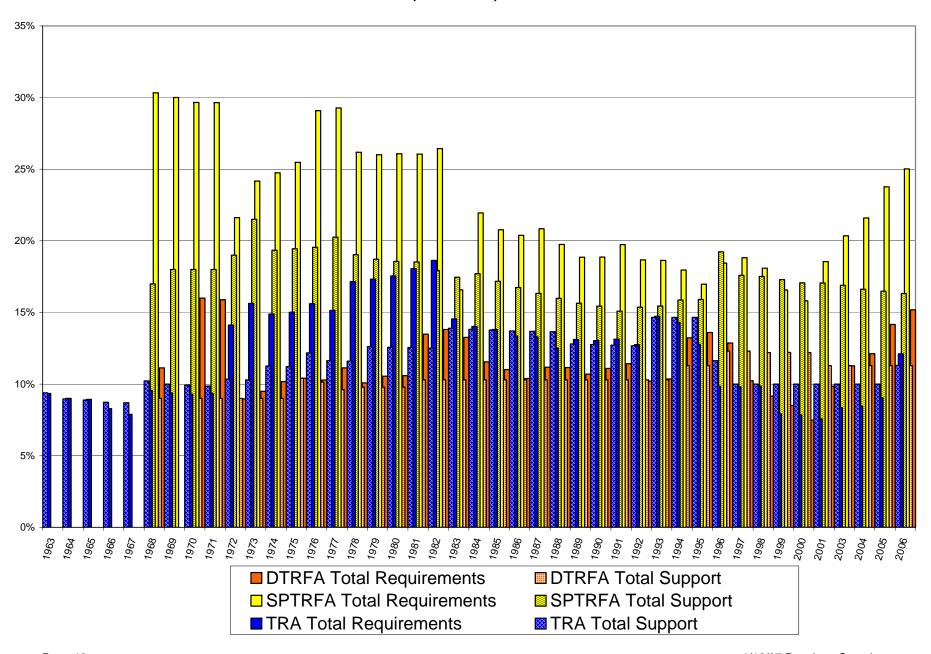


TRA

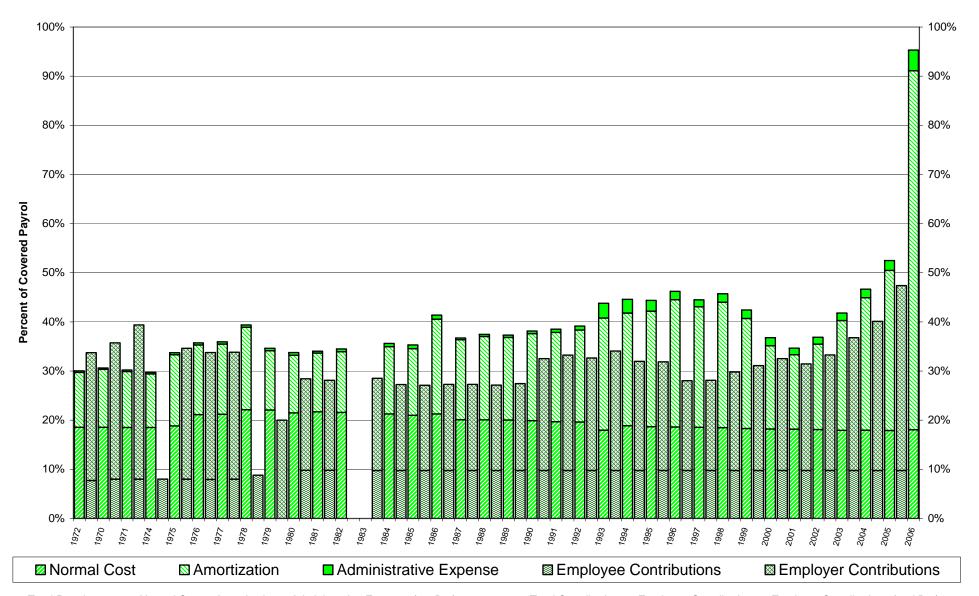


Total Requirements vs. Total Support

DTRFA, SPTRFA, and TRA



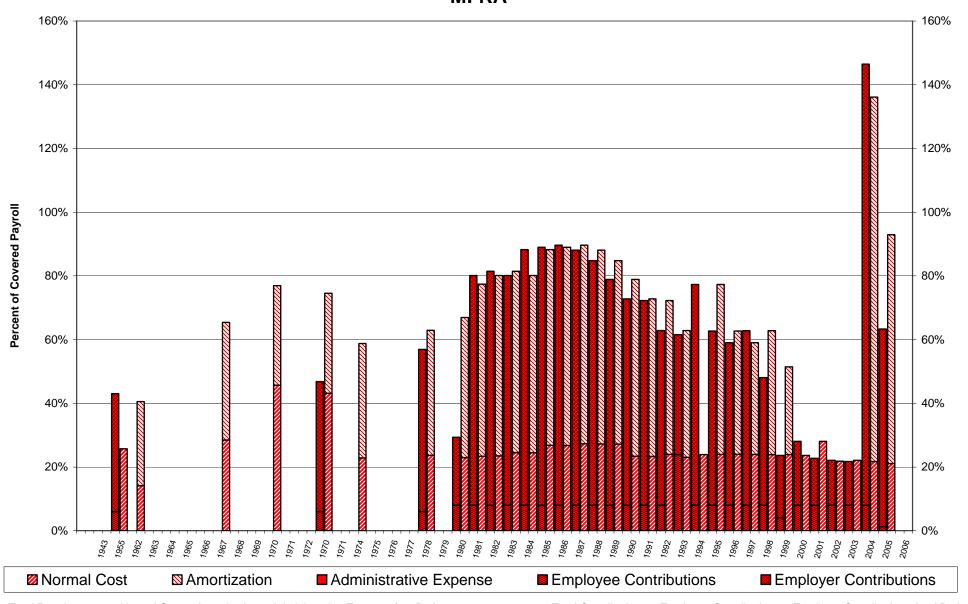
Total Requirements and Total Contributions Over Time MERF



Total Requirements = Normal Cost + Amortization + Administrative Expense (1st Bar)

Total Contributions = Employee Contributions + Employer Contributions (2nd Bar)

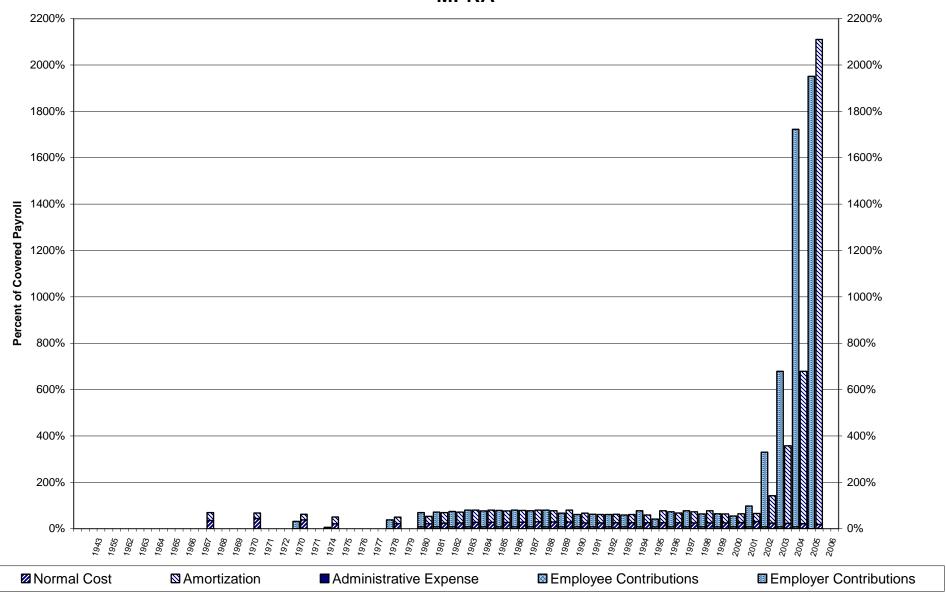
Total Requirements and Total Contributions Over Time MFRA



Total Requirements = Normal Cost + Amortization + Administrative Expense (1st Bar)

Total Contributions = Employee Contributions + Employer Contributions (2nd Bar)

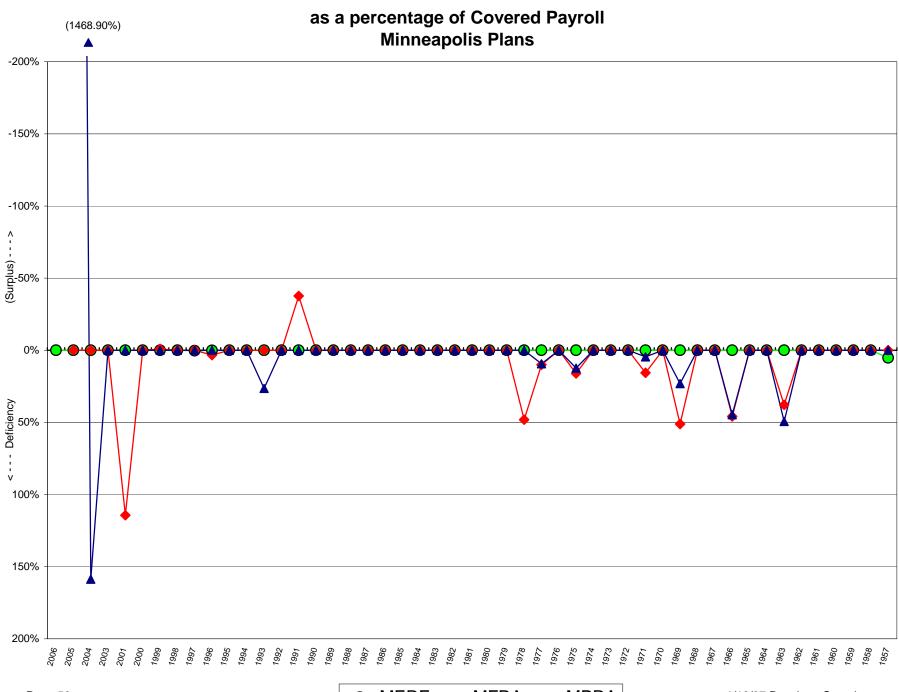
Total Requirements and Total Contributions Over Time MPRA



Total Requirements = Normal Cost + Amortization + Administrative Expense (1st Bar)

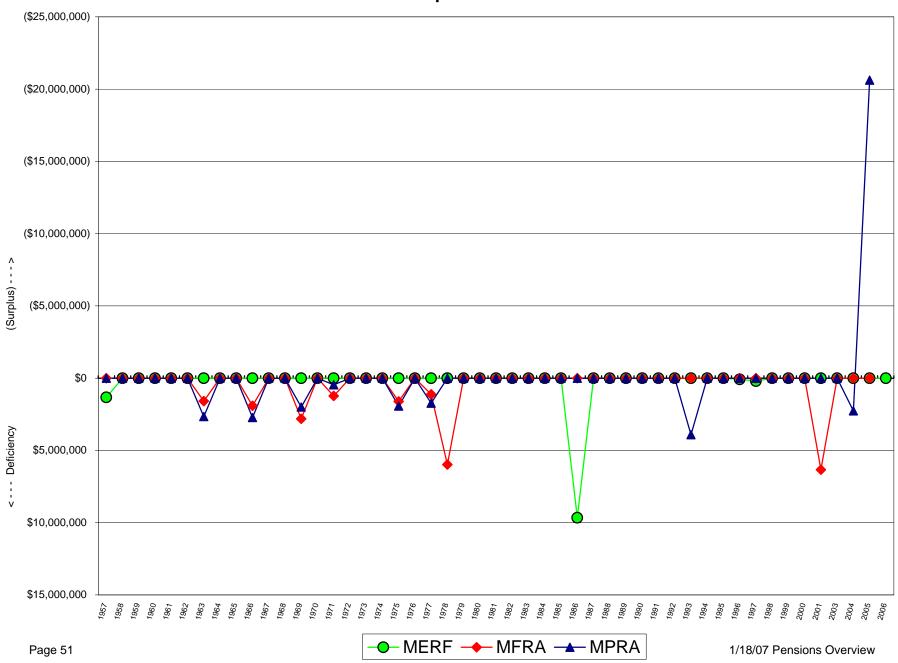
Total Contributions = Employee Contributions + Employer Contributions (2nd Bar)

Contribution Deficiency/(Surplus) Over Time



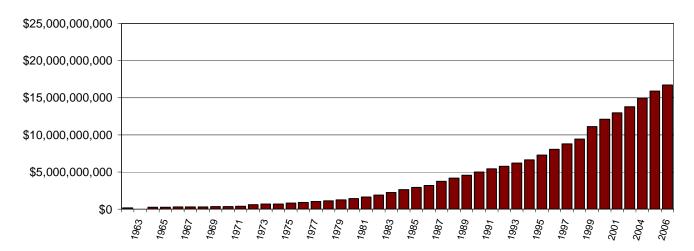
Contribution Deficiency/(Surplus) Over Time

\$ Minneapolis Plans

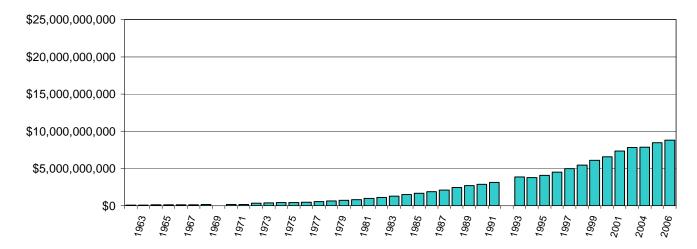


Administrative Expenses

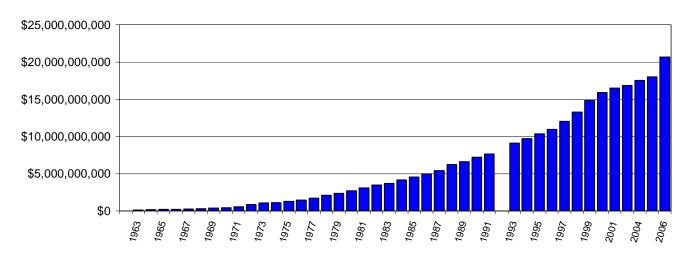
PERA-General



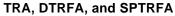
MSRS-General

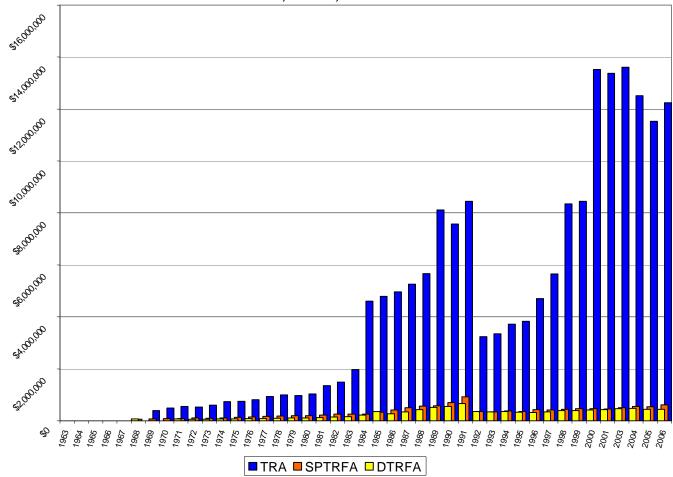


TRA



Administrative Expenses





Minnesota Public Pension Plans Actuarial Experience Gains (-) and Losses (+) (1986-2003)

Salary	y Increase	Assum	ption
--------	------------	-------	-------

		_							
<u>Plan</u>	2002-2003	2001-2002	2000-2001	<u>1996-2000</u>	<u>1991-2000</u>	<u>1986-2000</u>			
MSRS-General	-7,148,000	-100.655.000	108,969,000	-125,831,000	-344.439.000	-417,563,000			
PERA-General	33,730,000	-221,668,000	-50,387,000	-366,202,000	-725,461,000	-817,982,000			
TRA	-59,162,000	-119,422,000	7,300,000	-442,219,000	-1,188,570,000	-1,326,930,000			
Subtotal	-32,580,000	-441,745,000	65,882,000	-934,252,000	-2,258,470,000	-2,562,475,000			
Oubtotal	02,000,000	441,740,000	00,002,000	304,202,000	2,200,470,000	2,002,470,000			
MSRS-Corr.	-3,155,000	-6,690,000	-12,263,000	1,576,000	-5,753,000	-7,241,000			
State Patrol	10,717,000	-8,953,000	-10,122,000	701,000	-1,138,000	-6,369,000			
PERA-P&F	-14,079,000	-64,490,000	-5,139,000	-72,046,000	-141,994,000	-158,834,000			
P&F Consol. Accts.	, , ,	· · ·	, , , <u></u>	, , , <u></u>	, , , <u></u>				
Loc. Govt. Corr.	468,000	376,000	2,110,000	-926,000	-926,000	-926,000			
Subtotal	-6,049,000	-79,757,000	-25,414,000	-70,695,000	-149,811,000	-173,370,000			
Legislators		-1,595,000	569,000	-5,343,000	-8,495,000	-9,191,000			
Elected St. Officers		0	0	-236,000	-480,000	-588,000			
Judges	<u>1,007,000</u>	<u>1,965,000</u>	<u>-720,000</u>	<u>-7,034,000</u>	<u>-17,215,000</u>	<u>-19,710,000</u>			
Subtotal	1,007,000	370,000	-151,000	-12,613,000	-26,190,000	-29,489,000			
MERF	-7,515,000	7,831,000	-149,000	-6,148,000	-14,885,000	7,377,000			
DTRFA	1,296,000	-3,998,000	-1,811,000	-12,305,000	-56,155,000	-62,594,000			
MTRFA	-15,735,000	-17,097,000	-12,689,000	22,101,000	3,902,000	-20,052,000			
SPTRFA	-8,245,000	-8,292,000	-2,602,000	-20,063,000	-25,499,000	-32,734,000			
Subtotal	-22.684.000	-29,387,000	-17,102,000	-10,267,000	-77,752,000	-115,380,000			
Cubiciai	22,004,000	23,307,000	17,102,000	10,207,000	77,702,000	110,000,000			
Total	-67,821,000	-542,688,000	23,066,00	-1,033,975,000	-2,527,108,000	-2,873,337,000			
Investment Return Assumption									
		Investment	Return Assu	<u>ımption</u>					
Plan	2002-2003				1991-2000	1986-2000			
<u>Plan</u>	2002-2003	2001-2002	2000-2001	1996-2000	1991-2000	1986-2000			
MSRS-General	345,598,000	<u>2001-2002</u> 211,865,000	<u>2000-2001</u> -29,406,000	<u>1996-2000</u> -1,170,958,000	-1,339,497,000	-1,554,413,000			
MSRS-General PERA-General	345,598,000 380,033,000	2001-2002 211,865,000 235,075,000	2000-2001 -29,406,000 -24,896,000	1996-2000 -1,170,958,000 -1,230,517,000	-1,339,497,000 -1,425,328,000	-1,554,413,000 -1,722,945,000			
MSRS-General PERA-General TRA	345,598,000 380,033,000 580,484,000	2001-2002 211,865,000 235,075,000 351,134,000	2000-2001 -29,406,000 -24,896,000 -63,301,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000	-1,339,497,000 -1,425,328,000 -885,311,000	-1,554,413,000 -1,722,945,000 -1,371,667,000			
MSRS-General PERA-General	345,598,000 380,033,000	2001-2002 211,865,000 235,075,000	2000-2001 -29,406,000 -24,896,000	1996-2000 -1,170,958,000 -1,230,517,000	-1,339,497,000 -1,425,328,000	-1,554,413,000 -1,722,945,000			
MSRS-General PERA-General TRA Subtotal	345,598,000 380,033,000 <u>580,484,000</u> 1,306,115,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000	-1,339,497,000 -1,425,328,000 - <u>885,311,000</u> -3,650,136,000	-1,554,413,000 -1,722,945,000 <u>-1,371,667,000</u> -4,649,025,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr.	345,598,000 380,033,000 580,484,000 1,306,115,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol	345,598,000 380,033,000 580,484,000 1,306,115,000 19,710,000 20,370,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F	345,598,000 380,033,000 580,484,000 1,306,115,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts.	345,598,000 380,033,000 580,484,000 1,306,115,000 19,710,000 20,370,000 212,577,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts. Loc. Govt. Corr.	345,598,000 380,033,000 580,484,000 1,306,115,000 19,710,000 20,370,000 212,577,000 2,591,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000 1,585,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000 -489,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000 -258,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000 -258,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts.	345,598,000 380,033,000 580,484,000 1,306,115,000 19,710,000 20,370,000 212,577,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts. Loc. Govt. Corr.	345,598,000 380,033,000 580,484,000 1,306,115,000 19,710,000 20,370,000 212,577,000 2,591,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000 1,585,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000 -489,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000 -258,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000 -258,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts. Loc. Govt. Corr. Subtotal	345,598,000 380,033,000 580,484,000 1,306,115,000 19,710,000 20,370,000 212,577,000 2,591,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000 1,585,000 156,058,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000 -18,779,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000 -7 -7 -802,214,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000 -258,000 -893,142,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000 -258,000 -1,003,251,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts. Loc. Govt. Corr. Subtotal Legislators	345,598,000 380,033,000 580,484,000 1,306,115,000 19,710,000 20,370,000 212,577,000 2,591,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000 1,585,000 156,058,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000 -18,779,000 562,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000 -7 258,000 -802,214,000 2,759,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000 -258,000 -893,142,000 4,914,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000 -258,000 -1,003,251,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts. Loc. Govt. Corr. Subtotal Legislators Elected St. Officers	345,598,000 380,033,000 580,484,000 1,306,115,000 19,710,000 20,370,000 212,577,000 2,591,000 255,248,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000 1,585,000 156,058,000 17,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000 -18,779,000 -18,779,000 -14,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000 -7 258,000 -802,214,000 158,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000 -258,000 -893,142,000 4,914,000 301,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000 -258,000 -1,003,251,000 6,587,000 408,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts. Loc. Govt. Corr. Subtotal Legislators Elected St. Officers Judges Subtotal	345,598,000 380,033,000 580,484,000 1,306,115,000 19,710,000 20,370,000 212,577,000 2,591,000 255,248,000 2,387,000 2,387,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000 1,585,000 156,058,000 17,000 15,030,000 15,670,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000 -14,635,000 -18,779,000 562,000 14,000 -2,000 574,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000 -566,932,000 -802,214,000 2,759,000 158,000 -6,283,000 -3,366,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000 -258,000 -893,142,000 4,914,000 301,000 -7,195,000 -1,980,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000 258,000 -1,003,251,000 6,587,000 408,000 -8,761,000 -1,766,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts. Loc. Govt. Corr. Subtotal Legislators Elected St. Officers Judges	345,598,000 380,033,000 580,484,000 1,306,115,000 19,710,000 20,370,000 212,577,000 2,591,000 255,248,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000 1,585,000 156,058,000 17,000 15,030,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000 -18,779,000 -18,000 -14,000 -2,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000 -258,000 -802,214,000 158,000 -6,283,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000 -258,000 -893,142,000 4,914,000 301,000 -7,195,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000 -258,000 -1,003,251,000 6,587,000 408,000 -8,761,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts. Loc. Govt. Corr. Subtotal Legislators Elected St. Officers Judges Subtotal MERF	345,598,000 380,033,000 <u>580,484,000</u> 1,306,115,000 19,710,000 20,370,000 212,577,000 <u>2,591,000</u> 255,248,000 <u>2,387,000</u> 2,387,000 15,763,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000 1,585,000 156,058,000 17,000 15,030,000 15,670,000 7,714,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000 -14,635,000 -18,779,000 -14,000 -2,000 574,000 -5,538,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000 -802,214,000 2,759,000 158,000 -6,283,000 -3,366,000 -197,268,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000 -258,000 -893,142,000 4,914,000 301,000 -7,195,000 -1,980,000 -161,922,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000 -1,003,251,000 -1,003,251,000 -1,003,251,000 -1,766,000 -1,766,000 -210,927,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts. Loc. Govt. Corr. Subtotal Legislators Elected St. Officers Judges Subtotal MERF DTRFA	345,598,000 380,033,000 <u>580,484,000</u> 1,306,115,000 19,710,000 20,370,000 212,577,000 <u>2,591,000</u> 255,248,000 <u>2,387,000</u> 2,387,000 15,763,000 14,193,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000 1,585,000 156,058,000 623,000 17,000 15,030,000 15,670,000 7,714,000 6,139,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000 -14,635,000 -18,779,000 562,000 14,000 -2,000 574,000 -5,538,000 -5,482,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000 -802,214,000 2,759,000 158,000 -6,283,000 -3,366,000 -197,268,000 -48,167,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000 -258,000 -893,142,000 4,914,000 301,000 -7,195,000 -1,980,000 -161,922,000 -56,883,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000 			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts. Loc. Govt. Corr. Subtotal Legislators Elected St. Officers Judges Subtotal MERF DTRFA MTRFA	345,598,000 380,033,000 <u>580,484,000</u> 1,306,115,000 19,710,000 20,370,000 212,577,000 <u>2,591,000</u> 255,248,000 <u>2,387,000</u> 2,387,000 15,763,000 14,193,000 99,686,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000 1,585,000 156,058,000 17,000 15,030,000 15,670,000 7,714,000 6,139,000 71,199,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000 -14,635,000 -18,779,000 -562,000 -14,000 -2,000 -574,000 -5,482,000 13,655,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000 -802,214,000 2,759,000 158,000 -6,283,000 -3,366,000 -197,268,000 -48,167,000 -51,313,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000 -893,142,000 4,914,000 301,000 -7,195,000 -1,980,000 -161,922,000 -56,883,000 -15,300,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000 -1,003,251,000 -1,003,251,000 -1,766,000 -1,766,000 -210,927,000 -75,172,000 -193,272,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts. Loc. Govt. Corr. Subtotal Legislators Elected St. Officers Judges Subtotal MERF DTRFA MTRFA SPTRFA	345,598,000 380,033,000 <u>580,484,000</u> 1,306,115,000 19,710,000 20,370,000 212,577,000 <u>2,591,000</u> 255,248,000 <u>2,387,000</u> 2,387,000 15,763,000 14,193,000 99,686,000 48,877,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000 1,585,000 156,058,000 17,000 15,030,000 15,670,000 7,714,000 6,139,000 71,199,000 21,216,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000 -18,779,000 -18,779,000 -5,538,000 -5,482,000 13,655,000 -8,279,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000 -802,214,000 2,759,000 158,000 -6,283,000 -3,366,000 -197,268,000 -48,167,000 -51,313,000 2,469,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000 -893,142,000 4,914,000 301,000 -7,195,000 -1,980,000 -161,922,000 -56,883,000 -15,300,000 -24,317,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000 -258,000 -1,003,251,000 -1,003,251,000 -1,766,000 -1,766,000 -210,927,000 -75,172,000 -193,272,000 -72,740,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts. Loc. Govt. Corr. Subtotal Legislators Elected St. Officers Judges Subtotal MERF DTRFA MTRFA	345,598,000 380,033,000 <u>580,484,000</u> 1,306,115,000 19,710,000 20,370,000 212,577,000 <u>2,591,000</u> 255,248,000 <u>2,387,000</u> 2,387,000 15,763,000 14,193,000 99,686,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000 1,585,000 156,058,000 17,000 15,030,000 15,670,000 7,714,000 6,139,000 71,199,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000 -14,635,000 -18,779,000 -562,000 -14,000 -2,000 -574,000 -5,482,000 13,655,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000 -802,214,000 2,759,000 158,000 -6,283,000 -3,366,000 -197,268,000 -48,167,000 -51,313,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000 -893,142,000 4,914,000 301,000 -7,195,000 -1,980,000 -161,922,000 -56,883,000 -15,300,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000 -1,003,251,000 -1,003,251,000 -1,766,000 -1,766,000 -210,927,000 -75,172,000 -193,272,000			
MSRS-General PERA-General TRA Subtotal MSRS-Corr. State Patrol PERA-P&F P&F Consol. Accts. Loc. Govt. Corr. Subtotal Legislators Elected St. Officers Judges Subtotal MERF DTRFA MTRFA SPTRFA	345,598,000 380,033,000 <u>580,484,000</u> 1,306,115,000 19,710,000 20,370,000 212,577,000 <u>2,591,000</u> 255,248,000 <u>2,387,000</u> 2,387,000 15,763,000 14,193,000 99,686,000 48,877,000	2001-2002 211,865,000 235,075,000 351,134,000 798,074,000 11,694,000 12,190,000 130,589,000 1,585,000 156,058,000 17,000 15,030,000 15,670,000 7,714,000 6,139,000 71,199,000 21,216,000	2000-2001 -29,406,000 -24,896,000 -63,301,000 -117,603,000 -2,628,000 -2,005,000 -14,635,000 -18,779,000 -18,779,000 -5,538,000 -5,482,000 13,655,000 -8,279,000	1996-2000 -1,170,958,000 -1,230,517,000 -437,398,000 -2,838,873,000 -62,760,000 -82,780,000 -656,932,000 -802,214,000 2,759,000 158,000 -6,283,000 -3,366,000 -197,268,000 -48,167,000 -51,313,000 2,469,000	-1,339,497,000 -1,425,328,000 -885,311,000 -3,650,136,000 -70,850,000 -94,355,000 -728,195,000 -893,142,000 4,914,000 301,000 -7,195,000 -1,980,000 -161,922,000 -56,883,000 -15,300,000 -24,317,000	-1,554,413,000 -1,722,945,000 -1,371,667,000 -4,649,025,000 -80,384,000 -110,094,000 -813,031,000 -1,003,251,000 -1,003,251,000 -1,766,000 -1,766,000 -210,927,000 -75,172,000 -193,272,000 -72,740,000			

Minnesota Public Pension Plans Actuarial Experience Gains (-) and Losses (+) (1986-2003)

Mortality Assumption

<u>Plan</u>	2002-2003	2001-2002	2000-2001	1996-2000	<u>1991-2000</u>	<u>1986-2000</u>			
MSRS-General	-8,282,000	20,843,000	3,788,000	20,780,000	28,867,000	33,554,000			
PERA-General	38,275,000	-122,987,000	-14,319,000	-88,292,000	-44,209,000	16,751,000			
TRA	<u>-23,198,000</u>	<u>-10,365,000</u>	<u>-21,143,000</u>	50,487,000	57,010,000	54,848,000			
Subtotal	6,795,000	-112,509,000	-31,674,000	-17,025,000	41,668,000	105,153,000			
MSRS-Corr.	664,000	11,694,000	-2,628,000	214,000	1,219,000	847,000			
State Patrol	3,281,000	607,000	3,159,000	11,417,000	12,204,000	13,038,000			
PERA-P&F	21,520,000	-42,416,000	-25,777,000	10,828,000	15,345,000	23,126,000			
P&F Consol. Accts. Loc. Govt. Corr.	12.000	142.000	39,000	19,772,778	24,391,165	25,019,484			
Subtotal	<u>-12,000</u> 25,453,000	<u>142,000</u> -29,973,000	<u>-38,000</u> -25,284,000	<u>-2,000</u> 42,229,778	<u>-2,000</u> 53,157,165	<u>-2,000</u> 62,028,484			
Oubtotal	20,400,000	-23,373,000	-25,204,000	42,229,770	33,137,103	02,020,404			
Legislators		-5,000	105,000	-1,587,000	1,598,000	2,281,000			
Elected St. Officers		73,000	65,000	-314,000	-375,000	-445,000			
Judges	<u>-1,595,000</u>	<u>1,459,000</u>	<u>1,604,000</u>	<u>1,445,000</u>	6,680,000	<u>6,844,000</u>			
Subtotal	-1,595,000	1,527,000	1,774,000	-456,000	7,903,000	8,680,000			
MERF	10,513,000	7,714,000	-5,538,000	10,105,000	9,227,000	7,755,000			
DTRFA	-1,290,000	-1,207,000	-2,194,000	-1,796,000	-595,000	-24,670,000			
MTRFA	-18,966,000	-5,007,000	848,000	13,761,000	-19,411,000	-16,618,000			
SPTRFA	-1,742,000	<u>-2,106,000</u>	-2,475,000	-29,103,000	-35,268,000	-38,898,000			
Subtotal	-21,998,000	-8,320,000	-3,821,000	-17,138,000	-55,274,000	-80,186,000			
Total	19,168,000	-141,561,000	-64,543,000	17,715,778	56,681,165	103,430,484			
Other Assumptions									
<u>Plan</u>	2002-2003	2001-2002	2000-2001	1996-2000	1991-2000	1986-2000			
MSRS-General	79,388,000	45,958,000	13,977,000	210,148,000	161,489,000	365,317,000			
PERA-General	103,118,000	48,659,000	31,733,000	407,022,000	730,865,000	1,134,284,000			
TRA	451,185,000	11,405,000	4,892,000	616,885,000	1,170,772,000	1,445,631,000			
Subtotal	633,691,000	106,022,000	50,602,000	1,234,055,000	2,063,126,000	2,945,232,000			
MSRS-Corr.	7,053,000	9,225,000	12,702,000	35,948,000	29,639,000	37,672,000			
State Patrol	632,000	2,794,000	209,000	12,921,000	-8,901,000	-3,126,000			
PERA-P&F	69,944,000	20,098,000	58,959,000	194,138,000	196,059,000	218,207,000			
P&F Consol. Accts.				-134,063,938	-272,790,818	-290,462,162			
Loc. Govt. Corr.	<u>2,056,000</u>	<u>-554,000</u>	663,000	463,000	463,000 FF 530,848	463,000 27 246 462			
Subtotal	79,685,000	31,563,000	72,533,000	109,406,062	-55,530,818	-37,246,162			
Legislators		-455,000	1,027,000	3,452,000	189,000	2,822,000			
Elected St. Officers		71,000	217,000	65,000	-187,000	158,000			
Judges	<u>776,000</u>	<u>-3,848,000</u>	<u>156,000</u>	7,912,000	3,185,000	7,555,000			
Subtotal	776,000	-4,232,000	1,400,000	11,429,000	3,187,000	10,535,000			
MERF	8,230,000	15,073,000	25,640,000	62,682,000	70,618,000	114,951,000			
DTRFA	666,000	3,459,000	1,706,000	10,542,000	17,842,000	25,548,000			
MTRFA	6,000,000	8,686,000	17,173,000	22,223,000	59,140,000	115,434,000			
SPTRFA	4,479,000	3,239,000	9,695,000	-17,033,000	<u>-15,000,000</u>	6,235,000			
Subtotal	11,145,000	15,384,000	28,574,000	15,732,000	61,982,000	147,217,000			
Total	733,527,000	163,810,000	178,749,000	1,433,304,062	2,143,382,182	3,180,688,838			

Minnesota Public Pension Plans Actuarial Experience Gains (-) and Losses (+) (1986-2003)

Total Experience Gains and Losses

<u>Plan</u>	2002-2003	2001-2002	2000-2001	1996-2000	1991-2000	<u>1986-2000</u>
MSRS-General PERA-General	409,556,000 555,156,000	178,011,000 -60,921,000	-128,186,000 -57,869,000	-1,065,861,000 -1,277,989,000	-1,493,580,000 -1,464,133,000	-1,573,105,000 -1,389,892,000
TRA Subtotal	949,309,000 1,914,021,000	232,752,000 349,842,000	<u>-72,252,000</u> -258,307,000	<u>-212,245,000</u> -2,556,095,000	<u>-846,099,000</u> -3,803,812,000	<u>-1,198,118,000</u> -4,161,115,000
MSRS-Corr.	24,272,000	15,300,000	-5,521,000	-25,022,000	-45,745,000	-49,106,000
State Patrol	35,000,000	6,638,000	-8,759,000	-57,741,000	-92,190,000	-106,551,000
PERA-P&F	289,962,000	43,781,000	13,408,000	-524,012,000	-658,785,000	-730,532,000
P&F Consol. Accts.				-114,291,160	-248,399,653	-265,442,678
Loc. Govt. Corr.	<u>5,103,000</u>	<u>1,549,000</u>	3,224,000	-207,000	<u>-207,000</u>	-207,000
Subtotal	354,337,000	67,268,000	2,352,000	-721,273,160	-1,045,326,653	-1,151,838,678
Legislators		-1,432,000	2,263,000	-719,000	-1,794,000	2,499,000
Elected St. Officers		161,000	296,000	-327,000	-741,000	-467,000
Judges	<u>2,575,000</u>	<u>1,079,000</u>	<u>1,038,000</u>	<u>-3,960,000</u>	<u>-14,545,000</u>	<u>-14,072,000</u>
Subtotal	2,575,000	-192,000	3,597,000	-5,006,000	-17,080,000	-12,040,000
MERF	26,991,000	24,437,000	12,767,000	-130,629,000	-96,962,000	-80,844,000
DTRFA	14,865,000	4,393,000	-7,781,000	-51,726,000	-95,791,000	-136,888,000
MTRFA	58,985,000	57,781,000	18,987,000	6,772,000	-71,669,000	-114,508,000
SPTRFA	43,369,000	14,057,000	<u>-3,660,000</u>	-63,730,000	<u>-100,084,000</u>	<u>-138,137,000</u>
Subtotal	117,219,000	76,231,000	7,546,000	-108,684,000	-267,544,000	-389,533,000
Total	2,415,143,000	517,586,000	-232,045,000	-3,521,687,160	-5,230,724,653	-5,795,370,678

Minnesota Public Pension Plans Post Retirement Increases

from the

Minnesota Post Retirement Investment Fund (MPRIF)
Minneapolis Employees Retirement Fund (MERF)
Minneapolis Teachers Retirement Fund Association (MTRFA)
Duluth Teachers Retirement Fund Association (DTRFA)
St. Paul Teachers Retirement Fund Association (SPTRFA)
and
Increases in the Consumer Price Index (CPI-W)

Percent Increase

			Percent I			
Effective Date	CPI 1	MPRIF	MERF	MTRFA ²	DTRFA ³	SPTRFA 4
	%	%	%	%	%	%
1/1/07	1.8 ⁵	2.500	3.50		2.00	2.00
1/1/06	3.5	2.500	2.59039	2.00	2.00	2.00
1/1/05	2.6	2.500	3.17372	2.00	2.00	2.00
1/1/04	2.2	2.103	2.10347	2.00	2.00	2.00
1/1/03	1.4	0.7450	0.74456	2.00	2.00	2.00
1/1/02	2.7	4.4935	5.34299	2.31	5.25	3.70
1/1/01	3.5	9.5342	10.50999	8.81	10.2391	7.6723
1/1/00	2.2	11.1436	10.2275	9.67	9.0275	9.2619
1/1/99	1.3	9.8254	8.0432	7.33	7.0125	7.2145
1/1/98	2.3	10.0876	6.6680	7.28	6.3407	7.00
1/1/97	2.9	8.0395	3.9500	6.23	5.6315	
1/1/96	2.9	6.3954	3.5950	3.85	4.6424	
1/1/95	2.5	3.9850	3.1440	2.13		
1/1/94	2.8	6.0170	3.8240	4.50		
1/1/93	2.9	4.5530	5.9840			
1/1/92	4.1	4.2950	0.0000			
1/1/91	5.2	5.1000	5.0790			
1/1/90	4.8	4.0400	6.9180			
1/1/89	4.0	6.9180	5.93591			
1/1/88	3.6	8.0540	9.37158			
1/1/87	1.6	9.7920	7.5890			
1/1/86	3.5	7.9000	8.7160			
1/1/85	3.5	6.9050	7.3370			
1/1/84	3.0	7.4990	10.77			
1/1/83	6.0	6.8530	9.17			
1/1/82	10.3	7.4360				
1/1/81	13.4	3.2090				
1/1/80	11.4	0				
1/1/79	7.7	0				
1/1/78	6.5	4.00				

Note: These increases are permanent increases to retiree annuities.

¹ Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) annual average percent change

² MTRFA first paid a post retirement adjustment under the new system on 1/1/94. MTRFA was merged into TRA in 2006.

³ DTRFA first paid a post retirement adjustment under the new system on 1/1/96

⁴ SPTRFA first paid a post retirement adjustment under the new system on 1/1/98

⁵ Preliminary data, annual average October 2005-November 2006

Public Pension Plan State Aid

The State of Minnesota has established 16 different aid programs dedicated to or specifically applicable to public employee retirement plans.

The aid programs are:

- 1. Fire State Aid;
- 2. Minimum Volunteer Firefighter Fire State Aid;
- 3. First Class City Fire Insurance Premium Tax Surcharge;
- 4. Police State Aid:
- 5. Local Police and Paid Fire Relief Association Amortization Aid;
- 6. Supplemental Police and Paid Fire Amortization State Aid;
- 7. Additional Amortization State Aid;
- 8. Minneapolis Employees Retirement Fund (MERF) State Contribution;
- 9. Volunteer Fire Lump Sum Supplemental Benefit State Reimbursement;
- 10. Pre-1974 Retiree MERF Special Post Retirement Adjustment Aid;
- 11. Teacher Retirement Plan State Categorized Aid and State Funding;
- 12. 1993 State Supplemental MTRFA/SPTRFA Contributions;
- 13. 1996 State Supplementary MTRFA/SPTRFA Contributions;
- 14. 1997 State Supplemental First Class City Teacher Retirement Fund Association Funding;
- 15. 1997 State Aid for the PERA-General Employer Contribution Rate Increase; and
- 16. Ambulance Service Personnel Longevity Award and Incentive State Aid.

The following summarizes these aid programs, specifying their governing statutes, the establishment year, the source of the aid, the aid recipient or recipients, and the recent total aid amounts:

State Aid Program	Governing Statute	Year In Which Aid Program Established	Aid Source	Aid Recipient(s)		ecent Total id Amounts
1. Fire State Aid	Minnesota Statutes, Sections 69.011 to 69.051	1885	State General Fund (Dedicated proceeds of equivalent to two percent insurance premium tax)	Municipalities and nonprofit firefighting corporations with fire department with at least 10 firefighters	2000: 2001: 2002:	\$16,055,136 \$16,899,053 \$18,066,489
Minimum Volunteer Firefighter Fire State Aid	Minnesota Statutes, Sections 69.021, Subdivision 7, Paragraph (d), and 423A.02, Subdivision 3, Paragraph (e)	1996	30 percent of excess amortization and supplemental amortization state aid freed up by fully funded relief associations or consolidation accounts	Municipalities and nonprofit firefighting corporations eligible to receive fire state aid	2000: 2001: 2002:	\$1,210,366 \$1,065,323 \$1,846,119

Public Pension Plan State Aid

State Aid Program	Governing Statute	Year In Which Aid Program Established	Aid Source	Aid Recipient(s)		ecent Total id Amounts
3. First Class City Fire Insurance Premium Tax Surcharge	Minnesota Statutes, Section 2971.10	1934	State General Fund (Dedicated proceeds of two percent of fire insurance premium amount in Duluth, Minneapolis, and St. Paul)	Duluth (approx. 13%) Mpls. (approx. 55%) St. Paul (approx. 32%)	2000: 2001: 2002:	\$1,092,207 \$1,321,161 \$1,382,374
4. Police State Aid	Minnesota Statutes, Sections 69.011 to 69.051	1971	State General Fund (Dedicated proceeds of equivalent to two percent insurance premium tax)	Counties, cities, townships, the Metropolitan Airports Commission, Indian tribal governments, the Dept. of Public Safety, and the Dept. of Natural Resources.	2000: 2001: 2002:	\$45,915,460 \$44,843,783 \$47,384,086
5. Local Police and Paid Fire Relief Association Amortization State Aid	Minnesota Statutes, Section 423A.02, Subdivision 1	1980	State General Fund	Cities with local police or paid firefighter relief associations	2000: 2001: 2002:	\$1,639,219 \$1,616,837 \$3,451,988
6. Supplemental Police and Paid Fire Amortization State Aid	Minnesota Statutes, Section 423A.02, Subdivision 1a	1984	State General Fund	Cities with local police or paid firefighter relief associations	2000: 2001: 2002:	\$529,703 \$279,229 \$749,526
7. Additional Amortization State Aid	Minnesota Statutes, Section 423A.02, Subdivision 1b	1995	State General Fund (one-half of excess police state aid after ambulance longevity award program deduction)	Cities with local police or paid firefighter relief associations	2000: 2001: 2002:	\$4,164,411 \$8,665,401 \$5,161,643
8. Volunteer Fire Lump Sum Supplemental Benefit State Reimbursement	Minnesota Statutes, Section 424A.10	1988	State General Fund (line item appropriation to the Dept. of Revenue)	Volunteer firefighter relief associations paying lump sum service pensions in prior year which apply for reimbursement	2000: 2001: 2002:	\$378,000 \$420,000 \$420,000
9. State Contribution to MERF	Minnesota Statutes, Section 422A.101, Subdivision 3	1979	State General Fund	Minneapolis Employees Retirement Fund (MERF)	2000: 2001: 2002:	\$7,032,750 \$3,085,000 \$3,224,000
10. Pre-1974 MERF Retiree Special Post Retirement Adjustment Aid	Minnesota Statutes, Section 356.43	1991	State General Fund	MERF		\$510,647 \$483,729 acorporated into contribution to

Public Pension Plan State Aid

State Aid Program	Governing Statute	Year In Which Aid Program Established	Aid Source	Aid Recipient(s)		ecent Total id Amounts
11. State Funding of Teacher Retirement	Minnesota 1915/1931/19 Statutes, Sections 67/1985/1987 126C.10 to		State General Fund	School districts and other educational employers	2000 TRA: \$134,418,833 TRFA's:\$44,929,291	
	126C.23				2001 TRA: \$139,799,408 TRFA's:\$46,580,142	
						\$142,221,589 's:\$44,970,000
12. 1993 State Supplemental MTRFA/SPTRF A Contributions	Minnesota Statutes, Section 354A.12, Subdivision 3b	1993	State General Fund	Minneapolis Teachers Retirement Fund Association (MTRFA) and St. Paul Teachers Retirement Fund Association (SPTRFA)	2000: 2001: 2002:	\$3,000,000 \$3,000,000 \$3,000,000
13. 1996 State Supplementary MTRFA/SPTRF A Contributions	Minnesota Statutes, Section 423A.02, Subdivision 3	1996	State General Fund	MTRFA and SPTRFA	2000: 2001: 2002:	\$4,480,000 \$5,040,000 \$4,715,000
14. 1997 State Supplemental First Class City Teacher Retirement Fund Associations Funding	Minnesota Statutes, Section 354A.12, Subdivision 3a	1997	State General Fund	Duluth Teachers Retirement Fund Association (DTRFA), MTRFA, and SPTRFA	2000: 2001: 2002:	\$15,767,000 \$15,767,000 \$15,767,000
15. 1997 State Aid for PERA- General	Minnesota Statutes, Sections 124.2141 and 273.1385	1997	State General Fund	General Employee Retirement Plan of the Public Employees Retirement Association (PERA-General)	2000: 2001: 2002:	\$14,586,176 \$14,585,456 \$14,585,074
16. Ambulance Service Personnel Longevity Award and Incentive Program State Aid	Minnesota Statutes, Sections 69.021, Subdivision 11, Paragraph (c), and 144E.42	1993	State General Fund (deduction from excess police state aid)	Ambulance service personnel longevity award and incentive program	2000: 2001: 2002:	\$1,000,000 \$1,000,000 \$1,000,000

Various Minnesota Public Pension Funds:

Total Portfolio Time-Weighted Rates of Return

State Board of Investment

Year	Combined Fund	Basic Fund	Post Fund	MTRFA	DTRFA	SPTRFA	MERF
1990		-0.7%	5.0%	-2.5%	3.2%	4.6%	-5.9%
1991		26.3%	19.6%	25.0%	22.0%	19.8%	13.3%
1992		6.8%	8.0%	8.2%	6.5%	7.2%	8.8%
1993		12.2%	11.6%	12.3%	12.8%	11.3%	13.7%
1994	-0.4%			0.1%	0.2%	0.3%	1.2%
1995	25.5%			25.0%	25.5%	26.2%	23.4%
1996	15.3%			13.6%	13.4%	12.6%	12.9%
1997	21.5%			15.5%	15.5%	19.6%	18.5%
1998	16.1%			14.2%	11.1%	12.0%	15.7%
1999	16.5%		•	21.5%	29.4%	13.6%	15.5%
2000	-2.8%			-6.0%	-1.6%	-0.2%	-1.3%
2001	-6.0%			-7.7%	-4.7%	-1.4%	-6.2%
2002	-11.6%			-16.2%	-12.8%	-9.6%	-11.3%
2003	23.1%			22.8%	28.1%	27.0%	25.2%
2004	12.4%			10.2%	10.6%	14.1%	12.8%
2005	9.9%			5.7%	7.6%	9.9%	7.3%

- A. Deficit in the Minnesota Post Retirement Investment Fund (MPRIF)
 - ? Accounting Issue
 - ? Funding Issue
 - ? Benefits Issue
- B. Appropriate Approach to Providing Public Sector Pension Benefits
- C. Inadequate Defined Benefit Plan Contribution Rates
- D. Disparity in Defined Benefit Plan Accrual Rates and Normal Retirement Ages
- E. Future of Minnesota Local Retirement Plans
- F. Actuarial Value of Assets
- G. Unfunded Actuarial Accrued Liability
- H. Unfunded Actuarial Accrued Liability Level Percentage of Pay Amortization
- I. Extent of Active versus Passive Investment Strategies
- J. State Aid Programs Dedicated to Pension Funding
- K. Appropriate Manner for the State to Obtain Actuarial Information

A. Deficit in the Minnesota Post Retirement Investment Fund (MPRIF)

1. <u>Brief Background Information</u>

The Minnesota Post Retirement Investment Fund (MPRIF) is an investment fund and the postretirement adjustment mechanism for the various statewide retirement plans. Post-retirement increases are a combination of the percentage increase in the federal Consumer Price Index (CPI), subject to a 2.5 percent annual maximum, and one-fifth of the investment income on the MPRIF assets in excess of 8.5 percent plus one-fifth of any "excess" investment income from each of the prior four years. At retirement, actuarially determined required reserves for each retiree are transferred to the MPRIF and are invested in a manner virtually identically to the assets related to plan active members, with a heavy stock investment component. Transfers are made to and from the MPRIF annually in the event of future mortality gains or losses. If the market value of MPRIF assets is less than the required reserves value, no future excess investment income post-retirement increase is payable until the MPRIF deficit is eliminated. Post-retirement increases are compounding percentage amounts and increases, once granted. are not subject to any future reduction. For actuarial and annual financial reporting, MPRIF asserts are carried at the actuarial required reserve value rather than market value or other value. The MPRIF increases have averaged 5.7 percent over a 28-year period (1978-2005), compared to the CPI average increase of 4.3 percent, and have exceeded the cost of living increase in 19 of 28 years, include an 11-year continuing period 1992-2002. When the MPRIF increase over-performed the cost of living in the past, it usually did so by a considerable margin.

2. MPRIF Deficit Amount.

Because MPRIF increases are not rolled back when the investment climate is bad and because of the significant decline in the equity markets that occurred in 2001-2002, the current (June 30, 2006) market value of the MPRIF is \$4.178 billion less than the actuarial required reserves value of the MPRIF on that date, as follows:

	MPRIF-Whole	MSRS Portion	PERA Portion	TRA Portion
Required Reserves	\$26,089,000,000	\$3,689,400,000	\$6,791,100,000	\$12,371,200,000
Market Value	21,911,000,000	3,098,700,000	5,703,800,000	10,390,600,000
Deficit	\$4,178,000,000	\$590,700,000	\$1,087,300,000	\$1,980,600,000

3. Accounting Issue.

Generally accepted accounting principles for Minnesota public pension plans is governed by the Government Accounting Standards Board (GASB), which requires the use of market value or actuarial value of assets based on market value in pension accounting. The use of the actuarial required reserves of the M PRIF as the carrying value of the MPRIF for actuarial valuations and annual financial reporting is now viewed by some of the accounting personnel of the retirement plans and by the Office of the Legislative Auditor as being outside of the permitted values under GASB pronouncements and they may be seeking modifications in Minnesota actuarial and financial reporting laws to gain GASB consistency.

4. Funding Issue.

The sole funding mechanism for retiring the MPRIF deficit is the statutory claim against any potential future investment performance-related post-retirement adjustment until the deficit is eliminated (see Minnesota Statutes, Section 11A.18, Subdivision 9, Paragraph (c), Clause (9)). Unless MPRIF investment performance greatly exceeds 8.5 percent in the short run, the elimination of the MPRIF deficit may take one or two decades to eliminate. Unless the MPRIF never again earns an investment return in excess of 8.5 percent and the assets of the MPRIF become insufficient to pay benefits due and owing, the active member accounts of the participating retirement plans and the State will not have any enforceable legal obligation to provide additional funding to eliminate the MPRIF deficit. Because the market value of the MPRIF is only 83.99 percent of the MPRIF required reserves value, to produce one dollar excess MPRIF investment income (in excess of 8.5 percent of required reserves) would necessitate an actual rate of return on the market value of assets in excess of 10.12 percent.

A report produced by the Minnesota Taxpayers Association in Spring 2006 was strongly critical of various MPRIF practices, including the non-inclusion of the MPRIF deficit in the calculation of the unfunded actuarial accrued liability and funded ratio of the affected retirement plans. Reportedly, a report to be released by the Program Evaluation Division of the Office of the Legislative Auditor on Post-Employment Benefits for Public Employees will also be critical of the lack of a direct disclosure of the funding impact of the MPRIF deficit.

5. Benefit Issue.

The claim against all future potential MPRIF investment performance-related post-retirement adjustments that arises under Minnesota Statutes, Section 11A.18, Subdivision 9, whenever the MPRIF has a deficit means that current retirees of the statewide retirement plans (a total of 137,769 benefit recipients) will not receive a post-retirement adjustment in excess of 2.5 percent in any future year for the foreseeable future. Based on the experience of retirees during the period 1992-2002, when MPRIF increases were frequently twice or three times the cost of living, retirees will likely take issue with the expected modest future pattern of MPRIF adjustments.

The Legislature established the MPRIF with conflicting goals, seeking a post-retirement adjustment mechanism that would be affordable (hence the reliance on "excess" investment performance to fund a considerable portion of future adjustments), recurring (hence automatically payable every year), and capable of replacing purchasing power lost to inflation (hence the CPI-related adjustment component). While low inflation combined with strong equity markets accomplished these goals during the 1990s, that pattern is unlikely to be repeated for some time into the future.

The Commission was mandated to study the issue during the 2006-2007 Interim and report to the 2007 Legislature in Laws 2006, Chapter 277, Article 7. The Commission has conducted the basic research required to complete the study, but the Commission delayed completion of the study until after January 1, 2007.

B. Appropriate Approach to Providing Public Sector Pension Benefits

1. <u>Brief Background Information</u>.

The public sector at large and Minnesota in particular relies to a greater extent on defined benefit retirement plans than does the private sector nationally or in Minnesota.

Defined benefit retirement plans are an alternative to defined contribution plans. Retirement plans are categorized based on which of two potential variables (benefit levels or funding levels) is fixed. Defined benefit retirement plans utilize a formula, typically salary-related, to specify a certain level of benefits, leaving the funding of the plan as the variable. Defined contribution retirement plans, such as Individual Retirement Accounts (IRAs), 403(b) tax-sheltered annuities, and 401(k) plans, fix the level of the funding of retirement coverage, leaving the eventual retirement benefit variable because it is dependent on a number of factors.

The choice between defined benefit plans and defined contribution plans is not a choice between good and bad or right and wrong, but is a choice between competing valuable attributes. Defined benefit plans, for long-term employees, is more likely to produce an adequate benefit because it is benefit oriented, but also may produce unexpected future costs for the employer if assumptions about future economic and demographic experience are not matched. Defined contribution plans, for short duration employees, are more flexible and more portable, but do not provide sufficient benefit coverage for groups of employees, such as public safety employees, who face enhanced employment casualty risks.

2. <u>Current Utilization of Defined Contribution Plan Coverage</u>.

Defined contribution plan coverage in Minnesota applies to the following groups of public employees:

- ? Legislators and constitutional officers first elected after 1997;
- ? Most legislative staff and State agency and department heads (with defined benefit plan option for long-term employees);
- ? All University of Minnesota faculty;
- ? Most Minnesota State Colleges and Universities System faculty since 1989 (State university and community college faculty) or since 1994 (technical college faculty);
- ? Local elected officials elected since 2001:
- ? Local government physicians and some ambulance or rescue squad personnel; and
- ? Volunteer firefighters in 86 communities (13 percent of municipalities and 13 percent of all volunteer firefighters).

3. Desire or Need to Replicate Private Sector Benefit Practices.

Defined contribution retirement plan coverage has been proposed for Minnesota public employees based, in whole or in part, on the reflection of a desire or a need to replicate private sector practices. Defined benefit pension coverage in the private sector and corresponding funding burdens have plagued "legacy" airlines, such as Northwest Airlines, and heavy industrial firms, such as Ford Motor Company.

Replication of private sector compensation and benefit practices is not currently part of the pension policy principles of the Legislative Commission on Pensions and Retirement, which

express a preference for defined benefit plan coverage absent circumstances that make defined contribution plan coverage more appropriate and declares the purpose of public pension coverage to augment the public sector personnel and compensation system in assisting recruitment, retention, and career-end out-transitioning by providing retirement income, including Social Security, that is adequate and affordable.

C. Inadequate Defined Benefit Plan Contribution Rates

1. Brief Background Information

Under Commission Pension Policy Principles and longstanding practice, Minnesota defined benefit public pension plans other than volunteer firefighter relief associations are contributory plans, meaning that the funding requirement of the benefit plan is shared between the plan membership and participating employing units. Private sector defined benefit pension plans tend to be non-contributory plans, meaning that the employer/plan sponsor has total responsibility to fund the plan.

The funding requirement of Minnesota defined benefit plans is made up of three parts, the plan's normal cost, the plan's administrative expenses, and the plan's amortization requirement. Normal cost under the Entry Age Normal Actuarial Method used in Minnesota is the level percentage of covered pay figure calculated by the actuary that represents the average funding charge for active members for pension coverage. The administrative expenses are the costs of operating the plan without the inclusion of most investment expenses, which generally are netted against investment income. The amortization requirement is the debt service charge on the pension plan's unfunded actuarial accrued liability, which is a measure of past departures from full concurrent funding practices.

The Commission's policy on the allocation of pension funding costs differs between general employees and public safety employees, because of the greater employment risks of public safety employment and greater pension costs of those plans. For general public employees, under the Commission policy, the employee and employer should make matching contributions to meet the normal cost and the administrative expenses of the defined benefit pension plan and both the employee and the employer may be required to share some financial responsibility for funding the amortization requirement of the defined benefit pension plan. For protective and public safety employees covered by a statewide public pension plan, the employee should pay forty percent of the total actuarial costs of the defined benefit pension plan and the employer should pay sixty percent of the total actuarial costs of the defined benefit pension plan.

2. Current Contribution Deficiencies.

Of the various statewide and major local retirement plans, all plans other than the General Employee Retirement Plan of the Public Employees Retirement Association (PERA-General), the Local Government Correctional Employees Retirement Plan of the Public Employees Retirement Association (PERA-Correctional), and the Minneapolis Employees Retirement Fund (MERF), have a contribution deficiency, even when contribution increases enacted in 2005 and 2006 are factored in. The following summarizes the current actuarial funding requirements and the fully implemented required contribution rates of the retirement plans with contribution deficiencies:

General Employee Plans

	MSRS	S-General 1	PERA	A-General 2		TRA	Jı	udges	N	MERF
Normal Cost Admin. Expenses Amortization	8.52% 0.21% 1.38%	\$183,605,603 \$4,530,916 \$29,774,591	7.78% 0.20% 4.92%	\$366,059,040 \$9,407,790 \$231,431,639	9.43% 0.33% 2.34%	\$349,678,399 \$12,236,072 \$86,764,874	17.91% 0.17% 12.65%	\$6,538,362 \$62,099 \$4,620,928	18.05% 4.22% 73.04%	\$3,526,072 \$824,557 \$14,265,728
Total Req.	10.11%	\$29,774,391	12.90%	\$606,898,469	12.11%	\$448,679,345	30.73%	\$11,221,389	95.32%	\$18,616,357
Employee Contrib. Employer Contrib. E'er Add'l Cont.	5.00% 5.00% 0.00%	\$107,878,953 \$107,878,953 \$0	6.00% 7.00% 0.00%	\$282,233,706 \$329,272,657 \$0	5.51% 5.23% 0.00%	\$204,456,479 \$193,832,020 \$0	7.59% 20.50% 0.00%	\$2,772,195 \$7,488,460 \$0	9.75% 37.63% 1.86%	\$1,904,221 \$7,349,456 \$362,680
Direct State Funding Other Govt. Funding Total Contrib.	0.00% 0.00% 10.00%	\$0 \$0 \$215,757,906	0.00% 0.00% 13.00%	\$0 \$0 \$611,506,363	0.51% 0.07% 11.31%	\$18,819,110 \$2,500,000 \$419,607,609	0.00% 0.00% 28.09%	\$0 \$0 \$10,260,655	46.08% 0.00% 95.33%	\$9,000,000 \$0 \$18,616,357
Total Requirements Total Contributions	10.00% 10.11% 10.00%	\$215,757,906 \$217,911,110 \$215,757,906	13.00% 12.90% 13.00%	\$606,898,469 \$611,506,363	12.11% 11.31%	\$448,679,345 \$419,607,609	30.73% 28.09%	\$10,260,655 \$11,221,389 \$10,260,655	95.33% 95.32% 95.33%	\$18,616,357 \$18,616,357
Deficiency/(Surplus)	0.11%	\$2,153,204	(0.10%)	(\$4,607,874)	0.80%	\$29,071,736	2.64%	\$960,734	(0.01%)	\$0

DTRF		TRFA	SPTRFA		Legislators		Elected State Officers	
Normal Cost	9.19%	\$5,281,712	9.21%	\$21,575,645	17.61%	\$542,360	0.00%	\$0
Admin. Expenses	0.76%	\$436,869	0.26%	\$608,955	1.03%	\$31,708	0.00%	\$1,000
Amortization	5.24%	\$3,012,098	15.55%	\$36,420,175	92.60%	\$2,850,660	0.00%	\$476,221
Total Req.	15.19%	\$8,730,679	25.02%	\$58,604,775	111.24%	\$3,424,728	0.00%	\$477,221
Employee Contrib.	5.50%	\$3,161,554	5.69%	\$13,319,540	9.00%	\$277,062	0.00%	\$0
Employer Contrib.	5.79%	\$3,328,254	8.59%	\$20,111,296	0.00%	\$0	0.00%	\$409,095
Direct State Funding	0.00%	\$0	2.05%	\$4,803,000	0.00%	\$0	0.00%	\$0
Total Contrib.	11.29%	\$6,489,808	16.32%	\$38,233,836	9.00%	\$277,062	0.00%	\$409,095
Total Requirements	15.19%	\$8,730,679	25.02%	\$58,604,775	111.24%	\$3,424,728	0.00%	\$477,221
Total Contributions	11.29%	\$6,489,808	16.32%	\$38,233,836	9.00%	\$277,062	0.00%	\$409,095
Deficiency/(Surplus)	3.90%	\$2,240,871	8.70%	\$20,370,939	102.24%	\$3,147,666	0.00%	\$68,126

Public Safety Employee Plans

	MSRS-Correctional ¹		State Patrol ³		PERA-P&F ⁴		PERA-Correctional	
Normal Cost Admin. Expenses Amortization Total Reg.	17.69% 0.21% 5.44% 23.34%	\$28,786,714 \$341,764 \$8,853,309 \$37,981,787	24.41% 0.18% 2.10% 26.69%	\$14,098,467 \$103,978 \$1,213,075 \$15,415,520	22.32% 0.11% 3.14% 25.57%	\$149,097,708 \$734,897 \$20,977,965 \$170.810.570	12.14% 0.14% 0.39% 12.68%	\$17,134,103 \$197,516 \$550,224 \$17,881,843
Employee Contrib. Employer Contrib.	8.60% 12.10%	\$13,996,039 \$19,692,101	10.40% 15.60%	\$6,007,607 \$9,011,410	9.40% 14.10%	\$62,800,278 \$94,200,417	5.83% 8.75%	\$8,225,142 \$12,344,767
Total Contrib.	20.70%	\$33,688,140	26.00%	\$15,019,017	23.50%	\$157,000,695	14.58%	\$20,569,909
Total Requirements Total Contributions	23.34% 20.70% 2.64%	\$37,981,787 \$33,688,140 \$4,293,647	26.69% 26.00% 0.69%	\$15,415,520 \$15,019,017 \$396,503	25.57% 23.50% 2.07%	\$170,810,570 \$157,000,695 \$13,809,875	12.68% 14.58% (1.90%)	\$17,881,843 \$20,569,909 (\$2,688,066)
Deficiency/(Surplus)	2.04%	\$4,Z93,04 <i>1</i>	0.09%	\$390,503	2.07%	\$13,009,875	(1.90%)	(\$2,088,000)

Revised 1/19/07

¹ Phase-in period 2007-2010 ² Phase-in period 2006-2008 ³ Phase-in period 2007-2009

⁴ Phase-in period 2006-2009

D. Disparity in Defined Benefit Plan Accrual Rates and Normal Retirement Ages

1. <u>Brief Background Information</u>

In a defined benefit retirement plan, a retirement annuity is calculated, in part, utilizing benefit accrual rates, and is first payable in full at the normal retirement age or ages.

The benefit accrual rate is the percentage of the final average covered salary that is earned with each additional year of service rendered.

The normal retirement age is the earliest age at which a retirement annuity is payable without a reduction for an early commencement of the benefit.

2. <u>Current Disparities in Benefit Accrual Rates</u>

The principal disparity in benefit accrual rates between general employee retirement plans with Social Security coverage is between TRA and MSRS-General, PERA-General, DTRFA, and SPTRFA, where TRA has a benefit accrual rate in the level benefit tier of 1.9 percent of final average salary per year of service credit for years after July 1, 2006, and the other retirement plans have a benefit accrual rate of 1.7 percent of final average salary per year of service credit for all past and all future years.

Additionally, there is a long-standing disparity in benefit accrual rates between the Judges Retirement Plan and the other general employee retirement plans with Social Security coverage, with the Judges Retirement Plan benefit accrual rates set at 2.7 percent per year of service for pre-July 1, 1980, service and 3.2 percent per year of service for post-June 30, 1980, service while the other general employee plans have benefit accrual rates of 1.7 percent and 1.9 percent.

For public safety plans, the plans covering licensed police officers, the State Patrol Retirement Plan and the Public Employees Police and Fire Retirement Plan (PERA-P&F), provide a consistent benefit accrual rate set at 3.00 percent per year of service credit. The plans covering correctional officers, where the public pension plan benefit supplements Social Security benefits, the benefit accrual rates are smaller than those public safety plans without Social Security coverage, with differing benefit accrual rates. The MSRS-Correctional plan has a 2.4 percent per year of service benefit accrual rate and the PERA-Correctional plan has a 1.9 percent per year of service credit benefit accrual rate.

Before 1997, when there was a benefit accrual rate disparity between TRA and the other general employee retirement plans, that disparity led to the enactment of benefit improvement legislation in 1997 (see Laws 1997, Chapter 233) that provided uniform benefit accrual rates among those retirement plans.

3. Current Disparities in Normal Retirement Ages

There is a disparity between coverage groups within the general employee retirement plans with respect to the applicable normal retirement age. Members of MSRS-General, PERA-General, TRA, DTRFA, and SPTRFA who became pension plan members before July 1, 1989, are covered by the "Rule of 90" normal retirement age, where long service plan members may retire with full benefits at any age when the sum of attained age and accrued service credit totals 90. Post-June 30, 1989, members of these plans have no early normal retirement age access before age 66.

Although the actuarial valuation active member census information is sufficiently imprecise to determine the exact percentage of the portion of the membership who became plan members after June 30, 1989, approximately three-quarters of the applicable plan memberships are excluded from the "Rule of 90" benefit tier coverage (MSRS-General, 68 percent; PERA-General, 79 percent; TRA, 74 percent; DTRFA, 70 percent; and SPTRFA, 77 percent).

E. Future of Minnesota Local Retirement Plans

1. Brief Background Information

Although Minnesota utilizes statewide retirement plans to cover a large portion of the State's public workforce, Minnesota has a large number of local retirement plans, largely as a function of the numerous volunteer firefighter relief associations.

Over the 1960s, 1970s, and 1980s, the Legislature reduced the number of local pension plans providing primary retirement coverage to public employees, chiefly by phasing-out all of the local police and paid firefighter relief associations and by enabling the consolidation of most of the local police and paid firefighter relief associations into PERA-P&F. Also placed on a phase-out basis during this period was MERF and also consolidated into a statewide pension plan during this period was the St. Paul Bureau of Health Relief Association.

2. Administrative Issues

Those local retirement plans that were placed on a phase-out status two or three decades ago, MERF, the Minneapolis Firefighters Relief Association, the Minneapolis Police Relief Association, the Fairmont Police Relief Association, and the Virginia Fire Department Relief Association, now have very small or nonexistent active memberships and may no longer have the magnitude of administrative duties to justify a separate retirement plan administration.

3. Funding/Coverage Issues

With the consolidation of the Minneapolis Teachers Retirement Fund Association (MTRFA) into TRA in 2006, a policy question arises about the future with respect to DTRFA and SPTRFA. Both DTRFA and SPTRFA have declining funding ratios and growing contribution deficiencies, although neither plan has reached the significant level of financial and administrative problems that typified MTRFA immediately before the 2006 consolidation. At some point, some change may be appropriate, either using the MERF model (phase-out into a statewide retirement plan (PERA)), or using the MTRFA model (consolidation into a statewide retirement plan (TRA)).

F. Actuarial Value of Pension Fund Assets

1. Brief Background Information

For actuarial valuation and annual financial reporting purposes, Minnesota public pension plan assets are valued in a manner that is not solely the market value of the applicable securities.

Initially, in the 1950s and 1960s actuarial and financial reporting laws, pension plan assets were valued at their book (initial security purchase) value. In 1984 (Laws 1984, Chapter 564), the value of Minnesota pension plan assets for actuarial and financial reporting purposes was

changed to an actuarial value of assets, defined as book value plus or minus one-third of the difference between book value and market value.

In 2000 (Laws 2000, Chapter 461, Article 1, Section 3), the actuarial value of pension plan assets definition was revised upon the recommendation of the consulting actuary retained by the Legislative Commission on Pensions and Retirement, based on the current market value, but adjusted upward or downward based on portions of the difference between the actuarially expected increase in the asset value and the actual market value change over a five-year period. The intent of the actuarial value definition is to eliminate short-term market value fluctuations out of the ongoing asset value figures.

2. Comparison of Market Value and Actuarial Value of Pension Plan Assets

Using an actuarial value of assets rather than the market value of assets for a pension plan apparently is not uncommon among public pension plans and complies with generally accepted accounting principles under Government Accounting Standards Board pronouncements. Using a smoothing method that shaves off short-term market volatility is particularly advantageous from a policy perspective if the pension plan funding procedures immediately translate actuarial results into modified employer contribution amounts in the following year, where short-term value changes would produce highly variable contribution levels year to year. In Minnesota, this is a consideration only for MERF and for the five local police and paid firefighter relief associations. The use of a smoothing mechanism may be sensible policy where the smoothing period reflects the actual pattern of market volatility, which tends to be either less than one year or longer than five years based on long-term stock market return data from Ibbotson Associates. Even if the smoothing period matches market cycles, an actuarial value of pension assets definition does nothing more than delay the recognition of actual market changes.

The following compares the actuarial value of assets and the market value of assets for the various statewide and major local retirement plans as of June 30, 2006:

Plan	Actuarial Value of Assets	Market Value of Assets	Actuarial Value as % of Market Value
MSRS-General	\$8,486,756,016	\$8,767,249,551	96.8%
MSRS-Correctional	535,356,819	549,986,069	97.3
Judges	151,850,386	154,151,618	98.5
State Patrol	618,990,349	633,419,202	97.7
PERA-General	12,495,207,148	12,828,990,072	97.4
PERA-Correctional	125,775,917	131,696,690	95.5
PERA-P&F	5,017,950,719	5,167,417,402	97.1
TRA	19,035,611,839	19,785,671,584	96.2
DTRFA	270,925,689	281,950,173	96.1
SPTRFA	938,919,005	1,005,745,229	93.4
MERF	1,490,280,063	1,494,046,146	99.7
Total	\$49,167,623,950	\$50,800,323,736	

G. Unfunded Actuarial Accrued Liability Level Percentage of Pay Amortization

1. Brief Background Information

When pension plan actuarial accrued liabilities exceed pension plan assets, the plan has an unfunded actuarial accrued liability, which represents the cumulative total of past departures from sound full funding practices, such as past actuarial experience losses, past insufficient contributions, past benefit increases, or a combination of the three. If a retirement plan has an unfunded actuarial accrued liability, sound pension funding practices require that the unfunded actuarial accrued liability be paid or amortized over a reasonable period of time.

The amortization of pension plan unfunded actuarial accrued liabilities depend on the amortization period, measured by the amortization target date, and on whether the amortization contribution is calculated as a level dollar amount or as a level percentage of covered pay.

In Minnesota, amortization contribution requirements are calculated as part of the actuarial valuation process under Minnesota Statutes, Section 356.215, Subdivision 11, but only MERF and local police and fire relief association future contribution amounts are required to change in the following year as a consequence of that actuarial work. For all other Minnesota defined benefit retirement plans, the amortization contribution requirement is advisory, used by the Legislative Commission on Pensions and Retirement and the Legislature to set member and employer contribution rates.

Since 1984, Minnesota has used a level percentage of covered payroll amortization rather than the prior level dollar amortization requirement and has reset the amortization target date on several occasions, usually with a period no longer than 30 years.

2. <u>Impact of Level Percentage of Covered Pay Amortization</u>

The level percentage of covered pay amortization procedure provides potential contribution rate stability over time when compared to the level dollar amortization period over time, but has the effect of deferring much of the actual payments to reduce the principal amount of the unfunded actuarial accrued liability to the second half of the amortization period, with early period payments less than full interest on the unfunded actuarial accrued liability and with the unfunded actuarial accrued liability actually increasing in amount during the early portion of the amortization period.

The following sets forth a comparison of the amortization contribution rate calculated as part of the July 1, 2006, actuarial valuations with the 8.5 percent interest rate actuarial assumption amount:

Plan	Amortization Target Date	Unfunded Actuarial Accrued Liability	\$ Calculated Amortization Requirement	8.5% Interest on Unfunded Actuarial Accrued Liability	Difference
MSRS-General	2020	332,404,901	29,774,591	28,254,417	1,520,174
MSRS-Correctional	2023	112,123,450	8,853,308	9,530,493	(677,185)
Judges	2020	50,450,784	4,620,923	4,288,317	332,606
State Patrol	2036	22,488,729	1,213,074	1,911,542	(698,468)
PERA-General	2031	4,242,549,610	231,431,639	360,616,717	(129,185,078)
PERA-Correctional	2023	7,529,873	550,224	640,039	(89,815)
PERA-P&F	2020	242,613,301	20,977,965	20,622,131	355,834

Plan	Amortization Target Date	Unfunded Actuarial Accrued Liability	\$ Calculated Amortization Requirement	8.5% Interest on Unfunded Actuarial Accrued Liability	Difference
TRA DTRFA SPTRFA	2036 2032 2021	1,643,499,040 51,303,478 419,700,901	86,764,874 3,012,098 36,420,175	139,697,418 4,360,796 35,674,577	(52,932,544) (1,348,698) 745,598
MERF*	2020	127,373,249	14,265,726	7,642,395*	6,623,331

^{*} Interest only calculated based on 6.00 percent interest actuarial assumption applicable to this plan

H. Appropriateness of Current Actuarial Assumptions, Especially Economic Assumptions

1. Brief Background Information

Actuarial valuations are budgeting tools for recognizing pension costs and involve projecting future benefit expenditures and forecasting future economic and non-economic, or demographic, events. In determining the annual cost of a defined benefit pension plan and its financial health actuarially, there are two important factors, the actuarial cost method and the actuarial assumptions. Minnesota has considered the question of the appropriate actuarial cost method since the mid-1960s and requires in Minnesota Statutes, Sections 69.77, 69.773, and 356.215, the use of the Entry Age Normal Actuarial Cost Method.

Actuarial assumptions are predictions about future experience in various areas, some economic and some demographic. The principal economic actuarial assumptions are investment performance, cost-of-living salary increases, merit or longevity and salary increases, and payroll growth. The principal demographic actuarial assumptions are mortality, retirement age, withdrawal, separation, or turnover, and disablement.

In Minnesota public pension plans, the economic actuarial assumptions are set forth in statute (Minnesota Statutes, Section 356.215) and the demographic actuarial assumptions are specified or modified with Legislative Commission on Pensions and Retirement approval, upon the request of the public pension plan administration, the plan actuary, or the Commission's actuary.

In order to gauge the adequacy of actuarial assumptions, quadrennial experience studies are performed automatically for the three major retirement plans and are performed for the remaining statewide and major local retirement plans based upon ad hoc Commission action. Additionally, each actuarial valuation of a statewide or major local retirement plan is required to contain an actuarial gain and loss analysis, focusing on the major economic and demographic experience items, to assist in determining the continued accuracy of the various actuarial assumptions.

Changing actuarial assumptions, when the quadrennial experience study indicates a need to do so, is not al-ways an easy proposition. In the 1993-1995 round of experience studies, several assumptions that were identified for modification by the Commission actuary ultimately were not modified because of opposition from pension plan actuaries and administrators and several assumption changes were subject to dispute because of apparent stylistic disagreements among actuaries and because of the actuarial cost impact of the change on the potential for additional future benefit increases.

Frequently in the past, actuarial assumptions have been changed in combination with benefit improvements (principally 1973 and 1989 for the statewide plans) or in combination with

contribution restructurings (1984 for the statewide and major local plans; 1991 for the Minneapolis Employees Retirement Fund (MERF)).

2. Recommended Assumption Changes Arising Out of the 7/1/2000 – 6/30/2004 Experience Studies

The most recent quadrennial experience studies of MSRS-General, PERA-General, and TRA were conducted in late 2005 – early 2006 and contain several recommendations, which are as follows:

Experience Study Item	MSRS-General	PERA-General	TRA
Inflation	Conduct additional study with State Board of Investment (SBI)	Conduct additional study with SBI	Conduct additional study with SBI
Investment Return	Conduct additional study with SBI	Conduct additional study with SBI	Conduct additional study with SBI
Salary Increases	Conduct additional study with SBI	Conduct additional study with SBI	Conduct additional study with SBI
Payroll Growth	Conduct additional study with SBI	Conduct additional study with SBI	Conduct additional study with SBI
Withdrawal	Lower rates for females ages 35 to 54	No change	No change
Disability Incidence	Increase rates for ages 50 to 60	No change	No change
Retirement Age	Lower rates for "Rule of 90" ages 55 to 60	Lower rates for "Rule of 90" ages 55 to 61 and 63-64; Revise rates at ages 61 and 62	Increase rates for "Rule of 90" ages 56 and 57 and lower rates for "Rule of 90" ages 55 to 59, 61, and 65
Post-Retirement Mortality	No change	No change	No change
Pre-Retirement Mortality	No change	No change	No change
Disabilitant Mortality	No change	No change	No change
Survivor Mortality	No change	No change	No change
Marital Status	No change	No change	No change
Spouse's Age	No change	No change	No change
Optional Annuity Form Election	No change	No change	No change
Asset Valuation Method	Conduct additional study with auditors to determine GASB compliance	Conduct additional study with auditors to determine GASB compliance	Conduct additional study with auditors to determine GASB compliance
Amortization Method	Conduct additional study	Conduct additional study	Conduct additional study

I. Extent of Active Versus Passive Investment Strategies

1. <u>Brief Background Information</u>

Pension plans accumulate large amounts of assets to offset the liabilities undertaken by the plans and to avail themselves of investment income for a considerable portion of ultimate benefit payments rather than plan contributions. Pension plans are institutional investors and can follow an active investment strategy, a passive investment strategy, or can utilize each strategy for a portion of the total portfolio.

Active management is simply an attempt to "beat" the market as measured by a particular benchmark of index by utilizing one or more strategies for identifying investment securities or opportunities that provide above-average prospects for investment return. Passive management, or indexing, is an investment management approach based on investing in exactly the same securities, in the same proportions, as an index because of a belief that it is difficult to beat the market and a belief that when the market is beaten, it is a function of luck rather than skill.

Of the various larger Minnesota public pension plans, active management appears to be utilized to some degree. Active management strategies have the advantages of utilizing investment experts, of having the potential of significant returns, of allowing investment managers to take defensive actions when market downturns are evident. The disadvantages of active investment strategies are higher investment fees and expenses, higher potential for mistakes to be made, and greater potential for manager style to diminish performance. Passive investment strategies have the advantages of reduced investment fees and expenses and of a reduced time commitment to investment decision making. The disadvantages of passive investment strategies are the extent that investment performance is dictated by the index and the unavailability of potential defensive actions when market shifts are detected.

2. Portfolio Mix

Whether active or passive investment strategies are employed, the investment portfolio mix will have a significant impact on investment performance. The investment portfolio mix is the extent of utilization of domestic equity securities, international equity securities, debt securities, cash and cash equivalents, and alternative investments.

The following compares the investment portfolio mix of the State Board of Investment and of the other major Minnesota public pension plans as of June 30, 2006:

State Board of Investment						
Investment Type	Active Fund	Retired Fund	DTRFA	SPTRFA	MERF	
Domestic Stocks	49.0 %	47.2%	36.51%	71.39%	46.08%	
International Stocks	15.8	15.3				
Bonds	23.11	23.7	42.89	17.36	29.54	
Real Estate			0.67	8.91	4.46	
Alternative Investments	11.2	8.7	11.48	0.64	17.97	
Cash & Cash Equivalents	0.9	5.1	8.45	1.30	1.95	

3. Investment Management Style

Within the portfolio mix, pension plan assets are invested using a particular management style, active, passive, or enhanced passive or semi-passive.

An active management style invests in specific individual stocks or bonds in different proportions with the intention of earning a higher rate of return than the applicable index, attempting to earn more than the index, but running the risk that the investor can also earn less. Management fees are highest with this style.

A passive management style invests in specific individual stocks or bonds in the same proportion as those individual stocks or bonds are reflected in some benchmark index, with the result that the investor generally will earn the index rate less management fees. This style has the lowest management fees.

An enhanced passive or semi-passive management style generally invests close to an index, but with selected deviations in an attempt to earn a higher rate of return. Management fees under this style will be higher than the passive management style, but generally should be less than the active management style.

The State Board of Investment makes greatest use of the active management style in investing Minnesota public pension plan assets (47.91 percent of the total), followed by the semi-passive style (30.72 percent of the total), and the passive style (21.37 percent of the total). The following summarizes the proportion of pension fund assets allocated to each investment style as of June 30, 2006:

Portfolio Mix Category	Active Style		Semi-Passive	Style	Passive Style	
Domestic Equities	\$7,255,400,000	16.69%	\$7,367,700,000	16.95%	\$7,157,000,000	16.47%
International Equities	\$4,026,300,000	9.26%	\$761,200,000	1.75%	\$2,131,500,000	4.90%
Bonds	\$5,177,900,000	11.91%	\$5,222,100,000	12.02%		
Alternative Investments	\$4,359,791,069	10.03%				
Total	\$20,819,391,069	47.91%	\$13,351,000,000	30.72%	\$9,288,500,000	21.37%

While the active management style can produce higher investment returns than the semipassive or passive management styles, after the deduction of investment expenses, historically, most active money managers apparently do not exceed the applicable indices consistently. If active investment management produces erratic and inconsistent results, the investment authority may have a special burden to justify a significant utilization of that style.

4. Number of Managers

The utilization of an active investment management style can also involve a significant number of money managers.

According to a recent request for proposal with respect to the general and special projects investment consultants to the State Board of Investment, Minnesota public pension plan assets and other funds invested by the State Board of Investment are invested in domestic and international equities, fixed income, real estate, private equity and venture capital, resource funds (oil and gas), guaranteed investment contracts, and derivative securities.

Less than 20 percent of the assets under control of the SBI are managed internally. The remaining assets are managed by external money managers, classified as follows:

- 30 Domestic Equity (28 active, 3 semi-passive, and 1 passive)
- 15 Foreign Equity (8 active, 3 semi-passive, 1 passive, and 3 emerging markets)
- 8 Fixed Income (5 active and 3 semi-passive)
- 12 Real Estate
- 40 Private Equity and Venture Capital
- 4 Resource
- 1 Stable Asset/GIC
- 6 Deferred Compensation Mutual Funds

J. State Aid Programs Dedicated to Pension Funding

1. Brief Background Information

Because state and local government in Minnesota is an employment-intensive endeavor and because pension coverage is a consistent feature of Minnesota governmental employment, government at all levels in Minnesota has the burden of funding a significant portion of that pension coverage.

This cost burden of Minnesota public pension plan coverage has led to the creation of state aid programs directly related to pension plan funding and pension costs are a factor in generalized state aid programs.

The direct state aid programs related to public pensions, by year of creation, are as follows:

- ? Fire State Aid, 1885 (Laws 1885, Ch. 187).
- ? Teachers Retirement Association (TRA) Employer State Contribution, 1915 (Laws 1915, Ch. 199).
- ? First Class City Fire Insurance Surcharge, 1934 (Extra Session Laws 1934, Ch. 53).
- ? Police state aid, 1971 (Laws 1971, Ch. 695)
- ? Minneapolis Employees Retirement Fund (MERF) State Contribution, 1979 (Laws 1979, Ch. 303, Art. 6, Sec. 9).
- ? Local Police and Paid Fire Amortization Aid, 1980 (Laws 1980, Ch. 607, Art. XV, Sec. 5).
- ? Local Police and Paid Fire Supplemental Amortization Aid, 1984 (Laws 1984, Ch. 564, Sec. 48).
- ? Volunteer Fire Supplemental Benefit Reimbursement, 1988 (Laws 1988, Ch. 719, Art. 19, Sec. 22).
- ? Pre-1974 MERF Retiree Supplemental State Contribution, 1991 (Laws 1991, Ch. 345, Art. 4, Sec. 5).
- ? Ambulance Service Personnel Longevity Award and Incentive State Aid, 1993 (First Special Session Laws 1993, Ch. 1, Art. 1, Sec. 1).
- ? Minneapolis Teachers Retirement Fund Association (MTRFA)/St. Paul Teachers Retirement Fund Association (SPTRFA) Matching State Aid, 1993 (Laws 1993, Ch. 357, Sec. 3-4).
- ? Additional Local Police and Paid Fire State Aid, 1995 (Laws 1995, Ch. 262, Art. 4, Sec. 1).
- ? Minimum Volunteer Fire State Aid, 1996 (Laws 1996, Ch. 438, Art. 4, Sec. 2).
- ? MTRFA/SPTRFA Redirected State Aid, 1996 (Laws 1996, Ch. 438, Art. 4, Sec. 9).
- ? MTRFA/SPTRFA Additional Direct State Aid, 1997 (Laws 1997, Ch. 233, Art. 3, Sec. 4).
- Public Employees Retirement Association (PERA) Covered Employer State Aid, 1997 (Laws 1997, Ch. 233, Art. 1, Sec. 14-15).

The indirect state aid programs, where the aid proceeds can be used to pay employer retirement plan contributions, but where no specific portion of the aid is allocated to pension contributions, are state education aid, into which the TRA employer state contribution was folded, local government state aid, and state transportation aids.

2. Amount of Direct State Pension Aids FY 2006-2010

From information provided to the Commission staff by Katherine Schill of the House Fiscal Department on January 4, 2007, the following are the amounts of the direct state pension aids for Fiscal Year 2006 and for the following five fiscal years, Fiscal Year 2007 through Fiscal Year 2011:

		Nov. 06	Nov. 06	Nov. 06	Nov. 06	Nov. 06
	Actual	Forecast	Forecast	Forecast	Forecast	Forecast
	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
			(all numbers	in thousands)		
Fire State Aid	\$30,436	\$32,358	\$30,122	\$27,973	\$25,945	\$28,215
1st Class City Fire Insurance Surcharge	1,606	1,606	1,606	1,606	1,606	1,606
Police State Aid 1	47,641	48,267	53,590	59,434	65,411	67,737
MERF	8,065	9,000	9,000	9,000	9,000	9,000
Local Police & Paid Fire Amortization Aid	2,616	1,978	1,978	1,978	1,978	1,978
Local Police & Paid Fire Supplemental Amortization Aid	750	750	750	750	750	750
Supplemental Volunteer Firefighter Reimbursement	486	486	486	486	486	486
MTRFA 1993 Aid	2,472	2,486	2,500	2,500	2,500	2,500
Redistribution of Amortization Aid ²	1,436	1,436	1,436	1,436	1,436	1,436
Additional Local Police & Paid Fire						
Amortization Aid	8,284	4,843	4,843	4,843	4,843	
MTRFA 1997 Aid	13,298	13,300	13,300	13,300	13,300	13,300
SPTRFA 1997 Aid	2,969	2,967	2,967	2,967	2,967	2,967
PERA Pension Aid	14,568	14,560	14,560	14,560	14,560	14,560
Totals	\$134,627	\$134,037	\$137,138	\$140,833	\$144,782	\$144,535

¹ "Excess" police state aid is the funding source for local police and paid fire additional amortization state aid and for the ambulance service personnel longevity award and incentive state aid.

All of the various state aid programs are funded ultimately from the state General Fund. The MERF state aid, the 1993 and 1997 MTRFA state aid, and the 1997 and SPTRFA state aid, a total of \$26.8 million in Fiscal Year 2006, are within the jurisdiction of the House State Government Finance Division. The balance, a total of \$107.8 million in Fiscal Year 2006, is within the jurisdiction of the House Taxes Committee.

A number of policy questions can be raised with respect to the state involvement in pension plan funding, including the use of the state general fund as the appropriate source of all state pension aids, the appropriateness of dedicated funding rather than biennial appropriations for some aid programs, the adequacy of the qualification requirements for some aid programs, the adequacy of current aid applications or reporting, the disposition of funds upon aid disqualification, the manner in which the aid is allocated, the permissible uses for state aid, the extent of disclosure about state aid distributions, and the appropriate termination of state aid programs.

K. Appropriate Manner for the State to Obtain Actuarial Information

1. Brief Background Information

Actuarial information was first required from the state's various public employee retirement plans in 1957 (Special Session Laws 1957, Chapter 11), with regular actuarial reporting by the state's largest retirement plans mandated in 1965 (Laws 1965, Chapters 359 and 751),

Local police and paid firefighter amortization state aid and local police and paid firefighter supplemental amortization state aid are the funding sources for the minimum volunteer fire state aid and for the 1996 MTRFA and SPTRFA state aid.

extended to the Minneapolis Employees Retirement Fund (MERF) and the first class city teacher retirement fund associations in 1969 (Laws 1969, Chapter 289), and extended to monthly benefit volunteer firefighter relief associations in 1971 (Laws 1971, Chapter 261).

Until 1985, each Minnesota public pension plan utilized its own consulting actuary or actuarial firm to prepare the actuarial report of the plan, with the Legislative Commission on Pensions and Retirement retaining a consulting actuary to review the actuarial reporting by the planretained consulting actuaries.

In 1985, as a result of Laws 1984, Chapter 564, Section 43, the responsibility for the preparation of the actuarial reporting for statewide and major local retirement plans was shifted to a single consulting actuary retained by the Legislative Commission on Pensions and Retirement. The various retirement plans responded to this change by continuing to retain actuarial consultants to review the work product of the Commission-retained consulting actuary.

In 2004 (Laws 2004, Chapter 223, Section 7), largely as a result of Legislative Commission on Pensions and Retirement budgetary constraints, the responsibility for retaining the consulting actuary to prepare the regular actuarial reporting was transferred from the Legislative Commission on Pensions and Retirement to the various statewide and major local retirement plan administrators acting jointly.

2. Appropriate Manner for Obtaining Actuarial Information

The goals in acquiring actuarial information undoubtedly include accuracy, consistency with professional and legal standards, timeliness, responsiveness, and compatibility. Each of the three actuarial services arrangements has had departures from some or all of these goals. Before 1985, the Commission was very concerned about accuracy and about consistency with legal standards and requirements among the actuaries retained by the various retirement plans. After 1984, with the centralization of actuary services into one consulting actuary, with retirement plans initially were concerned about accuracy, timeliness, responsiveness, and compatibility. Although some of those concerns diminished over time, the concerns never were fully ameliorated. After 2004, the budgetary constraints of the Commission were addressed in the provision of actuarial services, but the retirement plan administrators were not accustomed to acting jointly in retaining a consulting actuary, and timeliness, accuracy, and compliance issues have arisen with the consulting actuary retained under this procedure.

If there is sufficient interest by the Commission and other relevant legislative committees, the appropriate manner for structuring the retention of actuarial services for the state may be considered and addressed.

This list provides definitions relevant for Minnesota public pension plans and funds. The first section identifies the systems which administer Minnesota's larger pension plans. The second section lists terms relevant for a basic understanding of the types of plans, the financing, and the operation of these plans. The last section contains more general terms that one would encounter in a study of these systems.

Minnesota Major Pension Systems

DTRFA	Duluth Teachers Retirement Fund Association.	DTRFA administers the pension plan and invests assets for Duluth public
	school teachers.	

IRAP Individual Retirement Account Plan. IRAP is a defined contribution plan primarily covering many recently hired Minnesota State Colleges and Universities System (MnSCU) state university, community college, and technical college personnel.

MERF Minneapolis Employees Retirement Fund. The MERF administers the pension plan and invests assets for certain Minneapolis employees hired before July 1, 1978. The plan includes some non-teaching employees of the Minneapolis School District as well as some employees of various Metropolitan Council agencies and entities.

MPRIF Minnesota Post Retirement Investment Fund. The MPRIF is the joint postretirement adjustment mechanism and retiree asset investment fund for the various statewide pension plans, administered by the SBI. The mechanism provides postretirement increases based in part on increases in the federal Consumer Price Index (CPI) and in part on investment performance in excess of 8.5 percent.

Minnesota State Retirement System. MSRS administers the various pension plans that cover state employees. The MSRS General Plan covers most executive branch employees as well as employees of the State Historical Society, employees of the Metropolitan Council, and administrative and clerical employees of the University of Minnesota. The Unclassified Plan covers legislative staff employees and various unclassified employees in state service. The Legislators Plan and the Judges Plan cover legislators who took office before July 1, 1997, and judges, respectively, while the Elected State Officers Plan covers constitutional officers who took office before July 1, 1997. The Correctional Plan covers various employees in state correctional institutions who have sufficient inmate contact. The State Patrol Plan covers peace officers employed by the State Patrol, the Bureau of Criminal Apprehension, the Department of Natural Resources Enforcement Division, and the Department of Public Safety Gambling Enforcement Division.

Minneapolis Teachers Retirement Fund Association. The MTRFA administers the pension plan and invests assets for Minneapolis public school teachers.

Public Employees Retirement Association. PERA administers various plans covering local, county, and school district non-teaching employees. The PERA General Plan covers non-public safety employees in these districts. The PERA Police and Fire Plan provides coverage for many police officers and paid firefighters throughout the state. The PERA Defined Contribution Plan provides coverage to certain local elected officials, certain local government physicians, and to certain basic and advanced emergency medical service personnel.

State Board of Investment. The SBI is the constitutionally established board composed of the Governor, Secretary of State, State Auditor, State Treasurer, and Attorney General and is charged with investing state assets, including the pension fund assets of TRA, MSRS, and PERA.

St. Paul Teachers Retirement Fund Association. The SPTRFA administers the pension plan and invests assets for St. Paul public school teachers.

Teachers Retirement Association. TRA provides coverage for public school teachers throughout the state, except for teachers in the first class cities, and for some teachers in community colleges, state universities, and technical colleges.

MSRS

MTRFA

PERA

SBI

SPTRFA

TRA

Essential Terms

<u>Types of Plans</u>. Primary pension plans can be categorized into two broad types, as follows:

Defined Benefit Plans Under a defined benefit plan, the eventual pension benefit is defined, or determinable, by formulas.

These formulas indicate that the benefit an individual will receive at retirement is a portion of the high-five average salary. The high-five average salary is generally the average salary in the highest five consecutive salary years. The portion of the high-five average salary that the individual will receive is determined by the benefit accrual rate (the percentage of the high-five the individual will receive per year of service provided to the employer) times years of service. Most Minnesota public pension plans

are defined benefit plans.

Defined Contribution Plans No specific benefit is specified. Rather, the contributions that must be paid to the fund are specified,

with the eventual pension benefit being a function of the overall magnitude of contributions, preretirement investment earnings, the age at retirement, and the expected mortality of the recipient.

MSRS Unclassified and IRAP are examples of defined contribution plans.

Common Funding Terms

Considerable attention is given to the funding of defined benefit plans to ensure that sufficient assets are being contributed and invested to meet the eventual plan obligations. Terms commonly encountered in studying plan funding are:

Actuarial Accrued Liability The pension plan liability recognized to date, as determined by the actuarial method used, or

alternatively, that portion of the actuarial present value of pension benefits and expenses which are not

provided for by future normal costs.

Actuarial Report A study performed periodically (annually in Minnesota) by an actuary to examine whether the

contributions made to a defined benefit plan are likely to be adequate, given the benefits offered, the mortality and other demographic factors of the membership, member terminations and turnover, and

pension fund investment performance.

Actuarial Value of Assets
The value of assets used for actuarial valuation purposes, defined for most Minnesota public pension

plans as the value of assets at cost plus one third of the difference between the cost value and the

market value. Also referred to as "current assets."

Amortization Requirement The contribution, expressed as a percentage of payroll, which must be made to pay off the unfunded

actuarial accrued liability by the full funding date.

Contribution Deficiency A comparison of required contributions to statutory contributions indicating that current contribution

rates are not sufficient to cover expenses, normal cost, and make necessary payments to retire the

unfunded actuarial accrued liability by the full funding date.

Contribution Sufficiency A comparison of required contributions to statutory contributions indicating that current contribution

rates are more than sufficient to cover expenses, normal cost, and make necessary payments to retire

the unfunded actuarial accrued liability by the full funding date.

Full Funding Date

The target date established for fully amortizing the pension plan unfunded actuarial accrued liability,

usually June 30, 2020 for Minnesota public pension plans.

Common Funding Terms

Funding Ratio Current assets expressed as a percentage of the actuarial accrued liability. A funding ratio of one

> hundred percent indicates current assets are equal to actuarial accrued liabilities. A funding ratio of less than one hundred percent indicates that the plan has unfunded actuarial accrued liabilities.

Normal Cost The cost, or additional liability, incurred by covering employees for the current year's operations.

The level of contributions, often expressed as a percentage of covered salary, determined by the **Required Contributions**

actuary to be necessary to fully fund a pension plan by the full funding date.

Statutory Contributions Contributions to be paid to a defined benefit plan, generally specified in statute in Minnesota.

Unfunded Actuarial Accrued Liability

Any amount of pension plan accrued liability in excess of the current assets (the actuarial value of

assets) of the pension plan.

Plan and Member Definitions

Current public employees with pension benefit coverage by the plan. Active Member

Employees who terminated service, who are eligible based on the length of their public service for **Deferred Retirees**

pension benefits other than a refund, but who are not yet receiving benefits, usually because they have

not reached the pension plan retirement age.

Pension Fund The vehicle that receives contributions, and accumulates the assets due to these contributions and the

investment income from investing the assets, for purposes of paying the benefits specified by the

pension plan.

Pension Plan The collection of provisions, generally found in state law or nonprofit corporation bylaw which specify:

> (1) membership eligibility requirements; (2) the contributions required by law from covered employees and employing units; and (3) the level, conditions, and nature of benefits payable at termination,

retirement, death, or date of disability.

Retirees A former public employee and former active member who is currently receiving pension benefits.

General Terms

Active Fund: The portion of TRA, PERA, or MSRS assets that has not been transferred to the Minnesota Post Active Employee Assets

Retirement Investment Fund (MPRIF) and that represents the assets accumulated on behalf of

active plan participants. Sometimes referred to as the Basic Retirement Funds.

The investment practice of determining what portion of an investment fund ought to be invested in Asset Allocation

various types of investment securities (e.g., stocks, bonds, cash equivalents, etc.).

Balanced Portfolio An asset allocation practice emphasizing the investment of significant portions of a fund in the two

major asset classes (e.g., debt (bonds) and equity (stocks)).

General Terms

Bonds A debt-related investment security, representing a loan of money in return for an enforceable

promise by the debtor to repay the principal amount of the loan and interest on the unpaid principal

balance at a stated percentage rate on or before a stated date.

Consumer Price Index A calculation of the apparent rate of inflation as derived from the comparative costs over time for a

group of goods and services which is computed and published by the Bureau of Labor Standards of

the U.S. Department of Labor.

Debt Securities An investment security that represents a loan from the investment fund to some other entity,

frequently a corporation, in order to obtain the interest payments on the loan principal balance,

rather than to obtain an ownership interest in the entity.

Dedicated Bond Portfolio An investment strategy where corporate and governmental bonds with various maturity lengths are

purchased to match an actuarially determined future stream of retirement annuity payments,

including any expected post-retirement increases.

Derivatives Securities whose price is linked to, or derived from, other assets, such as stocks, bonds, currencies,

or commodities.

Earnings Potential The predictable pattern of likely future investment gain attributable to a particular investment

security.

Equities Investment securities that represent an ownership interest in the entity issuing the security, that are

expected to produce income in the form of shared profits, typically referred to as dividends, and to

produce appreciation in value, typically referred to as capital appreciation or capital gain.

Full Funding or

Fully Funded Reserves

A practice in the Minnesota Post Retirement Investment Fund (MPRIF) whereby the entire actuarial present value of a retiree's future pension through death, at a five percent post-retirement interest

rate, is transferred in cash from the active fund (Basic Fund) to the MPRIF.

Inflation The economic impact of increases in the prices of goods and services on the purchasing power of

money.

Interest Assumption or

Actuarial Interest Assumption

The interest rate used by the actuarial valuation process to discount the amount of future pension or

benefit payments in determining its present value.

Investment Performance The measurement of the net gain or loss produced by an investment portfolio. The measurement

can be restricted to realized investment results only (yield) or inclusive of unrealized changes in market value (total rate of return) and can ignore the impact of cash flow (dollar-weighted rate of

return) or can attempt to correct for cash flow changes (time-weighted rate of return).

Investment Strategy The plan of an investment fund for purchasing various types of investment securities, attempting to

take advantage of the earnings potential of the various types of investment securities, to emphasize safety from risk through diversification, and to accommodate future liquidity and cash flow needs.

Minnesota Adjustable Fixed

Benefit Fund

The predecessor to the current Minnesota Post Retirement Investment Fund (MPRIF), that was created in 1969, that functioned in some respects like a variable annuity program, but with a

guaranteed benefit floor, and that emphasized stock investments.

General Terms

Minnesota Post Retirement Investment Fund

The fund which receives the fully funded actuarial reserves for a new retiree's pension benefit at the time of retirement from the Basic Fund, and which generates the funding for and pays post-retirement adjustments.

Mortality Gain or Loss

An actuarially calculated change in the required reserves in the Minnesota Post Retirement Investment Fund (MPRIF) or the Basic Retirement Funds resulting from a greater number or a fewer number of deaths when compared to the mortality actuarial assumptions.

Participation in the Minnesota Post Retirement Investment Fund The share of the total assets of the Minnesota Post Retirement Investment Fund (MPRIF) attributable to each statewide Minnesota public pension plan (TRA, PERA, or MSRS) based on the amount of fully funded MPRIF reserves attributable to retirees of the respective plan.

Portfolio

The collection of investment securities owned by a pension fund.

Post Fund

The Minnesota Post Retirement Investment Fund (MPRIF).

Post-Retirement Increases or Adjustments

The practice of granting additional benefits for retired persons during the course of their retired lifetimes, generally intended to replace all or a portion of inflation.

Post-Retirement Interest Actuarial Assumption The established rate of expected future investment earnings on invested assets attributable to retirees during the period of their retirement for use in actuarial determination.

Pre-Retirement Interest Actuarial Assumption The established rate of expected future investment earnings on invested assets attributable to active members during their active working lifetime for use in actuarial determinations.

Realized Investment Income

The proceeds obtained from investment securities of the pension plan, derived from interest paid on bonds, dividends paid on stocks, and net realized gains or losses on the sale of investments.

Realized Gains or Losses

The positive or negative difference between the cost (purchase price) of an investment security and the sale price of that security.

Required Reserves

The actuarially determined present value of a stream of future benefit payments that is transferred from the active fund of a statewide Minnesota public pension plan to the Minnesota Post Retirement Investment Fund (MPRIF) upon retirement.

Stocks

The equity or ownership interest in a corporation, issued by the corporation in the form of shares, and traded on an exchange or otherwise.

Unrealized Gain or Loss

The positive or negative difference between the cost (purchase price) of an investment security and the current fair market value of that security, which would be obtainable in the event of sale, but without actually selling the security.

Volatility

The tendency for the fair market value of investment securities, especially equity investments, to vary positively or negatively over a short period of time and within a considerable range.

Yield

The investment income obtained or obtainable from an investment security in the form of interest on bonds, dividends on equities, and any net realized gain upon security sale.