State of Minnesota \ LEGISLATIVE COMMISSION ON PENSIONS AND RETIREMENT

TO: Members of the Legislative Commission on Pensions and Retirement

FROM: Lawrence A. Martin, Executive Director

RE: Mandated Commission Study; Investment Based Post-Retirement Adjustment Mechanism Structure and Teacher Retirement Benefit Provision Comparison: Second Consideration

DATE: November 8, 2006

Introduction

Laws 2006, Chapter 277, Article 2, Section 1, requires a study by the Legislative Commission on Pensions and Retirement of the topic of the structure and implication of the investment performance-based post-retirement adjustment procedures used by the retirement plans administered by the Minnesota State Retirement System (MSRS), the retirement plans administered by the Public Employees Retirement Association (PERA), the Teachers Retirement Association (TRA), the Minneapolis Employees Retirement Fund (MERF), the first class city teacher retirement fund associations, the Minneapolis Firefighters Relief Association, and the Minneapolis Police Relief Association and of the topic of a comparison of Minnesota teacher retirement plans with other state teacher retirement plans with respect to normal retirement age, early retirement penalties, benefit taxation, Social Security coordination of pension benefits, pension benefit accrual rate formula multipliers, pension benefit final average salary periods, and pension benefit special early normal retirement provisions.

The mandate requires that the Commission produce a report containing its findings as a result of the study on or before December 1, 2006. The report is also required to include draft proposed legislation to implement any recommendations it formulates as a result of the study. The report must be filed with the State and Local Governmental Operations Committee and the Finance Committee of the Senate and the Governmental Operations and Veterans Affairs Committee, the State Government Finance Committee, and the Ways and Means Committee of the House of Representatives.

The Commission first considered the study topics on August 29, 2006. The Commission staff issue memorandum presented background information on investment-related post-retirement adjustment mechanisms applicable to the various statewide retirement plans (Minnesota Post Retirement Investment Fund), the Minneapolis Employees Retirement Fund (MERF), the first class city teacher retirement fund associations, the Minneapolis Firefighters Relief Association, the Minneapolis Police Relief Association and the Fairmont Police Relief Association. The memorandum will also present background information on various aspects of the benefit practices of the benefit plans of the Teachers Retirement Association (TRA), the Duluth Teachers Retirement Fund Association (DTRFA), and the St. Paul Teachers Retirement Fund Association (SPTRFA), including the normal retirement age, early retirement reductions, taxation of benefits, coordination with Social Security, pension benefit accrual rates, pension benefit final average salary periods, and special early normal retirement provisions.

This Commission staff issue memorandum accompanies the Commission's second consideration of the study topics. This Commission staff memorandum compares the past post-retirement adjustments with inflation, review the post-retirement adjustment mechanism costs and budgets, identify state aid implications of post-retirement adjustments, identify inconsistencies between the various post-retirement adjustments and identify related policy implications. The Commission staff issue memorandum also compares various benefit plan provisions for the statewide or largest teacher retirement plans in 50 states as identified by the Nations Conference on Teacher Retirement (NCTR), identifies additional benefit plan provisions appropriate for comparison, provides background information on those additional benefit plan components, and compares those provisions for 50 state teacher retirement plans, discusses alternative measures of the relative generosity or related actuarial cost of the pension benefit plans, identifies study and comparison limitations, and suggests preliminary potential findings based on study results. The Commission, after taking testimony and receiving additional information from interested parties and after considering its options as to potential conclusions and potential recommendations, will be in a position to formulate its conclusions and recommendations. Following those Commission decisions, the Commission staff will reformulate the two Commission staff memoranda into a report and prepare draft proposed legislation based on the Commission's conclusions and recommendations to include in the report document. This Commission staff memorandum presents an outline of the report document as envisioned by the staff.

Ability of Post-Retirement Adjustment Mechanisms to Offset Inflation Impact

The seven plans subject to comparison (the Minnesota Post Retirement Investment Fund, the Retirement Benefit Fund of the Minneapolis Employees Retirement Fund, the Duluth Teachers Retirement Fund Association, the St. Paul Teachers Retirement Fund Association, the Fairmont Police Relief Association, the Minneapolis Firefighters Relief Association, and the Minneapolis Police Relief Association) utilize four different basic mechanisms for providing post-retirement adjustments. The mechanisms are:

Investment Performance. Adjustments are based on the percentage increase in the plan's investment portfolio in excess of a specified rate of return. The mechanism was used wholly by the Minnesota Post Retirement Investment Fund before 1993 and in part after 1992, was used wholly by the Minneapolis Employees Retirement Fund (MERF) before 1993 and in part after 1992, was used wholly by the Duluth Teachers Retirement Fund Association (DTRFA) before 1995 and partially thereafter, was used wholly by the St. Paul Teachers Retirement Fund Association (SPTRFA) before 1997 and partially thereafter, and was used partially by the Minneapolis Firefighters Relief Association and by the Minneapolis Police Relief Association.

1. Indexation to an Active Member Salary Level (Escalator). Adjustments are based on the percentage increase in the salary of a specified active member employment position, typically a top grad or first class officer or firefighter. The mechanism is used wholly by the Fairmont Police Relief Association and partially by the Minneapolis Firefighters Relief Association and the Minneapolis Police Relief Association.

2. Consumer Price Index Increase Replacement. Adjustments are based on the percentage increase in the federal Consumer Price Index, calculated by the Bureau of Labor Statistics as an indicator of price changes in a market basket of goods and services. The mechanism has been used partially by the Minnesota Post Retirement Investment Fund and by the Minneapolis Employees Retirement Fund (MERF) since 1992.

3. Automatic Flat Rate Percentage Increase. Adjustments are equal to a specified percentage amount. The mechanism has been used partially by the Duluth Teachers Retirement Fund Association (DTRFA) since 1995 and the St. Paul Teachers Retirement Fund Association (SPTRFA) since 1997.

Of the four types of post-retirement adjustment mechanisms represented by the seven retirement programs surveyed, two mechanism types are clearly intended to measure and track inflationary pressures and tow mechanism types do not measure inflation and will track inflationary pressures only by chance of happenstance. The two adjustment mechanisms geared toward inflation are the Consumer Price Index increase replacement mechanism and the active member salary indexation (escalator) mechanism. The two adjustment mechanisms that match inflation only by happenstance are the investment performance mechanism and the automatic flat rate percentage increase mechanism.

Of the inflation-effect-oriented mechanisms, both are potentially incomplete or inadequate measures of inflation. The Consumer Price Index increase replacement mechanism is based on the broadest utilized measure of inflation, but remains a problematic measure. The Consumer Price Index measures a varying market basket of goods and services that likely provides generalized trend date, but the market basket is not necessarily reflective of retirees as a group. The market basket assembled for the comparison contains items that range from luxury items to basic necessities and is not focused on items solely or largely consumed by retirees. The range of goods and services demanded by retirees appears to be significantly altered from those demanded by workers in advance of retirement and also likely vary over time, with the elderly retiree population having a different set of needs and demands than the early retiree population. The active member salary level indexation mechanism is problematic in that salary increases include both cost-of-living and merit/productivity increases, salary increases depend on the bargaining process of the collective bargaining agent representing the employees in the designated employment position, salary increases are blurred by the fragmentation of "salary" into various components over time, with the creation of uniform allowances, overtime, shift differential, police canine handler compensation, court appearance pay, and the like, and salary increases depend on the financial condition of the employing unit over time. While salary increases could mirror inflationary impacts over time, there could easily be lags and advances compared to inflation during any period that could be further distorted with the effect of compounding.

Of the two other adjustment mechanisms, investment performance mechanisms make no attempt to directly measure inflationary effects and represent a hope that ebbs and flows in the investment markets and consequent investment performance will track overall inflationary impacts. However, periods of high inflation appear to be rarely correlated with high investment return periods, so any adjustment mechanism utilizing superior investment performance to determine the amount any adjustment will match any measure of the cost of living by happenstance. The automatic flat rate percentage increase makes no attempt to match inflationary impacts and will vary from exceeding the cost of living to matching the cost of living to understating the cost of living.

In attempting to gain a sense of the ability of the existing post-retirement adjustment mechanisms to match the impact of inflation, the Commission staff translated various lump sum adjustment payments by the Duluth Teachers Retirement Fund Association (DTRFA), the St. Paul Teachers Retirement Fund Association (SPTRFA), the Minneapolis Firefighters Relief Association (MFRA), and the Minneapolis Police Relief Association (MPRA) into the annuity for life that could have been purchased with the payment. The Commission staff calculation of these equivalent annuitized amounts, however, do not capture the compounding effect of the adjustments that would have occurred if the lump sum adjustments were actually annuitized. The understating of the potential compounding does impact on the comparability of the following comparisons on the margins, but does not change the thrust of the analysis in the view of the Commission staff.

In practice, the surveyed post-retirement adjustment mechanisms have had a very mixed pattern in replacing the purchasing power lost due to inflation. Looking at a comparison of the federal Consumer Price Index percentage increases and post-retirement adjustment mechanisms from the various post-retirement adjustment mechanisms for the period from 1978 to 2005, the period for which information is readily available, five of the seven mechanisms have provided post-retirement adjustments that cumulatively exceeded the cumulative Consumer Price Index percentage increase and two of the seven mechanisms provided adjustments equal to the cumulative percentage increase in the Consumer Price Index, with the mechanism providing the smallest cumulative percentage increase in excess of the Consumer Price Index exceeded the Consumer Price Index by 26.82 percent and the mechanism providing the largest cumulative percentage increase below the Consumer Price Index under-replaced the Consumer Price Index by 32.20 percent.

For the 28-year period for which data has been assembled, the Fairmont Police Relief Association has provided the largest cumulative post-retirement adjustment and the St. Paul Teachers Retirement Fund Association (SPTRFA) has provided the least cumulative post-retirement adjustment. The following compares the seven post-retirement adjustment mechanisms by the average effective compounded percentage increase that each mechanism provided for the 28-year period, highest to lowest:

Post-Retirement Adjustment Mechanism	Compounded Annual Percentage Increase
Fairmont Police Relief Association	7.6%
Minnesota Post Retirement Investment Fund	5.7%
Minneapolis Firefighters Relief Association	5.4%
Minneapolis Police Relief Association	5.375%
Minneapolis Employees Retirement Fund	5.2%
Consumer Price Index	4.3%
Duluth Teachers Retirement Fund Association	2.9%
St. Paul Teachers Retirement Fund Association	2.26%

The following compares the cumulative effect of the seven post-retirement adjustment mechanisms for a hypothetical individual who retired in 1977 with a monthly benefit of $1,000:

Effective Date	CPI	MPRIF	MERF	DTRFA	SPTRFA	MFRA	MPRA	Fairmont
1977	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00
1978	1,067.00	1,040.00	1,040.00	1,000.00	1,000.00	1,123.00	1,122.75	1,133.00
1979	1,163.03	1,040.00	1,040.00	1,000.00	1,006.44	1,207.23	1,197.97	1,327.88
1980	1,317.71	1,040.00	1,040.00	1,000.00	1,013.17	1,300.18	1,299.80	1,596.11
1981	1,482.43	1,073.37	1,073.37	1,000.00	1,020.37	1,405.50	1,406.39	1,754.12
1982	1,614.36	1,153.19	1,153.19	1,000.00	1,028.70	1,491.23	1,478.11	1,843.58
1983	1,675.71	1,232.22	1,258.94	1,000.00	1,035.78	1,555.35	1,566.80	1,893.36
1984	1,739.39	1,324.62	1,277.39	1,000.00	1,044.66	1,628.46	1,627.90	2,105.41
1985	1,807.22	1,416.09	1,414.50	1,028.90	1,052.47	1,708.25	1,693.02	2,176.99
1986	1,875.90	1,527.96	1,537.79	1,063.81	1,062.12	1,768.04	1,752.28	2,224.89
1987	1,896.53	1,677.58	1,654.49	1,096.55	1,072.64	1,852.90	1,838.14	2,293.86
1988	1,979.98	1,812.69	1,809.54	1,129.19	1,088.53	1,927.02	1,911.66	3,133.42
1989	2,067.10	1,938.09	1,916.95	1,129.19	1,104.73	2,002.17	1,993.14	3,243.09
1990	2,162.18	2,016.39	2,049.57	1,163.68	1,122.53	2,064.31	2,065.69	3,340.38
1991	2,294.08	2,119.22	2,153.67	1,197.82	1,141.29	2,136.56	2,156.58	3,433.91

Effective Date	CPI	MPRIF	MERF	DTRFA	SPTRFA	MFRA	MPRA	Fairmont
1992	2,365.19	2,210.24	2,153.67	1,231.43	1,163.04	2,224.29	2,237.62	3,519.76
1993	2,433.78	2,310.88	2,282.54	1,259.41	1,183.10	2,387.29	2,408.16	3,829.50
1994	2,499.50	2,449.92	2,369.83	1,288.78	1,204.01	2,501.87	2,459.44	3,923.89
1995	2,566.98	2,547.55	2,444.33	1,312.54	1,223.75	2,564.42	2,557.82	4,129.54
1996	2,631.16	2,710.48	2,532.21	1,373.47	1,243.98	2,872.36	2,790.56	4,294.72
1997	2,717.99	2,928.39	2,632.23	1,450.82	1,261.63	3,151.00	2,968.37	4,646.89
1998	2,764.19	3,223.79	2,807.75	1,542.81	1,349.94	3,299.52	3,103.95	5,041.56
1999	2,808.42	3,540.54	3,044.50	1,651.00	1,447.34	3,488.27	3,307.52	5,328.89
2000	2,884.24	3,935.08	3,355.87	1,800.05	1,581.39	3,690.49	3,555.77	5,825.55
2001	2,982.31	4,310.26	3,708.57	1,984.36	1,702.72	3,884.96	3,775.74	6,222.98
2002	3,030.03	4,503.94	3,906.72	2,088.53	1,765.72	4,105.84	3,926.74	6,429.72
2003	3,102.75	4,537.50	3,935.81	2,130.30	1,801.03	4,270.08	4,078.54	6,961.09
2004	3,161.70	4,632.92	4,018.60	2,172.91	1,837.05	4,209.02	4,177.88	7,536.36
2005	3,269.20	4,748.75	4,146.14	2,216.37	1,873.79	4,461.14	4,344.99	7,631.34

The significant cumulative effect of adjustments for the Fairmont Police Relief Association are a function of a huge percentage increase (36.6 percent) in 1989, when the relief association board of trustees unilaterally reinterpreted what compensation items were includable in the salary of a top grade police officer, and then prevailed in litigation over the issue, including an appeal to the State Court of Appeals, Fairmont Policeman's Benefit Association v. City of Fairmont 437 NW 2d 757 (1989), and significant percentage increases in comparison to the Consumer Price Index increases in 1978, 1979, 1980, 1984, 1994, 1998, 2001, 2002, and 2004. Without the 1989 post-retirement adjustment so far in excess of inflation in that year or in the preceding five years, and the cumulative effect of that adjustment over the years, the post-retirement adjustments over the total period would more closely track the cost of living.

The large increases granted by the Minnesota Post Retirement Investment Fund, are primarily a function of the large investment returns and the low inflation of the late 1990s and of the very early 2000s, primarily 1998, 1999, 2000, and 2001, when post-retirement adjustments exceeded the applicable Consumer Price Index percentage increase by eight percent on three occasions and by six percent on one occasion.

The Minneapolis Employees Retirement Fund (MERF) had an almost equivalent cumulative post-retirement adjustment history the period, but the incidence of the increases fit a different pattern, with somewhat smaller increases during the 1990s offset by somewhat higher adjustments provided in the mid-1980s, when the late John Chenoweth, the fund's Executive Director and a former state legislator, undertook conscious efforts to boost post-retirement adjustments at the expense of the active account by virtue of the transfer from the MERF Deposit Accumulation Fund to the MERF Retirement Benefit Fund of appreciating securities at less than full market values rather than at cash.

The Minneapolis Firefighters Relief Association post-retirement adjustments cumulative are attributable almost entirely to the active-salary-related benefit escalator, especially large increases in 1993, 1996, and 1997. Akin to the Fairmont Police Relief Association, the Minneapolis Firefighters Relief Association board of trustees also re-determined unilaterally the compensation components includable in the "salary" of a first class firefighter during the 1990s. That re-designation of compensation amounts was subject to litigation, resulting in a settlement between the City of Minneapolis and the Minneapolis Firefighters Relief Association. Alleged violations of the settlement agreement were the basis for renewed litigation between the city and the relief association initiated recently. The "thirteenth check" has been a minimal contributor to the cumulative post-retirement adjustment and the 110-percent-funded adjustment mechanism has not yet become operational because of the decline in Minneapolis Firefighters Relief Association asset values from the economic decline after 2000.

The Minneapolis Police Relief Association cumulative post-retirement adjustment experience is very similar to that of the Minneapolis Firefighters Relief Association, with the active-salary-related benefit escalator being the primary contributor, especially in 1993, 1996, 1997, 1999, and 2000. A re-definition of first class patrol officer "salary" also occurred within the Minneapolis Police Relief Association and has had the same litigation history.

The Duluth Teachers Retirement Fund Association (DTRFA) and St. Paul Teachers Retirement Fund Association (SPTRFA) post-retirement adjustments, although cumulatively understated compared to the Consumer Price Index (CPI) increase, were most substantial during the period 1997-2002, based on the strong investment market of the late 1990s and the accompanying low inflation.

While the cumulative results provide a sense of the overall results for the entire period, reviewed year-to-year, the ability of each post-retirement adjustment mechanism varies, as follows:

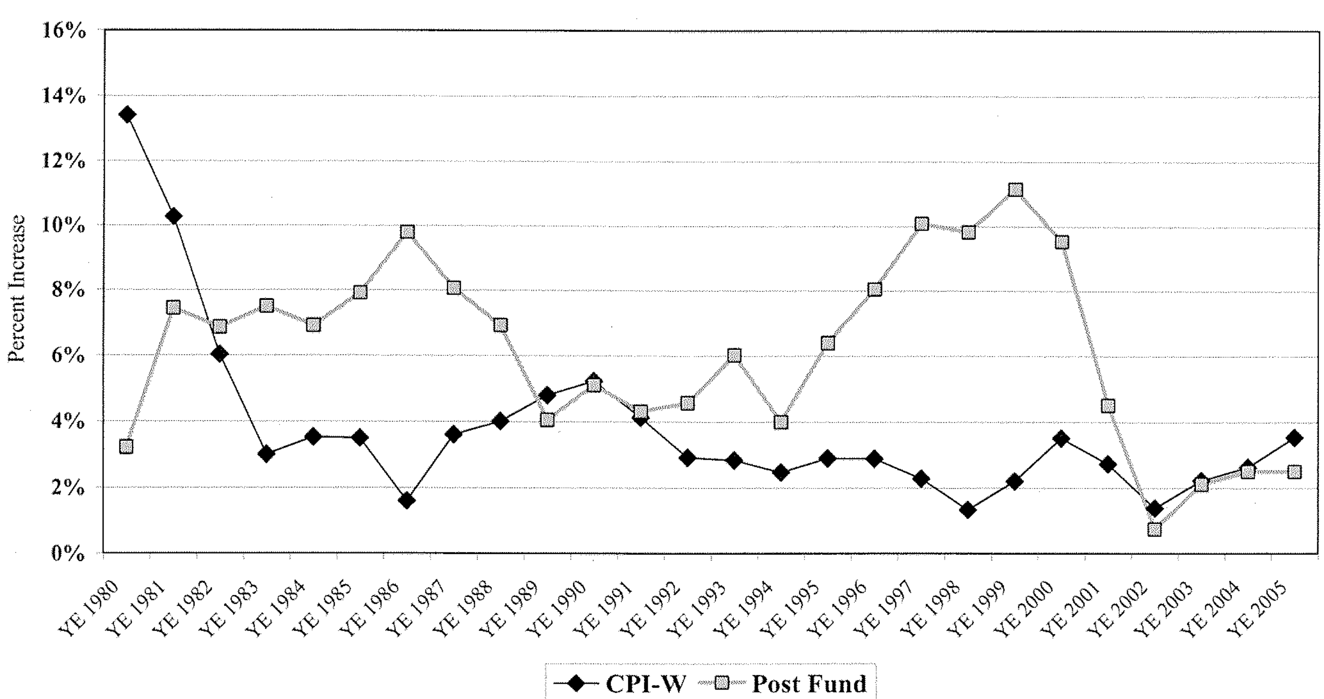
Post-Retirement Adjustment Mechanism	Number of Years in Excess of CPI	Number of Years Below CPI	Number of Years Equal to CPI
Minnesota Post Retirement Investment Fund	19	9	0
Minneapolis Employees Retirement Fund	19	9	0
Duluth Teachers Retirement Fund Association	9	19	0
St. Paul Teachers Retirement Fund Association	6	22	0
Minneapolis Firefighters Relief Association	18	10	0
Minneapolis Police Relief Association	18	10	0
Fairmont Police Relief Association	16	11	1

The pattern of when post-retirement adjustments exceeded or understated the Consumer Price Index varies, as follows:

Post-Retirement Adjustment Mechanism	CPI Comparison	Years
Minnesota Post Retirement Investment Fund	Above:	1983-1989, 1992-2002, 2004
	Below:	1978-1982, 1990-1991, 2003, 2005
Minneapolis Employees Retirement Fund	Above:	1983-1990, 1993-2002, 2004
	Below:	1978-1982, 1991-1992, 2003, 2005
Duluth Teachers Retirement Fund Association	Above:	1987, 1996-2002, 2004
	Below:	1978-1986, 1988-1995, 2003, 2005
St. Paul Teachers Retirement Fund Association	Above:	1998-2002, 2004
	Below:	1978-1997, 2003, 2005
Minneapolis Firefighters Relief Association	Above:	1978, 1983-1985, 1987, 1991-1994, 1996-2003, 2005
	Below:	1979-1982, 1986, 1988-1990, 1995, 2004
Minneapolis Police Relief Association	Above:	1982-1985, 1987, 1992-1993, 1995-2005
	Below:	1978-1981, 1986, 1988-1991, 1994
Fairmont Police Relief Association	Above:	1978-1980, 1984-1985, 1987, 1989, 1994, 1996, 1998-2004
	Below:	1981-1983, 1986, 1988, 1990-1993, 1997, 2005
	Even:	1995

As part of Commission staff work on the Minnesota Combined Investment Funds and Minnesota Post Retirement Investment Fund Structure and Transfers, presented by Edward Burek in August 2006, additional information was developed on the extent of correlation between the Consumer Price Index (CPI) and adjustments provided by the Minnesota Post Retirement Investment Fund in general, and for specific retirement date cohorts. The graph below presents a comparison between the CPI and the Minnesota Post Retirement Investment Fund adjustments over the period 1980-2006:

Minnesota Post Fund Post-Retirement Increases
vs.
Consumer Price Index for Urban Wage Earners and Clerical Workers



Retirement cohort comparisons prepared by Mr. Burek (1970 retirement; 1975 retirement; 1980 retirement; 1985 retirement; 1990 retirement; 1995 retirement; and 2000 retirement), presented below, indicate that all retirees have ultimately had cumulative adjustments greater than inflation, but that the extent of that post-retirement adequacy varies depending on which cohort is involved and the extent of adequacy periods in the past:

Retirement Year Cohort CPI
MPRIF Adjustment Comparison

$1,000 Initial Monthly Benefit
1970 Retirement Date

Year	Benefit Amount	Amount Needed to Match Inflation	Difference	Year	Benefit Amount	Amount Needed to Match Inflation	Difference
1970	$1,000	$1,000	$0	1989	3,023	3,174	-151
1971	1,107	1,057	+50	1990	3,143	3,326	-183
1972	1,135	1,104	+31	1991	3,304	3,499	-195
1973	1,328	1,141	+187	1992	3,446	3,643	-197
1974	1,494	1,212	+282	1993	3,605	3,748	-143
1975	1,508	1,345	+163	1994	3,821	3,853	-32
1976	1,544	1,467	+77	1995	3,973	3,950	+23
1977	1,559	1,551	+8	1996	4,228	4,064	+164
1978	1,622	1,652	-30	1997	4,566	4,182	+384
1979	1,622	1,779	-157	1998	5,023	4,278	+745
1980	1,622	1,982	-360	1999	5,515	4,334	+1,181
1981	1,673	2,248	-575	2000	6,122	4,429	+1,693
1982	1,797	2,479	-682	2001	6,703	4,584	+2,119
1983	1,921	2,628	-707	2002	7,005	4,708	+2,297
1984	2,065	2,707	-642	2003	7,054	4,774	+2,280
1985	2,208	2,801	-593	2004	7,202	4,879	+2,323
1986	2,382	2,900	-518	2005	7,382	5,006	+2,376
1987	2,616	2,946	-330	2006	7,566	5,181	+2,385
1988	2,828	3,051	-223				

$1,000 Initial Monthly Benefit
1975 Retirement Date

Year	Benefit Amount	Amount Needed to Match Inflation	Difference	Year	Benefit Amount	Amount Needed to Match Inflation	Difference
1975	$1,000	$1,000	$0	1991	2,189	2,602	-413
1976	1,023	1,091	-68	1992	2,284	2,708	-424
1977	1,033	1,153	-120	1993	2,389	2,787	-398
1978	1,075	1,228	-153	1994	2,532	2,865	-333
1979	1,075	1,323	-248	1995	2,633	2,936	-303
1980	1,075	1,474	-399	1996	2,802	3,022	-222
1981	1,109	1,671	-562	1997	3,026	3,109	-83
1982	1,191	1,843	-652	1998	3,329	3,181	+148
1983	1,273	1,954	-681	1999	3,654	3,222	+432
1984	1,369	2,012	-703	2000	4,057	3,293	+764
1985	1,436	2,083	-647	2001	4,442	3,408	+1,034
1986	1,579	2,156	-577	2002	4,642	3,500	+1,142
1987	1,733	2,190	-457	2003	4,675	3,549	+1,126
1988	1,874	2,269	-395	2004	4,773	3,627	+1,146
1989	2,003	2,360	-357	2005	4,892	3,722	+1,170
1990	2,083	2,473	-390	2006	5,014	3,852	+1,162

$1,000 Initial Monthly Benefit
1980 Retirement Date

Year	Benefit Amount	Amount Needed to Match Inflation	Difference	Year	Benefit Amount	Amount Needed to Match Inflation	Difference
1980	$1,000	$1,000	$0	1994	2356	1944	+412
1981	1032	1134	-102	1995	2451	1993	+458
1982	1108	1250	-142	1996	2607	2051	+556
1983	1185	1326	-141	1997	2816	2110	+706
1984	1274	1366	-92	1998	3098	2159	+939
1985	1361	1413	-52	1999	3401	2189	+1,214
1986	1469	1463	+6	2000	3775	2235	+1,540
1987	1613	1486	+127	2001	4134	2313	+1,821
1988	1744	1540	+204	2002	4320	2375	+1,945
1989	1864	1601	+263	2003	4350	2409	+1,941
1990	1939	1678	+261	2004	4442	2462	+1,980
1991	2038	1766	+272	2005	4553	2526	+2,027
1992	2125	1838	+287	2006	4666	2614	+2,052
1993	2223	1891	+332				

$1,000 Initial Monthly Benefit
1985 Retirement Date

Year	Benefit Amount	Amount Needed to Match Inflation	Difference	Year	Benefit Amount	Amount Needed to Match Inflation	Difference
1985	$1,000	$1,000	$0	1996	1,915	1,451	+464
1986	1,079	1,035	+44	1997	2,068	1,493	+575
1987	1,185	1,052	+133	1998	2,275	1,527	+748
1988	1,281	1,089	+192	1999	2,498	1,547	+951
1989	1,369	1,133	+236	2000	2,773	1,581	+1,192
1990	1,424	1,187	+237	2001	3,036	1,636	+1,400
1991	1,496	1,249	+247	2002	3,173	1,681	+1,492
1992	1,561	1,300	+261	2003	3,195	1,704	+1,491
1993	1,633	1,338	+295	2004	3,262	1,742	+1,520
1994	1,731	1,376	+355	2005	3,344	1,787	+1,557
1995	1,800	1,409	+391	2006	3,427	1,849	+1,578

$1,000 Initial Monthly Benefit
1990 Retirement Date

Year	Benefit Amount	Amount Needed to Match Inflation	Difference	Year	Benefit Amount	Amount Needed to Match Inflation	Difference
1990	$1,000	$1,000	$0	1999	1,756	1,303	+453
1991	1,051	1,052	-1	2000	1,949	1,332	+617
1992	1,096	1,095	+1	2001	2,134	1,378	+756
1993	1,147	1,127	+20	2002	2,230	1,415	+815
1994	1,215	1,158	+57	2003	2,246	1,435	+811
1995	1,264	1,187	+77	2004	2,293	1,467	+826
1996	1,345	1,222	+123	2005	2,350	1,505	+845
1997	1,453	1,257	+196	2006	2,409	1,558	+851
1998	1,599	1,286	+313				

$1,000 Initial Monthly Benefit
1995 Retirement Date

Year	Benefit Amount	Amount Needed to Match Inflation	Difference	Year	Benefit Amount	Amount Needed to Match Inflation	Difference
1995	$1,000	$1,000	$0	2001	1,688	1,161	+527
1996	1,064	1,029	+35	2002	1,764	1,192	+572
1997	1,149	1,059	+90	2003	1,777	1,209	+568
1998	1,265	1,083	+182	2004	1,814	1,235	+579
1999	1,389	1,097	+292	2005	1,859	1,267	+592
2000	1,542	1,121	+421	2006	1,906	1,312	+594

$1,000 Initial Monthly Benefit
2000 Retirement Date

Year	Benefit Amount	Amount Needed to Match Inflation	Difference	Year	Benefit Amount	Amount Needed to Match Inflation	Difference
2000	$1,000	$1,000	$0	2004	1,176	1,102	+74
2001	1,095	1,035	+60	2005	1,206	1,130	+76
2002	1,144	1,063	+81	2006	1,236	1,169	+67
2003	1,152	1,078	+74				

<u>Cost, Budget, and Aid Implications of Post-Retirement Adjustment Systems</u>

1. <u>Cost</u>. Post-retirement adjustment mechanisms have an actuarial cost, either direct or indirect. A direct actuarial cost occurs when the post-retirement adjustment is promised as part of eventual benefit payouts and is determinable, such as the active member salary-based adjustment mechanisms or as the flat amount adjustment mechanisms. A direct actuarial costs means that the portion of benefit coverage is part of the normal cost of the plan and the actuarial accrued liability of the plan. An indirect actuarial cost occurs when the post-retirement adjustment becomes payable upon the occurrence of a fortuitous event that is not reflected in the pension plan's actuarial assumptions, such as investment performance based post-retirement adjustments. An indirect actuarial cost means that the portion of the benefit coverage is not a distinct part of the normal cost of the plan, but becomes part of the actuarial accrued liability once the fortuitous event occurs.

   For the Minnesota Post Retirement Investment Fund and for the Minneapolis Employees Retirement Fund Retirement Benefit Fund, it is possible to identify the cost of the past investment-performance-related post-retirement adjustments, but the ongoing actuarial cost of the inflation-related portion of the two mechanisms is not discernible since the addition of a capped CPI-based adjustment in 1992 because the allocation of portions of normal cost does not extend to the post-retirement adjustment mechanism. The following sets for the investment-related actuarial gain that would have accrued to the associated retirement plan (i.e., the General State Employees Retirement Plan of the Minnesota State Retirement System (MSRS-General), the Correctional State Employees Retirement Plan of the Minnesota State Retirement System (MSRS-Correctional), the State Patrol Retirement Plan, the Legislators Retirement Plan, the Judges Retirement Plan, the General Employee Retirement Plan of the Public Employees Retirement Association (PERA-General), the Public Employees Police and Fire Retirement Plan (PERA-P&F), the Local Government Correctional Employees Retirement Plan of the Public Employees Retirement Association (PERA-Correctional), and the Teachers Retirement Association (TRA)) participating in the Minnesota Post Retirement Investment Fund or to the Minneapolis Employees Retirement Fund (MERF):

Investment Performance Actuarial Gain
Redistributed as Investment Performance Component
Post-Retirement Adjustment

Year	Minnesota Post Retirement Investment Fund	Minneapolis Employees Retirement Fund
1978	33,424,164	5,516,150
1981	41,717,000	5,951,632
1982	86,778,120	15,791,318
1983	120,133,090	20,364,659
1984	138,806,490	27,936,298
1985	187,056,450	24,760,026
1986	288,982,000	31,350,929
1987	391,386,240	30,475,147
1988	342,939,320	42,101,073
1989	276,552,417	29,742,589
1990	273,225,200	36,892,103
1991	247,598,992	29,297,246
1992	235,126,339	0
1993	63,603,211	14,925,760
1994	173,061,847	2,057,546
1995	39,363,943	0
1996	254,050,445	650,779
1997	368,132,705	3,383,064
1998	825,336,941	23,946,975
1999	923,925,964	37,267,143
2000	1,271,735,202	61,277,030
2001	1,233,620,996	73,157,167
2002	491,087,088	21,639,412
Total	8,307,644,164	538,484,046

The use of investment-related actuarial gains to fund a post-retirement adjustment mechanism, while appealing from a fiscal concern when initiated in 1969, does distort the actuarial funding process. The policy advantage of actuarial funding, beyond the increased security of potential future benefit payments from the amassing of assets, is the shift in funding benefits increasingly from a stream of contributions to a stream of investment returns, both realized and unrealized. With an actuarially funded pension plan, investment returns can be expected to actually provide up to three-quarters of the total benefit payment amounts. With dedicating "excess" investment income, the actuarial gains from the investment program for a significant portion of the pension plan assets, the Minnesota Post Retirement Investment Fund and the Retirement Benefit Fund of the Minneapolis Employees Retirement Fund made the interest rate actuarial assumptions more rigid. There are expected to be ebbs and flows in the investment program, with substantial investment performance years averaged against poor investment performance years, but when the large gains are redirected into benefits rather than offsetting past poor performing years, that averaging process is stilted. Among the various actuarial assumptions, the interest rate assumption is an attempt to project the most dynamic future experience item and foregoing the highest investment gain year to a considerable extent, as the post-retirement adjustment mechanisms do, investment performance is affected to a greater degree by "loss' years than would otherwise be the case.

While the foregone actuarial gains represented by the Minnesota Post Retirement Investment Fund and Minneapolis Employees Retirement Fund Retirement Benefit Fund post-retirement adjustment mechanisms represent a significant dollar amount that would otherwise have accrued to the respective retirement funds, that actuarial gain accrual would have occurred at the expense of the provision of automatic post-retirement adjustments and the relatively high inflation of the 1970s and 1980s would have necessitated some other mechanism for recurring post-retirement adjustments, either at the expense of adding additional ad hoc accrued liabilities to the retirement plans involved or of requiring ad hoc post-retirement adjustments funded from the state's General Fund, sometimes at periods of state budgetary difficulties.

While similar "cost" figures are not so easily ascertained for the other post-retirement adjustment mechanisms, where the mechanism explicitly utilizes an actuarial gain item, such as "excess" investment income or salary gains with respect to the local police and fire retirement plan escalators, the associated retirement plan would have additional retirement assets without a post-retirement adjustment mechanism, but the plan membership would consequently either forgo post-retirement benefit adequacy by going with out post-retirement adjustments to counter inflationary impacts, or obtain ad hoc post-retirement adjustments funded from retirement plan assets or from redirected employing unit revenue.

2. Budgets. The creation of the predecessor to the Minnesota Post Retirement Investment Fund, the Minnesota Adjustable Fixed Benefit Fund, appears to have been prompted by a political need to address the inflationary pressures of the late 1960s and the fiscal need at that time to avoid additional required employer contributions. These joint needs were accommodated by depositing the full actuarial present value of each retiree's benefit in a segregated account, valued at the applicable post-retirement interest rate actuarial assumption and the applicable mortality assumption, and dedicating all investment income in excess of that post-retirement actuarial assumption to fund automatic increases, with some amounts reserved to deposit into an "annuity stabilization reserve" and with past increases not guaranteed beyond the original benefit level in the event of investment downturns.

   Because the post-retirement adjustment was to be funded form extraordinary investment earnings in excess of the post-retirement interest rate assumptions, the creation and operation of the predecessor of the Minnesota Post Retirement Investment Fund was intended to be budgetary neutral. The budgetary drawbacks in practice of the creation of the Minnesota Adjustable Fixed Benefit Fund and its transformation into the current Minnesota Post Retirement Investment Fund have been that the mechanism has translated the post-retirement interest rate actuarial assumption into part of the benefit plan, making it difficult or impossible for the Legislature to revise the post-retirement interest rate actuarial assumption to reflect current best estimates of its future value without providing some additional benefit upon its modification. The rigidity has led to the granting of an ad hoc post-retirement adjustment and an increase in the "original" benefit amount in 1973-1974 when the post-retirement interest rate actuarial assumption was increased from 3.5 percent to five percent, the retention of a five percent post-retirement interest rate actuarial assumption when the pre-retirement interest rate actuarial assumption was increased to eight percent in 1984 (Laws 1984, Chapter 564, Section 43) and when the pre-retirement interest rate actuarial assumption was increased to 8.5 percent in 1989 (Laws 1989, Chapter 319, Article 13, Section 90), the addition of the federal Consumer-Price-Index-related portion of the post-retirement adjustment mechanism in 1992, which allowed for the effective post-retirement interest rate actuarial assumption to be 8.5 percent (Laws 1992, Chapter 530, Section 1), although the statutory post-retirement interest rate assumption remained set at five percent, and the additional post-retirement adjustment granted to existing retirees in 1997, when the inflation-related portion of the post-retirement mechanism was downsized from a maximum of 3.5 percent to a maximum of 2.5 percent to free up actuarial resources for an active member benefit increase (Laws 1997, Chapter 233, Article 1, sections 5, 19, 23, 31, 40, 41, 51, 55, 58, and 72).

   The budgetary and fiscal concerns that led the Legislature in 1969 to create the first version of the Minnesota Post Retirement Investment Fund and to retain the broad design of the mechanism in 1980, 1992, and 1997 also led to the use of an approach which is a poor measure of inflationary pressures on retiree benefits, as indicated above.

   With the significant short duration decline in market value in the equity markets in 2001-2002, a net deficit in the Minnesota Post Retirement Investment Fund was created for the first time since 1980 and that net deficit is sufficiently large and the remaining Minnesota Post Retirement Investment Fund assets are sufficiently depleted that without investment returns that do average ten percent or more for the decade or more, post-retirement adjustments from the Minnesota Post Retirement Investment Fund will be limited to 2.5 percent, the maximum Consumer Price Index match component of the mechanism. For post-2002 retirees, the Minnesota Post Retirement Investment Fund cumulative increases will not match or exceed inflation, leaving these retirees less well off than their fellow retirees who retired during the 1980s and 1990s and who have sizable prior cumulative adjustments to offset the effect.

3. State Aid Impact. No state aid program is directly related to a post-retirement mechanism by one of the retirement plans covered by this report and the indirect effect is limited to the Minneapolis Firefighters Relief Association and the Minneapolis Police Relief Association.

   None of the retirement plans participating in the Minnesota Post Retirement Investment Fund receive direct state aid, so the shortfall between the required reserves and the market value of the Minnesota Post Retirement Investment Fund does not cause on its own any increase in state aid.

   Employing units covered by three of the retirement plans do receive state aid for retirement coverage, police state aid and fire state aid for employers with police officers of firefighters covered by the Public Employees Police and Fire Retirement Plan (PERA-P&F) and police state aid for the Department of Public Safety on account of State Patrol officers, Gambling Enforcement officers and Bureau of Criminal Apprehension officers and for the Department of Natural Resources for enforcement (game warden) division officers, police state aid, amortization state aid, supplemental amortization state aid, and additional amortization state aid for or on behalf of the City of Minneapolis for the Minneapolis Police Relief Association, and fire state aid, fire insurance premium tax surcharge aid and additional amortization state aid for the City of Minneapolis for or on behalf of the Minneapolis Firefighters Relief Association. None of the amounts vary based on the magnitude of post-retirement adjustments, but the amortization state aids do terminate temporarily or permanently once the retirement plan becomes fully funded.

   The Minneapolis Employees Retirement Fund receives direct state aid based on its funded status, with a cap, but the aid amount does not change based on the magnitude of post-retirement adjustments paid by the Retirement Benefit Fund. The state aid to the Minneapolis Employees Retirement Fund is currently at the statutory maximum level. If the shortfall between the required reserves in the Retirement Benefit Fund and the market value of its assets were to be recognized and added to the employer funding obligation under Minnesota Statutes, Section 422A.101, it potentially would delay the dates at which state aid to the Minneapolis Employees Retirement Fund would be reduced or would be eliminated.

Inconsistencies between Post-Retirement Adjustment Mechanisms

The post-retirement adjustment mechanisms used in Minnesota for the statewide and major local retirement plans are very inconsistent from a policy standpoint and from an operational standpoint.

Two of the mechanisms, those used by the Duluth Teachers Retirement Fund Association (DTRFA) and the St. Paul Teachers Retirement Fund Association (SPTRFA), lack any mechanism to recognize the impact of inflation on the purchasing power of retirement benefits. Both plans utilize a combination mechanism that provides an automatic percentage increase annually, irrespective of the current rate of inflation, and provides an investment-related adjustment whenever the plan's five-year average time-weighted total rate of investment return exceeds the post-retirement interest rate actuarial assumption. The Commission's Principles of Pension Policy indicates that the goal of post-retirement adjustment mechanisms should be the preservation of the purchasing power of the initial retirement benefit amount in the face of any inflation to the extent of budget feasibility. A flat amount increase with investment-related adjustments based on investment market variability and volatility are not well designed to replace any lost benefit amount purchasing power.

Among the mechanisms that do have an inflation replacement orientation, the manner in which inflation is measured differs. The Minnesota Post Retirement Investment Fund and the Retirement Benefit Fund of the Minneapolis Employees Retirement Fund both use the percentage increase in the Consumer Price Index-Urban Wage Earners and Clerical Workers as published by the Bureau of Labor Statistics of the federal Department of Labor between the current June 30 and the prior June 30. The Fairmont Police Relief Association, the Minneapolis Firefighters Relief Association, and the Minneapolis Police Relief Association utilize a more indirect method for calculating inflationary impacts, based on the percentage increase in the salary level of a particular employment position in the applicable department, assuming that active wages eventually reflect past inflationary impacts. The police and fire escalator provisions are not the optimal inflation measure, since the collective bargaining process affecting wages typically has a time lag in responding to inflation, depending on collective bargaining schedules, the collective bargaining process may understate or overstate wage increases for the applicable employment position for various reasons unrelated to inflationary impacts, the applicable wage increases will include productivity increases, longevity increases, and other increases as well as cost-of-living increases, and the applicable employment position increases can be revised unrelated to inflationary increases by the inclusion of other compensation items, as all three relief associations have done on at least one occasion. As a consequence, the pattern of adjustments between the three relief associations have differed, with the Fairmont Police Relief Association having the greatest cumulative set of increases for the period 1978-

2005 even though both the Minneapolis Firefighters Relief Association and the Minneapolis Police Relief Association have an investment-related adjustment in addition to the escalator.

The Minnesota Post Retirement Investment Fund, the Minneapolis Employees Retirement Fund Retirement Benefit Fund, the Duluth Teachers Retirement Fund Association (DTRFA), and the St. Paul Teachers Retirement Fund Association (SPTRFA) potentially or actually rely heavily on investment-related post-retirement adjustments, despite the poor correlation between high investment performance periods and high inflation periods. In 1997, when the Minnesota Post Retirement Investment Fund reduced the cost-of-living component of the mechanism from a maximum of 3.5 percent to 2.5 percent, the Minnesota Post Retirement Investment Fund increased its reliance on the investment-related post-retirement adjustment portion of the mechanism. However, because of the 2001-2002 stock market decline and because of its requirement that all prior investment losses be recouped from future "excess" investment income, the investment-related post-retirement adjustment portion of the mechanism will not be equipped to provide any additional post-retirement adjustment assistance. Because the Duluth Teachers Retirement Fund Association (DTRFA) and the St. Paul Teachers Retirement Fund Association (SPTRFA) provide a relatively modest annual recurring flat percentage amount (two percent), those two mechanisms rely on the investment-related portion of the mechanism to provide a significant portion of a total post-retirement adjustment amount. Because neither of those mechanisms require any past investment shortfalls of any magnitude be recouped before new investment-related adjustments are payable, those mechanisms will be on line to pay additional adjustments as soon as the five-year average investment performance exceeds 8.5 percent, at a date likely to be much earlier than the Minnesota Post Retirement Investment Fund.

The asset-based post-retirement adjustment mechanism components of the Fairmont Police Relief Association, the Minneapolis Firefighters Relief Association, and the Minneapolis Police Relief Association have no clear apparent policy basis other than a desire to share any available funding that exists during the final phase-out years of closed retirement plans with retirees rather than allow those assets to revert to fire department or police department expenditure support upon the death of the last benefit recipient. The creation of publicly funded "last man" clubs in the form of public pension plans does not further the maintenance of benefit adequacy throughout retirement.

The combination of adjustment methods within all seven mechanisms and the different combinations indicate a lack of clear adherence to the post-retirement adjustment mechanism goal set forth in the Commission's Principles of Pension Policy and confusion on the policy basis for the combinations. The creation of these mechanisms and the introduction of combinations of methods occurred either during or following periods of relatively high inflation and governmental budget difficulties, suggesting that these mechanisms and combinations of methods were probably motivated by a desire to provide "catch-up" adjustments for past inflation, to take advantage of apparent untapped (or "free") funding or underutilized investment opportunities. If the goal is the replacement of lost purchasing power, "catch-up" adjustments are appropriate as a temporary phenomenon, but not a permanent portion of the mechanism, and the provision of adjustments because they can be funded rather than because they actually replace inflationary effects is likely misguided.

The final observation about post-retirement adjustment mechanism inconsistencies is the high degree of variability in results between the seven mechanisms. Five of the mechanisms have exceeded the 4.3 percent average annual rate of increase in the cost of living as measured by the federal Consumer Price Index for the period 1978-2005, while two have not, with the mechanism provided the largest average compound rate of adjustment, the Fairmont Police Relief Association at 7.6 percent, exceeded the smallest above Consumer Price Index compound increase rate adjustment mechanism, Minneapolis Employees Retirement Fund at 5.2 percent, by almost 50 percent, and exceeds the least generous adjustment mechanism, the St. Paul Teachers Retirement Fund Association, at 2.26 percent, by almost three and one-half times. Mechanisms that were well designed to match the goal of offsetting inflation espoused by the Commission's Principles of Pension Policy would be expected to have a narrower range and a better grouping around the Consumer Price Index average compound increase rate.

Potential Alternative Commission Conclusions

In response to the review and analysis of various Minnesota post-retirement adjustment mechanisms prepared by the Commission staff, and after receiving any additional information and testimony from interested parties during this hearing, the Commission has several potential options for the conclusions it can reach as the Commission Staff identify them. The options relate to the ultimate goal to be achieved in the design of post-retirement adjustment mechanisms and to the transition between the current mechanisms and the ultimate mechanism or mechanisms if a change is desired.

The options identified by the Commission staff for potential Commission conclusions are as follows:

A. Ultimate Post-Retirement Adjustment Goal

1. Retention of All Current Mechanisms. The Commission concludes that the current post-retirement adjustment mechanisms, although imperfect in their ability to replicate increases to counter inflationary pressures, have been in effect for a considerable period of time, have become part of the expectations of current retirees and active members, and are affordable within the current contribution structures, and should be continued without change.

2. Retention of Some Current Mechanisms. The Commission concludes that some current post-retirement adjustment mechanisms reflect local design decisions that are specific or unique to the retirement plan(s) involved and should be retained.

3. MPRIF; Replacement with Single Inflation-Related Mechanism. The Commission concludes that the Minnesota Post Retirement Investment Fund should be replaced by a mechanism more directly related to an appropriate measure of inflation.

4. MPRIF; Replacement with Reflecting Inflation During Retirement Periods. The Commission concludes that the Minnesota Post Retirement Investment Fund should be replaced by a mechanism that is more oriented to distinctly different retirement periods (early, middle, and late) where cost of living concerns may be different.

5. MPRIF; Replacement with Flat Percentage Rate Adjustment. The Commission concludes that the Minnesota Post Retirement Investment Fund should be replaced by a flat percentage rate annual adjustment mechanism.

6. MERF; Replicate New MPRIF Mechanism. The Commission concludes that the Minneapolis Employees Retirement Fund (MERF) Retirement Benefit Fund be replaced by a mechanism that separately replicates the revised Minnesota Post Retirement Investment Fund mechanism.

7. MERF; Incorporation Into New MPRIF Mechanism. The Commission concludes that the separate Minneapolis Employees Retirement Fund (MERF) Retirement Benefit Fund be terminated and be replaced by the revised Minnesota Post Retirement Investment Fund mechanism.

8. DTRFA and SPTRFA; Replicate New MPRIF Mechanism. The Commission concludes that the post-retirement adjustment mechanisms of the Duluth Teachers Retirement Fund Association (DTRFA) and the St. Paul Teachers Retirement Fund Association (SPTRFA) be replaced by a mechanism that separately replicates the revised Minnesota Post Retirement Investment Fund mechanism.

9. DTRFA and SPTRFA; Incorporation Into New MPRIF Mechanism. The Commission concludes that the separate post-retirement adjustment mechanisms of the Duluth Teachers Retirement Fund Association (DTRFA) and the St. Paul Teachers Retirement Fund Association (SPTRFA) be terminated and be replaced by the revised Minnesota Post Retirement Investment Fund mechanism.

10. Local Relief Associations; Replicate New MPRIF Mechanism. The Commission concludes that the post-retirement adjustment mechanisms of the Fairmont Police Relief Association, the Minneapolis Firefighters Relief Association, and the Minneapolis Police Relief Association be replaced by a mechanism that separately replicates the revised Minnesota Post Retirement Investment Fund mechanism.

11. Local Relief Associations; Incorporation Into New MPRIF Mechanism. The Commission concludes that the separate post-retirement adjustment mechanisms of the Fairmont Police Relief Association, the Minneapolis Firefighters Relief Association, and the Minneapolis Police Relief Association be terminated and be replaced by the revised Minnesota Post Retirement Investment Fund mechanism.

B. Transition in the Event of Revised Method(s)

1. Limit Revised MPRIF to New Entrants. The Commission concludes that the revised Minnesota Post Retirement Investment Fund mechanisms apply solely to new entrants into public pension plan retirement coverage.

2. Limit Revised MPRIF to New Retirees. The Commission concludes that the revised Minnesota Post Retirement Investment Fund mechanisms apply to public pension plan members who retire after July 1, 2007.

3. Cash Out Old MPRIF Retirees. The Commission concludes that the current Minnesota Post Retirement Investment Fund should be discontinued with the creation of a revised Minnesota Post Retirement Investment Fund, with all existing retired members retaining fixed current retirement benefit amounts or being cashed-out with a lump sum payment equal to the funded portion of their actuarially determined required reserves.

4. Transfer to Revised MPRIF with Benefit Downsizing. The Commission concludes that implementation of the revised Minnesota Post Retirement Investment Fund include authority for existing retirees to transfer to the revised mechanism, with the transferee's retirement annuity downsized to approximate actuarially the person's portion of the current deficit in the Minnesota Post Retirement Investment Fund.

5. Absorb MPRIF Deficit into Retirement Plans. The Commission concludes that the implementation of the revised Minnesota Post Retirement Investment Fund be effected by a transfer of all current retirees into the new mechanism, with the respective retirement plans absorbing the current deficit of the Minnesota Post Retirement Investment Fund into the unfunded actuarial accrued liability of the respective statewide retirement plan.

Potential Alternative Commission Recommendations

Depending on the conclusion or conclusions that the Commission reaches on this part of the mandated study, there are several options for the Commission to consider with respect to recommendations.

Based on the recommendation or recommendations selected by the Commission, the Commission staff will draft the applicable proposed legislative language required to implement the recommendation for inclusion in the Commission's report.

The options identified by the Commission staff for potential Commission recommendations are as follows:

1. Retention of Current Mechanisms Conclusion.

   a. Retention of All Current Mechanisms. The Commission recommends that all of the post-retirement adjustment mechanisms be retained unchanged.

   b. Retention of Some Current Mechanisms. The Commission recommends that the post-retirement adjustment mechanisms be retained for the (*Minneapolis Employees Retirement Fund*), (*Duluth Teachers Retirement Fund Association*), (*St. Paul Teachers Retirement Fund Association*), (*Fairmont Police Relief Association*), (*Minneapolis Firefighters Relief Association*), (*Minneapolis Police Relief Association*).

2. MPRIF Replacement Mechanism Conclusion.

   a. Inflation-Related Replacement Mechanism. The Commission recommends that the replacement post-retirement adjustment mechanism for the Minnesota Post Retirement Investment Fund be based on the percentage increase in the Consumer Price Index, with a limit of (*that amount, determined by the consulting actuary, that produces a total benefit package that is equal to the average current benefit plan normal cost for the most recent set of new entrants*), (*three percent per year with a carry forward of inflation in excess of the limit*), (*3.5 percent per year with a carry forward*), (*four percent per year with a carry forward*), (*five percent per year with no carry forward*), (*tiers of increasing percentage limits for successive five- or ten-year periods*).

   b. Retirement Period Inflation Replacement Mechanism. The Commission recommends that the replacement post-retirement adjustment mechanism for the Minnesota Post Retirement Investment Fund be based on the percentage increase in the Consumer Price Index, with a limit of ___ percent annually for the initial ten years of retirement, with a limit of ___ percent annually for the second ten years of retirement, with a limit of ___ percent annually for any year after 20 years of retirement, without any carry forward of inflation in excess of the limit into subsequent years.

c. Flat Percentage Increase Replacement Mechanism. The Commission recommends that the replacement post-retirement adjustment mechanism for the Minnesota Post Retirement Investment Fund be a flat annual percentage increase of (*three percent*), (*3.5 percent*), (*four percent*), (*five percent*).

3. Application to Other Post-Retirement Adjustment Mechanisms Conclusion.

a. Replication of Revised MPRIF. The Commission recommends that the revised Minnesota Post Retirement Investment Fund adjustment mechanism be replicated separately for the (*Minneapolis Employees Retirement Fund*), (*Duluth Teachers Retirement Fund Association*), (*St. Paul Teachers Retirement Fund Association*), (*Fairmont Police Relief Association*), (*Minneapolis Firefighters Relief Association*), (*Minneapolis Police Relief Association*).

b. Inclusion in Revised MPRIF. The Commission recommends that the revised Minnesota Post Retirement Investment Fund adjustment mechanism, as a replacement of the existing post-retirement adjustment mechanism or mechanisms include the (*Minneapolis Employees Retirement Fund*), (*Duluth Teachers Retirement Fund Association*), (*St. Paul Teachers Retirement Fund Association*), (*Fairmont Police Relief Association*), (*Minneapolis Firefighters Relief Association*), (*Minneapolis Police Relief Association*).

50 State Teacher Retirement Plans Benefit Comparison

1. Introduction. The study mandate requires the Legislative Commission on Pensions and Retirement to compare the statewide teacher retirement plans in the 50 states with respect to several benefit plan and related elements. The required elements, at a minimum, are the normal retirement age, the early retirement age, the early retirement reduction factors, the taxation of pension benefits, the coordination of the benefit program with Social Security, the benefit accrual rate formula multipliers, the final average salary period, and any special early normal retirement provisions. Additional items survey by the Commission staff were post-retirement adjustments, member and employer contribution rates, the most recent funded condition and actuarial cost information, and the pension plan's fund and account structure.

   The Commission surveyed three teacher retirement plans in Minnesota, the Minnesota Teachers Retirement Association (TRA), the Duluth Teachers Retirement Fund Association (DTRFA), the St. Paul Teachers Retirement Fund Association (SPTRFA), and 49 other teacher retirement plans identified by the National Council on Teacher Retirement (NCTR) as the statewide retirement plan covering teachers in each of the remaining 49 states. The information used in the comparison was primarily obtained from the websites of each teacher retirement plan, the member handbooks of the teacher retirement plans, the comprehensive annual financial reports (CAFR) of the teacher retirement plans, the actuarial valuations of the teacher retirement plans, and the internet versions of state teacher retirement statutes. The information on Social Security coverage was derived almost wholly from the Public Fund Survey website from information collected by the National Association of State Retirement Administrators (NASRA) and the NCTR. The information on the taxation of public retirement benefits was derived from a survey of individual income tax treatment of pension and retirement income prepared by Joel Michael of the Minnesota House of Representatives Research Department and from an August 2006 study, "State Personal Income Taxes on Pensions and Retirement Income: Tax Year 2005," prepared by Ronald Snell and Bert Waisanen of the National Conference of State Legislatures (NCSL). The individual results of the 49 non-Minnesota public pension plans from the Public Fund Survey website, made available through David Bergstrom, Executive Director of the Minnesota State Retirement System (MSRS), was used as a general guide for finding the applicable information for each plan from its handbooks, financial reporting, actuarial reporting, and statutes and was the primary source of information only for informational items that were otherwise unobtainable. A further crosscheck by the Commission staff for accuracy was a comparison of the assembled information with comparative information on a number of the same retirement plans assembled by Education Minnesota and forwarded to the Commission staff on November 1, 2006.

2. Caveats. The assemblage and comparison of benefit plan provisions for the 49 statewide teacher retirement plans prepared by the Commission staff was assembled with care and effort, with citations provided for each benefit plan element, but the comparison may contain errors and omissions.

   With teacher retirement plans which clearly intend to be relatively transparent and accessible, there are problems in finding all of the essential provisions and information about the benefit plan on its website, in its handbooks, in its comprehensive annual financial report, and in its governing statutes and administrative rules. An observer outside of Minnesota, for instance, would have difficulties in fully identifying the provisions governing the Minnesota Teachers Retirement Association (TRA). The online version of the TRA member handbook provides only summary or cursory information about some features of the plan, such as service credit (i.e. the handbook does not cover the differences between allowable service credit and formula service credit) or covered salary (summary is very generic in describing exceptions to covered salary). The handbook only rarely provides citations to Minnesota Statutes in its summaries. The 2005 TRA Comprehensive Annual Financial Report (CAFR) provides considerable financial and actuarial information, but provides a very minimal benefit plan summary, providing a very modest sense of the various key benefit provisions. The TRA website does include a copy of the most recent TRA actuarial information, which has a very detailed summary of the TRA benefit plan, but the link to the actuarial valuation is buried in the annual financial report component parts link index, making it difficult to find for an outside user. Nothing in the TRA CAFR or the TRA actuarial valuation readily provides information about the TRA Basic Program, which virtually has phased out or has phased out (because it was restricted to members employed before 1959) so an outside observer would not be alerted to the inapplicability of the various TRA benefit provisions related to the Basic Program. TRA statutes, Minnesota Statutes, Chapter 354, and the cross citations are few and are not readily identified. For instance, the role cross reference to the TRA post-retirement adjustment mechanism, Minnesota Statutes, Section 11A.18, is set forth in Minnesota

Statutes, Section 354.63, Subdivision 2, Paragraph (2), but the head note on the entire section and on the subdivision does not provide much sense of the substance of the provision, referencing "Participation in Minnesota Postretirement Investment Fund" and "Valuation of Assets; Adjustment of Benefits." Minnesota Statutes, Section 354.07, Subdivision 4, the TRA provision requiring the investment of TRA assets, also provides little information on the applicability of Minnesota Statutes, Chapter 11A, in general, or to Minnesota Statutes, Section 11A.14, the Minnesota Combined Investment Fund provision that is the repository for a majority of TRA assets.

With teacher retirement plans which were not transparent and accessible, either inadvertently or intentionally, the problems in determining the applicable benefit plan provisions outlined above are compounded.

Thus, in attempting to summarize 49 other state teacher retirement plans, some of which are not nearly as transparent as the Minnesota TRA in their internet home pages, the Commission staff had difficulties in ascertaining the totality of the relevant benefit plan information, including governing statutes. The Commission staff welcomes documented corrections or additions to the summaries contain in Appendix D.

3. Comparison of Earliest Normal Retirement Ages. Table 1 compares the earliest normal retirement ages for the 50-state statewide teacher retirement plans, attempting to rank them from the youngest earliest normal retirement age teacher retirement plan to the oldest earliest normal retirement age teacher retirement plan. Although there is some subjectivity and potential disagreement in attempting to factor various "Rule of xx" provisions into specific age or service provisions, the Minnesota Teachers Retirement Association (TRA), with the "Rule of 90" available to pre-July 1, 1989, hires, has one of the older earliest normal retirement ages among the 50 states.

Table 1
Earliest Normal Retirement Age

Rule of 75	New Mexico
Any age/20 years	Alaska, Massachusetts
Rule of 80	Arizona, Missouri, Oklahoma, Texas
Any age/25 years	Alabama, Mississippi, Montana
Any age/28 years	Arkansas, Rhode Island, South Carolina
Any age/30 years	Delaware, Florida, Georgia, Louisiana, Nevada, North Carolina, Ohio, Oregon, Tennessee, Utah, Vermont
Age 46/30 years	Michigan
Any age/35 years	Connecticut, Pennsylvania
Age 50/30 years	Colorado, Virginia, West Virginia
Age 55	Hawaii, New York, Washington
Age 55/25 years	New Jersey
Age 55/35 years	Illinois
Rule of 85	Indiana, Kansas, Nebraska, North Dakota, South Dakota, Wyoming
Age 57/30 years	Wisconsin
Rule of 88	Iowa
Age 60	California, Kentucky, Maine, New Hampshire
Rule of 90	Idaho, Minnesota
Age 62	Maryland

4. Comparison of Earliest Early Reduced Benefit Retirement Age. Table 2 compares the earliest early reduced benefit retirement age for the 50 states' teacher retirement plans, attempting to rank them from the youngest early reduced benefit retirement age to the oldest early reduced benefit retirement age. The Minnesota Teachers Retirement Association (TRA) is a middle group plan with respect to the earliest access to a retirement annuity that is reduced for early retirement.

Table 2
Earliest Early Reduced Retirement Age

Any age/any service	Nevada
Any age/4 years	Tennessee
Any age/5 years	Hawaii, Idaho, New York
Any age/6 years	Florida
Any age/10 years	Connecticut
Any age/20 years	Louisiana, New Hampshire
Any age/25 years	Arkansas, Delaware, Georgia, Maine, Missouri, New Jersey, Utah
Any age/30 years	Minnesota, West Virginia
Any age/35 years	Nebraska
Rule of 75	New Mexico
Age 50/4 years	Wyoming

Age 50/5 years	Arizona, Montana
Age 50/8 years	Alaska
Age 50/10 years	Virginia
Age 50/15 years	Indiana
Age 50/20 years	North Carolina
Age 50/25 years	Colorado
Age 55/any service	Iowa, Oregon, Wisconsin
Age 55/3 years	North Dakota, South Dakota
Age 55/5 years	California, Kentucky, Oklahoma, Texas, Vermont
Age 55/10 years	Kansas, Massachusetts
Age 55/15 years	Maryland, Michigan
Age 55/20 years	Illinois
Age 55/25 years	Ohio, Pennsylvania, South Carolina
Age 60	Alabama, Mississippi, Rhode Island

5. Comparison of Early Retirement Reduction Factors. Table 3 compares the reduction factors imposed upon retirement annuities when the annuity is payable at an age earlier than the normal retirement age for the 50 statewide teacher retirement plans, attempting to rank them from the least reduction to the greatest reduction. While the variability in the manner in which early retirement reductions are determined, there is considerable subjectivity and potential controversy in attempting to provide a rank ordering for the totality of plans. The problematic early retirement reduction requirements are those that are not specific percentage reduction factors, such as actuarial equivalency reductions, modified actuarial reductions (i.e. Minnesota, where the actuarial equivalency reduction is partially subsidized by setting equivalency against a benefit amount that includes deferred annuity augmentation over the period between the actual retirement age and the earliest normal retirement age), and reductions in the benefit accrual rate. Despite potential disagreements over its exact ranking, the Minnesota Teachers Retirement Association (TRA) appears to be in the group with the least onerous early retirement reduction.

Table 3
Early Retirement Reduction Factors

2.4% per year	Delaware, Kansas
3.0% per year	Iowa, Nebraska, New Jersey, Pennsylvania, South Dakota, Utah, Washington
Variable 4%/3%	Colorado
Modif. act. or 3%	Minnesota
4% per year	Nevada
4.8% + .01111%	Wisconsin
4.8% + 15%	Tennessee
Variable 5%/3%/2%/1%	Ohio
Variable 5%/3%	North Carolina
Variable 5%/4%	South Carolina
5.00% per year	Arkansas, Florida, Kentucky, Michigan, Wyoming
Variable 5.75%/3%	Idaho
Variable 6%/2.25%	Maine
Variable 6%/3%	California
Variable 6%/4%	Montana
Variable 6%/4.8%	Virginia
Variable 6%/5%/3%	Arizona, New York
Var. 6%/5%/4%/3%/2%	Hawaii
6% per year	Illinois, Maryland, North Dakota, Vermont
Variable 6.67%/6.66%/4.77%/4.85%/4.43%/4.06%	Oklahoma
Variable 6.75%/5%/4%/3%/1.5%	New Hampshire
6.996% per year	Georgia
Variable 7%/6%/4%/2%	Texas
Variable 7.2%/2.4%	New Mexico
Variable 11%/5%	Indiana
Reduced benefit accrual rate	Connecticut, Massachusetts, Missouri
Actuarial reduction	Alaska, Louisiana, Oregon, West Virginia
No early retirement	Alabama, Mississippi, Rhode Island

6. Extent of Benefit Taxation. Table 4 compares the personal income tax taxability of retirement benefits by the 50 states, including specific exemptions or exceptions for public retirement plan pension benefits. Retirement benefits payable by the Minnesota Teachers Retirement Association (TRA) are fully taxable under the Minnesota personal income tax and Minnesota is one of the states with the least favorable tax treatment of public pension plan retirement benefits in its personal income tax.

Table 4
Benefit Taxation

No Income Tax	Alaska, Florida, Nevada, South Dakota, Texas, Washington, Wyoming
Pensions Totally Exempt	Alabama, Hawaii, Kansas, Louisiana, Massachusetts, Michigan, Mississippi, New Hampshire, New York, Pennsylvania, Tennessee
Pensions Partially Exempt or Pension Exclusion	Arizona, Arkansas, Colorado, Delaware, Georgia, Idaho, Illinois, Iowa, Kentucky, Maine, Maryland, Missouri, Montana, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, South Carolina, Utah, West Virginia
No Pension Exemption or Exclusion	California, Connecticut, Indiana, Minnesota, Nebraska, New Mexico, Rhode Island, Vermont, Virginia, Wisconsin

7. Coordination with Social Security. Table 5 compares whether the statewide teacher retirement plan provides the sole retirement coverage for a teacher by virtue of the teaching service or whether the statewide teacher retirement plan supplements the federal Old Age, Survivors, Disability, and Health Insurance Program (Social Security). The Minnesota Teachers Retirement Association (TRA) is a retirement plan that supplements Social Security.

Table 5
Social Security Coordination

Social Security coverage in addition to plan coverage	Alabama, Arizona, Arkansas, Delaware, Georgia, Hawaii, Idaho, Indiana, Iowa, Kansas, Maryland, Michigan, Minnesota, Mississippi, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming
No Social Security in addition to plan coverage	Alaska, California, Colorado, Connecticut, Florida, Illinois, Kentucky, Louisiana, Maine, Massachusetts, Missouri, Nevada, Ohio, Texas

8. Benefit Accrual Formula Multipliers. Table 6 compares the relative size of the benefit accrual rates or formula multipliers per year of covered service used to calculate teacher retirement annuities for the 50 statewide teacher retirement plans. The benefit accrual rate used for the comparison is the largest benefit accrual rate used for any period of covered service, even if smaller benefit accrual rates are also applicable to a retirement annuity calculation, such as the Minnesota Teachers Retirement Association (TRA), where the benefit accrual rate utilized only applies to service credit rendered after July 1, 2006. Minnesota appears to rank at the top of the bottom third in the relative generosity of its benefit accrual rate practice.

Table 6
Largest Benefit Accrual Rate

3.00%	Kentucky, Rhode Island
2.67%	Nevada
2.55%	Mississippi, Missouri
2.50%	Alaska, Colorado, Louisiana, Massachusetts, Pennsylvania
2.40%	California
2.35%	New Mexico
2.325%	South Dakota
2.30%	Arizona, Illinois, Texas
2.20%	Ohio
2.15%	Arkansas
2.125%	Wyoming
2.0125%	Alabama
2.00%	Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Iowa, Maine, Nebraska, New York, North Dakota, Oklahoma, Utah, Washington, West Virginia
1.90%	Minnesota
1.82%	North Carolina, South Carolina
1.8182%	New Jersey
1.80%	Maryland
1.765%	Wisconsin
1.75%	Kansas
1.70%	Virginia
1.67%	Oregon, Vermont
1.667%	Montana, New Hampshire
1.5% plus	Tennessee
1.5%	Michigan
1.1%+annuity	Indiana

9. Final Average Salary Averaging Period. Table 7 compares the average period used in calculating the final average salary base used in the retirement annuity calculation for the 50 statewide teacher retirement plans. Typically, a public pension plan defined benefit plan retirement annuity calculation is a benefit accrual rate or rates multiplied by the number of years of covered service credit and the resulting percentage applied to a final average salary figure. The Minnesota Teachers Retirement Association (TRA) uses the longest final salary averaging period of the 50 statewide teacher retirement plans.

Table 7
Shortest Final Average Salary Period

2 years	Georgia
3 years	Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Hawaii, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Utah, Vermont, Virginia, Wisconsin, Wyoming
3.5 years	Idaho
4 years	Illinois, Mississippi, North Carolina
5 years	Florida, Indiana, Kentucky, Minnesota, New Mexico, Tennessee, Texas, Washington, West Virginia

10. Special Early Retirement Incentives. Table 8 compares the existence or absence of special early retirement incentives among the 50 statewide teacher retirement plans. The special early retirement incentives are additional authorization for an early age retirement or an encouragement for utilizing an existing early retirement provision. A majority of the 50 statewide teacher retirement plans do not have special early retirement incentives, but the Minnesota Teachers Retirement Association (TRA) was covered by a very brief early retirement window with a modest monetary inducement to utilize an existing retirement provision.

Table 8
Early Retirement Incentives

Unreduced early retirement benefit	Illinois
Rule of 80 or alternative	Oklahoma
Terminated position early retirement	Massachusetts
5 years additional service grant	Connecticut
2 years additional service credit plus	California
Additional service grant, 2-year max	New York
Cash payment or alternative	Minnesota, New Jersey
Special service purchase	Ohio
Cash payments	Iowa, Maine
No special incentive	Alabama, Alaska, Arizona, Arkansas, Colorado, Delaware, Florida, Georgia, Hawaii, Idaho, Indiana, Kansas, Kentucky, Louisiana, Maryland, Michigan, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Mexico, North Carolina, North Dakota, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming

11. Shortest Vesting Period. Table 9 compares the amount of service credit required to be rendered or obtained to gain a non-forfeitable entitlement to a retirement annuity from the 50 statewide teacher retirement plans. The benefit practice was not a mandated topic for comparison, but was an additional item for comparison undertaken by the Commission staff. The Minnesota Teachers Retirement Association (TRA) is among the group of retirement plans with the shortest vesting requirement.

Table 9
Shortest Vesting Period

Any service	Iowa, New Hampshire, New Jersey, Wisconsin
1 year	Pennsylvania
3 years	Minnesota, North Dakota, South Dakota
4 years	Mississippi, Utah, Wyoming
5 years	Arizona, Arkansas, California, Colorado, Delaware, Hawaii, Idaho, Illinois, Kentucky, Louisiana, Maine, Maryland, Michigan, Missouri, Montana, Nebraska, Nevada, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Vermont, Virginia, Washington, West Virginia
6 years	Florida
8 years	Alaska
10 years	Alabama, Connecticut, Georgia, Indiana, Kansas, Massachusetts, Rhode Island

12. Extent of Covered Salary Exceptions. Table 10 compares the extent of compensation items includable in the definition of "covered salary" by the 50 statewide teacher retirement plans by attempting to gauge the extent of exceptions to covered salary. The comparison item was not mandated, but is an

additional comparison topic undertaken by the Commission staff. The Minnesota Teachers Retirement Association (TRA) is among the group of statewide teacher retirement plans with a large number of exceptions in the definition of covered salary.

Table 10
Extent of Covered Salary Exclusions

None	Delaware, Illinois, Oklahoma
Few	Alabama, Alaska, Arkansas, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Missouri, Mississippi, New Hampshire, New Jersey, New Mexico, New York, Tennessee, Washington
Some	Arizona, California, Connecticut, Georgia, Hawaii, Idaho, Louisiana, Montana, Rhode Island, South Carolina, Utah, Vermont, Virginia, West Virginia
Many	Colorado, Florida, Michigan, Minnesota, Nebraska, Nevada, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Texas, Wisconsin, Wyoming

13. Post-Retirement Adjustment Mechanisms. Table 11 compares the 50 statewide teacher retirement plans with respect to the provision of post-retirement adjustments. The benefit practice was not a mandated comparison item, but was undertaken by the Commission staff as an additional comparative topic. The post-retirement adjustment mechanisms or practices of the 50 states are difficult to compare because of the fluidity of many of the mechanisms or practices in the event of high inflation, high investment performance, or strong retiree political pressure. The ranking in the table is largely a function of the maximum annual adjustment payable. The Minnesota Teachers Retirement Association (TRA) is among the top of the bottom third of the 50 teacher retirement plans on this comparative basis. If information was available on actual post-retirement adjustments paid over the past 10- or 20- year periods, that comparison could well yield a different set of rankings.

Table 11
Post-Retirement Adjustments

75% of CPI, 9% max	Alaska
Social Security increase, 6% max	Connecticut
CPI increase, 6% max	Idaho
Cost of living increase, 5% max	Missouri, Virginia
CPI increase, 4% max	Maine, South Carolina, Utah
CPI increase, 3% max	Maryland, Tennessee, Washington, Wyoming
CPI increase, 3% max, benefit cap	Massachusetts
Excess invest. income, 4% max	Arizona
60% of CPI	New Jersey
50% of CPI, 5% max	Vermont
50% of CPI, 4% max	New Mexico
Automatic 3.5%	Colorado
50% of CPI, 3% max, benefit cap	New York
Automatic 3% + excess invest. income	Michigan
Excess invest. income, 3% max	Iowa
Automatic 3.1%	South Dakota
Automatic 3%	Arkansas, Florida, Georgia, Illinois, Rhode Island
Automatic 3%, non-compounded	Mississippi, Ohio
CPI, 2.5% max	Nebraska
CPI, 2.5%, excess invest. income, 5% max	Minnesota
Automatic 2.5%, non-compounded	Hawaii
CPI, 2% max	Nevada, Oregon
Automatic 2%, non-compounded	California, Louisiana
Automatic 1.5% + additional funding benefit	Montana
Automatic 1.5%	Kentucky
Excess invest. income	Wisconsin
Ad hoc increases	Alabama, Delaware, Indiana, Kansas, New Hampshire, North Carolina, North Dakota, Oklahoma, Pennsylvania, Texas, West Virginia

14. Highest Funded Ratio. Table 12 compares the funded ratio (actuarial value of assets expressed as a percentage of the actuarial accrued liability of the retirement plan) of the 50 statewide teacher retirement plans as disclosed in the most recent actuarial valuation or comprehensive annual financial report. While many of the 50 statewide teacher retirement plans utilize the Entry Age Normal Cost actuarial method for calculating the actuarial accrued liability of the retirement plan, not all plans do so, which means that the comparison is somewhat distorted. The comparison item is an additional comparative item utilized by the Commission staff beyond the mandated study comparative topics. The Minnesota Teachers Retirement Association (TRA) ranks in the top quarter of the states in its current funded ratio.

Table 12
Highest Funded Ratio

108.11%	North Carolina	88.49%	Washington	72.40%	Mississippi
107.33%	Florida	88.20%	Maryland	70.81%	Montana
104.00%	Delaware	87.15%	Alabama	70.41%	New Mexico
101.55%	Tennessee	87.10%	Texas	69.60%	Massachusetts
100.90%	Georgia	85.72%	California	68.65%	Hawaii
99.53%	Wisconsin	85.63%	New Jersey	68.40%	Connecticut
99.20%	New York	85.57%	Nebraska	68.39%	New Hampshire
96.60%	South Dakota	85.30%	Arizona	68.34%	Maine
95.13%	Wyoming	83.70%	Michigan	64.60%	Louisiana
94.20%	Idaho	82.67%	Missouri	60.90%	Alaska
92.91%	Minnesota	80.36%	Arkansas	60.80%	Illinois
92.20%	Utah	80.31%	South Carolina	60.79%	Kansas
91.20%	Pennsylvania	77.30%	Nevada	59.29%	Rhode Island
90.74%	Vermont	76.29%	Kentucky	49.50%	Oklahoma
90.70%	Oregon	74.80%	North Dakota	43.40%	Indiana
90.30%	Virginia	73.99%	Ohio	19.10%	West Virginia
88.69%	Iowa	73.30%	Colorado		

15. Size of the Unfunded Actuarial Accrued Liability. Table 13 compares the absolute size of the unfunded actuarial accrued liability of the 50 statewide teacher retirement plans. While the comparison is greatly influenced by the size of the population of the state, the comparison does provide some measure of the relative benefit security of teacher retirement plan members. The comparison item is not a mandated item, but was included by the Commission staff in the comparative work. The Minnesota Teachers Retirement Association (TRA) is in the bottom third of the 50 states with respect to the absolute size of its unfunded actuarial accrued liability.

Table 13
Size of Unfunded Accrued Liability

$22.0 billion	Illinois	$4.6 billion	Maryland	$1.1 billion	Utah
$20.3 billion	California	$4.6 billion	Oregon	$1.0 billion	Montana
$20.1 billion	Ohio	$4.5 billion	Kentucky	$0.9 billion	Nebraska
$13.2 billion	Texas	$4.3 billion	Nevada	$0.8 billion	New Hampshire
$12.5 billion	Colorado	$4.3 billion	Virginia	$0.6 billion	New York
$9.2 billion	Indiana	$4.1 billion	Arizona	$0.5 billion	Idaho
$7.5 billion	Michigan	$4.1 billion	Hawaii	$0.5 billion	North Dakota
$7.4 billion	Massachusetts	$3.5 billion	Kansas	$0.3 billion	Wisconsin
$7.1 billion	Oklahoma	$3.1 billion	New Mexico	$0.2 billion	South Dakota
$6.6 billion	Louisiana	$3.0 billion	Maine	$0.2 billion	Wyoming
$6.5 billion	Mississippi	$2.5 billion	Alaska	$0.1 billion	Vermont
$5.8 billion	New Jersey	$2.3 billion	Iowa	($0.08 billion)	Delaware
$5.2 billion	Connecticut	$2.3 billion	Rhode Island	($0.4 billion)	Georgia
$5.1 billion	South Carolina	$2.2 billion	Alabama	($0.4 billion)	Tennessee
$5.1 billion	West Virginia	$2.2 billion	Arkansas	($7.6 billion)	Florida
$5.0 billion	Pennsylvania	$1.7 billion	Washington		
$4.8 billion	Missouri	$1.4 billion	Minnesota		

16. Amount of Unfunded Actuarial Accrued Liability per State Inhabitant. Table 14 compares the amount of the unfunded actuarial accrued liability of the 50 statewide teacher retirement plans on a per-state-inhabitant basis, as a measure of the burden to be borne by taxpayers of any existing poor pension funding practices. The population of each state used in making the comparison is the 2005 estimated population published by the Census Bureau. The comparison item was not mandated, but was included by the Commission staff in the 50 statewide teacher retirement plans comparison. The Minnesota Teachers Retirement Association (TRA) has among the lowest of unfunded actuarial accrued liability amounts per state inhabitant of the various states.

Table 14
Unfunded Actuarial Accrued Liability Amount per Inhabitant

$3,767.00	Alaska	$1,753.30	Ohio	$1,078.30	Kentucky
$3,215.20	Hawaii	$1,607.60	New Mexico	$1,068.80	Montana
$2,807.00	West Virginia	$1,481.40	Connecticut	$827.50	Missouri
$2,679.40	Colorado	$1,466.80	Indiana	$821.40	Maryland
$2,270.10	Maine	$1,459.00	Louisiana	$791.60	Arkansas
$2,225.20	Mississippi	$1,275.20	Kansas	$775.40	Iowa
$2,137.20	Rhode Island	$1,263.40	Oregon	$741.00	Michigan
$2,001.20	Oklahoma	$1,198.60	South Carolina	$690.30	Arizona
$1,780.70	Nevada	$1,156.50	Massachusetts	$665.30	New Jersey

$610.70 .... New Hampshire	$445.50 .... North Dakota	$270.40 .... Washington
$577.40 .... Texas	$445.40 .... Utah	$257.80 .... South Dakota
$568.20 .... Virginia	$402.30 .... Pennsylvania	$160.50 .... Vermont
$561.80 .... California	$392.70 .... Wyoming	$54.20 .... Wisconsin
$511.70 .... Nebraska	$349.90 .... Idaho	$31.20 .... New York
$482.70 .... Alabama	$272.80 .... Minnesota	

17. Interest Rate Actuarial Assumption. Table 15 compares the size of the interest rate actuarial assumption used by the 50 statewide teacher retirement plans in preparing their actuarial work. The item was added to the comparison by the Commission staff and was not a mandated comparison item. The interest rate actuarial assumption represents the expectation about the portion of total pension plan funding to be borne by the performance of invested retirement plan assets, with a greater interest rate actuarial assumption generally producing a lower actuarial accrued liability and a lower contribution requirement. The Minnesota Teachers Retirement Association (TRA) is among the top ten percent of the 50 statewide teacher retirement plans in its interest rate actuarial assumption.

Table 15
Interest Rate Actuarial Assumption

8.5%	Colorado, Connecticut, Illinois, Minnesota, Pennsylvania
8.25%	Alaska, Louisiana, Massachusetts, New Jersey, Rhode Island
8.00%	Alabama, Arizona, Arkansas, California, Delaware, Hawaii, Kansas, Maine, Michigan, Mississippi, Missouri, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Dakota, Ohio, Oregon, Texas, Utah, Vermont, Washington, Wyoming
7.80%	Wisconsin
7.75%	Florida, Idaho, Maryland, Montana, South Dakota
7.50%	Georgia, Indiana, Iowa, Kentucky, Oklahoma, South Carolina, Tennessee, West Virginia
7.25%	North Carolina

18. Salary Increase Rate Actuarial Assumption. Table 16 compares the 50 statewide teacher retirement plans with respect to the magnitude of the salary increase rate actuarial assumption used by the retirement plan in its actuarial valuation work. Salary increase assumptions indicate an expectation about the general growth of liabilities and pension costs for plans that provide retirement benefits related to covered salary, with a greater salary increase assumption generally producing a larger pension liability and annual cost. Although salary increase assumptions typically were a single value actuarial assumption a couple of decades ago, salary increase assumptions now are frequently variable over service lengths, age, or both, meaning that the comparison necessarily is of the outer parameters of a range.

Table 16
Salary Increase Assumption Range

26.40%/4.25%	Texas	9.01%/4.50%	Montana
18.50%/4.00%	Iowa	9.00%/5.30%	Idaho
17.00%/4.50%	Rhode Island	9.00%/2.50%	Louisiana
15.96%/4.00%	Maryland	8.90%/4.92%	South Dakota
15.50%/4.75%	Indiana	8.10%/4.00%	Kentucky
14.00%/4.50%	North Dakota	8.00%/4.99%	Connecticut
13.50%/5.00%	New Mexico	8.00%/4.00%	South Carolina
13.00%/6.25%	New Hampshire	8.00%/3.75%	Georgia
11.53%/4.38%	New York	7.25%/5.00%	Alabama
10.75%/4.75%	Utah	7.00%/5.50%	Mississippi
10.70%/4.50%	Washington	6.60%/4.40%	New Jersey
10.68%/4.41%	Vermont	6.50%/4.50%	Oregon
10.45%/3.85%	Ohio	6.25%/6.25%	Florida
10.30%/4.50%	Nebraska	6.25%/6.25%	Pennsylvania
10.00%/5.00%	Missouri	6.10%/4.00%	Virginia
9.90%/4.30%	Wisconsin	6.00%/5.00%	Minnesota
9.89%/4.25%	Delaware	6.00%/4.25%	Oklahoma
9.85%/4.75%	California	5.50%/5.00%	Alaska
9.80%/4.00%	Kansas	5.00%/5.00%	Wyoming
9.50%/5.50%	Maine	4.75%/4.75%	Tennessee
9.50%/4.50%	Arizona	4.00%/4.00%	Hawaii
9.40%/4.30%	Arkansas	Undisclosed	Illinois, Massachusetts, Michigan, Nebraska, North Carolina, Virginia

19. Highest Normal Cost. Table 17 compares the reported normal cost of many of the 50 statewide teacher retirement plans. Under the entry age normal cost actuarial method reportedly used by most of the 50 teacher retirement plans, including those that do not disclose a normal cost figure, and if the various actuarial assumptions are reasonably accurate, the normal cost figure is the single numeric value measuring the relative magnitude of the benefit plan of the retirement plan for its coverage group. If calculated under the entry age normal cost actuarial method and if based on reasonably accurate actuarial assumptions, a higher normal cost represents a more generous utilized benefit then and a lower normal cost the reverse. Of the 31 state teacher retirement plans disclosing this information, the Minnesota Teachers Retirement Association (TRA) is high in the bottom third of retirement plans, with a result more than twice the lowest value and less than half of the highest value.

Table 17
Highest Normal Cost

22.41%	Alaska	10.60%	Wisconsin
21.05%	Missouri	10.52%	Oklahoma
19.51%	Kentucky	10.40%	Texas
16.829%	California	9.80%	South Carolina
15.46%	Pennsylvania	9.30%	Minnesota TRA
14.66%	Georgia	9.25%	Indiana
14.53%	Colorado	9.23%	Minnesota SPTRFA
14.03%	Idaho	9.12%	Iowa
13.82%	Maine	9.05%	Minnesota DTRFA
13.56%	New Mexico	9.01%	Connecticut
13.16%	Arizona	8.96%	Vermont
12.79%	New Hampshire	8.23%	Kansas
12.75%	Arkansas	7.32%	Hawaii
11.568%	South Dakota	4.30%	Oregon
11.43%	Florida	Undisclosed	Alabama, Delaware, Illinois, Louisiana, Maryland, Massachusetts, Michigan, Mississippi, Nevada, New Jersey, New York, North Carolina, Ohio, Tennessee, Utah, Virginia, Washington, West Virginia, Wyoming
11.42%	Nebraska		
11.31%	North Dakota		
11.09%	Rhode Island		

20. Size of Retirement Plan Administrative Expense. Table 18 compares the relative size of the administrative expense of 33 of the 50 statewide teacher retirement plans disclosing the information, expressed as a percentage of covered payroll. The administrative expense represents the relative burden of the retirement plan administrative structure. The item is not a mandated comparison item. The Minnesota Teachers Retirement Association (TRA) has a relatively high administrative expense as a percentage of its total covered payroll, at more than five times greater than the lowest administrative cost retirement plan and slightly more than one-half of the highest administrative cost retirement plan.

Table 18
Size of Administrative Expense (as percentage of payroll)

0.65%	Maine	0.23%	New Hampshire
0.64%	Oregon	0.22%	Vermont
0.49%	North Dakota	0.21%	Oklahoma
0.43%	Pennsylvania	0.19%	Colorado
0.40%	Kentucky	0.17%	Indiana
0.39%	Louisiana	0.17%	Wyoming
0.37%	Alaska	0.16%	Iowa
0.34%	Minnesota	0.16%	Missouri
0.33%	Arkansas	0.15%	Georgia
0.33%	Idaho	0.14%	Kansas
0.33%	Rhode Island	0.14%	West Virginia
0.31%	South Carolina	0.14%	Wisconsin
0.28%	Arizona	0.10%	Texas
0.275%	South Dakota	0.06%	Florida
0.26%	Montana	Undisclosed	Connecticut, Delaware, Illinois, Maryland, Massachusetts, Michigan, Mississippi, Nebraska, Nevada, New Jersey, New York, North Carolina, Ohio, Tennessee, Utah, Virginia, Washington
0.24%	Hawaii		
0.24%	New Mexico		
0.237%	California		
0.23%	Alabama		

21. Greatest Employer Contribution. Table 19 compares the size of the employer contributions, as a percentage of covered pay, for the 49 statewide teacher retirement plans reporting an employer contribution rate. The item is an element that was added to the comparison and was not a mandated item. The Minnesota Teachers Retirement Association (TRA) is among the bottom fifth of statewide teacher retirement plans with the lowest employer contribution requirement.

Table 19
Greatest Employer Contribution

26.00% ....Alaska	10.39%...........Idaho	6.28% .... Florida
24.13% ....West Virginia	10.31%...........Nevada	6.13% .... Tennessee
15.50% ....Louisiana	9.75%.............Mississippi	6.03% .... Virginia
14.78% ....Maine	9.40%.............Michigan	6.00% .... South Dakota
14.00% ....Ohio	9.30%.............Connecticut	5.75% .... Iowa
13.75% ....Hawaii	8.70%.............Arizona	5.68% .... Wyoming
13.72% ....Rhode Island	8.65%.............New Mexico	5.63% .... New Jersey
13.38% ....Utah	8.25%.............California	5.63% .... New York
13.22% ....Indiana	8.10%.............Wisconsin	5.50% .... Minnesota
13.105% ....Kentucky	8.02%.............Nebraska	5.47% .... Kansas
13.10% ....Illinois	7.75%.............North Dakota	4.81% .... Vermont
13.00% ....Arkansas	7.58%.............Montana	4.69% .... Pennsylvania
13.00% ....Oklahoma	7.55%.............South Carolina	4.06% .... New Hampshire
11.11% ....Maryland	7.44%.............Delaware	2.34% .... North Carolina
11.11% ....Oregon	7.31%.............Texas	1.37% .... Washington
11.00% ....Missouri	6.56%.............Alabama	Undisclosed .... Massachusetts

22. Smallest Member Contribution. Table 20 compares the size of the member contributions, as a percentage of covered salary, for the 50 statewide teacher retirement plans. The item was not a mandated comparison item. The Minnesota Teachers Retirement Association (TRA) is among the 40 percent of statewide teacher retirement plans with the lowest member contribution requirement.

Table 20
Smallest Member Contribution

None ... Florida, Hawaii, Oregon, Utah	5.90%.. New Hampshire	7.75%.. North Dakota
2.00%.. Maryland	6.00%.. Arkansas, North Carolina, South Carolina, South Dakota, West Virginia	8.00%.. California, Colorado, Louisiana
3.00%.. Delaware, Indiana	6.23%.. Idaho	8.65%.. Alaska
3.70%.. Iowa	6.90%.. Texas	8.70%.. Arizona
3.90%.. Vermont	7.00%.. Connecticut, Oklahoma	9.00%.. Illinois, Massachusetts
4.00%.. Kansas	7.15%.. Montana	9.50%.. Rhode Island
4.30%.. Michigan	7.16%.. Pennsylvania	9.855% Kentucky
4.90%.. Wisconsin	7.25%.. Mississippi, Nebraska	10.00% Ohio
5.00%.. Alabama, Georgia, New Jersey, Tennessee, Virginia	7.60%.. New Mexico	10.31% Nevada
5.50%.. Minnesota	7.65%.. Maine	11.00% Missouri
5.63%.. New York		15.00% Washington

23. Smallest Proportion of Normal Cost Covered by the Member Contribution. Table 21 compares the extent to which members of the 32 statewide teacher retirement plans providing sufficient data to make the comparison pay the actuarial cost of the benefits that are being earned concurrently. The item is not a mandated comparison item. The Minnesota Teachers Retirement Association (TRA) is among the third of the applicable statewide teacher retirement plans with members paying the greatest proportion of the actuarial cost of their own benefit coverage.

Table 21
Smallest Proportion of Normal Cost Covered by Member Contribution

0.00% .... Florida, Hawaii, Oregon, Utah	56.05%.............. New Mexico
32.43% .... Indiana	59.35%.............. Minnesota
34.11% .... Georgia	61.22%.............. South Carolina
38.60% .... Alaska	63.49%.............. Nebraska
40.57% .... Iowa	66.11%.............. Arizona
43.53% .... Vermont	66.35%.............. Texas
44.40% .... Idaho	66.54%.............. Oklahoma
46.13% .... New Hampshire	68.52%.............. North Dakota
46.22% .... Wisconsin	69.08%.............. Montana
46.31% .... Pennsylvania	77.69%.............. Connecticut
47.06% .... Arkansas	85.66%.............. Rhode Island
47.54% .... California	Undeterminable.. Alabama, Delaware, Illinois, Louisiana, Maryland, Massachusetts, Michigan, Mississippi, Nevada, New Jersey, New York, North Carolina, Ohio, Tennessee, Virginia, Washington, West Virginia, Wyoming
48.60% .... Kansas	
50.51% .... Kentucky	
51.87% .... South Dakota	
52.26% .... Missouri	
55.06% .... Colorado	
55.35% .... Maine	

24. Discussion and Analysis. While the comparison of the benefit plans of the 50 statewide teacher retirement programs is of significant interest to the Legislature, which enacted the study mandate, and various interested parties, which lobbied for or requested the inclusion of the study mandate as an amendment to one of the Commission's omnibus retirement bills in the Committee on Rules and Legislative Administration of the House of Representatives, the actual process of conducting the study and contemplating the information assembled raises several Commission staff observations about the limitations inherent in the study approach and in the use of the resulting information, as follows:

a. Comparisons Unreducable to Easily Compared Numeric Values. Among the items mandated for comparison and among the items additionally compared by the Commission staff for the 50 statewide teacher retirement plans, few of the comparisons are easily reduced to numeric values that are readily and uncontroversially comparable. For instance, 48 of the 50 statewide teacher retirement plans (all but California and New Hampshire) have more than one normal retirement age, usually at least one with a specified age and at least one at any age with either a specified long-duration service requirement or with eligibility a function of a combination of age and service. The prior ranking comparison was based on the earliest possible normal retirement age for a long-service teacher who began teaching at the earliest possible age, but does not capture an accurate comparison for any demographic circumstance. Thus, even when the comparison is number-based, a single reliable numeric value for each state is not possible.

b. Conclusions for Comparison of Less than Full Benefit Plan Inaccurate. The eight mandated comparison items and the 12 additional comparison items included by the Commission staff, while important, are an insufficient basis for resolving the information into fully accurate conclusions. The comparison is akin to an exercise of comparing and ranking recipes based on the quantities of eggs, flour, and baking powder used, without also assessing all of the other ingredients and without ever actually tasting the end product. At best, the results are broadly instructive as to the relative pension value earned by teachers in each state and as to the relative benefit generosity towards teachers of policy makers in each state. The closest measurable item that does account for all aspects of the benefit plan is the retirement plan's normal cost calculated under the Entry Age Normal Actuarial Cost Method, with reasonable and accurate actuarial assumptions. While many public pension plans surveyed report that they use the Entry Age Normal Actuarial Cost Method, the manner in which their actuaries employ the method is not disclosed or known, the reasonableness and accuracy of the actuarial assumptions used is difficult to ascertain, and the results do not automatically translate as applicable to another teacher population. For instance, in the early 1980s, the Pennsylvania Public School Employees Retirement System actuarial work was based on the average entry age normal cost for new plan entrants during the prior plan year rather than based on all active plan members, which is a practice that could distort considerably the calculated plan normal cost, actuarial accrued liability, and unfunded actuarial accrued liability. Similarly, before the 1980s, New York City retirement plans apparently utilized mortality tables in their actuarial valuations that were based on 1910 mortality experience, even though longevity had increased considerably during the intervening 60 or 70 years. Also, teacher demographic groups vary from state to state in their composition as to entry age, attained age, accrued service, and salary progression, with a corresponding need to adjust actuarial assumptions to capture these differences, meaning that the normal cost for the Alabama Teachers Retirement Plan may not be replicated if the identical benefit plan were made applicable to Minnesota teachers.

c. Demographic Differences Unfactored in Comparison. The provision-by-provision comparison of the 50 teacher retirement benefit plans would be an insufficient basis for a complete and accurate comparison of teacher retirement coverage because it fails to account for the demographics of teachers in each state. Although the benefit plan provisions are important, benefits that are unused or minimally used will be overvalued in a provision-by-provision comparison because each provision is given equal value in that type of comparison. If early normal retirement eligibility is not utilized by a teacher population because it is based on longer service than the average teacher can achieve because of a late relative entry age or because local economics demand continuation in the job market longer in one state than in another, the actual value and the actuarial cost of a normal retirement age eligibility provision will not be the same for different demographic groups, even if the same provision applies to both.

d. Approach Lacks Policy Goal Framework or Criteria. The comparison mandated by the 2006 legislation is basically a frequency or body count analysis, without a policy goal framework or specified evaluation criteria. Thus, in the provision-by-provision comparison of the 50 statewide teacher retirement systems, the earlier the normal retirement age eligibility requirement, the earlier the early reduced benefit retirement age eligibility requirement, the more modest the early retirement reduction factor employed, the greater the personal income tax exemption for public pensions, the greater the benefit accrual formula multiplier rate, the shorter the final average salary averaging period, and the more recent the existence of a special early retirement incentive, the higher the ranking or the greater the perceived excessiveness of the teacher retirement system. The ranking analysis of highest benefit components and lowest eligibility restrictions does not address the question of the appropriateness of those benefit practices for a given population or the affordability of those benefit practices for a given jurisdiction. Providing too large a benefit at too early an age can prompt a teaching population to discontinue that employment while still being productive and while still advancing a career, at great potential financial cost to the employing unit in needing to recruit new teachers or reemploy retired teachers and at great potential educational cost to the affected student populations. In conducting the comparison, the Commission staff found that some states added plan features to induce retirement-eligible teachers to delay retiring or to permit the reemployment of retired teachers when such reemployment would otherwise be prohibited or penalized. Thus, providing a composite benefit plan as in Michigan, allowing normal retirement at age 46, or as in Nevada, allowing early reduced retirement at any age with any service, or as in Delaware, limiting the early retirement reduction factor to two-tenths of one percent per year under the normal retirement age, or as in Kentucky, providing a 3.00 percent per year benefit accrual rate, or as in Georgia, using a two-year final average salary period, or as in Illinois, offering an unreduced early retirement annuity incentive, or as in Wisconsin, vesting teachers for a retirement annuity with any covered service, or as in Oklahoma, providing no covered salary exclusions, or as in Alaska, providing post-retirement adjustments with a 9.00 percent annual limit, may achieve the highest potential generosity ranking. The resulting benefit plan may achieve no generally accepted public policy purpose.

e. Undocumented Apparent Premise for Comparison on State Competitiveness. One valid reason for attempting to ascertain Minnesota's rank among all other statewide teacher retirement benefit plans and formulating benefit changes based on that comparison would be if Minnesota competed with a number of or all of the other 49 states for recruiting or retaining teachers in a national market. Testimony before the Commission based on a plea from a former Minnesota Education Commissioner to Minnesota teachers to relocate to Florida has been offered to support this national market assertion, but no other anecdotal or more rigorous or comprehensive evidence of the existence of national market for elementary or secondary teachers has been presented to the Commission and no clear evidence of the role played by retirement coverage in that premised need for competitiveness has been offered either. If Minnesota teachers were generally in a national market and were sufficiently dissatisfied with their compensation, retirement and other fringe benefits, and employment conditions, the expectation would be that there would be a declining total population of active teachers and a significant percentage of active members leaving active service prior to retirement, which is not consistent with the available data, as set forth below, with comparable results for the other two major statewide Minnesota retirement plans, the General State Employees Retirement Plan of the Minnesota State Retirement System (MSRS-General) and the General Employee Retirement Plan of the Public Employees Retirement Association (PERA-General), for comparison.

Terminations Compared to Total Membership 1996-2005

	Teachers Retirement Association			MSRS-General			PERA-General		
Year	Terminations	Total Actives	%	Terminations	Total Actives	%	Terminations	Total Actives	%
1996	4,797	68,490	7.00	4,232	49,914	8.48	9,422	129,431	7.28
1997	5,041	68,554	7.35	7,801	46,289	16.85	12,176	130,865	9.30
1998	5,046	68,247	7.39	4,915	46,299	10.62	9,250	136,166	6.79
1999	4,700	68,613	6.85	4,249	47,168	9.01	11,862	137,528	8.63
2000	4,680	70,508	6.64	4,312	47,920	9.00	12,189	135,560	8.99
2001	5,362	71,097	7.54	4,290	49,229	8.71	10,157	138,759	7.32
2002	5,912	71,690	8.25	4,231	49,099	8.62	16,453	137,817	11.94
2003	5,390	71,916	7.49	4,087	48,136	8.49	24,350	140,066	17.38
2004	5,173	72,008	7.18	NR	NR	NR	7,352	138,164	5.32
2005	3,852	74,552	5.17	3,941	47,125	8.36	12,120	142,303	8.52

Source: TRA, MSRS-General, and PERA-General annual actuarial valuations.
NR indicates that an inadequate reconciliation of the membership was presented in the annual actuarial valuation.

f. Unclear Basis for Relying on Other State Policy Making Process. Another valid reason for attempting to ascertain the rank of the Minnesota Teachers Retirement Association (TRA) compared to all other statewide teacher retirement plans would be if there was some basis to believe that the pension policy making process in all or a substantial portion of the other states is better than that existing in Minnesota and deferral to the policy judgments of other state legislatures would produce a better designed and more appropriate benefit plan for Minnesota teachers. Although the Commission staff consulted the applicable teacher retirement laws for the 49 other statewide retirement plans, the statutes in other states provide no sense of the policy making process that went into their formulation and provide no basis to conclude that deferral by Minnesota in this important aspect of state government practice and expenditures would be appropriate or beneficial.

g. Other Significant Cost Drivers and Important Features Omitted. From the general experience of the Commission staff and from the process of assembling this comparative document, other benefit plan features and provisions exist that are either important benefit features and provisions exist that are either important benefit aspects or are significant cost drivers. In Minnesota, some of these features would be the full benefit intrastate portability provided by the Combined Service Annuity and related provisions, deferred annuity augmentation, and the lack of benefit forfeitures imposed on reemployed annuitants. In other states, there are various provisions with similar benefit and actuarial cost impacts, such as the Option #4 optional annuity form in the Pennsylvania Public School Employees Retirement Plan, which provides for a lump sum payment of accumulated member contributions, including service credit purchases, at retirement without deducting the full actuarial value of the lump sum payment from the resulting retirement annuity calculation, the authority in Wisconsin for employers to assume a portion of or all of its employees' member contributions, the deferred retirement options programs in various states, where employees are allowed to "retire" without terminating active employment and have their retirement benefits accumulate with interest and any cost-of-living adjustments during the interval, payable as a lump sum, expanded service credit purchase authorization in various states, where plan members are permitted to purchase credit for various periods, including "air time" where no actual prior service was rendered, and the retiree health insurance benefits in various states, where post-retirement medical insurance coverage is partially or fully subsidized.

h. Unclear Benefit Comparison Basis Where Retirement Benefit Program Tiers Exist. The comparison assembled by the Commission attempts to capture the retirement benefits potentially payable to any active member of the 50 statewide teacher retirement plans, even where there are numerous benefit program tiers and where earlier, typically more generous, retirement benefit plans have been replaced for new plan entrants after specified dates. The resulting blend of retirement provisions from various tiers, such as Hawaii, Maryland, Minnesota, New York, Oregon, Utah, and Washington, make the comparison more difficult and make the policy basis for various benefit practices less clear.

i. Comparison Omits References to Benefit Practices Outside the Formal Teacher Retirement Plan. The benefit comparison of the 50 statewide teacher retirement plans assembled by the Commission staff in response to the legislative mandate for a Commission study is limited to the benefits provided by the various retirement plans, rather than the benefit coverage obtained by teachers from various sources. The omitted potential benefit coverage can be very important and could change potential rankings if included. Within Minnesota, for instance, post-retirement health insurance coverage provided by a Minnesota school district directly, employer-matched contributions to a retirement savings program outside of the Teachers Retirement Association (the Minnesota State Deferred Compensation Program of a tax-sheltered annuity program), school-district-adopted early retirement incentive payment programs, or supplemental defined contribution retirement coverage provided to Minnesota State Colleges and Universities System faculty members are not factored in, in part because there is no reliable compendium of information about these benefit practices, and because the coverage expends only to a subgroup of the total teacher membership. Similar practices presumably occur to a greater or lesser degree in other states and are not included in the comparison. Some of these practices also may be subject to modification or discontinuation by virtue of recent changes in the generally accepted accounting principles for disclosure of related liabilities and costs. In Minnesota, the Office of the State Auditor has already issued a report on these "other post-employment benefits" and the Program Evaluation Division of the Legislative Auditor is scheduled to also issue a report in the near term. To the extent that these current practices have been omitted and to the extent that these current practices are likely to change in response to accounting disclosure changes, any comparison is incomplete and inadequate.

j. Policy Making Flux Over Post-Retirement Adjustment Mechanisms Impedes Broader Conclusions and Recommendations. Post-retirement adjustment mechanisms are an important part of the retirement coverage outlined in the attached benefit plan comparison and to the extent that the future of the Minnesota Post Retirement Investment Fund is in flux based on the other portion of this study, that policy making flux makes it difficult for the Commission to reach conclusions about the adequacy of other aspects of the retirement benefit plan compared to the other 49 statewide teacher retirement plans and to formulate recommendations about any benefit modifications that may be appropriate or needed.

Potential Alternative Commission Conclusions

In response to the 50 statewide teacher retirement plan benefit provision summary and comparison assembled by the Commission staff, and after receiving additional information and testimony from interested parties, the Commission has several potential options for the conclusions it can reach as the Commission staff identify them. The options relate to a different emphasis to be placed on the adequacy of the retirement benefit and the affordability of the benefit plan.

The options identified by the Commission staff for potential Commission conclusions are as follows:

1. Inconclusive Results. The Commission concludes that the 50 statewide teacher retirement plan benefit provision summary and comparison provides interesting information, but because of the limited scope of the comparisons and the difficulties in quantifying and ranking several of the benefit plan elements, the study is inconclusive about benefit adequacy and benefit plan affordability of the Minnesota teacher retirement plans.

2. Inadequate Benefit Coverage Elements. The Commission concludes that the 50 statewide teacher retirement plan benefit provision summary and comparison indicates that aspects of the benefit plans of the three Minnesota teacher retirement plans, especially (*insert benefit plan provision*) and (*insert benefit plan provision*), are inadequate and merit revision or reformulation.

3. Broadly Inadequate Benefit Coverage. The Commission concludes that the 50 statewide teacher retirement plan benefit provision summary and comparison indicates that the benefit plans of the three Minnesota teacher retirement plans are broadly inadequate and the (*insert benefit plan provision*), (*insert benefit plan provision*), and (*insert benefit plan provision*) merit revision and reformation.

4. Overadequate Benefit Coverage. The Commission concludes that the 50 statewide teacher retirement plan benefit provision summary and comparison indicates that the benefit plans of the three Minnesota teacher retirement plans provide total retirement benefits that are more than adequate, especially (*insert benefit plan provision*), (*insert benefit plan provision*), and (*insert benefit plan provision*), and merit revision and reformation.

5. Excessive Benefit Coverage. The Commission concludes that the 50 statewide teacher retirement plan benefit provision summary and comparison demonstrates that the benefit coverage provided by the three Minnesota teacher retirement plans is excessive and merits revision and reformation.

6. Reasonable Benefit Coverage Cost. The Commission concludes that the 50 statewide teacher retirement plan benefit provision summary and comparison indicates that the cost of the current three Minnesota teacher retirement plans is affordable and any modifications in the benefit plans should be cost neutral in result.

7. Modest Current Benefit Plan Cost. The Commission concludes that the 50 statewide teacher retirement plan benefit provision summary and comparison indicates that the cost of the three Minnesota teacher retirement plans is minimal and affordability concerns should not impede needed improvements.

8. Current Benefit Coverage Too Costly. The Commission concludes that the 50 statewide teacher retirement plan benefit provision summary and comparison indicates that the cost of the current three Minnesota teacher retirement plans is too great and merits modifications or reformulations that moderate plan cost.

9. Excessively Costly Benefit Coverage. The Commission concludes that the 50 statewide teacher retirement plan benefit provision summary and comparison indicates that the current three Minnesota teacher retirement plans are excessively too costly and merit revision or reformulation to reduce plan cost.

Potential Alternative Commission Recommendations

Depending on the conclusion that the Commission reaches on this part of the mandated study, there are several options for the Commission to consider with respect to recommendations.

Based on the recommendation or recommendations selected by the Commission, the Commission staff will draft the applicable proposed legislative language required to implement the recommendation or recommendations for inclusion in the Commission's report.

The options identified by the Commission staff for potential Commission recommendations are as follows:

1. Inconclusive Results Conclusion.

   a. Broader Provisions Future Study. The Commission recommends that there be a further 50 statewide teacher retirement plan study with the inclusion of a broader set of benefit provisions, including (*insert benefit plan provision*), (*insert benefit plan provision*), and (*insert benefit plan provision*).

   b. In-Depth Focused Future Study. The Commission recommends that there be a further study of an expanded set of retirement plan provisions for the statewide teacher retirement plans that (*are coordinated with Social Security*) (*geographically adjoin Minnesota*) (*are in states with an established pension commission*) (*other delimitation*).

   c. Future Study of Benefit Adequacy. The Commission recommends that there be a further study of the retirement benefit needs of Minnesota teachers and the benefit adequacy of the current Minnesota teacher retirement plans.

2. Inadequate/Broadly Inadequate Benefit Coverage Conclusions.

   Additional Benefit Modifications. The Commission recommends that the Minnesota teacher retirement plans be amended to (*lower the normal retirement age*) (*lower the early retirement reduction factors*) (*increase the benefit accrual rate*) (*lower the final average salary averaging period*) (*exempt the plan's retirement benefits from state income taxation*) (*other*).

3. Overadequate/Excessive Benefit Coverage Conclusions.

   a. Benefit Reductions for New Hires. The Commission recommends that the Minnesota teacher retirement plans be amended, for teachers first employed after July 1, 2007, to (*increase the normal retirement age*) (*increase the early retirement reduction factors*) (*reduce the benefit accrual rate*) (*increase covered salary exceptions*) (*add benefit amount limits*) (*other*).

   b. Benefit Reductions to Accompany Any Benefit Increases. The Commission recommends that, for existing members of the three Minnesota teacher retirement plans, any future benefit increases be accompanied with a comparable or greater benefit reduction.

4. Reasonable Benefit Coverage Cost Conclusion.

   Trade/Remix Benefit Plan Provisions. The Commission recommends that any revisions in the Minnesota teacher retirement plans be formulated, on an actuarial cost neutral basis, to better focus the ongoing benefit coverage of those plans by trading against any benefit increases reductions in (*disability coverage*) (*survivor coverage*) (*deferred annuity augmentations*) (*refund interest rate*) (*vesting period*) (*early retirement eligibility requirements*) (*amount of reemployed annuitant earnings limitation account payment*).

5. Modest Current Benefit Plan Cost Conclusion.

   Additional Benefit Increases. The Commission recommends that the Minnesota teacher retirement plans be amended to (*lower the normal retirement age*) (*lower the early retirement reduction factors*) (*increase the benefit accrual rate*) (*lower the final average salary averaging period*) (*exempt the plan's retirement benefits from state income taxation*) (*other*).

6. Too Costly/Excessively Costly Benefit Coverage Conclusions.

   a. Benefit Reductions for New Hires. The Commission recommends that the Minnesota teacher retirement plans be amended, for teachers first employed after July 1, 2007, to (*increase the normal retirement age*) (*increase the early retirement reduction factors*) (*reduce the benefit accrual rate*) (*increase covered salary exceptions*) (*add benefit amount limits*) (*other*).

   b. Benefit Reductions to Accompany Any Benefit Increases. The Commission recommends that, for existing members of the three Minnesota teacher retirement plans, any future benefit increases be accompanied with a comparable or greater benefit reduction.

Appendix A

Table 1
Minnesota Post Retirement Investment Fund
Comparison of Adjustments with Increases in the Consumer Price Index 1978-2005

Effective Date	CPI*	MPRIF	Difference
	%	%	+/-
1/1/05	3.3	2.50	-0.80
1/1/04	1.9	2.103	0.203
1/1/03	2.4	0.745	-1.655
1/1/02	1.6	4.4935	2.8935
1/1/01	3.4	9.5342	6.1342
1/1/00	2.7	11.1436	8.4436
1/1/99	1.6	9.8254	8.2254
1/1/98	1.7	10.0876	8.3876
1/1/97	3.3	8.0395	4.7395
1/1/96	2.5	6.3954	3.8954
1/1/95	2.7	3.985	1.285
1/1/94	2.7	6.017	3.317
1/1/93	2.9	4.553	1.653
1/1/92	3.1	4.295	1.195
1/1/91	6.1	5.10	-1.000
1/1/90	4.6	4.04	-0.560
1/1/89	4.4	6.918	2.518
1/1/88	4.4	8.054	3.654
1/1/87	1.1	9.792	8.692
1/1/86	3.8	7.90	4.100
1/1/85	3.9	6.905	3.005
1/1/84	3.8	7.499	3.699
1/1/83	3.8	6.853	3.053
1/1/82	8.9	7.436	-1.464
1/1/81	12.5	3.209	-9.291
1/1/80	13.3	0.00	-13.30
1/1/79	9.0	0.00	-9.00
1/1/78	6.7	4.00	-2.70

* *Consumer Price Index for All Urban Consumers (CPI-U) annual percent change (Dec. to Dec.)*

Table 2
Minneapolis Employees Retirement Fund (MERF)
Comparison of Adjustments with Increases in the Consumer Price Index 1978-2005

Effective Date	CPI*	MERF	Difference
	%	%	+/-
1/1/05	3.3	3.17372	-0.12628
1/1/04	1.9	2.10347	0.20347
1/1/03	2.4	0.74456	-1.65544
1/1/02	1.6	5.34299	3.74299
1/1/01	3.4	10.50999	7.10999
1/1/00	2.7	10.22750	7.52750
1/1/99	1.6	8.04320	6.44320
1/1/98	1.7	6.668	4.968
1/1/97	3.3	3.950	0.65
1/1/96	2.5	3.595	1.095
1/1/95	2.7	3.144	0.444
1/1/94	2.7	3.824	1.124
1/1/93	2.9	5.984	3.084
1/1/92	3.1	0.000	-3.10
1/1/91	6.1	5.079	-1.021
1/1/90	4.6	6.918	2.318
1/1/89	4.4	5.93591	1.53591
1/1/88	4.4	9.37158	4.97158
1/1/87	1.1	7.589	6.489
1/1/86	3.8	8.716	4.916
1/1/85	3.9	7.337	3.437
1/1/84	3.8	10.77	6.97
1/1/83	3.8	9.17	5.37
1/1/82	8.9	7.436**	-1.464
1/1/81	12.5	3.209**	-9.291
1/1/80	13.3	0.000**	-13.30
1/1/79	9.0	0.000**	-9.00
1/1/78	6.7	4.000**	-2.70

* *Consumer Price Index for All Urban Consumers (CPI-U) annual percent change (Dec. to Dec.)*
** *MERF participated in the Minnesota Post Retirement Investment Fund before 1983 and the Minnesota Post Retirement Investment Fund increases apply to the plan before 1983.*

Appendix A

Table 3
Duluth Teachers Retirement Fund Association (DTRFA)
Comparison of Adjustments with Increases in the Consumer Price Index 1978-2005

Effective Date	CPI*	DTRFA	Difference
	%	%	+/-
1/1/05	3.3	2.00	-1.30
1/1/04	1.9	2.00	0.10
1/1/03	2.4	2.00	-0.40
1/1/02	1.6	5.25	3.65
1/1/01	3.4	10.2391	6.8391
1/1/00	2.7	9.0275	6.3275
1/1/99	1.6	7.0125	5.4125
1/1/98	1.7	6.3407	4.6407
1/1/97	3.3	5.6315	2.3315
1/1/96	2.5	4.6424	2.1424
1/1/95	2.7	1.8440**	-0.856
1/1/94	2.7	2.3316**	-0.3684
1/1/93	2.9	2.2726**	-0.6274
1/1/92	3.1	2.8053**	-0.2947
1/1/91	6.1	2.9339**	-3.1661
1/1/90	4.6	3.0554**	-1.5446
1/1/89	4.4	0.0000**	-4.400
1/1/88	4.4	2.9766**	-1.4234
1/1/87	1.1	3.0779**	1.9779
1/1/86	3.8	3.3930**	-0.407
1/1/85	3.9	2.8898**	-1.0102
1/1/84	3.8	N/A	-3.80
1/1/83	3.8	N/A	-3.80
1/1/82	8.9	N/A	-8.90
1/1/81	12.5	N/A	-12.50
1/1/80	13.3	N/A	-13.30
1/1/79	9.0	N/A	-9.00
1/1/78	6.7	N/A	-6.70

* *Consumer Price Index for All Urban Consumers (CPI-U) annual percent change (Dec. to Dec.)*

** *From 1985 to 1995, DTRFA utilized a lump sum post-retirement mechanism. An equivalent percentage increase can be calculated by expressing the total lump sum adjustment expenditure in each year as a percentage of the present value of total retirement annuities and benefits in force. The equivalent percentage adjustment amounts do not include compounding.*

Table 4
St. Paul Teachers Retirement Fund Association (SPTRFA)
Comparison of Adjustments with Increases in the Consumer Price Index 1978-2005

Effective Date	CPI*	SPTRFA	Difference
	%	%	+/-
1/1/05	3.3	2.0000	-1.30
1/1/04	1.9	2.0000	0.10
1/1/03	2.4	2.0000	-0.40
1/1/02	1.6	3.7000	2.10
1/1/01	3.4	7.6723	4.2723
1/1/00	2.7	9.2619	6.5619
1/1/99	1.6	7.2145	5.6145
1/1/98	1.7	7.0000	5.30
1/1/97	3.3	1.4185**	-1.8815
1/1/96	2.5	1.6533**	-0.8467
1/1/95	2.7	1.6396**	-1.0604
1/1/94	2.7	1.7671**	-0.9329
1/1/93	2.9	1.7254**	-1.1746
1/1/92	3.1	1.9058**	-1.1942
1/1/91	6.1	1.6708**	-4.4292
1/1/90	4.6	1.6118**	-2.9882
1/1/89	4.4	1.4881**	-2.9119
1/1/88	4.4	1.4816**	-2.9184
1/1/87	1.1	0.9903**	-0.1097
1/1/86	3.8	0.9167**	-2.8833
1/1/85	3.9	0.7480**	-3.1520
1/1/84	3.8	0.8571**	-2.9429
1/1/83	3.8	0.6882**	-3.1118
1/1/82	8.9	0.8162**	-8.0838
1/1/81	12.5	0.7108**	-11.7892
1/1/80	13.3	0.6688**	-12.6312
1/1/79	9.0	0.6437**	-8.3563
1/1/78	6.7	0.00	-6.70

* *Consumer Price Index for All Urban Consumers (CPI-U) annual percent change (Dec. to Dec.)*

** *From 1985 to 1995, DTRFA utilized a lump sum post-retirement mechanism. An equivalent percentage increase can be calculated by expressing the total lump sum adjustment expenditure in each year as a percentage of the present value of total retirement annuities and benefits in force. The equivalent percentage adjustment amounts do not include compounding.*

Appendix A

Table 5
Minneapolis Firefighters Relief Association
Comparison of Adjustments with Increases in the Consumer Price Index 1978-2005

Effective Date	CPI*	Escalator	13th Check Annuity Equiv.	110% Funded Adj.	Total	Difference
	%	%	%	%	%	+/-
1/1/05	3.3	5.99	0.00	--	5.99	2.69
1/1/04	1.9	-1.43	0.00	--	-1.43	-3.33
1/1/03	2.4	4.00	0.00	--	4.00	1.60
1/1/02	1.6	4.00	1.6855	--	5.6855	4.0855
1/1/01	3.4	3.33	1.9397	--	5.2697	1.8697
1/1/00	2.7	3.37	2.4272	--	5.7972	3.0972
1/1/99	1.6	3.42	2.3005	--	5.7205	4.1205
1/1/98	1.7	4.00	0.7133	--	4.7133	3.0133
1/1/97	3.3	9.10	0.6007	--	9.7007	6.4007
1/1/96	2.5	11.40	0.6084	--	12.0084	9.5084
1/1/95	2.7	2.50	0.00	--	2.50	-0.20
1/1/94	2.7	4.20	0.5995	--	4.7995	2.0995
1/1/93	2.9	6.70	0.6281	--	7.3281	4.4281
1/1/92	3.1	3.50	0.6063	--	4.1063	1.0063
1/1/91	6.1	3.50	0.00	--	3.50	-2.60
1/1/90	4.6	2.60	0.5033	--	3.1033	-1.4967
1/1/89	4.4	3.90	0.00	--	3.90	-0.50
1/1/88	4.4	4.00	0.00	--	4.00	-0.40
1/1/87	1.1	4.80	0.00	--	4.80	3.70
1/1/86	3.8	3.50	0.00	--	3.50	-0.30
1/1/85	3.9	4.90	0.00	--	4.90	1.00
1/1/84	3.8	4.70	0.00	--	4.70	0.90
1/1/83	3.8	4.30	0.00	--	4.30	0.50
1/1/82	8.9	6.10	0.00	--	6.10	-2.80
1/1/81	12.5	8.10	0.00	--	8.10	-4.40
1/1/80	13.3	7.70	0.00	--	7.70	-5.60
1/1/79	9.0	7.50	0.00	--	7.50	-1.50
1/1/78	6.7	12.30	0.00	--	12.30	5.60

* *Consumer Price Index for All Urban Consumers (CPI-U) annual percent change (Dec. to Dec.)*

Table 6
Minneapolis Police Relief Association
Comparison of Adjustments with Increases in the Consumer Price Index 1978-2005

Effective Date	CPI*	Escalator	13th Check Annuity Equiv.	110% Funded Adj.	Total %	Difference
	%	%	%	%	%	+/-
1/1/05	3.3	3.9998	--	--	3.9998	0.6998
1/1/04	1.9	2.4357	--	--	2.4357	0.5357
1/1/03	2.4	3.8657	--	--	3.8657	1.4657
1/1/02	1.6	3.9994	--	--	3.9994	2.3994
1/1/01	3.4	5.7315	0.4548	--	6.1863	2.7863
1/1/00	2.7	6.9712	0.5342	--	7.5054	4.8054
1/1/99	1.6	6.0242	0.5359	--	6.5601	4.9601
1/1/98	1.7	4.00	0.5677	--	4.5677	2.8677
1/1/97	3.3	5.80	0.5716	--	6.3716	3.0716
1/1/96	2.5	8.50	0.5994	--	9.0994	6.5994
1/1/95	2.7	4.00	--	--	4.0000	1.3000
1/1/94	2.7	1.50	0.6295	--	2.1295	-0.5705
1/1/93	2.9	7.00	0.6214	--	7.6214	4.7214
1/1/92	3.1	3.10	0.6577	--	3.7577	0.6577
1/1/91	6.1	4.40	--	--	4.400	-1.7000
1/1/90	4.6	3.00	0.6401	--	3.6401	-0.9599
1/1/89	4.4	3.70	0.5652	--	4.2652	-0.1348
1/1/88	4.4	4.00	--	--	4.00	-0.40
1/1/87	1.1	4.90	--	--	4.90	3.80
1/1/86	3.8	3.50	--	--	3.50	-0.30
1/1/85	3.9	4.00	--	--	4.00	0.10
1/1/84	3.8	3.90	--	--	3.90	0.10
1/1/83	3.8	6.00	--	--	6.00	2.20
1/1/82	8.9	5.10	--	--	5.10	-3.80
1/1/81	12.5	8.20	--	--	8.20	-4.30
1/1/80	13.3	8.50	--	--	8.50	-4.80
1/1/79	9.0	6.70	--	--	6.70	-2.30
1/1/78	6.7	12.275	--	--	12.275	5.575

* *Consumer Price Index for All Urban Consumers (CPI-U) annual percent change (Dec. to Dec.)*

Appendix A

Table 7
Fairmont Police Relief Association
Comparison of Adjustments with Increases in the Consumer Price Index 1978-2005

Effective Date	CPI*	Escalator	13th Check Annuity Equiv.	Total	Difference
	%	%	%	%	+/-
1/1/05	3.3	1.2602	--	1.2602	-2.0398
1/1/04	1.9	8.2642	--	8.2642	6.3642
1/1/03	2.4	3.3222	--	3.3222	0.9222
1/1/02	1.6	6.8222	--	6.8222	5.2222
1/1/01	3.4	9.3202	--	9.3202	5.9202
1/1/00	2.7	5.6992	--	5.6992	2.9992
1/1/99	1.6	8.4933	--	8.4933	6.8933
1/1/98	1.7	8.20	--	8.20	6.50
1/1/97	3.3	4.00	--	4.00	0.70
1/1/96	2.5	5.00	--	5.00	2.50
1/1/95	2.7	2.70	--	2.70	0.00
1/1/94	2.7	8.80	--	8.80	6.10
1/1/93	2.9	2.50	--	2.50	-0.40
1/1/92	3.1	2.80	--	2.80	-0.30
1/1/91	6.1	3.00	--	3.00	-3.10
1/1/90	4.6	3.50	--	3.50	-1.10
1/1/89	4.4	36.60	--	36.60	32.20
1/1/88	4.4	3.10	--	3.10	-1.30
1/1/87	1.1	2.20	--	2.20	1.10
1/1/86	3.8	3.40	--	3.40	-0.40
1/1/85	3.9	4.00	--	4.00	0.10
1/1/84	3.8	11.20	--	11.20	7.40
1/1/83	3.8	2.70	--	2.70	-1.10
1/1/82	8.9	5.10	--	5.10	-3.80
1/1/81	12.5	9.90	--	9.90	-2.60
1/1/80	13.3	20.20	--	20.20	6.90
1/1/79	9.0	17.20	--	17.20	8.20
1/1/78	6.7	13.30	--	13.30	6.60

* *Consumer Price Index for All Urban Consumers (CPI-U) annual percent change (Dec. to Dec.)*

Appendix B

Background Information on Additional Benefit Plan Provision Elements

A. Post-Retirement Benefit Adequacy

1. Definitions. "Post-retirement adjustments" are modifications, usually increases, in the amount of retirement annuities and benefits that are payable after retirement. "Post-retirement benefit adequacy" is a measure used to determine whether or not post-retirement adjustments are adequate.

2. Commission Principles of Pension Policy Provision. Principle II.C.8. of the Principles of Pension Policy of the Legislative Commission on Pensions and Retirement indicates that the primary purpose for post-retirement adjustments is to replace the impact of inflation on previously adequate retirement benefits, with the adjustment mechanism funded on an actuarial basis, and with the inflation measure based on a valid recognized economic indicator. Specifically, the applicable principle states:

   8. Post-Retirement Benefit Adequacy

      a. The retirement benefit should be adequate during the period of retirement.
      b. Post-retirement 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.
      d. In order to replace inflation, the post-retirement adjustment system should follow a valid recognized economic indicator.

3. Policy Considerations Respecting Post-Retirement Adjustments and Adequacy. The Principles of Pension Policy reflect a more generally held conclusion that a public retirement benefit should remain adequate during the period of retirement and that post-retirement benefit adequacy should offset the effects of inflation. The Commission Principles additionally hold that any post-retirement adjustment mechanism following a valid recognized economic indicator, and that the post-retirement adjustment mechanism should be funded on an actuarial basis.

   Thus, the Principles indicate a goal of maintaining the adequacy of the public pension plan retirement benefit after the retirement, assuming that the retirement benefit is adequate at the time of retirement. Post-retirement adjustments are essentially of two types, either making an inadequate retirement benefit adequate or more adequate during the course of retirement or functioning to retain the adequacy of an already adequate retirement benefit throughout the period of retirement. If a post-retirement adjustment is needed to gain retirement benefit adequacy which was previously lacking, that purpose is best accomplished by an ad hoc post-retirement adjustment. If a post-retirement adjustment is needed to maintain retirement benefit adequacy, that purpose is best accomplished by an automatic post-retirement adjustment mechanism.

   The need to provide ad hoc post-retirement adjustments largely arises out of active member retirement benefit increases that redefine what constitutes a retirement benefit that is adequate at the time of retirement. This was the case in the numerous ad hoc post-retirement adjustments that were provided to the statewide pension plan benefit recipients who retired prior to the substantial 1973 benefit improvements.

   The need to provide automatic post-retirement adjustments arises out of actual inflationary forces or expected future inflation. The maintenance of benefit adequacy post-retirement adjustments is principally an outgrowth of the significant inflation that occurred during the late 1960s, 1970s, and early 1980s. Based on the Consumer Price Index for all urban workers, all items, for the period 1913-2001, there is a relative lack of inflation other than for the periods of 1916-1920, 1941-1948, 1951, 1969-1982, and 1988-1991.

   The significant inflation in the late 1960s led to the creation of the Minnesota Adjustable Fixed Benefit Fund, a predecessor to the Minnesota Post Retirement Investment Fund, in 1969. However, until 1992, the Minnesota Post Retirement Investment Fund had no inflation measure and it based post-retirement adjustments wholly on investment income (dividends, interest and net realized gains or losses) in excess of a five percent post-retirement interest rate assumption. Investment returns and inflation do not necessarily correlate well, as the experience since the 1974 recession indicates. In 1992, with a revision in the Minnesota Post Retirement Investment Fund, the annual automatic post-retirement adjustment was separated into two parts, with one based on the increase in the Consumer Price Index (CPI) up to 3.5 percent until 1997 and up to 2.5 percent after 1996 and with one based on the investment performance (total rate of return) in excess of a five percent interest rate plus the actuarial reserves arising from the CPI-based adjustment. The post-1991 version of the Minnesota Post Retirement Investment Fund will only maintain the adequacy of retirement annuities if inflation is under 3.5 percent annually, or if investment performance and greater inflation correlate well, or if the Consumer Price Index overstates actual retiree inflation, as some economists have recently asserted, and if the actual post-retirement adjustments match the actual, but unmeasured, retiree inflation.

Other post-retirement adjustment mechanisms similarly have potential inabilities to maintain post-retirement benefit adequacy. The Duluth Teachers Retirement Fund Association (DTRFA), Minneapolis Teachers Retirement Fund Association (MTRFA), and St. Paul Teachers Retirement Fund Association (SPTRFA) post-retirement adjustment mechanisms are not related to any measure of inflation, but provide compounding increases. The Minneapolis Employees Retirement Fund (MERF) Retirement Benefit Fund duplicates the pre-1997 Minnesota Post Retirement Investment Fund, is administered by the MERF Board, and has the same potential shortfalls as the Minnesota Post Retirement Investment Fund. The four remaining local police and paid firefighter relief associations use escalation, where the retirement benefit increase is based on the wage increases granted to a particular public safety employment position, thus dependent on the collective bargaining process. Two of the four local police and paid firefighters relief associations also have additional investment-performance-related "thirteenth check" post-retirement adjustments and three of the four local relief associations have and asset-based post-retirement adjustment in effect once the plan is fully funded.

B. Covered Salary; Final Average Salary

1. Definitions. "Covered salary" is the specification within a salary-related benefit plan of the various potential components of compensation or remuneration that are includable in the salary base for the computation of retirement annuities and benefits and for member contributions. "Final average salary" is the specification of the averaging period of covered salary figures to be used in the calculation of retirement annuities.

2. Commission Principles of Pension Policy Provision. The Principles of Pension Policy of the Legislative Commission on Pensions and Retirement lacks any principle directly related to the specification of covered salary.

   Principle II.C.7.c. of the Principles of Pension Policy of the Legislative Commission on Pensions and Retirement indicates that for all Minnesota retirement plans other than local police or firefighter relief associations, retirement annuities are to be determined using a final average salary figure based on the average of the five highest successive years salary unless the Legislature designates a different averaging period. Specifically, the applicable principle states:

   > 7. Adequacy of Benefits at 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.

3. Policy Analysis and Discussion. Minnesota's statewide retirement plans were not originally salary-related pension plans, with the predecessor to TRA established in 1915 as a money purchase (defined contribution) plan, with MSRS-General established in 1929 as a set dollar amount ($200 per month) plan, and with PERA-General established in 1931 also as a set dollar amount ($200 per month) plan. Conversion to salary-related pension plans occurred for MSRS-General and PERA-General in 1957, the work of the initial interim predecessor to the Legislative Commission on Pensions and Retirement, and for Teachers Retirement Association (TRA) in 1969, the work of the initial permanent predecessor to the Legislative Commission on Pensions and Retirement. The first class city teacher retirement fund associations and Minneapolis Employees Retirement Fund (MERF) generally shifted to salary-related pension plans in the 1950s (Duluth Teachers Retirement Fund Association (DTRFA) shifted in 1971).

   When the statewide Minnesota retirement plans converted to salary-related pension plans, they initially utilized a "career average" salary base for determining benefits, moving to a "highest five years average" salary base in 1973. The career average salary utilized the salary portion of the retirement formula to account for plan members who worked in disparate compensation arrangements, either as seasonal or part-time employees or as employees with considerable overtime or extracurricular compensation, thereby not requiring sensitivity in the crediting of allowable service.

The following demonstrates the impact of different employment situations for an MSRS-General employee (full-time employment, part-time or seasonal employment, early or late occurring mixes of part-time or seasonal employment, recurring overtime or extracurricular employment, and early or late occurring mixes of overtime or extracurricular employment), comparing career average salary and highest five years' average salary results, including the portion of member contributions recovered by one year's benefit amount:

(1) Year	(2) Salary Increase Rate	(3) Regular Career	(4) Part-time/ Seasonal Career	(5) Early Partial Part-Time/ Seasonal Employment	(6) Late Partial Part-Time/ Seasonal Employment	(7) Overtime/ Extra-curricular Career	(8) Early Partial Overtime/ Extra-Curricular Employment	(9) Late Partial Overtime/ Extra-Curricular Employment
1977	6.00	7,700	3,850	3,850	7,700	9,625	9,625	7,700
1978	5.95	8,162	4,081	4,081	8,162	10,203	10,203	8,162
1979	5.90	8,648	4,324	4,324	8,648	10,810	10,810	8,648
1980	5.85	9,158	4,579	4,579	9,158	11,448	11,448	9,158
1981	5.80	9,693	4,847	4,847	9,693	12,116	12,116	9,693
1982	5.75	10,256	5,128	5,128	10,256	12,820	12,820	10,256
1983	5.70	10,846	5,423	5,423	10,846	13,558	13,558	10,846
1984	5.65	11,464	5,732	5,732	11,464	14,330	14,330	11,464
1985	5.60	12,112	6,056	6,056	12,112	15,140	15,140	12,112
1986	5.55	12,790	6,395	6,395	12,790	15,988	15,988	12,790
1987	5.50	13,500	6,750	6,750	13,500	16,875	16,875	13,500
1988	5.45	14,242	7,121	7,121	14,242	17,803	17,803	14,242
1989	5.40	15,018	7,509	7,509	15,018	18,773	18,773	15,018
1990	5.35	15,829	7,915	7,915	15,829	19,786	19,786	15,829
1991	5.30	16,676	8,338	8,338	16,676	20,845	20,845	16,676
1992	5.25	17,560	8,780	8,780	17,560	21,950	17,560	17,560
1993	5.20	18,482	9,241	9,241	18,482	23,103	18,482	18,482
1994	5.15	19,443	9,722	9,722	19,443	24,304	19,443	19,443
1995	5.10	20,444	10,222	10,222	20,444	25,555	20,444	20,444
1996	5.05	21,487	10,744	10,744	21,487	26,859	21,487	21,487
1997	5.00	22,561	11,281	11,281	22,561	28,201	22,561	22,561
1998	5.00	23,689	11,845	11,845	23,689	29,611	23,689	23,689
1999	5.00	24,874	12,437	12,437	24,874	31,093	24,874	24,874
2000	5.00	26,118	13,059	13,059	26,118	32,648	26,118	26,118
2001	5.00	27,423	13,712	13,712	27,423	34,279	27,423	27,423
2002	5.00	28,795	14,398	28,795	14,398	35,994	28,795	35,994
2003	5.00	30,234	15,117	30,234	15,117	37,793	30,234	37,793
2004	5.00	31,746	15,873	31,746	15,873	39,683	31,746	39,683
2005	5.00	33,333	16,667	33,333	16,667	41,666	33,333	41,666
2006	5.00	35,000	17,500	35,000	17,500	43,750	35,000	43,750
Total Member Contributions		$22,291	$11,146	$14,328	$19,109	$27,864	$24,052	$23,882

	Regular Career	Part-Time/ Seasonal Career	Early Partial Part-Time/ Seasonal Employment	Late Partial Part-Time/ Seasonal Employment	Overtime/ Extra-Curricular Career	Early Partial Overtime/ Extra-Curricular Employment	Late Partial Overtime/ Extra-Curricular Employment
Career Average Salary Benefit							
Career Avg. Salary	$18,576	$9,288	$11,940	$15,924	$23,200	$20,044	$19,902
Benefit Accrual (0.51)	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Annual Ret. Benefit	$9,474	$4,737	$6,089	$8,121	$11,842	$10,222	$10,150
Benefit/ Contribution Ratio	0.4250	0.4250	0.4250	0.4250	0.4250	0.4250	0.4250
High-Five Average Salary Benefit							
High-Five Avg. Salary	$31,822	$15,911	$31,822	$15,911	$39,777	$31,822	$39,777
Benefit Accrual (.51)	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Annual Ret. Benefit	$16,229	$8,115	$16,229	$8,115	$20,286	$16,229	$20,286
Benefit/Contribution Ratio	0.7281	0.7281	1.1327	0.4247	0.7280	0.6747	0.8494

Appendix B

For Minnesota defined benefit pension plans, the definition of covered salary is the measure of a plan member's standard of living to be used in determining the appropriate replacement amount. Several decades ago, when employees received only one form of compensation as remuneration for their services, there were fewer questions about the adequacy of using "salary" to measure a person's standard of living. Now, with the advent of numerous employment-related compensation items, this may no longer be the case. For instance for police officers, their recurring compensation package can include a base salary, shift differential, uniform allowances, education incentive payments, court appearance amounts, dog handler compensation, tactical or special squad compensation, and overtime. There also may be additional compensation items like lump sum annual bonus or merit payments, tuition payments, and employer-paid flexible benefit account balances. Any definition or redefinition of covered salary should attempt to reasonably capture those items on which a public employee's regular standard of living is based. Among the teacher plans, there have been recent complaints concerning the adequacy of the covered salary figure. Over the past several sessions, proposed legislation has been introduced to attempt to reflect early or mid-career extracurricular teaching compensation in the highest five successive years average salary figure. Also, in past legislative sessions, proposed legislation has been introduced to add an alternative highest five successive years average salary figure in the Teachers Retirement Association (TRA) based on the average salary of all comparable TRA members, to adjust for lower salaries for some rural teachers. Similarly, the definition of covered salary should accurately reflect real compensation, so not to overstate a person's standard of living. The General Employee Retirement Plan of the Public Employees Retirement Association (PERA-General), historically, has covered city attorneys and other professionals retained by local government units who bear a close resemblance to independent contractors and may be credited with covered salary amounts based on a gross retained fee that does not closely relate to the individual's actual personal compensation.

Many Minnesota defined benefit public pension plans utilize a highest five successive years average covered salary figure for benefit calculation purposes in order to lessen the potential for manipulation from career-end compensation amounts that would occur if a shorter period of service credit was used. How-ever, manipulation apparently occurs. It has been reported that various public employees who receive hourly compensation work substantial overtime during the period prior to retirement, in order to "boost" their highest five successive years average salary in plans where overtime payments are included in covered salary. Some school superintendents approaching retirement in the past have negotiated contracts that accelerated salary to the early years of the contract, during the period giving rise to the highest five successive years average salary, in return for an agreement to perform the superintendent's duties for a reduced salary level (up to the Social Security earnings maximum) after retirement. The definition of covered salary must have sufficient safeguards against manipulation. In the past, there have been proposals to eliminate overtime compensation from covered salary or to set a maximum on the percentage increase in covered salary included in the highest five successive years average salary.

With the Combined Service Annuity provision, Minnesota Statutes, Section 356.30, there is portability of pension credit between the various Minnesota public pension plans. Portability includes the use of a common highest five successive years average salary for the benefit computation of all participating plans. This portability argues for consistency among the various pension plans in their definition of covered salary and the highest five successive years average salary. While the retirement plan administrators have argued in the past that there is substantial consistency in the salary definitions among the various pension plans, that consistency is not clear in reviewing the following comparison of various statutory definitions.

The reporting of covered salary is one of the major retirement-related reporting responsibilities of the employing units with public pension plan members. While these are usually governmental units, some quasi-governmental and non-governmental entities are also involved. The reporting of covered salary by the employer will be more likely to be accurate if the definition of covered salary is unambiguous and is constructed with administrative considerations in mind. Similarly, the pension plan must monitor these covered salary figures, and clarity in the definition will make this monitoring easier. In the past, PERA has had problems in monitoring the reporting of covered salary by Mr. John Allers, a public employee labor union official. A more understandable definition of covered salary will lead to better employer reporting, will allow for better pension plan monitoring of this reporting, and will allow for better enforcement of the applicable statutory provisions.

Covered salary is so important to a defined benefit pension plan that the term should be defined in statute along with all the other primary formula factors (plan membership eligibility, service credit, and benefit accrual percentage amount). However, the Minneapolis Employees Retirement Fund (MERF) has no specific definition of covered salary comparable to those of the other plans. The three first class city teacher retirement fund associations generally share the same statutory definition of covered salary, but apparently differ in the compensation items includable for pension benefit determination and contribution purposes. If any non-statutory practices represent good pension policy, it would be advisable to codify them in the applicable definition of covered salary.

C. Actuarial Funding of Pension Benefits

1. Definition. "Actuarial funding of pension benefits" means the method used to amass assets to offset eventual pension benefit payout obligations by using projections of accrued and accruing pension liabilities by an actuary based on a projection method that utilizes assumptions about economic and demographic occurrences.

2. Commission Principles of Pension Policy Provision. Principle II.D.2. suggests that Minnesota public pension plans be funded on an actuarial basis, with its Entry Age Normal Cost Method normal cost, administrative expenses, and amortization of unfunded actuarial accrued liability to be determined on a reasonable basis on average working career of the membership funded on a current basis. Specifically, the applicable principle states:

   2. Actuarial Funding of Pension Benefits

      a. 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. Policy Analysis and Discussion

   a. In General. With the creation of public pension plan liabilities, there arises a need to provide financing to match the liabilities and to create a trust fund for the accumulated assets. The method of financing depends primarily on the nature of the benefit plan as either a defined contribution plan or a defined benefit plan and the liability which is undertaken as a consequence. Since the obligation undertaken with a defined benefit plan is to provide a benefit of a predetermined amount at and after the time of retirement, the financing method will be more complex and will allow more variations. There are a number of possible financing methods which have been developed by actuaries which can be utilized.

   b. Basic Concepts in Public Pension Funding. The ten basic concepts underlying the manner in which public pension plans in Minnesota are funded are as follows:

      (1) the actual or ultimate pension cost;
      (2) the present value;
      (3) an actuarial method;
      (4) an actuarial assumption;
      (5) the actuarial valuation;
      (6) the normal cost;
      (7) the pension plan actuarial accrued liability;
      (8) the assets;
      (9) unfunded actuarial accrued liability; and the
      (10) amortization of unfunded actuarial accrued liability.

      The actual or ultimate cost of a pension plan is the total amount of any retirement annuities, disability benefits and survivor benefits plus the total amount of any administrative costs paid and less the amount of any investment earnings on any accumulated plan assets. The actual or ultimate cost will result no matter what method of financing is employed to fund pension benefits. The financing or actuarial funding method merely affects the timing of the financing and the amount of the financing burden which will be borne by the pension plan employer or employers.

      Present value is the calculated value of various future payments in terms of current dollars. Stated another way, present value is computed by identifying all future pension plan payments and discounting or reducing each payment by the amount of investment earnings which could be obtained between the calculation date and the future date of payment. Present value is the basis of all actuarial cost or funding methods. Present value is the way a pension plan attempts to evaluate its obligation to each active or retired member of the plan and to equate various benefit amounts and payment lengths.

An actuarial method, actuarial cost method or actuarial funding method is a budgeting tool through which the present value of future pension benefits is allocated to particular years as contribution amounts. The contribution can be made by the employee, the employer or both. As a budgeting tool, virtually any pattern of allocated contributions or recognized liability can be designed. Hence, there are several different actuarial methods which can be chosen. Any actuarial method chosen will result in the adequate funding of the ultimate or actual pension cost. The difference is the amount of pension cost which is assigned to each year. The goal of every actuarial cost method is to fund the present value of retirement benefits over the working career of the affected employees. In Minnesota, the chosen actuarial method has been the Entry Age Normal Actuarial Cost Method. Use of this method for all statewide and major Minnesota public pension funds is mandated by Minnesota Statutes, Section 356.215. The key to the Entry Age Normal Actuarial Cost Method is that it recognizes pension plan liability in equal installments or portions, measured as a percentage of covered payroll. Other actuarial cost methods produce a different liability accrual pattern, but level cost as a percentage of payroll over time has been chosen by the Minnesota Legislature as the most appropriate budgeting tool for pension costs.

An actuarial method utilizes actuarial assumptions. Actuarial assumptions are the body of predictions or expectations about the future experience of a pension plan on which actuarial calculations are based. Actuarial assumptions can be categorized as either economic assumptions or demographic assumptions. Economic assumptions refer to the general economy or the broad investment markets. They include the assumption as to future interest or investment income, the assumption as to future individual salary growth and the assumption as to future group covered payroll growth. Demographic assumptions refer to the particulars or peculiarities of the individuals covered by a pension plan. They include the expected mortality (life expectancy) of the plan members, the expected turnover or withdrawal (termination of employment prior to vesting) of the plan members, the expected retirement age of the plan members and the expected potential of disablement or pre-retirement death of the plan members. No actuarial result is more reliable than the accuracy of its actuarial assumptions. Actuarial assumptions under Minnesota law are monitored regularly through the use of quadrennial experience studies and are revised as necessary.

An actuarial valuation is a periodic computation by a specialized statistician or mathematician, known as an actuary, of the relative financial health of the pension plan in terms of a comparison of liabilities and assets and of the annual future contribution requirements needed to support the pension plan. An actuarial valuation for most Minnesota pension plans is undertaken annually. The actuarial valuations for the major pension plans in Minnesota are prepared by an actuary retained jointly by the six statewide and major local retirement plan administrators.

Normal cost is that portion of the total present value of future benefits of a pension plan which is allocated to a particular year. Under the Entry Age Normal Actuarial Cost Method used by Minnesota pension plans, normal cost is calculated as a percentage of covered payroll and is calculated as a level percentage amount for all future years.

In simplest terms, normal cost is the value of the pension benefit coverage under the plan then in effect for all active members, without reference to any prior funding problems and expressed as a percentage of covered payroll.

Actuarial accrued liability is the total of all prior normal cost requirements, plus interest, to date. The actuarial accrued liability represents that portion of the total present value of future benefits under the budgeting tool of the actuarial cost method which should have been funded or paid for to date.

Assets for pension purposes can have a variety of values. In Minnesota, the actuarial value of assets is based on the book (or cost) value of assets plus a portion of any appreciation or depreciation which has been experienced. Minnesota Statutes, Section 356.215, specifies that the actuarial value of assets that is an attempt to smooth the up and down fluctuations which occur in full market value.

Appendix B

A pension plan unfunded actuarial accrued liability represents the difference between the actuarial accrued liability of the pension fund and the actuarial value of pension plan assets. The unfunded actuarial accrued liability is a measure of any past departure from the budgeting tool reflected in the chosen actuarial cost method. An unfunded actuarial accrued liability can occur for any of the following reasons:

- recognition of credit (and hence pension liability) for service rendered prior to the creation of the pension plan;
- insufficient prior pension plan contribution amounts;
- benefit improvements;
- changes in actuarial assumptions to reflect future experience;
- deviations of actual experience from the actuarial assumption; and
- changes in actuarial method.

The requirement to amortize the unfunded actuarial accrued liability of a pension plan is the amount in addition to the normal cost of the pension plan which is needed to retire or pay off the unfunded actuarial accrued liability by a specified date. The amortization requirement reflects the additional contribution needed to make up any prior departure from the budgeting tool reflected in the choice of the actuarial cost method and to value a pension plan.

Under Minnesota Statutes, Section 356.215, any unfunded actuarial accrued liability of a pension plan is to be amortized on the basis of a level percentage of covered payroll and to be amortized by June 30, 2020. In the event of any major benefit increase, any actuarial assumption change or any actuarial method change, a separate 30 year amortization period is established for the new increment of unfunded actuarial accrued liability resulting and a new weight-averaged amortization target date is established.

c. Advantages of Actuarial Funding. Use of an actuarial funding method which spreads costs over time and requires periodic contributions to meet those costs has several advantages over the non-actuarial pay-as-you-go approach. Among them are the following:

(1) No Time Shifting of Current Obligations. The cost of the retirement benefits earned annually by the active public employees is paid by taxpayers in that year. Thus the full cost of employment compensation (salaries and fringe benefits) is recognized as it occurs. These ongoing costs are not shifted forward to future years and possibly to future generations of taxpayers.

(2) Lower Cost. With the amassing of actuarial reserves on a current financing basis, the assets of the fund are invested and grow through the return on those investments. This minimizes the tax revenues necessary to pay any given level of pension benefits.

(3) Benefit Security. The periodic contributions and the resulting investment growth on those contributions help assure the benefit security of present and future pension benefit recipients.

(4) Lower Public Sector Borrowing Costs. Properly funding pension plans to reduce and eventually eliminate unfunded liabilities is viewed favorably by rating agencies and helps reduce the cost of public sector bond issues.

Actuarial methods differ in how they allocate costs over time. An advantage of the entry age normal method used by Minnesota's open plans is that the combination of normal cost (to cover currently incurred pension costs) and the amortization payment (to retire past unfunded obligations) is expressed as an equal percentage of payroll over time. Its use reflects a belief that it is fair and prudent for taxpayers in each period and each generation to equally share the burden for pension costs. It may not be realistic to assume that future taxpayers can or should cover costs reflecting a higher percentage of payroll than current taxpayers must bear.

During the 1960s, a different actuarial method, the unit credit method, was occasionally used by Minnesota public pension plan actuaries to value their plans. The use of this method was reviewed by the Legislative Commission on Pensions and Retirement and rejected in favor of the entry age normal cost method. There have been occasional arguments over the years to shift back to this alternative actuarial method, or a variation on it. The unit credit method allocates cost based on current salary or service credit rather than as a constant percentage of payroll. The approach generally produces cost estimates for a young covered group that are less than the cost that would be allocated as a constant percentage of payroll under the entry age normal method. As the group ages, the computed cost is greater than that which would occur through constant percentage of payroll allocation. The unit credit method has two drawbacks. First, by reducing the apparent current costs of providing any given level of pension benefits, more of the cost is allocated to the future. This cost shifting could be viewed as unfair and future taxpayers may be unwilling or unable to cover the increasing percentage of public sector payroll costs that reflect employer pension contributions. Second, the approach may ultimately require more tax dollars than use of the entry age normal approach. If contributions are less than would be the case under a constant percentage of payroll allocation, there are fewer assets to earn investment returns to help finance the pensions. This further increases the need for later contributions. The dollar that was not contributed early may require far more than a one-dollar contribution many years later to offset this loss. If the dollar had entered the pension fund early, it would earn many years of investment return. It may require two or three dollars contributed many years later to offset the effect of the dollar that was not contributed earlier. It is the dollar plus all the accumulated investment earnings on that dollar that must now be contributed from tax revenue. The attraction of the unit credit method is that it may save current contributions. If short-term budget needs are an overwhelming consideration, this may be viewed by some to be a sufficient reason to adopt it. There is also some hope that it will never be necessary to impose higher contributions in the future, as suggested by a static analysis of this financing approach. The unit credit method may lower the required contributions compared to the entry age normal approach if the covered group is young and the covered employee group has an unchanging age and service distribution over time. If the group averages show increasing age and average service credit over time, however, annual pension costs could increase dramatically. Aging of the covered group can be expected if there is a downsizing of government, causing fewer new hires, or if job prospects in the private sector are not favorable, causing reduced member turnover.

d. <u>Amortization of Unfunded Actuarial Accrued Liabilities</u>. For major non-public safety plans, the target date for full funding is generally 2020, producing an amortization period that is generally consistent with the above principle statement. Earlier amortization dates were in effect prior to July 1, 1989. Significant benefit improvements occurred for the major plans due to 1989 legislation (Laws 1989, Chapter 319). As part of that legislation, the investment earnings assumption was increased from 8.0 percent to 8.5 percent, and amortization dates were extended to 2020. Local police and paid fire plans, which are closed to new members, use a 2010 amortization date. That date is compatible with the careers of the closed, aging group. The Minneapolis Employees Retirement Fund (MERF) has a 2020 amortization date although it was closed to new members in 1978. The 2020 amortization data may exceed the average working career of the membership.

   To amortize an unfunded liability by the target date means to fully retire that debt by that date. There is a question of whether these targets will be met in all cases. The contributions to a plan can be expected to be sufficient to retire the unfunded liability by the specified full funding date only if the necessary contributions as computed by the actuary are the same as the contributions required in law. For the major plans, the employee, employer, and in some cases, additional employer contributions are specified in statute. Due to the accumulated effects of minor benefit changes over time and to differences between actual experience and the demographic and economic assumptions used in the valuations, required contributions as determined by the actuary and statutory contributions can diverge over time. In other words, the contributions required by statute may be too large or too small to cover the plan's obligations. As part of the actuarial valuation for each plan, the actuary retained by the Legislative Commission on Pensions and Retirement notes the contributions required by law to be paid to the plan and compares this to the requirements as indicated by the valuation. If statutory contributions exceed those indicated as necessary by the actuary, a sufficiency exists. If this pattern continues, the unfunded obligations may be retired before the full funding date. If statutory contributions are less than those indicated as necessary by the actuary, a deficiency exists. If deficiencies in contributions are not eliminated, some unfunded liabilities will remain at the full funding date. If deficiencies are large, the unfunded liabilities may grow over time, jeopardizing the continued existence of the fund.

e. Actuarial Reporting Requirements of Minnesota Public Pensions Funds Since 1958. Since the creation of the Legislative Commission on Pensions and Retirement as an interim commission in 1955, data has been collected by the state on the various public pension funds in the state, as follows:

Laws 1957, Special Session, Chapter 11. The initial actuarial reporting law enacted by the Minnesota Legislature was Laws 1957, Special Session, Chapter 11. The 1957 actuarial reporting law was an uncoded temporary law applicable only to actuarial valuations prepared as of January 1, 1958. No prior generally applicable law required specific actuarial reporting to the Legislature or to any other public office or official. The 1957 actuarial reporting law required census tabulations of active members and benefit recipients, an actuarial balance sheet disclosing assets, liabilities and the actuarial full funding deficit, a statement of actuarial assumptions, an indication of the normal support rate for currently accruing liabilities and an indication of the 1997 target date amortization requirement. The 1957 actuarial reporting law was unspecific on the manner in which the actuarial calculation was to be prepared, leading to disputes when some funds prepared valuations on a basis other than the entry age normal actuarial method. The 1957 actuarial reporting law was broadly applicable to all statewide general and public safety pension plans, all local general employee plans, all local police relief associations and all local salaried firefighters relief associations. Problems with the 1957 actuarial reporting law led the Commission to refine the actuarial reporting requirements and procedures and to recommend a general ongoing actuarial reporting law in the years between 1958 and 1965.

Laws 1965, Chapters 359 and 751. Laws 1965, Chapter 359, was the initial codification of the general employee pension plan actuarial reporting law. Laws 1965, Chapter 751, was an uncoded temporary law applicable to local police and paid firefighters relief association actuarial valuations prepared as of December 31, 1964. The general employee pension plan actuarial reporting law required an indication of the level normal cost, an actuarial balance sheet disclosing assets, accrued liabilities and unfunded accrued liability as well as specific required reserve figures and an indication of the 1997 target date amortization requirement. The general employee pension plan actuarial reporting law required that the actuarial valuation normal cost and accrued liabilities to be prepared using the Entry Age Normal Cost (Level Normal Cost) Method, that the actuarial method be used to value all aspects of the benefit plan and known future benefit changes, that the actuarial valuation be prepared on the basis of a three percent interest assumption and other appropriate assumptions and that assets not include any present value of future amortization contributions. The general employee pension plan actuarial reporting law required annual actuarial valuations for the state employees retirement fund, the public employees retirement fund, and the state police officers retirement fund. The general employee pension plan actuarial reporting law also required the preparation of an experience study validating the actuarial assumptions used in the valuation. The local police and paid fire actuarial reporting law was based on the 1957 actuarial reporting law with the additional clarification of a three percent interest rate assumption, the requirement of normal cost and accrued liabilities calculated on the basis of the entry age normal cost method and the reporting of the amount for the amortization of the unfunded accrued liability by the 1997 target date. The local police and paid fire actuarial reporting law was applicable to all police and paid firefighters relief associations.

Laws 1967, Chapter 729. Laws 1967, Chapter 729, was a revision in the 1965 local police and paid fire actuarial reporting law. The 1967 local police and paid fire actuarial reporting law was a coded general statute requiring actuarial valuations as of December 31, 1967, and each four years thereafter. It was also made applicable volunteer firefighters relief associations and very small active membership police and paid firefighters relief associations. A three-percent salary rate assumption was added. A 2007 target date amortization requirement replaced the prior 1997 target date amortization requirement for police and paid fire plans, leaving the 1997 requirement for volunteer and smaller active membership police and paid fire relief associations. An addition of a requirement to the calculated normal cost for amortizing net actuarial experience gains or losses was also added.

Laws 1969, Chapter 289. Laws 1969, Chapter 289, revised the 1965 general employee pension plan actuarial reporting law by making the requirement applicable to the Minneapolis Employees Retirement Fund and to the three first class city teacher retirement fund associations. It also provided for an interest rate assumption to 3.5 percent as well as 3.0 percent for comparison purposes and added a salary assumption of 3.5 percent for funds with a final salary based benefit plan.

Appendix B

Laws 1973, Chapter 653, Section 45. Laws 1973, Chapter 653, Section 45, modified the general employee pension plan actuarial reporting law by increasing the interest assumptions from 3.5 percent to 5 percent.

Laws 1975, Chapter 192. Laws 1975, Chapter 192, recodified the general employee pension plan actuarial reporting law, previously coded as Minnesota Statutes 1974, Sections 356.21, 356.211, and 356.212, as Minnesota Statutes, Section 356.215.

Laws 1978, Chapter 563, Sections 9, 10, 11, and 31. Laws 1978, Chapter 563, Sections 9 to 11 and 31, repealed the separate local police and fire relief association actuarial reporting law, Minnesota Statutes 1976, Sections 69.71 to 69.76, and required the local police and fire relief associations to report under the general employee pension plan actuarial reporting law with specific adaptations, coded as Minnesota Statutes, Section 356.216. It also amended the actuarial reporting law by requiring specific reporting of entry age and retirement age assumptions and the provision of a summary of the benefit plan provisions on which the actuarial valuation is based.

Laws 1979, Chapter 184. Laws 1979, Chapter 184, modified the actuarial reporting law by replacing the 1997 amortization target date with a 2009 amortization target date and establishing a procedure for extending that target date in the event of substantial unfunded actuarial accrued liabilities resulting from benefit increases, actuarial cost method changes or actuarial assumption changes.

Laws 1984, Chapter 564, Section 43. Laws 1984, Chapter 564, Sections 43, substantially modified the actuarial reporting law. Actuarial valuations are required to comply with the Standards for Actuarial Work adopted by the Commission. The interest rate assumption was modified, with a post retirement interest rate of five percent and a pre-retirement interest rate of eight percent for the major, statewide plans. The actuarial balance sheet requirement was also substantially modified, and was expanded to include reporting of current and expected future benefit obligations, current and expected future assets and current and expected future unfunded liabilities. The amortization contribution requirement was also modified, with a change from a level dollar annual amortization procedure to a level percentage of future covered payroll amortization procedure for the major, statewide and local general employee plans other than MERF.

Laws 2000, Chapter 461, Article 1. Laws 2000, Chapter 461, Article 1, again substantially modified the actuarial reporting law. Salary assumptions and post-retirement interest rate assumptions were reset, and the actuarial value of assets also was changed to an approach that approaches, but smoothes, market values.

D. Allocation of the Funding Burden Between Members and Employers

1. Definition. "Funding burden allocation" refers to the portion of the annual actuarial cost of a contributory pension plan between the plan membership and the plan sponsor or sponsors.

2. Commission Principles of Pension Policy Provision. Principle II.D.3. of the Principles of Pension Policy of the Legislative Commission on Pensions and Retirement indicates that retirement benefits should be financed on a shared basis between members and employers, with the member and employer share for normal cost and administrative expenses and some portion of the amortization requirement shared on a matching basis for general employee plans, with the member and employer share of total cost on a 40 percent/60 percent basis for statewide public safety plans, and with the member and employer share of pension cost to be determined on a "case-by-case" basis for local public safety plans. Specifically, the applicable principle states:

   3. Allocation of Funding Burden Between Members and Employers

      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.

3. Policy Analysis and Discussion. Pension plans are classified as being "contributory" or "noncontributory." Contributory pension plans are pension plans where the plan members are required to make a member contribution, while noncontributory pension plans are pension plans where the plan members are not so required. Among defined benefit pension plans, most public sector pension plans are contributory plans and most private sector pension plans are noncontributory plans. Most defined contribution pension plans, public sector or private sector, are contributory plans.

   For contributory pension plans, the funding burden must be allocated between the employers and the plan members. The member contributions represent mandatory savings and the employer contributions represent a cost of conducting business and operations.

   Minnesota public pension plans, with the exceptions of the pre-1973 judicial retirement plan and most of the current volunteer firefighter relief associations, have required member contributions. When the Minnesota public pension plan was not subject to any regular actuarial reporting, typically before 1957, member contributions were set without any real basis for comparison and without any discernible policy for the allocation of the relevant cost or value between members and employers. During that pre-1957 period of absent or minimal actuarial reporting, employer contributions were also minimal or nonexistent, leading the 1957-1959 predecessor to the Legislative Commission on Pensions and Retirement to make the various employers responsible for amortizing the amassed unfunded actuarial accrued liabilities at that time.

   Employer responsibility for amortizing existing unfunded actuarial accrued liabilities was Commission policy until the mid-1970s, after the major benefit increases that were enacted in 1973, when the Commission concluded that the employer contribution levels then in existence were sufficient to meet the employer's responsibility for past unfunded actuarial accrued liabilities. At that time, in 1977, the Commission's Principles of Pension Policy provided that members and employers in general employee plans should allocate the amortization contribution requirement for unfunded actuarial accrued liabilities created after January 1, 1977.

   Although Commission policy changed the manner for allocating amortization contributions in 1977, Minnesota Statutes, Section 356.215, was not amended to require an actuarial separation of pre-1977 and post-1976 unfunded actuarial accrued liabilities and no clear implementation of the policy occurred. The unfunded actuarial accrued liabilities attributable to the major benefit increases in 1984, 1989, and 1997 tended to roll to employers and, consequently, the taxpayers. Benefit increases granted to the Teachers Retirement Association (TRA), to the State Patrol Retirement Plan, and to the Duluth Teachers Retirement Fund Association (DTRFA) in 1994 and 1995, respectively, were required to be amortized wholly by the members, but the 1997 benefit increase legislation reset the funding requirements of all three plans, essentially washing out that member funded amortization requirement.

   With the various post-1995-1996 benefit increases and contribution changes, resulting in the varied pattern of the level of funding burden allocation set forth in the chart above, the actual underlying policy on the allocation of a pension plan's funding burden between members and employers is unclear.

E. Actuarial Assumptions

1. Definition. "Actuarial assumptions" are the established set of projections or predictions about future economic and demographic occurrences used by the actuary in preparing actuarial valuations in calculating pension liabilities and pension costs.

2. Commission Principles of Pension Policy Provision. Principle II.D.5. of the Principles of Pension Policy of the Legislative Commission on Pensions and Retirement is the sole principle relating to actuarial assumptions, but the principle relates to actuarial assumption changes only, and provides that there should be an experience basis for any assumption change and that assumption change should not be changed solely to facilitate a benefit increase or affect a contribution rate reduction. Specifically, the applicable principle states:

5. Appropriate Basis For Actuarial Assumption Changes
    a. 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.
    b. Actuarial assumption changes should stand on their own merit, and should not be changed solely to improve benefits or to lower contribution rates.

3. Policy Considerations Relating to the Setting of Actuarial Assumptions

a. In General. The Legislative Commission on Pensions and Retirement is required under Minnesota Statutes, Section 3.85, to contract with an established actuarial consulting firm to pre-pare annual actuarial valuations of 14 statewide or major local Minnesota public employee pension plans and to prepare experience studies for the General State Employees Retirement Plan of the Minnesota State Retirement System (MSRS-General), the General Employee Retirement Plan of the Public Employees Retirement Association (PERA-General), and the Teachers Retirement Association (TRA) on a quadrennial basis. Minnesota Statutes, Section 356.215, specifies the content requirements of both the annual actuarial valuation reports and quadrennial experience studies. The quadrennial experience study is required to contain an actuarial analysis of the experience of the plan and a comparison of that plan experience with the actuarial assumptions in force for the most recent annual actuarial experience. The standards for actuarial work, issued by the Commission, specify the detailed contents and format requirements for both the actuarial valuation reports and the experience studies.

The purpose of the quadrennial experience studies is to provide the Commission with a periodic opportunity to review the accuracy of the current actuarial assumptions, compared to the experience for the most recent period and to revise those actuarial assumptions based on the recommendation for the Commission's consulting actuary and on input from plan administrators, their actuarial consultants, and others. The actuarial valuation process, as corrected or refined by the quadrennial experience process, is intended to provide policymakers and others with an accurate picture of the funded condition and financial requirements of a public pension plan and the process is not aided if it relies on incorrect or inadequate assumptions. If a trend line is established in recent experience, that trend line should be reflected in a plan's actuarial assumptions, even if those assumptions make the financing position of the plan appear worse than it would under different assumptions.

Minnesota public pension plan actuarial assumptions are specified in part in statute (interest/ investment return, individual salary increase, and payroll growth) and are determined in part by other parties, with Commission approval (the balance of all actuarial assumptions, generally, the demographic assumptions). Economic assumptions are required to project the *amount* of benefits that will be payable. Demographic assumptions are required to project *when* benefits will be payable. Demographic assumptions are used to project the development of the population of the pension scheme and hence when the benefits to be provided will be paid. The demographic assumptions project when a member is likely to progress between the various categories of membership (active, deferred, or retired) and how long the person stays in each category. The types of economic assumptions used to measure obligations under a defined benefit pension plan include the following:

(1) inflation;
(2) investment return (sometimes referred to as the valuation interest rate);
(3) compensation schedule; and
(4) other economic factors (e.g., Social Security, cost-of-living adjustments, growth of individual account balances, and variable conversion factors).

The types of demographic assumptions used to measure pension obligations include, but are not necessarily limited to, the following:

(1) retirement;
(2) mortality;
(3) termination of employment;
(4) disability and disability recovery;
(5) election of optional forms of benefits; and
(6) other assumptions, such as administrative expenses; household composition; marriage, divorce, and remarriage; open group assumptions; transfers; hours worked; and assumptions regarding missing or incomplete data.

The actuarial assumption selection process should result in assumptions that are reasonable in light of the particular characteristics of the defined benefit plan that is the subject of the measurement. A reasonable assumption is one that is expected to appropriately model the contingency being measured and is not anticipated to produce significant cumulative actuarial gains or losses over the measurement period. For any given measurement, two or more reasonable assumptions may be identified for the same contingency.

b. Interest/Investment Rate Actuarial Assumption. Because Minnesota public pension plan benefits are paid out over time and are paid from funds that are invested to obtain investment returns, future obligations are discounted for those future interest or investment earnings. In selecting the interest/investment rate actuarial assumption, the appropriate investment data should be reviewed, including the current yields to maturity of fixed income securities such as government securities and corporate bonds; any forecasts of inflation and of total returns for each asset class; historical investment data, including real risk-free returns, the inflation component of the return, and the real return or risk premium for each asset class; and the historical plan performance.

The interest/investment rate actuarial assumptions can be arrived at using one of two methods, either the building block method or the cash-flow matching method. Under the building-block method, the expected future investment return of each asset class is assembled as a combination of the components of investment return. These components are factors such as inflation and the real rate of return for the class. The best-estimate investment return range is determined by identifying a best-estimate range of expected future real returns for each broad asset class applicable to the plan, such as cash and cash equivalents, fixed income securities and equities, an average weighted real-return range reflecting the plan's expected asset class mix is computed and that range is combined with the expected inflation range. Under the cash flow matching method, the expected future investment return range is a combination of the internal rate of return on a bond portfolio with interest and principal payment approximately matching the plan's expected disbursements, and a risk adjustment range. The best-estimate investment return range is determined:

(1) by projecting the plan's benefit and expense disbursements to be valued in the measurement;
(2) by identifying a highly diversified portfolio available as of the measurement date of non-callable, high-quality corporate or U.S. government bonds with interest and principal payments approximately matching the projected disbursements;
(3) by computing the bond portfolio's internal rate of return;
(4) by establishing a risk adjustment range for the plan that reflects the uncertainties in the projected benefits and expenses, the expected returns on future contributions, the rein-vestment of interest and principal payments not fully needed to pay current benefits, any mismatches between the benefit disbursement stream and the high-quality bond portfolio's interest and principal payment stream, and the current and expected future plan in-vestments in equities or other asset classes besides high-quality bonds; and
(5) then by combining these figures.

c. Compensation/Salary Scale Actuarial Assumption. Compensation is a factor in determining participants' benefits in Minnesota public pension plans other than volunteer firefighter relief associations. Generally, a participant's compensation will change over the long term in accordance with inflation, productivity growth, and merit scale increases. The assumption used to measure the anticipated year-to-year change in compensation is referred to as the compensation or salary scale. It may be a single rate assumption, or, alternatively, it may be a select and ultimate rate assumption and vary by age and/or service, consistent with the merit scale component; or vary over future years, consistent with the inflation component.

In selecting the compensation or salary scale assumption, the appropriate compensation data should be reviewed, including the plan sponsor's current compensation practice and any anticipated changes in this practice; the current compensation distributions by age and/or ser-vice; historical compensation increases and the practices of the plan sponsor/sponsors; and historical national wage and productivity increases.

The compensation or salary scale assumption is generally constructed using a building-block method, which combines the best-estimate ranges for the components of compensation scale. These components include inflation, productivity growth, and merit scale.

d. Retirement Age Assumption. With only a few exceptions, where length of service is the determining factor, Minnesota public pension plan members are required to attain a specified minimum age at which retirement benefits are payable if the member also terminates active employment. The retirement age assumptions relate to the specific age at which retirement benefits are likely to begin or the ages with a specific probability of retirement benefit commencement. In selecting the retirement age assumptions, in addition to data on the past experience of the plan membership, consideration should be given to the factors of the plan design, where specific incentives may influence when participants retire; the design of and the date of anticipated payment from Social Security and Medicare; and the availability of other employer-sponsored post-retirement benefit programs.

e. Turnover/Termination of Employment Assumptions. The termination of public employment by a Minnesota public pension plan member determines the amount of the person's accrued service credit. Minnesota public pension plans utilize service credit in determining retirement benefit amounts. The termination/withdrawal/turnover assumption predicts the amount of service credit to be acquired by plan members and also predicts the extent of any gain expected to be accrued from plan members who terminate without vesting. In selecting the termination assumption, in addition to data on the past experience of the plan, consideration should be given to the factors of employer-specific or job-related factors such as occupation, employment policies, work environment, unionization, hazardous conditions, and location of employment; and applicable plan provisions, such as any early retirement benefits, the vesting schedule, or the payout options.

f. Mortality Assumptions. Generally, Minnesota public retirement plan benefits terminate upon the death of the recipient, or if a joint and survivor optional annuity form was chosen, upon the death of the survivor. The mortality assumption is the measure of the expected lifetimes of active members, retired members, deferred retirees, disabilitants, and survivors. In addition to data on the past experience of the plan, in selecting the mortality assumptions, consideration should be given to the likelihood and extent of mortality improvement in the future.

g. Disability Assumption. Except for the Legislators Retirement Plan, the Elected State Officers Retirement Plan, and some volunteer firefighter relief associations, Minnesota public pension plans pay disability benefits. The disability assumption is a prediction of the occurrence of disabilities, which constitute a premature commencement of benefits. In selecting the disability assumption, in addition to analyzing the data on the past experience of the plan, consideration should be given to the plan's definition of disability and the potential for recovery.

h. Optional Annuity Form Election Assumption. Most statewide and major local Minnesota public pension plans provide optional annuity forms, whereby the number adjusts the time-frame over which the benefit will be paid in return for a modification in the amount of the benefit. Many of these plans have a subsidized bounceback joint and survivor optional annuity form, the selection of which will increase the liability of the plan. The optional annuity form election assumption implements expectations about the future selections of optional annuity forms. In addition to analyzing the data on the past experience of the plan, in selecting the optional annuity form election assumption, consideration should be given to the benefit forms and benefit commencement dates available under the plan and the degree to which particular benefit forms may be subsidized.

Appendix C

Outline of Proposed Commission Report

Investment Based Post-Retirement Adjustment Mechanism Structure and Teacher Retirement Benefit Provision Comparison

I. Introduction; Statutory Report Mandate
(adapted from the first consideration memorandum)

II. Background Information on Investment-Related Post-Retirement Adjustments
(from the first consideration memorandum)

a. Minnesota Post Retirement Investment Fund
b. Retirement Benefit Fund of the Minneapolis Employees Retirement Fund
c. Duluth Teachers Retirement Fund Association Post-Retirement Adjustment Mechanism
d. St. Paul Teachers Retirement Fund Association Post-Retirement Adjustment Mechanism
e. Minneapolis Firefighters Relief Association Post-Retirement Adjustment Mechanisms
f. Minneapolis Police Relief Association Post-Retirement Adjustment Mechanisms
g. Fairmont Police Relief Association Post-Retirement Adjustment Mechanisms

III. Evaluation of Investment-Related Post-Retirement Adjustments *(from the second consideration memorandum)*

a. Comparison of Past Minnesota Post-Retirement Adjustments with Inflation
b. Review of the Costs and Budgets of the Minnesota Post Retirement Adjustment Mechanisms
c. Identification of the State Aid Implications of Minnesota Post-Retirement Mechanisms
d. Identification of Inconsistencies of Minnesota Post-Retirement Mechanisms
e. Identification of Policy Implications of Minnesota Post-Retirement Mechanisms

IV. Commission Conclusions and Recommendations on Post-Retirement Adjustment Mechanisms
(from the second consideration memorandum)

V. Background Information on Benefit Plan and Related Provisions Compared for Statewide Teacher Retirement Plans

a. Normal Retirement Ages *(from the first consideration memorandum)*
b. Early Retirement Reductions *(from the first consideration memorandum)*
c. State Income Taxation of Public Pension Benefits *(from the first consideration memorandum)*
d. Social Security Coverage for Public Employees *(from the first consideration memorandum)*
e. Benefit Accrual Rates *(from the first consideration memorandum)*
f. Pension Benefit Final Average Salary Period *(from the first consideration memorandum)*
g. Special Early Normal Retirement Provisions *(from the first consideration memorandum)*
h. Post-Retirement Benefit Adequacy *(from Appendix A of the second consideration memorandum)*
i. Actuarial Funding of Pension Benefits *(from Appendix A of the second consideration memorandum)*
j. Allocation of Funding Burden Between Members and Employers *(from Appendix A of the second consideration memorandum)*
k. Defining Covered Salary *(from Appendix A of the second consideration memorandum)*
l. Setting and Revising Actuarial Assumptions *(from Appendix A of the second consideration memorandum)*

VI. Findings and Analysis of 50 Statewide Teacher Retirement Plan Provision Comparison
(from the second consideration memorandum)

VII. Commission Conclusions and Recommendations on a Comparison Between Minnesota Teacher Retirement Plans and Other Statewide Teacher Retirement Plans
(from the second consideration memorandum)

Attachment A: Statewide Teacher Retirement Plans; Comparison of Selected Benefit and Related Provisions (Commission Staff Comparisons) *(from second consideration memorandum)*

Attachment B: Education Minnesota Comparison of Statewide Teacher Retirement Plans *(from second consideration memorandum)*

Attachment C: Any additional relevant information provided during the November 14, 2006, Commission meeting

Statewide Teacher Retirement Plans: Comparison of Selected Benefit and Related Provisions

Alabama Teachers Retirement System (Retirement Systems of Alabama)

Normal Retirement Age: Age 60 with 10 years of service credit; any age with 25 years of service credit. *(Alabama Stat. Sec. 16-25-14, Para. (a); CAFR Plan Provision Summary, p. 69)*

Early Retirement Age: Not applicable.

Reduction Factor/Amount: Not applicable.

Benefit Taxation: Public defined benefit retirement plan benefit exempt from state income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.0125% of average final compensation per year of service or, if membership began before October 1, 1971, $72 annually per year of service if higher amount. *(Member Handbook, p. 21)*

Final Average Salary: Average of highest 3 July 1-June 30 years out of the last 10 years, including partial years if beneficial, or entire period of creditable service where service is less than 3 years. If compensation includes maintenance, Board of Control fixes value of compensation not paid in money. *(Alabama Stat. Sec. 16-25-1, Clauses (17) & (18))*

Special Early Normal Retiremt Incentives: No current special early normal retirement incentive program.

Post-Retirement Adjustments: Ad hoc post-retirement adjustments based on legislative enactments. Adjustments have been granted on average every 2 years during the past 30 years. 2005 post-retirement adjustment was 4% increase and was funded by a charge on current employers based on proportional covered payroll. *(RSA Website; Alabama Stat. Sec. 16-25-190)*

Member & Employer Contrib. Rates: 5.00% of covered salary member contribution rate; 6.56% of covered salary employer contribution rate. *(CAFR Plan Provision Summary, pp. 24 & 71; Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$20,886.190,000 (2005)	NC		Undisclosed	Actuarial Method:	Projected benefit, with normal cost determined under entry age normal method.
Assets	18,704,009,000	Exp.	0.23%	$10,372,000	Interest Assumption:	8.00%
UAL	$2,182,181,000	Amort.		Undisclosed	Salary Assumption:	Range 7.25% (age 20) to 5.00% (age 60)
Ratio	87.15%	Total Req.		Undisclosed		

(Public Fund Survey Summary; CAFR Financial Section, p. 21; CAFR Actuarial Section, pp. 66 & 68)

Retirement Fund & Account Structure: Statutory funds are the annuity savings fund, the teacher retirement system expense fund, and the term life insurance fund. The annuity savings fund is credited with member contributions. The pension accumulation fund is credited with all other pension benefit reserves other than the annuity savings fund. The expense fund is credited with turnover gains. The term life insurance fund is credited with special employer contributions for this purpose. Additional funds are the preretirement death benefit account and deferred retirement option plan reserve. *(CAFR Financial Section, pp. 25, 26; Alabama Stat. Sec. 16-25-21)*

Alaska Teachers Retirement System (Alaska Division of Retirement and Benefits)

Normal Retirement Age: Post-6/30/2006 hiree, any age (Defined Contribution Plan); 7/1/1990-6/30/2006 hiree, age 60 with 8 years of service credit; 7/1/1955-6/30/1990 hiree, age 55 with 8 years of service credit; any age with 20 years of service credit. *(Alaska Stat. Sec. 14.25.110; TRS Handbook, pp. 37, 38)*

Early Retirement Age: Age 50 with 8 years of service credit if employed before July 2, 1990; age 55 with 8 years of service credit if employed after June 29, 1990. *(Alaska Stat. Sec. 14.25.110; Sec. 14.25.125; TRS Handbook, pp. 37, 38, 40)*

Reduction Factor/Amount: Indicated as actuarial reduction factor: 89.9% at age 59; 81.0% at age 58; 73.2% at age 57; 66.1% at age 56; 59.9% at age 55. *(2005 TRS Actuarial Valuation Benefit Plan Summary, pp. 42 & 43)*

Benefit Taxation: No individual state income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: No Social Security coverage by virtue of public employment. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.00% of average base salary per year of service for initial 20 years and all years prior to July 1, 1990, and 2.5% thereafter for hirees before July 1, 1990; 2.00% of average base salary for initial 20 years and 2.5% thereafter for hirees after June 30, 1991 and before July 1, 2006; defined contribution account for hirees after June 30, 2006. *(Alaska Stat. Sec. 14.25.110)*

Final Average Salary: Average of the highest 3 contract salaries, including addenda, for years in which at least 115 days were worked and compensated, either full time or part time. Base salary for part-time teachers calculated at the full-time equivalent rate. Termination bonuses are not includable. *(Alaska Stat. Sec. 14.25.220)*

Alaska Teachers Retirement System (Alaska Division of Retirement and Benefits)

Special Early Normal Retiremt Incentives: No current special early normal retirement incentive program.

Post-Retirement Adjustments: Automatic adjustment based on the CPI-Urban Wage Earners for Anchorage, payable to recipients age 60 or older or in receipt for at least 8 years. Adjustment is 75% of the CPI increase over preceding year or 9%, whichever is less for age 65 recipients and 50% of the CPI increase or 6%, whichever is less, for recipients age 60 or 8-year receipt. *(TRS Website; 2005 TRS Actuarial Valuation Benefit Plan Summary, pp. 46, 47)*

Member & Employer Contrib. Rates: 8.65% of covered salary member contribution rate; 26.00% of covered salary employer contribution rate. *(TRS Actuarial Valuation Benefit Plan Summary, p. 41; CAFR Financial Statement Notes, p. 15)*

Most Recent Funded Condition & Actuarial Costs:

AL	$6,498,556,000	NC	22.41%	$120,081,000	Actuarial Method:	Projected unit credit
Assets	3,958,939,000	Exp.	0.37%	2,029,000	Interest Assumption:	8.25%
UAL	$2,539,617,000	Amort.	31.09%	166,618,000	Salary Assumption:	Range 5.5% initial 5 years to 5.0% for balance
Ratio	60.9%	Total Req.	53.87%	$288,728,000	*(2005 TRS Actuarial Valuation, pp. 1, 3, 8, 11, 14, 15, 17)*	

Retirement Fund & Account Structure: Single teacher retirement trust fund. *(CAFR Financial Statement Notes, p. 12)*

Arizona State Retirement System

Normal Retirement Age: Age 65; age 62 with 10 years of service credit; "Rule of 80" (first day of month next following date on which sum of age and service credit equals 80). *(Arizona Stat. Sec. 38-711, Clauses 26 & 27)*

Early Retirement Age: Age 50 with 5 years of service credit. *(Arizona Stat. Sec. 38-758)*

Reduction Factor/Amount: Non-actuarial scaled reduction factor of 94% at age 63 with 9 years of service credit; 91% at age 62 with 9 years of service credit; 88% at age 61 with 9 years of service credit; 85% at age 60 with 9 years of service credit; 80% at age 59 with 9 years of service credit; 75% at age 58 with 9 years of service credit; 70% at age 57 with 9 years of service credit; 65% at age 56 with 9 years of service credit; and 60% at age 55 with 9 years of service credit. *(Arizona Stat. Sec. 38-758)*

Benefit Taxation: $2,500 annual state income tax exemption for Arizona public retirement plan benefit, but other state and local government retirement plan benefits are taxable. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.10% of average monthly compensation per year of service for initial 20 years of service, 2.15% per year of service for 21-25 years of service, 2.20% per year of service for 25-30 years of service, and 2.30% per year of service for 30 or more years of service. *(Arizona Stat. Sec. 38-757)*

Final Average Salary: Average of highest 36 consecutive months of salary within final 120 months of service, but excluding termination of service payments, if hired after December 31, 1983; average of highest 60 consecutive months of salary within final 120 months of service, including base salary, additional contracts, other compensation, sick pay, vacation pay, compensatory payments, retirement incentive pay, and termination payments if hired before January 1, 1984, unless highest 3-year average produces a higher benefit. *(Arizona Stat. Sec. 38-711, Clauses 5, 7, & 10; Sec. 38-746)*

Special Early Normal Retiremt Incentives: No current special early normal retirement incentive program.

Post-Retirement Adjustments: Automatic adjustment based on investment in excess of 8% interest assumption earnings that is credited to excess investment earnings account over a 10-year period. Adjustment is allocated primarily based on years of service of retirees, is allocated additionally based on the years of benefit receipt, and may not exceed 4% annually in aggregate. Unused excess investment performance carries forward, as do negative amounts. Over the past decade, the total average increase to retirees has been 35%. Adjustment is a permanent increase. *(Arizona Stat. Sec. 38-767)*

Member & Employer Contrib. Rates: 8.70% of covered salary member contribution rate; 8.70% of covered salary employer contribution rate. *(2005 ASRP Actuarial Valuation, p. 23)*

Most Recent Funded Condition and Actuarial Costs:

AL	$27,942,601,285 (2005)	NC	13.16%	$1,057,011,000	Actuarial Method:	Projected unit credit
Assets	23,836,519,123	Exp.	0.28%	22,200,000	Interest Assumption:	8.00%
UAL	$4,106,082,162	Amort.	4.29%	337,344,000	Salary Assumption:	Range 9.50% (initial year of service) to 4.50% (20 or more years of service)
Ratio	85.3%	Total Req.	17.64%	$1,416,555,000	*(2005 ASRP Actuarial Valuation, pp. 3, 4, 5, 8, 20, 21, 23, 24, & 25)*	

Retirement Fund & Account Structure: Single retirement system trust fund, with an ASRS depository separate from any other state monies or funds. Subsidiary accounts exist for administration, retirement, and investment. A long-term disability trust fund also exists and a health insurance premium benefits account also exists. *(Arizona Stat. Sec. 38-712; Sec. 38-720)*

Arkansas Teacher Retirement System

Normal Retirement Age: Age 60 with 5 years of service credit; any age with 28 years of service credit. *(Arkansas Stat. Sec. 24-7-701)*

Early Retirement Age: Any age with 25 years of service credit. *(Arkansas Stat. Sec. 24-7-702)*

Reduction Factor/Amount: Non-actuarial reduction factor of the lesser of 5% per year under 28 years of service credit or 5% per year under age 60. *(Arkansas Stat. Sec. 24-7-702)*

Benefit Taxation: $6,000 annual state income tax exemption for public retirement plan benefits. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.15% of final average salary per year of service and 1.39% for service rendered after July 30, 1986, for which no member contributions were made, plus $900 annual additional amount for members with 5 years of service credit retiring after July 1, 1999. *(Arkansas Stat. Sec. 24-7-705)*

Final Average Salary: Average of highest 3 years of covered salary, but salary utilized for any year may not exceed the prior year's salary by more than 10% unless directly caused by promotion, position change, salary schedule incremental increase, or school revenue increases. *(Arkansas Stat. Sec. 24-7-202, Paras. (13) & (24); Sec. 24-7-726)*

Special Early Normal Retiremt Incentives: Early retirement incentive for teachers to transfer service credit to Arkansas Public Employees Retirement system was enacted in 1987 and has expired. *(Arkansas Stat. Sec. 24-7-101; Sec. 24-7-102)*

Post-Retirement Adjustments: Annual automatic 3% of the original benefit amount, not compounded, payable to recipients who have received an annuity or benefit for at least one year. *(Arkansas Stat. Sec. 24-7-727)*

Member & Employer Contrib. Rates: Members as of June 30, 1999 could elect to eliminate future member contributions, and members after July 1, 1999 are required to contribute. Member contribution rate is 6.00% of covered salary. Employer contribution rate is 14.70% of covered salary. *(Arkansas Stat. Sec. 24-7-406; CAFR, p. 49)*

Most Recent Funded Condition & Actuarial Costs:

AL	$10,972,543,729	NC	12.75%	$250,155,000	Actuarial Method:	Entry age normal
Assets	8,817,254,313	Exp.	0.33%	6,454,762	Interest Assumption:	8.00%
UAL	$2,155,289,416	Amort.	5.94%	116,542,800	Salary Assumption:	Range 9.4% (age 20) to 4.3% (age 60)
Ratio	80.36%	Total Req.	19.02%	373,152,562$	*(CAFR, pp. 12, 48, 49, 52, 53, & 57)*	

Retirement Fund & Account Structure: Statutory accounts within the retirement fund are the member deposit account, the employer accumulation account, the retirement reserve account, the survivor benefit account, and the income expense account. The member deposit account is credited with member contributions. The employer accumulation account is credited with employer contributions. The retirement reserve account is credited with the reserves for a retirement benefit. The survivor benefit account is credited with the reserves for a survivor benefit. The income expense account is credited with all investment income and with employer administrative expense contributions. *(Arkansas Stat. Sec. 24-7-405 through Sec. 24-7-410)*

California State Teachers Retirement System

Normal Retirement Age: Age 60 with 5 years of service credit. *(California Education Code, Sec. 24201; 2005 CSTRS Actuarial valuation, p. 40)*

Early Retirement Age: Age 55 with 5 years of service credit; age 50 with 30 years of service credit. *(California Education Code, Sec. 24201; 2005 CSTRS Actuarial Valuation, p. 41)*

Reduction Factor/Amount: Non-actuarial reduction factor of one-half of 1% reduction per month under age 60 and one-quarter of 1% reduction per month under age 55. *(California Education Code, Sec. 24201; 2005 CSTRS Actuarial Valuation, p. 41)*

Benefit Taxation: Public retirement plan benefits fully taxable under state income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: No Social Security coverage by virtue of public employment. *(Public Fund Survey Summary)*

Benefit Accrual Rates: An age-related percentage of final compensation per year of service of 2.00 at age 60; 2.033 at age 60¼; 2.067 at age 60½; 2.10 at age 60¾; 2.133 at age 61; 2.167 at age 61¼; 2.20 at age 61½; 2.233 at age 61¾; 2.267 at age 62; 2.30 at age 62¼; 2.333 at age 62½; 2.367 at age 62¾; 2.40 at age 63 or later, plus 0.2% of final compensation per year of service credit if the retiree has 30 years of service credit and is at least age 50, but combined with the age-related factor may not exceed 2.4% per year of service, plus a longevity bonus for retirees with 30 years of service of $200 per month, with 31 years of service of $300 per month, and with 32 years of service of $400 per month, plus an annuity that is the actuarial equivalent of the annuity deposit contributions to the credit of the retiree. *(California Education Code, Sec. 25011; Sec. 24203; Sec. 24203.5; Sec. 24203.6; Sec. 24206; 2005 CSTRS Actuarial Valuation, pp. 40 & 41)*

California State Teachers Retirement System

<u>Final Average Salary</u>: Highest average earnable compensation during any 36 consecutive months of service credit, unless there was a salary reduction due to a school fund reduction, when nonconsecutive months may be used, if the retiring member has less than 25 years of service, or the highest 1-year final compensation if the retiring member has at least 25 years of service or if shorter period is collectively bargained with the associated costs paid from local sources. Compensation is a full-time equivalent basis amount. Compensation does not include job expense reimbursements, severance payments, and non-cash remuneration. *(California Education Code, Sec. 22119.2; Sec. 22134; Sec. 22134.5; Sec. 22135; Sec. 24214)*

<u>Special Early Normal Retiremt Incentives</u>: In 2004, school districts were authorized to offer an early retirement incentive, where teachers eligible to retire receive an additional 2 years of service credit or receive an additional 2 years of age and 2 years of service credit, with the cost borne by the school district. Early retirement limited term reduction program also exists, for teachers at least age 55 and under age 60, with a benefit equal to one-half of the amount calculated as if age 60, with the reduction continuing after age 60 for as many months as the retiree received benefits before age 60. *(California Statutes 2003, Ch. 313)*

<u>Post-Retirement Adjustments</u>: Annual percentage increase of 2%, non-compounding, paid to persons receiving benefits for at least one year. The retirement board is also required to report to the governor and to the legislature annually on the affect of inflation on retiree purchasing power and the supplementary increases needed to preserve benefit purchasing power. Various ad hoc post-retirement adjustments also have been granted, generally funded from the state general fund. *(California Education Code, Sec. 24400 through Sec. 24417)*

<u>Member & Employer Contrib. Rates</u>: 8.00% of covered salary member contribution rate; 8.25% of covered salary employer contribution rate. *(California Education Code, Sec. 22950; Sec. 22951; Sec. 22951.5; Sec. 22954)*

<u>Most Recent Funded Condition & Actuarial Costs</u>:

AL	$142,193,000,000(2005)	NC	16.829%	$3,920,000,000	Actuarial Method:	Entry age normal
Assets	<u>121,882,000,000</u>	Exp.	0.237%	93,000,000	Interest Assumption:	8.00%
UAL	$20,311,000,000	Amort.	<u>4.491</u>%	<u>1,046,100,000</u>	Salary Assumption:	Range 9.85% (under age 25, one year of service) to 4.75% (ages 35 to 45, 30 or 35 years of service)
Ratio	85.72%	Total Req.	21.557%	$5,059,100,000		

(2005 CSTRS Actuarial Valuation, pp. 1, 2, 5, 9, 10, 11, 12, 14, 19, 24, 35, 44, 45, 46, & 52)

<u>Retirement Fund & Account Structure</u>: In addition to a defined benefit program, there is a defined benefit supplement program, a cash balance benefit program, a voluntary investment program, a teacher's health benefit fund, and a teacher's replacement benefits program fund. Additionally, there is a tax-sheltered annuity fund and a supplemental benefit maintenance account. The defined benefit supplement program is funded from a portion of the regular member contributions and the full member contribution on service in excess of one year during any fiscal year. The cash balance benefit program is for "less than half-time" school employees. The voluntary investment program is a tax-deferred defined contribution program. The teachers' health benefit fund is a Medicare premium payment program. The teachers' replacement benefits program fund is a means to provide benefits in excess of Section 415 of the federal Internal Revenue Code. The supplemental benefit maintenance account funds an additional post-retirement adjustment if 80% of a retiree's purchasing power is not replaced by the other post-retirement adjustment mechanism. *(CAFR Financial Statement Notes, pp. 23, 24, & 25; California Education Code, Sec. 22951.5; Sec. 22954)*

Colorado Public Employees Retirement Association

<u>Normal Retirement Age</u>: Age 65 with 5 years of service credit; age 55 if sum of age and service credit totals 80; age 50 with 30 years of service credit if employed before July 1, 2005; age 55 with 30 years of service credit if employed after June 30, 2005; any age with 35 years of service credit; age 55 if sum of age and service credit totals 85 if employed after December 31, 2006. *(Colorado Stat. Sec. 24-51-602)*

<u>Early Retirement Age</u>: Age 60 with 5 years of service credit; age 55 with 20 years of service credit; age 50 with 25 years of service credit. *(Colorado Stat. Sec. 24-51-602; Sec. 24-51-604)*

<u>Reduction Factor/Amount</u>: Non-actuarial reduction factor of 4% per year under age 65 if the member retired at or after age 60 and of 3% per year under age 65 if the member retired on or after age 55. *(Colorado Stat. Sec. 24-51-605)*

<u>Benefit Taxation</u>: Annual exemption from state income tax per person for any pension income of $20,000 between age 55 and age 64 and of $24,000 above age 64. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

<u>Social Security Coverage</u>: No Social Security coverage by virtue of public employment. *(Public Fund Survey Summary)*

<u>Benefit Accrual Rates</u>: 2.5% of highest average salary per year of service credit, not to exceed 100%. An alternative money purchase annuity based on member contributions, a guaranteed annual compound interest rate, and a matching amount representing employer contributions and interest. *(Colorado Stat. Sec. 24-51-603; Sec. 24-51-605)*

<u>Final Average Salary</u>: Average of the highest annual salaries on which contributions were made for 3 periods of 12 consecutive months of service. Any salary used in the calculation from the 3 years prior to retirement may not have an increase over the prior year by more than 15%. Salary does not include commissions, converted unused sick leave or other leave, uniform allowances, expense reimbursements, automobile usage, honorariums, bonuses, or severance pay. *(Active Member Handbook, pp. 8 & 9; Colorado Stat. Sec. 24-51-101(42)(a))*

<u>Special Early Normal Retiremt Incentives</u>: No current early retirement incentive program in force.

Colorado Public Employees Retirement Association

Post-Retirement Adjustments: Annual automatic adjustment of 3.5%, compounding, payable to a retiree in receipt of benefits for at least 3 months, unless the retiree was not an active or retired member on June 30, 2005, when the adjustment is 3% or the CPI increase, whichever is less. An annual increase reserve also exists, funded from a 1% of pay deduction from the employer contribution for members who were not members on December 31, 2006, some service credit purchase amounts, and proportionate investment income, and the reserve supports an adjustment for members who were not a member on December 31, 2006, of the lesser of 3% or the CPI increase. *(Colorado Stat. Sec. 24-51-1001; Sec. 24-51-1002; Sec. 24-51-1003; Sec. 24-51-1009; Sec. 24-51-1010)*

Member & Employer Contrib. Rates: 8.00% of covered salary member contribution rate; 9.30% of covered salary employer contribution rate. *(CAFR Benefit Plan Summary, p. 79)*

Most Recent Funded Condition & Actuarial Costs:

AL	$46,752,296,440 (2005)	NC	14.53%	$470,948,368	Actuarial Method:	Entry age normal
Assets	34,273,165,233	Exp.	0.19%	6,158,307	Interest Assumption:	8.5%
UAL	$12,479,131,207	Amort.	3.60%	116,683,697	Salary Assumption:	Range 10.70% (age 20) to 4.50% (age 60)
Ratio	73.30%	Total Req.	18.32%	$593,790,372	*(CAFR Actuarial Section, pp. 81, 82, 90, 91, 94, 95, & 96)*	

Retirement Fund & Account Structure: The system has division (state and school, municipal, and judicial) trust funds, a health care trust fund, a life insurance reserve trust fund and a voluntary investment program. The health care trust fund relates to a monthly medical insurance premium subsidy program. The voluntary investment program is an Internal Revenue Code Section 401(k) retirement savings program. There is also a common operating fund, which is credited with proportional shares of the system budget. Within each division trust fund, there exists a member contribution reserve, an employer contribution reserve, a survivor benefit reserve, and an annual increase reserve. *(Colorado Stat. Sec. 24-51-208)*

Connecticut Teachers Retirement System

Normal Retirement Age: Age 60 with 20 years of service credit; any age with 35 years of service credit. *(Connecticut Stat. Sec. 10-183f(a))*

Early Retirement Age: Age 55 with 20 years of service credit; any age with 25 years of service credit; any age with 10 years of service credit. *(Connecticut Stat. Sec. 10-183f (b) & (c))*

Reduction Factor/Amount: Non-actuarial downsizing of the benefit accrual rate by 0.12% per year of service for each year under normal retirement with less than 30 years of service credit and by 0.06% per year of service for each year under normal retirement with at least 30 years of service credit. *(Connecticut Stat. Sec. 10-183g(b) & (c))*

Benefit Taxation: Public retirement plan benefits fully taxable under state income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: No Social Security coverage by virtue of public employment. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.0% of average annual salary per year of service, not to exceed 75% of average annual salary. *(Connecticut Stat. Sec. 10-183b, Clause (4); Sec. 10-183g(a))*

Final Average Salary: Average of highest annual salaries for 3 years of teaching service. Salary does not include compensation for extra duty assignments, coaching, unused sick leave, terminal pay, or severance pay. *(Connecticut Stat. Sec. 10-183b, Clauses (3) & (4))*

Special Early Normal Retiremt Incentives: As early retirement incentive, school districts are permitted to purchase up to 5 years of additional service credit for teachers at age 50 or older, is eligible to retire with the additional service credit, and agrees to retire by the end of the applicable school year. The service credit purchase is at full actuarial value over a period of years. *(Connecticut Stat. Sec. 10-183j)*

Post-Retirement Adjustments: For pre-September 1, 1992 retirees, annual automatic adjustment on benefit other than "1% contribution" benefit or voluntary contribution benefit of 3% minimum and 5% maximum, compounded. For post-August 31, 1992 retirees, with receipt of at least 9 months, annual adjustment on benefit other than "1% contribution" benefit or voluntary contribution benefit equal to Social Security increase, not to exceed 6%, and not to exceed 1.5% of the plan's total investment return was less than 8.5%, and proportionately further reduced if the cost of living adjustment reserve account is actuarially insufficient. Reserve account is funded with total rate of investment return in excess of 11.5%. Ad hoc adjustments in 1988, 1991, and 1999. *(Connecticut Stat. Sec. 10-183g(j), (k), (l), (m), (n), (o), (p), & (q))*

Member & Employer Contrib. Rates: 7.00% of covered salary member contribution rate; 9.20% of covered salary employer contribution rate. *(2004 CSTRS Actuarial Valuation, p. B-2)*

Most Recent Funded Condition & Actuarial Costs:

AL	$16,530,678,148 (2004)	NC	9.01%	$264,068,081	Actuarial Method:	Entry age normal
Assets	11,306,878,529	Exp.	n/a	---	Interest Assumption:	8.5%
UAL	$5,223,799,619	Amort.	9.49%	278,136,081	Salary Assumption:	Range of 8.00% (less than 7 years of service) to 4.99% (39 or more years of service)
Ratio	68.40%	Total Req.	18.50%	$542,204,162	*(2004 CSTRS Actuarial Valuation, pp. 1, B-1, B-2, B-3, B-8, C-6, F-1, F-2, & F-8)*	

Retirement Fund & Account Structure: Retirement plan trust fund and health insurance fund exist. *(Connecticut Stat. Sec. 10-183m; Sec. 10-183t)*

Delaware State Employees Retirement Plan

Normal Retirement Age: Age 62 with 5 years of service credit; age 60 with 15 years of service credit; any age with 30 years of service credit. *(Delaware Stat. Sec. 5522, Para. (a))*

Early Retirement Age: Age 55 with 15 years of service credit; any age with 25 years of service credit. *(Delaware Stat. Sec. 5522, Para. (c))*

Reduction Factor/Amount: Non-actuarial reduction factor of 0.2% of the benefit for each month under age 60 or under 30 years of service credit, whichever applies. *(Delaware Stat. Sec. 5522, Para. (d))*

Benefit Taxation: Annual exemption from state income tax per person for any pension income of $2,000 under age 60 and of $12,500 over age 59. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.0% of final average compensation per year of service rendered before January 1, 1997, and 1.85% of final average compensation per year of service rendered after December 31, 1996. *(Delaware Stat. Sec. 5527)*

Final Average Salary: Average of the 3 periods of 12 consecutive months during which compensation was highest. Compensation includes all salary, wages, and fees and includes overtime payments and payments for special duties. *(Delaware Stat. Sec. 5501, Paras. (f) & (h))*

Special Early Normal Retiremt Incentives: No current early retirement incentive program.

Post-Retirement Adjustments: Ad hoc post-retirement adjustments based on legislative enactment. Ad hoc increases are funded through a separate Post-Retirement Increase Fund, with funding of the fund based on monthly contributions using a 5-year amortization period. The current contribution rate is 2.6% of covered payroll. *(DSERP Website FAQ Question 15)*

Member & Employer Contrib. Rates: Member contribution rate of 3.00% of covered salary in excess of $6,000; employer contribution rate varies based on actuarial work (7.44% of covered salary in 2000, the last reported amount). *(Delaware Stat. Sec. 5543; Sec. 5544; DSERP Website FAQ Questions 1 & 2)*

Most Recent Funded Condition & Actuarial Costs:

AL	$5,572,719,000	NC	Not disclosed	Actuarial Method:	Aggregate entry age normal
Assets	5,660,057,000	Exp.	$4,454,000	Interest Assumption:	8.00%
UAL	($87,338,000)	Amort.	Not disclosed	Salary Assumption:	Range of 4.25% to 9.89%
Ratio	104%	Total Req.	Not disclosed	*(CAFR, p. 26 and unpaginated actuarial disclosure section)*	

Retirement Fund & Account Structure: A retirement trust fund, a post-retirement benefit fund, and a post-retirement health insurance premium fund exist. (Delaware Stat. Sec. 5541; Sec. 5548; & Sec. 5550)

Florida Retirement System

Normal Retirement Age: Age 62 with 6 years of service credit; any age with 30 years of service credit. *(Florida Stat. Sec. 121.021, Clause (29))*

Early Retirement Age: Any age with 6 years of service credit. *(Florida Stat. Sec. 121.091, Para. (3))*

Reduction Factor/Amount: Non-actuarial reduction factor of 5% per year under age 62 or under 30 years of service credit, with age 62 benefit accrual rate less than the benefit accrual rates applicable to age 63 or 31 years of service credit, to age 64 or 32 years of service credit, or to age 65 or 33 years of service credit. *(Florida Stat. Sec. 121.021, Clause (30))*

Benefit Taxation: No individual state income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: No Social Security coverage by virtue of public employment. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.00% of average final compensation per year of service credit. Maximum benefit of 100% of average final compensation. *(Florida Stat. Sec. 121.091, Para. (1))*

Final Average Salary: Average of the 5 highest fiscal years of earnings. Covered earnings do not include lump sum sick leave payments, retirement incentive bonuses, annual leave lump sum payments in excess of 500 hours, special services compensation, bonuses, automobile allowances, or housing allowances. *(Florida Stat. Sec. 121.021, Clauses (22), (23), (24), (25), & (47))*

Special Early Normal Retiremt Incentives: No special early retirement incentive program in force.

Post-Retirement Adjustments: Annual automatic adjustment of 3% to members retired for 12 months, prorated for shorter service, compounded. *(Florida Stat. Sec. 121.101)*

Florida Retirement System

Member & Employer Contrib. Rates: No member contribution; 6.28% of covered salary employer contribution. *(CAFR Summary Plan Description, p. 3)*

Most Recent Funded Condition & Actuarial Costs:

AL	$103,917,955,000 (2005)	NC	11.43%	$2,264,558,879,000	Actuarial Method: Entry age normal
Assets	111,539,878,000	Exp.	0.06%	15,295,934,000	Interest Assumption: 7.75%
UAL	($7,621,923,000)	Amort.	(1.29%)	($298,000,000,000)	Salary Assumption: 6.25%
Ratio	107.33%	Total Req.	10.20%	$2,351,854,813,000	*(CAFR Financial Statement, p. 19; CAFR Actuarial Section)*

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the annuity savings trust fund, the pension accumulation trust fund, the expense trust fund, and the survivors' benefit trust fund. Member contributions are required to be credited to the annuity savings trust fund. Transfers from the annuity savings trust fund to the pension accumulation trust fund occur upon retirement. Employer contributions also are credited to the pension accumulation trust fund. A portion of investment return on the annuity savings trust fund is credited to the expense trust fund. The survivors' benefit trust fund is funded by a portion of member contributions and a portion of employer contributions. *(Florida Stat. Sec. 238.09; Sec. 238.10)*

Georgia Teachers Retirement System

Normal Retirement Age: Age 60 with 10 years of service credit; any age with 30 years of service credit. *(Georgia Stat. Sec. 47-3-120(a) & (b))*

Early Retirement Age: Any age with 25 years of service credit. *(Georgia Stat. Sec. 47-3-120(b))*

Reduction Factor/Amount: Non-actuarial reduction factor of 0.583% of the benefit amount per month under age 60 or 7% of the benefit amount per year or portion of a year of service credit less than 30 years of service credit. *(Georgia Stat. Sec. 47-3-120(b))*

Benefit Taxation: Annual state income tax exclusion of $15,000 to individuals over age 61 and disability benefit recipients, with $4,000 limit on income from earned income. Also a $1,300 additional standard deduction applies each to taxpayer and spouse over age 61. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Pension Fund Survey Summary)*

Benefit Accrual Rates: 2.00% of average final salary per year of membership service, not to exceed 40 years of membership service. *(Georgia Stat. Sec. 47-3-120(a))*

Final Average Salary: Average of the salary for the 2 highest consecutive years of membership service. Earnable compensation does not include overtime, travel allowances, or salary for a secondary position, or salary in excess of $220,000. The salary in any year of the average final salary may not exceed the prior year by more than 8.37% for most teachers employed after July 1, 1984. *(Georgia Stat. Sec. 47-3-1; Sec. 47-3-120(d))*

Special Early Normal Retiremt Incentives: No special early retirement incentive program in force.

Post-Retirement Adjustments: Automatic 1.5% compounded adjustment every 6 months if the CPI does not decrease, payable to retirees receiving benefits for at least 6 months. *(TRS Member Handbook, p. 22)*

Member & Employer Contrib. Rates: 5.00% of covered salary member contribution rate; 9.24% of covered salary employer contribution rate. *(CAFR Financial Statement Notes, pp. 21 & 22)*

Most Recent Funded Condition & Actuarial Costs:

AL	$44,230,031,000 (2004)	NC	14.66%	$1,184,985,100	Actuarial Method: Entry age normal
Assets	44,617,956,000	Exp.	0.15%	19,558,000	Interest Assumption: 7.50%
UAL	($387,925,000)	Amort.	(0.57%)	(46,073,800)	Salary Assumption: Range of 3.75% to 8.00%
Ratio	100.9%	Total Req.	14.24%	$1,158,469,300	*(CAFR Financial Statement, p. 20; Financial Statement Notes, pp. 27, 28, 29, 35, 36, 38, & 39)*

Retirement Fund & Account Structure: In addition to the retirement trust fund, there is a statutory requirement for an expense fund, to which a portion of state appropriations are creditable. *(Georgia Stat. Sec. 47-4-29)*

Hawaii Employees Retirement System

Normal Retirement Age: Age 55 with 5 years of service credit for contributory plan (pre-July 1, 1984 employees); age 62 with 10 years of service credit; age 55 with 30 years of service credit for non-contributory plan (post-June 30, 1984 employees). *(Hawaii Stat. Sec. 88-73)*

Early Retirement Age: Any age with 5 years of service credit for contributory plan; age 55 with 20 years of service credit for non-contributory plan. *(Hawaii Stat. Sec. 88-73)*

Reduction Factor/Amount: Non-actuarial reduction factor of 5% per year under age 55; 4% per year under age 50; 3% per year under age 45; and 2% per year under age 40 for contributory plan. Non-actuarial reduction factor of 6% per year under age 62. *(HERS Website FAQs)*

Hawaii Employees Retirement System

Benefit Taxation: Public retirement plan benefits exempt from state individual income tax. Death benefits are taxable under state inheritance/estate tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.00% of average final compensation per year of service credit. *(Hawaii Stat. Sec. 88-74)*

Final Average Salary: Average of 3 highest years of earnings, excluding any lump sum vacation pay, if first employed after December 31, 1970, and higher of the average of the 3 highest years of earnings, excluding lump sum vacation pay, or average of 5 highest years of earnings, including lump sum vacation pay if employed before January 1, 1971. *(Hawaii Stat. Sec. 88-21; Sec. 88-81)*

Special Early Normal Retiremt Incentives: No special early retirement incentive program in force.

Post-Retirement Adjustments: Annual automatic post-retirement adjustment of 2.5%, not compounded. *(Hawaii Stat. Sec. 88-90)*

Member & Employer Contrib. Rates: No member contribution; 13.75% of covered salary employer contribution rate.

Most Recent Funded Condition & Actuarial Costs:

AL	$12,985,988,505 (2005)	NC	7.32%	$214,073,400	Actuarial Method:	Entry age normal
Assets	8,914,839,263	Exp.	0.24%	7,259,906	Interest Assumption:	8.00%
UAL	$4,071,149,242	Amort.	8.41%	245,950,450	Salary Assumption:	4.00%
Ratio	68.65%	Total Req.	15.97%	$467,283,756		

(CAFR Financial Section, p. 32; CAFR Actuarial Section, pp. 52, 53, 57, 74, 75, 77-81, 86, 87, & 88)

Retirement Fund & Account Structure: Statutory funds and accounts are the annuity savings fund, the pension accumulation fund, and the expense fund. Member contributions are required to be credited to the annuity savings fund, with the accumulated contributions transferred to the pension accumulation fund upon retirement. Employer contributions are required to be credited to the pension accumulation fund. The expense fund is required to be credited with the amount the board estimates necessary to fund the expense of the system, charged against the investment earnings of the system when reviewed by the legislature and approved by the governor. *(Hawaii Stat. Sec. 88-109; Sec. 88-112; Sec. 88-113; Sec. 88-114; Sec. 88-116)*

Idaho Public Employee Retirement System

Normal Retirement Age: Age 65 with 5 years of service credit; any age with "Rule of 90" (sum of age and service credit totals 90). *(PERSI Website, General Benefit Summary)*

Early Retirement Age: Any age with 5 years of service credit. *(PERSI Early Retirement Brochure)*

Reduction Factor/Amount: Non-actuarial reduction factor of 3% per year under age 65 or under the "Rule of 90" for the initial 5 years under age 65 or under the "Rule of 90"; and 5.75% per year under age 60 or under the sum of age and service credit of 85. *(PERSI Early Retirement Brochure)*

Benefit Taxation: Annual state individual income tax exemption of $21,900 for single filer or $32,850 married joint filers over age 61, with exemption reduced by Social Security or Railroad Retirement benefit amounts. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage.*(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.00% of final average salary per year of service credit, not to exceed 100% of highest 3 years average salary. *(PERSI Early Retirement Brochure)*

Final Average Salary: Average of highest 3.5 consecutive years of service. Salary increments that are inconsistent with usual compensation patterns can be disallowed by the retirement board. Salary includes remuneration other than cash, but does not include payments to employee medical savings accounts or severance payments, early retirement incentives and bonuses. *(Idaho Stat. Sec. 59-1302(5c) & (31))*

Special Early Normal Retiremt Incentives: No special early retirement incentive program in force.

Post-Retirement Adjustments: Subject to amendment or rejection by the state legislature, compounding increase equal to the CPI percentage increase rate, with 1.0% minimum and 6.0% maximum, if the plan is more than fully funded, including the liability for the adjustment. The adjustment is prorated for retirees in receipt of a benefit for less than one year. If there are extraordinary gains (assets in excess of accrued liability plus the amount necessary to absorb one standard deviation market event) and if the board determines they are to be allocated, the gains are allocated to retirees as an additional lump sum payment in proportion to each monthly benefit bears to all monthly benefits, to active members as a deposit in a supplemental retirement account to provide a supplemental defined contribution benefit, and to employers as a credit toward future contributions. *(Idaho Stat. Sec. 59-1309; Sec. 59-1355)*

Idaho Public Employee Retirement System

Member & Employer Contrib. Rates: 6.23% of covered salary member contribution rate; 10.39% of covered salary employer contribution rate. *(CAFR Financial Section, pp. 42 & 43)*

Most Recent Funded Condition & Actuarial Costs:

AL	$8,840,000,000 (2005)	NC	14.03%	$305,292,800	Actuarial Method:	Entry age normal
Assets	8,208,800,000	Exp.	0.33%	7,169,254	Interest Assumption:	7.75%
UAL	$508,600,000	Amort.	4.79%	104,230,400	Salary Assumption:	Range of 9.0% (female teachers with 5 years of service) to 5.3% (teachers with 20 years of service)
Ratio	94.2%	Total Req.	19.15%	$416,692,454		

(CAFR Financial Section, pp. 28, 42, 43; CAFR Actuarial Section, pp. 81, 82, 84, 86, 87, 90, 91, & 93)

Retirement Fund & Account Structure: There is a special retirement fund in the state treasury, with additional reserves in the form of a clearing account, a portfolio investment expense account, an administrative account, and a supplemental retirement account. The clearing account is the general body of plan assets. The investment expense account is dedicated to the payment of investment expenses. The administration account is dedicated for the payment of non-investment system expenses. The supplemental retirement account is credited with extraordinary gains on the investment portfolio that fund an additional post-retirement adjustment. *(Idaho Stat. Sec. 59-1311)*

Illinois Teachers Retirement System

Normal Retirement Age: Age 62 with 5 years of service credit; age 60 with 10 years of service credit; age 55 with 35 years of service credit. *(Illinois Stat. Sec. 40 ILCS 5/16-132)*

Early Retirement Age: Age 55 with 20 years of service credit. *(Illinois Stat. Sec. 40 ILCS 5/16-132)*

Reduction Factor/Amount: Non-actuarial reduction factor of 0.5% per month under age 60. *(Illinois Stat. Sec. 40 ILCS 5/16-133(a)(B))*

Benefit Taxation: Public retirement plan benefits exempt from state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: No Social Security coverage by virtue of public employment. *(Public Fund Survey Summary)*

Benefit Accrual Rates: Unless upgraded to post-June 30, 1998, accrual rate by the payment of 1.0% of highest annual salary of 4 years before the upgrade per year of pre-July 1, 1998 service, for pre-July 1, 1998 service, 1.67% per year for each of the first 10 years of service, 1.90% for each of the second 10 years of service, 2.10% for each of the third 10 years of service, and 2.30% per year of service in excess of 30 years, and for post-June 30, 1998 service, 2.2% per year of service credit, applied to final average salary, but not to exceed 75% of final average salary. *(Illinois Stat. Sec. 40 ILCS 5/16-133; Sec. 40 ILCS 5/16-133.2)*

Final Average Salary: Average of the highest 4 consecutive years of salary within the last 10 years of creditable service. *(Illinois Stat. Sec. 40 ILCS 5/16-133(b))*

Special Early Normal Retiremt Incentives: An early retirement option was offered in 1993 and has expired. Under 2004 legislation, two early retirement option programs were authorized. The Pipeline Early Retirement Option allows teachers who notified their employer of their retirement before June 1, 2005 and retires before July 1, 2007 retires with a full benefit with no additional member or employer contribution with 34 years of service credit or a 7% additional member contribution and a 20% additional employer contribution. The Modified Early Retirement Option provides an unreduced retirement annuity with an additional member contribution of 11.5% of the highest salary of the final average salary multiplied by the number of years under age 60 or the number of years under 35 years of service credit, whichever is less, and an additional employer contribution of 23.5% of the highest salary multiplied by the number of years the teacher is under age 60. *(Illinois Stat. Sec. 40 ILCS 5/16-133.3; Sec. 40 ILCS 5/16-133.4; Sec. 40 ILCS 5/16-133.5)*

Post-Retirement Adjustments: Automatic annual adjustment of 3%, which compounds. Retiree must be over age 65 or in receipt for at least one year to be eligible for the adjustment. *(Illinois Stat. Sec. 40 ILCS 5/16-133.1)*

Member & Employer Contrib. Rates: 9.00% of covered salary member contribution rate; 13.10% of covered salary employer contribution rate. *(Illinois Stat. Sec. 40 ILCS 5/16-152; Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$56,075,029,000 (2005)	NC	Undisclosed	Actuarial Method:	Projected unit credit
Assets	34,085,218,000	Exp.	Undisclosed	Interest Assumption:	8.5%
UAL	$21,989,811,000	Amort.	Undisclosed	Salary Assumption:	Undisclosed
Ratio	60.8%	Total Req.	Undisclosed		

(Public Fund Survey Summary)

Retirement Fund & Account Structure: The system has three funds or accounts. The benefit trust reserve is credited with most member and employer contributions and functions as the general clearing account for the retirement plan. The retirement annuity reserve is funded by contributions from annuitants electing the coverage of a minimum retirement annuity amount and sufficient state funding and is dedicated to minimum retirement annuity amounts. The teachers' health insurance fund is credited with a portion of member and employer contributions and funds the Teacher Retirement Insurance Program. *(Illinois Stat. Sec. 40 ILCS 5/16-182; Sec. 40 ILCS 5/16-184; Sec. 40 ILCS 5/16-185; Sec. 40 ILCS 5/16-186.3; Sec. 40 ILCS 5/16-187)*

Indiana Teachers Retirement Fund

Normal Retirement Age: Age 65 with 10 years of service credit; age 60 with 15 years of service credit; age 55 if the sum of age and years of service credit totals 85. *(2005 ISTRF Actuarial Valuation Benefit Summary)*

Early Retirement Age: Age 50 with 15 years of service credit. *(2005 ISTRF Actuarial Valuation Benefit Summary)*

Reduction Factor/Amount: Non-actuarial reduction factors of 11% for the year under age 60 and of 5% for each year under age 59. *(Indiana Stat. Sec. 5-10.2-4-5)*

Benefit Taxation: Public retirement plan benefits subject to state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 1.1% of final average salary per year of service credit, plus benefit derived from the person's annuity savings account balance. *(Indiana Stat. Sec. 5-10.2-4-4)*

Final Average Salary: Average of the 5 highest years of annual compensation during a career. Compensation may not include more than $2,000 of payments in contemplation of retirement. *(Indiana Stat. Sec. 5-10.2-4-3)*

Special Early Normal Retiremt Incentives: No special early retirement incentive program is in force.

Post-Retirement Adjustments: Ad hoc adjustments as approved by legislative enactment. An adjustment was approved for January 2007 of 2% for pre-July 2, 1991 retirees and 1% for July 1, 1991-July 1, 2004 retirees. Adjustment applies only to the defined benefit portion of the total benefit. *(May 2006 Member Newsletter)*

Member & Employer Contrib. Rates: 3.00% of covered salary member contribution rate; 13.22% of covered salary employer contribution rate. *(2005 ISTRF Actuarial Valuation Benefit Summary; CAFR Financial Statement Notes, p. 25; Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$16,264,893,444 (2005)	NC	9.25%	$345,425,443	Actuarial Method: Entry age normal
Assets	7,065,299,476	Exp.	0.17%	6,407,378	Interest Assumption: 7.50%
UAL	$9,199,593,968	Amort.	11.96%	446,625,762	Salary Assumption: Range from 15.5% (with one year of service) to 4.75% (with 24 years of service)
Ratio	43.4%	Total Req.	21.38%	$798,456,583	*(2005 ISTRF Actuarial Valuation, pp. 1, A-3, A-7, A-8, A-9, F-1, F-2, F-3, F-4, & G-8)*

Retirement Fund & Account Structure: Statutory funds and accounts are a pre-1996 account and a 1996 account, with each account segregated into an annuity savings account and a retirement allowance account. The pre-1996 account also contains a pension stabilization fund to cover cash flow requirements. The Annual Financial Report indicates that there are five established reserves, the member reserve, the benefits in force reserve, the employer reserve, the undistributed investment income reserve, and the unreserved fund balance. The member reserve is credited with member contributions and investment income. The benefits in force reserve is credited with member contributions for annuitants transferred from the member reserve, transfers from the employer reserve, contains the pension stabilization fund, and has an unfunded liability. The employer reserve contains the accumulated employer contributions and investment income and has an unfunded liability. The undistributed investment income reserve is created with all investment earnings, with subsequent transfers. The unreserved fund balance is the unfunded liability for retirees and non-retired members. *(Indiana Stat. Sec. 5-10.4-2-1; Sec. 5-10.4-2-2; Sec. 5-10.4-2-3; Sec. 5-10.4-2-4; Sec. 5-10.4-2-5; Sec. 5-10.4-2-6)*

Iowa Public Employees Retirement System

Normal Retirement Age: Age 65 with any service; age 62 with 20 years of service credit; any age if the sum of age and years of service credit totals 88. *(Iowa Stat. Sec. 97B.45)*

Early Retirement Age: Age 55 with any service. *(Iowa Stat. Sec. 97B.47)*

Reduction Factor/Amount: Non-actuarial reduction factor of 0.25% per month under age 65, under age 62 with 20 years of service, or under the "Rule of 88." *(Iowa Stat. Sec. 97B.50)*

Benefit Taxation: Annual state individual income tax exemption of $6,000 per taxpayer over age 54. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.0% of average salary per year of service credit, not to exceed 30 years of service credit. *(Iowa Stat. Sec. 97B.49A)*

Final Average Salary: For retirements before July 1, 2008, average of covered calendar year wages for the highest 3 years of service credit. For retirements after June 30, 2008, average of member's highest 12 consecutive quarters of service credit. Covered salary includes compensatory time or banked holiday pay limited to 240 hours and wage equivalents and do not include special lump sum payments and other special payment arrangements. *(Iowa Stat. Sec. 97B.1A 24.a.; Sec. 97B.1A 26.a.)*

Special Early Normal Retiremt Incentives: No retirement plan early retirement incentive program in force. School districts permitted to implement early retirement incentive programs in the form of a cash payment to retire early. *(IPERS Early Retirement Incentive Programs Brochure)*

Iowa Public Employees Retirement System

Post-Retirement Adjustments: For post-June 30, 1990 retirees, a favorable experience dividend adjustment is paid to retirees in receipt for at least one year. Favorable experience is any net positive actuarial experience gain in any year. The adjustment is a percentage amount, not to exceed 3%, is payable in a lump sum, and does not compound. The actuarial gain amount is credited to a favorable experience dividend reserve account and adjustment payment is subject to actuarial determinations of sufficiency. *(Iowa Stat. Sec. 97B.49F)*

Member & Employer Contrib. Rates: 3.70% of covered salary member contribution rate; 5.75% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$20,240,098,667 (2005)	NC	9.12%	$473,457,981	Actuarial Method:	Entry age normal
Assets	17,951,490,071	Exp.	0.16%	8,214,903	Interest Assumption:	7.50%
UAL	$2,288,608,596	Amort.	0.33%	16,649,273	Salary Assumption:	Range from 18.5% (age 22 with one year of service) to 4.0% (age 62 with 21 years of service)
Ratio	88.69%	Total Req.	9.61%	$498,322,157		

(IPERS Actuarial Valuation, pp. 1, 3, 4, 5, 6, 12, 23, 28, 29, C-1, C-2, C-4, & C-6)

Retirement Fund & Account Structure: The retirement plan has a single retirement fund and no statutory internal funds or sub-accounts. *(Iowa Stat. Sec. 97B.7)*

Kansas Public Employees Retirement System

Normal Retirement Age: Age 65 with 1 year of service credit; age 62 with 10 years of service credit; any age if the sum of age and years of service credit totals 85. *(Kansas Stat. Sec. 74-4914(1))*

Early Retirement Age: Age 55 with 10 years of service credit. *(Kansas Stat. Sec. 74-4914(4))*

Reduction Factor/Amount: Non-actuarial reduction factor of 0.2% per month between age 60 and age 62 and of 0.6% per month between age 55 and age 60. *(Kansas Stat. Sec. 74-4915(2))*

Benefit Taxation: Kansas public retirement plan benefits exempt from state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 1.75% of final average salary per year of participating years of service credit and 1.0% or 0.75% of final average salary per year of prior nonparticipating years of service credit. *(Kansas Stat. Sec. 74-4915(1))*

Final Average Salary: Average of highest 3 years of service. Covered salary excludes additional compensation such as sick leave and annual leave payments. *(Kansas Stat. Sec. 74-4902, Clauses (9), (17), & (33))*

Special Early Normal Retiremt Incentives: No early retirement incentive program in force.

Post-Retirement Adjustments: Ad hoc adjustments as provided through legislative enactments. The last adjustments were granted in 2000 (partial 13th check) and in 1998 (percentage increase). Additionally, each October, retirees receive a lump sum retirant dividend payment determined by the plan board, but not to exceed 8.33% of the retiree's annual benefit. *(Winter 2005 Retiree Newsletter)*

Member & Employer Contrib. Rates: 4.00% of covered salary member contribution rate; 5.47% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$8,928,334,248 (2005)	NC	8.23%	$219,081,756	Actuarial Method:	Entry age normal
Assets	5,427,574,148	Exp.	0.14%	3,871,508	Interest Assumption:	8.00%
UAL	$3,500,760,100	Amort.	7.65%	211,602,656	Salary Assumption:	Range from 9.80% (one year of service) to 4.0% (25 years of service)
Ratio	60.79%	Total Req.	16.02%	$434,555,920		

(2005 KPERS Actuarial Valuation, pp. 3, 5, 6, 16, 20, 38, 44, 46, 61, 93, & 100)

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the members' accumulated contribution reserve, the retirement benefit accumulation reserve, the retirement benefit payment reserve, and the expense reserve. The member's accumulated contribution reserve is credited with member contributions and a portion of investment earnings. The retirement benefit accumulation reserve is credited with a portion of employer contributions and a portion of investment earnings. The retirement benefit payment reserve is credited with transfers from the members' accumulated contribution reserve and the retirement benefit accumulation reserve upon retirement, plus a portion of investment earnings. The expense reserve contains funds to offset the budgeted administrative expenses of the system and a portion of investment earnings. The retirement benefit accumulation reserve contains the unfunded liability of the system. The retirement benefit payment reserve is fully funded. The system administrative budget is subject to legislative approval. Additionally, the financial report indicates that there is an optional term life insurance reserve for accumulating employee contributions for the optional coverage. Also, there is a retirant dividend payment reserve for the payment of an additional post-retirement adjustment. *(Kansas Stat. Sec. 74-4922; Sec. 74-4927c; Sec. 74-4927; Sec. 74-49,110; Sec. 74-49,111)*

Kentucky Teachers Retirement System

Normal Retirement Age: Any age with 27 years of service credit; age 60 with 5 years of service credit. *(Kentucky Stat. Sec. 161.600)*

Early Retirement Age: Age 55 with 5 years of service credit. *(Kentucky Stat. Sec. 161.600)*

Reduction Factor/Amount: Non-actuarial reduction factor of 5% per year under age 60 or under 27 years of service credit. *(KTRS Service Retirement Benefit Summary)*

Benefit Taxation: Portion of Kentucky public retirement plan benefit earned before January 1, 1998, exempt from state individual income tax, with the remainder exempt up to $40,200. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: No Social Security coverage by virtue of public employment. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.00% of final average salary per year of service credit rendered before June 30, 1983; 2.5% of final average salary per year of service credit rendered after June 29, 1983; and, for retirements after July 1, 2004, 3.00% per year of service in excess of 30 years of service credit. Minimum annual benefit of $440 per year of service credit. *(Kentucky Stat. Sec. 161.620(1))*

Final Average Salary: Average of 5 highest years of covered salary or, if at least age 55 with at least 27 years of covered service, average of 3 highest years of covered salary. Covered salary within the final 3 years of service is limited to prior year's salary plus highest increase percentage of one rank and step for the school district, excluding accrued annual leave or sick leave payments. *(Kentucky Stat. Sec. 161.220, Clauses (9), (10), & (23))*

Special Early Normal Retiremt Incentives: No early retirement incentive program in force.

Post-Retirement Adjustments: Annual compounding adjustment of 1.5% of the benefit to retirees in receipt for at least one year and prorated for receipt of less than one year. *(Kentucky Stat. Sec. 161.553)*

Member & Employer Contrib. Rates: 9.855% of covered salary member contribution rate; 13.105% of covered salary employer contribution rate. *(CAFR Actuarial Section, p. 63)*

Most Recent Funded Condition & Actuarial Costs:

AL	$19,134,870,000 (2005)	NC	19.51%	$495,665,597	Actuarial Method:	Projected unit credit
Assets	14,598,843,000	Exp.	0.40%	10,162,288	Interest Assumption:	7.50%
UAL	$4,536,027,000	Amort.	8.94%	227,127,137	Salary Assumption:	Range of 8.10% to 4.00%
Ratio	76.29%	Total Req.	28.85%	$732,955,032	*(CAFR Actuarial Section, pp. 63, 64, 66-71, & 74)*	

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the expense fund, the teachers' savings fund, the state accumulation fund, the allowance reserve fund, the medical insurance fund, the guarantee fund, the school employee annuity fund, the supplemental retirement benefit fund, and the life insurance benefit fund. The expense fund is credited with up to 4% of the investment earnings during the prior year and is used to pay administrative expenses. The teachers' savings fund accumulates member contributions and regular interest transferred from the guarantee fund, with turnover gains transferred back to the guarantee fund. The state accumulation fund is credited with state annuity and survivor benefit appropriations, is credited with interest from the guarantee fund and pays transfers to the allowance reserve fund upon retirement or death. The allowance reserve fund is credited with transfers from the teachers' savings fund and the state accumulation fund and pays retirement annuities and benefits. The medical insurance fund is credited with a portion of member and employer contributions and interest, as well as the employer medical insurance fund stabilization contribution and pays medical insurance benefits. The guarantee fund is credited with the plan's investment earnings and pays uniform interest to other funds as well as covering any cash flow shortages. The school employee annuity fund is a voluntary tax-sheltered annuity program under federal Internal Revenue Code Section 403(b). The supplemental retirement benefit fund covers excess benefits under federal Internal Revenue Code Section 403(b). The supplemental retirement benefit fund covers excess benefits under federal Internal Revenue Code Section 415. The life insurance benefit fund accumulates amounts related to the life insurance benefit of the plan. *(Kentucky Stat. Sec. 161.420)*

Louisiana Teachers Retirement System

Normal Retirement Age: Age 60 with 5 years of service credit; any age with 20 years of service credit if employment began before July 1, 1999; age 65 with 20 years of service credit; age 55 with 25 years of service credit; any age with 30 years of service credit if employment began after June 30, 1999. *(TRSL Webpage, Active Member Summary; CAFR Introduction)*

Early Retirement Age: If employment began after June 30, 1999, any age with 20 years of service credit or age 60 with 5 years of service credit. *(TRSL Webpage, Active Member Summary; CAFR Introduction)*

Reduction Factor/Amount: Actuarial reduction factors scaling from 9.01% if retiring 1 year early to 59.58% if retiring 10 years early with 20 years of service and scaling from 9.61% if retiring 1 year early to 61.46% if retiring 10 years early with 5 years of service credit. *(TRSL Benefits Handbook, Regular Plan and Plan A, p. 40)*

Benefit Taxation: Louisiana Teachers Retirement System and Louisiana State Employees Retirement System exempt from state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Louisiana Teachers Retirement System

Social Security Coverage: No Social Security coverage by virtue of public employment. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.00% of final average compensation per year of service credit if employed before July 1, 1999, and 2.50% of final average compensation per year of service credit if employed after June 30, 1999, or if employed before July 1, 1999, with 20 years of service at age 65, with 25 years of service at age 55, or with 30 years of service at any age. Maximum of 40 years of service credit. *(TRSL Benefits Handbook, Regular Plan and Plan A, p. 39)*

Final Average Salary: Average of salary earned during 3 highest consecutive years of service credit or 3 highest successive years if there has been a break in service. Salary in each year of average may not increase over prior year by more than 10% unless the increase is system-wide or by more than 25% where there has been a change in employment between parishes. Earnable compensation excludes per diems, payments in kind, payments in lieu of unused sick leave, and retroactive pay increases. *(Louisiana Stat. Sec. 701(5) & (10); TRSL Rule Sec. 201; Sec. 233; Sec. 901)*

Special Early Normal Retiremt Incentives: No early retirement incentive program in force.

Post-Retirement Adjustments: Automatic annual adjustment to retirees who are age 65 of 2% of the amount of the original retirement benefit received, payable from investment earnings in excess of the interest rate actuarial assumption if there are excess investment earnings. *(Louisiana Stat. Sec. 242)*

Member & Employer Contrib. Rates: 8.00% of covered salary member contribution rate; 15.50% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$18,669,800,000 (2005)	NC		Not disclosed	Actuarial Method:	Projected unit credit
Assets	12,082,681,682	Exp.	0.39%	$12,178,533	Interest Assumption:	8.25%
UAL	$6,587,118,318	Amort.		Not disclosed	Salary Assumption:	Range of 9.00% (University professor with one year of service) to 2.50% (school lunch person with 30 years of service)
Ratio	64.6%	Total Req.	23.59%	$738,878,667		

(Public Fund Survey Summary; CAFR Actuarial Section, pp. 101-109)

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the annuity savings fund, the employee experience account, the pension accumulation fund, the pension reserve fund, the supplemental benefit fund, and the expense fund. The annuity savings fund accumulates member contributions. The pension accumulation fund accumulates employer pension contributions. The pension reserve fund holds the reserves for benefits transferred from the annuity savings fund and the pension accumulation fund. The supplemental benefit fund is credited with transfers from the pension accumulation fund and is used to pay a supplemental benefit amount. The expense fund is used to pay the administrative expenses of the system and is funded from a board-determined deduction from plan investment earnings. The employee experience account is funded from a plan investment income deduction and is used to fund an automatic post-retirement adjustment annually. *(Louisiana Stat. Sec. 873; Sec. 875; Sec. 879; Sec. 880; Sec. 882; Sec. 883.1)*

Maine State Retirement System

Normal Retirement Age: Age 62 with 10 years of service credit; age 62 with 5 years of service credit; age 60 with 5 years of service credit. *(Maine Stat. Sec. 17851)*

Early Retirement Age: Any age with 25 years of service credit. *(Maine Stat. Sec. 17851)*

Reduction Factor/Amount: Apparently non-actuarial reduction factor of 6% per year between age 60 and age 62 and of 2.25% per year under age 60. *(Maine Stat. Sec. 17852, Para. 3)*

Benefit Taxation: Pension plan benefits up to $6,000 annually exempt from state individual income tax, reduced by any Social Security and Railroad Retirement benefits. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: No Social Security coverage by virtue of public employment. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.0% of final average compensation per year of service credit. *(Maine Stat. Sec. 17852)*

Final Average Salary: Average of earnable compensation for highest 3 years, not necessarily consecutive. Earnable compensation does not include more than 30 days of unused sick leave or vacation leave and does not include payments other than for services rendered. Compensation in any year of the average may not exceed the prior year by more than 5% or by more than 10% in total for the 3-year period. *(Maine Stat. Sec. 17001, Paras. 3-A, 4, & 13; Sec. 17810)*

Special Early Normal Retiremt Incentives: No current retirement plan early retirement incentive program in force. Employers authorized to offer monetary or non-monetary payment or award program to induce early retirements, but early retirement incentive payments are excluded from final average salary computation and the employer is responsible for the additional actuarial cost attributable to the incentive. *(Maine Stat. Sec. 17159)*

Maine State Retirement System

Post-Retirement Adjustments: Automatic annual adjustment based on the increase in the CPI, payable as a percentage and compounding, not to exceed 4% in any year, if funded by the legislature in a supplemental budget bill, payable to a retiree in receipt of benefits for at least one year and after attaining the normal retirement age if the person has less than 10 years of service credit. *(Maine Stat. Sec. 17806)*

Member & Employer Contrib. Rates: 7.65% of covered salary member contribution rate; 14.78% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$9,442,389,399 (2004)	NC	13.82%	$129,875,116	Actuarial Method: Entry age normal
Assets	6,452,570,244	Exp.	0.65%	6,108,453	Interest Assumption: 8.00%
UAL	$2,989,819,155	Amort.	17.09%	160,605,336	Salary Assumption: Range from 9.5% (age 20) to 5.5% (age 50)
Ratio	68.34%	Total Req.	31.56%	$296,588,905	*(2004 MSRS Actuarial Valuation, pp. 59-62, 65, 66, 72, 74, 76-79, 83, 95, & 98)*

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the member's contribution fund, the retirement allowance fund, the expense fund, the survivors' benefit fund, the state retiree health insurance fund, the state retired teachers health insurance fund, and the disability retirement benefit fund. The member contribution fund accumulates member contribution deductions, the retirement allowance fund contains all benefit reserves not contained in the member contribution fund, the survivors' benefit fund, and the disability retirement benefit fund. The expense fund is credited with a portion of the employer contribution needed to pay plan administrative expenses. The survivors' benefit fund accumulates reserves for survivor benefits. The state retiree health insurance fund accumulates assets for the payment of health insurance premiums, with new accumulations discontinued in 1995. The state retired teachers' health insurance fund accumulates assets for the payment of teacher health insurance premiums, with new accumulations discontinued in 1995. The disability retirement benefit fund accumulates reserves for disability benefits. *(Maine Stat. Sec. 17152; Sec. 17201; Sec. 17251; Sec. 17301; Sec. 17351; Sec. 17401; Sec. 17411; Sec. 17421)*

Maryland Teachers Retirement System

Normal Retirement Age: *Age 62 with 5 years of service credit; age 63 with 4 years of service credit; age 64 with 3 years of service credit; age 65 with 2 years of service credit; any age with 30 years of service credit. (SRPSM CAFR, p. 23; Maryland Stat. Sec. 23-401)*

Early Retirement Age: *Age 55 with 15 years of service credit. (SRPSM CAFR, p. 24; Maryland Stat. Sec. 23-402)*

Reduction Factor/Amount: Non-actuarial reduction factor of 6% per year under age 62. *(SRPSM CAFR, p. 24; Maryland Stat. Sec. 23-402)*

Benefit Taxation: Exemption from state individual income taxes of pension plan benefits of $20,700 per person annually for taxpayers over age 64. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 1.2% of average final compensation per year of service credit through June 30, 1998, and 1.8% of average final compensation per year of service credit after June 30, 1998. *(SRPSM CAFR, p. 23; Maryland Stat. Sec. 23-401)*

Final Average Salary: Average of the 3 highest consecutive annual salaries during covered service. Each year of average is limited to an increase of 20% unless approved by the board or by virtue of promotion. *(Maryland Stat. Sec. 20-204; Sec. 20-205)*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Annual automatic adjustment based on the CPI percentage increase, payable to retirees in receipt of benefits for at least one year, without limit and compounding to members employed before July 1, 1984 who make extra contributions, with 5% limit and compounding to members employed before July 1, 1984 who do not make extra contributions, and limited to 3% and compounding for retirees covered by the Contributory Plan and limited to 3% and non-compounding for retirees covered by the Noncontributory Plan. *(Maryland Stat. Sec. 29-401; Sec. 29-411; Sec. 29-412; Sec. 29-417; Sec. 29-418; Sec. 29-421; Sec. 29-422; Sec. 29-426; Sec. 29-427)*

Member & Employer Contrib. Rates: 2.00% of covered salary member contribution rate; 11.17% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$39,133,000,000 (2005)	NC	Undisclosed	Actuarial Method: Entry age normal
Assets	34,520,000,000	Exp.	$22,386,000	Interest Assumption: 7.75%
UAL	$4,614,000,000	Amort.	Undisclosed	Salary Assumption: Range from 15.96% to 4.00%
Ratio	88.2%	Total Req.	Undisclosed	*(Public Fund Survey Summary)*

Maryland Teachers Retirement System

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the accumulation fund, the annuity savings fund, and expense fund. The annuity savings fund accumulates member contributions and associated investment earnings. The accumulation fund is credited with employer contributions and with transfers from the annuity savings fund upon a retiree's retirement. The expense fund is credited with a proportional share of the retirement system's total expense. *(Maryland Stat. Sec. 21-123; Sec. 21-301; Sec. 21-302; Sec. 21-303; Sec. 21-311; Sec. 21-315)*

Massachusetts Teacher Retirement System

Normal Retirement Age: Age 65 with 10 years of service credit; any age with 20 years of service credit. *(Massachusetts Stat. Ch. 32, Sec. 5(1))*

Early Retirement Age: Age 55 with 10 years of service credit. *(Public Fund Survey Summary)*

Reduction Factor/Amount: Non-actuarial downsizing of retirement annuity of 0.01% per year of service credit per year under age 65. *(MTRS Website Retirement Allowance Estimation Estimator)*

Benefit Taxation: Massachusetts contributory public retirement plan benefits exempt from state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: No Social Security coverage by virtue of public employment. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.5% of average annual rate of compensation per year of service credit unless Retirement Plus is elected, with additional contributions, and 30 years of service is rendered, with additional 2.0% of average annual rate of compensation per year of service credit in excess of 24 years of service credit. *(Massachusetts Stat. Ch. 32, Sec. 5(2))*

Final Average Salary: Average of the 3 highest annual salaries, not necessarily consecutive, during covered service. Compensation is annual contract salary, plus school lunch program and physical education or athletic contract payments. Compensation does not include overtime payments or bonuses. *(Massachusetts Stat. Ch. 32, Sec. 1; Board Rule 807 CMR 6.00)*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force. Plan provides a termination retirement benefit if position is eliminated and member has at least 20 years of service credit and position is eliminated involuntarily without comparable position offer. The termination retirement benefit is one-third of final average salary plus annuity on member contributions. *(MTRS Benefit Summary, pp. 18 & 19)*

Post-Retirement Adjustments: Annual adjustment based on the CPI percentage increase, not to exceed 3% of benefits up to $12,000, compounded, if the legislature approves the adjustment, payable in full for retirees in receipt for at least one year and prorated for retirees in receipt for less than one year. *(Massachusetts Stat. Ch. 32, Sec. 102)*

Member & Employer Contrib. Rates: Varying percentage of covered salary depending on initial hiring date for member contribution: 5.00% before 1975; 7.00% 1975-1984*; 8.00% 1984-1996*; 9.00% after July 1, 1996*.
* Plus additional 2.00% rate on salary in excess of $30,000.
No available information on employer contributions. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$24,519,000,000 (2003)	NC	Undisclosed	Actuarial Method:	Entry age normal
Assets	17,074,000,000	Exp.	Undisclosed	Interest Assumption:	8.25%
UAL	$7,445,000,000	Amort.	Undisclosed	Salary Assumption:	Undisclosed
Ratio	69.6%	Total Req.	Undisclosed	*(Public Fund Survey Summary)*	

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the annuity savings fund, the annuity reserve fund, the pension fund, the special fund for military service credit, the expense fund, the pension reserve fund, and the Commonwealth's pension liability fund. The annuity savings fund accumulates regular and additional member deductions and is credited with regular interest. The annuity reserve fund is the fund to which reserves in the annuity savings fund are transferred upon the retirement of a member and from which benefits are payable. The pension fund accumulates employer contributions and receives transfers from the pension reserve fund or the Commonwealth's pension liability fund. The special fund for military service credit is credited with state appropriations representing regular deductions for members on military leave. The expense fund is credited with an appropriation for the plan's administrative expenses. The pension reserve fund is a reserve for future liabilities to be funded from actuarial investment gains and monies recovered for fringe benefits from federal grants. The Commonwealth's pension liability fund is the assets of the plan other than the annuity savings fund, the annuity reserve fund, and the expense fund. Al plan assets are invested through the Pension Reserves Investment Trust Fund by the Pension Reserves Investment Management Board. *(Mass. Stat. Ch. 32, Sec. 22)*

Michigan Public Schools Employees Retirement System

Normal Retirement Age: Age 46 with 30 years of service credit; age 60 with 10 years of service credit; age 60 with 5 years of service credit if employed after December 31, 1989; age 50 with 30 years of service credit; age 60 with 10 years of service credit; age 55 with 15 years of service credit if employed before January 1, 1990. *(Michigan Stat. Sec. 38.1381)*

Michigan Public Schools Employees Retirement System

Early Retirement Age: Age 55 with 15 years of service credit. *(Michigan Stat. Sec. 38.1381)*

Reduction Factor/Amount: Non-actuarial reduction factor of 0.5% per month under age 60. *(Michigan Stat. Sec. 38.1384(2), (3), & (4))*

Benefit Taxation: Michigan public retirement plan benefits exempt from state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 1.5% of final average compensation per year of service credit. *(Michigan Stat. Sec. 38.1384(1))*

Final Average Salary: Average of the 3 highest consecutive annual salaries. The final annual salary amount cannot exceed the prior year's salary plus the school's normal salary schedule increase. Compensation includes gross wages, extra work compensation, longevity pay, overtime pay, sick pay, holiday pay, and merit pay and does not include payments of unused sick or vacation time, bonuses, in-kind compensation, termination pay, expense reimbursements, payments in lieu of fringe benefits, or severance pay. *(Michigan Stat. Sec. 38.1303a; Sec. 38.1304(12); Sec. 38.1309)*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Automatic annual adjustment of 3%, non-compounded, if the retiree was in receipt for at least one year. For members employed before January 1, 1990, if investment return is greater than 8%, any investment return in excess of 8% is allocated on the basis of units, with units derived from the years of service credit and from the years since retirement, payable in a lump sum. *(Michigan Stat. Sec. 38-1404a)*

Member & Employer Contrib. Rates: Member contribution rate of 3.00% of the first $5,000 of covered salary, plus 3.60% of the next $10,000 of covered salary, plus 4.3% of covered salary in excess of $15,000; 9.40% of covered salary employer contribution rate. *(CAFR Financial Section, p. 26; Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$46,317,000,000 (2004)	NC	Undisclosed	Actuarial Method:	Entry age normal
Assets	38,784,000,000	Exp.	$75,517,985	Interest Assumption:	8.00%
UAL	$7,533,000,000	Amort.	Undisclosed	Salary Assumption:	Undisclosed
Ratio	83.7%	Total Req.	Undisclosed	*(Public Fund Survey Summary)*	

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the reserve for employee contributions, the reserve for employer contributions, the reserve for administrative expenses, the general fund, the reserve for member investment plan, the reserve for health benefits, the health advance funding subaccount, the reserve for retired benefit payments, the reserve for undistributed investment income, and the pension stabilization subaccount. The reserve for employee contributions is credited with service credit purchases and refund repayments. The reserve for employer contributions is credited with all employer contributions, except for health benefit payments, plus interest, and unclaimed amounts transferred from the reserve for employee contributions. The reserve for administrative expenses is credited with the administrative expense requirements of the plan transferred from the reserve for undistributed investment income. The general fund is credited with plan revenue not clearly payable to any other fund and is disbursed as directed by the retirement board. The reserve for member investment plan accumulates the member contributions to the optional retirement plan and interest. The reserve for health benefits accumulates employer contributions for the plan health benefits. The health advance funding subaccount is credited with employer health contributions once the reserve for health benefits is fully funded. The reserve for retired benefit payments is the source for benefit payments and is funded from transfers from the reserve for employer contributions. The reserve for undistributed investment income is credited with all plan investment earnings and funds interest transfers to other reserves. The pension stabilization subaccount is credited with the amount of assets of the plan in excess of full funding. *(Michigan Stat. Sec. 38-1329; Sec. 38.1330, Sec. 38-1331; Sec. 38-1332; Sec. 38-1333; Sec. 38-1334; Sec. 38-1335; Sec. 38-1336)*

Mississippi Public Employees Retirement System

Normal Retirement Age: Age 60 with 4 years of service credit; any age with 25 years of service credit. *(Mississippi Stat. Sec. 25-11-111)*

Early Retirement Age: No early retirement eligibility.

Reduction Factor/Amount: No early retirement reduction factors or amounts.

Benefit Taxation: Pension benefits paid at or after retirement age exempt. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.0% of final average compensation per year of service credit for each of the first 25 years of service credit and 2.5% of final average compensation per year of service credit for service in excess of 25 years of service. Minimum benefit of $10 per month per year of service credit. *(Mississippi Stat. Sec. 25-11-111)*

Mississippi Public Employees Retirement System

Final Average Salary: Average of 4 highest annual salaries for fiscal years, calendar years, a combination of fiscal years and calendar years that do not overlap, or final years. Compensation includes non-cash maintenance and up to 30 days of personal leave or medical leave. Compensation does not include employer-paid health or life insurance premiums. Increases within final 24 months are limited to 8% unless there was promotion or job change. *(Mississippi Stat. Sec. 25-11-5; Sec. 25-11-103; Board Regulation 33)*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Annual automatic adjustment of 3% per year of receipt, non-compounded, for full fiscal years in receipt before age 55 and of 3% per year of receipt, compounded, for full fiscal years in receipt after age 54, paid in a lump sum. *(Mississippi Stat. Sec. 25-11-112)*

Member & Employer Contrib. Rates: 7.25% of covered salary member contribution rate; 9.75% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$23,727,098,000 (2005)	NC	Undisclosed
Assets	17,180,705,000	Exp.	$10,442,000
UAL	$6,546,393,000	Amort.	Undisclosed
Ratio	72.40%	Total Req.	Undisclosed

Actuarial Method: Entry age normal
Interest Assumption: 8.00%
Salary Assumption: Range of 5.50% (with 5 years of service) to 7.00% (with 35 years of service)
(Public Fund Survey Summary)

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the annuity savings account, the annuity reserve, the employer's accumulation account, and the expense account. The annuity savings account accumulates member contributions and interest. The annuity reserve is the actuarial value of retirement benefits in force, including transfers from the annuity savings account upon retirement. The employer's accumulation account accumulates employer contributions and funds transfers upon retirement to the annuity reserve. The expense account is credited with legislative appropriations to meet administrative expenses of the system and a portion of employer contributions established for this purpose. *(Mississippi Stat. Sec. 25-11-123)*

Missouri Public School Retirement System

Normal Retirement Age: Age 60 with 5 years of service credit; any age with 30 years of service credit; any age when sum of age and service credit totals 80. *(Missouri Stat. Sec. 169.060.1.; Sec. 169.070.1.)*

Early Retirement Age: Any age with 25 years of service credit; age 55 with 5 years of service credit. *(Missouri Stat. Sec. 169.070.1.)*

Reduction Factor/Amount: With retirement at any age with 25 years of service credit, downsized benefit accrual rate of 1.59% with 29 years of service credit; 1.57% with 28 years of service credit; 1.55% with 27 years of service credit; 1.53% with 26 years of service credit; and 1.51% with 25 years of service credit. With retirement with 5 years of service credit, actuarial early retirement reduction. *(Missouri Stat. Sec. 169.460.2. & 3.)*

Benefit Taxation: Annual exclusion for pension benefits from state individual income tax of $6,000, reduced dollar for dollar by federal adjusted gross income, not including taxable Social Security amounts, in excess of $25,000 for single filers and $32,000 for married joint filers. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: No Social Security coverage by virtue of public employment. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.5% of final average salary per year of service credit for each year up to 31 years of service credit and 2.55% of final average salary per year of service credit for each year in excess of 30 years of service credit. *(Missouri Stat. Sec. 169.324.1.; Sec. 169.670.1.)*

Final Average Salary: Average of the 3 highest consecutive annual salaries. Compensation includes employer-paid health, dental, and vision insurance premiums. Any year in final average salary computation limited to increase greater than 20% of the prior year unless a promotion or job change is involved or unless the increase is part of school district-wide salary schedule adjustment. *(Missouri Stat. Sec. 169.010 (8) & (15); Sec. 169.270 (3) & (9))*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Annual automatic adjustment based on a determination of the cost of living of at least 2%, not to exceed 5% in any year, compounded, and not to exceed 80% accumulatively, payable when retiree has received benefit for either 2 years or 4 years minimum. *(Missouri Stat. Sec. 169.670.2. & 3.)*

Member & Employer Contrib. Rates: 11.00% of covered salary member contribution rate; 11.00% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$27,881,512,965 (2005)	NC	21.05%	$745,306,615
Assets	23,049,440,502	Exp.	0.16%	5,566,428
UAL	$4,832,072,463	Amort.	6.73%	238,285,678
Ratio	82.67%	Total Req.	27.94%	$751,111,329

Actuarial Method: Entry age normal
Interest Assumption: 8.00%
Salary Assumption: Range of 10.0% (under 3 years of service) to 5.0% (10 years of service and over)
(CAFR Actuarial Section, pp. 73, 75, 77, 79, 80, 81, & 84)

Missouri Public School Retirement System

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the employee's contribution fund and the general reserve fund. The employee's contribution fund accumulates member contributions and interest on those amounts. The general reserve fund contains the remainder of plan assets, including transfers from the employee contribution fund upon retirement. *(Missouri Stat. Sec. 169.350; Sec. 169.360; Sec. 169.370)*

Montana Teachers Retirement System

Normal Retirement Age: Age 60 with 5 years of service credit; any age with 25 years of service credit. *(MTRS Actuarial Valuation, p. 33; Montana Stat. Sec. 19-20-801)*

Early Retirement Age: Age 50 with 5 years of service credit. *(MTRS Actuarial Valuation, p. 33; Montana Stat. Sec. 19-20-802)*

Reduction Factor/Amount: Non-actuarial reduction factors of 0.5% per month under the normal retirement age during the initial 5 years under the normal retirement age and of 0.3% per month under the normal retirement age during the second 5 years under the normal retirement age. *(MTRS Actuarial Valuation, p. 33; Montana Stat. Sec. 19-20-802)*

Benefit Taxation: Annual exclusion from state individual income tax for pension benefits of $3,600 per person, with exclusion reduced by twice the amount of federal adjusted gross income in excess of $30,000. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 1.667% of final average compensation. Compensation in each year of the final average compensation computation may not exceed the prior year by more than 10% except for collectively bargained generally applicable increase, summer employment, employer change, or promotion. *(MTRS Actuarial Valuation, p. 33; Montana Stat. Sec. 19-20-804)*

Final Average Salary: Average of highest 3 consecutive years of earned compensation. Amounts normally excluded from earned compensation that have been converted and reported by the employer for at least 5 years before retirement are includable in the average. Earned compensation does not include maintenance, employer-paid insurance premiums, employee expense reimbursements, or non-cash benefits. Salary in any year of the final average salary may not exceed the prior year salary by more than 10% unless the salary increase is a result of collective bargaining, part of a general increase to whole class of teachers, a result of summer employment, a result of a change in employer, a result of a return from a break-in-service, or a result of a promotion. *(MTRS Benefit Plan Summary, pp. 10, 16, 17, & 18; Montana Stat. Sec. 19-20-101(3), (6), & (21))*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Automatic annual adjustment of 1.5%, compounded, payable to retirees in receipt for at least 3 years. The adjustment may be increased by the retirement board up to 3% per year compounded if the plan's required amortization period is less than 25 years, sufficient funds are available to fund at least a 0.1% increase and the additional adjustment does not extend the amortization period beyond 25 years. *(MTRS Actuarial Valuation Benefit Summary, p. 34; Montana Stat. Sec. 19-20-719)*

Member & Employer Contrib. Rates: 7.15% of covered salary member contribution rate; 7.58% of covered salary employer contribution rate. *(MTRS Actuarial Valuation Benefit Summary, p. 34)*

Most Recent Funded Condition & Actuarial Costs:

AL	$3,527,000,000 (2005)	NC	10.35%	$60,640,650	Actuarial Method:	Entry age normal
Assets	2,497,500,000	Exp.	0.26%	1,506,694	Interest Assumption:	7.75%
UAL	$1,029,500,000	Amort.	8.44%	49,449,960	Salary Assumption:	Range of 9.01% (general members with one year of service) to 4.50% (general members with over 21 years of service)
Ratio	70.81%	Total Req.	19.05%	$111,597,304		

(MTRS Actuarial Valuation, pp. 1, 6, 7, 14, 16, 17, 18, 22, 24, 26, & 27)

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the annuity savings fund, the pension accumulation fund, and the expense fund. The annuity savings fund accumulates member contributions and interest. The pension accumulation fund accumulates employer contributions, holds the reserves for all pension benefits, including transfers upon retirement of amounts from the annuity savings fund. The expense fund receives transfers from the pension accumulation fund to defray plan expenses. *(Montana Stat. Sec. 19-20-501; Sec. 19-20-605; Sec. 19-20-602)*

Nebraska Public Employees Retirement Systems-School System

Normal Retirement Age: Age 65 with 6 months of service credit; any age if sum of age and service credit totals 85. *(Nebraska Stat. Sec. 79-931; Sec. 79-934; 2005 Actuarial Valuation Summary of Plan Provisions)*

Early Retirement Age: Age 60 with 5 years of service credit; age 55 if the sum of age and service credit totals 85; any age with 35 years of service credit. *(Nebraska Stat. Sec. 79-931; Sec. 79-934)*

Nebraska Public Employees Retirement Systems-School System

Reduction Factor/Amount: Non-actuarial reduction factor of 3 % per year under age 65. Actuarial reduction of benefits payable before age 60, with reduction from age 65. *(Nebraska Stat. Sec. 79-934)*

Benefit Taxation: Pensions subject to state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.00% of final average earnings per year of service credit for member employed after July 1, 2001, or combination of money purchase annuity based on accumulated member contributions and annuity of $3.50 per month per year of service credit if it produces a higher benefit. *(Nebraska Stat. Sec. 79-333; Sec. 79-934)*

Final Average Salary: Average of highest 3 years of pensionable pay after July 1, 1968. Final average earnings do not include Retirement Incentive Plan or Staff Development Assistance payments. Compensation includes gross salaries, overtime pay or retroactive salary payments resulting from litigation, and does not include fraudulently received amounts, leave amounts converted to cash, expense reimbursements, bonuses or early retirement incentives. *(Nebraska Stat. Sec. 79-902 (30) & (35))*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Automatic annual adjustment of the percentage change in the CPI with a maximum of 2.5%. If the purchasing power of a retiree's benefit falls below 75% of the initial benefit amount, as measured using the CPI percentage increase, the benefit is adjusted to the 75% amount. *(Nebraska Stat. Sec. 79-947.01; Sec. 79-947.03; Sec. 79-947.04; Sec. 79-947.05)*

Member & Employer Contrib. Rates: 7.25% of covered salary member contribution rate; 8.02% of covered salary employer contribution rate. *(NPERS Actuarial Valuation Benefit Summary, p. 17)*

Most Recent Funded Condition & Actuarial Costs:

AL	$6,234,657,830 (2005)	NC	11.42%	$138,664,746	Actuarial Method:	Entry age normal
Assets	5,335,197,409	Exp.	Undisclosed		Interest Assumption:	8.00%
UAL	$899,460,421	Amort.	6.53%	79,289,036	Salary Assumption:	Range of 10.30% (age 20) to 4.50% (age 65)
Ratio	85.57%	Total Req.	17.95%	$217,953,782	*(NPERS Actuarial Valuation, pp. ii, iii, v, vi, 4, 5, 6, 11, 12, 22, & 25)*	

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the service annuity fund, the expense fund, and the contingent account. The service annuity fund is credited with state contributions to fund benefits for members with prior coverage by the Class V School Employees Retirement Act. The expense fund is funded from transfers from the contingent account and is the source for administrative expense payments. The school retirement fund accumulates state, employer, and member contributions and is the source for all retirement plan benefit payments. The contingent account facilitates the crediting of regular interest, to fund adjusted supplemental retirement benefits, and to cover special requirements of the school retirement fund or expense fund and is credited with the investment earnings of the retirement plan. *(Nebraska Stat. Sec. 79-966; Sec. 79-968; Sec. 79-971; Sec. 79-972.01; Sec. 79-973; Sec. 79-974)*

Nevada Public Employees Retirement System

Normal Retirement Age: Age 65 with 5 years of service credit; age 60 with 10 years of service credit; any age with 30 years of service credit. *(Nevada Stat. Sec. 286.510, Para. 1)*

Early Retirement Age: Any age with any service. *(Nevada Stat. Sec. 286.510, Para. 6)*

Reduction Factor/Amount: Non-actuarial reduction factor of 4% per year under age 65, or under age 60 with 10 years of service, or under 30 years of service credit. *(Nevada Stat. Sec. 286.510, Para. 6)*

Benefit Taxation: No state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: No Social Security coverage by virtue of public employment. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.5% of average compensation per year of service credit before July 1, 2001, and 2.67% of average compensation per year of service credit after June 30, 2001. The benefit may not exceed 90% and service credit may not exceed 36 years for a person first covered by the plan before July 1, 1985, and the benefit may not exceed 75% and service credit may not exceed 30 years for a person first covered by the plan after June 30, 1985. *(Nevada Stat. Sec. 286.551)*

Final Average Salary: Average of the highest 36 consecutive months of salary certified by the public employer. Compensation is the salary paid by the principal employer, longevity pay, shift differential pay, hazardous duty pay, holiday pay within a normal workweek, on-call pay, and extra assignment pay if it is standard practice. Compensation does not include employer-paid fringe benefit cost, overtime, and irregular additional payments. *(Nevada Stat. Sec. 286.025; Sec. 286.535; Sec. 286.551, Clause 2)*

Special Early Normal Retiremt Incentives: No early retirement incentive program currently in force.

Nevada Public Employees Retirement System

Post-Retirement Adjustments: Automatic annual compounding adjustment of the lesser of the increase in the CPI for the last 3 years or different index substituted by the board or 2.00% for retirees in benefit receipt for at least 3 years, 3.00% for retirees in benefit receipt for at least 6 years, 3.50% for retirees in benefit receipt for at least 9 years, 4.00% for retirees in benefit receipt for at least 12 years, and 5.00% for retirees in benefit receipt for at least 14 years. *(Nevada Stat. Sec. 286.575; Sec. 286.5765; Sec. 286.577; Sec. 286.5775; Sec. 286.578; Sec. 286.5785; Sec. 286.579)*

Member & Employer Contrib. Rates: 10.31% of covered salary member contribution rate; 10.31% of covered salary employer contribution rate. Member contributions can be assumed by the employing unit rather than receive pay increases. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$18,744,127,000 (2005)	NC	Undisclosed	Actuarial Method:	Entry age normal
Assets	14,492,171,000	Exp.	Undisclosed	Interest Assumption:	8.00%
UAL	$4,251,956,000	Amort.	Undisclosed	Salary Assumption:	Undisclosed
Ratio	77.3%	Total Req.	Undisclosed	*(Public Fund Survey Summary)*	

Retirement Fund & Account Structure: The plan has a retirement fund to which are credited all member and employer contributions and investment earnings and has an administrative fund in which are deposited all administrative fees charged against the various retirement funds managed by the retirement system. The retirement board is authorized to establish a fund to cover benefits in excess of the limitations in the federal Internal Revenue Code, Section 415. *(Nevada Stat. Sec. 286.220; Sec. 286.230; Sec. 286.241)*

New Hampshire Retirement System

Normal Retirement Age: Age 60 with any service credit. *(New Hampshire Stat. Sec. 100-A:5 I)*

Early Retirement Age: Age 50 with 10 years of service credit; any age with 20 years of service credit if the sum of age and service credit totals 70. *(New Hampshire Stat. Sec. 100-A:5 I)*

Reduction Factor/Amount: Non-actuarial reduction factor of 1.5% per year under age 60 with 35 years of service credit; 3% per year under age 60 with 30 years of service credit; 4% per year under age 60 with 25 years of service credit; 5% per year under age 60 with 20 years of service credit; and 6.75% per year under age 60 with less than 20 years of service credit. *(New Hampshire Stat. Sec. 100-A:5 I)*

Benefit Taxation: Earnings on retirement plans are exempt from state tax on interest and dividends. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 1.667% of average final compensation per year of service credit for retirements occurring under age 65 and 1.515% of average final compensation per year of service credit for retirements occurring over age 64. *(New Hampshire Stat. Sec. 100-A:5 I)*

Final Average Salary: Average of highest 3 years of creditable service salary. Earnable compensation includes overtime pay, vacation pay, sick pay, longevity pay, severance pay, extracurricular activity pay, and the fair market value of non-cash compensation if subject to federal taxation. Compensation of final 12 months limited to 150% of prior 12 months' compensation. Earnable compensation also excludes payments occurring 120 days after retirement or later. *(New Hampshire Stat. Sec. 100-A:1 XVII & XVIII)*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Ad hoc adjustments provided to retirees in receipt of a benefit for at least one year as approved by the fiscal committee of the legislature. Compounding adjustments have been granted every year during the past decade, have averaged 3.28%, and have ranged from 1.00% (2006) to 5.00% (1997). Adjustments generally are funded from a special account that is credited excess investment performance. *(NHRS Newsletter, Summer 2006)*

Member & Employer Contrib. Rates: 5.90% of covered salary member contribution rate; 4.06% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$2,404,673,066 (2005)	NC	12.79%	$108,927,802	Actuarial Method:	Aggregate
Assets	1,644,557,691	Exp.	0.23%	1,958,827	Interest Assumption:	8.00%
UAL	$760,115,375	Amort.	1.14%	9,708,967	Salary Assumption:	Range of 13.00% (at age 25) to 6.25% (over age 39)
Ratio	68.39%	Total Req.	14.16%	$120,595,597	*(2005 NHRS Actuarial Valuation, Sec. 1, & pp. 3, 14-18, 22, 23, 25, 37, B-3, B-4, & B-8)*	

New Hampshire Retirement System

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the member annuity savings fund, the state annuity accumulation fund, the special account for additional benefits, and the Section 401(h) subtrust medical special account. The member annuity savings fund accumulates member contributions and interest and the appropriate portion of the fund is transferred to the state annuity accumulation fund upon a member's retirement. The state annuity accumulation fund accumulates reserves for state annuities payable from employer contributions. The special account for additional benefits primarily accumulates investment earnings in excess of the assumed rate plus 0.5% and is used to provide supplemental post-retirement adjustments. The Section 401(h) subtrust is credited with a portion of employer contributions and is used to pay post-retirement medical-health insurance benefits. *(New Hampshire Stat. Sec. 100-A:15; Sec. 100-A:16; Sec. 100-A:17; Sec. 100-A:52-a; Sec. 100-A:53b)*

New Jersey Teachers Pension and Annuity Fund

Normal Retirement Age: Age 60 with any service credit; age 55 with 25 years of service credit. *(New Jersey Stat. Sec. 18A:66-43; Public Fund Survey Summary; NJTPAF Website Benefit Plan Summary)*

Early Retirement Age: Any age with 25 years of service credit. *(NJTPAF Website Benefit Plan Summary)*

Reduction Factor/Amount: Non-actuarial reduction factor of 3% per year under age 60. *(NJTPAF Website Benefit Plan Summary)*

Benefit Taxation: Exclusion for pension plan benefits, other than exempt military pensions, from state individual income tax of $20,000 for married joint filers and $15,000 for single filers over age 61 or if disabled. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 1.8182% of final average salary per year of service credit. *(New Jersey Stat. Sec. 18A:66-44)*

Final Average Salary: Average of highest 3 years of service credit salary. Compensation is teacher's contractual salary and excludes individual salary adjustments in anticipation of retirement, temporary duty pay, or extracurricular activity pay. *(New Jersey Stat. Sec. 18A:66-2, Para. d & Para. f)*

Special Early Normal Retiremt Incentives: Early retirement incentive programs previously in force in 1991-1992, 1993-1994, and 1997. State law prohibits employers participating in a statewide retirement plan from establishing early retirement incentive programs not authorized by law. Public Laws 1999, Chapter 59, permits local government units entering into joint service provision agreements or consolidating to offer affected full-time employees with cash payments, annuity purchase, employer contributions to deferred compensation, continuation of health insurance coverage, or service credit purchase in retirement plan to induce early retirement. Public Laws 2000, Chapter 126, permitted counties to offer the same incentive even without a joint service agreement. The applicable employing unit is obligated to pay the actuarial cost of an early retirement incentive. *(New Jersey Public Laws 1999, Ch. 59; New Jersey Public Laws 2000, Ch. 126)*

Post-Retirement Adjustments: Automatic annual adjustment equal to 60% of the percentage increase of the CPI, compounded. The adjustment is payable to retirees in receipt of benefits for at least 2 years. One-half of the adjustment amount is payable by the employer and one-half by the pension fund, unless the total adjustment is greater than 10%, whereupon the amount payable by the pension fund is limited to 5%. *(New Jersey Stat. Sec. 18A:66-126.1; Sec. 18A:66-126.2; Sec. 18A:66-126.3; Sec. 18A:66-126.4; Sec. 18A:66-126.5; Sec. 18A:66-126.6; Sec. 18A:66-126.7)*

Member & Employer Contrib. Rates: 5.00% of covered salary member contribution rate; calculated equivalent 5.63% of covered salary employer contribution rate, with 90% of the contribution funding post-retirement medical benefits, with estimate derived from plan annual financial report. *(CAFR Financial Statement Notes, p. 23)*

Most Recent Funded Condition & Actuarial Costs:

AL	$40,447,690,339 (2004)	NC	Undisclosed	Actuarial Method:	Unit credit
Assets	34,633,790,549	Exp.	$5,473,280	Interest Assumption:	8.25%
UAL	$5,813,899,790	Amort.	Undisclosed	Salary Assumption:	Range of 6.60% (4-15 years of service) to 4.40% (over 30 years of service)
Ratio	85.63%	Total Req.	Undisclosed	*(CAFR Actuarial Section, pp. 131, 134, 135, 164)*	

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the contingent reserve fund, the annuity savings fund, the retirement reserve fund, the pension fund, the special reserve fund, the interest fund, the benefit enhancement fund, the members' death benefit fund, the contributory group insurance premium fund, and the post-retirement medical premium fund. The contingent reserve fund accumulates the state and employer contributions and bears the accrued liability of the plan. The annuity savings fund accumulates member contributions. The retirement reserve fund exists to pay retirement benefits and is funded from transfers from the annuity savings fund upon retirement and from required amounts from the contingent reserve fund. The pension fund relates to pre-1971 teachers and pre-1956 retirees. The interest fund accumulates investment earnings and is used to allocate interest to other funds. The special reserve fund accumulates investment earnings in excess of the regular interest rate up to 1% of the book value of the total retirement plan. The benefit enhancement fund exists to fund the funding requirements of 2001 and was funded from then-existing excess assets. The members' death benefit fund exists to fund additional death benefits. The contributory group insurance premium fund accumulates excess premium amounts. The post-retirement medical fund exists to pay post-retirement medical benefits and is funded from a portion of employer contributions. *(New Jersey Stat. Sec. 18A:66-16; Sec. 18A:66-18; Sec. 18A:66-18.1; Sec. 18A:66-19; Sec. 18A:66-21; Sec. 18A:66-22; Sec. 18A:66-24; Sec. 18A:66-25; Sec. 18A:66-26; Sec. 18A:66-27; Sec. 18A:66-71.3; Sec. 18A:66-77)*

New Mexico Educational Retirement Plan

Normal Retirement Age: Age 65 with 5 years of service credit; any age with 25 years of service credit; age 60 if the sum of age and service credit totals 75. *(New Mexico Stat. Sec. 22-11-23)*

Early Retirement Age: Any age if the sum of age and years of service credit totals 75. *(New Mexico Stat. Sec. 22-11-23)*

Reduction Factor/Amount: Non-actuarial reduction factor if the retiree is under age 60 and has less than 25 years of service credit of 2.4% per year under age 60 and 7.2% per year under age 55. *(NMERP Active Member Handbook)*

Benefit Taxation: Pensions subject to state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.35% of final average salary per year of service credit. *(New Mexico Stat. Sec. 22-11-30)*

Final Average Salary: Average of annual earnings for last 20 quarters preceding retirement or last 20 consecutive quarters in which there were covered earnings. Salary is compensation or wages for services rendered and includes annual leave, sick leave, and additional services compensation, but excludes unused sick leave equivalent payments and expense reimbursements. *(New Mexico Stat. Sec. 22-11-2 X; Sec. 22-11-21.2; Sec. 22-11-30 H.; Sec. 2.82.5.20 D.)*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Automatic annual adjustment equal to one-half of the percentage increase in the CPI over the preceding year, not to exceed 4%, and not less than 2%, compounded, payable to retirees who are at least age 65 or in receipt of benefits for one year. *(New Mexico Stat. Sec. 22-11-31; Sec. 22-11-32)*

Member & Employer Contrib. Rates: 7.60% of covered salary member contribution; 8.65% of covered salary employer contribution. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$10,591,808,489 (2005)	NC	13.56%	$299,558,533	Actuarial Method:	Entry age normal
Assets	7,457,545,398	Exp.	0.24%	5,320,667	Interest Assumption:	8.00%
UAL	$3,134,263,091	Amort.	6.61%	146,023,739	Salary Assumption:	Rang of 13.50% to 5.00%
Ratio	70.41%	Total Req.	20.41%	$450,902,939	*(CAFR Actuarial Section, pp. 56-59, 61, 63, 65-67, 71, & 72)*	

Retirement Fund & Account Structure: A single retirement trust fund exists for the retirement plan except for post-employment health insurance benefits, which are provided through the retiree health care fund. *(CAFR Financial Section, p. 33)*

New York State Teachers Retirement System

Normal Retirement Age: Age 55 with 5 years of service credit; any age with 35 years of service credit if employed before July 1, 1973; age 55 with 30 years of service credit; age 62 with 5 years of service credit if employed after June 30, 1973. *(New York Education Law, Sec. 510; CAFR Financial Section, p. 31)*

Early Retirement Age: Any age with 5 years of service credit if employed before July 27, 1976; age 55 with 5 years of service credit if employed after July 26, 1976. *(New York Education Law, Sec. 510; CAFR Financial Section, p. 31)*

Reduction Factor/Amount: Non-actuarial reduction factor of 5% per year that total service is less than 20 years of service if employed before July 1, 1973; non-actuarial reduction factor of 6% per year that age is under age 62 and of 3% per year that age is under age 60 if employed after June 30, 1973. *(NYSTRS Website, "Pensions Calculation" Section)*

Benefit Taxation: New York state and local pension plan benefits exempt from state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: If employed before July 26, 1976, 1.8% of final average salary per year of service rendered before 1959, 2.00% of final average salary per year of service rendered after 1958, and 1.00% of final average salary per year of prior out-of-state service credit. If employed between July 27, 1976, and August 31, 1983, 1.67% of final average salary per year of service with less than 20 years of service credit or 2.0% of final average salary per year of service with between 20 and 30 years of service. If employed after August 30, 1983, 1.67% of final average salary per year of service with less than 20 years of service credit, 2.0% of final average salary per year of service credit with between 20 and 30 years of service credit, and 1.50% of final average salary per year of service credit in excess of 30 years of service credit. *(NYSTRS Website, "Pensions Calculation" Section)*

New York State Teachers Retirement System

Final Average Salary: Average of the 3 highest consecutive years of service salary. Compensation is the regular salary earned by a member and excludes termination payments and non-regular compensation. If employed before July 1, 1973, any salary used may not exceed the prior year by more than 20%. If employed after June 30, 1973, and before July 26, 1976, any salary used may not exceed the average of the prior 2 years salaries by more than 20%. If employed after July 25, 1976, any salary used may not exceed the average of the prior 2 years salaries by more than 10%. *(New York Education Law, Sec. 501, Para. 11; Board Rules Sec. 5003.1; Sec. 5003.2; Sec. 5003.3; Sec. 5003.4; Sec. 5003.5)*

Special Early Normal Retiremt Incentives: Article 19, Benefit Enhancement Additional Service Credit, allows a teacher first employed before July 27, 1976 and has at least 20 days of service credit during any one school year on or after July 1, 1992 to obtain at retirement 2 additional months of service credit with 2 to 2½ years of service credit, scaling up to 2 additional years of service credit with more than 22.5 years of service credit. This incentive has no time window and was enacted in 2000. Also, a 2002 early retirement incentive program allowed all teachers hired after June 30, 1973 who are age 55 with 25 years of service credit to retire early without a reduction if an active teacher on February 1, 2002, remaining in active service through the end of the 2002 school year and retires before September 1, 2002. Alternatively, school districts can offer teachers age 50 with 10 years of service credit or age 55 with at least 5 years of service credit, active on February 1, 2002, and teaching through the end of the school year one month of additional service credit for each year of service credit at retirement, to a maximum of 3 years of service credit. *(NYSTRS Website, Article 19, and 2002 Retirement Incentive Sections)*

Post-Retirement Adjustments: Ad hoc adjustments before 2001. Automatic annual adjustment equal to 50% of the CPI percentage increase over the prior year, with a minimum of 1% and a maximum of 3%, payable on a benefit up to $18,000, and payable to retirees who are at least age 62 and in receipt of benefits for at least 5 years, or who are at least age 55 and in receipt of benefits for at least 10 years, to disabilitants in receipt of benefits for at least 5 years, and to accidental death benefit recipients in receipt for at least 5 years. *(New York Education Law, Sec. 532; Sec. 532-a)*

Member & Employer Contrib. Rates: No member contribution if employed prior to July 27, 1976; 3.00% of covered salary member contribution rate if employed after July 26, 1976; 5.63% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$72,604,900,000 (2005)	NC	Undisclosed	Actuarial Method:	Aggregate
Assets	72,044,385,000	Exp.	$40,309,000	Interest Assumption:	8.00%
UAL	$560,515,000	Amort.	Undisclosed	Salary Assumption:	Range of 11.53% (males at age 25) to 4.38% (males at age 55)
Ratio	99.2%	Total Req.	Undisclosed	*(Public Fund Survey Summary; CAFR Retirement Section, pp. 67-70)*	

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the annuity savings fund, the annuity reserve fund, the pension accumulation fund, the pension reserve fund, the supplemental retirement allowance fund, and the expense fund. Administratively established funds or reserves are the group life insurance fund and the CO-ESC member contribution fund. The annuity savings fund accumulates member contributions for members employed before July 26, 1976, with a transfer to the annuity savings fund upon retirement. The annuity reserve fund accumulates reserves for the payment of some pension benefits and bears some of the actuarial liability of the pension plan. The pension accumulation fund contains the reserves for benefits for members employed after 1976 and that are not payable from the supplemental retirement allowance fund or the group life insurance fund. The pension reserve fund is the fund for the payment of benefits from reserves transferred from the pension accumulation fund. The supplemental retirement allowance fund exists to provide the supplemental retirement allowance paid to pre-1994 retirees. The expense fund exists for the payment of plan expenses, with expected investment expenses paid from investment earnings and with expected administrative expenses payable by the commissioner of education. The group life insurance fund provides a group term death benefit. The CO-ESC member contribution fund accumulates the member contributions for some more recent plan entrants. *(New York Education Law, Sec. 515; Sec. 516; Sec. 517; Sec. 518; Sec. 518-a; Sec. 519)*

North Carolina Teachers and State Employees Retirement System

Normal Retirement Age: Age 65 with 5 years of service credit; age 60 with 25 years of service credit; any age with 30 years of service credit. *(North Carolina Stat. Sec. 135-5)*

Early Retirement Age: Age 50 with 20 years of service credit; age 60 with 5 years of service credit. *(North Carolina Stat. Sec. 135-5)*

Reduction Factor/Amount: Non-actuarial reduction factor of 3% per year under age 65 with 25 years of service credit or 5% per year under age 60 and per year under 30 years of service credit. *(North Carolina Stat. Sec. 135-5)*

Benefit Taxation: Annual state individual income tax exclusion for public retirement plan benefits of $4,000 per person. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 1.82% of average final compensation per year of service credit. *(North Carolina Stat. Sec. 135-5)*

Final Average Salary: Average of the 4 highest years of service salary. Compensation means all salaries and wages, performance-based compensation, conversion of benefits to salary, payment of tax consequences for employer-provided benefits, and vacation leave payments. Covered compensation does not include expense reimbursements, terminal payments of unused sick leave, additional benefit supplements, retirement bonuses, early retirement incentives, contract buy-outs, and severance payments. *(North Carolina Stat. Sec. 135-1; Paras. (5), (7a), & (9))*

North Carolina Teachers and State Employees Retirement System

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Ad hoc adjustments based on legislative enactments. *(NCTSERS/No. Car. Treasurer Website, Increases in Your Benefit After Retirement Section)*

Member & Employer Contrib. Rates: 6.00% of covered salary member contribution rate; 2.34% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$43,827,854,000 (2005)	NC	Undisclosed	Actuarial Method:	Entry age normal
Assets	47,383,509,000	Exp.	Undisclosed	Interest Assumption:	7.25%
UAL	($3,555,655,000)	Amort.	Undisclosed	Salary Assumption:	Undisclosed
Ratio	108.11%	Total Req.	Undisclosed	*(Public Fund Survey Summary)*	

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the annuity savings fund, the annuity reserve fund, the pension accumulation fund, the pension reserve fund, and the retiree health benefit fund. The annuity savings fund accumulates the member contributions and is transferred to the pension accumulation fund upon retirement. The pension accumulation fund accumulates all reserves for benefits and employer contributions and the annuity reserve fund and pension reserve fund were merged into the pension accumulation fund in 1959. The retiree health benefit fund accumulates employer contributions for health coverage and investment earnings on those assets. *(North Carolina Stat. Sec. 135-7; Sec. 135-8; Sec. 135-39.6)*

North Dakota Teachers Fund For Retirement

Normal Retirement Age: Age 65 with 3 years of service credit; any age when the sum of age and service credit equals 85. *(North Dakota Stat. Sec. 15-39.1-10)*

Early Retirement Age: Age 55 with 3 years of service credit. *(North Dakota Stat. Sec. 15.39.1-12)*

Reduction Factor/Amount: Non-actuarial reduction factor of 6% per year under age 65 or under the "Rule of 85." *(North Dakota Stat. Sec. 15.39.1-12; NDTFFR Member Handbook, "Eligibility for Benefits" Section)*

Benefit Taxation: Annual state individual income tax exclusion for retirees of 3 North Dakota public pension plans of $5,000, reduced by the amount of Social Security benefits. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.00% of final average salary per year of service credit. *(North Dakota Stat. Sec. 15-39.1-10, Para. 2)*

Final Average Salary: Average of 3 highest salary fiscal years of service credit. Salary is earnings for regular teaching service and extracurricular activities and includes service or performance bonuses other than retirement-related bonuses, employer-paid fringe benefits, unused leave payments, severance pay, early retirement incentive payments, recruitment bonuses, or other payments determined ineligible by the retirement board. *(North Dakota Stat. Sec. 15-39.1-04, Clause 9; Sec. 15-39.1-10, Para. 2)*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Ad hoc adjustments based on legislative enactments. *(North Dakota Stat. Sec. 15-39.1-10.1; Sec. 15-39.1-10.2; Sec. 15-39.1-10.4; Sec. 15-39.1-10.5; Sec. 15-39.1-10.7)*

Member & Employer Contrib. Rates: 7.75% of covered salary member contribution rate; 7.75% of covered salary employer contribution rate. *(CAFR Actuarial Section Benefits Provision Summary, p. 118)*

Most Recent Funded Condition & Actuarial Costs:

AL	$1,965,200,000 (2005)	NC	11.31%	$43,436,378	Actuarial Method:	Entry age normal
Assets	1,469,700,000	Exp.	0.49%	1,881,859	Interest Assumption:	8.00%
UAL	$495,500,000	Amort.	8.56%	32,874,925	Salary Assumption:	Range of 14.00% (under one year of service) to 4.50% percent (over 14 years of service)
Ratio	74.8%	Total Req.	20.36%	$78,193,162	*(CAFR Actuarial Section, pp. 108, 109, 110, 111, 112, 115, 117)*	

Retirement Fund & Account Structure: The retirement plan has a single retirement trust fund. *(CAFR Financial Section, pp. 27, 28, & 40)*

Ohio State Teachers Retirement System

Normal Retirement Age: Age 65 with 5 years of service credit; any age with 30 years of service credit. *(Ohio Stat. Sec. 3307.58)*

Ohio State Teachers Retirement System

Early Retirement Age: Age 55 with 25 years of service credit; age 60 with 5 years of service credit. *(Ohio Stat. Sec. 3307.58)*

Reduction Factor/Amount: Non-actuarial reduction factors of 3% between age 64 and age 65; 2% between age 63 and age 64 with 29 years of service credit; 3% between age 63 and age 64 with 28 or fewer years of service credit; 3% between age 62 and age 63 with 28 or fewer years of service credit; 1% between ages 58 and 62 with 28 years of service credit; 3% between age 61 and age 62 with 27 or fewer years of service credit; 3% between age 60 and age 61 with 27 or fewer years of service credit; 5% between age 59 and age 60 with 26 years of service credit; 5% younger than age 59 with 25 or fewer years of service credit. *(Ohio Stat. Sec. 3307.58)*

Benefit Taxation: An annual state individual income tax credit from $25 to $200, based on the retirement income received. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: No Social Security coverage by virtue of public employment. (Public Funds Survey Summary)

Benefit Accrual Rates: 2.20% of final average salary per year of service credit. *(Ohio Stat. Sec. 3307.58)*

Final Average Salary: Average of the 3 highest years of compensation during service credit rendered. Salary in the highest 2 years in excess of the highest percentage increase during any of the 3 years preceding the averaging period or the percentage increase generally applicable to members of the respective employing unit is not includable in the average. Compensation means all salary paid by reason of teaching employment, including a supplemental contract. Compensation does not include unused leave payments, the cost of employer-paid benefit coverage, the value of incidental in-kind benefits of employment, payments in return for a waiver of rights, retroactive pay increases, or payments attributable to retirement. *(Ohio Stat. Sec. 3307.01(h); Sec. 3307.50.1; Board Rule 3307:1-4-01)*

Special Early Normal Retiremt Incentives: Employing units are permitted to offer early retirement incentive in the form of a service credit purchase by the employer for teachers who are at least age 50, agrees to retire, and does retire. The service credit purchase may not exceed 5 years of service credit or one-fifth of the person's total service, whichever is less. The employer can set a percentage limit on the number of purchases per year, but not less than 5%, and may specify the length of the option, but not less than one year. The purchase is at the actuarial liability increase as determined by the retirement plan actuary. *(Ohio Stat. Sec. 3307.54)*

Post-Retirement Adjustments: Automatic annual adjustment, not compounded, of 3% of the originally paid benefit amount, payable to retirees in benefit receipt for at least one year. *(Ohio Stat. Sec. 3307.67; Board Rule 3307:1-10-01)*

Member & Employer Contrib. Rates: 10.00% of covered salary member contribution rate; 14.00% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$77,100,037,000 (2005)	NC	Undisclosed	Actuarial Method:	Entry age normal
Assets	57,048,493,000	Exp.	$63,705,000	Interest Assumption:	8.00%
UAL	$20,051,544,000	Amort.	Undisclosed	Salary Assumption:	Range of 10.45% (age 20) to 3.85% (age 70)
Ratio	73.99%	Total Req.	Undisclosed	*(Public Fund Survey Summary)*	

Retirement Fund & Account Structure: Statutory funds, reserves, or accounts are the teachers' savings fund, the employers' trust fund, the annuity and pension reserve fund, the survivors' benefit fund, the guarantee fund, the expense fund, and the defined contribution fund. The teachers' savings fund accumulates member contributions and transfers individual account balances upon retirement to the annuity and pension reserve fund. The employers' trust fund is the depository for employer contributions, with transfers to the annuity and pension reserve fund upon retirement. The survivors' benefit fund is the source for survivor benefits and is funded from transfers from the employers' trust fund. The guarantee fund is credited with interest and allocates investment earnings. The expense fund is used to defray administrative and management expenses. The defined contribution fund accumulates member deductions for the board-established defined contribution plan. *(Ohio Stat. Sec. 3307.14; Sec. 3307.141)*

Oklahoma Teachers Retirement System

Normal Retirement Age: Any age when sum of age and service credit totals 80 if employed before July 1, 1992; any age when sum of age and service credit totals 90 if employed after June 30, 1992; age 62 with 5 years of service credit. *(Oklahoma Rule Sec. 715:10-15-1; Sec. 715:10-15-2); Oklahoma Stat. Sec. 70-17-105)*

Early Retirement Age: Age 55 with 5 years of service credit. *(Oklahoma Stat. Sec. 70-17-105)*

Reduction Factor/Amount: Non-actuarial reduction factors of 6.67% per year between ages 60 and 62; 6.66% between age 59 and age 60; 4.77% between age 58 and age 59; 4.85% between age 57 and age 58; 4.43% between age 56 and age 57; and 4.06% between age 55 and age 56. *(Oklahoma Rule Sec. 715:10-15-2)*

Benefit Taxation: Annual state individual income tax exclusion for public retirement plan benefits of $7,500. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Oklahoma Teachers Retirement System

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.00% of a limited final average compensation amount (either $40,000 or $25,000, depending on a member election before 1995) per year of service credit prior to July 1, 1995, and 2.00% of an unlimited final average compensation amount per year of service credit after June 30, 1995. *(Oklahoma Stat. Sec. 70-17-105; Oklahoma Rule Sec. 715:10-15-7)*

Final Average Salary: Average of highest 3 years salary for which service credit was rendered for pre-July 1, 1992, members or average of highest 5 years salary for which service credit was rendered for post-June 30, 1992, members. *(Oklahoma Rule Sec. 715:10-15-7.1; Oklahoma Stat. Sec. 70-17-101, Clauses (14), (15), & (28); Sec. 70-17-105)*

Special Early Normal Retiremt Incentives: Early retirement incentive program for teachers who were employed before July 1, 1995 and who worked one year beyond the attainment of age 62 or reach the "Rule of 80" if pre-July 1, 1992 hiree or the "Rule of 90" of post-June 30, 1992 hiree, entitling the teacher to move 2 years of service credit from the pre-1995 salary cap to the post-1995 salary figure, per year of service after the trigger retirement eligibility, with additional member contribution. *(2006 Special Legislative Session, House Bill 1179xx)*

Post-Retirement Adjustments: Ad hoc adjustments based on legislative enactments. The last ad hoc adjustment occurred in 2004, with increases ranging from 2.5% for retirees with fewer than 15 years of service and a monthly benefit in excess of $1,500 to 4.5% for retirees with 20 or more years of service and a monthly benefit less than $1,500. *(TRSO 2005 Actuarial Valuation, Appendix II, p. 48)*

Member & Employer Contrib. Rates: 7.00% of covered salary member contribution rate; 13.00% of covered salary employer contribution rate. *(TRSO 2005 Actuarial Valuation, Appendix I, p. 37)*

Most Recent Funded Condition & Actuarial Costs:

AL	$14,052,434,061 (2005)	NC	10.52%	$334,027,002	Actuarial Method:	Entry age normal
Assets	6,952,687,592	Exp.	0.21%	6,713,569	Interest Assumption:	7.5%
UAL	$7,099,746,469	Amort.	21.04%	574,609,607	Salary Assumption:	Range from 6.00% to 4.25%
Ratio	49.5%	Total Req.	31.77%	$915,350,178		

(TRSO 2005 Actuarial Valuation, Section A, p. 1; Section C, p. 3; Section H; Section J, Tables 1, 2, 3, 4c, 5a, 6a, 6b, 7, 12a, Appendix IV)

Retirement Fund & Account Structure: Statutory funds, reserves, or accounts are the teachers savings fund, the retirement benefit fund, the interest fund, the permanent retirement fund, the expense fund, the suspense fund, the reserve for investment fluctuations fund, the teachers' deposit fund, the membership annuity reserve fund, the retiree medical benefit fund, and the tax-sheltered annuity fund. The teachers' savings fund accumulates regular member contributions and interest earnings before July 1, 1998, and funds transfers to the retirement benefit fund upon each retirement. The retirement benefit fund consists of the assets needed to make retirement payments to retirees. The interest fund facilitates the allocation of investment earnings among other funds. The permanent retirement fund consists of accumulated gifts, awards, and bequests and also transfers from the suspense fund and functions as a permanent endowment for the retirement system. The expense fund defrays the system administrative and maintenance expenses and is funded from interest fund transfers, from dedicated revenue, and from legislative appropriations. The suspense fund receives transfers representing retirement obligations that cannot be legally discharged. The reserve for investment fluctuations fund is credited with 8% of investment returns until the accumulation reaches 2% of the total assets of the system and is paid out to other funds to reimburse deficits. The teachers' deposit fund accumulates voluntary member contributions under Internal Revenue Code Section 403(b). The membership annuity reserve fund is the accumulated member and state contributions for members retiring before August 2, 1968. The retiree medical benefit fund is a subaccount of the retirement benefit fund and is used to pay monthly retiree health insurance benefits. *(Oklahoma Stat. Sec. 70-17-107; Sec. 70-17-108)*

Oregon Public Employees Retirement System

Normal Retirement Age: Age 58 with 5 years of service credit; any age with 30 years of service credit if employed before January 1, 1996; age 60 with 5 years of service credit; any age with 30 years of service credit; age 65 with any service if employed after December 31, 1995. *(Oregon Stat. Sec. 238.005, Para. (14); Sec. 238.280)*

Early Retirement Age: Age 55 with any service. *(Oregon Stat. Sec. 238.280)*

Reduction Factor/Amount: Actuarial equivalent of the pension payable at the normal retirement age. *(2003 Actuarial Valuation Benefit Plan Summary, p. 39)*

Benefit Taxation: Oregon state and local pension plan benefits earned from service before October 1, 1991, exempt from state individual income tax. State individual income tax credit of up to 9% of retirement benefit allowed for individuals with household income less than $22,500 single or $45,000 married joint if over age 61 and Social Security is less than $7,500 or $15,000 joint. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 1.67% of final average salary per year of service credit. *(Oregon Stat. Sec. 238.300)*

Oregon Public Employees Retirement System

Final Average Salary: Average of the last 36 consecutive months of service credit salaries or the average of 3 consecutive calendar years of highest salary. Overtime salary amounts are included if they do not exceed the average hours of overtime for the same class of employees. Salary does not include expense reimbursement, employer-paid insurance premiums, payment of unused sick leave, accelerated payment of future wages, or domestic partner insurance premiums. *(Oregon Stat. Sec. 238.005, Paras. (8) & (21))*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Automatic annual adjustment equal to the percentage increase or decrease in the CPI over the prior 12 months, not to exceed 2%, compounded, but decrease is limited to the amount of the original benefit, payable to any retiree. 2003 legislation attempted to suspend the adjustment, but the legislation was overturned in Strunk v. PERS in 2005 and in City of Eugene v. PERS in 2005. *(Oregon Stat. Sec. 238.360)*

Member & Employer Contrib. Rates: No member contribution; 11.11% of covered salary employer contribution rate for school districts. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$49,240,000,000 (2005)	NC	4.30%	$291,196,000	Actuarial Method:	Entry age normal
Assets	44,660,000,000	Exp.	0.64%	43,238,460	Interest Assumption:	8.00%
UAL	$4,580,000,000	Amort.	10.50%	711,060,000	Salary Assumption:	Range of 6.50% (with 5 years of service) to 4.50% (with 20 years of service)
Ratio	90.70%	Total Req.	15.44%	$1,045,494,460	*(CAFR Actuarial Section, pp. 60-63)*	

Retirement Fund & Account Structure: Reserves and designations established by the system are the member reserve, the employer contribution designation, the benefit reserve, the undistributed investment earnings designation, the contingency reserve, the employer contingency reserve, the capital preservation reserve, the unallocated earnings designation, the deficit reserve, the pending designation, the retirant health insurance account, the retiree health insurance premium account, and the standard retiree health insurance account. The member reserve accumulates member contributions and investment earnings and funds transfers to the benefit reserve upon retirement. The employer contribution designation accumulates employer contributions and earning allocations and funds transfers to the benefit reserve upon retirement. The benefit reserve exists to pay benefits from transferred contributions and accrued investment earnings. The undistributed investment earnings designation is credited with investment earnings in excess of required minimum interest distributions. The contingency reserve is intended to prevent cash flow problems relating to interest fluctuations, mortality changes, or other unforeseen contingencies. The employer contingency reserve exists to prevent a deficit from the insolvency of an employer. The capital preservation reserve is used to offset capital investment losses. The unallocated earnings designation is the January through June annual net investment earnings pending a subsequent distribution. The deficit reserve is the unfunded liability for certain member account credits under a pre-2003 law. The pending designation is a 2004 calendar year earnings amount not distributed due to pending litigation. The retirant health insurance account is the accumulated employer contributions and investment earnings for the health insurance program. The retiree health insurance premium account exists to fund the retiree health insurance program. The standard retiree health insurance account represents the retiree contributions and investment earnings for the standard retiree health insurance program. *(CAFR Financial Section, pp. 27-28; Oregon Stat. Sec. 238.485; Sec. 238.670; Sec. 238.696; Sec. 238.615)*

Pennsylvania Public School Employees Retirement System

Normal Retirement Age: Age 62 with 1 year of service credit; age 60 with 30 years of service credit; any age with 35 years of service credit. *(Active Member Handbook)*

Early Retirement Age: Age 55 with 25 years of service credit. *(Active Member Handbook)*

Reduction Factor/Amount: Non-actuarial reduction factor of 3% per year under age 60, up to maximum of 15%. *(Active Member Handbook)*

Benefit Taxation: Pension plan benefits are exempt from state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.50% of final average salary per year of service credit. *(Active Member Handbook)*

Final Average Salary: Average of the 3 highest years of service credit salaries. Compensation does not include bonuses, severance payments, emoluments not based on standard employing unit salary schedule, payments for unused leave, seminar attendance bonuses, special health and welfare plan payments, special payments made to enhance retirement benefits, and severance payments. *(Board Rules Sec. 211.2)*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Ad hoc adjustments based on legislative enactment. Post-retirement adjustments have been granted by the Pennsylvania General Assembly every 4 or 5 years. *(PSERS Retiree Handbook, Publication #9775)*

Pennsylvania Public School Employees Retirement System

Member & Employer Contrib. Rates: 7.16% of covered salary member contribution rate; 4.69% of covered salary employer contribution rate. *(CAFR Actuarial Section, p. 88)*

Most Recent Funded Condition & Actuarial Costs:

AL	$57,123,000,000 (2004)	NC	15.46%	$1,550,764,463	Actuarial Method:	Entry age normal
Assets	52,094,500,000	Exp.	0.43%	42,645,000	Interest Assumption:	8.5%
UAL	$5,028,500,000	Amort.	(4.28%)	(429,319,010)	Salary Assumption:	6.25%
Ratio	91.2%	Total Req.	11.61%	$1,164,090,453	*(CAFR Actuarial Section, pp. 86, 88-92, 96, 97, 101, 103, 107, & 108)*	

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the members' savings account, the state accumulation account, the annuity reserve account, and the health insurance account. The members' savings account accumulates member contributions and regular interest, with transfers to the annuity reserve account upon retirement. The state accumulation account accumulates state and employer contributions and interest, with transfers to the annuity reserve account upon retirement. The annuity reserve account exists for the payment of retirement annuities and benefits. The health insurance account exists to fund the health insurance premium assistance program. The health insurance program account accumulates member contributions in connection with the direct health insurance premium program. *(CAFR Financial Statement Notes, p. 47; Pennsylvania Stat. Sec. 24:8521; Sec. 24:8522; Sec. 24:8523; Sec. 24:8524; Sec. 24:8525; Sec. 24:8526)*

Rhode Island Employees Retirement System

Normal Retirement Age: Age 60 with 10 years of service credit; any age with 28 years of service credit. *(Rhode Island Stat. Sec. 36-10-9, Para. (a), Clause (1))*

Early Retirement Age: Age 55 with 10 years of service credit. *(Rhode Island Stat. Sec. 36-10-9, Para. (b))*

Reduction Factor/Amount: Actuarial equivalent reduction. *(Rhode Island Stat. Sec. 36-10-9, Para. (b))*

Benefit Taxation: Pension plan benefits are fully taxable under state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Pension Fund Survey Summary)*

Benefit Accrual Rates: A percentage of final average salary per year of service credit of 1.7% for the initial decade of service, 1.9% for the second decade of service, 3.0% for years 21 through 34, and 2.0% for year 35. Maximum benefit of 80% of final average salary. *(Rhode Island Stat. Sec. 36-10-10)*

Final Average Salary: Average of the 3 highest consecutive years of service credit salaries. Compensation includes wages and longevity and incentive pay and does not include overtime pay, payments for unused leave, payments contingent upon retirement, or payments for temporary or extra duties. *(Rhode Island Stat. Sec. 36-8-1, Paras. (4) & (7))*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Automatic annual adjustment of 3%, compounded, payable to retirees in receipt of benefits for at least 3 years. *(Rhode Island Stat. Sec. 36-10-35)*

Member & Employer Contrib. Rates: 9.50% of covered salary member contribution rate; 13.72% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$5,634,195,435 (2004)	NC	11.09%	$89,836,104	Actuarial Method:	Entry age normal
Assets	3,340,527,073	Exp.	0.33%	2,673,212	Interest Assumption:	8.25%
UAL	$2,293,668,362	Amort.	18.05%	146,216,569	Salary Assumption:	Range of 17.00% (no service credit) to 4.50% (more than 10 years of service credit)
Ratio	59.29%	Total Req.	29.47%	$238,725,885	(CAFR Actuarial Section, pp. 44-51, 63, & 83)	

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the restricted receipt account, the annuity savings account, the contingent reserve account, and the restricted fund for providing health benefits to retirees. The restricted receipt account exists to pay plan administrative expenses through a deduction from investment earnings. The annuity savings account accumulates member contributions and transfers amounts to the contingent reserve account upon retirement. The contingent reserve account accumulates state contributions and funds all retirement benefit payments. The restricted fund for providing health benefits to retirees exists to fund the retiree health benefits program. *(Rhode Island Stat. Sec. 36-8-10.1; Sec. 36-10-1; Sec. 36-10-2; Sec. 36-10-3; Sec. 36-10-4)*

South Carolina Retirement System

Normal Retirement Age: Age 65 with 5 years of service credit; any age with 28 years of service credit. *(South Carolina Stat. Sec. 9-1-1510)*

South Carolina Retirement System

Early Retirement Age: Age 60 with 5 years of service credit; age 55 with 25 years of service credit. *(South Carolina Stat. Sec. 9-1-1515)*

Reduction Factor/Amount: Non-actuarial reduction factor of 5% per year under age 65 with less than 25 years of service credit and of 4% per year under 28 years of service credit with 25 or more years of service credit. *(South Carolina Stat. Sec. 9-1-1550)*

Benefit Taxation: Annual state income tax exclusion for pension plan benefits of $3,000 if under age 65 and of $10,000 if over age 64. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 1.82% of average final compensation per year of service credit. *(South Carolina Stat. Sec. 9-1-1550)*

Final Average Salary: Average of the 12 highest consecutive calendar year quarters of service credit salary. Compensation is full rate of compensation under a full working schedule. If compensation includes maintenance, fees, or in kind, the retirement board must fix the value. The earnable compensation amounts are audited after retirement and amounts not part of the regular salary base are excluded. Average final compensation is increased by unused annual leave amounts. *(South Carolina Stat. Sec. 9-1-10, Clauses (4) & (9))*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Automatic annual adjustment of 1% if the CPI increases by 1% and if the CPI percentage increase is greater than 1%, an additional percentage amount not to exceed the amount of the CPI increase or 4%, whichever is less, if the State Budget and Control Board determines that the cost of the adjustment, factoring in unrealized investment gains and losses, will not cause the plan's amortization period to exceed 30 years. Payable to retirees in receipt for at least one year and adjustment compounds. *(South Carolina Stat. Sec. 9-1-1810)*

Member & Employer Contrib. Rates: 6.00% of covered salary member contribution rate; 7.55% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$25,977,852,000 (2004)	NC	9.80%	$488,612,600
Assets	20,862,659,000	Exp.	0.31%	15,440,000
UAL	$5,115,193,000	Amort.	17.60%	877,508,343
Ratio	80.31%	Total Req.	27.71%	$1,381,560,900

Actuarial Method: Entry age normal
Interest Assumption: 7.25%
Salary Assumption: Range of 8.00% (with no service credit) to 4.00% (with 15 years of service credit or greater)
(CAFR Actuarial Section, pp. 77, 79, 83, 86, 87, 90, & 104)

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the employee annuity savings fund, the employer annuity accumulation fund, and the group life insurance fund. The employee annuity savings fund accumulates member contributions and related investment earnings and funds the transfers to the employer annuity accumulation fund upon retirement. The employer annuity accumulation fund accumulates the employer contributions and related investment earnings and is the source of all retirement annuities and benefits. The group life insurance fund exists to provide life insurance benefits to active and retired members. *(South Carolina Stat. Sec. 9-1-1010; Sec. 9-1-1020; Sec. 9-1-1030; Sec. 9-1-1050; Sec. 9-1-1110; Sec. 9-1-1130)*

South Dakota Retirement System

Normal Retirement Age: Age 65 with 3 years of service credit; age 55 if the sum of age and service credit totals 85. *(South Dakota Stat. Sec. 3-12-47, Clauses (47), (48), & (60); Sec. 3-12-90)*

Early Retirement Age: Age 55 with 3 years of service credit. *(SDRS Website, Summary of Early Retirement Benefits)*

Reduction Factor/Amount: Non-actuarial reduction factor of 3% per year under age 65 if the retiree has less than 21 years of service credit. If the retiree has credit for more than 20 years of service, the factor is 3% under age 64 with 21 years of service credit, under age 63 with 22 years of service credit, under age 62 with 23 years of service credit, under age 61 with 24 years of service credit, under age 60 with 25 years of service credit, under age 59 with 26 years of service credit, under age 58 with 27 years of service credit, under age 57 with 28 years of service credit, and under age 56 with 29 years of service credit. *(SDRS Website, Summary of Early Retirement Benefits)*

Benefit Taxation: No state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: Under standard formula, 1.625% of final average salary per year of service credit rendered before July 1, 2002, plus 1.55% of final average salary per year of service credit rendered after June 30, 2002. Under alternative formula, 2.325% of final average salary per year of service credit rendered before July 1, 2002, plus 2.25% of final average salary per year of service credit rendered after June 30, 2002, less 80% of the primary Social Security benefit. *(South Dakota Stat. Sec. 3-12-91)*

South Dakota Retirement System

Final Average Salary: Average of the 12 highest consecutive calendar year quarters service credit salary during the last 40 quarters of service credit. The final average salary is adjusted to eliminate extraordinary payments during the final year or final quarter. An extraordinary payment is an amount in excess of 105% of the prior year or quarter. Compensation is gross wage for personal services rendered and reported on federal W-2 form and excludes expense reimbursements, payments for unused leave, employer-paid insurance coverage, severance payments and early retirement inducements. *(South Dakota Stat. Sec. 3-12-47, Clauses (20), (34), & (40))*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Automatic annual adjustment of 3.1%, compounding, and prorated for retirees in receipt of benefits for less than one year. *(South Dakota Stat. Sec. 3-12-47, Clause (41); Sec. 3-12-88)*

Member & Employer Contrib. Rates: 6.00% of covered salary member contribution rate; 6.00% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$5,571,842,384 (2005)	NC	11.568%	$139,521,648	Actuarial Method:	Entry age normal
Assets	5,380,999,357	Exp.	0.275%	2,772,121	Interest Assumption:	7.75%
UAL	$190,843,027	Amort.	0.644%	7,767,284	Salary Assumption:	Range of 8.90% (at age 25) to 4.92% (at age 64)
Ratio	96.6%	Total Req.	12.487%	$150,061,053	(CAFR Actuarial Section, pp. 40-47)	

Retirement Fund & Account Structure: With the exception of an expense fund, the retirement system has a single retirement trust fund. The expense fund is credited with 3% of the contributions to the plan annually and is used for the payment of the administrative costs of the system. *(South Dakota Stat. Sec. 3-12-61; Sec. 3-12-72)*

Tennessee State Employees, Teachers, and Higher Education Employees Pension Plan

Normal Retirement Age: Any age with 30 years of service credit; age 60 with 4 years of service credit if employed before July 1, 1979; age 60 with 5 years of service credit if employed after June 30, 1979. *(Tennessee Stat. Sec. 8-36-201)*

Early Retirement Age: Age 55 with 10 years of service credit; any age with 4 or 5 years of service credit; any age with 25 years of service credit. *(Tennessee Stat. Sec. 8-36-301)*

Reduction Factor/Amount: Non-actuarial reduction factor of 0.4% per month under age 60 or normal retirement date for retiree at age 55 with 10 years of service credit. For retiree with less than 10 years of service credit, retiree has additional reduction of 15% of the benefit amount per year or portion of year under 10 years of service credit on top of the regular reduction. For retiree with 25 years of service credit, an actuarial equivalent to the age 55 benefit reduction is imposed. *(Tennessee Stat. Sec. 8-36-302)*

Benefit Taxation: Pension plan benefits are exempt from state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 1.50% of average final compensation per year of service credit, plus 0.25% of the amount of average final compensation in excess of the Social Security integration level salary per year of service credit, plus an increase of 5% of the calculated retirement benefit. The maximum benefit is 94.5% of average final compensation. The Social Security integration level salary is the average of the Social Security wage bases. *(Tennessee Stat. Sec. 8-36-102; Sec. 8-36-206; Sec. 8-36-208)*

Final Average Salary: Average of the 5 highest consecutive years of creditable service earnable compensation. Average final compensation may not include more than 5 longevity payments. Earnable compensation is compensation paid for services rendered, includes bonuses and incentives, cafeteria benefit amounts, and compensation in kind with a value determined by the retirement board, and excludes certain extra services payments greater than 25% of the salary base. *(Tennessee Stat. Sec. 8-34-101, Clauses (4), (10), & (14); Sec. 8-36-104)*

Special Early Normal Retiremt Incentives: No early retirement incentive program currently in force.

Post-Retirement Adjustments: Automatic annual adjustment of the percentage increase of at least one-half of 1% in the CPI, but not to exceed 3%, payable to retirees in receipt for at least one year, and compounding. *(Tennessee Stat. Sec. 8-36-701)*

Member & Employer Contrib. Rates: 5.00% of covered salary member contribution rate; 6.13% of covered salary employer contribution rate. *(CAFR Financial Section, p. 27; Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$23,266,967,000 (2005)	NC	Undisclosed		Actuarial Method:	Frozen entry age
Assets	23,627,160,000	Exp.		$3,008,000	Interest Assumption:	7.5%
UAL	($360,193,000)	Amort.	Undisclosed		Salary Assumption:	4.75%
Ratio	101.55%	Total Req.	Undisclosed		*(Public Fund Survey Summary)*	

Tennessee State Employees, Teachers, and Higher Education Employees Pension Plan

Retirement Fund & Account Structure: The statutory funds, reserves, and accounts are the members' fund and the state accumulation fund. The members' fund accumulates member contributions and related interest earnings and is the source of transfers of amounts to the state accumulation fund upon retirements. The state accumulation fund is the reserve for all benefits payable by the system. *(Tennessee Stat. Sec. 8-37-101; Sec. 8-37-201; Sec. 8-37-215; Sec. 8-37-301)*

Texas Teacher Retirement System

Normal Retirement Age: Any age if the sum of age and service totals 80 if employed before August 31, 2007; age 65 with 5 years of service credit; age 60 with 20 years of service credit if employed after August 30, 2007. *(TRST 2005 Actuarial Valuation Benefit Summary, p. 39)*

Early Retirement Age: Age 55 with 5 years of service credit; age 50 with 30 years of service credit. *(TRST 2005 Actuarial Valuation Benefit Summary, p. 39)*

Reduction Factor/Amount: Non-actuarial reduction factor of 2% per year under the "Rule of 80" for retirees under age 50 with 30 years of service credit and for retirees between ages 55 and 59 with at least 20 years of service credit; 7% between ages 64 and 65; 6% between ages 63 and 64; 7% per year between ages 61 and 63; 6% per year between ages 58 and 61; and 4% per year between ages 55 and 58. *(TRST 2005 Actuarial Valuation Benefit Summary, p. 40)*

Benefit Taxation: No state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: No Social Security coverage by virtue of public employment. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.3% of average final salary per year of service credit. *(TRST 2005 Actuarial Valuation benefit Summary, p. 39)*

Final Average Salary: Average of the 5 highest years of creditable service salary or average of the 3 highest years of service credit salary if the member was age 50, had 25 years of service credit, or had a total of age and service credit equal to 70 before August 2, 2005. Creditable compensation is payment of money for services rendered, in proportion to rendered service, and payable in normal periodic payments. Compensation does not include expense payments, allowances, bonuses, fringe benefits, payments for unused leave, employer-paid insurance coverage, payments as incentive to terminate employment or accept employment, and Fair Labor Standards Act compensatory leave. Salary increases during the last 3 years are limited to 10% over the prior year's compensation or $10,000, whichever is greater. *(TRST Member Handbook, pp. 28, 29)*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Ad hoc adjustments based on legislative enactments. *(TRST 2005 Actuarial Valuation Benefit Summary, pp. 47, 50)*

Member & Employer Contrib. Rates: 6.9% of covered salary member contribution rate; 7.31% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$102,495,000,000 (2005)	NC	10.40%	$1,372,384,000	Actuarial Method:	Entry age normal
Assets	89,299,000,000	Exp.	0.10%	25,114,716	Interest Assumption:	8.00%
UAL	$13,196,000,000	Amort.	3.19%	828,028,300	Salary Assumption:	Range from 26.40% to 4.25%
Ratio	87.1%	Total Req.	13.69%	$2,225,527,216		

(TRST 2005 Actuarial Valuation, pp. 1-3, 6, 12, 15, 16, 19, 23, 27, 29, 30, 31, &-32)

Retirement Fund & Account Structure: The statutory funds, reserves, and accounts are the member savings account, the state contribution account, the retired reserve account, the interest account, the expense account, and the deferred retirement option account. The member savings account accumulates member contributions plus regular interest and from the account amounts are transferred to the retired reserve account upon retirement. The state contribution account accumulates state contributions, interest, and related amounts, with transfers to the retired reserve account of needed amounts upon retirement. The retired reserve account functions as the source of all retirement annuity and benefit payments. The interest account accumulates investment earnings. The expense account is funded largely from investment earnings and functions to pay administrative expenses of the system. The deferred retirement option account functions to fund the deferred retirement option program. *(Texas Stat. Sec. 825.306; Sec. 825.307; Sec. 825.308; Sec. 825.309; Sec. 825.311; Sec. 825.312; Sec. 825.3121)*

Utah Noncontributory Defined Benefit System

Normal Retirement Age: Age 65 with 4 years of service credit; any age with 30 years of service credit. *(Utah Stat. Sec. 49-13-401)*

Early Retirement Age: Age 62 with 10 years of service credit; age 60 with 20 years of service credit; any age with 25 years of service credit. *(Utah Stat. Sec. 49-13-401)*

Reduction Factor/Amount: Non-actuarial reduction factor of 3% per year under age 65. *(Utah Stat. Sec. 49-13-402)*

Utah Noncontributory Defined Benefit System

Benefit Taxation: Annual state individual income tax exclusion of $4,800 for pension plan benefits, with exclusion reduced by one-half of federal adjusted gross income. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.00% of final average salary per year of service credit. *(Utah Stat. Sec. 49-13-402)*

Final Average Salary: Average of the highest 3 years of service credit salary. The percentage increase in each year of the computation may not exceed 10% plus the CPI increase unless the increase is related to a position transfer or a promotion. Compensation is the payment for services rendered, includes bonuses, cost of living adjustments and payments subject to the Social Security tax, and does not include remuneration in kind, employer-paid benefits, payments upon termination of employment, severance pay, and expense reimbursement. *(Utah Stat. Sec. 49-13-102 (1) & (2))*

Special Early Normal Retiremt Incentives: Early retirement incentive program allowing full retirement at any age with 25 years of service and higher benefit accrual rate in force for 6 months in 1987. Early retirement incentive program allowing the purchase of future service credit by members with 25 years of service to present immediate retirement was in force in 1995. No current early retirement incentive program in force. *(Utah Stat. Sec. 49-13-701)*

Post-Retirement Adjustments: Automatic annual adjustment of the percentage increase in the CPI, not to exceed 4%, with CPI increases in excess of 4% carried forward to a future year, not compounding, payable to retirees in receipt of a benefit for at least one year. *(Utah Stat. Sec. 49-12-407)*

Member & Employer Contrib. Rates: No member contribution rate; 13.38% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$14,166,548,000 (2005)	NC	Undisclosed	Actuarial Method:	Entry age normal
Assets	13,065,512,000	Exp.	$8,135,000	Interest Assumption:	8.00%
UAL	$1,101,036,000	Amort.	Undisclosed	Salary Assumption:	Range from 10.75% (no service credit) to 4.75% (15 years of service credit)
Ratio	92.2%	Total Req.	Undisclosed	*(Public Fund Survey Summary)*	

Retirement Fund & Account Structure: There is a single retirement trust fund for the retirement plan. *(Utah Retirement Systems CAFR, Financial Statement Notes, p. 46)*

Vermont State Teachers Retirement System

Normal Retirement Age: Age 62 with any service credit; any age with 30 years of service credit. *(Vermont Stat. Sec. 16-1937 (a))*

Early Retirement Age: Age 55 with 5 years of service credit. *(Vermont Stat. Sec. 16-1937 (d))*

Reduction Factor/Amount: Non-actuarial reduction factor of 6% per year under age 62. *(Vermont Stat. Sec. 16-1937 (g))*

Benefit Taxation: Pension plan benefits are fully taxable under state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 1.25% of average final compensation per year of service credit prior to July 1, 1990, and 1.67% of average final compensation per year of service credit after June 30, 1990. Maximum benefit is 50% of the average final compensation. *(Vermont Stat. Sec. 16-1937 (b))*

Final Average Salary: Average of highest 3 successive years of covered service salary. Unless there are significant additional duties, an increase of more than 10% over the prior year must be excluded. Earnable compensation does not include payments in lieu of benefits, payments for unused leave, termination-related payments, and compensation for unrendered service. *(Vermont Stat. Sec. 16-1931, Clauses (4) & (8))*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Annual automatic adjustment equal to one-half of the increase in the CPI, with a minimum of 1% and with a maximum of 5%, compounding, and payable to retirees with benefit receipt of at least one year. *(Vermont Stat. Sec. 16-1949)*

Member & Employer Contrib. Rates: 3.90% of covered salary member contribution rate; 4.81% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Vermont State Teachers Retirement System

Most Recent Funded Condition & Actuarial Costs:

AL	$1,492,149,988 (2005)	NC	8.96%	$43,622,447	Actuarial Method: Frozen initial liability
Assets	1,354,006,143	Exp.	0.22%	1,052,772	Interest Assumption: 8.00%
UAL	$138,143,845	Amort.	2.67%	13,004,599	Salary Assumption: Range of 10.68% (age 25) to 4.41% (age 60)
Ratio	90.74%	Total Req.	11.85%	$57,679,818	*(2005 VSTRS Actuarial Valuation, pp. 1, 3, 6, 7, 11, 12, 17, 18, 31, & 35)*

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the annuity savings fund, the pension accumulation fund, the annuity reserve fund, the pension reserve fund, and the expense fund. The annuity savings fund accumulates member contributions and, upon retirement, the applicable portion is transferred to the annuity reserve fund. The pension accumulation fund functions to pay all retirement benefits not payable from the annuity savings fund. The expense fund functions to pay the administrative expenses of the retirement plan and receives an appropriation from the state for this purpose. *(Vermont Stat. Sec. 16-1944)*

Virginia Retirement System

Normal Retirement Age: Age 65 with 5 years of service credit; age 50 with 30 years of service credit. *(Virginia Stat. Sec. 51.1-153 A)*

Early Retirement Age: Age 55 with 5 years of service credit; age 50 with 10 years of service credit. *(Virginia Stat. Sec. 51.1-153 B)*

Reduction Factor/Amount: Non-actuarial reduction factor of 0.5% per month under the normal retirement requirement for the first 5 years and 0.4% per month under the normal retirement requirement beyond the initial 5 years. *(Virginia Stat. Sec. 51.1-155 A.2)*

Benefit Taxation: Pension plan benefits are fully taxable under state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 1.7% of average final compensation per year of service credit. *(Virginia Stat. Sec. 51.1-155 A.1)*

Final Average Salary: Average of the 3 highest years of service credit creditable compensation if the member ceases employment after July 1, 1974. Increases during the final period unrelated to promotion may not exceed the average increase by other employees in comparable positions for the same employing unit. Creditable compensation is the full-time compensation of an employee in a covered position and does not include overtime pay, temporary payments and extra duty payments. *(Virginia Stat. Sec. 51.1-124.3; Sec. 51.1-152; Sec. 51.1-168)*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Annual automatic adjustment of the percentage increase in the CPI, limited to 3% plus one-half of the CPI increase amount in excess of 3% and 7%, compounding, and payable to retirees on the July 1 of the second calendar year after retirement. *(Virginia Stat. Sec. 51.1-166)*

Member & Employer Contrib. Rates: 5.00% of covered salary member contribution rate; 6.03% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$43,958,000,000 (2004)	NC	Undisclosed	Actuarial Method: Entry age normal
Assets	39,691,000,000	Exp.	$20,303,000	Interest Assumption: 8.00%
UAL	$4,267,000,000	Amort.	Undisclosed	Salary Assumption: Range from 6.10% (one year of service credit) to 4.00% (over 19 years of service credit)
Ratio	90.3%	Total Req.	Undisclosed	*(Public Fund Survey Summary)*

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the members' contribution account, the retirement allowance account, the advance premium deposit reserve, and the retiree health insurance credit reserve. The member contribution account accumulates member contributions and applicable investment earnings, with a transfer upon retirement to the retirement allowance account. The retirement allowance account accumulates employer contributions and related investment earnings, and pays all retirement annuities and benefits. The advance premium deposit reserve accumulates premium contributions during active membership and is charged for death benefits and expenses. The retiree health insurance credit reserve accumulates employer contributions and pays out months insurance premiums. *(Virginia Stat. Sec. 51.1-147; Sec. 51.1-148; Sec. 51.1-1140; Sec. 51.1-1401)*

Washington Teachers Retirement System

Normal Retirement Age: Any age with 30 years of service credit; age 55 with 25 years of service credit; age 60 with 5 years of service credit if employed before October 1, 1977; age 65 with 5 years of service credit if employed after September 30, 1977. *(Washington Stat. Sec. 41.32.480)*

Early Retirement Age: No early reduced retirement annuity eligibility if employed before October 1, 1977; age 55 with 20 years of service credit if employed after September 30, 1977 and before July 1, 1996; age 55 with 10 years of service credit if employed after June 30, 1996. *(TRS Plan 2: Summary of Selected Benefits; TRS Plan 3: Summary of Selected Benefits)*

Reduction Factor/Amount: No early reduced retirement annuity if employed before October 1, 1977. Actuarial equivalent reduction to age 65 benefit if the retiree has less than 30 years of service and a non-actuarial reduction factor of 3% per year under age 65 with 30 years of service credit if employed after September 30, 1977. *(TRS Plan 2: Summary of Selected Benefits; TRS Plan 3: Summary of Selected Benefits)*

Benefit Taxation: No state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.00% of final average salary per year of service credit for persons employed before June 1996; 1.00% of final average salary per year of service credit for persons employed after June 1996, plus a defined contribution benefit calculated on accumulated account amount. *(Washington Stat. Sec. 41.32.760; Sec. 41.32.840; Sec. 41.32.8401)*

Final Average Salary: Average of highest 60 consecutive months' service credit salary. Earnable compensation includes overtime payments, deferred compensation amounts and retroactive payments. Earnable compensation does not include severance pay and unused leave payments. *(Washington Stat. Sec. 41.32.010, Clauses (10) & (30); Sec. 41.32.345; Sec. 41.32.4945)*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Automatic annual adjustment of the percentage increase in the CPI over the prior year, not to exceed 3%, compounded, and payable to retirees in benefit receipt for at least one year. *(Washington Stat. Sec. 41.32.845; Sec. 41.32.770)*

Member & Employer Contrib. Rates: Varying percent of covered salary member contribution rate, set at 6.00% for members who were first employed before October 1, 1977; at 0.87% for members who were first employed after September 30, 1977 and before July 1, 1996; and between 5.00% and 15% for members who were first employed after June 30, 1996; 1.37% of covered payroll employer contribution. *(TRS Plan 1: Summary of Selected Benefits; TRS Plan 2: Summary of Selected Benefits; TRS Plan 3: Summary of Selected Benefits)*

Most Recent Funded Condition & Actuarial Costs:

AL	$14,539,400,000 (2004)	NC	Undisclosed	Actuarial Method:	Entry age normal for pre-October 1, 1977 hirees; Aggregate for post-September 30, 1977, hirees
Assets	12,866,400,000	Exp.	$7,096,000		
UAL	$1,673,000,000	Amort.	Undisclosed	Interest Assumption:	8.00%
Ratio	88.49%	Total Req.	Undisclosed	Salary Assumption:	Range from 10.7% (one year of service) to 4.5% (over 16 years of service)

(Public Fund Survey Summary)

Retirement Fund & Account Structure: Statutory funds, accounts, and reserves are the teachers' retirement system plan 1 fund, the teachers' retirement system plan 2 and 3 fund, and a department of retirement systems expense fund. The teachers' retirement system plan 1 fund applies to members hired before October 1, 1977. The teachers' retirement system plan 2 and 3 fund applies to members hired after September 30, 1997. The department of retirement systems expense fund is a joint fund with other Washington retirement plans and is funded from the state's general fund based on legislative appropriations. *(Washington Stat. Sec. 41.50.075; Sec. 41.50.110; Sec. 41.50.200; Sec. 41.50.215)*

West Virginia Teachers Retirement System

Normal Retirement Age: Age 60 with 5 years of service credit; age 55 with 30 years of service credit; any age with 35 years of service credit. *(West Virginia Stat. Sec. 18-7A-25 (a))*

Early Retirement Age: Any age with 30 years of service credit. *(West Virginia Stat. Sec. 18-7A-25 (b) & (c))*

Reduction Factor/Amount: Actuarial equivalent reduction to age 55 benefit. *(West Virginia Stat. Sec. 18-7A-25 (c))*

Benefit Taxation: Annual state and local government retirement plan benefit exclusion of $2,000. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.00% of final average salary per year of service credit. *(West Virginia Stat. Sec. 18-7A-26)*

West Virginia Teachers Retirement System

Final Average Salary: Average of 5 highest fiscal years of service salary earned within the last 15 years of service credit, or if total service is less than 15 years, the career average salary. Covered salary is periodic cash wages, includes retroactive payments to correct clerical errors or to settle lawsuit, and excludes bonuses, early retirement incentives, severance pay, fringe benefit cost, and payments for unused leave. *(West Virginia Stat. Sec. 18-7A-3, Clauses (4) & (10))*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force. *(West Virginia Stat. Sec. 18-7A-35b)*

Post-Retirement Adjustments: Ad hoc adjustments based on legislative enactments. The last ad hoc adjustment was payable on July 1, 2006, to retirees who were at least age 70 and have been retired for at least 5 years received a one-time 3% increase. *(2006 Session, House Bill 4846)*

Member & Employer Contrib. Rates: 6.00% of covered salary member contribution rate; 24.13% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$6,243,834,000 (2003)	NC		Unspecified	Actuarial Method:	Entry age and aggregate
Assets	1,190,882,000	Exp.	0.14%	$1,166,087	Interest Assumption:	7.50%
UAL	$5,052,952,000	Amort.		Unspecified	Salary Assumption:	Undisclosed
Ratio	19.1%	Total Req.	32.77%	$272,974,087	*(Public Fund Survey Summary)*	

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are the teacher employers' contribution collection account, the expense fund, the employers' accumulation fund, the retirement reserve fund, the members' deposit fund, and the income fund. The members' deposit fund accumulates member contributions and regular interest, with a transfer of amounts upon retirement. The employers' accumulation fund accumulates employing unit contributions and transfers the balance of a retiree's required reserves upon retirement. The retirement reserve fund exists to pay retirement annuities and benefits. The income fund is credited with investment earnings and other moneys received by the retirement system where no other disposition is specifically provided and functions to credit interest to other funds and accounts. The expense fund functions as the source of administrative expense payments. The teacher employers' contribution collection account is a special revenue account for the collection of employer contributions, including state general revenue fund allocations to fund the unfunded liability of the retirement plan. *(West Virginia Stat. Sec. 18-7A-6; Sec. 18-7A-16; Sec. 18-7A-18; Sec. 18-7A-18a; Sec. 5-10-28; Sec. 5-10-29; Sec. 5-10-31; Sec. 5-10-34; Sec. 5-10-36)*

Wisconsin Retirement System

Normal Retirement Age: Age 65 with any service credit; age 57 with 30 years of service credit. *(Wisconsin Stat. Sec. 40.02(42))*

Early Retirement Age: Age 55 with any service credit. *(Wisconsin Stat. Sec. 40.23(1)(a))*

Reduction Factor/Amount: Non-actuarial reduction factor of 0.4% per month under age 57; and 0.4% reduced by 0.01111% per year of service credit, per month under age 65 and over age 57. *(Wisconsin Stat. Sec. 40.23(2m)(f)1.)*

Benefit Taxation: State or local government retirement plan benefits exempt from state individual income tax only if taxpayer became a pension plan member before 1964. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 1.765% of final average earnings per year of service credit rendered before 2000 and 1.60% of final average earnings per year of service credit rendered after 1999. Maximum benefit is 70% of final average earnings. *(Wisconsin Stat. Sec. 40.23(2m)(e)1.)*

Final Average Salary: Average of 3 highest annual earnings periods' salaries. Earnings means gross payment for services rendered, including deferred compensation and payment in kind, but excludes cost of uniforms, employer-paid benefit costs, unemployment insurance, lump sum termination payments, payments contingent on termination, wage claim damages and penalties, payments during final 5 years changing the method for computing base compensation, payments in lieu of fringe benefits, and any other payment determined under department rule to be a normal salary progression pattern distortion. *(Wisconsin Stat. Sec. 40.02(3), (22), (33), & (41m)*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Annual adjustments may be approved by the Employee Trust Funds Board based on favorable actuarial experience creating surplus assets, either with fixed dividends or variable adjustments for retirees who elect participation in the variable annuity trust. Favorable actuarial experience is primarily favorable investment performance, but also includes mortality and other actuarial assumption gains. *(2005 WRS Investment Earnings Distribution Report ET-2124; Wisconsin Stat. Sec. 40.27; Sec. 40.28)*

Member & Employer Contrib. Rates: 4.90% of covered salary member contribution rate; 8.10% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Wisconsin Retirement System

Most Recent Funded Condition & Actuarial Costs:

AL	$68,234,102,432 (2005)	NC	10.60%	$1,024,078,000	Actuarial Method:	Frozen initial liability
Assets	67,909,996,000	Exp.	0.14%	13,525,540	Interest Assumption:	7.80%
UAL	$324,106,432	Amort.	0.20%	19,322,200	Salary Assumption:	Range from 9.9% (one year of service) to 4.3% (30 years of service)
Ratio	99.53%	Total Req.	10.94%	$1,056,925,740	*(2005 Actuarial Valuation, pp. I-1, I-10, I-16, I-18, I-19, I-20, I-23, I-24, II-1, II-2, II-3, III-1, & III-4)*	

Retirement Fund & Account Structure: Statutory funds, reserves, and accounts are an administrative account, the core retirement investment trust, the variable retirement investment trust, a transaction amortization account, a market recognition account, a current income account, the employee accumulation reserve, the employer accumulation reserve, the annuity reserve, the Social Security account, the group health insurance account, the income continuation account, the life insurance account, the employee-funded reimbursement account, the accumulated sick leave conversion account, and the health insurance premium credit account. The administrative account funds most of the administrative costs of the Department of Employee Trust Funds. The core retirement investment trust is an investment fund for system assets not held by the variable retirement investment trust and has a transaction amortization account and market recognition account. The variable retirement investment trust is the investment fund for the variable annuity program and must include a current income account. The employee accumulation reserve accumulates employee contributions and employer additional contributions and interest credits, with transfers upon retirement. The employer accumulation reserve accumulates employer contributions and interest and various actuarial gains. The annuity reserve consists of the present value of annuities and benefits in force, with interest credited. The Social Security account functions to transfer Social Security contributions. The insurance accounts function to support each insurance program. The employee-funded reimbursement account plan is a pre-tax benefit program. The accumulated sick leave conversion account is a mechanism to translate accumulated sick leave to health insurance premium credits. The health insurance premium credit account functions to pay health insurance plan premiums. *(Wisconsin Stat. Sec. 40.04)*

Wyoming Public Employee Pension System

Normal Retirement Age: Age 60 with 4 years of service credit; any age if the sum of age and service credit totals 85. *(Wyoming Stat. Sec. 9-3-415(a))*

Early Retirement Age: Age 50 with 4 years of service credit; any age with 25 years of service credit. *(Wyoming Stat. Sec. 9-3-415(b))*

Reduction Factor/Amount: Non-actuarial reduction factor of 5% per year under age 60. *(Wyoming Retirement System Board Rules, Chapter 14)*

Benefit Taxation: No state individual income tax. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage is in addition to public pension plan coverage. *(Public Fund Survey Summary)*

Benefit Accrual Rates: 2.125% of highest average salary per year of service credit for the initial 15 years of service credit and 2.25% of highest average salary per year of service credit for service credit in excess of 15 years of service credit. *(Wyoming Stat. Sec. 9-3-418)*

Final Average Salary: Average of acceptable salary of highest 36 continuous months of service credit. Acceptable salary includes pay for services rendered, pay for leave used, compensatory time pay during the same year as the compensatory leave is earned, and retroactive compensation awards, and does not include fringe benefits, housing allowances, early retirement incentive pay, transportation expenses, severance pay, bonuses, workers' compensation benefits, payments in lieu of fringe benefits, or any payment during any 3-year period deemed to increase the average salary for the primary purpose of increasing the retirement benefit. *(Wyoming Stat. Sec. 9-3-402(xvi) & (xix); Wyoming Retirement System Board Rules, Ch. 8)*

Special Early Normal Retiremt Incentives: No current early retirement incentive program in force.

Post-Retirement Adjustments: Annual automatic post-retirement adjustment by the retirement board equal to the percentage increase in the Wyoming cost-of-living index determined by the State Division of Economic Analysis, not to exceed 3%, compounded, for retirees who have been in benefit receipt for at least 2 years, if the system actuary determines the adjustment to be actuarially sound and reports that determination to the governor and the Joint Appropriations Interim Committee. *(Wyoming Stat. Sec. 9-3-419)*

Member & Employer Contrib. Rates: 5.57% of covered salary member contribution rate; 5.68% of covered salary employer contribution rate. *(Public Fund Survey Summary)*

Most Recent Funded Condition & Actuarial Costs:

AL	$5,091,754,000 (2005)	NC		Undisclosed	Actuarial Method:	Entry age normal
Assets	4,843,861,000	Exp.	0.17%	$1,930,267	Interest Assumption:	8.00%
UAL	$247,893,000	Amort.		Undisclosed	Salary Assumption:	5.00%
Ratio	95.13%	Total Req.		Undisclosed	*(CAFR Actuarial Section, pp. 67, 68, 81, 82, 89, & 93)*	

Retirement Fund & Account Structure: The retirement plan has a single retirement account that contains the entire assets of the plan and bears the total liability of the plan. *(Wyoming Stat. Sec. 9-3-407; Sec. 9-3-436)*

Minnesota Teachers Retirement Association

Normal Retirement Age:	Age 65 with any length of service credit, or age 62 with 30 years of service credit, or when the sum of age and service credit totals 90 if the member was initially employed before July 1, 1989; the full unreduced benefit receipt age under the federal Old Age, Survivors, and Disability Insurance Program, but not greater than age 66, if the member was initially employed after June 30, 1989. *(Minnesota Stat. Sec. 354.05, Subd. 38; Sec. 354.44, Subd. 6)*
Early Retirement Age:	Age 55 with at least 3 years of service credit or any age with at least 30 years of service credit. *(Minnesota Stat. Sec. 354.44, Subd. 1)*
Reduction Factor/Amount:	A non-actuarial reduction of one quarter of 1% per month that the retiree is under the normal retirement age if the member was initially employed before July 1, 1989, and the "Rule of 90" benefit tier produces a larger benefit or an actuarial reduction with some subsidization of the actuarial equivalent of the retirement annuity deferred to the normal retirement age and augmented at 3% per year of deferral if the member was initially employed before July 1, 1989, and the "level benefit" benefit tier produces a larger benefit or if the member was initially employed after June 30, 1989. *(Minnesota Stat. Sec. 354.44, Subd. 6, Paras. (c) & (e))*
Benefit Taxation:	Public pension benefit subject to state income taxation. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*
Social Security Coverage:	Social Security coverage in addition to public pension plan coverage for teachers first employed after July 1, 1957. *(Minnesota Stat. Sec. 355.02, Subd. 3)*
Benefit Accrual Rates:	1.2% of final average salary per year of service credit during the initial 10 years of 1.7% of final average salary per year of service credit thereafter for service credit rendered prior to July 1, 2006, and 1.4% of final average salary per year of service credit during the initial 10 years and 1.9% of final average salary per year of service credit thereafter for service credit rendered after June 30, 2006, if retiring under the "Rule of 90" benefit tier or 1.7% of final average salary per year of service credit for service credit rendered prior to July 1, 2006, and 1.9% of final average salary per year for service credit rendered after June 30, 2006, if retiring under the "level benefit" benefit tier, whichever is higher, for teachers first employed before July 1, 1989; 1.7% of final average salary per year of service credit for service credit rendered prior to July 1, 2006, and 1.9% of final average salary per year of service credit rendered after June 30, 2006, for teachers first employed after June 30, 1989. *(Minnesota Stat. Sec. 354.44, Subd. 6, Para. (b) or (d); Sec. 356.315)*
Final Average Salary:	Average of highest 5 successive years of service salary. Salaries for a teacher with a salary in excess of 95% of the governor's salary are subject to a special salary audit to determine compliance with plan salary definition. Covered salary excludes lump sum annual leave payments, sick leave payments, employer-paid insurance coverage amounts, severance payments, workers' compensation payments, extended duty day or non-duty day school administrator payments, or medical leave of absence payments unless paid under a uniform school district policy. *(Minnesota Stat. Sec. 354.05, Subd. 13a & Subd. 35)*
Special Early Normal Retiremt Incentives:	If employer designates position affected by employee layoffs due to budget shortfalls or reorganization between June 2, 2006, and September 1, 2006, a lump sum payment of $17,000 that may be used as deposit in health care savings plan account, as part of a service credit purchase sufficient to qualify for the "Rule of 90" benefit tier, or to purchase an annuity from the Unclassified State Employees Retirement Program of the Minnesota State Retirement System. *(Laws of Minnesota 2006, Ch. 271, Art. 3, Sec. 43)*
Post-Retirement Adjustments:	Automatic annual adjustment based on the federal Consumer Price Index percentage increase, not to exceed 2.5%, plus an investment income adjustment component if the total rate of return of the assets in the Minnesota Post Retirement Investment Fund exceeds 8.5% based on a 5-year investment income portion crediting procedure determined based on the relationship of the amount of the excess investment return aggregated components bears to the present value of Minnesota Post Retirement Investment Fund benefits, with prorated amounts payable to retirees with less than one year of benefit receipt. *(Minnesota Stat. Sec. 11A.18; Sec. 354.63)*
Member & Employer Contrib. Rates:	5.5% of covered salary member contribution rate and 5.5% of covered salary employer contribution rate, except for Special School District No. 1 (Minneapolis), where 9.14% employer contribution rate applies. Various state contribution amounts previously payable to the Minneapolis Teachers Retirement Fund Association are also payable to the Teachers Retirement Association. *(Minnesota Stat. Sec. 354.42, Subd. 2 & Subd. 3)*

Most Recent Funded Condition & Actuarial Costs:

AL	$19,950,190,861 (2005 adjusted)	NC	9.30%	$336,685,595	Actuarial Method:	Entry age normal
Assets	18,536,271,451	Exp.	0.34%	12, 193,332	Interest Assumption:	8.5%
UAL	$1,413,919,410	Amort.	2.19%	79,284,027	Salary Assumption:	Range from 6.00% (age 20) to 5.00% (age 50)
Ratio	92.91%	Total Req.	11.83%	$428,162,954	*(2005 Minnesota TRA Actuarial Valuation, Adjusted for MTRFA Consolidation)*	

Retirement Fund & Account Structure: Single retirement trust fund with two commingled investment funds, the Minnesota Combined Investment Fund (active member reserves) and the Minnesota Post Retirement Investment Fund (retired member reserves). *(Minnesota Stat. Sec. 11A.14; Sec. 354.42, Subd. 1a; Sec. 354.63)*

Duluth Teachers Retirement Fund Association

Normal Retirement Age: Age 60 with at least 10 years of service credit if initially employed before July 1, 1981; age 65 with any length of service credit, or age 62 with 10 years of service credit, or when the sum of age and service credit total 90 if the member was initially employed before July 1, 1989, and after June 30, 1981, or if initially employed before July 1, 1981, and electing the New Law Plan; the full unreduced benefit receipt age under the federal Old Age, Survivors, and Disability Insurance Program, but not greater than age 66, if initially employed after June 30, 1989. *(Minnesota Stat. Sec. 354A.011, Subd. 15a; Sec. 354A.24; Sec. 354A.31, Subd. 4a)*

Early Retirement Age: Age 55 with at least 10 years of service credit if initially employed before July 1, 1981; age 55 with at least 3 years of service credit or any age with at least 30 years of service credit if initially employed after June 30, 1981, and before July 1, 1989, or if initially employed before July 1, 1981, and electing the New Law Plan; age 55 with at least 3 years of service credit if initially employed after June 30, 1989. *(Minnesota Stat. Sec. 354A.31, Subd. 1, Subd. 4a, Subd. 6, & Subd. 7)*

Reduction Factor/Amount: Non-actuarial reduction of 0.25% for each month under age 60 if initially employed before July 1, 1981; non-actuarial reduction of one quarter of 1% per month that the retiree is under the normal retirement age if initially employed before July 1, 1989, and the "Rule of 90" benefit tier produces a larger benefit or an actuarial reduction with some subsidization of the actuarial equivalent of the retirement annuity deferred to the normal retirement age and augmented at 3% per year of deferral if initially employed after June 30, 1981, and before July 1, 1989, or if initially employed before July 1, 1981, and electing the New Law Plan with the "level benefit" benefit tier produces a larger benefit, or if initially employed after June 30, 1989. *(Minnesota Stat. Sec. 354A.31, Subd. 6 & Subd. 7)*

Benefit Taxation: Public pension benefit subject to state income taxation. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

Social Security Coverage: Social Security coverage in addition to public pension plan coverage. *(Minnesota Stat. Sec. 355.01, Subd 2c; Sec. 355.02, Subd. 3)*

Benefit Accrual Rates: 1.45% of final average salary per year of service credit if initially employed before July 1, 1981; 1.2% of final average salary per year of service credit during the initial 10 years and 1.7% of final average salary per year of service credit thereafter if initially employed after June 30, 1981, and before July 1, 1989, if retiring under the "Rule of 90" benefit tier or if initially employed before July 1, 1981, and selecting the New Law Plan and the "Rule of 90" benefit tier; 1.7% of final average salary per year of service credit if initially employed after June 30, 1989, or if employed after June 30, 1981, and before July 1, 1989, and if retiring under the "level benefit" benefit tier, or if initially employed before July 1, 1981, and selecting the New Law Plan and the "level benefit" benefit tier. *(Minnesota Stat. Sec. 354A.31, Subd. 4a)*

Final Average Salary: Average of highest 5 successive years of service salary. Covered salary excludes lump sum annual leave payments, sick leave payments, employer-paid insurance coverage amounts, severance payments, workers' compensation payments, extended duty day or non-duty day school administrator payments, or medical leave of absence payments unless paid under a uniform school district policy. *(Minnesota Stat. Sec. 354A.11, Subd. 7a & Subd. 24)*

Special Early Normal Retiremt Incentives: No special early retirement incentive applicable.

Post-Retirement Adjustments: Automatic annual 2% adjustment if retiree was in receipt for at least one year, plus excess investment performance adjustment if 5-year annualized total rate of investment return was in excess of 8.5% interest rate assumption, determined as the percentage amount in excess of 8.5% multiplied by 1.00 minus the amount of any contribution deficiency rate. *(Minnesota Stat. Sec. 354A.27)*

Member & Employer Contrib. Rates: 5.50% of covered salary member contribution; 5.79% of covered salary employer contribution. *(Minnesota Stat. Sec. 354A.12, Subd. 1 & Subd. 2a)*

Most Recent Funded Condition & Actuarial Costs:

AL	$310,923,929	NC	9.05%	$5,092,255	Actuarial Method:	Entry age normal
Assets	268,480,821	Exp.	0.78%	438,651	Interest Assumption:	8.5%
UAL	$42,443,108	Amort.	4.33%	2,435,073	Salary Assumption:	Range from 6.90% (age 20) to 5.00% (age 50)
Ratio	86.35%	Total Req.	14.16%	$7,965,979	*(2005 DTRFA Actuarial Valuation)*	

Retirement Fund & Account Structure: Single retirement trust fund for the pension plan. Voluntary tax-sheltered program has a bond fund, an equity fund, or a money market fund. *(Minnesota Stat. Sec. 354A.021)*

St. Paul Teachers Retirement Fund Association

Normal Retirement Age: Age 65 with at least 5 years of service credit, or age 60 with at least 25 years of service credit or when the sum of age and service credit total 90, if initially employed before July 1, 1977; age 65 with any length of service credit, or age 62 with 10 years of service credit, or when the sum of age and service credit total 90 if the member was initially employed after June 30, 1977, and before July 1, 1989; the full unreduced benefit receipt age under the federal Old Age, Survivors, and Disability Insurance Program, but not greater than age 66, if the member was initially employed after June 30, 1989. *(Minnesota Stat. Sec. 354A.011, Subd. 15a; Sec. 354A.23, Subd. 2; Sec. 354A.31, Subd. 4)*

St. Paul Teachers Retirement Fund Association

<u>Early Retirement Age</u>: Age 55 with at least 5 years of service credit if initially employed before July 1, 1977; age 55 with at least 3 years of service credit or any age with at least 30 years of service credit if employed after June 30, 1977. *(Minnesota Stat. Sec. 354A.31, Subd. 1, Subd. 4, Subd. 6, & Subd. 7)*

<u>Reduction Factor/Amount</u>: Non-actuarial reduction of 0.25% for each month under age 65 with less than 25 years of service or under age 60 with at least 25 years of service credit if initially employed before July 1, 1977; non-actuarial reduction of one quarter of 1% per month that the retiree is under the normal retirement age initially employed after June 30, 1977, and before July 1, 1989, and the "Rule of 90" benefit tier produces a larger benefit or an actuarial reduction with some subsidization of the actuarial equivalent of the retirement annuity deferred to the normal retirement age and augmented at 3% per year of deferral if initially employed after June 30, 1977, and before July 1, 1989, when the "level benefit" benefit tier produces a larger benefit, or if initially employed after June 30, 1989. *(Minnesota Stat. Sec. 354A.31, Subd. 6 & Subd. 7)*

<u>Benefit Taxation</u>: Public pension benefit subject to state income taxation. *(NCSL Personal Income Tax Summary; Minnesota House Research Department Individual Income Tax Comparison)*

<u>Social Security Coverage</u>: No Social Security coverage as part of teaching employment if initially employed before July 1, 1977; Social Security coverage in addition to public pension plan coverage if initially employed after June 30, 1977. *(Minnesota Stat. Sec. 355.01, Subd. 31; Sec. 355.02, Subd. 3)*

<u>Benefit Accrual Rates</u>: 2.50% of final average salary per year of service credit if employed before July 1, 1977, unless retirement is under the "Rule of 90" tier, then 2.00% of final average salary per year of service for each of the first 10 years of service and 2.50% of final average salary per year of service credit thereafter; 1.2% of final average salary per year of service credit during the initial 10 years and 1.7% of final average salary per year of service credit thereafter if initially employed after June 30, 1977, and before July 1, 1989, if retiring under the "Rule of 90" benefit tier; 1.7% of final average salary per year of service credit if initially employed after June 30, 1989, or if employed after June 30, 1977, and before July 1, 1989, and if retiring under the "level benefit" benefit tier. *(Minnesota Stat. Sec. 354A.31, Subd. 4)*

<u>Final Average Salary</u>: Average of highest 5 successive years of service salary. Covered salary excludes lump sum annual leave payments, sick leave payments, employer-paid insurance coverage amounts, severance payments, workers' compensation payments, extended duty day or non-duty day school administrator payments, or medical leave of absence payments unless paid under a uniform school district policy. *(Minnesota Stat. Sec. 354A.11, Subd. 7a & Subd. 24)*

<u>Special Early Normal Retiremt Incentives</u>: No special early retirement incentive applicable.

<u>Post-Retirement Adjustments</u>: Automatic annual 2% adjustment if retiree was in receipt for at least one year, plus excess investment performance adjustment if 5-year annualized total rate of investment return was in excess of 8.5% interest rate assumption, determined as the percentage amount in excess of 8.5% multiplied by 1.00 minus the amount of any contribution deficiency rate. *(Minnesota Stat. Sec. 354A.29)*

<u>Member & Employer Contrib. Rates</u>: 8.00% percent of covered salary member contribution if initially employed before July 1, 1977, or 5.5 percent of covered salary member contribution if initially employed after June 30, 1977; 11.64% of covered salary employer contribution for members initially employed before July 1, 1977, or 8.34% of covered salary employer contribution for members initially employed after June 30, 1977. *(Minnesota Stat. Sec. 354A.12, Subd. 1 & Subd. 2a)*

<u>Most Recent Funded Condition & Actuarial Costs</u>:

AL	$1,298,831,584	NC	9.23%	$21,035,503	Actuarial Method:	Entry age normal
Assets	905,292,514	Exp.	0.24%	546,765	Interest Assumption:	8.5%
UAL	$394,539,070	Amort.	14.30%	32,578,088	Salary Assumption:	Range from 7.75% (age 20) to 5.25% (age 55)
Ratio	69.65%	Total Req.	23.77%	$54,160,356	*(2005 SPTRFA Actuarial Valuation)*	

<u>Retirement Fund & Account Structure</u>: Single retirement trust fund with a separate reserve to which have been credited net asset amounts representing local police and paid fire amortization state aid paid to the retirement plan and excluded from assets on which post-retirement adjustments may be calculated. *(Minnesota Stat. Sec. 3354A.021)*

From: Alswager, Jan [MN] [Jan.Alswager@educationminnesota.org]
Sent: Wednesday, November 01, 2006 10:16 PM
To: Larry Martin
Cc:
Subject: pension study
Importance: High

Larry,

As shared at the last Pension Commission hearing, Education Minnesota is submitting information for your pension study. We have done extensive research and have attachments that compare Minnesota with the other 34 states that are coordinated with Social Security. You will note that the sources are included in the last document.

We also have some information/reports that we will drop off at your office that back up our comparisons.

We hope this information is very helpful so that the report can be complete as intended when the legislation was passed. If you have any questions, please let me know. You may contact me on my cell at 651-245-6151 or at my email address.

Thank you,

Jan Alswager
Director of Government Relations
Education Minnesota
41 Sherburne Avenue
St. Paul, MN 55103

Work: 800.652.9073 or 651.292.4890
Fax: 651.292.4815
Cell: 651.245.6151
jan.alswager@educationminnesota.org

Summary of Comparison
Thirty-four Social Security State Study

31 out of 35 *(4-way tie)* 35 out of 35	Normal retirement age Normal retirement age	Rule of 90, 62/30, 65/3 (hired before 7/1/89) 66/3 (level) (hired after 7/1/89)
15 out of 34	Employee contribution	
29 out of 34	Employer contribution	
34 out of 34 *(6-way tie for last)*	Final average salary period	
28 out of 35 35 out of 37	Formula multiplier Formula multiplier	1.7% 6/30/89-7/1/06 - 1.9% after 7/1/06 1.2% 1st 10 yrs; 1.7% through 6/30/06 1.9% beginning 7/1/06 going forward
32 out of 34	Pension calculations after 30 yrs	
34 out of 34 *(7-way tie for last place)*	Taxation of benefits	

Thirty-four Social Security State Study
Pension Benefit Comparisons

Normal Retirement Age

Rank	State	Age
1-4	AL	Any 25, 60/10
1-4	MS	Any 25, 60/4
1-4	MT	Any 25 60/5
1-4	NM	Any 25, R75, 65/5
5-7	AK	Any 28, 60/5
5-7	RI	Any 28, 60/10
5-7	SC	Any 28, 55/25, 65/any
8-9	AZ	R 80, 62/10, 65/any
8-9	TX	R 80, 65/5
10-16	DE	Any 30, 62/15, 60/15
10-16	FL	Any 30, 62/10
10-16	GA	Any 30, 60/10
10-16	MD	Any 30 65/5, 60/25
10-16	NC	Any 30, 65/5, 60/25
10-16	UT	Any 30, 65/4
10-16	VT	Any 30, 62/15, 60/15
17-24	HI	55/30, 62/10
17-24	KS	R85, 62/10, 65/any
17-24	MI	55/30, 60/10
17-24	NE	R85/55, 60/10
17-24	NY	55/30, 62/5
17-24	ND	R85, 65/3
17-24	WV	55/30, Any 35, 65/5
17-24	WY	R85, 60/Any
25	WI	57/30, 65/Any
26-27	IA	R88, 62/20, 65/Any
26-27	OR	58/30, 65/Any
28-31	ID	R90, 65/5
28-31	MN①	R90(step), 62/30, 65/3 (hired before 7/1/89)
28-31	OK	R90, 62/5
28-31	PA	Any 35, 62/1, 60/30
32-33	NH	60/Any
32-33	NJ	60/Any
34	WA	62/5, 65/5
35	MN②	66/3 (level) Hired after 7/1/89

Employee Contributions

Rank	State	Percent
1-2	FL	0.00%
1-2	UT	0.00%
3-4	NY	3.00%
3-4	DE	3.00%
5	WA	3.01%
6	VT	3.40%
7	IA	3.70%
8	KS	4.00%
9	MI	4.30%
10	NJ	4.50%
11-15	AL	5.00%
11-15	GA	5.00%
11-15	MD	5.00%
11-15	NH	5.00%
11-15	MN	5.00% (5.50% on 7/1/06
16	AZ	5.20%
17	WY	5.57%
18	ID	5.85%
19-23	AK	6.00%
19-23	WV	6.00%
19-23	NC	6.00%
19-23	OR	6.00%
19-23	SC	6.00%
24	WI	6.20%
25	TX	6.40%
26	OK	7.05%
27	MT	7.15%
28-30	MS	7.25%
28-30	PA	7.25%
28-30	NE	7.25%
31	NM	7.60%
21	ND	7.75%
33	HI	7.80%
34	RI	9.50%

Employer Contributions

Rank	State	Percent
1	WV	
2	AK	15.00%
3	UT	14.00%
4	OR	13.38%
5	RI	12.25%
6	MI	12.01%
7	MD	11.66%
8	OK	10.95%
9	ID	9.80%
10	MS	9.77%
11	HI	9.75%
12	DE	9.69%
13	GA	9.52%
14	FL	9.42%
15	NC	9.21%
16	NM	8.83%
17	AL	8.65%
18	ND	7.95%
19	MT	7.58%
20	NE	7.32%
21	WA	7.10%
22	SC	6.82%
23	WI	6.10%
24	TX	6.00%
25	IA	5.75%
26	WY	5.68%
27	NJ	5.44%
28	AZ	5.20%
29	MN	5.00% (5.50% on 7/1/06)
30	VT	4.96%
31	KS	4.19%
32	NH	4.11%
33	PA	3.80%
34	NY	2.52%

Final Average Salary Period

Rank	State	Salary Period
1	GA	High 2
2-24	AL	High 2
2-24	AZ	High 3
2-24	HI	High 3
2-24	KS	High 3
2-24	MD	High 3
2-24	MI	High 3
2-24	MT	High 3
2-24	NE	High 3
2-24	NH	High 3
2-24	NJ	High 3
2-24	NY	High 3
2-24	ND	High 3
2-24	OK	High 3
2-24	OR	High 3
2-24	PA	High 3
2-24	RI	High 3
2-24	SC	High 3
2-24	TX	High 3
2-24	UT	High 3
2-24	VT	High 3
2-24	WI	High 3
25	WY	High 3
26-24	ID	High 3.5
26-27	MS	High 4
28-34	DE	High 4
28-34	FL	High 5
28-34	IA	High 5
28-34	NM	High 5
28-34	WA	High 5
28-34	WV	High 5
28-34	MN	High 5

Formula Multiplier

Rank	State	Multiplier
1	PA	2.50%
2	NM	2.35%
3-4	TX	2.30%
3-4	AZ	2.30%
5	RI	1.7% 1st 10/1.9% 2nd 10/3.0% 21 34 (1-34 yrs=2.2%)
6	WY	2.125% up to 15 yrs/2.25% after 15 yrs
7	MS	
8	AK	2.15%
9	AL	2.01%
10-19	GA	2.00%
10-19	HI	2.00%
10-19	ID	2.00%
10-19	IA	2.00%
10-19	NE	2.00%
10-19	ND	2.00%
10-19	OK	2.00%
10-19	UT	2.00%
10-19	WA①	2.00%
10-19	WV	2.00%
20	NY	2.0% up to 30 yrs/1.5% after 30 yrs
21	DE	1.85%
22-24	NJ①	1.82%
22-24	NC	1.82%
22-24	SC	1.82%
25	MD	1.80%
26	KS	1.75%
27	WI	1.67% after 1999 / 1.765% before 1999
28	MN①	1.7% 6/30/89-6/30/06; 1.9% after 7/1/2006
29-31	MT	1.67%
29-31	OR	1.67%
29-31	VT	1.67%
32	NH	1.67% to 65 / 1.515% after
33	FL	1.60%
34	NJ②	1.5625%
35	MN②	1.2% 1st 10/1.7% thereafter to 7/1/06; 1.9% starting yr. 11
36	MI	1.50%
37	WA②	1.00% (plan#3) option

Taxation of Benefits

Rank	State	State Tax	S.S.
1-12	AL	Exempt	No
1-12	FL	No state tax	No
1-12	HI	Exempt	No
1-12	MI	Exempt	No
1-12	MS	Exempt	No
1-12	NH	No state tax	No
1-12	NJ	Pension Exclusion	No
1-12	NY	Exempt	No
1-12	PA	Exempt	No
1-12	TX	No state tax	No
1-12	WA	No state tax	Ad hoc
1-12	WY	No state tax	No
13-14	OR	Tax credit	No
13-14	SC	Age exempt table	No
15	KS	Exempt	Yes
16	MD	Exempt to $18,000	No
17	GA	Up to $15,000 excluded	No
18	DE	Exempt to $12,000	No
19	AK	Exempt to $6,000	No
20	IA	Exempt to $6,000	Yes
21	OK	Exempt to $5,500	No
22	NC	Age exempt table	No
23	MT	Exempt to $3,000	Yes
24	AZ	Up to $12,500 excluded	No
25	WV	Exempt to $2,000	Yes
26-27	WI	Tax credit	No
26-27	ID	Taxable	No
28-34	NE	Taxable	Yes
28-34	NM	Taxable	Yes
28-34	ND	Taxable	Yes
28-34	RI	Taxable	Yes
28-34	UT	Taxable	Yes
28-34	VT	Taxable	Yes
28-34	MN	Taxable	Yes

Pension Calculations After 30 yrs

Rank	State	Initial % final salary after 30 yrs	Actuarial reduction	Pension state taxed	Pension S.S. taxed
1	PA	75.0%	No if 60 yrs	No	No
2	NM	70.5%	No	Yes	Yes
3	TX	69.0%	No	No	No
4	WY	66.3%	No if 60 or R85	No	No
5	RI	66.0%	No	Yes	Yes
6	AK	64.5%	No	Exempt to $6000	No
7	AZ	63.75%	No	Exempt to $2500	No
8	MS	62.5%	No	No	No
9	AL	60.3%	No	No	No
10-20	GA	60.0%	No	Exempt to $15000	No
10-20	HI	60.0%	No if 55	No	No
10-20	ID	60.0%	Yes if before R90	Yes	No
10-20	IA	60.0%	Yes if before R88	Exempt to $6000	Yes
10-20	NE	60.0%	No, if 55	Yes	Yes
10-20	NY	60.0%	No, if R85	No	No
10-20	ND	60.0%	No, if 55	Yes	Yes
10-20	OK	60.0%	Yes if before R90	Exempt to $5500	No
10-20	UT	60.0%	No if 60	Yes	Yes
10-20	WA①	60.0%	No	No	Ad hoc
10-20	WV	60.0%	No if 60 or R85	Exempt to 2000	Yes
21-22	NJ①	54.6%	No	No	No
21-22	SC	54.6%	No	Age exempt table	No
23	NC	54.5%	No	Exempt to $4000	No
24	MD	54.0%	No	Exempt to $18000	No
25	KS	52.5%	No if 85	No	Yes
26-30	NH	50.1%	No if 60	No	No
26-30	MT	50.1%	No	Exempt to $3600	Yes
26-30	OR	50.1%	No if 58	Tax credit table	No
26-30	VT	50.1%	No	Yes	Yes
26-30	WI	50.1%	No if 57	Yes	No
31	FL	48.0%	No	No	No
32	NJ②	46.875%	No if 60	No	No
33	MN	46.0%	Yes if before R90 (hired before 7/1/89)	Yes (hired before 7/1/89)	Yes (hired before 6/30/89/under S.S. age 66 capped)
34	MI	45.0%	No if 55	No	No
35	WA②	30.0%	No	No	Ad hoc

W:Issues/Pensions/PensionBenefitComparisons/sp/10-23-06

* New Jersey, Washington & Minnesota have 2 tiers in some categories

Thirty-four Social Security State Study
Pension Benefit Comparisons

Normal Retirement Age			Employee Contributions			Employer Contributions			Final Average Salary Period			Formula Multiplier			Pension Calculations After 30 yrs						Taxation of Benefits			
Rank	*State*	*Age*	*Rank*	*State*	*Percent*	*Rank*	*State*	*Percent*	*Rank*	*State*	*Salary Period*	*Rank*	*State*	*Multiplier*	*Rank*	*State*	*Initial % final salary after 30 yrs*	*Actuarial reduction*	*Pension state taxed*	*Pension S.S. taxed*	*Rank*	*State*	*State*	*S.S.*
1-4	AL	Any 25, 60/10	1-2	FL	0.00%	1	WV		1	GA	High 2	1	PA	2.50%	1	PA	75.0%	No if 60 yrs	No	No	1-12	AL	Exempt	No
1-4	MS	Any 25, 60/4	1-2	UT	0.00%	2	AK	15.00%	2-24	AL	High 2	2	NM	2.35%	2	NM	70.5%	No	Yes	Yes	1-12	FL	No state tax	No
1-4	MT	Any 25 60/5	3-4	NY	3.00%	3	UT	14.00%	2-24	AZ	High 3	3-4	TX	2.30%	3	TX	69.0%	No	No	No	1-12	HI	Exempt	No
1-4	NM	Any 25, R75, 65/5	3-4	DE	3.00%	4	OR	13.38%	2-24	HI	High 3	3-4	AZ	2.30%	4	WY	66.3%	No if 60 or R85	No	No	1-12	MI	Exempt	No
5-7	AK	Any 28, 60/5	5	WA	3.01%	5	RI	12.25%	2-24	KS	High 3	5	RI	1.7% 1st 10/1.9% 2nd 10/3.0% 21-34 (1-34 yrs=2.2%)	5	RI	66.0%	No	Yes	Yes	1-12	MS	Exempt	No
5-7	RI	Any 28, 60/10	6	VT	3.40%	6	MI	12.01%	2-24	MD	High 3	6	WY	2.125% up to 15 yrs/2.25% after 15 yrs	6	AK	64.5%	No	Exempt to $6000	No	1-12	NH	No state tax	No
5-7	SC	Any 28, 55/25, 65/any	7	IA	3.70%	7	MD	11.66%	2-24	MI	High 3	7	MS		7	AZ	63.75%	No	Exempt to $2500	No	1-12	NJ	Pension Exclusion	No
8-9	AZ	R 80, 62/10, 65/any	8	KS	4.00%	8	OK	10.95%	2-24	MT	High 3	8	AK	2.15%	8	MS	62.5%	No	No	No	1-12	NY	Exempt	No
8-9	TX	R 80, 65/5	9	MI	4.30%	9	ID	9.80%	2-24	NE	High 3	9	AL	2.01%	9	AL	60.3%	No	No	No	1-12	PA	Exempt	No
10-16	DE	Any 30, 62/15, 60/15	10	NJ	4.50%	10	MS	9.77%	2-24	NH	High 3	10-19	GA	2.00%	10-20	GA	60.0%	No	Exempt to $15000	No	1-12	TX	No state tax	No
10-16	FL	Any 30, 62/10	11-15	AL	5.00%	11	HI	9.75%	2-24	NJ	High 3	10-19	HI	2.00%	10-20	HI	60.0%	No if 55	No	No	1-12	WA	No state tax	Ad hoc
10-16	GA	Any 30, 60/10	11-15	GA	5.00%	12	DE	9.69%	2-24	NY	High 3	10-19	ID	2.00%	10-20	ID	60.0%	Yes if before R90	Yes	No	1-12	WY	No state tax	No
10-16	MD	Any 30 65/5, 60/25	11-15	MD	5.00%	13	GA	9.52%	2-24	ND	High 3	10-19	IA	2.00%	10-20	IA	60.0%	Yes if before R88	Exempt to $6000	Yes	13-14	OR	Tax credit	No
10-16	NC	Any 30, 65/5, 60/25	11-15	NH	5.00%	14	FL	9.42%	2-24	OK	High 3	10-19	NE	2.00%	10-20	NE	60.0%	No, if 55	Yes	Yes	13-14	SC	Age exempt table	No
10-16	UT	Any 30, 65/4	11-15	MN	5.00% (5.50% on 7/1/06	15	NC	9.21%	2-24	OR	High 3	10-19	ND	2.00%	10-20	NY	60.0%	No, if R85	No	No	15	KS	Exempt	Yes
10-16	VT	Any 30, 62/15, 60/15	16	AZ	5.20%	16	NM	8.83%	2-24	PA	High 3	10-19	OK	2.00%	10-20	ND	60.0%	No, if 55	Yes	Yes	16	MD	Exempt to $18,000	No
17-24	HI	55/30, 62/10	17	WY	5.57%	17	AL	8.65%	2-24	RI	High 3	10-19	UT	2.00%	10-20	OK	60.0%	Yes if before R90	Exempt to $5500	No	17	GA	Up to $15,000 excluded	No
17-24	KS	R85, 62/10, 65/any	18	ID	5.85%	18	ND	7.95%	2-24	SC	High 3	10-19	WA①	2.00%	10-20	UT	60.0%	No if 60	Yes	Yes	18	DE	Exempt to $12,000	No
17-24	MI	55/30, 60/10	19-23	AK	6.00%	19	MT	7.58%	2-24	TX	High 3	10-19	WV	2.00%	10-20	WA①	60.0%	No	No	Ad hoc	19	AK	Exempt to $6,000	No
17-24	NE	R85/55, 60/10	19-23	WV	6.00%	20	NE	7.32%	2-24	UT	High 3	20	NY	2.0% up to 30 yrs/1.5% after 30 yrs	10-20	WV	60.0%	No if 60 or R85	Exempt to 2000	Yes	20	IA	Exempt to $6,000	Yes
17-24	NY	55/30, 62/5	19-23	NC	6.00%	21	WA	7.10%	2-24	VT	High 3	21	DE	1.85%	21-22	NJ①	54.6%	No	No	No	21	OK	Exempt to $5,500	No
17-24	ND	R85, 65/3	19-23	OR	6.00%	22	SC	6.82%	2-24	WI	High 3	22-24	NJ①	1.82%	21-22	SC	54.6%	No	Age exempt table	No	22	NC	Age exempt table	No
17-24	WV	55/30, Any 35, 65/5	19-23	SC	6.00%	23	WI	6.10%	25	WY	High 3	22-24	NC	1.82%	23	NC	54.5%	No	Exempt to $4000	No	23	MT	Exempt to $3,000	Yes
17-24	WY	R85, 60/Any	24	WI	6.20%	24	TX	6.00%	26-24	ID	High 3.5	22-24	SC	1.82%	24	MD	54.0%	No	Exempt to $18000	No	24	AZ	Up to $12,500 excluded	No
25	WI	57/30, 65/Any	25	TX	6.40%	25	IA	5.75%	26-27	MS	High 4	25	MD	1.80%	25	KS	52.5%	No if 85	No	Yes	25	WV	Exempt to $2,000	Yes
26-27	IA	R88, 62/20, 65/Any	26	OK	7.05%	26	WY	5.68%	28-34	DE	High 4	26	KS	1.75%	26-30	NH	50.1%	No if 60	No	No	26-27	WI	Tax credit	No

Thirty-four Social Security State Study
Pension Benefit Comparisons

Normal Retirement Age

Rank	State	Age
26-27	OR	58/30, 65/Any
28-31	ID	R90, 65/5
28-31	MN①	R90(step), 62/30, 65/3 (hired before 7/1/89)
28-31	OK	R90, 62/5
28-31	PA	Any 35, 62/1, 60/30
32-33	NH	60/Any
32-33	NJ	60/Any
34	WA	62/5, 65/5
35	MN②	66/3 (level) Hired after 7/1/89

Employee Contributions

Rank	State	Percent
27	MT	7.15%
28-30	MS	7.25%
28-30	PA	7.25%
28-30	NE	7.25%
31	NM	7.60%
21	ND	7.75%
33	HI	7.80%
34	RI	9.50%

Employer Contributions

Rank	State	Percent
27	NJ	* 5.44%
28	AZ	5.20%
29	MN	5.00% (5.50% on 7/1/06)
30	VT	4.96%
31	KS	4.19%
32	NH	4.11%
33	PA	3.80%
34	NY	2.52%

Final Average Salary Period

Rank	State	Salary Period
28-34	FL	High 5
28-34	IA	High 5
28-34	NM	High 5
28-34	WA	High 5
28-34	WV	High 5
28-34	MN	High 5

Formula Multiplier

Rank	State	Multiplier
27	WI	1.67% after 1999 / 1.765% before 1999
28	MN①	1.7% 6/30/89-7/1/06; 1.9% after 7/1/2006
29-31	MT	1.67%
29-31	OR	1.67%
29-31	VT	1.67%
32	NH	1.67% to 65 / 1.515% after
33	FL	1.60%
34	NJ②	1.5625%
35	MN②	1.2% 1st 10/1.7% thereafter to 7/1/06; 1.9% starting yr. 11
36	MI	1.50%
37	WA②	1.00% (plan#3) option

Pension Calculations After 30 yrs

Rank	State	Initial % final salary after 30 yrs	Actuarial reduction	Pension state taxed	Pension S.S. taxed
26-30	MT	50.1%	No	Exempt to $3600	Yes
26-30	OR	50.1%	No if 58	Tax credit table	No
26-30	VT	50.1%	No	Yes	Yes
26-30	WI	50.1%	No if 57	Yes	No
31	FL	48.0%	No	No	No
32	NJ②	46.875%	No if 60	No	No
33	MN	46.0%	Yes if before R90 (hired before 7/1/89)	Yes (hired before 7/1/89)	Yes (hired before 6/30/89/under S.S. age 66 capped)
34	MI	45.0%	No if 55	No	No
35	WA②	30.0%	No	No	Ad hoc

Taxation of Benefits

Rank	State	State	S.S.
26-27	ID	Taxable	No
28-34	NE	Taxable	Yes
28-34	NM	Taxable	Yes
28-34	ND	Taxable	Yes
28-34	RI	Taxable	Yes
28-34	UT	Taxable	Yes
28-34	VT	Taxable	Yes
28-34	MN	Taxable	Yes

W:/Issues/Pensions/PensionBenefitCompanisons/sp/10-23-06

* New Jersey, Washington & Minnesota have 2 tiers in some categories

Comparison of Minnesota Teacher Pension Benefits With Other Social Security States

October 2006

State System	Salary Rank	Normal Retirement Age	Penalties for Early Retirement	Taxation of Benefits	Pension Benefits COLA	Formula Multipliers	Tax S.S.	Final Average Salary Periods	Special Early Normal Retirement Provisions	EE Contri-bution	ER Contri-bution	Additional Comments
AL	42	60/10 A25	-	Exempt	Ad Hoc	2.01%	No	High 3	-	5.00	5.96	
AK	13	60/5 A28	Lesser of 5% ea yr under 28 yrs srv OR 5% ea yr under age 60	Exempt to $6000	Annual 3%	2.15%	No	High 3	Any/25	6.00	12.00	
AZ	25	65/A 62/10 R80	table	Up to $2500 excluded	Investment surplus capped @4%	2.3% x 30 yr	No	High 3	50/5	2.66	2.66	
DE	11	62/5 60/15 A30	2.4%/yr	Exempt to $12,000	Ad Hoc	1.85%	No	High 5	55/15; any/25	3.00	9.52	
FL	30	62/10 A30	5%/yr	No state tax	Annual 3%	1.6%	No	High 5	Any/6	0.00	9.21	
GA	18	60/10 A30	7%/yr	Up to $15,000 excluded	Annual 3%	2.0%	No	High 2	Any/25	5.00	11.29	Can purchase "air" time up to 3 yrs
HI	14	62/10 55/30	6%/yr	Exempt	Annual 2.5%	2.0%	No	High 3	55/20	7.80	9.69	
ID	29	65/5 R90	3%/yr first 5 yrs; 5.75%/yr thereafter	100% Taxable	1% annual	2.0%	No	High 3.5	55/5	5.85	9.77	
IA	40	65/A 62/20 R88	3%/yr	Exempt to $6000	Up to 3%	2.0%	Yes	High 5	55/4	3.70	5.75	
KS	38	65/A 62/10 R85	2.4% to 20%/yr	Exempt	Ad Hoc	1.75%	Yes	High 3	55/10	4.00	4.19	
MD	10	60/5; any/30	6%/yr max 30%	Exempt up to $18,500	2% to unlimited based on contribution	1.80%	No	High 3	Any/25	7.00	10.95	
MI	4	60/10 55/30	6%/yr	Exempt	Annual 3%	1.5%	No	High 3	55/15	4.30	11.66	Can purchase 5 yrs of "air" time- they call it "universal buy-in"
MN	17	Level-66/3 Step (R90)- 65/3 62/30	4-5.5%/yr tied to SS normal	100% Taxable	CPI up to 2.5% + investment surplus 1.2 first 10; 1.7 to 7/1/06; 1.9 after that	Hired after 6/30/89 1.7/1.9 after 7/1/00 Hired ON OR before 6/30/89	Yes	High 5	55/3	5.5	5.5*	* As of 7/1/07
MS	49	60/4 any/25	-	Exempt	3% compounded	2% to 25 yrs 2.5% over 25 yrs	No	High 4	-	7.25	9.75	