Commission to Study the Long Term Viability of the NH Retirement System

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Final Report

January 2, 2008

Commission to Study the Long Term Viability of the NH Retirement System

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Pamela Brenner, Town Administrator, Peterborough

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Gary Smith, President, SEIU Local 1984

Representative Marjorie K. Smith, Chair, House Finance Committee

Rick Trombly, Director of Public Affairs, National Education Association-NH

Chief James S. Valiquet, President, NH Association of Chiefs of Police

Report prepared by Kate McGovern, MPA, MA

<u>Acknowledgements</u>

New Hampshire Retirement System Interim Director Timothy Crutchfield, Financial Operations Director Richard Joyal, Chief Member Services Officer Merelise O'Connor, and Chief Investment Officer Jeff Gendron

David Frydman, House Legal Counsel

Richard W. Head, Associate Attorney General

Legislative staff: Shannon Whitehead, Christopher Callaghan, Chris Kennedy, Pam Smarling

Layout: Heather Quinn Claver

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Executive Summary

The HB 876 Commission was charged with making recommendations to ensure the long term viability of the Retirement System. Our guiding principle was to keep faith with New Hampshire's public employees and retirees. Understanding the need for predictability and stability for both employers and employees, the Commission conducted a comprehensive review of the plan's funding status and governance structure. We proceeded to develop a series of recommendations that, if implemented, will assure the continuation of our defined benefit pension system and medical subsidy program.

The Commission's findings are detailed in the Report, based on each of the charges in HB 876:

- Study the history of funding, benefits, and investment results of the New Hampshire retirement system.
- Review the structure and governance of the New Hampshire retirement system.
- Analyze the current financial status of the retirement system, and the challenges facing the system in the future.
- Assess the changes to general accounting standards and their potential effect on the retirement system.
- Make recommendations for ensuring the long-term viability of the retirement system, including an appropriate funding methodology.
- Design a sustainable and affordable cost of living increase for plan participants which may be adopted by the legislature as part of the retirement system.
- Study the limitation on maximum benefit amounts.
- Study the issue of equity in contribution rates between employers and employees.
- Study other matters deemed necessary by the commission.

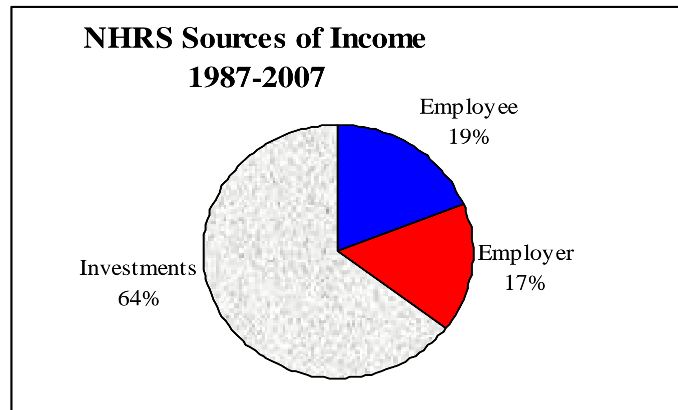
The Commission's Report begins with an acknowledgement of the crucial impact of HB 653, passed in 2007, which put stop gap measures in place. We use it as a basis for further action. The size and scope of the problems require a comprehensive approach on a range of issues. Understanding the underfunded condition of NHRS, we advocate prompt action be taken by the legislature and the trustees on the recommendations in our Report.

Priority Recommendations:

1. Establish a strong committee structure for the NHRS Board that facilitates and enables meaningful work to be accomplished, utilizing the experience and expertise of not only Board members, but appropriate outside individuals.
    - Establish an Investment Committee that includes non-board members who are investment professionals.
    - Establish an Audit Committee that includes non-board members who are accounting professionals.
2. Freeze the medical subsidy amount in 2010, subject to biennial review.
3. Establish a new health care subsidy plan, separate from the pension plan, by 7/1/09.
4. Transfer $250 million from the Special Account into the corpus, which will bring the trust up to 66.8%, and lessen the impact of medical contributions on employer rates.
5. Establish an employee-funded COLA program.
6. Allow non-vested members to leave money in the system, credited at a rate 2% below the assumed rate of return.
7. Details and other recommendations are included in the Report.

Overview

The New Hampshire Retirement System has served the state well since its founding forty years ago. Currently, more than 50,000 public employees, teachers, police and firefighters are contributing members of the plan. The State of New Hampshire and 475 political subdivisions also contribute to the plan. Two-thirds of plan assets come from investment gains. Starting with $98 million in 1967, the trust now holds assets exceeding $6 billion. The fund currently provides monthly pensions for more than 20,000 retirees and beneficiaries.



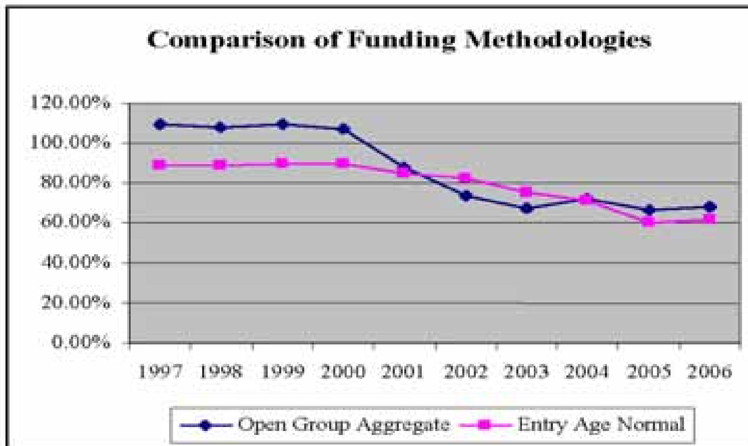
The chart below shows the annual fluctuations of investment earnings over a 20 year period. In five out of the 20 years, earnings were significantly below the assumed rate of return.

Twenty Year History of NHRS Time Weighted Annual Returns

Year	Return
1987	12.8%
1988	-1.9%
1989	17.0%
1990	16.8%
1991	9.0%
1992	13.5%
1993	14.4%
1994	1.4%
1995	20.0%
1996	17.5%
1997	18.6%
1998	17.5%
1999	14.4%
2000	13.2%
2001	-6.7%
2002	-6.4%
2003	2.5%
2004	14.9%
2005	10.1%
2006	10.0%
2007	16.0%

Source: NHRS. Fiscal years end June 30

Certain flaws in the system can be traced back to legislative action in 1991 adopting the Open Group Aggregate (OGA) funding methodology. The method over-stated the funding level which lowered employer contribution rates for an extended period. The situation was complicated by the use of gains sharing as the means of funding cost of living adjustments (COLAs). From 1990-2000, the trigger rate of 9% (average) resulted in the transfer of more than $900 million in "excess earnings" to the Special Account. Meanwhile, the OGA method masked the under-funding of the corpus of the trust. In 2007, the passage of HB 653 required the use of the more commonly accepted Entry Age Normal (EAN) method.



The graph compares the funding level using OGA with the levels using the EAN method.

In 1999, using OGA, the trust appeared to be 110% funded, while EAN shows that it was actually just 89.4% funded.

Following the 2001-2003 stock market decline, the funding dropped to a low of **60.27%** as of 6/30/05. In 2007, the passage of HB 653 altered the gains sharing trigger that would have sent funds to the Special Account, retaining $204 million in the corpus of the trust. The fund was further strengthened by an investment gain of 16% for FY 2007. The downward trend in the funding ratio was reversed, with the trust at **63.4%** as of 6/30/07. That translates into a $2.6 billion Unfunded Actuarially Accrued Liability (UAAL).

Amortization of the UAAL over the 30 year period at a stable contribution rate exceeds the current Normal cost of the pension plan to employers. The 2007 actuarial valuation calculated the two components of the projected employer contribution rates for 7/1/09-6/30/11, as indicated below:

	Employees	Teachers	Police	Fire	Total
Normal Cost	4.80%	3.78%	8.75%	11.56%	5.11%
UAAL	**4.86%**	**6.32%**	**10.76%**	**13.57%**	**6.49%**
Total Rate	9.66%	10.10%	19.51%	25.13%	11.60%

While the passage of HB 653 stabilized the situation, significant challenges remain. The Report contains detailed information about employer rates that explain the need for prompt action on the transfer of $250 million from the Special Account to the corpus, and freezing the medical subsidy at the 2010 levels, subject to biennial review.

Highlights of Recommendations for the Long-term Viability of the System

Responsibility for the New Hampshire Retirement System is divided between the legislature and the system's board of trustees. The legislature sets the level of benefits and appropriates the necessary funds. The board of trustees manages the investments, administers the benefits, and sets the necessary contribution rates. Each body functions autonomously and must continue to do so. However, the absence of constructive collaboration will cost future taxpayers dearly. The NHRS trust fund dropped to a level 25 percent below the national median before corrective action was taken. The current unfunded liability of $2.6 billion will have to be paid by the employers (taxpayers) over the next 30 years.

> Recommendation:
> The NHRS board should meet with appropriate legislative leaders and the governor at least twice per year.

The legislature and the board of trustees must jointly establish the capacity to address issues before they turn into problems. Neither body's autonomy should be compromised by constructive collaboration.

Challenges for the legislature

The legislature needs information on a wide range of complex and interrelated policy options, but access to technical expertise to evaluate the options is limited. The volunteer legislature's obligation to act on more than a thousand bills within a six month period, combined with pressures to restrain spending creates a climate that defers the costs of current benefits to future taxpayers. The long term viability of the system would be served by the continual development of expertise by legislators in dealing with the complex issues facing the system.

> Recommendation:
> Establish a joint legislative committee to maintain a liaison relationship with the system to expand the level of understanding within the legislative branch.

Challenges for the trustees

Trustees who are members of constituency groups or the legislature must act with the objectivity required as fiduciaries. The board must overcome its traditional reluctance to involve itself in policy matters by proactively providing the legislature with adequate information to make sound policy decisions. As fund fiduciaries, the trustees and the system management have the affirmative obligation to help the legislature evaluate the consequences of various decisions concerning the system. The long term viability of the system would be served if the trustees and system management provide guidance beyond the actuarial data and technical reports.

> Recommendations:
> - Clarify and affirm the fiduciary obligations of all NHRS trustees are not subordinate to any other role or position, or basis of selection to the NHRS board.
> - Adopt as a guiding principle the responsibility to regularly and openly communicate with stakeholders, including beneficiaries, employers, the state executive and legislative branches and the public, as part of the effort to make sound long term policy decisions.

Ten year review

The commissions in 1991 and 2007 were formed reactively, in response to events. An independent commission should be formed each decade to assess the funding progress and make recommendations concerning the long term viability of the system.

> Recommendation:
> In order to provide oversight as to the continued long term viability of the NHRS a commission similar to that established by Chapter 355:1, Laws of 2007 shall be convened once every 10 years.

Highlights of Recommendations for Benefits

Build a pre-funded cost-of-living adjustment (COLA) into the defined benefit plan, funded with a 2% increase in employee contributions

NHRS currently lacks a provision for guaranteed COLAs to protect the value of retirees' pensions against inflation. The Commission recommends increasing employee contribution rates by 2% in order to fund a new COLA benefit.

Since the salary levels, contribution amounts and retirement eligibility vary, the effective date of the new COLA will vary by employee category (employee, teacher, police officer or firefighter). The commencement of the COLA will be actuarially determined, using a combination of age and years of service for each employee category.

Provide current retirees with a minimum annual increase

The new COLA benefit (described above) does not apply to those already retired. COLAs for current retirees must continue to be funded by the Special Account. The remaining $300 million in the Special Account that is not earmarked for other benefits will be depleted within 2-5 years if COLAs continue as they have in the past. If funds are depleted before new money enters the account, retirees will be without COLAs.

Recommendation: Conserve the available funds *and* protect lower income pensioners by providing a 2.5% payment up to the median for each retiree category with a minimum amount of $500 annually, which would be paid as a "13th check", increasing at the CPI-U each year. The anticipated cost is $12-15 million per year. Depending upon available funding, other options are recommended, subject to biennial review (discussed in detail in the legislative section).

Allow the conditional resumption of gains sharing into the Special Account

Current law provides for the investment earnings in excess of 10.5% to be transferred to the Special Account when the trust reaches an 85% funding level.

The Commission recommends permitting such transfers starting at a 75% funding level, *provided* that employer rates do not increase as a result and that a loss sharing or make-up provision coming from future gain sharing is included. The availability of funds in the Special Account would help to protect retirees during the transition to the new employee funded COLA and the changes in medical subsidy benefits.

Stabilize the current medical subsidy program

NHRS pays a medical subsidy toward the cost of eligible retirees remaining on their former employers' group health insurance plans. Current statute provides an 8% per year increase in the amount of the subsidy payments. Current law also requires 25% of employer contributions to go toward the subsidies.

To ensure the continuity of the medical subsidy for those currently eligible, the Commission recommends:

- Immediately transfer $250 million that had been earmarked for health benefits from the Special Account into the corpus of the trust fund.
- Freeze the amount of the subsidy in 2010, subject to a biennial review.
- Adjust employer contributions into the subsidy program accordingly, not to exceed the maximum of 25%.

Establish a new retiree health care model open to all public employees by July 1, 2009

The NHRS health care subsidy is available to fewer than half of the current 20,000 retirees. Fewer than 12% of the active members are eligible for the program, including teachers and subdivision employees who retire with at least 20 years of service by 7/1/08 and police officers and firefighters who were hired by 6/30/00. Although retirees from state agencies continue to be covered by the State, many of the subdivision retirees will be without retirement health benefits.

There is a need to act quickly to remove the incentive for teachers and political subdivision employees to retire by 7/1/08. A new retiree health care funding plan open to all public employees should be in place by July 1, 2009, or the existing medical subsidy program should be extended in a manner that is financially supportable.

The Commission recommends the establishment of a preferential tax vehicle for employees to make contributions that would provide additional funds for post-employment medical expenses. Employer contributions would be negotiated. The vehicle would provide all public employees the opportunity for access to funds to assist with the costs of post-retirement health care.

Detailed Recommendations to the Legislature

Top priority: Address the Medical Subsidy

Background: About 10,000 retirees and beneficiaries (roughly half of NHRS retirees) are eligible for a medical subsidy, toward the cost of remaining on their former employers' group health plans. When the legislature authorized the subsidies, they were believed to be terminally funded. Due to the market downturn of 2001-2003 and other factors which are explained in section IX, the subsidies are now only **16%** funded. The valuation as of 6/30/07 reported the 401(h) medical sub-trust has assets of $156.9 million and liabilities of $822.2 million. Current law requires 25% of employer contributions to go into the 401(h) sub-trust to fund the medical subsidy.

- If the employer contributions are stopped entirely, the subsidy will run out of money within a few years. The depletion dates vary by group: teachers in 2011, employees in 2012, police in 2015, and fire in 2017.
- If nothing changes and employers continue funding the subsidy program with the 8% annual escalator in the subsidy amount, contribution rates are projected to increase significantly in FY 2010 and beyond. (the projected "grossed-up" rates are in the table below)

1. **The Commission recommends legislative action to address the impact on employer contribution rates, while preserving the subsidy for those currently eligible:**

- Immediately transfer $250 million that had been earmarked for health benefits from the Special Account into the corpus of the trust fund. The addition of these funds will increase the system's funding level to 66.8%, which will moderate the employer contribution rates.
- Remove the automatic 8% annual increase in the subsidy amount, freezing it at the 2010 level, subject to a biennial review, including consideration of different rates of growth for each group if those rates are actuarially supported.
- Amend the statute requiring 25% of the employer contributions to be paid toward the subsidy, to authorize the lesser of the actuarially required contribution to keep the program solvent, up to a maximum of 25%.

EMPLOYER CONTRIBUTION RATES					
	Employees	**Teachers**	**Police**	**Fire**	**Total**
Projected rates for pension and medical subsidy, if no action is taken					
Pension rates for 7/1/09 - 6/20/11	9.66%	10.10%	19.51%	25.13%	11.60%
Medical subsidy rate	3.22%	3.37%	6.5%	8.38%	3.87%
Total rate for 7/1/09 - 6/30/11	**12.88%**	**13.47%**	**26.01%**	**33.51%**	**15.47%**
Projected rates for pension plus medical subsidy with the Commission's recommendations					
Pension rates with $250 million transferred to the corpus	9.27%	9.56%	17.95%	22.70%	10.93%
Medical subsidy rates without the 8% annual subsidy increase	.54%	.83%	2.37%	1.92%	.92%
Total rate for 7/1/09-6/30/11	**9.81%**	**10.39%**	**20.32%**	**24.62%**	**11.85%**

2. **The Commission recommends that the legislature make further changes to remove the incentives to premature retirement by opening the new retiree health care funding plan (described below) to all public employees by 7/1/09, or extend the existing medical subsidy program in a manner that is financially supportable.**

   Background: The current medical program is available for a closed group of government employees: for fire and police who have been hired by 6/30/00 and for employees and teachers who retire by 7/1/08. Action is needed to remove incentives for premature retirement by teachers and subdivision employees by 7/1/08, and to address inequities between Group II members who were hired before and after 6/30/00.

3. **The Commission recommends legislative action to adopt a new retiree health care model to be enacted July 1, 2009.**

   Background: The actuaries project that a maximum of 10,052 people will be eligible for the current medical subsidy program. Although employees of state agencies are covered by the State, the majority of the NHRS membership; subdivision employees and teachers who retire after 7/1/08 and police officers and firefighters who were hired after 6/30/00 are without retiree health benefits.

   Benefits Subcommittee Principles for a Medical Subsidy and Health Care Funding Model
   - Protect the elderly, fixed income subsidy recipients (combination of medical subsidy and COLA reform)
   - Avoid incentives for premature retirement
   - Provide widely available access to pre-funded mechanisms to assist with retiree health costs
   - Address the impact of "grossed-up" employer rates
   - Spread the coverage beyond the 44% of retirees and 12% of active members currently covered
   - Extensive analysis and review supported by experts, and ample public and stakeholder input and communication, before final implementation of a new plan
   - Orderly and fair transition
   - All reasonable alternatives be explored to provide the best possible solution

   Detailed discussion of the recommendation: The establishment of a preferential tax vehicle would allow employees to make contributions that would provide additional funds for post-employment medical expenses, thus providing all public employees the opportunity for access to post-retirement medical benefits. The phases include: analysis, adoption, development, advertisement , and implementation.
   - In selecting an appropriate vehicle, the Commission recommends that the legislature analyze the models in use by other states, and collect information from experts in the field. The vehicles analyzed should include, but not necessarily be limited to: governmental trusts, Voluntary Employee Benefit Associations (VEBAs), 401(h) trusts and Health Savings Accounts.
   - In considering the analysis, adoption, development, and implementation of the optimal retiree health care model, the Commission recommends the following principles be considered:
     - Allow for employee and employer contributions
     - Tax advantaged contributions, earnings and benefit distributions
     - Include pre-funding for cost-effectiveness, security and to satisfy GASB accounting standards & IRS regulations
     - Employer contributions through negotiated matches for currently active employees
     - Additional voluntary employee contributions

- o Administrative efficiency
- o Availability & integration with other benefits
- o Unused sick/vacation leave may be deposited in the trust
- o Long term viability of the new trust

4. The Commission recommends the legislature consider and take additional actions to assure an orderly transition from the old medical subsidy program to the new retiree health funding plan, including but not limited to:

- Consider bonding to assist in the establishment of the trust and/or the transfer of medical subsidy eligible active employees and/or retirees to the new health care funding model
- Consider the integration of the new trust with the existing subsidy-eligible state employees and the benefits provided by 21-I:30.
- Move all subsidy eligible retirees into the new plan, bringing the current 401(h) sub trust funding with them (if permitted)
- Analyze alternative retiree health care insurance programs for political subdivision retirees and Medicare retirees that would reduce the overall costs of medical care
- Additional steps to provide for an orderly transition

Further information on the range of possibilities for the new health care model is in Chapter IX.

Priority: Recommendations to address cost-of living adjustments for current and future retirees

1. Build a COLA into the defined benefit plan, funded with a 2% increase in employee contributions. Active members will pre-fund their future COLAs.

Current law requires Group I employees and teachers to contribute 5% of pay, which combines with employer contributions to build a pension equivalent to half their working pay after 30 years. Group II police officers and firefighters contribute 9.3%, combining with employer contributions to build a half pay pension in 20 years. The Commission recommends legislative action to increase employee contribution rates by 2% in order to pre-fund a post-retirement COLA. The new method will also function as an incentive to postpone retirement.

Since the salary levels, contribution amounts and retirement eligibility vary, and the effective date of the new COLA will vary by employee category, actuarial analysis will be needed to determine the commencement of the COLA. The Commission recommends that the new benefit be phased in, using a combination of age and years of service for each employee category. The timing of the 2% increases should be enacted accordingly.

The unfunded accrued liability for the 2% prefunded COLA must be accounted for separately and is the responsibility of the employees, not employers. Details may need to be fine-tuned after analysis and further consultation with actuaries.

2. Recommendations to the Fiscal Committee: use the remaining approximately $300 million+ and interest earned on that in the Special Account for COLAs for current retirees.

The new self-funded COLA will take several years to phase in, and it will not apply to those who have already retired without an opportunity to contribute to the new benefit. In order to protect lower income pensioners, and forestall depletion of the Special Account, the Commission recommends the Fiscal Committee authorize COLAs paid as a 13th check, set at a rate of 2 ½% up to the median sub-group pension level, with a $500/year minimum amount for each retiree rising at the CPI-U each year. For example, if inflation is 3.5%, next year the minimum amount of the 13th check would be $517.50.

Depending upon the availability of special account funds, the fiscal committee could authorize lifetime terminal funding of the COLA amount rather than a 13th check. The committee could consider higher COLAs and longevity adjustments from the special account, or other funds outside of the pension system. This provision shall be reviewed biennially.

Why change from past practice of granting 0-5% COLAs across the board? According to NHRS projections, terminal funding of compounded 2% COLAs would cost $69.9 million in 2009; $76 million in 2010; $82.6 million in 2011 and $89.9 million in 2012, which would deplete the remaining $300 million in the Special Account. Providing a floor of $500 targets the remaining funds to those in greatest need and extends the remaining funds for as much as 20 years. The estimated cost for the "13th check" is $12-14 million per year.

Protecting low income retirees through the use of targeted COLAs will become increasingly significant because of the recommended freeze on the amount of the medical subsidy. Without the 8% annual escalator in the subsidy amounts, the low income retirees will be under additional financial pressure due to rising health care costs.

3. Allow the conditional resumption of gains sharing into the Special Account

Current law provides for the transfer of investment earnings in excess of 10.5% to be transferred to the Special Account when the trust reaches an 85% funding level.

Background: The Commission is aware of the need for funds in the Special Account to protect retirees during the transition to the new employee funded COLA and the changes in medical subsidy benefits A review of the history of the system found an actuarial audit by Ernst & Young (1994) which recommended that a "make-up" provision be used to protect the corpus of the fund in the event of a shortfall in earnings. That suggestion has been incorporated into the following proposal for a prudent way to reinstitute gains sharing:

Recommendation: Reduce the threshold for gains sharing from the 85% funding level to 75% provided that the employer normal rates do not increase as a result and provided that a loss sharing or make-up provision from future gain sharing is included to ensure the integrity of the pension fund and symmetry on the gains sharing.

The trigger rate will remain at 10.5%. When the trust fund reaches 75%, gains in excess of 10.5% will be transferred to the Special Account. Details may need to be fine tuned after actuarial and sensitivity analysis to ensure changes to the sharing mechanism are consistent with stable funding of the pension system and expected funding levels.

Recommendation: Change the Gains Sharing Formula when the trust fund reaches 85%, such that gains in excess of 10.5% will be shared 50/50 between the Special Account and the corpus.

The share directed to the corpus will function to reduce the employer rate. The employer rate reductions will be allocated based on the relative contributions of the political subdivisions and the state.

Other recommendations regarding member benefits

- Allow members to make additional contributions, credited at the actual rate of return, less 2%. This proposal needs further actuarial fine tuning.
- Remove the time restriction for non-vested members to leave their money in the system, but only credit the funds at 2% below the actual rate of return for the time they are out of the system. Further actuarial analysis may suggest fine tuning.
- Remove the phrase "and other compensation paid to the member by the employer" from RSA 100-A:1, XVII to address maximum benefit concerns.

Support of the principles of HB 653

- The Commission endorses the position on equity of employee and employer contribution rates established in HB 653: The annual employer contribution requirements effective July 1, 2008 and as calculated each year thereafter shall not be less than the employee contribution rates.
- The decision to use an Open Group Aggregate methodology caused systemic employer underfunding since 1992. The extended period of underfunding the trust account has been compounded by a period of down market return on investments and there is no quick fix for a return to 'wholeness'. The NHRS should adhere to the sound accounting principles that HB 653 established and work to accurately calculate the fund liabilities, thereby making financial decisions that put the system on a path to ensure full funding.
- The Commission supports the provision in HB 653 concerning the calculation of the fund liabilities, thereby putting the system on a path to ensure full funding using relatively level contribution rates, amortizing the UAAL over at 30 years or the maximum period set in GASB.

Recommendations for long-term viability

- Establish a joint legislative committee to maintain a liaison relationship with the System to expand the level of understanding within the Legislative branch.
- In order to provide oversight as to the continued long term viability of the NHRS a commission similar to that established by Chapter 355:1, Laws of 2007 shall be convened once every 10 years.

Detailed Recommendations to the New Hampshire Retirement System's Board of Trustees

Governance

- There is no greater responsibility for trustees than the soundness of the fund. Toward that end they must defend the system's independent status by asserting that independence lest it be lost. With the benefit of hindsight, more assertive representation with respect to a) the adoption and continued use of an inappropriate actuarial method, b) gain-sharing and c) the use of an unreasonably high assumed rate of return during the past 15 years would have served the system well.
- Clarify and affirm the fiduciary obligations of all NHRS trustees are not subordinate to any other role or position, or basis of selection to the NHRS board.
- The board should foster an atmosphere that is conducive to good decisions. That means addressing and eliminating sources of friction wherever they exist to focus on what is best for the system
- Amend the NHRS bylaws to commit all trustees to participate in ongoing orientation and educational activities relating to pension plan governance, investments, and other germane topics – with the expectation and goal of maintaining high levels of engagement and competence.
- Establish in NHRS bylaws a committee structure that enables greater involvement of non-Board individuals with specialized expertise and experience. One possible structure would establish five standing committees (Investment, Audit, Benefits, Legislative, and Personnel and Compensation) each with no less than two and no more than four NHRS trustees plus no less than two and no more than four individuals not currently serving on the NHRS Board. Thus each committee would have no less than four members and no more than eight, and make recommendations to the full board for ultimate approval.
  - The Investment committee could include investment professionals or those managing large endowments or similar funds, with asset allocation and other major policy direction established by the full board and the Investment committee delegated authority for decisions such as fund manager selection(s).
  - The Audit committee could include CPA's and others working in public accounting.
  - The Benefits committee could be charged with adjudicating any cases, and include NHRS retirees.
  - The Legislative committee could assess the impact on the NHRS of proposed legislation and assist in the development of potential legislation (including revisions to benefits), and include NHRS participants, retirees, current and former elected officials, and others with specialized expertise.
  - The Personnel and Compensation committee could include human resource professionals or benefit specialists, and recommend related policies to the full Board.
  - All non-board appointees to NHRS committees would be approved by the full board, and selected individuals would be held to the same fiduciary standards as board members and be provided appropriate liability insurance coverage.
- Commit in NHRS Bylaws to full transparency for all actions impacting participants, including reasonably complete Board/committee minutes. In addition, the NHRS would adopt as a guiding principle the responsibility to regularly and openly communicate with stakeholders.

Finance & Management

- The NHRS shall have a short-term goal of 80% terminal funding at a minimum. The higher this percentage is the better protected the fund will be, particularly during the inevitable down years.
- The assumed rate of return must be reasonable and sound, not set to minimize employer contributions.
- The Board should adopt a timetable for reviewing and renewing or replacing: actuaries, auditors, consultants, counsel on an appropriate timetable (3-5 years). Investment managers are under continuous review.
- The NHRS shall employ high-level personnel with expertise in accounting and investment skills to effectively assist the NHRS board of trustees, particularly with regard to any changes in IRS and GASB requirements. The board of trustees, in carrying out its fiduciary responsibility, must ensure access to ongoing educational opportunities for the board and staff to stay informed of changes in laws and regulations not only in managing the funds but also in preparing reports to the stakeholders in the system. The legislature and present and future beneficiaries are dependent upon the knowledge of the trustees and staff, the skill with which they carry out their responsibilities and the accuracy of the information they provide.
- The system should develop a method of communicating, in addition to the Comprehensive Annual Financial Report (CAFR), to facilitate stakeholders' and policy makers' understanding of the issues facing the system.
  - The annual CAFR contains an extraordinary amount of detail, so much that it is difficult to see the forest for the trees. For example, past narratives have not called attention to the substantial deterioration in the funded ratio or the fact that investment performance has lagged the assumed rate, or the implications for the core fund in the millions of dollars transferred to the Special Accounts through gain sharing.
  - The NHRS should provided accurate financial reports to all beneficiaries, employers, the state executive and legislative branches and the public as part of their effort to make sound long term policy decisions. This sharing of information is essential as part of a commitment to accountability. The information should include a report of unfunded accrued liability by employer.

Investments

- Adopt the American Law Institute "prudent expert" standard for the management of NHRS funds. It requires fiduciaries to become experts and/or to hire, carefully delegate and rigorously monitor those charged with fund management duties. This standard would apply to all board members, staff, and vendors.
- The board should set high standards, knowing how the investment results compare not only with its own benchmark but relative to its peers. The board should be open to new ideas, learn from best-in-class funds and not find comfort in the middle of the pack. Creativity need not be confused with risk.
- Expand the current System's Investment Policy Statement and elevate its importance in the governance structure. The statement should incorporate the following:

  a) A clear statement of investment objectives should describe how the average annual rate of return is to be achieved. (None is stated currently.) The policy should be linked to the assumed rate set by the trustees for the biennial actuarial calculation (currently 8 ½).

  b) A detailed breakdown of the asset structure most likely to enable the fund to reach its long range objective within appropriate risk parameters. The details should include all relevant sub-categories among equities, debt and alternative investments and identify the appropriate benchmarks for each performance analysis. The policy should establish an acceptable range for each allocation as well as a specific target allocation. The policy should be reviewed annually by the Investment Committee and approved by the Board of Trustees.

c) Clarity with respect to where the responsibility lies and how outcomes are measured (benchmarks) for the various decision levels in the investment process between the board of trustees, the investment committee, system's staff, investment consultants and portfolio managers. The policy statement should specify the minimum frequency of such reviews. The purpose is not only to answer the question: "How are we doing?" but to determine whether decisions as to asset mix and manager selection added value or not.

- Build staff strength under the Chief Investment Officer (CIO) commensurate with the scale and complexity of the $6 billion pool. Consider incentive policies for the CIO and the Executive Director tied to investment benchmarks. Previous reviews and audits have noted that the lack of investment experience on the Board combined with limited staff resources for the investment function leave the investment consultants with an inordinate degree of influence, making it difficult to test and optimize recommendations. Appropriate educational programs should be offered and required of staff and trustees.
- Recognizing that empirical evidence has shown that good corporate governance adds shareholder value, the system must do everything within reason to increase the value of its holdings. In any instance where the system suffers a loss as a result of alleged fraud there should be a process to ensure that it is collecting all securities class action money that may be due. Public pension funds have a responsibility to be proactive in exercising their rights as shareholders of public companies to affect change in the corporations they own to increase the return on their investments. By retaining monitoring services, the System could have timely access to information concerning all securities class actions and would be able to make prudent, informed decisions on whether and how to participate in such litigation. The system should adopt a policy to include reasonable standards for determining when it is appropriate to serve as a plaintiff and/or representative party in shareholder litigation.

Other Recommendations

Joint recommendation to the NHRS Board and the Legislature

The Commission recommends meetings of the board with legislative leadership and the governor at least twice a year. The Commission recognizes the importance of the NHRS maintaining appropriate and sufficient autonomy to enable effective and efficient functioning of the system. Several more minor operational issues have emerged over the years and should be clarified or addressed, possibly through statute revisions. In order to facilitate those improvements, the NHRS board would be obligated to provide a report and meet with appropriate legislative leaders and the governor at least twice per year. As examples, the NHRS could engage directly, or in close collaboration with the LBA Office, an external audit firm exclusively for audit work relating to the NHRS, and have clear authority to ensure confidentiality of plan participant personal information.

Recommendation to the Attorney General

The Commission recommends that the Attorney General's office review the lawsuit, Alaska v. Mercer U.S., Inc. to determine if there are any parallels with the NH Retirement System experiences, and to proceed accordingly if she determines there may be a cause of action.

Recommendation to Employers

The Commission recommends that employers understand the rate implications of various methods that permit employees to avoid the 150% Cap. Current law restricts the amount of termination pay that can be included in the retirement calculation. With certain exceptions, the final year's pay cannot be more than 150% higher than the second highest year. Contracts or personnel policies that permit termination pay to be spread over the final two or three years are designed to circumvent the cap. Although both employees and employers make contributions on the termination pay issued over that 2 or 3 year period, the contributions are not in the System long enough to make sufficient investment gains, since they are concentrated at the end of the employees' careers. Employers should be aware that such policies result in higher employer rates in the future.

Minority Reports on the Commission's Findings and Recommendations

Minority Report Regarding Medical Subsidies and COLAs

Submitted by Commissioners: Lou Copponi, Dean Crombie, David Lang, Gary Smith and James Valiquet

Introduction

We begin our discussions by thanking each and every commission member for their time, energy and expertise in addressing one of the more important issues facing New Hampshire, public sector workers active and retired, and the New Hampshire Retirement System. While we recognize the countless hours dedicated to this commission we would be remiss by not mentioning the outstanding efforts of staff that ensured all members of the commission had information (by the reams) in order that our work could be completed. Thanks to Kate McGovern, Shannon Whitehead, Chris Callaghan, and Chris Kennedy.

We also want to recognize the vast experience and knowledge of the members of the Commission. We feel that each and every one listened intently, spoke based on knowledge and used every opportunity to achieve consensus. The issues that faced this commission certainly did not fall short based on lack of passion or information. We appreciate all parties' constructive approach and we are proud to have participated.

We offer this report by the public employee representatives appointed to the Commission in order to ensure future reviewers have an understanding that there remain other approaches and or considerations.

Recognition of Outstanding Issues

1. Medical Subsidies
   a. Transfer of Medical Special Account Money to the Special Account
   b. Pension fund short fall after transfer
   c. Freezing the Medical Subsidy at the 2010 Level
   d. Recommended transfer of $250 million into the Corpus of the Retirement System to be used for employer contribution to the medical subsidy
2. Cost of Living Adjustments
   a. Future funding of Cost of Living Adjustments and other Benefits

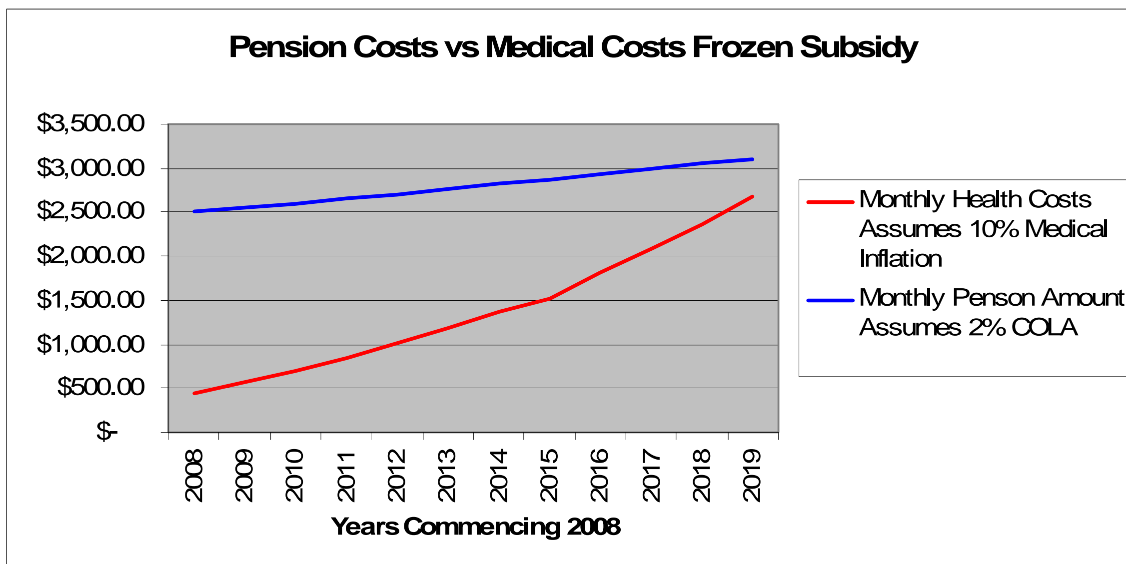
Discussion

Medical Subsidies

The medical subsidies currently being paid to Group 2 Retirees were initially created in statute in 1988 beginning with RSA 100A :50. The Legislature set up these payments for retirees in order to recognize and address medical inflation. The Legislature included an 8% annual escalator to help in softening the financial burden on recipients

caused by the exorbitant rise in medical insurance premiums. The Legislature also included a provision ensuring that employer costs of the medical subsidy were neutral through an employer replenishment system. The legislature created a new benefit and through terminal funding at the time ensured that the costs to the system and the employers would be neutral.

a. On November 13, 2007 the New Hampshire Retirement System based on conclusions from attorneys hired by NHRS ended the employer replenishment system created by the legislature and signed by the Executive Branch. (See RSA 100A:53 II) The transfer from the Medical Special Account into the Special Account ceased the employer replenishment. We would point out that to date there has been no ruling from either the Internal Revenue Service or a court furthermore the legislature has not changed the law.
b. The cessation of the employer replenishment causes approximately a $128 million shortfall to the pension system further lowering the funded ratio of the retirement plan. When the employer rates were set for the fiscal years 2008 and 2009 they included the employer replenishment from contributions into the 401(h) sub trust. The pension shortfall occurs without the recalculation of the employer rates eliminating the medical subsidy employer replenishment.
c. Freezing the medical subsidy for Group II members at the 2010 rate ends a benefit promise that retirees counted on and used in their retirement plans. It also sets up a dangerous situation whereby retirees could have their entire monthly pension consumed by the cost of health insurance. In the example below a retiree making $2500 per month with a 2% COLA will nearly consume their entire pension by 2019. (Monthly Health Costs assume current Medical subsidy being paid with a 10% annual Medical Inflation)



d. The recommended transfer of the $250 million dollars called for in the majority report appears to contradict the conclusion of the attorneys hired by the New Hampshire Retirement System. It raises the very serious question as to how employer replenishment can not be allowed on an annual basis yet than be allowable in the aggregate. In addition it also raises a serious question as to whether the transfer also runs afoul of the NH Constitution Article 36A as well as RSA 100A:16 II (h) 5.

2. Cost of Living Adjustments and Other Benefits

Currently there exists no mechanism for funding cost of living adjustments for retirees of the New Hampshire Retirement System other than the Special Account as outlined in statute. The funding source of COLA's has

sparked considerable discussion in past legislative sessions as well as here on the commission. To date the consensus has been that these benefits are important for our retired public sector employees and that no better funding source has been recognized. Absent the use of the Special Account money the only apparent way to fund COLA's would be to calculate the cost into the annual employers' contribution rate. In recent history the term 'gain sharing' has found its way into the discussion; for all intents and purposes gain sharing is described as investment money earned above the actuarial rate of assumption. The NHRS Board of Trustees selects the actuarial rate of assumption based on advice of their consultants and once the investment returns come back, money over that amount is placed into the special account. Current law, post HB 653 being signed into law in 2007, does not allow for any money to be deposited into the special account until the fund reaches 85% funding. If the present statutory language is not overturned the Special Account will be without revenue for quite a number of years, creating a lack of money to fund cost of living adjustments and other benefits. Other benefits could be described as adjustments to the frozen medical subsidy payments if adopted.

Minority Report Regarding Governance Structure

Submitted by Commissioners: Pam Brenner, Dennis Logue, John MacLean, Charlton MacVeagh, Jr., Dean Michener, Rep. John Reagan, and Rep. David L. Smith

One of the most important changes that will ensure the long-term viability of the NH Retirement System is to the overall governance structure.

What we have learned as members of the Retirement Study Commission is that, over time, a number of factors have contributed to the destabilization of the New Hampshire Retirement System. It would be difficult for anyone to offer an alternative opinion that, at a 57% funding ratio, the NHRS was not moving in the right direction, either to protect employees in the public sector or to protect employers' investment in the system on behalf of their employees. Even the changes made by the legislature in 2007, unpopular as they were with some stakeholders, have helped to assure that the system is moving toward stability. The current rise in the overall funding ratio to 63% bears that out. However, the system is not yet "out of the woods".

Accordingly, we believe that more significant changes must be recommended to continue the progress made during the last legislative session. One important change that we believe must be made is to modify the make-up of the NHRS Board of Trustees.

In the Appendix to the December 1, 2007 Interim Report of the Commission, there is a white paper on "Pension Governance" that outlines some of the literature and findings on the make-up of Boards of Trustees. Notable is the reference to a 2005 study entitled *Public Pension Governance, Funding and Performance: A Longitudinal Appraisal* that was co-authored by Olivia S. Mitchell and Tongxuan (Stella) Yang. That study indicated a "**negative correlation between fund earnings and the presence of active members on pension boards and a strong negative correlation with retired members**." (See page 29 of the Interim Report.)

Another study identified in the white paper, is the 2005 study entitled *Protecting and Politicizing Pension Fund Assets* authored by David Hess. Hess's findings suggest a "**diminishing return once boards consist of 47% member trustees.**" Similarly the Mitchell and Yang study concludes that **"having more retired members on the Board can depress investment performance, stock funding, and flow funding, while having more active employee participation can depress stock funding…"** In addition, those authors opine that investment performance and funding status can be boosted by enhancing plan governance and that one way is "**to include more expert Board members**." (See page 30 of the Interim Report.) Finally, the Report states on page 35 that **"(b)ased on the studies by Mitchell & Yang, and Hess, the NHRS Board composition is not optimal.**" It is larger and has more active plan members than the scholars recommend.

This recommendation to change the composition of the Board of Trustees is not made to cast aspersions upon those who have served on the Board in the past, but to recognize what has become very clear in our study and deliberations. That is, the NHRS and public pension systems generally, are extremely complex and require expertise in and knowledge of investments and actuarial determinations that are so critical to the continued health of pension systems. Precisely because the stakes are so high, it is imperative that trustees are able to pose appropriate questions to consultants and to make informed decisions about these complex matters. Other states have modified the make-up of their boards, most notably Oregon, and together with other changes that have been adopted, achieved a significant turnaround in the financial situation of their systems.

The NHRS Board currently consists of 14 members, with a local government employer representative added in 2007

under HB 653, thereby increasing the Board from 13 to 14 members as follows: two qualified business members, two legislators, the state treasurer, a representative of public employers, and eight employee members representing Groups I and II. Employee members currently constitute a majority of the Board at 57%.

The following recommendation comes as a result of the extensive research and review conducted by the Operations/ Administration Sub-committee regarding the most effective structure for the governance of a public pension system:

> ***NHRS Board composition be altered to a reduced size with the majority of members not being participants in the NHRS. One potential configuration is a total of 12 members, defined as follows: Four trustees "who shall be qualified persons with business experience and not members of the system" two members from the Legislature (as now, one senator and one representative); one trustee from each of the 4 member classifications: one trustee from local government management; and the State Treasurer.***

It is our opinion that this change, in conjunction with the other committee structure recommendations already adopted by the Commission, will significantly improve the integrity and financial status of the NH Retirement System for all current and future retirees.

Minority Report Regarding Gain Sharing

Submitted by Commissioners: Dean Michener, Charlton MacVeagh, Jr., Pamela Brenner, John MacLean

Subject: Minority Position Regarding Gain Sharing

Gain-sharing is a fundamentally flawed practice. Over the past 15 years gain sharing along with inadequate funding and poor investment results, brought the Retirement System to its current under-funded position.

HB 653, enacted only six months ago, marked a major turning point for the fund by prohibiting any gain-sharing until the actuarial funded ratio which currently stands at 63% reached 85%. The legislation also raised the trigger rate for gain sharing from half of one percent above the actuarial assumed rate (currently 8 1/2%) to a rate of return of 10 1/2%. These measures were designed to assure that pension fund assets would not be diverted to any other purpose until its fundamental position was restored.

Both measures reflect the lessons learned over the past 15 years:

First, that gain-sharing tilts the odds against the pension pool. Depriving the fund of 100% of the upside from its investments while retaining full exposure to the downside is a heads you win, tails I lose proposition. The current 8 1/2% assumed rate of return is a stretch goal, higher than that used in most retirement funds. Diverting any of the gains increases the risks of a shortfall which would lead to even higher employer rates to make up the difference.

Second: There is no clear end-point at which one can conclude that the game has been won or lost. The horizon for such a pension pool is measured in decades, covering numerous economic and stock market cycles. By the time it was clear that the 1990's did not mark the beginning of a new golden era for investors, over $900 million had been transferred to the Special Accounts, draining what would have served to cushion the core fund from the subsequent three-year market decline.

For those reasons we are opposed to the Commission recommendation that the threshold for gain-sharing be cut from 85% to 75%. This would not escape the notice of the actuaries or the rating agencies.

Finally, so long as the possibility of gain-sharing exists, it must incorporate a robust make-up provision for added protection for the pension fund.

Minority Report Regarding Benefits

Submitted by Commissioners: Pam Brenner, John MacLean, and Dean Michener
In addition to making recommendations for ensuring the long-term viability of the retirement system, the Commission was also charged with studying limitations on maximum benefit amounts. The Benefits Sub-committee was tasked with designing a sustainable and affordable COLA, a sustainable and affordable medical subsidy, and limitations on maximum benefit amounts.

While the Benefits Sub-committee recommended substantial changes in the mechanisms for funding and expanding COLAs and medical subsidies, very little was done to address the issue of limitations on maximum benefits paid to retirees. At a very minimum, we believe that the following provisions are both reasonable and necessary to ensure continued taxpayer support for retirement benefits for public sector employees:

1. **Cap the amount of every retirement annuity at 100% of a retiree's final base pay plus mandatory overtime.**

   While there are many potential ways for employees to "game the system", and take severance packages, retirement incentives or buy-out provisions, there is no possible justification for an individual to retire at an annual pension exceeding the amount earned in base salary and mandatory overtime while employed.

2. **Change from 3 to 5 years the required timeframe for calculation of the average final compensation (AFC).**

   Prior to 1974, the law required that AFC be calculated based on the five highest years of service. We concur with the original intent of the law, that an average of five years, rather than three years, is a better reflection of an employee's service career and a more appropriate measure for a pension annuity. From an equity standpoint, we believe that amending the AFC computation to the average of five years also provides a more balanced system for computation of a pension annuity. Currently, only a minority of NHRS members are afforded the opportunity to work voluntary overtime duty during their last three years of employment, thereby significantly increasing their AFC calculation. Changing this computation to five years will smooth those earnings, and reduce the resulting spike that occurs in the AFC calculation.

3. **Increase the number of years of service and the ages at which Group II employees may receive pensions equal to half of the average of their highest 5 years of service, as follows:**

<u>Group II [Fire & Police]</u>

Current Annual Accrual: 2.5%	Proposed Annual Accrual: 2.0%	Current Age & Service:	Proposed Age & Service
		Age 45 & 20 Years	Age 55 & 25 Years

The NHRS actuarial valuation report indicates that many Group II members are still working at age 50. In addition, according to the FY 2005 survey of the National Association of State Retirement Administrators, these changes would place the NHRS annual accrual rates and retirement ages/service requirements on par with those of public employees in New York and the other 5 New England states. The same survey shows that, of the reported retirement systems with public safety members, 80% have retirement age/service requirements higher than New Hampshire's.

Summary: Some will argue that the three changes outlined above will have a relatively minor effect on the system. However, the task of the Commission was to look at **all** issues that could affect the long-term viability of the system. Complacency in the past, with the "full-funding" of the system, the use of the Special Account, employer contribution rates that did not always keep pace with employee rates, and the granting of additional benefits that were supposedly "terminally funded", all contributed to the current instability of the system.

We recognize that these recommendations, as well as those recommended by a majority of the members of the Retirement Study Commission, will require all the stakeholders in the NHRS to compromise and to face what, in past years, may have been characterized as unacceptable changes. With respect to restoration of fiscal integrity, the cost to members may increase somewhat; however, the cost to the public in increased property taxes of $2.7 billion is clearly significant and very noticeable. There is little question that achieving this goal, which employers advocated, even over a 30 year horizon, will force the State, local governments and their taxpayers to make hard choices in terms of services and personnel to ameliorate as much as possible the tax impact of these restoration costs.

We believe that going forward, at least with non-vested members or new hires, the fundamental benefits of the NHRS need to be modified to (a) prevent any long-term deterioration of the system's fiscal integrity in the future and (b) to reflect the expectations of the public that in the future the benefits will bear some relationship to the realities of the public's own workplaces. In some cases, these modifications might be significant changes from the current benefit structure and, in others cases, they may amount to eliminating the potential for a few "outlying" situations that the public identifies as egregious abuses.

Charges under HB 876

The Commission created by HB 876 is charged with making recommendations to assure the system's long term viability. The Commission's findings will be presented to the Governor, the Legislature and the Board of Trustees.

Duties under HB 876, Chapter 355:1, Laws of 2007

The commission shall:

I. Study the history of funding, benefits, and investment results of the New Hampshire retirement system.

II. Review the structure and governance of the New Hampshire retirement system.

III. Analyze the current financial status of the retirement system, and the challenges facing the system in the future.

IV. Assess the changes to general accounting standards and their potential effect on the retirement system.

V. Make recommendations for ensuring the long-term viability of the retirement system, including an appropriate funding methodology.

VI. Design a sustainable and affordable cost of living increase for plan participants which may be adopted by the legislature as part of the retirement system.

VII. Study the limitation on maximum benefit amounts.

VIII. Study the issue of equity in contribution rates between employers and employees.

IX. Study other matters deemed necessary by the commission.

I. Study the history of funding, benefits, and investment results of the New Hampshire retirement system.

Introduction

In all public retirement systems a dynamic tension exists between the Plan Sponsor (the state) and the Fiduciaries (the trustees). Clear governance practices and system autonomy allow trustees to adhere to fiduciary duty absent undue political constraint. The history of NHRS indicates steady gains with respect to system autonomy. Clear legal autonomy was established in 1984 by the Article 36-A of the State Constitution and confirmed by the 1985 Sununu decision in the NH Supreme Court. Operational autonomy was gained gradually by legislative action.

The legislature and key stakeholders, including plan members and retirees and public employers, also play significant roles. Political interests interact with member benefit and public employer interests impacting public policy choices. The clearest example can be found in the choice of how to fund cost of living increases (COLAs) for retirees. The experience in New Hampshire is not atypical of the challenges faced by other funds, but certain unique aspects of the state's funding system narrowed the choices.

Overview of NHRS History

In 1983, the NH legislature authorized the use of "excess earnings" to fund retiree benefits such as COLAs. The gains-sharing method replaced erratic general fund appropriations. Prior to 1983, occasional COLAs had been provided on a temporary basis, causing the retirees' pensions to revert to the previous amount at the end of the year.

Although actuaries recommend pre-funding COLAs in the rate base, i.e. covering COLAs through the normal employer-paid system, the Special Account was devised as the method for New Hampshire. The pre-funding option would have increased the employer contribution rates, creating an unfunded mandate prohibited by the State Constitution.

The decision to use the Special Account to provide post-retirement benefits impacted several other aspects of plan management. First and foremost, it relied on a subjective determination of "excess earnings." The *trigger rate* determines the level that funds are sent to the Special Account. Actuaries stated that the trigger rate of only ½% over the earnings assumption rate provided an insufficient buffer to protect the corpus of the trust in years of weak markets. This "heads I win, tails you lose" proposition remained in effect until the passage of HB 653 in 2007.

Summary of significant events

1967: NH Retirement System was established.

1983: HB 500 created the Special Account.

1984: State Constitution amendments 28-A and 36-A, prohibited unfunded mandates and protected the NHRS trust fund, assuring that it be used solely for the benefit of the members.

1985: State Supreme Court case *NHRS v. Sununu*, held that the NHRS board is independent of the executive branch, with the obligation to manage the system solely for the benefit of its members.

1988: Group I was de-linked from Social Security; the medical subsidy for Group II was established.

1990: NHRS trustees asked the actuary to find an alternative funding method to provide rate relief.

1991: HB 51 established the Open Group Aggregate methodology, set the earnings assumption at 9 ¾ % and created a Commission to study NHRS.

1999: The Teachers' medical subsidy was established.

2000: The medical subsidy was authorized for Employees of political subdivisions.

2001: HB 170, granted NHRS additional autonomy from the executive and legislative branches. It also authorized the medical subsidy for state Employees.

2005: A strategic business plan was implemented. The earnings assumption was reduced from 9% to 8.5%

2007: HB 653 changed the methodology to Entry Age Normal, and restricted the flow of funds to the Special Account and added a trustee from public employers to the board. HB 876 created a Commission to study the long-term viability of the system.

With a relatively steady supply of funds, the legislature authorized COLAs and other benefits for retirees. One of the priorities for Group I members was the removal of the Social Security offset. Pensions of Group I members were reduced by as much as 50% when they began to collect Social Security. In 1988, the Special Account had sufficient funds to pay millions of dollars toward decoupling Group I members from Social Security. Although a 10% reduction remained, Group I pensions were no longer subjected to a direct offset.

The 1989 actuarial valuation that called for substantial increases in employer rates in the next biennium marked a significant turning point. The increase in benefits, particularly for Group I, was cited as a cause. Overall, the valuation's review of fund experience differed significantly from previous actuarial assumptions about salary, membership and mortality. The mortality assumptions had not been reviewed in 20 years. When NHRS was founded, it was assumed that Group I members would collect pensions for 10-12 years, and Group II members for only for 8-9 years. Also, 1987 had been a poor year in the stock market.

Under considerable pressure over the prospects of sharply higher employer rates, the NH legislature responded. The action occurred within the context of a national recession. Legislatures and/or executives in several other states responded to the economic pressure by taking steps to reduce the actuarially recommended retirement system contributions. New Jersey, New York and California were among other states that changed actuarial methods or assumptions at various times to artificially reduce the state contributions to their retirement systems.

In New Hampshire, the passage of HB 51 in 1991 mandated temporary use of the Open Group Aggregate methodology in place of the widely used Entry Age Normal method. The change, coupled with a boost in the earnings assumption rate to 9¾% resulted in a reduction in the employer rates. The funding level, as indicated by the graph, increased by nearly 30%. The result was a decrease in the employer contribution rates.

The changes in actuarial assumptions caused the trust fund to appear healthier than it was, leading to artificially low employer contributions. It also compromised the use of gains sharing as a means to fund post-retirement benefits, because there was no legitimate method of determining whether the gains were indeed "excess earnings." The use of Open Group Aggregate portrayed the trust as fully funded and the statute required funds to move into the Special Account, without respect to the funding level of the trust.

A performance audit of the system in 1994 pointed out a range of issues, including the use of the uncommon actuarial method and an extremely aggressive earnings assumption rate. However, it appears that the temptation to avoid the increased costs trumped these fundamental issues. Low employer rates and plentiful retiree benefits persisted through the 1990's. Double digit investment earnings during most of the "Roaring 1990's" appeared to belie the actuaries' cautions.

Then, the perfect storm gathered…

Recent history

For three consecutive years, fiscal '01-'03, NHRS investment return fell well short of its 9% long term target rate. The fund lost 6.7% in 2001, 6.4% in 2002, and gained only 2.5% in 2003. The funded ratio dropped from 110% in 1999 to a low of 66.4% in 2005.

The CAFR of 2005 indicated an unfunded liability of $2 billion. And, this was using the optimistic Open Group Aggregate methodology. Stakeholders and legislators worked to address the situation. Key changes included the

adoption of the more appropriate Entry Age Normal funding methodology, and a suspension of gains-sharing. The legislation passed, effective 6/30/07, just one day before $204 million would have moved to the Special Account under the previous statutory provisions. Rep. Ricia McMahon, working with colleagues on the House ED&A Committee explained that the passage of HB 653 was a critical step in stabilizing the fund and getting it back on the right track. Excerpts from her testimony are presented below:

Testimony on HB 653 by Rep. Ricia McMahon, ED&A Committee and NHRS Trustee

Funding Calculation Methodology

The preferred method for government public pension plans is the **Entry Age Normal** methodology (pay as you go*) and is recommended in **HB 653**. This approach will likely be required by the Government Accounting Standards Board (GASB) to calculate funding levels. The funded ratio is an accounting of the assets on hand, compared to projected liabilities: the amount of funds required if all employees retired immediately.

In 1993 the legislature adopted the Open Group Aggregate methodology which was intended to reduce employer contributions and shifted the obligation and burden to the future. For a long period when returns on investment were high, the rates contributed by the employers were **lower** than the rates of the employees for 16 of the past 20 years. **HB 653** stipulates that the employers' rate would be no less than the employee rate.

This current methodology (similar to a mortgage- longer horizon of payments) results in more volatility for employer rates which are set by the NHRS Trustees based on the biennial actuarial valuation. It rises and falls like an adjustable rate mortgage.

Unanticipated spikes in contributions by employers including the State of NH will continue to occur under this methodology. **Entry Age Normal** will **stabilize** the employer contributions after it is adopted by the legislature but it is not without costs as we convert and change from the methodology used since 1993 and make up for the postponed employer obligations.

Status of the System: NHRS trust fund is over $5 billion. It annually receives $411 million and pays out $317 million annually in lifetime benefits to 20,000 retirees and beneficiaries. Following the market downturn in 2001-2003 the System has steadily recovered from the losses it sustained. The NHRS is solid but the trust fund has not reached the funding level required over the next 20-30 years needed as more baby boomers retire. The 2006 Comprehensive Annual Financial Report (**CAFR**) shows that NHRS has a funded ratio of **67%**. This level of funding is similar to a mortgage that is already two-thirds paid off, with 30 more years to pay the balance. NHRS projections for plan funding indicate an 85-95% funding ratio within the next 15 years.

In part the lower funding ratio is due to "**gain sharing**" of the trust fund with some monies going to the **Special Account** that was created to provide supplemental allowances such as cost of living adjustments (COLA's) to beneficiaries. **HB 653** proposes that no additional funds would enter the Special Account until the NHRS funding level reaches **85%** of full funding and only at that point would asset gains in excess of **10 1/2%** (**trigger rate**) be transferred. The Fiscal Committee would no longer be restricted to the "Gentleman's Agreement" which requires funds in the Special Account to be in excess of a 3 year, 5% COLA reserve and can therefore continue to determine the feasibility of providing supplemental allowances with the funds currently in the account.

Detailed Chronological History

1967: RSA 100-A was enacted to establish the NH Retirement System. It combines four separate plans for teachers, police, firefighters and state employees. Established as a division of the Department of State Treasury, the fund started with $98 million. The board, chaired by the State Treasurer, included two trustees from each of the four member categories and the State Comptroller and State Bank Commissioner.

1973: The calculation of Average Final Compensation was modified from the highest five years to the highest three years.

1974: Group II retirement eligibility requirements was changed to age 45 with 20 years of service.

1977 Governance

- The board of trustees was reconstructed, replacing the State Comptroller and State Treasurer with two appointed, business-qualified, non-member trustees, one of whom would be Chair.
- A pro-rata administrative cost assessment of .25% of member payroll was implemented as part of the employer contribution.

1983 HB 500 created the Special Account to fund COLAs and other post-retirement benefits from excess fund earnings. Previously, COLAs were granted by the legislature from general fund monies. When temporary COLAs were provided, retirees' pensions would revert to the pre-COLA amount at the end of each year.

1984 The NH State Constitution is amended to include article 28-A and 36-A.

Article 28-A provision prevents the legislature from expanding NHRS benefits at the expense of subdivision employers. New or expanded benefits could only be funded by state appropriations or by the Special Account.

Article 36-A establishes the duty of NHRS to set employer contribution rates based on actuarial valuations, independent of the executive branch, and establishes that retirement system funds are exclusively for benefits of the membership, not to be diverted for any other purpose.

1985 The system's autonomy was confirmed by the State Supreme Court. *NHRS v. Sununu*, 126 NH 104, 108 (1985) held that the NHRS board is independent of the executive branch. Under the common law of trusts, the board of trustees owes the system's members and beneficiaries a fiduciary obligation to manage the system for the benefit of its members and beneficiaries.

1987

- Chapter 331 allowed the board of trustees to invest up to 15% of NHRS

1984 Amendments

[Art.] 28-a. [Mandated Programs.] The state shall not mandate or assign any new, expanded or modified programs or responsibilities to any political subdivision in such a way as to necessitate additional local expenditures by the political subdivision unless such programs or responsibilities are fully funded by the state or unless such programs or responsibilities are approved for funding by a vote of the local legislative body of the political subdivision.

Art.] 36-a [Use of Retirement Funds.] The employer contributions certified as payable to the New Hampshire retirement system or any successor system to fund the system's liabilities, as shall be determined by sound actuarial valuation and practice, independent of the executive office, shall be appropriated each fiscal year to the same extent as is certified. All of the assets and proceeds, and income there from, of the New Hampshire retirement system and of any and all other retirement systems for public officers and employees operated by the state or by any of its political subdivisions, and of any successor system, and all contributions and payments made to any such system to provide for retirement and related benefits shall be held, invested or disbursed as in trust for the exclusive purpose of providing for such benefits and shall not be encumbered for, or diverted to,

funds in international investments, and to engage the services of outside legal counsel for special investment and tax matters, and for other purposes, with the permission of the Attorney General.

- Group I Benefits
  - Early service reduction factors for Group I members were pro-rated based on years of service. (Prior to the change, pensions were reduced by 6 2/3% per year that the member was younger than age 60.) The new reduction factors: 3% for 30+ years of service, 4% for 25-29 years of service, 5% for 20-25 years of service, and 6 2/3% for fewer than 20 years of service.
- Group II Benefits
  - Service retirement formula for Group II members changed. Previously, it was 2.5% of AFC for the first 20 years of service, and 2% thereafter, up to a maximum of 75% of AFC. Effective 7/1/1987, Group II pensions are calculated on 2.5% of AFC multiplied by the years of service, not to exceed 40 years.
  - Group II spousal allowance: the surviving spouse of a retired Group II member will automatically receive a pension equal to 50% of the pension the member had been receiving.

Group I Reduction

Although the reduction is not linked to Social Security, many members associate the two, because the recalculation occurs at age 65. However, retirees may collect Social Security as early as 62 or as late as 67. The reduction in their NHRS pension occurs at age 65, regardless of when they start collecting Social Security.

Example:
Group I retiree at 60
AFC of $30,000 x 1.67% = 501 x 30 years = $15,030
Group I retiree at 65
AFC of $30,000 x 1.51% = 453 x 30 years = $13,590

1988:

- Increased the size of the board from 11 to 13 by including trustees from the NH House and Senate.
- SB 313: NHRS retirees will be permitted to stay in their former employers' group health plans, at their own expense. Those already retired will be able to join at the next open enrollment period.
- Group I benefits
  - SB 327 eliminated the Group I contribution and benefit integration with Social Security. Previously, Group I pensions were reduced by as much as 50% at age 65. The new formula reduced pensions by roughly 10% at age 65.
  - The Group I member contribution rate was increased from 4.6% to 5%.
- Group II benefits
  - Medical subsidy was established.
  - The lump sum death benefit of $3,600 was increased to $10,000.

1989: The actuarial valuation indicated an unfunded accrued liability of $169.7 million, which was subsequently revised to $217.5 million. It was alarmingly higher than the $3.9 million in 1988. According to the Chairman's introduction to the CAFR, the increased liability was in large part were attributable to new benefits provided by the legislature, particularly for Group I. According to the notes on the financial statement, plan benefits had increased by approximately $70 million and the pension benefit obligation by approximately $210 million.

Other factors that were mentioned included higher than expected salary increases, a 27% increase in covered payroll, and actuarial assumption changes, primarily with regard to mortality. The investment gains were significantly up , improving on the negative net investment return of $10.7 million in FY 1988, which included part of the poor investment calendar year of 1987. Although the assets were up by 29%, the liabilities rose by 53% between 6/30/88 and 6/30/89.

1990:

- The legislature established a Special Reserve for crediting ½ the amount of any funds that would have gone into the Special Account on behalf of any member classification with assets less than 125% funded. Legislation also set the amount of the Group II medical subsidy to the premium paid by the state in 1988, plus an increase of 8%/year.
- Due to the significant Employer rate increases, discussion about the impact of de-linking Group I from Social Security took place at the March and April board meetings.

Excerpt from March 13, 1990 Board of Trustees meeting:

> …Mr. McGoldrick feels that with regards to the special account there are issues which have not been addressed. The Board of Trustees has never taken a position regarding the additional employer costs of legislation, after terminal funding has been determined, that may arise because of subsequent actuarial assumption changes or unfavorable actuarial experience. He pointed to Chapter 193, Laws of 1988 (SB 327) as a specific example whereby that legislation was terminal funded, partially, by increasing employer normal contributions by 1.03% and .59% for employee and teacher groups respectively. Subsequent mortality rate and other actuarial assumption changes, made for June 30, 1989 valuation purposes, and unfavorable actuarial experience, have increased those costs related to Chapter 193 by another .42% and .37% for employee and teacher groups respectively. Mr. McGoldrick contends that additional costs should be taken from the special account of Group I memberships, because the long term costs are the true costs associated with the passage of Chapter 193. Mr. McGoldrick also suggested that the trustees entertain whether or not this retroactive costing procedure will continue in the future….

Excerpt from April 10, 1990 Board of Trustees meeting:

> Mr. Robert Baus, Buck Consultants, Inc. was present to discuss the long term effect of terminal funding for new benefits and the potential for interim review (between valuations) of actual versus assumed actuarial experience. Mr. Baus explained that new benefits had been funded from the Special Account for about seven years. Up until the major benefit changes of 1988, namely the removal of the Social Security offset provision from the Group I benefits, most of what was funded from the Special Account was additional allowances for COLA benefits. Cost estimates for COLA benefits will generally not vary because those benefits are payable to the retiree group. And, retiree cost liabilities will not have many variables affecting costs beyond original terminal funding. The Social Security offset legislation, on the other hand, deal with the whole population of membership where the variability of cost effects is much greater. Mr. Baus also explained that over time, if assumptions are accurate, normal rate increases will reverse themselves.

At the request of members of the legislative and executive branches, NHRS trustees asked the actuary to submit an alternative method, to provide rate relief for employers.

Excerpt from October 9, 1990 Board of Trustees meeting:

> ….Mr. Baus was asked by Chairman Baldwin whether or not any recommended change in funding methodology had any actuarially sound basis other than the perceived political consequences of the normal contribution rates as determined by the current methodology. Mr. Baus responded that the

current methodology (frozen initial liability funding method) had been in existence since the late 1960's. The normal rate at the time was set on the benefit structure then in existence. A great deal has changed since and the current membership population has matured. The present funding method does not provide for aggregate funding over a long term but depends for funding over the average working lifetime of the member. For Group II, the funding period has been reduced to about 10 years and for Group I, the funding period is down to 12-14 years.
Long-term pension funding should occur over a 20 to 30 year period, at minimum. The current funding method presents a very volatile situation as actuarial and economic losses must be recognized in a shorter period of time. An example is represented in the results of the June 30, 1989 actuarial valuation, which reflects actuarial losses.

Mr. Baus also expressed his concern over the Special Account since it will continue to affect the asset liability funding ratio even over the longer term. He went on to describe various funding methodologies, the background for which is on file at the NHRS.

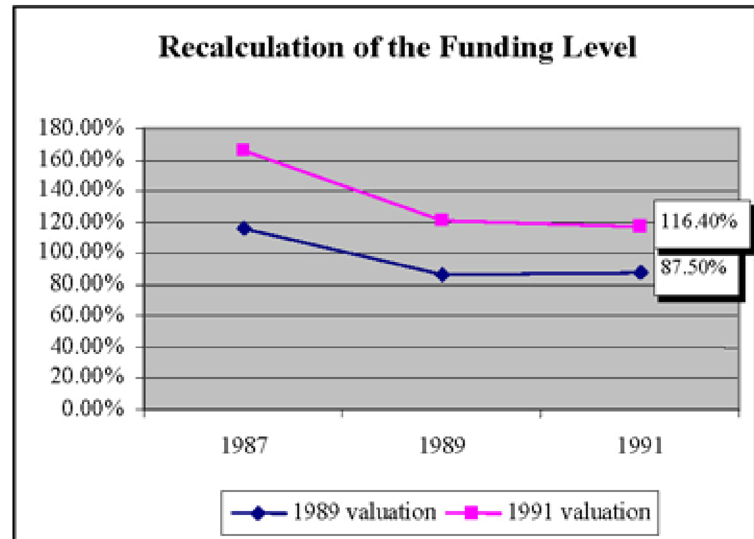
Excerpts from Board of Trustees minutes, November 13, 1990

…Mr. Baus re-opened the discussion with his opinion that the present statutory funding method of plan benefits was too short a period of time…any actuarial gains and losses over established assumptions reflected in the biennial actuarial valuations produced immediate higher volatility in employer normal contribution requirements to the system rather than longer intergenerational period such as 30 years for Group I and 20 years for Group II.…Four major areas when considering… methodologies: (1) benefit security…(2) intergenerational equity…(3) recognition of the "Special Account" and its relationship with the funding ratio and the effect on employer funding requirements; (4) funding COLAs for present and future retirees.
….Extensive discussion took place on the various funding alternatives and employer/state contribution rates with each actuarial funding methodology.

Excerpt from December 11, 1990

The legislative leadership, per letter of November 27, 1990, requested the Board of Trustees to direct the System's actuary to present estimates of employer normal contributions based on a Revised Open Group and asset to liability funding ratio method assuming automatic Cost-of-Living adjustments (COLAs) of 0%, 1%, 2% and 2.5%. They also requested that for each COLA level, the actuary assume the Special Account is repealed and, alternatively, the Special Account is to be retained but with the actuarial assumed investment rate of return threshold increased from the present 8% to 14%.

After review of these figures and considerable discussion, the Board decided to schedule an informational briefing for the legislative leadership "with the actuary to explain the various funding alternatives; and to make it clear that the Board could support either alternative other than the present methodology that led to the rates certified in November, such as the 'funding goal' or 'fully open-group aggregate' method. (Minutes, 12/11/1990 p. 4)



1991: Passage of HB 51 required the use of Open Group Aggregate and set the earnings assumption at 9 ¾ % for one year. Setting the interest assumption is a duty of the trustees. Initially, the board objected to the action, because the establishment of the earnings assumption rate is the responsibility of the trustees.
HB 51 also limited the funds going to the Special Account to earnings in excess of 10%, and created a study Commission.

Below are excerpts from relevant documents:

<u>Board of Trustees meeting January 8, 1991</u>
The minutes of the Board meeting included a report by the Chairman describing a meeting he, the actuary and the system's Executive Secretary attended in the Speaker's office with House and Senate leadership and staff from the Governor's office. Excerpts from the minutes:

> The Chairman emphasized to the legislative leadership that consideration of modifying the System's funding methodology could only be a one-time solution. Continued municipal staff growth and high teacher salary increases would carry with them higher funding responsibilities which would not warrant future NHRS funding modifications.
>
> The expected political ramifications of not granting retiree cost-of-living adjustments (COLA's) was of major concern. However, the funding aggregate open group methodology which was found to be most attractive among the leadership was that which assumed a 10% interest rate, 7% salary growth and no COLA…
>
> When asked by the legislative leadership what actuarial funding methodology was preferred by the trustees, Chairman Baldwin replied that both methods, the target funding (or funding goal) or fully-open group aggregate would work effectively. Mr. Baus agreed, but added that, given a choice, he would prefer the target funding method. He emphasized that while both methods tend to create level or constant contribution rates and a similar methodology to adequately fund benefits, the target funding method would provide more constant employer contribution rates.

Note: this discussion was followed by a vote authorizing the Chairman to express preference for the funding goal methodology, but that the board was willing to use either method. (Passed 10-0, with 1 abstention)

<u>Excerpts from Board of Trustees meeting February 12, 1991</u>

> …Chairman Baldwin expressed a potential displeasure at the thought of the legislature deciding on salary and interest assumptions other than what the Board of Trustees had approved, after months of Board of Trustees study and deliberation with Buck Consultants, Inc.
>
> Mr. Levesque expressed concern over the fact that House Bill 51-FN provided no sunsetting terminology and in effect, permanent underfunding of NHRS liabilities might be built in….Representative Ward nevertheless agreed to introduce an amendment to House Bill 51-FN which would clearly state that, should the legislature fail to act in a positive, actuarially sound manner by June 30, 1992, the normal

employer contribution rates would revert to those rates certified by the Board of Trustees on November 13, 1990.

Note: the board agreed to support the proposed amendment. Vote: 7-3.

Excerpts from the public hearing before the Senate Insurance Committee, February 13, 1991
Rep. Richard Campbell, the bill sponsor and former trustee (Summary of his position: rather than change the methodology to achieve a numerical result in the rates, set some temporary rates that are not unreasonable and study the methodology and other issues.)

…I believe that the rates that would come out of the bill as it is written, the amended bill are too low… Based on those preliminary figures, the rates for the policemen and firemen categories would actually go down substantially below what they are this year… there is no reason for them to go down and I believe it just isn't sound funding to have them go down….The Group I rates go up from the present but they have been – especially the teacher rates – excessively low for years and they should go up. I don't believe they go up enough under this. An actuary may perhaps – perhaps already has – indicated that he can accept the rates, but I think if you ask him the right questions, you will find that he is very reluctant to do so. I don't believe they are sound.
There's another problem…the trustees have a fiduciary duty to act solely to the benefit of the beneficiaries; unlike the legislature, which can take into account things like the public interest, they're not allowed to. If I were still a trustee and believing that the rates are too low and believing that the trustees might still be in the picture, I would feel duty bound to try to get the rates up. They might not take that position, but I think they ought to and if they did, there'd be tremendous confusion.

The next problem has to do with the constitutional provisions. Part I, Article 36a of the constitution says that an employer contribution shall be determined by sound actuarial practice and shall be appropriated as certified….I think it would be helpful to put in a provision there that says in effect while we believe that the rates that we're specifying are sound, that if, after the biennium is over, we look at it in retrospect and it turns out that they were too low, then the state should take the responsibility for that and make up the funding rather than throwing it back at the municipalities…

Rep. Kathleen Ward, the House member on the NHRS Board

….the actuary worked out all of these formulas of what we could do in order to raise the money to have it actuarially sound, and we did not receive permission until 4:00 on the afternoon of January 29th from Buck Associates because it is very true, our constitution requires us to have an actuarially sound system. That means that the actuary of note; in other words, we can't just go find somebody who is going to tell us what we want to hear, but THE actuary who was employed by the Retirement System for the State of New Hampshire has to say, "Yes, this formula is actuarially sound."

Now, we do have a letter…but we had them put it in writing that they are not happy, but they could live with it on a temporary basis, a one-time basis. I spoke whit the actuary just yesterday morning and he has not gone back on his letter and he says we're sound.

Charles Baldwin, Chairman, Board of Trustees, NHRS

I'm here basically in support of the bill on the conceptual level but would offer some thoughts… The

trustee concern here is to make sure that the system is sound and defining "sound" as us having the ability to meet the benefits or obligations of the system as currently defined…whatever benefits the legislature determines should be in place, the fiduciary responsibility of the Board of Trustees is to make sure that the system is adequately funded to achieve that.

When we saw the contribution rates back in mid-summer that the existing funding methodology, the actuary methodology, would produce, we said we had to do something about that. We undertook with our actuaries a very extensive study of the funding alternatives…one is the funding goal method and the other is the fully open group aggregate method; both work. In my view and in the view of the majority of the Board of Trustees that in the long-term the funding goal methodology is the better methodology because it drives the system towards having a funding level of 103%…

The trustees voted in favor of this legislation yesterday subject to the provision that there be an amendment limiting this 10%/7% to one year…

…With respect to the value of the 10-7-0, there's no doubt in my mind that that contribution level is below the long-term level that would be needed to adequately fund the system…I believe that if this is adopted the study committee, at the end of its investigation, will come back with a set of contribution rates that will generate higher costs than we see here today…

Now, what those higher cost will be are going to be determined, in large part, by how this special account is dealt with and how the core issue is dealt with.

One concern I have, speaking fiduciarily, is that while I see the role of the legislature quite properly to be the establishment of benefit levels of what benefits will be provided for the employees covered by the system, certainly the full oversight of the operations of the system, I think it's critical that the actuarial process, if you will, stay in the hands of the trustees, we have the fiduciarial responsibility for soundness of the system…

I would make the subject of study the issue of COLAs and the issue of special account and how the legislature will want to deal with COLAs in the future, ad hoc, automatic COLAs, combinations of automatic up to 2% of pay and then ad hoc after that, and so on…

Excerpt from Board of Trustee Minutes March 12, 1991

By way of reading the following excerpt from Article 36-a of the New Hampshire Constitution, Mr. Beaudry questioned the soundness of the most recent valuation results which established normal contribution rates as included in House Bill 51-FN: "The employer contributions certified as payable to the New Hampshire retirement system or any successor system to fund the system's liabilities, as shall be determined by sound actuarial valuation and practice, independent of the executive office, shall be appropriated each fiscal year to the same extent as is certified."

In light of the intent and purpose of House Bill 51-FN, Mr. Beaudry questioned the temporary one-year suspension of the Board's fiduciary responsibility to certify normal rates of contribution. He questioned the actuarial soundness of the actuarial valuation and whether the whole process had been independent of the executive office.

Mr. Beaudry moved and Mr. Connelly seconded that the trustees request that (Attorney) Alan Cleveland

provide an opinion on the way the legislation (HB-51) was drafted and presented, whether it meets sound actuarial valuation practices and whether it was independent of the executive branch."

The motion was defeated by a vote of 3-9.

The commission established by HB 1991, consisting of five Senators and five House members, filed its report October 15, 1991. Their primary recommendation related to the funding methodology:

> The Committee recommends a change in funding methodology from the current Entry Age Normal to the Open Group Aggregate. Under Open Group Aggregate, a longer term view of the system will result in substantially lower employer contributions and decreased volatility of the rates in future years.

The 1991 Commission also provided a finding on COLAs, disregarding the actuary's input concerning the need for a prefunded COLA, they opted to continue using the Special Account:

> During the public hearing, two recurring concerns were expressed by retirees and active members of the system. A great deal of testimony was heard regarding the ongoing need for cost of living adjustments and also a great concern for previously retired members who were receiving miniscule basic benefits. Consequently, the Committee requested an accounting of funds in the Special and Reserve accounts and costs to provide a COLA for all current retirees and to bring all current retirees to a minimum benefit level.

The recommendations concluded with:

> After reviewing all the testimony regarding the concerns by all parties, there is a recognized need to phase in employer contributions, higher to spread the burden, or lower to avoid the volatility between estimated billing and the two-year lag of actual experience.
>
> The discipline of the defined benefit structure takes several components – the responsibility of the Legislature to respect the plan, the need to review the plan in a regular and timely manner and to be aware at all times of the mandated cost to the taxpayer in order to provide a fair and even-handed retirement benefit to public employees.

Following the release of the Commission's report, a debate took place concerning the return of the fiduciary duty of the trustees. The legislature wanted the rate to remain high, to lessen the impact on employer rates. The actuary, Robert Baus of Buck Associates had the same analysis that Gabriel, Roeder, Smith (GRS) provided 15 years later:

<u>Excerpt from minutes of December 10, 1991 meeting</u>

> When asked for his views on the 9%/6% assumption rates being proposed by the legislative committee, Mr. Robert Baus indicated that although he considered those rates to be aggressive, he could support them provided those rates also supported prefunded cost-of-living increases. The support of such a rate package would assume trustees retained the same authority to review and make necessary adjustments to the assumption rates the same as they always had in the past. Mr. Baus added that if prefunded COLAs were not to be a part of the assumption rate package, the assumption rates should be set at less than 9%/6%.

While both actuaries are in agreement about the rate assumption and the impact of gains sharing, they differ drastically on a fundamental point. One of the reasons offered for the adoption of Open Group Aggregate (OGA)

in 1991 is totally contrary to the analysis provided by GRS. The actuary from Buck Consultants told the trustees and the legislators that OGA would reduce rate volatility. GRS has since explained that the opposite is true. The GRS analysis formed the basis for the return to the Entry Age Normal method in 2007.

Other events in 1991

- Passage of HB 62, which instituted "The Cap." The definition of earnable compensation: earnings plus termination pay in the final year shall not exceed 150% of the second highest year, with the exception of leave accrued by the effective date, 6/30/1991. The legislation also reduced the actuarial reduction for early retirement for Group I members with 35 years of service.
- In September, the Board voted to file an amicus curiae brief in support of the CalPERS suit "against the California politicians who are attempting to remove authority from the CalPERS Board of Trustees". (Board of Trustees minutes, 9/10/1991)

1992

SB 303 amended RSA 100-A:16 to require the use of the open group aggregate funding methodology, commencing with the valuation prepared as of June 30, 1991.

Excerpts from February 11, 1992 meeting

> Chairman Baldwin stated that whether a COLA did or did not become automatic was a decision of the Legislature, that it was beyond the purview of the Board of Trustees….further discussion continued with disagreements on whether Mr. Baus had recommended, and felt comfortable with, a 9% interest rate assumption…
> Rep. Ward insisted that funding methodology this year would include no automatic cost-of-living adjustments and that from her point of view as a legislator, COLA adjustments were no concern of the Board of Trustees because COLAs were not part of the defined benefits plan of the NHRS.
> Chairman Baldwin interrupted Rep. Ward and insisted that the trustees were not attempting to establish COLAs; that COLAs were not within the trustees' authority to establish. The Board of Trustees' responsibility, however, is to ensure that if the Legislature adopts an automatic OCLA, that it be properly funded.

Group I benefits: COLAs of 5% for retired teachers; with 10% for teachers retired prior to 7/1/1957.
Group II benefits: SB 316 established a minimum pension for Group II members of $5,200. It was funded by $3.1 million from the Special Account.

Excerpts from March 10, 1992 meeting

> Mr. Baus …said …the studies showed that the open group aggregate method is fine, the 9% interest rate and 6% salary growth assumption combination is on the aggressive side but is legally defensible… there is a benefit issue that is not addressed: that is the COLA issue…
> …Mr. Phil Maisano of Evaluation Associates commented on the 9% interest rate and the 6% salary growth assumption rates from the investment perspective. He stated that the way the System's assets were currently invested, the 9% and 6% assumptions were sensible.

1993

Based on a recommendation generated by a 1991 management letter from the Legislative Budget Assistant (LBA), NHRS had a review of its actuarial processes. In May of 1993, Mr. William Reimert, FSA of Milliman & Robertson,

Inc (M&R) presented their findings to the NHRS Board.

Excerpts from the May 11, 1993 meeting

What Mr. Reimert and his organization thought was of most priority was the current program under which "excess" investment earnings are withdrawn from plan assets and credited to the Special Account and Special Reserve in order to provide future benefit improvements. Mr. Reimert believes that there are potential long-term dangers to the actuarial soundness of the system from the practice of withdrawing from investment returns during peak years in order to provide increased benefits rather than allowing that money to remain available to fill in the valleys when lower returns are earned.

Chairman Baldwin clarified for Mr. Reimert that the Special Account did not exist because the actuary chose to create the plan that way; the Special Account was legislatively created…

The next recommendation of the M&R report suggested a reduction in the investment return assumption for the June 30, 1993 actuarial valuation in order to: respond to Buck Consultants' comment in the 1991 actuarial valuation that 9% was aggressive and should be closely monitored; recognize the recent decline in bond yields; reflect the Special Account and Special Reserve which can be expected to reduce total investment returns by 10%; and reduce the optimistic spread between the current investment return and salary growth assumptions….
Although not all actuaries agree on the suitability of the Open Group Aggregate Funding Method and Target Ratio Funding Method, M&R reported that these methods can be considered to be actuarially sound when used in combination, as they are with NHRS…

The debate that took place a few months later is probably typical of the on-going conundrum.
Excerpts from August, 20, 1993 meeting

Mr. Baus pointed out that reducing the interest rate assumption to 8.5% would produced further increases in the normal contribution rates…approximate $54 million… Mr. Baus told the trustees…he still believed that a 9% interest rate assumption to be aggressive without prefunded COLAs. However, the COLA issue aside…according to the IFE Pension Network Report the mean range of investment return assumptions for a fund size of $1-5 billion was 8.31%…
…Mr. Baus repeated that there was a sound theoretical basis for the 9% rate…however, if it could be afforded, the rate should be decreased…. (Extensive discussion)… Mr. McGoldrick agreed with other views that a skewed decision on the establishment of the assumed rate of interest could be characterized as an attempt to force more employer funding into the Special Account… Chairman Baldwin stated that as a public member, he favored the adoption and continuation of an assumed 9% investment rate of interest given the state of the economy and the current recession. The impact on employer budgets in adopting an 8.5% interest rate would require an additional $10.8 million dollars in funding. (Motion to set an 8.5% interest rate failed by 3-8)

1994

The Board was presented with the results of the Actuarial Audit by Ernst & Young, June 30, 1994.

Excerpts from August 22, 1994 meeting

…The issue raised in Section 3.1.1.4 related to the method of including excess investment earnings into the Special Account in good years while no offsetting movement of money out of the Special Account was provided in bad years. The E&Y report suggested that consideration be given to allowing both investment earnings and losses to be applied to the Special Account…

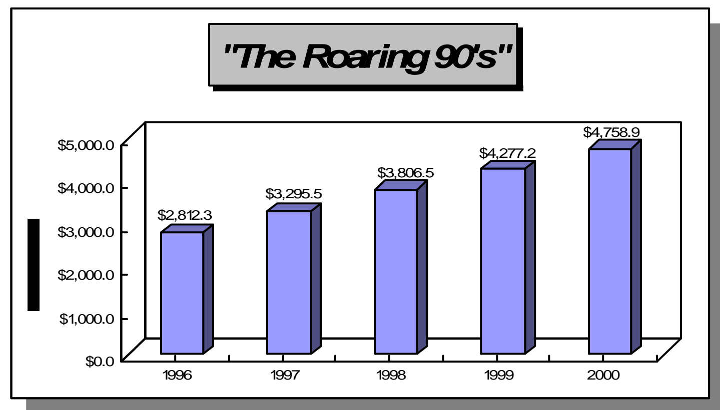
Chairman Baldwin commented that he and a minority of the trustees believed that a "makeup procedure should be created" and "that this was a matter for the legislature as it was beyond the authority of the Board of Trustees."

Excerpts from the Ernst & Young Report are in Chapter V

1995
The trustees supported legislation to extend "prudent man" investment authority. The measure was renewed, containing a 5 year sunset provision, although the Board had sought permanent authority to make investment decisions. (The sunset provisions were not removed until 2002. Independent authority under the standards of prudence is important for good governance of retirement systems.)

1996
The trigger rate for the Special Account was set at ½% over the assumed rate of return. $139.4 million in assets were transferred to the Special Account; $18.7 million in benefits were purchased.

1997 The 30th Anniversary of NHRS
The fund had grown from $98 million in 1967 to $3.3 billion in 1997. Substantial growth took place during 1997; a 21.6% return resulted in a revenue increase of $122.2 million. $96.2 million in assets were transferred to the Special Account; $45.6 million in benefits were purchased.



1998
The prudent investor rule was extended for another 5 years. The Additional Contributions program was extended to permit Group I members to contribute to offset the cost of an early service retirement reduction.

1999
The medical subsidy was started for Teachers who retire with at least 20 years of service by 7/1/04. The program was extended to Group II members who were hired by 6/30/1995.

2000
The medical subsidy was started for Employees of political subdivisions who retire with at least 20 years of service by 7/1/04. The program was extended to Group II members who were hired by 6/30/1997.

2001
HB 170 contained provisions granting NHRS additional functional autonomy from the state executive and legislative branches. The board was authorized to operate the system's budget as a charge against the trust fund and to hire independent legal counsel. Both of these measures were important governance reforms.

The medical subsidy was authorized for state Employees who retire by 7/1/04. The program was extended for Teachers and Employees of political subdivisions who retire by 7/1/08. Non classified and unclassified state employees were permitted to retire and return to full time state service. (This measure was repealed in the next session.)

A major technology project was launched. The installation of the Pension Gold system ultimately provided NHRS with the ability to operate independently from the old mainframe system run by Buck Consultants in New Jersey.

2002

HB 1302 provided additional system autonomy by removing the five year sunset clause permitting NHRS to use the "prudent person" standard. This was a significant step in good governance and system autonomy.

2003

HB 166 provided further system autonomy by separating the employees of the system from the executive branch; making them employees of the board of trustees. The board now has the authority to negotiate pay and benefits and create positions as needed. This was also a significant governance reform.

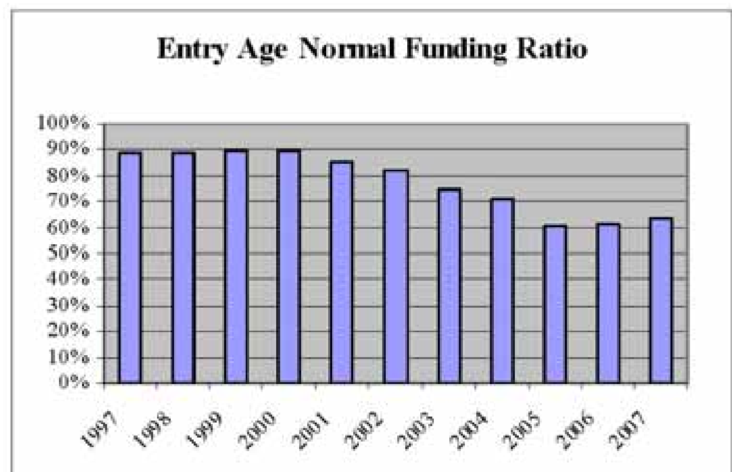
HB 23 provided the opportunity for members to buy up to 3 years of prior military service. The purchases do not count toward service retirement or medical subsidy eligibility. HB 356 provided that prior service credit purchases would no longer count toward medical subsidy eligibility.

2004

HB 338 included a provision closing the Additional Contributions program to new participants. The program brought millions of dollars into NHRS by allowing eligible members to build a second annuity, without providing additional service credit. The legislature repealed the provision, in large part due to concerns about the 9% credited interest. The board had maintained the interest at the same rate as the earnings assumption. The board might have reconsidered, and set a lower rate for additional contributions, if requested by concerned legislators. It is possible that a dialog between the board and the legislature could have reformed and preserved the program.

2005-2006

A strategic business plan was developed that included the periodic review of major vendors and consultants. The review process is a recommended practice in good governance and was a noteworthy reform. Implementation of the strategic business plan brought two significant changes. Evaluation Associates was replaced by Ennis Knupp as the investment consultant. Buck Consultants was replaced by Gabriel, Roeder Smith (GRS) as the system's actuary. However, there was a loss of transparency, as new business practices resulted in a change in the detail provided in the board minutes. Previous to 2005, board minutes contained a detailed account of the trustees' decision making process; the new format provides the minimum required under the right to know laws.



The trustees faced a difficult situation in the summer of 2005. The Chair was not re-nominated due to issues related to proper disclosure of personal financial interests. An independent investigation found that the fund had not suffered any losses, but it underscored the significance of having clear standards in the board policies. A new Chair was appointed by the Governor.

The board moved forward with a significant reform: a change in the earnings assumption from 9% to 8.5%, in recognition of the current market conditions. The action was not taken lightly because it would result in an increase of roughly $50 million in Employer contribution rates in the upcoming biennium. According to the Public Fund Survey, NHRS was the only system using a 9% assumption rate in 2005. The trustees were reluctant

to reduce the assumption rate. It would have increased the taxpayers' contributions *and* sent more money into the Special Account, because of the gain sharing formula. RSA 100-A:16 required asset gains in excess of ½% over the assumption rate be transferred to the Special Account. An assumption rate of 8½% meant that actuarial asset gains in excess of 9% (on a five year rolling average) would go to the Special Account. With such a low trigger rate, the corpus of the trust would not benefit substantially from a rate increase, because of the requirement to send substantial amounts of the funds into the Special Account.

Note: By 2005, the trust fund was 60.3% funded; while the median level for public funds was 86.6%. The legislature needed guidance from the trustees, so they could act to change the trigger rate in order to allow new revenue to rebuild the trust fund. The situation in 2005 is an example of the critical need for NHRS to work proactively with the legislature. This is one of the Commission's strongest recommendations for long-term viability of the NHRS.

In 2006, the passage of HB 1643 included a provision permitting NHRS members with at least 5 years of service to purchase 5 additional years of nonqualified service. Unlike the provision allowing the purchase of prior military service, this legislation allowed the service to count toward retirement eligibility and toward eligibility for the medical subsidy. Although the program brought in approximately $132.5 million, GRS estimated that the system liabilities increased over and above that by $25-40 million. Board minutes provide insufficient detail to know if there was any specific discussion of the potential impact of the passage of legislation permitting the unrestricted purchase of nonqualified service. Legislators were also unaware of the ramifications; the legislation passed without an actuarial fiscal note. The provision, repealed by HB 653 a year later, serves as another example of the consequences of the lack of collaboration between the system and the legislature.

Due to a concern about the projected depletion of the medical subsidies, a "Working Group" of stakeholders convened in August 2006. The Working Group included representatives of employer associations and member unions and associations. During a six month study, they learned about the impact of the Open Group Aggregate methodology and the gains sharing formula. The group brought a proposal to the legislature that later formed the basis of HB 653.

2007: NHRS Trustee Rep. Ricia McMahon worked with ED&A Chair Anne-Marie Irwin, Rep. Ken Hawkins and others from the House to develop HB 653. The House members then worked with Senate ED&A Chair Peter Burling, Sen. Michael Downing and others in the Senate to get the bill to the Governor in time to retain $204 million in the corpus of the trust. Passage of HB 653 changed the funding methodology to Entry Age Normal, and restricted the funds from entering the Special Account until the trust is 85% funded; at which point asset gains in excess of 10.5% will be transferred. Passage of HB 876 also created a Commission to study the long-term viability of the system. During FY 2007, the trust gained 16% and closed the year with a funded ratio of **63.4%.**

II. Review the structure and governance of the New Hampshire retirement system

Background

NHRS Members as of June 30, 2007

	Employees	Teachers	Police	Fire	Total
Active	26,474	18,477	4,263	1,588	50,802
Retired	10,859	6,928	2,293	1,168	21,248

The Board of Trustees

NHRS is governed by a 14-member Board of Trustees. The Chair and Vice Chair are members of the public, selected by the Governor and confirmed by the Executive Council (G&C). The Senate and House each select a trustee and the State Treasurer serves as an ex-officio member. There are nine plan members on the board; 2 from each of the four member categories: Teachers, Police Officers, Firefighters and Employees, and in 2007, a trustee from local government was added to the board. The member unions and associations and the Local Government Center prepare a list of names for the Governor, and he/she selects nominees for confirmation by G&C.

The board oversees the two core businesses of the retirement system, investing retirement funds and providing member services. They hire an executive director who supervises an administrative staff.

The most significant board responsibility is the management of the trust fund. Professional investment consultants are hired to work with the trustees to select fund managers for assets in each of the investment categories. The trustees conduct periodic reviews of the performance of each fund manager.

Based on a study of the system's assets and projected liabilities and capital market projections, the board sets an assumed rate of return for the fund. Following that, the actuaries calculate the biennial employer contribution rates. Choices that result in increases of employer contribution rates are not easy, since they have a significant impact on state and local budgets. However, the trustees are bound by statute, constitution and common law to act solely in the interests of plan participants. Article 36-a of the New Hampshire State Constitution prescribes that "Retirement System funds are to be used only to benefit the System." In addition to the trustees, the system's executive director, fund managers and consultants are fiduciaries. The system's ability to function autonomously from state government is key to fulfilling the fiduciary duty. Legislation and court rulings in recent years have clarified the system's autonomy, which are detailed in the History section.

The NHRS Administrative Staff

The Executive Director is responsible for managing the two core businesses: investing retirement funds and providing member services, with an administrative staff of 55-60 employees.

In 2001, NHRS began a major technology conversion program, assuring the capacity to store and process member records. The records had been on an old mainframe system, managed by Buck Consultants, the New Jersey based firm that also served as the System's actuary. Since NHRS pensions are based on salary and length of service, the capacity to process information is critical for calculating benefits. The new system, *Pension Gold*, is used by other

retirement systems, and customizations were designed to meet the plan requirements of NHRS. The new system enhanced the efficiency of NHRS obligations which include:

- Collection and processing of monthly data from 475 employers, regarding the earnings of more than 51,000 public employees
- Calculation of pensions based on individual records of salary and service for thousands of retirees and prospective retirees each year.
- Disbursement of roughly $30 million in monthly pensions for 20,000 retirees and beneficiaries

In 2005, NHRS developed a strategic business plan intended to:

- Build a foundation to support measurable improvement in member and employer services.
- Develop and implement best practices, policies, procedures and standards in investment, financial reporting, administration, operations and plan governance. The staff will be working to streamline business practices, revise and improve workflow, strengthen internal controls, ensure resources match obligations, and track their progress and success. Initiatives resulted in the periodic review of all professional services, including Request for Proposal (RFP) for investment consultants and actuaries.

As the baby boomers retire, the changing ratio of contributing members to retirees will continue to add to the administrative and financial challenges.

- Number of retiring members from 2001 to 2011 will more than double
- The boomer retirements will peak in 2012, and begin to level off.

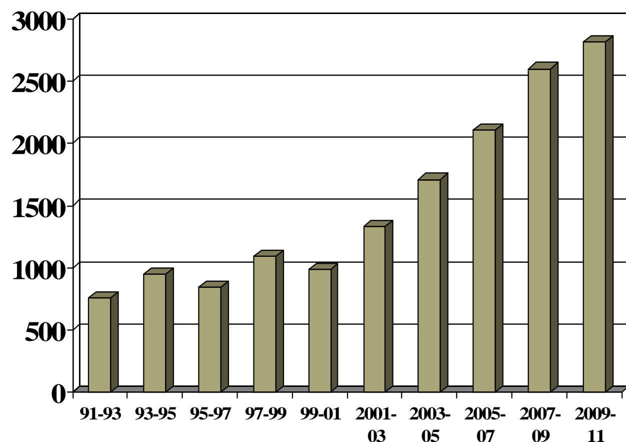


Chart: Number of retirements, actual and projected

The New Hampshire Legislature

NHRS is governed by RSA 100-A. Developed and amended over decades, its scope includes:

- Definition of eligibility for NHRS membership and benefits
- Member contribution rates
- Composition of the Board of Trustees
- Formulas for pension calculations
- Criteria for service credit purchases
- Additional benefits such as the medical subsidy

Each session, legislation is proposed on a range of topics dealing with NHRS benefits and administration. The majority of retirement legislation is reviewed by the Executive Departments and Administration (ED&A) Committees in the House and in the Senate. Bills are subsequently reviewed by the respective House and Senate Finance Committees. The Fiscal Committee, which is made up of both House and Senate members, is responsible for setting the amount of the annual Cost of Living Adjustment (COLA). An exception occurred for the COLA effective July 1, 2007, which was included in HB 653, providing for a 2.25% COLA.

Legislative proposals may also come from the board of trustees in the Comprehensive Annual Financial Report (CAFR), and at other times, as appropriate. RSA 100-A:15 VII (d) refers to, "any suggested changes in legislation which the board may seek in order to better serve the members of the system." Legislators review fiscal notes prepared by the NHRS actuary, indicating the cost of any prospective benefit. They may also seek input from the NHRS administrative staff to help them understand the impact of implementing new benefits or making changes to the eligibility criteria.

The Commission found that the NHRS staff and board should be proactive in assisting the legislature to make appropriate policy decisions. Without guidance from plan experts and those who are responsible for the well-being of the fund, the legislature is at a disadvantage and mistakes may result. Two recent examples are the enactment of an unrestricted provision allowing members to purchase nonqualified service and the repeal of the additional contributions program. Legislators lacked information concerning the financial impact of the provisions, enacting a costly program and repealing a cost-neutral one.

On a much larger and more significant scale, legislators lacked information about the impact of the Open Group Aggregate methodology on the plan's funding level, the long-term impact of the Special Account on employer rates, and the convoluted method of funding the medical subsidy program.

Fund Management and System Governance

The recommendations of the Operations/Administration subcommittee are supported by the White Paper on Pension Governance which is included as an Appendix to the subcommittee's report. The priority recommendations for the development of a board subcommittee structure are also supported by the Fiduciary Audit issued in December, 2002. The document also supports the subcommittee's recommendation that fiduciary obligations of NHRS trustees must not be subordinate to any other role or position. The audit specifically noted a training/education imperative curve for member trustees to develop an understanding of the critical distinction between the role of fiduciary and the role of member advocate.

Summary of the Fiduciary Audit of NHRS
Conducted by Independent Fiduciary Services
Report issued December 2002

Excerpts from IFS report
The System's use of its investment consultants is effective and efficient in many ways, though subject to significant caveats. The System obtains extensive, high quality services from its general investment consultant and real estate consultants. However, The System relies too heavily on the former and should revise its contracts with both, to more specifically enumerate their respective duties. The System's use of the private equity consultant is still evolving. (p.3)

With regard to monitoring appraised asset compliance, we are less certain whether the guidelines for monitoring alternative investment managers are operating effectively. (p. 8) (in spite of progress noted below, the following comments may still apply) …In-house investment expertise is significantly less than is typical for a public fund of this size…A high degree of reliance on external professional managers is considered acceptable when those managers are investing in highly diversified portfolios of publicly traded securities. However, with the NHRS

now diversifying into less traditional asset classes, there is a need both for more active involvement with investment professionals and more experienced staff to evaluate and closely monitor opportunities presented by consultants and others.

Over time, the Consultant has been given a larger role and expanded the responsibility for the investment program. While other, more recently hired consultants are focusing exclusively on real estate and alternative asset classes, they tend to be subordinate to the Consultant in overall portfolio structure and strategy issues. Moreover, even though the staff has increased its investment expertise, participation in the investment process, in our opinion the Board continues to rely almost exclusively on the Consultant to recommend, evaluate, and implement portfolio and manager activity. (p. 19)

…The addition of a CIO, supported by a small, experienced staff, would add an important second professional perspective and provide the creative tension necessary to assure that the recommendations made to the Board continue to be the best ones available… (p.20)…

A problem common to many funds is that Trustees are supplied with too much information. They are drowned in minutiae that distract them from the larger, significant policy matters on which they need to concentrate. Based on our observations, the NHRS Trustees fall into this category. (p. 21) In general we found that many of the reports did not provide the readily accessible, high level summary, key issue, and exception reporting that would enable Trustees to quickly focus on those issues of greatest risk or opportunity. (p. 22)

Since the majority of the Trustees are not investment "experts" they must rely on "information and advice from experts." Given the limited staff assigned to and experienced in investment issues, the Board has to rely on the investment consultants not just for technical expertise, but to identify and develop opportunities, interpret information, and advise on an entire range of issues. … Because of the lack of …experienced senior investment staff, we are uncertain that the consultant's advice receives sufficient in-depth professional scrutiny. (p 25)

…If the investment consultant's recommendations were critically tested by a knowledgeable CIO, or other experienced investment staff professionals, before being presented to the Board, i.e. if there was a constructive tension between the two parties, and if the investment consultant contractually acknowledged fiduciary responsibility for the advice it provides, we would find the current degree of reliance less troublesome. (p. 40) …."trust, but verify"…positive constructive tension between the consultant and in-house staff, which in turn, would contribute to the reliability of the advice provided to the trustees. (p. 133)

There is no formal process for teaching new Trustees how to be a Trustee, and in interviews this fact was widely mentioned as a deficiency. Although a few Trustees come to the Board with some level of investment expertise, the majority of them are elected or appointed based on criteria that do not necessarily include experience in investment, benefits or fiduciary issues. **Representatives of participant groups sometimes begin their terms expecting their role to be that of an advocate of their constituency, rather than a fiduciary responsible for the whole of the fund. Only two trustees are required to have "business experience," a requirement that is not defined and that is subject to broad interpretation** (emphasis added).

The required education goes beyond just "learning the ropes." IFS believes best practices suggest a formal, consistent basic training in fiduciary principles and investment concepts is a necessary step for a Trustee to become an effective member of the Board. (p. 26)

We believe that the use of a committee is consistent with good governance and "best practices." Committees make full use of board members' expertise, valuable time and commitment, and ensure diversity of opinions on the board. A smaller group allows for more focus and increases the likelihood of achieving a result. A smaller group can work more efficiently and less formally. (p. 50)

Examples of progress since the audit was presented in December 2002
CIO and Internal Auditor positions were developed
Autonomy legislation was enacted to provide staff compensation authority
A trustee orientation program was established
The assumed rate of return was reduced to 8.5%
A written governance policy was developed
Passive management was put in place for the domestic core investments
Action was undertaken to reduce investment management fees

Note: This summary does not include a review of the comments about the asset allocation strategy or other specific remarks about the investment program.

Excerpts from Summary of Recommendations

Section A

- The staff and Trustees should create guidelines for useful financial reporting and develop appropriate formats that clearly distinguish between accounting and investment information and that focus the Trustees directly on critical management issues, exceptions and matters requiring action.
- Trustees should be given the full set of tools they need to fulfill their fiduciary duties, including further and continuing training across all the areas of responsibility. This includes attending programs and seminars in areas that will continue to strengthen their skills. These programs could be developed and presented by some combination of staff, senior Board members, and consultants.
- Within the first few months of taking office, each new Trustee should receive a formal orientation in staff and Board procedures and operations, as well as a several-day course in fiduciary responsibility, benefits, investment principles and practices.

Section B

Efficiency and Effectiveness of Organizational Structure and Resources

- The board should explore with legal counsel whether they are in compliance with the apparent statutory language regarding subcommittees.
- The Board should consider the establishment of a committee structure. If they deem a committee structure is appropriate, it should then establish which committees should exist, how membership will be determined, their size, their authority and their specific functions.

Section K
Internal Controls and Operational Risk Management

- Minutiae could be removed from Board reports. For example, the various Schedules A though M attached to the monthly financial statements contain line items that do not require Board attention. While providing full disclosure is an understandable goal, the staff, appropriately supervised, could perform an important service by distilling the information presented to the Board. Staff should work with the Board to develop reports that provide a consistent snapshot of the NHRS's position and activities and easily highlight areas that need review or attention from Board members. The result will be improved quality of communications with the Board and likely a reduced reporting burden on the staff.

Summary
The Commission's recommendations concerning governance are among the most important for the long-term viability of the system. More than 70,000 active and retired public employees depend upon the pension plan.

Example of progress on compliance with Fiduciary Audit: The work on the Audit Committee: Excerpts from Minutes of NHRS Board Meeting, July 2005

Mr. Ablowich was next to address the Board with a review of the Audit Committee meeting and their recommendations. The topics discussed during the meeting were:

- Establish a cooling-off period between initial presentations by investment managers and the Board's hiring decision. More vigilant monitoring of investment performance (to be referred to the Investment Committee).
- More disclosure at the beginning of the investment processing regarding 3rd party marketers and the need for more complete information concerning the prevalence of 3rd party marketers in connection with present NHRS investments.
- Letter/inquiry to outside providers, professional advisors and consultants to the System to ascertain whether those vendors have been solicited for contributions to business, professional or charitable organizations by any trustee or staff employee and whether those contributions may have created the appearance of a conflict of interest.
- Add to section 401.04 Standards of Conduct, part of Code of Ethics: Trustees and staff employees are not permitted to solicit any outside service providers, professional advisors or consultants to the System for contributions, monetary or non-monetary, on behalf of or for any business (for- or not-for-profit), professional or charitable organization
- Establish a routine training program to ensure that trustees and staff are familiar with and understand the System's ethics policy and fiduciary responsibilities.
- Require the Investment Consultant to disclose whether any Trustee or staff member has recommended a firm or investment option to the consultant for inclusion in any review or search initiated either by the System or the Consultant.
- Include a specific provision in the investment guidelines excluding direct equity investment in non-pooled, non-publicly traded businesses (to be referred to the Investment Committee).
- Explore the advisability of implementing whistle-blower provisions in connection with the ethics policy

III. Analyze the current financial status of the retirement system, and the challenges facing the system in the future

According to the GRS valuation, as of 6/30/07:

- The trust fund's balance was $5.96 billion
- The actuarial present value of future benefits was $9.25 billion
- The trust fund was 63.4% funded.
- The unfunded actuarial accrued liability (UAAL) was $2.66 billion.

GRS estimates that it will take NHRS 22 years to reach an 85% funding level, but it could happen sooner or later, depending on several variables. The passage of HB 653 with it's limitation on gains sharing of funds into the Special Account immediately had a positive impact. Since FY 2007 ended with an investment gain of 16%, and a write-up of the assets, $204 million remained in the corpus of the trust, which otherwise would have been transferred into the Special Account. The timing of the legislation resulted in an increase in the plan's funded status from the 58% funding level GRS anticipated to 63.4%, as of 6/30/07.

Background: Balancing the Funding Equation

Contributions + Investments = Benefits + Expenses; C + I = B+ E. The funding equation needs to be remain balanced over the long term. If any of these factors change, action needs to be taken to make sure the pension obligations can be met.

NHRS retains an actuarial firm to evaluate and project the system's capacity to meet future income in investments and future benefit obligations. The projections are based on current assets, assumed investment returns and assumptions as to the number and age of retirees, life expectancy, inflation rates, and wage/salary levels. This biennial process guides the board's decisions on employer contribution rates and investment policy aimed at meeting its projected pension obligations.

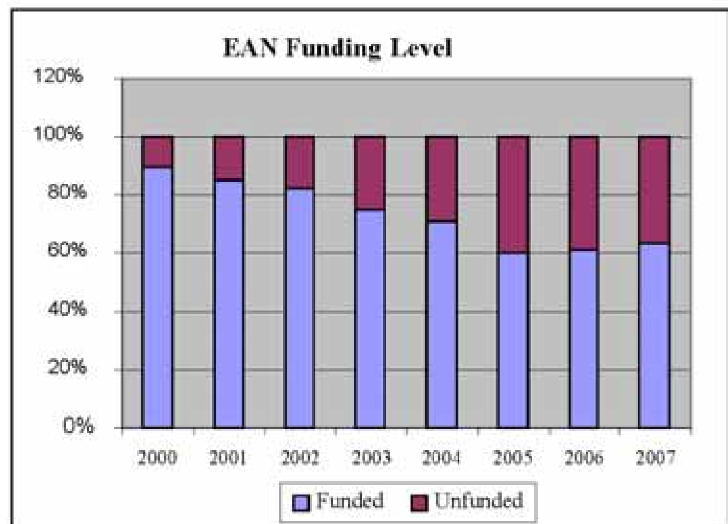
The funding equation is dynamic in that all its factors are interrelated. For example, as the baby boomers retire, the trust fund needs more cash on hand (liquidity) to pay benefits. The need for greater liquidity will require some of the portfolio be shifted to short term secure investments, which generally have a lower return than equities.

One of the key responsibilities of the board is establishment of an assumed average long term total annual investment return; interest and dividend income plus investment gains and losses, realized and unrealized.

Summary of presentations /information on the financial condition of the system

Bonding to pay off part of the UAAL?

The Commission considered the use of bonding in order to pay off part of the unfunded actuarially accrued liability (UAAL). State Treasurer Catherine Provencher presented "Bonding 101" providing the Commission an overview of the potential use of Pension Obligation Bonds (POB) to finance a portion of the UAAL. (Although she is also an ex-officio member of the NHRS Board, she was not speaking as a trustee.)



The chart shows the trust's level of funding using the entry age normal method.

Even though NHRS is only about 60% funded, the credit rating agencies have not downgraded NH, in part because HB 653 provided a clear plan to pay the debt, and NH employers have always made their pension contributions, so there is a good track record. It is not necessary to bond the debt, but it may be advantageous, under certain limited circumstances. The discussion of bonding covered both advantages and disadvantages.

The plan for the employers to pay off the UAAL over 30 years may get more difficult if there is another economic downturn. Bonding might be able to relieve some of the pressure.

Questions & Discussion

POB's are taxable because they rely on the retirement system making more in investment gains that the debt service on the bonds. The cost of bonding $500 million at 5 ¾% would be $35/million per year. If NHRS makes 8.5%, it works. It's risk arbitrage.

But who pays the $35 million? The state would pay; it's the state's bond. They can't pass the cost to NHRS or the local employers. (Unless the state tries to reduce the 35% share of local costs.) Why would the state pay the bond for all employers? The state would recoup the money because the state's employer contribution rate would be reduced. Is the goal is to reduce the state/local employer contribution rate, or to increase the funding level of the pension plan?

"Soft liability" provides more flexibility than "hard liability" – if you bond it, you have to pay the bond. But, there's no practical distinction to the local employers because NHRS contributions are mandatory. With bonding, you must still make payments – if you continue to pay at the current contribution rate, you'll pay off "the mortgage" sooner. It could work if you resist the temptation for "benefit creep" (ex New Jersey).

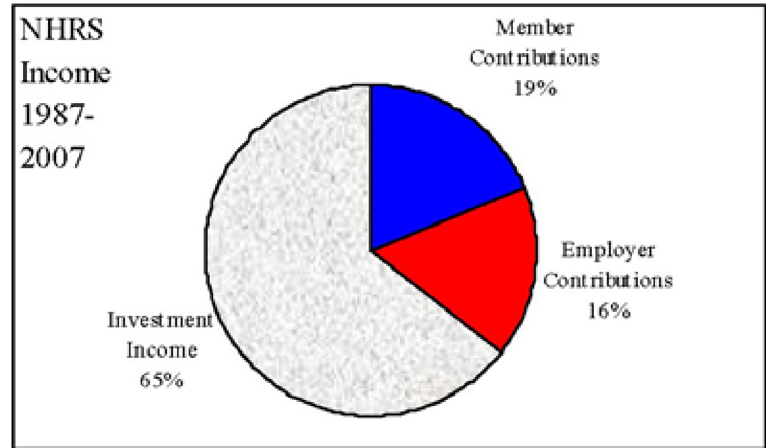
What about getting to the 85% funding sooner? In that case, the gains sharing will resume sooner than the expected 22 years. Gains sharing with the Special Account removes assets from the core fund. Although it's not the best method for providing COLAs, current retirees remain dependent on the Special Account for COLAs while the new employee-funded COLA is phased-in for active members.

Bonding could be part of a menu of options to help the fund recover. *Or* the payments in HB 653 could be made, as intended, and the UAAL will be paid off in 30 years. The State and political subdivisions will continue to make payments; they are not going out of business. But, is it fiscally irresponsible to push the UAAL ahead that far, to future taxpayers? It must be paid one way or the other. Bonding could help, but it is not a strategy without risk.

Bonding for a health trust?

New reporting requirements are drawing attention to OPEB "Other Post-Employment Benefits". For example the Segal Report showed how much the State will pay over time to fund retiree health insurance for state employees. (The Segal Report is discussed in section IX, concerning medical benefits.) There's another Commission studying the State's OPEB obligations for retiree health insurance under RSA 21-I:30, which is peripherally related to NHRS (the State currently receives about $15 million/year from the medical subsidy fund). Although health benefits may be in a different category than the pension liability, GASB now requires the disclosure of anticipated future payments for retiree health insurance. The Commission has recommended that the legislature consider the use of bonding to set up a new post-retirement health trust, as part of a new model, if appropriate.

Two-thirds of the fund income is generated by investments. Attention to the investment program must be a top priority.



Investment information

According to the Ennis Knupp Performance Report for the period ending 6/30/07, the fund gained 16%, but was still lagged its benchmark due to underperformance of equity investments.
The current investment gain assumption is 8.5%.

	6/30/06-6/30/07	3 years ending 6/30/07	5 years ending 6/30/07	10 years ending 6/30/07
NHRS Total fund	16%	11.9%	10.4%	7.9%*
Total fund custom benchmark	16.2%	12.1%	11.1%	8.2%

*The assumed rate of return for the period 6/30/97-6/30/06 was 9%. The majority of other public funds use an 8% assumption.

The Commission's Investment subcommittee looked at the various models used by other retirement systems. Many systems, including NHRS, employ investment consultants to assist the board of trustees in the identification, vetting and supervision of fund managers within each asset class. Several systems have in-house professional investment departments, with investment managers as system employees. The inclusion of non-trustee investment professionals as members serving on the board's investment committee will add expertise. It is also important to identify optimal training and education opportunities for trustees, and review the existing NHRS trustee orientation program.

Investment risk tolerance: The new restrictions on gains sharing put in place by HB 653 may provide more leeway for the portfolio. Previously, a more conservative than optimal investment strategy was developed because there was little incentive for the fund to take on risk, in order to gain more than 9%, since earnings in excess of 9% were transferred to the Special Account. Losses taken on risky investments would not be recouped from the Special Account. An investment strategy with lower risks seemed to be prudent. The use of index funds was a safe strategy and it reduced expenditures for active management fees. The fund will also need to retain an increasing amount of liquidity to meet the monthly payroll as the baby boomers retire.

Overview of the NHRS Investment Program

Excerpts from the presentation by NHRS Chief Investment Officer, Jeff Gendron
Investment Subcommittee Meeting October 12, 2007

The $6 billion investment program is fully externally managed. We don't manage any money in-house. We retain external managers for that purpose across the asset class spectrum. The portfolio is comprised of both active managers and recently, index fund portfolios as well. Active managers seek to beat the market, and index funds seek market exposure at low cost. The composition of the fund is domestic and international equity, fixed income, commercial real estate, and alternative investments which are comprised of private equity timber funds and absolute return strategies. And each of these asset classes requires a specialized area of knowledge and expertise to understand the concepts, the terminology, the mechanics of each of these asset classes and how they operate and how they come together to form the investment program.

There are also a number of functional specialization areas as well, that we need to monitor and be aware of. Things such as daily plant administration, proxy voting, securities lending, trading cost analysis, transition management, performance calculation methodologies, manager due diligence, contract and fee negotiations, legal interpretation, policy formulation, rebalancing liquidity analysis, relationship management, process improvement, compliance monitoring and financial reporting. So it's a broad scope and there are a lot of players involved. We're like the hub of the wheel, interacting with about 80 service providers; that is, investment managers and consultants, and our custodian, and the actuaries, and legal counsel, both internal and external.

It's a broad scope of responsibility, and we have a generalist model. When you run a program with a finite number of staff, service providers are an extension of staff. So there are things that you can have managers or consultants or custodians do, in terms of running reports or providing white papers or research, so we're not recreating the wheel. We leverage our service providers to the extent that we can, but even with that fact we run a pretty lean shop. (Mr. Gendron has one investment analyst who joined recently and is getting up to speed with the program.) The board has approved a second investment analyst position, so there will be a three-person team for this period running through fiscal year 2009.

The model is to have a chief investment officer and two analysts with specific focuses. One would be focused on the equity programs and one would be focused on fixed income, commercial real estate and alternative investments, which would give a rough split between the two individuals and would provide for specialization given the complexities of these asset classes. Having two analysts will provide coverage, cross-training and succession planning opportunities, and deepen our focus and our ability to do more due diligence with regard to the program and enhance our processes and controls. And as time goes by, we'll revisit our staffing needs based on the complexity and the scope of the investment program, which is changing substantially as we restructure the portfolio.

Specializing and focusing on the role of investment staff; there are three key areas: operations, monitoring and recording. We manage the daily administration of the $6 billion investment program. We implement all investment decisions from an operational perspective. We monitor the total fund portfolio for risks in key issues and elevate appropriate matters for consideration by the investment committee. We serve as fiduciaries to monitor the portfolio for conflicts of interest and compliance with governance principles. We prepare periodic and ad-hoc reports and we support the decision-making process of the investment committee by providing concise, relevant and timely updates.

The external consultant (Ennis Knupp) does project work and has the staff of experts who support various functions. However, there are many tasks concerning daily administration, primarily interacting with the custodial bank, Northern Trust, which must be done in-house. There's a lot of nuance to running a 6 billion portfolio largely with public market investments. So it's policing all those processes, looking at the portfolio on a daily basis, working with the custodian to resolve any issues that happen with regard to trading or the managers or any tax

related issues, proxy voting issues, and various matters.

There is a link between the actuarial process and the investment consultant's work on the asset liability modeling general study and the policy targets. First, the state statute provides the framework for the administration of the pension fund. It defines the composition of the Board of Trustees and establishes a fiduciary standard. It details responsibilities of the Board. It requires annual reports and audits of the pension fund and it outlines the board's actuarial responsibilities. The Board of Trustees operate within the parameters of statute, serving as fiduciaries to the pension fund, providing oversight and adopting policy for the administration of the pension fund, setting the employer contribution rates and the assumed rate of return and various related responsibilities.

The board gives marching orders to the actuary. The actuary receives demographic data from the NHRS staff to conduct an experience study. The actuary performs biennial evaluations and recommends the assumed rate of return and contribution rates for approval by the board of trustees. The actuary also evaluates the cost of legislation and various additional actuarial responsibilities.

The experience study is conducted by the actuary to study the membership of the four constituent groups focusing on mortality, service, and compensation, and the results of the study inform the biennial evaluation process. So those are inputs into the biennial evaluation, which creates a revaluation, or new value, of the assets and liabilities of the pension fund, and the results of the study serve as inputs for the general consultants when they conduct the asset liability modeling process. Those inputs could go into the work done by the general investment consultant and NHRS staff in the preparation of the asset liability modeling study and further down, the policy allocation targets. The general investment consultant, Ennis Knupp Associates (EK), deals with matters of allocation and asset liability modeling. EKA also serves as the public markets consultant and provide for oversight or insight into the private equity asset class on a project basis. (There is a second specialized consultant, the Townsend Group, with particular expertise in commercial real estate.)

The NHRS administrative staff coordinates the activities of EK, including the asset liability modeling study. The investment consultant uses the biennial valuation and resulting asset liability modeling study to provide analysis and recommendations for policy targets at the asset class level, and the investment committee has adopted a statement of investment policy, establishing roles and responsibilities and also includes the policy target asset allocations for the sub-asset classes.

What an asset liability modeling study does is to determine the appropriate mix of bond-like and equity-like investments. This is based on required contributions, pension fund, the pension plan funded ratio, and maturity, and the inputs include the valuation results for the pension plan, capital market assumptions for each asset class, and inflation estimates. The equity program includes stocks, commercial real estate and alternative investments. The asset liability modeling study has determined based on the input to the actuary that the ideal allocation is 30% to bond-like investments and 70% to equity-like investments, and that serves as the framework to drill down and the consultant to make recommendations at the asset class level.

Recently, the investment committee adopted a set of policy target asset allocations as follows: Domestic equity at 44%, international equity at 16%, fixed income at 30%, commercial real estate at 5%, and alternative investments at 5%. Each of these asset class targets would be impossible to maintain in a dynamic market environment, so there are ranges established around each target so that the asset classes can have some give and take, some flex before re-balancing is required. A combination of active and passive management strategies is used. Passive management is to gain diversified exposure to the asset class while incurring minimal expense and the goal of active management is to exceed the benchmark at a commensurate level of risk.

Question: Is the asset/liability model updated in reference to market conditions – specifically, the strategy for the down market in 2001?

Response: The policy targets remained consistent from 2001 until the asset allocation work done by Ennis Knupp in 2006. We had a slightly higher rating to domestic equity, a lower rating to international equity, higher ratings to commercial real estate and alternative investments, and lower rating to fixed income.

Changes in the asset allocation according to the CAFRs for periods ending 6/30/05 and 6/30/06

	FY '05 Actual %	Target as of 6/30/05	**Target Range 2005**	FY '06 Actual %	Target as of 6/30/06	**Target Range 2006**
Domestic equity	51.2%	47%	**43-53**	50%	44%	**40-48**
International equity	10.1%	12%	**9-15**	12%	16%	**12-20**
Domestic fixed income	19.2%	18%	**14-22**	20%	26%	**24-28**
Global fixed income	3.9%	3.0%	**0-5**	3.6%	4%	**2-6**
Alternative investments	8.2%	10.0%	**5-12.5**	6.6%	5%	**3-7**
Commercial real estate	7.4%	10.0%	**5-12.5**	7.8%	5%	**3-7**

Response, continued: Maintaining the actual rates of the plan in accordance with that allocation policy is the most significant determinant of long term success of a fund or an investment program. It's not the managers that you have, it's not active/passive, it's discipline. Discipline based on the asset allocation targets because – the linkage here is really important – that the experience tells you what your demographics look like. Your valuation tells you what your assets and liabilities look like and determines contribution rates and the assumed rate of return, which is really your target. What do we want to get for a return? Do we want to get the return that's required for the fund to support its liabilities? And how much volatility can we stand? We can stand only enough volatility, in terms of our returns, to support our assets and liabilities – to support our liabilities, I should say. So we can't be in asset classes that are so risky that our returns are spiked high in one year and low in another year because that volatility over time, while it seems to average 8 ½% or 9 ½%, volatility is a big detriment in how time rated returns stack up over long periods, so maintaining that discipline is really important.

The asset liability modeling study gives the bifurcation of bonds versus equities and the consultant then works with that to determine the optimal mix of assets based on scenario analysis, based on economic models and investment theory to meet that target over a long period of time. And we're not looking at one year periods or five year periods. We're looking at 15 year periods. And it's important that we adopt realistic capital market assumptions that each asset class is going to do in terms of performance over a long period of time. We know that over a year or two years or three years, some asset classes may widely outperform or widely under-perform, but we have to adopt something that's realistic and conservative. One of the benefits of using EKA as our general investment consultant is that they have a staff that contains several actuaries and they refresh their capital market assumptions at least every six months. So it's a dynamic model and it pushes those expectations out a little bit further, which gives us an ability to check ourselves on an ongoing basis to determine whether or not we're on track. And we revisit the asset allocation policy targets on an annual basis.

Question: To what extent is your asset allocation influenced by your liquidity needs, and if the inflow of contributions was matching the outflow, would that alter your 70-30 spread?

Response: No in terms of the way that it operates, because the experience study and the valuation take into

account the maturity of the plan; how many retirees are there versus how many actives, and those are inputs into the asset liability modeling study, which determines the 30% bonds, 70% equity split. The liabilities increase when you have a more mature population and a smaller working population. But underlying that question, the contributions don't cover the annuity payments on a real time basis.

Question: Is there a formal review schedule for our managers and consultants?

Response: The managers and consultants now are on a schedule of contracts that are not open-ended. With the strategic business plan, we're looking at all of our service providers on a rotating basis to determine whether we're getting the best services, the most competitive fees, and if we're keeping pace with the market with regard to services that are out there, and if we're getting the best available providers. And in terms of reviewing the investment program, that's somewhat dependent on consultants. I think there was a different flow of review with our former consultant, but with EKA the idea is not to always watch the managers obviously, but to look at the plan on an annual basis, look at the asset allocation policy targets and see if we're on track with our current capital market assumptions.

The managers are monitored on an ongoing basis. We report to the investment committee every month about what's happening, and investment consultants also are watching. And if there are developments in any of these firms where key individuals leave, we look at those – if there are mergers, we look at those portfolios to see the impact. But we have to be somewhat patient with regard to how managers perform over market cycles. And we're talking about market cycles, we're talking about 3 to 5 years or longer, and we're seeing what's happening to the economy at different periods of time. Managers can perform differently in different economic conditions. So it's important that we not be making changes all the time. You can incur a lot of costs by firing managers at the wrong time. We have to take a long term disciplined view.

Question: Is there anything other than an orientation for new trustees in terms of investment? Introduction to Investments?

Response: I'm actually formatting an orientation for the three new trustees coming on board. I'll be meeting with them in the coming weeks to review the investment program and orient them to our recording and terminology and the processes that we use. EKA has education sessions that they conduct at their offices in Chicago, and they expressed willingness to do an on-site session for the investment committee. There are educational sessions available; conferences and seminars and programs that folks can enroll themselves in.

Question: Do you feel NHRS should be more aggressive in some asset allocations?

Response: When we're using terms aggressive or conservative, it's all relative. We can look at it from a standpoint of how high is your return. We can also look at it as what do you have to support. Our whole reason for being is to support the annuity, and so the whole structure of what we do is to meet that obligation. And what it takes to do that over a long period of time is what we need to do. Our strategy is really driven by our responsibility, and there's a linkage; a very methodical and disciplined linkage, between the things that we need to cover, and how we are covering them. Our plan has been tailored specifically to meet that need, and it is on point to do that. I think we've structured the portfolio over the last two years and we haven't had a lot of time for this portfolio as it's evolving to really stretch its legs, and obviously, as you know, market dynamics have a play in that in terms of the early 2000's and performance in the recent two years. But I think that we're well structured and well positioned to support the assets going forward. But there are a lot of different aspects, as the Commission as a whole and all the various subcommittees are finding; there's not one cause, or one reason. We are well

positioned, appropriately positioned with regard to meeting our liabilities, and that's ultimately what it's all about. I don't think we're conservative.

Comments: There are a lot of plans that seem to be thinking out of the box more, and they get into the LDI investments, the short-long investments, in fact, the short long investments' some people are actually thinking they're part of an asset class, not a really big asset class; and I just wonder if we think out of the box enough. And I know where you're coming from, as far as our structure to support our system, and I understand that, but I just wonder if maybe it would help the cause, if we could update the rate of return if we dabbled in some of the other strategies that are out there. It seems that – we seem to be mundane. I wouldn't use conservative or aggressive. I would use unimaginative and pedestrian. And this Commission may well try to make that point.

Response: Another point to our position has to do with our funded status, we could be in a lot of different investments that might have high returns in certain periods of time, but when we look at those capital market assumptions, what is the expected return on these asset classes over long period of time? We can't lose sight of the volatility of those asset classes. And as I had mentioned earlier, the volatility will kill you. If you have returns in certain asset classes like private equity, that shoot the lights out one year, and then drop down the next year, and go high positive and go low negative, it will chew up your returns. And for a plan as we are, we have to acknowledge our realities, with the funding status being around 60% and potentially to go lower, depending on what accounting practices are passed, that's really important for us to focus on. We can't take the latest idea or the most exciting or most aggressive approach because we have an obligation to improve the funding status and to dampen the volatility of our returns so that we can support that liability over the long term.

There are a lot of new assets out there; a lot of new investment vehicles that are available these days. You have to put this in historical context in terms of what are we invested in and why. And we have gone through a sea change since our last consultant change at the end of 05, beginning of '06, where the portfolio, we spent two years modifying the composition of the portfolio, and then transitioning the assets to match the new allocation policy targets. There's a tremendous amount of transition work and restructuring, but that is just to set the foundation, because once we have these things in place, then we can look at other things like long-short strategies and other types of infrastructure investments and a lot of other things that are being discussed in the marketplace. We need to get the foundation set and in place. And one important sea change from previously is that we used to be 100% actively managed. And looking at different stats 10-30% of active managers have outperformed the index over a five year period. So, a very small minority outperforms, and if you have managers that don't perform at a market level, then that impacts your ability to meet your obligations.

We initiated a significant passive component which has reduced fees, and it gives us a mechanism for rebalancing at low cost. We can draw money out to support the annuity payments if we need to, and we can move money tactically between asset classes if we need to increase income and decrease equities. We can do it without the same type of expense and operational complexity that would occur if we were taking money from an active portfolio in equities and investing it in an active portfolio in bonds. We've gone through some major structural changes and some major philosophical changes in the last couple of years, and those changes haven't really had a chance to evolve and I think the exciting stuff is yet to come. We may have another year of restructuring ahead, because there are more asset classes that we're looking at going forward.

Ennis Knupp's Asset Liability Study May 2006

EK used a model based on 79% equity and 21% fixed income. The asset mix was expected to yield an average return of 7.7%. The risk/rewards analysis recommended a reduction in the equity asset allocation to 70%. EK also pointed out that the lower equity allocation reduces investment management fees and it is closer to current practices of other public funds, and offers the benefit of lower event risk in the investment program.

Commission recommendation: A clear statement of investment objectives should describe how the average annual rate of return is to be achieved. The policy should be linked to the assumed rate set by the trustees for the biennial actuarial calculation.

Ennis Knupp's Asset Liability Study December 2007

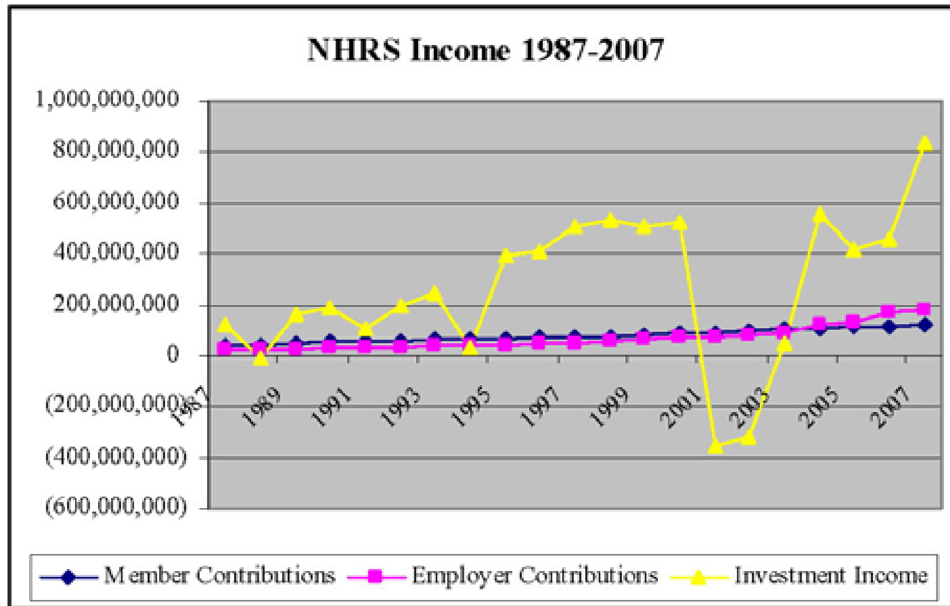
Ennis Knupp presented the trustees with a new study based on a portfolio of 70% equity and 30% fixed income. EK noted that the importance the curtailment of gains sharing and predicted a 50% probability of reaching 81% funded by 2022.

Using that asset mix, the portfolio has a 50% chance of returning 7%, and a 32% chance of achieving the assumed rate of 8.5%.

Priority Recommendation: Reconfigure the Board's Investment Committee to include 2-4 trustees and 2-4 non-trustees who are investment professionals or those with experience managing large endowments or similar funds.

Questions:

- Is 8.5% too aggressive? The Public Funds Survey for FY 2006 reported that the median assumption rate was 8%. Out of 109 systems in the survey, only 16 plans reported using an 8.5% earnings assumption.
- Is the asset allocation model optimal? The trustees will review the information presented in EK's report and consider the options.
- The trust fund investment program must be concerned with the long term. What strategies are in place for down markets?



History of NHRS Income 1982-2007

Fiscal Year	Member Contributions*	Employer Contributions	Investment Income
6/30/1982	24,781,166	23,157,299	33,317,529
6/30/1983	23,853,993	22,437,317	64,910,141
6/30/1984	23,229,003	17,202,584	46,842,834
6/30/1985	27,983,668	20,259,280	52,864,337
6/30/1986	31,172,667	19,691,550	46,734,565
6/30/1987	36,189,491	19,838,598	125,104,787
6/30/1988	39,930,000	23,538,368	(10,760,906)
6/30/1989	48,411,000	27,147,544	165,246,610
6/30/1990	53,612,000	31,548,452	184,102,403
6/30/1991	59,330,000	32,281,963	105,270,443
6/30/1992	59,877,000	35,161,908	198,203,103
6/30/1993	61,601,000	38,428,926	246,218,347
6/30/1994	64,256,000	38,796,202	30,240,502
6/30/1995	67,635,000	40,034,000	393,100,000
6/30/1996	70,174,000	44,903,000	407,528,000
6/30/1997	72,086,000	46,151,000	511,049,000
6/30/1998	75,703,000	58,977,000	534,722,000
6/30/1999	79,417,000	61,342,000	506,123,000
6/30/2000	85,581,000	69,828,000	526,539,000
6/30/2001	90,547,000	74,656,000	(357,130,000)
6/30/2002	97,322,000	83,516,000	(322,826,000)
6/30/2003	104,058,000	88,477,000	52,204,000
6/30/2004	109,707,000	123,640,000	558,793,000
6/30/2005	117,501,000	133,054,000	413,694,000
6/30/2006	116,486,000	170,821,000	460,199,000
6/30/2007	125,399,000	178,639,000	838,985,000
	1,765,842,988	1,523,527,991	5,811,274,695

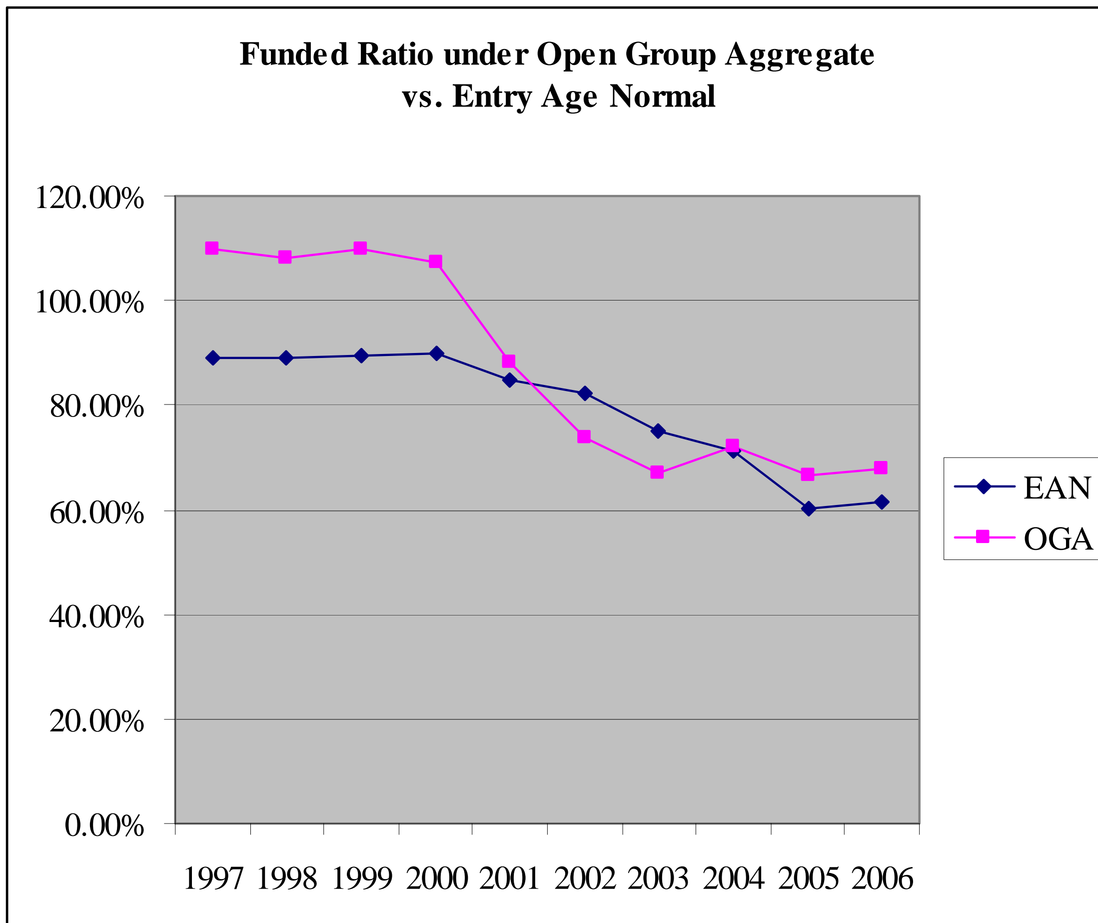
* The member contributions do no count voluntary additional contributions or service purchases.

IV. Assess the changes to general accounting standards and their potential effect on the retirement system

The Commission supports the adoption of Entry Age Normal funding methodology, enacted in HB 653

The decision to use an Open Group Aggregate methodology caused systemic employer underfunding since 1992. The extended period of underfunding the trust account has been compounded by a period of down market return on investments and there is no quick fix for a return to 'wholeness'. The NHRS should adhere to the sound accounting principles that HB 653 established and work to accurately calculate the fund liabilities, thereby making financial decisions that put the system on a path to ensure full funding.

The use of Open Group Aggregate (OGA) made the fund appear to be healthier than it actually was, resulting in artificially low employer contribution rates. Using OGA, the trust appeared to be 110% funded in 1999. Recalculating the ratio using Entry Age Normal showed the fund was only at about 89%. When earnings fell in 2001-2003, all public funds the NHRS trust dropped to a level 20 points below other public funds.



On September 7, 2007, actuaries from GRS briefed the Commission on the 2005 Public Funds Survey. They reported that of the 126 plans surveyed:

1. The average is 82% funded. At 58%, we are ranked 93rd from the top.
2. 72% of plans use Entry Age Normal, 14% use Projected Unit Credit & 7% use Open Group Aggregate.

Fortunately, when GRS completed the Valuation for the period ending June 30, 2007, the NHRS trust fund was **63.4%** funded. The median for public funds was at 85.8% in 2006. The NHRS trust is expected to reach 85% in 22 years and full funding in 30 years. The Commission's recommendation to transfer $250 million from the Special Account to the corpus of the trust will bring the fund to a level of **66.8%**. If investments do better than expected, the fund could recover more quickly.

The Commission supports the provision in HB 653 concerning the calculation of the fund liabilities, thereby putting the system on a path to ensure full funding using relatively level contribution rates, amortizing the UAAL over at 30 years or the maximum period set by the Governmental Accounting Standards Board (GASB). The Commission findings are supported by Article 36-a of the New Hampshire Constitution which requires the system's liabilities to be "determined by sound actuarial valuation and practice."

Background on Financial and Accounting Operations
Excerpts from the presentation by NHRS Chief Investment Officer Jeff Gendron
October 12, 2007

The financial operations team, headed by Dick Joyal, is responsible for the cash management and accounting for the $6 billion fund. The team provides support for the investment program, recording the valuation of the investments, funding capital calls and receiving distributions from the private equity managers and some of the real estate funds. They also facilitate cash management which supports the payment of annuity functions, and coordinate with the actuary to provide valuation data and to prepare financial reporting for the investment program.

Example of the complex financial management of income from investments and contributions and the outgoing pension checks: Assets are held both within the Northern Trust portfolio and within local custodian, Citizens Bank. There's a flow-through of the employer money coming into the Citizen's Bank account, flowing out to make annuity payments. But there's also a component where NHRS transfers money between Northern Trust and Citizens Bank to cover the annuity payments essentially on a monthly basis. Money comes into the portfolio in the form of security funding income, in the form of distributions from alternative investments, and other areas such as that, proceeds from class action litigation, and those monies flow into the Northern Trust account and, ultimately supports the annuity payments. NHRS pension payroll for retirees and beneficiaries is roughly $30 million per month.

Pension Payroll as of June 30, 2007

	Employees	Teachers	Police	Fire	Total
Annual Pension Payroll	$118,079,236	$134,240,304	$68,292,693	$37,150,627	$357,762,860
Monthly Payroll	$9,839,936	$11,186,692	$5,691,058	$3,095,886	$29,813,572
# of Retirees	10,859	6,928	2,293	1,168	21,248
Average Pension	$10,874	$19,376	$29,783	$31,807	$16,837

V. Make recommendations for ensuring the long-term viability of the retirement system, including an appropriate funding methodology

The Commission found that high standards of board governance and a collaborative relationship with the legislature are both critical to the long-term health of the system. The tension between the level of benefits established by the legislature and the management of the trust by the board has been complicated by the use of the Special Account as a means of funding post-retirement benefits. When the board and the legislature work at cross purposes, employer rates increase and retirees go without adequate COLAs. The Commission spent time learning about the Special Account and reached a compromise recommendation concerning its continued use, in a conditional and limited manner.

- The use of conditional "gains sharing" as a means to provide cost-of-living adjustments for those already retired was viewed as necessary by the Commission, since it was not financially possible to fund the COLAs with increases in the employer rates.
- The Commission recommended that active employees contribute an additional 2% toward their future COLAs, but it will take several years to phase in.
- The Commission recommended reducing the threshold for gains sharing from the 85% funding level (in HB 653) to 75%, provided that the employer normal rates do not increase as a result as determined by NHRS in consultation with the actuaries following approved actuary methods and provided that a loss sharing or make-up provision coming from future gain sharing is included to return money to the corpus to ensure the integrity of the pension fund and symmetry on the gain sharing. The trigger rate will remain at 10.5%. When the trust fund reaches 75%, gains in excess of 10.5% will be transferred to the Special Account. Details may need to be fine tuned after actuarial and sensitivity analysis to ensure changes to the sharing mechanism are consistent with stable funding of the pension system and expected funding levels. Further recommendation: Change the gains sharing formula when the trust fund reaches 85%, such that gains in excess of 10.5% will be shared 50/50 between the Special Account and the corpus. The employer share will be allocated based on the relative contributions of the political subdivisions and the state.

Background

The use of "excess" investment earnings (gain sharing) to fund supplemental retirement benefits began in 1983. Though inefficient and costly; it has been the only politically acceptable method. Once the contrivance was established in 1983, it was virtually impossible to undo because the remedy (direct funding of COLAs) was arguably unconstitutional, since the passage of Article 28-a in 1984. Without another source for COLAs, employees vigorously defend the Special Account.

The long-term impact of the diversion of pension fund assets to the Special Account was masked by the adoption of an overly optimistic funding methodology in 1991 that understated the System's long term liabilities and overstated it funding ratio. The problem was further compounded by on-going political pressure for low employer rates. The trustees responded to the pressure by maintaining an overly aggressive earnings assumption rate, which kept employer contributions artificially low.

In 1991 and in the ensuing years, actuaries and auditors repeatedly told the board that the assumption rate was unattainable due to the gains sharing. The board responded that the Special Account was the purview of the

legislature. In the political world, gains sharing could not be stopped without a pre-funded COLA. And, in the political world, a pre-funded COLA was impossible. Ironically, the deal for free COLAs ultimately cost the taxpayers billions of dollars.

What's wrong with gain sharing?

Put simply, gain sharing deprives the basic fund of necessary assets, truncating investment gains. Since the trust fund does not retain 100% of the upside, it lacks the ability to cushion the downside. Increased employer contributions ultimately must make up the gap.

Actuaries recommend the direct funding of COLAs, rather than the use of gain sharing. If gain sharing is used, adequate plan funding requires the adoption of a more conservative earnings assumption and higher employer rates. If the employer rates are inadequate, the funding ratio will decline.

A review of historical documents confirms that consultants warned the trustees and the legislature about the impact of gains sharing. In May of 1993, a review by Milliman & Robertson reported that the gain sharing could reduce total investment returns by 10%. In June of 1994, Ernst & Young's report explained:

> As it currently operates, unless the pension fund always earns more than the assumed rate of earnings, the fund cannot realize the assumed return over the long term. This results because any shortfall of earnings in years when the fund does not realize the assumed rate is never made up by excess earnings in the years when there are investment gains in excess of the assumed rate.

At various points, consultants from Buck and Evaluation Associates went along with the politics of the situation, but, generally, consultants were clear: absent a pre-funded COLA, the use of a 9% earnings assumption rate was too optimistic. There is a significant amount of detail concerning the development of the Special Account in the History section. Below are highlights of the history:

1983: The Special Account was established. In ensuing years, retirees with extremely low pensions were provided with COLAs. According to the Senate Research office, the proposal for the Special Account was introduced as HB 707, which was amended in ED&A, but died in the Senate. The substance of the bill became part of the COC budget bill, HB 500. It appears that the measure was a compromise between employers and employees: the legislation starting the Special Account also authorized the state to pay 35% of the employer contributions on behalf of local Group II members.

The new law allowed the Special Account to receive all earnings in excess of the assumed rate of return, which was 8%. Apparently, the legislators had no specific information about the potential downside: the Fiscal Note said, "The NH Retirement System based their estimated fiscal impact on an actuarial study for the biennium 1984-1985. The effects on the system after the next biennium are not quantifiable and will depend on the actual experience of the system."

Excerpt from Minutes of March 13, 1990 Board of Trustees meeting:

> …Mr. McGoldrick feels that with regards to the special account there are issues which have not been addressed. The Board of Trustees has never taken a position regarding the additional employer costs of legislation, after terminal funding has been determined, that may arise because of subsequent actuarial assumption changes or unfavorable actuarial experience.

Excerpt from October 9, 1990 meeting

Mr. Baus also expressed his concern over the Special Account since it will continue to affect the asset liability funding ratio even over the longer term.

Excerpt from November 13, 1990 meeting

(According to Mr. Baus) Four major areas when considering…methodologies: (1) benefit security… (2) intergenerational equity…(3) recognition of the "Special Account" and its relationship with the funding ratio and the effect on employer funding requirements; (4) funding COLAs for present and future retirees.

1991 HB 51 was passed requiring the rates for FY 1992 to be set using Open Group Aggregate, with 9 ¾% earnings assumption and 6 ¾ % salary increase assumption. It also raised the trigger rate for the Special Account to 10%. The provisions were in effect for 1992 only; the legislation established a Commission to make recommendations for subsequent policy.

The Commission established by HB 1991, consisting of five Senators and five House members, filed its report October 15, 1991. The Commission's findings recommended the continuation of Open Group Aggregate. They disregarded the actuary's input concerning the need for a prefunded COLA; opting to continue use of the Special Account. Excerpts from the report:

> The Committee recommends a change in funding methodology from the current Entry Age Normal to the Open Group Aggregate. Under Open Group Aggregate, a longer term view of the system will result in substantially lower employer contributions and decreased volatility of the rates in future years…
>
> …During the public hearing, two recurring concerns were expressed by retirees and active members of the system. A great deal of testimony was heard regarding the ongoing need for cost of living adjustments and also a great concern for previously retired members who were receiving miniscule basic benefits. Consequently, the Committee requested an accounting of funds in the Special and Reserve accounts and costs to provide a COLA for all current retirees and to bring all current retirees to a minimum benefit level.

Following the release of the Commission's report, a debate took place concerning the return of the fiduciary duty to the trustees. The legislature wanted the rate to remain high, to lessen the impact on employer rates. The actuary, Robert Baus of Buck Associates had the same analysis that Gabriel, Roeder, Smith (GRS) provided 15 years later:

Excerpt from December 10, 1991 meeting

When asked for his views on the 9%/6% assumption rates being proposed by the legislative committee, Mr. Robert Baus indicated that although he considered those rates to be aggressive, he could support them provided those rates also supported prefunded cost-of-living increases. The support of such a rate package would assume trustees retained the same authority to review and make necessary adjustments to the assumption rates the same as they always had in the past. Mr. Baus added that if prefunded COLAs were not to be a part of the assumption rate package, the assumption rates should be set at less than 9%/6%.

Excerpt from February 11, 1992 meeting

Chairman Baldwin stated that whether a COLA did or did not become automatic was a decision of the Legislature, that it was beyond the purview of the Board of Trustees….further discussion continued

with disagreements on whether Mr. Baus had recommended, and felt comfortable with, a 9% interest rate assumption… Rep. Ward insisted that funding methodology this year would include no automatic cost-of-living adjustments and that from her point of view as a legislator, COLA adjustments were no concern of the Board of Trustees because COLAs were not part of the defined benefits plan of the NHRS.

Chairman Baldwin interrupted Rep. Ward and insisted that the trustees were not attempting to establish COLAs; that COLAs were not within the trustees' authority to establish. The Board of Trustees' responsibility, however, is to ensure that if the Legislature adopts an automatic COLA, that it be properly funded.

1993: **Report by Milliman & Robertson identified problems with the Special Account**

Excerpts from the May 11, 1993 meeting

What Mr. Reimert and his organization thought was of most priority was the current program under which "excess" investment earnings are withdrawn from plan assets and credited to the Special Account and Special Reserve in order to provide future benefit improvements. Mr. Reimert believes that there are potential long-term dangers to the actuarial soundness of the system from the practice of withdrawing from investment returns during peak years in order to provide increased benefits rather than allowing that money to remain available to fill in the valleys when lower returns are earned.

Chairman Baldwin clarified for Mr. Reimert that the Special Account did not exist because the actuary chose to create the plan that way; the Special Account was legislatively created…

The next recommendation of the M&R report suggested a reduction in the investment return assumption for the June 30, 1993 actuarial valuation in order to: respond to Buck Consultants' comment in the 1991 actuarial valuation that 9% was aggressive and should be closely monitored; recognize the recent decline in bond yields; reflect the Special Account and Special Reserve which can be expected to reduce total investment returns by 10%…

The debate that took place a few months later is typical of the on-going conundrum.

Excerpts from August, 20, 1993 meeting

Mr. Baus pointed out that reducing the interest rate assumption to 8.5% would produced further increases in the normal contribution rates…approximate $54 million… Mr. Baus told the trustees…he still believed that a 9% interest rate assumption to be aggressive without prefunded COLAs. However, the COLA issue aside…according to the IFE Pension Network Report the mean range of investment return assumptions for a fund size of $1-5 billion was 8.31%…

…Mr. Baus repeated that there was a sound theoretical basis for the 9% rate…however, if it could be afforded, the rate should be decreased…. (Extensive discussion)… Mr. McGoldrick agreed with other views that a skewed decision on the establishment of the assumed rate of interest could be characterized as an attempt to force more employer funding into the Special Account… Chairman Baldwin stated that as a public member, he favored the adoption and continuation of an assumed 9% investment rate of interest given the state of the economy and the current recession. The impact on employer budgets in

adopting an 8.5% interest rate would require an additional $10.8 million dollars in funding. (Motion to set an 8.5% interest rate failed by 3-8)

November 2005
The assumption rate was finally reduced to 8.5%, more than a decade later. Since the trigger rate was just ½% above the assumption rate, asset gains in excess of 9% would go into the Special Account. So, the reduction of the assumption rate resulted in $11.5 million going into the Special Account as of 6/30/06. The 8.5% assumption rate resulted in a $50 million increase in employer contributions.

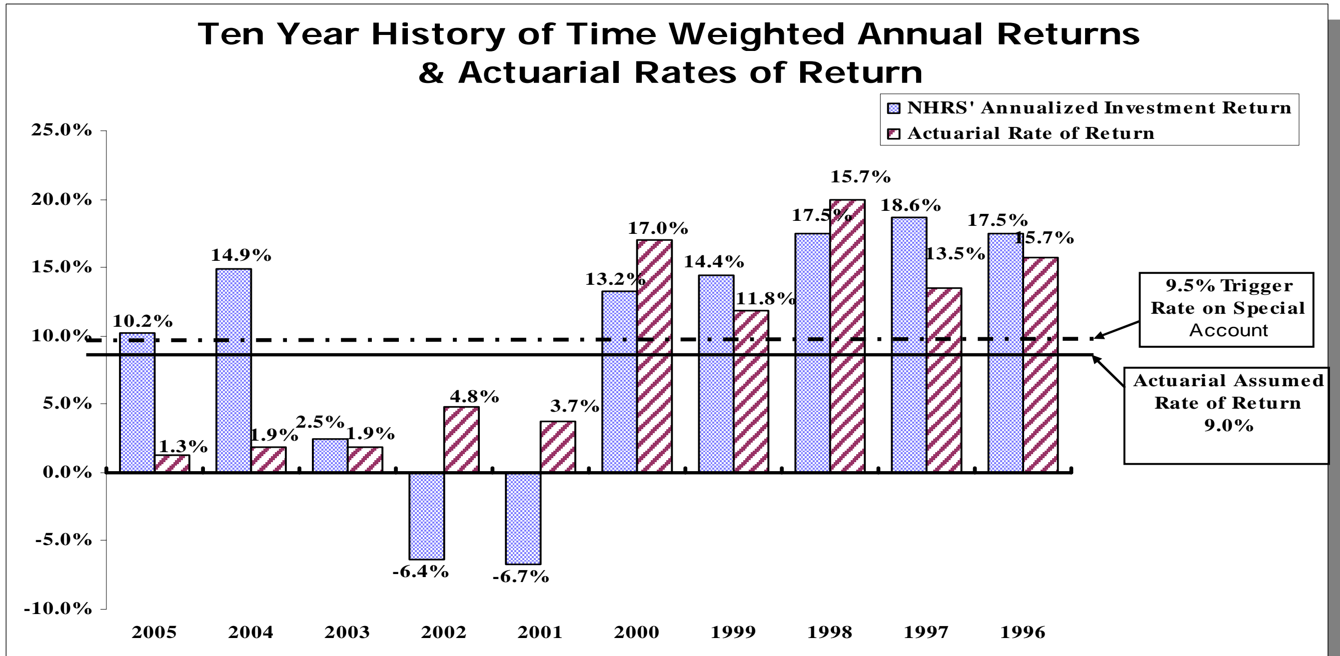
June 2007
HB 653 suspended the gains sharing until the fund reaches 85%; and increased the trigger rate to 10.5%. If HB 653 had not become effective 6/30/07, $204 million would have gone into the Special Account.

GRS Review of Gains Sharing
GRS was asked to calculate the impact of the resumption of gains sharing on the fund. The GRS study found the standard deviation on the assumed rate of return of 8.5% is 5.2%. Therefore, if all gains above 10.5% are sent to the Special Account, the expected annual average rate of return on the remaining fund decreases approximately 1.25% to 7.25%. They also calculated the impact of the use of gains sharing at various funding levels:

Funding status trigger	Estimated years before Reaching trigger	Estimated present value of future Gains Sharing (million)	Estimated Employer Rate increase
70%	7	$1,139	3.67% to 5.76%
80%	18	$405	1.97% to 3.09%
85%	22	$259	1.47% to 2.30%
90%	26	$159	1.05% to 1.64%
100%	30	$94	.66 to 1.03%

The challenge for two Commissions

Continuation of the indirect, expensive gains sharing system was the only politically acceptable alternative for the Commission of 1991. The use of the Open Group Aggregate methodology in 1991 indicated that the trust was 116.4% funded, so excess earnings were arguably available. Throughout the 1990's, the fund appeared to be well above 100%, and the consultants' warnings about the impact of the Special Account were disregarded. Between 1991 and 1999, more than $900 million went into the Special Account, providing for nearly $800 million in benefits between 1991 and 2003. In FY 2006, **$247** million that had been earmarked for medical subsidies was returned to the Special Account. The employers will now fund the subsidies with direct contributions, so the Commission recommends that $250 million be returned to the corpus.



The graph shows the impact of the previous trigger rate. Previously, gains in excess of ½% over the assumed rate of return, on a 5 year rolling average, were transferred to the Special Account. According to GRS, if the trigger rate had been set at the 10.5% since 1989, more than $200 million would have remained in the corpus of the trust.

- Between 1989 and 2006, the trigger rate of ½% over the earnings assumption required the transfer of $987.3 million into the Special Account.
- If the 10.5% trigger rate had been in place, $764.7 million would have been transferred.
- The Commission's recommendations to return $250 million to the corpus and to use a "make-up" procedure for future gain sharing provide a reasonable transition for the long-term viability for the pension plan.

Excerpts from Ernst & Young's Actuarial Audit, June 23, 1994

The legislation requiring the transferring of the pension fund's investment earnings in excess of the actuarially assumed rate of interest into a "special account" earmarked for cost-of-living adjustment and other benefit improvements should be reexamined. As it currently operates, unless the pension always earns more than the assumed rate of earnings, the fund cannot realize the assumed return over the long term. This results because any shortfall of earning in years when the fund does not realize the assumed rate is never made up by excess earnings in the years when there are investment gains in excess of the assumed rate. Incorporating a make-up procedure would, at least theoretically, permit the possibility of realizing the assumed rate of return over the long term. We understand this would require legislative action and we recommend such action.

Response by NHRS: The Chairman and a minority of the trustees believe that a 'make-up' procedure should be created with respect to the Special Account. This is a matter for the legislature as it is beyond the authority of the trustees.

Gains sharing plan design

The Ernst & Young Actuarial Audit (1994) recommended a "make-up" procedure or other means be developed to recapture Special Account assets when investment earnings do not reach the assumption rate. The Commission recommends the use of a "make-up" procedure to protect the corpus of the fund from any losses.

Special Account History

The use of the Special Account for post-retirement benefits provided COLAs, medical subsidy payments and other benefits for retirees. The table below shows the flow of assets and benefits since 1991:

	Employees	Teachers	Police	Fire	Total
Balance 6/30/87	**40.1**	**42.9**	**21.8**	**7.6**	**112.4**
Asset Gain	2.0	2.5	1.4	0.7	6.6
Interest Credited	3.2	3.4	5.8	3.7	16.1
Benefits purchased	-40.1	-42.9	-25.6	-11.8	-120.4
Balance 6/30/88	**5.2**	**5.9**	**3.4**	**0.2**	**14.7**
Asset Gain	6.6	7.9	4.2	2.3	21
Interest Credited	0.5	0.4	0.3	0	1.2
Benefits purchased	-5.8	-4.5	-2.2	-0.9	-13.4
Balance 6/30/89	**6.5**	**9.7**	**5.7**	**1.6**	**21.5**
Asset Gain	2.1	4.8	1.3	0.8	9
Interest Credited	0.5	0.6	0.4	0	1.5
Benefits purchased	-8.8	-6.2	-5.7	-2.2	-22.9
Balance 6/30/90	**-0.4**	**8.1**	**1.4**	**0**	**9.1**
Asset Gain	0	0.6	0.1	0	0.7
Interest Credited	0	0	0	0	0
Benefits purchased	0	0	-0.9	-0.7	-1.6
Balance 6/30/91	**-0.4**	**8.7**	**0.6**	**-0.7**	**8.2**
Asset Gain	9.2	21.6	12.3	3.4	46.5
Interest Credited	0	0.9	0	0	0.9
Benefits purchased	0	-7.6	-0.4	-0.2	-8.2
Balance 6/30/92	**4.9**	**14.6**	**7.4**	**1**	**47.4**
Asset Gain	0.6	1.9	1	0.2	3.7
Transfer from SR	0	0	1.7	0	1.7
Benefits purchased	-3.7	-8	-5.5	-0.1	-17.3
Balance 6/30/93	**5.7**	**17.5**	**9.8**	**2.5**	**35.5**
Asset Gain	5.5	13.2	7.5	2	28.2
Interest Credited	0.5	1.6	0.8	0.2	3.1
Benefits purchased	0	-0.1	0	-2.3	-2.4
Balance 6/30/94	**11.7**	**32.2**	**18.1**	**2.4**	**64.4**
Asset Gain	0	0	0	0	0
Interest Credited	0.9	2.4	1.4	0.2	4.9
Benefits purchased	-11.3	-19.4	-13.7	-2.4	-46.8
Balance 6/30/95	**1.3**	**15.2**	**5.8**	**0.2**	**22.5**
Asset Gain	53.8	52.3	28.9	19.7	154.7
Interest Credited	0.1	1.3	0.5	0	1.9
Benefits purchased	0	-13	-5.4	-0.3	-18.7
Balance 6/30/96	**55.2**	**55.8**	**29.7**	**19.6**	**160.4**
Asset Gain	35.5	36.4	19.8	12.9	104.6
Interest Credited	5.2	5.4	2.7	1.9	15.2
Benefits purchased	-16.5	-15.5	-9.3	-4.3	-45.6

Balance 6/30/97	**79.4**	**82.1**	**43**	**30.1**	**234.6**
Asset Gain	85.1	107	57.3	30.9	280.3
Transfer from SR	6.8	0	0	2.5	9.3
Interest Credited	7.5	7.9	4.1	2.8	22.3
COLAs 7/1/98	-14.5	-14.4	-8.1	-3.9	-40.9
GII Med Subsidy extension			-24.4	-11.7	-36.1
Balance 6/30/98	**164.3**	**182.6**	**71.9**	**50.7**	**469.5**
Asset Gain	22.1	28.1	14.8	8	73
Interest Credited	15.7	17.3	6.8	4.8	44.6
4% COLAs 7/1/99	-17.8	-18	-9.4	-4.8	-50
Ext of Police Med Sub	0	0	-15	0	-15
Balance 6/30/99	**184.3**	**210**	**69.1**	**58.7**	**522.1**
Asset Gain	79.6	102.3	53.1	28.7	263.7
Interest Credited	17.4	15.4	6.5	5.5	44.8
Other benefits purchased			-3.2	-2.8	-6
Teachers Med Sub		-93			-93
Balance 6/30/00	**281.3**	**234.7**	**125.5**	**90.1**	**731.6**
Asset Gain	0	0	0	0	0
Interest Credited	9	7.6	3.6	2.8	23
COLAs	-21.7	-23.1	-12.9	-6.3	-64
Ext GII Med Sub			-8.5	-2.8	-11.3
Teachers & EE's Med Sub	-36.4	-16.8			-53.2
Other benefits purchased			-9	-7.2	-16.2
Balance 6/30/01	**232.2**	**202.4**	**98.7**	**76.6**	**609.9**
Asset Gain	0	0	0	0	0
Interest Credited	7.5	7	3	2.9	20.4
COLAs	-18.1	-19.7	-11.1	-5.4	-54.3
Ext GII Med Sub for 6/30/00			-26.2	-9	-35.2
Ext Teachers & EE's Med Sub	-7	-35			-42
State EE's Med Sub	-83.3				-83.3
Other benefits purchased	-10.3	-2.4		-4.4	-17.1
Balance 6/30/02	**121**	**152.3**	**64.4**	**60.7**	**398.3**
Asset Gain	0	0	0	0	0
Interest Credited	2.1	2.6	1.1	1	6.8
COLAs	-11.4	-17.5	-7.1	-5.6	-41.6
GII Med Sub for Disability			-1.1	-0.5	-1.6
Balance 6/30/03	**111.7**	**137.4**	**57.3**	**55.6**	**362**

Recent History of the Special Account

In 2003, the groups were divided into seven categories to account for state and sub-division employees, police and fire.

	Employee -state	Employee-sub	Teachers	Police-state	Police-sub	Fire-state	Fire-sub	Total
Balance 6/30/03	**67.2**	**44.5**	**137.4**	**17.9**	**39.4**	**1.6**	**54**	**362**
Asset Gain	0	0	0	0	0	0	0	0
Interest credited	1.1	0.8	2.3	0.3	0.6	0	0.9	6
COLA	-8.2	-4.1	-13.2	-2.7	-5.1	-.2	-7.2	-40.7
GII disability 7/1/04				-.4	-.8	*	-.5	-1.7
Balance 6/30/04	**60.1**	**41.2**	**126.5**	**15.1**	**34.1**	**1.4**	**47.2**	**325.6**
Asset Gain	0	0	0	0	0	0	0	0
Interest credited	0.7	0.4	1.5	0.2	0.4	0	0.5	3.7
COLAs	-4.5	-2.3	-7.4	-1.6	-2.9	-0.2	-5.9	-24.8
GII disability 7/1/05				-0.4	-0.8		-0.5	-1.7
Balance 6/30/05	**56.3**	**39.3**	**120.6**	**13.3**	**30.8**	**1.2**	**41.3**	**302.8**
Asset Gain	2.1	1.4	4.5	0.7	1.6	0	1.2	11.5
Interest credited	4.6	3.3	10	1.1	2.4	0.1	3.3	24.8
COLAs	-5.1	-2.8	-9.1	-1.8	-3.3	-0.1	-4.1	-26.3
Balance 6/30/06	**57.9**	**41.2**	**126**	**13.3**	**31.5**	**1.2**	**41.7**	**312.8**
Asset gain	0	0	0	0	0	0	0	0
Interest credited	6.8	4.9	14.9	1.5	3.6	0.1	5	36.8
COLAs	-5.6	-3	-9.9	-1.9	-3.5	-0.1	-2.9	-26.9
Transfer from SMA	25.4	19.6	63.5	24.7	70	1.2	42.6	247
Balance 6/30/07	**84.5**	**62.7**	**194.5**	**37.6**	**101.6**	**2.4**	**86.4**	**569.7**
COLAs	-13.4	-7.5	-24.4	-4.8	-9	-0.2	-7.2	-66.5
Balance 7/1/07	**71.1**	**55.2**	**170.1**	**32.8**	**92.6**	**2.2**	**79.2**	**503.2**
Recommended transfer to the corpus								**-250**
Balance								**253.2***

*Minimum amount available: does not include credited interest and actuarial smoothing of the $247 million from the Special Medical Account. The balance is estimated to be at least $300 million.

VI. Design a sustainable and affordable cost of living increase for plan participants which may be adopted by the legislature as part of the retirement system

Background: The Commission was very committed to this charge. The value of the defined benefit pension is eroded by inflation over time. As retirees live longer, the inclusion of cost of living adjustments (COLAs) become increasingly important.

The GRS valuation, as of June 30, 2007 reported average pensions by employee category, age and gender. The following table lists average annual pensions for service retirements for retirees or their surviving beneficiaries between ages 90 and 94.

	Male Employees	Female Employees	Male Teachers	Female Teachers	Male Police	Female Police	Male Fire
Average Annual pension Age 90-94	$8,070	$5,854	$11,297	$9,387	$14,580	$11,855	$19,656
Number of retirees or beneficiaries	51	81	17	118	5	1	6

Options for funding COLAs

Information on funding alternatives, provided by GRS to the Commission on October 2, 2007

Prefunding is the most cost-effective & efficient method

With direct funding; the structure of the cola is built into the actuarial valuation, and affects the contribution rate directly. This is the preferred approach to funding a COLA, when the amount of the COLA is defined in statute. Compared with other methods, it is the cheapest approach because it allows for investment return to operate throughout the working life of the individual.

The previous source of COLAs for NHRS retirees was the Special Account; according to GRS, this is not the optimal method.

As Assistant Attorney General Richard Head explained, employers have been paying for cola and medical benefits indirectly. The fiscal notes provided to the legislature reported that the benefits were terminally funded from the Special Account. However, employers end up paying for the benefits due to cost shifting. When pension assets are transferred from the trust fund to the Special Account, the corpus lacks the funds to cushion it against any potential decline in earnings. In that event, the employer rates must be increased to make up the difference. So, essentially, the employers have been funding the COLAs.

However, even if it is constitutional to fund COLAs in the employer rate base the Commission did not recommend it. The employer rate levels required to pay the $2.7 billion unfunded accrued liability over the next 30 years precludes the addition of an employer-funded COLA benefit.

	Employee	Teachers	Police	Fire
Projected Employer rates for pension only	9.66%	10.10%	19.51%	25.13%
Cost of a 2% COLA for all active & retired members	3.78%	4.62%	10.39%	12.8%
Employer rate for pension & 2% COLA	**13.44%**	**14.72%**	**29.90%**	**37.93%**

Note: Rates are higher for Group II members mainly because Group II pensions are formed over a 20 year term, while the contributions of on behalf of Group I members are made over a 30 year period.

The Commission looked at how the costs break down for retirees, and those close to retirement, and active members. In the table below, the bold numbers show rate increases that would be required to pre-fund COLAs for everyone: active members, those close to retirement, and those already retired.

2% COLA	Employee	Teachers	Police	Fire
Increase to the Normal* rate	1.32%	1.31%	3.25%	4.2%
Increase to the UAAL**	2.46%	3.31%	7.14%	8.6%
Total cost for 2% for active & retired members	**3.78%**	**4.62%**	**10.39%**	**12.8%**
1% COLA	Employee	Teachers	Police	Fire
Increase to Normal* rate for 1% COLA	.61%	.60%	1.49%	1.92%
Increase to UAAL** for 1% COLA	1.15%	1.54%	3.29%	3.96%
Total cost for 1% for active & retired members	**1.76%**	**2.14%**	**4.78%**	**5.88%**
Total projected rate for pension & 1% COLA				

*The increases to the Normal rate are the amounts required to pre-fund a COLA for most active members.
**The UAAL (unfunded actuarially accrued liability) increases are the amounts required to fund COLAs for those close to retirement and those already retired.

Since current members should not pay for those already retired, the Commission recommended different strategies for each:

<u>1. Build a COLA into the defined benefit plan, funded with a 2% increase in employee contributions. Active members will pre-fund their future COLAs.</u>

Current law requires Group I employees and teachers to contribute 5% of pay, which combines with employer contributions to build a pension equivalent to half their working pay after 30 years. Group II police officers and firefighters contribute 9.3%, combining with employer contributions to build a half pay pension in 20 years. The Commission recommends legislative action to increase employee contribution rates by 2% in order to pre-fund a post-retirement COLA. The new method will also function as an incentive to postpone retirement.

Since the salary levels, contribution amounts and retirement eligibility vary, the effective date of the new COLA will vary by employee category, actuarial analysis will be needed to determine the commencement of the COLA. The Commission recommends that the new benefit be phased in, using a combination of age and years of service for each employee category. The timing of the 2% increases should be enacted accordingly.

The unfunded accrued liability for the 2% prefunded COLA must be accounted for separately and is the responsibility of the employees, not employers. Details may need to be fine-tuned after analysis and further consultation with actuaries.

2. Recommendations to the Fiscal Committee: use the remaining approximately $300 million+ and interest earned on that in the Special Account for COLAs for current retirees.

The new self-funded COLA will take several years to phase in, and it will not apply to those who have already retired without an opportunity to contribute to the new benefit. In order to protect lower income pensioners, and forestall depletion of the Special Account, the Commission recommends the Fiscal Committee authorize COLAs paid as a 13th check, set at a rate of 2 ½% up to the median sub-group pension level, with a $500/year minimum amount for each retiree rising at the CPI-U each year. For example, if inflation is 3.5%, next year the minimum amount of the 13th check would be $517.50.

Depending upon the availability of special account funds, the fiscal committee could authorize lifetime terminal funding of COLA amount rather than a 13th check. The committee could consider higher COLAs and longevity adjustments from the special account, or other funds outside of the pension system. This provision shall be reviewed biennially.

Why change from past practice of granting 0-5% across the board? According to NHRS projections, terminal funding of compounded 2% COLAs would cost $69.9 million in 2009; $76 million in 2010; $82.6 million in 2011 and $89.9 million in 2012, which would deplete the remaining $300 million in the Special Account. Providing a floor of $500 targets the remaining funds to those in greatest need and extends the remaining funds for as much as 20 years. The estimated cost for the "13th check" is $12-14 million per year.

Example: Testimony was provided during the hearings on HB 653 from a retired teacher whose pension is $793/month. A 1% COLA would give her another $8/month. A 2% COLA would give her another $16/month. The Commission's recommendation of a minimum of $500/year would give her another $42/month.

Protecting low income retirees through the use of targeted COLAs will become increasingly significant important because of the recommended freeze on the amount of the medical subsidy. Without the 8% annual escalator in the subsidy amounts, the low income retirees will be under additional financial pressure due to rising health care costs.

VII. Study the Limitation on Maximum Benefit Amounts

1. The Commission sought legal guidance on the latitude the legislature has to change benefits for active members of the pension system
2. The Commission sought comparative information about benefit levels in other states
3. The Commission considered ways to minimize benefit inequities and employer rate increases due to termination pay agreements that circumvent "the cap." Two recommendations were developed.

1. Legal Issues

Summary of briefing by House Counsel, David Frydman

Note: The briefing did not technically constitute legal advice; Attorney Frydman is not counsel to the Commission. He provided background on the constitutional and case law issues related to public pension systems, so the Commission could consider a broad range of legal issues.

While it is impossible to predict how each state's courts may rule, there are certain broad parameters that were identified, such as the state and federal Constitutions, specific statutory language and legislative intent, and case law. Since the NH Supreme Court has not ruled on these issues in the context of NHRS, the briefing covered precedents in other areas.

Pensions as contracts?

The contract clause of the U.S. Constitution may be relevant under certain sets of specific facts. States are prohibited from passing laws that impair contracts, unless it is reasonable and necessary to fulfill an important public purpose. While there is a strong federal presumption not to interpret state statutes as conveying contractual rights, because it binds future legislatures, most public pension systems are generally held to create a contractual relationship. The question among states is: at what point do contractual rights attach?

Attorney Frydman saw two patterns emerging among states. In the majority of states, language in their statutes and constitutions support an interpretation that pension rights attach when all of the conditions needed to draw a retirement benefit are met. This could mean at the point of vesting, a statutorily determined amount of service, which in New Hampshire is 10 years. "All conditions" could also be interpreted to include the age requirements as well as service requirements, which are different for Group I and Group II. In a minority of states, contractual rights are deemed to commence when new hires are enrolled and begin contributing to the pension plan.

In the event that contractual rights are determined to exist and a proposed law substantially impairs rights under the retirement system, changes may still be permitted if the law is found to be reasonable and necessary to fulfill an important public purpose. Some courts have found that states may pass laws that substantially impair the retirement benefits, if there is both a broad public purpose to the action, and the members receive an "enhancement" that is roughly equivalent to the detriment imposed. In those states, it is possible that benefits might be changed, provided that they are substituted with something of equivalent or comparable value.

There is ambiguity about how a court would rule in New Hampshire if the legislature changed benefits for current non-vested employees, for vested employees, or for those eligible to retire (age & service conditions) and still working. RSA 100-A doesn't affirmatively guarantee a specific set of benefits, nor does it contain language expressly reserving a legislative prerogative to change benefits.

"Safe harbor" discussion: what are the likely legal options?

- Legislatures can change benefits for everyone hired after the date when the change becomes effective.
- Changes may be acceptable for existing employees, if voluntary or comparable benefits are provided
- Changes for retirees are unlikely to be upheld
- If mandatory changes for current employees in various categories are considered, seek a court opinion prior to enactment.

Summary: It is clear that benefits can be changed for new hires, but the other questions are untested in New Hampshire. If the legislature is considering a change in benefits for current employees, it would be prudent to seek an advisory opinion from the court.

Medical benefits

The medical subsidy is distinct from the pension benefits; there is specific language making it clear that it is not contractual. RSA 100-A:54-II: "The legislature may discontinue contributions under this subdivision with respect to medical benefits provided under RSA 100-A:52 or cease providing such medical benefits for any reason, at any time…"

Article 28-A

- Continuity of the State's 35%. Political subdivisions are protected by Article 28-A from the State reneging on payment of state's 35% share of retirement contributions on behalf of teachers, police and firefighters. Since it was the arrangement that the State provided when municipalities joined NHRS, it would be an unfunded mandate if the State were to cease payments.
- Actuarially determined rate increases. Periodic adjustment of employer rates to provide for pension benefits are not violations of 28-A.
- New benefits. 28-A prevents the State from imposing new benefit requirements that would raise costs on political subdivisions. Although there is a provision allowing subdivisions to withdraw from NHRS, the three conditions that must be met are too high a hurdle to allow the State to justify any new benefits by arguing that subdivisions can simply opt-out of NHRS. However, if the general court removed some of those hurdles, for example the required three-fourth vote of vested employees, the court could deem a new NHRS requirement on political subdivisions may not be mandatory because they could opt-out of the system. However, because of the great fiscal barriers to opting out, this approach should be used only upon an opinion of the justices, permitting the change.
- Voluntary benefit enhancements. The legislature could establish frameworks that allow subdivisions to adopt new benefits on an optional basis.

Summary & Discussion

Commission members discussed the possibility of hiring counsel to further investigate these matters. There was general agreement on the practicality of Attorney Frydman's suggestion concerning the role of advisory judicial opinions. If any of the Commission's policy recommendations are outside of the "safe harbor," the report to the legislature would make note of it. The report would include the recommendation that the legislature seek a judicial opinion prior to enactment. The Commission also decided to ask the Attorney General's office to assign counsel to the Commission.

Summary of briefing by Assistant Attorney General Richard Head

Concerning the question of pension benefits as contractual rights, he outlined a four part test to determine the

extent of a contractual relationship. The contracts clause in the U.S. Constitution prohibits states from passing legislation that impairs the obligation of contracts.

> Article I, section 10, clause 1: No state shall enter into any treaty, alliance, or confederation; grant letters of marque and reprisal; coin money; emit bills of credit; make anything but gold and silver coin a tender in payment of debts; pass any bill of attainder, ex post facto law, or law impairing the obligation of contracts, or grant any title of nobility.

If a contractual relationship exists, courts would consider:

- Does the state law impair the contract?
- If so, is the impairment substantial?
- Is the law reasonable and necessary to fulfill an important public purpose? Note: budgetary considerations alone do not rise to that level. If the new law provides for the stability of the pension system, it might provide a compelling argument, but still may be insufficient to satisfy the court.
- How do state courts view the matter? Federal courts are generally respectful of state court interpretation.
- Article 23 of the NH Constitution against retrospective laws provides a strong argument against allowing changes to pension benefits, after a certain point in employees' tenure.
  Retrospective laws are highly injurious, oppressive, and unjust. No such laws, therefore, should be made, either for the decision of civil causes, or the punishment of offenses.
- At what point do contractual rights attach to pension benefits? It is probably after the probationary period (generally the first year of employment, depending upon the personnel policy or CBA). Once an employee is past probation, benefits are integrated into what is "contemplated compensation."
- There are 5 categories of employee status: retired, vested, non-vested, probationary and future employees. It is clear that changes can be made for the probationary and future employees. The Commission could request an opinion from the Justices concerning changes for vested or non-vested employees, but Attorney Head's thinks it is "probable that contractual rights have attached for employees who are past probation."

- Review of Article 28-a. New mandates are not prohibited if they are accepted by local governing bodies.
- Review of Article 36-a. Recognizes the pension system as an on-going obligation, out lasting any biennial budget cycle.
  Note: both of these articles were adopted in 1984, and are cited in their entirety in the History section.

Q&A on the Ice Miller Report to NHRS

- Commissioner Trombly asked about Ice Miller's use of the phrase "it's not impermissible". Atty. Head responded that it's his understanding that transfers from the Special Medical Account to reimburse the corpus are **not** permissible for NHRS.
- Chairman Bartlett asked if the employer contributions could only be used for pensions. Atty. Head responded that it **is** permissible for 25% of the employer contribution to go into the 401(h) for the medical subsidy.
- Dr. Shapiro as if it was proper for NHRS to stop the reimbursements to the corpus from the Special Medical Account, when it is required by RSA 100-A:53? Atty. Head responded that federal IRS regulations trump state laws; it is proper for NHRS to obey the federal requirement, regardless of state requirements to the contrary.
- Are contractual rights attached to the medical subsidy? Possibly for Group I members, but not Group II members. The Group II subsidy is provided under RSA 100-A**:52**; the subsidies for Group I members are in 100-A**:52(a)** and 100-A:**52(b).** *Note*: this appears to contradict the interpretation offered by David Frydman that RSA 100-A:54 permits the legislature to terminate all subsidy programs, but Atty. Head said it's open to court interpretation because RSA 100-A:54 only refers to 100-A:52, not specifically 100-A:52**(a)** or 100-A-52

(b). The specific language:
RSA 100-A:54, II
II. The legislature may discontinue contributions under this subdivision with respect to medical benefits provided under **RSA 100-A:52** or cease providing such medical benefits for any reason, at any time, in which event the funds allocated to provide such medical benefits, if any remain, shall be used to continue medical benefits to members who were eligible for them under RSA 100-A:52 and 100-A:55 prior to the discontinuance date as long as any funds remain.

Isn't the statute requiring 25% of the employer contribution to continue going to the medical subsidy unconstitutional now, because the reimbursement that made it cost-neutral has stopped?
Attorney Head didn't think it's unconstitutional because the medical subsidy is now part of the pension benefits, which employers pay for anyway, directly or indirectly. But, he had not had the opportunity to review the legislative intent. Generally, he explained that when employers join NHRS, they are agreeing to pay the actuarially required contributions, so that increases are not a new mandate. Chairman Bartlett asked if the medical costs had been part of the actuarially determined employer contributions. Dick Joyal said they have not been part of valuations in the past, but now it's a huge concern. (Since the Ice Miller report)

Dr. MacKay asked about the constitutionality of a COLA built into the rate base. Attorney Head thought it would be ok; because now there is a "reasonable expectation" that COLAs are part of the DB plan (even though they have been funded indirectly in the past, the employers still paid for them).

Commission Michener raised the issue of legislative intent concerning the medical subsidy program being cost-neutral to the employers, because of the reimbursement mechanism that was established. Commissioner Brenner pointed out that the removal of the reimbursement mechanism constitutes a modification of the program, which is not permitted under 28-a. Attorney Head suggested the Commission seek guidance from the Justices.

Can employee contribution rates be increased for all active members (not just new hires)? Yes, providing there is a commensurate benefit for them. The concept of equivalency is important, and can also apply to benefit reductions. If a benefit is reduced for employees who have a contractual right, it may be ok, providing there is a fair trade-off.

Commissioner MacKenzie asked about the fiduciary responsibility of legislators serving as trustees. Attorney Head said that they would not be exempt from adhering to fiduciary duties of NHRS by claiming sovereign immunity, because they would be functioning in their role as trustees, not legislators.

2. Comparisons with benefit levels in other states

Group II benefits are comparable with those of public safety personnel in other states. Some states allow service retirement for public safety workers after 20 years, regardless of age. Depending upon the age of entry into the profession, those employees may be able to retire before New Hampshire's minimum age requirement of 45. Other states set a retirement age of 50, but allow a higher multiplier for the pension benefit than New Hampshire's 2.5%.

Other plans, on average, have a higher benefit multipliers for Group I members. According to NASRA, the average multiplier for Social Security eligible employees is **1.85%** of Average Final Compensation; while NHRS Group I members have a multiplier of 1.67% at age 60. At age 65, Group I pensions are re-calculated at 1.51%.

The definition of AFC varies, according to NASRA "usually averaged over the final three years or five years of service." According to a study published in Pensions in the Public Sector, 20% of plans used a 5 year average, and 61% of plans used a 3 year average.

The use of the 5 year average reduces the benefit by diluting the impact of late-career raises and termination pay. The commission considered the use of a 5 year average, but was reluctance to recommend it as a means to curb excess termination pay, because it would reduce pensions for all, not just those who earned termination pay.

Example of impact 1.85% national average multiplier

AFC of $30,000 x 1.85% = $555 x 30 years = $16,650

NHRS multiplier of 1.67% for retirees at age 60

AFC of $30,000 x 1.67% = 501 x 30 years = $15,030

NHRS multiplier of 1.51% for retiree at age 65

AFC of $30,000 x 1.51% = 453 x 30 years = $13,590

According to the GRS Valuation, as of 6/30/07, the average NHRS pensions for retirees and beneficiaries collecting service retirement benefits are as follows:

Employees Male	Employees Female	Teachers Male	Teachers Female	Police Male	Police Female	Fire Male	Fire Female
$13,194	$8,798	$23,025	$17,612	$34,219	$17,325	$36,712	$13,660

Note: Group I members also pay into Social Security (5% to NHRS and 6.2% to Social Security). Group II members contribute 9.3% to NHRS; they do not contribute to Social Security for time worked as Group II members, and their Social Security may be reduced under the Government Pension Offset (GPO) or the Windfall Elimination Provision (WEP), for time worked at other jobs.

3. The CAP

Background: Employees and employers both make contributions based on a percentage of the employees' pay, throughout their careers in public service. Over a twenty or thirty year period, the contributions are invested in order to provide a lifetime pension benefit. When pay spikes up significantly in the final years, the contributions will be higher, but there is less time to make investment gains. The actuaries build a "loading factor" into the employer rates to reflect the impact of termination pay. (As the Commission's work was being completed, GRS had not yet completed its review of the loading factors.)

"The cap" Pensions are based on two factors, salary and service. The salary factor, Average Final Compensation, is based on the average of the three highest paid years of membership service. The final year is generally the highest paid year; due to termination pay (the member is paid for unused sick, vacation or other leave time, etc.). In order to limit the amount of termination pay that can be included in the pension benefit, a cap was enacted in 1991. The highest year cannot be more than 150% higher than the second highest year, with the exception of leave the member had on the books 6/30/1991.

NHRS provided information on 2007 retirees who hit the 150% cap (those whose final year's pay amounted to more than 150% of their second highest year). Of the 1614 retirees, 218 hit the cap, and of those, 192 were "grandfathered" – allowed to include extra termination pay in their pension calculations because they had the leave time on the books 6/30/1991 when the cap was implemented. The number of retirees with grandfathered leave is high right now, but inevitably will diminish.

	Total	150% cap	Pre-1991 leave
Employees	780	88	83
Teachers	600	84	64
Police	160	33	32
Fire	74	13	13

Circumventing the cap: The cap doesn't impact those who take termination pay over a 2 or 3 year period. In rare cases, such a severance package can significantly inflate a retirees' pension amount. There was an effort in the 2007 to address the issue with the enactment of RSA 100-A:6-a, which states that pensions cannot exceed 100% of the members' highest year of earnable compensation. (The relevant statutory language is at the end of this article.)

The Commission noted that there was still a possibility for certain types of termination packages to circumvent the cap, and developed the following two recommendations:

- Remove the phrase "***and other compensation paid to the member by the employer***" from RSA 100-A:1, XVII to address maximum benefit concerns.

- The Commission recommends that employers understand the rate implications of various methods that permit employee to avoid the 150% cap. Current law restricts the amount of termination pay that can be included in the retirement calculation. With certain exceptions, the final year's pay cannot be more than 150% higher than the second highest year. Contracts or personnel policies that permit termination pay to be spread over the final 2-3 years are designed to circumvent the cap. Although both employees and employers make contributions on termination pay issued, the contributions are not in the System long enough to make sufficient investment gains, since they are concentrated at the end of the employees' careers. Employers should be aware that such policies result in higher employer rates in the future.

Excerpts from RSA 100-A

RSA 100-A: 1

XVII. ""Earnable compensation'' shall mean for all members the full base rate of compensation paid plus any overtime pay, holiday and vacation pay, sick pay, longevity or severance pay, cost of living bonus, additional pay for extracurricular and instructional activities or for other extra or special duty, and other compensation paid to the member by the employer, plus the fair market value of non-cash compensation such as meals or living quarters if subject to federal income tax. However, earnable compensation in the final 12 months of creditable service prior to termination of employment shall be limited to 1 1/2 times the higher of the earnable compensation in the 12-month period preceding the final 12 months or the highest compensation year as determined for the purpose of calculating average final compensation, but excluding the final 12 months. Any compensation received in the final 12 months of employment in excess of such limit shall not be subject to member or employer contributions to the retirement system and shall not be considered in the computation of average final compensation. Provided that, the annual compensation limit for members of governmental defined benefit pension plans under section 401(a)(17) of the United States Internal Revenue Code of 1986, as amended, shall apply to earnable compensation for all employees, teachers, permanent firemen, and permanent policemen who first become eligible for membership in the

system on or after July 1, 1996. Earnable compensation shall not include compensation in any form paid later than 120 days after the member's termination of employment from a retirement eligible position, with the limited exceptions of disability related severance pay paid to a member or retiree no later than 120 days after a decision by the board of trustees granting the member or retiree disability retirement benefits pursuant to RSA 100-A:6 and of severance pay which a member was entitled to be paid within 120 days after termination but which, without the consent of the member and not through any fault of the member, was paid more than 120 days after the member's termination. The member shall have the burden of proving to the board of trustees that any severance payment paid later than 120 days after the member's termination of employment is earnable compensation and meets the requirements of an asserted exception to the 120-day post-termination payment requirement.

XVIII. "Average final compensation" shall mean the average annual earnable compensation of a member during his or her highest 3 years of creditable service, or during all of the years in his or her creditable service if less than 3 years.

100-A:6-a Maximum Retirement Benefit. – Notwithstanding any other provision of this chapter to the contrary, any member's initial calculation of the retirement benefit granted under the provisions of RSA 100-A:5 or RSA 100-A:6 shall not exceed 100 percent of the member's highest year of earnable compensation.

VIII. Study the issue of equity in contribution rates between employers and employees

The Commission reviewed the history and recent trends in employer contribution rates, and comparisons with employer and employee rates in other systems.

The Commission recommendations support the rate equity provision in HB 653:

The annual employer contribution requirements effective July 1, 2008 and as calculated each year thereafter shall not be less than the employee contribution rates under RSA 100-A:16, 1(a).

Background: Employer contributions are set by the system board of trustees. The rates are based on a biennial actuarial valuation which projects the amount the fund will need to meet its obligations. When the trust fund assets exceed the level needed for pensions, the rates are decreased. When the trust fund assets are insufficient to cover the expected pension obligations, the board increases the employer contribution rates.

The cost to the political subdivisions for police officers, teachers and firefighters is shared by the State, with 65% paid by the locality and 35% by the State. The entire cost of contributions on behalf of other employees is the responsibility of the subdivision.

Commission recommendation:

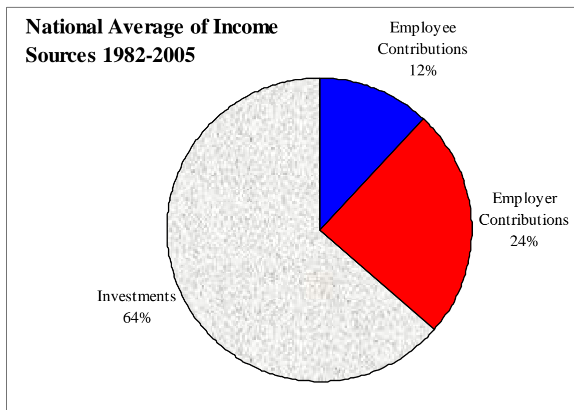
The assumed rate of return must be reasonable and sound, not set to minimize employer contributions.

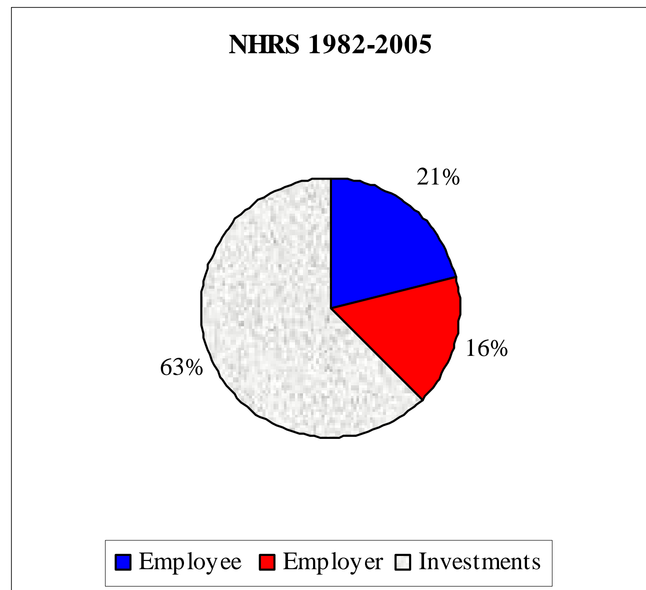
As documented in the section on the history of NHRS, both the legislature and the trustees acted at various times to set rates at amounts lower than necessary to fully fund the pension plan. The employers paid rates that were less than half the rate the employees were paying. Although the rates for employees and employers do not need to be the same, HB 653 used it as a benchmark to create a floor. The fact that employer rates cannot be set below employee rates will help prevent the legislature and the trustees from repeating the mistakes of the past.

One of the mechanisms used to maintain artificially low employer rates was the adoption of an overly aggressive assumed rate of return. The amount required from contributions is diminished, if it is assumed that it will be made up in investments. According to the Public Funds Survey, the national median for pension plans is 8%. NHRS maintained an assumption rate of 9% until 2005, when it was reduced to 8.5%.

National comparison

According to a survey done by the National Association of Retirement System Administrators, employers contributed 24% toward plan assets, while employees contributed 12% from 1982-2005. During that same time period, NHRS employers contributed 16%, while employees contributed 21%. Typically, employer contributions exceed those of plan participants.





Comparison of costs & benefits: the basic pension plan of NHRS is modest by national standards; it's the UAAL that's expensive

The rate impact of the UAAL

More than half of the current cost of the employer rates in New Hampshire is to pay off the unfunded accrued liability. (The "procrastination penalty" as Senator Janeway calls it.) The $2.6 billion UAAL will be paid off in 30 years.

	Employees	Teachers	Police	Fire
Normal Cost	4.80%	3.78%	8.75%	11.56%
UAAL	**4.86%**	**6.32%**	**10.76%**	**13.57%**
Total Rate	9.66%	10.10%	19.51%	25.13%

Sources: NASRA's Public Fund Survey Summary of Findings for FY 2006. www.nasra.org
GRS letter to NHRS 6/6/2007, and Fiscal Note for HB 653
NHRS CAFR 2006

Comparative contribution rates for Group I members in other retirement systems

Employee rates: NHRS employee contribution rates are exactly at the national average of 5% for Group I employees.

Employer contribution rates have risen steadily since 2002, both nationally and for NHRS. The Employer contribution rates on behalf of employees and teachers who are eligible for Social Security are indicated in the table below:

	2002	2003	2004	2005	2006	2007	2008	2010?
National average of public plans	6.0%	6.5%	7.1%	8.0%	8.5%	*	*	*
NHRS rate on behalf of Employees	4.14%	4.14	5.9%	5.9%	6.81%	6.81%	8.74%	9.66**
NHRS rate on behalf of Teachers	3.97%	3.97	4.06%	4.06%	5.7%	5.7%	8.93%	10.10% **

* National average data not yet available. **Rates calculated by GRS without health subsidy contribution. The average rates for Group II members were not reported in the Public Funds Survey.

NHRS Employer Rates

Over the past 15 years, the employers paid what they were required to pay, although the rates were artificially low. Due to legislative intervention in 1991 (described in detail in the History), and the refusal of the NHRS board to reduce the earnings assumption rate, taxpayers will pay more in the long run. Employer rates are projected to exceed the rate required from employees in the foreseeable future, as the UAAL is paid off.
According to HB 653, the $2.6 billion unfunded accrued liability will be amortized over the next 30 years.
The employer contribution rates increased, effective 7/1/07, by about $50 million, due to the change in the earnings assumption from 9% to 8.5%.

The projected rate increases for 7/1/09 are due to the implementation the Entry Age Normal funding methodology, which will produce relatively stable contribution rates. The change required by HB 653 will reduce rate volatility. It is supported by the Commission as a prudent action for the long-term viability of the system.

	7/1/05-6/30/07	7/1/07-6/30/09	GRS Valuation Rates For Pensions 7/1/09-6/30/11
Employees	6.81%	8.74%	9.66%
Teachers	5.7%	8.93%	10.10%
District share	3.7%	5.8%	6.57%
State share	2.0%	3.13%	3.53%
Police officers	14.9%	18.21%	19.51%
Local share	9.68%	11.84%	12.68%
State share	5.22%	6.37%	6.83%
Firefighters	22.09%	24.49%	25.13%
Local share	14.36%	15.92%	16.33%
State share	7.73%	8.57%	8.80%

Source for Projections: GRS Actuarial Valuation Report, as of 6/30/07

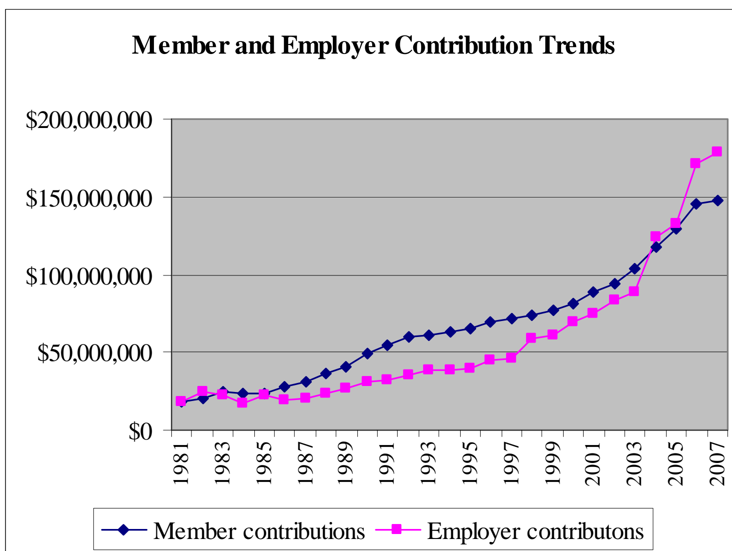
The cost to taxpayers

Total employer contributions for the period 7/1/06-6/60/07 were **$178 million** and are expected to total **$241** million in the current fiscal year.

The actual amounts paid by each employer in 2007 can be found in *Appendix II.*

The Commission has recommended that NHRS provide a breakdown of the amount of the UAAL to each employer. Local communities may consider bonding the debt to reduce operating expenses.

The graph shows the steep upward trend in the amounts of employer contributions. After many years of amounts below that of member contributions, in 2005, the amounts contributed by employers passed and then exceeded the contributions from members. Employer contributions are projected to continue to exceed member contributions in years to come.



The member contributions in the graph do not count any additional voluntary contributions. The Commission recommends that members be permitted to contribute additional money into the trust fund. The Commission has also recommended member regular contributions be increased by 2%, so that members can fund their own future cost of living adjustments. The new COLA will not require any additional employer cost.

IX. Study Other Matters Deemed Necessary by the Commission

Retiree Health Care

The NHRS Medical Subsidy

Legislation authorizing a subsidy payment toward the cost of retiree health insurance was passed in 1988 for Group II, in 1999 for teachers, and in 2001 for employees. The amounts paid to the State and municipalities each month by NHRS has amounted to $265,491,000 since the start of the subsidies in 1989. According to the Segal Report and NHRS documents, roughly $15 million of the nearly $60 million cost for post-retirement health insurance is paid by the NHRS subsidy, on behalf of eligible state retirees.

Terminal funding is an actuarial term that refers to the amount of a one-time, up front contribution representing the present value in today's dollars needed to be invested to pay for expected future benefits payouts. The contribution amounts are contingent on the actuarial assumptions. If the assumptions do not accurately reflect the actual experience, the terminal funding amount will either be too high or too low. Terminal funding normally applies to a closed group of people.

Source: NHRS

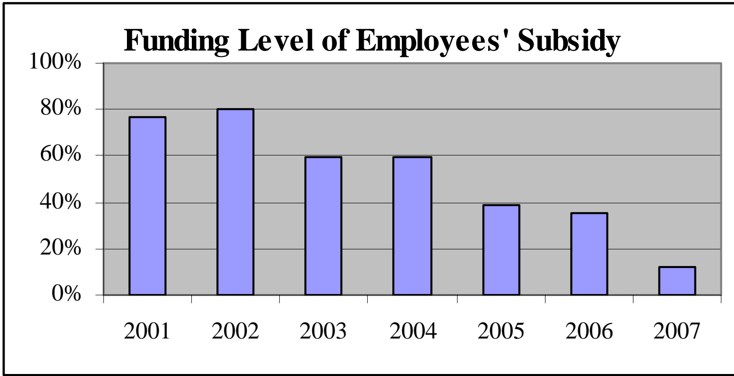
Contrary to common understanding, the subsidy did not come directly out of the Special Account. During a briefing by NHRS staff, the Commission learned: "When the legislature provides *terminal funding** from the Special Account for medical insurance subsidy benefits, the funds become earmarked for that specific purpose …and are no longer accounted for as part of the unencumbered Special Account funds." Each time a medical subsidy was approved or extended by the legislature, the amount required to terminally fund the benefit was taken out of the Special Account, and put into a *Special Medical Account*.

The function of the Special Medical Account was to reimburse the core trust fund, because the money to pay the subsidy actually comes from Employer Contributions. Twenty five percent of all employer contributions are sent to a 401(h) sub trust, for the purpose of paying the subsidy. In order to keep employer costs at zero, their 25% contribution was reimbursed by the Special Medical Account.

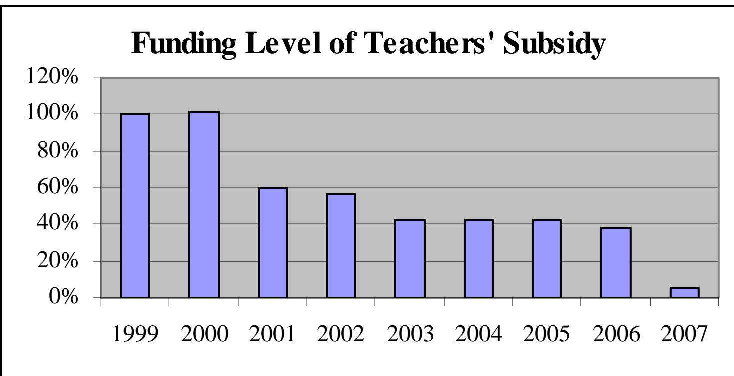
The procedure of reimbursing the corpus of the trust with funds from the Special Medical Account was in place since 1988, but a new legal review indicated it had to be stopped. According to a report by Ice Miller, LLP the use of the Special Medical Account was not in compliance with IRS regulations. The Ice Miller report, issued November 13, 2007, recommended a halt to the reimbursement mechanism that made the subsidy cost-neutral to employers. The next two sections of this report detail the status of the subsidy program and the impact of the Ice Miller Report.

Funding levels in the Medical Subsidy program for each employee category

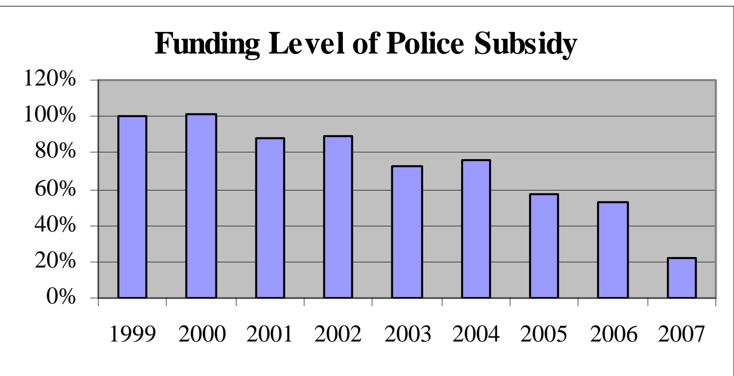
The medical subsidy program for each group was *terminally funded* with money from the Special Account. The amounts would have been adequate if the funds had grown at the 9% annual assumption rate. Instead, the funds lost up to 40% of their value from 2001-2003. By 2006, the funding for each group's medical subsidy was less than what the needed to cover the eligible members for their expected lifetimes. That situation existed before the recommendations in Ice Miller report caused a further drop in the balances, in 2006-2007. The charts on the next page illustrate the depletion of the subsidy account for each group.



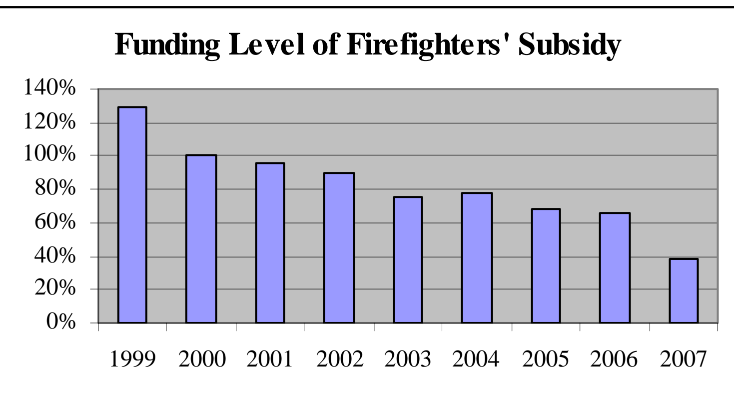
The Employees' subsidy, now at **12.1%**, started to fall shortly after it was established in 2000. Eligible employees include those retired from the State by 7/1/04 with at least 20 years of service, and subdivision employees who retire by 7/1/08 with at least 20 years of service. Without continued funding from employer contributions, the subsidy will be depleted by **2012**.



The Teachers' subsidy is in the worst shape at **5.7%**. In 1999, the terminal funding of $93 million was based on an annual gain 9% per year. Instead, it lost 40% of its value in the market downturn of 2001-03. In order to be eligible teachers must retire by 7/1/08, with at least 20 years of service. Without continued funding from employer contributions, the subsidy will be depleted by **2011**.



Since the subsidy for Police began in 1988, the funds had the benefit of the high earning years of the 1990's to grow, but the market drop took a toll, followed by the Ice Miller recommendations. The funding is now at **22.4%**. Police hired by 6/30/00 (and those who were hired by 7/1/05 who subsequently retire on disability) are eligible, but without continued funding from employer contributions, the subsidy will be depleted by **2015**. Additional legal requirements that are pending may cause it to deplete sooner.



Since the subsidy for Firefighters began in 1988, the funds had the benefit of the high earning years of the 1990's to grow, but the market drop took a toll, followed by the Ice Miller recommendations. The subsidy is now **38.5%** funded. Those hired by 6/30/00 (and those who were hired by 7/1/05 who subsequently retire on disability) are eligible, but without continued funding from employer contributions, the subsidy will be depleted by **2017**. Additional legal requirements that are pending may cause it to deplete sooner.

The Impact of the Ice Miller Report

> As of 7/1/07, the mechanism that made the medical subsidy program cost-neutral to the employers was halted, and $247 million earmarked for the program was sent back to the Special Account.

The impact is not confined to the medical program. Pension plan design is based on an inter-relationship of factors; changing one item results in changes elsewhere. Here's the current situation:

1. Funds cannot be transferred from the Special Account to provide medical subsidy benefits
2. Employer contributions on behalf of current workers *who do not qualify* for the benefit are being paid into the medical subsidy sub-trust.

Impact on the Pension Fund

Since 7/1/07, 25% of current employer contributions have continued to go into the 401(h) sub-trust for the medical subsidy program, *without being reimbursed* in the core pension fund. If this continues for the biennium, the core fund will be short by **$128 million**.

Impact on the Employers

In order to make up the $128 million, and continue the program, GRS estimated very significant Employer rate increases starting in FY 2010.

- The report did not consider the constitutionality of continuing the 25% employer contribution toward the medical subsidy. The contribution is required by state statute (when it was enacted, it was intended to be cost neutral).

Impact on the Retirees

According to the actuarial valuation, the program is massively under-funded. New depletion estimates are being prepared for each group.

- The teachers, with a 5.7% funding level, appear to be the worst off.
- At least $24.6 million of the medical subsidy funds for Group II retirees must be returned to the trust fund (with interest and penalties).

Impact on Active Members

The subsidies cover only a fraction of NHRS members. Of the 51,000 active members, fewer than 3,000 are expected to be eligible.

- In order to be eligible for the subsidy, teachers and sub-division employees must retire by 7/1/08 (and meet other criteria). As many as 10,000 are potentially eligible, but estimates indicate that fewer than 2,000 will actually retire by 7/1/08. The remaining active members will not be eligible.
- Of the nearly 6,000 active Group II members, none hired after 6/30/00 are eligible.

Item by item review

1. The IRS permits employer contributions to establish a medical trust within a public pension system, providing it is "subordinate". Since the primary purpose of the trust is providing pension benefits, the employer-funded medical benefits cannot be more than 25% of the total pension plan.
2. The IRS permits significantly over-funded pension plans to use "excess earnings" for medical benefits.

3. The NHRS medical subsidy program was established based on these guidelines (theoretically). The goal was to create a medical benefit, using "excess earnings," from the Special Account, with no additional cost for employers. A complex system was designed, presumably intended to comply with IRS guidelines.
   a. 25% of incoming employer contributions would go to a 401(h) medical sub-trust.
   b. Legislators would authorize money to be moved from the Special Account to cover the costs of providing medical subsidies to specific groups of retirees.
   c. NHRS would transfer money from the Special Account to an earmarked Special Medical Account, which would go into the trust fund, to replace the 25% of employer contributions that had been sent to the 401(h) sub-trust.

Problems:
The Internal Revenue Code (IRC) contains very specific thresholds for pension plans to assure the funds transferred for medical benefits are indeed "excess" assets. The review by Ice Miller and GRS indicated that "the requirements for that exception were not met in the past and could not be met at the present time." (Ice Miller report, p. 1)

Therefore: Special Medical Account funds cannot be used for the medical subsidy program.

The Special Medical Account was created by funds taken from the Special Account, earmarked by the legislature for the medical subsidy programs. Legislative action was based on fiscal notes reporting that each subsidy program would be terminally funded by transferring money from the Special Account.

For example, **SB 187**, passed in 1999, established the Teachers' medical subsidy. The fiscal note indicates an appropriation of $89.1 million from the teachers' Special Account to terminally fund the benefit for teachers who retired by 7/1/04. It also authorized the use of 25% of employer contributions to pay for the benefit.

1. The Ice Miller report did not review the constitutional (28-a) issue

- Under current state law, 25% of Employer contributions continue to go into the 401(h) sub-trust. Most legislators were unaware of this requirement, since the funds had been replenished by the Special Medical Account; this part of the process was virtually invisible.
- Until the following provisions are repealed by the legislature or found unconstitutional, NHRS will continue sending 25% of employer contributions to the 401(h) sub trust.

100-A:53 Method of Financing; Group II. –
I. The benefits provided under RSA 100-A:52 shall be provided by a 401(h) subtrust of the New Hampshire retirement system. The 401(h) subtrust shall be funded by allocating 25 percent of future group II employer contributions made for group II in accordance with RSA 100-A:16 to the subtrust until such time as the benefits are fully funded. Thereafter the subtrust shall receive only that portion of each year's contribution as is necessary to keep the benefits fully funded.

100-A:53-b Method of Financing; Group I Teachers. –
I. The benefits provided under RSA 100-A:52-a shall be provided by a 401(h) subtrust of the New Hampshire retirement system. The 401(h) subtrust shall be funded by allocating 25 percent of future group I teacher employer contributions made for group I teachers in accordance with RSA 100-A:16 to the subtrust until such time as the benefits are fully funded. Thereafter the subtrust shall receive only that portion of each year's contribution as is necessary to keep the benefits fully funded.

100-A:53-c Method of Financing; Group I Political Subdivision Employees. –
I. The benefits provided under RSA 100-A:52-a shall be provided by a 401(h) subtrust of the New Hampshire retirement system. The 401(h) subtrust shall be funded by allocating 25 percent of future group I employer

contributions made for group I political subdivision employees in accordance with RSA 100-A:16 to the subtrust until such time as the benefits are fully funded. Thereafter the subtrust shall receive only that portion of each year's contribution as is necessary to keep the benefits fully funded.

100-A:53-d Method of Financing; Group I State Employees. –

I. The benefits provided under RSA 100-A:52-b shall be provided by a 401(h) subtrust of the New Hampshire retirement system. The 401(h) subtrust shall be funded by allocating 25 percent of future group I state employer contributions made for group I state employees in accordance with RSA 100-A:16 to the subtrust until such time as the benefits are fully funded. Thereafter, the subtrust shall receive only that portion of each year's contribution as is necessary to keep the benefits fully funded.

2. "Operational failure"

According to the Ice Miller report, NHRS was crediting 33 1/3 of employer contributions to the 401(h) sub trust, and subsequently reimbursing the pension fund from the Special Medical Account for that amount. Since the replenishment mechanism was still in effect, the higher rate did not create any additional costs for the employers, but it ignored the 25% rate explicitly established by statute.

Apparently, this practice began more than five years ago, when the prior actuary realized the subsidy funds would prematurely deplete. Ice Miller identified this as an Operational Failure, which is IRS terminology for the fact that "the plan was not administered in accordance with its express terms," which called for the use of 25% of employer contribution. The practice of moving 33 1/3 of employer contributions was halted, effective 7/1/07, and Ice Miller recommends seeking "retroactive ratification" (by the legislature) of the prior actions.

Note: there is some language in RSA 100-A:54 that might defend the action, although it does appear to contradict the express language in RSA 100-A:53-53(d) concerning the 25% rate.

100-A:54 Miscellaneous Provisions. – I. It is the intention of the state of New Hampshire that the New Hampshire retirement system continue to provide medical benefits under RSA 100-A:52 subject to RSA 100-A:55, and that the employer make contributions in such amounts as the board of trustees shall deem necessary and appropriate under RSA 100-A:16 for such purpose.

3. Pre-July 1, 1988 Group II Retirees

Ice Miller found that $26.4 million was improperly transferred from the Special Medical Account into the 401(h) sub trust. The 401(h) sub trust cannot receive money from within the pension fund. Those funds, plus interest and penalties, must be repaid to the Special Account. The transaction cannot take place without IRS approval, so the final amount to be deducted from the Group II 401(h) sub trust is unlikely to be known for at least a year. The table below does not reflect the repayment of the $26.4 million.

Balances and funding levels in the 401(h) sub trust, according to GRS valuation, 7/1/07:

	Employees	Teachers	Police	Fire	Total
Balance	$27.6	$19.9	$63.3	$46.2	$156.9
Unfunded Liability (UAAL)	$201.2	$328.2	$219.0	$73.9	**$822.2**
Funded Status	12.1%	5.7%	22.4%	38.5%	16%

GRS presented its Actuarial Valuation based on current state law, which requires 25% of employer contributions to go to the 401(h) sub trust. Since that policy leaves the pension fund short by 25%, the new valuation indicates a significant increase, "grossing-up" the employer rate to accommodate the required medical contributions.

Projected Employer Rates for 7/1/09-6/30/11

	Employees	**Teachers**	**Police**	**Fire**
Employer normal cost for Pension	4.8%	3.78%	8.75%	11.56%
UAAL – Pension	4.86%	6.32%	10.76%	13.57%
Total for pension only	**9.66%**	**10.10%**	**19.51%**	**25.13%**
UAAL – Health	3.22%	3.37%	6.5%	8.38%
Total pension & health	**12.88%**	**13.47%**	**26.01%**	**33.51%**

Briefing on the relationship between the State of NH post-retirement health insurance and the NHRS Medical Subsidy

There is often confusion concerning the relationship between the NHRS subsidy and the State retiree health insurance The State of New Hampshire has fully funded the health insurance premiums for eligible retirees and their spouses since 1973. The eligibility for state paid retiree health insurance is in RSA 21-I:30. The criteria is unrelated to eligibility for the NHRS medical subsidy under RSA 100-A:52 (Group II) and RSA 110-A:52-b (Group I state employees). There are many State retirees who are eligible for State paid retiree health insurance, but are *not* eligible for the subsidy.

The Government Accounting Standards Board (GASB) now requires the disclosure of future costs associated with the continuation of post-retirement health benefits under RSA 21-I:30. The NHRS subsidy is a significant factor in assessing the cost, because it currently helps the State pay for the cost of post-retirement health premiums. Since the State's costs for post-retirement medical coverage are partially offset by funds from the NHRS medical subsidy, a depletion of those funds would have an impact on the State's anticipated costs.

Currently, the State receives the subsidy on behalf of thousands of State retirees including eligible Group II members hired on or before 6/30/00, and eligible Group I members who retired by 7/1/04. The following monthly amounts are provided by the NHRS subsidy, on behalf of eligible retirees and spouses:

	7/1/07-6/30/08
Single person, under age 65	$375.56
2 persons, under 65	$751.12
Single Medicare supplement plan	$236.84
2 persons, Medicare supplement	$473.68

In order to comply with the new GASB requirements, the State commissioned a report by Segal. On September 28, 2007, the Commission was briefed by Linda Hodgdon and Monica Ciolfi and representatives from Segal.

Relationship between the work of the HB876 Commission and the Commission on State Retiree Health Insurance
The HB 876 Commission has recommended the development of a new model for post-retirement health benefits by 7/1/09. It may or may not be integrated with current benefits for State of New Hampshire retirees. In order to consider the options, the following summary is provided.

State Retiree Health Plan Commission
Prepared by Pam Smarling, House Committee Research

Chapter 263, Laws of 2007 established the State Retiree Health Plan Commission. This Commission is reviewing only issues related to state retirees independent of the health care subsidy distributed under RSA 100-A. The Commission was charged with determining "the actuarial assumptions to be used in the actuarial valuation of liabilities relative to state retiree health benefits and to "ensure that an actuarial valuation report is completed by a qualified, independent actuary and submitted to the speaker of the house of representatives, the president of the senate, and the governor, on or before December 1 of every even-numbered year."

The Commissioner of the Department of Administrative Services has proposed an expansion of the scope of the Department's contract with its benefits consultant, The Segal Company to assist the Commission in its work. Among the items to be added to the contract will be a request for information on the various funding vehicles and plan design options for retiree health plans.

Any future work on the development of a new vehicle for funding retiree health care for NHRS members, could involve a discussion of coordinating the resources and possibly the goals of the NHRS group and the State Retiree Health Plan Commission.

Successful Pre-funded Retiree Health Care Programs
In order to collect information on how other states are addressing the problem of pre-funding retiree health care, retirement system experts were contacted at the National Conference of State Legislatures (NCSL), and the National Association of State Retirement Administrators (NASRA). In addition, discussions have been initiated with the Segal Company through the Risk Management Bureau of the New Hampshire Department of Administrative Services.

In general, these initial discussions have revealed that most state and local governments still fund retiree health benefits through pay-as-you go programs. There has been a high degree of recent interest in pre-funded plans, these are often defined contribution plans.

Two areas of success that have been identified are the Ohio Public Employee Retirement System Health Care Program and "value driven purchasing" initiatives. Value driven purchasing involves pooled negotiation for health care coverage. In Massachusetts, the Group Insurance Commission provides and administers health insurance and other benefits to state employees, retirees and their dependents and survivors.

Materials collected; websites:

1. https://www.opers.org/; Ohio Public Employees Retirement System
2. Value-Driven Health Care Purchasing: Case Study of the Massachusetts Group Insurance Commission; August 15, 2007; The Commonwealth Fund, by Sharon Silow-Carroll, M.B.A., M.S.W. and Tanya Alteras, M.P.P.
3. Value-Driven Health Care Purchasing: Case Study of Minnesota's Smart Buy Alliance; August 15, 2007; The Commonwealth Fund, by Sharon Silow-Carroll, M.B.A., M.S.W. and Tanya Alteras, M.P.P.
4. Value-Driven Health Care Purchasing: Case Study of Washington State's Puget Sound Health Alliance; August 15, 2007, The Commonwealth Fund, by Sharon Silow-Carroll, M.B.A., M.S.W. and Tanya Alteras, M.P.P.
5. Value-Driven Health Care Purchasing: Case Study of Wisconsin's Department of Employee Trust Funds; August 15, 2007; The Commonwealth Fund; by Sharon Silow-Carroll, M.B.A., M.S.W. and Tanya Alteras, M.P.P.
6. Pensions and Retirement Plan Enactments in 2007 State Legislatures, by Ronald K. Snell, National Conference of State Legislatures, October, 2007

Summary of options prepared for the HB 876 Commission

Developing an Approach to Funding Retiree Health Benefits: One Size Does Not Fit All
By Ice Miller, LLP, Prepared for NEA Conference, November, 2007

Retiree Health Care Vehicles Goals/Considerations
Tax-free contributions - employer & employee
Tax-free earnings; tax-free benefits/distributions
Pre-funding for security and to satisfy GASB & IRS
Administration
Availability & integration with other benefits

	Administrative/ Legal requirements	Employer Contributions	Employee Contributions	Apply Unused Sick or Vacation leave	Pooled or Individual (DB/DC) model	Advantages	Disadvantages
Voluntary Employees' Beneficiary Associations (VEBAs)	Create employee association trust	Yes	Post-tax (alternatively, employees may negotiate additional ER contributions in lieu of salary increases)	Yes	Either; most often individual Accounts (DC type)	Account balances can carry forward	Must use for medical purposes, no cash distributions
401(h)	Must be part of a qualified retirement plan	Allowed up to 25% of pension plan contributions	Under certain circumstances	No	Either; the NHRS trust is pooled	Can be invested with pension assets	IRS limitations on transfers to/from pension plan
Governmental Trusts Most common vehicle for state-wide pre-funding plans. Ex) Delaware, Alaska,	IRS approval of 115 or Integral trust structure is required OPEB bonds can go to 115 trust.	Yes	Post-tax, under certain circumstances (alternatively, employees may negotiate additional ER contributions in lieu of salary increases)	Yes, if "use it or lose it" basis	Either; most often pooled (DB type)	Account balances carry over, can design benefit distribution structure (fixed annual or variable)	Must use for medical purposes, no cash distributions
Health Reimbursement Arrangements (HRAs): a method of administering a DC model VEBA or Governmental trust. Ex) Michigan MERS	Set up an administrative structure	Yes	No				Must use for medical purposes, no cash distributions
Health Savings Accounts (HSAs) *	For use in conjunction with high deductible health plan "HDHP"**	Yes	Yes, pre-tax, up to an annual maximum, some rollovers allowed from other qualified plans.		Individual	Portable, carry over permitted, cash withdrawals allowed (subject to tax & pre-65 penalty)	Must be linked to participation in an HDHP, not "general" health insurance premiums.
Retiree Medical Trust		Allowed pre-tax	Mandatory are pre-tax Voluntary are post-tax		Either		

* Medicare supplement question – it sounds like it's ok to use HSA's to pay for Medicare supplement policies, providing retirees establish the HSA prior to going on Medicare. According to Ice Miller, " for those 65 or older (and who have previously established an HSA), any health insurance, Medicare premiums and out-of-pocket expenses (Part A, Part B, Medicare HMOs, Part D) and employee share of premiums for employer based coverage. But otherwise cannot be used to pay health insurance or Medigap premiums." (NEA presentation, p. 33)

**Currently, retirees are allowed to remain on their former employers' health plans. It is possible that those plans would not meet the "high deductible" standard for HSA's. It might be advisable for the State to contract for a high deductible group plan for retirees to access in conjunction with HSA's.

Note: These are general description: Each of these mechanisms has certain tax advantages and allows assets to accrue over time, either in pooled trusts or individual accounts. The assets can be used to pay medical costs, including costs of insurance premiums.

Closing Commentary

Excerpts from the comments of Commissioner Rick Trombly

This Commission began by adopting the statement that, "We are all in this together." Everybody stayed at the table, proving that these difficult issues can be discussed in an open setting.

There are two propositions that are common to employers and employees. They both need predictability and stability. Without both, the atmosphere of crisis takes hold. Our work has provided both.

The healthcare subsidy will be solvent, preserving for thousands of retirees the knowledge that they will not have to choose between heating oil and medication. The loss of that benefit would be devastating.

Employers and employees both made concessions to continue a program that regardless of whether or not it worked as well as it could have, certainly provided our most needy citizens with stability and predictability for their health insurance costs.

Employers will continue to fund the subsidy, but they will not have to over fund it, if prompt action is taken on our recommendation to freeze the 8% annual increase in the subsidy. A quarter of a billion dollars must also be transferred from the Special Account to the pension account to shore up the subsidy, so that the necessary employer rate increases will be minimal.

We propose that employees will fund a guaranteed COLA calculated to take effect in such a manner as not to impact their contributions to the system so they cannot live on what they earn. They will also be able to make voluntary contributions to enhance their retirement benefits, and they will continue to share gains in the system for additional COLAs for benefits. The difference is now the system will ensure these benefits are terminally funded so that employer rates do not rise.

With the option for employees to add additional money to their accounts for an assortment of reasons, money will not be flowing out of the pension fund based on the member's absence from the work force. These measures will help to increase the amount of funds available for investments, with no cost to the employers.

Changes in the investment strategies such as the involvement of outside professionals and other recommendations will ensure that the retirement system has procedures, safety valves, and warning signals that protect against another situation such as the one we face from occurring again.

We have done what we set out to do. We have provided a map to retirement predictability and stability for both employers and employees.

Glossary

Actuarial Assumptions – Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.

Actuarial Present Value (APV) – The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rates and with the assumed probability each payment will be made.

Actuarial Valuation – The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan.

Actuarial Value of Assets – The value of the assets as of a given date, used by the actuary for valuation purposes.

Actuary - A person professionally trained in technical and mathematical aspects of pensions and other related fields, who estimates how much money must be contributed to a pension plan in order to support the benefit that will become payable in the future.

Additional contributions - Extra money paid to NHRS by the active member and/or by the member's employer on behalf of the member, for the purpose of funding an additional annuity. (Additional contributions do not purchase additional service credit.) The program was closed to new applicants on 12/30/04, but those who applied before that date, and were approved for the program are permitted to continue contributing.

Annual Require Contribution (ARC) – The employer's period required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB Statement No. 25. The ARC consists of the Employer Normal Cost and Amortization Payment.

Average final compensation (AFC) - The average of a member's three highest years of membership service. A "year" refers to a ten, eleven, or twelve month block of membership service (based on the member's normal working time), beginning with the member's effective date of retirement and going back.

CAFR – Comprehensive Annual Financial Report

Creditable service - Service credit earned as an active NHRS member plus prior service credits. It is one of the variables in the pension formula.

Defined benefit plan (EAN) - A pension plan where retirement pensions are based upon a predetermined formula measured by service and salary credit, not contributions made to the plan.

Ennis Knupp & Associates – An investment consulting firm hired by NHRS in 2005, replacing Evaluation Associates.

Entry Age Normal – a funding methodology widely used by public pension systems and accepted by the Governmental Accounting Standards Board. It generates relatively stable contribution rates.

ERISA (Employee Retirement Income Act of 1974) Federal statute that requires persons engaged in the administration, supervision and management of pension monies have a fiduciary responsibility. The law that codified decades of case law concerning pension trusts. Private sector trust funds are governed by ERISA, and the spirit of ERISA applies to public sector funds, since the general trust law and case law summarized in ERISA apply to public funds.

Fiduciary: Any person who (1) exercises any discretionary authority or control over the management of a plan, (2) exercises any authority or control concerning the management or disposition of its assets or (3) has any discretionary authority or responsibility in the administration of the plan. Person, company or association holding assets in trust for a beneficiary. Fiduciary status extends not only to those persons named in the plan documents or law as having express authority and responsibility in the plan's investment or management but also covers those persons who undertake to exercise discretion or control over the plan regardless of their formal title. Under general trust law, ERISA and most statutes/ordinances governing public retirement systems, fiduciaries must discharge their duties solely in the interest of the participants and beneficiaries of an employee benefit plan. In addition, a fiduciary must act exclusively for the purpose of providing benefits to participants and beneficiaries while defraying reasonable expenses of administering the plan. The fiduciary is charged with the responsibility of investing the money wisely for the beneficiary's benefit.

Funded Ratio – The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.

GASB – The Governmental Accounting Standards Board.

GASB No. 25 and GASB No. 27 – These are governmental accounting standards that set the accounting rules for public retirement systems and employers that sponsor or contribute to them. Statement No. 27 sets the accounting rules for the employers that sponsor or contribute to public retirement systems while Statement No. 25 sets the rules for the systems themselves.

GASB No. 43 and GASB No. 45 require the disclosure the future costs of OPEB (other post-employment benefits) even if governmental entities appropriate funding on a pay-as-you-go basis. The most significant item is generally the cost of continuing retiree health insurance payments. These future costs must now be calculated and reported as liabilities on governmental financial statements.

Group I – Employees and Teachers who are members of NHRS. Group I members contribute 5% of pay; with 30 years of service, they retire on pensions equivalent to half of their working pay. Formula at age 60: AFC multiplied by 1.67%, multiplied by the years and months of service. Pensions of Group I members are recalculated at age 65 using the formula: AFC multiplied by 1.51%, multiplied by the years and months of service.

Group II – Police Officers and Firefighters who are members of NHRS. Group II members contribute 9.3% of pay; with 20 years of service, they retire on pensions equivalent to half of their working pay. Formula: AFC multiplied by 2.5%, multiplied by the years and months of service.

GRS – Gabriel Roeder Smith & Company, Consultants & Actuaries. Hired by NHRS in 2006, replacing Buck Consultants.

Nonqualified Service – An option for employees to purchase to add to their pension formulas, it is also known as "air time" in some systems. As long as the rates charged are adequate to fund the benefits purchased, and it does not create incentives for premature retirement, it can be beneficial to members, without harming the trust funds. During 2006, state statute permitted NHRS members to purchase time that counted toward premature retirement *and* eligibility for the medical subsidy program. The provision was repealed in 2007.

Open Group Aggregate (OGA) – a funding methodology seldom used by other public pension systems, which was adopted in New Hampshire in temporarily in 1991. It was officially in adopted 1992, in conjunction with target funding, in order to reduce employer contribution rates. An actuarial audit by Ernst & Young in 1994 commented that the use of Open Group Aggregate in conjunction with target funding "reduces current cost at the expense of increased future cost; is unusual and complex; does not take into account the IRC Section 415 limit increases, thereby underestimating future benefits and current costs; and does not result in a stable normal cost percentage." (HB 653 required NHRS to use Entry Age Normal, effective 7/1/07.)

Prudent Person Rule (a.k.a. prudent man rule) A common law standard applicable to the investment of trust funds. Historically stated: "All that can be required of a trustee in the investment of trust funds is that he conducted himself faithfully and exercise sound discretion. He is to observe how men of prudence, discretion and intelligence manage their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income as well as the probable safety of the capital to be invested."

Prudent Expert Rule: The ERISA standards imposed on fiduciaries to act both as a prudent person would act in a similar situation and with single-minded devotion to plan participants and beneficiaries. Having set standards to facilitate the decision-making process. Consider action of internal factors of the fund, hiring, and listening to investment experts and qualified legal counsel, obtaining independent studies when advisable, and considering the financial variable of the prospective course of action.

Service retirement – For NHRS members, service retirement eligibility is for Group I and Group II members age 60 or older regardless of years of service, and to Group II members ages 45-60 with at least twenty years of creditable service. **Early service retirement** - An early reduced retirement pension payable to Group I members at ages 50 through 59, with at least ten years of creditable service. Group I members can collect an early service retirement pension younger than age 50, if they have at least twenty years of creditable service and their years of service plus their age equals at least seventy.

Terminal funding – the amount of a one-time, up front contribution representing the present value in today's dollars needed to be invested to pay for expected future benefits payouts. The contribution amounts are contingent on the actuarial assumptions. If the assumptions do not accurately reflect the actual experience, the terminal funding will either be too high or too low. Terminal funding normally applies to a closed group of people.

Unfunded Actuarial Accrued Liability (UAAL) – The difference between the Actuarial Liability and the Actuarial Value of Assets. **Actuarial Accrued Liability –** The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.

Sources: NHRS website; the International Foundation's program for the Certificate of Achievement in Public Plan Policy (CAPPP); Gabriel, Roeder, Smith.

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Appendices

Appendix I

Subcommittee Reports

Benefits Subcommittee

Chair: Dr. Lisa K. Shapiro

Members : Pamela Brenner; Lou Copponi; Sen. Michael Downing; Dean Michener; Rick Trombly

Final Recommendations of the Benefits Subcommittee on Medical Subsidy and Health Care Financing as Adopted by the Full Commission

Benefits Subcommittee Principles on Medical Subsidy and Health Care Funding Model

- Protect the elderly, fixed income subsidy recipients (combination of medical subsidy and COLA reform)
- Avoid incentives for premature retirement.
- Provide widely available access to pre-funded mechanisms to assist with retiree health costs
- Address the impact of "grossed-up" employer rates
- Spread the coverage beyond the 44% of retirees and 11% of active members currently covered
- Extensive analysis and review supported by experts, and ample public and stakeholder input and communication, before final implementation of a new plan
- Orderly and fair transition
- All reasonable alternatives be explored to provide the best possible solution

1. **Recommendation to the legislature to adopt a new retiree health care model to be Implemented July 1, 2009.**

   The Commission recommends the establishment of a preferential tax vehicle for employees to make contributions that would provide additional funds for post-employment medical expenses. The vehicle would provide all public employees the opportunity for access to funds to assist with the costs of post-retirement health care. Tasks include: Analysis, Adoption, Development, Advertisement, and Implementation.

   - In selecting the appropriate vehicle, the Commission recommends that the legislature analyze the models in use by other states, and collect information from experts in the field. The vehicles analyzed should include, but not necessarily be limited to: Governmental trusts, Voluntary Employee Benefit Associations (VEBAs), 401(h) trusts and Health Savings Accounts.
   - In considering the analysis, adoption, development, and implementation of the optimal health care retiree model, the Commission recommends that the following principles be considered:
     - Allows for employee and employer contributions
     - Tax advantaged contributions, earnings and benefit distributions
     - Includes pre-funding for cost-effectiveness, security and to satisfy GASB & IRS

- o Employer contributions through negotiated matches for currently active employees
- o Additional voluntary employee contributions
- o Administrative efficiency
- o Availability & integration with other benefits
- o Unused sick/vacation leave deposited in the trust
- o Long term viability of the new trust

2. Recommendation to the legislature and NHRS to provide for an orderly and fair transition from the current medical subsidy program to the new health plan.

Background Data: The current medical subsidy program is available for a closed group of government employees. For fire and police, must have been hired by the year 2000; for employees and teachers, must retire by 2008. There are also additional limitations. About 10,000 retirees, half of the total government retirees in the pension system are currently receiving a medical subsidy. The medical subsidy for retirees from state versus political subdivision positions has different impacts on retirees. The medical subsidy program was terminally funded. If employer contributions are discontinued beginning in FY 2010, the medical subsidy program is forecasted to run out of money within 3 to 9 years depending on which group: fire:2017 (9 years), police:2015(7 years); employees:2012(4 years) and teachers: 2011(3 years). Further changes to the 401h subtrust as recommended to NHRS by an outside legal counsel could reduce the number of years further for Group II.

The Commission recommends that the legislature take action in 2008 session to contain the costs of the existing medical subsidy program in order to extend the number of years of coverage, and other actions to ensure that the manner in which the current medical subsidy program is administered is more consistent with the original intent of the program having no immediate and an overall limited impact on taxpayers. The benefits committee recommends the legislature pass legislation in the 2008 session that does the following, or identifies alternatives that would achieve the same goals (for example consider changes in spousal subsidy levels or pre- versus-post Medicare subsidy levels) of ensuring funds are available for retirees who qualify for the program:

- Freeze the current level of subsidy amounts beginning in FY 2010 subject to biennial review, including consideration of different rates of growth for each group if those rates are actuarially supported. Ensure a minimum annual COLA of $500 rising at CPI to protect lower income pensioners.
- Transfer $250 million from the special account to the pension fund corpus to keep faith with the original intent of the medical subsidy program.
- Set the employer health care subsidy contribution at the lesser of the actuarial required contribution rate or 25 percent, in conjunction with ensuring the solvency of the program and consistency with IRS and GASB.
- Make further changes that remove incentives for premature retirement by opening the new retiree health care funding plan to be implemented July 1, 2009, to all public employees or extend the existing medical subsidy program in a manner that is financially supportable.

The Commission recommends the legislature consider and take additional actions to assure an orderly transition from the old medical subsidy program to the new retiree health funding plan. The following are recommended ideas for consideration and further analysis by the legislature:

- Consider bonding to assist in the establishment of the trust and/or the transfer of medical subsidy eligible active employees and/or retirees to the new health care funding model
- Consider the integration of the new trust with the existing subsidy-eligible state employees and the benefits provided by 21-I:30.
- Consider moving all subsidy eligible retirees into the new plan, bringing the current 401(h) sub trust funding with them (if permitted)
- Analyze alternative retiree health care insurance programs for political subdivision retirees and Medicare retirees that would reduce the overall costs of medical care
- Additional steps to provide for an orderly transition

Final Recommendations of the Benefits Subcommittee on COLAs and Maximum Benefits as Adopted by the Full Commission

1. **2% mandatory (tax advantaged) employee contribution to fund a 2% COLA**. The effective date of the new COLA will vary by employee category. The commencement of the COLA will be actuarially determined, using a combination of age and years of service for each employee category. The new method will also function as an incentive to postpone retirement. Additional voluntary COLA contributions permitted with the return on those contributions at the actual rate of return. The unfunded accrued liability for the 2% prefunded COLA is accounted for separately and is the responsibility of the employees, not employers. Details may need to be fine-tuned after analysis and further consultation with actuaries.
2. **Use the remaining approximately $300 million+ and interest earned on that in the Special Account for COLAs for current retirees**. At a minimum: COLAs paid as a 13th check, set at a rate of 2 ½% up to the median sub-group pension level, with a $500/year minimum amount for each retiree rising at the CPI-U each year. Depending upon the availability of special account funds, fiscal committee continued authorization to fund lifetime terminal funding of COLA amount rather than a 13th check, higher COLA and longevity adjustments from the special account , or other funds outside of the pension system. This provision shall be reviewed biennially.

Available cost data:

- Extrapolated estimate of 2 ½% up to median subgroup salary with minimum $500 per pensioner issued as a one year bonus check is $12-14 million
- Estimated cost of a 2% COLA with no minimum or maximum and terminally funded for remaining life is $70 million

3. **Reduce the threshold for gains sharing from the 85% funding level to 75% provided that the employer normal rates do not increase as a result as determined by NHRS in consultation with the actuaries following approved actuary methods and provided that a loss sharing or make-up provision coming from future gain sharing is included to return money to the corpus to ensure the integrity of the pension fund and symmetry on the gain sharing**. The trigger rate will

remain at 10.5%. When the trust fund reaches 75%, gains in excess of 10.5% will be transferred to the Special Account. Details may need to be fine tuned after actuarial and sensitivity analysis to ensure changes to the sharing mechanism are consistent with stable funding of the pension system and expected funding levels.

4. **Change the Gains Sharing Formula when the trust fund reaches 85%, such that gains in excess of 10.5% will be shared 50/50** between the Special Account and the corpus. The employer share will be allocated based on the relative contributions of the political subdivisions and the state.
5. **Allow members to make additional contributions, credited at the actual rate of return, less 2%.** This proposal needs further actuarial fine tuning.
6. **Remove the time restriction for non-vested members to leave their money in the system**, but only credit the funds at 2% below the actual rate of return for the time they are out of the system. Further actuarial analysis may suggest fine tuning.
7. **Ask the Attorney General's office to review the lawsuit, Alaska v. Mercer U.S., Inc.** to determine if there are any parallels with the NH Retirement System experiences, and to proceed accordingly if the AG determines there may be a cause of action.
8. **Remove the phrase "and other compensation paid to the member by the employer," from RSA 100-A:1, XVII** to address concerns about maximum benefits.

Report of the Finance Subcommittee

As adopted by the full Commission

Chair: Rep. John Reagan

Members: Rep. David Smith, Gary Smith, Chief James Valiquet

The Finance subcommittee' s charge was to 1) assess the changes to general accounting standards and their potential effect on the retirement system, and 2) analyze the current financial status of the retirement system and the challenges facing the system in the future. We conclude that to ensure long-term viability the NHRS must attain a funded ratio that will sustain the present level of pension benefits and produce future benefits for present and future employees. This can be accomplished by increasing and protecting the fund and by reducing the rate of depletion. The finance sub-committee recommendations address the first part of these solutions. Those relating to the rate of depletion are more appropriately addressed by the benefits and investment sub-committees.

The issues considered by the commission are not new. The Finance sub–committee reviewed many documents and analyses prepared over the past 15 years which identified problems not addressed by the NHRS or the legislature. One such document, that at 98 pages is too long to reproduce here, is the NHRS performance audit dated April 20, 1994, presented to the general court by the auditing firm of Ernst & Young. Copies of this and all the documents submitted by the commission members will be found in the official file of the commission.

FINDINGS

1. The decisions to use an Open Group Aggregate methodology caused systemic employer underfunding since 1992. The extended period of underfunding the trust account has been compounded by a period of down market return on investments and there is no quick fix for a return to 'wholeness'. The NHRS should adhere to the sound accounting principles that HB 653 established and work to accurately calculate the fund liabilities, thereby making financial decisions that put the system on a path to ensure full funding. The NHRS should also be familiar with and follow closely IRS and GASB requirements.
2. The NHRS shall employ high-level personnel with expertise in accounting and investment skills to effectively assist the NHRS board of trustees. In addition, the board of trustees, in carrying out its fiduciary responsibility, must ensure access to ongoing educational opportunities for the board and staff to stay informed of changes in laws and regulations not only in managing the funds but also in preparing reports to the stakeholders in the system. The legislature and present and future beneficiaries are dependent upon the knowledge of the trustees and staff, the skill with which they carry out their responsibilities and the accuracy of the information they provide.
3. The NHRS shall adhere to the changes to the actuarial evaluation of the unfunded accrued liability in HB 653 which requires the annual level of contribution to be set at 30 years or the maximum period set in GASB.
4. The NHRS should provided accurate financial reports to all beneficiaries, employers, the state executive and

legislative branches and the public as part of their effort to make sound long term policy decisions. This sharing of information is essential as part of a commitment to accountability. The information should include a report of unfunded accrued liability by employer.

5. The NHRS shall have a short-term goal of 80% terminal funding at a minimum. The higher this percentage is the better protected the fund will be, particularly during the inevitable down years.
6. The system must first be concerned about protecting principal. While we believe that higher yield and good growth opportunities shall be a prudent strategy to immediately improve the funding ratio, we recognize this is the responsibility of the NHRB. It is therefore imperative that the NHRB establish an investment committee composed of highly qualified and experienced experts to advise the board on all investment decisions.
7. In order to provide oversight as to the continued long term viability of the NHRS a commission similar to that established by Chapter 355:1, Laws of 2007 shall be convened once every 10 years.

Investment Subcommittee Report

Chair: Senator Harold Janeway

Members: Dean Crombie, Barbara Doyle, David Lang, Mark MacKenzie.

Introduction

Investment results over the past decade through 9/30/07 have been poor. The 7% average annual total return on marketable securities (89% of the total fund) was two percentage points below the assumed actuarial rate of 9% that prevailed until 2006. The 4% return on the alternate investments (4.4% of the total), primarily venture capital, was particularly weak. Real estate, 6.5% of the total, was the only standout with a 15.4% return. As of 6/30/07 the fund was in the 69th percentile relative to its peers. (Mellon Analytical Public Fund Universe)

Observations

- Marked progress has been made over the past two years. The hiring of new actuaries: Gabriel, Roeder, Smith & Company and investment consultant: Ennis Knupp & Associates has brought fresh talent and insight to the New Hampshire Retirement System (hereafter "the System"). (The predecessor actuary and investment consultant had been in place for more than 25 years.)

  These changes led to a thorough strategic review, following which the investment program was substantially overhauled. Underperforming investment managers have been let go. Sizable portions of the equity and fixed-income assets were indexed. Most of the changes were implemented in the 4th calendar quarter of last year. Investment results since have improved in absolute and relative terms. More remains to be done.

- House Bill 653 was a major positive step. Important and positive changes are now in place thanks to the enactment of HB 653 last spring. Building on the collaborative efforts of the Working Group, the actuarial method was changed to the industry standard entry-age-normal. Gain sharing was eliminated until the funding ratio reaches 85% (currently 63%), and is further limited thereafter to returns in excess of 10.5%.

- There is an inherent conflict between the long-term nature of retirement funds in which obligations are measured in decades and the state's two-year budget and election cycles.

- Time is both friend and foe. With the power of compounding timely funding is the primary means of meeting long-term obligations. (As much as 75% of the growth in assets can be derived from investment returns.) Conversely, it now has become clear that the cost of catching up from an extended period of underinvestment, the procrastination penalty, is high.

- Oversight and management of the System demands a level of experience and understanding that is not easily acquired or readily available.

Recommendations

1. Expand the current System's Investment Policy Statement and elevate its importance in the governance structure. The statement should incorporate the following:
   a) A clear statement of objectives including the average annual rate of return. (None is stated currently.) The policy should be linked to the assumed rate set by the trustees for the biennial actuarial calculation (currently 8 1/2 %). That rate must be reasonable and sound, not set to minimize employer contributions.
   b) A detailed breakdown of the asset structure most likely to enable the fund to reach its long range objective within appropriate risk parameters. The details should include all relevant sub-categories among equities, debt and alternative investments and identify the appropriate benchmarks for each performance analysis. The policy should establish an acceptable range for each allocation as well as a specific target allocation. The policy should be reviewed annually by the Investment Committee and approved by the Board of Trustees.
   c) c) Clarity with respect to where the responsibility lies and how outcomes are measured (benchmarks) for the various decision levels in the investment process between the board of trustees, the investment committee, System's staff, investment consultants and portfolio managers. The policy statement should specify the minimum frequency of such reviews. The purpose is not only to answer the question: "How are we doing?" but to determine whether decisions as to asset mix and manager selection added value or not.

2. The Board should adopt a timetable for reviewing and renewing or replacing: actuaries, auditors, consultants, counsel on an appropriate timetable (3-5 years). Investment managers are under continuous review.
3. There is no greater responsibility for trustees than the soundness of the fund. Toward that end they must defend the system's independent status by asserting that independence lest it be lost. With the benefit of hindsight, more assertive representation with respect to a) the adoption and continued use of an inappropriate actuarial method, b) gain-sharing and c) the use of an unreasonably high assumed rate of return during the past 15 years would have served the system well.
4. Build staff strength under the Chief Investment Officer (CIO) commensurate with the scale and complexity of the $6 billion pool. Consider incentive policies for the CIO and the Executive Director tied to investment benchmarks. Previous reviews and audits have noted that the lack of investment experience on the Board combined with limited staff resources for the investment function leave the investment consultants with an inordinate degree of influence, making it difficult to test and optimize recommendations. Appropriate educational programs should be offered and required of staff and trustees.
5. Communicate openly, clearly and consistently with all stakeholders. The annual CAFR contains an extraordinary amount of detail, so much that it is difficult to see the forest for the trees. For example past narratives have not called attention to the substantial deterioration in the funded ratio or the fact that investment performance has lagged the assumed rate, or the implications for the core fund in the millions of dollars transferred to the Special Accounts through gain sharing. The system's minimalist meeting minutes, while within the law, do not shed any light on how and why decisions are reached. That policy should change.

6. Establish a joint legislative committee to maintain a liaison relationship with the System to expand the level of understanding within the Legislative branch.
7. The Board should set high standards for itself and the System. It should know how the investment results compare not only with its own benchmark but relative to its peers. The Board should foster an atmosphere that is conducive to good decisions. That means addressing and eliminating sources of friction wherever they exist to focus on what is best for the system. The Board should be open to new ideas, learn from best-in-class funds and not find comfort in the middle of the pack. Creativity need not be confused with risk.
8. Recognizing that empirical evidence has shown that good corporate governance adds shareholder value, the System must do everything within reason to increase the value of its holdings. In any instance where the System suffers a loss as a result of alleged fraud there should be a process to ensure that it is collecting all securities class action money that may be due. Public pension funds have a responsibility to be proactive in exercising their rights as shareholders of public companies to affect change in the corporations they own to increase the return on their investments. By retaining monitoring services, the System could have timely access to information concerning all securities class actions and would be able to make prudent, informed decisions on whether and how to participate in such litigation. The System should adopt a policy to include reasonable standards for determining when it is appropriate to serve as a plaintiff and/or representative party in shareholder litigation.

Operations-Administrative Subcommittee Recommendations

Chair: Dr. Edward R. MacKay

Members: Dr. Dennis Logue, John MacLean, Charlton MacVeagh

Governance

MOVED, the NH Retirement System Study Commission approve the following:

(1) Adopt the American Law Institute "prudent expert" standard for the management of New Hampshire Retirement System (NHRS) funds. It requires fiduciaries to become experts and/or to hire, carefully delegate and rigorously monitor those charged with fund management duties. This standard would apply to all Board members, staff, and vendors. The prudent expert standard establishes higher expectations for fiduciaries, and can be contrasted to the current "prudent person" standard in RSA 100-A:15:

> In the management, investment and reinvestment of system assets so held in trust hereunder, the system's board of trustees shall exercise the judgment and care under the circumstances then prevailing, which persons of prudence, discretion and intelligence, acting in a like capacity and familiar with such matters, would use in the conduct of a pension plan of like character and with like aims as the system, and by diversifying investments of the system so as to minimize the risk of large losses to the trust fund.

(2) Clarify and affirm the fiduciary obligations of all NHRS Trustees are not subordinate to any other role or position, or basis of selection to the NHRS Board.

(3) Amend the NHRS Bylaws to commit all Trustees to participate in ongoing orientation and educational activities relating to pension plan governance, investments, and other germane topics – with the expectation and goal of maintaining high levels of engagement and competence.

(4) Assure the NHRS appropriate and sufficient autonomy to enable effective and efficient functioning of the system. As examples, the NHRS engage directly, or in close collaboration with the LBA Office, an external audit firm exclusively for audit work relating to the NHRS, and have clear authority to ensure confidentiality of plan participant personal information. Several more minor operational issues have emerged over the years and should be clarified or addressed, possibly through statute revisions. In order to facilitate those improvements, the NHRS Board would be obligated to provide a report and meet with appropriate legislative leaders and the governor at least twice per year.

(5) Establish in NHRS Bylaws a committee structure that enables greater involvement of non-Board individuals with specialized expertise and experience. One possible structure would establish five standing committees (Investment, Audit, Benefits, Legislative, and Personnel and Compensation) each with no less than two and no more than four NHRS Trustees *plus* no less than two and no more than four individuals not currently serving on the NHRS Board. Thus each committee would have no less than four members and no more than eight, and make recommendations to the full Board for ultimate approval. The Investment committee could include investment professionals or those managing large endowments or similar funds, with asset allocation and other major policy direction established by the full Board and the Investment committee delegated authority for decisions such as fund manager selection(s). The Audit committee could include CPA's and others working in public accounting. The Benefits committee could be charged with adjudicating any cases, and include NHRS retirees. The Legislative committee could assess the impact on the NHRS of proposed legislation and assist in the development of potential legislation (including

revisions to benefits), and include NHRS participants, retirees, current and former elected officials, and others with specialized expertise. The Personnel and Compensation committee could include Human Resource professionals or benefit specialists, and recommend related policies to the full Board. All non-Board appointees to NHRS committees would be approved by the full Board, and selected individuals would be held to the same fiduciary standards as Board members and be provided appropriate liability insurance coverage.

(6) Commit in NHRS Bylaws to full transparency for all actions impacting participants, including reasonably complete Board/committee minutes. In addition, the NHRS would adopt as a guiding principle the responsibility to regularly and openly communicate with stakeholders.

Operations-Administrative Subcommittee Recommendations

History

Charge: *Study the history of funding, benefits, and investment results of the New Hampshire retirement system.*

MOVED, the NH Retirement System Study Commission approve the attached "history" of the New Hampshire Retirement System, subject to any grammatical corrections and reasonable editorial revisions to refine presentations/statements and include additional pertinent information, and formatting consistent with the overall Commission report.

Operations-Administrative Subcommittee Recommendations

Equity

Charge: *Review issue of equity of contributions (by) employee and employer.*

MOVED, the NH Retirement System Study Commission endorse the position on equity of employee and employer contribution rates established in HB 653: *The annual employer contribution requirements effective July 1, 2008 and as calculated each year thereafter shall not be less than the employee contribution rates under RSA 100-A:16, I(a).*

The White Paper on Pension Governance follows, as part of this subcommittee's report.

White Paper on Pension Governance

Prepared for the HB 876 Commission to Make Recommendations to
Ensure the Long Term Viability of the NH Retirement System

Kate McGovern, MPA, MA

Abstract

In all public retirement systems a dynamic tension exists between the plan sponsor (the state) and the fiduciaries (the trustees). Clear governance practices and system autonomy allow trustees to adhere to fiduciary duty absent undue political constraint.

The legislature and key stakeholders, including plan members, retirees and public employers, play significant roles. Political interests interact with member benefit and public employer interests, impacting public policy choices. A working understanding of the complex interrelationships can inform the strategies that assure the best practices of plan governance. A range of studies and findings are available concerning public plan governance from scholarly and professional sources. This paper integrates theory and practice to inform policy development.

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Introduction

The challenge of public pension fund governance is gaining attention for good reason. The first in a 3-part series in *Governing* magazine declared, "Public funds are responsible for managing more than $3 trillion in assets – money that will or already does pay retirement benefits to as many as 14 million public servants and 7 million retirees and their family members…And yet, very little is known, either in or out of government, about the boards, how they're governed and who's in charge of overseeing the many calculations, estimations and factors that go into managing a public pension fund."

Experts in the field of pension management have estimated the cost of ineffective governance at around 100 basis points, (one percentage point), the equivalent of $60 million per year in additional return based on the current NHRS plan assets.

In an interview for *GRS Insight*, a publication of the actuarial firm, Gabriel Roeder Smith (GRS), John Por and Tom Iannucci of Cortex Applied Research discussed common pitfalls. Por and Iannucci identified "excessive and often unrecognized risk taking, a tendency to concentrate on low-impact decisions, insufficient attention to managing costs, and a failure to adequately consider the organizational consequences of investment decisions."

"The good news", according to Por and Iannuicci, "is that these risks can be minimized with effective trustee education and by committing to a governance improvement program. By applying good governance principles, most common mistakes can be avoided. Boards will not only achieve better long-term investment results but will also be able to demonstrate a higher degree of rigor in the exercise of their fiduciary duties. Enhancing one's board governance practices is one of the most critical factors in achieving long-term success."

Academic studies underscore the findings of practitioners and consultants. In *Pensions in the Public Sector*, Michael Useem and David Hess explained, "The governance policies of a pension fund can thus be key to its performance: designed well, investment risks will be appropriate and returns will be superior; structured poorly, more tax revenues may be required to make up for the otherwise avoidable and predictable shortfalls. Good governance, then, stands between a fund's success in servicing the public and its failure to do so. (Useem & Hess in Mitchell & Hustead, 2001, p.141-142)

Chapter 1

Overview of Principles: Fiduciary Duty, Autonomy, Transparency

Fiduciary Duty

The cornerstone of good pension plan governance lies in strict adherence to fiduciary duty. System trustees function as fiduciaries, a legal status carrying specific responsibilities. Pension fund administrative staff and consultants also function as fiduciaries, to the degree that the trustees delegate fund management duties to them. Fiduciary duties include *Care* and *Loyalty*.

Duty of Loyalty

The duty of loyalty is exclusively owed to plan members and beneficiaries, which includes active members, retirees, and those receiving survivor benefits. The trustees must "manage the fund so as to enable the system to meet its obligations not only to current retirees, but also to those expected to retire in the future."

The U.S. Supreme Court has ruled that trustees have "an unwavering duty of complete loyalty" to the members and beneficiaries of an employee benefits plan. And further, the "duty to the trust beneficiaries must overcome any loyalty to the interest of the party that appointed the [trustee]." Trustees may not substitute any other interest for the well-being of the fund.

- No fiduciary duty is owed to a sub-group of "constituents"
- No fiduciary duty of loyalty is owed to an appointing authority

To assure adherence to the duty of loyalty, trustees should develop methods for resolving conflicts of interest between the sponsoring organization and the pension plan, as well as between the plan and its vendors (e.g., external investment managers), in ways that are not disadvantageous to the pension plan from an ex ante perspective. (Logue, 2007)

Duty of Care

According to Commission member Dennis Logue, the duty of care requires a fiduciary to study issues intensively, to hire outside experts when appropriate, and to do the proper analysis. For example, trustees should:

- Participate in and oversee the development of the pension investment policy statement. This statement should include broad guidelines regarding strategic asset allocation, acceptable investment strategies, and permissible types of transactions, or alternatively, the types of transactions that are prohibited (for instance, writing uncovered call options). This statement should also indicate whether the chief investment officer (CIO) is allowed or expected to overlay decisions made by portfolio managers. For example, the statement should address whether or

not the CIO is allowed to take positions in futures that increase or reduce the equities exposure of individual managers.

- Establish a risk tolerance for the pension plan that reflects the circumstances and preferences of both sponsors and beneficiaries. The pension plan fiduciary should actively participate in assessing risk, in setting limits on the total acceptable dollar loss (value at risk), and in developing policies that will keep the plan invested in a way that is consistent with the risk tolerance.

- Hire a Chief Investment Officer with the appropriate educational credentials and experience to serve as a competent administrator.

- Decide whether internal or external management of the pension plan will produce the highest risk-adjusted, cost-adjusted investment returns that are consistent with the risk tolerance set for the fund.

- Select investment managers based on clearly defined, rational criteria, such as historical performance (i.e., performance that yields insight into predictable future behavior), anticipated future investment, strategies, ability to handle administrative tasks, willingness to participate in the monitoring process, compensation, trading style and activity, and use of soft dollars.

- Establish investment guidelines for each manager. These guidelines should specify the minimum and maximum exposure to each relevant asset. For example, this might limit a manager to owning less than 5% of a company and investing no more than 10% of the managed portfolio in a company

- Monitor the performance of investment managers for investment returns as well as for their level of adherence to the previously agreed upon investment guidelines.

- Assure that all administrative and clerical functions are performed accurately and in a timely manner

- Commit to continuing education to stay current with the latest advances in theory and practice.

Standards of Prudence

The standard of prudence has evolved in pension case law, beyond the "prudent man" rule that required fiduciaries simply to act in good faith. The standard found in the Harvard v. Amory case set general criteria:

> "All that can be required of a trustee to invest is that he shall conduct himself faithfully and exercise sound discretion. He is to observe how men of prudence, discretion, and intelligence manage their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income, as well as the probable safety of the capital to be invested." (Harvard. v. Amory in Logue, 2007)

The *prudent investor* standard requires the use of modern portfolio theory to improve the level of assets, not simply to conserve them. In 1940, the Trust Division of the American Bankers Association established the Model Prudent Man Investment Act:

> "In acquiring, investing, reinvesting, exchanging, retaining, selling, and managing the property for the benefit of another, a fiduciary shall exercise the judgment and care, under the circumstances then prevailing, which men of prudence, discretion, and intelligence exercise in the management of their own funds, considering the probable outcome, as well as the probable safety of their capital."
>
> (American Bankers Association in Logue, 2007)

The highest standard is that of *prudent expert.* It requires fiduciaries to become experts and/or to hire, carefully delegate and rigorously monitor those charged with fund management duties. Good faith is not a defense to imprudence. Further, a good outcome does not absolve fiduciaries of liability for imprudent conduct – standards of fiduciary duty must be adhered to, irrespective of investment results. The American Law Institute drafted a new standard that has been adopted in the majority of states, including the following components:

- Any and all investments must be considered as part of the portfolio and not be judged on an individual basis.
- No investment should be considered inherently prudent or imprudent.
- In the majority of cases, trust assets must be diversified.
- Inflationary effects must be given consideration in investment decisions. That is, the focus must be upon real values. (This is a significant departure from the original notion that the primary risk to protect against was the erosion of normal principal.)
- Investment skill must be demonstrated by the fiduciaries

Summary: The Seven Deadly Sins of A Fiduciary

Fiduciaries oversee a broad scope of functions in plan management. There are two core businesses in each retirement system: investment of funds and administration of benefits. In a presentation on pension governance, Commission member Dennis Logue delineated *The Seven Deadly Sins of a Fiduciary* which are: Apathy, Cowardice, Laziness, Ignorance, Excessive Self-Reliance, Financial & Social Self-Enrichment and Deception. Retirement systems can protect themselves against such fiduciary breaches through strict adherence to best practices.

In order to meet fiduciary obligations, trustees must learn as much as possible about pension plan governance and investment management to maintain a high level of competence, and be as faithful as possible to the interests of pension plan beneficiaries. Service as a trustee should include attention to:

- The specifics of any investment, including reading the prospectus for new securities, and the recent financial experience of portfolio companies;
- The current financial theory supporting the application of a particular investment strategy;

- The operations and investment strategies of peer pension investors;
- The legal ramifications from the use of different financial instruments;
- The estimated risk-to-reward ratios for any given total portfolio composition;
- Monitoring of any activity that is delegated outside the immediate authority of the fiduciary
- The decision-making process and its documentation, the data used, the philosophies followed, the competence of involved parties, and the policies used to reduce conflicts of interest.
- Measurement of Liabilities, Actuarial Estimates, Discount Rate
- Measurement of Returns on Illiquid Assets, Real Estate, Venture Capital, Private Equity
- Smoothing of annual contributions

In a broad sense, trustees need an operational understanding of the common pitfalls in public plans such as true "cost" versus "guesstimated cost" and outlandish estimates of future returns. Trustees must make a commitment to sound actuarial funding methodology using conservative estimates and discount rates. They must also work openly, providing full public disclosure.

The appointment of qualified trustees with an appropriate level of investment knowledge and judgment (rather than simply seeking representatives of various constituencies) is extremely important. Given the dynamics of public plan management, trustees must be proactive in developing good governance procedures that anticipate and reduce the potential for adverse political influence. (Logue, 2007)

Autonomy

The pension system's ability to function autonomously from state government is critical to good governance. Under pension law, the legislature functions as *settlor*: the entity that established the trust. The legislature is not a fiduciary. Governmental entities are accountable to the citizens who have elected them, not exclusively to plan participants.

During times of fiscal stress or intense political rivalry, legislature and/or executives may seek to divert pension assets and/or reduce pension contributions. The most common occurrences were during the recession of 1991. An article in Fortune magazine characterized the trend as "The Great Pension Robbery" observing that "The immediate victims of any cut in contributions or attachments of assets are the public employees whose retirement funds are being raided. But taxpayers may be on the hook too: they could have to make up the difference if, thanks to the raids, public plans lack the wherewithal to pay retirement benefits in the future." (Deutschman & Fefer in Fortune, January 13, 1992)

In the article, *Investment Practices of State and Local Fund,* Alica H.Munnell and Annika Sunden reviewed the aftermath of the aforementioned efforts by state governments.

In most cases, litigation was required to enforce state obligations. In 1991, the California legislature reduced its contributions to CalPERS by $1.6 billion and continued to under-contribute in ensuing years. Following a lengthy court battle, "the California Supreme Court ruled that workers had a right to an actuarially sound pension system, and ordered the state to pay back the money to the pension system." (Munnell & Sunden in Mitchell & Hustead, 2001, p. 175)

The study also reviews cases in New York and New Jersey, concluding that "the evidence of states trying to use pensions as a safety valve indicates that affected parties will sue, and the courts will protect the rights of participants" (Munnell & Sunden in Mitchell & Hustead, 2001, p. 177). The fact that retirement systems may find the need to litigate against the legislative and/or executive branch underscores the importance of autonomy. Systems must have the authority to establish actuarially sound contribution rates, and to hire and compensate independent legal counsel. Without functional autonomy, systems may lack the capacity to defend plans from actuarial manipulation or under-funding. Fiduciary duty requires systems to act solely in the interests of plan participants, regardless of political considerations.

Transparency

The principle of transparency goes beyond the common understanding of public right to know laws. It fundamentally addresses the question of how stakeholders can gain sufficient knowledge and information to make reasonable judgments concerning public pension funds.

In his article, Asset/Liability Management in the Public Sector, Michael Peskin describes the self-interests of each of the stakeholders – members, elected officials, and taxpayers. Based on the interest of plan members in good benefits and taxpayer interest in low costs, Peskin identifies the political incentive to trade short term accommodation for long-term costs. He observes that "the time horizon of elected officials rarely extends much beyond the next election. In hard-fought battles for budget resources, long-term concerns are least represented." Peskin suggests "the solution to this political imbalance is to adopt a rigorous and disciplined framework within which to calculate liabilities and assets and to establish policies. Such a framework must make the price of options and transfers of costs or risks to future generations transparent."

(Peskin in Mitchell & Hustead, 2001, p. 203)

Chapter 2

Board Composition and Governance

Review of the literature

Several significant studies have examined the role of member trustees and plan governance in as variables in plan funding. *Public Pension Governance, Funding and Performance: A Longitudinal Appraisal* (2005), co-authored by Olivia S. Mitchell and Tongxuan (Stella) Yang, measured management practices, board composition and reporting practices, with respect to investment performance. The study indicated a negative correlation between fund earnings and the presence of active members on pension boards and a strong negative correlation with retired members. In his study, *Protecting and Politicizing Pension Fund Assets*, (2005) David Hess examines the role of politically affiliated trustees and member trustees. An earlier study by Hess with Michael Useem, *Governance and Investment of Public Pensions* (Chapter 7 in Mitchell & Hustead, 2001) examined the size and composition of the boards in conjunction with the scope of responsibility.

Identified limitations of member trustees

While Mitchell and Yang qualify their findings concerning the negative impact of member-trustees, each qualification is balanced with explanations that support the findings. Along with David Hess and other scholars, Mitchell and Yang acknowledge that plan members are highly motivated to work for positive investment outcomes. The members' motivation, however, is balanced by an apparent lack of financial expertise, and a possible tendency to be overly cautious with the investments. The passage below is typical of these studies, opening with a positive quality and moving to the problematic aspects of member-trustees:

> Most likely, plan participants will be more concerned with their benefits and push for better funding, than would politically affiliated members such as appointed and ex-officio representatives. On the other hand, Mitchell (1988) suggests that Board members who are not financially expert may find it difficult to monitor plan performance, in which case having more active members or retired members may permit lower funding…We hypothesize that having more participants on the Board may lead to lower returns due to a more conservative approach to investment."
>
> (Mitchell & Yang, 2005, p. 11-12)

In his study, David Hess identifies a myriad of political dynamics that have compromised plan funding levels. (Hess, 2005) One of his findings supports Mitchell and Yang's study of member trustees. While acknowledging the member-trustees were highly motivated to be good stewards, Hess pointed to the findings of the Myners Report regarding their limitations. According to Hess, the Myners Report found that "trustees' lack of expertise caused them to rely heavily on the opinions of consultants and follow the actions of funds in their peer group without giving adequate consideration to what their fund should have as an investment objective." (p.211)

However, he pointed out that trustees who are union members have an informational advantage because unions tend to provide retirement education programs.

Hess goes on to discuss the optimal number of seats for member trustees, suggesting a tipping point where the advantages of independence and commitment are outweighed by the issues of expertise. His findings suggested a diminishing return once boards consist of 47% member trustees. He also draws a distinction concerning the function of the board as a whole, finding that the funds perform worse when the board is directly responsible for setting the portfolio's asset allocation. Hess' work can be seen in conjunction with that of Mitchell & Yang:

> …Supportive of previous research, we find that public plan governance has an important impact on plan investment performance and funding status. Having more retired employees on the Board can depress investment performance, stock funding, and flow funding, while having more active employee participation can depress stock funding…
>
> …plan governance structure could be enhanced to boost investment performance and funding status. One way would be to include more expert Board members; another might be to provide better training to Board representatives, especially if they are active or retired employees…
>
> (Mitchell & Yang, 2005 p. 20-21)

Identified limitations of politically affiliated trustees

There is enough blame to go around in the states that are suffering substantial pension deficits. Expanding upon a minor theme in the Mitchell & Yang study, Hess distinctly identifies a motivation on the part of governmental sponsors to reduce or avoid pension contributions, particularly during times of slow economic growth. He notes the impact, "consistent underfunding ultimately shifts current funding problems on to future taxpayers." (Hess, 2005, p. 193)

Posing the question, "The Board of Trustees: Stewards or Politicians?" Hess reviews the motivations and limitations of each category of trustee. He refers to corporate governance literature based on agency theory to draw a distinction between "politically affiliated trustees" (appointed or ex-officio) with "inside directors." He considers member elected trustees "outside directors." The inside directors, Hess explains, are expected to side with management, while the outside directors are "generally considered to be sufficiently independent from the CEO that they can protect the shareholders' rights when they may be harmed by top management's behavior." (p. 196-196)

In this context, Hess is considering the CEO as the plan sponsor (the state government). He provides several examples of potentially negative consequence of political influence on investments. Politically affiliated trustees may support local economically targeted investments (ETI's) that pose undue risk or provide insufficient return to the fund; or they may select fund managers on a preferential basis. He provides examples of such occurrences in California and Maryland, commenting, "taken together, these problems have led commentators to argue that

public pension funds with trustees who are susceptible to political pressure will perform slightly worse than funds with boards having more politically-independent trustees." (p.198)

Hess goes on to describe how politically affiliated trustees went along with efforts by states to reduce necessary plan contributions. While the activities listed above may hinder returns, the manipulation of actuarial assumptions for political purposes is far more costly:

> …In the early 1990's the New York State pension fund raised its expected rate of return from 8% to 8.75% in order to reduce contributions by $325 million and balance the state budget. In 1991, the governor of California explicitly stated his desire to raise the expected rate of return on the state's pensions from 8.5% to 9.5% to reduce the state's contribution to pension plans by approximately $400 million per year. (Hess, 2005, p. 203)

Putting the gravity of the situation in context, Hess describes the extent of the current underfunding problem. Using Census Bureau statistics, he points out that, "93% of all state pension funds were underfunded in 2003… at the end of the strong market in the 1990's…only 31% of the pension systems were underfunded, and the average system had a funding level of 115%."

Returning to recent history, he identifies factors that lead to success and those that put plans in deficit. He noted a change in investment practices leading to the positive returns in the 1990's. Several states had statutory restrictions on the extent of exposure to equities. These legal and philosophical restrictions were steadily removed, as public pensions increased their equity investments. Plan holdings were less than 40% equities in 1990, and rose to nearly 60% by 2000. By the end of 2003, the average equity allocation was 65%. (Hess, 2005, p. 195)

Board size and composition

According to the study, "Developments in State and Local Plans," conducted in 1996, the average pension board size varied, with teacher retirement systems averaging 10.3 members, state employee systems averaging 9.24 members, and police and firefighter systems averaging 7.5 members. The average composition was 46% appointed, 35% elected, 16% ex-officio, and 3% other. (Mitchell, McCarthy, Wisniewski & Zorn in Mitchell & Hustead, 2001)

The period from 1990-1996 was examined by Michael Useem and David Hess, as reported in their article, *Governance and Investments of Public Pensions (*Chapter 7 in Mitchell & Hustead, 2001). During the early 1990's, the removal of restrictions on equity investments resulted in improved performance by many public funds. "From 1992-1994, 20-25% of the pension funds faced a constitutional or statutory equity cap of 35% or less (below generally recommended asset allocations at the time), but by 1996 the fraction of funds facing this cap dropped to 14%." (Useem & Hess in Mitchell & Hustead, 2001)

Useem and Hess examined the composition and authority of boards in conjunction with their

investment authority. While the removal of state restrictions on equity investments accounted for much of the improved performance by public funds, governance was found to be a significant factor as well:

> The relative constancy of the governing board size – eight trustees give or take three throughout this period – implies a curvilinear optimum somewhere in the range. By way of inference from research on the performance of units ranging from produce teams to corporate boards, too few members is to deny the board the diverse experience, expertise, and wisdom that make for good decisions, but too many is also to undermine its communication, consensus, and responsibility that also make for effective actions. A governing body of five members is suboptimal, and so too is a board of twenty-five. (Yermack, 1996, in Useem & Hess, p. 137)

The study, which included 171 systems, highlighted two in particular, the California Public Employees' Retirement System (CalPERS) and the South Carolina Retirement System (SCRS). Looking solely at the variable of board size, South Carolina's board was considered to be smaller than optimal, with only five members. CalPERS' board was larger than most, with 13 members, but its use of four committees was noted, as well as the guidance of a Chief Investment Officer (CIO) whose previous experience included management of an $8 billion corporate retirement fund. Considering board meetings and committees, CalPERS trustees typically spent four days per month on their duties. While other significant variables provided CalPERS an advantage over SCRS, it was noted that CalPERS' seven year average rate of return exceeded that of SCRS by 82 basis points. (Useem & Hess in Mitchell & Hustead, 2001)

Criteria: Motivation and Competence

Keith Ambachtsheer's work, *The Three Grades of Pension Fund Governance Quality: Bad,_Better, Best* is based on corporate performance theory. Citing the work of Peter Drucker, Elliot Jaques, and John Carver, Ambachtsheer focuses on governance in an operational context, stating that oversight boards must pass two tests: motivation and competence. In the aspect of motivation, he seems to concur with Hess on the value of committed member trustees, but it is clear that competency criteria must be met, and specific governance practices in place, in order to have optimal results.

The Myners Principles for Institutional Investment Decision Making found that public pension boards fell short of optimal governance and performance standards in a series of respects.

- Trustees are often asked to take crucial investment decisions without either appropriate resources or expertise to make informed judgments; as a consequence, trustees rely heavily on a small number of investment consulting firms, whose advice and performance they are not sufficiently expert to examine, or evaluate;
- Trustees also commit a low level of resources to asset allocation decisions and advice. The lack of attention these decisions receive is likely to affect investment performance;
- The objectives set for fund managers are often unrelated to the long-term objectives of the pension fund. Fund managers are often assessed against the performance of a 'peer

group': this encourages managers to herd around a benchmark and undermines active fund management;

- There is also a lack of clarity about the timescales over which fund managers' performance is to be judged. This uncertainty leads to an unnecessary emphasis being placed on achieving short-term results;
- Fund managers appear unnecessarily reluctant to engage with companies in relation to corporate underperformance, despite the possible benefits this might have for their clients. Trustees also do not generally mandate such engagement;
- The substantial costs of broking commissions are subject to insufficiently clear scrutiny and control.

(Myners in Logue, 2007)

Consideration of roles in relation to duties

Scholarly studies and professional guidelines both speak to the importance of fiduciary duty in two critical respects – competence and loyalty. While issues of competence may not be fully resolved with educational programs, additional training is a recommended strategy. The Clapman Committee's report on "Best Practice Principles" recommended that boards "should engage in an annual evaluation of trustee skills and, where appropriate, should develop a plan for improving and expanding the board's competencies." (Clapman in Ambachtsheer, 2007)

Professional practitioners provide valuable insight on the complicated, yet critical aspects of plan governance. Cortex Applied Research principals, John Por and Tom Iannucci point out the consequences of failure to take a proactive approach to good governance, "Experience suggests that if the plan sponsor begins to perceive that its financial responsibilities to its pension plan are untenable, two things usually happen: somebody will be blamed, and some high profile (although not necessarily effective) remedy will be imposed…Trustees need to create their own conditions for change (e.g. board self-assessment, executive director performance evaluation, enhanced investment performance measurement, etc.)."

Further, issues of loyalty may be addressed through a prerequisite understanding of the obligations carried as a trustee. The challenges presented by each category of trustee are delineated on the following page. The development of an appropriate strategy addressing the potential weaknesses in each category should enhance the chances for a cohesive board adhering to its fiduciary responsibility.

The article "Developments in State and Local Plans," (Chapter 2 in Mitchell & Hustead, 2001) also noted a recommendation by the National Conference of Commissioners on Uniform State Laws encouraging states to adopt certain standards for public pensions. "The Management of Public Employee Retirement Systems Act (MPERSA) is intended to modernize investments decision making in public pensions." (Wisniewski, 1999 in Mitchell et. al) While the ideal model has yet to take hold among state legislatures, progress has been made with certain elements, particularly fiduciary standards.

Template of Roles

Each of the trustee categories brings advantages and risks. Good governance may be achieved by the development of a comprehensive framework that maximizes the strengths of each trustee while mitigating the risk. It may be possible to identify the risks and value intrinsic to each category of trustee. The following template considers the questions: How do they get on the board? What's the worst that can happen? What's the best? Once the range of possibilities is understood, one may identify ways to prevent the worst and assure the best.

Public appointments – prominent citizens; who may also be friends, contributors, or political allies of the governor.

Best scenario:

- Civic minded people with financial expertise, dedicated to public service
- With the ability to withstand political pressure and fulfill fiduciary duty.

Worst case scenarios:

- Use the position for personal financial gain.
- Help political allies balance the state budget by under-funding the system.

Member appointments – may be a friend or political ally of association or union president

Best scenario:

- Employees dedicated to be good stewards of the fund
- With the ability to withstand peer/political pressure and fulfill fiduciary duty

Worst case scenarios:

- Take positions based on what is popular or unpopular with the rank & file, without regard to actuarial soundness.
- Function as advocate for greater benefits

Employer trustees – may be selected from an association of managers or municipal officials or by a governor or mayor

Best scenario:

- Public managers dedicated to be good stewards of the fund
- With the ability to withstand peer/political pressure and fulfill fiduciary duty

Worse case scenarios:

- Take positions based on what is popular or unpopular with peers in their professional association or the elected official who appointed them.
- Function as an advocate for cutting benefits

Legislative appointments – generally appointed by the leadership of the majority party

Best scenario:

- Legislators with expertise to function as liaisons with the legislative branch, sponsoring responsible, appropriate legislation at the behest of the board.
- With the ability to withstand peer/political pressure and fulfill fiduciary duty.

Worst case scenarios:

- Help political allies balance the budget by under-funding the system
- Sponsor legislation based on special interest, misinformation or personal bias, which passes because their colleagues assume it's backed by the board.

Chapter 3

Consideration of perspectives on board composition & governance relative to NHRS

Composition

Based on the studies by Mitchell & Yang, and Hess, the NHRS Board composition is not optimal. It is larger and has more active plan members than the scholars recommend (the 9th active member was added, effective 7/1/07). However, there is no board seat for a retired member, which is the role that Mitchell & Yang found to be most detrimental.

The NHRS Board currently has 14 members:

- Two trustees "who shall be qualified persons with business experience and not be members of the system"
- Two trustees from the N.H. Legislature; one Senator and one House member
- Two trustees from each of the 4 membership classifications
- One trustee from local government management
- The State Treasurer (ex-officio)

RSA 100-A:14 (Appendix D)

Concerns about politically affiliated trustees

The scholarly research points out concerns with both politically affiliated trustees and member-trustees. In 1988, the NHRS Board was expanded from 11 to 13 members, adding seats for House and Senate appointees. In 1991, a former NHRS legislative trustee was the sponsor of HB 51 that introduced the Open Group Aggregate methodology and increased the assumption rate to 9.75%. However, the majority of other trustees and the actuary (reluctantly) went along with it. A closer examination of the interaction between politically-affiliated and other trustees is merited in the case of NHRS.

Election vs. Appointment of member-trustees

New Hampshire's system is actually a hybrid between two systems described in the literature. David Hess and others draw a distinction between member-elected trustees and trustees appointed by the executive. Hess cited his findings of improved outcome with trustees appointed by the executive; theorizing that they may be better qualified than elected-member trustees. (Hess, 2005) The executive-appointed trustees in Hess' study were most likely public members. The member trustees in New Hampshire are appointed by the Governor & Council, from a panel of 5 members proposed by each of five named organizations: the New Hampshire state employees' association, the New Hampshire education association, the New Hampshire police association, the New Hampshire state permanent firemen's association, and the New Hampshire Local Government Center (RSA 100-A:14:I).

Whether or not the two-tiered selection process results in a higher level of qualification than trustees who are directly elected by constituent groups, remains to be studied. Anecdotally, the Texas County and District plan's board consists entirely of member-trustees, all appointed by the executive; according to the 2006 Public Funds Survey, the Texas plan is 110.2% funded. The specific variable concerning member-trustees who are nominated by constituency groups and subsequently appointed by the executive is not evident in the studies.

Motivation of stakeholders

Each of the studies acknowledges that member trustees play a valuable role in governance, due to their stake in the fund. As Hess points out "the board of trustees must be able to prevent the political misuse of the fund's assets and have the expertise and motivation to ensure successful investment performance. Similar to the role envisioned for independent directors in corporate governance, there is a role for member-elected trustees. These trustees are motivated, accountable to plan beneficiaries, and independent of political influence. A growing body of empirical evidence suggests they are potentially good stewards of pension assets. (Hess, 2005)

Evidence of the motivation of member-trustees to resist attempts to under-fund the pension systems can be found during the legislative controversy in 1991. During the debate around the passage of HB 51, which imposed an earnings assumption rate of 9 ¾%, several member trustees consistently challenged the usurpation of the board's fiduciary duty. An excerpt from the Minutes of Board meeting March 12, 1991 is in Appendix B.

Training and expertise

Two of the NHRS trustees are required by statute to have expertise; the development of expertise on the part of all trustees is articulated as a board goal. The NHRS Draft Governance Manual articulates a Trustee Education Policy: In order to permit Trustees to discharge their fiduciary duties with care, skill, prudence, and diligence and to ensure that all Trustees have a full understanding of the issues facing NHRS, the Board has adopted orientation and continuing education programs; encourages education; and makes available appropriate periodicals to foster Trustee awareness of relevant developments. Trustees are provided in-house orientation sessions and the opportunity to attend educational seminars and conferences.

According to the *GRS Insight*'s interview with Por and Iannuicci, "the key to effective governance is the trustees' ability to shift from a 'hands-on' operational perspective to a 'policy and oversight' perspective. This is difficult, as most trustees are 'doers' in their non-trustee life and are unaccustomed to playing a strictly oversight role.

A fiduciary audit, prepared by Independent Fiduciary Services in 2002, noted, "Representatives of participant groups sometimes begin their terms expecting their role to be that of an advocate of their constituency, rather than a fiduciary responsible for the whole of the fund…The required education goes beyond just "learning the ropes." IFS believes best practices suggest a formal, consistent basic training in fiduciary principles and investment concepts is a necessary step for a Trustee to become an effective member of the Board." (IFS report, 2002, p. 26)

There is a significant qualitative difference between knowing how to read the financial reports and understand the investment terms and concepts, and the ability to provide critical analysis. The function goes beyond learning how to ask the right questions; there is a need to strategically evaluate the overall investment program. The IFS audit suggested supplementing the role of the trustees with enhanced staff capacity. They observed that "If the investment consultant's recommendations were critically tested by a knowledgeable CIO, or other experienced investment staff professionals, before being presented to the Board....if there was positive constructive tension between the consultant and in-house staff, which in turn, would contribute to the reliability of the advice provided to the trustees." (IFS, 2002, p.40, p.133)

Optimal size for a deliberative body

There are differing views on the best size for pension boards, and the proper use of committees. In the interview with Governing.com, Gary Findlay reported that the MOSERS board runs as a committee of the whole. While acknowledging that it's a matter of preference, Findlay is confident that it works for them. (Governing.com, 2007) According to their website, the MOSERS board has 11 members.

A review of fund performance between 1990-1996 by Michael Useem and David Hess suggested that optimal board size was eight members. However, it was noted that CalPERS functioned well with a 13-member board through the use of committees. (Useem & Hess in Mitchell & Hustead, 2001)

Current (as of 11/07) operation of the NHRS Investment Committee as a committee of the whole (14 members) is not aligned with best practices. The IFS audit noted, "We believe that the use of a committee is consistent with good governance and "best practices." Committees make full use of board members' expertise, valuable time and commitment, and ensure diversity of opinions on the board. A smaller group allows for more focus and increases the likelihood of achieving a result. A smaller group can work more efficiently and less formally. (IFS, 2002, p. 50)

Alternative Investment Committee Model

According to the website of Texas ERS, state statute authorizes the Board of Trustees to establish advisory committees as it deems necessary. The Investment Advisory Committee (IAC) was created to consult and advise the board on investments and investment related issues. Generally, the IAC meets the day before each board meeting to consider investment related issues in depth. The committee of experts is currently chaired by a professor of Finance at the University of Texas.

Transparency

In an interview with Governing.com, Executive Director of the Missouri State Employees Retirement System (MOSERS), Gary Findlay linked the issues of transparency and autonomy. In response to the question, "How do you protect the authority you're given?" Findlay responded, "It requires a lot of openness and transparency. All of our reports are on our website

and available to anyone. (http://www.mosers.org/) I think the way to protect the authority you're given is not to abuse it, but to use it to do the best job you can. Then the results speak for themselves." (Governing.com, 2007)

It is of some concern that the minutes of the NHRS board meetings no longer provide the level of detail that allow readers to understand the basis for any decisions made by the trustees. A key element in transparency is the opportunity to see the deliberative process.

Autonomy

New Hampshire's statutes and Constitution require that the retirement system be managed solely in the interest of plan participants. These requirements are based in the common law, case law and federal law concepts of fiduciary duty and prudent investor standards.

> **RSA 100-A:15 (I)** ... All of the assets and proceeds, and income therefrom, of the New Hampshire retirement system, and all contributions and payments made thereto, shall be held, invested or disbursed in trust solely in the interest of the members and beneficiaries of the system for the exclusive purpose of providing those benefits and defraying those reasonable administrative expenses....

> **Article 36-a of the New Hampshire State Constitution** prescribes that "Retirement System funds are to be used only to benefit the System."

> **State Supreme Court: *NHRS v. Sununu, 126 NH 104, 108 (1985).*** *(Holding that the NHRS Board is independent of the executive branch)*..."Under the common law of trusts, the board of trustees owes the System's members and beneficiaries a fiduciary obligation to manage the System for the benefit of its members and beneficiaries..."

During the legislative sessions of 2001-2003, statutory gains were made in the categories recommended in best practices. NHRS was provided permanent use of prudent investor standards with the removal of a five year sunset provision. The system also gained autonomy for the purpose of creating positions and compensating employees, hiring independent legal counsel, and purchasing authority. While attention is still needed for the appropriate coordination of audit requirements, NHRS has established clear legal and functional independence from the legislative and executive branches. Such autonomy is essential to the optimal operation of a public retirement system.

Chapter 4
Summary

> A pension plan can be viewed as a contractual arrangement between the public employer and public sector employees that sets aside deferred wages in exchange for current service...The key reason for funding public pension plans is to improve intergenerational equity – that is, to reduce the transfer of unfunded costs of currently accruing benefits to later generations of taxpayers.
>
> Michael Peskin,
>
> Asset/Liability Management in the Public Sector

Effective problem solving

The structure of governmental plans provides the two essential roles of fiduciary (the trust) and plan sponsor (the state). The board of trustees must assure that retirement funds are invested prudently, for the sole benefit of members and beneficiaries. The legislative branch of the state government is responsible for establishing the level of benefits, and paying required contributions into the trust.

The strategies for continuous improvement in motivation and competence on the part of the system are relatively straightforward. (Ambachtsheer, 2007) However, good governance alone will not solve the problems associated with NHRS. History has shown that the complications arise in interaction of the system with the legislative branch of state government. Problems created by legislative action in 1991 remained uncorrected, although they were readily apparent. As Commission member Rep. John Reagan reported, the long-term impact of the Open Group Aggregate methodology and the overly aggressive 9% assumption rate, combined with the gains sharing of investment returns, were identified in a Performance Audit by Ernst & Young in 1994. Neither the board of trustees nor the legislature took action on the findings; passing significant costs forward to future taxpayers. (Ernst & Young, 1994, in Reagan, 2007)

The formation of special commissions in 1991 and 2007 were motivated by a perception of crisis. The charge of the 2007 Commission is to make recommendations to ensure the long-term viability of the NHRS. Indications are that continuous improvements in system governance, strict adherence to fiduciary duty, and the strengthening of system autonomy are fundamental to long-term viability. Indications are that these elements must be coupled with appropriate, constructive collaboration with the legislature.

Funding Sustainability

The on-going challenges facing public pensions are discussed by Ray Henry in "Public Pension Plan Design for the Future" (2005), a paper presented at a conference organized by the Labor and Worklife Program at Harvard Law School. Henry describes a range of issues, and suggests proactive strategies to ensure funding sustainability. Acknowledging the dichotomy of the long-term structure of a pension plan with the short-term budget and political cycles, Henry notes that

"Funding of public plans must avoid any significant contribution rate volatility and must not fall prey to undetected economic or demographic trends that result in gradually increasing rates over long periods…Success is also highly dependent upon the actuarial methods employed…" (Henry, 2005, p. 8) In this respect, the reestablishment of the Entry Age Normal methodology by HB 653 is extremely significant. The level funding method will reduce the volatility in employer rates, thereby lessening the temptation and to artificially alter assumption rates. Henry explains the value of the participation of stakeholders in the process as extending, beyond the oversight function.

Henry cites five elements that should involve all stakeholders: "(1) good governance, (2) professional administration and communication, (3) professional money management, (4) forward -looking decision support capabilities, and (5) clear, long-term strategic directions. Public pension plans are financial services organizations, and as such they must be forward-looking, learning organizations with the ability to recognize and negotiate future risk and change." (Henry, 2005, p.16)

Conclusion

Based on a review of the literature and best practices, the Commission charged with making recommendations to assure the long-term viability of New Hampshire Retirement System has the opportunity to make a significant contribution. A critical aspect of effective plan governance is reliant upon a genuine on partnership among the stakeholders. Responsibility for the plan is bifurcated between the legislature and the trustees. Problems festered over the past 15 years, with each party lacking the power to unilaterally change policy. Employers, taxpayers, retirees and active plan members are now impacted by ill-conceived policies of the past. The opportunity now exists to establish policy based on reasoned recommendations. And, to create a mechanism to proactively manage the plan that integrates the stakeholders into a functioning partnership.

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Appendix A
Findings from Yang & Mitchell

Table 4. Estimated Responsiveness of Key Explanatory Variables

Variables	Stock Funding Ratio	Flow Funding Ratio	1 Year Investment Return
Capital Market & Performance Factors			
-30 percentage points in S&P 500 Index			-12 percentage points
-20 percentage points in 1-year plan investment return	-8 percentage points		
-24% in plan stock funding ratio		-11 percentage points	
Governance Factors			
+1 active Board member	-.07 percentage points		
+1 retired Board member	-1.7 percentage points	-2.3 percentage points	-0.4 percentage points
Annual report issues			+2.1 percentage points

Yang & Mitchell, 2005, p. 32

<u>Definition of dependent variables</u>

Stock funding ratio: the ratio of plan assets to liabilities

Flow funding ratio: how well a plan meets its annual contribution requirements.

Investment performance: rates of return

<u>Significance of capital market scenarios</u>

- A 30% drop in the S&P 500 index, such as was experienced during 2000-2002, would be predicted to cut public pension investment returns by 12 percentage points.
- A 20 point drop in one year's returns would reduce the stock funding ratio by 8 percentage points.

Appendix B

Excerpt from Board of Trustee Minutes

March 12, 1991

Pages 3-4

By way of reading the following excerpt from Article 36-a of the New Hampshire Constitution, Mr. Beaudry questioned the soundness of the most recent valuation results which established normal contribution rates as included in House Bill 51-FN: "The employer contributions certified as payable to the New Hampshire retirement system or any successor system to fund the system's liabilities, as shall be determined by sound actuarial valuation and practice, independent of the executive office, shall be appropriated each fiscal year to the same extent as is certified."

In light of the intent and purpose of House Bill 51-FN, Mr. Beaudry questioned the temporary one-year suspension of the Board's fiduciary responsibility to certify normal rates of contribution. He questioned the actuarial soundness of the actuarial valuation and whether the whole process had been independent of the executive office.

Mr. Beaudry moved and Mr. Connelly seconded that the trustees request that (Attorney) Alan Cleveland provide an opinion on the way the legislation (HB-51) was drafted and presented, whether it meets sound actuarial valuation practices and whether it was independent of the executive branch."

Notes:

- The motion was defeated by a vote of 3-9. The three supporters were all member-trustees. The five other member-trustees voted in opposition, as well as both legislative trustees and one of the public members (the other public member, the Chair, did not vote.)
- This motion was selected for inclusion in this Appendix because of its reference to the Constitutional issues. It must be noted that other trustees, including the Chair, voiced their objections to the usurpation of the board's fiduciary responsibilities at other meetings and during legislative hearings.

Appendix C

Background on Fiduciary Duty

West Virginia case: Retirees sued the Board of Trustees for allowing the legislature not to collect sufficient contributions to pay their benefits. In ***Dadisman v. Moore***, 384 S.E. 2d 816 (W. Va. 1988) the Court found that the failure of trustees to act on the legislature's lack of appropriating the adequate money is a breach of their fiduciary duty as trustees to the retirement system and its participants. The Court asked rhetorically why the board of trustees didn't appear as petitioners years earlier rather than now as defendants.

Terms

Fiduciary: Any person who (1) exercises any discretionary authority or control over the management of a plan, (2) exercises any authority or control concerning the management or disposition of its assets or (3) has any discretionary authority or responsibility in the administration of the plan. Person, company or association holding assets in trust for a beneficiary. Fiduciary status extends not only to those persons named in the plan documents or law as having express authority and responsibility in the plan's investment or management but also covers those persons who undertake to exercise discretion or control over the plan regardless of their formal title. Under general trust law, ERISA and most statutes/ordinances governing public retirement systems, fiduciaries must discharge their duties solely in the interest of the participants and beneficiaries of an employee benefit plan. In addition, a fiduciary must act exclusively for the purpose of providing benefits to participants and beneficiaries while defraying reasonable expenses of administering the plan. The fiduciary is charged with the responsibility of investing the money wisely for the beneficiary's benefit.

ERISA (Employee Retirement Income Act of 1974) Federal statute that requires persons engaged in the administration, supervision and management of pension monies have a fiduciary responsibility. The law that codified decades of case law concerning pension trusts. Private sector trust funds are governed by ERISA, and the spirit of ERISA applies to public sector funds, since the general trust law and case law summarized in ERISA apply to public funds.

Prudent Person Rule (a.k.a. prudent man rule) A common law standard applicable to the investment of trust funds. Historically stated: "All that can be required of a trustee in the investment of trust funds is that he conducted himself faithfully and exercise sound discretion. He is to observe how men of prudence, discretion and intelligence manage their own affairs, not in regard to speculation, but in regard to the permanent disposition of their funds, considering the probable income as well as the probable safety of the capital to be invested."

Prudent Expert Rule: The ERISA standards imposed on fiduciaries to act both as a prudent person would act in a similar situation and with single-minded devotion to plan participants and beneficiaries. Having set standards to facilitate the decision-making process. Consider action of internal factors of the fund, hiring, and listening to investment experts and qualified legal counsel, obtaining independent studies when advisable, and considering the financial variable of the prospective course of action.

Appendix D

CHAPTER 100-A
NEW HAMPSHIRE RETIREMENT SYSTEM
Sections 100-A:14 and 100-A:15

100-A:14 Administration. –
I. The administration of this system is vested in a board of 14 trustees. The state treasurer shall be an ex officio voting member of the board. The governor and council shall appoint 2 trustees, to be known as non-member trustees, who shall be qualified persons with business experience and not be members of the system, and who shall serve for a term of 2 years and until their successors are appointed and qualified, except that the original appointment of one of the non-member trustees shall be for a term of one year. The remaining 11 members of the board shall consist of 2 employees, 2 teachers, 2 permanent policemen, 2 permanent firemen, one member of the senate who shall be appointed annually by the senate president, one member of the house of representatives who serves on the executive departments and administration committee and who shall be appointed annually by the speaker of the house, and one person representing management in local government. Whenever a vacancy occurs, the senate president or the speaker of the house shall fill the vacancy in the same manner by appointing a senate or a house member who shall serve for the unexpired term. The New Hampshire state employees' association, the New Hampshire education association, the New Hampshire police association, the New Hampshire state permanent firemen's association, and the New Hampshire Local Government Center shall each annually nominate from their members a panel of 5 persons, all of whom except for the panel of the Local Government Center shall be active members of the retirement system, or one of the 4 predecessor systems, no later than May 31 of each year, and the panels so named shall be filed with the secretary of state no later than June 10 of each year. From each of the above named panels the governor and council shall appoint one person annually to the board, except for the panel of the Local Government Center, which shall have one person appointed every 2 years. Members appointed to the board in the manner aforesaid shall serve for a term of 2 years. Each member so appointed shall hold office until his or her successor shall be appointed and qualified. Whenever a vacancy occurs, the governor and council shall fill the vacancy by appointing a member who shall serve for the unexpired term from the same panel from which the former member was appointed. The governor shall designate one of the non-member trustees to serve as chairman of said board of trustees.
II. The board of trustees shall establish such rules and regulations as it deems necessary for the proper administration of this chapter.

III. The members of the board of trustees shall serve without compensation but shall be reimbursed for actual and necessary travelling and other expenses and disbursements incurred or made by them in the discharge of their official duties.
IV. Each trustee shall be entitled to one vote in the board of trustees, provided, however, that the chairman shall be non-voting except in the event of a tie vote. Seven trustees shall constitute a quorum for the transaction of any business. Seven votes shall be necessary for any resolution or action by the board at any meeting.
V. The board of trustees shall have the full power to employ and compensate such employees on such terms as may be necessary as charges upon the funds of the retirement system, and establish personnel policies without regard to any personnel or civil service law or personnel or civil service rule of the state. The employees of the retirement system shall not be classified employees of the state within the meaning of RSA 21-I:49. Notwithstanding, any individual employed by

the retirement system whose employment calls for 30 hours or more work in a normal calendar week, and whose position is anticipated to have a duration of 6 months or more, shall be entitled to elect to receive such health, dental, life insurance, deferred compensation, and retirement benefits as are afforded to classified employees of the state. Upon election by such individual, the retirement system shall pay from its funds the state's share of such benefits. Any remaining costs of health, dental, and life insurance benefits which an individual elects to receive pursuant to this paragraph, shall be withheld from such individual's salary as a payroll deduction. Written notice of the availability of these benefit options shall be provided to each individual upon employment by the retirement system. It may also engage such actuarial, medical, and like services as may be required to transact the business of the system. The compensation for such special services, and all other expenses of the board necessary, hereto, shall be paid at such rates and in such amounts as the board shall approve. Service as an employee of the retirement system shall be creditable service for purposes of RSA 21-I:30, II. Any retirement system employee who transfers, without a break in service, to a state classified service position shall transfer all the days of sick leave credit and annual leave credit that the retirement system employee has accumulated pursuant to this section. At the time of such a transfer, the employee shall immediately begin to accrue annual and sick leave as granted at the time of the transfer by the receiving agency according to the employee's continuous years worked.

V-a. The board of trustees shall have the power to purchase, receive, take by grant, gift, devise, bequest, or otherwise acquire, own, hold, improve, employ, use, and otherwise deal in and with property or any interest therein, whether tangible or intangible, for the purposes of this chapter.

VI. The board of trustees shall keep in convenient form such data as may be necessary for actuarial valuation of the various funds of the retirement system and for checking the experience of the system.

VII. The board of trustees shall keep a record of all its proceedings. It shall annually make a report showing the fiscal transactions of the retirement system for the preceding fiscal year, the amount of the accumulated cash and securities of the system and the last balance sheet showing the financial condition of the system by means of an actuarial valuation of the assets and liabilities of the system, and shall file the same with the secretary of state.

VIII. Immediately after the establishment of the retirement system, the board of trustees shall adopt mortality and service tables for use in all calculations in connection with the system, and shall certify the rates of contribution payable under the provisions hereof. The board of trustees shall also determine from time to time the rate or rates of regular interest for use in all calculations, except as otherwise provided, with the rate of 4 percent per annum compounded annually applicable from the date of establishment until changed by the board.

IX. In 1970, and at least once in each 5-year period thereafter, the board shall have an actuary make an actuarial investigation into the mortality, service and compensation experience of the members and beneficiaries of the retirement system, and a valuation of the assets and liabilities of its funds, and taking into account the result of such investigation and valuation, the board shall adopt such mortality, service and other tables as shall be deemed necessary, and certify the rates of contribution payable under the provisions of this chapter.

X. On the basis of regular interest and the tables last adopted by the board of trustees, the board shall have an actuary make periodic valuations of the contingent assets and liabilities of the funds of the retirement system. Such valuations shall be prepared at least once in each 2-year period commencing June 30, 1977.

XI. The board of trustees shall annually notify each active member of the amount of his earnable compensation, contributions deducted, and interest credited on his contributions during the previous fiscal year; the total of his member annuity savings fund; his date of birth; his accrued service credits; and such other information as the board of trustees believe will inform the member of his status in the system. The notice shall be prepared prior to the end of each calendar year based on information through June 30 of such year. The first notice shall be due by December 31, 1976.

XII. The executive director appointed pursuant to RSA 100-A:44 shall notify the selectmen of all towns, all city councils, and the superintendent or chief fiscal officer of all school districts within 10 days of the introduction and within 30 days of the enactment of any legislative measure relative to the retirement systems which would affect the retirement system costs to cities, towns and school districts. For the purposes of this paragraph, ""legislative measure'' shall mean any bill or joint resolution introduced in either the senate or the house of representatives but shall not include amendments to bills or joint resolutions.

XIII. Administrative Cost Assessment. Other provisions of law notwithstanding, the cost of administration of the retirement system as provided in this section shall be a charge upon the funds of the retirement system. The amount of administrative expense recorded monthly by the department of administrative service, division of accounting services, shall be paid to the state treasurer by the board of trustees. The board shall biennially review the administrative expenses for the previous biennium and shall submit in a budget for legislative appropriation, those amounts that the board, in its reasonable discretion, may deem necessary for the efficient operation of the system. Administrative balances accrued prior to June 30, 2001 shall be retained by the retirement system and expended for ongoing operations.

XIV. The board of trustees shall have the authority to recover for the retirement system any benefits deemed not payable under this chapter as a result of a death of any retiree or beneficiary, or as the result of the remarriage of a surviving spouse in receipt of benefits.

XV. The board of trustees shall, consistent with RSA 21-I:13, V, provide the commissioner of the department of administrative services with information necessary for the commissioner to carry out the responsibilities set forth in RSA 21-I:27, including such information as the name and social security number of each covered retiree, spouse, and dependent; the retiree agency-identifying information in a format compatible with the billing needs of the department; and such other information that the commissioner of the department of administrative services shall request in order to carry out the retiree health benefits program administration.

Source. 1967, 134:1, 405:7. 1973, 524:2. 1974, 40:74. 1975, 461:1. 1977, 488:1-3; 600:17. 1979, 434:29, I. 1985, 55:24. 1988, 193:11. 1994, 269:1. 2000, 246:2, eff. July 1, 2000. 2001, 158:6, 77, eff. July 1, 2001. 2002, 140:3, eff. May 10, 2002. 2003, 132:1, eff. Aug. 13, 2003. 2004, 146:1, eff. July 23, 2004. 2005, 53:2, eff. July 22, 2005. 2006, 120:11, eff. July 14, 2006; 178:4, eff. July 24, 2006. 2007, 263:38, eff. July 1, 2007; 268:3, 4, eff. June 30, 2007.

Section 100-A:15

100-A:15 Management of Funds. –

I. The members of the board of trustees shall be the trustees of the several funds created hereby and shall have full power to invest and reinvest such funds, and the board of trustees shall have the powers, privileges, and immunities of a corporation. The members of the board of trustees shall also have the power to invest and reinvest such funds in participation units in the public deposit investment pool established pursuant to RSA 383:22. Said trustees shall have full power to hold, purchase, sell, assign, transfer, and dispose of any of the securities and investments in which any of the funds created hereby have been invested, as well as the proceeds of such investments. All of the assets and proceeds, and income therefrom, of the New Hampshire retirement system, and all contributions and payments made thereto, shall be held, invested or disbursed in trust solely in the interest of the members and beneficiaries of the system for the exclusive purpose of providing those benefits and defraying those reasonable administrative expenses provided for under this chapter. In the management, investment and reinvestment of system assets so held in trust hereunder, the system's board of trustees shall exercise the judgment and care under the circumstances then prevailing, which persons of prudence, discretion and intelligence, acting in a like capacity and familiar with such matters, would use in the conduct of a pension plan of like character and with like aims as the system, and by diversifying investments of the system so as to minimize the risk of large losses to the trust fund.

II. The board of trustees shall:

(a) Have the authority to empower an investment committee of its members to make investments and deposits between meetings of the board.

(b) Have the further authority to hire investment counsel. The compensation for investment counsel services and the compensation for actuarial services required by the board of trustees in performing the duties required by RSA 100-A:14 shall be a charge upon the funds of the New Hampshire retirement system.

(c) Appoint and employ a custodian of the several funds of the retirement system, and such custodian, as an agent of the board, shall be compensated and such compensation shall be a charge upon the funds of the retirement system.

(d) Have the full power and authority to delegate to any agent, within or without the state, who may or may not be the custodian of stocks and securities, the power and discretion to make decisions with regard to the purchase or sale of any legal object of investment and to take any action necessary to effect decisions by or on behalf of the New Hampshire retirement system with the same legal effect as if performed by the board of trustees of the New Hampshire retirement system. The board of trustees shall have the power to authorize the payment of compensation to an agent or agents for management services.

III. Except as otherwise provided in this section, no trustee and no employee of the board of trustees shall have any personal interest in the gains or profits of any investment made by the board; nor shall any trustee or employee of the board, directly or indirectly, for himself or as an agent, in any manner use the same except to make such current and necessary payments as are authorized by the board; nor shall any trustee or employee of the board become an endorser or surety, or in any manner an obligor, for money loaned to or borrowed from the board.

IV. The board of trustees is authorized to engage the services of legal counsel for special investment, federal, and tax matters and to engage outside counsel for other matters. The payment for services provided in this paragraph shall be a charge upon the funds of the New Hampshire retirement system.

V. The board of trustees shall adopt rules pursuant to RSA 541-A relative to procedures to be followed in establishing and modifying investment objectives and guidelines, and in selecting investment managers, investment products and investment participations.

VI. The funds of the New Hampshire retirement system shall be audited annually. The board of trustees shall complete, not later than 120 days after the close of the fiscal year, unless the fiscal committee and the governor and council for good cause shall extend such period, a comprehensive annual financial report concerning the preceding fiscal year that details the financial condition and operation of the system during that period in a manner consistent with generally accepted accounting principles. Said report subsequently shall be audited by the legislative budget assistant who may designate a certified public accountant not employed in the state service to conduct the annual audit and may accept the findings and report of the certified public accountant as fulfilling the provisions of this paragraph, provided that in either case said audit shall be conducted in accordance with prevailing standards and practices of governmental auditing specified by authoritative national standard setting bodies. The cost of such audit shall be a charge upon the funds of the New Hampshire retirement system.

VII. The board of trustees shall complete a comprehensive annual investment report at the same time that the annual financial report under paragraph VI is completed. The investment report shall be submitted to the president of the senate, the speaker of the house, and the governor. The report shall include, but shall not be limited to:

(a) A description of the board's philosophy for investing the assets of the system, including an analysis of any significant changes in philosophy which have occurred from the prior annual report.

(b) An analysis of the return on investment, by investment category.

(c) Anticipated future uses of and approaches to the management, investment, and reinvestment of system assets under the principles of paragraph I.

(d) Any suggested changes in legislation which the board may seek in order to better serve the members of the system. This is not intended to preclude the board of trustees from seeking additional legislation as needs arise between annual reports.

VIII. The management, investment, and reinvestment practices for the assets held in trust by the board pursuant to this section shall be subject to review by the legislature.

Source. 1967, 134:1. 1973, 238:1. 1975, 379:2. 1977, 533:1, 2. 1978, 52:24. 1981, 346:1; 536:11. 1987, 331:1, 2. 1990, 117:1, 2. 1991, 268:10, 11. 1995, 271:1, 2. 1998, 198:1, eff. June 18, 1998. 2001, 158:7, eff. July 1, 2001. 2002, 140:2, eff. May 10, 2002. 2005, 43:1, eff. July 16, 2005.

UNIFORM MANAGEMENT OF PUBLIC EMPLOYEE RETIREMENT SYSTEMS ACT

SECTION 7. GENERAL DUTIES OF TRUSTEE AND FIDUCIARY. A trustee or other fiduciary shall discharge duties with respect to a retirement system:

(1) solely in the interest of the participants and beneficiaries;

(2) for the exclusive purpose of providing benefits to participants and beneficiaries and paying reasonable expenses of administering the system;

(3) with the care, skill, and caution under the circumstances then prevailing which a prudent person acting in a like capacity and familiar with those matters would use in the conduct of an activity of like character and purpose;

(4) impartially, taking into account any differing interests of participants and beneficiaries;

(5) incurring only costs that are appropriate and reasonable; and

(6) in accordance with a good-faith interpretation of the law governing the retirement program and system.

SECTION 8. DUTIES OF TRUSTEE IN INVESTING AND MANAGING ASSETS OF RETIREMENT SYSTEM.

(a) In investing and managing assets of a retirement system pursuant to Section 7, a trustee with authority to invest and manage assets:

(1) shall consider among other circumstances:

(A) general economic conditions;

(B) the possible effect of inflation or deflation;

(C) the role that each investment or course of action plays within the overall portfolio of the retirement program or appropriate grouping of programs;

(D) the expected total return from income and the appreciation of capital;

(E) needs for liquidity, regularity of income, and preservation or appreciation of capital; and

(F) for defined benefit plans, the adequacy of funding for the plan based on reasonable actuarial factors;

(2) shall diversify the investments of each retirement program or appropriate grouping of programs unless the trustee reasonably determines that, because of special circumstances, it is clearly prudent not to do so;

(3) shall make a reasonable effort to verify facts relevant to the investment and management of assets of a retirement system;

(4) may invest in any kind of property or type of investment consistent with this [Act]; and

(5) may consider benefits created by an investment in addition to investment return only if the trustee determines that the investment providing these collateral benefits would be prudent even without the collateral benefits.

(b) A trustee with authority to invest and manage assets of a retirement system shall adopt a statement of investment objectives and policies for each retirement program or appropriate grouping of programs. The statement must include the desired rate of return on assets overall, the desired rates of return and acceptable levels of risk for each asset class, asset-allocation goals, guidelines for the delegation of authority, and information on the types of reports to be used to evaluate investment performance. At least annually, the trustee shall review the statement and change or reaffirm it.

SECTION 9. SPECIAL APPLICATION OF DUTIES.

(a) A trustee may return a contribution [with interest] to a public employer or employee, or make alternative arrangements for reimbursement, if the trustee determines the contribution was made because of a mistake of fact or law.

(b) Upon termination of a retirement program, a trustee may return to a public employer any assets of the program remaining after all liabilities of the program to participants and beneficiaries have been satisfied.

(c) If a retirement program provides for individual accounts and permits a participant or beneficiary to exercise control over the assets in such an account and a participant or beneficiary exercises control over those assets:

(1) the participant or beneficiary is not a fiduciary by reason of the exercise of control; and

(2) a person who is otherwise a fiduciary is not liable for any loss, or by reason of any breach of fiduciary duty, resulting from the participant's or beneficiary's exercise of control.

(d) If an insurer issues to a retirement system a contract or policy that is supported by the insurer's general account, but is not a guaranteed benefit policy, the insurer complies with Section 7 if it manages the assets of the general account with the care, skill, and caution under the circumstances then prevailing which a prudent person acting in a like capacity and familiar with those matters would use in the conduct of an activity of like character and purpose, taking into account all obligations supported by the general account.

SECTION 10. REVIEWING COMPLIANCE.

(a) Compliance by a trustee or other fiduciary with Sections 6 through 8 must be determined in light of the facts and circumstances existing at the time of the trustee or fiduciary's decision or action and not by hindsight.

(b) A trustee's investment and management decisions must be evaluated not in isolation but in the context of the trust portfolio as a whole and as a part of an overall investment strategy having risk and return objectives reasonably suited to the program or appropriate grouping of programs.

SECTION 11. LIABILITY OF TRUSTEE OR OTHER FIDUCIARY.

(a) A trustee or other fiduciary who breaches a duty imposed by this [Act] is personally liable to a retirement system for any losses resulting from the breach and any profits made by the trustee or other fiduciary through use of assets of the system by the trustee or other fiduciary. The trustee or other fiduciary is subject to other equitable remedies as the court considers appropriate, including removal.

(b) An agreement that purports to limit the liability of a trustee or other fiduciary for a breach of duty under this [Act] is void.

(c) A retirement system may insure itself against liability or losses occurring because of a breach of duty under this [Act] by a trustee or other fiduciary.

(d) A trustee or other fiduciary may insure against liability or losses occurring because of a breach of duty under this [Act] if the insurance is purchased or provided either by the trustee or fiduciary personally or, on the trustee or fiduciary's behalf, by this State, the retirement system, a public employer whose employees participate in a retirement program served by the trustee or fiduciary, an employee representative whose members participate in a retirement program served by the trustee or fiduciary, or the trustee or fiduciary's employer.

Appendix II

Employer Contributions to NHRS for Fiscal Year 2007

NEW HAMPSHIRE RETIREMENT SYSTEM
FISCAL YEAR 2007 EMPLOYER CONTRIBUTIONS
BROKEN DOWN BY EMPLOYER

Employer Name	Employer * Contributions	State of NH's ** 35% Share of Political Subdivision Normal Contributions	Total Employer Contributions	Percentage of Total Employer Contributions
Albany - Emp	2,180.0	0.0	2,180.0	0.00%
Alexandria - Emp/Pol	19,384.8	2,123.9	21,508.8	0.01%
Allenstown - Emp/Fire/Pol	82,273.9	27,884.9	110,158.8	0.06%
Allenstown SD - Teachers	87,428.2	47,076.7	134,504.9	0.06%
Allenstown Sewer Commission	17,337.7	0.0	17,337.7	0.01%
Alstead - Police	7,553.3	4,067.2	11,620.5	0.01%
Alton - Emp/Fire/Pol	167,453.4	37,221.2	204,674.6	0.12%
Alton SD - Emp/Teach	150,321.9	48,878.8	199,200.8	0.11%
Amherst - Fire/Pol	135,245.2	72,824.3	208,069.5	0.10%
Amherst SD - Emp/Teach	480,777.8	182,071.7	662,849.5	0.34%
Andover - Police	3,736.3	2,011.8	5,748.1	0.00%
Andover SD - Emp/Teach	52,808.7	21,963.8	74,772.6	0.04%
Androscoggin Valley Reg Refuse	9,045.9	0.0	9,045.9	0.01%
Antrim - Emp/Pol	55,085.9	10,830.7	65,916.5	0.04%
Ashland - Emp/Pol	52,846.3	15,107.6	67,953.8	0.04%
Ashland Electric Dept - Emp	14,748.9	0.0	14,748.9	0.01%
Ashland SD - Emp/Teach	53,411.4	20,833.1	74,244.5	0.04%
Atkinson - Emp/Police	46,825.1	15,660.0	62,485.1	0.03%
Auburn - Emp/Fire/Pol	78,218.4	29,814.2	108,032.6	0.05%
Auburn SD - Emp/Teach	114,472.6	50,327.8	164,800.4	0.08%
Baker Free Library - Emp	6,124.8	0.0	6,124.8	0.00%
Barnstead - Emp/Fire/Pol	79,337.0	26,057.8	105,394.8	0.06%
Barnstead SD - Emp/Teach	121,998.0	41,372.6	163,370.6	0.09%
Barrington - Emp/Pol/Fire	122,448.6	30,520.5	152,969.1	0.09%
Barrington SD (SAU 74)	234,031.3	74,065.6	308,096.8	0.16%
Bartlett - Fire/Pol	20,912.2	11,260.4	32,172.6	0.01%
Bartlett SD - Emp/Teach	97,453.1	32,843.7	130,296.8	0.07%
Bath SD - Emp/Teach	16,647.4	6,663.9	23,311.3	0.01%
BCEP Solid Waste District	21,742.8	0.0	21,742.8	0.02%
Bedford - Emp/Fire/Pol	565,957.2	208,264.6	774,221.8	0.40%
Bedford SD (SAU 25)	648,147.9	258,924.2	907,072.0	0.46%
Belknap County - Emp/Pol	570,850.8	86,903.3	657,754.0	0.40%

Belknap County Conserv. Dist	3,183.6	0.0	3,183.6	0.00%
Belmont - Emp/Fire/Pol	231,463.1	84,831.8	316,294.9	0.16%
Bennington - Emp/Pol	25,482.4	6,540.8	32,023.2	0.02%
Berlin - Emp/Fire/Pol	465,008.6	147,377.9	612,386.5	0.33%
Berlin Housing Authority -Emp	10,899.5	0.0	10,899.5	0.01%
Berlin Water Works – Emp	46,846.3	0.0	46,846.3	0.03%
Bethlehem - Emp/Pol	28,861.7	9,358.0	38,219.7	0.02%
Bethlehem SD - Emp/Teach	55,035.1	21,369.8	76,404.9	0.04%
Boscawen - Emp/Pol	57,572.5	15,904.2	73,476.7	0.04%
Bow - Emp/Fire/Pol	202,711.2	55,530.8	258,242.0	0.14%
Bow SD - Emp/Teach	468,548.9	175,871.4	644,420.3	0.33%
Bradford – Police	10,129.7	5,454.4	15,584.1	0.01%
Brentwood - Emp/Fire/Pol	52,926.7	21,150.1	74,076.8	0.04%
Brentwood SD - Emp/Teach	71,729.5	35,234.3	106,963.7	0.05%
Bridgewater – Police	4,889.5	2,632.8	7,522.3	0.00%
Bristol - Emp/Fire/Pol	126,341.2	44,990.5	171,331.7	0.09%
Brookline - Emp/Fire/Pol	61,505.8	22,206.9	83,712.6	0.04%
Brookline Public Library Emp	3,044.7	0.0	3,044.7	0.00%
Brookline SD - Emp/Teachers	96,313.4	51,861.1	148,174.5	0.07%
Campton - Emp/Pol	29,378.9	12,084.8	41,463.6	0.02%
Campton SD - Emp/Teach	99,255.7	39,167.4	138,423.1	0.07%
Campton/Thornton Fire Dept	7,845.5	4,224.5	12,070.1	0.01%
Canaan - Emp/Pol	60,949.1	13,670.4	74,619.6	0.04%
Candia – Police	34,667.3	18,667.0	53,334.3	0.02%
Candia SD - Emp/Teach	91,004.3	40,665.6	131,669.9	0.06%
Canterbury - Emp/Pol	16,128.9	3,499.5	19,628.4	0.01%
Carroll - Emp/Fire/Pol	36,495.3	11,724.2	48,219.4	0.03%
Carroll County - Emp/Pol	486,261.6	88,565.4	574,827.0	0.34%
Center Harbor – Police	15,074.2	8,116.9	23,191.1	0.01%
Central Hooksett Water Prct	7,722.3	0.0	7,722.3	0.01%
Charlestown - Emp/Pol	69,791.7	10,586.9	80,378.6	0.05%
Cheshire County - Emp/Pol	653,746.6	82,379.3	736,125.8	0.46%
Chester - Emp/Fire/Pol	38,596.1	9,629.0	48,225.2	0.03%
Chester SD - Emp/Teach	117,647.2	47,827.7	165,474.9	0.08%
Chesterfield - Emp/Pol	58,698.5	11,868.3	70,566.7	0.04%
Chesterfield SD - Emp/Teach	70,509.9	37,966.8	108,476.7	0.05%
Chichester – Police	16,488.2	8,878.3	25,366.5	0.01%
Chichester SD - Emp/Teach	70,437.0	27,204.1	97,641.1	0.05%
Claremont - Emp/Fire/Pol	472,858.1	140,437.4	613,295.5	0.33%
Claremont SD - Emp/Teach	502,264.8	196,516.4	698,781.2	0.35%
Clarksville – Emp	2,023.7	0.0	2,023.7	0.00%
Cocheco Arts & Tech Acad	5,794.2	3,120.0	8,914.2	0.00%
Colebrook - Emp/Pol	56,271.6	11,197.2	67,468.8	0.04%

Colebrook SD – Teachers	71,881.9	38,705.6	110,587.5	0.05%
Concord - Emp/Fire/Pol	2,240,937.2	713,560.3	2,954,497.5	1.57%
Concord Reg Sol Waste Res	8,914.2	0.0	8,914.2	0.01%
Concord SD - Emp/Teach	1,320,975.8	496,541.2	1,817,517.1	0.93%
Contoocook Valley SD (SAU 01)	893,644.4	290,369.9	1,184,014.3	0.63%
Conway - Emp/Pol	260,937.7	59,229.4	320,167.1	0.18%
Conway SD - Emp/Teach	509,531.2	178,414.2	687,945.4	0.36%
Conway Village Fire District	46,060.4	12,554.2	58,614.6	0.03%
Coos County - Emp/Pol	316,743.9	52,370.2	369,114.1	0.22%
Coos County Nursing Home – Emp	136,230.8	0.0	136,230.8	0.10%
Cornish – Emp	7,414.3	0.0	7,414.3	0.01%
Cornish SD - Emp/Teach	33,986.9	12,000.1	45,987.0	0.02%
Croydon SD - Emp/Teach	3,390.0	1,251.7	4,641.7	0.00%
Danville – Pol	17,981.6	9,682.4	27,664.0	0.01%
Deerfield - Emp/Pol	69,393.0	18,065.5	87,458.5	0.05%
Deerfield SD – Teachers	116,417.4	62,686.3	179,103.7	0.08%
Deering – Police	8,394.6	4,520.2	12,914.7	0.01%
Derry - Emp/Fire/Pol	1,732,192.3	688,109.2	2,420,301.4	1.22%
Derry Housing Authority Emp	6,051.9	0.0	6,051.9	0.00%
Dorchester – Emp	3,082.2	0.0	3,082.2	0.00%
Dover - Emp/Fire/Pol	1,332,274.1	455,292.3	1,787,566.4	0.94%
Dover Housing Authority	58,155.4	0.0	58,155.4	0.04%
Dover SD - Emp/Teach	852,252.1	341,670.4	1,193,922.5	0.60%
Dresden SD - Emp/Teach	267,972.8	69,726.5	337,699.3	0.19%
Dublin - Emp/Pol	37,019.4	8,264.2	45,283.6	0.03%
Dunbarton - Emp/Pol	24,928.0	7,039.5	31,967.5	0.02%
Dunbarton SD - Teachers	31,280.8	16,843.5	48,124.3	0.02%
Durham - Emp/Fire/Pol	485,142.2	185,874.2	671,016.3	0.34%
E. Kingston - Emp/Pol/fire	32,330.2	12,929.7	45,259.9	0.02%
E. Kingston SD - Emp/Teach	38,982.3	18,709.5	57,691.8	0.03%
Effingham – Pol	4,609.6	2,482.1	7,091.7	0.00%
Eidelweiss Village District E	5,422.5	0.0	5,422.5	0.00%
Enfield - Emp/Pol	103,343.4	17,484.7	120,828.1	0.07%
Epping - Emp/Fire/Pol	114,621.0	38,730.3	153,351.4	0.08%
Epping SD - Emp/Teach	274,338.0	109,205.4	383,543.4	0.19%
Epsom - Emp/Fire/Pol	56,825.6	22,603.3	79,428.9	0.04%
Epsom SD - Teachers	68,447.6	36,856.4	105,304.1	0.05%
Errol SD - Teachers	4,389.1	2,363.4	6,752.4	0.00%
Exeter - Emp/Fire/Pol	589,252.8	211,699.0	800,951.8	0.41%
Exeter Reg Coop SD - Emp/Tch	929,949.7	321,306.0	1,251,255.7	0.65%
Exeter SD - Emp/Teach	271,586.1	108,100.2	379,686.2	0.19%
Fall Mountain Reg SD (SAU 60)	442,768.2	150,417.1	593,185.3	0.31%

Farmington - Fire/Pol	68,738.7	37,013.2	105,751.9	0.05%
Farmington SD - Emp/Teach	298,641.0	101,212.9	399,853.9	0.21%
Fitzwilliam - Emp/Pol	32,153.3	7,273.3	39,426.6	0.02%
Francestown - Emp/Pol	14,186.5	2,384.1	16,570.6	0.01%
Franconia - Police	15,455.3	8,322.1	23,777.4	0.01%
Franklin - Emp/Fire/Pol	308,653.1	100,514.6	409,167.7	0.22%
Franklin Career Academy	2,688.2	1,447.5	4,135.7	0.00%
Franklin SD - Emp/Teach	232,340.9	93,250.0	325,590.9	0.16%
Freedom - Police	9,886.7	5,323.6	15,210.3	0.01%
Freedom SD - Emp/Teach	26,706.8	10,533.3	37,240.1	0.02%
Fremont - Police	13,208.8	7,112.4	20,321.2	0.01%
Fremont SD - Emp/Teach	103,947.1	47,702.4	151,649.5	0.07%
Gilford - Emp/Fire/Pol	318,545.5	113,984.8	432,530.3	0.22%
Gilford SD (SAU 73)	480,997.2	158,515.6	639,512.8	0.34%
Gilmanton - Emp/Fire/Pol	70,516.7	24,799.1	95,315.8	0.05%
Gilmanton SD (SAU 79)	113,266.2	35,975.5	149,241.6	0.08%
Goffstown - Emp/Fire/Pol	512,562.0	151,611.6	664,173.6	0.36%
Goffstown SD - Emp/Teach	567,584.5	244,973.9	812,558.4	0.40%
Goffstown Village Water Prct	4,328.4	0.0	4,328.4	0.00%
Gorham - Emp/Fire/Pol	123,980.6	21,780.0	145,760.6	0.09%
Goshen - Emp/Pol	7,389.3	1,776.0	9,165.3	0.01%
Goshen-Lempster SD (SAU 71)	47,860.9	14,857.0	62,717.9	0.03%
Gov Wentworth Reg Coop SD	721,404.7	257,174.7	978,579.4	0.51%
Grafton - Emp/Pol	6,708.4	1,878.0	8,586.4	0.00%
Grafton County - Emp/Pol	688,759.7	82,948.4	771,708.1	0.48%
Grantham - Emp/Pol	40,999.4	9,664.8	50,664.1	0.03%
Greenfield - Emp/Pol	25,746.9	5,262.5	31,009.3	0.02%
Greenland - Emp/Pol	51,845.1	23,118.7	74,963.8	0.04%
Greenland SD - Emp/Teach	83,943.4	37,375.6	121,319.0	0.06%
Greenville - Emp/Pol	26,593.9	7,623.8	34,217.7	0.02%
Groton - Emp/Pol	6,307.1	2,221.8	8,528.9	0.00%
GRS Coop SD - Emp/Teach	119,318.8	51,310.2	170,629.0	0.08%
Hampstead - Emp/Fire/Pol	90,566.7	32,085.1	122,651.8	0.06%
Hampstead SD - Emp/Teach	275,959.9	115,216.2	391,176.1	0.19%
Hampton - Emp/Fire/Pol	970,759.4	365,738.0	1,336,497.4	0.68%
Hampton Falls - Emp/Fire/Pol	45,849.8	17,536.0	63,385.9	0.03%
Hampton Falls SD - Emp/Teach	87,845.6	34,918.3	122,764.0	0.06%
Hampton SD - Emp/Teach	364,934.8	159,942.1	524,876.9	0.26%
Hancock – Police	13,654.0	7,352.2	21,006.1	0.01%
Hanover - Emp/Fire/Pol	596,528.6	166,188.1	762,716.7	0.42%
Hanover SD - Emp/Teach	155,578.0	62,112.1	217,690.2	0.11%
Harrisville – Police	4,225.5	2,275.3	6,500.8	0.00%
Harrisville SD - Emp/Teach	18,336.1	7,503.0	25,839.1	0.01%

Haverhill - Emp/Pol	58,945.3	17,639.3	76,584.6	0.04%
Haverhill Coop SD - Emp/Teach	215,709.4	78,001.6	293,711.0	0.15%
Hebron - Emp/Pol	6,057.2	2,078.1	8,135.3	0.00%
Henniker - Emp/Fire/Pol	121,679.4	28,127.2	149,806.5	0.09%
Henniker SD - Emp/Teach	110,789.0	49,379.2	160,168.2	0.08%
Hill SD – Teachers	10,245.1	5,516.6	15,761.6	0.01%
Hillsboro-Deering SD	298,556.7	131,183.2	429,739.9	0.21%
Hillsborough - Emp/Fire/Pol	81,251.1	43,750.6	125,001.7	0.06%
Hillsborough County - Emp/Pol	1,708,658.5	330,646.9	2,039,305.4	1.20%
Hinsdale - Emp/Pol	64,938.3	16,558.3	81,496.5	0.05%
Hinsdale SD - Emp/Teach	142,006.6	58,121.2	200,127.8	0.10%
Holderness - Emp/Fire/Pol	50,415.1	17,396.0	67,811.1	0.04%
Holderness SD - Emp/Teach	71,512.2	27,789.2	99,301.3	0.05%
Hollis - Emp/Fire/Pol	246,938.1	71,839.8	318,777.9	0.17%
Hollis SD - Emp/Teach	187,600.0	84,070.9	271,670.9	0.13%
Hollis-Brookline Coop SD	294,772.4	134,535.4	429,307.8	0.21%
Hooksett - Emp/Fire/Police	533,267.3	213,782.5	747,049.9	0.37%
Hooksett Public Library - Emp	9,034.8	0.0	9,034.8	0.01%
Hooksett SD - Emp/Teach	271,611.9	108,973.2	380,585.1	0.19%
Hooksett Sewer Commission	11,825.9	0.0	11,825.9	0.01%
Hooksett Village Water Prct	7,913.1	0.0	7,913.1	0.01%
Hopkinton - Emp/Fire/Pol	144,131.1	40,441.1	184,572.2	0.10%
Hopkinton SD - Emp/Teach	317,421.0	121,548.9	438,969.9	0.22%
Hudson - Emp/Fire/Pol	946,302.1	356,811.3	1,303,113.4	0.67%
Hudson SD - Emp/Teach	736,766.9	296,229.7	1,032,996.6	0.52%
Inter-Lakes SD	377,628.5	124,788.3	502,416.7	0.27%
Jackson - Emp/Pol	23,619.0	5,101.3	28,720.4	0.02%
Jackson SD - Emp/Teach	12,242.3	4,183.4	16,425.7	0.01%
Jaffrey - Emp/Fire/Pol	150,973.9	39,212.8	190,186.7	0.11%
Jaffrey-Rindge Coop (SAU 47)	447,801.6	164,126.3	611,927.8	0.31%
John Stark Reg SD - Emp/Teach	233,926.2	89,320.9	323,247.1	0.16%
Kearsarge Reg Coop SD	506,025.1	206,625.6	712,650.6	0.36%
Keene - Emp/Fire/Pol	1,230,306.7	370,615.4	1,600,922.0	0.86%
Keene SD - Emp/Teach	958,827.0	357,827.8	1,316,654.8	0.67%
Kensington – Police	20,981.6	11,297.8	32,279.4	0.01%
Kensington SD - Emp/Teach	40,443.1	20,442.1	60,885.2	0.03%
Kingston - Emp/Fire/Pol	101,979.8	36,006.4	137,986.2	0.07%
Laconia - Emp/Fire/Pol	740,812.7	279,860.6	1,020,673.3	0.52%
Laconia Housing & Redevel	35,972.2	0.0	35,972.2	0.03%
Laconia SD (SAU 30)	709,257.3	257,909.8	967,167.1	0.50%
Laconia Water Works – Emp	43,651.0	0.0	43,651.0	0.03%
Lafayette Reg Coop SD	41,076.2	14,590.7	55,666.9	0.03%

Lakes Region Mutual Fire Aid	34,210.6	10,643.2	44,853.8	0.02%
Lakes Region Planning Com	15,089.6	0.0	15,089.6	0.01%
Lancaster - Emp/Fire/Pol	89,737.3	23,545.4	113,282.6	0.06%
Landaff SD – Teachers	1,715.0	923.4	2,638.4	0.00%
Langdon – Police	3,707.4	1,996.3	5,703.7	0.00%
Lebanon - Emp/Fire/Pol	835,220.5	250,646.0	1,085,866.4	0.59%
Lebanon SD (SAU 88)	679,466.2	249,332.9	928,799.1	0.48%
Lee - Emp/Fire/Pol	72,759.9	22,834.0	95,594.0	0.05%
Lempster - Emp/Pol	9,918.0	1,683.3	11,601.3	0.01%
Lincoln - Emp/Pol	80,077.5	17,969.8	98,047.3	0.06%
Lincoln-Woodstock SD (SAU 68)	125,654.1	47,458.2	173,112.3	0.09%
Lisbon – Police	20,630.4	11,108.7	31,739.1	0.01%
Lisbon Reg SD - Emp/Teach	85,195.4	36,021.9	121,217.4	0.06%
Litchfield - Emp/Fire/Pol	98,576.1	39,120.8	137,696.9	0.07%
Litchfield SD - Emp/Teach	345,454.5	137,161.1	482,615.6	0.24%
Littleton - Emp/Fire/Pol	185,909.5	63,880.7	249,790.3	0.13%
Littleton Public Library – Emp	7,254.0	0.0	7,254.0	0.01%
Littleton SD - Emp/Teach	286,892.4	106,775.5	393,667.8	0.20%
Littleton Water & Light Dept	56,970.6	0.0	56,970.6	0.04%
Londonderry - Emp/Fire/Pol	1,198,973.6	498,697.8	1,697,671.4	0.84%
Londonderry SD (SAU 12)	1,242,950.7	505,621.8	1,748,572.5	0.87%
Loudon - Emp/Fire/Pol	74,623.2	26,106.7	100,729.9	0.05%
Lyme - Emp/Pol	42,060.5	5,250.7	47,311.3	0.03%
Lyme SD (SAU 76) - Emp/Teach	43,831.5	19,771.7	63,603.3	0.03%
Lyndeborough – Police	9,527.5	5,130.2	14,657.6	0.01%
Lyndeborough SD – Teach	14,467.5	7,790.2	22,257.7	0.01%
Madbury-Police	2,419.2	1,302.6	3,721.8	0.00%
Madison - Emp/Pol	38,127.7	6,849.7	44,977.4	0.03%
Madison SD - Emp/Teach	46,693.7	17,627.8	64,321.5	0.03%
Manchester - Fire/Pol	3,641,221.7	1,960,657.8	5,601,879.5	2.56%
Manchester SD (SAU 37)	2,897,321.7	1,474,475.2	4,371,796.9	2.04%
Marlborough - Emp/Pol	28,178.9	7,170.8	35,349.6	0.02%
Marlborough SD - Emp/Teach	45,524.4	20,088.6	65,612.9	0.03%
Marlow – Emp	7,105.5	0.0	7,105.5	0.00%
Marlow SD - Emp/Teach	10,522.2	4,671.5	15,193.7	0.01%
Mascenic Reg SD - Emp/Teach	245,356.4	111,203.0	356,559.4	0.17%
Mascoma Valley SD (SAU 62)	348,265.6	123,442.6	471,708.1	0.24%
Mason – Police	13,535.1	7,288.1	20,823.3	0.01%
Meredith - Emp/Fire/Pol	269,334.2	45,455.4	314,789.6	0.19%
Meriden Village Water District	2,664.8	0.0	2,664.8	0.00%
Merrimack - Emp/Fire/Pol	938,829.4	327,117.4	1,265,946.9	0.66%
Merrimack County - Emp/Pol	1,569,989.8	249,528.2	1,819,518.0	1.10%

Merrimack SD (SAU 26)	1,202,598.7	418,019.5	1,620,618.2	0.85%
Merrimack Valley SD	564,176.2	227,706.9	791,883.1	0.40%
Merrimack Village District	34,483.7	0.0	34,483.7	0.02%
Middleton – Police	15,060.9	8,109.7	23,170.6	0.01%
Milan SD - Emp/Teach	20,041.7	8,898.6	28,940.2	0.01%
Milford - Emp/Fire/Pol	394,060.9	86,137.0	480,197.9	0.28%
Milford Area Comm Ctr	16,577.7	0.0	16,577.7	0.01%
Milford SD (SAU 40)	630,109.3	236,513.2	866,622.5	0.44%
Milton - Emp/Fire/Pol	63,199.1	18,821.3	82,020.4	0.04%
Milton SD - Emp/Teach	156,447.4	54,832.5	211,279.9	0.11%
Monadnock Reg SD - Emp/Teach	633,251.1	210,259.9	843,510.9	0.45%
Monroe – Emp	4,636.9	0.0	4,636.9	0.00%
Monroe SD (SAU 77) - Emp/Tch	24,780.8	6,781.6	31,562.4	0.02%
Mont Vernon – Emp/Pol	25,869.2	7,029.2	32,898.3	0.02%
Mont Vernon SD - Emp/Teach	46,424.8	20,448.4	66,873.2	0.03%
Moultonborough - Emp/Fire/Pol	163,289.1	38,212.0	201,501.1	0.11%
Moultonborough SD - Emp/Teach	266,255.2	94,838.4	361,093.6	0.19%
Nashua - Emp/Fire/Pol	3,637,991.9	1,541,505.0	5,179,497.0	2.56%
Nashua Airport Authority – Emp	13,642.5	0.0	13,642.5	0.01%
Nashua Housing Authority	43,181.3	0.0	43,181.3	0.03%
NE Interstate Water Pol Cntrl	8,788.0	0.0	8,788.0	0.01%
Nelson – Emp	5,453.1	0.0	5,453.1	0.00%
Nelson SD - Teachers	8,047.9	4,333.5	12,381.4	0.01%
New Boston - Police	23,828.5	12,830.7	36,659.2	0.02%
New Boston SD - Emp/Teach	106,026.0	38,552.2	144,578.2	0.07%
New Castle - Emp/Fire/Pol	41,263.2	15,725.2	56,988.4	0.03%
New Castle SD - Emp/Teach	15,619.8	8,337.6	23,957.3	0.01%
New Durham – Emp/Pol	62,882.2	11,399.2	74,281.5	0.04%
New Hampton - Emp/Pol/Fire	46,790.4	13,575.5	60,365.9	0.03%
New Ipswich – Emp/Pol	47,122.1	12,479.4	59,601.5	0.03%
New London – Emp/Fire/Pol	142,568.3	28,030.6	170,598.9	0.10%
New London-Spfld Wtr Sys	8,146.9	0.0	8,146.9	0.01%
Newbury – Police	17,843.2	9,607.9	27,451.1	0.01%
Newfields – Emp/Pol	22,790.8	9,951.2	32,741.9	0.02%
Newfields SD - Teachers	28,496.3	15,344.1	43,840.4	0.02%
Newfound Area SD - Emp/Teach	474,792.6	144,581.1	619,373.6	0.33%
Newington – Emp/Fire/Pol	164,525.3	80,010.5	244,535.7	0.12%
Newington SD - Emp/Teach	17,319.2	6,827.2	24,146.4	0.01%
Newmarket – Emp/Pol	174,723.6	32,544.6	207,268.2	0.12%
Newmarket SD (SAU 31)	317,600.0	111,078.1	428,678.1	0.22%
Newport - Emp/Fire/Pol	228,126.7	58,528.2	286,654.9	0.16%

Newport SD - Emp/Teach	270,310.5	103,942.8	374,253.3	0.19%
Newton - Emp/Pol	39,490.3	14,351.1	53,841.4	0.03%
NH Community Devel Fin	18,137.7	0.0	18,137.7	0.01%
NH Equestrian Academy	1,127.4	607.1	1,734.5	0.00%
NH Land/Community Heritage	2,675.4	0.0	2,675.4	0.00%
NH Muni Bond Bank Emp	7,519.7	0.0	7,519.7	0.01%
No. Conway Wtr Prct&Fire	47,507.8	7,575.6	55,083.4	0.03%
No. Country Education Svc	37,082.8	13,533.4	50,616.2	0.03%
No. Hampton - Emp/Fire/Pol	216,038.6	98,344.7	314,383.2	0.15%
No. Hampton SD - Emp/Teach	147,563.7	63,108.5	210,672.2	0.10%
Northfield - Emp/Pol	74,845.5	22,314.3	97,159.8	0.05%
Northumberland - Emp/Pol	51,411.8	9,352.1	60,763.9	0.04%
Northumberland SD - Emp/Tch	105,983.3	45,035.9	151,019.2	0.07%
Northwood - Emp/Fire/Pol	56,325.0	24,123.8	80,448.8	0.04%
Northwood SD (SAU 44)	85,572.0	36,256.7	121,828.7	0.06%
Nottingham - Fire/Pol	40,192.7	21,642.2	61,834.9	0.03%
Nottingham SD (SAU 44)	88,489.7	39,039.6	127,529.2	0.06%
Orford - Emp/Pol	16,232.2	4,232.3	20,464.5	0.01%
Ossipee - Emp/Pol	108,040.2	19,964.5	128,004.7	0.08%
Oyster River Coop SD	676,252.3	244,294.5	920,546.8	0.48%
Pease Development Authority	134,492.6	0.0	134,492.6	0.09%
Pelham - Emp/ Fire/Pol	324,261.1	151,499.5	475,760.6	0.23%
Pelham SD - Emp/Teach	359,318.5	153,679.5	512,998.1	0.25%
Pembroke - Emp/Pol	114,621.3	28,724.2	143,345.5	0.08%
Pembroke SD - Emp/Teach	371,240.3	164,560.0	535,800.3	0.26%
Pemi Baker Coop - Emp/Teach	258,445.3	94,318.1	352,763.4	0.18%
Penacook Boscawen Water Prct	8,198.9	0.0	8,198.9	0.01%
Peterborough - Emp/Fire/Pol	206,174.3	37,801.9	243,976.2	0.14%
Piermont SD- Emp/Teach	18,542.6	6,056.6	24,599.1	0.01%
Pittsburg - Emp/Pol	12,837.4	2,793.5	15,630.9	0.01%
Pittsburg SD - Emp/Teach	39,564.8	18,763.6	58,328.4	0.03%
Pittsfield - Emp/Fire/Pol	73,606.4	20,681.9	94,288.3	0.05%
Pittsfield SD - Emp/Teach	201,243.5	62,255.1	263,498.6	0.14%
Plainfield - Emp/Pol	34,232.5	7,376.9	41,609.4	0.02%
Plainfield SD (SAU 32)	65,910.5	29,979.1	95,889.6	0.05%
Plaistow - Emp/Fire/Pol	194,027.6	65,317.6	259,345.2	0.14%
Plaistow Public Library - Emp	6,730.8	0.0	6,730.8	0.00%
Plymouth - Emp/Fire/Pol	203,532.8	63,331.5	266,864.3	0.14%
Plymouth Court Jurisdictional	3,370.8	0.0	3,370.8	0.00%
Plymouth SD - Emp/Teach	145,720.1	55,497.0	201,217.1	0.10%
Plymouth Village Water & Sewer	28,687.1	0.0	28,687.1	0.02%

Portsmouth - Emp/Fire/Pol	1,754,431.4	573,499.2	2,327,930.6	1.23%
Portsmouth Housing Authority	81,403.6	0.0	81,403.6	0.06%
Portsmouth SD (SAU 52)	894,655.8	321,528.1	1,216,183.8	0.63%
Portsmouth-Josie F. Prescott	3,931.3	0.0	3,931.3	0.00%
Profile Coop SD - Emp/Teach	98,823.2	36,573.2	135,396.3	0.07%
Prospect Mountain High School	135,368.2	49,085.7	184,453.9	0.10%
Raymond - Emp/Fire/Pol	215,331.6	58,763.1	274,094.6	0.15%
Raymond SD - Emp/Teach	334,639.9	142,318.3	476,958.2	0.24%
Rindge - Emp/Fire/Pol	95,320.0	27,090.8	122,410.8	0.07%
Rivendell Interstate SD-SAU 78	48,458.7	26,093.1	74,551.8	0.03%
Rochester - Emp/Fire/Pol	977,289.7	320,865.1	1,298,154.8	0.69%
Rockingham County-Emp/Pol/Fire	1,578,524.7	286,768.8	1,865,293.5	1.11%
Rockingham Planning Comm – Emp	15,638.1	0.0	15,638.1	0.01%
Rollinsford – Police	19,718.6	10,617.7	30,336.4	0.01%
Rollinsford SD - Emp/Teach	49,130.5	16,266.4	65,396.8	0.03%
Rumney - Emp/Pol	17,057.8	3,481.7	20,539.5	0.01%
Rumney SD – Teachers	28,127.7	15,145.7	43,273.4	0.02%
Rye - Emp/Fire/Pol	209,826.4	73,990.3	283,816.7	0.15%
Rye SD - Emp/Teach	158,600.7	68,701.0	227,301.7	0.11%
Rye Water District - Emp	11,607.7	0.0	11,607.7	0.01%
Salem - Emp/Fire/Pol	1,523,502.2	606,804.4	2,130,306.7	1.07%
Salem Housing Auth – Emp	17,394.1	0.0	17,394.1	0.01%
Salem SD - Emp/Teach	1,052,216.2	462,707.1	1,514,923.3	0.74%
Salisbury – Emp	2,595.8	0.0	2,595.8	0.00%
Sanborn Reg Coop SD (SAU 17)	523,362.4	193,711.8	717,074.1	0.37%
Sanbornton - Emp/Fire/Pol	57,703.0	14,076.5	71,779.6	0.04%
Sanbornton Public Library	2,610.2	0.0	2,610.2	0.00%
Sandown - Emp/Fire/Pol	56,977.9	18,296.6	75,274.5	0.04%
Sandwich – Police	9,383.2	5,052.5	14,435.7	0.01%
SAU 02 – Emp	33,871.1	0.0	33,871.1	0.02%
SAU 03 - Emp/Teach	342,206.1	143,371.0	485,577.1	0.24%
SAU 06 – Emp	51,512.3	0.0	51,512.3	0.04%
SAU 07 - Emp/Teach	19,090.5	557.2	19,647.7	0.01%
SAU 09 - Emp/Teach	43,353.7	785.5	44,139.2	0.03%
SAU 10 (Derry Coop SD)	931,315.4	380,446.5	1,311,761.9	0.65%
SAU 13 – Emp	18,713.0	0.0	18,713.0	0.01%
SAU 15 - Emp/Teach	38,137.4	2,816.4	40,953.8	0.03%
SAU 16 - Emp/Teach	76,745.3	3,755.9	80,501.1	0.05%
SAU 18 - Emp/Teach	50,502.3	9,888.0	60,390.3	0.04%
SAU 19 - Emp/Teach	59,048.7	3,726.6	62,775.4	0.04%
SAU 20 – Emp	23,407.9	0.0	23,407.9	0.02%

SAU 21 – Emp	47,937.5	0.0	47,937.5	0.03%
SAU 21 Federal - Emp/Teach	20,318.1	6,552.5	26,870.6	0.01%
SAU 23 - Emp/Teach	47,944.4	7,687.8	55,632.1	0.03%
SAU 24 - Emp/Teach	52,449.6	3,218.8	55,668.5	0.04%
SAU 28 – Emp	44,893.9	0.0	44,893.9	0.03%
SAU 29 - Emp/Teach	88,668.2	2,835.1	91,503.3	0.06%
SAU 33 – EMP	22,176.7	0.0	22,176.7	0.02%
SAU 34 – Emp	35,941.3	0.0	35,941.3	0.03%
SAU 35 - Emp/Teach	49,615.2	5,651.0	55,266.3	0.03%
SAU 38 - Emp/Teach	115,730.2	17,890.6	133,620.8	0.08%
SAU 39 – Emp	70,618.2	0.0	70,618.2	0.05%
SAU 41 – Emp	46,641.1	0.0	46,641.1	0.03%
SAU 42 (Nashua SD)	2,588,166.0	993,299.7	3,581,465.7	1.82%
SAU 43 - Emp/Teach	42,055.7	1,820.8	43,876.5	0.03%
SAU 44 - Emp/Teach	47,485.5	5,759.1	53,244.6	0.03%
SAU 46 – Emp	33,266.1	0.0	33,266.1	0.02%
SAU 48 - Emp/Teach	55,427.2	884.6	56,311.7	0.04%
SAU 50 - Emp/Teach	40,936.5	3,024.5	43,961.0	0.03%
SAU 51 - Emp/Teach	16,776.2	967.1	17,743.3	0.01%
SAU 53 - Emp/Teach	94,428.4	21,462.5	115,890.9	0.07%
SAU 54 (Rochester SD)	1,062,014.9	437,884.8	1,499,899.8	0.75%
SAU 55 – Emp	54,297.0	0.0	54,297.0	0.04%
SAU 56 - Emp/Teach	40,271.1	1,864.0	42,135.1	0.03%
SAU 57 – EMP	15,558.2	0.0	15,558.2	0.01%
SAU 58 – Emp	8,652.0	0.0	8,652.0	0.01%
SAU 63 - Emp/Teach	47,114.1	3,061.5	50,175.6	0.03%
SAU 64 - Emp/Teach	37,804.6	4,322.0	42,126.6	0.03%
SAU 67 – Emp	17,998.8	0.0	17,998.8	0.01%
SAU 70 – Emp	37,326.5	0.0	37,326.5	0.03%
SAU 75 (Grantham SD)	41,340.8	18,358.3	59,699.1	0.03%
Seabrook - Fire/Pol	414,258.8	223,062.5	637,321.3	0.29%
Seabrook SD - Emp/Teach	210,425.2	92,635.9	303,061.1	0.15%
Seacoast Charter Sch- Teach	6,450.1	3,473.1	9,923.2	0.00%
Shaker Regional SD (SAU 80)	357,066.5	145,768.8	502,835.3	0.25%
Shelburne – Emp	5,280.0	0.0	5,280.0	0.00%
Somersworth - Emp/Fire/Pol	373,257.7	129,602.1	502,859.7	0.26%
Somersworth Housing Auth	25,746.2	0.0	25,746.2	0.02%
Somersworth SD - Emp/Teach	406,589.9	146,645.9	553,235.8	0.29%
Souhegan Coop SD - Emp/Teach	333,822.2	127,102.4	460,924.6	0.23%
South Hampton – Police	6,123.7	3,297.4	9,421.1	0.00%
South Hampton SD - Emp/Teach	19,165.6	9,263.0	28,428.6	0.01%
Southern NH Planning Comm	31,981.3	0.0	31,981.3	0.02%

Springfield - Emp/Pol	11,356.9	3,198.9	14,555.8	0.01%
Stark – Emp	4,285.4	0.0	4,285.4	0.00%
Stark SD - Emp/Teach	6,915.5	2,780.1	9,695.6	0.00%
State of New Hampshire	**42,038,019.8**	**0.0**	**42,038,019.8**	**29.54%**
Stewartstown – Emp	2,434.7	0.0	2,434.7	0.00%
Stewartstown SD - Teachers	12,449.7	6,703.7	19,153.3	0.01%
Stoddard SD - Emp/Teach	9,550.6	3,821.7	13,372.3	0.01%
Strafford – Police	15,197.4	8,183.2	23,380.6	0.01%
Strafford County - Emp/Pol	1,109,038.3	204,317.7	1,313,356.0	0.78%
Strafford SD (SAU 44)	119,328.2	42,921.1	162,249.3	0.08%
Stratford – Emp	3,533.5	0.0	3,533.5	0.00%
Stratford SD - Emp/Teach	46,776.9	19,335.6	66,112.5	0.03%
Stratham - Emp/Pol	123,517.8	31,013.3	154,531.1	0.09%
Stratham SD - Emp/Teach	152,436.5	68,526.1	220,962.6	0.11%
Sugar Hill - Emp/Pol	13,051.2	3,653.0	16,704.2	0.01%
Sullivan County - Emp/Pol	523,956.1	61,363.5	585,319.5	0.37%
Sunapee - Emp/Pol	101,493.2	14,887.1	116,380.2	0.07%
Sunapee SD - Emp/Teach	163,884.6	60,742.4	224,627.0	0.12%
Sutton – Police	13,597.9	7,322.0	20,919.9	0.01%
Swanzey – Police	47,516.4	25,585.8	73,102.2	0.03%
SWNH District Fire Mutual Aid	50,010.7	4,815.5	54,826.3	0.04%
Tamworth - Emp/Fire/Pol	32,779.2	10,941.6	43,720.7	0.02%
Tamworth SD - Emp/Teach	82,305.6	32,243.9	114,549.4	0.06%
Thornton - Emp/Pol	39,982.7	9,558.7	49,541.3	0.03%
Thornton SD - Emp/Teach	57,993.5	19,592.8	77,586.2	0.04%
Tilton - Emp/Pol	116,986.9	45,209.1	162,195.9	0.08%
Tilton-Northfield Fire Dist	89,438.1	46,986.3	136,424.5	0.06%
Timberlane Reg SD	1,213,837.6	454,524.3	1,668,361.8	0.85%
Troy - Emp/Pol	40,361.4	9,345.1	49,706.5	0.03%
Tuftonboro - Emp/Fire/Pol	37,620.0	14,962.8	52,582.8	0.03%
Unity – Emp	6,163.3	0.0	6,163.3	0.00%
Unity SD - Emp/Teach	20,567.0	7,935.4	28,502.4	0.01%
Wakefield - Emp/Fire/Pol	101,160.6	27,473.4	128,633.9	0.07%
Wakefield SD - Emp/Teach	110,435.6	42,096.1	152,531.7	0.08%
Walpole - Emp/Pol	46,938.2	6,784.5	53,722.6	0.03%
Warner - Emp/Pol	48,855.3	8,723.3	57,578.6	0.03%
Warner Village Water District	4,978.8	0.0	4,978.8	0.00%
Warren SD - Emp/Teach	21,490.5	8,185.7	29,676.2	0.02%
Washington - Emp/Pol	16,801.4	2,765.9	19,567.2	0.01%
Washington SD - Emp/Teach	10,846.6	4,709.4	15,556.0	0.01%
Waterville Estates Village Dis	5,636.5	0.0	5,636.5	0.00%
Waterville Valley Emp/Fire/Pol	77,617.2	15,213.0	92,830.2	0.05%
Waterville Valley SD - Emp/Tea	10,498.9	4,883.9	15,382.8	0.01%

Weare - Emp/Pol	115,355.5	35,367.7	150,723.1	0.08%
Weare SD – Teach	161,050.6	86,719.6	247,770.1	0.11%
Webster - Emp/Pol	15,882.2	6,526.2	22,408.4	0.01%
Weeks Public Library	4,176.0	0.0	4,176.0	0.00%
Wentworth SD – Teach	13,823.0	7,443.2	21,266.2	0.01%
West Ossipee Fire Precinct	7,951.6	4,281.6	12,233.3	0.01%
Westmoreland – Emp	7,615.3	0.0	7,615.3	0.01%
Westmoreland SD - Emp/Teach	28,207.2	11,627.1	39,834.3	0.02%
White Mtn Reg SD - Emp/Teach	347,648.9	120,362.4	468,011.3	0.24%
Whitefield - Emp/Pol	38,626.8	9,093.8	47,720.6	0.03%
Wilmot - Emp/Pol	15,251.7	2,345.6	17,597.3	0.01%
Wilton – Pol	29,066.0	15,650.9	44,716.9	0.02%
Wilton SD - Emp/Teach	46,255.2	21,562.6	67,817.8	0.03%
Wilton-Lyndeborough Coop SD	88,173.6	40,789.0	128,962.6	0.06%
Winchester - Emp/Pol	71,546.0	15,196.6	86,742.6	0.05%
Winchester SD - Emp/Teach	96,322.1	38,254.6	134,576.7	0.07%
Windham - Emp/Fire/Pol	488,270.5	182,421.6	670,692.1	0.34%
Windham SD - Emp/Teach	344,478.8	149,517.3	493,996.1	0.24%
Winnacunnet Coop SD	386,214.6	147,055.2	533,269.7	0.27%
Winnisquam Reg Coop SD	399,617.1	149,050.4	548,667.6	0.28%
Wolfeboro - Emp/Fire/Pol	286,460.4	74,900.4	361,360.8	0.20%
Woodstock - Emp/Pol	39,817.6	13,706.5	53,524.1	0.03%
Woodsville Fire District	14,822.4	0.0	14,822.4	0.01%
Woodsville Water & Light Dept	25,260.9	0.0	25,260.9	0.02%
Total Employer Contributions	**142,292,086.2**	**35,061,591.3**	**177,353,677.6**	**100.0000%**

* Employer contributions are based on receivable amounts submitted by employers. The contributions reported do not necessarily agree with actual payments made by employers nor do they agree with contributions accrued on NHRS' general ledger books.

** Amounts in column E represent allocated amounts for the 35% share of political subdivision employer contributions that are paid by the State of NH.

Appendix III

Executive Summary of GRS Valuation as of June 30, 2007

SECTION A
EXECUTIVE SUMMARY

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II.C

Executive Summary

Covered Group	Employees	Teachers	Police	Fire	Total
A. Number of Participants as of June 30, 2007					
Actives	26,474	18,477	4,263	1,588	50,802
Retirees, Disabilities, and Beneficiaries	10,859	6,928	2,293	1,168	21,248
Vested Terminations	528	480	38	3	1,049
Total	37,861	25,885	6,594	2,759	73,099
Total Covered Annual Payroll	$942,318,644	$922,308,092	$233,348,112	$97,364,534	$2,195,339,382
Long Range Cost					
B. Actuarial Present Value of Projected Benefits	$3,107,149,385	$3,584,708,122	$1,679,870,123	$881,740,692	$9,253,468,322
C. Actuarial Present Value of Future Normal Costs	775,603,118	655,295,445	335,300,229	209,494,508	1,975,693,300
D. Actuarial Accrued Liability (AAL): B – C	2,331,546,267	2,929,412,677	1,344,569,894	672,246,184	7,277,775,022
E. Valuation Assets	1,476,474,795	1,841,418,900	872,425,768	421,936,852	4,612,256,315
F. Unfunded Actuarial Accrued Liability (UAAL): D – E	855,071,472	1,087,993,777	472,144,126	250,309,332	2,665,518,707
G. Funded Status	63.3%	62.9%	64.9%	62.8%	63.4%
Current Cost					
H. Total Normal Cost (% of Covered Payroll)	9.80%	8.78%	18.05%	20.86%	10.77%
I. Member Contributions (% of Payroll)	5.00%	5.00%	9.30%	9.30%	5.66%
J Employer Normal Cost (% of Payroll)	4.80%	3.78%	8.75%	11.56%	5.11%
K. UAAL Contribution (% of Payroll)	4.86%	6.32%	10.76%	13.57%	6.49%
L. Total Employer Contribution (% of Payroll)	9.66%	10.10%	19.51%	25.13%	11.60%
M. Contributions for Fiscal Year 2010					
1. As Percent of Payroll	12.88%	13.47%	26.01%	33.51%	15.47%
2. As a Dollar Amount	$138,504,065	$141,772,659	$69,261,759	$37,232,662	$386,771,145
N. Contributions for Fiscal Year 2011					
1. As Percent of Payroll	12.88%	13.47%	26.01%	33.51%	15.47%
2. As a Dollar Amount	$144,736,747	$148,152,429	$72,378,538	$38,908,132	$404,175,846

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Discussion

Actuarial Valuation

This is the actuarial valuation of the New Hampshire Retirement System, prepared as of June 30 2007. Valuations are prepared bi-annually, as of June 30. The June 30, 2007 valuation determines the contribution rate for Fiscal Years 2010 and 2011.

The primary purposes of the valuation report are to measure the plan's liabilities, to determine the required employer contribution rate in accordance with actuarial standards and the New Hampshire State Statute, and to analyze changes in NHRS' actuarial position.

In addition, the report provides information in connection with Governmental Accounting Standards Board Statement No. 25 and No. 43 (GASB No. 25 and GASB No. 43) , and it provides summaries of the member data, financial data, plan provisions, and actuarial assumptions and methods.

Financing Objectives

NHRS is supported by member contributions, employer contributions, and net earnings on the investments of the fund. The member contribution rate is set by statute at 5.00% for Group I Members (Employees and Teachers) and 9.30% for Group II members (Police and Fire) of member's compensation. The employer contributions are determined in accordance with statute by an actuarial valuation. Legislation was enacted in 2007 which requires the use of the entry-age actuarial cost method and a 30-year amortization of unfunded actuarial accrued liability in the determination of the employer contributions.

We have determined that the following pension contribution rates satisfy the statute based on the June 30 2007 valuation:

	Employer Contribution Rates				
	Employees	**Teachers**	**Police**	**Fire**	**Total**
Pension	9.66%	10.10%	19.51%	25.13%	11.60%

In order for the statute to be satisfied, this entire rate must be contributed to the pension fund. The statute also requires that 25% of the contributions collected from the employers must be contributed to the 401(h) account for the medical subsidy. In order to satisfy both sections of the statute (pension funding and post-retirement medical funding), the contributions must be increased by 33% so that after the 401(h) contributions, the rates above are contributed to the the pension fund. The total contribution rates are shown in the table below:

	Employer Contribution Rates				
	Employees	**Teachers**	**Police**	**Fire**	**Total**
Pension	9.66%	10.10%	19.51%	25.13%	11.60%
Health	3.22%	3.37%	6.50%	8.38%	3.87%
Total	12.88%	13.47%	26.01%	33.51%	15.47%

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Contribution Requirement

RSA 100 - A:16 II provides that the State shall pay 35% of the computed contribution (referred to in statute as the "normal contribution") for all political subdivision employers who have members in the Teachers, Police and Fire divisions. The table below indicates this breakdown of obligations for these members:

	Employer Contribution Rates											
	Employees			Teachers			Police			Fire		
	Political Subdivision	State	Total	Political Subdivision	State	Total	Political Subdivision	State	Total	Political Subdivision	State	Total
Pension	9.66%	0.00%	9.66%	6.57%	3.53%	10.10%	12.68%	6.83%	19.51%	16.33%	8.80%	25.13%
Health	3.22%	0.00%	3.22%	2.19%	1.18%	3.37%	4.23%	2.27%	6.50%	5.45%	2.93%	8.38%
Total	12.88%	0.00%	12.88%	8.76%	4.71%	13.47%	16.91%	9.10%	26.01%	21.78%	11.73%	33.51%

In addition, there are two political subdivisions who are completing an intial buy-in to NHRS. Their remaining buy-in contributions are as follows:

Fund	Agency	UAAL as of 6/30/2007	2007/2008 Contribution	UAAL as of 6/30/2008	2008/2009 Contribution	UAAL as of 6/30/2009	Fiscal Year of Final Payment	Timing of Payment (0 = beginning of FY; 1 = end of FY)
Employees	Town of Raymond	18,888	2,667	17,826	2,667	16,674	2019	1
	Brookline Public Library	8,135	1,483	7,217	1,483	6,221	2014	0
	Total	27,023	4,150	25,043	4,150	22,895		

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Funded Status

As of the valuation date, the Unfunded Actuarial Accrued Liability (UAAL) is $2,665.5 million (pension only), and the funded ratio (the ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability) is 63.4%. This valuation was prepared using the Entry-Age Actuarial Cost Method. The prior valuation (June 30, 2005) used the Open Aggregate Actuarial Cost Method. The prior method did not produce an accrued liability. Therefore there is no consistent measure of unfunded actuarial accrued liability and funded status from the prior valuation. The actuarial cost method was changed by legislation enacted in 2007.

Variability of Future Contribution Rates

The Actuarial Cost Method used to determine the contribution rate is intended to produce contribution rates which are generally level as a percent of payroll. Even so, when experience differs from the assumptions, as it often does, the employer's contribution rate can vary significantly from year-to-year.

Actuarial Value of Assets

The Actuarial Value of Assets is less than the Market Value of Assets by $632 million as of the valuation date (see Section C). This difference will be gradually recognized over the next five years in the absence of offsetting losses/gains.

In addition, there is a special accounts reserve of approximately $503 million (actuarial value) that is available to finance future pension benefit enhancements such as future COLAs.

Legislation enacted in 2007 precludes any asset gains from being transferred to the special accounts until such time as the funded status of NHRS reaches 85%. This year, approximately $204 million dollars would have been transferred into the special accounts had the new law not been enacted.

Benefit Provisions

Legislation enacted in 2007 provided the following changes in plan provisions:

- A post-retirement COLA equal to 2.25% for all retirees retired for at least 12 months as of July 1, 2007;
- A maximum retirement benefit equal to 100% of the member's highest year of earnable compensation;
- Repealing of the option to purchase nonqualified service credit in the System.

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Actuarial Assumptions and Methods

Section F summarizes the current assumptions. The following changes in methods and assumptions were made with this valuation:

- A new actuary using valuation software specifically designed for use with public sector pension funds;
- The wage inflation assumption has been explicitly set at 4.5%. The remaining merit and longevity salary scale assumptions for each group have been reduced by 0.5% so long as the combined increase (merit and longevity plus wage inflation) was not less than 4.5%.
- The assumption that all Group II retirees will have a 50% spousal allowance paid has been changed to reflect actual experience and reported data.
- The assumption that all retirees retire at mid-year has been changed for the Teacher group only to reflect that all Teachers are assumed to retire at the beginning of each fiscal year.
- Normal cost has been loaded to account for administrative expenses paid directly out of the NHRS fund.
- The funding value of assets method was changed to a method that does not rely on the book value.

We believe the assumptions are internally consistent and are reasonable, based on the actual experience of NHRS. These actuarial assumptions and methods comply with the parameters for disclosure in GASB Statement No. 25.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates, and amortization periods.

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Actuarial Value of Assets

Year Ended June 30:	2007	2008	2009	2010	2011
A. Funding Value Beginning of Year	$4,647,972,589				
B. Market Value End of Year	5,967,916,108				
C. Market Value Beginning of Year	5,112,256,446				
D. Non-Investment Net Cash Flow	25,324,266				
E. Investment Income					
E1. Market Total: B - C - D	830,335,396				
E2. Amount for Immediate Recognition (8.5%)	396,153,951				
E3. Amount for Phased-In Recognition: E1-E2	434,181,445				
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.20 x E3	86,836,289				
F2. First Prior Year	116,070,964	$ 86,836,289			
F3. Second Prior Year	0	116,070,964	$ 86,836,289		
F4. Third Prior Year	0	0	116,070,964	$ 86,836,289	
F5. Fourth Prior Year	0	0		116,070,964	$ 86,836,289
F6. Total Recognized Investment Gain	202,907,253	202,907,253	202,907,253	202,907,253	86,836,289
G. Preliminary Funding Value End of Year: A + D + E2 + F6	5,272,358,059				
H. Difference between Market & Funding Value: B-G	695,558,049				
I. Final Funding Value after 25% Corridor	5,272,358,059				
J. Recognized Rate of Return	12.85%				

The Funding Value of Assets recognizes assumed investment income (line E2) fully each year. Differences between actual and assumed investment income (line E3) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Funding Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Funding Value of Assets will tend to be greater than market value. The Funding Value of Assets is unbiased with respect to Market Value. At any time it may be either greater of less than Market Value. If assumed rates are exactly realized for 4 consecutive years, it will become equal to Market Value.

Allocation of Assets

	Employees	Teachers	Policemen	Firemen	Total
Allocated Fund Assets (Actuarial Value)	$ 1,630,323,141	$ 2,031,344,094	$ 1,061,122,271	$ 549,568,553	$ 5,272,358,059
Less Special Accounts	(126,226,186)	(170,045,079)	(125,415,840)	(81,438,146)	(503,125,251)
Less Medical Special Account	-	-	-	-	-
Less 401(h) Account	(27,622,160)	(19,880,115)	(63,280,663)	(46,193,555)	(156,976,493)
Net Pension Valuation Assets	$ 1,476,474,795	$ 1,841,418,900	$ 872,425,768	$ 421,936,852	$ 4,612,256,315

Appendix IV

GRS and Ice Miller Document Index

GRS & ICE MILLER DOCUMENT INDEX

DOCUMENT	DESCRIPTION	DATE
GRS-090707	New Hampshire Retirement System Actuarial Issues Presentation	9/7/07
GRS-092507	Pension Benefits & Options presentation to Blue Ribbon Commission on Public Employees Retirement Systems	9/25/07
GRS-100207	Approaches to the funding of Post-Retirement COLA and Medical Plans; Retiree Health Benefit Models Attachments Referenced in Document: Funding Vehicles-Retiree Health Care GRS Insight – Sept. 2005 Managing Impact of GASB Stmt 45 NGA Issues Brief	10/2/07
Ice Miller-Nov07	"Developing An Approach to Funding Retiree Health Benefits: One Size Does Not Fit All" Presentation to NEA Retirement Benefits Forum	11/07
Section A–Draft Executive Summary	Executive Summary GRS Draft – Actuarial Valuation	11/7/07
GRS - 110807	Supplemental actuarial valuations of effect of pre-funding cost-of-living adjustments in the employer normal contribution at 1% annually or 2% annually.	11/8/07
GRS–110807 Special Account	Re Special Account Earnings & Consolidation. Suggested changes to process used to credit interest and gains to the special account, in light of the passage of HB 653.	11/8/07
GRS-111207	Supplemental valuations and simplified projections of funded status and gain sharing based on the 6/30/07 actuarial valuation results	11/12/07
Ice Miller-111307	Report to the Board of Trustees of the New Hampshire Retirement System on Funding of Employer-Provided Retiree Health Insurance	11/13/07
GRS-112607	Re 401(h) subtrust. Cash flow projections to determine solvency of the post -retirement health care plan based on the 6/30/07 actuarial valuation results.	11/26/07
GRS Draft Actuarial Valuation-Full Doc	GRS Draft Actuarial Valuation Report – Full Document	11/30/07
GRS-120607	Re Cost Evaluation of NHRS Commission Proposed Changes. Supplemental actuarial valuation of effect of transferring $250 million from Special Account reserve to net pension assets, providing no future increases in post-retirement health subsidy benefits after FY 2010, and setting post-retirement health contributions equal to the ARC as computed by GASB 45 (but not more than allowed under IRC section 401(h)).	12/6/07
GRS-121307	Re Post Retirement Medical Plan. Supplemental actuarial valuations and cash flow projections	12/13/07
GRS-122007	Liabilities by Employer participating in the NHRS as of 6/30/07	12/20/07
GRS-122007 Lump Sum	Effect of Lump Sum on Cost of NHRS Benefits	12/20/07

These documents will be archived on the State of New Hampshire's website.