

**New Hampshire Retirement System
Actuarial Funding Policy
(Adopted: March 11, 2014)**

FUNDING OBJECTIVES

The main financial objective of the New Hampshire Retirement System (NHRS) is to receive employer and member contributions to fund the long-term costs of benefits provided by statute to plan members and beneficiaries. From the perspective of the members and beneficiaries, a funding policy based on actuarially determined contributions is one which will pay all benefits provided by statute when due. From the perspective of the contributing plan sponsors and taxpayers, the actuarially determined contributions have the additional objectives of keeping contribution rates relatively stable as a percentage of active member payroll and equitably allocating the costs over the active members' period of active service. For pension funding, the payment of benefits is supported in part by income earned on investment assets. This funding policy meets those criteria. It is stipulated by state law and implemented through the application of Board adopted governance policies.

Statutory Pension Funding Policy for NHRS

The statute that establishes the pension funding policy for NHRS is RSA 100-A:16.

RSA 100-A:16 Excerpts:

100-A:16 Method of Financing – All of the assets of the Retirement System shall be credited, according to the purpose for which they are held, between 2 funds, namely, the member annuity savings fund and the state annuity accumulation fund. Each of the funds shall be subdivided on account of the various member classifications. In making the determinations required under this section for financing the Retirement System, the Board of Trustees shall use the entry age normal funding methodology. The Board of Trustees shall direct the System's actuary to prepare biennial valuations of the System's assets and liabilities commencing with the valuation prepared as of June 30, 2007. Such biennial valuation shall be the basis for determining the annual contribution requirements of the System until the next following biennial valuation.

...

II(b) The contributions of each employer for benefits under the retirement system on account of group II members shall consist of a percentage of the earnable compensation of its members to be known as the "normal contribution," and an additional amount to be known as the "accrued liability contribution;" provided that beginning with state fiscal year 2013 and for each state fiscal year thereafter, any employer shall pay the full amount of such total contributions. The rate percent of such normal contribution, including contributions on behalf of group II members whose group II creditable service is in excess of 40 years, in each instance shall be fixed on the basis of the liabilities of the system with respect to the particular members of the various member classifications as shown by actuarial valuations,

New Hampshire Retirement System
Actuarial Funding Policy
(Adopted: March 11, 2014)

...

II(c) The contributions of each employer for benefits under the retirement system on account of group I members shall consist of a percentage of the earnable compensation of its members to be known as the "normal contribution," and an additional amount to be known as the "accrued liability contribution;" provided that beginning with state fiscal year 2013 and for each state fiscal year thereafter, any employer shall pay both normal and accrued liability contributions. The rate percent of such normal contribution in each instance shall be fixed on the basis of the liabilities of the system with respect to the particular members of the various member classifications as shown by actuarial valuation,

...

II(e) Immediately following the actuarial valuation prepared as of June 30 of each fiscal year, the Board shall have an actuary determine the amount of the unfunded accrued liability for each member classification as the amount of the total liabilities of the state annuity accumulation fund on account of such classification which is not dischargeable by the total of the funds in hand to the credit of the state annuity accumulation fund on account of such classification, and the aforesaid normal contributions to be made on account of the members in such classification during the remainder of their active service. The amount so determined with respect to each member classification shall be known as the "unfunded accrued liability" with respect to such classification. On the basis of each such unfunded accrued liability, the board shall have an actuary determine the level annual contribution required to discharge such amount over a period of 30 years or the maximum period allowed by standards adopted by the Government Accounting Standards Board, whichever is less.

Board Established Policy Associated with Funding:

Actuarial Cost Method

The law stipulates under RSA 100-A:16 the use of the entry age normal actuarial cost method for each of the four member classifications. The purpose of this method is to determine the annual Normal Cost for each individual active member, payable from the date of employment to the date of retirement, that is:

- (i) Sufficient to accumulate to the value of the member's benefit at the time of retirement, and
- (ii) A constant percentage of the member's year by year projected covered pay.

The Actuarial Accrued Liability under this cost method is the accumulation of normal costs accrued prior to the actuarial valuation date. The Actuarial Accrued Liability represents the theoretical amount of assets required to fund benefits earned on members' past service. The Normal Cost represents the cost required to fund benefits accruing during the current year.

New Hampshire Retirement System
Actuarial Funding Policy
(Adopted: March 11, 2014)

Under RSA 100-A:16, II (i), if the actuarially determined normal contribution rate as set forth in subparagraphs (b) and (c) on account of any of the various member classifications shall be negative in any fiscal year, then the excess amount resulting from the difference between zero and the negative actuarially determined normal contribution rate shall be used to reduce the member contribution rate for that member classification in that fiscal year.

Under RSA 100-A:16, II-a. (a) if within a member classification the employer rates have lowered to require them to be equal to the member rates, then for all subsequent years the employer rates and the members rates for such member classification shall continue to be equal whether the system liabilities increase or decrease.

Asset Valuation Method

The Actuarial Value of Assets is based on the market value with investment gains and losses smoothed over 5 years. The Actuarial Value of Assets will not consistently be above or below the Market Value and is expected to converge to the Market Value in a relatively short period of time. At any time it may be either greater or less than Market Value. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than Market Value. If assumed rates are exactly realized for 4 consecutive years, the Actuarial Value will become equal to Market Value.

Actuarial Value is limited to a 20% corridor around the Market Value. This means that if the preliminary development of the Actuarial Value results in an amount that is greater than 120% of the Market Value (or less than 80% of the Market Value), the final Actuarial Value is limited to 120% (or 80%) of the Market Value. Any gains or losses on the Market Value outside of the 20% corridor are therefore recognized immediately.

Amortization Method

The law stipulates under RSA 100-A:16 an amortization period of 30 years or the maximum period allowed by standards adopted by the Government Accounting Standards Board (GASB), whichever is less. When this statute was enacted, the GASB accounting standards provided broad guidelines on plan funding. The GASB Statements Nos. 67 and 68 do not address plan funding and only address financial reporting. This Actuarial Funding Policy retains the original intent of the statute.

Beginning with the June 30, 2007 actuarial valuation which determined the employer contribution rates beginning with the fiscal year ending June 30, 2010, the 30-year period is a closed period ending June 30, 2039.

The amortization method is a level percentage of payroll, consistent with RSA 100-A:16 II (b) and (c).

New Hampshire Retirement System
Actuarial Funding Policy
(Adopted: March 11, 2014)

Funding Target

The funding objective is to achieve 100% funding. For this purpose, 100% funding means that the Actuarial Value of Assets equals the Actuarial Accrued Liability. The amortization objective is to reach 100% funding by June 30, 2039.

Risk Management

The main financial objective of this funding policy is to fund the long-term costs of benefits provided by statute to plan members and beneficiaries. There are numerous risks that NHRS faces in trying to achieve this objective including funding risk, demographic risk, investment risk, and benefit risk. The Board policies for managing these risks are outlined in this section.

Funding Risk

Frequency of Actuarial Valuations

Regular valuations manage funding risk by allowing employer contribution rates to reflect actual experience as it emerges. Funding valuations are required by RSA 100-A:16, III, as of June 30 every other year on the odd years to determine employer contribution rates for the biennium beginning two years after the valuation date.

Interim funding valuations on June 30 of the even years are required for financial reporting. Funding calculations from interim valuations may be used as additional information for budgeting contributions in anticipation of the next rate setting valuation.

Demographic and Investment Risk

Process for Reviewing and Updating Actuarial Assumptions

The Board adopts actuarial assumptions based on recommendations of the actuary. Demographic and investment risks may be managed in part by having regular reviews of the actuarial assumptions. The law stipulates that the Board shall have the actuary make an actuarial investigation into the experience of the System at least every 5 years (RSA 100-A:14, IX) and shall adopt actuarial assumptions as necessary. If circumstances warrant, the Board may change assumptions more frequently based on the recommendation of the actuary.

The experience study report shall include, but not necessarily be limited to analysis of and recommendations regarding the following assumptions.

- i. Pre-retirement withdrawal rates
- ii. Retirement rates

New Hampshire Retirement System
Actuarial Funding Policy
(Adopted: March 11, 2014)

- iii. Disability rates
- iv. Pay increase rates

- v. Mortality rates both before and after retirement
- vi. Investment returns considering both real return and inflation, which must be consistent with the investment policy

The actuary shall assume no change in the active member population unless there is compelling evidence to support the expectation of a significant increase or decrease in the workforce covered by the System.

The experience study report will serve as the basis for determinations by the Board regarding whether or not demographic or economic assumptions should be modified for future valuations.

In the interim years, the actuary shall issue a written opinion in regard to the reasonableness of the assumed rate of return that shall address any difference between the assumed rate of return and the expected rate of return as determined by the investment committee (RSA 100-A:15, VII. (c)(1)).

Responding to Favorable/Unfavorable Investment Experience

Investment risk is addressed in the System's Investment Manual. Annual investment experience other than assumed is reflected in the valuation asset method described above.

Asset Liability Studies

The Board adopts an asset allocation based on recommendations from the Independent Investment Committee (IIC), which relies upon the advice from the Director of Investments and the Investment Consultant to formulate its recommendations to the Board. The asset allocation approved by the Board will reflect the results of an Asset Liability Study performed at least once in every five-year period, or more often, as recommended by the IIC, System staff, and Investment Consultant.

Risk Measures

In order to quantify the risks outlined in this actuarial funding policy, the following metrics will be included in annual valuation reports. These metrics provide quantifiable measurements of risk and its movement over time:

- i. Funded ratio (Actuarial Value of Assets divided by Actuarial Accrued Liability).
 - Measures progress towards the funding objective of the 100% target funded ratio.
- ii. Actual Total Payroll versus expected Total Payroll for each member classification.

**New Hampshire Retirement System
Actuarial Funding Policy
(Adopted: March 11, 2014)**

- Measures the funding risk associated with receiving contributions as a level percent of payroll.
- iii. Dollar standard deviation of investment return divided by Total Payroll
 - Measures the risk associated with negative asset returns relative impact on the funded status of the plan. A decrease in this measure indicates a decrease in investment risk.
- iv. Total Unfunded Actuarial Accrued Liability (UAAL) divided by Total Payroll
 - Measures the risk associated with contribution decreases relative impact on the ability to fund the UAAL. A decrease in this measure indicates a decrease in contribution risk.
- v. Total Actuarial Accrued Liability (AAL) divided by Total Payroll
 - Measures the risk associated with the ability to respond to liability experience through adjustments in contributions. A decrease in this measure indicates a decrease in experience risk. This also provides a long-term measure of the asset risk in situations where the System has a funded ratio below 100%.
- vi. Total Actuarial Value of Assets divided by Total Payroll
 - Measures the risk associated with the ability to respond to asset experience through adjustments in contributions. A decrease in this measure indicates a decrease in asset risk.

Benefit Risk

Responding to Legislative Proposals and Changes

Benefit risk may be managed as follows:

1. The NHRS shall review legislative proposals and changes for the potential legal, administrative, IRC compliance, and funding impact on the System. If a legislative proposal has the potential for a meaningful impact on plan funding, the Board shall consult with the actuary to estimate the actuarial impact to the System.
2. Under RSA 100-A:15 VII (d), the NHRS may request or recommend legislative proposals to comply with other state or federal regulations, improve administration, or secure funding for benefits provided by statute.

The NHRS does not determine benefit eligibility or the level of benefits.

**New Hampshire Retirement System
Actuarial Funding Policy
(Adopted: March 11, 2014)**

Statutory Medical Subsidy Funding Policy for NHRS

The statutes that establish the medical subsidy funding policy for NHRS are RSA 100-A:53, 53-b, 53-c, and 53-d.

RSA 100-A:53, 53-b, 53-c, and 53-d Excerpts:

Medical Subsidy Funding Policy

Medical Subsidy benefits provided through NHRS are funded on a pay-as-you-go basis. The medical subsidy benefits provided by statute are fixed amounts for a declining population and therefore pay-as-you-go is a reasonable funding method.

The four sections of the statute refer to four separate member classifications for funding Medical Subsidy benefits provided through the NHRS. These member classifications differ from the pension member classifications and are RSA 100-A:53, Group II; 100-A:53-b, Group I Teachers; 100-A:53-c, Group I Political Subdivision Employees; 100-A:53-d, Group I State Employees.

The comparable funding provisions of the four sections of the statute are as follows:

The benefits provided under RSA 100-A:52, 52-a, and 52-b shall be provided by a 401(h) subtrust of the New Hampshire Retirement System. Beginning July 1, 2009, the 401(h) subtrust shall be funded by allocating to the subtrust the lesser of:

- (a) 25 percent of member classification employer contributions; or
- (b) The percentage of employer contributions made for the member classification determined by the actuary to be the minimum rate necessary to maintain the benefits provided under RSA 100-A:52, 52-a, and 52-b.

All contributions made to the Retirement System to provide medical benefits under RSA 100-A:52, 52-a, and 52-b shall be maintained in a separate account, the 401(h) subtrust. All funds and accumulated interest shall not be used for or diverted to any purpose other than to provide said medical benefits. Similarly, none of the funds accumulated to provide the retirement benefits set forth in this chapter, may be used or diverted to provide medical benefits under RSA 100-A:52, 52-a, and 52-b. The funds, if any, providing medical benefits under RSA 100-A:52, 52-a, and 52-b may be invested pursuant to the provisions of RSA 100-A:15.

Board Established Policy Associated with Funding:

The law stipulates under RSA 100-A:53, 53-b, 53-c, and 53-d the minimum rate necessary to maintain benefits. For purposes of this determination, the contribution rate calculations are made with respect to the market value of assets for each member classification separately. Any shortfall in assets for a member classification is to be made up through funding in the nearest rate setting biennium.

New Hampshire Retirement System
Actuarial Funding Policy
(Adopted: March 11, 2014)

Risk Management

There are fewer risks in a pay-as-you-go medical subsidy arrangement than for pension pre-funding.

Solvency Risk

The greatest risk facing the pay-as-you-go financing of the statutory medical subsidy benefits is maintaining solvency of the four IRC Section 401(h) subtrusts. The contribution rate setting based on the June 30th valuation in the odd years determines the rates for the biennium beginning two years after the valuation and ending four years after the valuation date.

In order to mitigate the financing risk, the Board has adopted a policy of determining the employer contribution rate such that the expected assets in each of the four subtrusts will exceed the expected benefit payments for the year by at least 20% each year. This is referred to as a 20% margin. The Board may review the sufficiency of the margin and make changes based upon the recommendation of the actuary.

Risk Measures

In order to quantify the risks outlined in this actuarial funding policy, the following metrics will be included in annual valuation reports. These metrics provide quantifiable measurements of risk and its movement over time:

- i. 20-year projections of contributions and benefit payments.
 - Measures progress towards the funding objective of solvency with a 20% margin.
- ii. Actual Total Payroll versus expected Total Payroll for each member classification.
 - Measures the funding risk associated with receiving contributions as a level percent of payroll.

**New Hampshire Retirement System
Actuarial Funding Policy
(Adopted: March 11, 2014)**

Miscellaneous Matters Associated with Funding:

Overall Conformance with Professional Standards of Practice

By law, the actuary shall be a member of the American Academy of Actuaries and have at least 7 years of actuarial experience (RSA 100-A:1, XXIX). The work of the actuary in connection with this policy shall conform to Actuarial Standards of Practice for public employee retirement plans promulgated by the Actuarial Standards Board and shall satisfy the requirements of the Governmental Accounting Standards Board with respect to the development of information needed by the system and by employers for financial reporting purposes.