

NHRS BUDGET OVERVIEW FY 2022 & 2023 April 19, 2021

NHRS Highlights

- Completed an actuarial experience study in June which resulted in adjustments to a number of actuarial assumptions. The assumed rate of return was reduced from 7.25% to 6.75%, the inflation assumption was reduced from 2.50% to 2.0% and the payroll growth factor was reduced from 3.75% to 3.25% for police, fire and employees, while for teachers it was reduced from 2.75% to 2.25% in response to continued anticipated decline in the school-age population in NH.
- Maintained normal business operations despite shifting most staff to remote work in March 2020 due to the COVID-19 pandemic. All benefit payments to retirees and beneficiaries were made on time. In addition, there were no delays in processing retirement applications.
- Achieved investment performance for FY 2020 of 1.1%. The three-year, five-year, 10-year, 20-year, and 25-year returns for the periods ended June 30, 2020, were 5.2%, 5.9%, 8.7%, 5.4%, and 7.5%, respectively. The six-month return through December 31, 2020, was 14.5%. All returns are net of fees. Compared to the members in the InvestorForce Public Defined Benefit Net Universe, NHRS performed better than 70% of its peers over past 10 fiscal years.
- Following the recent actuarial experience study, certified employer contribution rates for FY 2022 and 2023 in September. Rates increased by 20%, on average.
- The funded ratio on the pension plan was 61.0% in FY 2020, up from 60.8% in FY 2019
- Implemented a 1.5% COLA for eligible retirees and beneficiaries, which was enacted during the 2019 legislative session and effective beginning July 1, 2020.
- Earned a Certificate of Achievement for Excellence in Financial Reporting for the Comprehensive Annual Financial Report (CAFR).
- Continued to expand education and outreach to members and employers through live and virtual
 presentations, written materials, and online content. Developed targeted educational presentations
 geared to new and mid-career members. Developed a comprehensive employer resource page.
- Continued to maintain administrative and investment expenses at favorable levels as compared to peer pension plans.

Ongoing initiatives to improve efficiency at NHRS

- Created a Contact Center to enhance customer service by centralizing all phone, email, fax and walkin customer interactions in one operating unit with enhanced technology, effective metrics, and elevated security to ensure caller identification.
- In the second year of the four-year project to upgrade our core pension application ("PensionGold") from the 17-year-old version 2 to version 3 (PGV3 project). The project is now 38% completed.
- Made a number of substantial changes to the security infrastructure to further improve the security of NHRS' data and assets. The changes included: contracting with new external security operation center for 24x7x365 monitoring for threats; external third-party vulnerability and penetration testing; increased cybersecurity testing for all staff; and in-depth user auditing to limit access to key systems.

Significant challenges/opportunities faced by NHRS

- The experience study and subsequent adjustments to actuarial assumptions generated impactful rate increases for employers, but continued the process of ensuring that the funding of the system is in alignment with anticipated costs for providing benefits.
- After a successful migration to remote work for most employees due to COVID-19, we have developed a phased strategy for returning to the office and maintaining high-quality customer service while at the same time maximizing staff and visitor health and safety. Partial re-opening targeted to begin July 1, 2021.

Impact of recent legislation on NHRS

There was no retirement system-related legislation passed in the 2020 session.

The Cost of Living Adjustment (COLA) legislation that was enacted in 2019 increased the system's unfunded liability by \$65 million. This legislation authorized a 1.5% COLA on the first \$50,000 of an annual pension benefit to members who retired on or before July 1, 2014, or any beneficiary of such member who is receiving a survivorship pension benefit. The cost of the COLA is being amortized over 20 years through an increase in employer contribution rates beginning in fiscal year 2022.

NHRS budget overview

The operations portion of the NHRS statutory administrative budget has been held relatively flat with spending well under the budgeted amounts over the past 8 years. The statutory administrative budget is funded by the trust, not the General Fund. The cost impact of a multi-year upgrade of our 17-year-old core pension database application first appeared in actual spending in FY 2019, and in budgeted amounts in FY 2020. Implementation costs associated with this project are expected through FY 2024. The upgrade will improve the application from a stand-alone client server platform (PGV2) to a web-based system with enhanced cybersecurity and functionality (PGV3).

FY	2020	2019	2018	2017	2016	2015	2014	2013
Operations Budget	\$9.3M	\$8.8M	\$8.5M	\$8.3M	\$8.1M	\$8.7M	\$8.5M	\$8.6M
Operations Actual	\$7.9M	\$7.7M	\$7.5M	\$7.7M	\$7.2M	\$7.5M	\$7.2M	\$7.2M
PGV3 Budget	\$2.8M	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PGV3 Actual	\$2.1M	\$1.0M	\$0	\$0	\$0	\$0	\$0	\$0
Total NHRS Budget	\$12.1M	\$8.8M	\$8.5M	\$8.3M	\$8.1M	\$8.7M	\$8.5M	\$8.6M
Total NHRS Actual	\$10.0M	\$8.7M	\$7.5M	\$7.7M	\$7.2M	\$7.5M	\$7.2M	\$7.2M

NEW HAMPSHIRE RETIREMENT SYSTEM BUDGET REVIEW STATUTORY ADMINISTRATIVE BUDGET

FY 2021 Through FY 2023

FT 2021 THIOUGH FT 2023							
		(A)	(B)	(C)			
		FY 2021	FY 2022	FY 2023			
		BUDGET	PROPOSED	PROPOSED			
1	Statutory Budget						
2	Salaries & Benefits:	\$6,918,821	\$7,142,498	\$7,604,366			
3	Information Technology:						
4	Technology-Software & Hardware	885,000	883,000	883,000			
5	All Other Administrative Costs:						
6	Current Expenses	182,485	200,060	201,610			
7	Rents & Leases	482,800	465,000	465,000			
8	Utilities	105,000	90,000	90,000			
9	Building Maintenance	115,000	115,000	115,000			
10	Equipment	4,900	24,700	24,700			
11	Consultants (IMEs)	220,000	232,000	234,000			
12	Retiree Health Care	227,900	158,300	177,900			
13	Education & Training	56,600	73,300	73,400			
14	Other	253,054	240,989	242,966			
15	Subtotal All Other Adm Costs	\$1,647,739	\$1,599,349	\$1,624,576			
16	Subtotal Before PGV3 Project	\$9,451,560 % Change	\$9,624,847 1.8%	\$10,111,942 5.1%			
17	PG V3 Project:						
18	Project Costs	2,838,077	2,690,042	2,046,280			
19	Subtotal PGV3 Project	\$2,838,077	\$2,690,042	\$2,046,280			
20	Total	\$12,289,637 % Change	\$12,314,889 0.2%	\$12,158,222 -1.3%			



New Hampshire Retirement System Overview

April 2021







- Membership
- Benefits
- Investments
- Contributions/Funding
- Legislation
- Summary
- Appendices



- NHRS is a contributory, multi-employer, defined benefit plan established in 1967
- Provides retirement, disability, and death benefits, as well as a post-retirement Medical Subsidy, to eligible members and beneficiaries
- Once members attain eligibility, they can receive a guaranteed lifetime pension
- Pension benefits are funded through employee and employer contributions and investment income
 - Investment returns have historically provided the majority of funding for pension benefits



- NHRS is a component unit of state government overseen by a Board of Trustees
 - Board of Trustees and Independent Investment Committee are fiduciaries
- NH Legislature is the plan sponsor (RSA 100-A)
- NHRS staff implements statute, rules, policies
 - Internal Revenue Code
- NH Constitution Art. 36-a
 - Protects funds 'for the exclusive purpose' of providing benefits
 - Requires Board to certify employer rates based on sound actuarial practice
 - Requires employers to pay the rates certified



 NHRS Trustees have a fiduciary obligation to ensure that the plan is adequately funded

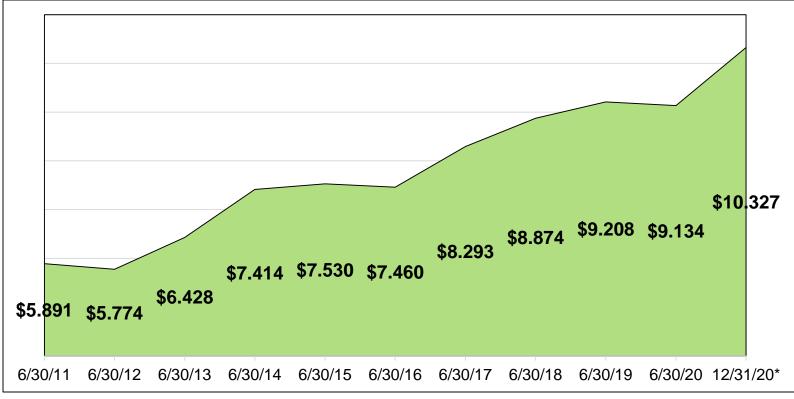


Equation must balance in the long term

- NHRS Trust Fund at 6/30/20: \$9.134 billion
- NHRS Trust Fund at 12/31/20: \$10.327 billion



Assets in Billions: June 30, 2011 to present



* - Unaudited



Recent NHRS initiatives

- Cyber security enhancements and training
- Enhanced education/outreach for members, employers and the general public
- Pension application upgrade ('PGv3')
- Contact Center
- Executive Director hire



Significant developments since 2007

- 2007: Change in actuarial methodology
- 2009: Independent Investment Committee formed
- 2010: 30-Year Amortization of UAAL begins
- 2011: Board reduced rate of return to 7.75%
- 2011: HB 2 Increased member contributions; reduced benefit accruals; changed composition of NHRS Board; eliminated state employer contribution subsidy to political subdivisions
- 2014-16: NH Supreme Court upholds legislative changes
- 2016: Board reduced rate of return to 7.25%
- 2017: Decennial Commission
- 2020: Board reduced rate of return to 6.75%



Group I

- Employees
- Teachers
- Group II
 - Police
 - Fire

461 active participating employers

 State of NH, counties, school districts, communities, and other political subdivisions





	Employees	Teachers	Police	Fire	Total
Active	24,602	17,917	4,256	1,704	48,479
Retiree/ Beneficiary	19,434	14,198	4,227	1,753	39,612

- Active Members
 - Average Age: 46.7
 - Average Service: 11.8 years

Retirees

- Average Age: 71.2
- Average benefit: \$20,841





- In the same period, \$46.8 million in post-retirement Medical Subsidy payments were paid on behalf of eligible retirees and beneficiaries
- Nearly 80% of annuitants live in NH



- Four types of retirement: service, disability, early, and vested deferred
- Different benefit provisions apply to Group I and Group II
- Different benefit provisions apply based on vested status and date of hire
- Pension benefits are determined by statutory formulas that consists of three components:
 - Creditable Service
 - Average Final Compensation
 - Benefit Multiplier

Average Annual Pension Benefits at June 30, 2020



- Employee: \$14,210
- Teacher: \$22,466

Group II

- Police: \$37,357*
- Fire: \$41,365*

All Retirees

• Average: \$20,841

Note: Plan does not include automatic cost-of-living adjustments

* Group II members do not participate in Social Security

Benefits



- Annual benefit under \$10k: 28%
- Annual benefit under \$25k: 65%
- Annual benefit under \$50k: 94%
- Annual benefit greater than \$75k: 1.4%

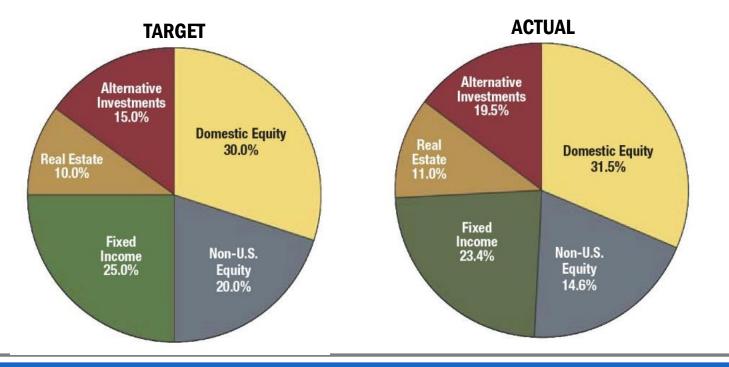


- Board of Trustees
 - Approves investment policy, including asset allocation
 - Hires investment consultant
- Independent Investment Committee
 - Created by Legislature, effective Jan. 1, 2009
 - Recommends investment policy to the Board
 - Oversees the administration of the investment program within Board's policies
 - Hires investment service providers, such as the custodian and investment managers
 - Prepares a Comprehensive Annual Investment Report (CAIR) for approval by the Board





- Reviewed regularly
- Long-term time horizon (25-plus years)
- Manage risk and liquidity
- Diversified portfolio among different types of assets
- Target and actual asset allocation at 6/30/20





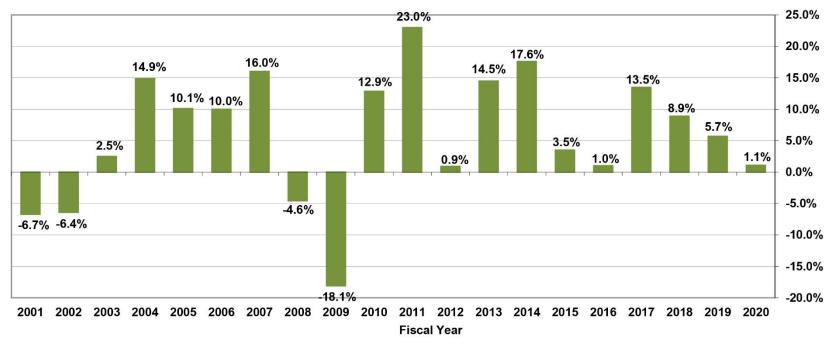
- One-year return on investments: 1.1%
- Three-year return: 5.2%
- Five-year return: 5.9%
- 10-year return: 8.7%
- 20-year return: 5.4%
- 25-year return: 7.5%

FY 2021 return thought 12/31/20: 14.5%

Assumed rate of return is 6.75%



• Annual returns, 2001-20



Source Data: Time-weighted annual returns (net of fees) provided by NEPC, LLC



- Investment performance better than 74% of peers over past 10 years
- Since inception in 2009, IIC performance relative to the peer median has added more than \$275 million to Trust Fund



Member Contributions

- Set by statute
 - Employees: 7% Police: 11.55%
 - Teachers: 7% Fire: 11.8%

Employer Contributions

- Actuarially determined then certified by Trustees on biennial basis
 - Consist of three parts: Normal cost, UAAL, Medical Subsidy
 - Separate rates for each member group
- Local employers have paid 100% of contributions for teachers, police and fire since state subsidy was repealed in 2011

Normal Cost

Estimated annual cost of pension benefits as they are earned

Unfunded Liability

- Estimated value of accrued NHRS benefits not yet funded
- \$6.04 billion at the close of FY 2020, a funded ratio of 61.0%
- The result of artificially low employer contributions coupled with transfer of 'excess' investment earnings to Special Account over an extended period beginning in early '90s
- Exacerbated by Great Financial Crisis (2008-09)
- Further impacted by reductions in assumed rate of return in 2011, 2016, and 2020
- Statutory structure to amortize bulk of UAAL through 2039
 - Future biennial gains or losses incurred after 7/1/17 amortized over closed periods of no more than 20 years

Medical Subsidy

• Closed benefit; funded at pay-go rate

Biennial Actuarial Valuation

- Calculates funding status
- Used to set employer rates per statute
- Based upon assumptions from most recent experience study
- Actuarial Experience Study
 - Required by law at least every five years
 - Conducted every four years per Board policy
 - Evaluates assumptions
 - Demographic Assumptions
 - Economic Assumptions, including assumed rate of investment return

Contributions/Funding *Experience Study*

- What action did the Board take?
 - Adopted proposed changes to demographic assumptions based on a four-year experience study conducted by GRS (FYs 2016-19)
 - Adopted revised economic assumptions, based on recommendations from the actuary:
 - Reduced wage inflation from 3.25% to 2.75% (2.25% for teachers)
 - Reduced price inflation from 2.5% to 2.0%
 - Reduced the assumed rate of return from 7.25% to 6.75%
 - Increased the medical subsidy margin for teachers from .20% to .50%

Contributions/Funding *Experience Study*

- Why did the Board take those actions?
 - The actual experience of the system over the past 4 years indicated that the assumptions did not support the actual cost of the plan going forward
 - Economic and investment forecasts provided to the Board indicated limited inflation and reduced prospects for investment returns
 - The Trustees are fiduciaries subject to constitutional and legal requirements:
 - To determine employer contribution rates "by sound actuarial valuation and practice"
 - To act solely in the interest of the plans participants and beneficiaries



Primary drivers on FY 22-23 rates

- Reduction of the assumed rate of investment return from 7.25% to 6.75%
- Adoption of updated post-retirement mortality assumptions
- Reduction in the payroll growth factor

Additional influences on rates

- COLA increased the employer contribution rates an additional 0.11% to 0.34% as a percent of payroll, depending on the member classification, and decreased the funded ratio of the pension plan by 0.2%
- Because it was only enacted recently, layered amortization has only a minor impact on the FY 22-23 contribution rates, although it did, in fact, reduce the impact of the assumption changes slightly

Contributions/Funding UAAL as a % of Employer Pension Rate – FY 2022-23

Member Category	Pension: Normal Cost	Pension: UAAL	UAAL as a % of Total Pension Cost	Medical Subsidy	Total Employer Rate
Emp. – State	2.58%	11.17%	81.2%	0.78%	14.53%
Emp. – P. Sub.	2.58%	11.17%	81.2%	0.31%	14.06%
Teacher	2.82%	16.66%	85.5%	1.54%	21.02%
Police	6.72%	23.95%	78.1%	3.21%	33.88%
Fire	7.07%	22.71%	76.3%	3.21%	32.99%

Member share of normal cost: Employee: 73%; Teacher: 71%; Police: 63%' Fire: 63%

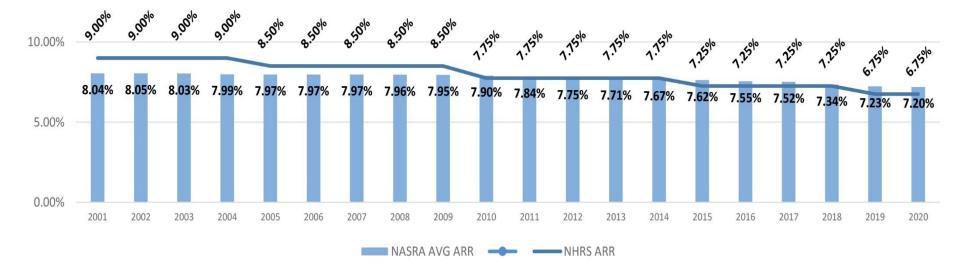
Contributions/Funding Pension liabilities and costs for New England states

	Adjusted Net Pension Liability as % of Personal Income	Rank	Pension contributions as % of Direct General Spending by State and Local Governments	Rank
NH	1.5%	10th	3.91%	24th
Conn.	16.7%	48th	10.27%	50th
Maine	5.3%	36th	3.33%	14th
Mass.	10.6%	44th	4.23%	32nd
R.I.	7.6%	38th	6.34%	45th
Vermont	9.7%	43rd	2.82%	7th
Nat. Avg.	2.7%	-	5.16%	-

Source: Fitch Ratings, Oct. 2020; based on FY 2019 data. Note: Adjusted NPL calculated by applying a 6% assumed rate of return to all plans. Source: NASRA, Dec. 2020; based on FY 2018 data

Contributions/Funding *Experience Study*

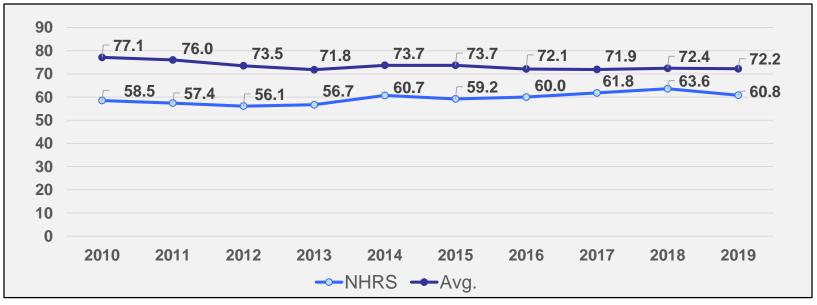




Source: National Association of Retirement System Administrators



Funded ratio relative to peers – FY 2010-19



Source: NASRA, Nov. 2020

• Key Takeaways

- The Board is bound by legal and constitutional requirements with respect to determining contribution rates
- Revising the assumptions was necessary to properly fund the plan over the long term
- Increased employer contributions strengthen the plan, position it to better withstand economic downturns and promotes intergenerational equity
- These changes do not change the cost of the plan, only the timing of the payments



2020 session

- 13 NHRS-related bills introduced
- No bills enacted into law
- 2021 session
 - 11 bills introduced
- Since 2007, more than 100 changes have been made to the statute governing NHRS



- Provide data and objective analysis
 - Fiscal Note Worksheets
 - "Bill Briefs"
 - Testimony
 - Informational materials (annual reports, actuarial valuations, etc.)



Closing thoughts

• NHRS provides a modest pension benefit

- Majority of pension payments remain in-state and support local economy
- Plan is in place to pay down unfunded liability and manage future volatility
- Board has been taking responsible steps to assure proper plan funding, as reflected in:
 - The decisions to reduce the ARR over the past 10 years
 - The improvement in NHRS' funded ratio, relative to the NASRA average, despite the impact of the reductions in the ARR
- This is a marathon, not a sprint -- and there are no shortcuts



Appendices



Board of Trustees

The members of the New Hampshire Retirement System (NHRS) Board of Trustees are appointed and serve pursuant to RSA 100 A:14

Public Members

Tim Lesko, *Chair* Scott Christensen Maureen Kelliher Robert Maloney

Employee Members

Melvin Friese, *Employee* Sue Ellen Hannan, *Teacher* Andrew Martineau, *Fire* William Hart, *Police*

Employer Members

Donald Roy, *N.H. School Boards Assoc.* Scott Myers, *N.H. Municipal Association* Ken Merrifield, *State of N.H.* Christopher Coates, *N.H. Assoc. of Counties*

Ex Officio Member

Monica Mezzapelle, State Treasurer



Independent Investment Committee

The members of the NHRS Independent Investment Committee are appointed and serve three-year terms pursuant to RSA 100-A:14-b

Trustee Members

Maureen Kelliher, Chair Tim Lesko

Public Members

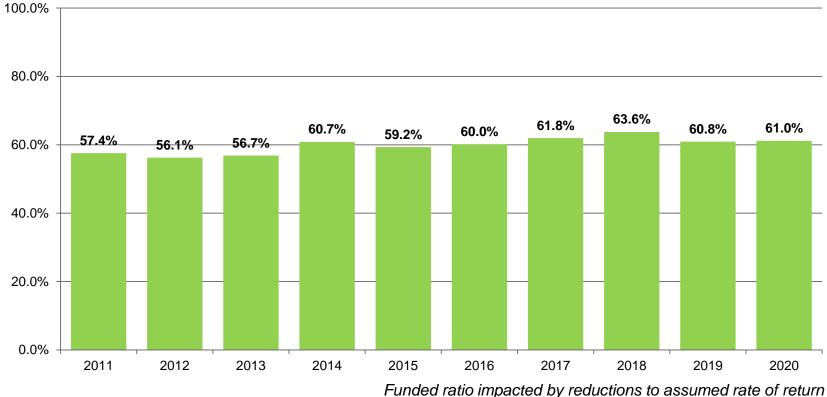
Christine Clinton Keith Quinton Daniel LaPlante

Active Participant Member Michael McMahon

"Each member of the independent investment committee shall have substantial experience in the field of institutional investment or finance, other than their experience as trustees of the New Hampshire retirement system, taking into account factors such as educational background, business experience, and professional licensure and designations." (RSA 100-A:14-b II.) 36



Actuarial funded ratio: June 30, 2011 to June 30, 2020



and revised actuarial assumptions in 2011, 2016, 2020

Appendix *Members and Beneficiaries 2011-2020*

- Active Members
 - 2020: 48,479
 - 2019: 48,288
 - 2018: 48,121
 - 2017: 47,886
 - 2016: 48,069
 - 2015: 47,812
 - 2014: 48,307
 - 2013: 48,688
 - 2012: 48,625
 - 2011: 49,738

- Retirees/Beneficiaries
 - 2020: 39,612
 - 2019: 38,352
 - 2018: 37,012
 - 2017: 35,694
 - 2016: 32,776
 - 2015: 31,350
 - 2014: 31,054
 - 2013: 29,729
 - 2012: 28,454
 - 2011: 27,130

Appendix *Membership Data at June 30, 2020*



• State vs. Political Subdivision

	Employees	Teachers	Police	Fire	Total
State	9,820	0	1,106	66	10,992
Political Subs.	14,782	17,917	3,150	1,638	37,487
Total	24,602	17,917	4,256	1,704	48,479

Membership by Gender

	Employees	Teachers	Police	Fire	Total
Female	14,946	14,160	617	48	29,771
Male	9,656	3,757	3,639	1,656	18,708
Total	24,602	17,917	4,256	1,704	48,479

Benefits Group I Service Retirement: Hired On/After 7/1/11

- Service Retirement Age: 65
- Service Retirement Formula: AFC divided by 66, multiplied by creditable service = annual pension

\$50,000 ÷ 66 = \$758 x 30 years = \$22,727

Appendix Group II Service Retirement: Hired On/After 7/1/11

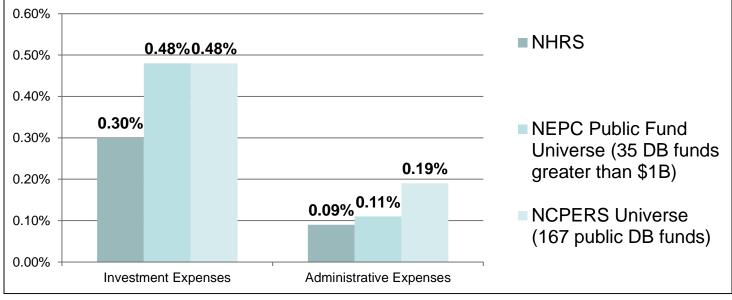
- Service Retirement Age: 52.5 (with minimum 25 years of service)
- Service Retirement Formula: AFC multiplied by 0.20%, multiplied by creditable service = annual pension

\$50,000 x 0.20 = \$1,000 x 25 years = \$25,000

Note: Group II members do not participate in Social Security



- NHRS investment and administrative expenses are paid from the pension Trust Fund, not the General Fund
- NHRS expenses as a percentage of assets



Most recent data available (NCPERS - FY 2019; NEPC - FY 2019)



	Employer Pension Cost		Medical	Total	
	Normal Cost	UAAL	Subsidy	Employer Rate	
GROUP I					
Emp State	1.92%	8.96%	1.05%	11.93%	
Emp P. Sub.	1.92%	8.96%	0.29%	11.17%	
Teachers	1.86%	14.13%	1.81%	17.80%	
GROUP II					
Police	5.04%	19.73%	3.66%	28.43%	
Fire	6.35%	20.08%	3.66%	30.09%	



	Employer Pension Cost		Medical	Total	
	Normal Cost	UAAL	Subsidy	Employer Rate	
GROUP I					
Emp State	2.58%	11.17%	0.78%	14.53%	
Emp P. Sub.	2.58%	11.17%	0.31%	14.06%	
Teachers	2.82%	16.66%	1.54%	21.02%	
GROUP II					
Police	6.72%	23.95%	3.21%	33.88%	
Fire	7.07%	22.71%	3.21%	32.99%	



Biennial Actuarial Valuations

- 6/30/19 valuation determined FY 2022-23 rates
- 6/30/21 valuation will determine FY 2022-23 rates
- Biennial NHRS Trustee Rate Certification
 - 9/20 Trustees certified FY 2022-23 rates
 - 9/22 Trustees will certify FY 2024-25 rates

The New Hampshire Retirement System (NHRS) is governed by New Hampshire RSA 100-A, rules, regulations, and Federal laws including the Internal Revenue Code. NHRS also implements policies adopted by the Board of Trustees. These laws, rules, regulations, and policies are subject to change. Even though the goal of NHRS is to provide information that is current, correct, and complete, NHRS does not make any representation or warranty as to the current applicability, accuracy, or completeness of any information provided. The information herein is intended to provide general information only, and should not be construed as a legal opinion or as legal advice. Members are encouraged to address specific questions regarding NHRS with an NHRS representative. In the event of any conflict between the information herein and the laws, rules, and regulations which govern NHRS, the laws, rules, and regulations shall prevail.