

State of New Hampshire

GENERAL COURT

CONCORD

MEMORANDUM

DATE: December 1, 2023

TO: Honorable Sherman Packard, Speaker of the House

Honorable Jeb Bradley, President of the Senate

Honorable Paul C. Smith, House Clerk Honorable Tammy L. Wright, Senate Clerk

Honorable Chris Sununu, Governor Michael York, State Librarian

FROM: Representative Carol McGuire, Chair

SUBJECT: Retirement Benefits Commission RSA 100-A:58 (HB 2, Ch. 79:68,

Laws of 2023)

Pursuant to RSA 100-A:58 (HB 2, Chapter 79:68, Laws of 2023), enclosed please find the Final Report of the Retirement Benefits Commission.

If you have any questions or comments regarding this report, please do not hesitate to contact me.

I would like to thank those members of the committee who are instrumental in this study. I would also like to acknowledge all those who testified before the committee and assisted the committee in our study.

Enclosures

cc: Members of the Commission

FINAL REPORT

Retirement Benefits Commission

RSA 100-A:58 (HB 2, Chapter 79:68, Laws of 2023)

December 1, 2023

Rep. Rep. Carol McGuire
Rep. Matthew Wilhelm
Sen. James Gray
Senate President Jeb Bradley
David Caron, NHMA

Cathy Stacey, NH Association of Counties
Frank Campo, NH Troopers Association
Germano Martins, SEA

Speaker Sherman Packard
Rep. Peter Leishman
Sen. Donna Soucy
Sen. David Watters
Duane Ford, Admin SAU 67
Brian Ryll, Professional Fire Fighters
Association
Robert Fuller, NEA

Commission Charge:

The commission shall examine issues surrounding retirement benefits, including:

- (a) The impact retirement benefits have on the retention of employees and the ability to attract new employees.
- (b) Whether changes to the current benefit structure are warranted, including the cost and funding source of any proposed change.
- (c) The report of the decennial retirement commission.
- (d) Analyzing the financial status of the retirement system and performing a risk assessment to the system.
- (e) Whether cost of living adjustments (COLAs) or stipend are appropriate and could be funded through employer and employee contributions.
- (f) Making recommendations ensuring the long-term viability of the New Hampshire retirement system.
- (g) Considering the effect that policy changes have on the state and political subdivisions.
- (h) Consideration of a state employer match toward state employee contributions under the state of New Hampshire public employees deferred compensation plan.

Process and Procedures:

The commission organized on August 3rd, 2023, and elected Representative Carol McGuire as Chair. Senator James Gray was elected Vice Chair. Representative McGuire appointed Brian Ryll clerk. The commission met 6 times throughout the study period.

Findings:

The commission worked with Marty Karlon from the New Hampshire Retirement System to review 20 proposals which would impact the retirement system and received actuarial reports on several to determine the financial effects of each plan. The commission agreed that they needed to identify immediate changes that would positively impact Group II tier 'B' employees, that can be fast-tracked through the legislative process to aide in the recruitment and retention efforts of public safety personnel. Secondly, the commission agreed that longer term recommendations were needed to enhance benefits for all NHRS members.

Recommendations:

The commission voted to put forward the following recommendations and assigned them to legislative members as follows:

Immediate:

- Increase the multiplier for Group II Tier B and C members and future hires to 2.5% for all years worked in excess of 10 years (Rep Leishman)
- Reduce the service requirement to be considered vested in the retirement system from 10 years to 5 years. (Senator Soucy)
- Amend the current Group II calculation of base compensation to include a member's mandatory overtime. (Rep. McGuire)

Long Term:

- Continue to evaluate allowing part-time employees to contribute to the retirement system.
- Continue to evaluate establishing a regular Cost-of-living-adjustment (COLA) inside of the New Hampshire Retirement System for all members.

Respectfully Submitted,

Representative Carol McGuire, Chair



2023 Proposals Impacting Retirement Benefits

This chart shows the impact on the NHRS unfunded actuarial accrued liability (UAAL) and on future employer contribution rates for several 2023 legislative proposals related to retirement benefits, including proposals made by the Retirement Benefits Commission.

Proposal	UAAL Impact	Projected Employer rate increase for Police/Fire as	Members impacted							
		percentage of covered payroll								
	GROUP II									
HB 436 – As introduced: This bill put any member vested prior to 1/1/14 into Tier A; it also decreased by one year the minimum age/service and increased the multiplier by 0.1% for Group II members on the transition tables who were not vested by 1/1/14. (House ED&A-OTO with amendment – 0483h)	\$81.8M	+1.49% / +2.39% Total FY 26 Group II contribution rate increase: \$9.6M	Group II, Tier B – 1,731 members. (Note: As drafted, AFC/Earnable Compensation changes also applied to Group I members who became vested between 1/1/12 and 12/31/13; these costs are not shown)							
HB 436 – Am 0483h: This bill, over a 10-year period, adjusted the application of the minimum age, minimum years of service, earnable compensation, average final compensation, and annuity multipliers for Group II, Tier B members. In addition, the maximum benefit amount was amended for all members who commenced service on/after 1/1/01, with a 1.25% inflation escalator included. (Passed by House, referred to Finance; House Finance-retained)	\$195.7M	+5.58% / +5.41% Total FY 26 Group II contribution rate increase: \$30.0M	Group II, Tier B – 1,731 members. (Note: As drafted, maximum benefit changes also applied to Group I, Tier B members and all members hired on/after 7/1/11; these costs are not shown)							
HB 2 – Sections 67-83: Same as HB 436 (am-483h) but without the inflation escalator on the maximum benefit. (Passed by House)	\$133.0M	+3.89% / +3.43% Total FY 26 Group II contribution rate increase: \$20.3M	Group II, Tier B – 1,731 members.							
HB 436 – "D. McGuire draft amendment": Same as HB 2, but without the changes to AFC and Earnable Compensation for Group II Tier B members. (Finance, Division I-withdrawn)	\$71.7M	+2.18% / +1.91% Total FY 26 Group II contribution rate increase: \$11.4M	Group II, Tier B – 1,731 members.							
HB 2 – Am 2164s: Same as HB 2 except minimum age and service for retirement and maximum benefit did not change. (Senate floor amendment-failed)	\$100.5M	+3.10% / +3.12% Total FY 2026 contribution rate increase: \$16.9M	Group II, Tier B – 1,731 members.							
HB 449: This bill increases the service retirement and disability retirement annuity multiplier to 2.5% for the first 20 years of service of Group II retirement for all Group II members. (House ED&A-retained)	\$82.2M	+3.26% / +2.77% Total FY 2026 contribution rate increase: \$16.9M	Group II, Tier B – 1,731 members; Group II, Tier C – 3,235 members plus future hires.							

Proposal	UAAL Impact	Projected Employer rate increase for Police/Fire as percentage of covered payroll	Members impacted
HB 525: This bill put anyone vested prior to 1/1/14 into Tier A; it also increased the multiplier by 0.1% for others on the transition tables, with no other changes for these members. (House-ITL)	\$72.5M	+1.41% / +1.92% Total FY 26 Group II contribution rate increase: \$8.5M	Group II, Tier B – 1,731 members. (Note: As drafted, AFC/Earnable Compensation changes also applied to Group I members who became vested between 1/1/12 and 12/31/13; Group I costs are not shown)
HB 579: This bill eliminated the transition provision adopted in 2011 for Group II members who began service before July 1, 2011. This eliminated Tier B in Group II. (House-ITL)	\$226M	+5.96% / +6.01% Total FY 26 Group II contribution rate increase: \$32.4M	Group II, Tier B – 1,731 members.
"Sen. Gray Proposal" (not introduced): Increase multiplier by 0.25% for all Group II members for every year in excess of 20 years worked, and by another 0.25% for all Group II members for every year in excess of 30 years worked – up to maximum of 2.5%.	\$15.7M	+0.48% / +0.65% Total FY 26 Group II contribution rate increase: \$2.9M	Group II, Tier B – 1,731 members – and Tier C – 3,235 members, plus future hires.
Added 10/31/23 - "Sen. Gray Proposal" (2.5% multiplier at 20 years, Tier B): Increase multiplier for Group II Tier B members to 2.5% for all years worked in excess of 20 years.	\$11.6M	+0.30% / +0.32% Total FY 26 Group II contribution rate increase: \$1.7M With UAAL funding: +0.08% / +0.10% One-time state appropriation of \$11.6M and FY 26 Group II contribution rate increase: \$468,000. Terminal Funding: 0% / 0% One-time state appropriation of \$16.6M.	Group II, Tier B – 1,731 members.
Added 10/31/23 - "Sen. Gray Proposal" (2.5% multiplier at 20 years, Tiers B/C): Increase multiplier for Group II <u>Tier B and C members (and future hires)</u> to 2.5% for all years worked in excess of 20 years. (Because this proposal covers future hires, it cannot be terminally funded.)	\$18.5M	+0.71% / +0.72% Total FY 26 Group II contribution rate increase: \$3.9M With UAAL funding: +0.31% / +0.34% One-time state appropriation of \$18.5M and FY 26 Group II contribution rate increase: \$1.7M.	Group II, Tier B – 1,731 members – and Tier C – 3,235 members, plus future hires.

Proposal	UAAL Impact	Projected Employer rate increase for Police/Fire as percentage of covered payroll	Members impacted
Added 11/8/23 - "Sen. Gray Proposal" (2.5% multiplier at 15 years, Tiers B/C): Increase multiplier for Group II <u>Tier B and C members (and future hires)</u> to 2.5% for all years worked in excess of 15 years. (Because this proposal covers future hires, it cannot be terminally funded.)	\$36.3M	+1.39% / +1.35% Total FY 26 Group II contribution rate increase: \$7.5M With UAAL funding: +0.60% / +0.63% One-time state appropriation of \$36.3M and FY 26 Group II contribution rate increase: \$3.3M.	Group II, Tier B – 1,731 members – and Tier C – 3,235 members, plus future hires.
Added 11/8/23 - "Sen. Gray Proposal" (2.5% multiplier at 10 years, Tiers B/C): Increase multiplier for Group II <u>Tier B and C members (and future hires)</u> to 2.5% for all years worked in excess of 10 years. (Because this proposal covers future hires, it cannot be terminally funded.)	\$55.9M	+2.19% / +2.02% Total FY 26 Group II contribution rate increase: \$11.6M With UAAL funding: +0.95% / +0.94% One-time state appropriation of \$55.9M and FY 26 Group II contribution rate increase: \$5.1M.	Group II, Tier B – 1,731 members – and Tier C – 3,235 members, plus future hires.
Added 9/21/23 - Am 2258s (original): This amendment increases the multiplier used to calculate service and disability benefits for Group II, Tier B members to 2.5%.	\$62.6M	No pre-funding: +1.67% / +1.57% Total FY 26 Group II contribution rate increase: \$8.9M With UAAL funding: +0.48% / +0.52% One-time state appropriation of \$62.6M and FY 26 Group II contribution rate increase of \$2.67M. Terminal Funding: 0% / 0% One-time state appropriation of \$92.6M.	Group II, Tier B – 1,731 members.
Added 10/4/23 - Am 2258s (question from the Commission): This proposal increases the multiplier used to calculate service and disability benefits for Group II, Tier B members to 2.5%, but only for members who work up to their full age and service requirements and retire under service retirement.	\$54.6M	No pre-funding: +1.39% / +1.41% Terminal Funding: 0% / 0% One-time state appropriation of \$78.6M.	Group II, Tier B – 1,731 members.

Added 9/21/23 - Am 2259s (original): This amendment increases the multiplier used to calculate service and disability benefits for Group II, Tier B members to 2.5% for members with 5 or more years of service on 1/1/2012 and 2.25% for members hired prior to 7/1/2011 with less than 5 years of service on 1/1/2012. The bill also reduces the minimum age and service requirements for Group II, Tier B members with 5 or more years of service on 1/1/2012.	\$47.0M	No pre-funding: +1.21% / +1.11% Total FY 26 Group II contribution rate increase: \$6.4M With UAAL funding: +0.33% / +0.32% One-time state appropriation of \$47.0M and FY 26 Group II contribution rate increase of \$1.8M. Terminal Funding: 0% / 0% One-time state appropriation of \$59.1M.	Group II, Tier B – 1,731 members.
Proposal	UAAL	Projected Employer	Members impacted
•	Impact	rate increase for Police/Fire as	•
		percentage of covered payroll	
Added 10/31/23 - Am 2259s (question from the Commission): This amendment increases the multiplier used to calculate service and disability benefits for Group II, Tier B members to 2.5% for members with 5 or more years of service on 1/1/2012 and 2.25% for members hired prior to 7/1/2011 with less than 5 years of service on 1/1/2012. The bill also reduces the minimum age and service requirements for Group II, Tier B members with 5 or more years of service on 1/1/2012. All these changes would only apply to members who work up to their full age and service requirements and retire under service retirement. Other 1: To assess the impact of piecemeal benefit restoration through subsequent legislation. NHRS	\$43.9M \$219.4M	No pre-funding: +1.07% / +1.03% Total FY 26 Group II contribution rate increase: \$5.7M With UAAL funding: +0.27% / +0.28% One-time state appropriation of \$43.9M and FY 26 Group II contribution rate increase: \$1.5M. Terminal Funding: 0% / 0% One-time state appropriation of \$53.7M. +10.27% / +8.13% Total FY 26 Group II contribution	Group II, Tier C – 3,235 members plus future hires
restoration through subsequent legislation, NHRS asked the actuary to estimate the cost of restoring pre- 2011 benefits to all active and future Group II members.		Total FY 26 Group II contribution rate increase: \$52.1M	members, plus future hires.
		ROUP I	
SB 57 (ultimately included in HB 2): Adjust the recalculation of a Group I retiree's NHRS benefit to his	\$45M	+ 0.21% (Employee) / 0.30% (Teacher)	Group I actives – 41,500 members, plus future hires.

or her full retirement age under the federal Social Security system.		Total FY 26 Group I contribution rate increase: \$7.15M	
Other 2: In order to assess the impact of a piecemeal approach to benefit restoration through subsequent legislation in future years, NHRS asked the actuary to estimate the cost of restoring the AFC and earnable compensation changes to Group I, Tier B, consistent with the changes proposed for Group II, Tier B.	\$187.6M	+0.79% / +0.91% Total FY 26 Group I contribution rate increase: \$24.0M	Group I, Tier B – 11,145 members.

Notes:

- 1. Some proposals included additional funding sources beyond future employer contributions. For comparative purposes, the cost of all proposals is shown with no additional funding sources, except am2258s and am 2259s.
- 2. Group II employer contribution rates for FYs 24 and 25 are 31.25% (police) and 30.35% (fire) of covered payroll, respectively. Group I rates are 19.64% (teachers) and 13.85%/13.53% (state/local employees). The increases shown in the chart should be added to these percentages.
- 3. Member counts are as of 6/30/22.

Amendment 2258s - Highlights of Actuarial Analysis

Summary: This amendment increases the multiplier used to calculate service and disability benefits for approximately 1,800 Group II, Tier B members to 2.5%.

	POLICE	FIRE	TOTAL
Emp. Rate impact with no pre-funding:	+1.67%	+1.57%	_
FY 26* Emp. Contribution Increase	\$6.27M	\$2.63M	\$8.90M
UAAL:	\$45.2M	\$17.4M	\$62.6M
Emp. Normal cost with UAAL pre-funded:	+0.48%	+0.52%	_
FY 26* Emp. Contribution Increase	\$1.80M	\$0.87M	\$2.67M
Terminal funding cost (no rate impact):	\$65.3M	\$27.3M	\$92.6M

^{* –} first year of ongoing contribution costs

Pension Results

State

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - State									
Employees Teachers Police Fire									
Normal Cost %	0.00%	N/A	0.48%	0.52%					
UAAL%	0.00%	N/A	1.19%	1.05%					
Total Impact of Proposal	0.00%	N/A	1.67%	1.57%					

Expected Employer Dollar Increase (Decrease) Due to Proposal - State (\$ Millions)										
	Emp	oloyees	Те	achers	P	olice		Fire	Т	otal*
FY 2023	\$	-	\$	-	\$	-	\$	-	\$	-
FY 2024		:-		-				-		-
FY 2025		7 <u>-</u>		-		<u>=</u> **		72		==
FY 2026		9. -		-		1.76		0.07		1.83

Political Subdivisions

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - Political Subdivisions									
Employees Teachers Police Fire									
Normal Cost %	0.00%	0.00%	0.48%	0.52%					
UAAL%	0.00%	0.00%	1.19%	1.05%					
Total Impact of Proposal	0.00%	0.00%	1.67%	1.57%					

Expected Employer Dollar Increase (Decrease) Due to Proposal - Pol. Sub. (\$ Millions)										
	Employees		Teachers		Police		Fire		Total*	
FY 2023	\$	-	\$	=	\$	=	\$	-	\$:-
FY 2024		-		-		-		=		-
FY 2025		-		-				-		1-
FY 2026		-		=		4.51		2.56		7.07

^{*} Totals may not add due to rounding.

Contribution rates for fiscal years 2024 and 2025 have been certified, and are therefore not subject to change. The dollar-amount increases shown for FY 2026 above represent the impact of this proposal to that fiscal year alone. Expected increases to employer contributions for future fiscal years are these amounts increased with wage inflation.

Increase (Decrease) in Unfunded Actuarial Accrued Liabilities Due to Proposal							
as of June 30, 2021 Increased with Interest to December 1, 2023 (\$ Millions)							
Employees	Teachers	Police Fire Total*					
<u>خ</u>	ċ	Ċ	45.2 ¢	17.4	\$ 62.6		

Comment 1 — We have reflected the change beginning in fiscal year 2026, the next year for which Board certification of employer pension contribution rates is scheduled. Actual employer contribution rates for FY 2026 will be based on the June 30, 2023 actuarial valuation and may differ. Actual dollar amounts will be determined based on actual payroll and may differ. As written, the bill will affect all future years. Calculation of the estimated dollar impact on years beyond FY 2026 was beyond the scope of this request.

Comment 2 — The following table shows the impact split out by type of retirement.

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll									
Employees Teachers Police Fire									
Age & Service	0.00%	0.00%	1.66%	1.55%					
Disability	0.00%	0.00%	0.01%	0.02%					
Total Impact of Proposal	0.00%	0.00%	1.67%	1.57%					

Comment 3 — An appropriation of \$65.3 for Police and \$27.3 for Fire as of July 1, 2024 would terminally fund these benefit provision changes.

Comment 4 — The effective date of the bill is 60 days after its passage. We have estimated the impact of the actuarial accrued liabilities as of December 1, 2023. Results may vary slightly depending on the actual passage of the bill.

Amendment to HB 449-FN

Amend the bill by replacing all after the enacting clause with the following:

 $\frac{23}{24}$

1 Group II Service Retirement Benefits. Amend RSA 100-A:5, II(d) through (e) to read as follows:

(d) Active group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

10	Creditable service on	Minimum years	Minimum	Annuity
11	January 1, 2012	of service	age attained	multiplier
12	(1) Less than 4 years	24	age 49	[2.1] 2.5%
13	(2) At least 4 years	23	age 48	$[\frac{2.2}{}]$ 2.5%
14	but less than 6 years			
15	(3) At least 6 years but	22	age 47	[2.3] 2.5 %
16	less than 8 years			
17	(4) At least 8 years but	21	age 46	[2.4] 2.5 %
18	less than 10 years			

- (e) Notwithstanding the transition provisions of subparagraph (d), the member may replace the additional years of service required for minimum retirement age with the years of service that are purchased under RSA 100-A:4, IX. Therefore, allowing the member to retire between the age of 45 and 49 depending upon the years of service purchased. The purchased years under RSA 100-A:4, IX shall have an annual multiplier of 2.5 percent [regardless of the percentage listed in subparagraph (d)].
- 2 New Hampshire Retirement System; Disability Retirement Benefits. Amend RSA 100-A:6, II(b) to read as follows:
- (b) Upon ordinary disability retirement, the group II member shall receive an ordinary disability retirement allowance which shall consist of: a member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 1/2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the

Amendment to HB 449-FN - Page 2 -

number of years of his or her creditable service not in excess of 40 at the time of ordinary disability retirement, or for members who commenced service on or after July 1, 2011,[-shall be equal to 2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 42.5 at the time of ordinary disability retirement, and group II members] or who have not attained vested status prior to January 1, 2012, shall be as provided in the transition provisions in RSA 100-A:5, II(d) with the maximum number of years of creditable service not in excess of 40.5 years provided, however, that such allowance shall not be less than 25 percent of the member's final compensation at the time of his or her disability retirement.

- 3 New Hampshire Retirement System; Disability Retirement Benefits. Amend RSA 100-A:6, II(d)(2) to read as follows:
- (2) For members who commenced service on or after July 1, 2011, any group II member who has more than 33 1/3 years of service, a supplemental disability retirement allowance shall be paid. Such supplement shall be equal to [2 percent] the corresponding multiplier as provided in the transition provisions in RSA 100-A:5, II(d) of his or her average final compensation multiplied by the number of years of his or her creditable service in excess of 33 1/3 but not in excess of 42.5 years.
- 4 Effective Date. This act shall take effect 60 days after its passage.

2023-2258s

AMENDED ANALYSIS

This bill modifies the group II members retirement annuity multipliers for the New Hampshire retirement system.





September 6, 2023

Ms. Marie Mullen
Director of Finance
New Hampshire Retirement System
54 Regional Drive
Concord, New Hampshire 03301

Re: Amendment to House Bill (HB) 449-FN (2023-2258s) – Group II Tier B Retirement Eligibility and Benefit Multiplier Changes

Dear Ms. Mullen:

Enclosed are the results of a supplemental actuarial valuation to measure the financial effects of a multiplier increase for Group II Tier B members, as requested.

Respectfully submitted, Gabriel, Roeder, Smith & Company

Heidi G. Barry, ASA, FCA, MAAA

HGB:ah Enclosure

cc: Jan Goodwin (NHRS via email)
Tim Crutchfield (NHRS via email)
Mark Cavanaugh (NHRS via email)
Marty Karlon (NHRS via email)
Jeffrey T. Tebeau (GRS via email)
Casey T. Ahlbrandt-Rains (GRS via email)

Supplemental Actuarial Valuation House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

Requested By: Ms. Marie Mullen, Director of Finance

New Hampshire Retirement System

Date: September 6, 2023

Submitted By: Heidi G. Barry, ASA, FCA, MAAA

Jeffrey T. Tebeau, FSA, EA, FCA, MAAA Casey T. Ahlbrandt-Rains, ASA, MAAA Gabriel, Roeder, Smith & Company

This report contains the results of a supplemental actuarial valuation of a variation of HB 449-FN (2023-2258s). Specifically, the changes relate to the Group II Tier B benefit multipliers. The purpose of this valuation is to determine the impact of the proposed provisions on the Retirement System's actuarial accrued liabilities and employer contribution rates.

Supplemental valuations do not predict the results of future actuarial valuations. (Future activities can affect future valuation results in an unpredictable manner.) Rather, supplemental valuations give an indication of the probable effect of the **change only** on future valuations without comment on the complete end result of the future valuations.

This report should not be relied on for any purpose other than the purpose described above. GRS is not responsible for unauthorized use of this report.

Heidi G. Barry, Jeffrey T. Tebeau, and Casey T. Ahlbrandt-Rains are independent of the plan sponsor, are Members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

The valuations were based upon data furnished by NHRS for the June 30, 2021 contribution rate setting actuarial valuation. Actuarial methods and assumptions were the same as those used in the annual actuarial valuation as of June 30, 2021. In particular:

- The assumed rate of interest was 6.75%;
- The valuation method was the Entry Age Actuarial Cost Method; and
- Payroll growth is assumed to be 2.75% per year (2.25% for Teachers).

The unfunded liability as of June 30, 2017 shall be amortized through 2039. Each subsequent change in unfunded liability as calculated in odd-numbered years shall be separately amortized over a fixed period of no longer than 20 years.

A brief summary of the data used in this valuation is presented on the following page.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

Valuation	Active	Valuation		Average	
Group	Members	Payroll	Age	Service*	Pay
Employees:					
Male	9,654	\$ 564,962,311	48.3	10.9	\$58,521
Female	14,904	735,964,049	49.3	10.6	49,380
Total	24,558	1,300,926,360	48.9	10.7	52,974
Teachers:					
Male	3,746	263,333,764	45.9	14.3	70,297
Female	14,385	934,901,766	45.5	12.9	64,991
Total	18,131	1,198,235,530	45.6	13.2	66,088
Police:					
Male	3,582	286,063,788	38.8	11.0	79,861
Female	602	41,278,695	38.4	8.5	68,569
Total	4,184	327,342,483	38.8	10.6	78,237
Fire:					
Male	1,657	142,817,591	41.2	13.0	86,190
Female	52	3,646,540	36.0	7.8	70,126
Total	1,709	146,464,131	41.1	12.8	85,702
Total:					
Male	18,639	1,257,177,454	45.4	11.8	67,449
Female	29,943	1,715,791,050	47.3	11.7	57,302
Grand Total	48,582	\$2,972,968,504	46.5	11.7	\$61,195

* One month of service was added to the reported service for all active participants in consideration of potential subsidized service purchases in the future.

Valuation	Active	Valuation
Group	Members	Payroll
Employees:		
State	9,699	\$ 584,721,355
Political Subdivisions	14,859	716,205,005
Subtotal	24,558	1,300,926,360
Teachers:	18,131	1,198,235,530
Police:		
State	1,078	91,759,702
Political Subdivisions	3,106	235,582,781
Subtotal	4,184	327,342,483
Fire:		
State	58	4,096,525
Political Subdivisions	1,651	142,367,606
Subtotal	1,709	146,464,131
Total	48,582	\$ 2,972,968,504

Group II Members Affected by Proposal

	Police	Fire
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 between 8 and 10 Years	214	152
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 between 6 and 8 Years	279	107
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 between 4 and 6 Years	309	135
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 Less than 4 Years	445	183
Total	1,247	577



Supplemental Actuarial Valuation House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

Current Provisions Affected:

Group II Tier B Service Retirement Benefits:

Active Group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

	Minimum	Minimum	
	Years of	Age	Annuity
Creditable Service on January 1, 2012	Service	Attained	Multiplier
(1) Less than 4 years	24 Years	Age 49	2.1%
(2) At least 4 years but less than 6 years	23 Years	Age 48	2.2%
(3) At least 6 years but less than 8 years	22 Years	Age 47	2.3%
(4) At least 8 years but less than 10 years	21 Years	Age 46	2.4%

Notwithstanding the transition provisions of subparagraph (d), the member may replace the additional years of service required for minimum retirement age with the years of service that are purchased under RSA 100-A:4, IX. Therefore, allowing the member to retire between the ages of 45 and 49 depending upon the years of service purchased. The purchased years under RSA 100-A:4, IX shall have an annual multiplier of 2.5 percent regardless of the percentage listed in subparagraph (d).

Group II Tier B Disability Benefits:

Upon ordinary disability retirement, the Group II member shall receive an ordinary disability retirement allowance which shall consist of: a member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 1/2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 40 at the time of ordinary disability retirement, or for members who commenced service on or after July 1, 2011, shall be equal to 2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 42.5 at the time of ordinary disability retirement, and Group II members or who have not attained vested status prior to January 1, 2012, shall be as provided in the transition provisions in RSA 100-A:5, II(d) with the maximum number of years of creditable service not in excess of 40.5 years provided, however, that such allowance shall not be less than 25 percent of the member's final compensation at the time of his or her disability retirement.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

New Provisions under Consideration:

Group II Service Retirement Benefits:

Active Group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

	Minimum	Minimum	
	Years of	Age	Annuity
Creditable Service as of January 1, 2012	Service	Attained	Multiplier
(1) Less than 4 years	24 Years	Age 49	2.5%
(2) At least 4 years but less than 6 years	23 Years	Age 48	2.5%
(3) At least 6 years but less than 8 years	22 Years	Age 47	2.5%
(4) At least 8 years but less than 10 years	21 Years	Age 46	2.5%

Notwithstanding the transition provisions of subparagraph (d), the member may replace the additional years of service required for minimum retirement age with the years of service that are purchased under RSA 100-A:4, IX. Therefore, allowing the member to retire between the age of 45 and 49 depending upon the years of service purchased. The purchased years under RSA 100-A:4, IX shall have an annual multiplier of 2.5 percent.

Group II Tier B Disability Benefits:

Upon ordinary disability retirement, the Group II member shall receive an ordinary disability retirement allowance which shall consist of: a member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 1/2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 40 at the time of ordinary disability retirement, or for members who commenced service on or after July 1, 2011, shall be equal to 2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 42.5 at the time of ordinary disability retirement, and Group II members or who have not attained vested status prior to January 1, 2012, shall be as provided in the transition provisions in RSA 100-A:5, II(d) with the maximum number of years of creditable service not in excess of 40.5 years provided, however, that such allowance shall not be less than 25 percent of the member's final compensation at the time of his or her disability retirement.

The provisions in this bill shall take effect 60 days after its passage.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

Actuarial Statement

Under the proposed scenario outlined in the new provisions, the impact would be reflected in the next rate-setting valuation as of June 30, 2023, which determines the rates for the 2026-2027 biennium. Since the rates for the 2026-2027 biennium are unknown at this time, only the net impact of the proposal is shown.

Pension Results

State

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - State												
Employees Teachers Police Fire												
Normal Cost %	0.00%	N/A	0.48%	0.52%								
UAAL%	0.00%	N/A	1.19%	1.05%								
Total Impact of Proposal	0.00%	N/A	1.67%	1.57%								

Expected Employer Dollar Increase (Decrease) Due to Proposal - State (\$ Millions)												
	Employees Teachers Police Fire T									Total*		
FY 2023	\$	-	\$	-	\$	-	\$	-	\$	-		
FY 2024		-		-		-		-		-		
FY 2025		-		-		-		-		-		
FY 2026		-		-		1.76		0.07		1.83		

Political Subdivisions

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - Political Subdivisions												
Employees Teachers Police Fire												
Normal Cost %	0.00%	0.00%	0.48%	0.52%								
UAAL%	0.00%	0.00%	1.19%	1.05%								
Total Impact of Proposal	0.00%	0.00%	1.67%	1.57%								

Expected Employer Dollar Increase (Decrease) Due to Proposal - Pol. Sub. (\$ Millions)											
Employees Teachers Police Fire Total*											
FY 2023	\$	-	\$	-	\$	-	\$	-	\$	-	
FY 2024		-		-		-		-		-	
FY 2025		-		-		-		-		-	
FY 2026		-		-		4.51		2.56		7.07	

^{*} Totals may not add due to rounding.

Contribution rates for fiscal years 2024 and 2025 have been certified, and are therefore not subject to change. The dollar-amount increases shown for FY 2026 above represent the impact of this proposal to that fiscal year alone. Expected increases to employer contributions for future fiscal years are these amounts increased with wage inflation.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

Actuarial Statement (Continued)

Increase (Decrease) in Unfunded Actuarial Accrued Liabilities Due to Proposal											
as of June 30, 2021 Increased with Interest to December 1, 2023 (\$ Millions)											
Employees Teachers Police Fire Total*											
\$ -	\$		ı	\$	45.2	\$	17.4	\$	62.6		

^{*} Totals may not add due to rounding.



House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

Comment 1 — We have reflected the change beginning in fiscal year 2026, the next year for which Board certification of employer pension contribution rates is scheduled. Actual employer contribution rates for FY 2026 will be based on the June 30, 2023 actuarial valuation and may differ. Actual dollar amounts will be determined based on actual payroll and may differ. As written, the bill will affect all future years. Calculation of the estimated dollar impact on years beyond FY 2026 was beyond the scope of this request.

Comment 2 — The following table shows the impact split out by type of retirement.

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll											
Employees Teachers Police Fire											
Age & Service	0.00%	0.00%	1.66%	1.55%							
Disability	0.00%	0.00%	0.01%	0.02%							
Total Impact of Proposal 0.00% 0.00% 1.67% 1.57%											

Comment 3 — An appropriation of \$65.3 for Police and \$27.3 for Fire as of July 1, 2024 would terminally fund these benefit provision changes.

Comment 4 — The effective date of the bill is 60 days after its passage. We have estimated the impact of the actuarial accrued liabilities as of December 1, 2023. Results may vary slightly depending on the actual passage of the bill.

Comment 5 — If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision.

Comment 6 — No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them.

Comment 7 — In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.

Comment 8 — This report is intended to describe the financial effect of the proposed plan changes on the Retirement System. Except as otherwise noted, potential effects on other benefit plans were not considered.

Comment 9 — Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

Comment 10 — This calculation is based upon present and proposed plan provisions that are outlined in the report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in the report.

Comment 11 — This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation, and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Comment 12 — Please refer to the June 30, 2021 actuarial funding valuation report dated April 29, 2022 for additional discussions regarding the risks associated with measuring the accrued liability and the actuarially determined contribution. Additional assessment of risks was outside the scope of this assignment.



Amendment 2259s - Highlights of Actuarial Analysis

Summary: This amendment increases the multiplier used to calculate service and disability benefits for approximately 1,800 Group II, Tier B members to 2.5% for members with 5 or more years of service on 1/1/2012 and 2.25% for members hired prior to 7/1/2011 with less than 5 years of service on 1/1/2012. The bill also reduces the minimum age and service requirements for Group II, Tier B members with 5 or more years of service on 1/1/2012.

	POLICE	FIRE	TOTAL
Emp. rate impact with no pre-funding:	+1.21%	+1.11%	_
FY 26* Emp. Contribution Increase	\$4.53M	\$1.86M	\$6.39M
UAAL:	\$33.5M	\$13.5M	\$47.0M
Emp. normal cost with UAAL pre-funded:	+0.33%	+0.32%	_
FY 26* Emp. Contribution Increase	\$1.24M	\$0.54M	\$1.78M
Terminal funding cost:	\$41.6M	\$17.5M	\$59.1M

^{* –} first year of ongoing contribution costs

Pension Results

State

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - State								
	Employees Teachers Police Fire							
Normal Cost %	0.00%	N/A	0.33%	0.32%				
UAAL%	0.00%	N/A	0.88%	0.79%				
Total Impact of Proposal	0.00%	N/A	1.21%	1.11%				

Expected Employer Dollar Increase (Decrease) Due to Proposal - State (\$ Millions)									
	Employees Teachers Police Fire To				otal*				
FY 2023	\$	-	\$	-	\$	-	\$ -	\$	-
FY 2024		-		-		-	-		-
FY 2025		-		-		-	-		-
FY 2026		-		-		1.27	0.05		1.32

Political Subdivisions

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - Political Subdivisions							
	Employees Teachers Police Fire						
Normal Cost %	0.00%	0.00%	0.33%	0.32%			
UAAL%	0.00%	0.00%	0.88%	0.79%			
Total Impact of Proposal	0.00%	0.00%	1.21%	1.11%			

Expected Employer Dollar Increase (Decrease) Due to Proposal - Pol. Sub. (\$ Millions)									
	Employees		mployees Teachers Police Fire		Teachers Police Fire		Teachers		Total*
FY 2023	\$	-	\$	-	\$	-	\$ -	\$ -	
FY 2024		-		-		-	-	-	
FY 2025		-		-		-	-	-	
FY 2026		-		-		3.26	1.81	5.07	

^{*} Totals may not add due to rounding.

Contribution rates for fiscal years 2024 and 2025 have been certified, and are therefore not subject to change. The dollar-amount increases shown for FY 2026 above represent the impact of this proposal to that fiscal year alone. Expected increases to employer contributions for future fiscal years are these amounts increased with wage inflation.

Increase (Decrease) in Unfunded Actuarial Accrued Liabilities Due to Proposal						
as of June 30, 2021 Increased With Interest to December 1, 2023 (\$ Millions)						
Employees	Teachers	Police	Fire	Total*		
\$ -	\$ -	\$ 33.5	\$ 13.5	\$ 47.0		

Comment 1 — We have reflected the change beginning in fiscal year 2026, the next year for which Board certification of employer pension contribution rates is scheduled. Actual employer contribution rates for FY 2026 will be based on the June 30, 2023 actuarial valuation and may differ. Actual dollar amounts will be determined based on actual payroll and may differ. As written, the bill will affect all future years. Calculation of the estimated dollar impact on years beyond FY 2026 was beyond the scope of this request.

Comment 2 — The following table shows the impact split out by type of retirement. Note that the number of disabilities is expected to be less under the proposed benefit provision changes as members will be eligible for normal retirement earlier than under the current provisions. This results in a decrease to the disability costs associated with the bill even though many members will receive a higher multiplier than under the current provisions.

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll								
	Employees Teachers Police Fire							
Age & Service	0.00%	0.00%	1.25%	1.15%				
Disability	0.00%	0.00%	(0.04)%	(0.04)%				
Total Impact of Proposal	0.00%	0.00%	1.21%	1.11%				

Comment 3 — An appropriation of \$41.6 for Police and \$17.5 for Fire as of July 1, 2024 would terminally fund these benefit provision changes.

Comment 4 — The effective date of the bill is 60 days after its passage. We have estimated the impact of the actuarial accrued liabilities as of people of the bill.

Amendment to HB 449-FN

Amend the bill by replacing all after the enacting clause with the following:

1 Group II Service Retirement Benefits. Amend RSA 100-A:5, II(d) to read as follows:

(d) Active group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

9	Creditable service on	Minimum years	Minimum	Annuity
10	January 1, 2012	of service	age attained	multiplier
11	(1) Less than 4 years	24	age 49	[2.1] 2.25%
12	(2) At least 4 years	23	age 48	[2.2] 2.25%
13	but less than $[6]$ 5 years			
14	[(3) At least 6 years but	22	age 47	2.3 %
15	less than 8 years			
16	(4) At least 8 years but	21	age 46	2.4 %
17	less than 10 years]			
18	(3) At least 5 years	22	age 47	2.5%
19	but less than 6 years			
20	(4) At least 6 years	21	age 46	2.5%
21	but less than 8 years			
22	(5) At least 8 years	20	age 45	2.5%
23	but less than 10 years			

- 2 New Hampshire Retirement System; Disability Retirement Benefits. Amend RSA 100-A:6, II(b) to read as follows:
- (b) Upon ordinary disability retirement, the group II member shall receive an ordinary disability retirement allowance which shall consist of: a member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 1/2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 40 at the time of ordinary disability

Amendment to HB 449-FN - Page 2 -

retirement, or for members who commenced service on or after July 1, 2011, [shall be equal to 2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 42.5 at the time of ordinary disability retirement, and group II members] or who have not attained vested status prior to January 1, 2012, shall be as provided in the transition provisions in RSA 100-A:5, II(d) with the maximum number of years of creditable service not in excess of 40.5 years provided, however, that such allowance shall not be less than 25 percent of the member's final compensation at the time of his or her disability retirement.

- 3 New Hampshire Retirement System; Disability Retirement Benefits. Amend RSA 100-A:6, II(d)(2) to read as follows:
- (2) For members who commenced service on or after July 1, 2011, any group II member who has more than 33 1/3 years of service, a supplemental disability retirement allowance shall be paid. Such supplement shall be equal to [2-percent] the corresponding multiplier as provided in the transition provisions in RSA 100-A:5, II(d) of his or her average final compensation multiplied by the number of years of his or her creditable service in excess of 33 1/3 but not in excess of 42.5 years.
 - 4 Effective Date. This act shall take effect 60 days after its passage.

2023-2259s

AMENDED ANALYSIS

This bill modifies the group II members retirement annuity multipliers for the New Hampshire retirement system.





September 7, 2023

Ms. Marie Mullen
Director of Finance
New Hampshire Retirement System
54 Regional Drive
Concord, New Hampshire 03301

Re: Amendment to House Bill (HB) 449-FN (2023-2259s) – Group II Tier B Retirement Eligibility and Benefit Multiplier Changes

Dear Ms. Mullen:

Enclosed are the results of a supplemental actuarial valuation to measure the financial effects of a multiplier increase and retirement eligibility changes for Group II Tier B members, as requested.

Respectfully submitted, Gabriel, Roeder, Smith & Company

Heidi G. Barry, ASA, FCA, MAAA

Heidi & Barry

HGB:dj Enclosure

cc: Jan Goodwin (NHRS via email)
Tim Crutchfield (NHRS via email)
Mark Cavanaugh (NHRS via email)
Marty Karlon (NHRS via email)
Jeffrey T. Tebeau (GRS via email)
Casey T. Ahlbrandt-Rains (GRS via email)

Supplemental Actuarial Valuation House Bill 449-FN (2023-2259s)

Group II Tier B Retirement Eligibility and Multiplier Changes as of June 30, 2021

Requested By: Ms. Marie Mullen, Director of Finance

New Hampshire Retirement System

Date: September 7, 2023

Submitted By: Heidi G. Barry, ASA, FCA, MAAA

Jeffrey T. Tebeau, FSA, EA, FCA, MAAA Casey T. Ahlbrandt-Rains, ASA, MAAA Gabriel, Roeder, Smith & Company

This report contains the results of a supplemental actuarial valuation of a variation of HB 449-FN (2023-2259s). Specifically, the changes relate to the Group II Tier B retirement eligibility and benefit multipliers. The purpose of this valuation is to determine the impact of the proposed provisions on the Retirement System's actuarial accrued liabilities and employer contribution rates.

Supplemental valuations do not predict the results of future actuarial valuations. (Future activities can affect future valuation results in an unpredictable manner.) Rather, supplemental valuations give an indication of the probable effect of the **change only** on future valuations without comment on the complete end result of the future valuations.

This report should not be relied on for any purpose other than the purpose described above. GRS is not responsible for unauthorized use of this report.

Heidi G. Barry, Jeffrey T. Tebeau, and Casey T. Ahlbrandt-Rains are independent of the plan sponsor, are Members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

The valuations were based upon data furnished by NHRS for the June 30, 2021 contribution rate setting actuarial valuation. Actuarial methods and assumptions were the same as those used in the annual actuarial valuation as of June 30, 2021. In particular:

- The assumed rate of interest was 6.75%;
- The valuation method was the Entry Age Actuarial Cost Method; and
- Payroll growth is assumed to be 2.75% per year (2.25% for Teachers).

The unfunded liability as of June 30, 2017 shall be amortized through 2039. Each subsequent change in unfunded liability as calculated in odd-numbered years shall be separately amortized over a fixed period of no longer than 20 years.

A brief summary of the data used in this valuation is presented on the next page.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2259s)

Group II Tier B Retirement Eligibility and Multiplier Changes as of June 30, 2021

Valuation	Active	Valuation		Average	
Group	Members	Payroll	Age	Service*	Pay
Employees:					
Male	9,654	\$ 564,962,311	48.3	10.9	\$58,521
Female	14,904	735,964,049	49.3	10.6	49,380
Total	24,558	1,300,926,360	48.9	10.7	52,974
Teachers:					
Male	3,746	263,333,764	45.9	14.3	70,297
Female	14,385	934,901,766	45.5	12.9	64,991
Total	18,131	1,198,235,530	45.6	13.2	66,088
Police:					
Male	3,582	286,063,788	38.8	11.0	79,861
Female	602	41,278,695	38.4	8.5	68,569
Total	4,184	327,342,483	38.8	10.6	78,237
Fire:					
Male	1,657	142,817,591	41.2	13.0	86,190
Female	52	3,646,540	36.0	7.8	70,126
Total	1,709	146,464,131	41.1	12.8	85,702
Total:					
Male	18,639	1,257,177,454	45.4	11.8	67,449
Female	29,943	1,715,791,050	47.3	11.7	57,302
Grand Total	48,582	\$2,972,968,504	46.5	11.7	\$61,195

^{*} One month of service was added to the reported service for all active participants in consideration of potential subsidized service purchases in the future.

Valuation	Active	Valuation
Group	Members	Payroll
Employees:		
State	9,699	\$ 584,721,355
Political Subdivisions	14,859	716,205,005
Subtotal	24,558	1,300,926,360
Teachers:	18,131	1,198,235,530
Police:		
State	1,078	91,759,702
Political Subdivisions	3,106	235,582,781
Subtotal	4,184	327,342,483
Fire:		
State	58	4,096,525
Political Subdivisions	1,651	142,367,606
Subtotal	1,709	146,464,131
Total	48,582	\$ 2,972,968,504

Group II Members Affected by Proposal

	Police	Fire
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 between 8 and 10 Years	214	152
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 between 6 and 8 Years	279	107
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 between 4 and 6 Years	309	135
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 Less than 4 Years	445	183
Total	1,247	577



Supplemental Actuarial Valuation House Bill 449-FN (2023-2259s)

Group II Tier B Retirement Eligibility and Multiplier Changes as of June 30, 2021

Current Provisions Affected:

Group II Tier B Service Retirement Benefits:

Active Group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

	Minimum	Minimum	
	Years of	Age	Annuity
Creditable Service on January 1, 2012	Service	Attained	Multiplier
(1) Less than 4 years	24 Years	Age 49	2.1%
(2) At least 4 years but less than 6 years	23 Years	Age 48	2.2%
(3) At least 6 years but less than 8 years	22 Years	Age 47	2.3%
(4) At least 8 years but less than 10 years	21 Years	Age 46	2.4%

Group II Tier B Disability Benefits:

Upon ordinary disability retirement, the Group II member shall receive an ordinary disability retirement allowance which shall consist of: a member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 1/2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 40 at the time of ordinary disability retirement, or for members who commenced service on or after July 1, 2011, shall be equal to 2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 42.5 at the time of ordinary disability retirement, and group II members or who have not attained vested status prior to January 1, 2012, shall be as provided in the transition provisions in RSA 100-A:5, II(d) with the maximum number of years of creditable service not in excess of 40.5 years provided, however, that such allowance shall not be less than 25 percent of the member's final compensation at the time of his or her disability retirement.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2259s)

Group II Tier B Retirement Eligibility and Multiplier Changes as of June 30, 2021

New Provisions under Consideration:

Group II Tier B Service Retirement Benefits:

Active Group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

	Minimum	Minimum	
	Years of	Age	Annuity
Creditable Service as of January 1, 2012	Service	Attained	Multiplier
(1) Less than 4 years	24 Years	Age 49	2.25%
(2) At least 4 year but less than 5 years	23 Years	Age 48	2.25%
(3) At least 5 years but less than 6 years	22 Years	Age 47	2.50%
(4) At least 6 years but less than 8 years	21 Years	Age 46	2.50%
(5) At least 8 years but less than 10 years	20 Years	Age 45	2.50%

Group II Tier B Disability Benefits:

Upon ordinary disability retirement, the Group II member shall receive an ordinary disability retirement allowance which shall consist of: a member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 1/2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 40 at the time of ordinary disability retirement, or for members who commenced service on or after July 1, 2011, shall be equal to 2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 42.5 at the time of ordinary disability retirement, and group II members or who have not attained vested status prior to January 1, 2012, shall be as provided in the transition provisions in RSA 100-A:5, II(d) with the maximum number of years of creditable service not in excess of 40.5 years provided, however, that such allowance shall not be less than 25 percent of the member's final compensation at the time of his or her disability retirement.

The provisions in this bill shall take effect 60 days after its passage.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2259s)

Group II Tier B Retirement Eligibility and Multiplier Changes as of June 30, 2021

Actuarial Statement

Under the proposed scenario outlined in the new provisions, the impact would be reflected in the next rate-setting valuation as of June 30, 2023, which determines the rates for the 2026-2027 biennium. Since the rates for the 2026-2027 biennium are unknown at this time, only the net impact of the proposal is shown.

Pension Results

State

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - State										
Employees Teachers Police Fire										
Normal Cost %	0.00%	N/A	0.33%	0.32%						
UAAL %	0.00%	N/A	0.88%	0.79%						
Total Impact of Proposal	0.00%	N/A	1.21%	1.11%						

Expected Employer Dollar Increase (Decrease) Due to Proposal - State (\$ Millions)										
	Employees Teachers Police Fire									Total*
FY 2023	\$	-	\$	-	\$	-	\$	-	\$	-
FY 2024		-		-		-		-		-
FY 2025		-		-		-		-		-
FY 2026		-		-		1.27		0.05		1.32

Political Subdivisions

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - Political Subdivisions									
Employees Teachers Police Fire									
Normal Cost %	0.00%	0.00%	0.33%	0.32%					
UAAL%	0.00%	0.00%	0.88%	0.79%					
Total Impact of Proposal	0.00%	0.00%	1.21%	1.11%					

Expected Employer Dollar Increase (Decrease) Due to Proposal - Pol. Sub. (\$ Millions)										
	Employees Teachers Police							Fire		Total*
FY 2023	\$	-	\$	-	\$	-	\$	1	\$	-
FY 2024		-		-		-		-		-
FY 2025		-		-		-		-		-
FY 2026		-		-		3.26		1.81		5.07

^{*} Totals may not add due to rounding.

Contribution rates for fiscal years 2024 and 2025 have been certified, and are therefore not subject to change. The dollar-amount increases shown for FY 2026 above represent the impact of this proposal to that fiscal year alone. Expected increases to employer contributions for future fiscal years are these amounts increased with wage inflation.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2259s)

Group II Tier B Retirement Eligibility and Multiplier Changes as of June 30, 2021

Actuarial Statement (Continued)

Increase (Decrease) in Unfunded Actuarial Accrued Liabilities Due to Proposal									
as of June 30, 2021 Increased With Interest to December 1, 2023 (\$ Millions)									
			achers Police Fire Total*						
Employees		Teachers		Police		Fire		Total*	

^{*} Totals may not add due to rounding.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2259s)

Group II Tier B Retirement Eligibility and Multiplier Changes as of June 30, 2021

Comment 1 — We have reflected the change beginning in fiscal year 2026, the next year for which Board certification of employer pension contribution rates is scheduled. Actual employer contribution rates for FY 2026 will be based on the June 30, 2023 actuarial valuation and may differ. Actual dollar amounts will be determined based on actual payroll and may differ. As written, the bill will affect all future years. Calculation of the estimated dollar impact on years beyond FY 2026 was beyond the scope of this request.

Comment 2 — The following table shows the impact split out by type of retirement. Note that the number of disabilities is expected to be less under the proposed benefit provision changes as members will be eligible for normal retirement earlier than under the current provisions. This results in a decrease to the disability costs associated with the bill even though many members will receive a higher multiplier than under the current provisions.

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll										
Employees Teachers Police Fire										
Age & Service	0.00%	0.00%	1.25%	1.15%						
Disability	0.00%	0.00%	(0.04)%	(0.04)%						
Total Impact of Proposal	0.00%	0.00%	1.21%	1.11%						

Comment 3 — An appropriation of \$41.6 for Police and \$17.5 for Fire as of July 1, 2024 would terminally fund these benefit provision changes.

Comment 4 — The effective date of the bill is 60 days after its passage. We have estimated the impact of the actuarial accrued liabilities as of December 1, 2023. Results may vary slightly depending on the actual passage of the bill.

Comment 5 — If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision.

Comment 6 — No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them.

Comment 7 — In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.

Comment 8 — This report is intended to describe the financial effect of the proposed plan changes on the Retirement System. Except as otherwise noted, potential effects on other benefit plans were not considered.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2259s)

Group II Tier B Retirement Eligibility and Multiplier Changes as of June 30, 2021

Comment 9 — Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

Comment 10 — This calculation is based upon present and proposed plan provisions that are outlined in the report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in the report.

Comment 11 — This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation, and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Comment 12 — Please refer to the June 30, 2021 actuarial funding valuation report dated April 29, 2022 for additional discussions regarding the risks associated with measuring the accrued liability and the actuarially determined contribution. Additional assessment of risks was outside the scope of this assignment.





September 6, 2023

Ms. Marie Mullen
Director of Finance
New Hampshire Retirement System
54 Regional Drive
Concord, New Hampshire 03301

Re: Amendment to House Bill (HB) 449-FN (2023-2258s) – Group II Tier B Retirement Eligibility and Benefit Multiplier Changes

Dear Ms. Mullen:

Enclosed are the results of a supplemental actuarial valuation to measure the financial effects of a multiplier increase for Group II Tier B members, as requested.

Respectfully submitted, Gabriel, Roeder, Smith & Company

Heidi G. Barry, ASA, FCA, MAAA

HGB:ah Enclosure

cc: Jan Goodwin (NHRS via email)
Tim Crutchfield (NHRS via email)
Mark Cavanaugh (NHRS via email)
Marty Karlon (NHRS via email)
Jeffrey T. Tebeau (GRS via email)
Casey T. Ahlbrandt-Rains (GRS via email)

Supplemental Actuarial Valuation House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

Requested By: Ms. Marie Mullen, Director of Finance

New Hampshire Retirement System

Date: September 6, 2023

Submitted By: Heidi G. Barry, ASA, FCA, MAAA

Jeffrey T. Tebeau, FSA, EA, FCA, MAAA Casey T. Ahlbrandt-Rains, ASA, MAAA Gabriel, Roeder, Smith & Company

This report contains the results of a supplemental actuarial valuation of a variation of HB 449-FN (2023-2258s). Specifically, the changes relate to the Group II Tier B benefit multipliers. The purpose of this valuation is to determine the impact of the proposed provisions on the Retirement System's actuarial accrued liabilities and employer contribution rates.

Supplemental valuations do not predict the results of future actuarial valuations. (Future activities can affect future valuation results in an unpredictable manner.) Rather, supplemental valuations give an indication of the probable effect of the **change only** on future valuations without comment on the complete end result of the future valuations.

This report should not be relied on for any purpose other than the purpose described above. GRS is not responsible for unauthorized use of this report.

Heidi G. Barry, Jeffrey T. Tebeau, and Casey T. Ahlbrandt-Rains are independent of the plan sponsor, are Members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

The valuations were based upon data furnished by NHRS for the June 30, 2021 contribution rate setting actuarial valuation. Actuarial methods and assumptions were the same as those used in the annual actuarial valuation as of June 30, 2021. In particular:

- The assumed rate of interest was 6.75%;
- The valuation method was the Entry Age Actuarial Cost Method; and
- Payroll growth is assumed to be 2.75% per year (2.25% for Teachers).

The unfunded liability as of June 30, 2017 shall be amortized through 2039. Each subsequent change in unfunded liability as calculated in odd-numbered years shall be separately amortized over a fixed period of no longer than 20 years.

A brief summary of the data used in this valuation is presented on the following page.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

Valuation	Active	Valuation		Average	
Group	Members	Payroll	Age	Service*	Pay
Employees:					
Male	9,654	\$ 564,962,311	48.3	10.9	\$58,521
Female	14,904	735,964,049	49.3	10.6	49,380
Total	24,558	1,300,926,360	48.9	10.7	52,974
Teachers:					
Male	3,746	263,333,764	45.9	14.3	70,297
Female	14,385	934,901,766	45.5	12.9	64,991
Total	18,131	1,198,235,530	45.6	13.2	66,088
Police:					
Male	3,582	286,063,788	38.8	11.0	79,861
Female	602	41,278,695	38.4	8.5	68,569
Total	4,184	327,342,483	38.8	10.6	78,237
Fire:					
Male	1,657	142,817,591	41.2	13.0	86,190
Female	52	3,646,540	36.0	7.8	70,126
Total	1,709	146,464,131	41.1	12.8	85,702
Total:					
Male	18,639	1,257,177,454	45.4	11.8	67,449
Female	29,943	1,715,791,050	47.3	11.7	57,302
Grand Total	48,582	\$2,972,968,504	46.5	11.7	\$61,195

* One month of service was added to the reported service for all active participants in consideration of potential subsidized service purchases in the future.

Valuation	Active	Valuation
Group	Members	Payroll
Employees:		
State	9,699	\$ 584,721,355
Political Subdivisions	14,859	716,205,005
Subtotal	24,558	1,300,926,360
Teachers:	18,131	1,198,235,530
Police:		
State	1,078	91,759,702
Political Subdivisions	3,106	235,582,781
Subtotal	4,184	327,342,483
Fire:		
State	58	4,096,525
Political Subdivisions	1,651	142,367,606
Subtotal	1,709	146,464,131
Total	48,582	\$ 2,972,968,504

Group II Members Affected by Proposal

	Police	Fire
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 between 8 and 10 Years	214	152
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 between 6 and 8 Years	279	107
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 between 4 and 6 Years	309	135
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 Less than 4 Years	445	183
Total	1,247	577



Supplemental Actuarial Valuation House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

Current Provisions Affected:

Group II Tier B Service Retirement Benefits:

Active Group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

	Minimum	Minimum	
	Years of	Age	Annuity
Creditable Service on January 1, 2012	Service	Attained	Multiplier
(1) Less than 4 years	24 Years	Age 49	2.1%
(2) At least 4 years but less than 6 years	23 Years	Age 48	2.2%
(3) At least 6 years but less than 8 years	22 Years	Age 47	2.3%
(4) At least 8 years but less than 10 years	21 Years	Age 46	2.4%

Notwithstanding the transition provisions of subparagraph (d), the member may replace the additional years of service required for minimum retirement age with the years of service that are purchased under RSA 100-A:4, IX. Therefore, allowing the member to retire between the ages of 45 and 49 depending upon the years of service purchased. The purchased years under RSA 100-A:4, IX shall have an annual multiplier of 2.5 percent regardless of the percentage listed in subparagraph (d).

Group II Tier B Disability Benefits:

Upon ordinary disability retirement, the Group II member shall receive an ordinary disability retirement allowance which shall consist of: a member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 1/2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 40 at the time of ordinary disability retirement, or for members who commenced service on or after July 1, 2011, shall be equal to 2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 42.5 at the time of ordinary disability retirement, and Group II members or who have not attained vested status prior to January 1, 2012, shall be as provided in the transition provisions in RSA 100-A:5, II(d) with the maximum number of years of creditable service not in excess of 40.5 years provided, however, that such allowance shall not be less than 25 percent of the member's final compensation at the time of his or her disability retirement.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

New Provisions under Consideration:

Group II Service Retirement Benefits:

Active Group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

	Minimum	Minimum	
	Years of	Age	Annuity
Creditable Service as of January 1, 2012	Service	Attained	Multiplier
(1) Less than 4 years	24 Years	Age 49	2.5%
(2) At least 4 years but less than 6 years	23 Years	Age 48	2.5%
(3) At least 6 years but less than 8 years	22 Years	Age 47	2.5%
(4) At least 8 years but less than 10 years	21 Years	Age 46	2.5%

Notwithstanding the transition provisions of subparagraph (d), the member may replace the additional years of service required for minimum retirement age with the years of service that are purchased under RSA 100-A:4, IX. Therefore, allowing the member to retire between the age of 45 and 49 depending upon the years of service purchased. The purchased years under RSA 100-A:4, IX shall have an annual multiplier of 2.5 percent.

Group II Tier B Disability Benefits:

Upon ordinary disability retirement, the Group II member shall receive an ordinary disability retirement allowance which shall consist of: a member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 1/2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 40 at the time of ordinary disability retirement, or for members who commenced service on or after July 1, 2011, shall be equal to 2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 42.5 at the time of ordinary disability retirement, and Group II members or who have not attained vested status prior to January 1, 2012, shall be as provided in the transition provisions in RSA 100-A:5, II(d) with the maximum number of years of creditable service not in excess of 40.5 years provided, however, that such allowance shall not be less than 25 percent of the member's final compensation at the time of his or her disability retirement.

The provisions in this bill shall take effect 60 days after its passage.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

Actuarial Statement

Under the proposed scenario outlined in the new provisions, the impact would be reflected in the next rate-setting valuation as of June 30, 2023, which determines the rates for the 2026-2027 biennium. Since the rates for the 2026-2027 biennium are unknown at this time, only the net impact of the proposal is shown.

Pension Results

State

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - State										
Employees Teachers Police Fire										
Normal Cost %	0.00%	N/A	0.48%	0.52%						
UAAL%	0.00%	N/A	1.19%	1.05%						
Total Impact of Proposal	0.00%	N/A	1.67%	1.57%						

Expected Employer Dollar Increase (Decrease) Due to Proposal - State (\$ Millions)											
	Employees Te			Teachers		Police		Fire		Total*	
FY 2023	\$	-	\$	-	\$	-	\$	-	\$	-	
FY 2024		-		-		-		-		-	
FY 2025		-		-		-		-		-	
FY 2026		-		-		1.76		0.07		1.83	

Political Subdivisions

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - Political Subdivisions										
Employees Teachers Police Fire										
Normal Cost %	0.00%	0.00%	0.48%	0.52%						
UAAL%	0.00%	0.00%	1.19%	1.05%						
Total Impact of Proposal	0.00%	0.00%	1.67%	1.57%						

Expected Employer Dollar Increase (Decrease) Due to Proposal - Pol. Sub. (\$ Millions)										
	Employees Teachers Police Fire									otal*
FY 2023	\$	-	\$	-	\$	-	\$	-	\$	-
FY 2024		-		-		-		-		-
FY 2025		-		-		-		-		-
FY 2026		-		-		4.51		2.56		7.07

^{*} Totals may not add due to rounding.

Contribution rates for fiscal years 2024 and 2025 have been certified, and are therefore not subject to change. The dollar-amount increases shown for FY 2026 above represent the impact of this proposal to that fiscal year alone. Expected increases to employer contributions for future fiscal years are these amounts increased with wage inflation.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

Actuarial Statement (Continued)

Increase (Decrease) in Unfunded Actuarial Accrued Liabilities Due to Proposal											
as of June 30, 2021 Increased with Interest to December 1, 2023 (\$ Millions)											
Employees Teachers Police Fire Total*											
\$ -	\$		ı	\$	45.2	\$	17.4	\$	62.6		

^{*} Totals may not add due to rounding.



House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

Comment 1 — We have reflected the change beginning in fiscal year 2026, the next year for which Board certification of employer pension contribution rates is scheduled. Actual employer contribution rates for FY 2026 will be based on the June 30, 2023 actuarial valuation and may differ. Actual dollar amounts will be determined based on actual payroll and may differ. As written, the bill will affect all future years. Calculation of the estimated dollar impact on years beyond FY 2026 was beyond the scope of this request.

Comment 2 — The following table shows the impact split out by type of retirement.

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll										
Employees Teachers Police Fire										
Age & Service	0.00%	0.00%	1.66%	1.55%						
Disability	0.00%	0.00%	0.01%	0.02%						
Total Impact of Proposal	0.00%	0.00%	1.67%	1.57%						

Comment 3 — An appropriation of \$65.3 for Police and \$27.3 for Fire as of July 1, 2024 would terminally fund these benefit provision changes.

Comment 4 — The effective date of the bill is 60 days after its passage. We have estimated the impact of the actuarial accrued liabilities as of December 1, 2023. Results may vary slightly depending on the actual passage of the bill.

Comment 5 — If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision.

Comment 6 — No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them.

Comment 7 — In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.

Comment 8 — This report is intended to describe the financial effect of the proposed plan changes on the Retirement System. Except as otherwise noted, potential effects on other benefit plans were not considered.

Comment 9 — Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.



Supplemental Actuarial Valuation House Bill 449-FN (2023-2258s) Group II Tier B Multiplier Changes as of June 30, 2021

Comment 10 — This calculation is based upon present and proposed plan provisions that are outlined in the report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in the report.

Comment 11 — This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation, and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Comment 12 — Please refer to the June 30, 2021 actuarial funding valuation report dated April 29, 2022 for additional discussions regarding the risks associated with measuring the accrued liability and the actuarially determined contribution. Additional assessment of risks was outside the scope of this assignment.





October 27, 2023

Ms. Marie Mullen
Director of Finance
New Hampshire Retirement System
54 Regional Drive
Concord, New Hampshire 03301

Re: Retirement Benefits Commission Valuation Request – Benefit Multiplier Changes for Group II Tiers B and C

Dear Ms. Mullen:

Enclosed are the results of a supplemental actuarial valuation to measure the financial effects of a multiplier change for Group II Tier B and Tier C members, as requested.

Respectfully submitted, Gabriel, Roeder, Smith & Company

Heidi G. Barry, ASA, FCA, MAAA

HGB:dj Enclosure

cc: Jan Goodwin (NHRS via email)
Tim Crutchfield (NHRS via email)
Mark Cavanaugh (NHRS via email)
Marty Karlon (NHRS via email)
Jeffrey T. Tebeau (GRS via email)
Casey T. Ahlbrandt-Rains (GRS via email)

Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Requested By: Ms. Marie Mullen, Director of Finance

New Hampshire Retirement System

Date: October 27, 2023

Submitted By: Heidi G. Barry, ASA, FCA, MAAA

Jeffrey T. Tebeau, FSA, EA, FCA, MAAA Casey T. Ahlbrandt-Rains, ASA, MAAA Gabriel, Roeder, Smith & Company

This report contains the results of a supplemental actuarial valuation of changes to benefit multipliers applying to credited service over 20 years for Group II Tiers B and C. The purpose of this valuation is to determine the impact of the proposed provisions on the Retirement System's actuarial accrued liabilities and employer contribution rates.

Supplemental valuations do not predict the results of future actuarial valuations. (Future activities can affect future valuation results in an unpredictable manner.) Rather, supplemental valuations give an indication of the probable effect of the **change only** on future valuations without comment on the complete end result of the future valuations.

This report should not be relied on for any purpose other than the purpose described above. GRS is not responsible for unauthorized use of this report.

Heidi G. Barry, Jeffrey T. Tebeau, and Casey T. Ahlbrandt-Rains are independent of the plan sponsor, are Members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

The valuations were based upon data furnished by NHRS for the June 30, 2021 contribution rate setting actuarial valuation. Actuarial methods and assumptions were the same as those used in the annual actuarial valuation as of June 30, 2021. In particular:

- The assumed rate of interest was 6.75%;
- The valuation method was the Entry Age Actuarial Cost Method; and
- Payroll growth is assumed to be 2.75% per year (2.25% for Teachers).

The unfunded liability as of June 30, 2017 shall be amortized through 2039. Each subsequent change in unfunded liability as calculated in odd-numbered years shall be separately amortized over a fixed period of no longer than 20 years.

A brief summary of the data used in this valuation is presented on the following page.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Valuation	Active	Valuation		Average	
Group	Members	Payroll	Age	Service*	Pay
Employees:					
Male	9,654	\$ 564,962,311	48.3	10.9	\$58,521
Female	14,904	735,964,049	49.3	10.6	49,380
Total	24,558	1,300,926,360	48.9	10.7	52,974
Teachers:					
Male	3,746	263,333,764	45.9	14.3	70,297
Female	14,385	934,901,766	45.5	12.9	64,991
Total	18,131	1,198,235,530	45.6	13.2	66,088
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Male	3,582	286,063,788	38.8	11.0	79,861
Female	602	41,278,695	38.4	8.5	68,569
Total	4,184	327,342,483	38.8	10.6	78,237
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Male	1,657	142,817,591	41.2	13.0	86,190
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Total	1,709	146,464,131	41.1	12.8	85,702
Total:					
Male	18,639	1,257,177,454	45.4	11.8	67,449
Female	29,943	1,715,791,050	47.3	11.7	57,302
Grand Total	48,582	\$2,972,968,504	46.5	11.7	\$61,195

* One month of service was added to the reported service for all active participants in consideration of potential subsidized service purchases in the future.

Valuation	Active	Valuation
Group	Members	Payroll
Employees:		
State	9,699	\$ 584,721,355
Political Subdivisions	14,859	716,205,005
Subtotal	24,558	1,300,926,360
Teachers:	18,131	1,198,235,530
Police:		
State	1,078	91,759,702
Political Subdivisions	3,106	235,582,781
Subtotal	4,184	327,342,483
Fire:		
State	58	4,096,525
Political Subdivisions	1,651	142,367,606
Subtotal	1,709	146,464,131
Total	48,582	\$ 2,972,968,504



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Current Provisions Affected:

Group II Tiers B and C Service Retirement Benefits:

Active Group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

	Minimum	Minimum	
	Years of	Age	Annuity
Creditable Service on January 1, 2012	Service	Attained	Multiplier
(1) Less than 4 years	24 Years	Age 49	2.1%
(2) At least 4 years but less than 6 years	23 Years	Age 48	2.2%
(3) At least 6 years but less than 8 years	22 Years	Age 47	2.3%
(4) At least 8 years but less than 10 years	21 Years	Age 46	2.4%

Notwithstanding the transition provisions of subparagraph (d), the member may replace the additional years of service required for minimum retirement age with the years of service that are purchased under RSA 100-A:4, IX. Therefore, allowing the member to retire between the ages of 45 and 49 depending upon the years of service purchased. The purchased years under RSA 100-A:4, IX shall have an annual multiplier of 2.5 percent regardless of the percentage listed in subparagraph (d).

Active Group II members who commenced service on or after July 1, 2011 shall have an annual multiplier of 2.0 percent.

Group II Tiers B and C Disability Benefits:

Upon ordinary disability retirement, the Group II member shall receive an ordinary disability retirement allowance which shall consist of: a member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 1/2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service on or after July 1, 2011, shall be equal to 2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 42.5 at the time of ordinary disability retirement, and Group II members who have not attained vested status prior to January 1, 2012, shall be as provided in the transition provisions in RSA 100-A:5, II(d) with the maximum number of years of creditable service not in excess of 40.5 years provided, however, that such allowance shall not be less than 25 percent of the member's final compensation at the time of his or her disability retirement.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

New Provisions under Consideration:

Group II Tiers B and C Service Retirement Benefits:

Active Group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

Creditable Service as of January 1, 2012	Minimum Years of Service	Minimum Age Attained	Annuity Multiplier
(1) Less than 4 years	24 Years	Age 49	2.1% for the first 20 years, 2.5% thereafter
(2) At least 4 years but less than 6 years	23 Years	Age 48	2.2% for the first 20 years, 2.5% thereafter
(3) At least 6 years but less than 8 years	22 Years	Age 47	2.3% for the first 20 years, 2.5% thereafter
(4) At least 8 years but less than 10 years	21 Years	Age 46	2.4% for the first 20 years, 2.5% thereafter

Notwithstanding the transition provisions of subparagraph (d), the member may replace the additional years of service required for minimum retirement age with the years of service that are purchased under RSA 100-A:4, IX. Therefore, allowing the member to retire between the age of 45 and 49 depending upon the years of service purchased. The purchased years under RSA 100-A:4, IX shall have an annual multiplier of 2.5 percent.

Active Group II members who commenced service on or after July 1, 2011 shall have an annual multiplier of 2.0 percent applied to the first 20 years of credited benefit service, and 2.5 percent to service in excess of 20 years.

Group II Tiers B and C Disability Benefits:

Upon ordinary disability retirement, the Group II member shall receive an ordinary disability retirement allowance which shall consist of: a member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 1/2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 40 at the time of ordinary disability retirement, or for members who commenced service on or after July 1, 2011, shall be equal to 2 percent of the first 20 years of credited service and 2.5 percent for service over 20 years multiplied times his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 42.5 at the time of ordinary disability retirement, and Group II members who have not attained vested status prior to January 1, 2012, shall be as provided in the transition provisions in RSA 100-A:5, II(d), as amended above, with the maximum number of years of creditable service not in excess of 40.5 years provided, however, that such allowance shall not be less than 25 percent of the member's final compensation at the time of his or her disability retirement.

The provisions in this bill shall take effect 60 days after its passage.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Actuarial Statement

Under the proposed scenario outlined in the new provisions, the impact would be reflected in the next rate-setting valuation as of June 30, 2023, which determines the rates for the 2026-2027 biennium. Since the rates for the 2026-2027 biennium are unknown at this time, only the net impact of the proposal is shown.

Pension Results

State

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - State								
	Employees Teachers Police Fire							
Normal Cost %	0.00%	N/A	0.31%	0.34%				
UAAL %	0.00%	N/A	0.40%	0.38%				
Total Impact of Proposal	0.00%	N/A	0.71%	0.72%				

Expected Employer Dollar Increase (Decrease) Due to Proposal - State (\$ Millions)										
	Employees Teache		chers	Police		Fire		Total*		
FY 2023	\$	-	\$	-	\$	-	\$	-	\$	-
FY 2024		-		-		-		-		-
FY 2025		-		-		-		-		-
FY 2026		-		-		0.75		0.03		0.78

Political Subdivisions

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - Political Subdivisions								
Employees Teachers Police Fire								
Normal Cost %	0.00%	0.00%	0.31%	0.34%				
UAAL %	0.00%	0.00%	0.40%	0.38%				
Total Impact of Proposal	0.00%	0.00%	0.71%	0.72%				

Expected Employer Dollar Increase (Decrease) Due to Proposal - Pol. Sub. (\$ Millions)										
	Employees Teachers		Police		Fire		Total*			
FY 2023	\$	-	\$	-	\$	-	\$	-	\$	-
FY 2024		-		-		-		-		-
FY 2025		-		-		-		-		-
FY 2026		-		-		1.92		1.17		3.09

^{*} Totals may not add due to rounding.

Contribution rates for fiscal years 2024 and 2025 have been certified, and are therefore not subject to change. The dollar-amount increases shown for FY 2026 above represent the impact of this proposal to that fiscal year alone. Expected increases to employer contributions for future fiscal years are these amounts increased with wage inflation.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Actuarial Statement (Continued)

Increase (Decrease) in Unfunded Actuarial Accrued Liabilities Due to Proposal								
as of June 30, 2021 Increased with Interest to December 1, 2023 (\$ Millions)								
_		F l		Dalia.	F:			T-4-1*
Employees		Teachers		Police	FI	ire		Total*

^{*} Totals may not add due to rounding.

An appropriation of \$13.1 million and \$5.4 million for police and fire, respectively, as of December 1, 2023 would fully fund the increase in the UAAL as a result of the benefit changes. This would eliminate the UAAL payment component of the increase in the contribution rates, resulting in an increase in the future employer contribution rates which equal the increase in the normal costs only, as shown on previous page (i.e., 0.31% of pay for Police and 0.34% of pay for Fire). Please note that since new hires are impacted by the proposed changes, the proposed changes cannot be terminally funded.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Comment 1 — We have reflected the change beginning in fiscal year 2026, the next year for which Board certification of employer pension contribution rates is scheduled. Actual employer contribution rates for FY 2026 will be based on the June 30, 2023 actuarial valuation and may differ. Actual dollar amounts will be determined based on actual payroll and may differ. As written, the bill will affect all future years. Calculation of the estimated dollar impact on years beyond FY 2026 was beyond the scope of this request.

Comment 2 — The benefit changes proposed in this analysis would apply to new hires. The increase in unfunded liabilities shown on the previous page is as of December 1, 2023 and does not account for the increases in liability associated with new hires for whom these changes would apply.

Comment 3 — If the proposed benefit changes were to be granted only to Group II Tier B members (hired before July 1, 2011 but not vested as of January 1, 2012), then the resulting contribution rate increases would be 0.30% of pay (0.08% normal cost, 0.22% UAAL%) for Police and 0.32% of pay (0.10% normal cost, 0.22% UAAL%) for Fire. In this case, increases in unfunded liabilities would be approximately \$8.1 million for Police and \$3.5 million for Fire as of December 1, 2023. An appropriation of \$11.2 million for Police and \$5.4 million for Fire as of December 1, 2023 would terminally fund these benefit provision changes.

Comment 4 — The effective date of the benefit provision change is unknown. We have estimated the impact of the actuarial accrued liabilities as of December 1, 2023. Results may vary slightly depending on the actual effective date of the proposed changes.

Comment 5 — If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision.

Comment 6 — No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them.

Comment 7 — In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.

Comment 8 — This report is intended to describe the financial effect of the proposed plan changes on the Retirement System. Except as otherwise noted, potential effects on other benefit plans were not considered.

Comment 9 — Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Comment 10 — This calculation is based upon present and proposed plan provisions that are outlined in the report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in the report.

Comment 11 — This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation, and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Comment 12 — Please refer to the June 30, 2021 actuarial funding valuation report dated April 29, 2022 for additional discussions regarding the risks associated with measuring the accrued liability and the actuarially determined contribution. Additional assessment of risks was outside the scope of this assignment.





October 30, 2023

Ms. Marie Mullen
Director of Finance
New Hampshire Retirement System
54 Regional Drive
Concord, New Hampshire 03301

Re: Retirement Benefits Commission Valuation Request – Variation of House Bill (HB) 449-FN (2023-2259s) – Group II Tier B Retirement Eligibility and Benefit Multiplier Changes for Service Retirement

Dear Ms. Mullen:

Enclosed are the results of a supplemental actuarial valuation to measure the financial effects of retirement eligibility changes for Group II Tier B members and a multiplier increase for members who have reached eligibility for Service Retirement, as requested.

Respectfully submitted, Gabriel, Roeder, Smith & Company

Heidi G. Barry, ASA, FCA, MAAA

HGB:dj Enclosure

cc: Jan Goodwin (NHRS via email)
Tim Crutchfield (NHRS via email)
Mark Cavanaugh (NHRS via email)
Marty Karlon (NHRS via email)
Jeffrey T. Tebeau (GRS via email)
Casey T. Ahlbrandt-Rains (GRS via email)

Supplemental Actuarial Valuation Group II Tier B Retirement Eligibility and Service Retirement Multiplier Changes as of June 30, 2021

Requested By: Ms. Marie Mullen, Director of Finance

New Hampshire Retirement System

Date: October 30, 2023

Submitted By: Heidi G. Barry, ASA, FCA, MAAA

Jeffrey T. Tebeau, FSA, EA, FCA, MAAA Casey T. Ahlbrandt-Rains, ASA, MAAA Gabriel, Roeder, Smith & Company

This report contains the results of a supplemental actuarial valuation of a further variation of HB 449-FN (2023-2259s). Specifically, the changes relate to the Group II Tier B retirement eligibility and benefit multipliers which would apply only if the member reaches eligibility for Service Retirement. The purpose of this valuation is to determine the impact of the proposed provisions on the Retirement System's actuarial accrued liabilities and employer contribution rates.

Supplemental valuations do not predict the results of future actuarial valuations. (Future activities can affect future valuation results in an unpredictable manner.) Rather, supplemental valuations give an indication of the probable effect of the **change only** on future valuations without comment on the complete end result of the future valuations.

This report should not be relied on for any purpose other than the purpose described above. GRS is not responsible for unauthorized use of this report.

Heidi G. Barry, Jeffrey T. Tebeau, and Casey T. Ahlbrandt-Rains are independent of the plan sponsor, are Members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

The valuations were based upon data furnished by NHRS for the June 30, 2021 contribution rate setting actuarial valuation. Actuarial methods and assumptions were the same as those used in the annual actuarial valuation as of June 30, 2021. In particular:

- The assumed rate of interest was 6.75%;
- The valuation method was the Entry Age Actuarial Cost Method; and
- Payroll growth is assumed to be 2.75% per year (2.25% for Teachers).

The unfunded liability as of June 30, 2017 shall be amortized through 2039. Each subsequent change in unfunded liability as calculated in odd-numbered years shall be separately amortized over a fixed period of no longer than 20 years.

A brief summary of the data used in this valuation is presented on the next page.



Supplemental Actuarial Valuation Group II Tier B Retirement Eligibility and Service Retirement Multiplier Changes as of June 30, 2021

Valuation	Active	Valuation		Average	
Group	Members	Payroll	Age	Service*	Pay
Employees:					
Male	9,654	\$ 564,962,311	48.3	10.9	\$58,521
Female	14,904	735,964,049	49.3	10.6	49,380
Total	24,558	1,300,926,360	48.9	10.7	52,974
Teachers:					
Male	3,746	263,333,764	45.9	14.3	70,297
Female	14,385	934,901,766	45.5	12.9	64,991
Total	18,131	1,198,235,530	45.6	13.2	66,088
Police:					
Male	3,582	286,063,788	38.8	11.0	79,861
Female	602	41,278,695	38.4	8.5	68,569
Total	4,184	327,342,483	38.8	10.6	78,237
Fire:					
Male	1,657	142,817,591	41.2	13.0	86,190
Female	52	3,646,540	36.0	7.8	70,126
Total	1,709	146,464,131	41.1	12.8	85,702
Total:					
Male	18,639	1,257,177,454	45.4	11.8	67,449
Female	29,943	1,715,791,050	47.3	11.7	57,302
Grand Total	48,582	\$2,972,968,504	46.5	11.7	\$61,195

^{*} One month of service was added to the reported service for all active participants in consideration of potential subsidized service purchases in the future.

Valuation	Active		Valuation	
Group	Members	Payroll		
Employees:				
State	9,699	\$	584,721,355	
Political Subdivisions	14,859		716,205,005	
Subtotal	24,558		1,300,926,360	
Teachers:	18,131		1,198,235,530	
Police:				
State	1,078		91,759,702	
Political Subdivisions	3,106		235,582,781	
Subtotal	4,184		327,342,483	
Fire:				
State	58		4,096,525	
Political Subdivisions	1,651		142,367,606	
Subtotal	1,709		146,464,131	
Total	48,582	\$	2,972,968,504	

Group II Members Affected by Proposal

	Police	Fire
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 between 8 and 10 Years	214	152
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 between 6 and 8 Years	279	107
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 between 4 and 6 Years	309	135
Hired Prior to 7/1/11 with Creditable Service on 1/1/12 Less than 4 Years	445	183
Total	1,247	577



Supplemental Actuarial Valuation Group II Tier B Retirement Eligibility and Service Retirement Multiplier Changes as of June 30, 2021

Current Provisions Affected:

Group II Tier B Service Retirement Benefits:

Active Group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

	Minimum	Minimum	
	Years of	Age	Annuity
Creditable Service on January 1, 2012	Service	Attained	Multiplier
(1) Less than 4 years	24 Years	Age 49	2.1%
(2) At least 4 years but less than 6 years	23 Years	Age 48	2.2%
(3) At least 6 years but less than 8 years	22 Years	Age 47	2.3%
(4) At least 8 years but less than 10 years	21 Years	Age 46	2.4%



Supplemental Actuarial Valuation Group II Tier B Retirement Eligibility and Service Retirement Multiplier Changes as of June 30, 2021

New Provisions under Consideration:

Group II Tier B Service Retirement Benefits:

Active Group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

	Minimum	Minimum	
	Years of	Age	Annuity
Creditable Service as of January 1, 2012	Service	Attained	Multiplier
(1) Less than 4 years	24 Years	Age 49	2.25%
(2) At least 4 year but less than 5 years	23 Years	Age 48	2.25%
(3) At least 5 years but less than 6 years	22 Years	Age 47	2.50%
(4) At least 6 years but less than 8 years	21 Years	Age 46	2.50%
(5) At least 8 years but less than 10 years	20 Years	Age 45	2.50%

The proposed **multiplier** changes above would <u>only</u> apply to members who have attained Service Retirement eligibility.

The provisions in this bill shall take effect 60 days after its passage.



Supplemental Actuarial Valuation Group II Tier B Retirement Eligibility and Service Retirement Multiplier Changes as of June 30, 2021

Actuarial Statement

Under the proposed scenario outlined in the new provisions, the impact would be reflected in the next rate-setting valuation as of June 30, 2023, which determines the rates for the 2026-2027 biennium. Since the rates for the 2026-2027 biennium are unknown at this time, only the net impact of the proposal is shown.

Pension Results

State

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - State										
Employees Teachers Police Fire										
Normal Cost %	0.00%	N/A	0.27%	0.28%						
UAAL %	0.00%	N/A	0.80%	0.75%						
Total Impact of Proposal	0.00%	N/A	1.07%	1.03%						

Expected Employer Dollar Increase (Decrease) Due to Proposal - State (\$ Millions)										
	Emp	Employees Teachers Police Fire Tot								Total*
FY 2023	\$	-	\$	-	\$	-	\$	-	\$	-
FY 2024		-		-		-		-		-
FY 2025		-		-		-		-		-
FY 2026		-		-		1.12		0.05		1.17

Political Subdivisions

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - Political Subdivisions									
Employees Teachers Police F									
Normal Cost %	0.00%	0.00%	0.27%	0.28%					
UAAL%	0.00%	0.00%	0.80%	0.75%					
Total Impact of Proposal	0.00%	0.00%	1.07%	1.03%					

Expected Employer Dollar Increase (Decrease) Due to Proposal - Pol. Sub. (\$ Millions)										
	Employees Teachers					Police Fire			Total*	
FY 2023	\$	-	\$	-	\$	-	\$	-	\$	=
FY 2024		-		-		-		-		-
FY 2025		-		-		-		-		-
FY 2026		-		-		2.89		1.68		4.57

^{*} Totals may not add due to rounding.

Contribution rates for fiscal years 2024 and 2025 have been certified, and are therefore not subject to change. The dollar-amount increases shown for FY 2026 above represent the impact of this proposal to that fiscal year alone. Expected increases to employer contributions for future fiscal years are these amounts increased with wage inflation.



Supplemental Actuarial Valuation Group II Tier B Retirement Eligibility and Service Retirement Multiplier Changes as of June 30, 2021

Actuarial Statement (Continued)

Increase (Decrease) in Unfunded Actuarial Accrued Liabilities Due to Proposal											
as of June 30, 2021 Increased With Interest to December 1, 2023 (\$ Millions)											
Employees		Teachers		Police Fire Total*					Total*		
			- \$ 31.0 \$ 12.9 \$ 43.9								

^{*} Totals may not add due to rounding.



Supplemental Actuarial Valuation Group II Tier B Retirement Eligibility and Service Retirement Multiplier Changes as of June 30, 2021

Comment 1 — We have reflected the change beginning in fiscal year 2026, the next year for which Board certification of employer pension contribution rates is scheduled. Actual employer contribution rates for FY 2026 will be based on the June 30, 2023 actuarial valuation and may differ. Actual dollar amounts will be determined based on actual payroll and may differ. As written, the bill will affect all future years. Calculation of the estimated dollar impact on years beyond FY 2026 was beyond the scope of this request.

Comment 2 — An appropriation of \$37.2 for Police and \$16.5 for Fire as of July 1, 2024 would terminally fund these benefit provision changes.

Comment 3 — The effective date of the bill is 60 days after its passage. We have estimated the impact of the actuarial accrued liabilities as of December 1, 2023. Results may vary slightly depending on the actual passage of the bill.

Comment 4 — If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision.

Comment 5 — No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them.

Comment 6 — In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.

Comment 7 — This report is intended to describe the financial effect of the proposed plan changes on the Retirement System. Except as otherwise noted, potential effects on other benefit plans were not considered.

Comment 8 — Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

Comment 9 — This calculation is based upon present and proposed plan provisions that are outlined in the report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in the report.



Supplemental Actuarial Valuation Group II Tier B Retirement Eligibility and Service Retirement Multiplier Changes as of June 30, 2021

Comment 10 — This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation, and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Comment 11 — Please refer to the June 30, 2021 actuarial funding valuation report dated April 29, 2022 for additional discussions regarding the risks associated with measuring the accrued liability and the actuarially determined contribution. Additional assessment of risks was outside the scope of this assignment.





November 7, 2023

Ms. Marie Mullen
Director of Finance
New Hampshire Retirement System
54 Regional Drive
Concord, New Hampshire 03301

Re: Retirement Benefits Commission Valuation Request – Benefit Multiplier Changes for Group II Tiers B and C

Dear Ms. Mullen:

Enclosed are the results of a supplemental actuarial valuation to measure the financial effects of a multiplier change for Group II Tier B and Tier C members, as requested.

Respectfully submitted, Gabriel, Roeder, Smith & Company

Heidi G. Barry, ASA, FCA, MAAA

HGB:dj Enclosure

cc: Jan Goodwin (NHRS via email)
Tim Crutchfield (NHRS via email)
Mark Cavanaugh (NHRS via email)
Marty Karlon (NHRS via email)
Jeffrey T. Tebeau (GRS via email)
Casey T. Ahlbrandt-Rains (GRS via email)

Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Requested By: Ms. Marie Mullen, Director of Finance

New Hampshire Retirement System

Date: November 7, 2023

Submitted By: Heidi G. Barry, ASA, FCA, MAAA

Jeffrey T. Tebeau, FSA, EA, FCA, MAAA Casey T. Ahlbrandt-Rains, ASA, MAAA Gabriel, Roeder, Smith & Company

This report contains the results of a supplemental actuarial valuation of changes to benefit multipliers applying to credited service over 10 years for Group II Tiers B and C. The purpose of this valuation is to determine the impact of the proposed provisions on the Retirement System's actuarial accrued liabilities and employer contribution rates.

Supplemental valuations do not predict the results of future actuarial valuations. (Future activities can affect future valuation results in an unpredictable manner.) Rather, supplemental valuations give an indication of the probable effect of the **change only** on future valuations without comment on the complete end result of the future valuations.

This report should not be relied on for any purpose other than the purpose described above. GRS is not responsible for unauthorized use of this report.

Heidi G. Barry, Jeffrey T. Tebeau, and Casey T. Ahlbrandt-Rains are independent of the plan sponsor, are Members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

The valuations were based upon data furnished by NHRS for the June 30, 2021 contribution rate setting actuarial valuation. Actuarial methods and assumptions were the same as those used in the annual actuarial valuation as of June 30, 2021. In particular:

- The assumed rate of interest was 6.75%;
- The valuation method was the Entry Age Actuarial Cost Method; and
- Payroll growth is assumed to be 2.75% per year (2.25% for Teachers).

The unfunded liability as of June 30, 2017 shall be amortized through 2039. Each subsequent change in unfunded liability as calculated in odd-numbered years shall be separately amortized over a fixed period of no longer than 20 years.

A brief summary of the data used in this valuation is presented on the following page.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Valuation	Active	Valuation		Average	
Group	Members	Payroll	Age	Service*	Pay
Employees:					
Male	9,654	\$ 564,962,311	48.3	10.9	\$58,521
Female	14,904	735,964,049	49.3	10.6	49,380
Total	24,558	1,300,926,360	48.9	10.7	52,974
Teachers:					
Male	3,746	263,333,764	45.9	14.3	70,297
Female	14,385	934,901,766	45.5	12.9	64,991
Total	18,131	1,198,235,530	45.6	13.2	66,088
Police:					
Male	3,582	286,063,788	38.8	11.0	79,861
Female	602	41,278,695	38.4	8.5	68,569
Total	4,184	327,342,483	38.8	10.6	78,237
Fire:					
Male	1,657	142,817,591	41.2	13.0	86,190
Female	52	3,646,540	36.0	7.8	70,126
Total	1,709	146,464,131	41.1	12.8	85,702
Total:					
Male	18,639	1,257,177,454	45.4	11.8	67,449
Female	29,943	1,715,791,050	47.3	11.7	57,302
Grand Total	48,582	\$2,972,968,504	46.5	11.7	\$61,195

* One month of service was added to the reported service for all active participants in consideration of potential subsidized service purchases in the future.

Valuation	Active	Valuation
Group	Members	Payroll
Employees:		
State	9,699	\$ 584,721,355
Political Subdivisions	14,859	716,205,005
Subtotal	24,558	1,300,926,360
Teachers:	18,131	1,198,235,530
Police:		
State	1,078	91,759,702
Political Subdivisions	3,106	235,582,781
Subtotal	4,184	327,342,483
Fire:		
State	58	4,096,525
Political Subdivisions	1,651	142,367,606
Subtotal	1,709	146,464,131
Total	48,582	\$ 2,972,968,504



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Current Provisions Affected:

Group II Tiers B and C Service Retirement Benefits:

Active Group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

	Minimum	Minimum	
	Years of	Age	Annuity
Creditable Service on January 1, 2012	Service	Attained	Multiplier
(1) Less than 4 years	24 Years	Age 49	2.1%
(2) At least 4 years but less than 6 years	23 Years	Age 48	2.2%
(3) At least 6 years but less than 8 years	22 Years	Age 47	2.3%
(4) At least 8 years but less than 10 years	21 Years	Age 46	2.4%

Notwithstanding the transition provisions of subparagraph (d), the member may replace the additional years of service required for minimum retirement age with the years of service that are purchased under RSA 100-A:4, IX. Therefore, allowing the member to retire between the ages of 45 and 49 depending upon the years of service purchased. The purchased years under RSA 100-A:4, IX shall have an annual multiplier of 2.5 percent regardless of the percentage listed in subparagraph (d).

Active Group II members who commenced service on or after July 1, 2011 shall have an annual multiplier of 2.0 percent.

Group II Tiers B and C Disability Benefits:

Upon ordinary disability retirement, the Group II member shall receive an ordinary disability retirement allowance which shall consist of: a member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 1/2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service on or after July 1, 2011, shall be equal to 2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 42.5 at the time of ordinary disability retirement, and Group II members who have not attained vested status prior to January 1, 2012, shall be as provided in the transition provisions in RSA 100-A:5, II(d) with the maximum number of years of creditable service not in excess of 40.5 years provided, however, that such allowance shall not be less than 25 percent of the member's final compensation at the time of his or her disability retirement.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

New Provisions under Consideration:

Group II Tiers B and C Service Retirement Benefits:

Active Group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

	Minimum	Minimum	
	Years of	Age	
Creditable Service as of January 1, 2012	Service	Attained	Annuity Multiplier
(1) Less than 4 years	24 Years	Age 49	2.1% for the first 10 years, 2.5% thereafter
(2) At least 4 years but less than 6 years	23 Years	Age 48	2.2% for the first 10 years, 2.5% thereafter
(3) At least 6 years but less than 8 years	22 Years	Age 47	2.3% for the first 10 years, 2.5% thereafter
(4) At least 8 years but less than 10 years	21 Years	Age 46	2.4% for the first 10 years, 2.5% thereafter

Notwithstanding the transition provisions of subparagraph (d), the member may replace the additional years of service required for minimum retirement age with the years of service that are purchased under RSA 100-A:4, IX. Therefore, allowing the member to retire between the age of 45 and 49 depending upon the years of service purchased. The purchased years under RSA 100-A:4, IX shall have an annual multiplier of 2.5 percent.

Active Group II members who commenced service on or after July 1, 2011 shall have an annual multiplier of 2.0 percent applied to the first 10 years of credited benefit service, and 2.5 percent to service in excess of 10 years.

Group II Tiers B and C Disability Benefits:

Upon ordinary disability retirement, the Group II member shall receive an ordinary disability retirement allowance which shall consist of: a member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 1/2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 40 at the time of ordinary disability retirement, or for members who commenced service on or after July 1, 2011, shall be equal to 2 percent of the first 10 years of credited service and 2.5 percent for service over 10 years multiplied by his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 42.5 at the time of ordinary disability retirement, and Group II members who have not attained vested status prior to January 1, 2012, shall be as provided in the transition provisions in RSA 100-A:5, II(d), as amended above, with the maximum number of years of creditable service not in excess of 40.5 years provided, however, that such allowance shall not be less than 25 percent of the member's final compensation at the time of his or her disability retirement.

The provisions in this bill shall take effect 60 days after its passage.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Actuarial Statement

Under the proposed scenario outlined in the new provisions, the impact would be reflected in the next rate-setting valuation as of June 30, 2023, which determines the rates for the 2026-2027 biennium. Since the rates for the 2026-2027 biennium are unknown at this time, only the net impact of the proposal is shown.

Pension Results

State

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - State										
	Employees	Teachers	Police	Fire						
Normal Cost %	0.00%	N/A	0.95%	0.94%						
UAAL %	0.00%	N/A	1.24%	1.08%						
Total Impact of Proposal	0.00%	N/A	2.19%	2.02%						

Expected Employer Dollar Increase (Decrease) Due to Proposal - State (\$ Millions)									
	Emp	Employees Teachers Police Fire							Total*
FY 2023	\$	-	\$	-	\$	-	\$	-	\$ -
FY 2024		-		-		-		-	-
FY 2025		-		-		-		-	-
FY 2026		-		-		2.30		0.09	2.39

Political Subdivisions

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - Political Subdivisions								
	Employees	Teachers	Police	Fire				
Normal Cost %	0.00%	0.00%	0.95%	0.94%				
UAAL %	0.00%	0.00%	1.24%	1.08%				
Total Impact of Proposal	0.00%	0.00%	2.19%	2.02%				

Expected Employer Dollar Increase (Decrease) Due to Proposal - Pol. Sub. (\$ Millions)										
	Emp	oloyees	es Teachers		Р	olice	Fire		Total*	
FY 2023	\$	-	\$	-	\$	-	\$	-	\$	-
FY 2024		-		-		-		-		-
FY 2025		-		-		-		-		-
FY 2026		-		-		5.91		3.29		9.20

^{*} Totals may not add due to rounding.

Contribution rates for fiscal years 2024 and 2025 have been certified, and are therefore not subject to change. The dollar-amount increases shown for FY 2026 above represent the impact of this proposal to that fiscal year alone. Expected increases to employer contributions for future fiscal years are these amounts increased with wage inflation.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Actuarial Statement (Continued)

Increase (Decrease) in Unfunded Actuarial Accrued Liabilities Due to Proposal								
as of June 30, 2021 Increased with Interest to December 1, 2023 (\$ Millions)								
Employees		Teachers		Police		Fire		Total*

^{*} Totals may not add due to rounding.

An appropriation of \$40.8 million and \$15.1 million for police and fire, respectively, as of December 1, 2023 would fully fund the increase in the UAAL as a result of the benefit changes. This would eliminate the UAAL payment component of the increase in the contribution rates, resulting in an increase in the future employer contribution rates which equal the increase in the normal costs only, as shown on the previous page (i.e., 0.95% of pay for Police and 0.94% of pay for Fire). Please note that since new hires are impacted by the proposed changes, the proposed changes cannot be terminally funded.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Comment 1 — We have reflected the change beginning in fiscal year 2026, the next year for which Board certification of employer pension contribution rates is scheduled. Actual employer contribution rates for FY 2026 will be based on the June 30, 2023 actuarial valuation and may differ. Actual dollar amounts will be determined based on actual payroll and may differ. As written, the bill will affect all future years. Calculation of the estimated dollar impact on years beyond FY 2026 was beyond the scope of this request.

Comment 2 — The benefit changes proposed in this analysis would apply to new hires. The increase in unfunded liabilities shown on the previous page is as of December 1, 2023 and does not account for the increases in liability associated with new hires for whom these changes would apply.

Comment 3 — The effective date of the benefit provision change is unknown. We have estimated the impact of the actuarial accrued liabilities as of December 1, 2023. Results may vary slightly depending on the actual effective date of the proposed changes.

Comment 4 — If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision.

Comment 5 — No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them.

Comment 6 — In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.

Comment 7 — This report is intended to describe the financial effect of the proposed plan changes on the Retirement System. Except as otherwise noted, potential effects on other benefit plans were not considered.

Comment 8 — Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

Comment 9 — This calculation is based upon present and proposed plan provisions that are outlined in the report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in the report.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Comment 10 — This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation, and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Comment 11 — Please refer to the June 30, 2021 actuarial funding valuation report dated April 29, 2022 for additional discussions regarding the risks associated with measuring the accrued liability and the actuarially determined contribution. Additional assessment of risks was outside the scope of this assignment.





November 7, 2023

Ms. Marie Mullen
Director of Finance
New Hampshire Retirement System
54 Regional Drive
Concord, New Hampshire 03301

Re: Retirement Benefits Commission Valuation Request – Benefit Multiplier Changes for Group II Tiers B and C

Dear Ms. Mullen:

Enclosed are the results of a supplemental actuarial valuation to measure the financial effects of a multiplier change for Group II Tier B and Tier C members, as requested.

Respectfully submitted, Gabriel, Roeder, Smith & Company

Heidi G. Barry, ASA, FCA, MAAA

HGB:dj Enclosure

cc: Jan Goodwin (NHRS via email)
Tim Crutchfield (NHRS via email)
Mark Cavanaugh (NHRS via email)
Marty Karlon (NHRS via email)
Jeffrey T. Tebeau (GRS via email)
Casey T. Ahlbrandt-Rains (GRS via email)

Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Requested By: Ms. Marie Mullen, Director of Finance

New Hampshire Retirement System

Date: November 7, 2023

Submitted By: Heidi G. Barry, ASA, FCA, MAAA

Jeffrey T. Tebeau, FSA, EA, FCA, MAAA Casey T. Ahlbrandt-Rains, ASA, MAAA Gabriel, Roeder, Smith & Company

This report contains the results of a supplemental actuarial valuation of changes to benefit multipliers applying to credited service over 15 years for Group II Tiers B and C. The purpose of this valuation is to determine the impact of the proposed provisions on the Retirement System's actuarial accrued liabilities and employer contribution rates.

Supplemental valuations do not predict the results of future actuarial valuations. (Future activities can affect future valuation results in an unpredictable manner.) Rather, supplemental valuations give an indication of the probable effect of the **change only** on future valuations without comment on the complete end result of the future valuations.

This report should not be relied on for any purpose other than the purpose described above. GRS is not responsible for unauthorized use of this report.

Heidi G. Barry, Jeffrey T. Tebeau, and Casey T. Ahlbrandt-Rains are independent of the plan sponsor, are Members of the American Academy of Actuaries (MAAA), and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

The valuations were based upon data furnished by NHRS for the June 30, 2021 contribution rate setting actuarial valuation. Actuarial methods and assumptions were the same as those used in the annual actuarial valuation as of June 30, 2021. In particular:

- The assumed rate of interest was 6.75%;
- The valuation method was the Entry Age Actuarial Cost Method; and
- Payroll growth is assumed to be 2.75% per year (2.25% for Teachers).

The unfunded liability as of June 30, 2017 shall be amortized through 2039. Each subsequent change in unfunded liability as calculated in odd-numbered years shall be separately amortized over a fixed period of no longer than 20 years.

A brief summary of the data used in this valuation is presented on the following page.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Valuation	Active	Valuation		Average	
Group	Members	Payroll	Age	Service*	Pay
Employees:					
Male	9,654	\$ 564,962,311	48.3	10.9	\$58,521
Female	14,904	735,964,049	49.3	10.6	49,380
Total	24,558	1,300,926,360	48.9	10.7	52,974
Teachers:					
Male	3,746	263,333,764	45.9	14.3	70,297
Female	14,385	934,901,766	45.5	12.9	64,991
Total	18,131	1,198,235,530	45.6	13.2	66,088
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Male	3,582	286,063,788	38.8	11.0	79,861
Female	602	41,278,695	38.4	8.5	68,569
Total	4,184	327,342,483	38.8	10.6	78,237
Fire:					
Male	1,657	142,817,591	41.2	13.0	86,190
Female	52	3,646,540	36.0	7.8	70,126
Total	1,709	146,464,131	41.1	12.8	85,702
Total:					
Male	18,639	1,257,177,454	45.4	11.8	67,449
Female	29,943	1,715,791,050	47.3	11.7	57,302
Grand Total	48,582	\$2,972,968,504	46.5	11.7	\$61,195

* One month of service was added to the reported service for all active participants in consideration of potential subsidized service purchases in the future.

Valuation	Active	Valuation
Group	Members	Payroll
Employees:		
State	9,699	\$ 584,721,355
Political Subdivisions	14,859	716,205,005
Subtotal	24,558	1,300,926,360
Teachers:	18,131	1,198,235,530
Police:		
State	1,078	91,759,702
Political Subdivisions	3,106	235,582,781
Subtotal	4,184	327,342,483
Fire:		
State	58	4,096,525
Political Subdivisions	1,651	142,367,606
Subtotal	1,709	146,464,131
Total	48,582	\$ 2,972,968,504



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Current Provisions Affected:

Group II Tiers B and C Service Retirement Benefits:

Active Group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

	Minimum	Minimum	
	Years of	Age	Annuity
Creditable Service on January 1, 2012	Service	Attained	Multiplier
(1) Less than 4 years	24 Years	Age 49	2.1%
(2) At least 4 years but less than 6 years	23 Years	Age 48	2.2%
(3) At least 6 years but less than 8 years	22 Years	Age 47	2.3%
(4) At least 8 years but less than 10 years	21 Years	Age 46	2.4%

Notwithstanding the transition provisions of subparagraph (d), the member may replace the additional years of service required for minimum retirement age with the years of service that are purchased under RSA 100-A:4, IX. Therefore, allowing the member to retire between the ages of 45 and 49 depending upon the years of service purchased. The purchased years under RSA 100-A:4, IX shall have an annual multiplier of 2.5 percent regardless of the percentage listed in subparagraph (d).

Active Group II members who commenced service on or after July 1, 2011 shall have an annual multiplier of 2.0 percent.

Group II Tiers B and C Disability Benefits:

Upon ordinary disability retirement, the Group II member shall receive an ordinary disability retirement allowance which shall consist of: a member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 1/2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 40 at the time of ordinary disability retirement, or for members who commenced service on or after July 1, 2011, shall be equal to 2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 42.5 at the time of ordinary disability retirement, and Group II members who have not attained vested status prior to January 1, 2012, shall be as provided in the transition provisions in RSA 100-A:5, II(d) with the maximum number of years of creditable service not in excess of 40.5 years provided, however, that such allowance shall not be less than 25 percent of the member's final compensation at the time of his or her disability retirement.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

New Provisions under Consideration:

Group II Tiers B and C Service Retirement Benefits:

Active Group II members who commenced service prior to July 1, 2011 and who have not attained vested status prior to January 1, 2012 shall be subject to the following transition provisions for years of service required for regular service retirement, the minimum age for regular service retirement, and the multiplier used to calculate the retirement annuity, which shall be applicable on, or after January 1, 2012 according to the following table:

	Minimum Years of	Minimum Age	
Creditable Service as of January 1, 2012	Service	Attained	Annuity Multiplier
(1) Less than 4 years	24 Years	Age 49	2.1% for the first 15 years, 2.5% thereafter
(2) At least 4 years but less than 6 years	23 Years	Age 48	2.2% for the first 15 years, 2.5% thereafter
(3) At least 6 years but less than 8 years	22 Years	Age 47	2.3% for the first 15 years, 2.5% thereafter
(4) At least 8 years but less than 10 years	21 Years	Age 46	2.4% for the first 15 years, 2.5% thereafter

Notwithstanding the transition provisions of subparagraph (d), the member may replace the additional years of service required for minimum retirement age with the years of service that are purchased under RSA 100-A:4, IX. Therefore, allowing the member to retire between the age of 45 and 49 depending upon the years of service purchased. The purchased years under RSA 100-A:4, IX shall have an annual multiplier of 2.5 percent.

Active Group II members who commenced service on or after July 1, 2011 shall have an annual multiplier of 2.0 percent applied to the first 15 years of credited benefit service, and 2.5 percent to service in excess of 15 years.

Group II Tiers B and C Disability Benefits:

Upon ordinary disability retirement, the Group II member shall receive an ordinary disability retirement allowance which shall consist of: a member annuity which shall be the actuarial equivalent of his or her accumulated contributions at the time of his or her ordinary disability retirement; and a state annuity which, together with his or her member annuity, for members who are in vested status before January 1, 2012, shall be equal to 2 1/2 percent of his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 40 at the time of ordinary disability retirement, or for members who commenced service on or after July 1, 2011, shall be equal to 2 percent of the first 15 years of credited service and 2.5 percent for service over 15 years multiplied by his or her average final compensation at the time of ordinary disability retirement multiplied by the number of years of his or her creditable service not in excess of 42.5 at the time of ordinary disability retirement, and Group II members who have not attained vested status prior to January 1, 2012, shall be as provided in the transition provisions in RSA 100-A:5, II(d), as amended above, with the maximum number of years of creditable service not in excess of 40.5 years provided, however, that such allowance shall not be less than 25 percent of the member's final compensation at the time of his or her disability retirement.

The provisions in this bill shall take effect 60 days after its passage.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Actuarial Statement

Under the proposed scenario outlined in the new provisions, the impact would be reflected in the next rate-setting valuation as of June 30, 2023, which determines the rates for the 2026-2027 biennium. Since the rates for the 2026-2027 biennium are unknown at this time, only the net impact of the proposal is shown.

Pension Results

State

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - State									
	Employees	Teachers	Police	Fire					
Normal Cost %	0.00%	N/A	0.60%	0.63%					
UAAL %	0.00%	N/A	0.79%	0.72%					
Total Impact of Proposal	0.00%	N/A	1.39%	1.35%					

Expected E	Expected Employer Dollar Increase (Decrease) Due to Proposal - State (\$ Millions)										
	Employees		Employees Teac		achers	Police		Fire		Total*	
FY 2023	\$	-	\$	-	\$	-	\$	-	\$	-	
FY 2024		-		-		-		-		-	
FY 2025		-		-		-		-		-	
FY 2026		-		-		1.46		0.06		1.52	

Political Subdivisions

Increase (Decrease) in Employer Pension Rates as a Percent of Payroll - Political Subdivisions									
	Employees	Teachers	Police	Fire					
Normal Cost %	0.00%	0.00%	0.60%	0.63%					
UAAL%	0.00%	0.00%	0.79%	0.72%					
Total Impact of Proposal	0.00%	0.00%	1.39%	1.35%					

Expected Employer Dollar Increase (Decrease) Due to Proposal - Pol. Sub. (\$ Millions)												
	Employees		Employees		Te	achers	P	olice		Fire		Total*
FY 2023	\$	-	\$	-	\$	-	\$	-	\$	-		
FY 2024		-		-		-		-		-		
FY 2025		-		-		-		-		-		
FY 2026		-		-		3.75		2.20		5.95		

^{*} Totals may not add due to rounding.

Contribution rates for fiscal years 2024 and 2025 have been certified, and are therefore not subject to change. The dollar-amount increases shown for FY 2026 above represent the impact of this proposal to that fiscal year alone. Expected increases to employer contributions for future fiscal years are these amounts increased with wage inflation.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Actuarial Statement (Continued)

Increase (Decrease) in Unfunded Actuarial Accrued Liabilities Due to Proposal									
as of June 30, 2021 Increased with Interest to December 1, 2023 (\$ Millions)									
_									
Employees	Te	achers		Police		Fire	1	Γotal*	

^{*} Totals may not add due to rounding.

An appropriation of \$26.2 million and \$10.1 million for police and fire, respectively, as of December 1, 2023 would fully fund the increase in the UAAL as a result of the benefit changes. This would eliminate the UAAL payment component of the increase in the contribution rates, resulting in an increase in the future employer contribution rates which equal the increase in the normal costs only, as shown on the previous page (i.e., 0.60% of pay for Police and 0.63% of pay for Fire). Please note that since new hires are impacted by the proposed changes, the proposed changes cannot be terminally funded.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Comment 1 — We have reflected the change beginning in fiscal year 2026, the next year for which Board certification of employer pension contribution rates is scheduled. Actual employer contribution rates for FY 2026 will be based on the June 30, 2023 actuarial valuation and may differ. Actual dollar amounts will be determined based on actual payroll and may differ. As written, the bill will affect all future years. Calculation of the estimated dollar impact on years beyond FY 2026 was beyond the scope of this request.

Comment 2 — The benefit changes proposed in this analysis would apply to new hires. The increase in unfunded liabilities shown on the previous page is as of December 1, 2023 and does not account for the increases in liability associated with new hires for whom these changes would apply.

Comment 3 — The effective date of the benefit provision change is unknown. We have estimated the impact of the actuarial accrued liabilities as of December 1, 2023. Results may vary slightly depending on the actual effective date of the proposed changes.

Comment 4 — If you have reason to believe that the information provided in this report is inaccurate, or is in any way incomplete, or if you need further information in order to make an informed decision on the subject matter of this report, please contact the authors of the report prior to making such decision.

Comment 5 — No statement in this report is intended to be interpreted as a recommendation in favor of the changes, or in opposition to them.

Comment 6 — In the event that more than one plan change is being considered, it is very important to remember that the results of separate actuarial valuations cannot generally be added together to produce a correct estimate of the combined effect of all of the changes. The total can be considerably greater than the sum of the parts due to the interaction of various plan provisions with each other, and with the assumptions that must be used.

Comment 7 — This report is intended to describe the financial effect of the proposed plan changes on the Retirement System. Except as otherwise noted, potential effects on other benefit plans were not considered.

Comment 8 — Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

Comment 9 — This calculation is based upon present and proposed plan provisions that are outlined in the report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in the report.



Supplemental Actuarial Valuation Group II Multiplier Changes for Tiers B and C as of June 30, 2021

Comment 10 — This report was prepared using our proprietary valuation model and related software which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation, and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Comment 11 — Please refer to the June 30, 2021 actuarial funding valuation report dated April 29, 2022 for additional discussions regarding the risks associated with measuring the accrued liability and the actuarially determined contribution. Additional assessment of risks was outside the scope of this assignment.



BOLD PLAN • STRONG UNION • FULLY INVOLVED MEMBERS

PROFESSIONAL FIRE FIGHTERS

OF NEW HAMPSHIRE

Retirement Benefits Commission HB 2, Chapter 100-A:58, Laws of 2023

Suggested Topic for Further Review – 1 of 3

Multiplier

History

Members vested prior to January 1, 2012 receive a 2.5% multiplier for all years of service.

Members not vested prior to January 1, 2012 receive a 2.1%-2.4% multiplier for all years of service.

Proposal

Every Group II member in the NHRS "sliding scale" or "Tier B" be eligible for a retention multiplier with a formula as follows:

All members who were in the system, but not vested prior to January 1, 2012 (current sliding scale) receive a multiplier of 2.5% for all years of service, **but only if** they have reached their required age and years of service as it is under current law.

If a member fails to reach their current requirement for age and years of service, their multiplier remains what it is under current law for all years of service.

Rationale

Applying a principle discussed as a part of this commission, members should be rewarded for their ongoing service to their state and local communities.

Amendment 2258s applies the 2.5% multiplier to all members on the sliding scale. By using the above formula, the overall cost should decrease, as we cannot assume every member will reach retirement age before leaving on disability, vested deferred status, or removing their money from the system altogether.

Should a member leave before eligibility, they would default to their current multiplier status.

There are currently approximately 1,730 members on the sliding scale (down from 1,824 from last year). Of the 1,730 approximately 1,500 have not reached the eligible age/time to qualify for the 2.5% multiplier.

Some members in the sliding scale still have in excess of 12 years before reaching eligibility.

Testimony from the NHRS shows that 30-year careers in public safety are not the "norm", as Group II service classification is hazardous. A more realistic benchmark would be the current retirement age.



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PROFESSIONAL FIRE FIGHTERS

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Retirement Benefits Commission HB 2, Chapter 100-A:58, Laws of 2023

Suggested Topic for Further Review – 2 of 3

Multiplier

History

Members vested prior to January 1, 2012 receive a 2.5% multiplier for all years of service.

Members not vested prior to January 1, 2012 receive a 2.1%-2.4% multiplier for all years of service.

Members hired on or after July 1, 2011 receive a 2% multiplier for all years of service.

Proposal (like proposal 1, but for all members)

Every Group II member in the NHRS be eligible for a retention multiplier with a formula as follows:

All members who were in the system, but not vested prior to January 1, 2012 receive a multiplier of 2.5% for all years of service, **but only if** they have reached their required age and years of service as it is under current law.

All members hired on or after July 1, 2011 receive a multiplier of 2.25% for all years of service, **but only** if they have reached their required age and years of service as it is under current law.

If a member fails to reach their current requirement for age and years of service, their multiplier remains what it is under current law for all years of service.

Rationale

Applying a principle discussed as a part of this commission, members should be rewarded for their ongoing service to their state and local communities.

Testimony from the NHRS shows that 30-year careers in public safety are not the "norm", as Group II service classification is hazardous. A more realistic benchmark would be the current retirement age.

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Retirement Benefits Commission HB 2, Chapter 100-A:58, Laws of 2023

Suggested Topic for Further Review – 3 of 3

Reporting of Overtime Pay

History

For members vested prior to January 1, 2012, overtime pay is reported as "Base Compensation". Overtime, as defined by the NHRS includes compensation paid for all hours worked in excess of what the Employer reports as the regular weekly base compensation for a full-time position. Base compensation is calculated as an average of the member's highest 3 or 5 years of service.

For members not vested by January 1, 2012, overtime pay is reported as "Compensation Over Base". In the compensation over base formula, any compensation paid in excess of base compensation must be an average percentage of compensation over base, for all of the member's years of service (**not the highest 3 or 5**).

Proposal

Repeal this restriction on overtime and include a member's overtime as base compensation.

<u>Rationale</u>

The recruitment and retention issues in NH are exacerbated by the common practice of what is often referred to as mandatory overtime, forced overtime, or forced holdovers. Research has shown that for a fire department to operate safely and effectively, they must maintain proper staffing levels, creating the need for mandatory overtime daily.

While proper staffing remains a priority, this practice impacts firefighters' physical, emotional, and psychological health, which in many cases leads to family stress, behavioral health issues, substance abuse issues, and burnout.

In addition, the employee is required to make their contributions on every dollar that they earn, yet they are penalized in their overtime calculation at the end of their careers.

By returning all overtime to base compensation, the state recognizes that a member should not be penalized for actual hours worked.

Any concerns for "spiking" at the end of a member's career remain controlled by the limitations provided in RSA 100-A:6 shall not exceed the lesser of 85 percent of the member's average final compensation or \$120,000.