North Dakota
Retiree Health Insurance Credit Fund
Actuarial Valuation as of July 1, 2024

Table of Contents

Section	Page	
		Introduction
A		***Actuarial Valuation Results***
	1-4	Comments on the Actuarial Valuation
	5-7	Risk Measures
	8-9	Summary of Actuarial Valuation Results
	10	Actuarial Valuation Results – Gain/Loss Analysis
	11-12	Schedule of Funding Progress
B		***Asset Exhibits***
	1	Statement of Fiduciary Net Position
	2	Statement of Changes in Fiduciary Net Position
	3	Development of Actuarial Value of Assets
C		***Actuarial Valuation Data***
	1	Age/Service/Salary
	2	Historical Schedule of Active and Retired Member Data
	3	Summary of Retired Member Data
D		***Actuarial Valuation Procedures***
	1-2	Actuarial Assumptions in the Valuation Process
	3-11	Actuarial Valuation Assumptions
E		***Benefit Provisions***
	1-4	Brief Summary of Plan Provisions
F	1-11	***GASB Statement No. 74 Schedules***
G	1-7	***Calculation of the GASB Statement Nos. 74 and 75 Single Discount Rate***
H	1	***Glossary of Terms***

P: 312.456.9800 | www.grsconsulting.com

October 16, 2024

Board Members
North Dakota Retiree Health Insurance Credit Fund
Bismarck, North Dakota

Members of the Board:

We are pleased to provide our formal annual Actuarial Valuation Report as of July 1, 2024, for the North Dakota Retiree Health Insurance Credit Fund ("RHIC"). The actuarial valuation was performed at the request of the Board and is intended for use by the Board and RHIC and those designated by the Board and RHIC. This report may be provided to parties other than the Board and RHIC only in its entirety and only with the permission of the Board and RHIC. GRS is not responsible for unauthorized use of this report.

The purposes of this actuarial valuation are to measure the funding progress of RHIC and to determine the actuarial employer contribution rate for the RHIC for the Plan Year commencing July 1, 2024, and ending on July 1, 2025, and to compare it to the statutory employer contribution rate. This actuarial valuation also provides information required by GASB Statement No. 74. Information required by GASB Statement No. 75 and the employer allocation of the Net OPEB Liability are provided in a separate report. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results, associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

The actuarial employer contribution rate in this report is determined using the actuarial assumptions and methods disclosed in Section D of this report. This report includes general risk metrics on page A-5 but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

This actuarial valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

We have assessed that the contribution rate calculated under the current funding policy is a reasonable Actuarially Determined Employer Contribution (ADEC) and it is consistent with the plan accumulating adequate assets to make benefit payments when due.

120 North LaSalle Street | Suite 1350 | Chicago, Illinois 60602-3495

The actuarial valuation was based upon information furnished by the North Dakota Public Employees' Retirement System ("NDPERS") Staff, concerning benefits provided by the North Dakota Retiree Health Insurance Credit Fund, financial transactions, plan provisions and census data for active members, retirees and beneficiaries as of July 1, 2024. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the NDPERS Staff.

This report was prepared using actuarial assumptions adopted by the Board as authorized under North Dakota Administrative Code Section 71-06. All assumptions are unchanged since the last valuation and were based on an experience review for the period from July 1, 2014 to July 1, 2019. The assumptions were adopted for first use commencing with the actuarial valuation as of July 1, 2020. In addition, the investment return assumption was decreased from 6.50 percent to 5.75 percent beginning with the July 1, 2022 actuarial valuation. All actuarial assumptions used in this report are generally reasonable for the purposes of this actuarial valuation. The combined effect of the assumptions is expected to have no significant bias (i.e., not significantly optimistic or pessimistic). Additional information about the actuarial assumptions are included in Section D of this report.

Beginning January 1, 2020, members first enrolled in the NDPERS Main System and the Defined Contribution Plan on or after that date will not be eligible to participate in RHIC. Therefore, RHIC has become, for the most part, a closed plan. The RHIC employer contributions for members first enrolled in the NDPERS Main System on or after January 1, 2020 are made as additional contributions to the NDPERS Main System. The RHIC employer contributions for members first enrolled in the NDPERS Defined Contribution Plan on or after January 1, 2020 are made as additional contributions to the members' defined contribution accounts. The plan provisions are unchanged since the last actuarial valuation, performed as of July 1, 2023.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the North Dakota Retiree Health Insurance Credit Fund as of the actuarial valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

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.

Bonita J. Wurst and Abra D. Hill are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

Gabriel, Roeder, Smith & Company will be pleased to review this actuarial valuation report with the Board of Trustees and to answer any questions pertaining to the actuarial valuation.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

Bonita J. Wurst

Bonita J. Wurst, ASA, EA, MAAA, FCA
Senior Consultant

Abra D. Hill

Abra D. Hill, ASA, MAAA, FCA
Consultant

cc: Rebecca Fricke, NDPERS
Derrick Hohbein, NDPERS

SECTION A

ACTUARIAL VALUATION RESULTS

Comments on the Actuarial Valuation

Purpose

At your request, we have performed an actuarial valuation of the North Dakota Retiree Health Insurance Credit Fund as of July 1, 2024.

The purposes of this actuarial valuation are as follows:

- To determine the funding status of the RHIC as of the actuarial valuation date;
- To determine the actuarial employer contribution rate for the fiscal year beginning July 1, 2024; and
- To provide other data required for RHIC.

OPEB plan financial reporting under GASB Statement No. 74 is provided in Section F of this report. Employer financial reporting under GASB Statement No. 75 is provided in a separate report.

Membership Data

We received the member data from the NDPERS Staff. We performed certain checks for reasonableness and found the member data to be complete and reliable for actuarial valuation purposes. However, we did not audit the data.

A total of 16,283 active members were included in the actuarial valuation as of July 1, 2024. Between the 2023 and 2024 actuarial valuations, the number of active employees decreased by 1,000 members, or 5.8 percent. The average annual valuation pay increased by 9.5 percent, from $58,160 to $63,668 between the 2023 and 2024 actuarial valuations.

The number of eligible current benefit recipients increased from 14,996 to 15,599, or 4.0 percent, since the last actuarial valuation. All eligible retirees, including those not enrolled in the NDPERS health insurance plan, were included beginning with the 2016 actuarial valuation.

The average monthly benefit available remained at $98. The assumed average monthly benefit utilized was $89.

A total of 8,255 terminated vested members were included in the actuarial valuation as of July 1, 2024. Terminated vested liabilities were first reflected in the July 1, 2020 actuarial valuation.

Section C summarizes the membership data.

Plan Provisions

Section E outlines the principal benefit provisions of the RHIC. Beginning January 1, 2020, members first enrolled in the NDPERS Main System and the Defined Contribution Plan on or after that date are not eligible to participate in RHIC. Therefore, RHIC has become, for the most part, a closed plan. The RHIC employer contributions for members first enrolled in the NDPERS Main System on or after January 1, 2020 are made as additional contributions to the NDPERS Main System. The RHIC employer contributions for members first enrolled in the NDPERS Defined Contribution plan on or after January 1, 2020 are made as additional contributions to the members' defined contribution accounts. There were no changes in plan provisions since the previous actuarial valuation.

Actuarial Assumptions and Methods

This report was prepared using actuarial assumptions adopted by the Board as authorized under North Dakota Administrative Code Section 71-06. All actuarial assumptions used in this report are generally reasonable for the purposes of this actuarial valuation.

Most of the actuarial assumptions used in the actuarial valuation as of July 1, 2024 were based on an experience review for the five-year period ending July 1, 2019. The actuarial assumptions were first adopted for use commencing with the actuarial valuation as of July 1, 2020. In addition, the investment return assumption was decreased from 6.50 percent to 5.75 percent beginning with the July 1, 2022 actuarial valuation.

Section D outlines the actuarial assumptions and methods used in the actuarial valuation.

The assumption for administrative expenses is equal to the prior years' administrative expenses, adjusted for inflation. In total, the administrative expense assumption increased from $363,698 to $379,015.

Prior to the actuarial valuation as of July 1, 2019, the actuarial contribution rate was calculated using a 40-year closed period (beginning July 1, 1990) level-percentage of pay amortization of the unfunded liability. First effective with the actuarial valuation as of July 1, 2019, the Board adopted a change in the method used to calculate the actuarial rate to a modified version of the Aggregate Actuarial Cost Method in order to be more consistent with projected contributions to a mostly closed plan. The actuarial rate is equal to the rate needed to pay off the unfunded liability and future Normal Cost contributions at the end of 20 years (June 30, 2039) as a level percent of closed group (decreasing) payroll. The remaining amortization period as of the July 1, 2024 actuarial valuation is 15 years.

Gain/Loss Analysis

During the plan year ending June 30, 2024, the Unfunded Actuarial Accrued Liability ("UAAL") decreased from $92,754,158 as of June 30, 2023, to $89,637,373 as of July 1, 2024, which is a decrease of $3,116,785. The expected UAAL as of July 1, 2024, if all actuarial assumptions were realized and if contributions using the actuarial rate of 1.38 percent were made was $87,647,949. The UAAL was higher than expected due mostly to statutory contributions less than actuarial contributions. The increase was partially offset by demographic experience. The UAAL based on the market value of assets is $86,405,552.

Comments on the Actuarial Valuation

Plan Asset Return

On a market value basis, RHIC assets had an investment return of approximately 12.45 percent (net of investment expenses). On an actuarial value of asset basis, RHIC assets had an investment return of approximately 5.94 percent, which compares to the prior year assumed rate of return of 5.75 percent.

The actuarial value of assets is currently 98.3 percent of the market value of assets. There are $3,231,821 in net asset gains currently being deferred that will be phased into the actuarial value of assets over the next four years.

Funded Ratio

The funded ratio measures the portion of the actuarial accrued liability (calculated based on the actuarial assumptions disclosed in this report) that is currently funded. The funded ratio is 67.2 percent on an actuarial value of assets basis and 68.3 percent on a market value of assets basis.

The funded ratio and unfunded actuarial accrued liability are appropriate for assessing the need for and the amount of future unfunded liability contributions (excludes normal cost contributions). They are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan's benefit obligations.

Comments on the Actuarial Valuation

Employer Contributions

First effective with the actuarial valuation as of July 1, 2019, the actuarially determined contribution rate is calculated as the rate needed to pay off the unfunded liability and future Normal Cost contributions at the end of 20 years (June 30, 2039) as a level percent of closed group (decreasing) payroll. If employers contributed the actuarial contribution rate, the contribution rate would be expected to remain level over the 20-year period (assuming the actuarial assumptions are realized, including a 5.75 percent return on the actuarial value of assets). A closed amortization period is expected to increase the funded ratio to 100 percent by the end of the closed period (assuming no actuarial gains or losses). The contributions that are made by employers are based on fixed contribution rates that are set by statute (and not based on the actuarially determined rate). The statutory contribution rate of 1.14 percent is lower than the actuarial contribution rate of 1.34 percent.

The statutory contribution is expected to fully fund the current unfunded liability (assuming the actuarial assumptions are realized, including a 5.75 percent return on the actuarial value of assets) within approximately 27 years.

Historical Trends

The funded ratio decreased from 69.4 percent in 2015, to a low of 55.4 percent in 2016, and then increased to the current funded ratio of 67.2 percent.

The ratio of active members to retired members has decreased from 4.5 active members for each retired member in 2015 to 1.0 in 2024. The ratio decreased from 4.5 in 2015 to 2.3 in 2016 due to the change of no longer requiring enrollment in the NDPERS health insurance plan to receive payments from the RHIC.

Risks Associated with Measuring the Accrued Liability and Contributions

The determination of the accrued liability and the statutory and actuarially determined contribution requires the use of actuarial assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the actuarial assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the statutory and actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

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 due to changing conditions; 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. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. **Investment Risk** – actual investment returns may differ from the expected returns;
2. **Asset/Liability Mismatch** – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. **Contribution Risk** – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. **Salary and Payroll Risk** – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
5. **Longevity Risk** – members may live longer or shorter than expected and receive pensions for a period of time other than assumed; and
6. **Other Demographic Risks** – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example, if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise, if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

Risk Measures

The statutory contribution may be considered as a minimum contribution that complies with State statute. The timely receipt of contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made in accordance with the funding policy do not necessarily guarantee benefit security.

Plan Maturity Measures

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	2020	2021	2022	2023	2024
Ratio of the Market Value of Assets to Payroll	0.13	0.17	0.15	0.17	0.18
Ratio of Actuarial Accrued Liability to Payroll	0.20	0.22	0.26	0.27	0.26
Ratio of Actives to Retirees and Beneficiaries	1.79	1.54	1.33	1.15	1.04
Ratio of Non-Investment Cash Flow to Market Value of Assets	0.83%	0.10%	-0.71%	-1.27%	-1.36%

Ratio of Market Value of Assets to Payroll

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

Ratio of Actuarial Accrued Liability to Payroll

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time. The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

Ratio of Actives to Retirees and Beneficiaries

A young plan with many active members and few retirees will have a high ratio of actives to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

Risk Measures

Ratio of Net Cash Flow to Market Value of Assets

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means benefits and expenses exceed contributions, and existing funds may be used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

Additional Risk Assessment

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.

Summary of Actuarial Valuation Results

	Valuation as of July 1, 2023		Valuation as of July 1, 2024	
	Total	% of Payroll[1]	Total	% of Payroll[1]
Active Members				
Number	17,283		16,283	
Average Age	48.3		48.5	
Average Years of Benefit Service	12.5		13.0	
Average Years of Vesting Service	12.6		13.2	
Total Payroll	$ 1,005,182,784		$ 1,036,707,331	
Projected Annual Compensation	1,061,236,658		1,095,098,278	
Terminated Vested Members[2]				
Number	7,992		8,255	
Retired Members and Beneficiaries				
Number	14,996		15,599	
Total Annualized Benefits	$ 16,040,935		$ 16,619,346	
Total Membership	40,271		40,137	
Actuarial Accrued Liability				
Active Members	$ 79,106,910		$ 78,306,064	
Terminated Vested Members	17,313,448		17,154,198	
Retired Members and Beneficiaries	171,872,818		177,521,290	
Total	268,293,176		272,981,552	
Actuarial Value of Assets	175,539,018		183,344,179	
Unfunded Actuarial Accrued Liability	92,754,158		89,637,373	
Funded Ratio (Actuarial Value of Assets)	65.4%		67.2%	
Present Value of Future Benefits (PVFB)	$ 305,478,650		$ 308,505,123	
Present Value of Future Salaries (PVFS)	11,384,723,990		11,528,979,424	
Present Value of Future Salaries over Remaining Amortization Period	9,396,364,070		9,339,672,443	
Unfunded Present Value of Future Benefits	129,939,632		125,160,944	
Unfunded PVFB/PVFS over Remaining Amortization Period	1.38%		1.34%	
Annual Gross Normal Cost				
Benefits	$ 4,160,052	0.39%	$ 4,042,086	0.37%
Expenses of Administration	363,698	0.04%	379,015	0.03%
Total	4,523,750	0.43%	4,421,101	0.40%
Actuarial Contribution	14,675,538	1.38%	14,675,411	1.34%
Statutory Employer Contribution	12,098,098	1.14%	12,484,120	1.14%
Statutory Contribution Deficit/(Surplus)	2,577,440	0.24%	2,191,291	0.20%
PVFS to Pay Off Unfunded PVFB Based on Statutory Rate of 1.14%	11,398,213,355		10,979,030,188	
Amortization Period from Statutory Rate (Years)	60+		27	

[1] *Rates are calculated as a percentage of projected annual compensation.*

[2] *Terminated vested member liabilities first reflected in 2020.*

Summary of Actuarial Valuation Results

	Valuation as of July 1, 2023		Valuation as of July 1, 2024	
	Total	% of Payroll[1]	Total	% of Payroll[1]
Results Based on Market Value of Assets				
Market Value of Assets	$ 168,318,052		$ 186,576,000	
Unfunded Actuarial Accrued Liability	99,975,124		86,405,552	
Funded Ratio (Market Value of Assets)	62.7%		68.3%	
Present Value of Future Benefits (PVFB)	$ 305,478,650		$ 308,505,123	
Present Value of Future Salaries (PVFS)	11,384,723,990		11,528,979,424	
Present Value of Future Salaries over Remaining Amortization Period	9,396,364,070		9,339,672,443	
Unfunded Present Value of Future Benefits	$ 137,160,598		$ 121,929,123	
Unfunded PVFB/PVFS over Remaining Amortization Period	1.46%		1.31%	
Total Annual Gross Normal Cost	4,523,750	0.43%	4,421,101	0.40%
Actuarial Contribution	15,491,083	1.46%	14,296,473	1.31%
Statutory Employer Contribution	12,098,098	1.14%	12,484,120	1.14%
Statutory Contribution Deficit/(Surplus)	3,392,985	0.32%	1,812,353	0.17%
PVFS to Pay Off Unfunded PVFB Based on Statutory Rate of 1.14%	12,031,631,425		10,695,537,118	
Amortization Period from Statutory Rate (Years)	60+		23	

[1] *Rates are calculated as a percentage of projected annual compensation.*

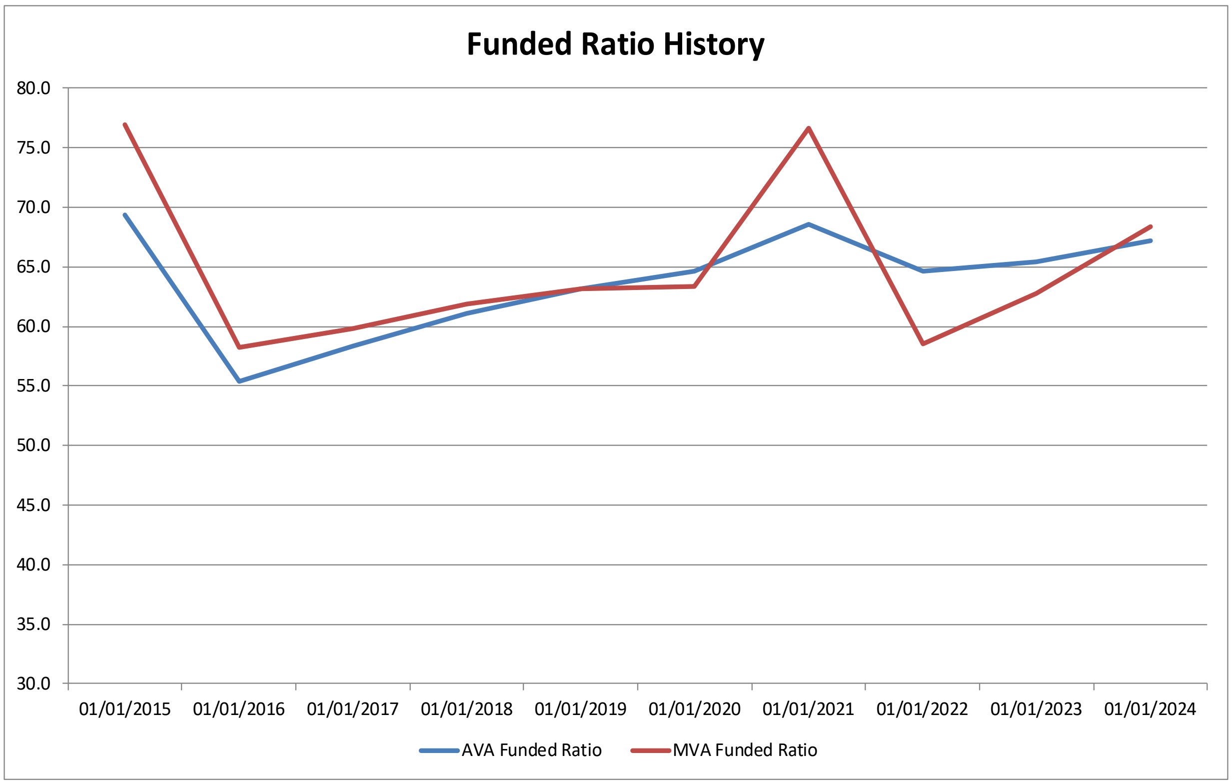
Actuarial Valuation Results
Gain/Loss Analysis

Unfunded liability at previous valuation	$	92,754,158
Expected unfunded liability at current valuation		
Normal cost for plan year		4,523,750
Interest on unfunded liability and normal cost		5,461,604
Contributions using actuarial rate with interest to current valuation date		15,091,563
Total expected change in unfunded liability at current valuation		(5,106,209)
Total expected unfunded liability at current valuation		87,647,949
Change due to:		
Amount of contributions (statutory vs actuarial contributions)		2,405,875
Amount of administrative expenses		7,175
Recognition of asset (gains)/losses		(329,845)
Salary experience		-
Retirement experience		110,442
Withdrawal experience		(442,224)
Disability experience		(74,596)
Death-in-Service experience		(102,479)
Death After Retirement experience		(519,180)
New entrants/Rehires		729,519
Data changes and other experience		204,737
Change in actuarial assumptions		-
Changes in plan provisions		-
Total change		1,989,424
Unfunded liability at current valuation	$	89,637,373

FY 2024 Actuarial Employer Contribution Rate	1.38%
Expected FY 2025 Employer Contribution Rate	1.38%
Expected FY 2025 Employer Contribution Rate with New Pay Base	1.32%
Impact due to New Pay Base	-0.06%
Change due to:	
Amount of contributions (statutory vs actuarial contributions)	0.02%
Amount of administrative expenses	0.00%
Recognition of asset (gains)/losses	0.00%
Demographic, Data Changes, and Other Experience	0.00%
Change in actuarial assumptions	0.00%
Changes in plan provisions	0.00%
Total change	0.02%
FY 2025 Actuarial Employer Contribution Rate	1.34%
FY 2025 Statutory Contribution Rate	1.14%

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (AVA) (a)	Actuarial Accrued Liability (AAL) (b)	AVA Unfunded AAL (UAAL) (b – a)	AVA Funded Ratio (a / b)	Market Value of Assets (MVA) (c)	MVA Unfunded AAL (UAAL) (b – c)	MVA Funded Ratio (a / b)
7/1/2015	$ 89,433,998	$ 128,940,013	$ 39,506,015	69.4	$ 99,142,050	$ 29,797,963	76.9 %
7/1/2016	97,782,124	176,592,907	78,810,783	55.4	102,921,075	73,671,832	58.3
7/1/2017	114,602,927	196,694,770	82,091,843	58.3	117,593,690	79,101,080	59.8
7/1/2018	126,211,715	206,662,795	80,451,080	61.1	127,905,982	78,756,813	61.9
7/1/2019	137,601,769	217,831,024	80,229,255	63.2	137,512,286	80,318,738	63.1
7/1/2020	148,513,691	229,740,674	81,226,983	64.6	145,620,917	84,119,757	63.4
7/1/2021	163,278,611	237,951,735	74,673,124	68.6	182,334,446	55,617,289	76.6
7/1/2022	170,644,833	263,968,385	93,323,552	64.6	154,483,072	109,485,313	58.5
7/1/2023	175,539,018	268,293,176	92,754,158	65.4	168,318,052	99,975,124	62.7
7/1/2024	183,344,179	272,981,552	89,637,373	67.2	186,576,000	86,405,552	68.3



There was a change in the covered number of retirees as a result of no longer requiring enrollment in the NDPERS health insurance plan. The participation rates that apply to future retirees were changed in the actuarial valuation as of July 1, 2015, in conjunction with this Plan change. The change for current retirees was first reflected in the actuarial valuation as of July 1, 2016.

Schedule of Funding Progress

Valuation Year	Actuarial Accrued Liabilities	Valuation Assets (AVA)	Unfunded Actuarial Accrued Liabilities	Ratio of Assets to AAL	Active Member Payroll	UAAL as Percent of Active Member Payroll
2015[1]	$ 128,940,013	$ 89,433,998	$ 39,506,015	69.4%	$ 1,052,657,000	3.8%
2016	176,592,907	97,782,124	78,810,783	55.4%	1,066,653,605	7.4%
2017	196,694,770	114,602,927	82,091,843	58.3%	1,081,841,008	7.6%
2018	206,662,795	126,211,715	80,451,080	61.1%	1,094,216,775	7.4%
2019	217,831,024	137,601,769	80,229,255	63.2%	1,115,857,588	7.2%
2020	229,740,674	148,513,691	81,226,983	64.6%	1,139,970,530	7.1%
2021	237,951,735	163,278,611	74,673,124	68.6%	1,090,257,793	6.8%
2022	263,968,385	170,644,833	93,323,552	64.6%	1,032,405,030	9.0%
2023	268,293,176	175,539,018	92,754,158	65.4%	1,005,182,784	9.2%
2024	272,981,552	183,344,179	89,637,373	67.2%	1,036,707,331	8.6%

[1] *The active member payroll is approximated based on figures from the NDPERS Comprehensive Annual Financial Report.*

SECTION B

ASSET EXHIBITS

Statement of Fiduciary Net Position

Assets	Fiscal Year Ending June 30, 2023	Fiscal Year Ending June 30, 2024
Cash	$ 1,627,141	$ 1,583,500
Receivables		
Contribution receivable	1,351,210	862,111
Interest receivable	901	1,202
Due from other fiduciary funds	422,817	0
Due from Uniform Group Insurance Plan	0	0
Due from other state agencies	190	183
Total receivables	1,775,118	863,496
Investments		
Equities	109,976,710	120,260,279
Fixed income	55,046,287	63,927,579
Real estate	-	-
Mutual funds	-	-
Annuities	-	-
Alternative Investments		
Invested cash	96,387	57,181
Total Investments	165,119,384	184,245,039
Prepaid expenses	-	-
Capital assets (net of depreciation/amortization)	60,478	49,456
Total assets	168,582,121	186,741,491
Liabilities		
Salaries payable	-	-
Accounts payable	263,984	165,491
Due to other fiduciary funds	-	-
Due to Uniform Group Insurance Plan	-	-
Due to other state agencies	85	-
Accrued compensated absences	-	-
Total liabilities	264,069	165,491
Net position restricted for postemployment healthcare benefits	$ 168,318,052	$ 186,576,000

Statement of Changes in Fiduciary Net Position

	Fiscal Year Ending	
	June 30, 2023	June 30, 2024
Additions:		
Contributions:		
From employer	$ 12,137,476	$ 12,328,091
From employee	10,741	7,894
Total contributions	12,148,217	12,335,985
Investment income		
Net change in fair value of investments	12,315,155	16,039,784
Interest and dividends	4,144,674	5,306,731
Less investment expense	(484,757)	(542,564)
Net investment income	15,975,072	20,803,951
Repurchase service credit	282,185	282,386
Miscellaneous Income	1	596
Total additions	28,405,475	33,422,918
Deductions:		
Benefits paid to participants	-	-
Refunds	6,234	11,197
Prefunded credit applied	14,208,566	14,783,098
Health premiums paid	-	-
	14,214,800	14,794,295
Administrative expenses	355,695	370,675
Total deductions	14,570,495	15,164,970
Change in net position	13,834,980	18,257,948
Net position restricted for postemployment healthcare benefits		
Beginning of year	154,483,072	168,318,052
End of year	$ 168,318,052	$ 186,576,000

Development of Actuarial Value of Assets

Fiscal Year Ending	2023	2024	2025	2026	2027	2028
Beginning of Year:						
(1) Market Value of Assets	$ 154,483,072	$ 168,318,052				
(2) Actuarial Value of Assets[1]	170,644,833	175,539,018				
End of Year:						
(3) Market Value of Assets	168,318,052	186,576,000				
(4a) Contributions (Incl. repurchase svc credit)	12,430,403	12,618,967				
(4b) Net Disbursements	14,570,495	15,164,970				
(5) Total Investment Income						
=(3)-(1)-(4a)+(4b)	15,975,072	20,803,951				
(6) Projected Rate of Return	5.75%	5.75%				
(7) Projected Investment Income						
=(1)x(6)+([1+(6)]^.5-1)x(4a-4b)	8,822,109	9,606,113				
(8) Asset Adjustment	0	0				
(9) Investment Income in						
Excess of Projected Income	7,152,963	11,197,838				
(10) Excess Investment Income Recognized						
This Year (5-year recognition)						
(10a) From This Year	1,430,593	$ 2,239,568				
(10b) From One Year Ago	(7,714,645)	1,430,593	$ 2,239,568			
(10c) From Two Years Ago	5,411,064	(7,714,645)	1,430,593	$ 2,239,568		
(10d) From Three Years Ago	(621,529)	5,411,064	(7,714,645)	1,430,593	$ 2,239,568	
(10e) From Four Years Ago	(293,315)	(621,529)	5,411,062	(7,714,643)	1,430,591	$ 2,239,566
(10f) Total Recognized Investment Gain/(Loss)	(1,787,832)	745,051	1,366,578	(4,044,482)	3,670,159	2,239,566
(11) Change in Actuarial Value of Assets						
=(4a)-(4b)+(7)+(8)+(10f)	4,894,185	7,805,161				
End of Year:						
(3) Market Value of Assets	**$ 168,318,052**	**$ 186,576,000**				
(12) Final Actuarial Value of Assets as of 6/30 = (2)+(11)	**$ 175,539,018**	**$ 183,344,179**				
(13) Difference Between Market & Actuarial Values	(7,220,966)	3,231,821				
(14) Estimated Market Value Rate of Return on Total Plan Assets	10.41%	12.45%				
(15) Actuarial Value Rate of Return	4.15%	5.94%				
(16) Ratio of Actuarial Value to Market Value	104.3%	98.3%				

[1] *Asset gains and losses in FY 2016 and prior were fully recognized as of July 1, 2017, and subsequent asset gains/losses will be smoothed in over a five-year period.*

SECTION C

ACTUARIAL VALUATION DATA

Age/Service/Salary
as of July 1, 2024

	Vesting Service as of Valuation Date									
Current Age	**Under 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35 and Over**	**Totals**	**Valuation Payroll**
Under 20	8	-	-	-	-	-	-	-	**8**	**$ 424,596**
20-24	220	8	-	-	-	-	-	-	**228**	**12,264,663**
25-29	400	280	3	-	-	-	-	-	**683**	**38,877,688**
30-34	372	836	184	3	-	-	-	-	**1,395**	**86,414,092**
35-39	297	859	595	154	4	-	-	-	**1,909**	**125,380,803**
40-44	260	821	561	436	110	8	-	-	**2,196**	**147,166,546**
45-49	171	707	498	435	292	94	13	-	**2,210**	**148,025,034**
50-54	150	619	467	406	297	249	92	4	**2,284**	**149,738,372**
55-59	97	472	435	392	308	232	187	85	**2,208**	**141,212,418**
60-64	105	489	425	391	301	184	125	176	**2,196**	**133,461,366**
65-69	43	176	158	118	84	70	29	70	**748**	**43,608,310**
70-74	14	46	31	26	16	16	4	9	**162**	**8,109,331**
75 and Over	3	17	8	11	6	4	3	4	**56**	**2,024,114**
Total	**2,140**	**5,330**	**3,365**	**2,372**	**1,418**	**857**	**453**	**348**	**16,283**	**$ 1,036,707,331**

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Previous Valuation		Current Valuation		Change
Average Age:	48.3	Average Age:	48.5	0.2
Average Benefit Service:	12.5	Average Benefit Service:	13.0	0.5
Average Vesting Service:	12.6	Average Vesting Service:	13.2	0.6
Average Annual Pay:	$58,160	Average Annual Pay:	$63,668	$5,508
Vested Participants	16,597	Vested Participants	15,353	(1,244)
Nonvested Participants	686	Nonvested Participants	930	244
Total Participants	17,283	Total Participants	16,283	(1,000)

Historical Schedule of Active and Retired Member Data through July 1, 2024

Valuation Date July 1,	Number of Active Members	Number of Terminated Vested Members[1]	Number of Retired Members	Average Annual Benefit	Number of Active Members Per Retiree
2015	23,237		5,212	$ 1,455	4.5
2016	23,664		10,320	1,199	2.3
2017	23,497		11,232	1,164	2.1
2018	23,747		11,823	1,170	2.0
2019	23,997		12,471	1,174	1.9
2020	23,495	6,734	13,092	1,175	1.8
2021	21,067	7,112	13,697	1,174	1.5
2022	19,018	7,639	14,290	1,179	1.3
2023	17,283	7,992	14,996	1,175	1.2
2024	16,283	8,255	15,599	1,173	1.0

[1] *Terminated vested member liabilities first reflected in 2020.*

Summary of Retired Member Data
as of July 1, 2024

	Monthly Benefit Amount							
Age	**Under $30**	**$30-$59**	**$60-$89**	**$90-$119**	**$120-$149**	**$150-$179**	**$180 and over**	**Total**
Under 50	14	12	7	1	1	3	0	**38**
50 - 54	10	12	10	6	9	22	0	**69**
55 - 59	36	37	32	16	77	134	20	**352**
60 - 64	123	177	133	103	317	328	167	**1,348**
65 - 69	555	790	609	466	554	521	396	**3,891**
70 - 74	532	834	629	528	659	490	343	**4,015**
75 - 79	381	602	474	375	484	258	213	**2,787**
80 - 84	209	340	303	281	253	140	109	**1,635**
85 - 89	107	205	210	127	144	83	69	**945**
90 and Over	52	125	119	79	66	44	34	**519**
Total	**2,019**	**3,134**	**2,526**	**1,982**	**2,564**	**2,023**	**1,351**	**15,599**

	Previous Valuation	Current Valuation	Change
Average Age	73.1	73.4	0.3
Average Monthly Benefit Available	$98	$98	$0
Assumed Average Monthly Benefit Utilized	$89	$89	$0
Total Participants	14,996	15,599	603

SECTION D

ACTUARIAL VALUATION PROCEDURES

Actuarial Assumptions in the Valuation Process

Normal cost and the allocation of benefit values between service rendered before and after the actuarial valuation date were determined using the ***Individual Entry Age Normal*** actuarial cost method having the following characteristics:

- The normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement; and
- Each annual normal cost is a constant percentage of the member's year by year projected covered pay.

This assumption was adopted by the Board for use beginning with the July 1, 2017 actuarial valuation. The previous actuarial cost method was the Projected Unit Credit actuarial cost method.

Financing of Unfunded Actuarial Accrued Liabilities. First effective with the actuarial valuation as of July 1, 2019, the Board adopted a change in the method used to calculate the actuarial rate to a modified version of the Aggregate Actuarial Cost Method in order to be more consistent with projected contributions to a mostly closed plan. The actuarial rate is equal to the rate needed to pay off the unfunded liability and future Normal Cost contributions at the end of 20 years (June 30, 2039) as a level percent of closed group (decreasing) payroll.

Actuarial Value of Pension Plan Assets. The calculated value is determined by adjusting the market value of assets to reflect the investment gains and losses (the difference between the actual investment return and the expected investment return) during each of the last five years at the rate of 20 percent per year. This asset smoothing method was adopted by the Board for use beginning with the July 1, 2017 actuarial valuation. Net deferred asset gains attributable to fiscal years 2016 and prior were fully recognized as of July 1, 2017.

Actuarial Valuation Assumptions. The contribution and benefit values of the Fund are calculated by applying actuarial assumptions to the benefit provisions and census information furnished, using the actuarial cost method described above.

The principal areas of financial risk which require actuarial assumptions about future experiences are:

- Long-term rates of investment return to be generated by the assets of the Plan;
- Rates of mortality among members, retirees and beneficiaries;
- Rates of withdrawal of active members;
- Rates of disability among members; and
- The age patterns of actual retirement.

In an actuarial valuation, the monetary effect of each assumption is calculated for as long as a present covered person survives; a period of time which can be as long as a century.

Actual experience of the Plan will not coincide exactly with assumed experience. Each actuarial valuation provides a complete recalculation of assumed future experience and takes into account all past differences between assumed and actual experience. The result is a continual series of adjustments (usually small) to the computed contribution rate.

Actuarial Assumptions in the Valuation Process

From time-to-time it becomes appropriate to modify one or more of the actuarial assumptions, to reflect experience trends (but not random year-to-year fluctuations). Thus, an experience review of the North Dakota Public Employees' Retirement System for the period July 1, 2014 to July 1, 2019, was performed to compare the demographic and economic experience against the actuarial assumptions used in the valuations. Most of the actuarial assumptions described in this section were adopted by the Board for use beginning with the July 1, 2020 actuarial valuation.

All actuarial assumptions are expectations of future experience, not current market measures.

The actuarial assumptions were provided by, and are the responsibility of, the NDPERS Board.

Current Actuarial Valuation Assumptions and Methods

The same actuarial assumptions used to value pension benefits for the covered members in the Public Employees Retirement System and the Highway Patrolmen's Retirement System are used in this actuarial valuation. The NDPERS Main System actuarial assumptions are used for the covered members of the Defined Contribution Plan.

The assumed rate of investment return used was 5.75 percent, net of expenses, annually. This assumption was adopted by the Board for use beginning with the July 1, 2022 actuarial valuation.

The assumed rate of price inflation is 2.25 percent. This assumption was adopted by the Board for use beginning with the July 1, 2020 actuarial valuation.

No Cost of Living Adjustments (COLA) are provided to benefits recipients. Therefore, there is no COLA assumption for this actuarial valuation.

The rates of annual salary increase used for individual members are in accordance with the following table. This assumption is used to project a member's current salary.

Service at Beginning of Year	Main System State Employee	Main System Non-State Employee	Public Safety	Judges	Highway Patrol
0	10.75%	13.25%	17.75%		10.75%
1	7.50%	8.00%	15.00%		8.75%
2	5.75%	7.25%	12.75%		6.75%
3			7.25%		
4			7.25%		
Age*					
Under 30	5.75%	7.25%	6.75%	3.00%	6.75%
30-34	5.75%	6.75%	6.75%	3.00%	6.75%
35-39	5.75%	6.75%	6.25%	3.00%	6.00%
40-44	5.25%	6.25%	6.25%	3.00%	5.50%
45-49	5.25%	6.25%	5.25%	3.00%	4.75%
50-54	4.75%	5.75%	5.25%	3.00%	4.50%
55-59	4.50%	5.50%	5.25%	3.00%	3.75%
60-64	4.00%	4.75%	5.25%	3.00%	3.75%
65-69	4.00%	4.75%	4.50%	3.00%	3.75%
70+	3.50%	4.50%	4.25%	3.00%	3.75%

* *Age-based salary increase rates apply for employees with three or more years of service in the Main System and the Highway Patrolmen's Retirement System, five or more years of service in the Public Safety Systems and for all employees in the Judges System.*

Actuarial Valuation Assumptions

The assumed rate of payroll growth used in projections for the Judges, Public Safety, and Highway Patrol groups is 3.50 percent. This assumption was adopted by the Board for use beginning with the July 1, 2020 actuarial valuation.

The mortality assumptions are as follows:

Type	Assumption	Male Scaling Factor	Female Scaling Factor
Post-Retirement Non-Disabled	Pub-2010 Healthy Retiree Mortality Table (for General Employees), sex distinct	103%	101%
Post-Retirement Disabled	Pub-2010 Disabled Retiree Mortality Table (for General Employees), sex distinct	117%	112%
Pre-Retirement	Pub-2010 Employee Mortality Table (for General Employees), sex distinct	92%	92%

Mortality is projected from 2010 with generational mortality improvement using the MP-2019 two-dimensional mortality improvement scales.

Following is a table with the life expectancies by age as of the actuarial valuation date.

	Healthy Mortality Future Life Expectancy (Years) in 2024		Disabled Mortality Future Life Expectancy (Years) in 2024	
Age	Male	Female	Male	Female
20	67.40	70.84	50.10	54.69
25	62.02	65.44	45.36	49.54
30	56.65	60.04	40.57	44.43
35	51.32	54.67	36.14	39.71
40	46.03	49.32	32.00	35.38
45	40.77	44.00	28.05	31.35
50	35.65	38.79	24.39	27.64
55	30.76	33.81	21.13	24.34
60	26.04	28.92	18.20	21.28
65	21.53	24.16	15.48	18.17
70	17.24	19.59	12.84	14.93
75	13.29	15.31	10.24	11.76
80	9.80	11.45	7.83	8.93
85	6.94	8.18	5.76	6.63
90	4.83	5.68	4.12	4.93
95	3.40	3.96	2.97	3.58
100	2.42	2.77	2.12	2.49
105	1.82	2.02	1.57	1.80

Actuarial Valuation Assumptions

Rates of separation from active membership are represented by the following table (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members terminating employment.

Service Beginning of Year	Service and Age-Based Rates for First Five Years of Service					
	Main System			Public Safety		
	Age					
	Under 30	30-39	40+	Under 30	30-39	40+
0	28.00%	20.00%	17.00%	27.00%	19.00%	16.00%
1	24.00%	17.00%	14.00%	25.00%	19.00%	16.00%
2	18.00%	14.00%	12.00%	20.00%	16.00%	14.00%
3	16.00%	13.00%	12.00%	17.00%	14.00%	14.00%
4	13.00%	11.00%	11.00%	17.00%	10.00%	10.00%

Age	Age-Based Rates Only After First Five Years of Service	
	Main System	Public Safety
20-24	11.00%	10.00%
25-29	10.00%	10.00%
30-34	6.50%	7.50%
35-39	5.50%	7.50%
40-44	4.50%	5.00%
45-49	4.20%	5.00%
50-54	3.90%	5.00%
55-59	3.60%	5.00%
60+	3.30%	5.00%

No pre-retirement termination is assumed for Judges.

Withdrawal rates end upon eligibility for early retirement.

Early retirement eligibility is as follows:

Main System: Earlier of (i) age 55 and 3 years of service, and (ii) eligibility for Rule of 85. For members hired on or after 1/1/2016, earlier of (i) age 60 and 3 years of service, and (ii) eligibility for Rule of 90.

Public Safety: Age 50 and 3 years of service (10 years for BCI members hired on or after August 1, 2023).

Rates of separation from active membership (Continued)

Highway Patrol

Service Beginning of Year	Service and Age-Based Rates for First Five Years of Service Rates
0	8.00%
1	8.00%
2	7.00%
3	7.00%
4	6.00%

Age	Rates
Under 35	2.50%
35+	1.25%

Withdrawal rates end upon eligibility for early retirement.

Early retirement eligibility is as follows:

Highway Patrol: Age 50 and 10 years of service.

Rates of disability:

Before age 65:	Males: 15.00% of OASDI disability incidence rates. Females: 8.50% of OASDI disability incidence rates.
Age 65 and later:	0.15% per year.

Actuarial Valuation Assumptions

Rates of disability were as follows:

	All Plans	
Age	**Male**	**Female**
20	0.0090%	0.0051%
25	0.0128%	0.0073%
30	0.0165%	0.0094%
35	0.0221%	0.0125%
40	0.0330%	0.0187%
45	0.0539%	0.0306%
50	0.0909%	0.0515%
55	0.1513%	0.0858%
60	0.2440%	0.1383%
65	0.1500%	0.1500%

Rates of retirement for members eligible to retire during the next year were as follows:

	Main System			Public Safety		Judges		Highway Patrol	
Age	Reduced	Unreduced - Rule of 85	Unreduced - Not Rule of 85	Rule of 85	Not Rule of 85	Rule of 85	Not Rule of 85	Rule of 80	Not Rule of 80
50		50%		25%	4%			100%	25%
51		20%		25%	4%			100%	25%
52		20%		25%	4%			100%	25%
53		20%		25%	4%			100%	25%
54		20%		25%	4%			100%	25%
55	1%	8%		25%	10%	10%	2%	100%	75%
56	1%	8%		25%	10%	10%	2%	100%	75%
57	1%	8%		25%	10%	10%	2%	100%	75%
58	1%	9%		25%	10%	10%	2%	100%	75%
59	2%	9%		25%	10%	10%	2%	100%	75%
60	2%	9%		25%	10%	10%	2%	100%	100%
61	4%	15%		25%	10%	10%	2%		
62	8%	20%		50%	25%	10%	2%		
63	8%	20%		50%	25%	10%	2%		
64	8%	20%		50%	25%	10%	2%		
65		35%	20%	50%	50%	100%	10%		
66		35%	20%	50%	50%	100%	10%		
67		20%	15%	50%	50%	100%	10%		
68		20%	15%	50%	50%	100%	10%		
69		20%	15%	50%	50%	100%	10%		
70		20%	15%	100%	50%	100%	20%		
71		20%	15%	100%	50%	100%	20%		
72		20%	15%	100%	50%	100%	20%		
73		20%	15%	100%	50%	100%	20%		
74		20%	15%	100%	50%	100%	20%		
75		50%	50%	100%	100%	100%	100%		
76		50%	50%						
77		50%	50%						
78		50%	50%						
79		50%	50%						
80+		100%	100%						

Rates of retirement for Terminated Vested members eligible to retire during the next year were as follows:

	Main System			Public Safety		Judges		Highway Patrol	
Age	Reduced	Unreduced - Rule of 85	Unreduced - Not Rule of 85	Rule of 85	Not Rule of 85	Rule of 85	Not Rule of 85	Rule of 80	Not Rule of 80
50		70%		25%	10%			100%	25%
51		70%		25%	10%			100%	25%
52		70%		25%	10%			100%	25%
53		70%		25%	10%			100%	25%
54		70%		25%	10%			100%	25%
55	1%	70%		25%	10%	10%	2%	100%	75%
56	1%	70%		25%	10%	10%	2%	100%	75%
57	1%	70%		25%	10%	10%	2%	100%	75%
58	1%	70%		25%	10%	10%	2%	100%	75%
59	2%	70%		25%	10%	10%	2%	100%	75%
60	2%	70%		25%	25%	10%	2%	100%	100%
61	4%	70%		25%	25%	10%	2%		
62	8%	70%		50%	25%	10%	2%		
63	8%	70%		50%	25%	10%	2%		
64	8%	70%		50%	25%	10%	2%		
65		70%	25%	50%	50%	100%	10%		
66		70%	25%	50%	50%	100%	10%		
67		70%	25%	50%	50%	100%	10%		
68		70%	25%	50%	50%	100%	10%		
69		70%	25%	50%	50%	100%	10%		
70		70%	25%	100%	50%	100%	20%		
71		70%	25%	100%	50%	100%	20%		
72		70%	25%	100%	50%	100%	20%		
73		70%	25%	100%	50%	100%	20%		
74		70%	25%	100%	50%	100%	20%		
75		70%	50%	100%	100%	100%	100%		
76		70%	50%						
77		70%	50%						
78		70%	50%						
79		70%	50%						
80+		100%	100%						

Participation Rates for current members eligible to receive a benefit were as follows:

Benefit Status of Eligible Member	Age	Participation Rate
Currently Receiving Benefits	Any	100.0%
Not Currently Receiving Benefits	65 and Over	0.0%
Not Currently Receiving Benefits	Under 65	100% Upon Attainment of Age 65

Participation Rates for current active and terminated vested members were as follows:

Years of Service at Retirement/Termination	Under Age 55	Age 55-64	Age 65+
Less than 5	33.0%	38.5%	55.0%
5-10	42.0%	49.0%	70.0%
10-15	48.0%	56.0%	80.0%
15-20	51.0%	59.5%	85.0%
20-25	54.0%	63.0%	90.0%
25+	54.0%	63.0%	90.0%

Actuarial Valuation Assumptions

Assumed Service Credit: All active members (full time and part time) are assumed to earn one full year of service for each assumed future year of service.

Marital Status: It is assumed that 75 percent of participants in the Main System and Public Safety and 100 percent of Judges and Highway Patrol participants have an eligible spouse at the time of retirement or pre-retirement death. The male spouse is assumed to be three years older than the female spouse. Spouses are assumed to be the opposite sex of the employees and retirees. The relatively low rate of same-sex spouses does not have a material actuarial impact on the actuarial valuation results.

Form of Payment Election Assumption:

Form of Payment	Main System, Public Safety	Judges	Highway Patrol
Life Annuity	50%	0%	0%
50% Joint and Survivor	45%	100%	100%
Refund of Member Contributions	5%	0%	0%

Benefits are valued without reduction for the optional form of payment.

Benefit Service: Exact fractional years of service are used to determine the amount of benefit payable.

Decrement Timing: All decrements are assumed to occur at the middle of the year.

Decrement Operation: Turnover decrements do not operate after the member reaches retirement eligibility (early or normal).

Eligibility Testing: Eligibility for benefits is determined based upon the age nearest birthday and years of service on the date the decrement is assumed to occur.

Pay Increase Timing: Beginning of (fiscal) year.

Actuarial Valuation Assumptions

Expenses: Assumed administrative expenses were added to the Normal Cost and are based on the prior year's expenses, adjusted for inflation. The assumed amount added to the Normal Cost is:

Expenses		
Assumed FY 2024	$	363,698
Actual FY 2024		370,675
Assumed FY 2025		379,015

Assumptions for Missing or Incomplete Data: Pay was annualized for active members who have an entry date after the last actuarial valuation date of July 1, 2023. Pay was annualized by dividing the provided pay by the maximum of one month and calculated service (based on entry date). A minimum pay amount of $10,000 was assumed for all members. Active members in the Main System with $0 pay provided were assumed to have pay of $40,503, the average of non-zero annualized salary of newly hired members. Active members in the Judges System with $0 pay provided were assumed to have pay of $165,071, the average of non-zero annualized salary of newly hired members. Active members in the Public Safety with Prior Service System with $0 pay provided were assumed to have pay of $57,731, the average of non-zero annualized salary of newly hired members. Active members in the Public Safety without Prior Service System with $0 pay provided were assumed to have pay of $48,797, the average of non-zero annualized salary of newly hired members.

Changes in Actuarial Valuation Assumptions and Methods since the Previous Actuarial Valuation

There have been no changes in actuarial assumptions since the previous actuarial valuation as of June 30, 2023.

SECTION E

BENEFIT PROVISIONS

Brief Summary of Plan Provisions

This section summarizes the major benefit provisions of the North Dakota Public Employees Retirement System Retiree Health Insurance Credit Fund as included in the actuarial valuation. It is not intended to be, nor should it be, interpreted as a complete statement of all plan provisions.

1. ***Covered Employees:***

   Members of the Public Employees Retirement System, the Highway Patrolmen's Retirement System and the Defined Contribution Retirement Plan who elect coverage. Members first enrolled in the NDPERS Main System and the Defined Contribution Retirement Plan on or after January 1, 2020 are not eligible to participate in RHIC.

2. ***Eligibility:***

   Receiving a periodic payment from the Public Employees Retirement System, the Highway Patrolmen's Retirement System or the Defined Contribution Retirement Plan and incurring an eligible insurance premium expense.

3. ***Normal Retirement:***

Age requirement:

Main and DC Systems and Judges:

Age 65, or at any age with age plus service equal to at least 85 (Rule of 85).

For members enrolled after December 31, 2015, into the Main System, attainment of age 65, or at age 60 with age plus service equal to at least 90 (Rule of 90).

Highway Patrol:

Age 55, or at any age with age plus service equal to at least 80 (Rule of 80).

Public Safety:

Age 55, or if not National Guard, at any age with age plus service equal to at least 85 (Rule of 85). National Guard is eligible for Rule of 85 beginning on August 1, 2015.

Service requirement:

Main and DC Systems and Judges:

Three years for the Main System and five years for Judges.

Highway Patrol:

Ten years.

Public Safety:

Three consecutive years (10 years for BCI members hired on or after August 1, 2023).

Benefit amount:

A monthly stipend equal to $5.00 times service.

4. *__Early Retirement__:*

Age requirement:

Main and DC Systems and Judges:

Age 55. (Age 60 for members enrolled after December 31, 2015 into the Main System)

Highway Patrol and Public Safety:

Age 50.

Service requirement:

Main and DC Systems and Public Safety:

Three years (10 years for BCI members hired on or after August 1, 2023).

Judges:

Five years.

Highway Patrol:

Ten years.

Benefit amount:

Main and DC Systems and Judges:

The Normal Retirement Benefit reduced by 3% for retirements at age 64 and an additional 6% for each year by which retirement precedes age 64.

Benefits are unreduced upon the fulfillment of the Rule of 85 or Rule of 90 with a minimum of age 60 (if applicable).

Highway Patrol and Public Safety:

The Normal Retirement Benefit reduced by 3% for retirements at age 54 and an additional 6% for each year by which retirement precedes age 54.

Benefits are unreduced upon the fulfillment of the Rule of 80 for Highway Patrol and Rule of 85 for Public Safety.

5. *__Disability Retirement__:*

Age requirement:

None.

Service requirement:

Six months.

Other requirements:

As required by applicable pension plan.

Benefit amount:

Same as Normal Retirement Benefit.

6. Pre-Retirement Death Benefit:

Age requirement:

None.

Service requirement:

Main and DC Systems and Public Safety:
Three years (10 years for BCI members hired on or after August 1, 2023).

Judges:
Five years.

Highway Patrol:
Ten years.

Benefit amount:

Same as Normal Retirement Benefit accrued to the date of the member's death, payable for as long as benefits are payable to the spouse from the Retirement System under the standard option.

7. Post-Retirement Death Benefit:

Following a retired member's death, the Retiree Health Insurance Credit Fund will (1) continue benefits to the member's spouse if the spouse continues to receive a monthly pension from a member's Retirement System or (2) provide benefits to the member's spouse if the member selected a joint and survivor option from the Retiree Health Insurance Credit Fund.

8. Alternative Options:

If benefits from the member's Retirement System are paid under the single life, level Social Security, or 10- or 20-year term certain options (without a continuation to the spouse after the certain period ends), actuarially reduced health credit benefits may be elected for the spouse. Alternative options in the Retiree Health Insurance Credit Fund include 50% and 100% joint and survivor annuities.

9. Service:

Members receive credit for each year and month of employment.

10. Contributions:

The employer contributes 1.14% of covered salaries and wages for participating employees. The RHIC employer contributions for members first enrolled in the NDPERS Main System on or after January 1, 2020 are made as additional contributions to the NDPERS Main System. The RHIC employer contributions for members first enrolled in the NDPERS Defined Contribution plan on or after January 1, 2020 are made as additional contributions to the members' defined contribution accounts.

Changes in Plan Provisions Since the Previous Actuarial Valuation

There have been no changes in plan provisions since the previous actuarial valuation as of June 30, 2023.

SECTION F

GASB STATEMENT NO. 74 SCHEDULES

GASB Statement No. 74

Accounting Standard

For postemployment (OPEB) benefit plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 74, "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans," replaces the requirements of GASB Statement No. 43, "Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans." GASB Statement No. 74 establishes standards of financial reporting for separately issued financial reports of state and local government OPEB plans.

Reporting under GASB Statement No. 74 is effective for plan fiscal years commencing after June 15, 2016.

The following discussion provides a summary of the information that is required to be disclosed under this new accounting standard. A number of these disclosure items are provided in this report. However, certain non-actuarial information, such as notes regarding accounting policies and investments, is not included in this report, and internal staff will be responsible for preparing that information to comply with this accounting standard.

Financial Statements

GASB Statement No. 74 requires defined benefit OPEB plans to present two financial statements: a statement of fiduciary net position and a statement of changes in fiduciary net position.

The *statement of fiduciary net position* presents the following items as of the end of the OPEB plan's reporting period:

- Assets;
- Receivables (deferred inflows and outflows of resources);
- Investments;
- Liabilities; and
- Fiduciary net position (assets, plus deferred outflows, minus liabilities, minus deferred inflows).

The *statement of changes in fiduciary net position* presents the following for the plan's reporting period:

- Additions, such as contributions and investment income;
- Deductions, such as benefit payments and expenses; and
- Net increase or decrease in the fiduciary net position (the difference between additions and deductions).

Notes to Financial Statements

GASB Statement No. 74 also requires the notes of the plan's financial statements to include additional disclosure information. This disclosure information should include:

- **Plan Description:**
  - The name of the OPEB plan, the administrator of the OPEB plan and the identification of whether the OPEB plan is a single-employer, agent or cost-sharing OPEB plan.
  - The number of participating employers (if agent or cost-sharing OPEB plan) and the number of nonemployer contributing entities.
  - The composition of the OPEB plan's Board and the authority under which benefit terms may be amended.
  - The number of plan members by category and if the plan is closed.
  - The authority under which benefit terms are established or may be changed, the types of benefit provided and the classes of plan members covered. A brief description of the benefits and the description of automatic post-employment benefit changes and the sharing of benefit-related costs with inactive plan members.
  - A brief description of contribution requirements, including: (a) identification of the authority under which contribution requirements of employers, nonemployer contributing entities and plan members are established or may be amended; (b) the contribution rates of the employer, nonemployer contributing entities and plan members; and (c) legal or contractual maximum contribution rates. If the OPEB plan of the entity that administers the OPEB plan has the authority to establish or amend contribution requirements, disclose the basis for determining contributions.
- **Plan Investments:**
  - A description of investment policies, including procedures for making and amending investment decisions; policies for asset allocation; and description of any significant changes in investment policy occurring during the reporting period.
  - Identification of investments that represent 5% or more of the fiduciary net position.
  - The annual money-weighted rate of return on the OPEB plan investments.
- **Receivables:**
  - The terms of any long-term contracts for contributions to the OPEB plan and the outstanding balance on any such long-term contracts.
- **Allocated insurance contracts excluded from OPEB plan assets**
- **Reserves:**
  - A description of the policy related to reserves;
  - The authority for the reserve policy;
  - The conditions under which the reserves can be used; and
  - The balances of the reserves.

In addition, Single-Employer and Cost-Sharing OPEB plans should disclose the following information in notes to financial statements:

- The components of the net OPEB liability:
  - The total OPEB liability;
  - The fiduciary net position;
  - The net OPEB liability; and
  - The OPEB plan's fiduciary net position as a percentage of the total OPEB liability.
- Significant actuarial assumptions and other inputs used to measure the total OPEB liability:
  - Significant actuarial assumptions include inflation, healthcare cost trend rates, salary changes, ad hoc postemployment benefit changes and the sharing of benefit-related costs with inactive plan members.
  - If applicable, the patterns of practice relied upon for projecting the sharing of benefit-related costs with inactive plan members.
  - The source of the actuarial assumptions for mortality.
  - The dates of experience studies on which assumption are based.
- Measure of the net OPEB liability using +/- 1% on the healthcare trend rate.
- On the discount rate:
  - The discount rate used and the change in the discount rate since the prior fiscal year end.
  - Actuarial assumptions about projected cash flows.
  - The long-term expected rate of return on OPEB investments and a description of how it was determined.
  - The municipal bond rate used and the source of that rate.
  - The periods of projected benefit payments to which the long-term expected rate of return are used.
  - The assumed asset allocation of the portfolio and the long-term expected real rate of return for each major asset class, and whether the returns are arithmetic or geometric.
  - Measure of the net OPEB liability using +/- 1% on the discount rate.
- The date of the actuarial valuation and, if applicable, the fact that update procedures were used to roll forward the total OPEB liability.

Required Supplementary Information

For Single-Employer and Cost-Sharing OPEB Plans, GASB Statement No. 74 requires a 10-year fiscal history of:

- Sources of changes in the net OPEB liability;
- Information about the components of the net OPEB liability and related ratios, including the OPEB plan's fiduciary net position as a percentage of the total OPEB liability, and the net OPEB liability as a percent of covered-employee payroll;
- Comparison of the actual employer contributions to the actuarially determined contributions based on the plan's funding policy along with the significant methods and actuarial assumptions used in calculating the actuarially determined contributions; and
- The annual money-weighted rate of return on OPEB plan investments for each year.

For Agent OPEB Plans, GASB Statement No. 74 requires a 10-year history of the annual money-weighted rate of return on OPEB plan investments.

Notes to the required schedules should include factors that significantly affect trends in the amounts reported (for example, changes of benefit terms, changes in the size or composition of the population covered or the use of different actuarial assumptions). Information about investment-related factors that significantly affect trends in the amounts reported should be limited to those factors over which the OPEB plan or the participating governments have influence.

Measurement of the Net OPEB Liability

The net OPEB liability is to be measured as the total OPEB liability, less the amount of the OPEB plan's fiduciary net position. In actuarial terms, this will be the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations performed to determine the employer's contribution requirement). The net OPEB liability should be measured as of the OPEB plan's most recent fiscal year end.

Frequency and Timing of the Actuarial Valuation

An actuarial valuation to determine the total OPEB liability is required to be performed at least every two years. If the actuarial valuation is not calculated as of the plan's fiscal year end, the total OPEB liability is required to be rolled forward from the actuarial valuation date to the OPEB plan's fiscal year end. If update procedures are used to roll forward the total OPEB liability, the date of the actuarial valuation must be no more than 24 months earlier than the OPEB plan's most recent fiscal year end.

The total OPEB liability shown in this report is based on an actuarial valuation performed as of July 1, 2024, and a measurement date of June 30, 2024.

Single Discount Rate

Projected benefit payments are required to be discounted to their actuarial present values using a Single Discount Rate that reflects (1) a long-term expected rate of return on OPEB plan investments (to the extent that the plan's fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this actuarial valuation, the expected rate of return on OPEB plan investments is 5.75%; the municipal bond rate is 3.97% (based on the daily rate closest to but not later than the measurement date of the Fidelity "20-Year Municipal GO AA Index"); and the resulting Single Discount Rate is 5.75%.

Actuarial Assumptions

The actuarial assumptions used to value the liabilities are outlined in detail in Section D.

Future Uncertainty or Risk

Future results may differ from those anticipated in this actuarial valuation. Reasons include, but are not limited to:

- Actual medical trend differing from expected;
- Changes in the healthcare plan designs offered to active and retired members; and
- Participant behavior differing from expected; e.g.,
    - Elections at retirement;
    - One-person versus two-person coverage elections; and
    - Time of retirement or termination.

Benefits Valued

The benefit provisions that were valued are described in Section E. The actuarial valuation is required to be performed on the current benefit terms and existing legal agreements. Consideration is to be given to the written plan document as well as other communications between the employer and plan members and an established pattern of practice for cost sharing. The summary of major plan provisions is designed to outline principal plan benefits. If the plan summary is not in accordance with the actual provisions or administrative practices, please alert the actuaries, so they can be sure the proper provisions are valued.

Effective Date and Transition

GASB Statement No. 74 is effective for an OPEB plan's fiscal years beginning after June 15, 2016.

Executive Summary
as of June 30, 2024

Actuarial Valuation Date		7/1/2024
OPEB Plan's Fiscal Year Ending Date (Reporting Date)		6/30/2024
Membership		
Number of		
- Retirees and Beneficiaries		15,599
- Inactive, Nonretired Members		8,255
- Active Members		16,283
- Total		40,137
Covered Payroll	$	1,036,707,331
Net OPEB Liability		
Total OPEB Liability	$	272,981,552
Plan Fiduciary Net Position		186,576,000
Net OPEB Liability	$	86,405,552
Plan Fiduciary Net Position as a Percentage of Total OPEB Liability		68.35 %
Net OPEB Liability as a Percentage of Covered Payroll		8.33 %
Development of the Single Discount Rate		
Single Discount Rate		5.75 %
Long-Term Expected Rate of Return		5.75 %
Long-Term Municipal Bond Rate*		3.97 %
Last year ending June 30 in the 2024 to 2124 projection period for which projected benefit payments are fully funded		2124

**Source: Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-Year Municipal GO AA Index" as of June 30, 2024. In describing this index, Fidelity notes that the municipal curves are constructed using option-adjusted analytics of a diverse population of over 10,000 tax-exempt securities.*

Schedules of Required Supplementary Information
Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear

Last 10 Fiscal Years (which may be built prospectively)

FY Ending June 30,	Total OPEB Liability	Plan Net Position	Net OPEB Liability	Plan Net Position as a % of Total OPEB Liability	Covered Payroll	Net OPEB Liability as a % of Covered Payroll
2017	$ 196,694,770	$ 117,593,690	$ 79,101,080	59.78 %	$ 1,081,841,008	7.31 %
2018	206,662,795	127,905,982	78,756,813	61.89 %	1,094,216,775	7.20 %
2019	217,831,024	137,512,286	80,318,738	63.13 %	1,115,857,588	7.20 %
2020	229,740,674	145,620,917	84,119,757	63.38 %	1,139,970,530	7.38 %
2021	237,951,735	182,334,446	55,617,289	76.63 %	1,090,257,793	5.10 %
2022	274,514,031	154,483,072	120,030,959	56.28 %	1,032,405,030	11.63 %
2023	268,293,176	168,318,052	99,975,124	62.74 %	1,005,182,784	9.95 %
2024	272,981,552	186,576,000	86,405,552	68.35 %	1,036,707,331	8.33 %

Sensitivity of Net OPEB Liability to the Single Discount Rate Assumption

The following presents the net OPEB liability/(asset) of North Dakota Retiree Health Insurance Credit Fund, calculated using the current discount rate of 5.75%, as well as what the North Dakota Retiree Health Insurance Credit Fund net OPEB liability/(asset) would be if it were calculated using a discount rate that is 1-percentage point lower (4.75%) or is 1-percentage point higher (6.75%) than the current rate.

1% Decrease 4.75%	Current Single Discount Rate Assumption 5.75%	1% Increase 6.75%
$ 118,095,167	$ 86,405,552	$ 59,715,285

Sensitivity of Net OPEB Liability to the Healthcare Cost Trend Rate Assumption

The benefit provided by the North Dakota Retiree Health Insurance Credit Fund is a fixed dollar subsidy and is not affected by healthcare cost trend. Therefore, a sensitivity analysis was not performed.

GASB Statement No. 74

Schedule of Changes in Net OPEB Liability and Related Ratios Multiyear

Last 10 Fiscal Years (which may be built prospectively)

Fiscal year ending June 30,	2024	2023	2022	2021	2020	2019	2018	2017
Total OPEB liability								
Service cost	$ 4,160,052	$ 4,865,725	$ 4,003,587	$ 4,273,247	$ 4,041,849	$ 3,827,807	$ 3,766,661	$ 3,430,578
Interest on the total OPEB liability	15,125,396	14,547,655	15,155,215	14,657,683	15,498,021	15,217,017	14,485,170	14,327,443
Changes of benefit terms	-	-	-	-	-	-	-	-
Difference between expected and actual experience[1]	197,223	(776,702)	616,158	2,164,642	314,726	(1,374,146)	2,732,254	(2,231,206)
Changes of assumptions	-	(10,642,733)	30,533,446	-	4,372,129	5,002,621	-	8,860,723
Benefit payments, including refunds of employee contributions	(14,794,295)	(14,214,800)	(13,746,110)	(12,884,511)	(12,317,075)	(11,505,070)	(11,016,060)	(10,014,370)
Net change in total OPEB liability	4,688,376	(6,220,855)	36,562,296	8,211,061	11,909,650	11,168,229	9,968,025	14,373,168
Total OPEB liability - beginning	268,293,176	274,514,031	237,951,735	229,740,674	217,831,024	206,662,795	196,694,770	182,321,602
Total OPEB liability - ending (a)	$ 272,981,552	$ 268,293,176	$ 274,514,031	$ 237,951,735	$ 229,740,674	$ 217,831,024	$ 206,662,795	$ 196,694,770
Plan fiduciary net position								
Employer contributions	$ 12,328,091	$ 12,137,476	$ 12,565,573	$ 13,110,651	$ 13,392,266	$ 12,977,460	$ 12,834,547	$ 12,575,627
Employee contributions	7,894	10,741	12,234	15,481	16,319	15,859	15,984	16,173
Repurchase service credit	282,386	282,185	456,895	375,038	556,585	377,329	746,942	464,323
OPEB plan net investment income	20,803,951	15,975,072	(26,756,507)	36,526,655	6,904,869	8,178,932	8,210,898	12,074,082
Benefit payments, including refunds of employee contributions	(14,794,295)	(14,214,800)	(13,746,110)	(12,884,511)	(12,317,075)	(11,505,070)	(11,016,060)	(10,014,370)
OPEB plan administrative expense	(370,675)	(355,695)	(383,458)	(430,097)	(453,913)	(437,349)	(480,244)	(443,220)
Other	596	1	(1)	312	9,580	(857)	225	
Net change in plan fiduciary net position	18,257,948	13,834,980	(27,851,374)	36,713,529	8,108,631	9,606,304	10,312,292	14,672,615
Plan fiduciary net position - beginning	168,318,052	154,483,072	182,334,446	145,620,917	137,512,286	127,905,982	117,593,690	102,921,075
Plan fiduciary net position - ending (b)	$ 186,576,000	$ 168,318,052	$ 154,483,072	$ 182,334,446	$ 145,620,917	$ 137,512,286	$ 127,905,982	$ 117,593,690
Net OPEB liability - ending (a) - (b)	$ 86,405,552	$ 99,975,124	$ 120,030,959	$ 55,617,289	$ 84,119,757	$ 80,318,738	$ 78,756,813	$ 79,101,080
Plan fiduciary net position as a percentage of total OPEB liability	68.35 %	62.74 %	56.28 %	76.63 %	63.38 %	63.13 %	61.89 %	59.78 %
Covered-employee payroll	$ 1,036,707,331	$ 1,005,182,784	$ 1,032,405,030	$ 1,090,257,793	$ 1,139,970,530	$ 1,115,857,588	$ 1,094,216,775	$ 1,081,841,008
Net OPEB liability as a percentage of covered-employee payroll	8.33 %	9.95 %	11.63 %	5.10 %	7.38 %	7.20 %	7.20 %	7.31 %

[1] *Includes liability attributable to service credit repurchases.*

System Asset Allocation

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return	Allocation-Weighted Long-Term Expected Real Rate of Return
S&P 500 Index	33.00 %	4.00 %	1.32 %
US Small Cap Equity	6.00 %	6.00 %	0.36 %
International Equities	26.00 %	7.00 %	1.82 %
Core-Plus Fixed Income	35.00 %	3.29 %	1.15 %
Total	100.00 %		4.65 %

Asset allocation and long term (equilibrium) expected arithmetic returns were provided by RIO and are net of inflation of 2.40%.

The discount rate used to measure the total OPEB liability was 5.75%. The projection of cash flows used to determine the discount rate assumed statutory/Board approved employer contributions will be made at the statutory rates described in this report. For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries are not included. Based on those actuarial assumptions, the OPEB plan's fiduciary net position was projected to be sufficient to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Schedule of Contributions Multiyear
Last 10 Fiscal Years

FY Ending 30-Jun	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2017	$ 11,696,450	$ 12,575,627	$ (879,177)	$ 1,081,841,008	1.16 %
2018	12,251,732	12,834,547	(582,815)	1,094,216,775	1.17 %
2019	12,707,111	12,977,460	(270,349)	1,115,857,588	1.16 %
2020	12,145,328	13,392,266	(1,246,938)	1,139,970,530	1.17 %
2021	13,340,003	13,110,651	229,352	1,090,257,793	1.20 %
2022	12,413,473	12,565,573	(152,100)	1,032,405,030	1.22 %
2023	14,765,881	12,137,476	2,628,405	1,005,182,784	1.21 %
2024	14,675,538	12,328,091	2,347,447	1,036,707,331	1.19 %

10 fiscal years will be built prospectively.

Valuation Date:	July 1, 2024
Notes	The actuarially determined contribution amount is calculated as of June 30, 12 months prior to the end of the fiscal year in which the contributions are reported.

Methods and Assumptions Used to Determine Actuarially Determined Contribution Rates (for fiscal year 2024 contribution):

Actuarial Cost Method	Entry Age Normal
Amortization Method	NA
Asset Valuation Method	5-Year smoothed market
Inflation	2.25%
Salary Increases	Not Applicable
Investment Rate of Return	5.75%
Retirement Age	Age-based table of rates that are specific to the type of eligibility condition.
Mortality	Pub-2010 Healthy Retiree Mortality table (for General Employees), sex-distinct, with rates multiplied by 103% for males and 101% for females. Pub-2010 Disabled Retiree Mortality table (for General Employees), sex-distinct, with rates multiplied by 117% for males and 112% for females. Pub-2010 Employee Mortality table (for General Employees), sex-distinct, with rates multiplied by 92% for both males and females. Mortality rates are projected from 2010 using the MP-2019 scale.

Other Information:

Notes	Beginning January 1, 2020, members first enrolled in the NDPERS Main System and the Defined Contribution Plan on or after that date will not be eligible to participate in RHIC. Therefore, RHIC will become for the most part a closed plan. There were no other benefit changes during the year. The investment return assumption was decreased from 6.50% to 5.75% beginning with the actuarial valuation as of July 1, 2022. All other actuarial assumptions were adopted by the Board based on an experience study covering the period July 1, 2015, through June 30, 2019. The determination of the actuarial rate was changed effective July 1, 2019 to equal the rate needed to pay off the unfunded liability and future NC contributions at the end of 20 years as a level percent of closed group (decreasing) payroll. The employer rate to the System is the statutory contribution rate of 1.14% of payroll.

Methods and Assumptions Used to Determine GASB 74/75 Net OPEB Liability:

Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Plan Fiduciary Net Position (Market value of assets, no asset smoothing)
Inflation	2.25%
Salary Increases	Not Applicable
Investment Rate of Return	5.75%
Retirement Age	Age-based table of rates that are specific to the type of eligibility condition.
Mortality	Pub-2010 Healthy Retiree Mortality table (for General Employees), sex-distinct, with rates multiplied by 103% for males and 101% for females. Pub-2010 Disabled Retiree Mortality table (for General Employees), sex-distinct, with rates multiplied by 117% for males and 112% for females. Pub-2010 Employee Mortality table (for General Employees), sex-distinct, with rates multiplied by 92% for both males and females. Mortality rates are projected from 2010 using the MP-2019 scale.

Other Information:

Notes	RHIC is for the most part a closed plan. There were no benefit changes during the year. The investment return assumption was decreased from 6.50% to 5.75% beginning with the actuarial valuation as of July 1, 2022. All other actuarial assumptions were adopted by the Board based on an experience study covering the period July 1, 2015, through June 30, 2019. The employer rate to the System is the statutory contribution rate of 1.14% of payroll.

SECTION G

CALCULATION OF THE GASB STATEMENT NOS. 67 AND 68 SINGLE DISCOUNT RATE

Calculation of the Single Discount Rate

GASB Statement No. 74 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total OPEB Liability. This rate considers the ability of the System to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The current employer and employee fixed rate contributions are assumed to be made in each future year. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed actuarial valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a municipal bond rate is required, as described in the following paragraph.

The Single Discount Rate (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) a tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this actuarial valuation, the expected rate of return on OPEB plan investments is 5.75 percent; the municipal bond rate is 3.97 percent; and the resulting Single Discount Rate is 5.75 percent.

The tables in this section provide detailed information on the development of the Single Discount Rate for the RHIC plan.

The **Projection of Contributions** table shows the development of expected contributions in future years. Normal Cost contributions for future hires are not included (nor are their liabilities).

The **Projection of Plan Fiduciary Net Position** table shows the development of expected asset levels in future years.

The **Present Values of Projected Benefit Payments** table shows the development of the Single Discount Rate. It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.

Projection of Contributions

Year	Projected Contributions from Current Employees	Projected Service Cost and Expense Contributions	Projected UAL Contributions	Projected Total Contributions	Admin Expenses	Total EANC
2025	$ -	$ 4,415,829	$ 8,063,019	$ 12,478,848	$ 373,743	$ 4,042,086
2026	-	4,221,283	8,069,044	12,290,328	377,447	3,843,836
2027	-	4,050,061	8,037,084	12,087,145	381,272	3,668,789
2028	-	3,879,374	8,004,152	11,883,527	384,856	3,494,518
2029	-	3,711,678	7,968,958	11,680,636	388,412	3,323,266
2030	-	3,547,665	7,930,536	11,478,201	391,856	3,155,809
2031	-	3,384,801	7,883,406	11,268,207	394,984	2,989,817
2032	-	3,220,841	7,824,565	11,045,407	397,761	2,823,080
2033	-	3,057,828	7,757,883	10,815,710	399,827	2,658,001
2034	-	2,893,619	7,681,491	10,575,109	401,359	2,492,260
2035	-	2,730,716	7,592,984	10,323,700	402,257	2,328,459
2036	-	2,566,742	7,489,762	10,056,504	402,218	2,164,524
2037	-	2,406,014	7,380,502	9,786,516	401,394	2,004,620
2038	-	2,249,416	7,259,222	9,508,638	398,992	1,850,424
2039	-	2,095,126	7,129,945	9,225,071	395,668	1,699,458
2040	-	1,943,988	6,986,607	8,930,595	390,729	1,553,259
2041	-	1,797,984	6,836,902	8,634,886	384,375	1,413,609
2042	-	1,658,866	6,678,048	8,336,914	376,494	1,282,372
2043	-	1,524,647	6,516,468	8,041,115	366,186	1,158,461
2044	-	1,392,741	6,349,712	7,742,452	353,820	1,038,921
2045	-	1,264,876	6,172,914	7,437,790	339,914	924,962
2046	-	1,142,694	6,001,789	7,144,482	323,064	819,630
2047	-	1,021,815	5,828,657	6,850,472	304,184	717,631
2048	-	904,246	5,652,831	6,557,077	282,810	621,436
2049	-	793,448	5,491,633	6,285,081	260,753	532,695
2050	-	692,417	5,350,604	6,043,021	237,587	454,830
2051	-	598,828	5,231,831	5,830,658	213,872	384,956
2052	-	513,391	5,131,735	5,645,126	190,004	323,387
2053	-	435,737	5,049,708	5,485,445	166,271	269,466
2054	-	365,784	4,988,172	5,353,956	143,334	222,450
2055	-	302,990	4,949,672	5,252,662	121,145	181,845
2056	-	246,611	4,929,930	5,176,541	100,362	146,249
2057	-	197,617	4,930,408	5,128,025	81,750	115,867
2058	-	156,115	4,956,239	5,112,353	65,526	90,589
2059	-	122,044	5,006,653	5,128,697	51,718	70,326
2060	-	94,134	5,079,779	5,173,913	40,113	54,021
2061	-	71,436	5,174,778	5,246,214	30,723	40,713
2062	-	53,717	5,290,894	5,344,611	23,224	30,493
2063	-	40,078	5,425,964	5,466,042	17,462	22,616
2064	-	29,683	5,580,274	5,609,957	13,112	16,571
2065	-	21,887	5,749,783	5,771,669	9,706	12,181
2066	-	15,917	5,932,259	5,948,176	7,101	8,816
2067	-	11,503	6,127,754	6,139,257	5,140	6,363
2068	-	8,062	6,334,835	6,342,897	3,654	4,408
2069	-	5,601	6,553,152	6,558,753	2,539	3,062
2070	-	3,675	6,783,688	6,787,363	1,692	1,983
2071	-	2,379	7,024,895	7,027,274	1,091	1,288
2072	-	1,502	7,276,734	7,278,236	663	839
2073	-	844	7,539,251	7,540,096	391	453
2074	-	437	7,813,633	7,814,070	216	221

Projection of Plan Fiduciary Net Position

Year	Projected Beginning Plan Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 5.750%	Projected Ending Plan Fiduciary Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
2025	$ 186,576,000	$ 12,478,848	$ 16,403,369	$ 373,743	$ 10,606,272	$ 192,884,008
2026	192,884,008	12,290,328	17,024,245	377,447	10,945,933	198,718,576
2027	198,718,576	12,087,145	17,557,393	381,272	11,260,438	204,127,494
2028	204,127,494	11,883,527	18,053,844	384,856	11,551,504	209,123,825
2029	209,123,825	11,680,636	18,506,401	388,412	11,820,111	213,729,759
2030	213,729,759	11,478,201	18,908,431	391,856	12,067,719	217,975,393
2031	217,975,393	11,268,207	19,273,320	394,984	12,295,458	221,870,753
2032	221,870,753	11,045,407	19,607,000	397,761	12,503,587	225,414,986
2033	225,414,986	10,815,710	19,907,643	399,827	12,692,287	228,615,514
2034	228,615,514	10,575,109	20,176,814	401,359	12,861,823	231,474,274
2035	231,474,274	10,323,700	20,418,123	402,257	13,012,209	233,989,804
2036	233,989,804	10,056,504	20,624,421	402,218	13,143,430	236,163,099
2037	236,163,099	9,786,516	20,794,911	401,394	13,255,931	238,009,242
2038	238,009,242	9,508,638	20,916,332	398,992	13,350,833	239,553,389
2039	239,553,389	9,225,071	20,988,469	395,668	13,429,632	240,823,955
2040	240,823,955	8,930,595	21,022,720	390,729	13,493,511	241,834,613
2041	241,834,613	8,634,886	21,006,238	384,375	13,543,888	242,622,774
2042	242,622,774	8,336,914	20,935,699	376,494	13,582,984	243,230,479
2043	243,230,479	8,041,115	20,819,550	366,186	13,613,126	243,698,985
2044	243,698,985	7,742,452	20,661,588	353,820	13,636,427	244,062,457
2045	244,062,457	7,437,790	20,464,412	339,914	13,654,674	244,350,594
2046	244,350,594	7,144,482	20,233,586	323,064	13,669,948	244,608,375
2047	244,608,375	6,850,472	19,964,973	304,184	13,684,586	244,874,277
2048	244,874,277	6,557,077	19,654,005	282,810	13,700,980	245,195,519
2049	245,195,519	6,285,081	19,295,701	260,753	13,722,523	245,646,669
2050	245,646,669	6,043,021	18,900,152	237,587	13,753,472	246,305,422
2051	246,305,422	5,830,658	18,468,488	213,872	13,798,239	247,251,960
2052	247,251,960	5,645,126	17,993,259	190,004	13,861,554	248,575,378
2053	248,575,378	5,485,445	17,483,618	166,271	13,948,244	250,359,178
2054	250,359,178	5,353,956	16,939,307	143,334	14,063,166	252,693,659
2055	252,693,659	5,252,662	16,376,366	121,145	14,211,114	255,659,924
2056	255,659,924	5,176,541	15,805,029	100,362	14,396,302	259,327,376
2057	259,327,376	5,128,025	15,219,500	81,750	14,622,932	263,777,082
2058	263,777,082	5,112,353	14,625,451	65,526	14,895,646	269,094,105
2059	269,094,105	5,128,697	14,025,639	51,718	15,219,233	275,364,677
2060	275,364,677	5,173,913	13,421,876	40,113	15,598,517	282,675,119
2061	282,675,119	5,246,214	12,817,304	30,723	16,038,322	291,111,627
2062	291,111,627	5,344,611	12,212,901	23,224	16,543,557	300,763,671
2063	300,763,671	5,466,042	11,614,118	17,462	17,119,129	311,717,262
2064	311,717,262	5,609,957	11,025,411	13,112	17,769,853	324,058,549
2065	324,058,549	5,771,669	10,447,506	9,706	18,500,540	337,873,546
2066	337,873,546	5,948,176	9,880,210	7,101	19,316,062	353,250,473
2067	353,250,473	6,139,257	9,325,464	5,140	20,221,433	370,280,560
2068	370,280,560	6,342,897	8,783,875	3,654	21,221,831	389,057,759
2069	389,057,759	6,558,753	8,255,944	2,539	22,322,637	409,680,666
2070	409,680,666	6,787,363	7,742,727	1,692	23,529,507	432,253,117
2071	432,253,117	7,027,274	7,244,560	1,091	24,848,364	456,883,104
2072	456,883,104	7,278,236	6,761,736	663	26,285,402	483,684,342
2073	483,684,342	7,540,096	6,294,577	391	27,847,147	512,776,616
2074	512,776,616	7,814,070	5,843,266	216	29,540,518	544,287,722

Projection of Plan Fiduciary Net Position (Concluded)

Year	Projected Beginning Plan Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 5.750%	Projected Ending Plan Fiduciary Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
2075	$ 544,287,722	$ 8,099,285	$ 5,408,023	$ 112	$ 31,372,833	578,351,705
2076	578,351,705	8,395,260	4,989,088	53	33,351,780	615,109,603
2077	615,109,603	8,702,087	4,586,760	23	35,485,464	654,710,372
2078	654,710,372	9,021,051	4,201,372	10	37,782,475	697,312,516
2079	697,312,516	9,351,946	3,833,288	3	40,251,914	743,083,085
2080	743,083,085	9,694,555	3,482,884	1	42,903,367	792,198,122
2081	792,198,122	10,049,127	3,150,516	0	45,746,955	844,843,688
2082	844,843,688	10,416,556	2,836,504	0	48,793,393	901,217,132
2083	901,217,132	10,797,610	2,541,127	0	52,054,041	961,527,656
2084	961,527,656	11,191,708	2,264,599	0	55,540,908	1,025,995,673
2085	1,025,995,673	11,600,136	2,007,059	0	59,266,698	1,094,855,447
2086	1,094,855,447	12,023,428	1,768,544	0	63,244,896	1,168,355,227
2087	1,168,355,227	12,461,495	1,548,951	0	67,489,776	1,246,757,548
2088	1,246,757,548	12,915,392	1,348,028	0	72,016,473	1,330,341,385
2089	1,330,341,385	13,385,529	1,165,387	0	76,841,049	1,419,402,574
2090	1,419,402,574	13,872,023	1,000,499	0	81,980,532	1,514,254,631
2091	1,514,254,631	14,376,021	852,698	0	87,453,003	1,615,230,956
2092	1,615,230,956	14,898,001	721,194	0	93,277,667	1,722,685,430
2093	1,722,685,430	15,438,618	605,096	0	99,474,916	1,836,993,867
2094	1,836,993,867	15,998,614	503,434	0	106,066,408	1,958,555,455
2095	1,958,555,455	16,578,465	415,173	0	113,075,139	2,087,793,886
2096	2,087,793,886	17,178,816	339,231	0	120,525,520	2,225,158,992
2097	2,225,158,992	17,800,915	274,499	0	128,443,484	2,371,128,892
2098	2,371,128,892	18,445,539	219,867	0	136,856,576	2,526,211,140
2099	2,526,211,140	19,113,038	174,234	0	145,794,021	2,690,943,966
2100	2,690,943,966	19,804,244	136,529	0	155,286,822	2,865,898,503
2101	2,865,898,503	20,520,155	105,726	0	165,367,876	3,051,680,808
2102	3,051,680,808	21,262,052	80,860	0	176,072,095	3,248,934,095
2103	3,248,934,095	22,030,247	61,038	0	187,436,498	3,458,339,802
2104	3,458,339,802	22,825,692	45,443	0	199,500,317	3,680,620,369
2105	3,680,620,369	23,649,384	33,343	0	212,305,143	3,916,541,554
2106	3,916,541,554	24,502,371	24,089	0	225,895,054	4,166,914,890
2107	4,166,914,890	25,385,801	17,121	0	240,316,762	4,432,600,332
2108	4,432,600,332	26,300,137	11,960	0	255,619,741	4,714,508,251
2109	4,714,508,251	27,246,571	8,201	0	271,856,383	5,013,603,003
2110	5,013,603,003	28,226,620	5,515	0	289,082,190	5,330,906,298
2111	5,330,906,298	29,241,262	3,632	0	307,355,946	5,667,499,875
2112	5,667,499,875	30,291,444	2,339	0	326,739,884	6,024,528,864
2113	6,024,528,864	31,378,711	1,471	0	347,299,898	6,403,206,001
2114	6,403,206,001	32,504,273	903	0	369,105,757	6,804,815,129
2115	6,804,815,129	33,669,446	539	0	392,231,322	7,230,715,357
2116	7,230,715,357	34,875,809	313	0	416,754,790	7,682,345,643
2117	7,682,345,643	36,124,767	177	0	442,758,941	8,161,229,175
2118	8,161,229,175	37,417,722	97	0	470,331,400	8,668,978,200
2119	8,668,978,200	38,756,329	51	0	499,564,917	9,207,299,394
2120	9,207,299,394	40,142,235	27	0	530,557,674	9,777,999,277
2121	9,777,999,277	41,577,389	13	0	563,413,602	10,382,990,255
2122	10,382,990,255	43,063,416	6	0	598,242,709	11,024,296,374
2123	11,024,296,374	44,602,002	3	0	635,161,427	11,704,059,800
2124	11,704,059,800	46,195,114	2	0	674,292,986	12,424,547,899

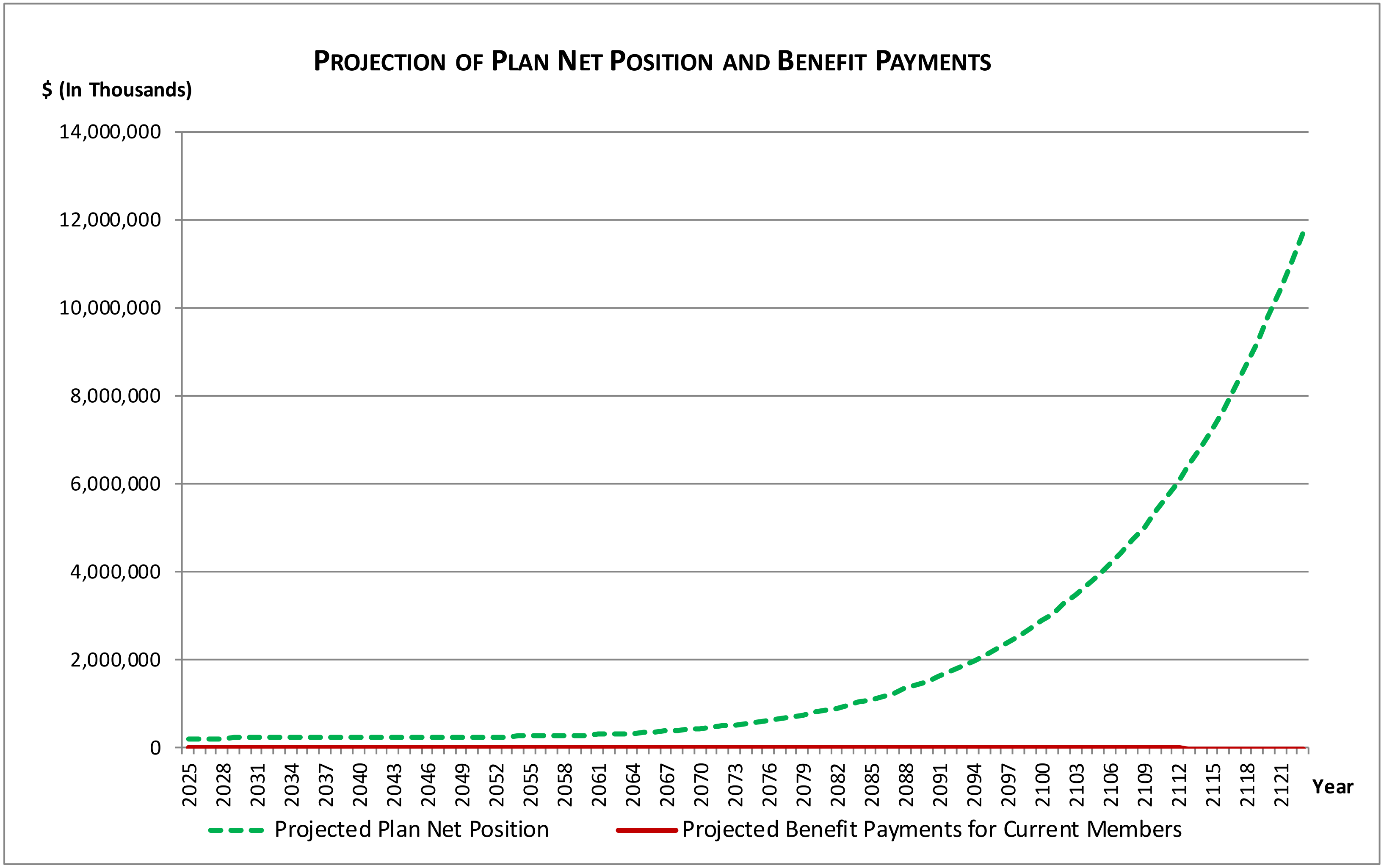
Discount Rate Development
Present Values of Projected Benefits Ending June 30 for 2025 to 2074

Year	Projected Beginning Plan Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Projected Benefit Payments	Unfunded Portion of Projected Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate of 5.75% (v)	Present Value of Unfunded Benefit Payments Using Municipal Bond Rate of 3.97% (vf)	Present Value of All Benefit Payments Using Single Discount Rate (SDR) of 5.75%
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)-.5)	(g)=(e)*vf ^((a)-.5)	(h)=(c)/(1+SDR)^(a-.5)
2025	$ 186,576,000	$ 16,403,369	$ 16,403,369	$ 0	$ 15,951,182	$ 0	$ 15,951,182
2026	192,884,008	17,024,245	17,024,245	0	15,654,792	0	15,654,792
2027	198,718,576	17,557,393	17,557,393	0	15,267,189	0	15,267,189
2028	204,127,494	18,053,844	18,053,844	0	14,845,279	0	14,845,279
2029	209,123,825	18,506,401	18,506,401	0	14,389,983	0	14,389,983
2030	213,729,759	18,908,431	18,908,431	0	13,903,157	0	13,903,157
2031	217,975,393	19,273,320	19,273,320	0	13,400,904	0	13,400,904
2032	221,870,753	19,607,000	19,607,000	0	12,891,644	0	12,891,644
2033	225,414,986	19,907,643	19,907,643	0	12,377,606	0	12,377,606
2034	228,615,514	20,176,814	20,176,814	0	11,862,849	0	11,862,849
2035	231,474,274	20,418,123	20,418,123	0	11,351,986	0	11,351,986
2036	233,989,804	20,624,421	20,624,421	0	10,843,199	0	10,843,199
2037	236,163,099	20,794,911	20,794,911	0	10,338,377	0	10,338,377
2038	238,009,242	20,916,332	20,916,332	0	9,833,326	0	9,833,326
2039	239,553,389	20,988,469	20,988,469	0	9,330,723	0	9,330,723
2040	240,823,955	21,022,720	21,022,720	0	8,837,778	0	8,837,778
2041	241,834,613	21,006,238	21,006,238	0	8,350,685	0	8,350,685
2042	242,622,774	20,935,699	20,935,699	0	7,870,111	0	7,870,111
2043	243,230,479	20,819,550	20,819,550	0	7,400,897	0	7,400,897
2044	243,698,985	20,661,588	20,661,588	0	6,945,386	0	6,945,386
2045	244,062,457	20,464,412	20,464,412	0	6,505,064	0	6,505,064
2046	244,350,594	20,233,586	20,233,586	0	6,081,977	0	6,081,977
2047	244,608,375	19,964,973	19,964,973	0	5,674,927	0	5,674,927
2048	244,874,277	19,654,005	19,654,005	0	5,282,776	0	5,282,776
2049	245,195,519	19,295,701	19,295,701	0	4,904,462	0	4,904,462
2050	245,646,669	18,900,152	18,900,152	0	4,542,717	0	4,542,717
2051	246,305,422	18,468,488	18,468,488	0	4,197,603	0	4,197,603
2052	247,251,960	17,993,259	17,993,259	0	3,867,225	0	3,867,225
2053	248,575,378	17,483,618	17,483,618	0	3,553,371	0	3,553,371
2054	250,359,178	16,939,307	16,939,307	0	3,255,551	0	3,255,551
2055	252,693,659	16,376,366	16,376,366	0	2,976,227	0	2,976,227
2056	255,659,924	15,805,029	15,805,029	0	2,716,211	0	2,716,211
2057	259,327,376	15,219,500	15,219,500	0	2,473,365	0	2,473,365
2058	263,777,082	14,625,451	14,625,451	0	2,247,588	0	2,247,588
2059	269,094,105	14,025,639	14,025,639	0	2,038,214	0	2,038,214
2060	275,364,677	13,421,876	13,421,876	0	1,844,420	0	1,844,420
2061	282,675,119	12,817,304	12,817,304	0	1,665,570	0	1,665,570
2062	291,111,627	12,212,901	12,212,901	0	1,500,737	0	1,500,737
2063	300,763,671	11,614,118	11,614,118	0	1,349,559	0	1,349,559
2064	311,717,262	11,025,411	11,025,411	0	1,211,490	0	1,211,490
2065	324,058,549	10,447,506	10,447,506	0	1,085,569	0	1,085,569
2066	337,873,546	9,880,210	9,880,210	0	970,802	0	970,802
2067	353,250,473	9,325,464	9,325,464	0	866,472	0	866,472
2068	370,280,560	8,783,875	8,783,875	0	771,773	0	771,773
2069	389,057,759	8,255,944	8,255,944	0	685,946	0	685,946
2070	409,680,666	7,742,727	7,742,727	0	608,327	0	608,327
2071	432,253,117	7,244,560	7,244,560	0	538,238	0	538,238
2072	456,883,104	6,761,736	6,761,736	0	475,051	0	475,051
2073	483,684,342	6,294,577	6,294,577	0	418,185	0	418,185
2074	512,776,616	5,843,266	5,843,266	0	367,094	0	367,094

Discount Rate Development
Present Values of Projected Benefits Ending June 30 for 2075 to 2124

Year	Projected Beginning Plan Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Projected Benefit Payments	Unfunded Portion of Projected Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate of 5.75% (v)	Present Value of Unfunded Benefit Payments Using Municipal Bond Rate of 3.97% (vf)	Present Value of All Benefit Payments Using Single Discount Rate (SDR) of 5.75%
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v^((a)-.5)	(g)=(e)*vf ^((a)-.5)	(h)=(c)/(1+SDR)^(a-.5)
2075	$ 544,287,722	$ 5,408,023	$ 5,408,023	$ 0	$ 321,277	$ 0	$ 321,277
2076	578,351,705	4,989,088	4,989,088	0	280,273	0	280,273
2077	615,109,603	4,586,760	4,586,760	0	243,661	0	243,661
2078	654,710,372	4,201,372	4,201,372	0	211,053	0	211,053
2079	697,312,516	3,833,288	3,833,288	0	182,092	0	182,092
2080	743,083,085	3,482,884	3,482,884	0	156,451	0	156,451
2081	792,198,122	3,150,516	3,150,516	0	133,826	0	133,826
2082	844,843,688	2,836,504	2,836,504	0	113,936	0	113,936
2083	901,217,132	2,541,127	2,541,127	0	96,522	0	96,522
2084	961,527,656	2,264,599	2,264,599	0	81,341	0	81,341
2085	1,025,995,673	2,007,059	2,007,059	0	68,171	0	68,171
2086	1,094,855,447	1,768,544	1,768,544	0	56,803	0	56,803
2087	1,168,355,227	1,548,951	1,548,951	0	47,045	0	47,045
2088	1,246,757,548	1,348,028	1,348,028	0	38,716	0	38,716
2089	1,330,341,385	1,165,387	1,165,387	0	31,651	0	31,651
2090	1,419,402,574	1,000,499	1,000,499	0	25,695	0	25,695
2091	1,514,254,631	852,698	852,698	0	20,709	0	20,709
2092	1,615,230,956	721,194	721,194	0	16,563	0	16,563
2093	1,722,685,430	605,096	605,096	0	13,141	0	13,141
2094	1,836,993,867	503,434	503,434	0	10,338	0	10,338
2095	1,958,555,455	415,173	415,173	0	8,062	0	8,062
2096	2,087,793,886	339,231	339,231	0	6,229	0	6,229
2097	2,225,158,992	274,499	274,499	0	4,767	0	4,767
2098	2,371,128,892	219,867	219,867	0	3,610	0	3,610
2099	2,526,211,140	174,234	174,234	0	2,705	0	2,705
2100	2,690,943,966	136,529	136,529	0	2,005	0	2,005
2101	2,865,898,503	105,726	105,726	0	1,468	0	1,468
2102	3,051,680,808	80,860	80,860	0	1,062	0	1,062
2103	3,248,934,095	61,038	61,038	0	758	0	758
2104	3,458,339,802	45,443	45,443	0	534	0	534
2105	3,680,620,369	33,343	33,343	0	370	0	370
2106	3,916,541,554	24,089	24,089	0	253	0	253
2107	4,166,914,890	17,121	17,121	0	170	0	170
2108	4,432,600,332	11,960	11,960	0	112	0	112
2109	4,714,508,251	8,201	8,201	0	73	0	73
2110	5,013,603,003	5,515	5,515	0	46	0	46
2111	5,330,906,298	3,632	3,632	0	29	0	29
2112	5,667,499,875	2,339	2,339	0	18	0	18
2113	6,024,528,864	1,471	1,471	0	10	0	10
2114	6,403,206,001	903	903	0	6	0	6
2115	6,804,815,129	539	539	0	3	0	3
2116	7,230,715,357	313	313	0	2	0	2
2117	7,682,345,643	177	177	0	1	0	1
2118	8,161,229,175	97	97	0	1	0	1
2119	8,668,978,200	51	51	0	0	0	0
2120	9,207,299,394	27	27	0	0	0	0
2121	9,777,999,277	13	13	0	0	0	0
2122	10,382,990,255	6	6	0	0	0	0
2123	11,024,296,374	3	3	0	0	0	0
2124	11,704,059,800	2	2	0	0	0	0
					$ 308,505,123	$ 0	$ 308,505,123

Projection of Plan Net Position and Benefit Payments



SECTION H

GLOSSARY OF TERMS

Glossary of Terms

Actuarial Accrued Liability (AAL). The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability."

Actuarial Assumptions. Estimates of future plan experience such as investment return, expected lifetimes and the likelihood of receiving a pension from the Pension Plan. Demographic, or "people" assumptions, include rates of mortality, retirement and separation. Economic, or "money" assumptions, include expected investment return, inflation and salary increases.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method."

Actuarial Present Value of Future Plan Benefits. The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Actuarial Value of Assets (AVA). Smoothed value of assets that recognizes the difference between the expected investment return using the actuarial valuation assumption of 6.50 percent and the actual investment return over a five-year period. Dampens volatility of asset value over time.

Amortization. Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

Annual Required Contribution. The sum of the normal cost and amortization of the unfunded actuarial accrued liability.

Asset Return. The net investment return for the asset divided by the mean asset value. Example: if $1.00 is invested and yields $1.08 after a year, the asset return is 8.00 percent.

Funded Ratio. The actuarial value of assets divided by the actuarial accrued liability. Measures the portion of the actuarial accrued liability that is currently funded.

Market Value of Assets (MVA). The value of assets currently held in the trust available to pay for benefits of the Pension Plan. Each of the investments in the trust is valued at market price which is the price at which buyers and sellers trade similar items in the open market.

Normal Cost (NC). The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost." Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Unfunded Actuarial Accrued Liability (UAAL). The difference between the actuarial accrued liability and actuarial valuation assets. Sometimes referred to as "unfunded accrued liability."