2022 ANNUAL COMPREHENSIVE FINANCIAL REPORT

FOR THE FISCAL YEARS ENDED JUNE 30, 2022 AND JUNE 30, 2021



NORTH DAKOTA
PUBLIC EMPLOYEES RETIREMENT SYSTEM

AN AGENCY OF THE STATE OF NORTH DAKOTA

North Dakota Public Employees Retirement System An Agency of the State of North Dakota

Annual Comprehensive Financial Report

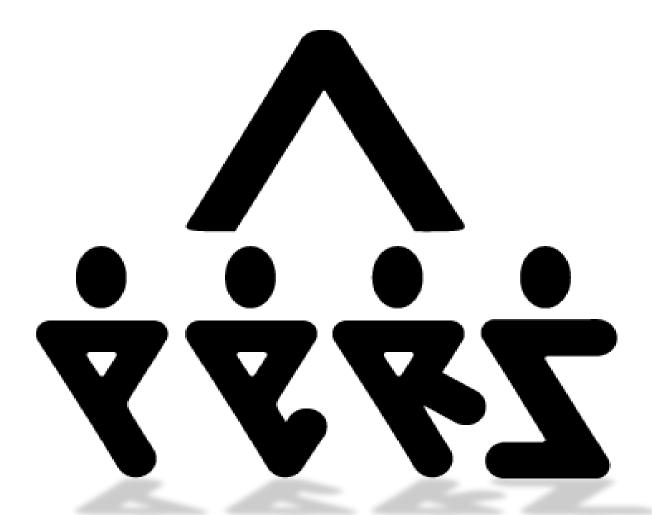
For the Fiscal Years Ended June 30, 2022 and June 30, 2021

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Prepared by the staff of the North Dakota Public Employees Retirement System PO Box 1657; Bismarck, North Dakota 58502-1657

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INTRODUCTORY SECTION



Public Pension Coordinating Council

Recognition Award for Administration 2022

Presented to

North Dakota Public Employees Retirement System

In recognition of meeting professional standards for plan administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)

National Conference on Public Employee Retirement Systems (NCPERS)

National Council on Teacher Retirement (NCTR)

AL II WALL



Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

North Dakota Public Employees Retirement System

For its Annual Comprehensive Financial Report For the Fiscal Year Ended

June 30, 2021

Christopher P. Morrill

Executive Director/CEO



North Dakota Public Employees Retirement System 1600 East Century Avenue, Suite 2 • PO Box 1657

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Fax (701) 328-3920 Email ndpers-info@nd.gov Website www.ndpers.nd.gov

December 15, 2022

Board of Trustees Members of the System

We are pleased to present the Annual Comprehensive Financial Report for the North Dakota Public Employees Retirement System (System) for the fiscal year ended June 30, 2022. The management of the System is responsible for both the accuracy of the data and the completeness and fairness of the presentation.

Generally accepted accounting principles (GAAP) require that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The System's MD&A can be found immediately following the report of the independent auditors in the Financial Section.

Plan History and Services Provided

The System is the administrator of three defined benefit pension plans and an optional defined contribution retirement plan. The System also manages and administers the retiree health insurance credit program, the uniform group insurance program, the deferred compensation program, and the pretax benefits program. Following is a brief overview of the statistical and financial highlights for each of these programs for the fiscal year ended June 30, 2022.

Defined Benefit Pension Plans

The Public Employees Retirement System (PERS) is a cost-sharing multiple-employer retirement plan. PERS was established July 1, 1966 as a defined contribution plan and was changed to a defined benefit plan by the 1977 North Dakota Legislature. PERS covers substantially all employees of the State of North Dakota and its agencies, and various participating political subdivisions. PERS also covers Supreme and District Court Judges and public safety officers, including participating political subdivision police, firefighters, and correctional officers as well as retirees of the National Guard plan. The Highway Patrolmen's Retirement System (HPRS) is a single-employer defined benefit plan established July 1, 1949 that covers substantially all sworn officers of the North Dakota Highway Patrol. The System became the administrator of this plan effective July 1, 1983. The Retirement Plan for Employees of Job Service North Dakota (Job Service Plan) is a single-employer defined benefit plan established July 1, 1961 and is limited to employees participating in the plan as of September 30, 1980. The System became the administrator of the Job Service plan effective August 1, 2003.

PERS has 41,062 contributing members and 14,204 retirees and beneficiaries currently receiving benefits. HPRS has 206 contributing members and 135 retirees and beneficiaries. The Job Service Plan has 1 contributing member and 175 retirees. The employers participating in PERS include 99 state agencies and 374 political subdivisions.

PERS, HPRS and Job Service Plan are accounted for as pension trust funds.

Defined Contribution Retirement Plan

An optional Defined Contribution Retirement Plan (DC Plan) was established effective January 1, 2000. The DC Plan was available to state employees who are in positions not classified by the Human Resource Management Services division of the State of North Dakota. Employees of the judicial branch or the Board of Higher Education and State Institutions under the jurisdiction of the Board of Higher Education are not eligible to participate in the Plan. The 2013 Legislative Assembly passed legislation to expand eligibility for the Plan to include all new state employees hired on or after October 1, 2013 through July 31, 2017. Eligibility then reverted back to non-classified employees. The Plan has 88 participants.

The defined contribution retirement plan is accounted for as a pension trust fund.

Retiree Health Insurance Credit Program

This program was created by the North Dakota Legislature in 1989, and closed to new entrants effective January 1, 2020. It is designed to provide members with a benefit that can be used to offset the cost of their health insurance premiums during their retirement years. There are 24,989 contributing members and 13,834 retired participants currently receiving benefits.

The retiree health insurance credit program is accounted for as an other post-employment benefit trust fund.

Uniform Group Insurance Program

Group Health Insurance. The System began administering the group health insurance plan in 1971. There are 25,086 active and retired contracts under this plan as of June 30, 2022. Total covered lives, including spouses and dependents, are 58,954. As of June 30, 2022 there were 126 political subdivisions participating in the group health program. The health insurance premiums paid to Sanford Health Plan for the fiscal year ended June 30, 2022 totaled \$330.5 million. This last year, the System continued its efforts to reduce the trend in health care costs by promoting wellness through online programs and supporting health club memberships and providing on-site wellness programs and premium discounts to employers that have on-site wellness programs. In addition, the System continued targeted programs that include Healthy Pregnancy, diabetes management and prevention, an opioid management program, as well as a value based care arrangement coordinated with Sanford Health Plan.

<u>Group Life Insurance.</u> The System began administering the group life insurance plan in 1971. There are 18,195 active and 3,161 retired employees covered under the basic life insurance plan. Active employees have the option of purchasing additional life insurance under the employee supplemental, dependent supplemental, and spouse supplemental provisions of the plan. The life insurance premiums paid to Voya for the fiscal year ended June 30, 2022 totaled \$4.0 million. As of fiscal year end, there is \$1.874 billion of life insurance in force for all participants covered by this plan.

<u>Voluntary Insurance Products.</u> The 1995 North Dakota Legislature authorized the System to offer voluntary insurance products, specifically dental, vision and long term care insurance. On January 1, 1997, the System began offering a dental plan and long term care plan, and on January 1, 2003, a vision plan was offered. There are 13,095 participants in the dental plan and 13,302 participants in the vision plan. NDPERS' administration of the long term care plan was discontinued as of January 1, 2019.

<u>Employee Assistance Program.</u> The 1997 North Dakota Legislature authorized the System to administer an employer-sponsored Employee Assistance Program (EAP) for all state employees, effective August 1, 1997. The System has contracted with four EAP vendors to provide services to employees and their families. The System collects the monthly premiums from the employers and remits them to the appropriate vendor. Approximately 14,820 state employees are covered under this program.

The uniform group insurance plan is a public entity risk pool and is accounted for as an enterprise fund.

Deferred Compensation Program

This is a voluntary, supplemental retirement plan provided in accordance with Section 457 of the Internal Revenue Code. It allows eligible employees to defer and invest income on a pretax basis to be withdrawn at a later date, usually at retirement. The System has administered the Plan since 1987. Thirteen companies have agreed to provide investment services for the State's deferred compensation program. The System is the trustee for deferred compensation assets totaling \$167.3 million; provider companies hold the remaining plan assets of \$173.4 million in custodial accounts for the exclusive benefit of participants and their beneficiaries. Approximately 15,567 employees participate in this program.

The deferred compensation program is accounted for as an other employee benefit trust fund.

Pretax Benefits Program (FlexComp)

This program was established by the North Dakota Legislature in 1989 in accordance with Section 125 of the Internal Revenue Code. It allows eligible employees to elect to reduce their salaries to pay for qualified insurance premiums, medical expenses, and dependent care expenses on a pretax basis. There are 2,659 participants in the medical and dependent care spending accounts. Employee contributions to the spending accounts totaled \$5.53 million. Starting in January 2013, the System contracted with a benefits service company for processing spending account reimbursements.

The pretax benefits program is accounted for as an other employee benefit trust fund.

Major Initiatives

Retirement

- Renewed our investment consultant for our 457 Companion Plan and 401(a) Plan with the incumbent provider
- Renewed the 457 Companion Plan and 401(a) Plan recordkeeping services with the incumbent provider
- Went out to bid for our Retiree Health Insurance Credit third party claims administration and selected the incumbent provider
- Reduced the long term rate of return assumption on our DB plans
- Renewed our actuarial consultant with the incumbent vendor
- Reduced the administrative fees assessed to Defined Contribution participant accounts

Group Insurance

- Went out to bid for our Medicare Part D provider and switched carriers effective January 2022
- Outsourced the administration of the Medicare Part D Late Enrollment Penalty and Low Income Subsidy to the new carrier
- Renewed our FlexComp contract with the incumbent provider
- · Renewed our Dental contract with the incumbent provider
- Renewed our Health plan contract with the incumbent provider
- Offered COBRA Premium Subsidies and increased dependent care limitations in accordance with the American Rescue Plan

Administrative

- · Developed a process to conduct Board elections electronically
- · Developed an interface to replace our legacy mainframe system
- · Converted our phones to soft phones to accommodate a remote workforce
- Upgraded our business system to Business Process Management
- Developed a process to allow temporary employees the ability to enroll in health insurance electronically
- Developed a process to allow employers do an electronic ACA certification of temporary employees
- · Secured new office space inside a state owned building

Financial Information

The financial statements included in this report are the responsibility of the System's management and have been prepared in accordance with generally accepted accounting principles for governmental accounting and reporting as pronounced or adopted by the Governmental Accounting Standards Board and the Financial Accounting Standards Board. Management is also responsible for maintaining a system of adequate internal accounting controls designed to provide reasonable assurance that assets are safeguarded against loss from unauthorized use or disposition and that transactions are executed in accordance with management's authorization and are recorded properly to permit the preparation of financial statements in accordance with generally accepted accounting principles. Management has established a comprehensive framework of internal controls to provide a reasonable basis for asserting that the financial statements are fairly presented. Because the cost of a control should not exceed the benefits to be derived, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

The expenses of the System are monitored through two budgetary controls. The majority of the administrative expenditures are appropriated each biennium by the North Dakota Legislature; certain statutorily-prescribed expenses (including benefit payments, actuarial and consulting fees and audit fees) have received a continuing appropriation from the North Dakota Legislature and are reviewed directly by the System's Board.

Revenues and Expenses

Investment earnings, together with employee and employer contributions, are the funding sources for the benefits provided through the System. The main expenses of the System are benefit payments and the cost of administering the System. The following tables show the combined revenues and expenses for the PERS, HPRS and Job Service plans for fiscal years 2022 and 2021:

(Millions) Revenue Type Employee Contributions Employer Contributions Investment Income Total	Fiscal Year 2022 \$ 91.5 99.3 (268.3) \$ (77.5)	Fiscal Year 2021 \$ 87.5 93.6 870.4 \$1,051.5	Change in \$ s \$ 4.0 5.7 (1,138.7) \$(1,129.0)	Percentage <u>Change</u> 4.6% 6.1 (130.8) (120.1)%
Expense Type Benefits Refunds & Transfers Administrative Expenses Total	\$ 246.9	\$ 228.9	\$ 18.0	7.9%
	15.7	13.0	2.7	20.8
	2.4	2.6	(0.2)	(7.7)
	\$ 265.0	\$ 244.5	\$ 20.5	21.0%

The decrease in revenues reflects weaker financial markets. The increase in expenses is primarily due to an increase in the total number of retirees who are receiving pension payments.

Funding Status

The funding goal of any retirement system is to accumulate sufficient assets to pay all of its promised benefits as they come due. The annual valuation of the System's assets and liabilities performed by the System's actuary provides the best current estimate of the System's funding status and allows the Board to monitor funding progress.

A common measure of the strength of a pension system is to express the assets as a percentage of liabilities - the greater the percentage, the stronger the funding position of the System. The July 1, 2022 actuarial valuation reports the actuarial value of assets for PERS at \$3,750 million, which is 67.8% of the actuarial accrued liabilities of \$5,534 million. The actuarial value of assets for HPRS is \$96.4 million, which is 69.0% of the actuarial accrued liabilities of \$139.7. The Job Service Plan is fully funded. The actuarial value of assets for the Job Service Plan is \$92.6 million, which is 131.3% of the actuarial present value of benefits of \$70.5 million.

The Retiree Health Insurance Credit Program is advance-funded on an actuarially-determined basis. As of fiscal year end, the program's actuarial value of assets is 64.6% of the actuarial accrued liability. As of June 30, 2022 the annual gross normal cost for this plan is \$4.9 million.

Funding progress is covered in more detail in the actuarial section of this report.

Investments

The North Dakota State Investment Board (SIB) invests the funds for the PERS, HPRS and Job Service Plans. Chapter 21-10 of the North Dakota Century Code states that the SIB shall apply the prudent investor rule when investing funds under its supervision. The prudent investor rule means that in making investments, the fiduciaries shall exercise the judgment and care, under the circumstances then prevailing, that an institutional investor of ordinary prudence, discretion and intelligence exercises in the management of large investments entrusted to it, not in regard to speculation, but in regard to the permanent disposition of funds, considering probable safety of capital as well as probable income. All funds must be invested exclusively for the benefit of the System's members and all investments are made in accordance with the System's long-term investment objectives and performance goals.

The combined fair value of assets for PERS and HPRS as of June 30, 2022 is \$3.7 billion, which is a decrease of 8.1% from the previous year. The fair value of assets for Job Service as of June 30, 2021 is \$86.3 million, a decrease of 10.8% from the previous year. During the fiscal year ended June 30, 2022 the System's portfolio remained broadly diversified with investments in domestic and international equities, domestic and international fixed income securities, real estate, private equity, timber, infrastructure, and cash equivalents.

The PERS and HPRS assets had an annualized rate of return of (6.66)% for the fiscal year ended June 30, 2022. The annualized rate of return was 7.07% for the last three years and 7.18% for the last five years. The annualized rate of return for the fiscal year ended June 30, 2022 for the Job Service Plan was (6.01)%. The annualized rate of return was 0.96% for the last three years and 2.55% for the last five years.

The assets of the Retiree Health Insurance Credit Program are also invested with the SIB. The market value of assets as of June 30, 2022 is \$152.3 million, which is 15.5% lower than the previous year. The assets earned an annualized rate of return of (14.95)% for the fiscal year ended June 30, 2022. The annualized rate of return was 3.94% for the last three years and 5.08% for the last five years. During the fiscal year ended June 30, 2022, the System's portfolio remained broadly diversified with investments in domestic and international equities and fixed income securities.

The assets of the defined contribution retirement plan are invested according to the direction of each participating member. The participant can select from fifteen investment categories and a mutual fund window, as provided by the Board. The investment categories are designed to cover a broad range of investment options to allow the participant to structure an investment strategy that meets their individual return objectives and risk tolerances. The market value of assets in the defined contribution retirement plan as of June 30, 2022 is \$16.8 million, which is a 14.4% decrease from the previous year.

More detailed information on investment policies, schedule of fees and commissions, performance results and asset allocation can be found in the Investment Section of this report.

Independent Audit

The financial statements contained in this report were audited by the accounting firm of CliftonLarsonAllen LLP, under the direction of the North Dakota State Auditor. The auditors' opinion was unmodified for the System for the year ended June 30, 2022.

Achievement Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the North Dakota Public Employees Retirement System for its annual comprehensive financial report (ACFR) for the fiscal year ended June 30, 2021. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized annual comprehensive financial report, whose contents conform to program standards. The ACFR must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. The North Dakota Public Employees Retirement System has received a Certificate of Achievement for the last twenty-six consecutive years (fiscal years ended June 30, 1996 - 2021). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA for their review.

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Acknowledgements

The preparation of this report is the result of the combined effort of the System's staff. It is intended to provide complete and accurate information concerning the activities and results of operations. Copies of this report are available to employers, members and other interested parties upon request or it can be downloaded from the System's website.

Sincerely,

Scott Miller Executive Director Derrick Hohbein, CPA, MBA, CEBS Chief Operating/Financial Officer The Retirement Board is the governing authority of the Public Employees Retirement System and consists of nine persons. A North Dakota citizen who is neither a state or political subdivision employee is appointed by the Governor to serve as Chairman of the Board. A member of the Attorney General's legal staff and the State Health Officer are also appointed to serve on the Board. One Board member is elected by retired PERS members, two members are appointed by legislative management, and the remaining three Board members are elected from active emlpoyees currently contributing to PERS. Three members of the Retirement Board are included in the membership of the North Dakota State Investment Board (SIB). The Retirement Board has specified that the members who serve on the SIB are to be selected from among the four elected members.

THE RETIREMENT BOARD

The Board members, and their respective terms, are as follows:



Mona Rindy Chairperson Term Expires 4/1/2025



Dirk Wilke Health Department Designee



Claire Ness Attorney General Appointee



Casey Goodhouse Member Elected Term Expires 6/30/24



Yvonne Smith Retiree Elected Term Expires 6/30/24



Adam Miller Member Elected Term Expires 6/30/22



Kim Wassim Member Elected Term Expires 6/30/23



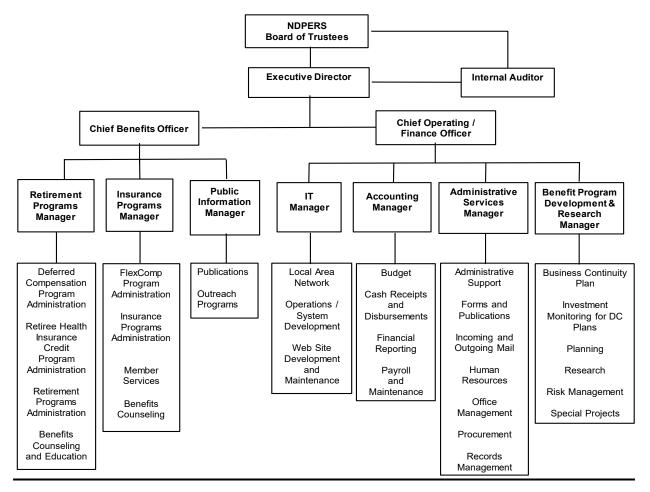
Senator Dick Dever
Appointed by
Legislative Management



Rep. Pam Anderson
Appointed by
Legislative Management

The Board's mission is to design, communicate and efficiently administer a viable employee benefits program within a framework of prudent risk taking, applicable state and federal laws, and professional and ethical standards so as to provide an employee benefit package that is among the best available from public and private employers in the upper Midwest.

Organizational Chart



ADMINISTRATION

Scott Miller, Executive Director

Derrick Hohbein, CPA, MBA Chief Operating / Finance Manager
Rebecca Fricke, Chief Benefits Officer
Shawna Piatz, CPA, CIA, Chief Audit Executive
MaryJo Anderson, Retirement Programs Manager
Lindsay Schaf, Insurance Programs Manager
Aime Miller, Public Information Manager
Mandy Nagel, IT Manager
Robin Mistelski, Accounting Manger
Janis Lund, Administrative Services Manager
Katheryne Korom, Research and Project Manager

See the following page for a listing of professionals who provide services to the North Dakota Public Employees Retirement System and pages 99-100 in the Investment Section for a summary of fees paid to investment professionals.

Consulting & Professional Services

ACTUARY:

Gabriel Roeder Smith & Company

Chicago, IL

AUDITOR:

Clifton Larson Allen LLP

Baltimore, MD

DISABILITY CONSULTANT:

Mid Dakota Clinic Bismarck, ND

INSURANCE CONSULTANT:

Deloitte Consulting LLP

Minneapolis, MN

3rd PARTY PAYMENT PROCESSING

ASI Flex (Flexcomp & RHIC Reimbursements) Columbia, MO

INVESTMENT CONSULTANT

Callan LLC

San Francisco, CA

INVESTMENT SERVICES:

North Dakota Retirement & Investment Office

Bismarck, ND

LEGAL COUNSEL:

North Dakota Attorney General's Office

Bismarck, ND

DENTAL INSURANCE CARRER:

Delta Dental of Minnesota

Minneapolis, MN

HEALTH INSURANCE CARRIER:

Sanford Health Plan Sioux Falls, SD

LIFE INSURANCE CARRIER:

Voya Financial

New York, NY

VISION INSURANCE CARRIER:

Superior Vision

Rancho Cordova, CA

EMPLOYEE ASSISTANCE PROGRAM VENDORS:

eni NexGen EAP

New York, NY

Live Well Solutions

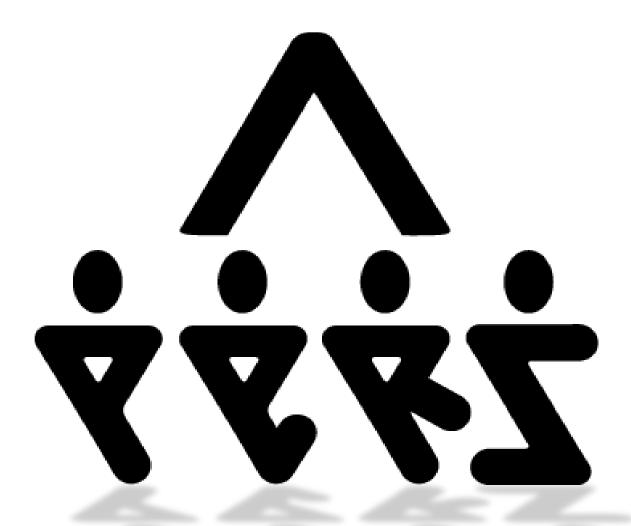
Fargo, ND

St. Alexius/Heartview

Bismarck, ND

Village Family Services

Fargo, ND



FINANCIAL SECTION



CliftonLarsonAllen LLP CLAconnect.com

INDEPENDENT AUDITORS' REPORT

Governor Doug Burgum The Legislative Assembly

Scott Miller, Executive Director North Dakota Public Employees' Retirement System Bismarck, North Dakota

Report on the Audit of the Financial Statements

Opinions

We have audited the accompanying financial statements of the proprietary fund and each of the individual fiduciary funds of the North Dakota Public Employees' Retirement System (the System), a department of the State of North Dakota, as of and for the years ended June 30, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the proprietary fund and the fiduciary net position of each of the individual fiduciary funds of the System as of June 30, 2022 and 2021, and the respective changes in financial and net position and, where applicable, cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America..

Basis for Opinions

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Emphasis of Matter

As discussed in Note 1, the financial statements of the System are intended to present the financial position, the changes in financial position, and cash flows of only that portion of the State of North Dakota that is attributable to the transactions of the System. They do not purport to, and do not, present fairly the financial position, changes in financial position, and, where applicable, the cash flows of the State of North Dakota as of June 30, 2022 and 2021, and for the years then ended in conformity with accounting principles generally accepted in the United States of America. Our opinions are not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

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Governor Doug Burgum
The Legislative Assembly
Scott Miller, Executive Director
North Dakota Public Employees' Retirement System

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and Government Auditing Standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or
 error, and design and perform audit procedures responsive to those risks. Such procedures include
 examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that
 are appropriate in the circumstances, but not for the purpose of expressing an opinion on the
 effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant
 accounting estimates made by management, as well as evaluate the overall presentation of the financial
 statements
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that
 raise substantial doubt about the System's ability to continue as a going concern for a reasonable period
 of time

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the schedules of changes to the net pension liability and related ratios, changes to the net other postemployment benefits liability and related ratios, employer contributions and investment returns, and the related notes, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Governor Doug Burgum
The Legislative Assembly
Scott Miller, Executive Director
North Dakota Public Employees' Retirement System

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the System's basic financial statements. The schedules of investment expenses, administrative expenses and consulting expenses, and statement of appropriations (collectively, "the supplementary information"), as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the accompanying supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated December 8, 2022 on our consideration of the internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the internal control over financial reporting and compliance.

CliftonLarsonAllen LLP

Clifton Larson Allen LLP

Baltimore, Maryland December 8, 2022

Management's Discussion and Analysis (MD&A) of the North Dakota Public Employees Retirement System's (NDPERS) financial performance provides an overview of the system's financial activities for the fiscal years ended June 30, 2022 and 2021. Please read it in conjunction with the basic financial statements, which follow this discussion.

NDPERS administers a total of seven fiduciary funds. This includes three defined benefit pension trust funds (PERS, Highway Patrol and Job Service), one defined contribution pension trust fund, the retiree health insurance credit trust fund, the deferred compensation trust fund and pretax benefits trust fund. NDPERS also administers one proprietary fund, the Uniform Group Insurance Program, which is an enterprise fund.

Financial Highlights - Pension and Other Employee Benefit Plans

• As of June 30, 2022, and 2021, the Plan Fiduciary Net Position (FNP) as a percentage of the Total Pension Liability (TPL) and Total OPEB Liability (TOL) for each pension and OPEB fund is shown below:

	2022	2021
Public Employees Retirement System	65.7%	79.1%
Highway Patrolmen Retirement System	66.1%	81.1%
Retirement Plan for Employees of Job Service of ND	122.2%	148.8%
Retiree Health Insurance Credit Fund	58.5%	76.6%

The decreases in the FNP as a percentage of the TPL for the Public Employees Retirement System and the Highway Patrol System were mainly due to decreases in the discount rate and investment returns from June 30, 2021 to June 30, 2022. The decrease in the FNP as a percentage of the TPL for the Retiree Health Insurance Credit Fund and Job Service of ND was the result of negative investment earnings in the current year, and a decrease in the long term rate of return assumption.

 The fiduciary net position for all trust funds administered by NDPERS decreased \$382.1 million during the fiscal year ended June 30, 2022. This decrease is primarily due to decreased investment earnings.

	Change in
(in thousands)	 Net Position
Public Employees Retirement System	\$ (313,951)
Highway Patrolmen Retirement System	(7,751)
Retiree Health Insurance Credit Fund	(27,851)
Defined Contribution Retirement Fund	(2,819)
Pretax Benefits Fund	(324)
Deferred Compensation Plan	(19,006)
Retirement Plan for Employees of Job Service ND	 (10,426)
Total Decrease in Plan Fiduciary Net Position	\$ (382,128)

Financial Highlights - Uniform Group Insurance Program

 Net position increased by \$23.5 million or 64.9%. The increase is primarily a result of the realization of a gain share on the health insurance plan for the year ended June 30, 2022.

Overview of the Financial Statements

The MD&A is intended to serve as an introduction and overview of the basic financial statements for NDPERS, which include the fund financial statements and notes to the financial statements.

Financial Statements

There are two financial statements presented for the fiduciary funds. The Statements of Fiduciary Net Position as of June 30, 2022 and 2021 indicate the net position available to pay future benefits and gives a snapshot at a particular point in time. The Statements of Changes in Fiduciary Net Position for the years ended June 30, 2022 and 2021 provide a view of the current year's additions and deductions to the individual trust funds.

There are three financial statements presented for the proprietary fund. The Statements of Net Position as of June 30, 2022 and 2021 provide a snapshot at a particular point in time of the net position available for use by this program. The Statements of Revenues, Expenses, and Changes in Fund Net Position for the years ended June 30, 2022 and 2021, provide a view of the current year's operating and non-operating revenues and expenses for the enterprise fund. The Statements of Cash Flows for the years ended June 30, 2022 and 2021 show the cash used and provided by operating activities as well as the net increase or decrease in cash due to operating and investing activities for the years presented.

Notes to the financial statements. The notes provide additional information that is essential for a full understanding of the data provided in the fund financial statements. The notes to the financial statements can be found on pages 17-54 of this report.

Required supplementary information. The required supplementary information consists of a Schedule of Employer Contributions, Schedule of Changes to the Net Pension Liability and Related Ratios, and Schedule of Investment Returns for the defined benefit pension trust funds and a Schedule of Net OPEB Liability and related ratios, Schedule of Employer Contributions and Schedule of Investment Returns for the Retiree Health Insurance Credit advance funded plan.

Other supplementary schedules. The other supplementary schedules consist of a Schedule of Investment Expenses, Schedule of Administrative Expenses, Schedule of Consulting Expenses and Statement of Appropriations.

Financial Analysis

The financial results for fiscal years 2022, 2021 and 2020 are summarized on page 5. The information in the tables on the following page are condensed from the Financial Statements.

Statement of Fiduciary Plan Net Position (condensed, in thousands)

	June 30,	June 30, %		%	June 30,
	2022	_Change_	2021	Change	2020
Assets					
Cash	\$ 21,361	17.7%	\$ 18,154	7.8%	\$ 16,847
Receivables	22,972	-3.8%	23,871	-6.7%	25,582
Investments	4,113,847	-8.6%	4,500,167	25.1%	3,596,248
Invested Securities Lending Collateral	23,612	44.9%	16,290	77.3%	9,189
Software & Equipment, Net of					
Accumulated Depreciation	355	55.0%	229	-38.9%	375
Total Assets	4,182,147	-8.3%	4,558,711	25.0%	3,648,241
Liabilities					
Long-Term Liabilities	141	-24.2%	186	22.4%	152
Other Liabilities	26,881	26.4%	21,272	58.1%	13,452
Total Liabilities	27,022	25.9%	21,458	57.7%	13,604
Fiduciary Net Position	\$ 4,155,125	-8.4%	\$ 4,537,253	24.8%	\$ 3,634,637

The total assets for all fiduciary funds as of June 30, 2022 were \$4.18 billion and were comprised mostly of investments. For the fiscal year ended June 30, 2022 net position decreased \$382.1 million. The decrease was primarily due to financial market loses during the fiscal year. For the fiscal year ended June 30, 2021, net position increased by \$902.6 million. This increases were primarily due to financial market gains during the fiscal year.

Total liabilities as of June 30, 2022 increased \$5.6 million due to an increase in securities lending collateral. Total liabilities as of June 30, 2021 increased \$7.9 million over the prior year due to increases in accounts payable and securities lending collateral.

Statement of Changes in Fiduciary Plan Net Position (condensed, in thousands)

	J	lune 30, 2022	% Change	June 30, 2021		% Change	Jı	June 30, 2020	
Additions									
Contributions	\$	226,465	5.3%	\$	214,981	5.8%	\$	203,276	
Transfers In		2,613	-2.9%		2,690	27.9%		2,103	
Net Investment Income/(Loss)		(325,627)	-134.3%		950,393	701.9%		118,521	
Other		11,777	32.9%		8,859	-29.2%		12,518	
Total Additions		(84,772)	-107.2%		1,176,923	249.8%		336,418	
Deductions									
Benefit Payments		276,697	7.9%		256,388	7.3%		238,909	
Transfers Out		714	12.8%		633	-1.7%		644	
Refunds		15,769	21.6%		12,970	-9.0%		14,252	
Administrative Expenses		4,177	-3.2%		4,316	-7.5%		4,665	
Total Deductions		297,357	8.4%		274,307	6.1%		258,470	
Change in Fiduciary Net Position	\$	(382,129)	-142.3%	\$	902,616	1058.0%	\$	77,948	

Additions. Contributions, transfers in and earnings on invested funds are the primary additions that are accumulated and used to pay benefits for each of the plans. Contributions and transfers in, combined, increased by \$11.4 million for the year ended June 30, 2022 and increased \$12.3 million for the year ended June 30, 2021. The increases reflect an increase in contributions as a result of membership and payroll growth. Investment earnings decreased \$1.276 billion in 2022. Investment earnings increased by \$831.9 million in 2021 from the previous year. The change in Other Additions for June 30, 2022 and June 30, 2021 is primarily due to fluctuations in service purchase payments received during the year.

<u>Deductions</u>. Total deductions increased by \$23.1 million or 8.4% for the fiscal year ended June 30, 2022. Total deductions increased by \$15.8 million or 6.1% for the fiscal year ended June 30, 2021. The increase each year was due to an increase in benefit payments, which reflects the increase in the total number of retirees who are receiving pension payments, as well as the significant increase in refunds/transfers.

Statement of Proprietary Fund Net Position (in thousands)

	Ju	June 30, % 2022 Change		June 30, 2021		% Change	Ju	June 30, 2020	
Assets									
Cash & Investments	\$	33,457	-7.4%	\$	36,136	-0.4%	\$	36,294	
Receivables		26,371	14389.6%		182	-97.5%		7,279	
Capital Assets		124	33.3%		93	-38.4%		151	
Total Assets		59,952	64.7%		36,411	-16.7%		43,724	
Liabilities									
Long-Term Liabilities		76	2.7%		74	13.8%		65	
Other Liabilities		283	43.7%		197	-97.5%		7,834	
Total Liabilities		359	32.5%		271	-96.6%		7,899	
Net Position	\$	59,593	64.9%	\$	36,140	0.9%	\$	35,825	

The net position for the proprietary fund increased by \$23.5 million during the fiscal year ended June 30, 2022. The increase is mostly due to a moratorium of PPACA fees, as well as a gain share on the health plan where premiums exceeded claims. The net position for the proprietary fund increased by \$0.3 million during the fiscal year ended June 30, 2021. The increase is mostly due to investment earnings.

Total assets, as of June 30, 2022, were \$60.0 million and were comprised mainly of cash and investments as well as a \$26.0 receivable from Sanford Health Plan. Total assets increased by \$23.5 million from the prior fiscal year primarily due to a moratorium of PPACA fees, as well as a gain share on the health plan where premiums exceeded claims. Total assets, as of June 30, 2021, were \$36.4 million and were comprised mainly of cash and investments. Total assets decreased by \$7.3 million from the prior fiscal year primarily due to payment of a receivable related to the PPACA moratorium.

Total liabilities, as of June 30, 2022, were \$0.4 million, \$0.3 million as of June 30, 2021 and \$7.9 million as of June 30, 2020, and were comprised mostly of unearned premiums, which represent premiums received before they are due as well as a liability to Sanford Health Plan as further explained in Note 14.

The net position of the proprietary fund consists primarily of cash and investments and is to pay administrative expenses of the uniform group insurance program, reduce premium payments/increases, and increase insurance coverage.

Statement of Changes in Proprietary Fund Net Position (in thousands)

	 une 30, 2022	% Change	June 30, 2021				June 30, 2020	
Operating Revenues								
Premium Revenues	\$ 356,896	-2.7%	\$	366,941	-0.3%	\$	367,910	
Administrative Fee	953	-2.9%		981	-2.0%		1,001	
Miscellaneous	26,113	652925.0%		(4)	-100.1%		7,023	
Total Operating Revenues	383,962	4.4%		367,918	-2.1%		375,934	
Non-Operating Revenues								
Net Investment Income	 (1,690)	-232.3%		1,277	78.1%		717	
Total Revenues	382,272	3.5%		369,195	-2.0%		376,651	
Operating Expenses								
Premium Expenses	356,984	-2.7%		366,959	-0.3%		367,954	
Administrative Expenses	1,672	-8.7%		1,832	3.6%		1,769	
Total Operating Expenses	358,656	-2.7%		368,791	-0.3%		369,723	
Non-Operating Expense								
Transfer Out	 163	85.2%		88	-22.1%		113	
Change in Net Position	\$ 23,453	7321.8%	\$	316	-95.4%	\$	6,815	
Total Net Position	\$ 59,593	64.9%	\$	36,140	0.9%	\$	35,825	

The net position for the proprietary fund increased by \$23.5 million during the fiscal year ended June 30, 2022 primarily due to a moratorium of PPACA fees, as well as a gain share on the health plan where premiums exceeded claims. The net position for the proprietary fund increased by \$0.3 million during the fiscal year ended June 30, 2021 primarily due to positive investment earnings. The net position for the proprietary fund increased by \$6.8 million during the fiscal year ended June 30, 2020 primarily due to a refund of PPACA fees for the year as a result of a federal moratorium.

Contacting NDPERS Financial Management

This financial report is designed to provide our members, annuitants, employers, business partners and the general public with a general overview of the System's financial activities. If you have questions about this report or need additional financial information, contact the North Dakota Public Employees Retirement System, PO Box 1657, Bismarck, ND 58502.

North Dakota Public Employees Retirement System – Financial Section Statement of Net Position – Proprietary Fund June 30, 2022 and 2021

	Uniform Group Insurance Program						
	2022	2021					
ASSETS							
CURRENT ASSETS							
Cash and Cash Equivalents	\$ 1,452,713	\$ 1,699,735					
Invested Cash	1,635,593	1,719,117					
Commingled Domestic Fixed Income Investments	30,368,921	32,716,340					
Due from Fiduciary Funds	92,105	-					
Unearned Premiums	20,668	105,400					
Accounts Receivable	26,258,022						
Total Current Assets	59,828,022	36,423,004					
NONCURRENT ASSETS							
Capital Assets (Net of Depreciation/Amortization)	123,759	92,841					
Total Assets	59,951,781	36,410,445					
LIABILITIES							
CURRENT LIABILITIES							
Salaries Payable	90,779	85,798					
Accounts Payable	159,293	· ·					
Due to Other State Agencies	25,473	13,480					
Accrued Compensated Absences	7,370	6,720					
Total Current Liabilities	282,915	196,793					
NONCURRENT LIABILITIES							
Accrued Compensated Absences	76,284	73,663					
Total Liabilities	359,199	270,456					
NET POSITION							
Net Investment in Capital Assets	123,759	92,841					
Unrestricted Net Position	59,468,823	- /-					
Total Net Position	\$ 59,592,582	\$ 36,139,989					

North Dakota Public Employees Retirement System – Financial Section Statements of Revenues, Expenses, and Changes in Fund Net Position–Proprietary Fund For the Fiscal Year Ended June 30, 2022 and 2021

	Uniform Group Insurance Program						
		2022		2021			
OPERATING REVENUES		_		_			
Premium Revenues	\$	356,896,044	\$	366,940,896			
Administrative Fee		952,004		980,446			
Underwriting Gain (Loss)		26,111,259		(4,408)			
Miscellaneous		1,977		47			
Total Operating Revenues		383,961,284		367,916,981			
OPERATING EXPENSES							
Premium Expenses		356,984,101		366,958,640			
Salaries and Wages		1,078,063		1,005,078			
Operating Expenses		353,597		309,960			
Professional Fees		118,910		323,669			
Data Processing		92,734		92,570			
Amortization		28,632		101,221			
Total Operating Expenses		358,656,037		368,791,138			
Operating Gain (Loss)		25,305,247		(874,157)			
NON-OPERATING REVENUES AND EXPENSES							
Investment Income (Loss)		(1,648,090)		1,322,916			
Investment Expenses		(42,064)		(45,970)			
Total Non-Operating Revenues and Expenses		(1,690,154)		1,276,946			
INCOME BEFORE TRANSFERS		23,615,093		402,789			
TRANSFERS OUT		162,500		87,500			
Change in Net Position		23,452,593		315,289			
Total Net Position - Beginning of Year		36,139,989		35,824,700			
TOTAL NET POSITION - END OF YEAR	\$	59,592,582	\$	36,139,989			

North Dakota Public Employees Retirement System – Financial Section Statements of Cash Flows – Proprietary Fund For the Fiscal Year Ended June 30, 2022 and 2021

	Uniform Group Insurance Program					
		2022		2021		
CASH FLOWS FROM OPERATING ACTIVITIES						
Premiums Collected	\$	356,896,044	\$	366,940,896		
Administrative Fees Collected		940,542		389,444		
Payments to Suppliers		(590, 150)		(682,995)		
Premiums Paid		(356,984,101)		(366,958,640)		
Payments to Employees		(1,069,811)		(989,484)		
Underwriting Gain (Loss)		39,738		(4,408)		
Miscellaneous Income		1,977		47		
Net Cash Provided (Used) by Operating Activities		(765,761)		(1,305,140)		
CASH FLOWS FROM INVESTING ACTIVITIES						
Net Purchase of Investments		2,347,419		(4,064,655)		
Investment Income/(Loss)		(1,648,090)		1,322,916		
Investment Expense		(42,064)		(45,970)		
Net Cash Provided (Used) by Investing Activities		657,265		(2,787,709)		
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES						
Purchase of Software		(59,550)		(42,850)		
Transfers Out		(162,500)		(87,500)		
Net Cash Used by Financing Activities		(222,050)		(130,350)		
				_		
NET CHANGE IN CASH AND CASH EQUIVALENTS		(330,546)		(4,223,199)		
Cash and Cash Equivalents - Beginning of Year		3,418,852		7,642,051		
CASH AND CASH EQUIVALENTS - END OF YEAR	\$	3,088,306	\$	3,418,852		
RECONCILIATION OF OPERATING INCOME TO NET CASH						
PROVIDED (USED) BY OPERATING ACTIVITIES						
Operating Income (Loss)	\$	25,305,247	\$	(874,157)		
Adjustments to Reconcile Operating Income (Loss) to Net Cash						
Provided (Used) by Operating Activities:						
Amortization		28,632		101,221		
Effect of Changes in Assets and Liabilities:						
Accounts Receivable		(26,075,610)		7,044,072		
Due from Other State Agencies				52,724		
Unearned Premium		84,732		-		
Due from Other Fiduciary Funds		(92,105)		-		
Salaries Payable		4,981		6,687		
Accrued Compensated Absences		3,271		8,907		
Accounts Payable		(36,902)		38,644		
Amounts held in custody of others		-		(7,687,798)		
Due to Other State Agencies	ф.	11,993	\$	4,560		
Net Cash Provided (Used) by Operating Activities		(765,761)	<u> </u>	(1,305,140)		

	Public Employees Retirement	Highway Patrolmen's Retirement	Retiree Health Insurance	Defined Contribution Retirement	Pretax Benefits	Deferred Compensation	Retirement Plan for Employees of Job Service	
	System	System	Credit Fund	Fund	Program	Plan	North Dakota	Total
ASSETS								
Cash	\$ 19,350,154	<u> </u>	\$ 1,441,571	\$ 221,306	\$ 76,883	\$ 270,116	\$ 1,340	\$ 21,361,370
Receivables:								
Contribution Receivable	11,011,361	730,304	792,296	90,660	545,741	1,216,019	593	14,386,974
Interest Receivable	8,369,490	214,063	532	-	-	-	199	8,584,284
Due from Other State Agencies			199					199
Total Receivables	19,380,851	944,367	793,027	90,660	545,741	1,216,019	792	22,971,457
Investments:								
External Investment Pool	3,599,792,150	91,378,024	-	-	-	-	-	3,691,170,174
Equities	-	-	96,887,675	-	-	-	17,152,361	114,040,036
Fixed Income	-	-	54,944,364	149,804	-	3,045,746	68,585,665	126,725,579
Mutual Funds	-	-	-	16,279,378	-	160,978,323	-	177,257,701
Invested Cash			498,576	342,385		3,293,943	518,444	4,653,348
Total Investments	3,599,792,150	91,378,024	152,330,615	16,771,567		167,318,012	86,256,470	4,113,846,838
Invested Securities Lending Collateral Capital Assets	23,022,445	589,333	-	-	-	-	-	23,611,778
(Net of Depreciation/Amortization)	174,532	2,106	71,755	485	27,871	78,042	623	355,414
Total Assets	3,661,720,132	92,913,830	154,636,968	17,084,018	650,495	168,882,189	86,259,225	4,182,146,857

	Public Employees Retirement System	Highway Patrolmen's Retirement System	Retiree Health Insurance Credit Fund	Defined Contribution Retirement Fund	Pretax Benefits Program	Deferred Compensation Plan	Retirement Plan for Employees of Job Service North Dakota	Total
LIABILITIES								
Salaries Payable	\$ 119,901	\$ -	\$ -	\$ -	\$ 26,893	\$ 35,480	\$ -	\$ 182,274
Accounts Payable	2,697,848	-	153,882	97	12,915	26,686	81,755	2,973,183
Due to Other State Agencies	14,068	-	14	162	2,158	4,018	-	20,420
Due to Proprietary Funds	-	-	-	-	92,105	-	-	92,105
Amounts Held in Custody for Others	-	-	-	-	-	2,000	-	2,000
Securities Lending Collateral	23,022,445	589,333	-	-	-	-	-	23,611,778
Accrued Compensated Absences	93,968	. <u>-</u>			17,833	28,926		140,727
Total Liabilities	25,948,230	589,333	153,896	259	151,904	97,110	81,755	27,022,487
FIDUCIARY NET POSITION								
Restricted for Pensions	3,635,771,902	92,324,497	_	17,083,759	-	168,785,079	86,177,470	4,000,142,707
Restricted for Postemployment								
Healthcare Benefits	-	-	154,483,072	-	-	-	-	154,483,072
Restricted for Pretax Benefits		<u> </u>			498,591			498,591
Total Fiduciary Net Position Held in Trust	\$ 3,635,771,902	\$ 92,324,497	\$ 154,483,072	\$ 17,083,759	\$ 498,591	\$ 168,785,079	\$ 86,177,470	\$ 4,155,124,370

	5		5 "	5.6.1			Retirement	
	Public	Highway	Retiree	Defined	Б.,	5 ()	Plan for	
	Employees	Patrolmen's	Health	Contribution	Pretax	Deferred	Employees of	
	Retirement	Retirement	Insurance	Retirement	Benefits	Compensation	Job Service	Total
ASSETS	System	System	Credit Fund	Fund	Program	Plan	North Dakota	Total
	Ф 40.400.000	Φ.	Ф 4 000 7 4 г	Ф 044040	# 000 400	¢ 000.070	ф 44.700	ф 40.4E4.00E
Cash	\$ 16,168,202	\$ -	\$ 1,298,715	\$ 214,040	\$ 238,482	\$ 223,073	\$ 11,723	\$ 18,154,235
Receivables:								
Contribution Receivable	12,731,180	4,300	941,729	102,629	612,014	1,058,391	1,022	15,451,265
Interest Receivable	8,205,048	214,366	37	-	-	-	6	8,419,457
Due from Other Fiduciary Funds	-	-	-	-	-	-	-	-
Due from Other State Agencies	-		282				<u> </u>	282
Total Receivables	20,936,228	218,666	942,048	102,629	612,014	1,058,391	1,028	23,871,004
Investments:								
External Investment Pool	3,917,244,099	99,855,106	-	-	-	-	-	4,017,099,205
Equities	-	-	118,281,574	-	-	-	19,108,158	137,389,732
Fixed Income	-	-	61,279,787	622,065	-	2,318,952	77,129,210	141,350,014
Mutual Funds	-	-	-	18,721,710	-	181,261,020	-	199,982,730
Invested Cash	-	-	681,897	242,473	-	2,985,672	435,556	4,345,598
Total Investments	3,917,244,099	99,855,106	180,243,258	19,586,248		186,565,644	96,672,924	4,500,167,279
Invested Securities Lending Collateral Capital Assets	15,875,367	415,066	-	-	-	-	-	16,290,433
(Net of Depreciation/Amortization)	123,726	2,037	9,372	361	30,947	61,894	462	228,799
Total Assets	3,970,347,622	100,490,875	182,493,393	19,903,278	881,443	187,909,002	96,686,137	4,558,711,750

	Public Employees Retirement System	Highway Retiree Patrolmen's Health Retirement Insurance System Credit Fund		Defined Contribution Pretax Retirement Benefits Fund Program		Benefits	Deferred Compensation Plan		Retirement Plan for Employees of Job Service North Dakota		Total		
LIABILITIES	_			_									
Salaries Payable	\$ 131,657	\$	-	\$ -	\$	-	\$	20,259	\$	35,891	\$ -	\$	187,807
Accounts Payable	4,471,974		-	158,834		102		16,192		33,006	82,440		4,762,548
Due to Other State Agencies	18,050		-	113		100		3,804		6,491	-		28,558
Due to Proprietary Funds	-		-	-		-		-		-	-		-
Amounts Held in Custody for Others	-		-	-		-		-		3,322	-		3,322
Securities Lending Collateral	15,875,367		415,066	-		-		-		-	-		16,290,433
Accrued Compensated Absences	127,874		-	-		-		19,202		38,722	-		185,798
Total Liabilities	20,624,922		415,066	158,947		202		59,457		117,432	82,440		21,458,466
FIDUCIARYNET POSITION													
Restricted for Pensions Restricted for Postemployment	3,949,722,700	1	00,075,809	-		19,903,076		-		187,791,570	96,603,697		4,354,096,852
Healthcare Benefits	-		-	182,334,446		-		-		-	-		182,334,446
Restricted for Pretax Benefits	-			 				821,986		-			821,986
Total Fiduciary Net Position													
Held in Trust	\$ 3,949,722,700	\$ 1	00,075,809	\$ 182,334,446	\$	19,903,076	\$	821,986	\$	187,791,570	\$ 96,603,697	\$	4,537,253,284

North Dakota Public Employees Retirement System – Financial Section Statement of Changes in Fiduciary Net Position – Fiduciary Funds For the Fiscal Year Ended June 30, 2022

	Public Employees Retirement System	Highw ay Patrolmen's Retirement System	Retiree Health Insurance Credit Fund	Defined Contribution Retirement Fund	Pretax Benefits Program	Deferred Compensation Plan	Retirement Plan for Employees of Job Service North Dakota	Total
ADDITIONS								
Contributions:								
From Employer	\$ 96,630,783	\$ 2,686,795	\$ 12,565,573	\$ 503,267	\$ -	\$ -	\$ -	\$ 112,386,418
From Employee	89,633,939	1,825,729	12,234	551,993	6,013,536	16,032,276	9,299	114,079,006
Transfers from Other Plans	-	=	=	1,205	-	712,500	-	713,705
Transfer from Proprietary Fund	-	=	=	-	-	162,500	-	162,500
From External Plans						1,737,082		1,737,082
Total Contributions	186,264,722	4,512,524	12,577,807	1,056,465	6,013,536	18,644,358	9,299	229,078,711
Investment Income:			_			_		
Net Change in Fair Value of Investments	(315,774,045)	(8,022,147)	(30,112,037)	(4,557,395)	-	(27,438,499)	(7,105,726)	(393,009,849)
Interest and Dividends	68,878,159	1,747,872	3,893,161	1,468,973	454	(205,073)	1,862,254	77,645,800
Less Investment Expense	(9,307,158)	(239,010)	(537,631)	(5,720)			(308,015)	(10,397,534)
Net Investment Income/(Loss)	(256,203,044)	(6,513,285)	(26,756,507)	(3,094,142)	454	(27,643,572)	(5,551,487)	(325,761,583)
Securities Lending Income	130,680	3,314	-	-	-	-	-	133,994
Repurchase Service Credit	10,249,235	159,747	456,895	-	-	-	-	10,865,877
FICA Tax Savings	-	=	=	-	890,175	-	-	890,175
Miscellaneous Income (Expense)	14,125	62	(1)	6,844				21,030
Total Additions	(59,544,282)	(1,837,638)	(13,721,806)	(2,030,833)	6,904,165	(8,999,214)	(5,542,188)	(84,771,796)
DEDUCTIONS								
Benefits Paid to Participants	236,144,369	5,840,127	-	782,229	6,125,693	9,195,151	4,865,682	262,953,251
Refunds	15,758,175	7,897	2,631	-	-	-	-	15,768,703
Prefunded Credit Applied	-	-	13,743,479	-	-	-	-	13,743,479
Transfers to Other Plans	163,705				550,000			713,705
	252,066,249	5,848,024	13,746,110	782,229	6,675,693	9,195,151	4,865,682	293,179,138
Administrative Expenses	2,340,267	65,650	383,458	6,255	551,867	812,126	18,357	4,177,980
Total Deductions	254,406,516	5,913,674	14,129,568	788,484	7,227,560	10,007,277	4,884,039	297,357,118
CHANGE IN FIDUCIARY NET POSITION	(313,950,798)	(7,751,312)	(27,851,374)	(2,819,317)	(323,395)	(19,006,491)	(10,426,227)	(382,128,914)
Net Position - Beginning of Year	3,949,722,700	100,075,809	182,334,446	19,903,076	821,986	187,791,570	96,603,697	4,537,253,284
FIDUCIARY NET POSITION - END OF YEAR	\$3,635,771,902	\$ 92,324,497	\$ 154,483,072	\$ 17,083,759	\$ 498,591	\$ 168,785,079	\$86,177,470	\$4,155,124,370

North Dakota Public Employees Retirement System – Financial Section Statement of Changes in Fiduciary Net Position – Fiduciary Funds For the Fiscal Year Ended June 30, 2021

	D.H.C.	I Barbara and	Define	Defined			Retirement	
	Public	Highw ay Patrolmen's	Retiree Health	Defined Contribution	Pretax	Deferred	Plan for	
	Employees Retirement	Retirement	Insurance	Retirement	Benefits	Compensation	Employees of Job Service	
	System	System	Credit Fund	Fund	Program	Plan	North Dakota	Total
ADDITIONS	Gyotom	Cystom	Or Cult I unu	Tunu	Trogram	- I Idii	1 TOTAL DUNOTA	Total
Contributions:								
From Employer	\$ 91,265,640	\$ 2,293,404	\$ 13,110,651	\$ 481,934	\$ -	\$ -	\$ -	\$ 107,151,629
From Employee	85,914,756	1,548,335	15,481	412,341	5,757,480	14,167,468	13,979	107,829,840
Transfers from Other Fiduciary Plans	- · · · · · · · · · · · · · · · · · · ·	-	-	5,918	-	627,500	-	633,418
Transfer from Proprietary Fund	_	-	-	-	-	87,500	_	87,500
From External Plans	_	-	-	4,984	-	2,052,023	-	2,057,007
Total Contributions	177,180,396	3,841,739	13,126,132	905,177	5,757,480	16,934,491	13,979	217,759,394
Investment Income:	· · · · · ·							
Net Change in Fair Value of Investments	793,302,359	18,448,605	34,154,175	3,591,121	-	38,727,815	4,513,662	892,737,737
Interest and Dividends	62,626,623	1,427,901	2,867,873	957,992	793	1,100	1,833,777	69,716,059
Less Investment Expense	(11,212,468)	(244,020)	(495,393)	(10,209)	-	-	(322,167)	(12,284,257)
Net Investment Income	844,716,514	19,632,486	36,526,655	4,538,904	793	38,728,915	6,025,272	950,169,539
Securities Lending Income	216,695	5,355						222,050
Repurchase Service Credit	7,129,269	400,751	375,038	-	-	-	-	7,905,058
FICA Tax Savings	-	-	-	-	856,973	-	-	856,973
Miscellaneous Income (Expense)	(1,723)	(11)	312	11,662				10,240
Total Additions	1,029,241,151	23,880,320	50,028,137	5,455,743	6,615,246	55,663,406	6,039,251	1,176,923,254
DEDUCTIONS								
Benefits Paid to Participants	218,414,339	5,780,173	-	1,275,339	5,795,730	7,574,521	4,668,820	243,508,922
Refunds	12,792,647	171,704	5,437	-	-	-	-	12,969,788
Prefunded Credit Applied	-	-	12,879,074	-	-	-	-	12,879,074
Transfers to Other Plans	93,418				540,000			633,418
	231,300,404	5,951,877	12,884,511	1,275,339	6,335,730	7,574,521	4,668,820	269,991,202
Administrative Expenses	2,569,186	37,097	430,097	6,370	479,999	775,462	17,371	4,315,582
Total Deductions	233,869,590	5,988,974	13,314,608	1,281,709	6,815,729	8,349,983	4,686,191	274,306,784
CHANGE IN FIDUCIARY NET POSITION	795,371,561	17,891,346	36,713,529	4,174,034	(200,483)	47,313,423	1,353,060	902,616,470
Net Position - Beginning of Year	3,154,351,139	82,184,463	145,620,917	15,729,042	1,022,469	140,478,147	95,250,637	3,634,636,814
FIDUCIARY NET POSITION - END OF YEAR	\$3,949,722,700	\$100,075,809	\$ 182,334,446	\$19,903,076	\$ 821,986	\$187,791,570	\$96,603,697	\$4,537,253,284

North Dakota Public Employees Retirement System – Financial Section Notes to the Financial Statements June 30, 2022 and 2021

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity

The Public Employees Retirement System (the System) is an agency of the State of North Dakota, operating through the legislative authority of North Dakota Century Code 54-52-03. As a state agency, the System is considered to be a department of the State of North Dakota and is included in the State's Annual Comprehensive Financial Report as a pension and other employee benefit trust fund except for the uniform group insurance program, which is reported as a proprietary fund.

The System is governed by a nine-member board, five of the members are appointed and the remaining four are elected by the participants of the retirement plans.

The System administers three defined benefit pension plans and one defined contribution retirement plan. The System also manages and administers the retiree health insurance credit program, the uniform group insurance program, the deferred compensation program and the pretax benefits program.

For financial reporting purposes, the System has included all funds, and has considered all potential component units for which the System is financially accountable, and other organizations for which the nature and significance of their relationship with the System are such that exclusion would cause the System's financial statements to be misleading or incomplete. The Governmental Accounting Standards Board (GASB) has set forth criteria to be considered in determining financial accountability. This criteria includes appointing a voting majority of an organization's governing body and (1) the ability of the System to impose its will on that organization or (2) the potential for the organization to provide specific financial benefits to, or impose specific financial burdens on the System.

Based upon these criteria, there are no component units to be included within the System as a reporting entity and the System is part of the State of North Dakota as a reporting entity.

Fund Financial Statements

The System's only non-fiduciary activity is the administration and management of the uniform group insurance program. This program is an enterprise fund that relies to a significant extent on fees and charges for support and is shown in the separate proprietary fund financial statements.

The Statement of Net Position presents the reporting entity's non-fiduciary assets and liabilities with the difference reported as net position. Net position is reported as restricted for benefits which result when constraints on net position use are either externally imposed by creditors, grantors, contributors, and the like, or imposed by law through constitutional provisions or enabling legislation.

All other activities of the system are pension and other post-employment employee benefit trust funds and are shown in the separate fiduciary fund financial statements.

North Dakota Public Employees Retirement System – Financial Section Notes to the Financial Statements June 30, 2022 and 2021

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Measurement Focus, Basis of Accounting and Financial Statement Presentation

The financial statements of the System are reported using the economic resources measurement focus and the accrual basis of accounting.

This measurement focus includes all assets and liabilities associated with the operations of the proprietary and fiduciary funds on the statements of net position. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows.

The proprietary fund is used to account for the operations of the Uniform Group Insurance Program. The System has been given the responsibility to manage this public entity risk pool. The Uniform Group Insurance Program is a risk sharing pool that provides the employees of the State of North Dakota, or any of its political subdivisions, institutions, departments, or agencies, economies of scale in purchasing health, life, dental, vision, and long-term care insurance.

The fiduciary funds consist of the pension and other employee benefit trust funds that are used to account for assets held by the department in a trust capacity. These include:

Public Employees Retirement System – a cost-sharing multiple-employer defined benefit retirement plan.

Highway Patrolmen's Retirement System – a single-employer defined benefit retirement plan.

Retiree Health Insurance Credit Fund – a cost-sharing multiple employer other post-employment benefit (OPEB) plan that offsets the members' cost of health insurance during their retirement.

Defined Contribution Retirement Plan – an optional defined contribution retirement plan available to state employees.

Pretax Benefits Program – allows eligible employees to elect to reduce their salaries to pay for eligible dependent care and medical expenses.

Deferred Compensation Plan – voluntary, supplemental retirement plan provided in accordance with Section 457 of the Internal Revenue Code.

Retirement Plan for Employees of Job Service North Dakota – a single-employer defined benefit retirement plan.

The System follows the pronouncements of the GASB, which is the nationally accepted standard setting body for establishing accounting principles generally accepted in the United States of America for governmental entities.

The proprietary fund is accounted for on the accrual basis of accounting. Revenues are recognized when earned, and expenses are recognized when the liability is incurred, regardless of the timing of related cash flows. The proprietary fund distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of the proprietary fund are premiums and administrative fees charged to the participants in the Uniform Group Insurance Program and underwriting gains and losses. Operating expenses include premiums, salaries and wages, and administrative expenses. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

The fiduciary funds are accounted for on the accrual basis of accounting. Member contributions are recognized in the period in which the contributions are due. Employer contributions to each plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of each system.

Budgetary Process

The System operates through a biennial appropriation provided by the State Legislature. The System prepares a biennial budget on the modified accrual basis, which is included in the Governor's budget and presented to the General Assembly at the beginning of each legislative session. The General Assembly enacts the budgets of the various state departments through passage of specific appropriation bills. Before signing the appropriation bills, the Governor has line item veto powers over legislation, subject to legislative override. Once passed and signed, the appropriation becomes the system's financial plan for the next two years. Changes to the appropriation are subject to approval by the Emergency Commission.

The Statement of Appropriations has been prepared using the accrual basis of accounting. Unexpended appropriations lapse at the end of each biennium, except certain capital expenditures covered under the North Dakota Century Code (NDCC), Section 54-44.1-11. Expenditures not subject to appropriation of a specific amount include premium expenses, professional fees, depreciation and amortization expense, benefits and refunds paid to participants, prefunded credits applied, and employee reimbursements in the Pretax Benefits Program.

There were no supplemental appropriations during the fiscal years ending June 30, 2022 and 2021. The legal level of budgetary control is at the appropriation and expenditure line item level, with administrative controls established at lower levels of detail in certain instances.

Investment Valuation and Income Recognition

The fair value of investments is discussed in further detail in Note 2 to the financial statements.

The net change in fair value of investments consists of the realized gains or losses and the unrealized increase or decrease in fair value of investments during the year. Realized gains and losses on sales of investments are computed based on the difference between the sales price and the original cost of the investment sold. Realized gains and losses on investments that had been held in more than one fiscal year and sold in the current fiscal year were included as a change in the fair value of investments reported in the prior year(s) and the current year. Unrealized gains and losses are computed based on changes in the fair value of investments between years. Security transactions are accounted for on a trade date basis. Interest income is recognized when earned. Dividend income is recorded on the ex-dividend date. The fair value for the Stable Value option within the deferred compensation and defined contribution plans is measured at contract value.

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Derivative Securities

Derivatives are financial arrangements between two parties whose payments are based on, or "derived" from, the performance of some agreed upon benchmark. The System's investment policy allows the use of derivative securities to hedge or replicate underlying exposures but not for speculation. All derivatives are considered investment derivative instruments. The fair value of all derivative securities is reported in the statements of fiduciary net position.

Accounts Receivable and Credit Policy

Accounts receivable primarily include amounts due for contributions, insurance premiums, employee pretax benefit deductions, and accrued interest on investments. Management reviews all receivables at year-end and assesses collectability. All remaining receivables are considered collectible.

Capital Assets and Depreciation

Capital assets, which include equipment and intangibles (software) greater than \$5,000, are presented in the accompanying financial statements at cost or estimated historical cost. Donated capital assets are stated at acquisition value at the time of donation. Capital assets acquired via lease agreements are capitalized at the inception of the agreement. Additions, improvements and other capital outlays that significantly extend the useful life of an asset are capitalized. Other costs incurred for repairs and maintenance are expensed as incurred. For the years ending June 30, 2022 and 2021, the System capitalized equipment and software in accordance with Section 54-27-21 of the North Dakota Century Code.

The capital assets are depreciated on a straight-line basis over estimated useful lives ranging from five to 10 years.

Accrued Compensated Absences

Annual leave is a part of permanent employees' compensation as set forth in Section 54-06-14 of the North Dakota Century Code. Employees are entitled to earn annual leave based on tenure of employment, within a range of a minimum of one working day per month of employment, to a maximum of two working days per month of employment, to be fixed by rules and regulations adopted by the employing unit. No more than 240 hours of annual leave may be carried forward beyond April 30th of each year. Employees are paid for unused annual leave upon termination or retirement. Permanent employees accrue sick leave from the first day of employment at the rate of eight hours per month with unlimited accumulation. Employees with at least 10 years of state employment are paid one-tenth of their accumulated sick leave under Section 54-06-14 of the North Dakota Century Code when the employee leaves the employ of the state.

The System's liability for accumulated unpaid leave is reported in the applicable funds.

Amounts Held in Custody for Others

Amounts held in custody for others includes monies collected from participating employers for deferred compensation contributions that had not been forwarded to the investment provider company as of June 30, 2022.

Unearned Premiums

Unearned premiums include monies collected by the System from individuals or participating employers for insurance premiums before the premiums are due.

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Transfers to/from Other Plans

Transfers to/from other plans consist of monies transferred from the Public Employees Retirement System Defined Benefit Plan to the Defined Contribution Retirement Plan pursuant to Section 54-52.6 Subsection 3 of the North Dakota Century Code. Each eligible employee who elects to terminate membership in the Defined Benefit Plan has a lump sum amount transferred to the participating member's account under the Defined Contribution Retirement Plan. For new employees electing to transfer to the Defined Contribution Retirement Plan, the lump sum transferred is the actual employee and employer contributions plus interest. In 2022 and 2021, transfers to other plans also includes transfers from the pretax benefits program, retirement plan, and insurance plan to the deferred compensation plan to cover general administrative expenses.

Restricted Net Position

Net position restricted for benefits consists of funds on deposit with Sanford Health Plan to pay health care benefits in the event total claims incurred during the biennium exceed total premiums. This amount was \$0 as of June 30, 2022 and June 30, 2021. See Note 14 for additional discussion on the status of open contracts.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period.

Actual results could differ from those estimates. The System utilizes various investment instruments. Investment securities, in general, are exposed to various risks, such as interest rate, credit, and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such change could materially affect the amounts reported in the statement of fiduciary net position.

Fair Value Measurement

The System's investments in the Defined Contribution Retirement Plan and Deferred Compensation Plan are measured and reported at fair value, and are classified according to the following hierarchy:

Level 1 – Investments that represent unadjusted quoted prices for identical instruments in active markets.

Level 2 – Investments are based on quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.

Level 3 – Investments are based on valuation techniques in which significant inputs are unobservable.

NOTE 2 DEPOSITS AND INVESTMENTS

Defined Contribution Retirement Fund

		June 30	0, 2022	
		Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs
	June 30, 2022	(Level 1)	(Level 2)	(Level 3)
Investments at Fair Value				
Mutual Funds	\$ 16,279,378	\$ 16,279,378	\$ -	\$ -
Investments at Contract Value Fixed Income	149,804			
Investments at Amortized Cost Invested Cash	342,385			
Total Investments	\$ 16,771,567			
		June 30	0, 2021	
		June 30 Quoted Prices in Active Markets for Identical Assets	Significant Other Observable	Significant Unobservable Inputs
	June 30, 2021	Quoted Prices in Active Markets for Identical	Significant Other	_
Investments at Fair Value	June 30, 2021	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Unobservable Inputs
Investments at Fair Value Mutual Funds	June 30, 2021 \$ 18,721,710	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Unobservable Inputs
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
Mutual Funds Investments at Contract Value	\$ 18,721,710	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)

NOTE 2 DEPOSITS AND INVESTMENTS (CONTINUED)

Deferred Compensation Plan

	-	June 30	0, 2022	
		Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs
	June 30, 2021	(Level 1)	(Level 2)	(Level 3)
Investments at Fair Value				
Mutual Funds	\$160,978,323	\$ 160,978,323	\$ -	\$ -
Investments at Contract Value Fixed Income	3,045,746			
Investments at Amortized Cost Invested Cash	3,293,943			
Total Investments	\$167,318,012			
		June 30	0, 2021	
		Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs
	June 30, 2021	(Level 1)	(Level 2)	(Level 3)
Investments at Fair Value				
Mutual Funds	\$181,261,020	\$ 181,261,020	\$ -	\$ -
Investments at Contract Value Fixed Income	2,318,952			
Investments at Amortized Cost Invested Cash	2,985,672			

Investments Measured at the Net Asset Value - Proprietary Fund

	June 30, 2022
Commingled Domestic Fixed Income	\$ 30,368,921
	luna 20 2024
	June 30, 2021

NOTE 2 DEPOSITS AND INVESTMENTS (CONTINUED)

<u>Investments Measured at the Net Asset Value – Fiduciary Funds</u>

	June 30, 2022							
				Retirement				
	Public	Highway	Retiree	Plan for				
	Employees	Patrolmen's	Health	Employees of				
	Retirement	Retirement	Insurance	Job Services				
	System	System	Credit Fund	North Dakota				
Commingled External Investment Pools	\$ 3,599,792,150	\$ 91,378,024	\$ -	\$ -				
Commingled Equities	-	-	96,887,675	17,152,361				
Commingled Fixed Income	-	-	54,944,364	68,585,665				
Total Investments Measured at the								
Net Asset Value	\$ 3,599,792,150	\$ 91,378,024	\$ 151,832,039	\$ 85,738,026				
		June 30	0, 2021					
				Retirement				
	Public	Highway	Retiree	Plan for				
	Employees	Patrolmen's	Health	Employees of				
	Retirement	Retirement	Insurance	Job Services				
	System	System	Credit Fund	North Dakota				
Commingled External Investment Pools	\$ 3,917,244,099	\$ 99,855,106	\$ -	\$ -				
Commingled Equities	-	-	118,281,574	19,108,158				
Commingled Fixed Income	-	-	61,279,787	77,129,210				
Total Investments Measured at the								
Net Asset Value	\$ 3,917,244,099	\$ 99,855,106	\$ 179,561,361	\$ 96,237,368				

Net Asset Value Measurement

The System's investments in the Uniform Group Insurance Program are held in an external investment pool with the North Dakota Retirement and Investment Office and are valued at Net Asset Value (NAV). The System's investments in commingled cash are valued at amortized cost. There are no unfunded commitments and the plan may redeem investments daily with a one day redemption notice period.

The System's investments in the Public Employees Retirement System and Highway Patrol Retirement System are held in an external investment pool with the North Dakota Retirement and Investment Office and are valued at Net Asset Value (NAV). There are no unfunded commitments and the plan may redeem investments daily with a one day redemption notice period.

The System's investments in the Retiree Health Insurance Credit Fund are directly managed and held in an individual investment account with the North Dakota Retirement and Investment Office and are valued at NAV as of June 30, 2022 and 2021. There are no unfunded commitments and the plan may redeem investments daily with a one day redemption notice period. For the years ended June 30, 2022 and 2021, the Retirement Plan for Employees of Job Service of North Dakota's investments were held in an individual investment pool with the North Dakota Retirement and Investment Office and were valued at Net Asset Value (NAV). There were no unfunded commitments and the plan may redeem investments daily with a one day redemption notice period.

NOTE 2 DEPOSITS AND INVESTMENTS (CONTINUED)

Deposits

According to North Dakota Century Code 21-04-01, the System is required to bank at the state-owned and operated Bank of North Dakota. The System receives interest for funds on deposit in all accounts.

Cash and cash equivalents for reporting purposes, includes cash and short-term, highly liquid investments that are readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. This includes investments with original maturity of three months or less at the time of acquisition.

	2022	2021
Cash Deposits at the Bank of North Dakota Recorded as Cash and Cash Equivalents	\$ 20,797,790	\$ 17,488,930
Cash Deposits at State Treasury Recorded as Cash and Cash Equivalents	2,007,216	2,336,748
Cash Held by the North Dakota Retirement and Investment Office Recorded as Cash and Cash Equivalents	1,635,593	1,719,117
Guaranteed Investment Contract with Health Plan Provider Recorded as Cash and Cash Equivalents	9,077	28,292
Total Cash and Cash Equivalents	\$ 24,449,676	\$ 21,573,087

Custodial Risk

For deposits, custodial risk is the risk that in the event of the failure of a depository financial institution, the System will not be able to recover the deposits. The System does not have a formal policy that limits custodial risk for deposits. Deposits at the Bank of North Dakota and the State Treasury are uncollateralized but are guaranteed by the State of North Dakota (NDCC Section 6-09-10).

At June 30, 2022 and 2021, the carrying amount of the System's cash deposits were \$54,818,596 and \$54,289,427, and the bank balances were \$53,993,984 and \$53,258,613. All of the System's deposits are uncollateralized and uninsured at June 30, 2022 and 2021.

Investments

Total investments of the fiduciary funds of the System as of June 30, 2022 and 2021, consisted of the following:

	 2022	 2021
Equity Securities	\$ 2,158,621,201	\$ 2,561,562,701
Fixed Income Securities	995,463,837	1,084,047,978
Real Assets	757,923,432	625,531,022
Mutual Funds	177,257,701	199,982,730
Invested Cash	24,580,667	29,042,848
Securities Lending Collateral	23,611,778	16,290,433
	\$ 4,137,458,616	\$ 4,516,457,712

NOTE 2 DEPOSITS AND INVESTMENTS (CONTINUED)

All investments of the fund, except for the Defined Contribution Retirement Plan and Deferred Compensation Plan, are to be made by the North Dakota State Investment Board (SIB). Chapter 21-10-07 of the North Dakota Century Code requires that all investments made by this state agency, be made using the prudent investor rule.

Investments of the Defined Contribution Retirement Plan and the Deferred Compensation Plan are participant directed and are held by TIAA.

The System's Board is responsible for establishing the investment policy for the fund assets, which includes setting investment goals and specifying the percentage of assets to be invested in various types of investments. The investment goals are viewed over the long term. The Board recognizes the plans' performance objectives, benefit projections, and capital market expectations when determining the asset allocation. The SIB is responsible for managing the System's investments in accordance with the investment policy. The following were the System's asset allocation policies for the Public Employees Retirement System, Highway Patrolmen's Retirement System, Retirement Plan for Employees of Job Service of North Dakota, and Retiree Health Insurance Credit Fund as of June 30, 2022.

Asset Class	Т	Target Allocation							
	PERS & HPRS	JSND	RHIC						
Domestic Equities	30.00%	2.00%	39.00%						
International Equities	21.00%	18.00%	26.00%						
Private Equity	7.00%	6.00%	0.00%						
Domestic Fixed Income	23.00%	74.00%	35.00%						
Global Real Assets	19.00%	0.00%	0.00%						
Total	100.00%	100.00%	100.00%						

Rate of return – The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for changing amounts actually invested. The annual money-weighted rate of return on pension and OPEB plan investments, net of pension and OPEB plan investment expense for the years ended June 30, 2022 and 2021 are:

	2022	2021		
Public Employees Retirement System	-6.32%	27.43%		
Highway Patrolman's Retirement System	-6.50%	23.90%		
Job Service Plan	-5.55%	6.81%		
Retiree Health Insurance Credit Fund	-14.48%	25.58%		

Realized gains and losses — Realized gains and losses on sales of investments are components of net change in fair value of investments and are computed as described in Note 1.

NOTE 2 DEPOSITS AND INVESTMENTS (CONTINUED)

For the years ended June 30, 2022 and 2021, the following are the net realized gains (losses):

	2022	2021
Public Employees Retirement System	\$ 170,740,373	\$ 301,304,554
Highway Patrolmen's Retirement System	4,337,609	7,191,804
Retiree Health Insurance Credit Plan	17,279,324	6,384,582
Defined Contribution Plan	195,667	401,039
Deferred Compensation Plan	13,843,422	7,861,634
Job Service Plan	2,461,462	2,375,571

Credit Risk

All investments of the Public Employees Retirement System, Highway Patrolmen's Retirement System, and Uniform Group Insurance Program are invested in an external investment pool managed by SIB. The pool is not rated. The System does not have a formal credit risk policy that limits the credit risk of the investments.

All investments of the Retirement Plan for Employees of Job Service of North Dakota and Retiree Health Insurance Credit Fund are managed and invested by the SIB in institutional equity and fixed income mutual funds. The fixed income funds are rated AA. The System does not have a formal credit risk policy that limits the credit risk of the investments.

Investments of the Defined Contribution Retirement Plan and the Deferred Compensation Plan are invested in mutual funds directed by the participants. The mutual funds are not rated. The System does not have a formal credit risk policy that limits the credit risk of the investments.

Interest Rate Risk

Interest rate risk is the risk that changes in interest rates of debt securities will adversely affect the fair value of an investment. The System does not have a formal investment policy that limits investment maturities as a means of managing its exposure to potential fair value losses arising from future changes in interest rates. The SIB has chosen to use the Segmented Time Distribution disclosure method. Tables detailing the System's portion of the investment pool are reported on the next page. Readers may refer to the North Dakota Retirement and Investment Office financial statements regarding highly sensitive securities that are disclosed at the SIB level.

The System does not have a formal investment interest rate risk policy for the investments in the Defined Contribution Retirement Plan or the Deferred Compensation Plan as the investments are directed by each individual participant.

NOTE 2 DEPOSITS AND INVESTMENTS (CONTINUED)

PERS and HPRS Plan

	2022							
		Less Than 1						
Type (in thousands)	Fair Value	Year	1-6 Years	6-10 Years	Years			
Domestic Fixed Income Pool	\$ 579,319	\$ 22,304	\$ 162,797	\$ 70,976	\$ 322,243			
Below Investment Grade FI Pool	79,341	855	43,395	29,225	5,866			
Large Cap Domestic Equity Pool	107,920	6,624	67,359	1,326	32,611			
Total Debt Securities	\$ 766,580	\$ 29,783	\$ 273,551	\$ 101,527	\$ 360,720			

Note: Table above represents fixed income investments, as well as debt securities in underlying equity funds.

	2021								
		Less Than 1			Over 10				
Type (in thousands)	Fair Value	Year	1-6 Years	6-10 Years	Years				
Domestic Fixed Income Pool	\$ 640,088	\$ 55,770	\$ 163,265	\$ 101,832	\$ 319,220				
Below Investment Grade FI Pool	91,795	105	39,500	43,664	8,526				
Large Cap Domestic Equity Pool	132,693	1,225	77,443	1,559	52,466				
Small Cap Domestic Equity Pool									
Total Debt Securities	\$ 864,576	\$ 57,100	\$ 280,208	\$ 147,055	\$ 380,212				

Note: Table above represents fixed income investments, as well as debt securities in underlying equity funds.

Job Service Retirement Plan

						2022				
		Less Than 1					Over 10			
Type (in thousands)	Fa	ir Value		Year	1.	-6 Years	6-	10 Years	 Years	
Pooled Investments	\$	68,586	\$	-	\$	37,744	\$	30,842	\$	_

Note: Table above represents fixed income investments, as well as debt securities in underlying equity funds.

			2021		
		Less Than 1			Over 10
Type (in thousands)	Fair Value	Year	1-6 Years	6-10 Years	Years
Pooled Investments	77,129	-	41,428	32,832	2,869

Note: Table above represents fixed income investments, as well as debt securities in underlying equity funds.

NOTE 2 DEPOSITS AND INVESTMENTS (CONTINUED)

Retiree Health Insurance Credit Fund

						2022				
	Less Than 1 Over 1						Over 10			
Type (in thousands)	Fa	ir Value		Year	1	-6 Years	6-	10 Years		Years
Pooled Investments	\$	54,944	\$		- \$	4,705	\$	50,239	\$	-

Note: Table above represents fixed income investments, as well as debt securities in underlying equity funds.

			2021		
		Less Than 1			Over 10
Type (in thousands)	Fair Value	Year	1-6 Years	6-10 Years	Years
Pooled Investments	61,280	-	5,346	48,782	7,152

Note: Table above represents fixed income investments, as well as debt securities in underlying equity funds.

Securities Lending

Securities are loaned versus collateral that may include cash; U.S. government and select OECD government debt securities; and domestic and international equities from major indices as defined specifically in the non-cash collateral guidelines within the Securities Lending Authorization Agreement. U.S. securities are loaned versus collateral valued at 102% of the market value of the securities plus any accrued interest. Non-U.S. securities are loaned versus collateral valued at 105% of the market value of the securities plus any accrued interest.

Non-cash collateral cannot be pledged or sold unless the borrower defaults.

All securities loans can be terminated on demand by either the lender or the borrower, although the average term of North Dakota State Investment Board loans was approximately 70 days as of June 30, 2022.

Cash open collateral is invested in a short term investment pool, the NDSIB USD Cash fund, which had an interest sensitivity of 1 days as of this statement date.

There were no violations of legal or contractual provisions, no borrower or lending agent default losses known to the securities lending agent.

There are no dividends or coupon payments owing on the securities lent. Securities lending earnings are credited to participating clients on approximately the fifteenth day of the following month.

Indemnification deals with the situation in which a client's securities are not returned due to the insolvency of a borrower and Northern Trust has failed to live up to its contractual responsibilities relating to the lending of those securities. Northern Trust's responsibilities include performing appropriate borrower and collateral investment credit analyses, demanding adequate types and levels of collateral, and complying with applicable Department of Labor and Federal Financial Institutions Examination Council regulations concerning securities lending.

For securities loaned at fiscal year end, the SIB has no credit risk exposure to borrowers because the amounts the SIB owes the borrowers exceeds the amounts the borrowers owe the SIB.

NOTE 3 DUE TO/FROM AND TRANSFERS IN/OUT FIDUCIARY AND PROPRIETARY FUNDS AND STATE AGENCY TRANSACTIONS

The June 30, 2022 due from/to fiduciary and proprietary funds are summarized as follows:

Fund	Fiduc Prop	From iary and orietary unds	Due to Fiduciary and Proprietary Funds	
Fiduciary				
Public Employees Retirement System	\$	-	\$	-
Highway Patrolmen's Retirement System		-		-
Retiree Health Insurance Credit Fund		-		-
Retirement Plan for Employees of Job Service North Dakota		-		-
Pretax Benefits Program		-		92,105
Deferred Compensation Plan		-		-
Defined Contribution Plan		-		-
Proprietary				
Uniform Group Insurance Program		92,105		_
	\$		\$	-

As of June 30, 2021 there were no due from/to balances on the fiduciary or proprietary funds as the Plan liquidated all account balances as of June 30, 2021.

These balances are a result of a time lag between the dates the expenditures are incurred, the allocations determined, and when the transactions are entered into the accounting system.

NOTE 3 DUE TO/FROM AND TRANSFERS IN/OUT FIDUCIARY AND PROPRIETARY FUNDS AND STATE AGENCY TRANSACTIONS (CONTINUED)

June 30, 2022 due from/to state agencies are summarized as follows:

Fund		Due From State Agencies		Due to Agencies
Fiduciary				
Public Employees Retirement System				
NDIT	\$	_	\$	11,687
Attorney General		-	·	553
Central Duplicating		-		62
RIO		-		1,766
Total	\$		\$	14,068
Retiree Health Insurance Credit Fund				
Job Service	\$	199	\$	-
Attorney General				14
Total	\$	199	\$	14
Defined Contribution Plan				
NDIT	\$	_	\$	161
Attorney General	Ψ		Ψ	1
Total	\$		\$	162
. 5.5.				
Pretax Benefits Program				
NDIT	\$	-	\$	2,058
Attorney General				100
Total			\$	2,158
Deferred Compensation Plan				
NDIT	\$	_	\$	3,787
Attorney General	Ψ	_	Ψ	231
Total	\$		\$	4,018
				,
Proprietary				
Uniform Group Insurance Program				
NDIT	\$	-	\$	8,266
State Auditor		-		16,481
Central Duplicating		-		7
Attorney General		-		719
Total	\$	-	\$	25,473

These balances are a result of a time lag between the dates that services are provided, the payments are made, and the transactions are entered into the accounting system.

NOTE 3 DUE TO/FROM AND TRANSFERS IN/OUT FIDUCIARY AND PROPRIETARY FUNDS AND STATE AGENCY TRANSACTIONS (CONTINUED)

The June 30, 2021 due from/to state agencies are summarized as follows:

		From		Due to
Fund	State /	Agencies	State	e Agencies
Fiduciary				
Public Employees Retirement System	•		•	44.040
Information Technology Department	\$	-	\$	14,018
Attorney General		-		1,067
Central Duplicating		-		17
Central Supply		-		25
Department of Transportation		-		293
Workforce Safety and Insurance				2,630
Total	\$	-	\$	18,050
Retiree Health Insurance Credit Fund				
Job Service	\$	282	\$	_
Attorney General	*		Ψ	113
Total	\$	282	\$	113
			<u> </u>	
Defined Contribution Plan				
Information Technology Department	\$		\$	100
Total	\$	-	\$	100
Pretax Benefits Program				
Information Technology Department	\$		\$	2,908
Central Supply	Ψ	_	Ψ	2,900
Workforce Safety and Insurance		_		658
Attorney General		_		232
Total	\$		\$	3,804
iotai	Ψ		Ψ	0,004
Deferred Compensation Plan				
Information Technology Department	\$	-	\$	4,954
Central Supply		-		12
Workforce Safety and Insurance		-		1,315
Attorney General		_		210
Total	\$		\$	6,491
Proprietary		_		
Uniform Group Insurance Program				
Information Technology Department	\$		\$	10,533
Central Supply	Φ	-	Φ	10,555
Workforce Safety and Insurance		-		1,973
Central Duplicating		-		1,973
Attorney General		-		939
Total	\$		\$	13,480
iulai	Φ		φ	13,400

NOTE 3 DUE TO/FROM AND TRANSFERS IN/OUT FIDUCIARY AND PROPRIETARY FUNDS AND STATE AGENCY TRANSACTIONS (CONTINUED)

The June 30, 2022 transfers in/out are summarized as follows:

Fund Type/Fund	Transfers In		Transfers Ou	
Fiduciary Funds				
Defined Contribution Plan	\$	1,205	\$	-
Deferred Compensation Plan		875,000		-
Pretax Benefit Program		-		550,000
Public Employee Retirement System		-		163,705
Proprietary Funds				
Uniform Group Insurance Program		-		162,500

The June 30, 2021 transfers in/out are summarized as follows:

Fund Type/Fund	Tra	Transfers In		nsfers Out
Fiduciary Funds				
Defined Contribution Plan	\$	5,918	\$	-
Deferred Compensation Plan		715,000		-
Pretax Benefit Program		-		540,000
Public Employee Retirement System		-		93,418
Proprietary Funds				
Uniform Group Insurance Program		-		87,500

The transfer to the Defined Contribution Retirement Fund is for those employees electing to transfer from the PERS plan. The transfers to the Deferred Compensation Plan are to cover administrative expenses pursuant to NDCC 54-52-04 subsection 11.

NOTE 4 CAPITAL ASSETS

A statement of changes in equipment and accumulated depreciation for the System for the year ended June 30, 2022 and 2021 is as follows:

		Balance 7/1/2021		Additions	Dele	etions		Balance 3/30/2022
Proprietary Funds: Capital Assets Being Depreciated: Software Less Accumulated Amortization for:	\$	3,019,129	\$	59,550	\$	-	\$	3,078,679
Software		(2,926,288)		(28,632)		_		(2,954,920)
Total Capital Assets Being Depreciated, Net		92,841		30,918				123,759
Proprietary Funds Capital Assets, Net	\$	92,841	\$	30,918	\$		\$	123,759
Fiduciary Funds: Capital Assets Being Depreciated: Software	\$	7,485,072	\$	198,052	\$	_	\$	7,683,124
Total Capital Assets Being Depreciated	Ψ_	7,485,072	Ψ	198,052	Ψ		Ψ_	7,683,124
Less Accumulated Depreciation for:								
Software		(7,256,273)		(71,437)				(7,327,710)
Total Capital Assets Being Depreciated, Net		228,799		126,615				355,414
Fiduciary Funds Capital Assets, Net	\$	228,799	\$	126,615	\$		\$	355,414
		Balance 7/1/2020	Δ	Additions	Dele	etions		Balance 6/30/2021
Proprietary Funds: Capital Assets Being Depreciated: Software Less Accumulated Amortization for:		7/1/2020 2,976,279	\$	42,850	Dele \$	etions -	\$	3,019,129
Capital Assets Being Depreciated: Software Less Accumulated Amortization for: Software		7/1/2020 2,976,279 (2,825,067)		42,850 (101,221)		etions - -	\$	3,019,129 (2,926,288)
Capital Assets Being Depreciated: Software Less Accumulated Amortization for:		7/1/2020 2,976,279		42,850		etions - -	\$	3,019,129
Capital Assets Being Depreciated: Software Less Accumulated Amortization for: Software		7/1/2020 2,976,279 (2,825,067)		42,850 (101,221)		- - -	\$	3,019,129 (2,926,288)
Capital Assets Being Depreciated: Software Less Accumulated Amortization for: Software Total Capital Assets Being Depreciated, Net	\$	7/1/2020 2,976,279 (2,825,067) 151,212	\$	42,850 (101,221) (58,371)	\$	etions - - -	\$	3,019,129 (2,926,288) 92,841
Capital Assets Being Depreciated: Software Less Accumulated Amortization for: Software Total Capital Assets Being Depreciated, Net Proprietary Funds Capital Assets, Net Fiduciary Funds: Capital Assets Being Depreciated: Software	\$	7/1/2020 2,976,279 (2,825,067) 151,212	\$	42,850 (101,221) (58,371)	\$	etions	\$	3,019,129 (2,926,288) 92,841
Capital Assets Being Depreciated: Software Less Accumulated Amortization for: Software Total Capital Assets Being Depreciated, Net Proprietary Funds Capital Assets, Net Fiduciary Funds: Capital Assets Being Depreciated:	\$	7/1/2020 2,976,279 (2,825,067) 151,212 151,212	\$	42,850 (101,221) (58,371) (58,371)	\$		\$	3,019,129 (2,926,288) 92,841 92,841
Capital Assets Being Depreciated: Software Less Accumulated Amortization for: Software Total Capital Assets Being Depreciated, Net Proprietary Funds Capital Assets, Net Fiduciary Funds: Capital Assets Being Depreciated: Software Total Capital Assets Being Depreciated	\$	7/1/2020 2,976,279 (2,825,067) 151,212 151,212 7,379,921	\$	42,850 (101,221) (58,371) (58,371)	\$		\$ \$	3,019,129 (2,926,288) 92,841 92,841 7,485,072
Capital Assets Being Depreciated: Software Less Accumulated Amortization for: Software Total Capital Assets Being Depreciated, Net Proprietary Funds Capital Assets, Net Fiduciary Funds: Capital Assets Being Depreciated: Software Total Capital Assets Being Depreciated Less Accumulated Depreciation for:	\$	7/1/2020 2,976,279 (2,825,067) 151,212 151,212 7,379,921 7,379,921	\$	42,850 (101,221) (58,371) (58,371) 105,151 105,151	\$		\$ \$	3,019,129 (2,926,288) 92,841 92,841 7,485,072 7,485,072

NOTE 5 LEASE OBLIGATIONS

Intra-Agency Lease

The system entered into an intra-agency lease for office space until June 30, 2023. Expenditures for this lease were \$113,185 for the year ended June 30, 2022 and \$171,308 for the year ended June 30, 2021, respectively. The future minimum lease payment for the fiscal year ending June 30, 2023 is \$99,843.

The lease contains clauses stating that renewal is dependent upon appropriation funding by the State Legislature. Lease obligations for operating and capital leases are payable from all funds of the System.

NOTE 6 CHANGE IN LONG-TERM LIABILITIES

	Propr	ietary Fund	Fiduciary Fund		
	Accrued	Compensated	Accrued Compensated		
	Al	osences	Absences		
Balance - June 30, 2020	\$	71,476	\$	152,262	
Increases		51,045		117,987	
Decreases		(42,138)		(84,451)	
Balance - June 30, 2021		80,383		185,798	
Increases		64,618		108,704	
Decreases		(61,347)		(153,774)	
Balance - June 30, 2022	\$	83,654	\$	140,727	
Balance - Due Within One Year	\$	7,370	\$	12,398	

The accrued annual compensated absences is generally liquidated by excess revenue in the Uniform Group Insurance Program and the Pension Trust Funds.

NOTE 7 NORTH DAKOTA PUBLIC EMPLOYEES RETIREMENT SYSTEM

All eligible employees of the System, except those electing to participate in the North Dakota Defined Contribution Retirement Plan, contribute to the North Dakota Public Employees Retirement System (PERS), a state-wide cost-sharing multiple-employer defined benefit pension plan, which is detailed in the notes that follow.

The System is required to contribute to PERS at a statutorily determined rate for permanent employees. The System's contributions to PERS for the years ended June 30, 2022 and 2021, were \$235,972 and \$221,614 which were equal to the required contributions for each year.

The System is required to contribute to the North Dakota Defined Contribution Retirement Plan at a statutorily determined rate for permanent employees who have elected to participate in this plan. The System's contributions to this plan for the years ended June 30, 2022 and 2021, were \$17,857 and \$17,467.

NOTE 8 DESCRIPTION OF PLANS

General

The System administers three defined benefit pension plans and a defined contribution plan. The Public Employees Retirement System (PERS) is a cost-sharing multiple-employer retirement plan. The PERS was established July 1, 1966 as a defined contribution plan and was changed to a defined benefit plan by the 1977 North Dakota Legislature. The PERS is administered in accordance with Chapter 54-52 of the North Dakota Century Code. The Highway Patrolmen's Retirement System (HPRS) was established July 1, 1949 and is administered in accordance with Chapter 39-03 of the North Dakota Century Code. The HPRS is a single-employer defined benefit plan. The North Dakota Defined Contribution Retirement Plan was established on January 1, 2000 and is administered in accordance with Chapter 54-52.6 of the North Dakota Century Code. The Retirement Plan for Employees of Job Service North Dakota is a single-employer defined benefit public employee retirement plan administered by the Agency. The plan is established under NDCC 52-11-01 with benefit provisions established through the plan document, as amended.

The costs of administering PERS, HPRS, and the Retirement Plan for Employees of Job Service North Dakota are financed through the contributions and investment earnings of each plan. The administrative costs of the Defined Contribution Plan are funded by forfeitures of non-vested employer contributions and administrative fees charged to individual participant accounts.

The following brief description of the PERS, HPRS, Defined Contribution Plan and the Retirement Plan for Employees of Job Service North Dakota is provided for general information purposes only. Participants should refer to the applicable chapters of the North Dakota Century Code for more complete information.

The PERS covers substantially all employees of the State of North Dakota, its agencies and various participating political subdivisions (Main System). It also covers Supreme and District Court Judges, the National Guard Security Officers and Firefighters, peace officers and correctional officers employed by political subdivisions, and as of August 1, 2017, firefighters employed by participating political subdivisions. Effective August 1, 2015, current and newly eligible members of the National Guard System were transferred to the Law Enforcement System. The HPRS covers substantially all sworn officers of the North Dakota Highway Patrol. An optional Defined Contribution Retirement Plan (DC Plan) was established effective January 1, 2000. The DC plan was available to state employees who are in positions not classified by the Human Resource Management Services division of the State of North Dakota. Employees under the judicial branch or the Board of Higher Education and State Institutions under the jurisdiction of the Board of Higher Education are not eligible to participate in the Plan. The 2013 Legislative Assembly passed legislation to expand eligibility to the Plan to include all new state employees hired on or after October 1, 2013 through July 31, 2017. The Retirement Plan for Employees of Job Service North Dakota is limited to employees participating in the plan as of September 30, 1980.

Responsibility for administration of the defined benefit pension plans and the defined contribution plan is assigned to a Board comprised of nine members. The Board consists of a Chairman, who is appointed by the Governor; one member appointed by the Attorney General; one member appointed by the State Health Officer; two members of the legislative assembly appointed by the chairman of the legislative management, three members elected by the active membership of the NDPERS system; and one member elected by the retired public employees.

NOTE 8 DESCRIPTION OF PLANS (CONTINUED)

The plans are not subject to the provisions of the Employee Retirement Income Security Act of 1974. The number of participating political subdivisions in the PERS was:

	2022	2021
Cities	97	98
Counties	51	51
School Districts	131	131
Other	94	88
Total Participating Political Subdivisions	373	368

Employee membership data is as follows:

	PE	RS	HPRS		Job Service	
	2022	2021	2022	2021	2022	2021
Retirees, Beneficiaries, and Disability		_		_		
Currently Receiving Benefits	14,204	13,575	135	135	175	177
Terminated Vested Participants	8,673	7,877	35	28	-	-
Inactive Participants	7,610	7,094	20	21	-	-
Active Plan Participants						
Vested	17,247	17,160	70	73	1	3
Nonvested	7,532	7,434	81	78		
Total Plan Membership	55,266	53,140	341	335	176	180

The defined contribution plan had 88 and 89 active participants as of June 30, 2022 and June 30, 2021, respectively.

BENEFITS

PERS

Benefits are set by statute. The System has no provisions or policies with respect to automatic and ad hoc post-retirement benefit increases. Members of the main system are entitled to unreduced monthly pension benefits beginning when the sum of age and years of credited service equal or exceed 85 (Rule of 85), or at normal retirement age (65). For members hired on or after January 1, 2016, the Rule of 85 is replaced with the Rule of 90 with a minimum age of 60. The annual pension benefit is equal to 2.00% of their average monthly salary, using the highest 36 months out of the last 180 months of service, for each year of service. For members hired on or after January 1, 2020 the annual pension benefit is equal to 1.75% of their average monthly salary, using the three highest periods of twelve consecutive months employed during the last one hundred eighty months of employment. The Plan permits early retirement at ages 55-64 with three or more years of service.

Supreme and District Court Judges are entitled to unreduced monthly pension benefits beginning at normal retirement age of (65) or the Rule of 85. The monthly pension benefit is equal to a percentage of average monthly salary using the highest 36 months out of the last 180 months of service. The percentage is equal to 3.50% of average monthly salary multiplied by the first ten years of service, plus 2.80% of the average monthly salary times the second ten years of service, plus 1.25% of average monthly salary times years of service in excess of twenty years. The judicial retirement formula is only applied to eligible judicial service. Non-judicial service benefits are calculated using the 2.00% multiplier. The Plan permits early retirement at ages 55-64 with five or more years of service.

NOTE 8 DESCRIPTION OF PLANS (CONTINUED)

Members of the National Guard System are entitled to unreduced monthly pension benefits at normal retirement age (55). Effective August 1, 2015, the National Guard System became part of the Law Enforcement System. Members of the Law Enforcement System are entitled to unreduced monthly pension benefits at normal retirement age (55) or the Rule of 85. The monthly pension benefit for the National Guard/Law Enforcement is equal to 2.00% of their average monthly salary, using the highest 36 months out of the last 180 months of service, for each year of service. The Plan permits early retirement at ages 50-55 with three or more years of service.

Members may elect to receive the pension benefits in the form of a single life, joint and survivor, term-certain annuity, or partial lump sum with ongoing annuity. Members may elect to receive the value of their accumulated contributions, plus interest, as a lump sum distribution upon retirement or termination, or they may elect to receive their benefits in the form of an annuity. For each member electing an annuity, total payment will not be less than the members' accumulated contributions plus interest.

HPRS

Benefits are set by statute. The System has no provisions or policies with respect to automatic and ad hoc post-retirement benefit increases. Members are entitled to unreduced pension benefits upon attainment of age 55 and 10 years of eligible employment or when the sum of age and years of credited service equals or exceeds 80. The annual pension benefit is equal to a percentage of average monthly salary using the highest 36 months out of the last 180 months of service. The percentage is equal to the sum of the first 25 years of service multiplied by 3.60% and 1.75% multiplied by years of service in excess of 25, if any. The Plan permits early retirement at ages 50-54, with ten or more years of service.

Members may elect to receive the pension benefits in the form of a single life, joint and survivor, term-certain annuity, or partial lump sum with ongoing annuity. Members may elect to receive the value of their accumulated contributions, plus interest, as a lump sum distribution upon retirement or termination, or they may elect to receive their benefits in the form of an annuity. For each member electing an annuity, total payment will not be less than the members' accumulated contributions plus interest.

Defined Contribution Plan

Benefits are set by statute. Members are entitled to their vested account balance. A participating member is immediately 100% vested in the member's contributions. A participating member vests in the employer contributions made on the member's behalf as follows:

Upon completion of two years of service	50%
Upon completion of three years of service	75%
Upon completion of four years of service	100%

Members may elect to receive their account balance in a lump sum, lump sum direct rollover or periodic distribution. Legislation was passed during the 2015 session providing eligible members of the Defined Contribution Plan a special election period in which to elect to return to the PERS defined benefit plan.

NOTE 8 DESCRIPTION OF PLANS (CONTINUED)

Retirement Plan for Employees of Job Service North Dakota

Benefits are established through the plan document, as amended by the Board. The System provides a post-retirement cost-of living adjustment each year based on the Consumer Price Index. Employees are entitled to annual pension benefits beginning at normal retirement age (65). Employees may elect optional retirement eligibility at age 62 with 5 years of credited service, at age 60 with 20 years of credited service, or at age 55 with 30 years of credited service. Pension benefits are calculated based on the final average earnings (basic monthly earnings averaged over the highest three consecutive years of basic earnings) of the employee multiplied by the sum of:

- 1.5% times years of credited service up to five plus
- 1.75% times years of credited service between six and ten plus
- 2.0% times years of credited service in excess of ten years

Death and Disability Benefits

<u>PERS</u>

Death and disability benefits are set by statute. If an active member dies with less than three years of service for the Main System and Public Safety, or less than five years of service for Supreme and District Court Judges, a death benefit equal to the value of the member's accumulated contributions, plus interest, is paid to the member's beneficiary. If the member has earned more than three years of credited service for the Main System and Public Safety, the surviving spouse will be entitled to a single payment refund, life-time monthly payments in an amount equal to 50% of the member's accrued normal retirement benefit, or monthly payments in an amount equal to the member's accrued 100% Joint and Survivor retirement benefit if the member had reached normal retirement age prior to date of death. If the surviving spouse dies before the member's accumulated pension benefits are paid, the balance will be payable to the surviving spouse's designated beneficiary.

For Judges who have earned more than five years of credited service, the death benefit is the greater of (i) lump sum payment of accumulated contributions, or (ii) 100% of the members' accrued benefit (not reduced on account of age), payable for the spouse's lifetime.

Eligible members who become totally disabled after a minimum of 180 days of service, receive monthly disability benefits equal to 25% of their final average salary with a minimum benefit of \$100. To qualify under this section, the member has to become disabled during the period of eligible employment and apply for benefits within one year of termination. The definition for disabled is set by the System in the North Dakota Administrative Code.

For Judges only, the disability benefit formula is 70% of final average salary minus Social Security and Workers Compensation benefits.

HPRS

Death and disability benefits are set by statute. If an active member dies with less than ten years of credited service, a death benefit equal to the value of the member's accumulated contributions, plus interest is paid to the member's beneficiary. If the member has earned more than ten years of credited service, the surviving spouse, if any, will be entitled to a single payment refund or life-time monthly payments in an amount equal to 50% of the member's accrued normal retirement benefit. If the surviving spouse dies before the member's accumulated pension benefits are paid, the balance will be payable to any designated beneficiary.

NOTE 8 DESCRIPTION OF PLANS (CONTINUED)

Eligible members who become totally disabled after a minimum of 180 days of service, receive monthly disability benefits that are up to 70% of their final average salary, reduced by worker's compensation, with a minimum benefit of \$100. To qualify under this section the member must meet the criteria established by the System for being totally disabled and apply for benefits within one year of termination.

Defined Contribution Plan

Death and disability benefits are set by statute. Upon the death of a participating member or former participating member, the vested account balance of that deceased participant is available to the participant's designated beneficiary(ies).

A member who becomes totally and permanently disabled while employed by the State is eligible to receive a distribution of the vested account balance. To qualify under this section, the member must meet the criteria established by the System for being totally disabled.

Retirement Plan for Employees of Job Service North Dakota

The plan document provides disability and death benefits. If the death of a participant occurs prior to his/her annuity starting date, the surviving spouse who has been married at least two years prior to the participant's death or, if married less than two years is a parent of a child of this marriage, then the spouse shall receive monthly benefits. The amount is the greater of the benefit had the participant retired on the day before he/she died and elected the Contingent Annuitant Option with 55% of his/her retirement benefit continued to his/her spouse or 55% of the smaller of 40% of the deceased participant's average monthly earnings or the deceased participant's normal retirement benefit obtained by increasing their credited service by the period of time between their date of death and the date they would have attained age 60. Upon remarriage of the surviving spouse before age 60, the death benefits will cease.

If a participant becomes totally disabled, he/she will be eligible for a monthly disability benefit that shall be equal to the greater of 40% of the participant's average annual earnings or the accrued benefit determined as their date of disability.

Refunds of Member Contributions

Upon termination, if a member of PERS or HPRS is not vested (is not 65 or does not have three years of service for the Main System and National Guard/Law Enforcement, or five years of service for the Supreme and District Court Judges, credited for the PERS, or is not 60 or does not have ten years of service credited for the HPRS), they will receive the accumulated member contributions plus interest, or may elect to receive this amount at a later date. If a member has vested, they have the option of applying for a refund or can remain as a terminated vested participant. If a member terminated and withdrew their accumulated member contribution and is subsequently reemployed, they have the option of repurchasing their previous service.

Contributions

Contribution rates for PERS, HPRS, and the Defined Contribution Plan are set by state statute and are a percentage of salaries and wages. Contribution rates for the Job Service Retirement Plan are established in the plan document, as amended, which prescribes that they are actuarially determined using the frozen initial liability actuarial cost method which is the same as the aggregate cost method.

NOTE 8 DESCRIPTION OF PLANS (CONTINUED)

Members that made a qualifying election under Senate Bill 2015 to move from the Defined Contribution Plan back to the Defined Benefit Plan have a 2% increase on employee contributions. The 2019 Legislative Assembly passed legislation that ended the RHIC plan for new hires after January 1, 2020 and redirected the 1.14% RHIC employer contribution to the retirement account for both the PERS plan as well as the defined contribution plan.

PERS

Member contributions are set by statute. During the 1983-1985 biennium the State and some of the participating political subdivisions implemented the employer pickup provision of the IRS code whereby a portion or all of the required member contributions are made by the employer. The State is paying 4% of the member contribution. Some of the political subdivisions are paying all or part of the member contributions. Employer contributions are set by statute except the contribution rates for the National Guard/Law Enforcement Plans which are set by the Board.

Contribution rates are established by statute as a percent of covered compensation as follows:

	Member Contributions	Employer Contributions
Public Employees Retirement System		
Members first enrolled prior to January 1, 2020	7.00%	7.12%
Members first enrolled after January 1, 2020	7.00%	8.26%
Members returning to the Defined Benefit Plan		
as a result of Senate Bill 2015	9.00%	7.12%
Judges Retirement System	8.00%	17.52%
Law Enforcement with Previous Service		
State - BCI Plan	6.00%	9.81%
State - National Guard	5.50%	9.81%
Political Subdivisions	5.50%	9.81%
Law Enforcement without Previous Service	5.50%	7.93%

The member's account balance includes employee contributions, interest, and the vested employer contributions equal to the member's contributions to an eligible deferred compensation plan. Members of the Supreme and District Court Judges are not eligible to vest in the employer contributions if contributing to the deferred compensation plan.

NOTE 8 DESCRIPTION OF PLANS (CONTINUED)

The minimum monthly member contribution to the deferred compensation plan is \$25 and the maximum vesting in the employer contributions may not exceed the following:

1 to 12 months of service	Greater of one percent of monthly salary or \$25
13 to 24 months of service	Greater of two percent of monthly salary or \$25
25 to 36 months of service	Greater of three percent of monthly salary or \$25
Longer than 36 months of service	Greater of four percent of monthly salary or \$25

HPRS

Member and employer contributions are set by statute as a percent of covered compensation. The state is paying 4.0% of the member contribution. The member contribution rate is 13.8% and the employer rate is 20.2%. Both the member and the employer contribution rate will increase by 0.5% in January 2023, 2024, and 2025.

Defined Contribution Plan

Member and employer contributions are set by statute as a percent of covered compensation. The state is paying 4% of the member contribution. The member contribution rate is 7.00% and the employer rate is 7.12% for members first enrolled prior to January 1, 2020. For members first enrolled after January 1, 2020 the member contribution rate is 7.00% and the employer rate is 8.26%.

Retirement Plan for Employees of Job Service North Dakota

Employees' contributions are established at 7.0% of total compensation. The funding policy of the plan provides for employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are designed to accumulate sufficient assets to pay benefits when due. For the fiscal years ended June 30, 2022 and June 30, 2021 there were no employer contributions necessary into the plan.

Effective July 1, 1999, the "scheduled contribution" will be zero as long as the plan's actuarial value of assets exceeds the actuarial present value of projected benefits. The "scheduled contribution" and amortization will be determined when the plan is not in surplus and will be based on a funding policy adopted by the Employer.

NOTE 9 NET PENSION LIABILITY OF THE PLANS

The components of the net pension liability (asset) of the Plans at June 30, 2022 and 2021, are as follows:

2022	PERS	HPRS	JSND
Total Pension Liability	\$ 6,607,469,220	\$ 170,663,177	\$ 70,492,767
Plan Fiduciary Net Position	3,635,771,902	92,324,497	86,177,470
Net Pension Liability (Asset)	\$ 2,971,697,318	\$ 78,338,680	\$ (15,684,703)
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability (Asset)	55.03%	54.10%	122.25%
2021	PERS	HPRS	JSND
2021 Total Pension Liability	PERS \$ 4,991,542,997	HPRS \$ 123,371,001	JSND \$ 64,843,971
Total Pension Liability	\$ 4,991,542,997	\$ 123,371,001	\$ 64,843,971

The plan provisions used in the measurement of the total pension liability are the same as those used in the PERS, HPRS and JSND Actuarial Valuation and Reviews as of July 1, 2022 and 2021.

Actuarial Assumptions

The actuarial assumptions used in the June 30, 2022 and June 30, 2021 valuations were based on the results of an actuarial experience study for the period July 1, 2014 – June 30, 2019 as adopted by the Board.

PERS:

The total pension liability as of June 30, 2022 and 2021, was determined by actuarial valuations as of July 1, 2022 and 2021, respectively, using the following actuarial assumptions, applied to all periods included in the measurement (unless noted otherwise):

Actuarial Cost

Method Entry Age Normal

Inflation 2.25%

Salary Increases 3.50% to 17.75% including inflation.

Retirement Age Age-based table of rates that are specific to the type of eligibility condition

NOTE 9 NET PENSION LIABILITY OF THE PLANS (CONTINUED)

Mortality Rates Sex-distinct Pub-2010 tables for General Employees, with scaling based on actual experience.

Respective corresponding tables were used for healthy retirees, disabled retirees, and active

members.

Other Notes The employer rates to the System are the statutory/Board approved contribution rates of 7.12% of payroll for the Main System (8.26% for members enrolled on or after January 1,

2020), 17.52% for the Judges System, 9.81% for the Public Safety with prior Main System,

and 7.93% for the Public Safety without prior Main System service System.

The benefit accrual rate for members first enrolled on or after January 1, 2020 in the Main and Public Safety Systems is 1.75% (compared to 2.00% for members enrolled before January 1,

2020).

as of July 1, 2020.

The investment return assumption was updated from 7.00% to 6.50% beginning with the actuarial valuation as of July 1, 2022. All other actuarial assumptions used in the actuarial valuation as of July 1, 2022 were based on an experience review for the period from July 1, 2014 to July 1, 2019, and were adopted for first use commencing with the actuarial valuation

Highway Patrol

The total pension liability as of June 30, 2022 and 2021, was determined by actuarial valuations as of July 1, 2022 and 2021, using the following actuarial assumptions, applied to all periods included in the measurement (unless noted otherwise):

Actuarial Cost

Method Entry Age Normal

Asset Valuation

Method Plan Fiduciary Net Position (Market value of assets, no assets smoothing)

Inflation 2.25%

Salary Increases Service-based table for members with less than five years of service and age-based table for

members with more than five years of service

Retirement Age Age-based table of rates that are specific to the type of eligibility condition

Mortality Rates 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

MP-2019 scale.

NOTE 9 **NET PENSION LIABILITY OF THE PLANS (CONTINUED)**

Other Notes There were no benefit changes during the year

> The assumptions were updated beginning with the actuarial valuation as of July 1, 2020 based on an experience study covering the period of July 1, 2014 through July 1, 2019. The investment return assumption was decreased from 7.00% to 6.50% beginning with the actuarial valuation as of July 1, 2022

> The employer rate to the System is the statutory ccontribution rate of 20.20% of payroll. The statutory employer and empoyee contributions will each increase by 0.5% of pay every year from January 1, 2023 to January 1, 2025, ultimately increasing both by 1.5% of pay.

JSND

The total pension liability as of June 30, 2022 and 2021, was determined by actuarial valuations as of July 1, 2022 and 2021, using the following actuarial assumptions, applied to all periods included in the measurement (unless noted otherwise):

Actuarial Cost

Method **Entry Age Normal**

Asset Valuation

Method Plan Fiduciary Net Position (Market value of assets, no assets smoothing)

COLA 2.25% Inflation 2.25% Salary Increases 3.50%

Investment Rate

of Return As of June 30, 2022, 3.00%. As of June 30, 2021, 3.75%.

Age-based table of rates that are specific to the type of eligibility condition Retirement Age

Pub-2010 Healthy Retiree Mortality table (for General Employees), sex-distinct, with rates **Mortality 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 Notes There were no benefit changes during the year

> The assumptions were updated beginning with the actuarial valuation as of July 1, 2020 based on an experience study covering the period July 1, 2014 through July 1, 2019. The Board approved lowering the investment return assumption from 3.75 percent to 3.00 percent, first

effective July 1, 2022.

The System has assets in excess of the present value of future benefits. Therefore, no

employer contributions are being made.

NOTE 9 NET PENSION LIABILITY OF THE PLANS (CONTINUED)

Investment Rate of Return

The long-term expected investment rate of return assumption for PERS, HPRS, and JSND was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Estimates of arithmetic real rates of return, for each major asset class included in the pension plan's target asset allocation as of July 1, 2022 are summarized in the following tables:

PERS and HPRS

Long-Term	
Expected Real	
Rate of Return	
5.75%	
6.45%	
9.20%	
0.34%	
4.56%	
0.00%	

JSND

	Long-Term Expected Real
Asset Class	Rate of Return
Domestic Equity	5.37%
Core Fixed Income	1.31%
Limited Duration Fixed Income	0.59%
Global Equity	5.74%
Diversified Short-Term Fixed Income	1.86%
Short-Term Corporate Fixed Income	0.53%
US High Yield	4.22%
Emerging Market Debt	4.96%

Discount Rate

For PERS, GASB Statement No. 67 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total Pension 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. In years where assets are not projected to be sufficient to meet benefit payments the use of a municipal bond rate is required.

NOTE 9 NET PENSION LIABILITY OF THE PLANS (CONTINUED)

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 the June 30, 2022 valuation, the expected rate of return on pension plan investments is 6.50%; the municipal bond rate is 3.69%; and the resulting Single Discount Rate is 5.10%. For the June 30, 2021 valuation, the expected rate of return on pension plan investments is 7.00%; the municipal bond rate is 1.92%; and the resulting Single Discount Rate is 7.00%.

For HPRS, the expected rate of return on pension plan investments is 6.50%, the municipal bond rate is 3.69% and the resulting Single Discount Rate is 5.02% for June 30, 2022. The discount rate used to measure the total pension liability was 7.00% as of June 30, 2021.

For JSND, the discount rate was 3.00% as of June 30, 2022 and 3.75% as of June 30, 2021. The projection of cash flows used to determine the discount rate assumed plan member and employer contributions will be made at rates equal to those based on the July 1, 2022 and July 1, 2021 Actuarial Valuation Reports. 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, as well as projected contributions from future plan members, are not included. Based on those assumptions (for JSND it is assumed no future contribution will be made), the pension plans' fiduciary net position were projected to be available to make all projected future benefit payments for current plan members as of June 30, 2022. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability as of June 30, 2022 and 2021.

Sensitivity of Net Pension Liability (Asset)

The following presents the net pension liability (asset) of the Plans as of June 30, 2022, calculated using the discount rate of 5.10% for PERS (7.00% as of June 30, 2021), 5.02% for HPRS (7.00% as of June 30, 2021) and 3.00% for JSND (3.75% as of June 30, 2021), as well as what the Plan's net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

NOTE 9 NET PENSION LIABILITY OF THE PLANS (CONTINUED)

Net Pension Liability (Asset) as of June 30, 2022	1% Decrease (4.10%)	Current Discount (5.10%)	1% Increase (6.10%)
PERS	\$ 3,942,552,866	\$ 2,971,697,318	\$ 2,175,743,390
	1% Decrease Current Discount (4.02%) (5.02%)		1% Increase (6.02%)
HPRS	40,084,617	23,295,192	9,514,031
	1% Decrease (2.00%)	Current Discount (3.00%)	1% Increase (4.00%)
JSND	\$ (8,404,268)	\$ (15,684,703)	\$ (21,896,493)
Net Pension Liability (Asset) as of June 30, 2021	1% Decrease (6.00%)	Current Discount (7.00%)	1% Increase (8.00%)
as of June 30, 2021	(6.00%)	(7.00%)	(8.00%)
as of June 30, 2021	(6.00%) \$ 1,686,774,453 1% Decrease	(7.00%) \$ 1,041,820,297 Current Discount	(8.00%) \$ 505,489,341 1% Increase
as of June 30, 2021 PERS	(6.00%) \$ 1,686,774,453 1% Decrease (6.00%)	(7.00%) \$ 1,041,820,297 Current Discount (7.00%)	(8.00%) \$ 505,489,341 1% Increase (8.00%)

NOTE 10 RETIREE HEALTH INSURANCE CREDIT (RHIC) FUND

The Retiree Health Insurance Credit Fund, a cost-sharing multiple-employer other post-employment benefit (OPEB) plan, is administered by the System to provide members that were first enrolled in the plan prior to January 1, 2020 and are receiving retirement benefits from the PERS, the HPRS, and Judges retired under Chapter 27-17 of the North Dakota Century Code a credit toward their monthly health insurance premium under the state health plan based upon the member's years of credited service. Effective July 1, 2015, the credit is also available to apply towards monthly premiums under the state dental, vision and long term care plan and any other health insurance plan. Effective August 1, 2019 the credit is expanded to also include any dental, vision, and long term care plan. The Retiree Health Insurance Credit Fund is advance-funded on an actuarially determined basis.

Employee membership data is as follows:

	2022	2021
Retired Participants, Receiving Benefits	14,290	13,697
Active Participants, Not Receiving Benefits	19,018	21,067
	33,308	34,764

NOTE 10 RETIREE HEALTH INSURANCE CREDIT (RHIC) FUND (CONTINUED)

The employer contribution for the PERS, the HPRS and the Defined Contribution Plan is set by statute at 1.14% of covered compensation. Employees participating in the retirement plan as part-time/temporary members are required to contribute 1.14% of their covered compensation to the Retiree Health Insurance Credit Fund. Employees purchasing previous service credit are also required to make an employee contribution to the Fund. The benefit amount applied each year is shown as "prefunded credit applied" on the Statement of Changes in Plan Net Position for the pension trust funds.

Retiree health insurance credit benefits and death and disability benefits are set by statute. There are no provisions or policies with respect to automatic and ad hoc post-retirement benefit increases. Employees who are receiving monthly retirement benefits from the PERS, the HPRS, the Defined Contribution Plan, the Chapter 27-17 judges or an employee receiving disability benefits, or the spouse of a deceased annuitant receiving a surviving spouse benefit or if the member selected a joint and survivor option are eligible to receive a credit toward their monthly health insurance premium under the state health plan.

The benefits are equal to \$5.00 for each of the employee's, or deceased employee's years of credited service not to exceed the premium in effect for selected coverage. The retiree health insurance credit is also available for early retirement with reduced benefits.

NOTE 11 NET OPEB LIABILITY OF THE RHIC FUND

The components of the net OPEB liability of the RHIC Plan at June 30, 2022 and June 30, 2021 are as follows:

2022	RHIC			
Total OPEB Liability	\$	274,514,031		
RHIC Fiduciary Net Position		154,483,072		
Net OPEB Liability (Asset)	\$	120,030,959		
RHIC Fiduciary Net Position as a Percentage of the Total OPEB Liability		56.28%		
2021		RHIC		
Z021 Total OPEB Liability	\$	RHIC 237,951,735		
	\$			
Total OPEB Liability	\$	237,951,735		

NOTE 11 NET OPEB LIABILITY OF THE RHIC FUND (CONTINUED)

Actuarial Assumptions

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% for 2022; 6.5% for 2021

Mortality Rates Pub-2010 Healthy Retiree Mortality table (for General Employees), sex-distinct, with rates

multiplied by 103% for mailes 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 Geneeral 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 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.

Investment Rate of Return

The long-term expected investment rate of return assumption for the RHIC fund was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of RHIC investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Estimates of arithmetic real rates of return, for each major asset class included in the RHIC's target asset allocation as of July 1, 2022 are summarized in the following table:

	Long-Term Expected
Asset Class	Real Rate of Return
Large Cap Domestic Equities	5.75%
Small Cap Domestic Equities	0.00%
International Equities	6.00%
Core-Plus Fixed Income	0.22%

NOTE 11 NET OPEB LIABILITY OF THE RHIC FUND (CONTINUED)

Discount Rate

For the purpose of the June 30, 2022 valuation, the expected rate of return on OPEB plan investments is 5.75%; the municipal bond rate is 3.69%; and the resulting single discount rate is 5.39%. discount rate and the OPEB plan investments were both 6.5% as of June 30, 2021. The projection of cash flows used to determine the discount rate assumed plan member and statutory/Board approved employer contributions will be made at rates equal to those based on the July 1, 2022, and July 1, 2021, PERS actuarial valuation reports. For this purpose, only employer contributions that are intended to fund benefits of current RHIC 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 assumptions, the RHIC 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 RHIC investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Sensitivity of Net OPEB Liability (Asset)

The following presents the net OPEB liability of the Plans as of June 30, 2022 (using a single discount rate of 5.39%) and June 30, 2021 (using a 6.50% single discount rate), as well as what the RHIC net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

_	Net OPEB Liability (Asset) as of June 30, 2022		1% Decrease Current Discount (4.39%) (5.39%)				1	% Increase (6.39%)
	RHIC	\$	153,212,299	\$	120,030,959	\$	92,176,119	
	Net OPEB Liability (Asset) as of June 30, 2021	1% Decrease (5.50%)		Cui	rrent Discount (6.50%)	1	% Increase (7.50%)	
	RHIC	\$	82,487,616	\$	55,617,289	\$	32,880,996	

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 healthcare cost trend rate was not performed.

NOTE 12 DEFERRED COMPENSATION PLAN FOR PUBLIC EMPLOYEES

The System was given the authority by Chapter 54-52.2 to administer an employee deferred compensation plan in accordance with Internal Revenue Code Section 457. The plan allows employees of the State of North Dakota or any of its political subdivisions, institutions, departments, or agencies to participate, providing that the employee has signed a participant agreement, which permits them to defer a portion of their salary until future years. Each participant may defer the lesser of \$20,500 for calendar year 2022 (\$19,500 for 2021) or 100% of gross annual compensation. The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency.

All compensation deferred under the plans, all property and rights purchased with those amounts, and all income attributable to those amounts, property or rights are held in trust for the exclusive use of the employee or their beneficiary.

NOTE 12 DEFERRED COMPENSATION PLAN FOR PUBLIC EMPLOYEES (CONTINUED)

The deferred compensation plan had 15,567 and 14,559 active participants as of June 30, 2022 and 2021, respectively.

The related investments are reported at fair value as follows:

	2022	2022		
Investment Balance by:	•	_		
State of North Dakota	\$ 150,768,142	90%	\$ 173,169,034	93%
Other Jurisdictions	16,549,870	10%	13,396,610	7%
Total Investments	\$ 167,318,012	100%	\$ 186,565,644	100%

NOTE 13 FEDERAL INCOME TAX STATUS

The System is qualified under Section 401(a) of the Internal Revenue Code (IRC) and is exempt from the payment of any federal income taxes under Section 501(a) of the IRC and by virtue of being an agency of the state of North Dakota.

NOTE 14 UNIFORM GROUP INSURANCE PROGRAM SURPLUS

The Uniform Group Insurance Program, a proprietary fund, contracted with Sanford Health Plan to provide health care insurance to the employees of the State of North Dakota, or any of its political subdivisions, institutions, departments or agencies. The contract for the 2019-2021 biennium provides for an accounting of premiums paid and claims incurred during the biennium. The final gain or loss is determined two years after the end of the biennium, which for the 2019-2021 biennium will occur in 2023 with an initial settlement occurring in 2022. In the event of a loss, the system does not have any risk. For this period, premiums exceeded claims, therefore, a gain of \$26.1 million was returned to the System.

The System again entered into a similar contract with Sanford Health Plan for the 2021-2023 biennium. The contract for the 2021-2023 biennium provides for an accounting of premiums paid and claims incurred during the biennium. The final gain or loss is determined two years after the end of the biennium, which for the 2021-2023 biennium will occur in 2025. In the event of a loss, the system does not have any risk. No other insurance contracts have a gain sharing provision.

The accumulated surplus and other invested funds in the amounts of \$33.5 million and \$36.1 million are shown as cash, invested cash and commingled domestic fixed income investments on the Statement of Net Position as of June 30, 2022 and 2021, respectively.

NOTE 15 RISK MANAGEMENT

The System is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The following are funds/pools established by the state for risk management issues:

NOTE 15 RISK MANAGEMENT (CONTINUED)

The 1995 Legislative Session established the Risk Management Fund (RMF), an internal service fund, to provide a self-insurance vehicle for funding the liability exposures of state agencies resulting from the elimination of the state's sovereign immunity. The RMF manages the tort liability of the state, its agencies' employees and the University System. All state agencies participate in the RMF and their fund contribution was determined using a projected cost allocation approach. The statutory liability of the State is limited to a total of \$250,000 per person and \$1,000,000 per occurrence.

The System also participates in the North Dakota Fire and Tornado Fund and the State Bonding Fund. The agency pays an annual premium to the Fire and Tornado Fund to cover property damage to building and personal property. Replacement cost coverage is provided by estimating replacement cost in consultation with the Fire and Tornado Fund. The Fire and Tornado Fund is reinsured by a third party insurance carrier for losses in excess of one million dollars per occurrence during a 120-month period. The State Bonding Fund currently provides the agency with blanket fidelity bond coverage in the amount of \$2,000,000 for its employees. The State Bonding Fund does not currently charge any premium for this coverage.

The System participates in the North Dakota Workforce Safety, an Enterprise Fund of the State of North Dakota. Workforce Safety is a state insurance fund and a "no fault" insurance system covering the State's employers and employees financed by premiums assessed to employers. The premiums are available for the payment of claims to employees injured in the course of employment.

There have been no significant reductions in insurance coverage from the prior year and settled claims resulting from these risks have not exceeded insurance coverage in any of the past three fiscal years.

NOTE 16 RELATED PARTIES

As stated in Note 1 of these financial statements, the System is a state agency of the state of North Dakota, as such, the other state agencies of the state and political subdivisions are related parties.

NOTE 17 SUBSEQUENT EVENTS

The System evaluated subsequent events through December 8, 2022 which is the date the financial statements were available to be issued. Events or transactions occurring after June 30, 2022, but prior to December 8, 2022 that provided additional evidence about conditions that existed at June 30, 2022, have been recognized in the financial statements for the year ended June 30, 2022. Events or transactions that provided evidence about conditions that did not exist at June 30, 2022, but arose before the financial statements were available to be issued have not been recognized in the financial statements for the year ended June 30, 2022.

NOTE 18 CONTINGENCY

The State Investment Board was named as a defendant in a case arising out of the Tribune bankruptcy proceedings, relating to securities that were purchased by external investment managers in one or more portfolios held by the SIB on behalf of its investment client funds. Outside counsel was retained, in addition to assistance received from the ND Office of Attorney General. On July 15, 2019, the Litigation Trustee filed a Notice of Appeal to the Second Circuit, appealing the various judgments of the US District Court that dismissed his claims against defendants in the Action and denying leave to amend his complaint to add a constructive fraudulent transfer claim. The Second Circuit held oral argument on August 24, 2020, and on August 20, 2021, upheld the dismissal. The Litigation Trustee then filed a petition for an en banc rehearing by the full Second Circuit of the Court's August 20, 2021, decision which was denied on October 7, 2021. On February 22, 2022, the U.S. Supreme Court declined to review the Second Circuit's latest decision leaving all action dismissed in favor of the SIB and co-defendants. No further activity is expected in the case.

North Dakota Public Employees Retirement System – Financial Section Required Supplementary Information Schedule of Changes to the Net Pension Liability and Related Ratios For the Years Ended June 30

Public Employees Retirement System

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability									
Service Cost	\$ 143,197,284	\$ 242,751,143	\$ 135,139,549	\$ 172,183,673	\$ 164,018,071	\$ 113,148,379	\$ 126,443,929	\$ 104,158,320	\$ 94,611,357
Interest	345,662,042	296,285,379	317,129,009	294,701,001	279,835,016	269,769,850	243,284,784	236,419,648	218,719,441
Change of Benefit Terms	-	-	-	-	-	-	-	2,615	-
Differences Between Expected and									
Actual Experience	3,714,515	47,335,729	17,186,877	(210,895,384)	(65,345,796)	(3,612,020)	15,914,938	4,395,805	25,782,859
Changes of Assumptions	1,375,418,631	(1,743,329,166)	1,859,558,804	(464,473,143)	125,224,437	741,491,982	108,139,418	(76,152,255)	-
Benefit Payments, Including Refund of									
Employee Contributions	(252,066,249)	(231,300,404)	(218,553,888)	(197,757,937)	(182,521,663)	(162,991,968)	(149,664,141)	(134,929,737)	(119,886,323)
Net Change in Total Pension Liability	1,615,926,223	(1,388,257,319)	2,110,460,351	(406,241,790)	321,210,065	957,806,223	344,118,928	133,894,396	219,227,334
Total Pension Liability - Beginning	4,991,542,997	6,379,800,316	4,269,339,965	4,675,581,755	4,354,371,690	3,396,565,467	3,052,446,539	2,918,552,143	2,699,324,809
Total Pension Liability - Ending (A)	\$ 6,607,469,220	\$ 4,991,542,997	\$ 6,379,800,316	\$4,269,339,965	\$4,675,581,755	\$4,354,371,690	\$3,396,565,467	\$3,052,446,539	\$ 2,918,552,143
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Plan Fiduciary Net Position									
Contributions - Employer	\$ 96,630,783	\$ 91,265,640	\$ 85,504,033	\$ 81,588,318	\$ 80,727,209	\$ 78,933,571	\$ 77,080,576	\$ 70,842,535	\$ 61,661,050
Contributions - Employee	89,633,939	85,914,756	81,477,666	78,213,580	77,486,189	76,007,456	74,218,276	68,392,061	59,394,200
Service Credit Repurchase	10,249,235	7,129,269	10,818,588	7,219,697	19,984,972	11,805,070	9,179,163	6,651,879	8,325,140
Net Investment Income	(256,072,364)	844,933,209	101,105,998	159,824,092	249,165,181	311,760,863	11,333,836	81,536,565	316,629,563
Transfers and Other Income	14,125	(1,723)	(2,580)	(5,641)	(24,440)	32,183	23,574,937	-	-
Benefit Payments, Including Refund of									
Employee Contributions	(252,066,249)	(231,300,404)	(218,553,888)	(197,757,937)	(182,521,663)	(162,991,968)	(149,664,141)	(134,929,737)	(119,886,324)
Administrative Expense	(2,340,267)	(2,569,186)	(2,729,759)	(2,531,304)	(2,472,761)	(2,607,243)	(2,537,799)	(2,365,357)	(2,210,792)
Net Change in Plan Fiduciary Net Position	(313,950,798)	795,371,561	57,620,058	126,550,805	242,344,687	312,939,932	43,184,848	90,127,946	323,912,837
Plan Fiduciary Net Position - Beginning	3,949,722,700	3,154,351,139	3,096,731,081	2,970,180,276	2,727,835,589	2,414,895,657	2,371,710,809	2,281,582,863	1,957,670,026
Plan Fiduciary Net Position - Ending (B)	3,635,771,902	3,949,722,700	3,154,351,139	3,096,731,081	2,970,180,276	2,727,835,589	2,414,895,657	2,371,710,809	2,281,582,863
Net Pension Liability - Ending (A)-(B)	\$ 2,971,697,318	\$ 1,041,820,297	\$ 3,225,449,177	\$1,172,608,884	\$1,705,401,479	\$1,626,536,101	\$ 981,669,810	\$ 680,735,730	\$ 636,969,280
Plan Fiduciary Net Position as a Percentage	FF 6551	70 ::	40	70.5551	00.5551	20.572	74 / 20/		70 4551
of the Total Pension Liability	55.03%	79.13%	49.44%	72.53%	63.53%	62.65%	71.10%	77.70%	78.18%
Covered Payroll	\$ 1,248,307,560	\$ 1,213,675,937	\$ 1,167,767,935	\$1,098,416,146	\$1,075,957,954	\$1,063,371,798	\$1,048,548,467	\$ 973,536,402	\$ 888,452,060
Plan Net Pension Liability (Asset) as a	05.040/	05.040/	070.040/	400 750/	450 500/	450.6007	00.000/	00.000/	74.000/
Percentage of Covered Payroll	85.84%	85.84%	276.21%	106.75%	158.50%	152.96%	93.62%	69.92%	71.69%

^{*}Complete data for this schedule is not available prior to 2014.

North Dakota Public Employees Retirement System – Financial Section Required Supplementary Information Schedule of Changes to the Net Pension Liability and Related Ratios For the Years Ended June 30

Highway Patrolmen's Retirement System

	2022		2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability										
Service Cost	\$ 3,280,944	\$	6,693,393	\$ 2,877,493	\$ 2,818,006	\$ 2,738,268	\$ 2,701,326	\$ 2,226,286	\$ 2,038,291	\$ 1,894,183
Interest	8,547,642		7,304,593	7,869,528	7,527,064	7,203,350	6,951,177	6,311,403	6,007,875	5,750,017
Change of Benefit Terms	-		(135,457)	-	-	-	-	-	-	-
Differences Between Expected and										
Actual Experience	1,844,603		(2,196,613)	729,281	(67,748)	(621,359)	21,564	39,748	984,241	(299,964)
Changes of Assumptions	39,467,011		(60,572,392)	66,142,608	3,042,863	-	1,257,370	3,945,801	394,419	-
Benefit Payments, Including Refund of										
Employee Contributions	 (5,848,024)		(5,951,877)	(5,704,586)	(5,391,115)	(4,981,377)	 (4,806,319)	(4,713,495)	(4,745,510)	(3,784,735)
Net Change in Total Pension Liability	47,292,176		(54,858,353)	71,914,324	7,929,070	4,338,882	6,125,118	7,809,743	4,679,316	3,559,501
Total Pension Liability (Asset) - Beginning	 123,371,001		178,229,354	106,315,030	98,385,960	94,047,078	 87,921,960	80,112,217	75,432,901	71,873,400
Total Pension Liability (Asset) - Ending (A)	\$ 170,663,177	\$	123,371,001	\$ 178,229,354	\$ 106,315,030	\$ 98,385,960	\$ 94,047,078	\$87,921,960	\$80,112,217	\$75,432,901
		-				 	 			
Plan Fiduciary Net Position										
Contributions - Employer	\$ 2,686,795	\$	2,293,404	\$ 2,176,902	\$ 2,090,886	\$ 2,152,970	\$ 2,155,944	\$ 2,127,355	\$ 2,002,291	\$ 1,864,632
Contributions - Employee	1,825,729		1,548,335	1,469,682	1,411,619	1,453,533	1,455,540	1,436,236	1,351,798	1,243,520
Service Credit Repurchase	159,747		400,751	205,461	167,824	281,573	249,436	-	96,429	87,418
Net Investment Income	(6,509,971)		19,637,841	2,667,371	4,250,901	6,716,525	8,500,352	316,963	2,334,780	9,239,929
Transfers and Other Income	62		(11)	(16)	(41)	(187)	221	-	-	-
Benefit Payments, Including Refund of										
Employee Contributions	(5,848,024)		(5,951,877)	(5,704,586)	(5,391,115)	(4,981,377)	(4,806,319)	(4,713,495)	(4,745,510)	(3,784,735)
Administrative Expense	(65,650)		(37,097)	(45,870)	(43,555)	(30,353)	(30,195)	(31,450)	(30,925)	(27,983)
Net Change in Plan Fiduciary Net Position	(7,751,312)		17,891,346	768,944	2,486,519	5,592,684	7,524,979	(864,391)	1,008,863	8,622,781
Plan Fiduciary Net Position - Beginning	100,075,809		82,184,463	81,415,519	78,929,000	73,336,316	65,811,337	66,675,728	65,666,865	57,044,084
Plan Fiduciary Net Position - Ending (B)	92,324,497		100,075,809	82,184,463	81,415,519	78,929,000	73,336,316	65,811,337	66,675,728	65,666,865
Net Pension Liability (Asset) - Ending (A)-(B)	\$ 78,338,680	\$	23,295,192	\$ 96,044,891	\$ 24,899,511	\$ 19,456,960	\$ 20,710,762	\$22,110,623	\$13,436,489	\$ 9,766,036
Plan Fiduciary Net Position as a Percentage										
of the Total Pension Liability	54.10%		81.12%	46.11%	76.58%	80.22%	77.98%	74.85%	83.23%	87.05%
Covered Payroll	\$ 12,267,230	\$	11,516,196	\$ 11,409,711	\$ 10,354,210	\$ 10,737,297	\$ 10,629,403	\$10,526,791	\$10,145,713	\$ 9,348,386
Plan Net Pension Liability (Asset) as a										
Percentage of Covered Payroll	638.60%		202.28%	841.78%	240.48%	181.21%	194.84%	210.04%	132.44%	104.47%
= = =										

^{*}Complete data for this schedule is not available prior to 2014.

North Dakota Public Employees Retirement System – Financial Section Required Supplementary Information Schedule of Changes to the Net Pension Liability and Related Ratios For the Years Ended June 30

Retirement Plan for Employees of Job Service North Dakota

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability									
Service Cost	\$ 41,998	\$ 58,356	\$ 57,560	\$ 70,295	\$ 80,344	\$ 55,500	\$ 71,420	\$ 127,734	\$ 87,668
Interest	2,342,037	2,628,514	3,038,156	3,129,175	3,500,344	4,130,232	4,281,440	5,026,167	5,107,459
Change of Benefit Terms	-	-	-	-	-	-	-	-	-
Differences Between Expected and									
Actual Experience	3,413,145	(201,346)	(1,122,296)	(504,895)	(310,124)	(1,648,283)	(2,006,791)	(1,806,271)	(1,607,033)
Changes of Assumptions	4,717,298	2,898,630	539,852	-	5,811,755	4,421,401	69,885	(309,878)	-
Benefit Payments, Including Refund of									
Employee Contributions	(4,865,682)	(4,668,820)	(4,581,575)	(4,626,846)	(4,582,577)	(4,534,153)	(4,601,196)	(4,694,171)	(4,594,462)
Net Change in Total Pension Liability	5,648,796	715,334	(2,068,303)	(1,932,271)	4,499,742	2,424,697	(2,185,242)	(1,656,419)	(1,006,368)
Total Pension Liability (Asset) - Beginning	64,843,971	64,128,637	66,196,940	68,129,211	63,629,469	61,204,772	63,390,014	65,046,433	66,052,801
Total Pension Liability (Asset) - Ending (A)	\$ 70,492,767	\$ 64,843,971	\$ 64,128,637	\$ 66,196,940	\$ 68,129,211	\$ 63,629,469	\$ 61,204,772	\$ 63,390,014	\$ 65,046,433
Plan Fiduciary Net Position									
Contributions - Employer	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Contributions - Employee	9,299	13,979	27,047	29,159	32,987	39,417	44,178	50,142	55,748
Service Credit Repurchase	-	-	-	-	-	-	-	-	-
Net Investment Income	(5,551,487)	6,025,272	2,621,067	6,229,630	2,918,585	5,238,877	4,840,333	3,260,507	11,887,840
Transfers and Other Income	-	-	-	-	-	-	-	-	-
Benefit Payments, Including Refund of									
Employee Contributions	(4,865,682)	(4,668,820)	(4,581,575)	(4,626,846)	(4,582,577)	(4,534,153)	(4,601,196)	(4,694,171)	(4,594,462)
Administrative Expense	(18,357)	(17,371)	(19,148)	(16,808)	(46,295)	(12,684)	(32,253)	(30,214)	(31,455)
Net Change in Plan Fiduciary Net Position	(10,426,227)	1,353,060	(1,952,609)	1,615,135	(1,677,300)	731,457	251,062	(1,413,736)	7,317,671
Plan Fiduciary Net Position - Beginning	96,603,697	95,250,637	97,203,246	95,588,111	97,265,411	96,533,954	96,282,892	97,696,628	90,378,957
Plan Fiduciary Net Position - Ending (B)	86,177,470	96,603,697	95,250,637	97,203,246	95,588,111	97,265,411	96,533,954	96,282,892	97,696,628
Net Pension Liability (Asset) - Ending (A)-(B)	\$(15,684,703)	\$(31,759,726)	\$(31,122,000)	\$ (31,006,306)	\$ (27,458,900)	\$ (33,635,942)	\$ (35,329,182)	\$ (32,892,878)	\$ (32,650,195)
Plan Fiduciary Net Position as a Percentage									
of the Total Pension Liability	122.25%	148.98%	148.53%	146.84%	140.30%	152.86%	157.72%	151.89%	150.20%
Covered Payroll	\$ 175,176	\$ 175,176	\$ 314,607	\$ 416,552	\$ 416,652	\$ 498,564	\$ 564,684	\$ 790,649	\$ 842,601
Plan Net Pension Liability (Asset) as a Percentage of Covered Payroll	(25,573.44)%	(18,130.18)%	(9,892.34)%	(7,443.56)%	(6,590.37)%	(6,746.56)%	(6,256.45)%	(4,160.24)%	(3,874.93)%
i crocintage of covered rayroll	(20,010.74)/0	(10,100.10)/0	(3,032.04)/0	(1,440.00)/0	(0,000.01)/0	(0,1-0.50)/0	(0,230.73) /0	(4,100.24)/0	(0,017.00)/0

^{*}Complete data for this schedule is not available prior to 2014.

North Dakota Public Employees Retirement System – Financial Section Required Supplementary Information Schedule of Changes to the Net Other Post Employment Benefit Liability and Related Ratios For the Years Ended June 30

Retiree Health Insurance Credit Fund

		2022		2021		2020		2019		2018		2017
Total OPEB Liability												
Service Cost	\$	4,003,587	\$	4,273,247	\$	4,041,849	\$	3,827,807	\$	3,766,661	\$	3,430,578
Interest		15,155,215		14,657,683		15,498,021		15,217,017		14,485,170		14,327,443
Change of Benefit Terms		-		-		-		-		-		-
Differences Between Expected and												
Actual Experience		616,158		2,164,642		314,726		(1,374,146)		2,732,254		(2,231,206)
Changes of Assumptions		30,533,446		-		4,372,129		5,002,621		_		8,860,723
Benefit Payments, Including Refund of												
Employee Contributions		(13,746,110)		(12,884,511)		(12,317,075)		(11,505,070)		(11,016,060)		(10,014,370)
Net Change in Total OPEB Liability		36,562,296		8,211,061		11,909,650		11,168,229		9,968,025		14,373,168
Total OPEB Liability (Asset) - Beginning		237,951,735		229,740,674		217,831,024		206,662,795		196,694,770		182,321,602
Total OPEB Liability (Asset) - Ending (A)	\$	274,514,031	\$	237,951,735	\$	229,740,674	\$	217,831,024	\$	206,662,795	\$	196,694,770
Plan Fiduciary Net Position												
Contributions - Employer	\$	12,565,573	\$	13,110,651	\$	13,392,266	\$	12,977,460	\$	12,834,547	\$	12,575,627
Contributions - Employee		12,234		15,481		16,319		15,859		15,984		16,173
Service Credit Repurchase		456,895		375,038		556,585		377,329		746,942		464,323
Net Investment Income		(26,756,507)		36,526,655		6,904,869		8,178,932		8,210,898		12,074,082
Transfers and Other Income		-		-		-		-		-		-
Benefit Payments, Including Refund of												
Employee Contributions		(13,746,110)		(12,884,511)		(12,317,075)		(11,505,070)		(11,016,060)		(10,014,370)
Administrative Expense		(383,458)		(430,097)		(453,913)		(437,349)		(480,244)		(443,220)
Other		(1)		312		9,580		(857)		225		-
Net Change in Plan Fiduciary Net Position		(27,851,374)		36,713,529		8,108,631		9,606,304		10,312,292		14,672,615
Plan Fiduciary Net Position - Beginning		182,334,446		145,620,917		137,512,286		127,905,982		117,593,690		102,921,075
Plan Fiduciary Net Position - Ending (B)		154,483,072		182,334,446		145,620,917		137,512,286		127,905,982		117,593,690
	_				_				_			
Net OPEB Liability (Asset) - Ending (A)-(B)	\$	120,030,959	<u>\$</u>	55,617,289	\$	84,119,757	\$	80,318,738	\$	78,756,813	\$	79,101,080
Plan Fiduciary Net Position as a Percentage												
of the Total OPEB Liability		56.28%		76.63%		63.38%		63.13%		61.89%		59.78%
Covered Payroll	\$ 1	1,032,405,030	¢ -	1,090,257,793	\$	1,139,970,530	φ.	1,115,857,588	\$ -	1,094,216,775	¢ 1	,081,841,008
Plan Net Pension Liability (Asset) as a	Ψ	1,002,400,000	Ψ	1,000,201,130	Ψ	1, 100,070,000	Ψ	1, 110,007,000	Ψ	1,007,210,770	ΨΙ	,001,041,000
Percentage of Covered Payroll		11.63%		5.10%		7.38%		7.20%		7.20%		7.31%
				2270				3 / 0		3 / 3		

^{*}Complete data for this schedule is not available prior to 2017.

North Dakota Public Employees Retirement System – Financial Section Required Supplementary Information Schedule of Employer Contributions For the Years Ended June 30

Public Employees Retirement System										
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially Determined Contribution Contributions in Relation to the	157,390	157,543	140,537	127,129	125,714	116,564	124,336	107,514	107,864	97,985
Actuarially Determined Contribution	96,631	91,266	85,504	81,588	80,727	78,934	77,081	70,843	61,661	48,847
Contribution Deficiency (Excess)	60,759	66,277	55,033	45,541	44,987	37,630	47,255	36,671	46,203	49,138
Covered Payroll Contributions as a Percentage of	1,248,308	1,213,676	1,167,768	1,098,416	1,075,958	1,063,372	1,048,548	973,536	888,452	800,878
Covered Payroll	7.74%	7.52%	7.32%	7.43%	7.50%	7.42%	7.35%	7.28%	6.94%	6.10%
Highway Patrolmen's Retirement Syst		0004		2242	0040		2242	0045	0044	2242
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially Determined Contribution Contributions in Relation to the	3,921	4,081	3,256	2,936	2,949	3,060	2,307	2,201	2,348	2,191
Actuarially Determined Contribution	2,687	2,293	2,177	2,091	2,153	2,156	2,127	2,002	1,865	1,586
Contribution Deficiency (Excess)	1,234	1,788	1,079	845	796	904	180	199	483	605
Covered Payroll Contributions as a Percentage of	12,267	11,516	11,410	10,354	10,737	10,629	10,527	10,146	9,348	8,167
Covered Payroll	21.90%	19.91%	19.08%	20.20%	20.05%	20.28%	20.21%	19.73%	19.95%	19.42%
Retiree Health Insurance Credit Plan										
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially Determined Contribution Contributions in Relation to the	12,414	13,340	12,145	12,707	12,252	11,696	7,544	6,439	7,014	7,411
Actuarially Determined Contribution	12,566	13,111	13,392	12,977	12,835	12,575	12,350	11,479	10,710	9,960
Contribution Deficiency (Excess)	(152)	229	(1,247)	(270)	(583)	(879)	(4,806)	(5,040)	(3,696)	(2,549)
Covered Payroll Contributions as a Percentage of	1,032,405	1,090,258	1,139,971	1,115,858	1,094,217	1,081,841	1,142,375	1,052,657	1,001,204	914,368
Covered Payroll	1.22%	1.20%	1.17%	1.16%	1.17%	1.16%	1.08%	1.09%	1.07%	1.09%

PERS

Benefit Changes: There were no benefit changes during the year.

Changes of Assumptions: The investment return assumption was lowered from 7.00 to 6.50 percent

for the July 1, 2022 valuation.

HPRS

Benefit Changes: There were no benefit changes during the year.

Changes of Assumptions: The investment return assumption was lowered from 7.00 to 6.50 percent

for the July 1, 2022 valuation.

JSND

Benefit Changes: There were no changes made in the plan provisions since the prior

valuation

Changes of Assumptions: The Board approved the following changes to the actuarial assumptions

beginning with the July 1, 2022 actuarial valuation:

• The investment return assumption was lowered from 3.75 to 3.00

percent for the July 1, 2022 valuation

All other actuarial assumptions used in the July 1, 2022 are the same as

the last actuarial valuation as of July 1, 2021.

RHIC

Benefit Changes: 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.

Changes of Assumptions: The Board approved the following changes to the actuarial assumptions

beginning with the July 1, 2022 actuarial valuation:

• The investment return assumption was lowered from 6.50 to 5.75

percent for the July 1, 2022 valuation

All other actuarial assumptions used in the July 1, 2022 are the same as

the last actuarial valuation as of July 1, 2021.

Schedule of Employer Contributions - PERS

Valuation date July 1, 2021

Actuarial cost method Entry Age Normal Method.

Amortization Method Level Percentage of Payroll, Open Period

Assumed annual payroll growth of 3.50% (3.00% for Judges)

Remaining amortization period 20 years

Asset valuation method 5-Year smoothed marked

Inflation 2.25%

Salary Increases 3.50% to 17.75% including inflation

Investment Rate of Return 7.00%

Retirement Age Age-based table of rates that are specific to the type of eligibility

condition

Mortality Sex-distinct Pub-2010 tables for General Employees, with scaling

based on actual experience. Respective corresponding tables were used for healthy retirees, disabled retirees, and active members.

Mortality rates are projected from 2010 using the MP-2019 scale.

Other Notes: The interest rate on member contributions decreased from 7.00% to

6.50% effective January 1, 2021.

The benefit accrual rate for members first enrolled on or after January 1, 2020 in the Main and Public Safety Systems is 1.75% (compared to

2.00% for members enrolled before January 1, 2020).

Theinvestment return assumption was updated from 7.50% to 7.00% beginning with the actuarial valuation as of July 1, 2020. Other updates to actuarial assumptions since the July 1, 2019 valuation include changes to mortality tables used for the valuation as well as changes to rates of annual salary increases, separation for active membership, disability, and retirement. The actuarial assumptions were based on an experience review for the period from July 1, 2014 to July 1, 2019

The employer rates to the System are the statutory/Board approved contribution rates of 7.12% of payroll for the Main System (8.26% for members enrolled on or after January 1, 2020), 17.52% for the Judges System, 9.81% for Public Safety with prior Main System service System and 7.93% for Public Safety without prior Main System service System.

Schedule of Employer Contributions - HPRS

Valuation date July 1, 2022

Actuarial cost method Entry Age Normal Method.

Amortization Method Level Percentage of Payroll, Open Period

Assumed annual payroll growth of 3.50%

Remaining amortization period 20 years

Asset valuation method 5-Year smoothed marked

Inflation 2.25%

Salary Increases Service-based table for members with less than five years of service

and age-based table for members with more than five years of service

Investment Rate of Return 79

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 Notes: There were no benefit changes during the year.

The economic assumptions were updated beginning with the actuarial valuation as of July 1, 2020 based on a review performed by GRS. The investment return assumption was decreased from 7.50% to 7.00% beginning with the actuarial valuation as of July 1, 2020. All other actuarial assumptions were adopted by the Board based on an experience study covering the period July 1, 2014, through June 30, 2019.

The employer rate to the System is the statutory contribution rate of 19.70% of payroll. The statutory employer and employee contributions will each increase by 0.5% of pay every year from January 1, 2022 to

January 1, 2025 ultimately increasing both by 2.0% of pay.

Schedule of Employer Contributions – Job Service

Valuation date July 1, 2022

Actuarial cost method Frozen Initial Liability (Aggregate since no initial Liability remains)

N/A Amortization Method

Asset valuation method 5-Year smoothed marked

Inflation 2..25% COLA 2.25% Salary Increases 3.50%

Investment Rate of Return As of June 30, 2022, 3.75%. As of June 30, 2021, 4.25%.

Age-based table of rates that are specific to the type of eligibility Retirement Age

condition

Pub-2010 Healthy Retiree Mortality table (for General Employees), sex-Mortality

distinct, with rates multiplied by 103% for males and 101% for females. Pub-2010 Disabled Retiree Mortality table (for General Employees), sexdistinct, with rates multiplied by 117% for males and 112% for females. Pub-2010 Employee Mortality table (for General Employees), sexdistinct, with rates multiplied by 92% for both males and females.

Mortality rates are projected from 2010 using the MP-2019 scale.

Other Notes: There were no benefit changes during the year.

> The assumptions were updated beginning with the actuarial valuation as of July 1, 2020 based on an experience study covering the period July 1, 2014 through July 1, 2019. The Board approved lowering the investment return assumption from 4.25 percent to 3.75 percent, first

effective July 1. 2021.

The System has assets in excess of the present value of future benefits.

Therefore, no employer contributions are being made.

Schedule of Employer Contributions – RHIC

Valuation date July 1, 2022

Actuarial cost method Entry Age Normal Method.

Amortization Method N/A

Asset valuation method 5-Year smoothed marked

Inflation 2.25%

Salary Increases Not Applicable

Investment Rate of Return 6.50%

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 mailes and 101% for females. Pub-2010 Disabled Retiree Mortality table (for General Employees), sexdistinct, with rates multiplied by 117% for males and 112% for females. Pub-2010 Employee Mortality table (for Geneeral Employees), sexdistinct, with rates multiplied by 92% for both males and females.

Mortality rates are projected from 2010 using the MP-2019 scale.

Other 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 7.25% to 6.5% beginning with the actuarial valuation as of July 1, 2020. 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.

North Dakota Public Employees Retirement System – Financial Section Required Supplementary Information Schedule of Investment Returns

_	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Public Employees Retirement	-6.32%	27.43%	3.57%	5.69%	9.21%	13.01%	0.49%	3.61%	16.29%	13.52%
Highway Patrolmen's Retirement	-6.50%	23.90%	3.28%	5.39%	9.16%	12.93%	0.48%	3.66%	16.20%	13.38%
Retirement Plan for Employees										
Job Service North Dakota	-5.55%	6.81%	3.09%	7.00%	3.32%	5.85%	5.14%	3.41%	13.46%	12.07%
Retiree Health Insurance Credit Fund	-14.48%	25.58%	5.37%	6.75%	7.01%	11.75.%	0.83%	-	-	-

North Dakota Public Employees Retirement System – Financial Section Supplemental Information Schedule of Investment Expenses – Fiduciary Funds For the Fiscal Year Ended June 30, 2022

	Public Employees Retirement System*	Pa Re	lighway trolmen's etirement System	In	Retiree Health Isurance edit Fund	Con Ret	efined tribution irement Fund	 tax efits ıram	Compe	erred ensation gram	 o Service tirement Plan
Payments to State Investment Board:	 										
Investment Fees	\$ 8,907,948	\$	225,924	\$	537,631	\$	-	\$ -	\$	-	\$ 308,015
Administrative Expenses	706,836		13,086		-					-	
	 9,614,784		239,010		537,631		-	-		-	 308,015
Payments to Providers: Investment Fees (Net of Plan											
Servicing Credits)	 						5,720	 			
Total Investment Expenses	\$ 9,614,784	\$	239,010	\$	537,631	\$	5,720	\$ 	\$	_	\$ 308,015

^{*}Also includes GASB 68 admin expenses of the Retirement & Investment Office

North Dakota Public Employees Retirement System – Financial Section Supplemental Information Schedule of Investment Expenses – Fiduciary Funds For the Fiscal Year Ended June 30, 2021

	Public Employees Retirement System*	Pa Re	lighway trolmen's etirement System	In	Retiree Health surance edit Fund	Con Re	efined itribution tirement Fund	Ben	tax efits gram	Comp	erred ensation gram	 Service tirement Plan
Payments to State Investment Board:												
Investment Fees	\$ 10,467,739	\$	234,365	\$	495,393	\$	-	\$	-	\$	-	\$ 322,167
Administrative Expenses	850,897		9,655									
	11,318,636		244,020		495,393		-		-		-	322,167
Payments to Providers: Investment Fees (Net of Plan												
Servicing Credits)							10,209					
Total Investment Expenses	\$ 11,318,636	\$	244,020	\$	495,393	\$	10,209	\$		\$		\$ 322,167

^{*}Also includes GASB 68 admin expenses of the Retirement & Investment Office

North Dakota Public Employees Retirement System – Financial Section Supplemental Information Schedule of Administrative Expenses – Fiduciary Funds For the Fiscal Year Ended June 30, 2022

	Public	Highway	Retiree	Defined			
	Employees	Patrolmen's	Health	Contribution	Pretax	Deferred	Job Service
	Retirement	Retirement	Insurance	Retirement	Benefits	Compensation	Retirement
	System	System	Credit Fund	Fund	Program	Program	Plan
Personnel Services:							
Salaries	\$ 1,029,865	\$ 6,353	\$ 52,935	\$ 1,899	\$ 221,914	\$ 309,377	\$ 2,849
Social Security	75,800	468	3,887	139	16,320	22,688	209
Retirement	121,858	752	6,215	223	26,638	36,370	334
Insurance	266,487	1,644	13,423	482	60,328	70,471	722
Total Personnel Services	1,494,010	9,217	76,460	2,743	325,200	438,906	4,114
Professional Services:							
Actuarial	99,468	51,463	22,500	-	-	-	10,913
Audit	43,418	268	3,216	115	10,921	21,843	173
Data Processing	387,934	2,391	21,677	2,304	91,444	175,664	1,172
Consulting	21,068	130	122	392	-	49,412	-
Legal Counsel	25,883	160	1,326	85	1,742	2,362	62
Misc Outside Services	25,230	150	243,773	88	72,419	30,188	1,202
Total Professional Services	603,001	54,562	292,614	2,984	176,526	279,469	13,522
Communication:							
Printing	10,574	65	432	15	1,328	1,436	23
Postage	26,197	162	1,172	42	4,156	4,157	63
Telephone	9,284	57	457	16	1,497	2,323	25
Total Communication	46,055	284	2,061	73	6,981	7,916	111
Rentals:							
Equipment Rent	1,588	10	91	3	400	799	5
Office Rent	43,903	271	2,524	91	11,044	22,087	136
Total Rentals	45,491	281	2,615	94	11,444	22,886	141
Miscellaneous:							
Depreciation/Amortization	38,239	600	3,871	152	9,383	19,034	158
Dues & Prof Development	23,280	144	704	25	1,107	2,334	38
Insurance	870	11	99	4	424	422	3
Repairs and Maintenance	18,579	115	1,068	38	4,673	9,347	57
Supplies	62,807	387	3,627	130	15,822	31,386	195
Travel	7,935	49	339	12	307	426	18
Total Miscellaneous	151,710	1,306	9,708	361	31,716	62,949	469
Total Administrative Expenses	\$2,340,267	\$ 65,650	\$ 383,458	\$ 6,255	\$ 551,867	\$ 812,126	\$ 18,357

North Dakota Public Employees Retirement System – Financial Section Supplemental Information Schedule of Administrative Expenses – Fiduciary Funds For the Fiscal Year Ended June 30, 2021

	Public	Highway	Retiree	Defined			
	Employees	Patrolmen's	Health	Contribution	Pretax	Deferred	Job Service
	Retirement	Retirement	Insurance	Retirement	Benefits	Compensation	Retirement
	System	System	Credit Fund	Fund	Program	Program	Plan
Personnel Services:							
Salaries	\$1,076,656	\$ 6,815	\$ 56,442	\$ 1,851	\$ 168,345	\$ 301,000	\$ 2,776
Social Security	78,934	500	4,126	135	12,297	21,994	203
Retirement	121,265	768	6,434	211	18,847	34,871	316
Insurance	270,389	1,712	13,816	453	39,837	65,454	679
Total Personnel Services	1,547,244	9,795	80,818	2,650	239,326	423,319	3,974
Professional Services:							
Actuarial	184,015	21,200	21,850	-	_	-	9,500
Audit	49,690	315	3,133	103	12,501	25,002	154
Data Processing	299,159	2,081	20,063	1,837	71,371	133,611	992
Consulting	87,754	555	340	204	- -	24,696	-
Legal Counsel	31,548	200	5,249	104	3,817	3,105	81
Misc Outside Services	26,340	167	273,469	148	72,461	10,219	1,313
Total Professional Services	678,506	24,518	324,104	2,396	160,150	196,633	12,040
Communication:							
Printing	6,737	42	512	17	753	753	25
Postage	21,240	134	1,229	40	3,229	3,230	70
Telephone	10,693	68	581	19	2,237	2.533	29
Total Communication	38,670	244	2,322	76	6,219	6,516	124
Rentals:							
Equipment Rent	2,717	17	171	6	683	1,367	8
Office Rent	66,294	420	4,180	137	16,678	33,357	206
Total Rentals	69,011	437	4,351	143	17,361	34,724	214
Miscellaneous:							
Depreciation/Amortization	134,257	1,461	12,394	807	33,740	67,481	721
Dues & Prof Development	11,917	75	426	14	849	2,053	20
Insurance	954	6	51	2	179	358	3
Repairs and Maintenance	28,398	180	1,791	59	7,144	14,289	88
Supplies	59,946	379	3,810	222	15,031	30,089	185
Travel	283	2	30	1	_	-	2
Total Miscellaneous	235,755	2,103	18,502	1,105	56,943	114,270	1,019
Total Administrative Expenses	\$2,569,186	\$ 37,097	\$ 430,097	\$ 6,370	\$479,999	\$ 775,462	\$ 17,371

North Dakota Public Employees Retirement System – Financial Section Supplemental Information Schedule of Consultant Expenses – Fiduciary Funds For the Fiscal Year Ended June 30, 2022

	Public Employees Retirement System	Highway Patrolmen's Retirement System	Retiree Health Insurance Credit Fund	Defined Contribution Retirement Fund	Pretax Benefits Program	Deferred Compensation Program	Job Service Retirement Plan
Actuary Fees: Gabriel Roeder Smith & Co	\$ 99,468	\$ 51,463	\$ 22,500	\$ -	\$ -	\$ -	\$ 10,913
Audit/Accounting Fees: CliftonLarsonAllen LLP	43,418	268	3,216	115	10,921	21,843	173
Disability Consulting Fees: Mid Dakota Clinic	4,800	-	-	-	-	-	-
IT Consulting: Sagitec Solution LLC	262,758	1,621	15,106	542	66,095	132,190	813
Miscellaneous Consulting Fees: Gabriel Roeder Smith & Co	16,268	130	-	-	-	-	-
Investment Consulting Callan Associates	-	-	-	388	-	49,412	-
Legal: Ice Miller, LLP ND Attorney General	12,102 13,781	75 85	452 874	16 69	- 1,742	2,362	24 38
Totals	\$ 452,595	\$ 53,642	\$ 42,148	\$ 1,130	\$ 78,758	\$ 205,807	\$ 11,961

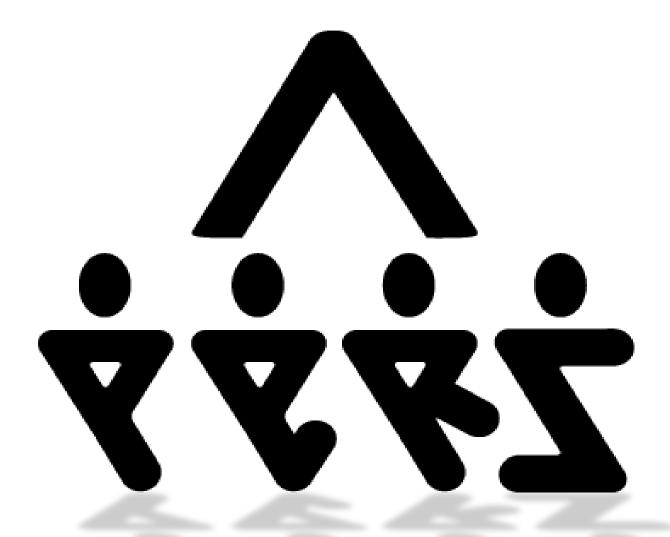
North Dakota Public Employees Retirement System – Financial Section Supplemental Information Schedule of Consultant Expenses – Fiduciary Funds For the Fiscal Year Ended June 30, 2021

	Public Employees Retirement System	Highway Patrolmen's Retirement System	Retiree Health Insurance Credit Fund	Defined Contribution Retirement Fund	Pretax Benefits Program	Deferred Compensation Program	Job Service Retirement Plan
Actuary Fees: Gabriel Roeder Smith & Co	\$ 184,015	\$ 21,200	\$ 21,850	\$ -	\$ -	\$ -	\$ 9,500
Audit/Accounting Fees: CliftonLarsonAllen LLP	49,690	315	3,133	103	12,501	25,002	154
Disability Consulting Fees: Mid Dakota Clinic	4,500	-	-	-	-	-	-
IT Consulting: Sagitec Solution LLC	202,136	1,279	12,745	418	50,854	101,708	627
Miscellaneous Consulting Fees: Gabriel Roeder Smith & Co	15,255	555	340	-	-	-	-
Investment Consulting Callan Associates	68,000	-	-	204	-	24,696	-
Legal: Ice Miller, LLP ND Attorney General	8,176 22,407	15 193	691 3,422	22 574	48 3,379	2,672 8,357	34 55
Totals	\$ 554,179	\$ 23,557	\$ 42,181	\$ 1,321	\$ 66,782	\$ 162,435	\$ 10,370

	Approved Fiscal Years 2021-2023	Fiscal Year 2022 Expenditures	Unexpended
ALL FUND TYPES			
Salaries and Wages	7,209,060	3,470,511	3,738,549
Operating Expenses	2,500,736	1,170,278	1,330,458
Capital Assets	257,600	257,600	-
Contingency	250,000	-	250,000
	10,217,396	4,898,389	5,319,007

Reconciliation of Administrative Expenses to Appropriated Expenditures

Administrative expenses as reflected in the financial statements	2022
Pension and OPEB trust funds	4,177,980
Enterprise funds - Group Insurance	358,656,037
Total administrative expenses	362,834,017
Adjustments:	
Change in accrued compensated absences	41,800
Professional Fees, premiums and benefits paid pursuant to NDCC54-52-04(6)	(357,877,130)
Amortization Expense	(100,067)
Contribution/premium over & short	(231)
	4,898,389



INVESTMENT SECTION



December 13, 2022

Board of Trustees Members of the System

This report is a summary of the investment portfolios managed by the State Investment Board (SIB) and market environment for the fiscal year ended June 30, 2022.

Introduction

For the fiscal year ended June 30, 2022, the North Dakota Public Employees Retirement System (PERS) investment portfolio experienced a net total return of -6.66%. The Job Service Pension Plan experienced a net total return of -6.01% for the same time period, while the Retiree Health Insurance Credit Fund returned -14.95% net of fees. The investment return calculations were prepared using a monthly time-weighted rate of return methodology based upon fair values and are subject to independent review.

Economic Overview as of June 30, 2022

The fiscal year ending June 30, 2022 was divided into two distinct market environments, delineated by the Federal Reserve's (Fed) mid-year "pivot" in monetary policy rhetoric. The first half of the fiscal year was characterized by the Goldilocks market conditions of the post-pandemic recovery and the transition to the inflationary environment that followed. Low interest rates, pent up demand, and healthy consumer balance sheets spurred economic activity in the first half. However, expansionary fiscal and monetary policy implemented during the heart of the COVID-19 pandemic sparked an inflationary environment that gained momentum in the first half of the 2022 fiscal year.

At first, the Federal Reserve viewed rising inflation as "transitory," primarily attributing the phenomenon to COVID-related supply chain issues. The Federal Funds rate remained suppressed at 0.00% – 0.25% throughout the first half of the fiscal year and the Fed continued quantitative easing. As the prices for goods and services escalated, it became gradually more apparent that inflation was more pervasive than initially expected. The Consumer Price Index (CPI) grew by 5.4% in the twelve months ending July 2021. That number climbed to 7.0% by December before peaking at 9.1% in June 2022. The Fed's first action to combat inflation was to announce the wind down of quantitative easing or the purchase of fixed income securities. By March of 2022 the Fed implemented its first rate hike of 25 basis points (bps). May and June each witnessed escalating rate hikes from the Fed of 50bps and 75bps, respectively. By the end of the fiscal year, the Federal Funds Target Rate had risen to a range of 1.50% - 1.75%. Treasury yields also climbed during the year, which challenged fixed income market returns. The yield on the 10-year treasury more than doubled from 1.45% at the start of the fiscal year to 2.98% by June 30, 2022.

Risk assets generally performed well in the first half of the fiscal year before reversing fortunes in the second half. Financial markets were initially resilient to the threat of inflation, optimistically expecting it to abate without the intervention of more aggressive monetary policy. U.S. gross domestic product (GDP) expanded in each of the first two quarters of the fiscal year. A surge in private inventory investment drove real GDP 2.2% and 7.0% higher (annualized) in the first and second fiscal quarters, respectively. The housing market also remained strong, with low mortgage rates fueling demand. However, escalating inflation and the Fed's pivot to more hawkish rhetoric quickly deflated financial asset prices. U.S. GDP fell in both the third and fourth fiscal quarters, satisfying a common but not technically sufficient definition of recession.

International markets underperformed the U.S. in the face of a rising dollar and a myriad of geopolitical issues. In the second fiscal quarter, parts of Northern Europe experienced a surge in COVID-related hospitalizations and

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North Dakota Public Employees Retirement System – Investment Section Report on Investment Activity

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subsequently reintroduced economic restrictions to curb the virus. The broader region also faced a natural gas shortage that was only exacerbated by the Russia/Ukraine conflict in the second half of the fiscal year. News out of China shook investor confidence, with concerns surfacing over the solvency of indebted property developer, China Evergrande. The company fell behind on payments to debt holders in the first fiscal quarter which sparked fears of broader market contagion. China's zero-COVID policy also restricted the country's growth as waves of infections surfaced throughout the year.

Commodities proved resilient, with the Bloomberg Commodity Price Index appreciating 23.8% in the fiscal year. Energy prices benefited from both strong demand and supply constraints. WTI crude oil prices climbed from roughly \$75/bbl at the start of the year to over \$120/bbl in June 2022. The prolonged conflict in Ukraine also contributed significantly to higher energy, food, and materials prices, in addition to further congesting global supply chains. The U.S. job market was an economic stalwart and source of stability throughout the year. Job openings remained elevated as employers struggled to fill vacancies. The unemployment rate trended consistently lower from 5.9% in June 2021 to end the year at 3.6% in June 2022.

Domestic Equity

The S&P 1500 Index, a broad market indicator for the U.S. stock market, gained 11.1% in the first half of the fiscal year, but lost 19.9% in the second. The Index ended the year with an 11.0% loss. U.S. equities were challenged by inflation, rising interest rates, and waning consumer sentiment in the second half. The Conference Board's Consumer Confidence Index hit a 16-month low in June 2022 and the University of Michigan's consumer sentiment survey indicated levels of pessimism nearing those reached during the Global Financial Crisis of 2008-2009.

The small cap index (S&P 600) declined by 16.8% during the year, trailing the S&P 500 large cap index (-10.6%). The Russell 3000 Value Index fell by 7.5%, but significantly outperformed the -19.8% return of the Russell 3000 Growth Index.

International Equity

International equities trailed their domestic counterparts. Developed market equities, as measured by the MSCI EAFE Index, declined 17.8% during the fiscal year. As in the U.S., value outperformed growth in international developed markets. The MSCI EAFE Value Index declined by 12.0%, while the MSCI EAFE Growth Index fell by 23.8% during the fiscal year. In the 2022 fiscal year the U.S. Dollar Index (DXY) rose by 14.0%, which contributed to the MSCI EM Index's 25.3% decline; emerging markets are generally more sensitive to a rising U.S. dollar. China was a significant laggard as a result of COVID lockdowns.

Private Equity

Private equity remained an attractive asset class in the 2022 fiscal year with institutional investors placing significant capital into new programs. According to Pitchbook, 3,369 new partnerships were formed, raising \$ 957.8 billion in capital during the 12-month period. This was a larger number of new partnerships and a higher total dollar amount invested than in fiscal year 2021. Due to the nature of private equity performance measurement, benchmark comparisons of fund performance are inherently imprecise.

Domestic Fixed Income

After 10-year Treasury yields doubled in the 2021 fiscal year, they continued their ascent in 2022 to double again. The yield curve also flattened during the year, as shorter-dated yields increased more than those of longer-maturity Treasuries. Given the higher interest rate sensitivity of longer-dated bonds, the Bloomberg Government Long Index was particularly challenged in the 2022 fiscal year, falling 18.4%. Credit spreads widened, which led the Bloomberg Credit Index to fall by 13.6% and the Bloomberg Corporate High Yield Index (-12.8%) to underperform the Bloomberg Aggregate Index (-10.3%).

International Fixed Income

Developed international fixed income significantly underperformed domestic bonds on an unhedged basis in the 2022 fiscal year, with the FTSE Non-U.S. World Government Bond Index declining by 21.9%. The U.S. dollar appreciated notably during the fiscal year, which supported the FTSE Non-U.S. World Government Hedged Bond Index on a relative basis. The hedged index fell by a more moderate 9.3% during the year. As with U.S. markets, losses were largely concentrated in the second half of the year when global central banks took and/or signaled a less accommodative approach to monetary policy.

North Dakota Public Employees Retirement System – Investment Section Report on Investment Activity

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Emerging market debt trailed developed market sovereign bonds. The JP Morgan Emerging Markets Bond Index Plus, which tracks hard currency emerging market fixed and floating-rate debt instruments issued by sovereign entities, declined by 27.7% over the trailing 12-month period ended June 30, 2022. European markets also trailed the broad international index. The FTSE Euro Government Bond Index fell 23.0% during the period.

Real Estate

Private Real Estate was one of the few asset classes to generate positive results during the 2022 fiscal year. The NCREIF Property Index, a measure of the domestic direct private real estate market, appreciated 21.5% during the year. The Index produced positive results in all four quarters of the fiscal year. The FTSE NAREIT Equity Index, a measure of the publicly traded real estate, fell by 6.3% in the 2022 fiscal year after growing by 38.0% in the prior fiscal year. Being publicly-traded securities, Real Estate Investment Trusts (REITS) tend to demonstrate higher correlations to public equities over shorter time periods as compared to private real estate.

Timber

The NCREIF Timberland Property Index rose 12.0% in the 2022 fiscal year, with the appreciation component driving returns. The total acreage of the index declined, but the market value went up, leading to an increase in the market value per acre. The total value of the NCREIF Timberland Property Index's 13.0 million acres was \$24.0 billion at the end of the fourth fiscal quarter. The largest regional component of the index remains the South by a significant margin. The South region represents 8.3 million acres valued at \$15.7 billion. From a performance perspective, the Northeast produced the largest gain, while the South underperformed other regions.

Infrastructure

By definition, infrastructure assets are essential to the economic health and productivity of civilized society. They include the basic facilities, services, and installations needed for the functioning of a community, such as transit and communications systems; both potable and sewage water lines; and electricity access. They also include such public entities as schools, post offices, and airports. Most of these facilities have traditionally been owned and regulated by municipalities and states. Until recently, the private sector's participation has been limited, to varying degrees, to the areas of design, construction, and operation. Budget and fiscal pressures can limit the ability of public authorities to maintain existing infrastructure, much less to build new facilities required by a growing population. In response to these problems, many municipalities and states have sold or are contemplating the sale of their infrastructure assets to private investors.

Private infrastructure is challenging to appropriately benchmark given the concentrated nature of the assets. NDSIB uses a custom benchmark to measure performance. From a public market perspective, the FTSE Global Core 50/50 Infrastructure Index is a market capitalization weighted index that represents publicly traded companies that operate and own infrastructure assets on a global basis. The FTSE Global Core 50/50 Infrastructure Index returned 2.9% over the 12-month period ended June 30, 2022.

Summary

The State Investment Board and staff are focused on prudently managing the portfolios in our care. The past year has unfolded with a very volatile market where all asset valuations have been affected by inflation and higher interest rates. The funds in our care are invested with a long-term view in mind, expecting some years to have lower returns and other years to have higher returns. A diligent investment process is used to allocate the funds to balance the risks under an assumed range of return scenarios and to select, size and monitor manager mandates in a sound fiduciary manner.

Sincerely,

SCOTT ANDERSON Chief Investment Officer

North Dakota Public Employees Retirement System – Investment Section Investment Policies

By state law, PERS and HPRS assets are invested by the North Dakota State Investment Board (SIB). This change became effective July 1, 1989, with the primary purpose being to achieve cost savings through pooling of assets for investment. The System also contracts with the SIB to invest the assets of the Job Service Retirement Plan and the Retiree Health Insurance Credit Plan (RHIC).

State law requires that the SIB apply the prudent investor rule when investing funds under its supervision. The "prudent investor rule" means fund fiduciaries shall exercise the judgment and care, similar to that of an institutional investor who exercises ordinary prudence, discretion, and intelligence when managing the assets of large investments entrusted to it. The funds belonging to the System must be invested exclusively for the benefit of the members and the beneficiaries in accordance with the System's investment goals and objectives.

The Retirement Board is responsible for establishing policies on investment goals and objectives and asset allocation, which are to be viewed over the long term. The investment goals for PERS and HPRS are: to accumulate sufficient wealth through a diversified portfolio of investments which will enable the State of North Dakota to pay all current and future retirement benefits and expense obligations of the Fund and, to obtain investment returns in excess of that needed to allow for increases in a retiree's annuity to maintain the purchasing power of their retirement benefit.

The Board acknowledges the material impact that funding the pension plan has on the State's financial performance. To enable the State to continue offering secure pension benefits to plan participants, the Board believes that the Fund should pursue the following secondary goals:

- Stabilize the employee and employer contributions needed to fund the Plan over the long term.
- Avoid both substantial volatility in contributions and sizable fluctuations in the funding status of the plan.

The investment performance objectives for the PERS, HPRS, Job Service and RHIC plans are:

- The fund's rate of return, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.
- The fund's risk, measured by the standard deviation of net returns, should not exceed 115% of the policy benchmark over a minimum evaluation period of five years.
- The risk-adjusted performance of the fund, net of fees and expenses, should at least match that of the policy benchmark over a minimum evaluation period of five years.

The investment goals for the Job Service Retirement Plan are:

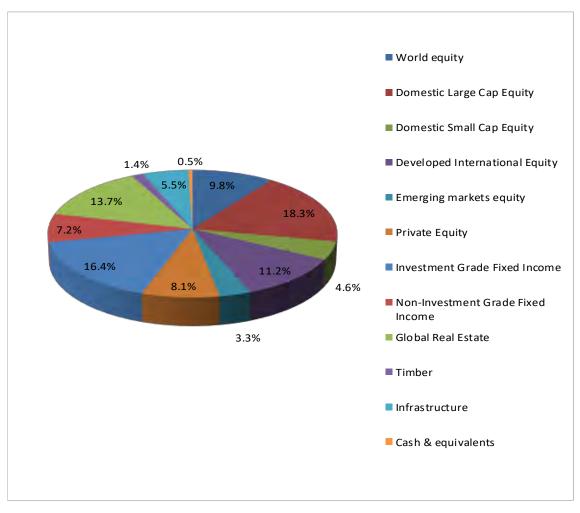
- To maintain a level of surplus sufficient to eliminate the need for future contributions.
- To achieve a rate of return which exceeds the rate of inflation, as measured by the Consumer Price Index
- To maximize the Plan's surplus to increase future benefit payments as a secondary objective.

The investment goals for the Retiree Health Insurance Credit Plan are:

- To accumulate sufficient wealth through a diversified portfolio of investments which will enable the State of North Dakota to pay all current and future retirement benefits and expense obligations of the fund.
- To obtain an investment return in excess of that needed to allow for increases in a retiree's credit to maintain the purchasing power of their benefit.

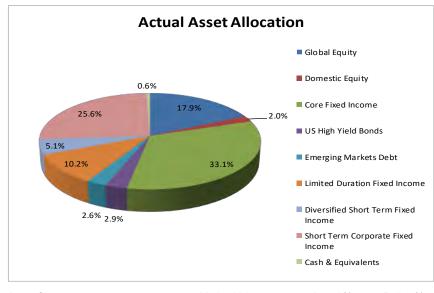
The SIB is responsible for carrying out the Retirement Board's investment goals, objectives and policies; implementing the asset allocation plan submitted by the System, maintaining a separate accounting and preparing periodic investment performance reports for the System funds under their authority. The System's assets may be pooled with other funds, at the discretion of the SIB.

Public Employees and Highway Patrolmen's Retirement Systems Asset Allocation - June 30, 2022



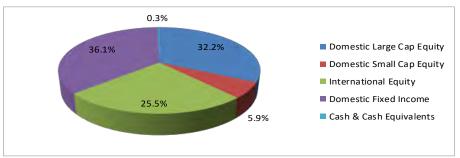
Asset Class	Market Value	Actual %	Policy %
World equity	\$ 362,796,049	9.8%	10.0%
Domestic Large Cap Equity	676,560,112	18.3%	19.3%
Domestic Small Cap Equity	170,472,309	4.6%	4.8%
Developed International Equity	413,664,501	11.2%	12.7%
Emerging markets equity	120,805,088	3.3%	4.2%
Private Equity	300,283,105	8.1%	7.0%
Investment Grade Fixed Income	604,553,024	16.4%	16.0%
Non-Investment Grade Fixed Income	264,185,233	7.2%	7.0%
Global Real Estate	505,741,306	13.7%	11.0%
Timber	50,739,138	1.4%	1.4%
Infrastructure	201,442,988	5.5%	6.6%
Cash & equivalents	19,927,319	0.5%	0.0%
Total	\$3,691,170,172	100.0%	100.0%

Job Service Retirement Plan Asset Allocation - June 30, 2022



Asset Class	Marl	ket Value	Actual %	Policy %
Global Equity		15,428,342	17.9%	18.0%
Domestic Equity		1,724,019	2.0%	2.0%
Core Fixed Income		28,571,532	33.1%	34.0%
US High Yield Bonds		2,477,016	2.9%	3.0%
Emerging Markets Debt		2,269,992	2.6%	3.0%
Limited Duration Fixed Income		8,815,922	10.2%	10.0%
Diversified Short Term Fixed Income		4,368,057	5.1%	5.0%
Short Term Corporate Fixed Income		22,083,146	25.6%	25.0%
Cash & Equivalents		518,444	0.6%	0.0%
Total	\$	86,256,470	100.0%	100.0%

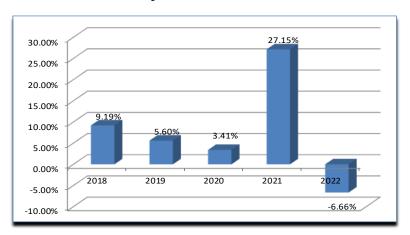
Retiree Health Insurance Credit Program Asset Allocation - June 30, 2022



Asset Class	Mar	ket Value	Actual %	Policy %
Domestic Large Cap Equity	\$	49,020,249	32.2%	33.0%
Domestic Small Cap Equity		9,034,816	5.9%	6.0%
International Equity		38,832,610	25.5%	26.0%
Domestic Fixed Income		54,944,364	36.1%	35.0%
Cash & Cash Equivalents		498,576	0.3%	0.0%
Total	\$	152,330,615	100.0%	100.0%

North Dakota Public Employees Retirement System – Investment Section Investment Results

Public Employees and Highway Patrolmen's Retirement Systems Investment Results



Public Employees and Highway Patrolmen's Retirement Systems (PERS) Schedule of Investment Results⁽¹⁾ For the Five Years Ended June 30, 2022

						Annua	alized
	<u>2018</u>	<u>2019</u>	2020	<u>2021</u>	2022	3 Year	<u>5 Year</u>
Total Fund (PERS)	9.19%	5.60%	3.41%	27.15%	-6.66%	7.07%	7.18%
Actual Total Fund Policy Benchmark	3.09%	6.02%	3.21%	25.84%	-7.04%	6.48%	6.74%
Global Equity	10.52%	3.04%	-7.14%	43.33%	-13.21%	4.93%	5.64%
MSCI World	11.09%	6.33%	2.84%	39.04%	-14.34%	7.00%	7.67%
Large Cap Domestic Equities	15.99%	10.13%	12.98%	42.57%	-12.72%	12.03%	12.42%
Russell 1000	14.54%	10.02%	7.48%	43.07%	-13.04%	10.17%	11.00%
Small Cap Domestic Equities	17.69%	3.00%	-4.48%	40.81%	-16.93%	3.77%	6.25%
Russell 2000	17.57%	-3.31%	-6.63%	62.02%	-25.20%	4.21%	5.17%
Developed International Equities	10.30%	-0.88%	-0.57%	37.48%	-20.00%	3.03%	3.64%
Benchmark ⁽²⁾	7.04%	1.29%	-5.42%	33.60%	-16.76%	1.70%	2.66%
Emerging Markets Equities	9.46%	0.42%	1.44%	46.48%	-28.22%	2.17%	3.23%
MSCI Emerging Markets Net	8.20%	1.22%	-3.39%	40.90%	-25.28%	0.57%	2.18%
Private Equity ⁽³⁾	5.27%	8.62%	3.05%	48.81%	11.73%	19.66%	14.40%
Investment Grade Fixed Income	1.60%	8.13%	9.68%	1.51%	-10.66%	-0.18%	1.79%
Bloomberg Aggregate	-0.40%	7.87%	8.74%	-0.33%	-10.29%	-0.93%	0.88%
Below Investment Grade Fixed Income	5.25%	6.93%	1.10%	14.41%	-0.78%	4.70%	5.25%
Bloomberg High Yield Corp 2% Issuer Cap	2.62%	7.48%	0.00%	15.34%	-12.82%	0.18%	2.09%
Global Real Estate	7.70%	6.02%	2.20%	8.91%	24.96%	11.63%	9.70%
NCREIF Total	7.19%	6.51%	2.69%	7.37%	21.45%	10.22%	8.86%
Timber	-2.52%	4.10%	6.28%	4.87%	7.37%	6.17%	3.96%
NCREIF Timber	3.57%	2.95%	0.34%	3.10%	12.01%	5.03%	4.32%
Infrastructure	7.37%	5.12%	4.47%	14.49%	8.26%	8.99%	7.88%
Benchmark	3.09%	3.91%	1.62%	5.26%	18.33%	8.17%	6.28%
Cash	1.47%	2.31%	1.50%	0.11%	0.22%	0.61%	1.12%
90 Day T-bills	1.36%	2.31%	1.63%	0.09%	0.17%	0.63%	1.11%

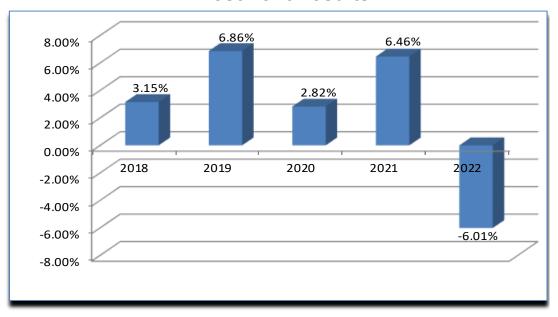
⁽¹⁾ The investment return calculations were prepared using a monthly time-weighted rate of return methodology based upon market values

⁽²⁾MSCI EAFE through 6/30/16 and MSCI World ex-US thereafter.

⁽³⁾ It has been determined that there is no benchmark that is an accurate reflection of the System's investments in this asset class. For total fund policy purposes, the actual asset class return is used.

North Dakota Public Employees Retirement System – Investment Section Investment Results

Job Service Retirement Plan Investment Results



Job Service Retirement Plan Schedule of Investment Results⁽¹⁾⁽²⁾ For the Five Years Ended June 30, 2022

						Annua	alized
	<u>2018</u>	<u>2019</u>	2020	2021	2022	3 Year	5 Year
Total Fund	3.15%	6.86%	2.82%	6.46%	-6.01%	0.96%	2.55%
Actual Fund Policy Benchmark	3.09%	6.74%	5.04%	7.97%	-7.91%	1.46%	3.04%
Global Equity	8.38%	8.90%	-6.00%	25.05%	-0.77%	5.27%	6.60%
Weighted Benchmark - Global Equity	13.51%	8.05%	3.94%	40.57%	-14.29%	7.79%	8.96%
Global Fixed Income	0.92%	5.37%	4.75%	2.21%	-7.20%	-0.21%	1.11%
Weighted Benchmark - Global Fixed Income	0.30%	3.75%	2.94%	0.73%	-5.73%	-0.08%	0.34%
Cash	1.44%	2.27%	1.46%	0.11%	0.22%	0.60%	1.10%
90 Day T-bills	1.36%	2.31%	1.63%	0.09%	0.17%	6.30%	1.11%

⁽¹⁾The investment return calculations were prepared using a monthly time-weighted rate of return methodology based upon market values

 $^{^{(2)}}$ Mid year 2016 the investments were removed from pension pools and were directly managed

Retiree Health Insurance Credit Program Investment Results



Retiree Health Insurance Credit Plan Schedule of Investment Results⁽¹⁾ For the Five Years Ended June 30, 2022

						Annua	alized
	<u>2018</u>	<u>2019</u>	<u>2020</u>	2021	2022	3 Year	<u>5 Year</u>
Total Fund	11.81%	11.81%	4.98%	25.57%	-14.95%	3.94%	5.08%
Large Cap Domestic Equity	17.50%	17.50%	7.07%	42.52%	-13.36%	9.75%	10.58%
Russell 1000	18.03%	18.03%	7.48%	43.07%	-13.04%	10.17%	11.00%
Small Cap Domestic Equity	17.72%	17.72%	-9.65%	58.28%	-17.10%	5.84%	5.81%
Russell 2000	24.60%	24.60%	-6.63%	62.02%	-25.20%	4.21%	5.17%
International Equity	21.47%	21.47%	-1.91%	35.68%	-20.27%	2.00%	2.92%
MSCIEAFE	20.27%	20.27%	-4.11%	35.72%	-19.42%	1.60%	2.52%
Core Plus Fixed Income	2.42%	2.42%	7.27%	3.59%	-12.27%	-0.84%	1.07%
Barclays Aggregate	-0.32%	-0.32%	8.74%	-0.33%	-10.29%	-0.93%	0.88%
Cash	N/A	N/A	1.26%	0.01%	0.12%	0.46%	0.91%
90 Day T-bills	N/A	N/A	1.63%	0.09%	0.17%	0.63%	1.11%

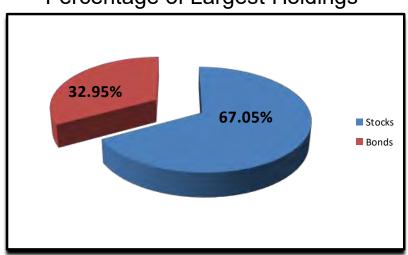
⁽¹⁾The investment return calculations were prepared using a monthly time-weighted rate of return methodology based upon market values

Largest Holdings by Market Value at June 30, 2022

Fair Value
\$ 45,195,310
44,682,724
15,894,256
15,289,785
14,924,940
10,204,327
10,104,995
10,126,311
9,848,560
9,288,586
\$ 50,381,230
6,857,353
5,227,379
5,441,184
5,034,746
3,883,734
3,687,056
3,460,916
3,907,901
3,300,222

A complete list of all holdings is available upon request

Percentage of Largest Holdings



North Dakota Public Employees Retirement System – Investment Section Schedule of Investment Fees

Public Employees and Highway Patrolmen's Retirement System Schedule of Investment Fees

For the Fiscal Year Ended June 30, 2022

	Assets Under	
Investment Manager's Fees:	<u>Management</u>	<u>Fees</u>
Global Equity	\$363 Million	\$ 1,392,279
Domestic Large Cap Equity	\$677 Million	863,618
Domestic Small Cap Equity	\$170 Million	1,265,220
Developed International Equity	\$414 Million	1,533,789
Emerging Markets Equity	\$121 Million	761,546
Private Equity	\$300 Million	4,259,659
Investment Grade Fixed Income	\$605 Million	1,652,815
Below Investment Grade Fixed Income	\$264 Million	4,432,805
Global Real Estate	\$506 Million	4,282,575
Timber	\$51 Million	332,547
Infrastructure	\$201 Million	6,560,175
Cash & Equivalents	\$20 Million	 15,130
Total Investment Managers' Fees		\$ 27,352,158
Other Investment Service Fees:		
Custodian Fees	\$3.69 Billion	\$ 332,354
Investment Consultant Fees	\$3.69 Billion	132,339
SIB Administrative Fees	\$3.69 Billion	 528,044
Total Investment Service Fees		\$ 992,737

North Dakota Public Employees Retirement System – Investment Section Schedule of Investment Fees

Job Service Retirement Plan Schedule of Investment Fees For the Fiscal Year Ended June 30, 2022

	Asset	s Under	
	<u>Mana</u>	gement	<u>Fees</u>
Investment Management Fees	\$86	Million	\$ 418,128
Custodian Fees	\$86	Million	9,086
SIB Contract Fees	\$86	Million	 11,602
Total Investment Expense			\$ 438,816

Retiree Health Insurance Credit Plan Schedule of Investment Fees For the Fiscal Year Ended June 30, 2022

Other Investment Service Fees:	Assets Under <u>Management</u>		<u>Fees</u>
Investment Management Fees	\$152	Million	\$ 756,405
Custodian Fees	\$152	Million	11,397
SIB Contract Fees	\$152	Million	21,101
Total Investment Service Fees			\$ 788,903

Defined Contribution Investments

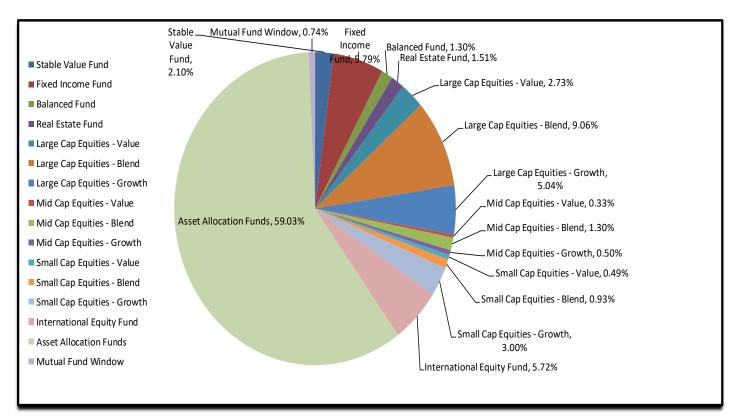
The Defined Contribution Retirement Plan (Plan) is a long-term retirement savings vehicle and is intended as a source of retirement income for eligible participants. Each participating member shall direct the investment of the individual's accumulated employer and employee contributions and earnings to one or more investment choices within available categories of investment provided by the Board. The available investment options cover a broad range of investment risk and rewards appropriate for this kind of retirement savings program. Participants bear the risk and reap the rewards of investment returns that result from the investment options that they select. TIAA is the record-keeper for the Plan.

The Board has adopted an investment policy that serves the following purposes:

- Establishes an investment program that will allow plan participants the opportunity to structure an investment strategy that meets their individual return objectives and risk tolerances
- Defines the investment categories offered by the Plan
- Establishes benchmarks and performance standards for each investment category to evaluate each fund's performance
- Establishes a procedure for reporting and evaluating the various funds and a methodology for monitoring their performance
- Defines the procedures for investment fund evaluation and formal fund review.

Defined Contribution Retirement Plan Investment Options - June 30, 2022

Investment Options	Market Value	Percent		
Stable Value Fund	\$ 353,648	2.10%		
Fixed Income Fund	975,100	5.79%		
Balanced Fund	218,778	1.30%		
Real Estate Fund	253,969	1.51%		
Large Cap Equities - Value	459,789	2.73%		
Large Cap Equities - Blend	1,526,840	9.06%		
Large Cap Equities - Growth	849,246	5.04%		
Mid Cap Equities - Value	55,540	0.33%		
Mid Cap Equities - Blend	219,540	1.30%		
Mid Cap Equities - Growth	84,667	0.50%		
Small Cap Equities - Value	82,081	0.49%		
Small Cap Equities - Blend	155,927	0.93%		
Small Cap Equities - Growth	505,199	3.00%		
International Equity Fund	962,795	5.72%		
Asset Allocation Funds	9,944,192	59.03%		
Mutual Fund Window	124,257	0.74%		
Contributions in Transit	73,059	0.43%		
Total	\$ 16,844,627	100.00%		

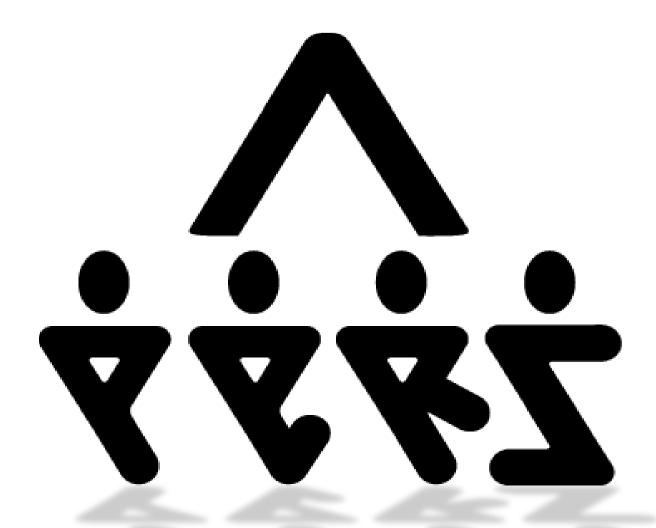


Defined Contribution Retirement Plan - Schedule of Investment Results For the Five Years Ended June 30, 2022

	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	2022	3-Year <u>Annualized</u>	5-Year <u>Annualized</u>
Stable Value Fund/Money Market Fund:							
Vanguard Treasury Money Market - VUSXX	1.26%	2.21%	1.40%	0.04%	0.17%	0.54%	1.01%
Wells Fargo Stable Fund (2)	1.24%	1.54%	1.66%	1.41%	1.19%	1.76%	1.61%
3 Month T-Bill Index (2)	1.33%	2.30%	1.56%	0.01%	0.17%	0.63%	1.11%
Fixed Income Fund:							
Mass Mutual Income Bond Fund	N/A	4.26%	7.19%	8.17%	-6.35%	2.78%	2.96%
Baird Core Plus Bond Fund - BCOSX	3.33%	7.37%	8.53%	1.52%	-11.27%	-0.75%	1.02%
Vanguard Total Bond Market Index	-0.53%	7.85%	8.96%	-0.42%	-0.94%	0.84%	1.40%
Blmbg: Aggregate Flt Adj	-0.40%	7.97%	8.92%	-0.33%	-10.38%	-0.91%	0.90%
Blmbg: TIPS	-0.68%	9.33%	7.98%	4.42%	-5.14%	3.04%	3.21%
PGIM High Yield Fund Z	3.01%	8.71%	-0.59%	16.20%	-12.00%	0.55%	2.62%
Blmbg HY Corp 1% Lss Cap	2.23%	6.19%	-1.89%	14.69%	-12.82%	0.01%	1.97%
Templeton Global Bond Adv (2)	-1.88%	5.56%	-6.08%	-2.33%	-9.01%	-5.85%	-2.87%
FTSE WGBI	1.90%	5.48%	4.60%	0.76%	-16.77%	-4.27%	-1.17%
Real Estate (Sector) Fund:							
Cohen & Steers Realty Shares (2)	4.36%	14.57%	- 4.61%	35.75%	-4.66%	7.28%	8.10%
FTSE NAREIT All Equity REITs Index (2)	3.50%	13.01%	-6.47%	32.80%	-5.89%	5.34%	6.75%
Balanced Fund:							
T Rowe Price Capital Appreciation (2)	8.06%	14.86%	5.97%	29.33%	-7.85%	8.09%	9.41%
Large Cap Equities - Value:							
Hartford Dividend & Growth (2)	9.82%	9.82%	-0.90%	41.90%	-1.64%	11.42%	10.78%
T Rowe Price Equity Income (2)	9.51%	5.50%	-11.18%	47.77%	-2.80%	8.46%	8.07%
Russell 1000 Value Index	6.77%	8.46%	-8.84%	43.68%	-6.82%	6.87%	7.17%
Large Cap Equities - Blend:							
Vanguard Dividend Growth Fund	10.57%	19.00%	1.27%	33.04%	-0.01%	10.44%	12.13%
S&P 500 Index	14.37%	10.42%	7.51%	40.79%	-10.62%	10.60%	11.31%
Large Cap Equities - Growth:							
Well's Fargo Adv Growth Adm (2)	29.03%	14.09%	20.56%	42.87%	-34.93%	3.87%	10.53%
Russell 3000 Growth Index	22.47%	10.60%	21.94%	42.99%	-19.78%	11.84%	13.63%
Franklin Growth Adv (2)	16.97%	12.86%	12.96%	40.64%	-19.65%	8.48%	11.00%
Vanguard Institutional Index	22.50%	11.60%	23.28%	42.50%	-10.65%	10.58%	11.28%
Mid Cap Equities - Value:							
Virtus Mid Cap Value Equity I	7.70%	6.89%	-11.71%	49.24%	-13.03%	4.65%	5.70%
Russell Mid Cap Value	7.60%	3.68%	-11.81%	53.06%	-10.00%	6.70%	6.27%
Mid Cap Equities - Blend:							
Columbia Mid Cap Index A	12.95%	0.91%	-7.18%	52.49%	-14.96%	6.37%	6.53%
S&P Mid Cap 400	13.50%	1.36%	-6.70%	53.24%	-14.64%	6.87%	7.02%
Mid Cap Equities - Growth:							
PGIM Jennison Mid-Cap Growth Z	13.16%	14.09%	11.52%	48.79%	-26.86%	6.67%	9.40%
Russell Mid Cap Growth	18.52%	13.94%	11.91%	43.77%	-29.57%	4.25%	8.88%

Defined Contribution Retirement Plan - Schedule of Investment Results For the Five Years Ended June 30, 2022

	<u>2018</u>	<u>2019</u>	2020	<u>2021</u>	2022	3-Year Annualized	5-Year Annualized
Small Cap Equities - Value:	2010	2013	2020	2021	LULL	Ailliualizeu	AlliludiiZeu
Northern Small Cap Value Fund	7.14%	-4.35%	-19.57%	57.06%	-11.69%	3.71%	3.23%
Russell 2000 Value Index	13.10%	-6.24%	-17.48%	73.28%	-16.28%	6.18%	4.89%
Small Cap Equities - Blend:							
DFA US Small Cap (3)	15.31%	-5.53%	-11.71%	65.00%	-14.07%	7.77%	6.40%
Russell 2000 Index (2)	17.57%	-3.31%	-6.63%	62.03%	-25.20%	4.21%	5.17%
Small Cap Equities - Growth:							
Brown Small Company Fund Investor	28.58%	8.33%	16.35%	22.89%	-35.46%	-2.64%	5.15%
Russell 2000 Growth Index	21.90%	-0.50%	3.48%	51.36%	-33.43%	1.40%	4.80%
International Equity Funds							
American Funds New Perspective Fund	1.44%	7.02%	10.72%	45.76%	-22.47%	7.76%	9.04%
Vanguard Total International Stock Index Inv (2)	7.10%	0.64%	-4.09%	36.51%	-18.94%	2.00%	2.71%
MSCI EAFE	7.28%	5.74%	-4.80%	35.72%	-15.75%	6.21%	7.00%
FTSE GI All Cap ex US Indx	6.08%	-0.06%	-4.66%	33.76%	-19.27%	1.91%	2.74%
Invesco Developing Markets Y	12.46%	2.96%	-1.87%	37.16%	-34.95%	-4.33%	0.28%
MSCI Emerging Markets Index (2)	8.20%	1.21%	-3.39%	40.90%	-25.28%	0.57%	2.18%
Asset Allocation Funds:							
TIAA-CREF Lifecycle Ret Income (2)	5.45%	5.51%	4.53%	16.29%	-11.37%	2.51%	3.69%
Income Benchmark (1)	4.53%	6.87%	4.99%	16.07%	-10.93%	3.20%	4.31%
TIAA-CREF Lifecycle 2010 (2)	5.77%	5.56%	4.51%	16.33%	-11.39%	2.51%	3.76%
2010 Benchmark (1)	4.77%	7.30%	4.45%	15.70%	-10.69%	3.24%	4.40%
TIAA-CREF Lifecycle 2015 (2)	6.44%	5.44%	4.45%	18.14%	-11.85%	2.84%	4.07%
2015 Benchmark (1)	5.39%	7.51%	4.17%	17.75%	-11.28%	3.54%	4.72%
TIAA-CREF Lifecycle 2020 (2)	7.39%	5.24%	4.35%	20.07%	-12.59%	3.08%	4.36%
2020 Benchmark (1)	6.22%	7.68%	3.92%	19.84%	-11.84%	3.90%	5.10%
TIAA-CREF Lifecycle 2025 (2)	8.54%	4.95%	4.11%	23.29%	-13.53%	3.54%	4.80%
2025 Benchmark (1)	7.35%	7.83%	3.72%	23.28%	-12.51%	4.37%	5.58%
TIAA-CREF Lifecycle 2030 (2)	9.62%	4.64%	3.86%	26.80%	-14.60%	4.00%	5.23%
2030 Benchmark (1)	8.49%	8.06%	3.36%	27.05%	-13.25%	4.88%	6.09%
TIAA-CREF Lifecycle 2035 (2)	10.79%	4.27%	3.56%	30.25%	-15.58%	4.42%	5.64%
2035 Benchmark (1)	9.64%	8.08%	2.55%	30.82%	-13.99%	5.37%	6.57%
TIAA-CREF Lifecycle 2040 (2)	11.96%	3.81%	3.22%	33.89%	-16.41%	4.92%	6.07%
2040 Benchmark (1)	10.82%	8.14%	2.33%	34.58%	-14.55%	5.93%	7.07%
TIAA-CREF Lifecycle 2045 (2)	12.60%	3.33%	2.98%	37.57%	-17.18%	5.47%	6.42%
2045 Benchmark (1)	11.59%	8.15%	2.33%	38.38%	-15.03%	6.53%	7.51%
TIAA-CREF Lifecycle 2050 (2)	12.82%	3.34%	2.84%	38.33%	-17.46%	5.50%	6.48%
2050 Benchmark (1)	11.74%	8.15%	2.33%	39.56%	-15.28%	6.61%	7.59%
TIAA-CREF Lifecycle 2055 (2)	12.97%	3.25%	2.78%	38.80%	-17.52%	5.57%	6.54%
2055 Benchmark (1)	11.91%	8.15%	2.34%	40.08%	-15.36%	6.70%	7.67%
TIAA-CREF Lifecycle 2060 (2)	13.04%	3.19%	2.84%	39.31%	-17.58%	5.70%	6.61%
2060 Benchmark (1)	12.08%	8.16%	2.35%	40.61%	-15.43%	6.78%	7.75%



ACTUARIAL SECTION



P: 312.456.9800 | www.grsconsulting.com

December 7, 2022

Board Members North Dakota Public Employees Retirement System Bismarck, North Dakota

Members of the Board:

At your request, we have performed an actuarial valuation, which includes actuarial valuation results for funding purposes and separate actuarial valuation results for accounting purposes for the North Dakota Public Employees Retirement System ("NDPERS") as of July 1, 2022. The purpose of the funding actuarial valuation, which is performed annually, is to determine the funding status and actuarial employer contribution rate for NDPERS. The actuarial valuation was performed at the request of the Board and is intended for use by the Board and NDPERS and those designated by the Board and NDPERS. This report may be provided to parties other than the Board and NDPERS only in its entirety and only with the permission of the Board and NDPERS. GRS is not responsible for reliance upon this valuation for any other purpose, or by any other party.

Actuarial Assumptions and Methods

The actuarial valuation report was prepared using actuarial assumptions adopted by the Board as authorized under North Dakota Administrative Code Section 71-02. All actuarial assumptions used in this report are reasonable for the purposes of this actuarial valuation.

Most of the actuarial assumptions used for this valuation were based on an experience review for the period from July 1, 2014 to July 1, 2019. The actuarial assumptions were first adopted for use commencing with the actuarial valuation as of July 1, 2020. There was a decrease in the investment return assumption, from 7.00 percent to 6.50 percent, since the previous actuarial valuation.

In a letter dated July 1, 2022, GRS determined that an investment return assumption of 6.50 percent can be deemed reasonable for this valuation. However, we caution that 6.50 percent is really an upper bound. If capital market assumptions remain at the levels documented in the July 1, 2022 letter, the 6.50 percent return assumption might not comply with actuarial standards for the July 1, 2023 valuation.

The actuarial employer contribution rate is calculated using a 20-year open period, level percentage of payroll amortization method. The remaining amortization period will be reset to 20 years in each future actuarial valuation.

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The actuarial assumptions and methods used, including the economic and demographic assumptions, the actuarial cost method and the asset valuation method, meet the Actuarial Standards of Practice issued by the Actuarial Standards Board for the funding of public sector pension plans and are set by the Board. Assumptions and methods required under GASB Statement Nos. 67 and 68 were used in the preparation of the accounting disclosures and schedules required by GASB Statement Nos. 67 and 68.

Benefit Provisions

There have been no changes in plan provisions since the previous actuarial valuation as of July 1, 2021.

In 2021, House Bill 1380 was passed, which adds the Main System as a recipient of potential future Legacy Fund earnings if the Plan's actuarial funded ratio is less than 90 percent. This potential source of revenue has no immediate actuarial impact.

Participant Data

A total of 24,779 active members (including the Main System, Judges and Public Safety) were included in the actuarial valuation as of July 1, 2022. Between the 2021 and 2022 actuarial valuations, the number of active employees increased by 185 members, or 0.8 percent. The average annual actuarial valuation pay increased by 2.1 percent, from \$49,348 to \$50,378 between the 2021 and 2022 actuarial valuation. There were 6,209 active members who were eligible for retirement (normal, early or Rule of 85, 88 or 90) as of July 1, 2022.

The number of benefit recipients increased from 13,575 to 14,204, or 4.6 percent, since the last actuarial valuation. The average monthly benefit increased by 3.5 percent, from \$1,363 to \$1,411. During the year ending June 30, 2022, there were 1,054 members awarded a benefit.

There were 7,610 inactive members as of July 1, 2022, who were vested and elected to receive a deferred benefit. The average monthly deferred benefit is \$538. There were 8,673 inactive members as of July 1, 2022, who were not vested or elected to receive a refund of contributions.

Actuarial Valuation Assets

On a market value basis, NDPERS assets had an investment return of approximately -6.53 percent (net of investment expenses). On an actuarial value of asset basis, NDPERS assets had an investment return of approximately 7.43 percent, which compares to the prior year assumed rate of return of 7.00 percent.

The actuarial value of assets is currently 103.2 percent of the market value of assets. There are \$114,587,764 in net asset losses currently being deferred that will be phased into the actuarial value of assets over the next four years.

Statutory and Actuarial Employer Contributions

The actuarially determined contribution rate is calculated as the normal cost contribution (to fund benefits accruing during the year) plus a contribution to amortize the unfunded liability. The unfunded liability contribution rate is calculated using a 20-year open period, level percentage of payroll amortization



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method. The remaining amortization period will be reset to 20 years in each future actuarial valuation. If employers contributed the actuarial contribution rate, the contribution rate would be expected to gradually decrease using a 20-year open amortization period as the funded ratio gradually increased. An open amortization period is expected to gradually improve the funded ratio. However, the funded ratio is not expected to reach 100 percent under this method (assuming no actuarial gains or losses) because the remaining unfunded liability at each future valuation date is re-amortized over a new 20-year period.

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 rates and the actuarial contribution rates are as follows.

Employer Contribution Rates as a % of Projected Annual Compensation for Fiscal Year Ending June 30, 2023

	Statutory Rate	Actuarial Rate
Main System	7.12%1	14.70%
Judges	17.52%	11.90%
Public Safety with prior Main System service	9.81%	11.40%
Public Safety without prior Main System service	7.93%	9.16%
Total PERS (Combined)	7.56%	14.44%

¹ The statutory contribution for members hired on or after January 1, 2020 is 8.26% of pay.

The portion of the statutory contribution that is applied toward the unfunded liability is the statutory contribution rate minus the employer normal cost rate. For the Total PERS System, the unfunded liability contribution rate from the statutory contribution is significantly lower than the rate calculated using the 20-year level percentage of payroll amortization period.

Because the statutory employer rate is higher than the actuarial employer rate (based on a 20-year amortization period) for the Judges System, the statutory employer rate amortizes the unfunded liability over a period shorter than 20 years.

The statutory employer rate for the Public Safety with prior Main System service is expected to amortize the unfunded liability over a period of approximately 50 years.

Based on the current actuarial valuation and the current actuarial assumptions and methods and benefit provisions for current employees, the total statutory contribution rate of 14.12 percent (15.26 percent for employees hired on or after January 1, 2020) for the Main System is not expected to ever amortize the unfunded liability. The plan changes for employees first enrolled on or after January 1, 2020 will slowly improve the funding of the plan, but only have a marginal impact on the current valuation results. When new hires are reflected, the Main System funded ratio is projected to ultimately decrease from the current funded ratio of about 67 percent, to approximately 50 percent in 35 years, and to less than 40 percent in 50 years. We recommend an increase to the Main System total statutory contribution rate such that the funded ratio is projected to reach 100 percent within 30 years.



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Similarly, based on the current actuarial valuation and the current actuarial assumptions, methods, and benefit provisions for current employees, the total statutory contribution rate of 13.43 percent for the Public Safety without Prior Main System service is not expected to ever amortize the unfunded liability. We recommend an increase to the Public Safety without Prior Main System service total statutory contribution rate such that the funded ratio is projected to reach 100 percent within 30 years.

Reliance on Others

The actuarial valuation was based upon information furnished by the NDPERS Staff, concerning benefits provided by the North Dakota Public Employees Retirement System, financial transactions, plan provisions and census data for active members, terminated members, retirees and beneficiaries as of July 1, 2022. 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.

The trend data in the Financial Section and the schedules and other data in this Section are prepared by NDPERS Staff with our input. Data prior to fiscal year 2016 was prepared by NDPERS Staff and the prior actuary. Specifically, these exhibits are:

- Actuarial Assumptions and Cost Method;
- Changes in Actuarial Assumptions and Cost Method;
- · Active Member Valuation Data;
- Retirees and Beneficiaries Added to and Removed from the Rolls;
- Solvency Test;
- Analysis of Financial Experience;
- Schedule of Retired Members by Type of Benefit; and
- Schedule of Average Monthly Benefit Payments.

Accounting Schedules under GASB Statement Nos. 67 and 68

The total pension liability (actuarial accrued liability) is based on a measurement date of July 1, 2022, using the Entry Age Normal actuarial cost method. A single discount rate of 5.10 percent (which is different than the rate used in the funding actuarial valuation calculations) was used to measure the total pension liability. The single discount rate was based on the expected rate of return on pension plan investments of 6.50 percent and the municipal bond rate of 3.69 percent.

All other assumptions and methods used in the funding actuarial valuation for calculation of the actuarial accrued liabilities as of July 1, 2022, were used in the GASB Statement Nos. 67 and 68 actuarial valuation for calculation of the total pension liability for fiscal year ending June 30, 2022.

The net pension liability is measured as the total pension liability, less the amount of the pension plan's fiduciary net position (market value of assets) as of June 30, 2022.

Certification



Board Members December 7, 2022 Page 5

To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the North Dakota Public Employees Retirement System 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. 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 herein.

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

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.

This report reflects the impact of COVID-19 through June 30, 2022. However, this report does not reflect the longer term and still developing future impact of COVID-19, which is likely to further influence demographic experience and economic expectations. We will continue to monitor these developments and their impact.

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.

This report should not be relied on for any purpose other than the purpose stated.

The signing actuaries are independent of the plan sponsor.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

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

Bonito J. Wurst

Senior Consultant

Abra D. Hill, ASA, MAAA, FCA Consultant

Consultani

Abra D. Hill



Actuarial Assumptions and Cost Method – Public Employees Retirement System (Adopted July 1, 2022)

Mortality Tables:

The mortality assumptions are as follows:

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

Disability Incidence Rates:

Before Age 65:

Males: 15 % of OASDI disability incidence rates Females: 8.5% of OASDI disability incidence rates

Age 65 and Later: .15% per year

Sample rates are as follows:

<u>Age</u>	<u>Male</u>	<u>Female</u>
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 Separation from Active Membership:

23	Se	rvice and Ag	e-Based Rates	for First Five Y	ears of Servi	ce
Service Beginning of	, I	Main System	1.	0	Public Safety	
Year		A		ige		
	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 R	ates Only afte	er First Five Yea	rs of Service	
7 V		Main System	1447		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%		44 4.50% 5.00%			
45-49		4.20%			5.00%	
50-54		3.90%	5.00%			
55-59		3.60%			5.00%	
		100000000000000000000000000000000000000				

No pre-retirement termination is assumed for Judges.

Vested participants that terminate are assumed to elect the option with the greater present value:

5.00%

- 1) A refund of their accumulated contributions with interest or
- 2) A deferred benefit.

60+

Withdrawal rates end upon eligibility for early retirement. Early retirement eligibility is as follows: Main System: Earlier of 1) age 55 and 3 years of service, and 2) eligibility for Rule of 85. For members hired after 1/1/16, earlier of 1) age 55 and 3 years of service, and 2) eligibility for Rule of 90.

Judges: Earlier of 1) age 55 and 5 years of service, and 2) eligibility for Rule of 85.

3.30%

Public Safety: Age 50 and 3 years of service.

Refund of Employee Contributions:

Inactive vested members are assumed to elect a refund of employee contributions in lieu of a deferred pension benefit when it is more valuable than the deferred annuity

Retirement Rates:

		Main System		Pub	lic Safety		udges
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
50		50%		25%	4%	-	
51		20%		25%	4%		
52		20%		25%	4%		
53		20%		25%	4%		
54		20%		25%	4%		
55	1%	8%		25%	10%	10%	2
56	1%	8%		25%	10%	10%	2
57	1%	8%		25%	10%	10%	
58	1%	9%		25%	10%	10%	2
59	2%	9%		25%	10%	10%	2
60	2%	9%		25%		10%	
61	4%	15%		25%	10%	10%	2
62	8%	20%		50%	25%	10%	. 2
63	8%	20%		50%	25%	10%	
64	8%	20%		50%	25%	10%	
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%	
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%				

Investment Rate of Return:

6.50% per annum, net of investment expenses

Annual Administrative Expenses:

Prior year expenses, adjusted for inflation

Assumed expenses for 2022 are as follows:

Main System: \$ 2,531,385 Judges: \$ 7,369 Public Safety With Prior Main Service: \$ 72,292 Public Safety Without Prior Main Service: \$ 15,947

Salary Scale:

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

^{*}Age-based salary increase rates apply for employees with three or more years of service in the Main System, five or more years of service in the Public Safety Systems and for all employees in the Judges System.

Inflation:

2.25% per annum

Payroll Growth:

Main System and Public Safety: 3.5% per annum

Judges: 3.00% per annum

Marital Status:

It is assumed that 75% of participants in the Main System and Public Safety and 100% of Judges 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.

Part Time Employees:

One full year of service is credited for each future year of service.

Split Service:

Liabilities are held in both plans based on service in each plan, and are based on the actuarial assumptions of the plan in which they are currently active.

Actuarial Cost Method:

Normal cost and the allocation of benefit values between service rendered before and after the 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.

Actuarial Value of Assets:

The calculated value is determined by adjusting the fair value of the 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 a rate of 20% per year. The asset smoothing method was adopted by the Board for use beginning with July 1, 2017, actuarial valuation. Net deferred gains attributable to fiscal years 2016 and prior were fully recognized as of July 1, 2017.

Social Security Disability (for Judges' Disability Benefit Offset):

Eligibility: 50% of disabled judges

Consumer Price Index Increase: 2.25% per annum

Wage Base Increases: 3.00% per annum

Workers' Compensation (for Judges' Disability Benefit Offset):

None assumed for disability benefit offset

Account Balance Due to Vested Employer Contribution (PEP):

Participation under Chapter 54/52.2: if not elected, none. If elected, 100% of active members of the Main System and Public Safety.

Contribution: Maximum allowed based on service at the beginning of the Plan year.

Benefit Election:

Main System and Public Safety:

- 50% of new retirements are assumed to elect the life annuity,
- 45% are assumed to elect the 50% joint and survivor annuity, and
- 5% are assumed to elect a Refund of Member Contributions

Judaes:

All participants elect the 50% joint and survivor annuity

Changes in Actuarial Assumptions and Methods - Public Employees Retirement System:

The investment return assumption was decreased from 7.00 percent to 6.50 percent. There have been no other changes in actuarial assumptions since the previous actuarial valuation as of June 30, 2021.

Summary of Plan Provisions - Public Employees Retirement System

This section summarizes the major benefit provisions of the North Dakota Public Employees Retirement System as included in the valuation. It is not intended to be, nor should it be, interpreted as a complete statement of all plan provisions. Benefits are set by statute. There are no provisions or policies with respect to automatic and ad hoc post-retirement benefit increases.

1. Normal Service Retirement:

Main System and Judges:

Eligibility: Attainment of age 65 with at least 10 years of eligible employment or 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).

Benefit: 2% of final average salary multiplied by years of service for the Main System (1.75% for members hired on or after January 1, 2020), and 3.50% of final average salary for each of the first ten years of service, 2.80% for each of the next ten years of service and 1.25% for service in excess of twenty years for the Judges Plan.

Public Safety:

Eligibility: Attainment of age 55 and three consecutive years of service, or if not former

National Guard, at any age with age plus service equal to at least 85 (Rule of 85). Former National Guard is eligible for Rule of 85 on August 1, 2015.

Benefit: 2% of final average salary multiplied by years of service (1.75% for members

hired on or after January 1, 2020).

2. Early Service Retirement:

Main System:

Eligibility: Attainment of age 55 with three years of service

Benefit: The Normal Service Retirement Benefit as determined above. A benefit that

begins before age 65 (or Rule of 85, if earlier) is reduced by one-half of one percent for each month before the earlier of age 65 or the age at which the

Rule of 85 is met.

For members enrolled after December 31, 2015, into the Main System, a benefit that begins before age 65 (or Rule of 90, if earlier) is reduced by 2/3 of one percent for each month before the earlier of age 65 or the age at which

the Rule of 90 is met.

Judges:

Eligibility: Attainment of age 55 with five years of service

Benefit: The Normal Service Retirement Benefit as determined above. A benefit that

begins before age 65 (or Rule of 85, if earlier) is reduced by one-half of one percent for each month before age 65 or the age at which the Rule of 85 is

met.

Public Safety:

Eligibility: Attainment of age 50 with three years of service

Benefit: The Normal Service Retirement Benefit as determined above. A benefit that

begins before age 55 (or Rule of 85, if earlier) is reduced by one-half of one percent for each month before the earlier of age 65 or the age at which the

Rule of 85 is met.

3. Disability Benefit:

Main System and Public Safety:

Eligibility: Six months of service and inability to engage in any substantial gainful activity

Benefit: 25% of the member's final average salary at disability minus workers'

compensation benefits, with a minimum of \$100 per month.

Judges:

Eligibility: Six months of service and inability to engage in any substantial gainful activity

Benefit: 70% of the member's final average salary at disability minus Social Security

and Workers' Compensation benefits paid.

4. Deferred Vested Retirement:

Main System:

Eligibility: Three years of service

Benefit: The Normal Service Retirement Benefit payable at age 65 or the Rule of 85, if

earlier. Reduced early retirement benefits can be elected upon attainment of

age 55.

Public Safety:

Eligibility: Three years of service

Benefit: The Normal Service Retirement Benefit payable at age 55 or the Rule of 85, if

earlier. Reduced early retirement benefits can be elected upon attainment of

age 50.

Judges:

Eligibility: Five years of service

Benefit: The Normal Service Retirement Benefit payable at age 65 or the Rule of 85, if

earlier. Reduced early retirement benefits can be elected upon attainment of

age 55.

5. Pre-Retirement Death Benefits:

Main System and Public Safety:

Vested participants with a surviving spouse:

Eligibility: Three years of service

Benefit: One of the following options:

Lump sum payout of member's accumulated contributions with interest

• 50% of the member's accrued benefit (not reduced on account of age) payable for the surviving spouse's lifetime

- Continuation portion of 100% joint and survivor annuity (only if participant was eligible for normal retirement).
- A partial lump sum payment in addition to the one of the annuity options above.

Non-vested members or vested members without a surviving spouse Eligibility: Non-vested or no surviving spouse

Benefit: Lump sum payout of member's accumulated contributions with interest.

Judges:

Vested participants with a surviving spouse:

Eligibility: Five years of service

Benefit: One of the following options:

- Lump sum payout of member's accumulated contributions with interest
- 100% of the member's accrued benefit (not reduced on account of age) payable for the surviving spouse's lifetime

Non-vested members or vested members without a surviving spouse

Eligibility: Non-vested or no surviving spouse

Benefit: Lump sum payout of member's accumulated contributions with interest.

6. Refund of Member Contributions

Paid to terminated non-vested members and terminated vested members who choose refund in lieu of a monthly retirement benefit.

7. Accumulated Member Contributions

Member contributions accumulate with interest at the following rates:

 Time Period
 Per Annum Interest Rate

 Through June 30, 1981
 5.00%

 July 1, 1981 - June 30, 1986
 6.00%

After June 30, 1986 0.5% less than the actuarial interest rate assumption

8. Standard and Optional Forms of Payment:

Standard form of payment:

Main System and Public Safety:

Monthly benefit for life with a refund to beneficiary at death of the remaining balance (if any) of accumulated member contributions

Judges:

Monthly benefit for life, with 50% payable to an eligible survivor

Optional forms of payment:

Life annuity (for Judges)

- 50% joint and survivor annuity with pop-up (for Main System and Public Safety)
- 100% joint and survivor annuity with pop-up
- Ten-year certain and life annuity
- Twenty-year certain and life annuity
- Social Security level income annuity
- A partial lump sum payment in addition to one of the annuity options above
- An actuarially equivalent graduated benefit option with either a one percent or two percent increase to be applied the first day of January of each year. Not available for disability or early retirements or in combination with a partial lump sum option, a deferred normal retirement option, or a Social Security level income annuity.

9. Final Average Salary:

Average of the highest salary received by the member for any 36 months employed during the last 180 months of employment. For members who terminate after December 31, 2019, final average salary is the higher of the final average salary calculated on December 31, 2019 or the average salary earned in the three highest periods of twelve consecutive months employed during the last 180 months of employment.

10. Contributions:

Contribution rates specified in the Century Code (except employer rate for Public Safety); differ between permanent full-time employees and part-time temporary employees. Rates are as follows:

			Rates
			Determined
			by the Board
	Rates Set	by Statute	of Retirement
	Member	Employer	Employer
Main System Permanent Employees*	7.00%	7.12%	
Main System Temporary Employees**	14.12%	0.00%	
Judges	8.00%	17.52%	
Public Safety with			
prior Main System service	5.50%		9.81%
BCI Employees	6.00%		9.81%
National Guard members	5.50%		9.81%
Public Safety without			
prior Main System service	5.50%		7.93%

^{*} The statutory employer contribution for members hired on or after January 1, 2020 increases to 8.26% of pay.

^{**} The statutory member contribution for temporary employees hired on or after January 1, 2020 increases to 15.26% of pay.

Effective January 1, 2000: A member's account balance includes vested employer contributions equal to the member's contributions to the deferred compensation Plan under chapter 54-52.2. The vested employer contribution may not exceed:

- For months 1-12 of service credit, \$25 or 1% of the member's monthly salary, whichever is greater
- For months 13-24 of service credit, \$25 or 2% of the member's monthly salary, whichever is greater
- For months 25-36 of service credit, \$25 or 3% of the member's monthly salary, whichever is greater
- For service exceeding 36 months, \$25 or 4% of the member's monthly salary, whichever is greater

Vested employer contributions are credited to the member's account balance

11. Rollovers:

The fund may accept rollovers from other qualified plans under ruled adopted by the Board for the purchase of additional service credit.

Changes in Plan Provisions Since the Previous Valuation:

There have been no changes in plan provisions since the previous actuarial valuation as of June 30, 2021.

Solvency Test - PERS 2013 – 2022

A short-term solvency test is one means of checking a system's progress under its funding program. In a short-term solvency test, the plan's present assets (primarily cash and investments) are compared with:

- 1) Active member contributions on deposit
- 2) The liabilities for future benefits to present retired lives; and
- 3) The liabilities for service already rendered by active members.

In a system that has been following level percent of payroll financing, the liabilities for service already rendered by active members (liability 3) should be partially covered by the remainder of present assets. If the system continues using level cost financing, the funded portion of liability 3 will increase over time.

(Amounts in Millions)

Valuation Date	Total Actuarial	(1) Active Member	(2) Retirees, Beneficiaries	(3) Active Members (Employer	Actuarial Value of	Portion (%) of	Actuarial Accr	ued Liability
7/1	Accrued Liability	Contributions*	and Inactive Members	Financed Portion)	Assets	(1)	(2)	(3)
2013	\$2,716.5	\$687.9	\$1,126.0	\$902.6	\$1,683.0	100%	88%	0%
2014	2,938.8	746.5	1,255.4	936.9	1,895.8	100%	92%	0%
2015	3,052.4	788.3	1,437.0	827.1	2,094.3	100%	91%	0%
2016	3,396.6	879.3	1,559.5	957.8	2,265.3	100%	89%	0%
2017	3,726.8	943.0	1,751.0	1,032.8	2,633.2	100%	97%	0%
2018	3,959.1	1,027.6	1,917.4	1,014.0	2,868.8	100%	96%	0%
2019	4,269.3	1,068.4	2,163.0	1,037.9	3,081.9	100%	93%	0%
2020	4,717.4	1,138.6	2,404.6	1,174.2	3,260.6	100%	88%	0%
2021	4,991.5	1,213.5	2,601.0	1,177.0	3,546.8	100%	90%	0%
2022	5,533.6	1,256.4	2,921.5	1,355.7	3,750.4	100%	85%	0%

^{*}Includes vested employer contributions for members who have the Portability Enhancement Provision (PEP).

Schedule of Funding Progress

(Amounts in Millions)

	Actuarial Accrued	Valuation	Unfunded Actuarial	Ratio of Assets	Active Member	UAAL as Percent of
July 1	<u>Liability</u>	<u>Assets</u>	Accrued Liabilities	to AAL	<u>Payroll</u>	Active Member Payroll
2013	2,716.5	1,683.0	1,033.5	62.0%	800.9	129.1%
2014	2,938.8	1,895.8	1,042.9	64.5%	888.5	117.4%
2015	3,052.4	2,094.3	958.2	68.6%	973.5	98.4%
2016	3,396.6	2,265.3	1,131.3	66.7%	1048.5	107.9%
2017	3,726.8	2,633.2	1,093.6	70.7%	1063.4	102.8%
2018	3,959.1	2,868.8	1,090.3	72.5%	1076.0	101.3%
2019	4,269.3	3,081.9	1,187.5	72.2%	1,098.40	108.1%
2020	4,717.4	3,260.6	1,456.8	69.1%	1,167.80	124.8%
2021	4.991.5	3,546.8	1444,7	71.1%	1,213.70	119.0%
2022	5,533.6	3,750.4	1,783.2	67.8%	1,248.30	142.9%

Schedule of Active Member Valuation Data - PERS - 2012-2022

	Main System					
Valuation Date 7/1	Number	Annual Payroll (\$ in Millions)	Average Annual Pay ¹	% Increase in Avg Pay		
2013	21,201	\$865.9	\$40,841	8.4%		
2014	21,814	946.2	43,376	9.3%		
2015	22,381	993.6	43,395	0.0%		
2016	22,762	1,007.8	44,274	2.0%		
2017	22,574	1,020.8	45,222	2.1%		
2018	22,711	1,027.3	45,234	0.0%		
2019	22,826	1,040.2	45,570	0.7%		
2020	23,487	1,103.1	46,967	3.1%		
2021	23,370	1,132.4	48,455	3.2%		
2022	23,487	1,160.8	49,425	2.0%		
7 10 1		Ju	dges			
Valuation Date 7/1	Number	Annual Payroll (\$ in Millions)	Average Annual Pay ¹	% Increase in Avg Pay		
2013	49	\$6.6	\$134,673	8.0%		
2014	50	7.0	139,290	3.4%		
2015	51	7.3	142,636	2.4%		
2016	56	7.9	141,733	(0.6)%		
2017	54	7.9	145,668	2.8%		
2018	55	8.0	145,615	(0.0)%		
2019	56	8.2	145,791	0.1%		
2020	57	8.4	148,047	1.5%		
2021	57	8.7	151,836	2.6%		
2022	57	8.7	153,147	0.9%		

		Public Safety with Pri	ior Main System Service	
Valuation Date 7/1	Number	Annual Payroll (\$ in Millions)	Average Annual Pay ¹	% Increase in Avg Pay
2013	268	\$13.4	\$49,981	10.9%
2014	315	16.7	53,121	6.3%
2015	318	18.7	58,781	10.7%
2016	498	28.2	56,678	(3.6)%
2017	498	28.8	57,762	1.9%
2018	598	34.5	57,728	(0.1)%
2019	732	43.0	58,731	1.7%
2020	745	45.4	60,918	3.7%
2021	967	61.5	63,633	4.5%
2022	990	64.7	65,400	2.8%
		Public Safety without F	Prior Main System Service	e
Valuation Date 7/1	Number	Annual Payroll (\$ in Millions)	Average Annual Pay ¹	% Increase in Avg Pay
2013	70	\$2.6	\$36,998	1.1%
2014	83	3.6	43,872	18.6%
2015	95	4.6	48,204	9.9%
2016	100	4.6	46,217	(4.1)%
2017	117	5.9	50,400	9.0%
2018	119	6.1	51,352	1.9%
2019	140	7.1	50,646	(1.4)%
2020	200	10.8	54,124	6.9%
2021	200	11.1	55,485	2.5%
2022	245	14.0	57,125	3.0%

Analysis of Financial Experience - PERS

Changes in the Contribution Rate During Years Ended June 30 Resulting from Differences Between Assumed Experience and Actual Experience

Main	System
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<u>Plan Year Ended</u>	June 30, 2019	June 30, 2020	June 30, 2021	June 30, 2022
Employer Cost Rate - Beginning of Year	11.20%	12.22%	12.94%	12.46%
Death after Retirement	(0.03)	0.00	(0.04)	0.00
Withdrawal from Employment	(0.04)	0.03	0.04	0.01
Age and Service Requirements	0.00	0.00	0.00	0.00
Financial Experience-Investments	(0.16)	(0.42)	(0.94)	0.03
Salary Scale and Service	(0.41)	(0.20)	(0.09)	(0.18)
Contribution Income	0.34	0.36	0.41	0.36
Administrative Expenses	0.00	0.01	(0.02)	(0.03)
New and Reinstated Members	0.10	0.12	0.10	0.11
Demographic Changes	0.10	0.11	0.06	(0.35)
Assumption Changes	1.09	0.71	0.00	2.33
Death and Retirement from Withdrawals	0.03	0.00	0.00	(0.04)
Employer Cost Rate - End of Year	12.22%	12.94%	12.46%	14.70%

Judges

<u>Plan Year Ended</u>	June 30, 2019	June 30, 2020	June 30, 2021	June 30, 2022
Employer Cost Rate - Beginning of Year	2.03%	2.83%	8.81%	8.62%
Plan Change	0.00	0.00	0.00	0.00
Plan Experience	0.66	0.77	0.04	1.91
Investment Loss/(Gain)	(0.45)	0.10	(0.64)	(0.18)
Contribution Loss/(Gain)	(1.15)	(1.16)	0.41	(0.78)
Assumption Changes	1.74	6.27	0.00	2.33
Employer Cost Rate - End of Year	2.83%	8.81%	8.62%	11.90%

Law Enforcement With Prior Main Service*

<u>Plan Year Ended</u>	June 30, 2019	June 30, 2020	June 30, 2021	June 30, 2022
Employer Cost Rate - Beginning of Year	7.64%	8.00%	9.33%	9.81%
Plan Change	0.00	0.00	0.00	0.00
Plan Experience	(0.35)	(0.16)	0.60	(0.72)
Investment Loss/(Gain)	(0.06)	0.01	0.01	(0.01)
Contribution Loss/(Gain)	(0.13)	(0.13)	(0.13)	(0.04)
Assumption Changes	0.90	1.61	0.00	2.36
Employer Cost Rate - End of Year	8.00%	9.33%	9.81%	11.40%

Law Enforcement Without Prior Main Service

<u>Plan Year Ended</u>	June 30, 2020	June 30, 2020	June 30, 2021	June 30, 2022
Employer Cost Rate - Beginning of Year	6.20%	6.37%	7.72%	7.93%
Plan Change	0.00	0.00	0.00	0.00
Plan Experience	(0.22)	0.44	0.20	(0.62)
Investment Loss/(Gain)	(0.05)	(0.01)	(0.02)	0.00
Contribution Loss/(Gain)	(0.33)	(0.40)	0.03	(0.10)
Assumption Changes	0.77	1.32	0.00	1.95
Employer Cost Rate - End of Year	6.37%	7.72%	7.93%	9.16%

Retirees and Beneficiaries Added to and Removed from the Rolls PERS - 2013-2022

Plan	Beg.	of Year	Ad	ded to Rol	ls	Remov	ved from R	olls	End of	Year Bal	ance		verage nnual	% Increase in Annual
Year	No.	Ann. Benefits	No.	Ann. Ber	nefits*	No.	Ann. Ben	efits*	No.**	Ann. Be	enefits*	В	enefit	Benefits
						Retirem	ent							
2013	8,242	\$ 95,	708	\$	10.9	(284)	\$	(4.0)	8,666	\$	102.2	\$	11,798	7.2%
2014	8,666	102.	855		13.2	(291)		(2.4)	9,230		113.0		12,243	10.6%
2015	9,230	113.	992		19.3	(243)		(2.4)	9,979		129.9		13,017	15.0%
2016	9,979	129.	703		12.3	(288)		(2.6)	10,394		139.6		13,435	7.5%
2017	10,394	139.	870		16.1	(307)		(3.0)	10,957		152.8		13,943	9.4%
2018	10,957	152.	953		19.7	(372)		(3.6)	11,538		169.0		14,645	10.6%
2019	11,538	169.	913		18.8	(334)		(3.0)	12,117		184.9		15,257	9.4%
2020	12,117	184.	1,032		20.5	(401)		(4.3)	12,748		201.1		15,772	8.8%
2021	12,748	201.	1 1,025		18.6	(412)		(4.3)	13,361		215.3		16,116	7.1%
2022	13,361	215.	1,036		22.8	(420)		(4.7)	13,977		233.4		16,701	8.4%

^{* \$} in millions

^{**} Excludes 24 pensioners as of June 30, 2014, 28 pensioners as of June 30, 2015, 35 pensioners as of June 30, 2016, 41 pensioners as of June 30, 2017, 37 pensioners as of June 30, 2018, 37 pensioners as of June 30, 2019, 42 pensioners as of June 30, 2020, 35 pensioners as of June 30, 2021, and 32 pensioners as of June 30, 2022 in suspended status.

Plan	Beg.	of Y	ear	Add	led to R	olls	Remov	ed from Ro	lls		End of	Yea	r Balance		verage Annual	% Increase in Annual
Year	No. Ann. Benefits		No. Ann. Benefits		No. Ann. Benefits		No. Ann. Benefits			Benefit		Benefits				
				200			Retirem	ent								
2013	34	\$	1,470,584	2	\$	60,181	0	\$,	0	36	\$	1,530,765	\$	42,521	4.1%
2014	36		1,530,765	2		190,156	0			0	38		1,720,921		45,287	12.4%
2015	38		1,720,921	6		462,888	0			0	44		2,183,809		49,632	26.9%
2016	44		2,183,809	2		85,597	(3)	(147	,63	38)	43		2,121,768		49,343	-2.8%
2017	43		2,121,768	10		674,619	(3)	(156	,43	33)	50		2,639,954		52,799	24.4%
2018	50		2,639,954	7		331,377	(2)	(68)	,57	72)	55		2,902,760		52,777	10.0%
2019	55		2,902,760	3		241,678	0			0	58		3,144,438		54,214	8.3%
2020	58		3,144,438	3		293,611	(1)	(94	,08	34)	60		3,343,965		55,733	6.3%
2021	60		3,343,965	3		293,778	0			0	63		3,637,743		57,742	8.8%
2022	63		3,637,743	1		48,097	0			0	64		3,685,840		57,591	1.3%

Values prior to July 1, 2016, were calculated by the prior actuary.

Public Safety with prior Main System Service

Plan	Beg	of Year	Add	led to	Rolls	Remov	ed from Rolls	End of	Yea	r Balance		verage Annual	% Increase in Annual
Year	No.	Ann. Benefits	its No.		Ann. Benefits		Ann. Benefits	No.	Ann. Benefits		Benefit		Benefits
						Retirem	ent						
2013	47	\$ 864,421	9	\$	225,057	0	(\$13,776)	56	\$	1,075,702	\$	19,209	24.4%
2014	56	1,075,702	7		83,168	(1)	(57,253)	62		1,101,617		17,768	2.4%
2015	62	1,101,617	11		301,041	0	0	73		1,402,658		19,215	27.3%
2016	73	1,402,658	7		53,522	(1)	(10,529)	79		1,445,651		18,299	3.1%
2017	79	1,445,651	11		390,805	0	0	90		1,836,456		20,405	27.0%
2018	90	1,836,456	15		371,954	(2)	(22,510)	103		2,185,900		21,222	19.0%
2019	103	2,185,900	15		309,766	(3)	(87,471)	115		2,408,195		20,941	10.2%
2020	115	2,408,195	12		223,956	(2)	(38,955)	125		2,593,195		20,746	7.7%
2021	125	2,593,195	15		399,735	(3)	(44,015)	137		2,948,915		21,525	13.7%
2022	137	2,948,915	14		341,750	(3)	(18,787)	148		3,271,877		22,107	11.0%

Public Safety without prior Main System Service

Plan Beg of Year		of Year	Add	led to Rolls	Remov	ved from Rolls	End of	Year Balance	Annual	% Increase in Annual
Year	No.	Ann. Benefits	No.	Ann. Benefits	No.	Ann. Benefits	No.	Ann, Benefits	Benefit	Benefits
					Retirem	ent				
2013	0	\$ 0	1	\$ 9,792	0	\$ 0	1	\$ 9,792	\$ 9,792	100.0%
2014	1	9,792	0	0	0	0	1	9,792	9,792	0.0%
2015	1	9,792	0	0	0	0	1	9,792	9,792	0.0%
2016	1	9,792	1	3,264	0	0	2	13,056	6,528	33.3%
2017	2	13,056	4	57,609	0	0	6	70,665	11,778	441.2%
2018	6	70,665	2	19,573	0	0	8	90,238	11,280	27.7%
2019	8	90,238	2	10,405	0	0	10	100,643	10,064	11.5%
2020	10	100,643	2	24,715	0	0	12	125,358	10,447	24.6%
2021	12	125,358	2	14,349	0	0	14	139,708	9,979	11.4%
2022	14	139,708	3	30,110	(2)	(24,143)	15	145,675	9,712	4.3%

Values prior to July 1, 2016, were calculated by the prior actuary.



P: 312.456.9800 | www.grsconsulting.com

December 7, 2022

Board Members North Dakota Highway Patrolmen's Retirement System Bismarck, North Dakota

Members of the Board:

At your request, we have performed an actuarial valuation, which includes actuarial valuation results for funding purposes and separate actuarial valuation results for accounting purposes for the North Dakota Highway Patrolmen's Retirement System ("HPRS") as of July 1, 2022. The purpose of the funding actuarial valuation, which is performed annually, is to determine the funding status and actuarial employer contribution rate for the HPRS. The actuarial valuation was performed at the request of the Board and is intended for use by the Board and HPRS and those designated by the Board and HPRS. This report may be provided to parties other than the Board and HPRS only in its entirety and only with the permission of the Board and HPRS. GRS is not responsible for reliance upon this valuation for any other purpose, or by any other party.

Actuarial Assumptions and Methods

The actuarial valuation report was prepared using actuarial assumptions adopted by the Board as authorized under North Dakota Administrative Code Section 71-05. All actuarial assumptions used in this report are reasonable for the purposes of this actuarial valuation.

Most of the actuarial assumptions used in the actuarial valuation as of July 1, 2022 were based on an experience review for the 5-year period ending July 1, 2019. The actuarial assumptions were first adopted for use commencing with the actuarial valuation as of July 1, 2020. There was a decrease in the investment return assumption, from 7.00 percent to 6.50 percent, since the previous actuarial valuation.

In a letter dated July 1, 2022, GRS determined that an investment return assumption of 6.50 percent can be deemed reasonable for this valuation. However, we caution that 6.50 percent is really an upper bound. If capital market assumptions remain at the levels documented in the July 1, 2022 letter, the 6.50 percent return assumption might not comply with actuarial standards for the July 1, 2023 valuation.

The actuarial employer contribution rate is calculated using a 20-year open period, level percentage of payroll amortization method. The remaining amortization period will be reset to 20 years in each future actuarial valuation.

The actuarial assumptions and methods used, including the economic and demographic assumptions, the actuarial cost method and the asset valuation method, meet the Actuarial Standards of Practice issued by the Actuarial Standards Board for the funding of public sector pension plans and are set by the Board. Assumptions and methods required under GASB Statement Nos. 67 and 68 were used in the preparation of the accounting disclosures and schedules required by GASB Statement Nos. 67 and 68.

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

Board Members December 7, 2022 Page 2

Benefit Provisions

In 2021, Senate Bill 2043 was passed, which establishes gradual retirement contribution increases to the HPRS. The statutory employer and employee contributions will each increase by 0.5 percent of pay every year from January 1, 2022 to January 1, 2025, ultimately increasing both by 2.0 percent of pay. There were no other changes in benefit provisions since the previous actuarial valuation as of July 1, 2021. The Board set the rate at 2.00 percent for the indexing percentage for the year beginning July 1, 2022, applicable to the final average salaries of HPRS deferred vested members.

Participant Data

A total of 151 active members were included in the actuarial valuation as of July 1, 2022. Between the 2021 and 2022 actuarial valuations, the number of active employees remained at 151 members. The average annual actuarial valuation pay increased by 6.5 percent, from \$76,266 to \$81,240 between the 2021 and 2022 actuarial valuation. There were 16 active members who were eligible for retirement (normal, early or Rule of 80) as of July 1, 2022.

The number of benefit recipients remained the same since the last actuarial valuation. The average monthly benefit increased, from \$3,589 to \$3,602. During the year ending June 30, 2022, there were 2 members awarded a benefit.

There were 35 inactive members as of July 1, 2022 who were vested and elected to receive a deferred benefit. The average monthly deferred benefit is \$2,478. There were 20 inactive members as of July 1, 2022 who elected to receive a refund of contributions.

Actuarial Valuation Assets

On a market value basis, HPRS assets had an investment return of approximately -6.55 percent (net of investment expenses). On an actuarial value of asset basis, NDPERS assets had an investment return of approximately 6.87 percent, which compares to the prior year assumed rate of return of 7.00 percent.

The actuarial value of assets is currently 104.5 percent of the market value of assets. There are \$4,118,396 in net asset losses currently being deferred that will be phased into the actuarial value of assets over the next 4 years.

Statutory and Actuarial Employer Contributions

The actuarially determined contribution rate is calculated as the normal cost contribution (to fund benefits accruing during the year) plus a contribution to amortize the unfunded liability. The unfunded liability contribution rate is calculated using a 20-year open period, level percentage of payroll amortization method. The remaining amortization period will be reset to 20 years in each future actuarial valuation. If employers contributed the actuarial contribution rate, the contribution rate would be expected to gradually decrease using a 20-year open amortization period as the funded ratio gradually increased. An open amortization period is expected to gradually improve the funded ratio. However, the funded ratio is not expected to reach 100 percent under this method (assuming no actuarial gains or losses) because the remaining unfunded liability at each future actuarial valuation date is re-amortized over a new 20-year period.



Board Members December 7, 2022 Page 3

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 20.20 percent is significantly lower than the actuarial contribution rate of 39.35 percent.

The portion of the statutory contribution that is applied toward the unfunded liability is the statutory contribution rate minus the employer normal cost rate. The unfunded liability contribution rate from the statutory contribution is lower than the rate calculated using the 20-year level percentage of payroll amortization period and is not high enough to amortize the unfunded liability over any period of time based on current statutory rates.

In 2021, Senate Bill 2043 was passed, which establishes gradual retirement contribution increases to the HPRS. The statutory employer and employee contributions will each increase by 0.5 percent of pay every year from January 1, 2022 to January 1, 2025, ultimately increasing both by 2.0 percent of pay.

The additional employer and employee contributions will gradually reduce the contribution deficit, but will not eliminate the shortfall completely. We recommend additional increases to the statutory contribution rate such that the unfunded liability is amortized over a period of no longer than 30 years.

Reliance on Others

The actuarial valuation was based upon information furnished by the NDPERS Staff, concerning benefits provided by the North Dakota Highway Patrolmen's Retirement System, financial transactions, plan provisions and census data for active members, terminated members, retirees and beneficiaries as of July 1, 2022. 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.

The trend data in the Financial Section and the schedules and other data in this Section are prepared by NDPERS Staff with our input. Data prior to fiscal year 2016 was prepared by NDPERS Staff and the prior actuary. Specifically, these exhibits are:

- · Actuarial Assumptions and Cost Method;
- Changes in Actuarial Assumptions and Cost Method;
- Active Member Valuation Data;
- Retirees and Beneficiaries Added to and Removed from the Rolls;
- · Solvency Test;
- Analysis of Financial Experience;
- · Schedule of Retired Members by Type of Benefit; and
- Schedule of Average Monthly Benefit Payments.



Board Members December 7, 2022 Page 4

Accounting Schedules under GASB Statement Nos. 67 and 68

The total pension liability (actuarial accrued liability) is based on a measurement date of July 1, 2022, using the Entry Age Normal actuarial cost method. A single discount rate of 5.02 percent (which is different than the rate used in the funding actuarial valuation calculations) was used to measure the total pension liability. The single discount rate was based on the expected rate of return on pension plan investments of 6.50 percent and the municipal bond rate of 3.69 percent. All other assumptions and methods used in the funding actuarial valuation for calculation of the actuarial accrued liabilities as of July 1, 2022, were used in the GASB Statement Nos. 67 and 68 actuarial valuation for calculation of the total pension liability for fiscal year ending June 30, 2022.

The net pension liability is measured as the total pension liability, less the amount of the pension plan's fiduciary net position (market value of assets) as of June 30, 2022.

Certification

To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the North Dakota Highway Patrolmen's Retirement System 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. 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 herein.

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

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.

This report reflects the impact of COVID-19 through June 30, 2022. However, this report does not reflect the longer term and still developing future impact of COVID-19, which is likely to further influence demographic experience and economic expectations. We will continue to monitor these developments and their impact.

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.



Board Members December 7, 2022 Page 5 This report should not be relied on for any purpose other than the purpose stated. The signing actuaries are independent of the plan sponsor. Respectfully submitted, Gabriel, Roeder, Smith & Company Bonita J. Wurst Abra D. Hill Bonita J. Wurst, ASA, EA, MAAA, FCA Abra D. Hill, ASA, MAAA, FCA Senior Consultant Consultant

Actuarial Assumptions and Cost Method – Highway Patrolmen's Retirement System (Adopted July 1, 2021)

Mortality Tables:

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

Rates of Separation from Active Membership:

Service Beginning	Service and Age-Based Rates For First Five Years of Service
of Year	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%

Disability Incidence Rates:

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%

Refund of Employee Contributions:

Inactive vested members are assumed to elect a refund of employee contributions in lieu of a deferred pension benefit when it is more valuable than the deferred annuity.

Retirement Rates:

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

	Male & Female							
Age	Rule of 80	Not Rule of 80						
50	100.00%	25.00%						
51	100.00%	25.00%						
52	100.00%	25.00%						
53	100.00%	25.00%						
54	100.00%	25.00%						
55	100.00%	75.00%						
56	100.00%	75.00%						
57	100.00%	75.00%						
58	100.00%	75.00%						
59	100.00%	75.00%						
60+	100.00%	100.00%						

Investment Rate of Return:

6.50% per annum, net of investment expenses

Annual Administrative Expenses:

Prior year expenses, adjusted for inflation

Salary Scale:

Service At					
Beginning	Increase				
of Year	Rate				
0	10.75%				
1	8.75%				
2	6.75%				
Age*					
Under 30	6.75%				
30 - 34	6.75%				
35 - 39	6.00%				
40 - 44	5.50%				
45 - 49	4.75%				
50 - 54	4.50%				
55 - 59	3.75%				
60 - 64	3.75%				
65 - 69	3.75%				
70+	3.75%				

Inflation:

2.25% per annum

Payroll Growth:

3.5% per annum

Marital Status:

It is assumed that 100% of participants have an eligible spouse at the time of retirement or preretirement 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.

Workers' Compensation:

None assumed for disability benefit offset

Indexing for Benefits of Inactive Vested Members:

3% per annum.

Split Service:

Liabilities are held in both plans based on service in each plan, and are based on the actuarial assumptions of the plan in which they are currently active.

Transfers to PERS System:

Annual withdrawal, disability incidence and retirement rate assumptions for members who have transferred to the PERS System follow those specified in the PERS System, and are applied to the benefits held in the HPRS.

Actuarial Cost Method:

Normal cost and the allocation of benefit values between service rendered before and after the 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.

Actuarial Value of Assets:

The calculated value is determined by adjusting the fair value of the 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 a rate of 20% per year.

Benefit Election:

All participants are assumed to elect the 50% joint and survivor annuity

Changes in Actuarial Assumptions and Methods – Highway Patrolmen's Retirement System:

The investment return assumption was decreased from 7.00 to 6.50 percent. There have been no other changes in actuarial assumptions since the previous valuation as of June 30, 2021.

Summary of Plan Provisions – Highway Patrolmen's Retirement System

This section summarizes the major benefit provisions of the North Dakota Highway Public Employees Retirement System as included in the valuation. It is not intended to be, nor should it be, interpreted as a complete statement of all plan provisions. Benefits are set by statute. There are no provisions or policies with respect to automatic and ad hoc post-retirement benefit increases.

1. Normal Service Retirement:

Eligibility: Attainment of age 55 with at least 10 years of eligible employment or with age plus service equal to at least 80 (Rule of 80)

Benefit: 3.6% of final average salary for each of the first 25 years of service plus 1.75% of final average salary for service in excess of 25 years.

2. Early Service Retirement:

Eligibility: Attainment of age 50 with 10 years of eligible employment

Benefit: The Normal Service Retirement Benefit as determined above, reduced by one-

half of one percent for each month before age 55.

3. Disability Benefit:

Eligibility: Accumulation of six months of service and inability to engage in substantial

gainful activity

Benefit: 70% of the member's final average salary at disability minus workers'

compensation, with a minimum of \$100 per month

4. Deferred Vested Retirement:

Eligibility: Ten years of service

Benefit: The Normal Service Retirement Benefit payable at age 55 or the Rule of 80, if

earlier. Vested benefits are indexed at a rate set by the Retirement Board based on the increase in final average salary from date of termination to

benefit commencement date, as follows:

Year Beginning	Average Annual Increase	Three-Year Average Increase
07/01/1994	3.00%	3.01%
07/01/1995	2.00%	2.86%
07/01/1996	2.00%	2.33%
07/01/1997	3.00%	2.33%
07/01/1998	1.80%	2.27%
07/01/1999	1.26%	2.02%
07/01/2000	2.00%	1.69%
07/01/2001	1.81%	1.69%
07/01/2002	1.73%	1.85%
07/01/2003	0.00%	1.18%
07/01/2004	0.00%	0.58%
07/01/2005	4.00%	1.33%
07/01/2006	4.00%	2.67%
07/01/2007	4.00%	4.00%
07/01/2008	4.00%	4.00%
07/01/2009	5.00%	4.33%

07/01/2010	5.00%	4.67%
07/01/2011	2.00%	4.00%
07/01/2012	2.00%	3.00%
07/01/2013	3.00%	2.33%
07/01/2014	3.00%	2.67%
07/01/2015	3.00%	3.00%
07/01/2016	2.00%	2.67%
07/01/2017	0.00%	1.67%
07/01/2018	0.00%	0.67%
07/01/2019	2.00%	0.67%
07/01/2020	2.50%	1.50%
07/01/2021	1.50%	2.00%
07/01/2022	2.00%	2.00%

5. Pre-Retirement Death Benefits:

Eligibility: Ten years of service

Benefit: One of the following options:

- Lump sum payout of member's accumulated contributions with interest
- 50% of the member's accrued benefit (not reduced on account of age) payable for the surviving spouse's lifetime

Eligibility: Less than ten years of service

Benefit: Lump sum payment of member's accumulated contributions with interest.

6. Standard and Optional Forms of Payment:

Standard form of payment:

Monthly benefit for life with 50% of the benefit continuing for the life of the surviving spouse (if any).

Optional forms of payment:

- 100% joint and survivor annuity
- Ten-year certain and life annuity
- Twenty-year certain and life annuity
- A partial lump sum payment in addition to one of the annuity options above
- An actuarially equivalent graduated benefit option with either a one percent or two
 percent increase to be applied the first day of January of each year. Not available for
 disability or early retirements or in combination with a partial lump sum option or a
 deferred normal retirement option.

7. Final Average Salary:

Average of the highest salary received by the member for any 36 months employed during the last 180 months of employment for members terminating on or before December 31, 2019. For members who terminate employment after December 31, 2019, final average salary is the higher of the final average salary calculated on December 31, 2019, or the average salary earned in the three highest periods of twelve consecutive months employed during the last one hundred eighty months of employment.

8. Contributions:

Member contributions as a percent of monthly salary: 13.3%

Member contributions earn interest at an annual rate equal to .5% less than the actuarial interest rate assumption.

State contributions as a percent of monthly salary for each participating member: 19.7%

Changes in Plan Provisions Since the Previous Valuation:

Since the last actuarial valuation, Senate Bill 2043 was passed which establishes gradual retirement contribution increases to the HPRS. The statutory employer and employee contributions will each increase by 0.5% of pay every year from January 1, 2022 to January 1, 2025, ultimately increasing both by 2.0% of pay.

Schedule of Active Member Valuation Data - HPRS 2013 – 2022

/aluation Date 7/1 Number		al Payroll Millions)	Avera	age Annual Pay ¹	% Increase in Avg Pay	
2013	149	\$ 9.3	\$	62,741	11.4%	
2014	156	10.1		65,037	3.7%	
2015	161	10.8		66,921	2.9%	
2016	156	10.5		67,479	0.8%	
2017	151	10.6		70,393	4.3%	
2018	154	10.7		69,723	(1.0)%	
2019	144	10.4		71,904	3.1%	
2020	154	11.4		74,089	3.0%	
2021	151	11.5		76,266	2.9%	
2022	151	12.3		81,240	6.5%	

¹Prior to the actuarial valuation as of July 1, 2017, annual payroll and average annual pay were based on projected annual compensation for the upcoming year.

Beginning with the actuarial valuation as of July 1, 2016, annual payroll and average annual pay are based on annualized payroll as of the actuarial valuation date.

Results prior to 2016 provided by NDPERS prior actuary.

North Dakota Highway Patrolmen's Retirement System Retirees and Beneficiaries Added to and Removed from the Rolls, 2013 – 2022

	Beg of Year			Added to Rolls		Removed from Rolls		End of Year Balance			Average Annual		% Increase in Annual		
Year	No.	Ann. Benefits*		No.	Ann. Benefits*		No. Ann. Benefits		. Benefits*	No.** Ann. Benefits*		Benefit		Benefit	
							Retirem	ent							
2013	116	\$	3,694,098	4	\$	169,974	(4)	\$	(114,418)	116	\$	3,749,654	\$	32,325	1.5%
2014	116		3,749,654	2		138,200	(1)		(64,069)	117		3,823,785		32,682	2.0%
2015	117		3,823,785	16		967,969	(5)		(94,620)	128		4,697,134		36,696	22.8%
2016	128		4,697,134	2		68,562	(7)		(179,032)	123		4,586,664		37,290	-2.4%
2017	123		4,586,664	6		172,703	(2)		(26,340)	127		4,733,027		37,268	3.2%
2018	127		4,733,027	4		194,391	(4)		(60,036)	127		4,867,383		38,326	2.8%
2019	127		4,867,383	10		624,714	(1)		(37,177)	136		5,454,919		40,110	12.1%
2020	136		5,454,919	3		235,356	(6)		(62,027)	133		5,628,248		42,318	3.2%
2021	133		5,628,248	4		253,031	(2)		(67,197)	135		5,814,082		43,067	3.3%
2022	135		5,814,082	2		67,993	(2)		(47,216)	135		5,834,859		43,221	0.4%

^{* \$} in millions.

Results prior to 2016 provided by NDPERS prior actuary.

^{**} Includes alternate payees.

Solvency Test - HPRS 2013 – 2022

A short-term solvency test is one means of checking a system's progress under its funding program. In a short-term solvency test, the plan's present assets (primarily cash and investments) are compared with:

- 1) Active member contributions on deposit
- 2) The liabilities for future benefits to present retired lives; and
- 3) The liabilities for service already rendered by active members.

In a system that has been following level percent of payroll financing, the liabilities for service already rendered by active members (liability 3) should be partially covered by the remainder of present assets. If the system continues using level cost financing, the funded portion of liability 3 will increase over time.

(Amounts in Millions)

Valuation			A	(1) ctive	Re	(2) tirees,		(3) Members		tuarial	Portion (%)	of Present Value	Covered
1.7		Total Actuarial Accrued Liability		Member Contributions		Term Vested and Beneficiaries		(Employer Financed Portion)		alue of ssets	(1)	By Assets (2)	(3)
2013	\$	71.9	\$	13.5	\$	40.5	\$	17.9	\$	49.0	100%	88%	0%
2014		75.5		14.8		41.9		18.8		54.6	100%	95%	0%
2015		80.1		12.3		54.1		13.7		58.9	100%	86%	0%
2016		87.9		14.3		53.9		19.7		61.7	100%	88%	0%
2017		94.0		16.0		57.3		20.7		70.7	100%	95%	0%
2018		98.4		17.4		60.1		20.8		76.1	100%	98%	0%
2019		106.3		18.2		66.3		21.8		80.9	100%	95%	0%
2020		119.3		19.5		72.6		27.2		84.9	100%	90%	0%
2021		123.4		20.7		74.9		27.8		91.4	100%	95%	0%
2022		139.7		22.5		81.2		36.0		96.4	100%	91%	0%

Schedule of Funding Progress

(Amounts in Millions)

	Actuarial Accrued	Actuarial Valuation	Unfunded Actuarial	Ratio of Assets	Active Member	UAAL as Percent of Active
July 1	<u>Liability</u>	of Assets (AVA)	Accrued Liabilities	to AAL	<u>Payroll</u>	Member Payroll
2013	71.9	49.0	22.9	68.2	7.2	279.8
2014	75.5	54.6	20.9	72.3	9.3	223.6
2015	80.1	58.9	21.2	73.5	10.1	209.3
2016	87.9	61.7	26.2	70.2	10.5	248.8
2017	94.0	70.7	23.3	75.2	10.6	219.4
2018	98.4	76.1	22.3	77.4	10.7	207.5
2019	106.3	80.9	25.4	76.1	10.4	245.4
2020	119.3	84.9	34.4	71.2	11.4	301.6
2021	123.4	91.4	31.9	74.1	11.5	277.2
2022	139.7	96.4	43.2	69.0	12.3	352.5

Analysis of Financial Experience - HPRS

Changes in the Contribution Rate During Years Ended June 30 Resulting from Differences Between Assumed Experience and Actual Experience

Plan Year Ended	June 30, 2019	June 30, 2020	June 30, 2021	June 30, 2022
Employer Cost Rate - Beginning of Year	25.50%	29.38%	33.77%	32.16%
Plan Change	1.12	0.00	0.00	0.00
Plan Experience	(0.14)	(1.25)	(1.31)	(0.44)
Change in Amortization Schedule	0.00	0.00	0.00	0.00
Assumption Changes	3.08	4.9	0.00	6.99
Investment Loss/(Gain)	(0.48)	0.08	(1.39)	0.06
Contribution Loss/(Gain)	0.30	0.66	1.09	0.58
Employer Cost Rate - End of Year	29.38%	33.77%	32.16%	39.35%



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December 7, 2022

Board Members Retirement Plan for Employees of Job Service North Dakota Bismarck, North Dakota

Members of the Board:

At your request, we have performed an actuarial valuation, which includes actuarial valuation results for funding purposes and separate actuarial valuation results for accounting purposes for the Retirement Plan for Employees of Job Service North Dakota ("Job Service Plan") as of July 1, 2022. The purpose of the funding actuarial valuation, which is performed annually, is to determine the funding status and actuarial employer contribution rate for the Job Service Plan. The actuarial valuation was performed at the request of the Board and is intended for use by the Board and the Job Service Plan and those designated by the Board and the Job Service Plan. This report may be provided to parties other than the Board and the Job Service Plan only in its entirety and only with the permission of the Board and the Job Service Plan. GRS is not responsible for reliance upon this actuarial valuation for any other purpose, or by any other party.

Actuarial Assumptions and Methods

The actuarial valuation report was prepared using actuarial assumptions adopted by the Board as authorized under North Dakota Administrative Code Section 71-02. All actuarial assumptions used in this report are reasonable for the purposes of this actuarial valuation.

Most of the actuarial assumptions used in the actuarial valuation as of July 1, 2022 were based on an experience review for the 5-year period ending July 1, 2019. The actuarial assumptions were first adopted for use commencing with the July 1, 2020 actuarial valuation. There was a decrease in the investment return assumption, from 3.75 percent to 3.00 percent, since the previous actuarial valuation.

In a letter dated July 1, 2022, GRS determined that an investment return assumption of 3.00 percent can be deemed reasonable for this valuation. However, we caution that 3.00 percent is really an upper bound. If capital market assumptions remain at the levels documented in the July 1, 2022 letter, the 3.00 percent return assumption might not comply with actuarial standards for the July 1, 2023 valuation.

The Frozen Initial Liability Actuarial Cost Method is used to determine the actuarial employer contribution rate, which is equal to the normal cost plus the payment required to amortize the initial unfunded actuarial accrued liability over a selected period of years. The normal cost is determined by calculating the total present value of all future benefits, subtracting the outstanding balance (if any) of the initial unfunded actuarial accrued liability, subtracting the actuarial value of assets and determining payments (not less than zero) that are a level percent of pay over the future working lifetime of all participants.

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

Board Members December 7, 2022 Page 2

The actuarial assumptions and methods used, including the economic and demographic assumptions, the actuarial cost method and the asset valuation method, meet the Actuarial Standards of Practice issued by the Actuarial Standards Board for the funding of public sector pension plans and are set by the Board. Assumptions and methods required under GASB Statement Nos. 67 and 68 were used in the preparation of the accounting disclosures and schedules required by GASB Statement Nos. 67 and 68.

Benefit Provisions

There were no changes in benefit provisions since the previous actuarial valuation as of July 1, 2021.

Participant Data

A total of 1 active member was included in the actuarial valuation as of July 1, 2022. Between the 2021 and 2022 actuarial valuations, the number of active employees decreased from 3 to 1. The average annual valuation pay increased from \$58,392 to \$61,332 between the 2021 and 2022 actuarial valuation. The active member was eligible for normal retirement as of July 1, 2022.

The number of benefit recipients decreased from 177 to 175, since the last actuarial valuation. The average monthly benefit paid by Job Service and excluding benefit amounts paid by the insurer increased by 7.9 percent, from \$2,193 to \$2,366. During the year ending June 30, 2022, there were 2 members awarded a benefit. A 5.9 percent cost of living adjustment was granted in December 2021.

There was 1 inactive member as of July 1, 2022.

Actuarial Valuation Assets

On a market value basis, the Retirement Plan for Employees of Job Service North Dakota assets had an investment return of approximately -5.9 percent (net of investment expenses). On an actuarial value of asset basis, the Retirement Plan for Employees of Job Service North Dakota had an estimated net asset rate of return of 1.73 percent, which compares to the prior year assumed rate of return of 3.75 percent.

The actuarial value of assets is currently 107 percent of the market value of assets. There are \$6,417,615 in net asset losses currently being deferred that will be phased into the actuarial value of assets over the next 4 years.

Statutory and Actuarial Employer Contributions

The "actuarial contribution" under the Frozen Initial Liability Actuarial Cost Method is the normal cost plus the payment required to amortize the unfunded initial actuarial accrued liability over a selected period of years. The normal cost is determined by calculating the total present value of all future benefits, subtracting the outstanding balance (if any) of the unfunded initial actuarial accrued liability, subtracting the actuarial value of assets and determining payments (not less than zero) that are a level percent of pay over the future working lifetime of all participants. In the absence of an unfunded initial actuarial accrued liability, the Frozen Initial Liability Actuarial Cost Method is the same as the Aggregate Cost Method.



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An "actuarial contribution" will be determined when the plan is not in surplus and will be based on a funding policy adopted by the Employer.

Reliance on Others

The actuarial valuation was based upon information furnished by the NDPERS Staff, concerning benefits provided by the Retirement Plan for Employees of Job Service North Dakota, financial transactions, plan provisions and census data for active members, terminated members, retirees and beneficiaries as of July 1, 2022. 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.

The trend data in the Financial Section and the schedules and other data in this Section are prepared by NDPERS Staff with our input. Data prior to fiscal year 2016 was prepared by NDPERS Staff and the prior actuary. Specifically, these exhibits are:

- Actuarial Assumptions and Cost Method;
- · Changes in Actuarial Assumptions and Cost Method;
- Active Member Valuation Data;
- · Retirees and Beneficiaries Added to and Removed from the Rolls;
- Solvency Test;
- Analysis of Financial Experience;
- · Schedule of Retired Members by Type of Benefit; and
- Schedule of Average Monthly Benefit Payments.

Accounting Schedules under GASB Statement Nos. 67 and 68

The total pension liability (actuarial accrued liability) is based on a measurement date of July 1, 2022, under the Entry Age Normal actuarial cost method. A single discount rate of 3 percent, which is the same rate that is used in the funding actuarial valuation calculations, was used to measure the total pension liability.

All other assumptions and methods used in the funding actuarial valuation for calculation of the actuarial accrued liabilities as of July 1, 2022, were used in the GASB Statement Nos. 67 and 68 actuarial valuation for calculation of the total pension liability for fiscal year ending June 30, 2022.

The net pension liability is measured as the total pension liability, less the amount of the pension plan's fiduciary net position (market value of assets) as of June 30, 2022.

Certification

To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the Retirement Plan for Employees of Job Service North Dakota 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. 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 herein



North Dakota Public Employees Retirement System – Actuarial Section Actuary's Certification Letter Job Service Retirement Plan

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

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.

This report reflects the impact of COVID-19 through June 30, 2022. However, this report does not reflect the longer term and still developing future impact of COVID-19, which is likely to further influence demographic experience and economic expectations. We will continue to monitor these developments and their impact.

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.

This report should not be relied on for any purpose other than the purpose stated.

The signing actuaries are independent of the plan sponsor.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

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

Bonita J. Wurst

Senior Consultant

Abra D. Hill, ASA, MAAA, FCA

Abra D. Hill

Consultant



Actuarial Assumptions and Cost Method Retirement Plan for Employees of Job Service of North Dakota

Actuarial Cost Method:

There is a wide range of funding methods that are considered acceptable by the actuarial profession and meet government standards. The frozen initial liability actuarial cost method is the method used currently for the Retirement Plan for Employees of Job Service North Dakota.

The "annual contribution" under this method is the normal cost plus the payment required to amortize the unfunded initial actuarial accrued liability over a selected period of years. The normal cost is determined by calculating the total value of all future benefits, subtracting the outstanding balance (if any) of the unfunded initial actuarial accrued liability, subtracting the actuarial value of assets, and determining payments (not less than zero) that are a level percent of pay over the future working lifetime of all participants. In the absence of an unfunded initial liability actuarial accrued liability, the frozen initial liability actuarial cost method is the same as the aggregate cost method.

The "scheduled contribution" will be determined when the plan is not in surplus and will be based on a funding policy adopted by the Employer.

Asset Valuation Method:

The asset value indicates the portion of the benefits already funded. The method used to determine this value is called the actuarial asset valuation method. The actuarial asset valuation method is as follows:

The calculated value is determined by adjusting the fair 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 first adopted by the Board to 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 Assumptions:

The information and analysis is used in selecting each assumption that has a significant effect on this actuarial valuation is shown in our report titled Experience Review: July 2014 - June 2019.

Mortality Tables:

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.

The mortality assumptions are as follows:

Туре	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%	

Disability Incidence Rates:

Sample rates are as follows:

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%

Withdrawal Rates:

There are no withdrawal rates for Job Service members.

Retirement Rates:

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

<u>Age</u>	<u>Rates</u>
50-64	15.00%
65+	100.00%

Salary Scale:

3.5% per year.

Post-retirement cost-of-living adjustment:

2.25% per year.

Marital Status:

It is assumed that 85 percent of participants have an eligible spouse at the time of retirement or pre-retirement death. The male spouse is assumed to be four 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

Rate of Return on Assets/Discount Rate:

3.00% per year, compounded annually, net of investment expenses

Future Benefit Accruals:

One year of credited service per year per active employee included in the valuation

Annual Administrative Expenses:

Prior year expenses, adjusted for inflation

Benefit Election:

55% of participants are assumed to elect the Single Life Annuity with 120 month guarantee, and 45% are assumed to elect the 55% Contingent Annuitant Option.

Changes in Actuarial Assumptions or Cost Method:

The Board approved the following changes to the actuarial assumptions beginning with the July 1, 2022 actuarial valuation:

 The investment return assumption was lowered from 3.75 to 3.00 percent for the July 1, 2022 valuation

All other actuarial assumptions used in the July 1, 2022 are the same as the last actuarial valuation as of July 1, 2021.

Summary of Plan Provisions – Job Service Retirement System

This section summarizes the major benefit provisions of the Retirement Plan for Employees of Job Service as included in the valuation. It is not intended to be, nor should it be, interpreted as a complete statement of all plan provisions. Benefits are established through the plan document, as amended. The system provides a post-retirement cost-of-living adjustment each year, based on the Consumer Price Index

1. Normal Retirement

Age Requirement: 65 Service Requirement: None

Benefit: Average monthly earnings multiplied by the sum of:

a. 1.5% times credited service up to five years, plus

b. 1.75% times credited service between six and ten years, plus

c. 2.00% times credited service in excess of ten years

Average Monthly Earnings - monthly average earnings during the highest three consecutive years of employment

2. Optional Retirement:

Age and Service Requirements:

Age 62 with 5 years of credited service, or Age 60 with 20 years of credited service, or Age 55 with 30 years of credited service.

Benefit: Accrued normal retirement benefit.

3. Early Retirement:

Age Requirement: Ten years before normal or optional retirement age

Service Requirement: Same as optional retirement

Benefit: Accrued normal retirement benefit, reduced if payments begin before

normal or optional retirement

4. Disability Benefit:

Age Requirement: None

Service Requirement: Five years of credited service

Benefit: Greater or accrued normal retirement benefit or 40% of average monthly

earnings

5. Deferred Vested Retirement:

Age Requirement: None

Service Requirement: Five years of credited service

Benefit: Accrued normal retirement benefit payable at normal or optional

retirement. After attainment of early retirement age, reduced benefits

may not be paid.

Employees who meet the requirements for a vested benefit may elect to receive a return of their accumulated employee contributions (including interest at 4% per year) in lieu of all other benefits under the plan.

6. Refund of Member Contributions:

Employees who do not meet the requirements for a vested benefit will receive a return of their accumulated employee contributions (including interest at 4% per year).

7. Pre-Retirement Death Benefits:

Married participants or single participants with eligible children

Surviving Spouse's Benefit:

Age Requirement: None

Service Requirement: None

Benefit: 55% of the greater of (a) or (b):

- (a) Accrued normal retirement benefit
- (b) The lesser of (1) or (2)
 - (1) 40% of average monthly earnings
 - (2) Normal retirement benefit based on credited service to age 60

Children's Benefit:

Provided for children under age 18 (age 22 if a full-time student) note: the actuarial valuation does not consider the benefits for expected surviving children

Single participants with no eligible children

120 Payment Guarantee:

Age Requirement: None

Service Requirement: Five years of credited service

Benefit: Accrued normal retirement benefit payable for 120 months.

Not payable if surviving spouse or children's benefit is

payable.

Lump Sum Benefit:

Age Requirement: None

Service Requirement: None

Benefit: Accumulated employee contributions (including interest at

4% per year). Not payable if the surviving spouse, children's benefit or 120 payment guarantee is in effect

8. Post-Retirement Death Benefits:

Based on form of payment elected by the pensioner.

9. Post-Retirement Cost-of-Living Adjustment:

Based on the Consumer Price Index as approved by the Board.

10. Participation:

Plan participant before October 1, 1980

11. Credited Service:

Monthly salaried employment in a probationary or permanent status including only: service for which contributions were made (including purchased service), eligible military service and unused sick leave.

12. Contribution Rate:

Employee: 7% of average monthly earnings (4% picked up by employer)

Employer: remaining scheduled contribution, if any.

13. Normal and Optional Forms of Payment:

- Single Life Annuity with 120 month guarantee (Normal);
- Single Life Annuity with 180 month guarantee;
- Single Life Annuity with 240 month guarantee;
- 55% Contingent Annuitant Option;
- 75% Contingent Annuitant Option;
- 100% Contingent Annuitant Option; and
- Uniform Income Option

Changes in Plan Provisions Since the Previous Valuation:

There have been no changes in plan provisions since the previous valuations as of July 1, 2021.

Schedule of Active Member Valuation Data Job Service Retirement Plan 2013 – 2022

Valuation Date 7/1	Number	Annual Payroll (\$ in Millions)	Average Annual Pay ¹	% Increase in Avg Pay
2013	15	\$ 0.8	\$ 56,173	2.3%
2014	13	0.8	60,819	8.3%
2015	11	0.7	63,402	4.2%
2016	9	0.6	62,743	(1.0)%
2017	8	0.5	62,321	(0.7)%
2018	7	0.4	59,522	(4.5)%
2019	7	0.4	59,507	(0.0)%
2020	5	0.3	62,921	5.7%
2021	3	0.2	58,392	(7.2)%
2022	1	0.1	61,332	5.0%

¹Prior to the actuarial valuation as of July 1, 2017, annual payroll and average annual pay are based on projected annual compensation for the upcoming year. Beginning with the actuarial valuation as of July 1, 2016, annual payroll and average annual pay are based on annualized payroll as of the actuarial valuation date.

Results prior to 2016 provided by NDPERS prior actuary.

Retirement Plan for Employees of Job Service North Dakota Retirees and Beneficiaries (Including Traveler's Annuitants) Added to and Removed from the Rolls, 2013 – 2022

Plan Beg o		of Ye	of Year		Year Added to Rolls		Remov	Removed from Rolls E		End of Year Balance			Average Annual	% Increase in Total Ann.
Year	No.	Anr	n. Benefits*	No.	Ann.	Benefits*	No.	Ann. Benefits*	No.**	An	n. Benefits*	1	Benefit	Benefits
							Retirer	nent						
2013	212	\$	4,389,159	8	\$	273,087	(7)	(\$250,470)	213	\$	4,411,776	\$	20,713	0.5%
2014	213		4,411,776	6		300,806	(6)	(86,706)	213		4,625,876		21,718	4.9%
2015	213		4,625,876	2		106,825	(9)	(119,238)	206		4,613,463		22,395	-0.3%
2016	206		4,613,463	7		119,994	(7)	(126,408)	206		4,607,049		22,364	-0.1%
2017	206		4,607,049	2		110,266	(9)	(189,860)	199		4,527,455		22,751	-1.7%
2018	199		4,527,455	7		239,216	(10)	(169,016)	196		4,597,655		23,457	1.6%
2019	196		4,597,655	0		142,105	(11)	(161,369)	185		4,578,391		24,748	-0.4%
2020	185		4,578,391	7		210,459	(11)	(267,983)	181		4,520,867		24,977	-1.3%
2021	181		4,520,867	5		289,805	(9)	(153,303)	177		4,657,369		26,313	3.0%
2022	177		4,657,369	3		424,014	(5)	(112,290)	175		4,969,094		28,395	6.7%

^{*} Includes cost of living adjustment of 3.6% for retirement benefits in pay status as of July 1, 2012, 1.7% as of July 1, 2013, 1.5% as of July 1, 2014, 1.7% as of July 1, 2015, 0.3% as of July 1, 2017, 2.0% as of July 1, 2018, 2.8% as of July 1, 2019, 1.6% as of July 1, 2020, 1.3% as of July 1, 2021, and 5.9% as of July 1, 2022. Excludes benefits paid by the insurer.

Results prior to 2016 provided by NDPERS prior actuary.

Numbers may not add due to rounding.

^{**} Includes 2 alternate payees.

Solvency Test – Job Service Retirement Plan 2013 – 2022

A short-term solvency test is one means of checking a system's progress under its funding program. In a short-term solvency test, the plan's present assets (primarily cash and investments) are compared with:

- 1) The liabilities for future benefits to present retired lives; and
- 2) The liabilities for future benefits to inactive vested employees not in pay status; and
- 3) The liabilities for future benefits to current active employees.

In a system that has been following level percent of payroll financing, the liabilities for service already rendered by active members (liability 3) should be partially covered by the remainder of present assets. If the system continues using level cost financing, the funded portion of liability 3 will increase over time.

(Amounts in Millions)

Valuation		(1) Retirees,	(2) Inactive Vested Employee	(3)	Actuarial	Portion (%)	of Present Value	Covered
Date	Present Value of	Term Vested and	(Not in	Active	Value of		by Assets	
7/1	Future Benefits	Beneficiaries	Pay Status)	Members	Assets	(1)	(2)	(3)
2013	\$66.4	\$56.7	\$1.9	\$7.8	\$76.3	100%	100%	100%
2014	65.5	57.9	0.0	7.6	78.2	100%	100%	100%
2015	63.6	56.2	0.0	7.4	79.2	100%	100%	100%
2016	61.4	55.0	0.0	6.4	81.0	100%	100%	100%
2017	63.8	57.4	0.0	6.4	98.4	100%	100%	100%
2018	68.3	62.1	0.0	6.1	98.4	100%	100%	100%
2019	66.3	60.1	0.0	6.2	97.8	100%	100%	100%
2020	64.2	59.4	0.0	4.8	97.0	100%	100%	100%
2021	64.9	62.1	0.0	2.8	95.9	100%	100%	100%
2022	70.5	68.6	0.7	1.2	92.6	100%	100%	100%

As of July 1, 2017, the asset smoothing method was revised and net deferred asset gains attributable to fiscal years 2016 and prior were fully recognized.

Schedule of Funding Progress

(Amounts in Millions)

	Present Value	Valuation Assets	Unfunded Present Value	Ratio of Assets	Active Member	UPVFB as Percent of
July 1	of Future Benefits	<u>(AVA)</u>	of Future Benefits	to PVFB	<u>Payroll</u>	Active Member Payroll
2013	66.0	76.3	(10.3)	115.6%	1.0	(1,016.4)%
2014	65.2	78.2	(13.0)	119.9%	0.8	(1,538.9)%
2015	63.6	79.2	(15.6)	124.5%	0.8	(1,969.7)%
2016	61.4	81.0	(20.0)	132.0%	0.6	(3,472.6)%
2017	63.8	98.4	(34.5)	154.1%	0.5	(6,926.6)%
2018	68.3	98.4	(30.1)	144.1%	0.4	(7,229.0)%
2019	66.3	97.8	(31.5)	147.5%	0.4	(7,564.2)%
2020	64.2	97.0	(32.7)	151.0%	0.3	(10,406.6)%
2021	64.9	95.9	(30.9)	147.7%	0.2	(17,663.7)%
2022	70.5	92.6	(22.1)	131.3%	0.1	(36,012.6)%

Analysis of Financial Experience - Job Service Retirement Plan

Changes in the Contribution Rate During Years Ended June 30 Resulting from Differences Between Assumed Experience and Actual Experience

Plan Year Ended	June 30, 2019	June 30, 2020	June 30, 2021	June 30, 2022
Employer Cost Rate - Beginning of Year	0.00%	0.00%	0.00%	0.00%
Plan Change	0.00	0.00	0.00	0.00
Plan Experience	0.00	0.00	0.00	0.00
Change in Amortization Schedule	0.00	0.00	0.00	0.00
Assumption Changes	0.00	0.00	0.00	0.00
Investment Loss/(Gain)	0.00	0.00	0.00	0.00
Contribution Loss/(Gain)	0.00	0.00	0.00	0.00
Employer Cost Rate - End of Year	0.00%	0.00%	0.00%	0.00%



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December 7, 2022

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

Members of the Board:

At your request, we have performed an actuarial valuation, which includes actuarial valuation results for funding purposes and separate actuarial valuation results for accounting purposes for the North Dakota Retiree Health Insurance Credit Fund ("RHIC") as of July 1, 2022. The purpose of the funding actuarial valuation, which is performed annually, is to determine the funding status and actuarial employer contribution rate for the 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 reliance upon this valuation for any other purpose, or by any other party.

Actuarial Assumptions and Methods

The actuarial valuation 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 reasonable for the purposes of this actuarial valuation.

Most of the actuarial assumptions used in the actuarial valuation as of July 1, 2022 were based on an experience review for the 5-year period ending July 1, 2019. The actuarial assumptions were first adopted for use commencing with the July 1, 2020 actuarial valuation. There was a decrease in the investment return assumption, from 6.50 percent to 5.75 percent, since the previous actuarial valuation.

In a letter dated July 1, 2022, GRS determined that an investment return assumption of 5.75 percent can be deemed reasonable for this valuation. However, we caution that 5.75 percent is really an upper bound. If capital market assumptions remain at the levels documented in the July 1, 2022 letter, the 5.75 percent return assumption might not comply with actuarial standards for the July 1, 2023 valuation.

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 as a level percent of closed group (decreasing) payroll. The remaining amortization period as of the July 1, 2022 actuarial valuation is 17 years.

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The actuarial assumptions and methods used, including the economic and demographic assumptions, the actuarial cost method and the asset valuation method, meet the Actuarial Standards of Practice issued by the Actuarial Standards Board for the funding of public sector pension plans and are set by the Board. Assumptions and methods required under GASB Statement Nos. 74 and 75 were used in the preparation of the accounting disclosures and schedules required by GASB Statement Nos. 74 and 75.

Benefit Provisions

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. There were no changes in plan provisions since the previous valuation.

Participant Data

A total of 19,018 active members were included in the actuarial valuation as of July 1, 2022. Between the 2021 and 2022 actuarial valuations, the number of active employees decreased by 2,049 members, or 9.7 percent. The average annual actuarial valuation pay increased by 4.9 percent, from \$51,752 to \$54,286 between the 2021 and 2022 actuarial valuation.

The number of eligible current benefit recipients increased from 13,697 to 14,290, or 4.3 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 \$90.

A total of 7,639 terminated vested members were included in the actuarial valuation as of July 1, 2022. Terminated vested liabilities were first reflected in the July 1, 2020 actuarial valuation.

Actuarial Valuation Assets

On a market value basis, RHIC assets had an investment return of approximately -14.72 percent (net of investment expenses). On an actuarial value of asset basis, RHIC assets had an investment return of approximately 5.2 percent, which compares to the prior year assumed rate of return of 6.50 percent.

The actuarial value of assets is currently 110.5 percent of the market value of assets. There are \$16,161,761 in net asset losses currently being deferred that will be phased into the actuarial value of assets over the next 4 years.



Board Members December 7, 2022 Page 3

Statutory and Actuarial 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 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 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 1.35 percent.

The statutory contribution is not 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 the expected future service of the current active members (approximately 60 years).

Reliance on Others

The actuarial valuation was based upon information furnished by the NDPERS Staff, concerning benefits provided by the North Dakota Retiree Health Insurance Credit Fund, financial transactions, plan provisions and census data for active members, terminated members, retirees and beneficiaries as of July 1, 2022. 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.

The trend data in the Financial Section and the schedules and other data in this Section are prepared by NDPERS Staff with our input. Data prior to fiscal year 2016 was prepared by NDPERS Staff and the prior actuary. Specifically, these exhibits are:

- · Actuarial Assumptions and Cost Method;
- Changes in Actuarial Assumptions and Cost Method;
- · Active Member Valuation Data;
- · Retirees and Beneficiaries Added to and Removed from the Rolls;
- Solvency Test;
- Analysis of Financial Experience;
- Schedule of Retired Members by Type of Benefit; and
- · Schedule of Average Monthly Benefit Payments.

Accounting Schedules under GASB Statement Nos. 74 and 75

The total OPEB liability (actuarial accrued liability) is based on a measurement date of July 1, 2022, under the Entry Age Normal actuarial cost method. A single discount rate of 5.39 percent (which is different than the rate used in the funding actuarial valuation calculations) was used to measure the total OPEB liability. The single discount rate was based on the expected rate of return on pension plan investments of 5.75 percent and the municipal bond rate of 3.69 percent. All other assumptions and methods used in the funding actuarial valuation for calculation of the actuarial accrued liabilities as of July 1, 2022, were used in



Board Members December 7, 2022 Page 4

the GASB Statement Nos. 74 and 75 actuarial valuation for calculation of the total OPEB liability for fiscal year ending June 30, 2022.

The net OPEB liability is measured as the total OPEB liability, less the amount of the OPEB plan's fiduciary net position (market value of assets) as of June 30, 2022.

Certification

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. 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 herein.

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

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.

This report reflects the impact of COVID-19 through June 30, 2022. However, this report does not reflect the longer term and still developing future impact of COVID-19, which is likely to further influence demographic experience and economic expectations. We will continue to monitor these developments and their impact.

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.

This report should not be relied on for any purpose other than the purpose stated.

The signing actuaries are independent of the plan sponsor.

Respectfully submitted,

Gabriel, Roeder, Smith & Company

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

Bonito J. Wurst

Senior Consultant

Abra D. Hill, ASA, MAAA, FCA

Abra O. Hill

Consultant

Actuarial Assumptions and Cost Method Retiree Health Insurance Credit Fund

Mortality Tables:

The mortality assumptions are as follows:

Туре	Assumption	Male Scaling	Female Scaling
		Factor	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%

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

	Healthy M	ortality	Disabled N	Nortality		
	Future	Life	Future	Life		
	Expectancy (Ye	ears) in 2022	Expectancy (Years) in 2022			
Age	Male	Female	Male	Female		
20	67.20	70.66	49.76	54.36		
25	61.82	65.26	45.04	49.22		
30	56.45	59.86	40.27	44.13		
35	51.13	54.49	35.87	39.44		
40	45.85	49.15	31.77	35.14		
45	40.59	43.82	27.84	31.12		
50	35.47	38.62	24.18	27.42		
55	30.58	33.64	20.91	24.12		
60	25.87	28.76	18.01	21.08		
65	21.37	24.01	15.32	18.01		
70	17.11	19.46	12.71	14.79		
75	13.17	15.18	10.13	11.63		
80	9.70	11.34	7.73	8.82		
85	6.86	8.10	5.69	6.55		
90	4.78	5.62	4.07	4.88		
95	3.36	3.92	2.93	3.54		
100	2.40	2.75	2.10	2.48		
105	1.81	2.01	1.56	1.79		

Withdrawal Rates:

Different withdrawal rates are applied to the active members of the Main and DC Systems, Highway Patrol, Judges and Law Enforcement. Rates for the Main and Law Enforcement Systems are detailed below. The withdrawal assumptions applied to the active members in the other groups are detailed in the valuation report for their retirement system.

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		Main System	1	P	ublic Safety	
of Year			A	ge		
	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	Ag	ge-Based Ra	tes Only Aft	er First Five Ye	ars of Servi	ce
	1	Main System	1	P	ublic Safety	P
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%	

5.00%

No pre-retirement termination is assumed for Judges.

3.30%

Disability Incidence Rates:

Rates of disability were as follows:

60+

<u>Age</u>	<u>Male</u>	<u>Female</u>
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%

Retirement Rates:

Different retirement rates are applied to the active members of the Main and DC Systems, Highway Patrol, Judges, and Law Enforcement. Retirement rates for the Systems are detailed below. The retirement rates applied to the active members of the other groups are detailed in the valuation report for the retirement system.

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

		Main Sys	tem	Pub	lic Safety		udges	High	way Patrol
Age I	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%
9	2%	9%		25%	10%	10%	2%	100%	75%
50	2%	9%		25%	10%	10%	2%	100%	100%
51	4%	15%		25%	10%	10%	2%		
52	8%	20%		50%	25%	10%	2%		
53	8%	20%		50%	25%	10%	2%		
54	8%	20%		50%	25%	10%	2%		
5		35%	20%	50%	50%	100%	10%		
66		35%	20%	50%	50%	100%	10%		
57		20%	15%	50%	50%	100%	10%		
68		20%	15%	50%	50%	100%	10%		
69		20%	15%	50%	50%	100%	10%		
0		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%						

Unreduced retirement is achieved when reaching age 65 or meeting the Rule of 85.

Participation Rates:

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

Benefit Status of Eligible	Action	2000/1000000000000000000000000000000000
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%

Benefit Election:

Main and DC Systems and Law Enforcement:

- 50% of participants are assumed to elect the Single Life Annuity
- 45% are assumed to elect the 50% Contingent Annuitant Option,
- 5% of new retirements are assumed to elect a Refund of Member Contributions

Valued without reduction for optional form of payment

Judges and HPRS:

 100% of retirees will elect a 100% joint and survivor form of pension from the retirement system

Valued without reduction for optional form of payment

Interest Rate:

5.75% per annum, net of investment expenses

Inflation:

2.25% per annum

Annual Administrative Expenses:

Prior year expenses, adjusted for inflation

Marital Status:

It is assumed that 75% of participants in the Main System and Law Enforcement and 100% of Judges and Highway Patrol participants have an eligible spouse at the time of retirement or preretirement 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

Payroll Growth:

3.5% per annum

Actuarial Cost Method:

Normal cost and the allocation of benefit values between service rendered before and after the 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

Asset Valuation Method:

Calculated by determining the adjusted fair 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% per year.

Changes in Actuarial Assumptions or Cost Method:

The long term rate of return was reduced from 6.5% to 5.75% for the July 1, 2022 valuation. All other actuarial assumptions remain unchanged.

Summary of Plan Provisions - Retiree Health Insurance Credit Fund

This section summarizes the major benefit provisions of the North Dakota Public Employees Retirement System Retiree Health Insurance Credit Fund as included in the valuation. It is not intended to be, nor should it be, interpreted as a complete statement of all plan provisions. Benefits are set by statute. There are no provisions or policies with respect to automatic and ad hoc post-retirement benefit increases.

1. Covered Employees:

Members of the Public Employees Retirement System, the Highway Patrolmen's Retirement System and the Defined Contribution Retirement Plan. Members first enrolled in the NDPERS Main 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 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, DC Systems, and Judges: Age 65, or at any age with age plus service equal to at least 85 (rule of 85). For member 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)

Law Enforcement: 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 on August 1, 2015.

Service Requirement:

Main, DC Systems, and Judges: None

Highway Patrol: 10 years

Law Enforcement: 3 consecutive years

Effective July 1, 2015, the Retiree Health Insurance Credit benefit may be used for any health insurance and/or prescription drug plan for which a retiree incurs an eligible premium expense. In addition, the benefit can also be applied toward NDPERS administered dental, vision, and long-term care plan premium expenses. Effective August 1, 2019 the benefit may be used for any eligible health, prescription drug plan, dental, vision, or long term care plan premium expense.

Benefit Amount: A monthly stipend equal to \$5.00 times years of service.

4. Early Retirement:

Age Requirement:

Main, DC Systems, and Judges: Age 55

Highway Patrol and Law Enforcement: Age 50

Service Requirement:

Main, DC Systems, and Law Enforcement: 3 years

Judges: 5 years

Highway Patrol: 10 years

Benefit:

Main, 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, minimum age 60 (if applicable)

Highway Patrol and Law Enforcement: 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 Law Enforcement

5. Disability Retirement:

Age Requirement: None

Service Requirement: 6 months

Other Requirements: As required by applicable pension plan

Benefit: Same as Normal Retirement Benefit

6. Pre-Retirement Death Benefits:

Age Requirement: None

Service Requirement:

Main, DC Systems, and Law Enforcement: 3 years

Judges: 5 years

Highway Patrol: 10 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 Benefits:

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 member's Retirement Plan, 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 Plan are paid under 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 member's defined contribution account.

Plan Amendments - Retiree Health Insurance Credit Fund

There have been no changes in plan provisions since the previous actuarial valuation as of June 30, 2021.

Retired Members and Beneficiaries, Average Annual Benefit and Active Member/Retiree Comparison Retiree Health Insurance Credit Fund 2013 – 2022

Valuation Date July 1,	Number of Active Members*	Number of Terminated Vested Members ¹	Number of Retired Members	verage al Benefit	Number of Active Members Per Retiree
2013	21,785		4,635	\$ 1,428	4.7
2014	22,642		4,828	1,428	4.7
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

^{*} Number of active members prior to 7/1/2014 is approximated based on figures from the NDPERS Comprehensive Annual Financial Report.

¹Terminated vested member liabilities first reflected in 2020.

Schedule of Funding Progress

(Amounts in Millions)

	Actuarial Value	Actuarial Accrued	AVA Unfunded	AVA Funded	Market Value	MVA Unfunded	MVA Funded
July 1	of Assets	<u>Liability</u>	AAL (UAAL)	Ratio	of Assets (MVA)	AAL (UAAL)	Ratio
2013	66.0	114.1	48.1	57.8	75.6	38.5	66.2
2014	77.9	116.6	38.7	66.8	92.0	24.6	78.9
2015	89.4	128.9	39.5	69.4	99.1	29.8	76.9
2016	97.8	176.6	78.8	55.4	102.9	73.7	58.3
2017	114.6	196.7	82.1	58.3	117.6	79.1	59.8
2018	126.2	206.7	80.5	61.1	127.9	78.8	61.9
2019	137.6	217.8	80.2	63.2	137.5	80.3	63.1
2020	148.5	229.7	81.2	64.6	145.6	84.1	63.4
2021	163.3	238.0	74.7	68.6	182.3	55.6	76.6
2022	170.6	264.0	93.3	64.6	154.5	109.5	58.5

Assets and Actuarial Accrued Liabilities Retiree Health Insurance Credit Fund 2013-2022

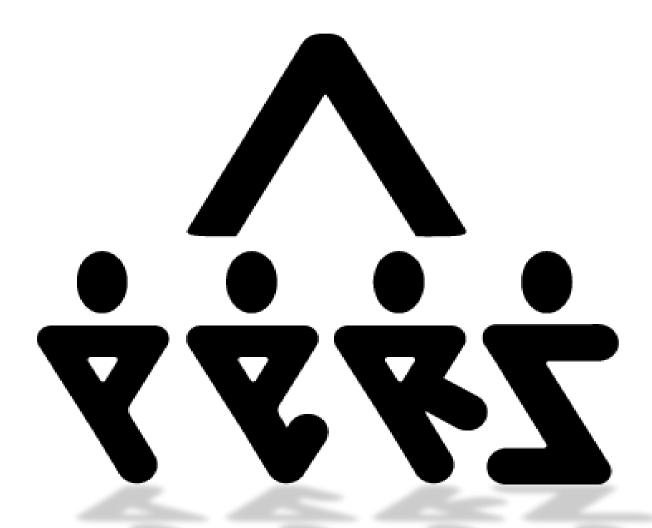
(Amounts in Millions)

			(,			
			Assets as of % of Total	Unfunded		Total Unfunded
	Total Actuarial	Total Actuarial	Actuarial Accrued	Actuarial Accrued	Total	Liability as
July 1	Accrued Liability	Value of Assets	<u>Liability</u>	<u>Liability</u>	<u>Payroll</u>	% of Payroll
2013	114.1	66.0	57.8	48.1	914.4	5.3
2014	116.6	77.9	66.8	38.7	1,001.2	3.9
2015	128.9	89.4	69.4	39.5	1,052.7	3.8
2016	176.6	97.8	55.4	78.8	1,142.4	6.9
2017	196.7	114.6	58.3	82.1	1,157.5	7.1
2018	206.7	126.2	61.1	80.5	1,170.9	7.2
2019	217.8	137.6	63.2	80.2	1,195.3	7.2
2020	229.7	148.5	64.6	81.2	1,140.0	7.4
2021	238.0	163.3	68.6	74.7	1,090.0	6.8
2022	264.0	170.6	64.6	93.3	1,032.4	9.0

Analysis of Financial Experience -Retiree Health Insurance Credit Fund

Changes in the Contribution Rate During Years Ended June 30 Resulting from Differences Between Assumed Experience and Actual Experience

<u>Plan Year Ended</u>	June 30, 2019	June 30, 2020	June 30, 2021	June 30, 2022
Employer Cost Rate - Beginning of Year	1.09%	1.02%	1.11%	1.08%
Plan Change	0.00	0.00	0.00	0.00
Plan Experience	(.02)	(.01)	0.02	0.10
Change in Amortization Schedule	0.00	0.00	0.00	0.00
Assumption Changes	(.04)	0.11	0.00	0.15
Investment Loss/(Gain)	(.01)	0.00	(.05)	0.02
Contribution Loss/(Gain)	0.00	(.01)	0.00	0.00
Employer Cost Rate - End of Year	1.02%	1.11%	1.08%	1.35%



STATISTICAL SECTION

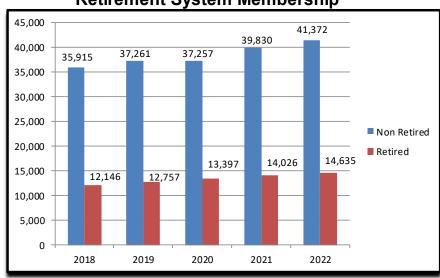
The Statistical Section contains membership and financial information for the programs administered by the System. Included in this section are schedules providing financial trend information for administrative cost per member, benefits paid, changes in net position and deferred compensation assets by provider. Information on the operations of the System is provided in the schedules of members by type of benefit, average benefit payments, participating employers, Group Health insurance contracts and premiums.

Retirement System Membership - PERS, HPRS, and Job Service As of June 30

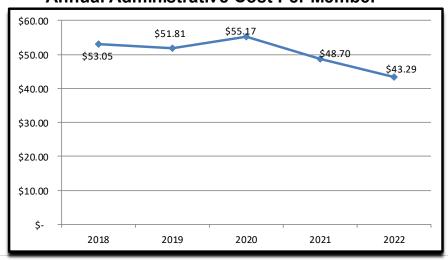
	<u>2018</u>	<u>2019</u>	2020	<u>2021</u>	2022
State Agencies	15,174	15,205	15,022	15,757	16,486
Cities	2,946	3,333	3,454	3,839	4,107
Counties	6,343	6,529	6,368	6,821	6,991
School Districts	10,390	11,070	11,285	12,192	12,876
Other Political Subdivisions	1,062	1,124	1,128	1,221	912
Total Non-Retired ⁽¹⁾	35,915	37,261	37,257	39,830	41,372
Retired Members & Beneficiaries	12,146	12,757	13,397	14,026	14,635
Total Membership	48,061	50,018	50,654	53,856	56,007
Administrative Expenses	\$ 2,549,409	\$ 2,591,667	\$ 2,794,805	\$ 2,622,870	\$ 2,424,274
Administrative Cost Per Member	\$ 53.05	\$ 51.81	\$ 55.17	\$ 48.70	\$ 43.29

⁽¹⁾ Total non-retired members includes all contributing members plus all non-contributing members who have not begun to receive retirement benefits





Annual Administrative Cost Per Member



North Dakota Public Employees Retirement System – Statistical Section Benefit Expenses

Schedule of Benefit Expenses by Type - PERS Fiscal Year Ended June 30

FY Ended		Annuities		Ref	unds			
June 30	Retirant	Disability	Survivor	Death	Separation	Transfers	Total	
2017	143,554,696	1,750,399	8,505,934	1,228,689	7,712,641	239,609	162,991,968	
2018	159,661,655	1,943,716	9,566,078	1,618,411	9,541,076	190,727	182,521,663	
2019	173,479,569	1,898,910	10,266,007	1,022,439	10,760,049	330,963	197,757,937	
2020	190,942,582	1,969,568	11,400,300	1,599,850	12,522,865	118,721	218,553,888	
2021	203,565,116	2,052,095	12,797,127	1,465,511	11,327,136	93,418	231,300,404	
2022	220,444,108	2,104,928	13,595,331	2,085,387	13,672,789	163,705	252,066,250	

Schedule of Benefit Expenses by Type - HPRS Fiscal Year Ended June 30

FY Ended		Annuities			Refu	nds			
June 30	Retirant	Disability	Survivor	Death		Separation	Transfers	Т	otal
2017	4,237,782	105,131	425,683	'	0	37,723		0	4,806,319
2018	4,361,198	111,204	421,406		0	87,569		0	4,981,377
2019	4,811,640	117,268	412,348		0	49,859		0	5,391,115
2020	5,057,745	117,268	405,319		0	124,254		0	5,704,586
2021	5,258,825	117,268	404,080		0	171,704		0	5,951,877
2022	5,300,801	123,958	415,368		0	7,897		0	5,848,024

Schedule of Benefit Expenses by Type - Job Service Fiscal Year Ended June 30

FY Ended		Annuities			Refun	ds			
June 30	Retirant	Disability	Survivor	Death	Se	paration	Transfers	Т	otal
2017	4,117,689	92,459	324,005		0	0		0	4,534,153
2018	4,325,831	73,795	182,951		0	0		0	4,582,577
2019	4,388,276	75,587	162,983		0	0		0	4,626,846
2020	4,314,030	77,142	175,543		0	14,861		0	4,581,576
2021	4,354,129	78,216	236,475		0	0		0	4,668,820
2022	7,504,015	79,847	281,820		0	0		0	7,865,682

Changes in Net Position

Additions:	FY Ended 30-Jun	Member Contributions	Employer Contributions	Purchased Service <u>Credit</u>	Investment Income	Miscellaneous Income	Total Additions	Employer Contributions as a % of Covered Payroll
Public Employees								
Retirement System:	2013	46,815,060	48,846,796	7,470,218	231,849,472	_	334,981,546	5.50%
rectirement dystem.	2014	59,394,200	61,661,050	8,325,140	316,628,462	1,101	446,009,953	6.33%
	2015	68,392,061	70,842,535	6,651,879	81,536,565	-	227,423,040	6.92%
	2016	74,218,276	77,080,576	9,179,163	11,333,124	23,575,649	195,386,788	6.86%
	2017	76,007,456	78,933,571	11,805,070	311,760,863	32,183	478,539,143	6.94%
	2018	77,486,189	80,727,209	19,984,972	249,165,181	(24,440)	427,339,111	7.01%
	2019	78,213,580	81,588,318	7,219,697	159,824,092	(5,641)	326,840,046	7.09%
	2020	81,477,666	85,504,033	10,818,588	101,105,998	(2,580)	278,903,705	6.90%
	2020	85,914,756	91,265,640	7,129,269	844,933,209	(1,723)	1,029,241,151	7.10%
	2021	89,633,939	96,630,783	10,249,235		14,125		7.74%
	2022	09,033,939	90,030,763	10,249,235	(256,072,364)	14,125	(59,544,282)	1.1470
Highway Patrolmen's	0040	4 000 045	4 500 400	400.400	0.054.550		0.000.500	40.070/
Retirement System:	2013	1,028,615	1,586,186	133,169	6,854,552	=	9,602,522	16.97%
	2014	1,243,520	1,864,632	87,418	9,239,929	-	12,435,499	18.38%
	2015	1,351,798	2,002,291	96,429	2,334,780	-	5,785,298	18.58%
	2016	1,436,236	2,127,355	-	316,958	5	3,880,554	18.85%
	2017	1,455,540	2,155,944	249,436	8,500,352	221	12,361,493	18.94%
	2018	1,453,533	2,152,970	281,573	6,716,525	(187)	10,604,414	18.70%
	2019	1,411,619	2,090,886	167,824	4,250,901	(41)	7,921,189	20.19%
	2020	1,469,682	2,176,902	205,461	2,667,371	(16)	6,519,400	18.00%
	2021	1,548,335	2,293,404	400,751	19,637,841	(11)	23,880,320	19.91%
	2022	1,825,729	2,686,795	159,747	(6,509,971)	62	(1,837,638)	21.90%
Job Service								
Retirement Plan:	2013	72,174	-	-	9,984,241	=	10,056,415	0.00%
	2014	55,748	=	-	11,887,840	=	11,943,588	0.00%
	2015	50,142	-	-	3,260,507	-	3,310,649	0.00%
	2016	44,178	-	-	4,840,333	-	4,884,511	0.00%
	2017	39,417	-	-	5,238,877	-	5,278,294	0.00%
	2018	32,987	-	-	2,918,585	-	2,951,572	0.00%
	2019	29,159	=	-	6,229,630	=	6,258,789	0.00%
	2020	27,047	_	-	2,621,067	-	2,648,114	0.00%
	2021	13,979	_	-	6,025,272	-	6,039,251	0.00%
	2022	9,299	_	-	(5,551,487)	_	(5,542,188)	0.00%
Retiree Health								
Insurance Credit Plan:	2013	13,300	9,959,603	371,587	7,963,391	-	18,307,881	1.09%
	2014	15,539	10,709,792	368,859	12,366,408	=	23,460,598	1.07%
	2015	12,625	11,478,599	347,238	2,760,953	-	14,599,415	1.09%
	2016	16,655	12,349,883	383,089	793,705	-	13,543,332	1.08%
	2017	16,173	12,575,627	464,323	12,074,082	-	25,130,205	1.09%
	2018	15,984	12,834,547	746,942	8,210,898	_	21,808,371	1.10%
	2019	15,859	12,977,460	377,329	8,178,932	(857)	21,548,723	1.09%
	2020	16,319	13,392,266	556,585	6,904,869	9,580	20,879,619	1.11%
	2021	15,481	13,110,651	375,038	36,526,655	312	50,028,137	1.14%
	2022	12,234	12,565,573	456,895	(26,756,507)	(1)	(13,721,806)	1.15%

Changes in Net Position

Deductions:	FY Ended <u>30-Jun</u>	<u>Benefits</u>	Administrative <u>Expenses</u>	Transfers & <u>Refunds</u>	Total <u>Deductions</u>	Change in Net Position
Public Employees						
Retirement System:	2013	103,295,777	2,059,315	5,996,324	111,351,416	223,630,130
	2014	113,300,699	2,210,792	6,585,625	122,097,116	323,912,837
	2015	127,179,525	2,365,357	7,750,212	137,295,094	90,127,946
	2016	141,263,796	2,537,799	8,400,345	152,201,940	43,184,848
	2017	153,811,029	2,607,243	9,180,939	165,599,211	312,939,932
	2018	171,171,449	2,472,761	11,350,214	184,994,424	242,344,687
	2019	185,644,486	2,531,304	12,113,451	200,289,241	126,550,805
	2020	204,312,452	2,729,759	14,241,436	221,283,647	57,620,058
	2021	218,414,339	2,569,186	12,886,065	233,869,590	795,371,561
	2022	236,144,369	2,340,267	15,921,880	254,406,516	(313,950,798)
Highway Patrolmen's						
Retirement System:	2013	3,749,888	29,237	22,428	3,801,553	5,800,969
	2014	3,752,627	27,983	32,108	3,812,718	8,622,781
	2015	4,528,178	217,332	30,925	4,776,435	1,008,863
	2016	4,658,232	31,450	55,263	4,744,945	(864,391)
	2017	4,768,596	30,195	37,723	4,836,514	7,524,979
	2018	4,893,808	30,353	87,569	5,011,730	5,592,684
	2019	5,341,256	43,555	49,859	5,434,670	2,486,519
	2020	5,580,332	45,870	124,254	5,750,456	768,944
	2021	5,780,173	37,097	171,704	5,988,974	17,891,346
	2022	5,840,127	65,650	7,897	5,913,674	(7,751,312)
Job Service						
Retirement Plan:	2013	4,353,984	30,014	-	4,383,998	5,672,417
	2014	4,594,462	31,455	-	4,625,917	7,317,671
	2015	4,694,171	30,214	-	4,724,385	7,317,671
	2016	4,601,196	32,253	=	4,633,449	251,062
	2017	4,534,153	12,684	-	4,546,837	731,457
	2018	4,582,577	46,295	-	4,628,872	(1,677,300)
	2019	4,626,846	16,808	-	4,643,654	1,615,135
	2020	4,581,575	19,148	-	4,600,723	(1,952,609)
	2021	4,668,820	17,371	-	4,686,191	1,353,060
	2022	4,865,682	18,357	-	4,884,039	(10,426,227)
Retiree Health						
Insurance Credit Plan:	2013	6,458,449	185,619	8,765	66,652,833	11,655,048
	2014	6,798,427	201,471	2,992	7,002,890	16,457,708
	2015	7,246,091	217,989	6,994	7,471,074	7,128,341
	2016	9,329,881	431,291	3,135	9,764,307	3,779,025
	2017	10,012,681	443,220	1,689	10,457,590	14,672,615
	2018	11,013,375	480,244	2,685	11,496,304	10,312,292
	2019	11,497,890	437,349	7,180	11,942,419	9,606,304
	2020	12,312,461	453,913	4,614	12,770,988	8,108,631
	2021	12,879,074	430,097	5,437	13,314,608	36,713,529
	2022	13,743,479	383,458	2,631	14,129,568	(27,851,374)

Schedule of Retired Members by Type of Benefit - PERS As of June 30, 2022

Main System

Monthly Amount	Normal	Early	Disability	Service*	Beneficiary**	Total	Total***
Under \$200	722	500	1	44	214	1,481	1,267
\$200 - \$400	786	777	16	60	272	1.911	1,639
\$400 - \$600	661	627	34	62	209	1,593	1,384
\$600 - \$800	494	362	36	110	142	1,144	1,002
\$800 - \$1,000	435	199	21	239	86	980	894
\$1,000 - \$1,200	344	165	11	332	73	925	852
\$1,200 - \$1,400	261	82	1	361	58	763	705
\$1,400 - \$1,600	216	44	4	332	36	632	596
\$1,600 - \$1,800	179	24	3	367	27	600	573
\$1,800 - \$2,000	165	19	0	348	29	561	532
\$2,000 - \$2,200	113	8	0	301	16	438	422
\$2,200 - \$2,400	100	7	0	283	22	412	390
\$2,400 - \$2,600	85	5	1	268	7	366	359
\$2,600 - \$2,800	71	5	0	228	11	315	304
\$2,800 - \$3,000	50	4	0	183	9	246	237
\$3,000 and Over	382	4	0	1.173	51	1,610	1.559
Total	5,064	2.832	128	4,691	1.262	13.977	12,715
Payment Option	Normal	Early	Disability	Service*	Beneficiary**	Total	Total***
Life	3,127	2,001	103	2,182	235	7,648	7,413
Life 1% Graduated Benefits	5	0	0	5	0	10	10
Life 2% Graduated Benefits	11	0	0	10	0	21	21
Level Social Security Payment	1	17	0	87	0	105	105
Joint & 100% Survivor	1,273	532	16	1,484	673	3,978	3,305
Joint & 100% Survivor 1% Graduated Benefits	1	0	0	3	0	4	4
Joint & 100% Survivor 2% Graduated Benefits	7	0	0	7	1	15	14
Joint & 50% Survivor	517	196	8	827	281	1,829	1,548
Joint & 50% Survivor 1% Graduated Benefits	4	0	0	3	1	8	7
Joint & 50% Survivor 2% Graduated Benefits	0	0	0	1	0	1	1
20 Year C & L	60	23	1	28	36	148	112
10 Year C & L	55	56	0	44	29	184	155
10 Year C & L 1% Graduated Benefits	0	0	0	1	0	1	1
5 Year C & L	3	7	0	9	6	25	19
Total	5,064	2,832	128	4,691	1,262	13,977	12,715
Age	Normal	Early	Disability	Service*	Beneficiary**	Total	Total***
Under 50	0	0	14	0	35	49	14
50 - 54	0	0	20	23	27	70	43
55 - 59	0	24	32	221	50	327	277
60 - 64	0	281	61	887	89	1,318	1,229
65 - 69	1,502	694	1	1,362	165	3,724	3,559
70 - 74	1,553	713	0	1,038	203	3,507	3,304
75 and Over	2,009	1,120	0	1,160	693	4,982	4,289
Total	5,064	2,832	128	4,691	1,262	13,977	12,715

^{*} Includes Rule of 85, Rule of 88 and Rule of 90.

^{**} Includes alternate payees

^{***} Total excluding beneficiaries

Schedule of Retired Members by Type of Benefit - PERS As of June 30, 2022

Judges

Monthly Amount	Normal	Early	Disability	Service*	Beneficiary**	Total	Total***
Under \$400	0	0	0	0	0	0	0
\$400 - \$800	0	0	0	0	1	1	0
\$800 - \$1,200	2	0	0	0	0	2	2
\$1,200 - \$1,600	0	0	0	2	1	3	2
\$1,600 - \$2,000	1	2	0	0	3	6	3
\$2,000 - \$2,400	0	0	0	0	0	0	0
\$2,400 - \$2,800	1	0	0	0	1	2	1
\$2,800 - \$3,200	2	0	0	0	3	5	2
\$3,200 - \$3,600	2	1	0	0	1	4	3
\$3,600 - \$4,000	2	1	0	0	0	3	3
\$4,000 - \$4,400	0	0	0	0	1	1	0
\$4,400 - \$4,800	4	0	0	2	1	7	6
\$4,800 - \$5,200	0	0	0	0	2	2	0
\$5,200 - \$5,600	2	0	0	2	0	4	4
\$5,600 - \$6,000	1	0	0	1	0	2	2
\$6,000 and Over	11	0	1	8	2	22	20
Total	28	4	1	15	16	64	48
Payment Option	Normal	Early	Disability	Service*	Beneficiary**	Total	Total***
Life	2	1	0	1	4	8	4
Level Social Security Payment	0	0	0	0	0	0	0
Joint & 100% Survivor	19	1	0	8	10	38	28
Joint & 50% Survivor	6	2	1	6	2	17	15
10 Year C & L	0	0	0	0	0	0	0
5 Year C & L	0	0	0	0	0	0	0
Total	28	4	1	15	16	64	48
Age	Normal	Early	Disability	Service*	Beneficiary**	Total	Total***
Under 50	0	0	0	0	0	0	0
50 - 54	0	0	0	0	0	0	0
55 - 59	0	0	0	0	0	0	0
60 - 64	0	0	1	3	1	5	4
65 - 69	2	1	0	1	0	4	4
70 - 74	13	1	0	6	6	26	20
70 - 74	13	-	•	•	0	20	20

15

28

Total

^{*} Includes Rule of 85, Rule of 88 and Rule of 90.

^{**} Includes alternate payees

^{***} Total excluding beneficiaries

Schedule of Retired Members by Type of Benefit - PERS As of June 30, 2022

Public Safety with Prior Main Service

Public Safety with prior Main System Service

Monthly Amount	Normal	Early	Disability	Service*	Beneficiary**	Total	Total***
Under \$200	4	1	0	0	3	8	5
\$200 - \$400	6	2	0	0	3	11	8
\$400 - \$600	10	4	0	0	1	15	14
\$600 - \$800	7	1	0	0	3	11	8
\$800 - \$1,000	8	0	0	0	1	9	8
\$1,000 - \$1,200	10	0	0	0	2	12	10
\$1,200 - \$1,400	6	0	0	0	0	6	6
\$1,400 - \$1,600	8	0	1	1	1	11	10
\$1,600 - \$1,800	6	0	0	0	0	6	6
\$1,800 - \$2,000	4	1	0	0	0	5	5
\$2,000 - \$2,200	6	0	0	1	2	9	7
\$2,200 - \$2,400	3	0	0	1	0	4	4
\$2,400 - \$2,600	1	1	0	0	0	2	2
\$2,600 - \$2,800	3	0	0	0	0	3	3
\$2,800 - \$3,000	2	0	0	1	0	3	3
\$3,000 and Over	27	1	0	5	0	33	33
Total	111	11	1	9	16	148	132
Payment Option	Normal	Early	Disability	Service*	Beneficiary**	Total	Total***
Life	53	6	1	1	1	62	61
Level Social Security Payment	2	1	0	1	0	4	4
Joint & 100% Survivor	36	4	0	6	7	53	46
Joint & 100% Survivor 1% Graduated Benefits	0	0	0	0	0	0	0
Joint & 50% Surviyor	19	0	0	1	2	22	20
20 Year C & L	0	0	0	0	6	6	0
10 Year C & L	0	0	0	0	0	0	0
5 Year C & L	0	0	0	0	0	0	0
20 Year Certain	0	0	0	0	0	0	0
Total	111	11	1	9	16	148	132
Age	Normal	Early	Disability	Service*	Beneficiary**	Total	Total***
Under 50	0	0	1	0	5	6	1
50 - 54	0	1	0	0	1	2	1
55 - 59	17	3	0	2	0	22	22
60 - 64	25	1	0	3	1	30	29
65 - 69	35	4	0	3	3	45	42
70 - 74	26	0	0	1	6	33	27
75 and Over	8	2	0	0	0	10	10
Total	111	11	1	9	16	148	132

^{*} Includes Rule of 85, Rule of 88 and Rule of 90.

^{**} Includes alternate payees

^{***} Total excluding beneficiaries

Schedule of Retired Members by Type of Benefit - PERS As of June 30, 2022

Public Safety without Prior Main Service

Public Safety without Prior Main System Service

Monthly Amount	Normal	Early	Disability	Service*	Beneficiary**	Total	Total***
Under \$200	1	0	0	0	0	1	1
\$200 - \$400	1	0	0	0	0	1	1
\$400 - \$600	.5	1	0	0	1	7	6
\$600 - \$800	1	0	0	0	0	1	1
\$800 - \$1,000	0	0	1	0	0	1	1
\$1,000 - \$1,200	0	0	0	0	1	1	0
\$1,200 - \$1,400	1	0	0	0	0	1	1
\$1,400 - \$1,600	0	0	0	0	1	1	0
\$1,600 - \$1,800	0	0	0	0	0	0	0
\$1,800 - \$2,000	0	0	0	0	0	0	0
\$2,000 - \$2,200	0	0	0	0	0	0	0
\$2,200 - \$2,400	0	0	0	0	0	0	0
\$2,400 - \$2,600	0	0	0	0	0	0	0
\$2,600 - \$2,800	0	0	0	0	0	0	0
\$2,800 - \$3,000	0	0	0	0	0	0	0
\$3,000 and Over	1	0	0	0	0	1	1
Total	10	1	1	0	3	15	12
Payment Option	Normal	Early	Disability	Service*	Beneficiary**	Total	Total***
Life	3	0	1	0	1	5	4
Level Social Security Payment	0	0	0	0	0	0	0
Joint & 100% Survivor	5	1	0	0	2	8	6
Joint & 50% Survivor	2	0	0	0	0	2	2
10 Year C & L	0	0	0	0	0	0	0
5 Year C & L	0	0	0	0	0	0	0
Total	10	1	1	0	3	15	12
Age	Normal	Early	Disability	Service*	Beneficiary**	Total	Total***
Under 50	0	0	1	0	0	1	1
50 - 54	0	0	0	0	1	1	0
55 - 59	3	1	0	0	1	5	4
60 - 64	1	0	0	0	1	2	1
65 - 69	5	0	0	0	0	5	5
70 - 74	1	0	0	0	0	1	1
75 and Over	0	0	0	0	0	0	0
Total	10	1	1	0	3	15	12

^{*} Includes Rule of 85, Rule of 88 and Rule of 90.

^{**} Includes alternate payees

^{***} Total excluding beneficiaries

Schedule of Retired Members by Type of Benefit - HPRS As of June 30, 2022

Monthly Amount	Normal	Early	Disability	Service*	Beneficiary**	Total
Under \$200	1	0	0	0	0	1
\$200 - \$400	0	0	0	0	2	2
\$400 - \$600	0	0	0	0	0	0
\$600 - \$800	0	0	0	0	1	1
\$800 - \$1,000	1	0	0	0	2	3
\$1,000 - \$1,200	1	0	0	0	4	5
\$1,200 - \$1,400	1	0	0	1	7	9
\$1,400 - \$1,600	0	1	0	0	3	4
\$1,600 - \$1,800	0	0	0	0	2	2
\$1,800 - \$2,000	0	0	0	0	1	1
\$2,000 - \$2,200	1	2	0	1	1	5
\$2,200 - \$2,400	4	1	0	0	0	5
\$2,400 - \$2,600	2	0	0	4	2	8
\$2,600 - \$2,800	0	0	0	5	0	5
\$2,800 - \$3,000	0	0	0	5	0	5
\$3,000 - \$3,200	1	0	0	7	0	8
\$3,200 - \$3,400	1	1	0	1	0	3
\$3,400 - \$3,600	1	0	0	6	1	8
\$3,600 - \$3,800	3	1	0	2	0	6
\$3,800 - \$4,000	0	1	0	2	0	3
\$4,000 - \$4,200	0	0	o	1	1	2
\$4,200 - \$4,400	0	0	0	5	0	5
\$4,400 - \$4,600	1	0	0	4	0	5
\$4,600 - \$4,800	1	0	0	4	0	5
\$4,800 - \$5,000	ō	0	0	2	o	2
\$5,000 and Over	4	0	0	28	0	32
Total	23	7	ō	78	27	135
Payment Option	Normal	Early	Disability	Service*	Beneficiary**	Total
Life	0	0	0	1	4	5
Level Social Security Payment	0	0	0	0	0	0
Joint & 100% Survivor	12	2	0	50	3	67
Joint & 50% Survivor	11	5	0	27	20	63
5 Year C & L	0	0	o	0	0	0
10 Year C & L	0	0	0	0	0	0
Total	23	7	0	78	27	135
Age	Normal	Early	Disability	Service*	Beneficiary**	Total
Under 50	0	0	0	0	0	0
50 - 54	0	0	0	9	1	10
55 - 59	2	6	0	14	1	23
60 - 64	6	0	0	13	0	19
65 - 69	3	0	0	18	3	24
70 - 74	3	0	0	11	7	21
75 - 79	0	0	0	11	4	15
80 - 84	1	1	o	2	7	11
85 - 89	5	0	0	0	3	8
90 and Over	3	0	0	0	1	4
		U U	4.7	1.7	1	-

^{*} Includes Rule of 80.

^{**} Includes alternate payees

Schedule of Retired Members by Type of Benefit - Job Service Retirement Plan as of June 30, 2022

Monthly Amount	Normal	Early	Disability	Beneficiary*	Total
Under \$200	3	0	0	1	4
\$200 - \$400	4	0	0	3	7
\$400 - \$600	6	0	0	0	6
\$600 - \$800	3	0	0	6	9
\$800 - \$1,000	3	0	0	5	8
\$1,000 - \$1,200	2	0	0	1	3
\$1,200 - \$1,400	4	0	0	4	8
\$1,400 - \$1,600	8	0	0	2	10
\$1,600 - \$1,800	8	0	0	1	9
\$1,800 - \$2,000	4	0	0	6	10
\$2,000 - \$2,200	12	0	0	1	13
\$2,200 - \$2,400	8	0	0	0	8
\$2,400 - \$2,600	10	0	0	1	11
\$2,600 - \$2,800	7	0	0	1	8
\$2,800 - \$3,000	9	0	0	0	9
\$3,000 - \$3,200	6	0	0	0	6
\$3,200 - \$3,400	7	0	0	1	8
\$3,400 - \$3,600	10	0	0	o	10
\$3,600 - \$3,800	3	0	0	0	3
\$3,800 - \$4,000	4	0	0	0	4
\$4,000 - \$4,200	5	0	0	0	5
\$4,200 - \$4,400	3	0	0	0	3
\$4,400 - \$4,600	o o	0	0	0	0
\$4,600 - \$4,800	4	0	0	0	4
\$4,800 - \$5,000	0			0	0
	9	0	0	0	9
\$5,000 and Over Total	142	0	0	33	175
Payment Option	Normal	Early	Disability	Beneficiary*	Total
Life	41				49
Joint & 55% Survivor		0	0	8	
Joint & 55% Survivor	27	0	0	15 7	42
Color and Color and Color and Color	16	0			23
Joint & 100% Survivor	16	0	0	1	18
10 Year C & L	19	0	0		20
15 Year C & L	3	0	0	0	3
20 Year C & L	20	0	0	0	20
Total	142	0		33	175
Age	Normal	Early	Disability	Beneficiary*	Total
Under 50	0	0	0	0	0
50 - 54	0	0	0	0	0
55 - 59	0	0	0	0	0
60 - 64	0	0	0	0	0
65 - 69	20	0	0	1	21
70 - 74	34	0	0	8	42
75 - 79	39	0	0	3	42
80 - 84	23	0	0	5	28
85 - 89	12	0	0	8	20
90 and Over	14	0	0	8	22
Total	142	0	0	33	175

^{*} Includes 2 alternate payees

Monthly Benefit Amount - Retiree Health Insurance Credit Plan as of June 30, 2022

1	Age	Under \$30	\$30-\$59	\$60-\$89	\$90-\$119	\$120-\$149	\$150-\$179	\$180 and over	Total
-	Under 50	10	12	6	0	0	1	0	29
	50 - 54	7	13	12	8	8	30	1	79
	55 - 59	40	37	34	18	69	142	25	365
	60 - 64	133	177	131	91	315	343	190	1,380
	65 - 69	507	771	573	479	592	533	379	3,834
	70 - 74	465	771	577	461	617	389	306	3,586
	75 - 79	314	497	399	364	394	215	158	2,341
	80 - 84	171	283	286	227	211	121	78	1,377
	85 - 89	98	202	190	112	118	78	62	860
	90 and Over	41	108	96	74	57	35	28	439
	Total	1,786	2,871	2,304	1,834	2,381	1,887	1,227	14,290

Schedule of Average Benefit Payments - As of June 30 Retiree Health Insurance Credit Fund

	<u>Total</u>
2018 Total Participants Average Monthly Benefits	11,823 \$98
2019 Total Participants Average Monthly Benefits	12,471 \$98
2020 Total Participants Average Monthly Benefits	13,092 \$88
2021 Total Participants Average Monthly Benefits	13,697 \$89
2022 Total Participants Average Monthly Benefits	14,290 \$90

Schedule of Average Benefit Payments - PERS As of June 30 Main System Years of Credited Service

	Years of Credited Service										
	< 10	10-14	15-19	20-24	25-29	>=30	Total				
2018 Number of Retirees Average Monthly Benefits Average Years of Service	2,052	1,577	1,388	1,451	1,629	2,436	10,533				
	\$ 267	\$ 506	\$ 747	\$ 1,223	\$ 1,709	\$ 2,637	\$ 1,269				
	6.27	12.33	17.29	22.57	27.31	35.45	20.88				
2019 Number of Retirees Average Monthly Benefits Average Years of Service	2,175	1,627	1,440	1,540	1,712	2,588	11,082				
	\$ 273	\$ 523	\$ 780	\$ 1,274	\$ 1,773	\$ 2,735	\$ 1,321				
	6.26	12.31	17.30	22.56	27.33	35.53	20.94				
2020 Number of Retirees Average Monthly Benefits Average Years of Service	2,322 \$ 282 6.26	1,689 \$ 550 12.30	1,481 \$ 814 17.31	1,618 \$ 1,316 22.57	1,778 \$ 1,812 27.34	2,752 \$ 2,823 35.60	11,640 \$ 1,367 20.96				
2021 Number of Retirees Average Monthly Benefits Average Years of Service	2,467	1,746	1,545	1,708	1,824	2,882	12,172				
	\$ 288	\$ 570	\$ 844	\$ 1,353	\$ 1,845	\$ 2,885	\$ 1,397				
	6.25	12.32	17.34	22.56	27.35	35.64	20.94				
2022 Number of Retirees Average Monthly Benefits Average Years of Service	2,568	1,814	1,615	1,772	1,892	3,054	12,715				
	\$ 293	\$ 600	\$ 884	\$ 1,393	\$ 1,898	\$ 2,969	\$ 1,447				
	6.26	12.32	17.33	22.55	27.35	35.69	21.01				

Schedule of Average Benefit Payments - PERS As of June 30 Judges

		Years of	Credited Ser	vice			
	< 10	10-14	15-19	20-24	25-29	>=30	Total
2018 Number of Retirees	4	2	6	11	7	10	40
Average Monthly Benefits Average Years of Service	\$ 2,274	\$ 2,739	\$ 4,123	\$ 5,452	\$ 4,845	\$ 6,141	\$ 4,865
	6.29	10.54	17.81	23.17	26.80	35.81	23.84
2019 Number of Retirees Average Monthly Benefits Average Years of Service	4	3	6	11	7	11	42
	\$ 2,274	\$ 3,588	\$ 4,123	\$ 5,452	\$ 4,891	\$ 6,276	\$ 4,949
	6.29	11.92	17.81	23.17	26.80	35.44	23.81
2020 Number of Retirees Average Monthly Benefits Average Years of Service	4	3	6	11	7	13	44
	\$ 2,274	\$ 3,588	\$ 4,123	\$ 5,452	\$ 4,891	\$ 6,589	\$ 5,102
	6.29	11.92	17.81	23.17	26.80	35.58	24.38
2021 Number of Retirees Average Monthly Benefits Average Years of Service	4	3	6	11	8	15	47
	\$ 2,274	\$ 3,643	\$ 4,123	\$ 5,452	\$ 5,261	\$ 6,808	\$ 5,297
	6.29	11.92	17.81	23.17	26.70	35.27	24.79
2022 Number of Retirees Average Monthly Benefits Average Years of Service	5	3	6	11	8	15	48
	\$ 2,482	\$ 3,643	\$ 4,123	\$ 5,452	\$ 5,261	\$ 6,855	\$ 5,270
	6.67	11.92	17.81	23.17	26.70	35.27	24.45

Schedule of Average Benefit Payments - PERS As of June 30 Law Enforcement with Prior Main Service⁽¹⁾

			,	Years of	Credited Ser	vice			
	<	< 10	1	0-14	15-19	20-24	25-29	>=30	Total
2018									
Number of Retirees		15		11	10	18	17	23	94
Average Monthly Benefits	\$	481	\$	915	\$ 1,452	\$ 1,839	\$ 2,180	\$ 3,317	\$ 1,896
Average Years of Service		6.18		12.47	17.25	22.19	27.38	33.29	21.63
2019									
Number of Retirees		20		13	11	20	15	25	104
Average Monthly Benefits	\$	630	\$	947	\$ 1,466	\$ 1,733	\$ 2,018	\$ 3,464	\$ 1,852
Average Years of Service		6.27		12.27	17.05	22.12	27.49	33.24	20.75
2020									
Number of Retirees		24		14	12	19	16	28	113
Average Monthly Benefits	\$	596	\$	815	\$ 1,491	\$ 1,703	\$ 2,138	\$ 3,452	\$ 1,830
Average Years of Service		5.99		12.26	17.27	22.15	27.44	33.19	20.46
2021									
Number of Retirees		29		15	12	17	19	31	123
Average Monthly Benefits	\$	627	\$	851	\$ 1,491	\$ 1,865	\$ 2,266	\$ 3,554	\$ 1,900
Average Years of Service		5.99		12.37	17.27	22.23	27.28	33.40	20.31
2022									
Number of Retirees		30		15	14	18	21	34	132
Average Monthly Benefits	\$	619	\$	908	\$ 1,570	\$ 1,834	\$ 2,222	\$ 3,694	\$ 1,965
Average Years of Service		5.96		12.33	17.25	22.13	27.32	33.80	20.65

⁽¹⁾ Includes former National Guard members.

Schedule of Average Benefit Payments - PERS As of June 30 Law Enforcement without Prior Main Service

Years of Credited Service												
	<	< 10	10-14	1	5-19	20	0-24	25-29	>	-=30	Т	otal
2018 Number of Retirees Average Monthly Benefits Average Years of Service	\$	5 401 4.01	1 \$ 1,204 12.58	\$	0 - 0.00	\$	0 - 0.00	1 \$ 3,126 26.17	\$	0 - 0.00	\$	7 905 8.40
2019 Number of Retirees Average Monthly Benefits Average Years of Service	\$	7 410 4.44	1 \$ 1,204 12.58	\$	0 - 0.00	\$	0 - 0.00	1 \$ 3,126 26.17	\$	0 - 0.00	\$	9 800 7.76
2020 Number of Retirees Average Monthly Benefits Average Years of Service	\$	8 421 4.79	1 \$ 1,204 12.58	\$	0 - 0.00	\$	0 - 0.00	2 \$ 2,345 27.05	\$	0 - 0.00	\$	11 842 9.54
2021 Number of Retirees Average Monthly Benefits Average Years of Service	\$	10 456 5.06	1 \$ 1,204 12.58	\$	0 - 0.00	\$	0 - 0.00	2 \$ 2,345 27.05	\$	0 - 0.00	\$	13 805 9.02
2022 Number of Retirees Average Monthly Benefits Average Years of Service	\$	9 457 5.22	1 \$ 1,204 12.58	\$	1 497 16.58	\$	0 - 0.00	1 \$ 3,126 26.17	\$	0 - 0.00	\$	12 745 8.53

Schedule of Average Benefit Payments - PERS As of June 30 HPRS

			TIFIXS					
	Years of Credited Service							
	< 10	10-14	15-19	20-24	25-29	>=30	Total	
2018								
Number of Retirees	0	2	4	5	65	20	96	
Average Monthly Benefits	\$ -	\$ 1,481	\$ 2,388	\$ 2,923	\$ 3,862	\$ 4,366	\$ 3,807	
Average Years of Service	0.00	11.75	17.10	22.75	27.89	31.36	27.56	
2019								
Number of Retirees	1	3	4	6	68	23	105	
Average Monthly Benefits	\$ 1,456	\$ 1,765	\$ 2,388	\$ 3,351	\$ 3,917	\$ 4,854	\$ 3,947	
Average Years of Service	2.25	11.69	17.10	22.96	27.93	31.33	27.27	
2020								
Number of Retirees	1	3	4	6	70	23	107	
Average Monthly Benefits	\$ 1,456	\$ 1,765	\$ 2,388	\$ 3,351	\$ 4,039	\$ 4,854	\$ 4,026	
Average Years of Service	2.25	11.69	17.10	22.96	27.99	31.33	27.32	
2021								
Number of Retirees	1	3	4	6	72	22	108	
Average Monthly Benefits	\$ 1,456	\$ 1,765	\$ 2,388	\$ 3,351	\$ 4,107	\$ 5,116	\$ 4,117	
Average Years of Service	2.25	11.69	17.10	22.96	27.97	31.18	27.25	
2022								
Number of Retirees	0	3	5	6	72	22	108	
Average Monthly Benefits	\$ -	\$ 1,765	\$ 2,837	\$ 3,351	\$ 4,072	\$ 5,116	\$ 4,123	
Average Years of Service	0.00	11.69	17.05	22.96	27.94	31.18	27.37	

Schedule of Average Benefit Payments - PERS As of June 30 Job Service Plan

Retirement <u>Plan</u>	Travelers <u>Annuitants</u>	<u>Total</u>
		196
\$2,420	\$791	\$1,955
135	50	185
\$2,510	\$853	\$20,662
133 \$2,515	48 \$880	181 \$2,081
133	44	177
\$2,608	\$938	\$2,193
133	42	175
\$2,783	\$1,047	\$2,366
	Plan 140 \$2,420 135 \$2,510 133 \$2,515 133 \$2,608	Plan Annuitants 140 56 \$2,420 \$791 135 50 \$2,510 \$853 133 48 \$2,515 \$880 133 44 \$2,608 \$938 133 42

Stage Agency Employers

Adjutant General ND National Guard

Aeronautics Commission

Attorney General's Office

Bank Of North Dakota

Beef Commission

Bismarck State College

Career & Technical Education

Central Services

Commission on Legal Councel for Indigents

Dairy Promotion Commission

Department Of Commerce

Department Of Corrections And Rehabilitation

Department Of Corrections Transitional Services

Department of Environmental Quality

Department Of Financial Institutions

Department Of Human Services

Department Of Transportation

Department of Water Resources

Dept Of Agriculture

Dickinson State University

Education Standards & Practice

Electrical Board

Facility Management

Field Services Division

Game & Fish Department

Governor's Office Heart River Correctional Center

Highway Patrol

Historical Society

Housing Finance Agency

Indian Affairs Commission

Industrial Commission

Information Technology Dept

Insurance Department

James River Correctional Ctr

Job Service North Dakota

Juvenile Services - DOCR Lake Region State College

Land Department

Legislative Assembly

Legislative Council

Life Skills and Transition Center

Mayville State University

Milk Marketing Board

Mill & Elevator Association

Minot State University

ND Barley Council ND Board of Medicine

ND Board Of Nursing

ND Board Of Pharmacy

ND Corn Utilization Council

ND Council On The Arts

ND Department Of Health

ND Department Of Labor

ND Ethics Commission

ND Oilseed Council

ND Public Employees Retirement System

ND Securities Department

ND Soybean Council

ND St College Of Science

ND State Board Of Accountancy

ND State Board Of Cosmetology

ND State Library

ND State Plumbing Board

ND Supreme Court

ND System Information Technology Services

ND University System Office

ND Veterans Home

ND Wheat Commission

ND Youth Correctional Center North Dakota State Hospital

North Dakota State University

Office Of Administrative Hearings

Office Of Management & Budget

Parks & Recreation Department Protection & Advocacy Project

Public Finance Authority

Public Instruction

Public Service Commission

Racing Commission

Real Estate Commission

Retirement & Investment Office

Rough Rider Industries

School For The Blind

School for the Deaf

Secretary Of State

Soil Conservation Committee

State Auditor's Office

State Board Of Law Examiners

State Fair Association

State Penitentiary

State Seed Department State Treasurer's Office

Tax Department

University Of North Dakota

Valley City State University

Veterans Affairs Department

Williston State College

Workforce Safety & Insurance

Total State Employers = 99

County Employers

Adams County

Barnes County

Benson County

Billings County

Bottineau County

Bowman County

Burke County

Burleigh County Cass County

Cavalier County

Dickey County

Divide County

Dunn County

Eddy County **Emmons County** Foster County

Golden Valley County

Grand Forks County

Grant County

Griggs County

Hettinger County

Lamoure County Logan County

Mchenry County

Mcintosh County

Mckenzie County

Mclean County

Mercer County

Morton County

Mountrail County

Nelson County

Oliver County Pembina County Pierce County

Ransom County Renville County Richland County Rolette County Sargent County Sheridan County Slope County

Ramsey County

Stark County Steele County

Stutsman County Towner County

Traill County Walsh County

Ward County Wells County Williams County

Total County Employers = 51

School District Employers

Anamoose Public School District #14

Apple Creek Elementary School

Beach Public School District #3

Belcourt School District #7

Belfield Public School #13

Beulah Public School #27

Billings County School District

Bismarck Public Schools

Bottineau Public School

Bowman County School District #1

Burke Central School

Burleigh County Special Education Unit

Carrington School District #49

Cavalier Public Schools

Center Stanton Public School

Central Cass Public School District #7

Central Regional Education Association

Dakota Prairie Public School

Devils Lake Public School

Dickinson Public Schools

Divide County School Dist #1

Drake Public School District

Drayton Public School #19

Dunseith School District #1 East Central Special Education Unit

Elgin/New Leipzig Public School School

Ellendale Public School District #40

Enderlin Area School District #24

Fairmount Public School

Fargo Public Schools

Fort Totten School District #30

Garrison Public School District #51

Glen Ullin Public School #48

Glenburn School District

Grafton Public School District #3

Great Northwest Education Cooperative

Halliday Public School

Harvey Public School Dist #38

Hazen Public School District #3

Hillsboro Public School

James River Multidistrict Special Education Unit

Jamestown Public School District #1

Kenmare Public School District #28

Killdeer Public School #16 Kindred Public School District #2

Kulm Public School District #7

Lake Region Special Education Unit

Lakota Public School District # 66

Lamoure School District #8

Larimore Public School District #44

Leeds Public School District 6

Lewis & Clark Public Schools

Lidgerwood Public School Linton Public School District #36

Lisbon Public School

Lonetree Special Education Unit

Mandan Public School District #1

Mandaree Public School #36

Manyel Public School

Maple Valley School District

Mapleton Public School

Max Public School

Mcclusky Public Schools

Mckenzie Cty Public School #1 Medina Public School District #3

Midkota School

Midway Public School District #128

Milnor Public School District #2

Minot Public School District #1

Minto Public School District #20 Mohall Lansford Sherwood School

Morton Sioux Special Education Unit

Mott/Regent School Dist #1 Mt Pleasant School Dist #4

Napoleon Public School District #2

Nedrose Public School

New Rockford Sheyenne Public School

New Salem Almont School District #49

New Town Public School District

Newburg United Public School

North Border School District # 100

North Sargent School District #3

North Valley Career and Tech Center

Northern Cass School District #97

Northern Plains Special Ed Unit Oakes Public Schools

Oberon Public Schools #16

Oliver-Mercer Special Education Unit

Park River Area School District Peace Garden Special Services

Pembina Special Education Cooperative

Pingree-Buchanan School District

Richland School District # 44

Rolette Public School

Roughrider Education Services Program (RESP)

Rugby Public School District #5

Rural Cass Special Education Unit

Sargent Central Public School District #6 Sawver Public School

Sheyenne Valley Career And Tech Center

Sheyenne Valley Special Education Unit

Solen Public School Dist #3

Souris Valley Special Services

South Central Prairie Special Edudcation Unit

South East Education Cooperative South Heart Public School District #9

South Prairie School District #70

St John School District #3

Stanley Community Public School District # 2

Surrey Schools Sw Special Education Unit

Tau School District #60

Thompson Public School

Tioga Public School District #15

Turtle Lake Mercer School District #72 Underwood School District #8

United Public School District #7

Valley City Public School

Velva Public School

Wahpeton Public School District 37

Warwick Public School Washburn Public School

West Fargo Public School #6

West River Student Services

Westhope Public School #17

White Shield School Dist #85 Williston Basin School District #7

Wilmac Multidistrict Special Education Unit

Wilton Public School District Yellowstone School District # 14

Zeeland Public Schools

Total School District Employers = 131

City Employers

City of Glenburn City of Alexander City of Ashley City of Grafton City of Beach City of Grand Forks City of Belfield City of Granville City of Berthold City of Grenora City of Beulah City of Gwinner City of Bottineau City of Halliday City of Bowman City of Hankinson City of Burlington City of Harvey City of Carrington City of Harwood City of Carson City of Hatton City of Cavalier City of Hettinger City of Cooperstown City of Jamestown City of Crosby City of Kenmare City of Devils Lake City of Killdeer City of Dickinson City of Kindred City of Kulm City of Dodge City of Drayton City of Lakota City of Lamoure City of Elgin City of Ellendale City of Larimore City of Emerado City of Lidgerwood City of Lincoln City of Fargo City of Fessenden City of Linton City of Finley City of Lisbon

City of Maddock

City of Mapleton City of McClusky City of Mcville City of Medora City of Michigan City of Minot City of Minto City of Mohall City of Mott City of Napoleon City of Neche City of New England City of New Leipzig City of New Rockford City of New Salem City of New Town City of Northwood City of Oakes City of Park River City of Pembina City of Powers Lake City of Ray City of Regent City of Rhame

City of Mandan

City of Richardton City of Rolla City of Rugby City of Sawyer City of Scranton City of Sherwood City of St John City of Stanley City of Surrey City of Thompson City of Tioga City of Towner City of Underwood City of Valley City City of Velva City of Wahpeton City of Walhalla City of Watford City City of West Fargo City of Westhope City of Williston City of Wilton City of Wishek City of Zeeland

Total City Employers = 99

Other Political Subdivision Employers

Agassiz Water Users District
Barnes County Soil Conservation District
Bismarck Rural Fire Protection
Bottineau County Water Resource District
Bowman City Park Board
Burleigh County Council On Aging
Burleigh County Soil Conservation District
Carnegie Regional Library
Cass County Soil Conservation District
Cass County Water Resource District
Cavalier County Health District
Cavalier County Job Development Authority
Central Plains Water District
Central Valley Health Unit
City of Bottineau Park Board

City of Garrison

City County Health District
Consolidated Waste Ltd
Crosby Park District
Custer Health Unit
Devils Lake Basin Joint Water Resource Board
Devils Lake Park Board
Dickey County Health District
Dunseith Community Nursing Home
Eddy County Soil Conservation District

First District Health Foster County Soil Conservation District Garrison Diversion Conservancy District Grafton Park District

Emmons County Soil Conservation District

Emmons County Public Health

Fargo Park District

Grand Forks County Water Resource District Grand Forks Park District Grand Forks Public Library

Grand Forks-E Grand Forks Metropolitan Planning

Great Plains Housing Authority Greater Ramsey Water District Griggs County Public Library

James River Soil Conservation District James River Valley Library System

Jamestown Parks And Recreation District

Jamestown Regional Airport Kidder County District Health Unit

Kindred Park District

Lake Metigoshe Recreation Service District Lake Region District Health Unit

Logan County Soil Conservation District McIntosh District Health Unit

Mercer County Soil Conservation District

Minot Park District

Minot Rural Fire Department

Municipal Airport Authority of the City of Fargo Nelson-Griggs District Health Unit

North Central Soil Conservation District North Dakota Firefighters Association Park District - City of New Rockford R & T Water Supply Commerce Authority

Ramsey County Housing Authority Ramsey County Soil Conservation District Ramsey County Water Resource District

Ransom County Soil Cons Dist Red River Joint Water Resource District Rolette County Public Health

Rolette County Soil Conservation District Sargent County District Health Unit

Sheridan County Soil Conservation District

Southeast Region Career & Technology Center

Southest Water Users District Southwest Water Authority

Southwestern District Health Unit

Stark County Council on Aging/Elder Care Stark & Billings Soil Conservation District

Tioga Park District

Towner County Public Health Unit
Trail County Job Development Authority

Traill County Water Resource District

Traill District Health Unit

Tri-Cities Joint Job Development Authority

Upper Missouri Health Unit Valley City Park District

Wahpeton Park Board
Walsh County Health District

Walsh County Housing Authority

Walsh County Job Development Authority Walsh County Water Resource District

Ward County Water Resource District Watford City Park District

Wells County Dist Health Unit

West Fargo Park District

Western Area Water Supply Authority Williams County Soil Conservation District

Williston Housing Authority

Williston Rural Fire Protection District #1

Total Other Political Subdivision Employers = 93

Principle Participating Employers

	2022			2013				
Participating Employer	Covered Employees	Rank	% of Total System	Covered Employees	Rank	% of Total System		
Department of Human Services	1,128	1	6.40%	1,268	1	5.97%		
Department of Transportation	792	2	4.49%	1,035	3	4.87%		
University of North Dakota	682	3	3.87%	1,123	2	5.29%		
Bismarck Public Schools	652	4	3.70%	766	5	3.61%		
North Dakota State University	580	5	3.29%	830	4	3.91%		
Fargo Public Schools	535	6	3.03%	626	6	2.95%		
City of Fargo	471	7	2.67%	412	10	1.94%		
West Fargo Public School District #6	463	8	2.63%	435	9	2.05%		
Minot Public School District #1	417	9	2.37%	511	7	2.41%		
Information Technology Dept	352	10	2.00%	N/A	N/A	N/A		
North Dakota State Hospital	N/A	N/A	N/A	436	8	2.05%		
Remaining Employers	11,556		65.55%	13,804		64.95%		
Total Covered Employees*	17,628		100.00%	21,246		100.00%		

^{*}Total covered employees represents the number of employees in a contributing status as of June 30, 2022 and June 30, 2013 respectively in the Main retirement plan

Deferred Compensation Program Schedule of Assets By Provider

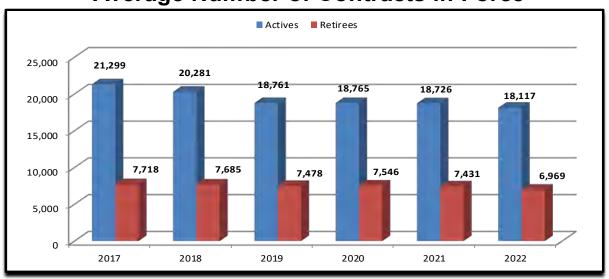
	6/30/18	6/30/19	6/30/20	6/30/21	6/30/22
AIG VALIC	\$9,820,173	\$10,053,565	\$10,282,875	\$12,427,149	\$10,151,515
American Trust Center	12,898,604	14,027,844	14,177,650	19,343,402	16,440,177
AXA Equitable	17,781,744	17,108,369	16,234,828	18,660,442	15,984,782
Bank of North Dakota	5,498,920	5,407,961	5,420,148	5,468,857	5,726,158
Commonwealth Annuity & Life Insurance Co.					
(Formerly Chase Financial/Kemper)	8,726,263	8,324,323	7,821,654	9,532,791	7,519,780
Mass Mutual (formerly Hartford)	59,851,708	64,220,246	64,914,891	78,769,860	67,468,257
ING (Formerly Aetna)	2,116,468	2,229,557	2,135,826	2,251,684	2,388,129
Jackson National Life	6,987,381	5,841,212	5,682,128	6,735,694	4,775,336
Kansas City Life (formerly Sunset Life)	50,314	0	0	0	0
Lincoln National	6,836,529	6,214,835	6,202,271	7,073,193	5,998,885
NDPERS Companion Plan ⁽¹⁾	112,605,791	126,192,471	139,277,186	186,529,831	167,318,012
Nationwide Life Insurance	19,154,725	20,866,715	22,279,890	27,497,044	24,568,880
New York Life ⁽¹⁾	220,746	200,584	0	0	0
Symetra (Formerly Safeco)	122,177	125,774	124,970	149,836	127,169
Waddell & Reed Financial Services	9,802,256	10,800,789	11,802,831	15,251,816	12,297,495
Total	\$272,473,798	\$291,614,245	\$306,357,148	\$389,691,599	\$340,764,575

⁽¹⁾ As of January 1, 1999 the System is the trustee for these deferred compensation assets and is reporting them as a trust fund in the June 30, 2022 and June 30, 2021 financial statements

All other assets are being held in trust by the respective provider company, for the exclusive benefit of participants and their beneficiaries.

Accordingly, these assets are not included in the System's financial statements

GROUP HEALTH INSURANCE PROGRAM Average Number of Contracts in Force



Health Insurance Premium Active State Contracts

