2025 Annual Comprehensive Financial Report

For Fiscal Year Ended June 30, 2025

MACCRAY Public Schools, Clara City, MN
Photo by Steve Silverman

TRA | TEACHERS RETIREMENT ASSOCIATION

A Pension Trust Fund of the State of Minnesota

2025 Annual Comprehensive Financial Report

For Fiscal Year Ended June 30, 2025

TEACHERS RETIREMENT ASSOCIATION

A Pension Trust Fund of the State of Minnesota
60 Empire Drive, Suite 400, St. Paul, MN 55103
651-296-2409 | 800-657-3669

minnesotatra.org

Executive Director
Tim Maurer

This report was prepared by TRA Finance and Executive staff.

This document can be made available in alternative formats to individuals with disabilities by calling 800-657-3669 or through the Minnesota Relay Service at 800-627-3529.

Table of Contents

Table of Contents

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Minnesota Teachers Retirement Association

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2024

Christopher P. Morrill

Executive Director/CEO

Government Finance Officers Association

Award for Outstanding Achievement in Popular Annual Financial Reporting

Presented to

Minnesota Teachers Retirement Association

For its Annual Financial Report
For the Fiscal Year Ended

June 30, 2024

Christopher P. Morrill

Executive Director/CEO

Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2025

Presented to

Minnesota Teachers Retirement Association

In recognition of meeting professional standards for
plan funding and 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)

Robert A. Wylie
Program Administrator

TEACHERS RETIREMENT ASSOCIATION
651.296.2409 800.657.3669 fax 651.297.5999
Info@MinnesotaTRA.org

Letter of Transmittal

December 22, 2025

Members and the Board of Trustees

Teachers Retirement Association
60 Empire Drive, Suite 400
Saint Paul, MN 55103-4000

Dear Members and Trustees:

We are pleased to present this Annual Comprehensive Financial Report (ACFR) of the Teachers Retirement Association (TRA) for the fiscal year ended June 30, 2025, our 94th year of service.

The Office of the Legislative Auditor has issued an unmodified (clean) opinion on TRA's financial statements for the year ended June 30, 2025. The independent auditor's report is located at the front of the financial section of this report. Management believes that the accompanying statements, schedules, and tables are fairly presented. We are solely responsible for the content of the report, including its financial statements, which will help in understanding information about TRA and in comparing our operating results with those of other teacher retirement systems.

TRA management has implemented a system of internal controls to monitor and safeguard assets, ensure transactions are carried out in accordance with Minnesota statutes, and promote efficient operations. Internal controls are designed to provide reasonable, not absolute, assurance safeguarding TRA's assets against loss. The concept of reasonable assurance recognizes that a cost-benefit analysis requires estimates and judgments by management. All internal control evaluations occur within this framework.

Readers are encouraged to refer to the Management Discussion and Analysis on pages 18-23 for an overview of additions to and deductions from the TRA pension fund and additional financial reporting detail for the fiscal year.

TRA Profile

TRA administers the defined-benefit retirement plan that provides retirement, disability, and survivor benefits to Minnesota's public educators and administrators. As of June 30, 2025, TRA had 591 reporting units, 86,462 active members and a total of 70,483 retirees, survivors, beneficiaries, and disabilitants who were receiving monthly benefits.

TRA follows the provisions of statements promulgated by the Governmental Accounting Standards Board (GASB). TRA contracted with CavMac Actuarial Consulting Services (CavMac) to prepare two annual actuarial valuation reports. One report is performed in accordance with the accounting and financial reporting requirements of GASB Statement 67. The second report is performed using the actuarial assumptions and methods contained in Minnesota Statutes, section 356.215, which provides results that assist board members and state policymakers with funding determinations. These statutes specify key funding policy elements including the amortization period, actuarial cost method, asset smoothing method, and investment earnings assumption.

TRA is managed by a board of eight trustees who oversee the administration of the pension fund in accordance with their fiduciary obligations. The Minnesota Office of the Attorney General provides legal counsel to the board. TRA's plan provisions are governed by state law and, as a governmental pension plan, must also comply with federal tax law. For financial reporting purposes, TRA is considered a pension trust fund of the State of Minnesota, and TRA financial results are incorporated into the ACFR of the State of Minnesota.

TRA's ACFR complies with Minnesota Statutes, section 356.20. Transactions are reported on the accrual basis of accounting. Contributions from employers and members are recognized as revenue when earned. Expenses are recorded when corresponding liabilities are incurred, regardless of when payment is made. Most financial transactions, including disbursements from the pension fund, are processed through the centralized controls of the Statewide Integrated Financial Tools (SWIFT) system, under the statutory authority of Minnesota Management and Budget (MMB) and the Department of Administration.

All TRA assets are invested by the State Board of Investment (SBI). A listing of the investments in the TRA fund can be found on page 67. The SBI has developed a strategic asset allocation and other investment policies based on the long-term investment horizon profile of TRA members and benefit recipients. The SBI, with advice from the Investment Advisory Council (IAC), continually reviews policies and asset allocation to ensure sufficient assets are available to finance benefits. TRA's executive director represents TRA as a member of the IAC, which is comprised of 10 members from the public experienced in finance and investment, the commissioner of MMB, the executive directors of the statewide retirement systems, and three governor appointees.

Economic Conditions and Outlook (from Minnesota Management and Budget)

The economic outlook for Minnesota, projected in MMB's November 2025 Budget and Economic Forecast, has weakened since MMB's February 2025 Budget and Economic Forecast. Limited growth in employment is forecasted compared to the February forecast. The state's unemployment rate remains below the national rate, and it is anticipated that this will continue throughout the forecast period. Minnesota's job market remains favorable to job seekers, with more vacancies than unemployed workers.

Minnesota's economic outlook is informed by the Standard & Poor's Global Market Intelligence (SPGMI) forecasts for both the U.S. and Minnesota, data from the Minnesota Department of Economic and Employment Development (DEED), the Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages (QCEW), Minnesota tax revenues, and additional data from the BLS and the Bureau of Economic Analysis (BEA). The November 2025 Budget and Economic Forecast has been prepared with substantial missing data due to the federal government shutdown, including federal and state labor and employment data for September and October.

Minnesota's payroll employment is estimated to decline by about 3,600 jobs (-0.1 percent) in fiscal year 2026, followed by an increase of 3,000 jobs (0.1 percent) in fiscal year 2027. In fiscal year 2028, an increase of 8,700 jobs (0.3 percent) and an increase of 10,000 jobs (0.3 percent) in fiscal year 2029 is projected.

The state's unemployment rate rose to 3.6 percent in August 2025, up 0.6 percentage points from February 2025, but still 0.7 percentage points below the U.S. unemployment rate. Additionally, broader labor-market indicators suggest the employment outlook is worsening, with the number of long-term unemployed (those unemployed for more than 27 weeks) nearly doubling year-over-year and an increasing number of part-time workers unable to find full-time employment. A lower forecast for international immigration, declining birth rates, and the continuing retirements of Baby Boomers is projected to limit the state's labor force and further constrain employment growth in the coming years. Without sustained worker inflows either from international immigration or domestic migration, Minnesota employers may struggle to fill jobs, potentially slowing the growth of total wage and salary disbursements and constraining the expansion of overall economic activity.

SPGMI projects U.S. real GDP growth will average 1.9 percent per year from fiscal year 2026 through fiscal year 2029, reflecting very low payroll employment growth, low growth in consumption and business investment, and elevated inflation. Minnesota is closely tied to national economic trends, and the current state-level data aligns with that outlook.

With only moderate projected growth in Minnesota employment in the November 2025 Budget and Economic Forecast, average wage growth (growth in wage and salary income per worker) is expected to be the primary driver of growth in total nominal wage income through the forecast horizon. The growth rate in nominal wage and salary income per worker is forecast to increase 4.1 percent in fiscal year 2026, 3.7 percent in fiscal year 2027, 3.7 percent in fiscal year 2028, and 3.7 percent in fiscal year 2029.

The market for existing homes appears healthy. Despite high mortgage rates, new listings in Minnesota were up 3.3 percent in October 2025 compared to the same period last year, and available inventory remained steady at 3.1 months of supply. Home prices in Minnesota also remain at record highs despite high mortgage rates. In October 2025, the median sales price statewide reached $351,000, a 0.9 percent increase compared to the previous year. According to the Federal Housing Finance Agency (FHFA), Minnesota home prices were 4.1 percent higher in the second quarter of 2025 compared to the year prior. On average, Minnesota sellers received 96.9 percent of the original list price at closing.

Legislation

TRA continues to implement benefit changes enacted during the past several years. Post-retirement adjustments for eligible retirees are increasing by increments of 0.1% each year until the post-retirement adjustment reaches 1.5% on January 1, 2028, and thereafter. On January 1, 2025, eligible retirees received a 1.2% post-retirement adjustment. Legislation enacted in 2023 and 2024 lowered the normal retirement age for Tier II members, effective July 1, 2024, and increased the employer contribution rate by 0.75% resulting in a rate of 9.5%, and the employee contribution increased by 0.25% resulting in a rate of 8%, effective July 1, 2025.

Legislation enacted during the 2025 legislative session also impacted retirement benefits and contribution rates. Effective June 30, 2025, eligible members who are age 60 or older with at least 30 years of service are able to retire under a lowered reduction factor, 5% with augmentation, resulting in a higher retirement benefit. This benefit replaces TRA's former early retirement benefit for eligible members aged 62 or older with at least 30 years of service using a 6% reduction factor with augmentation. To fund the benefit improvement: (1) effective July 1, 2025, the upcoming 9.5% employer contribution rate was increased by 0.31% for a rate of 9.81%, and (2) effective June 30, 2025, all new retirees will not receive a postretirement increase until January 1st following the year in which they reach normal retirement age.

The pension adjustment rate for school districts and the base budgets for Minnesota State, Perpich Center for Arts Education, and Minnesota State Academies will increase to fund the cumulative 1.06% employer contribution rate increases enacted in 2024 and 2025.

Investment Results

The SBI invests the assets of the TRA funds and is governed by the prudent person rule and other standards set forth in Minnesota Statutes, Chapters 11A and 356A. TRA participates in a Combined Funds model. The Combined Funds represent the assets for both the active and retired public employees in the statewide retirement systems, the biggest of which are the Public Employees Pension Association (PERA), TRA, and the Minnesota State Retirement System (MSRS). The SBI commingles the assets of these plans into the Combined Funds to capture investment efficiencies.

Since the benefit obligations are not all immediately payable, the SBI can maintain a long-term strategy. This approach, along with a well-diversified investment portfolio, helps weather periods of short-term volatility in the investment markets.

Within this investment environment TRA retirement assets under the SBI investment management (see page 66) produced an investment return of 10.9% for the fiscal year ended June 30, 2025, net of investment management fees and any profit sharing agreements. The 10.9% return equals the composite benchmark for the fiscal year. Over the latest 5, 10, 20, and 30-year periods, the TRA investment portfolio has experienced an annualized investment return of 10.6%, 8.9%, 8.3% and 8.6% respectively. For time periods referenced, the performance of the portfolio exceeded the performance of the composite benchmark and exceeded the respective assumed rate of return.

The public equity category returned 15.6% for the fiscal year ended June 30, 2025. The domestic portion of public equity returned 15.2% and the international portion returned 16.6%. The private markets produced a return of 6.1% for fiscal year 2025. The fixed income portion of the combined funds produced a return of 5.8% for the fiscal year.

Statutory Funding Status

The actuarial value of TRA assets increased $1.9 billion for a total of $30.2 billion as of June 30, 2025 as compared to $28.3 billion on June 30, 2024. For actuarial purposes, investment gains and losses over or under the assumed return are recognized over a five-year period. The rate of return was higher than the 7% assumed rate of return, resulting in an actuarial gain of $837 million. The five-year smoothing of investment gains and losses produced a deferred investment gain of $1.1 billion as of June 30, 2025. This deferred gain will be recognized over the next four fiscal years.

Another key measure to assess TRA funding health is the adequacy of employee and employer contributions including direct aid. The 2023 legislature passed a bill lowering the investment return assumption and the normal retirement age for Tier II members. Taking that into consideration, the current valuation results show a contribution sufficiency of 0.44% of pay. TRA's UAAL, the difference between the Actuarial Accrued Liability (AAL) and the Actuarial Value of Assets (AVA), decreased from $7.1 billion on June 30, 2024, to $6.8 billion on June 30, 2025. Included in 2023 and recent legislation is an increase in contribution rates effective July 1, 2025. Employee contribution rates will be 8.0% and employer rates will be 9.81%.

The 2025 Omnibus Pensions and Retirement Bill changed the amortization method for financing the System's Unfunded Actuarial Accrued Liability (UAAL) from a single base being amortized over the period ending June 30, 2048 to a "layered" amortization approach. Under the new method, the UAAL as of July 1, 2024 and the benefit increases enacted in 2025 will each be amortized over the period ending June 30, 2048, but other bases will be amortized over varying periods depending on the source the UAAL impacts. On June 30, 2025, the funding ratio stood at 81.6%, an increase from 79.9% on June 30, 2024.

Major Initiatives

The TRA Board of Trustees approved a strategic plan developed in collaboration with TRA staff and board members. The four goals in the plan are as follows:

Engagement and education: TRA will provide information to empower members, employers, legislators and taxpayers to be aware and engaged about TRA's governance structure as well as the value of a defined-benefit plan.

Member educational materials should be clear, accurate, accessible and presented in innovative ways for all life stages.

Fund integrity balanced with equity in plan provisions: TRA will abide by its fiduciary duty to ensure the financial stability of the plan while working toward fairness in benefit structure and contribution rates. TRA will continually monitor the plan's financial health. When needed, TRA will recommend adjustments to stabilize the fund while upholding the board's guiding principles of shared commitment, intergenerational equity, long-term financial sustainability and maintaining the recruitment/retention value of a TRA pension.

Engaged, empowered, high-performing workforce: TRA will demonstrate dedication, stability and inclusivity. Leadership and staff will respect all perspectives and experiences. Succession planning and operational workforce planning will support the transfer of knowledge from outgoing employees and the recruitment and retention of new and existing employees.

Risk-intelligent organization: TRA will be a risk-intelligent organization with a robust, proactive and comprehensive risk-management program. TRA will continue to monitor and respond to known and emerging risks.

TRA executive leadership outlined strategies and action plans to accomplish each of the four goals. Leadership continues to apprise the board on the progress made toward achieving the goals. The strategic plan will continue to guide TRA's planning efforts as we enter 2026.

Executive Director Transition: This year, the TRA Board of Trustees guided the agency through a transition in its executive leadership that led to the appointment of a new executive director.

Jay Stoffel, TRA's former executive director, retired in October 2024 after serving as the fund's top administrator since 2017. Upon Stoffel's departure, TRA's then-Deputy Executive Director Tim Maurer took on the duties and responsibilities of interim executive director.

A national search was conducted for the position and the board established a subcommittee of trustees intended to focus on the search and review of applications before qualified candidates would be presented to the board at large for consideration. At the February 2025 meeting, the TRA Board of Trustees voted unanimously to appoint Tim Maurer to serve as the organization's next executive director. Maurer officially assumed the role on March 7, 2025.

Introducing ID.me for Stakeholder Verification: TRA employs cutting-edge technology to keep TRA stakeholders' myTRA online accounts secure. Since February 2025, TRA has required the use of ID.me—a third-party vendor—to sign in to myTRA. By engaging in enhanced risk mitigation, TRA is better prepared to combat the threat of cybercrime that is ever-present for financial services organizations.

ID.me is certified against federal standards to provide secure login and identity verification. The service helps TRA ensure that the individuals signing in to myTRA are legitimate and not bad actors engaged in fraud. The transition to using ID.me for account verification followed months of planning and preparation, with collaboration occurring between TRA's Communications, Finance, IT, Pension Administration, and Security teams.

ID.me is used by many government agencies, including the Social Security Administration and the Department of Veterans Affairs. Once users have set up ID.me accounts, they can access a variety of online services across government, health care, and commerce using the same credentials. By the end of fiscal year 2025, more than 18,000 TRA stakeholders had accessed their myTRA account using ID.me.

Awards and Recognition

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to TRA for its Annual Comprehensive Financial Report for the cal year ended June 30, 2024. This was the 27th consecutive year that the Association has achieved this prestigious award. To be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized Annual Comprehensive Financial Report. This report must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of only one year. We believe that our current Annual Comprehensive Financial Report continues to meet the Certificate of Achievement Program requirements.

In addition, GFOA awarded TRA with the Award for Outstanding Achievement in the Popular Annual Financial Reporting (PAFR) for the fiscal year ended June 30, 2024. The PAFR Award is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government popular reports. In order to receive this award, a government unit must publish a Popular Annual Financial Report, whose contents conform to program standards of creativity, presentation, understandability, and reader appeal. This was the third year we produced and published a PAFR and are pleased to have received this award again.

TRA was also awarded the Public Pension Coordinating Council's Recognition Award for Administration and Funding in 2025. This award recognizes TRA's meeting of professional standards in plan administration in categories such as benefits, actuarial valuations, audit, investments, and communications to members. The funding award is given to retirement systems that meet funding and contribution adequacy measures.

The preparation of this report is possible only through the combined efforts of our employees, employer units, and professional consultants. It is intended to provide a complete and reliable portrayal of the financial status of the pension fund as a basis for making management decisions and determining responsible stewardship over the assets held in trust for the members of the Association. We have notified members, employer unit officials, and other interested persons about the availability of the report on the TRA website. A summary that highlights key aspects of the report will be provided to all members in the TRIB, TRA's periodic newsletter.

Lastly, our sincere appreciation is extended to all who assisted in and contributed toward the completion of this publication.

Respectfully submitted,

Tim Maurer, Executive Director

Maria Steele, Chief Financial Officer

TRA Board of Trustees and Executive Leadership

As of June 30, 2025

Board of Trustees

Executive Leadership

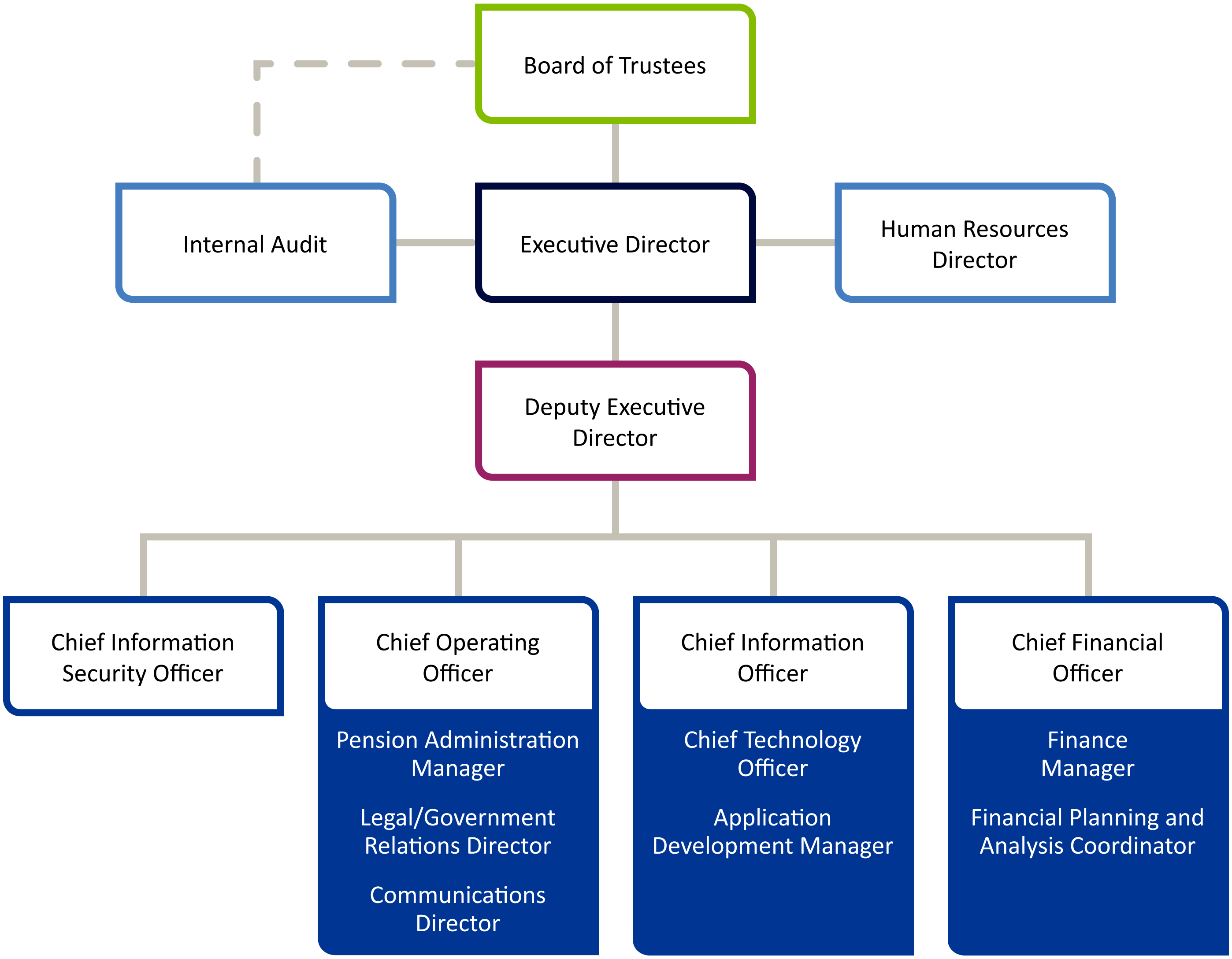
Tim Maurer
Executive Director

Maria Steele
Chief Financial Officer

Rachel Barth
Chief Operating Officer

Administrative Organization

As of June 30, 2025



Consulting Services

Actuary
CavMac Actuarial Consulting Services
Bellevue, Nebraska

Auditors
Office of the Legislative Auditor
St. Paul, Minnesota

CliftonLarsonAllen LLP
Chicago, Illinois

Investments*
Minnesota State Board of Investment
St. Paul, Minnesota

Legal Counsel
Office of the Attorney General
St. Paul, Minnesota

Ice Miller
Indianapolis, Indiana

*The Schedule of Investment Managers and Fees is found on pages 70-72.

Mission

TRA provides retirement, disability and survivor benefits to Minnesota's public educators assisting them in achieving future income security. TRA strives to provide benefits that attract and retain competent teachers who serve communities throughout the state, building a stronger education system. TRA is committed to safeguarding the financial integrity of the fund and takes pride in providing exceptional, innovative services.

Vision

To be an outstanding retirement system pursuing benefits and services that exceed members' expectations.

Goals

Engagement and Education

TRA will provide information to empower members, employers, legislators and taxpayers to be aware and engaged about TRA's governance structure as well as the value of defined-benefit plan. Member educational materials should be clear, accurate, accessible and presented in innovative ways for all life stages.

Fund Integrity Balanced with Equity in Plan Provisions

TRA will abide by its fiduciary duty to ensure the financial stability of the plan while working toward fairness in benefit structure and contribution rates. TRA will continually monitor the plan's financial health. When needed, TRA will recommend adjustments to stabilize the fund while upholding the Board's guiding principles of shared commitment, intergenerational equity, long-term financial sustainability and maintaining the recruitment/retention value of a TRA pension.

Engaged, Empowered, High-Performing Workforce

TRA will demonstrate dedication, stability and inclusivity. Leadership and staff will respect all perspectives and experiences. Succession planning and operational workforce planning will support the transfer of knowledge from outgoing employees and the recruitment and retention of new and existing employees.

Risk-Intelligent Organization

TRA will be a risk-intelligent organization with a robust, proactive and comprehensive risk-management program. TRA will continue to monitor and respond to known and emerging risks.

Financial

MACCRAY Auditorium
Photo by Steve Silverman

OLA | OFFICE OF THE LEGISLATIVE AUDITOR

Judy Randall, Legislative Auditor
State of Minnesota

Independent Auditor's Report

Members of the Board of Trustees
Teachers Retirement Association of Minnesota

Tim Maurer, Executive Director
Teachers Retirement Association

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of the Teachers Retirement Association (TRA), which included the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position as of and for the year ended June 30, 2025, and the related notes to the financial statements, which collectively comprise TRA'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 financial position of the Teachers Retirement Association as of June 30, 2025, and the changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit 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 Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of TRA 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 opinion.

Room 140 Centennial Building, 658 Cedar Street, St. Paul, MN 55155-1603 • Phone: 651-296-4708 • Fax: 651-296-4712
Email: legislative.auditor@state.mn.us • Website: www.auditor.leg.state.mn.us • Minnesota Relay: 1-800-627-3529 or 711

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 TRA'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.

Auditor's Responsibilities of 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 auditor's report that includes our opinion. 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 TRA'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 TRA'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 other required supplementary information, 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 auditing standards generally accepted in the United States of America, 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.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the basic financial statements as a whole. The supporting schedules in the Financial Section, 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 auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the Introduction, Investments, Actuarial, and Statistical Sections, as listed in the Table of Contents, but does not include the basic financial statements and our auditor's report thereon. Our opinion on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated.

If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we will also issue a report on our consideration of TRA's 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 TRA'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 TRA's internal control over financial reporting and compliance.

Lori Leysen, CPA
Deputy Legislative Auditor

Jordan Bjonfald, CPA
Audit Director

December 22, 2025
Saint Paul, Minnesota

Management Discussion and Analysis

June 30, 2025

This overview summarizes the financial activities of the Teachers Retirement Association (TRA) of Minnesota for the fiscal year ended June 30, 2025. Please review this information along with the transmittal letter on page 4 and the additional information presented in the financial statements and required supplementary information.

Financial Highlights

Financial highlights of fiscal year 2025 include:

- The Net Position Restricted for Pension Benefits increased in value by $2.2 billion during fiscal year 2025. Plan contributions and investments produced a net gain of $4.3 billion during the fiscal year, while plan benefits and other expenses totaled $2.1 billion.
- Investment returns for the 2025 fiscal year were 10.9% using the time-weighted value method, net of investment management fees and the effect of any profit-sharing arrangements, resulting in a net investment gain of $3.1 billion. Investment returns over performed the 7% assumed return rate.
- Contributions paid by employees, employers, and non-employers totaling $1.1 billion, is a decrease of $94.3 million from the fiscal year 2024. This is due to a one-time direct aid payment received in fiscal year 2024.
- Pension benefits paid to retirees and beneficiaries was $2 billion, representing a decrease of $15.6 million from fiscal year 2024.
- Refunds of member contributions plus interest were $22 million, representing no material change from the fiscal year 2024 .
- Administrative expenses of the fund were $19.7 million. The fiscal year 2024 total was $17.5 million, representing an increase of $2.2 million for the fiscal year. The increase is due to salary expense increases and additional costs relating to the board elections not incurred in the prior year.

Actuarial Highlights

TRA's funding objective is to meet long-term benefit obligations through the accumulation of contributions and investment income. This funding is structured so that the burden of paying retirement costs is shared equitably by present and future generations of members and taxpayers.

By state law, TRA and its actuarial consultant are required to prepare an actuarial funding valuation to assist decision-makers in assessing the funding strength of the TRA fund. The results of this report will be used to describe key funding measures such as the funding ratio, the Unfunded Actuarial Accrued Liability (UAAL) and the adequacy of current contribution rates.

As of June 30, 2025, the accrued liability funding ratio was 81.6%, an increase from the funding ratio of 79.9% as of June 30, 2024. TRA's UAAL on June 30, 2024, was $7.1 billion. The June 30, 2025, UAAL was $6.8 billion, a decrease of $319 million from the previous year. The key actuarial funding measures are presented on page 85.

TRA's actuary has also prepared a separate actuarial valuation report under the requirements of GASB Statement 67 (GASB 67) for presentations and disclosures within the financial section of this report. The GASB 67 valuation is the foundation of a report TRA will issue in early 2026 to assist employer units in their GASB Statement 68 (GASB 68) financial reporting presentations and disclosures in 2026. The fiscal year 2025 results indicate a Net Pension Liability of $5.7 billion, a decrease of $623.5 million from the $6.4 billion on July 1, 2024.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the financial reports of TRA. The financial reports consists of:

- the basic financial statements, comprised of the *Statement of Fiduciary Net Position* and the *Statement of Changes in Fiduciary Net Position*;
- the notes to the basic financial statements;
- required supplementary information; and
- other supplementary information.

The *Statement of Fiduciary Net Position* (page 24) presents information on the assets and liabilities of TRA, with the difference between the two reported as net position. The net position of the Association reflects the resources available to pay benefits to members when due. Over time, increases and decreases in net position measure whether the Association's financial position is improving or deteriorating. It can be thought of as a snapshot of the financial position of TRA at that specific point in time.

The *Statement of Changes in Fiduciary Net Position* presents information detailing the changes in net position that occurred during the current fiscal year. All changes in net position are reported on an accrual basis. This means that the revenue or expense is recognized as soon as the underlying event giving rise to the change occurs, regardless of when the actual cash is received or paid. Thus, revenues and expenses are reported in this statement for some items that will not result in cash flows until future fiscal periods.

The notes to the financial statements (pages 26-47) provide additional information that is essential for a full understanding of the data provided in the financial statements.

The report also contains required supplementary information in addition to the basic financial statements. The required supplementary information (pages 48-50) will provide a 10-year historical trend. The *Schedule of Changes in the Employers' Net Pension Liability* includes a reconciliation of the fiscal year 2025 net pension liability for GASB 67 reporting purposes.

The *Schedule of Employer and Non-Employer Contributions* presents information about the actuarially required contributions and contributions actually received in relation to this requirement, covered payroll, and contributions as a percentage of covered payroll.

The *Schedule of Investment Returns* (page 50), using the money-weighted method, is presented and will provide a 10-year historical trend.

Three other supporting schedules are also presented:

- The *Schedule of Administrative Expenses* (page 58) presents the overall cost of administering the Association.
- The *Schedule of Professional Consultant Fees* (page 59) provides a breakdown of professional consulting fees.
- The *Schedule of Investment Expenses* (page 60) provides further details about investment expenses.

Financial Analysis of the TRA Fund

Plan Assets

Total plan assets of the TRA fund as of June 30, 2025, were $32.5 billion and were mostly comprised of cash, investments, and contributions. Total plan assets increased $2.1 billion from the June 30, 2024 total of $30.4 billion. The primary reason for the increase was the investment appreciation in fair value of TRA assets by the end of fiscal year 2025.

Plan Liabilities

Total liabilities as of June 30, 2025, were $1.2 billion, a decrease of $85.2 million from the June 30, 2024 liability. The primary reason for the decrease in value of liabilities was the securities lending program and long-term bonds payable for the building co-owned by TRA. The final bond payment for the building was made June 2025.

Net Position

Association assets exceeded liabilities on June 30, 2025, by $31.3 billion. The amount has increased from the June 30, 2024 amount of $29.1 billion by $2.2 billion. TRA relies heavily on investment earnings to help pay benefits and expenses over the long term since annual employee and employer contributions are less than one-half of the amount needed to fund cash outflows.

As a result, the fair value of assets of the TRA fund will generally decline during periods of weak investment performance, but rise during periods of strong performance.

Revenues — Additions to Fiduciary Net Position

Total additions to the TRA fund during fiscal year 2025 were $4.3 billion, representing a decrease of $182 million from $4.4 billion in fiscal year 2024. Total employee and employer contributions, and direct aid for fiscal year 2025 decreased $94.3 million from the previous fiscal year for a combined fiscal year total of $1.1 billion. The decrease is attributable to the one-time direct aid contribution of $176.1 million received in fiscal year 2024 as part of the Pension Omnibus Budget Bill.

A net investment gain of $3.1 billion was recorded for fiscal year 2025. This amount decreased by $87.8 million from the net investment gain of $3.2 billion in fiscal year 2024.

Fiduciary Net Position

For Fiscal Years Ended June 30, 2025 and June 30, 2024

(Dollars in Thousands)

Assets	2025	2024	Change
Cash and Investments	$ 32,422,884	$ 30,331,001	$ 2,091,883
Receivables	23,024	30,644	(7,620)
Capital Assets	6,486	7,079	(593)
Total Assets	**$ 32,452,394**	**$ 30,368,724**	**$ 2,083,670**
Liabilities			
Current Liabilities	$ 1,189,805	$ 1,275,251	$ (85,446)
Long Term Liabilities	1,214	994	220
Total Liabilities	**$ 1,191,019**	**$ 1,276,245**	**$ (85,226)**
Fiduciary Net Position	**$ 31,261,375**	**$ 29,092,479**	**$ 2,168,896**

Changes in Fiduciary Net Position

For Fiscal Years Ended June 30, 2025 and June 30, 2024

(Dollars in Thousands)

Additions	2025	2024	Change
Employee Contributions	$ 503,821	$ 480,136	$ 23,685
Employer Contributions	638,430	756,421	(117,991)
Net Investment Gain(Loss)	3,111,259	3,199,055	(87,796)
Other	912	803	109
Total Additions	**$ 4,254,422**	**$ 4,436,415**	**$ (181,993)**
Deductions			
Monthly Benefits	$ 2,043,842	$ 2,059,436	$ (15,594)
Refunds of Contributions	21,951	21,501	450
Administrative Expenses	19,732	17,502	2,230
Total Deductions	**$ 2,085,525**	**$ 2,098,439**	**$ (12,914)**
Change in Fiduciary Net Position	**$ 2,168,897**	**$ 2,337,976**	**$ (169,079)**
	$ 31,261,375	**$ 29,092,479**	**$ 2,168,896**

Expenses — Deductions from Fiduciary Net Position

The primary expenses of TRA include pension benefit payments to members and beneficiaries, refunds of contributions to former members, and the cost of administering the Fund. Total benefits paid in fiscal year 2025 were $2 billion. Retirement benefits paid this fiscal year decreased by $15.5 million over the previous fiscal year; this decrease is net of (or after deducting) the one-time, lump-sum Cost of Living Adjustment (COLA) payout that occurred last fiscal year.

Member refunds increased from $21.5 million to $22 million for fiscal year 2025. Administrative expenses increased by $2.2 million during the fiscal year to 19.7 million. Overall, fund deductions decreased by $12.9 million for fiscal year 2025.

Actuarial Funding Valuations Highlights

The financial health of a public pension plan is not exclusively assessed by analyzing the basic financial statements. To assist funding analysis, TRA's actuary prepared an actuarial valuation in accordance with Minnesota Statute, section 356.215. These financial statements should also be reviewed in conjunction with the Actuarial section of this ACFR.

Actuarial Assets

The actuarial value of assets increased from $28.3 billion on June 30, 2024 to $30.2 billion as of June 30, 2025. The actuarial value of assets smooths investment gains and losses over a five-year period to minimize the volatility associated with any one year. On a market value basis, TRA assets were $31.3 billion on June 30, 2025. As a result, the net deferred investment gain of $1.1 billion (actuarial value of assets minus the market value) is an improvement from the $769.7 million gain in last year's valuation. Absent unfavorable investment experience, the deferred asset gains are expected to flow through the smoothing method over the next four years, increasing the funded ratio and decreasing the Required Contribution Rate.

Actuarial Liabilities

TRA's Actuarial Accrued Liability on June 30, 2025, increased to $37 billion from the June 30, 2024, amount of $35.4 billion, an increase of 4.4%. A complete reconciliation can be seen on pages 95-97.

TRA's Unfunded Actuarial Accrued Liability (UAAL) decreased from $7.1 billion on June 30, 2024 to $6.8 billion on June 30, 2025. This represents a decrease of $319.3 million. By statute, the unfunded liability must be fully amortized by June 30, 2048.

TRA's funding objective is to meet long-term benefit obligations through the accumulation of contributions and investment income. As of June 30, 2025, the Actuarial Accrued Liability funding ratio for TRA was 81.6%, an improvement from the comparable funding ratio of 79.9% as of June 30, 2024.

Contributions

TRA's statutory contribution rate of 18.49% of member covered payroll is currently higher than the Required Contribution Rate calculated by TRA's actuarial consultant. The Required Contribution Rate to fund normal pension costs, amortizing the UAAL, plus TRA administrative costs was calculated as 18.05%. The resulting contribution sufficiency is 0.44% of covered payroll, or about $30.4 million projected in fiscal year 2026.

Legislation

Remaining from the 2023 legislative session are increases to employee and employer contribution rates effective July 1, 2025.

- The employer rate will increase 0.75% from 8.75% to 9.5%.
- The employee rate will increase 0.25% from 7.75% to 8%.

On May 23, 2025, the 2025 Omnibus Pension and Retirement Bill (SF 2884 / HF 1889) was signed into law.

The bill changed TRA's 62-and-30 early retirement provision to 60-and-30 with a reduction factor of 5%

with augmentation down from 6% effective June 30, 2025.

Also effective June 30, 2025, all new retirees will not receive a post-retirement increase/COLA until January 1st following the year in which they reach normal retirement.

To fund the increased cost of the change to the early retirement provision, the employer contribution rate was increased by 0.31% for a total rate of 9.81%, effective July 1, 2025. To offset the cost to the employers, the state has budgeted to provide $40 million per biennium. TRA will absorb the remaining 0.26% of the total cost of the benefit improvement.

From the 2024 Pensions and Retirement Bill

- Accelerated the effective date from July 1, 2025 to July 1, 2024 for lowering the normal retirement age from age 66 to age 65 for Tier II members.

- Certain Minnesota State employees who were not informed of the option to elect TRA upon initial employment, may elect to transfer from the Individual Retirement Account Plan (IRAP) to TRA for future coverage and purchase past service credit.

GASB Statements 67-68 actuarial valuation results

The TRA Board of Trustees authorized a separate actuarial valuation report designed to comply with the provisions of GASB 67. The *Required Supplementary Information*, beginning on page 48, details the results of this valuation report. The focus of this valuation is primarily for financial statement presentations rather than funding analysis. Under the set of assumptions used in this valuation, TRA had a net pension liability of $5.7 billion on June 30, 2025 and a contribution deficiency of $42.2 million for fiscal year 2025. The GASB 67 investment return for fiscal year 2025, using the money-weighted method, was 10.9%, net of investment management fees and the effect of any profit-sharing arrangements.

The Net Pension Liability of $5.7 billion on June 30, 2025 is a decrease of 9.8% from the $6.4 billion calculated at June 30, 2024. The decrease (improvement) is primarily attributable to investment performance that was significantly higher than the actuarial target of 7%.

Under GASB 67 parameters, the actuary must calculate the date on which June 30, 2025 assets would be depleted, absent future cash flows and asset accumulations that would occur related to future members of TRA. The actuary has determined that using the GASB 67 methodology in fiscal year 2025, TRA assets are not expected to be depleted in the future.

TRA will allocate the results of the GASB 67 accounting valuation to each employer unit. (link to full report below). TRA provides employer units with this information in the calendar year 2026 to facilitate their compliance with the financial reporting requirements of GASB 68 for their fiscal year 2026 financial reporting cycle.

https://minnesotatra.org/financial/annual-reports/

Summary

Due to the long-term nature of defined benefit plans, one must review the financial performance of TRA over a period of years and not at any one point in time. The funding ratio of the TRA fund increased from 79.9% to 81.6% for fiscal year 2025. However, the 2023 legislature passed a package that includes changes to the actuarial assumption, benefit provisions, and contribution rates as well as additional State appropriations payable in fiscal year 2024. Appropriated State funds received in 2024 in the amount of $145 million were designated to pay down the UAAL. As a result of the 2023 Omnibus Pension Bill, contribution rates will increase for both employers and employees on July 1, 2025 and the normal retirement age for Tier II members was reduced from 66 to 65.

The long-term financial health of TRA, like all retirement funds, is heavily dependent on two key items: (1) future investment returns and (2) contributions. Legislative changes made by the 2025 Legislature improved benefits and increased statutory contribution rates. As a result, TRA is currently experiencing a contribution sufficiency of 0.44% of pay. Effective July 1, 2025, the employer contribution rate will increase by 1.06% and the employee contribution rate will increase by 0.25%.

TRA's Executive Management Team continually reviews actuarial reports and funding projections to closely monitor the adequacy of contributions. The team will seek Board and legislative action to remedy any long-term structural deficiencies, should they exist.

Teachers Retirement Fund
Statement of Fiduciary Net Position
June 30, 2025

(Dollars in Thousands)

Assets	
Cash and Cash Equivalent Investments	
Cash	$ 16,190
Building Account Cash	889
Short-Term Investments	951,334
Total Cash and Cash Equivalent Investments	**$ 968,413**
Accounts Receivable	**$ 23,024**
Investments (at Fair Value)	
Treasuries Pool	$ 2,942,065
Bond Pool	1,755,883
Alternative Investments Pool	6,859,623
U.S. Stock Index Pool	8,217,143
U.S. Stock Actively Managed Pool	2,423,493
Broad International Stock Pool	5,180,625
Global Equity	364,996
Return Seeking Fixed Income	1,561,172
Short Duration Laddered Bonds	992,233
Total Investments	**$30,297,233**
Securities Lending Collateral	**$ 1,157,238**
Capital Assets, Net of Depreciation	
Land	$ 171
Building & Equipment Net of Depreciation	4,112
Equipment, Furniture, and Fixtures	232
Internally Generated Software	1,363
Right to Use Assets	608
Total Capital Assets	$ 6,486
Total Assets	$32,452,394
Liabilities	
Current	
Accounts Payable	$ 31,135
Accrued Compensated Absences	1,138
Right to Use Payable	294
Securities Lending Collateral	1,157,238
Total Current Liabilities	**$ 1,189,805**
Long Term	
Accrued Compensated Absences	$ 899
Right to Use Payable	315
Total Long Term Liabilities	**$ 1,214**
Total Liabilities	**$ 1,191,019**
Net Position Restricted For Pensions	**$31,261,375**

The accompanying notes are an integral part of this statement.

Teachers Retirement Fund
Statement of Changes in Fiduciary Net Position
For Fiscal Year Ended June 30, 2025

(Dollars in Thousands)

Additions		
Contributions		
Employee	$	503,821
Employer		574,381
Direct Aid (State/City/District)		64,049
Total Contributions	$	1,142,251
Investment Income		
Net Appreciation in Fair Value of Investments	$	3,219,796
Investment Expense		(113,877)
Net Investment Gain	$	3,105,919
Securities Lending Activities:		
Securities Lending Income	$	65,939
Securities Lending Expenses:		
Borrower rebates	$	(59,427)
Management Fees		(1,172)
Total Securities Lending Expenses	$	(60,599)
Net Income from Securities Lending	$	5,340
Total Net Investment Gain	$	3,111,259
Other Income	$	912
Total Additions	$	4,254,422
Deductions		
Retirement Benefits Paid	$	2,043,748
Earnings Limitation Savings Account	$	94
Refunds of Contributions to Members	$	21,951
Administrative Expenses	$	19,732
Total Deductions	$	2,085,525
Net Increase	$	2,168,897
Net Position Restricted for Pensions		
Beginning of Year	$	29,092,478
End of Year	$	31,261,375

The accompanying notes are an integral part of this statement.

1. Description of TRA

A. Organization

The Teachers Retirement Association (TRA) is the administrator of a multiple employer, cost-sharing retirement fund. TRA administers a Basic Plan (without Social Security coverage) and a Coordinated Plan (coordinated with Social Security coverage) in accordance with Minnesota Statutes, Chapters 354 and 356. Assets of the fund may be used to pay benefits to both Basic and Coordinated members without legal restriction.

B. Participating Members and Employers

Membership in TRA is mandatory for educators employed in Minnesota's public elementary and secondary schools, charter schools, and select state-supported educational institutions. Exceptions include teachers working for the St. Paul Public School District and certain faculty members employed by Minnesota State.

Faculty at state universities, community colleges, and technical colleges have the option to elect TRA membership or to participate in the Defined Contribution Retirement Plan (DCR) administered by Minnesota State. Teachers employed by Minnesota State may elect TRA coverage within one year of their eligible employment. Newly-tenured Minnesota State members also have a one-year period to elect TRA coverage. Those who choose the DCR plan are not considered TRA members, except for Social Security coverage purposes.

A schedule of employer units and membership is presented in *Figure 1, Employer Units and Membership*.

Figure 1. Employer Units and Membership

Employer Units	
Independent School Districts	369
Colleges and Universities	34
State Agencies	5
Charter Schools	180
Professional Organizations	3
Total Employer Units	**591**
Membership	
Retirees, Disabilitants and Beneficiaries receiving benefits	70,483
Terminated members with deferred vested benefits	21,701
Other terminated, non-vested members entitled to a refund of contributions	42,550
Subtotal	**134,734**
Current Employees	
Vested	70,356
Non-vested	16,106
Subtotal	**86,462**
Total Membership	**221,196**

C. Benefit Provisions

TRA provides retirement benefits, as well as disability benefits to members and benefits to survivors upon the death of eligible members. All benefits vest after three years of eligible service credit. The defined retirement benefits are based on a member’s highest average salary for any consecutive 60 months of formula service, age, and years of formula service credit upon termination of service. TRA members belong to either the Basic or Coordinated Plan.

Two methods are used to compute benefits for TRA’s Coordinated and Basic Plan members. Members first employed **before July 1, 1989,** receive the greater of the Tier I or Tier II benefits as described:

Tier I	Step Rate Formula	Percentage
Basic	1st 10 years of service	2.2% per year
	All years after	2.7% per year
Coordinated	1st 10 years of service (service years are prior to July 1, 2006)	1.2% per year
	1st 10 years of service (service years are on or after July 1, 2006)	1.4% per year
	All other years of service (service years are prior to July 1, 2006)	1.7% per year
	All other years of service (service years are on or after July 1, 2006)	1.9% per year

With the following provisions:

a. Normal retirement age is 65 with less than 30 years of allowable service and 60 with 30 or more years of allowable service credit.

b. 3% per year early retirement reduction for all years under normal retirement age.

c. Unreduced benefits for early retirement under a Rule-of-90 (age plus allowable service credits equals 90 or more).

Or

For years of service prior to July 1, 2006, a level formula of 1.7% per year for Coordinated plan members and 2.7% per year for Basic Plan members. For years of service July 1, 2006 and after, a level formula of 1.9% per year for Coordinated members and 2.7% for Basic members applies. An early retirement reduction is applied to members retiring prior to age 65. Beginning June 30, 2025, new reduction factors will apply, including special factors for members retiring at age 60 or later with at least 30 years of service.

Tier II Benefits

Members first employed **after June 30, 1989**, receive only the Tier II benefit calculation with a normal retirement age that is their retirement age for full Social Security retirement benefits, but not to exceed age 65 effective July 1, 2024.

An early retirement reduction is applied to members retiring before age 65. Beginning June 30, 2025, new reduction factors will apply, including special factors for members retiring at age 60 or later with at least 30 years of service.

Other

Former Minneapolis Teachers Retirement Fund Association (MTRFA) members with Basic Program eligibility retain the plan provisions of the Basic Program as defined in the MTRFA Articles of Incorporation and Bylaws as they existed at the merger on June 30, 2006. Four former MTRFA active and inactive members retain Basic Program coverage.

Former members of the Duluth Teachers Retirement Fund Association (DTRFA) retain the plan provisions as defined in the DTRFA Articles of Incorporation and Bylaws as they existed at the merger on June 30, 2015.

The benefit provisions stated in the preceding paragraphs of this section are current provisions and apply to active plan participants. Vested, terminated members who are entitled to benefits, but are not yet receiving them, are bound by the provisions in effect at the time they last terminated their public service. Pension benefits are funded from member and employer contributions and income from investment of fund assets.

D. Reporting Entity

TRA functions as a separate statutory entity created by the Minnesota Laws of 1931, Chapter 406. The Association maintains rights to sue or be sued in its own name and to hold property in its own name. For financial reporting purposes, TRA is considered a pension trust fund of the State of Minnesota and is included in the State's Annual Comprehensive Financial Report (ACFR) with its fiduciary funds. TRA is not a component unit and does not have any component units. This report includes financial information for TRA only.

The State of Minnesota acts as a fiduciary and trustee of TRA's funds. The eight member Board of Trustees is defined by Minnesota Statute, Section

354.06, and consists of four active member representatives, one retired member representative, and three statutory officials.The State Legislature determines the contribution rates for members and employers and sets benefits provisions. The Board of Trustees is responsible for TRA's administration and the Minnesota State Board of Investment (SBI) is responsible for investing plan assets.

2. Summary of Significant Accounting Policies

A. Basis of Presentation and Basis of Accounting

The basis of presentation in preparing the TRA accompanying financial statements is performed in accordance with Generally Accepted Accounting Principles (GAAP). TRA adheres to accounting and financial reporting standards established by the Governmental Accounting Standards Board (GASB). GASB is the independent, not-for-profit, standards-setting organization and the official source of GAAP for state and local governmental entities in the United States of America. TRA's financial reporting is performed in accordance with the GASB requirements through Statement 95, and including Statements 98 and 101.

The basis of accounting indicates the timing of transactions or events for recognition in the financial statements. TRA's financial statements are prepared using the accrual basis of accounting. Employee contributions, employer contributions, and related receivables are recognized as revenues when due, pursuant to statutory requirements. Annuity benefits, refunds and expenses are recognized when due and payable in accordance with Minnesota Statutes, Chapters 354 and 356. Administrative and other expenses, and the associated liabilities, are recognized when the liability is incurred.

TRA implemented no changes in accounting principles during fiscal year 2025.

B. Cash, Cash Equivalents and Accounts Receivable

TRA's defined benefit retirement funds, cash and cash equivalents include cash on deposit in the state's treasury, commingled with other state funds, and short-term investments. Cash on deposit consists of year-end receipts not yet processed as of the investment cutoff on June 30, 2025. Short-term investments, which the SBI staff manages, include U.S. Treasury issues, repurchase agreements, banker's acceptances, commercial paper, money market, and certificates of deposit.

Amounts classified as accounts receivable consist primarily of employee and employer contributions, calculated as a percentage of each employee's salary. They are direct statutory payments from employers received after the fiscal year end on salaries earned prior to June 30, 2025. Under Minnesota Statutes, Section 354.52, subdivision 4, TRA employers must remit contributions within 14 days after the member is paid. A Schedule of Accounts Receivable as of June 30, 2025, is presented in *Figure 2, Schedule of Accounts Receivable.*

Figure 2. Schedule of Accounts Receivable

(Dollars in Thousands)

Description	Amount
Member contributions	$ 10,693
Employer contributions	12,074
State Board of Investment	160
Interagency Receivable	4
Retirement Building	93
Total Receivables	**$ 23,024**

C. Investment Policies

The SBI was established by Article XI of the Minnesota Constitution to invest all state funds. The Board's membership is composed of the Minnesota Governor (who is designated as Chair of the Board), State Auditor, Secretary of State, and Attorney General. The legislature also established a 17-member Investment Advisory Council (IAC) to advise the SBI and its staff on investment related matters. TRA's Executive Director is a permanent member of the IAC.

The state's public retirement fund assets are invested in various pooled investment accounts, commonly referred to as the Combined Funds, as established in Minnesota Statutes Chapter 11A. Each participating retirement fund owns an undivided participation in the Combined Funds' pooled investment accounts.

The SBI investment policy may be amended by a majority vote of the Board. The policy outlines the investment philosophy and guidelines within which the Combined Fund’s investments will be managed.

Description of Significant Investment Policy Changes During the Year

The SBI had no significant investment changes during the year.

Valuation of Investments

Investments in the Combined Funds are reported on a trade date basis at fair value. Fair value is the proportionate share of the combined market value of the investment portfolio of the SBI investment pool in which the funds participate. All securities within the pools are valued at fair value except for U.S. government short-term securities and commercial paper, which are valued at fair value less accrued interest. Accrued interest is recognized as short-term income. The SBI values long-term fixed income securities by using various valuation systems which provide prices for both actively traded and privately placed bonds. For equity securities, the SBI uses various valuation services. Fair value is the last reported sales price for securities traded on national or international exchanges. If a security is not actively traded, then the fair value is based on the analysis of financial statements, analysis of future cash flows and independent appraisals.

Assumptions made in valuing securities are as follows:

- Values of actively traded securities determined by recognized exchanges are objectively negotiated purchase prices between willing buyers and sellers, and are not subject to either undue influence or market manipulation. Securities traded on a national or international exchange are valued using the last reported trade price.
- Values of securities not actively traded are determined by objective appraisals by qualified professional analysts whose results would not vary materially from those of other similarly qualified professionals. The fair value of investments is based upon valuations provided by a recognized pricing service. Short-term investments are reported at cost, which approximates fair value. The fair value of real estate investments is based on independent yearly appraisals. Investments that do not have an established market are reported at estimated fair value.

The term "market value" is used when describing asset valuation methods for actuarial purposes, and is used consistently throughout the Actuarial Section and in other places in the ACFR when referring to funded status. "Market value" is equivalent to "Fair value."

Investment Income

Investment income is recognized as it is earned. Accrued investment income of the pooled investment accounts is included in participation in the accounts. Gains and losses on sales or exchanges are recognized on the transaction date.

Investment Expenses

For financial reporting purposes, the cost of security transactions is included in the transaction price. Investment expenses include administrative expenses of the SBI to manage the state's comprehensive investment portfolio and investment management fees paid to the external money managers and the state's master custodian for pension fund assets. These expenses are allocated proportionately to the funds participating in the pooled investment accounts. Details of these expenses are presented in the *Schedule of Investment Management Fees* (pages 70-72) found within the unaudited Investment Section of this ACFR.

TRA's financial statements have historically reported investment expenses for management fees for public market investments. For the fiscal year 2025, the *Statement of Changes in Fiduciary Net Position* lists expenses for investment management fees for all asset class categories, including private markets. Investment returns throughout the ACFR are net of all public and private market investment management fees, including the effect of any profit-sharing arrangements. This change has no effect on the net investment income or the net position restricted for pensions.

A detailed schedule of fees and commissions the SBI paid to brokerage firms, along with the number of shares traded, total commissions, commissions per share for the pooled investment accounts, and other investment information may be obtained from:

Minnesota State Board of Investment
Retirement Systems of Minnesota Building
60 Empire Drive, Suite 100
Saint Paul, Minnesota 55103

Asset Allocation

To match the long-term nature of pension obligations, the SBI maintains a strategic asset allocation for the Combined Funds that includes allocations to public equity, fixed income and cash investments, and private markets. Figure 3 on the next page highlights the target asset allocation at June 30, 2025.

The SBI conducts routine rebalancing as required to maintain the portfolio's long-term target asset allocation. Per the SBI policy, if the portfolio's actual allocation to Public Equity or Fixed Income and Cash deviates +/- 10% or more from the target allocation the Executive Director is required to rebalance by repositioning assets to bring the portfolio back into line within the established range(s) within a reasonable timeframe, subject to market conditions. The Executive Director applies judgment with respect to the timing and amounts of all rebalancing trades.

For example, the target allocation for Fixed Income and Cash is 25% of the portfolio. A +/- 10% deviation from the 25% target equals +/- 2.5% of the portfolio. Therefore, the Fixed Income and Cash allocation would require rebalancing if the actual allocation rose to 27.5% or fell to 22.5%.

The Private Markets target allocation is not subject to the rebalancing process described above, reflecting the constraints of capital pacing, valuation timing and liquidity, which make it impractical to maintain precise targets through routine rebalancing. The SBI recognizes that in some market situations the allocation to Private Markets may exceed 25%, but by statute may not exceed 35%.

The long-term expected return on investment is based on the asset allocation study completed by the SBI in 2016. Subsequent periodic reviews of the portfolio's asset allocation were conducted in 2017 and 2020, with incremental policy changes approved in each instance.

An updated asset allocation study was conducted during fiscal year 2025 and was adopted by the Board at its October 2025 meeting. It is anticipated that the new strategic asset allocation will be implemented over the remainder of fiscal year 2026.

The SBI's long-term expected rate of return on pension plan investments was determined using a building-block method. Best estimates for expected future real rates of return (expected returns, net of inflation) were developed for each asset class using both long-term historical returns and long-term capital market expectations from a number of investment management and consulting organizations. The asset class estimates and the target allocations were then combined to produce a geometric, long-term expected real rate of return for the portfolio. Inflation expectations were applied to derive the nominal rate of return for the portfolio.

Figure 3. Asset Allocation Targets

June 30, 2025

Public Equity		50%
-Domestic Equity	33.5%	
-International Equity	16.5%	
Fixed Income		25%
-Core Bonds & Return Seeking Bonds	10%	
-Treasuries	10%	
-Cash & Laddered Bonds	5%	
Private Markets		25%

Figure 4. Target Asset Allocation and Long Term Expected Real Rate of Return

Asset Class	Target Allocation	Long-term Expected Real Rate of Return (Geometric Mean)
Domestic Equity	33.50%	5.10%
International Equity	16.50%	5.30%
Private Markets	25.00%	5.90%
Fixed Income	25.00%	0.75%
Total	100.00%	

The pooled accounts have not been rated for credit quality. Figure 5, TRA Investment Portfolio, provides a summary of the cost and fair values of the investments as of June 30, 2025, as reported on the *Statement of Fiduciary Net Position* (page 24)

Figure 5. TRA Investment Portfolio

(Dollars in Thousands)

TRA Investment Portfolio: June 30, 2025		
TRA Fund	**Cost**	**Fair**
Pooled Accounts		
Treasuries Pool	$ 3,137,898	$ 2,942,065
Bond Pool	1,773,221	1,755,883
Alternative Investments	6,199,872	6,859,623
US Stock Index Pool	5,292,854	8,217,143
US Stock Actively Managed	2,359,545	2,423,493
Broad International Stock Pool	3,964,292	5,180,625
Global Equity	294,693	364,996
Return Seeking Fixed Income	1,490,560	1,561,172
Short Duration Laddered Bonds	924,891	992,233
Total	$ 25,437,826	$ 30,297,233
Short Term Cash Equivalents		
Money Market	$ 890,053	$ 894,275
CD Repo Pool	56,855	57,059
Total	$ 946,908	$ 951,334
Total Invested	$ 26,384,734	$ 31,248,567

Net investment income is summarized on the *Statement of Changes in Fiduciary Net Position* (page 25). The summarized amounts show net investment gain of $3.1 billion for fiscal year 2025.

Annual money-weighted return on plan investments

For the year ended June 30, 2025, the annual money-weighted rate of return on the assets of the combined retirement fund, net of investment management fees and the effect of any profit-sharing arrangements, was 10.9% (*Figure 6. 10-Year Schedule of Investment Returns using the Money-Weighted Method*).

Explanation of money-weighted return

The money-weighted rate of return is a method of calculating period-by-period returns on pension plan investments that adjusts for the changing amounts actually invested. For purposes of GASB 67, the money-weighted rate of return is calculated as the internal rate of return on pension plan investments, net of investment management fees, and the effect of any profit-sharing arrangements.

Figure 6. 10-Year Schedule of Investment Returns using the Money-Weighted Method

Year	Investment Return
FY 2025	10.9%
FY 2024	12.3%
FY 2023	8.9%
FY 2022	(6.2)%
FY 2021	30.3%
FY 2020	4.2%
FY 2019	7.3%
FY 2018	10.5%
FY 2017	15.2%
FY 2016	(0.1)%

D. Capital Assets

TRA classifies capital assets as tangible or intangible right-to-use assets.

Tangible assets include land, buildings, building improvements, equipment, furniture, and internally developed software.

Equipment, furniture, and fixtures are assets with an initial cost of more than $30,000, $300,000 for property, and $1,000,000 for software. Except for land, tangible assets are depreciated using the straight-line method over their useful lives: computer equipment (3 years), office equipment (5 years), modular furniture (10 years), and software (10 years).

Intangible right-to-use assets are recognized per GASB Statements 87 (Leases) and 96 (Subscription-Based IT Technology Arrangements - SBITA), with thresholds of $30,000 for equipment, $300,000 for property, and $250,000 for SBITAs. These assets and related liabilities are measured at contract commencement using present value of expected payments and amortized over the contract term or asset life. TRA had no qualified leases under GASB 87 for the year. Capital assets and right-to-use assets are reported on the June 30, 2025 *Statement of Fiduciary Net Position*, with details in Figure 7 and Figure 15.

Figure 7. Schedule of Capital Assets

(Dollars in Thousands)

Description	Balance 7/1/2024	Additions	Deletions	Balance 6/30/2025
Description				
Furniture and Equipment	$ 3,477	$ 244	$ (385)	$ 3,336
Reserve for Depreciation - Furniture and Equipment	(3,477)	(12)	385	(3,104)
Internally Generated Computer software	$ 20,116	$ —	$ —	$ 20,116
Reserve for Amortization - Developed Software	(17,586)	(1,167)	—	(18,753)
Net Capital Assets	$ 2,530	$ (935)	$ —	$ 1,595
Description				
Land	$ 171	$ —	$ —	$ 171
Building	$ 10,637	$ —	$ —	$ 10,637
Reserve for Building Depreciation	(6,259)	(266)	—	(6,525)
Net Building	$ 4,378	$ (266)	$ —	$ 4,112
Building Equipment	$ 108	$ —	$ —	$ 108
Reserve for Building Equipment Depreciation	(108)	—	—	(108)
Net Building Equipment	$ —	$ —	$ —	$ —
Description				
Right to Use Assets-SBITA	$ —	$ 887	$ —	$ 887
Reserve for Amortization-Right to Use Assets	—	(279)	—	(279)
Net Right to Use Assets	$ —	$ 608	$ —	$ 608

E. Accrued Compensated Absences

Accrued Compensated Absences for TRA staff are calculated by Minnesota Management and Budget (MMB) in accordance with GASB 101. The liability calculation includes accrued vacation leave, sick leave, compensatory leave, and any other potential liability costs related to severance at various rates within the limits specified in collective bargaining agreements. Accumulated amounts for compensated absences are accrued when incurred. Such leave is liquidated in cash primarily at the time of termination of employment. The total liability at June 30, 2025, is $2,037,000. Of this, $1,138,000 is considered a short-term liability and $899,000 is shown as a long-term liability on the *Statement of Fiduciary Net Position*. The total increased by $217,000 during fiscal year 2025. Prior year actual expenses incurred compared to the accrued liability deemed immaterial.

3. Deposits and Investment Risk Disclosures

A. Fair Value Reporting

GASB Statement 72 (GASB 72), Fair Value Measurement and Application, sets forth the framework for measuring the fair value of investments based on a hierarchy of valuation inputs. The hierarchy has three Levels:

Level 1: Market valuation approach using quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity can access at the measurement date.

Level 2: Market valuation approach using inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. Inputs for Level 2 include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability;
- Inputs derived principally from or corroborated by observable market data by correlation or other means.

Level 3: Unobservable inputs for the asset or liability. Unobservable inputs reflect the SBI's assumptions about the inputs that market participants would use in pricing an asset or liability. Assets classified as a Level 3 typically use the cost approach, income approach, or consensus pricing for a valuation technique.

Net Asset Value (NAV): Investments that do not have a readily determinable fair value are measured using the NAV per share (or its equivalent) as a practical expedient, and are not classified in the fair value hierarchy. Cash and cash equivalents (investments with less than 90 days to maturity) are not leveled per GASB 72.

All non-cash investments, including derivative investments that are not hedging derivatives, are required to be measured at fair value on a recurring basis. The SBI maintains investment pools that participants can invest in; participants own a proportionate share of the investment pools. The fair value of the investment pools is priced daily by the SBI custodian, when a daily price is available, by using independent pricing sources.

In *Figure 8, Fair Value of TRA Investments*, Level 3 investments primarily consist of assets where the asset is distressed, or there is not an active market. The fair values of the assets measured at NAV have been determined using the March 31, 2025 values adjusted for cash flows. The investments measured at NAV are typically not eligible for redemption. Distributions are received as underlying investments when the funds are liquidated, which occur over the life of the investment. The typical liquidation period for alternative investments ranges from 3 to 12 years. The majority of the distribution is received during the liquidation period, however it is not uncommon for a minimal amount of the fund to remain open while awaiting final close from the General Partner.

As of June 30, 2025, the alternative investments are not expected to be sold at an amount different from the NAV value of the SBI's ownership interest in partner's capital.

The SBI has a total of $11,549,777,269 in unfunded commitments to the investments valued at NAV. TRA's portion of unfunded commitments is $3.6 billion. Unfunded commitments is money that has been committed to an investment but not yet transferred to the General Partner (Investor).

The SBI has 194 Private Equity investments representing 73.3% of the NAV value (Investments Measured at Net Asset Value). There are 50 out of 194 Private Equity funds that are over the 12-year liquidation period and represent 8% of the Private Equity NAV value.

The SBI has 35 Real Estate investments representing 10.2% of the NAV value. There are 7 out of 35 Real Estate funds that are over the 12-year liquidation period and represent 3.1% of the Real Estate NAV value.

The SBI has 31 Real Assets investments representing 8.6% of the NAV value. There are 16 out of 31 Real Assets funds that are over the 12-year liquidation period and represent 34.4% of the Real Assets NAV value.

The SBI has 42 Private Credit investments representing 7.9% of the NAV value. There are 12 out of 42 Private Credit funds that are over the 12-year liquidation period and represent 6% of the Private Credit NAV value.

Explanations of investment types follow *Figure 8. Fair Value of TRA Investments*.

Figure 8. Fair Value of TRA Investments

As of June 30, 2025

(Dollars in Thousands)

Investments	Fair Value	Level 1	Level 2	Level 3
Equity				
Common Stock	$ 15,417,761	$ 15,412,528	$ 5,088	$ 145
Real Estate Investment Trust	260,310	260,310	—	—
Other Equity	366,619	249,452	955	116,212
Equity Total	$ 16,044,690	$ 15,922,290	$ 6,043	$ 116,357
Fixed Income				
Asset-Backed Securities	$ 450,884	$ —	$ 449,227	$ 1,657
Mortgage-Backed Securities	1,015,641	—	1,014,771	870
Corporate Bonds	1,631,410	—	1,630,764	646
Government Issues	4,095,538	—	4,095,538	—
Short-Term Investments	240,343	$ —	$ 240,343	$ —
Fixed Income Total	$ 7,433,816	$ —	$ 7,430,644	$ 3,173
Investment Derivatives				
Rights	$ 27	$ 27	$ —	$ —
Warrants	14	14	—	—
Derivative Total	$ 41	$ 41	$ —	$ —
Total Investments by Fair Value	$ 23,478,547	$ 15,922,331	$ 7,436,687	$ 119,530

Investments Measured at the Net Asset Value (NAV)	NAV	Unfunded Commitments	Number of Investments	Percent of the NAV
Private Equity	$ 5,010,220	$ 2,571,634	194	73.3%
Real Estate	697,129	399,950	35	10.2%
Real Assets	584,624	186,387	31	8.6%
Private Credit	541,363	393,912	42	7.9%
NAV total	$ 6,833,336	$ 3,551,883	302	100.0%

Note: *Cash, cash equivalents, and derivative futures (hedge type instruments) are not leveled under GASB Statement 72, are not included in this exhibit. Any variance between recorded account balances and the fair value of investments as reported in the exhibit are accounts payable and accounts receivable items on June 30, 2025, and not leveled under GASB Statement 72.*

Investment types used in Figure 8:

Equity

Common Stock: Securities representing equity ownership in a corporation, providing voting rights, and entitling the holder to a share of the company's success through dividends and/or capital appreciation.

Real Estate Investment Trust (REIT): An investment pool established by a group of investors for the purpose of investing in real estate or mortgages. REITs are generally exempt from federal taxes, provided that 95% of earned income is distributed and that the various investors are not treated differently.

Other Equity: Includes Preferred Stock, Depository Receipts, Limited Partnership Units, Common Stock Units, Mutual Funds, and Non-Security Asset Stock.

Fixed Income

Asset Backed Securities: Bonds or notes backed by financial assets, including auto loans and credit card receivables.

Mortgage Backed Securities: An asset-backed security that is secured by a mortgage or collection of mortgages. The mortgages are sold to a government agency or investment bank that will package the loans together into a security that can be purchased by investors.

Corporate Bonds: Debt obligations issued by corporations as an alternative to offering equity ownership by issuing stock. Like most municipal bonds and Treasuries, most corporate bonds pay semi-annual interest and promise to return their principal when they mature. Maturities range from 1 to 30 years.

Government Issue: Securities or bonds issued by any of the 50 states, the territories and their subdivisions, counties, cities, towns, villages and school districts, agencies (such as authorities and special districts created by the states), and certain federally sponsored agencies such as local housing authorities.

Short-Term Investments: Short-term investment funds include cash, bank notes, corporate notes, government bills and various safe short-term debt instruments. These types of funds are usually used by investors who are temporarily parking funds before moving them to another investment that will provide higher returns. These funds traditionally have low management fees, usually well below 1% per year.

Investment Derivatives

Rights: The right to purchase newly issued securities in proportion to the investor's holdings of certain stocks. Generally, they are actively traded and must be exercised within a short period of time.

Warrants: The right to purchase one or more shares of stock. Warrants are usually attached to other issues purchased by an investor. They are often detachable and can be exercised over a long period (5 to 10 years). A warrant, because it has a value of its own, can be traded.

Options – Futures: A contract that gives the holder the right to buy from or sell to the writer a specified amount of securities at a specified price, good for a specified period of time. An American option can be exercised at any time prior to its expiration. A European option can be exercised only on its expiration date.

Investments Measured at the Net Asset Value (NAV)

Private Equity: The private equity investment strategy is to establish and maintain a broadly diversified private equity portfolio composed of investments that provide diversification by industry type, stage of corporate development and location.

Real Estate: The real estate investment strategy calls for the establishment and maintenance of a broadly diversified real estate portfolio composed of investments that provide overall diversification by property type and location. The main components of this portfolio consist of investments in closed-end commingled funds. The remaining portion of the portfolio may include investments in less diversified, more focused (specialty) commingled funds and REITs.

Real Assets: The strategy for real assets investments is to establish and maintain a portfolio of real assets investment vehicles that provide an inflation hedge and additional diversification. Real Assets investments will include oil and gas investments and energy service industry investments that are diversified by geographic area as well as by type.

Private Credit: The strategy for private credit investments is to target funds that typically provide a current return and may have an equity component. Structures such as subordinated debt investments and mezzanine investments are typical yield-oriented investments.

B. Investment Risk

The SBI is responsible for the investing of TRA assets under the authority of Minnesota Statutes, Section 11A.24. The following notes (C through F) apply to TRA investments.

C. Custodial Credit Risk

Custodial credit risk for cash deposits and investments is the risk that, in the event of a bank or custodian failure, TRA will not be able to recover the value of its investments or collateral securities. Cash consists of year-end receipts not processed as of the investment cutoff deadline on June 30th. TRA cash funds are held in the state treasury, commingled with other state funds. Minnesota Statute, Section 9.031 requires that deposits be secured by depository insurance or a combination of depository insurance and collateral securities held in the state's name by an agent of the state. Such insurance and collateral shall be in amounts sufficient to ensure that deposits do not exceed 90% of the sum of the insured amount and the fair value of the collateral. Throughout fiscal year 2025, the combined depository insurance and collateral was sufficient to meet legal requirements and secure all TRA deposits, eliminating exposure to custodial credit risk.

D. Credit Risk

Credit risk is the risk that an issuer or counterparty to an investment will be unable to fulfill its obligations. The SBI has policies designed to minimize credit risk. They may invest funds in governmental obligations provided the issue is backed by the full faith and credit of the issuer or the issue is rated among the top four quality rating categories by a nationally recognized rating agency. They may invest funds in corporate obligations provided the issue is rated among the top four quality categories by a nationally recognized rating agency. They may also invest in unrated corporate obligations or in corporate obligations that are not rated among the top four quality categories provided that:

- The aggregate value of these obligations may not exceed 5% of the fund for which the state board is investing;
- Participation is limited to 50% of a single offering; and
- Participation is limited to 25% of an issuer's obligations.

The SBI may also invest in bankers acceptances, deposit notes of U.S. banks, certificates of deposit, mortgage securities, and asset backed securities rated in the top four quality categories by a nationally recognized rating agency. Commercial paper must be rated in the top two categories.

As of June 30, 2025, TRA's proportionate share of the SBI's exposure to credit risk, based on the lower Standard and Poor's or Moody's Quality ratings for debt securities and short-term investments, is shown in Figure 9, Credit Risk Exposure. For clarity of reporting, Moody's ratings are displayed in this figure using the comparable Standard and Poor's rating. If only one rating exists, that rating is used.

Figure 9. Credit Risk Exposure

(Dollars in Thousands)

Quality Rating	Fair Value
AAA	$ 298,441
AA	4,782,971
A	321,999
BBB	782,524
BB	426,159
B	377,232
CCC	203,274
CC	9,658
C	302
D	1,751
Unrated	1,414,060
Total	$ 8,618,371

E. Concentration of Credit Risk

Concentration of credit risk is the risk of loss that may be attributed to the magnitude of a government's investment in a single issuer. The SBI determines concentration of credit risk based on security identification number.

TRA does not have exposure to a single issuer that equals or exceeds 5%; therefore, there is no material concentration of credit risk.

F. Interest Rate Risk

Interest rate risk is the risk that changes in interest rates of debt investments could adversely affect the fair value of an investment. The SBI controls interest rate risk through guidelines developed for each portfolio. TRA's share of the debt securities are held in external investment pools and have the weighted average maturities as shown in Figure 10, Interest Rate Risk.

Figure 10. Interest Rate Risk

Security Type	Weighted Average Maturity (*in Years*)
MUNICIPAL	16.16
US TREASURY	12.32
CMO	9.45
AGENCY	8.50
YANKEE	8.25
MORTGAGE PASS-THROUGH	7.66
FOREIGN	7.34
CORPORATE	5.37
ASSET BACKED	5.01
BANK LOAN	4.87

G. Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates between the U.S. dollar and foreign currencies could adversely affect the fair value of an investment. Most foreign currency risk resides within the SBI's international equity investment holdings. In order to reduce foreign currency risk, the SBI has developed and implemented a number of policies. Government obligations, including guaranteed or insured issues of the International Bank for Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, and the African Development Bank, must pay interest and principal in U.S. dollars. The principal and interest of obligations of corporations, including those corporations incorporated or organized under the laws of the Dominion of Canada or any province thereof, must also be paid in U.S. dollars. The SBI uses a foreign currency overlay manager to implement an active hedging program for its international developed markets passive equity portfolio. In addition, the SBI active managers also have discretion to use forward currency contracts within their portfolios to hedge foreign currency risk as they deem appropriate. TRA's share of investments as of June 30, 2025, was distributed among the currencies as shown in *Figure 11, Schedule of Foreign Currency Risk*.

Figure 11. Schedule of Foreign Currency Risk

(Dollars in Thousands)

Currency	Cash	Fixed Income	Equity	Total
Australian Dollar	$ 1,003	$ 183	$ 204,230	$ 205,416
Brazilian Real	342	7,691	67,183	75,216
Canadian Dollar	2,322	297	393,584	396,203
Chilean Peso	25	799	3,648	4,472
Colombian Peso	65	3,577	496	4,138
Czech Koruna	44	4,347	2,138	6,529
Danish Krone	706	—	79,171	79,877
Dominican Peso	—	150	—	150
Egyptian Pound	9	—	307	316
Euro Currency	6,582	54,635	1,815,665	1,876,882
Hong Kong Dollar	1,351	—	354,596	355,947
Hungarian Forint	15	1,749	14,151	15,915
Indian Rupee	17	5,014	77,824	82,855
Indonesian Rupiah	75	5,738	17,990	23,803
Japanese Yen	11,577	—	724,282	735,859
Kuwaiti Dinar	—	—	3,300	3,300
Malaysian Ringgit	34	7,437	10,111	17,582
Mexican Peso	62	6,437	33,459	39,958
New Israeli Sheqel	99	—	15,050	15,149
New Taiwan Dollar	54	—	242,371	242,425
New Zealand Dollar	45	—	4,749	4,794
Norwegian Krone	228	—	27,860	28,088
Philippine Peso	10	55	1,962	2,027
Polish Zloty	5	4,290	14,751	19,046
Pound Sterling	4,615	6,325	524,721	535,661
Qatari Rial	—	—	3,381	3,381
Romanian LEU	9	1,332	1,280	2,621
Saudi Riyal	33	—	29,422	29,455
Singapore Dollar	300	—	53,587	53,887
SOL	17	2,685	—	2,702
South African Rand	216	6,667	33,286	40,169
South Korean Won	127	—	191,605	191,732
Swedish Krona	344	—	93,182	93,526
Swiss Franc	547	—	297,620	298,167
Thailand Baht	50	4,575	16,409	21,034
Turkish Lira	21	842	6,754	7,617
UAE Dirham	35	—	12,107	12,142
Uruguayan Peso	—	816	—	816
Uzbekistan Sum	—	139	—	139
Yuan Renminbi	81	2,832	46,871	49,784
Total	**$ 31,065**	**$ 128,612**	**$ 5,419,103**	**$ 5,578,780**

H. Derivative Financial Instruments Governmental Accounting Standards Board (GASB) Statement 53 Disclosures:

On behalf of TRA, the SBI invests in various types of derivative financial instruments. Derivatives are defined as financial arrangements between two parties that has value based on or derived from future price fluctuations. Derivative financial instruments used by the SBI include futures, options, stock warrants and rights, currency forwards, swaps and synthetic guaranteed investment contracts. For accounting purposes, derivative instruments are considered to be investments and not hedges.

Minnesota Statutes, Section 11A.24, provides that any agreement for put (sell) and call (buy) options and futures contracts may only be entered into with a fully offsetting amount of cash or securities. This applies to foreign currency forward contracts used to offset the currency risk of a security. All other derivatives are exchange-traded. The purpose of the SBI's derivative activity is to equitize cash in the portfolio, to adjust the duration of the portfolio, or to offset current futures positions.

The fair value balances and notional amounts (or face value) at June 30, 2025, classified by derivative instrument type (e.g., futures, options, currency forwards, and stock warrants and rights), and the changes in fair value for fiscal year 2025 are shown in *Figure 12, Schedule of Derivative Financial Instruments*. Explanations of each derivative instrument type are presented below:

- **Futures** are contract commitments to purchase (asset) or sell (liability) at a future date. The net change in the values of futures contracts is settled on a regular basis and gains and losses are included in investment income.
- **Options** are contracts that give buyers or sellers the right to buy (calls) or sell (puts) a security at a predetermined price at a future date. Gains and losses result from variances in the fair value of the security that is the subject of the contract that occur prior to or on the contract specified date. The gains and losses are included in investment income.
- **Currency Forward Contracts** are used to manage portfolio foreign currency risk. The provisions of the contract vary based on what is negotiated between the two parties to the contract.
- **Stock Warrants and Rights**, similar to Options, these instruments offer the right to purchase shares of a stock at a certain price by a certain date. They usually have a longer term before expiration, e.g., five years or more. When exercised, new shares are issued by the company. Rights are the same but are issued to current stock owners to enable them to retain their relative ownership share. Gains and losses from the sale or exercise of stock warrants and rights are included in investment income.
- **Swaps:** A derivative contract through which two parties exchange the cash flows or liabilities from two different financial instruments. Most swaps involve cash flows based on a notional principal amount such as a loan, bond, or currency. Usually, the principal does not change hands. Each cash flow comprises one leg of the swap. One cash flow is generally fixed, while the other is variable and based on a benchmark interest rate, floating currency exchange rate or index price. The most common kind of swap is an interest rate swap, but currency swaps and credit default swaps on a reference security or basket of securities are also common.

The SBI is exposed to credit risk through counterparties in foreign currency forward contracts that are used to offset the currency risk of a security. TRA is exposed to credit risk through 25 counterparties. TRA's proportionate share of the maximum loss that the SBI would have recognized as of June 30, 2025, if all counterparties failed to perform as contracted is $246.7 million. These counterparties have S&P ratings of BBB+ or better. There is no collateral held or any liabilities included in netting arrangements with those counterparties that would have reduced the SBI's exposure to credit risk.

Figure 12. Schedule of Derivative Financial Instruments

(Dollars in Thousands)

Derivative Investment Type	Changes in Fair Value During Fiscal Year 2025	Fair Value at June 30, 2025	Notional Amount
Futures			
Index Futures – Long	$ 10,397	$ —	$ 32
Index Futures – Short	—	—	—
Fixed Income Futures – Long	(1,728)	—	426,676
Fixed Income Futures – Short	4,559	—	(302,037)
Options			
Futures Options – Bought	(1,066)	—	—
Futures Options – Written	583	—	—
Equity Options – Bought	—	—	—
Equity Options – Written	—	—	—
Fixed Income Options – Written	72	(139)	(105,321)
Fixed Income Options - Bought	(4)	144	34,883
Currency Forwards			
Foreign Currency Forwards	(49,221)	(23,782)	10,461,579
Stock Warrants and Rights			
Stock Warrants	(4)	14	57
Stock Rights	60	27	2
Swaps			
Credit Default – Bought	(52)	—	—
Credit Default – Written	440	2,239	66,004
Pay Fixed Interest Rate	(1,268)	(203)	114,596
Receive Fixed Interest Rate	245	(96)	35,178
Total Return Swaps Equity	51	6	(317)

I. Securities Lending

Governmental Accounting Standards Board (GASB) Statement 28 Disclosures

TRA does not own specific securities, but instead owns shares in pooled funds invested by the SBI. The SBI is authorized to use securities lending transactions in accordance with Minnesota Statutes, Section 356A.06, subdivision 7, and has, pursuant to a Securities Lending Authorization Agreement, authorized State Street Bank and Trust Company (State Street) to lend its securities to broker-dealers and banks pursuant to a form of loan agreements.

During the fiscal year, State Street lent, on behalf of the SBI, certain securities of the SBI held by State Street as custodian and received cash or other collateral including securities issued or guaranteed by the United States government. State Street does not have the ability to pledge or sell collateral securities delivered absent a borrow default. Borrowers were required to deliver collateral for each loan equal to at least 100% of the market value of the loaned securities.

Pursuant to the Securities Lending Authorization Agreement, State Street had an obligation to indemnify the SBI in the event of default by a borrower. There were no failures by any borrowers to return loaned securities or pay distributions thereon during the fiscal year that resulted in a declaration of notice of default of the borrower.

During the fiscal year, the SBI and the borrowers maintained the right to terminate securities lending transactions upon notice. The cash collateral received on each loan was invested, together with the cash collateral of other qualified tax-exempt plan lenders, in a collective investment pool. As of June 30, 2025, such investment pool had an average duration of 1 days and an average weighted maturity of 111.01 days for USD. Because the loans were terminable at will, their duration did not generally match the duration of the investments made with cash collateral. On June 30, 2025, the SBI had no credit risk exposure to borrowers. The TRA portion of the market value of the collateral held and the market value of securities on loan from the SBI as of June 30, 2025, were $1.9 billion and $1.9 billion respectively. *See Figure 13, Securities Lending* for the detail of the securities on loan. Cash collateral totaling $1,157,238,052 is reported on the *Statement of Fiduciary Net Position* as an asset. Liabilities resulting from these securities lending transactions are also reported on the *Statement of Fiduciary Net Position.*

Figure 13. Securities Lending

(Dollars in Thousands)

Investment Type	Amount as of June 30, 2025
Domestic Equity	$ 1,279,547
International Equity	197,112
Domestic Corporate Bonds	103,496
U.S. Government Bonds	277,338
Total	$ 1,857,493

4. Other Notes

A. Administrative Expenses and Budget

The annual budget of TRA operations is developed by TRA management and approved by the Board of Trustees. The budget is also sent to the Department of Minnesota Management & Budget (MMB) for policy analysis and is included in the Governor's Biennial Budget presentation to the legislature. The legislature adopts appropriation and expenditure amounts resulting in an approved budget for the Association.

TRA administrative costs are not financed by any specific type of contribution or other income of the Fund. Administrative costs are included in the annual determination of the Actuarial Required Contribution Rate (page 97, line B3).

B. Earnings Limitation Savings Account (ELSA)

Teachers under their Social Security normal retirement age who resume teaching service for a TRA-covered employer after retirement are subject to a $46,000 annual earnings limitation.

If a retired member earns more than the limitation, the annuity payable during the following calendar year will be offset one dollar for each two dollars earned in excess of the limitation.

The pension offset amounts are redirected to a separate individual savings account, called the Earnings Limitation Savings Account (ELSA), and later distributed to the retiree. Effective January 1, 2011, ELSA accounts no longer accrue interest. A member may apply for a lump-sum payment or rollover of their ELSA account balance, as long as it has been at least one year after the last deferred amount was redirected to the ELSA account.

Since 2022, ELSA withholding is suspended per the legislature for certain retirees who return to work in Pre-K-12 TRA-covered positions for fiscal years 2022, 2023, and 2024. In the 2024 Omnibus Pension Bill, the suspension was extended for fiscal years 2025, 2026 and 2027 and subsequent retiree benefit withholding in calendar years 2026, 2027, and 2028. This temporary suspension of withholding ELSA does not apply to retirees returning to Minnesota State positions.

As of June 30, 2025, TRA had 86 retirees with an ELSA account established. The total of all ELSA account balances was $600,721. The dollar amount of pension benefits withheld due to excess earnings during fiscal year 2025 was $94,293. ELSA assets are invested in the TRA Fund until distribution. TRA distributed ELSA refunds to 19 members during fiscal year 2025. They totaled $298,219 and are included as a deduction in the *Statement of Changes in Fiduciary Net Position* as a component of Refund of Contributions to Members.

C. Participating Pension Plan

All 98 employees of TRA are covered by the multiple employer cost sharing defined benefit plan administered by TRA. All TRA employees participate in the Coordinated Plan and are eligible for the plan provisions described in Note 1, C.

Minnesota Statute, Section 354.42 sets the rates for the employee and employer contributions. These statutes are established and amended by the state legislature. During fiscal year 2025, Coordinated members were required to contribute 7.75% of their annual covered salary. Employers contributed 8.75% of their annual covered salary for Coordinated members. The total covered payroll salaries for all TRA employees during fiscal year 2025 was approximately $9.9 million or 0.15% of total membership-covered salaries. The total covered payroll salaries for the entire membership of TRA for fiscal year 2025 was approximately $6.4 billion. TRA paid 100% of its required employer contributions listed below in *Figure 14.*

Figure 14. Schedule of TRA Employer Pension Contributions for TRA Employees

(Dollars in Thousands)

2025	2024	2023
$794	$739	$687

D. Ownership of Office Building

The 1999 Legislature enacted law permitting TRA, the Public Employees Retirement Association (PERA), and the Minnesota State Retirement System (MSRS) to purchase land and construct a 140,000 square foot office building to house the administrative offices of these three state entities. Ownership of the facility is prorated based on the amount of square footage each retirement fund occupies in the building. The building is located on 4.3 acres of land at 60 Empire Drive in Saint Paul. TRA has occupied the fourth floor of the building since September 2001 and has a 36% ownership interest.

In June 2000, the State of Minnesota, under the authority of the Commissioner of Minnesota Management and Budget, issued 30-year revenue bonds totaling $29 million to pay for the construction of the facility. Each owner (retirement fund) is responsible for principal and interest payments based on its ownership percentage.

In August, 2012, the bonds were refunded with the proceeds of a new, lower-interest rate bond issue. The 2013 series $21,880,000 Retirement System Revenue Refunding bonds are secured by the value of the total assets of the retirement systems, excluding any fund related to or dedicated to defined contribution plans administered by the retirement systems. The goal of the 2012 refunding bonds was not only to attempt to approximate the debt service payments that existed under the 2000 revenue bonds, but to also shorten the repayment period by five years.

Through the issuance of the refunding bonds, which received a AAA rating from Standard & Poor's and Fitch, the bond term was reduced by five years and the present value of the savings to the retirement systems was $9.6 million. The bonds mature on June 1, 2025. TRA's share of the present value savings of the 2012 bond issuance was approximately $3.5 million.

In June 2025, TRA paid off their portion of the remaining building debt. TRA is depreciating its share of the facility over 40 years. The depreciation schedule, shown in *Figure 15, Schedule of Office Building and Equipment,* summarizes the asset valuation of the office building and building equipment.

Figure 15. Schedule of Office Building and Equipment

(Dollars in Thousands)

Description	(TRA Share @ 36%) Balance 7/1/2024	Additions	Deletions	Balance 6/30/2025
Land	**$ 171**	**$ —**	**$ —**	**$ 171**
Building	$ 10,637	$ —	$ —	$ 10,637
Reserve for Building Depreciation	(6,259)	(266)	—	(6,525)
Net Building	**$ 4,378**	**$ (266)**	**$ —**	**$ 4,112**
Building Equipment	$ 108	$ —	$ —	$ 108
Reserve for Depreciation	(108)	—	—	(108)
Net Building Equipment	**$ —**	**$ —**	**$ —**	**$ —**

5. Contributions Required and Made

Contributions totaling $1.1 billion ($503.8 million employee and $638.4 million employer and direct aid) were received in accordance with the statutory contribution rates and amounts. On page 97, Line C, statutory contributions are projected as sufficient to meet the actuarially determined required contributions. The sufficiency is 0.44% of covered payroll. This translates into a contribution sufficiency of about $30.4 million projected for fiscal year 2026.

The TRA actuary performs an annual actuarial funding valuation in accordance with Minnesota statute and the Minnesota Legislative Commission on Pensions and Retirement’s (LCPR) Standards for Actuarial Work. The report is meant to assist the legislature in determining the funding progress made towards paying off TRA’s unfunded liabilities.

Minnesota Statutes, Chapter 354 sets the rates (page 97, Line A4) for employee and employer contributions.

TRA also uses the level percentage of payroll method to amortize the fund's unfunded liability over a closed period ending June 30, 2048.

TRA changed the amortization method for financing the System's Unfunded Actuarial Accrued Liability (UAAL) from a single base being amortized over the period ending June 30, 2048 to a "layered" amortization approach. Under the new method, the UAAL as of July 1, 2024 will continue to be amortized according to its current schedule, but new bases will be amortized over varying periods depending on the source the UAAL impacts.

TRA's actuarial consultant performs another actuarial valuation to comply with the requirements of GASB 67.The components of the *Net Pension Liability* of the TRA plan as of June 30, 2025, are as follows for participating employers and non-employers:

Net Pension Liability	(Dollars in Thousands)
Total Pension Liability (TPL)	$36,992,230
Fiduciary Net Position (FNP)	$31,261,375
Net Pension Liability (NPL)	$5,730,855
Fiduciary Net Position as a percentage of the Total Pension Liability	84.51%

6. Net Pension Liability

Key Methods and Assumptions Used in Valuation of Total Pension Liability	
Actuarial Information	
Price inflation	2.50%
Salary increases, including price inflation	2.85% to 8.85% before July 1, 2028 and 3.25% to 9.25%, after June 30, 2028
Wage growth rate	2.85% before July 1, 2028, and 3.25%, after June 30, 2028
Payroll growth rate	3%
Long-term rate of return, net of investment expense, including price inflation	7%
Municipal bond index rate	
Prior measurement date	3.94%
Measurement date	5.25%
Year Fiduciary Net Position (FNP) is projected to be depleted	N/A
Single equivalent interest rate (SEIR), net of investment expense, including price inflation	
Prior measurement date	7%
Measurement date	7%
Cost of living adjustment	1.0% for January 2019 through January, 2023, then increasing by 0.1% each year up to 1.5% annually.
Mortality Assumptions	
Pre-retirement mortality rates were based on the PubT-2010(A) Employee Mortality Table, male rates set forward 1 year and female rates unadjusted. Generational projection uses the MP-2021 scale.	
Post-retirement mortality rates were based on the PubT-2010(A) Retiree Mortality Table, male rates set forward 1 year and female rates unadjusted. Generational projection uses the MP-2021 scale.	
Beneficiary mortality rates were based on the Pub-2010(A) Contingent Survivor Mortality Table, male rates set forward 1 year and female rates unadjusted. Generational projection uses the MP-2021 scale.	
Post-disability mortality rates were based on the PubNS-2010 Disabled Retiree Mortality Table, male rates set forward 1 year and female rates unadjusted. Generational projection uses the MP-2021 scale.	

Discount Rate - Single Equivalent Interest Rate (SEIR) – volatility of SEIR

The discount rate used to measure the TPL as of the Measurement Date was 7%. The projection of cash flows used to determine the discount rate was performed in accordance with GASB 67. On that basis, the *Fiduciary Net Position (FNP)* was not projected to be depleted and, as a result, the Municipal Bond Index Rate was not used in the determination of the SEIR. The SEIR at the prior measurement date was 7%.

Projected Cash Flows

The projection of cash flows used to determine the discount rate assumed that plan contributions from members and employers will be made at the current contribution rates as set out in state statute and supplemental aid will be received as currently provided in statute.

- Employee contribution rates: 11.25% for Basic members and 7.75% for Coordinated members. Effective July 1, 2025 employee contribution rates will increase to 11.5% for Basic members and 8% for Coordinated members.
- Employer contribution rates: 12.75% for Basic members and 8.75% for Coordinated members. In addition, a supplemental amount equal to 3.64% of Salary for Special School District #1 (Minneapolis Schools) members until the Fund is fully funded. Effective July 1, 2025 employer contribution rates will increase to 13.81% for Basic members and 9.81% for Coordinated members.
- Supplemental aid: $35,587,410 every year until the amortization date of June 30, 2048 or full actuarial funding is achieved.
- 2025 Omnibus Pension and Retirement Bill (SF 2884 / HF 1889) changed the early retirement provision from 62-and-30 to 60-and-30 also reducing the reduction factor by 1% (with augmentation) effective June 30, 2025.

  Also approved was a 5% augmented reduction factor for those who retire beginning at age 60 or older with 30 years of service, expanded post-retirement adjustment delay, and a 0.31% employer contribution rate increase. This increase will be funded in part by a state contribution of $20 million per year for two years. TRA will absorb the additional 0.26% of the additional employer contribution.
- Administrative expenses in the prior year were projected forward with price inflation as an estimate for administrative expenses in current and future years. The portion of expenses in future years allocated to the current members was based on the proportionate share of covered payroll in each year for the remainder of the existing members to the total covered payroll for all members.

Based on those assumptions, the System's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current System members. Therefore, the long-term expected rate of return on System investments of 7% was applied to all periods of projected benefit payments to determine the Total Pension Liability.

The Fiduciary Net Position projections are based on TRA's financial status on the Measurement Date, the indicated set of methods and assumptions, and the requirements of GASB 67. As such, the Fiduciary Net Position projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing basis reflecting the impact of future members. Therefore, the results of this test do not necessarily indicate whether or not the TRA Fund will actually run out of money, the financial condition of the TRA Fund, or TRA's ability to make benefit payments in future years.

Long-Term Rate of Return

The long-term expected rate of return on pension plan investments is reviewed regularly as part of the experience study. Generally, several factors are considered in evaluating the long-term rate of return assumption including long-term historical data, estimates inherent in current market data, and an analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of investment management fees, and the effect of any profit-sharing arrangements, and inflation) were developed using assumptions for each major asset class, as well as estimates of variability and correlations, provided by the System's investment consultant (SBI).

These ranges were 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 then adding expected inflation. The assumption is intended to be a long-term assumption (30 to 50 years) and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

The experience study was completed in August 2023. The recommended change was a reduction to the investment return assumption from 7.5% to 7% which was first implemented in the July 1, 2023 valuation due to the passage of the HF3100 Pension Budget Omnibus Bill signed into law May 19, 2023.

Municipal Bond Rate

A municipal bond rate was not used in determining the discount rate. If it were required, the rate would be 5.25% on the Measurement Date.

Periods of Projected Benefit Payments

Projected future benefit payments for all current plan members were projected through 2124.

Assumed Asset Allocation

The target asset allocation and best estimates of geometric real rates of return for each major asset class, as provided by the SBI, are summarized in *Figure 4, Target Asset Allocation and Long Term Expected Real Rate of Return*, which can be found on page 31.

Sensitivity Rate Analysis

GASB 67 requires disclosures of the sensitivity of the Net Pension Liability (NPL) to changes in the discount rate. The range is plus 1% and minus 1% of the current discount rate determined as summarized in *Figure 16, Sensitivity Rate Analysis.*

Figure 16. Sensitivity Rate Analysis

(Dollars in Thousands)

Sensitivity of Net Position Liability (NPL) to Changes in the Discount Rate			
	1% Decrease Rate 6%	Current Discount Rate 7%	1% Increase Rate 8%
NPL	$10,810	$5,731	$1,551

The complete 2025 *Actuarial Valuation Accounting Report* is available at:

https://minnesotatra.org/financial/annual-reports/

Required Supplementary Information

Schedule of Changes in the Employers' Net Pension Liability *(continued on next page)*

(continued on next page)

For the 10 Fiscal Years Ended June 30

(Dollars in Thousands)

	2025	2024	2023
Total Pension Liability			
Service cost	$ 725,514	$ 682,786	$ 627,177
Interest	2,410,196	2,379,150	2,282,503
Benefit term changes	413,417	56,762	615,463
Differences between expected and actual experience *	57,467	307,636	(90,669)
Assumptions changes	4,629	(909,324)	—
Benefit payments, including member refunds	(2,065,793)	(2,080,937)	(2,027,562)
Net change in Total Pension Liability	$ 1,545,430	$ 436,073	$ 1,406,912
Total Pension Liability – beginning	$ 35,446,800	$ 35,010,727	$ 33,603,815
Total Pension Liability – ending (a)	$ 36,992,230	$ 35,446,800	$ 35,010,727
Employer contributions	$ 574,381	$ 544,667	$ 508,764
Non-employer contributions-Direct Aid (State/City/District)	64,049	211,754	35,587
Employee contributions	503,821	480,136	442,448
Net investment income	3,111,259	3,199,055	2,213,897
Benefit payments, including member refunds	(2,065,793)	(2,080,937)	(2,027,562)
Administrative expenses	(19,732)	(17,502)	(16,534)
Other	912	803	1,559
Net Change in Plan Fiduciary Net Position	$ 2,168,897	$ 2,337,976	$ 1,158,159
Plan Fiduciary Net Position – beginning	$ 29,092,479	$ 26,754,503	$ 25,596,344
Plan Fiduciary Net Position - ending (b)	$ 31,261,377	$ 29,092,479	$ 26,754,503
Net Pension Liability - ending (a)-(b)	$ 5,730,853	$ 6,354,321	$ 8,256,224
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	84.51%	82.07%	76.42%
Covered Payroll	$ 6,416,226	$ 6,094,735	$ 5,735,250
Employers' Net Pension Liability as a percentage of covered payroll	89.32%	104.26%	143.96%

Required Supplementary Information

Schedule of Changes in the Employers' Net Pension Liability *(concluded)*

For the 10 Fiscal Years Ended June 30

(Dollars in Thousands)

	2022	2021	2020	2019	2018	2017	2016
	$ 596,232	$ 513,165	$ 489,790	$ 476,708	$ 1,056,681	$ 1,267,304	$ 438,938
	2,223,274	2,188,186	2,123,261	2,079,081	2,064,148	1,975,771	2,062,775
	—	—	—	—	(3,681,114)	—	—
	33,875	(65,710)	177,794	(70,899)	(17,461)	(167,572)	(798)
	—	1,919,160	6,673	—	(10,167,248)	(3,355,602)	15,871,845
	(1,987,622)	(1,949,875)	(1,914,465)	(1,877,836)	(1,831,887)	(1,776,814)	(1,728,023)
	$ 865,759	$ 2,604,926	$ 883,053	$ 607,054	$(12,576,881)	$ (2,056,913)	$ 16,644,737
	$ 32,738,056	$ 30,133,130	$ 29,250,077	$ 28,643,023	$ 41,219,904	$ 43,276,817	$ 26,632,080
	$ 33,603,815	$ 32,738,056	$ 30,133,130	$ 29,250,077	$ 28,643,023	$ 41,219,904	$ 43,276,817
	482,679	448,829	425,223	403,300	378,728	367,791	354,961
	35,590	37,840	35,587	35,587	35,587	35,587	35,587
	428,993	410,162	396,679	386,669	374,550	361,175	347,256
	(1,710,746)	6,684,106	939,748	1,579,099	2,160,111	2,855,218	(23,672)
	(1,987,622)	(1,949,875)	(1,914,465)	(1,877,836)	(1,831,887)	(1,776,814)	(1,728,023)
	(15,666)	(16,022)	(15,392)	(15,156)	(15,673)	(11,702)	(11,338)
	1,359	1,721	1,560	2,306	2,581	2,404	3,569
	$ (2,765,413)	$ 5,616,761	$ (131,060)	$ 513,969	$ 1,103,997	$ 1,833,659	$ (1,021,660)
	$ 28,361,757	$ 22,744,996	$ 22,876,056	$ 22,362,087	$ 21,258,090	$ 19,424,431	$ 20,446,091
	$ 25,596,344	$ 28,361,757	$ 22,744,996	$ 22,876,056	$ 22,362,087	$ 21,258,090	$ 19,424,431
	$ 8,007,471	$ 4,376,299	$ 7,388,134	$ 6,374,021	$ 6,280,936	$ 19,961,814	$ 23,852,386
	76.17%	86.63%	75.48%	78.21%	78.07%	51.57%	44.88%
	$ 5,573,701	$ 5,326,108	$ 5,166,241	$ 5,000,930	$ 4,832,917	$ 4,688,875	$ 4,515,699
	143.67%	82.17%	143.01%	127.46%	129.96%	425.73%	528.21%

* *For 2017 and prior, includes impact of date change for expected increase in COLA to 2.50%.*

Required Supplementary Information

Schedule of Employer and Non-Employer Contributions

For the 10 Fiscal Years Ended June 30

(Dollars in Thousands)

	2025	2024	2023	2022	2021	2020	2019	2018	2017	2016
Actuarially determined employer contribution	$ 680,615	$ 724,793	$ 459,133	$ 481,192	$ 529,896	$ 490,881	$ 472,491	$ 516,157	$ 516,582	$ 459,699
Actual non-employer contributions	64,049	211,754	35,587	35,590	37,840	35,587	35,587	35,587	35,587	35,587
Actual employer contributions	574,381	544,667	508,764	482,679	448,829	425,223	403,300	378,728	367,791	354,961
Total contributions	$ 638,430	$ 756,421	$ 544,351	$ 518,269	$ 486,669	$ 460,810	$ 438,887	$ 414,315	$ 403,378	$ 390,548
Annual contribution deficiency (excess)	$ 42,185	$ (31,628)	$ (85,218)	$ (37,077)	$ 43,227	$ 30,071	$ 33,604	$ 101,842	$ 113,204	$ 69,151
Covered payroll	$6,416,226	$6,094,735	$5,735,250	$5,573,701	$5,326,108	$5,166,241	$5,000,930	$4,832,917	$4,688,875	$4,515,699
Actual contributions as a percent of covered employee payroll	9.95%	12.41%	9.49%	9.30%	9.14%	8.92%	8.78%	8.57%	8.60%	8.65%

Schedule of Investment Returns

Annual money-weighted rates		
Teachers Retirement Association Plan	FY 2025	10.92%
Teachers Retirement Association Plan	FY 2024	12.27%
Teachers Retirement Association Plan	FY 2023	8.87%
Teachers Retirement Association Plan	FY 2022	(6.17)%
Teachers Retirement Association Plan	FY 2021	30.26%
Teachers Retirement Association Plan	FY 2020	4.22%
Teachers Retirement Association Plan	FY 2019	7.27%
Teachers Retirement Association Plan	FY 2018	10.49%
Teachers Retirement Association Plan	FY 2017	15.18%
Teachers Retirement Association Plan	FY 2016	(0.12)%

Investment Performance is presented net of investment management fees and the effect of any profit-sharing arrangements

Notes to Required Supplementary Information for Fiscal Year Ended June 30, 2025

Changes of Benefit and Funding Terms

The following changes were made by the Minnesota Legislature and reflected in the valuation performed as of July 1:

2025

The 2025 Omnibus Pensions and Retirement Bill (HF1889/SF2884) made several changes to benefit provisions and actuarial methods.

- Expanded the current special early retirement reductions available at age 62 with at least 30 years of service to age 60 and 61 with at least 30 years of service.
- Lowered special early retirement reductions for members who retire after reaching age 60 with 30 years of service from 6% with augmentation to 5% with augmentation.
- Delayed retired members' eligibility for their first COLA until age 65, including members who retire under special early retirement.
- Increased employer contribution rates by 0.31% above the previously scheduled increase.
- Changed the amortization method for financing the System's Unfunded Actuarial Accrued Liability (UAAL) from a single base being amortized over the period ending June 30, 2048 to a "layered" amortization approach. Under the new method, the UAAL as of July 1, 2024 will continue to be amortized according to its current schedule, but new bases will be amortized over varying periods depending on the source the UAAL impact.

2024

The 2024 Omnibus Pensions and Retirement Bill (HF 5040/SF 4643) lowered the normal retirement age for Tier II members from 66 to 65 effective July 1, 2024 and provided for a one-time State appropriation of $28.46 million to cover the cost.

HF 3100, appropriated $176,166,838 to TRA, payable on October 1, 2023:

- $28,735,816 for the difference between the statutory 1.1% compounded COLA payable on January 1, 2024 and a one-time 2.5% lump-sum COLA for coordinated plan members;
- $2,384,222 for the difference between the statutory 1.1% compounded COLA payable on January 1, 2024 and a one-time 4% lump-sum COLA for basic plan members; and
- $145,046,800 to pay down the unfunded actuarial accrued liability.

Suspension of Earnings Limitations for Retired Teachers who Return to Work has been extended:

- Temporary suspension of earnings limitations over $46,000 for retirees returning to Pre-K-12 positions earned during fiscal years 2025, 2026, and 2027. No amounts will be withheld from reemployed retiree benefits for Pre-K-12 positions and deposited into an ELSA for calendar years 2026, 2027, and 2028. This does not apply to retirees returning to Minnesota State positions.

2023	The 2023 Tax Finance and Policy Bill contained a number of changes: • Effective July 1, 2025, the normal retirement age for Tier II members will decrease from 66 to 65. • The employer contributions rate will increase from 8.75% to 9.5% on July 1, 2025. • The employee contribution rate will increase from 7.75% to 8% on July 1, 2025.
2022	Suspension of Earnings Limitations for Retired Teachers Who Return to Work: • Temporary suspension of earnings limitations over $46,000 for retirees returning to Pre-K-12 positions earned during fiscal years 2022, 2023, and 2024. No amounts will be withheld from reemployed retiree benefits for Pre-K-12 positions and deposited into an ELSA for calendar years 2023, 2024, and 2025. This does not apply to retirees returning to Minnesota State positions.
2021	None
2020	None
2019	None
2018	The 2018 Omnibus Pension Bill contained a number of changes: • The COLA was reduced from 2% each January 1 to 1%, effective January 1, 2019. • Beginning January 1, 2024, the COLA will increase 0.1% each year until reaching the ultimate rate of 1.5% in January 1, 2028. • Beginning July 1, 2024, eligibility for the first COLA changes to normal retirement age (age 65 to 66, depending on date of birth). However, members who retire under Rule of 90 and members who are at least age 62 with 30 years of service credit are exempt. • The COLA trigger provision, which would have increased the COLA to 2.5% if the funded ratio was at least 90% for two consecutive years, was eliminated. • Augmentation in the early retirement reduction factors is phased out over a five-year period beginning July 1, 2019 and ending June 30, 2024 (this reduces early retirement benefits). Members who retire and are at least age 62 with 30 years of service are exempt. • Augmentation on deferred benefits will be reduced to 0% beginning July 1, 2019. Interest payable on refunds to members was reduced from 4% to 3%, effective July 1, 2018. Interest due on payments and purchases from members, employers is reduced from 8.5% to 7.5%, effective July 1, 2018. • The employer contribution rate is increased each July 1 over the next 6 years, (7.71% in 2018, 7.92% in 2019, 8.13% in 2020, 8.34% in 2021, 8.55% in 2022, and 8.75% in 2023). In addition, the employee contribution rate will increase from 7.50% to 7.75% on July 1, 2023. The state provides funding for the higher employer contribution rate through an adjustment in the school aid formula.
2017	None
2016	None

Changes in Actuarial Assumption

7/1/2025 Valuation	• Liability load for inactive non-vested members changed from 9% to 13% and the liability load for inactive vested members changed from 7% to 6%.
7/1/2024 Valuation	• Mortality tables were updated for active employees, retirees, disabled retirees, and contingent beneficiaries to recently published tables derived from public plan data known as the Pub2010 family. • Retirement rates were increased for some of the Tier II early retirement ages and some of the unreduced retirement rates were modified for both tiers to better align with actual experience. • Probability that new female retirees elect either the Straight Life Annuity or 100% Joint & Survivor Annuity were refined to reflect the actual experience. • Termination rates were reduced in the first 10 years of employment and slightly increased in years 16 to 25 to better match the observed experience. • Disability rates were decreased beyond age 45 by 15% to reflect the continued lower than expected observations.
7/1/2023 Valuation	• The investment return assumption was changed from 7.5% to 7%. This does not affect the GASB valuation which was already using the 7% assumption.
7/1/2021 Valuation	For GASB valuation only: • The investment return assumption was changed from 7.5% to 7%.
7/1/2020 Valuation	• Assumed termination rates were changed to more closely reflect actual experience. • The Pre-retirement mortality assumption was changed to the RP-2014 white collar employee table, male rates set back 5 years and female rates set back 7 years. Generational projection uses the MP-2015 scale. • Assumed form of annuity election proportions were changed to more closely reflect actual experience for female retirees.
7/1/2018 Valuation	• The investment return assumption was changed from 8.5% to 7.5%. • The price inflation assumption was lowered from 3% to 2.5%. • The payroll growth assumption was lowered from 3.5% to 3%. • The wage inflation assumption (above price inflation) was reduced from 0.75% to 0.35% for the next 10 years, and 0.75% thereafter. • The total salary increase assumption was adjusted by the wage inflation change. • The amortization date for the funding of the Unfunded Actuarial Accrued Liability (UAAL) was reset to June 30, 2048 (30 years). • A mechanism in the law that provided the TRA Board with some authority to set contribution rates was eliminated.

Note: Most of these changes were made previously for GASB purposes in the 2017 GASB valuation.

7/1/2017 Valuation	• The Cost of Living Adjustment was assumed to increase from 2% annually to 2.5% annually on July 1, 2045. • Adjustments were made to the combined service annuity loads. The active load was reduced from 1.4% to 0%, the vested inactive load increased from 4% to 7% and the non-vested inactive load increased from 4% to 9%. For GASB valuation: ◦ The investment return assumption was changed from 8% to 7.5%. ◦ The COLA was not assumed to increase to 2.5%, but remain at 2% for all future years. ◦ The price inflation assumption was lowered from 2.75% to 2.5%. ◦ The payroll growth assumption was lowered from 3.5% to 3%. ◦ The general wage growth assumption was lowered from 3.5% to 2.85% for 10 years followed by 3.25%, thereafter. ◦ The salary increase assumption was adjusted to reflect the changes in the general wage growth assumption.
7/1/2016 Valuation	• The Cost of Living Adjustment was not assumed to increase for funding or GASB calculation (it remained at 2% for all future years). • The price inflation assumption was lowered from 3% to 2.75%. • The general wage growth and payroll growth assumptions were lowered from 3.75% to 3.5%. • Minor changes as some durations for the merit scale of the salary increase assumption. • The Pre-retirement mortality assumption was changed to the RP-2014 white collar employee table, male rates set back 6 years and female rates set back 5 years. Generational projection uses the MP-2015 scale. • The post-retirement mortality assumption was changed to the RP-2014 white collar annuitant table, male rates set back 3 years and female rates set back 3 years, with further adjustments of the rates. Generational projection uses the MP-2015 scale. • The post-disability mortality assumption was changed to the RP-2014 disabled retiree mortality table, without adjustment. • Separate retirement assumptions for members hired before or after July 1, 1989, were created to better reflect each group's behavior in light of different requirement for retirement eligibility. • Assumed termination rates were changed to be based solely on years of service in order to better fit the observed experience. • A minor adjustment and simplification of the assumption regarding the election of optional form of annuity payment at retirement were made.

Method and Assumptions Used in Calculations of Actuarially Determined Contributions

TRA is funded with contributions from members and their employers. The actuarially determined contributions in the *Schedule of Employer and Non-Employer Contributions* (on page 50) are calculated as of the beginning of the fiscal year in which contributions were reported.

The following methods and assumptions were used to calculate the actuarially determined employer contributions reported for the most recent Measurement Date, June 30, 2025 (based on the July 1, 2024 valuation).

Actuarial cost method	Entry Age Normal
Amortization method	Level percentage of payroll, closed
Remaining amortization period	24 years
Asset valuation method	5-year moving average
Inflation	2.5%
Wage growth rate	2.85% before July 1, 2028 and 3.25% after June 30, 2028
Salary increase, including inflation	2.85% to 8.85% before July 1, 2028 and 3.25% to 9.25% after June 30, 2028
Long-term rate of return, net of investment expense including price inflation	7.0%
Cost of living adjustment	1% for January 2019 through January 2023, then increasing by 0.1% each year up to 1.5% annually

Please see the information presented earlier for detailed information on the benefit changes and assumption changes that may have impacted the Actuarially Determined Contributions shown in the *Schedule of Employer and Non-Employer Contributions* on page 50.

This page left intentionally blank.

Supporting Schedules
to Financial Section

Teachers Retirement Association of Minnesota
A Pension Trust Fund of the State of Minnesota

Schedule of Administrative Expenses

For Fiscal Year Ended June 30, 2025

(Dollars in Thousands)

Personnel Services		
Salaries	$	9,899
Employer contributions to Teachers Retirement Association		794
Employer contributions to Social Security		645
Insurance contributions		1,833
Employee training		48
Workers' compensation		37
Total Personnel Services	**$**	**13,256**
Communication		
Duplicating and printing expenses	$	89
Postage		508
Telephone		64
Total Communication Expenses	**$**	**661**
Office Building Maintenance		
Lease of office and storage space	$	88
Building operating expenses		626
Rental of office machines/furnishings		22
Repairs and maintenance		136
Building depreciation		266
Bond interest expense		5
Total Office Building Maintenance	**$**	**1,143**
Professional Services		
Actuarial services	$	195
Audit fees		300
Legal fees		32
Management consultant services		90
Other Services		21
Total Professional Services	**$**	**638**
Other Operating Expenses		
Computer and system services	$	2,010
Depreciation of office equipment		12
Dues and subscriptions		31
Insurance expense		11
Miscellaneous administrative expenses		99
Amortization		1,446
State indirect costs		95
Office equipment and supplies		266
Travel		64
Total Other Operating Expenses	**$**	**4,034**
Total Administrative Expenses	**$**	**19,732**

Schedule of Professional Consultant Fees

For Fiscal Year Ended June 30, 2025

(Dollars in Thousands)

Actuarial		
CavMac Actuarial Consulting Services	$	195
Total Actuarial Fees	**$**	**195**
Audit		
Legislative auditor	$	221
Clifton Larson Allen LLP		79
Total Audit Fees	**$**	**300**
Legal		
Attorney General	$	22
Ice Miller LLP		7
Other		3
Total Legal Fees	**$**	**32**
Management Consulting		
Pension Benefit Information LLC	$	46
Minnesota Management and Budget		44
Total Management Consulting Fees	**$**	**90**
Other Services		
Board Election Services	$	17
Graphic Design		4
Total Other Services	**$**	**21**
Total Consultant Fees	**$**	**638**

Schedule of Investment Expenses

For Fiscal Year Ended June 30, 2025

(Dollars in Thousands)

External Managers		
Domestic active equity pool managers	$	4,673
Global equity pool managers		1,356
Domestic bond pool managers		1,574
Semi-passive equity pool managers		1,247
Passive equity pool managers		278
Treasury protection pool managers		1,262
Return seeking fixed income pool managers		4,191
International equity pool managers		10,625
Ladder Portfolio pool managers		293
Private markets pool managers		83,766
Total External Manager Fees	**$**	**109,265**
Other Investment Expenses		
State Board of Investment	$	3,710
Aon Hewitt Investment Consulting, Inc.		175
Pension Consulting		160
Broadridge (QED)		114
Albourne		453
Total Other Investment Expenses	**$**	**4,612**
Total Investment Pool Managers Expenses	**$**	**113,877**

** TRA's financial statements have historically reported investment expenses for management fees for public markets investments. In prior years, private markets investment fees were accounted for in all investment income figures and asset values. Starting in fiscal year 2024, TRA's Statement of Changes in Fiduciary Net Position lists expenses for investment management fees for all asset class categories, including private markets. Investment returns throughout the ACFR are net of all public and private markets investment management fees, including any profit-sharing arrangements. This change has no effect on the net investment income or the net position restricted for pensions.*

Investments

MACCRAY Common Area
Photo by Steve Silverman

Minnesota State Board of Investment
60 Empire Drive, Suite 100
St. Paul, MN 55103
Phone: (651) 296-3328
Fax: (651) 296-9572
Email: minn.sbi@state.mn.us
Website: https://msbi.us/
An Equal Opportunity Employer

INVESTMENT AUTHORITY

Minnesota Statutes provide that the Minnesota State Board of Investment (SBI) is responsible for investing the assets of the three statewide public pension plans: the Minnesota State Retirement System (MSRS), the Minnesota Public Employees Retirement Association (PERA), and the Minnesota Teachers Retirement Association (TRA) (See *Minnesota Statutes*, Chapters 11A and 356A). Each of MSRS, PERA, TRA, and the SBI are separate and independent entities with independent governance structures. Under Article 11, Section 8 of the Minnesota Constitution, the governing body of the SBI includes Minnesota's Governor, Auditor, Secretary of State, and Attorney General. Additionally, a 17-member Investment Advisory Council (IAC), established under Minnesota Statute, advises the SBI and its staff on investment-related matters. TRA's executive director serves as a member of the IAC.

INVESTMENT POLICY

Minnesota law requires the SBI to operate within standard investment practices of the prudent person rule. The SBI is required to "exercise that degree of judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived therefrom." (See *Minnesota Statutes*, section 11A.09 and 356A.04). The SBI is authorized to own government obligations, corporate obligations, various short-term obligations, equity, real estate, and resource investments, whether publicly or privately traded, subject to specific constraints. (See *Minnesota Statutes*, section 11A.24). The SBI must manage the pension fund assets for the exclusive benefit of the plan participants and beneficiaries. (See *Minnesota Statutes*, section 356A.05).

INVESTMENT OBJECTIVES AND PERFORMANCE

The SBI invests TRA's pension contributions from employees and employers through a pooled vehicle known as the Combined Funds. The Combined Funds include the assets of the defined benefit plans administered by MSRS, TRA, and PERA. TRA's ownership interest in the Combined Funds is represented by a participation interest in the pooled vehicle.

Because the assets of the Combined Funds are intended to accumulate for an extended period of time, the SBI is able to take advantage of the long-term investment return opportunities offered by a diversified investment approach that includes a meaningful allocation to public equities and private markets. This long-term, institutional investment approach allows the SBI to ensure that sufficient funds are available to make all required distributions to TRA plan participants and beneficiaries and to meet the actuarial assumed rate of return target over appropriate periods of time. The Minnesota legislature is responsible for setting the actuarial assumed rate of return for the three statewide retirement systems, including TRA. The current assumption, which was most recently adjusted by the legislature in 2023, is 7%.

Long-Term Objectives. The long-term objectives of the Combined Funds are to: 1) provide returns that are 3-5 percentage points greater than inflation over the latest 20-year period; and 2) outperform a composite market index weighted in a manner that reflects the actual asset mix of the Combined Funds over the latest 10-year period.

Consistent with these objectives, the SBI maintains a long-term strategic asset allocation policy target for the Combined Funds as follows:

- Public Equity 50%
- Total Fixed Income 25%
- Private Markets 25%

As of June 30, 2025, the SBI met or exceeded each of the Combined Funds' long-term investment objectives: 1) the 20-year annualized return was 8.3%, which exceeded inflation, as measured by CPI, by 5.8 percentage points and 2) the 10-year return was 8.9%, which exceeded the composite index by 0.2%.

Most Recent Fiscal Year Performance and Peer Comparisons. For the one-year period ending June 30, 2025, the Combined Funds returned 10.9%, placing it among the top performing investment funds in the country. Comparing the Combined Funds' investment returns against other public pension plans with over $20 billion in assets within the Trust Universe Comparison Service, the Combined Funds ranked in the top quartile or better over the 1-, 3-, 5-, 10-, and 20-year time periods.

INVESTMENT PRESENTATION

Investment returns were prepared using a time-weighted rate of return methodology based on fair market value. Performance is presented net of investment management fees and the effect of any profit-sharing arrangements.

On behalf of all of us at the SBI, thank you to the TRA plan participants and beneficiaries - it's a privilege to play a role in contributing to your retirement security. We are grateful for your continued trust and support.

Respectfully submitted,

Jill E. Schurtz
Executive Director and Chief Investment Officer
Minnesota State Board of Investment
December 2, 2025

Investment Summary

Prepared by TRA management with data obtained from the State Board of Investment's Fiscal Year 2025 Quarterly Investment Reports

The SBI Board consists of four-members including Governor Tim Walz (Chair), Attorney General Keith Ellison, Secretary of State Steve Simon, and State Auditor Julie Blaha.

The Legislature has established a 17-member Investment Advisory Council (IAC) to advise the SBI and its staff on investment-related matters.

The mission statement of the IAC:

> The IAC fulfills its statutory duty to the SBI by providing advice and independent due diligence review of the investment policy and implementation recommendations that guide the SBI's investment of assets.

The SBI appoints 10 members from the public experienced in finance and investment.

Two active employee representatives and one retiree representative are appointed to the IAC by the Governor.

The Commissioner of Minnesota Management and Budget (MMB) and the Executive Directors of TRA, Minnesota State Retirement System (MSRS), and Public Employees Retirement Association (PERA) are permanent members of the IAC. See list of current council members below.

Investment Advisory Council

(as of November 20, 2025)

Public Members (appointed by SBI):		
Gary Martin, Chair	Chief Investment Officer (Retired)	Macalester College
Nancy Orr, Vice Chair	Chief Investment Officer, Vice President-Investments	Charles Stewart Mott Foundation
Amy Jensen	Chief Investment Officer	Lansing Group, LLC
Dan McConnell	President	Minnesota State Building and Construction Trades Council
Dennis Santos	Senior Vice President & Chief Investment Officer	Okabena Investment Services
Sunil Swami	Chief Investment Officer	Alerus
Jen Wilson	Senior Managing Director, Private Equity	Thrivent
Shawn Wischmeier	Chief Investment Officer	Margaret A. Cargill Philanthropies
Employee & Retirement Representatives (appointed by the Governor):		
Denise Anderson	Governor's Appointee	Active Public Employee Representative
Ify Onyiah	Governor's Appointee	Active Public Employee Representative
Peggy Ingison	Governor's Appointee	Retiree Member Representative
Permanent Members:		
Erin Campbell	Commissioner	Minnesota Management & Budget
Erin Leonard	Executive Director	Minnesota State Retirement System
Doug Anderson	Executive Director	Public Employee Retirement Association
Tim Maurer	Executive Director	Teachers Retirement Association

Consultants

Aon Investments USA Inc., of Chicago, IL is general consultant to the SBI. Albourne Partners of Norwalk, CT is the SBI's consultant for private markets. Meketa Investment Group, LLC of Portland, OR is the Special Projects Consultant for the SBI.

All investments made by the SBI are governed by the prudent person rule and other standards codified in Minnesota Statutes, Chapters 11A and 356A.

Investment performance methodology is reported in compliance with the mandatory requirements of the Chartered Financial Analyst (CFA) Institute.

Combined Retirement Funds

Investment Objectives

All TRA assets are accounted for within the Combined Funds managed by the SBI. The Combined Funds consist not only of the TRA assets, but also the assets of the Public Employees Retirement Association (PERA) and the Minnesota State Retirement System (MSRS). The SBI has one primary responsibility with respect to its management of the Combined Funds: to ensure that sufficient funds are available to finance pension benefits at the time of retirement. All assets in the Combined Funds are managed externally by outside money management firms retained by the SBI.

The Combined Funds include the pension contributions of most Minnesota public employees, including TRA members, during their working years. Employee and employer contribution rates are specified in state law as a percentage of an employee's salary. The rates are set so that contributions plus expected investment earnings cover the projected cost of promised pension benefits. In order to meet these projected pension costs, the Combined Funds need to generate annual investment returns of at least 7%, as specified in Minnesota statute.

While an active member is working, employee and employer contributions are placed into the TRA Fund. The prefunding of future pension benefits provides the SBI with a long investment time horizon to take advantage of long run return opportunities offered by equities and other investments, in order to meet its actuarial return target.

The SBI measures the performance of the Combined Funds relative to a composite of market indices that is weighted in a manner that reflects their long-term asset allocation policy. The Combined Funds are expected to match or exceed the composite index over a 10-year period. It is also expected they generate returns of 3 to 5 percentage points greater than inflation over the latest 20-year period. Investment returns are prepared using a time-weighted rate of return methodology, based upon market value. Performance is measured net of investment management fees and the effect of any profit-sharing arrangements to ensure that the SBI's focus is on the Combined Funds' true net return.

Asset Allocation

The allocation of assets among equities, fixed income (bonds) and alternative investments can have a dramatic impact on investment results. In fact, asset allocation decisions overwhelm the impact of individual security selection within a total portfolio. Consequently, the SBI focuses considerable attention on the selection of an appropriate long-term asset allocation policy for the Combined Funds.

Rate of Return Results

The Combined Funds produced a total rate of return of 10.9% for fiscal year 2025. Over the last five years, the Combined Funds generated an annualized return of 10.6%.

As stated earlier, the Combined Funds are expected to exceed the return of a composite of market indices over a 10-year period. Performance relative to this standard measured two effects:

- The ability of the investment managers selected by the SBI, in aggregate, to add value to the returns available from the broad capital markets.

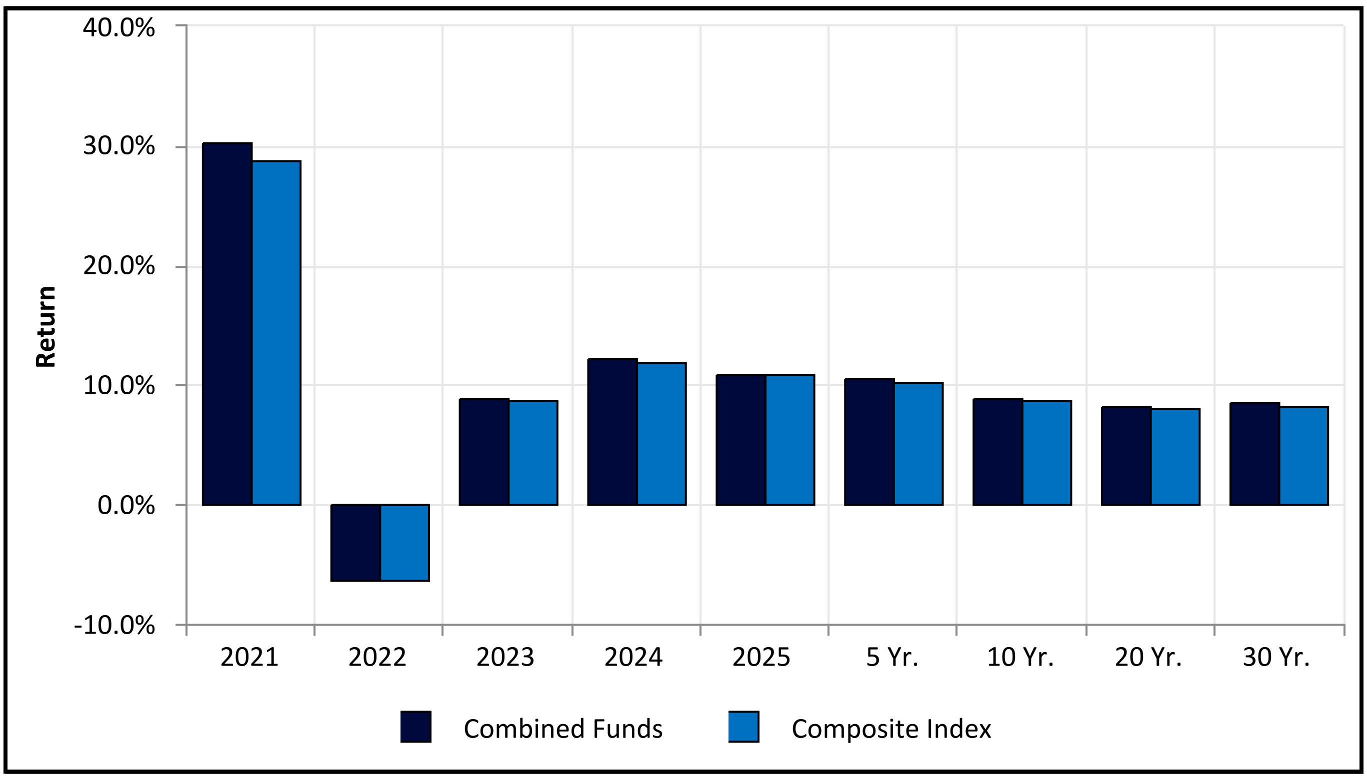
- The impact of the SBI's rebalancing activity. (The SBI rebalances the total fund when market movements take the stock or bond segments measurably above or below their long-term asset allocation targets. The policy imposes a low risk, buy low sell high discipline among asset classes on a total fund basis.)

Combined Funds Performance vs. Composite Index

For a majority of time periods shown below the Combined Fund returns exceeded the composite index investment performance.

Combined Funds - Investment Performance

Combined Funds Performance vs. Composite Index (Past Five Fiscal Years and Longer-Term)
Fiscal Year Ended June 30, 2025



	2021	2022	2023	2024	2025	5 Yr.	10 Yr.	20 Yr.	30 Yr.
Combined Funds	30.3%	(6.4)%	8.9%	12.3%	10.9%	10.6%	8.9%	8.3%	8.6%
Composite Index	28.8%	(6.3)%	8.7%	11.9%	10.9%	10.2%	8.7%	8.1%	8.3%
Excess	1.5%	(0.1)%	0.2%	0.5%	—%	0.4%	0.2%	0.2%	0.3%

Investment Performance is presented net of investment management fees and the effect of any profit-sharing arrangements. The Combined Funds' performance is evaluated relative to a composite of public market index and private market investment returns. The composite performance is calculated by multiplying the beginning of month Composite weights and the monthly returns of the asset class benchmarks.

Combined Funds - Performance of Asset Pools (Net of Fees)

June 30, 2025

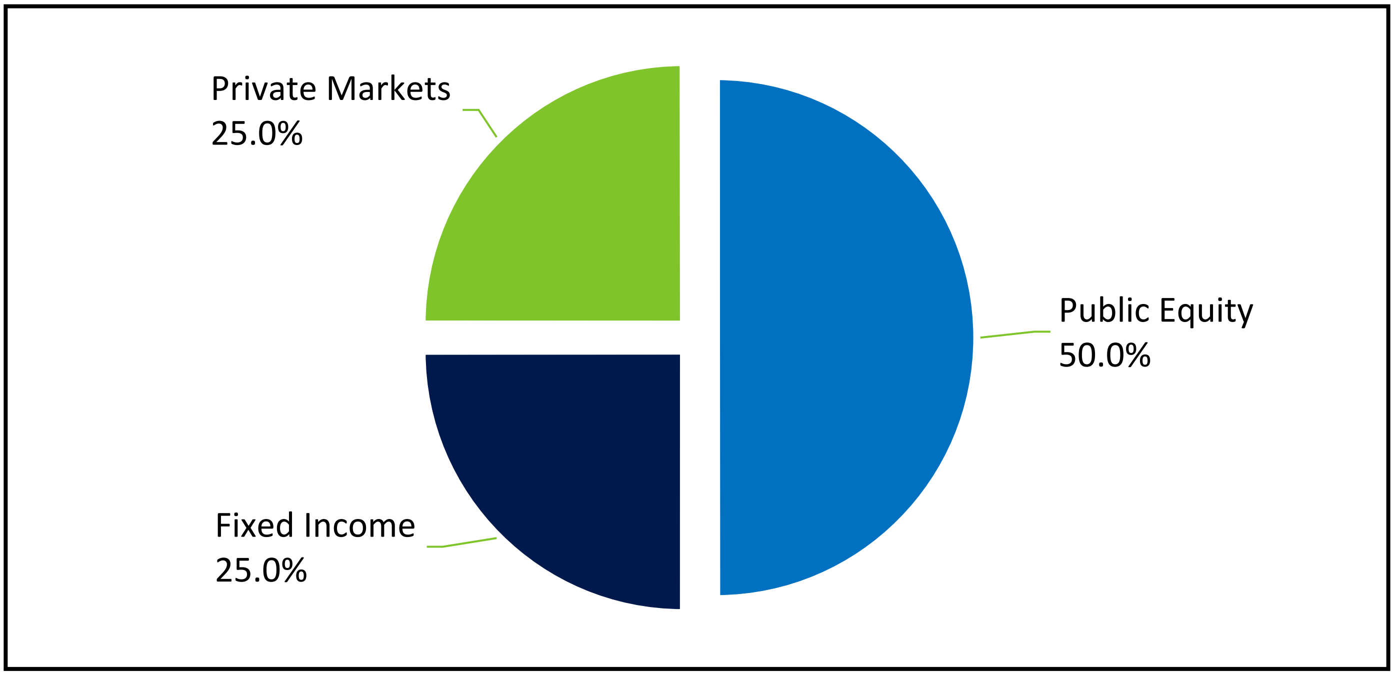
Rates of Return (Annualized)

	1 Year %	3 Year %	5 Year %	10 Year %	20 Year %	30 Year %
Public Equity	15.6%	17.6%	14.4%	10.9%	9.3%	9.2%
Public Equity Benchmark	16.3%	17.5%	14.1%	10.8%	9.2%	9.0%
Excess	(0.6)%	0.1%	0.2%	0.1%	0.1%	0.2%
Domestic Equity	15.2%	19.2%	16.1%	12.8%	10.4%	10.1%
Domestic Equity Benchmark	15.3%	19.1%	16.0%	12.9%	10.5%	10.2%
Excess	(0.1)%	0.1%	0.1%	(0.1)%	(0.1)%	(0.1)%
International Equity	16.6%	14.5%	11.1%	6.7%	6.4%	6.3%
International Equity Benchmark	17.7%	14.0%	10.1%	6.1%	5.8%	5.6%
Excess	(1.2)%	0.5%	1.0%	0.6%	0.5%	0.7%
Global Equity	14.2%	14.4%	—	—	—	—
MSCI AC World Index (net)	16.2%	17.3%	—	—	—	—
Excess	(1.9)%	(2.9)%	—	—	—	—
Total Fixed Income	5.8%	2.8%	(0.8)%	2.4%	3.6%	4.8%
Total Fixed Income Benchmark	5.1%	1.7%	(1.5)%	1.9%	3.1%	4.4%
Excess	0.7%	1.1%	0.7%	0.6%	0.5%	0.4%
Core/Core Plus	6.5%	3.4%	(0.1)%	2.3%	3.6%	4.7%
Core Bonds Benchmark	6.1%	2.5%	(0.7)%	1.8%	3.1%	4.3%
Excess	0.4%	0.9%	0.7%	0.6%	0.5%	0.4%
Return Seeking Fixed Income	8.6%	6.9%	—	—	—	—
Bloomberg U.S. Aggregate	6.1%	2.5%	—	—	—	—
Excess	2.5%	4.4%	—	—	—	—
Treasury Protection	4.4%	(0.6)%	(4.4)%	—	—	—
Bloomberg Treasury 5+ Year	4.2%	(0.7)%	(4.6)%	—	—	—
Excess	0.2%	0.1%	0.1%	—	—	—
Laddered Bond + Cash	5.0%	4.7%	2.8%	2.0%	1.9%	3.0%
ICE BofA US 3-Month Treasury	4.7%	4.6%	2.8%	2.0%	1.7%	2.5%
Excess	0.3%	0.2%	0.0%	0.1%	0.2%	0.5%
Total Private Markets	6.1%	5.2%	14.9%	11.5%	12.5%	13.4%
Private Equity	8.3%	6.5%	17.1%	14.8%	14.6%	15.6%
Private Credit	4.8%	7.9%	12.5%	11.5%	12.2%	—
Resources	(1.9)%	1.7%	10.5%	2.0%	10.3%	12.2%
Real Estate	(1.6)%	(3.9)%	7.8%	8.0%	7.7%	9.1%

Investment performance is prepared using a time-weighted return methodology, based on fair value, net of investment management fees and the effect of any profit-sharing arrangements

Combined Funds
Portfolio Distribution: Strategic Asset Policy Target Allocation*

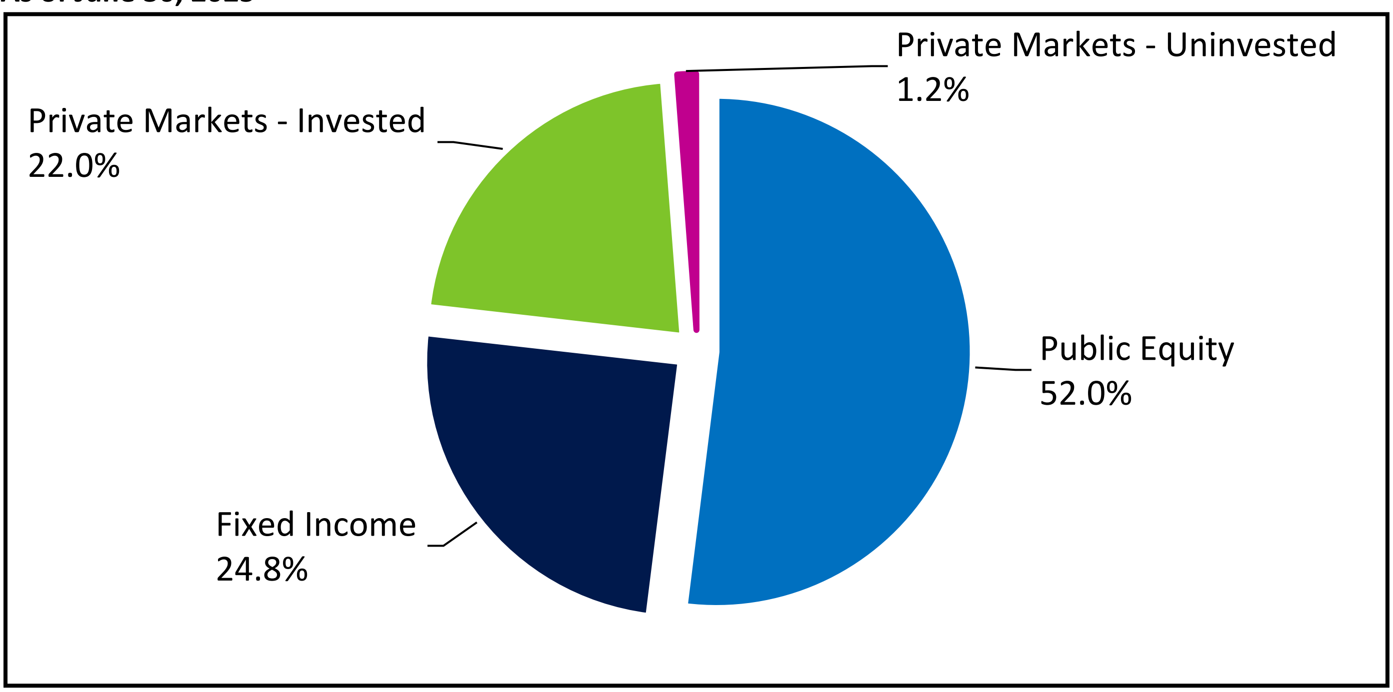
As of June 30, 2025



**See note on Asset Allocation page 30.*

Combined Funds
Portfolio Distribution: Actual Asset Mix

As of June 30, 2025



The market value of the TRA Fund investment portfolio is approximately $31.3 billion.

Teachers Retirement Fund
List of Largest Assets Held
June 30, 2025

By Market Value

(Dollars in Millions)

Top 10 Equity Holdings

Security	$ Market Value	% of Portfolio
NVIDIA CORP	$666.8	2.13%
MICROSOFT CORP	663.6	2.12%
APPLE INC	518.9	1.66%
MSBI SIF	450.8	1.44%
AMAZON.COM INC	382.5	1.22%
META PLATFORMS INC CLASS A	294.6	0.94%
BLACKROCK LONG TERM PRIVATE CA	249.7	0.80%
BROADCOM INC	223.1	0.71%
ALPHABET INC CL A	178.0	0.57%
TAIWAN SEMICONDUCTOR MANUFAC	156.8	0.50%

Top 10 Bond Holdings

Security	% Coupon	$ Market Value	% of Portfolio	Maturity Date
US Treasury N/B	4.63%	$106.5	0.34%	2/15/2035
US Treasury N/B	4.00%	74.5	0.24%	11/15/2052
US Treasury N/B	4.25%	70.4	0.23%	6/30/2031
US Treasury N/B	4.75%	64.6	0.21%	11/15/2053
US Treasury N/B	1.25%	61.7	0.20%	8/15/2031
US Treasury N/B	4.13%	59.5	0.19%	2/29/2032
US Treasury N/B	4.63%	58.1	0.19%	6/30/2026
US Treasury N/B	4.38%	56.4	0.18%	5/15/2034
US Treasury N/B	4.50%	55.8	0.18%	12/31/2031
US Treasury N/B	4.63%	53.7	0.17%	11/15/2044

TRA's assets are commingled in various pooled investment accounts administered by the SBI. TRA does not own specific values of the underlying assets. The percentages and market value shown are those attributable to the TRA Fund based on TRA's participation in the SBI's Combined Funds. Information on investment activity, a listing of specific investments owned by the pooled accounts and a schedule of fees and commissions can be obtained from the SBI.

Schedule of Investment Management Fees *(continued on next page)*

For Fiscal Year Ended June 30, 2025

(Dollars in Thousands)

Domestic Active Equity Pool Managers		
Zevenbergen Capital	$	323
Winslow Capital		246
Barrow, Hanley		317
LSV Asset		303
Sands Capital		143
Peregrine Capital		415
Goldman Equity		297
Hotchkis and Wiley		605
Martingale		370
Wellington Management Company, LLP		326
Arrowmark Asset Management, LLC		408
Hood River Capital Management, LLC		477
Rice Hall James & Associates, LLC		443
Total Domestic Active Equity Pool Managers	$	4,673
Semi Passive Equity Pool Managers		
Blackrock	$	645
JP Morgan		602
Total Semi Passive Equity Pool Managers	$	1,247
Passive Domestic Equity Pool Managers		
Blackrock	$	5
Total Passive Domestic Equity Pool Managers	$	5
Large Cap Passive Domestic Equity Pool Managers		
Blackrock Passive	$	272
Total Passive Domestic Equity Pool Managers	$	272
Small Cap Passive Domestic Equity Pool Managers		
Blackrock Passive	$	1
Total Passive Domestic Equity Pool Managers	$	1
Domestic Bonds Pool Managers		
Blackrock Financial Management	$	237
Dodge & Cox		399
Goldman		407
Neuberger		395
Western Asset Management		136
Total Domestic Bonds Pool Managers		1,574
Page Subtotal		7,772

Schedule of Investment Management Fees *(continued on next page)*

For Fiscal Year Ended June 30, 2025

(Dollars in Thousands)

Subtotal from Previous Page	$	7,772
Return Seeking Fixed Income Pool Managers		
Columbia	$	451
PIMCO		739
Blackrock		619
Ashmore Emerging Market		492
KKR High Yield		305
Oaktree High Yield		374
PGIM FI Mac		382
Payden & Rygel Mav		361
TCW		468
Total Return Seeking Fixed Income Pool Managers	$	4,191
International Equity Pool Managers		
Acadian Asset	$	656
State Street Emerging		169
Fidelity Investments		455
JP Morgan Fleming		458
Earnest Partners, LLC		296
Macquarie/Delaware Investments		766
Martin Currie, Inc.		719
Marathon Asset		470
Morgan Stanley Dean		1,087
Pzena Investment Management		1,401
Rock Creek		44
Columbia Management		485
State Street		225
Record Currency		2,723
Earnst Partners, LLC		514
Ashmore		5
NISA		41
Fidelity		111
Total International Equity Pool Managers	$	10,625
Page Subtotal	$	22,588

Schedule of Investment Management Fees *(concluded)*
For Fiscal Year Ended June 30, 2025

(Dollars in Thousands)

Subtotal from Previous Page	$	22,588
Global Equity Pool Managers		
Martin Currie, Inc.	$	300
Ariel		624
Baillie Gifford		432
Total Global Equity Pool Managers	$	1,356
Treasury Protection Pool Managers		
Blackrock	$	426
Goldman Sachs		428
Neuberger Berman		408
Total Treasury Protection Pool Managers	$	1,262
Laddered Portfolio Pool Managers		
Goldman	$	150
Neuberger		143
Total Laddered Equity Pool Managers	$	293
Private Markets		
T Rowe	$	77
Total Private Markets	**$**	**77**
Private Pool Managers		
Private Credit	$	7,689
Private Equity		56,462
Real Assets		7,199
Real Estate		12,339
Total Private Pool Managers	$	83,689
Total Investment Management Fees	$	109,265

Note: *The investment portfolio of TRA had a fair value of approximately $31.3 billion as of June 30, 2025.*
The effective investment management expense ratio for TRA's assets are: public markets program, approximately 0.11% (11 basis points); private markets program, approximately 1.19% (119 basis points); and the effective total expense ratio overall, approximately 0.35% (35 basis points), based upon average quarterly values for fiscal year 2025.

Summary of Investments

As of June 30, 2025

(Dollars in Thousands)

	Cost Value	Fair Value	% of Investments at Fair Value
Fixed Income Investments			
Treasuries Pool	$ 3,137,898	$ 2,942,065	9.42%
Bond Pool	1,773,221	1,755,883	5.62%
Return Seeking Fixed Income	1,490,560	1,561,172	5.00%
Short Duration Laddered Bonds	924,891	992,233	3.18%
Total Fixed Income Investments	$ 7,326,570	$ 7,251,353	23.22%
Private Markets			
Alternative Investment Pool	$ 6,199,872	$ 6,859,623	21.95%
Total Private Markets	$ 6,199,872	$ 6,859,623	21.95%
Equity Investments			
US Stock Index Pool	$ 5,292,854	$ 8,217,143	26.30%
US Stock Actively Managed Pool	2,359,545	2,423,493	7.76%
Broad International Stock Pool	3,964,292	5,180,625	16.58%
Global Equity Pool	294,693	364,996	1.17%
Total Equity Investments	$ 11,911,384	$ 16,186,257	51.81%
Short Term Cash Investments			
Money Market	$ 890,053	$ 894,275	2.86%
CD Repo Pool	56,855	57,059	0.18%
Total Short Term Investments	$ 946,908	$ 951,334	3.04%
Total Investments	$ 26,384,734	$ 31,248,567	100%

General Information Regarding Investment of Funds

TRA's investments are made by the SBI and external managers as prescribed by law, and are made only in such securities as are duly authorized legal investments in accordance with Minnesota Statutes, Section 11A.24. State Street Bank and Trust of Boston acts as custodian of securities for the Combined Funds. Principal Bank of Minneapolis, Minnesota, is the current custodian of short term investments of the SBI. Examination and verification of securities held by the custodians is performed periodically by the Minnesota Office of the Legislative Auditor. Investment returns are prepared using a time-weighted rate of return methodology, based upon fair values, net of investment management fees, and the effect of any profit-sharing arrangements.

This page left intentionally blank.

Actuarial

MACCRAY Classroom
Photo by Steve Silverman

CavMac
Actuarial Consulting Services

December 1, 2025

Board of Trustees
Teachers Retirement Association of Minnesota
60 Empire Drive, Suite 400
St. Paul, MN 55103

Dear Board Members:

At your request, we have prepared an actuarial funding valuation of the Teachers Retirement Association of Minnesota (TRA or System) as of July 1, 2025 for the plan year ending June 30, 2026. Such valuations, which analyze the funding progress of the System, are required to be performed annually under state law. To the best of our knowledge and belief, the funding valuation was performed in accordance with the requirements of Minnesota Statutes, Section 356.215, and the requirements of the Standards for Actuarial Work established by the State of Minnesota Legislative Commission on Pensions and Retirement (LCPR).

Since the prior valuation, there have been several changes that affect the current valuation results including:

- The 2025 Omnibus Pensions and Retirement Bill (HF 1889/SF 2884) made the following changes to benefit provisions and actuarial methods.
    - Expanded the current special early retirement reductions available at age 62 with at least 30 years of service to ages 60 and 61 with at least 30 years of service.
    - Lowered special early retirement reductions for members who retire after reaching age 60 with 30 years of service from 6% per year with augmentation to 5% with augmentation.
    - Delayed retired members' eligibility for their first COLA until age 65, including members who retire under special early retirement.
    - Increased employer contribution rates by 0.31% above the previous scheduled increase.
    - Changed the amortization method for financing the System's Unfunded Actuarial Accrued Liability (UAAL) from a single base being amortized over the period ending June 30, 2048 to a "layered" amortization approach. Under the new method, the UAAL as of July 1, 2024 and the benefit increases enacted in 2025 will be amortized over the period ending June 30, 2048, but other bases will be amortized over varying periods depending on the source the UAAL impact. Please see Section 4 of the valuation report for a full description of the varying amortization periods.
- VIA Actuarial Solutions, the actuary for the Legislative Commission on Pensions and Retirement (LCPR), completed their Public Retirement Plan Portability Assumptions Study and the results are contained in their report, dated February 19, 2025. As a result

OMAHA OFFICE | 3906 Raynor Parkway | Suite 201 | Bellevue, NE 68123
Phone: 402-630-4122 | CavMacConsulting.com

Board of Trustees
December 1, 2025
Page 2

of this study, the liability load for inactive non-vested members changed from 9% to 13% and the liability load for inactive vested members changed from 7% to 6%.

- VIA Actuarial Solutions also completed their replication of CavMac's July 1, 2024 actuarial valuation report. While VIA stated there were no "meaningful differences" with regards to our valuation results, we did make a small adjustment to our method for estimating monthly benefits owed to inactive vested members based on their feedback.

These changes had an impact on the benefit structure and contribution rates as well as the actuarial methods used in the valuation.

As described in the funding valuation report, the results of the valuation indicate that the System is 81.60% funded and the current statutory contribution rates exceed the total actuarial contribution rate by 0.44% of payroll, resulting in a small contribution sufficiency. The contribution sufficiency is determined using the actuarial value of assets, which is less than the market value of assets. If the net deferred investment gain is recognized, i.e., the fair value of assets is used, the contribution sufficiency increases to 1.59% of payroll. The funding report was prepared exclusively for TRA and the LCPR to determine the actuarial required contribution rate using the statutory investment return assumption of 7.00%.

In preparing the valuation, we relied, without audit, on information (some oral and some in writing) supplied by TRA staff. This information includes, but is not limited to, statutory provisions, member data and financial information. We found this information to be reasonable and comparable to the information used in last year's valuation. However, we did not audit the data. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete, our results may be different, and our calculations may need to be revised.

The actuarial required contribution rates are developed using the Entry Age Normal (EAN) cost method. An asset smoothing method, defined in statute, is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded actuarial accrued liability and are amortized as a level percentage of payroll over a closed period set in state statute. Actuarial assumptions, including the investment return assumption, mortality tables and others identified in the valuation report are prescribed by Minnesota Statutes Section 356.215, the Legislative Commission on Pensions and Retirement (LCPR), and the Board of Trustees. Collectively, these parties are responsible for selecting the plan's funding policy, actuarial valuation methods, asset valuation method, and actuarial assumptions. The current funding policy is expected to result in the Plan reaching full funding by 2048, the end of the longest amortization base, if the actuarial contribution rate is contributed and all actuarial assumptions are met in the future. Actual experience that varies from that assumed may impact the Plan's ability to meet its funding goals, so long-term funding should be monitored on a regular basis. The policies, methods and assumptions used in this valuation are those that have been prescribed and are described in Appendix C of the valuation report.

In order to prepare the results in the July 1, 2025 actuarial valuation report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about

Board of Trustees
December 1, 2025
Page 3

future contingent events along with recognized actuarial approaches to develop the needed results. Future actuarial results may differ significantly from the current results presented in the valuation report due to factors such 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. Since the potential impact of such factors is outside the scope of a standard actuarial valuation, an analysis of the range of potential results is not presented herein.

The actuary prepared the following supporting schedules in the Actuarial Section of the Annual Comprehensive Financial Report:

- Actuarial Asset Value
- Actuarial Valuation Balance Sheet
- Determination of Unfunded Actuarial Accrued Liability and Supplemental Contribution Rate
- Changes in the Unfunded Actuarial Accrued Liability
- Determination of Contribution Sufficiency /(Deficiency) – Total
- Solvency Test
- Schedule of Funding Progress
- Reconciliation of Member Data
- Schedule of Active Member Valuation Data

We also provided the following schedules in the Financial Section of the Annual Comprehensive Financial Report:

- Total Pension Liability
- Schedule of Changes in the Employers' Net Pension Liability
- Schedule of the Employers' Net Pension Liability
- Sensitivity Analysis on the Net Pension Liability

In addition, we provided the *Schedule of Contributions from Employers and Non-employer Contributing Entities* found in the Required Supplementary Information. The schedules are presented prospectively, and in time, trend analysis will become evident. Actuarial computations presented in the July 1, 2025 actuarial funding valuation report are for purposes of determining the sufficiency of the current statutory contributions to meet the funding goals of the System. The calculations have been made on a basis consistent with our understanding of the System's funding requirements and goals, and on a basis consistent with our understanding of the plan provisions described in Appendix B of the valuation report. Determinations for purposes other than meeting these requirements may be significantly different from the results shown in the July 1, 2025 actuarial funding valuation report. Accordingly, additional determinations may be needed for other purposes.

We also prepared actuarial computations as of June 30, 2025 for purposes of fulfilling financial accounting requirements for the System under Governmental Accounting Standards Board (GASB) Statement No. 67. The results are presented in a separate report dated

Board of Trustees
December 1, 2025
Page 4

November 13, 2025. For GASB 67 purposes, TRA is a cost-sharing multiple employer plan. The actuarial assumptions used in the funding valuation report were also used for GASB 67 reporting. In addition, the entry age normal actuarial cost method, which is required to be used under GASB 67, is also used in the statutory funding valuation report. The actuarial assumptions and methods used in both the funding and the GASB 67 accounting valuation reports meet the parameters set by Actuarial Standard of Practice (ASOPs), as issued by the Actuarial Standards Board, and generally accepted accounting principles (GAAP) applicable in the United State of America as promulgated by the Governmental Accounting Standards Board.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this information is complete and accurate, and that the valuation was prepared in accordance with principles of practice which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying Opinions, and supporting recommendation of the American Academy of Actuaries. In addition, the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement System. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. Further, Pat Beckham and Brent Banister meet the requirements of “approved actuary” under Minnesota Statutes, Section 356.215, Subdivision 1, Paragraph (c).

Respectfully submitted,

Patrice Beckham

Patrice A. Beckham, FSA, EA, FCA, MAAA
Consulting Actuary

Brent A. Banister

Brent Banister PhD, FSA, EA, FCA, MAAA
Chief Actuary

Ben Mobley

Ben Mobley, ASA, FCA, MAAA
Consulting Actuary

Summary of Actuarial Assumptions and Methods

Summary of Actuarial Assumptions

The following assumptions were used in valuing the liabilities and benefits under the plan. For funding purposes, all assumptions are prescribed by statutes, the Legislative Commission on Pensions and Retirement (LCPR), or the Board of Trustees. The assumptions prescribed are based on the full experience study dated August 2, 2023.

The Allowance for Combined Service Annuity was based on the recommendation of VIA Actuarial Solutions, the actuary for the Legislative Commission on Pensions and Retirement (LCPR). We are unable to judge the reasonableness of this assumption without performing a substantial amount of additional work beyond the scope of this assignment, so we have relied on their findings.

Investment return	7% compounded annually.
Future post-retirement adjustments	1% for January, 2019 through January, 2023, then increasing by 0.1% each year up to 1.5% annually.
Salary increases	Reported salary for prior fiscal year, with new hires annualized, is increased according to the salary increase table shown in the rate table for current fiscal year and annually for each future year. See table of sample rates.
Payroll growth	3% per year
Future service	Members are assumed to earn future service at a full-time rate.
Mortality: Pre-retirement	PubT-2010 (A) Employee Mortality Table, male rates set forward 1 year and female rates unadjusted. Generational projection uses the MP-2021 scale.
Healthy Retirees	PubT-2010 (A) Retiree Mortality Table, male rate set forward 1 year and female rates unadjusted. Generational projection uses the MP-2021 scale.
Beneficiaries	Pub-2010 (A) Contingent Survivor Mortality Table, male rates set forward 1 year and female rates unadjusted. Generational projection uses the MP-2021 scale.
Disabled Retirees	PubNS-2010 Disabled Retiree Mortality Table, male rates set forward 1 year and female rates unadjusted. Generational projection uses the MP-2021 scale.
Disability	Age-related rates based on experience; see table of sample rates.
Withdrawal	Rates vary by service based on actual plan experience, as shown in the rate table.
Expenses	Prior year administrative expenses expressed as percentage of prior year payroll.
Retirement age	Graded rates beginning at age 55 as shown in rate table. Members who have attained the highest assumed retirement age will retire in one year.
Percentage married	85% of male members and 65% of female members are assumed to be married. Members are assumed to have no children.
Age difference	Females two years younger than males.
Allowance for Combined Service Annuity	Liabilities for vested former members are increased by 6% and liabilities for non-vested former members are increased by 13% to account for the effect of some Participants being eligible for a Combined Service Annuity.

Refund of contributions	All employees withdrawing after becoming eligible for a deferred benefit are assumed to take the larger of their contributions accumulated with interest or the value of their deferred benefit.
Interest on member contributions	Members and former members who are eligible for the money purchase annuity are assumed to receive interest credits equal to the pre-retirement interest rate. All other members and former members receive the interest crediting rate as specified in statutes.
Commencement of deferred benefits	Members receiving deferred annuities (including current terminated deferred members) are assumed to begin receiving benefits at unreduced retirement age.
Commencement of active death benefits	Beneficiaries are assumed to commence benefit payments immediately.
Form of Payment	Married members are assumed to elect subsidized joint and survivor (J&S) form of annuity as follows: Males: 10% elect 50% J&S option 5% elect 75% J&S option 70% elect 100% J&S option 15% elect Straight Life option Females: 10% elect 50% J&S option 5% elect 75% J&S option 45% elect 100% J&S option 40% elect Straight Life option Members eligible for deferred annuities (including current terminated deferred members) and future disability benefits are assumed to elect a life annuity.
Missing data for members	Membership data was supplied by TRA as of the valuation date. This information has not been audited by CavMac. We have reviewed the information for internal consistency and we have no reason to doubt its substantial accuracy. In the small number of cases where submitted data was missing or incomplete and could not be recovered, the following assumptions were applied if needed: Data for active members: Salary, service, and date of birth: Based on current active demographics Gender: Female Data for terminated members: Average salary: $48,500 Date of termination: Derived from date of birth, original entry age, and service Data for in-pay members: Beneficiary date of birth: Wife two years younger than husband Gender: Based on first name Form of payment: Life annuity for retirees and beneficiaries, 100% J&S option for disabled retirees.

Changes in actuarial assumptions since the previous valuation	• The 2025 Omnibus Pensions and Retirement bill (HF 1889/SF 2884) adjusted some benefit provisions and actuarial methods. ◦ Changed the current special early retirement provisions and COLA provisions. ◦ Increased employer contribution rates by 0.31% above the previous scheduled increase. ◦ Changed the amortization method for financing the System's Unfunded Actuarial Accrued Liability (UAAL). • VIA Actuarial Solutions, the actuary for the Legislative Commission on Pensions and Retirement (LCPR), completed their Public Retirement Portability Assumptions Study and the results are contained in their report dated February 19, 2025. As a result of this study, the liability load for inactive non-vested members changed from 9% to 13% and the liability load for inactive vested members changed from 7% to 6%. • VIA Actuarial Solutions also completed their replication of CavMac's July 1, 2024 actuarial valuation report. While VIA stated there were no "meaningful differences" with regards to our valuation results, we did make a small adjustment to our method for estimating monthly benefits owed to inactive vested members based on their feedback.

Pre-retirement Mortality and Disability Rates (%)

	Pre-retirement Mortality* Rate (%)		Disability Rate (%)	
Age	Male	Female	Male	Female
20	0.029	0.012	—	—
25	0.015	0.008	—	—
30	0.021	0.013	—	—
35	0.029	0.019	0.010	0.010
40	0.041	0.029	0.030	0.030
45	0.067	0.045	0.043	0.043
50	0.110	0.068	0.085	0.085
55	0.169	0.099	0.136	0.136
60	0.263	0.149	0.213	0.213
65	0.436	0.250	—	—

**Rates shown are for 2010, the base year of the tables.*

Annuitant Mortality Rates (%)

	Retirement*		Contingent		Disability	
Age	Male	Female	Male	Female	Male	Female
55	0.245	0.189	0.854	0.439	2.201	1.742
60	0.379	0.284	1.067	0.596	2.584	1.956
65	0.618	0.446	1.446	0.839	3.193	2.256
70	1.134	0.766	2.258	1.272	4.113	2.862
75	2.161	1.443	3.586	2.037	5.537	4.003
80	4.082	2.762	5.711	3.410	7.929	6.007
85	7.677	5.241	9.361	6.075	11.678	9.331
90	13.971	9.744	15.547	10.979	17.681	13.665
95	23.960	17.771	24.625	18.386	25.226	19.298
100	34.636	28.160	34.636	28.160	34.636	28.160

**Rates shown are for 2010, the base year of the tables.*

Termination Rates

Service	Male	Female
Less than 1	20.00%	20.00%
1	12.00%	10.00%
2	8.50%	8.50%
3	6.00%	7.00%
4	5.00%	5.50%
5	4.25%	4.50%
6	3.75%	3.50%
7	3.25%	3.00%
8	2.75%	2.50%
9	2.25%	2.25%
10	2.00%	2.00%
15	1.10%	1.10%
20	0.80%	0.80%
25	0.55%	0.55%
30	0.50%	0.50%
Over 30	0.00%	0.00%

Retirement Rates for Coordinated and Basic Members (%)

Coordinated Tier II members age 60 or older with 30 or more years of service have 7% added to their early retirement rates

Coordinated Members					Basic Members	
Age	Tier I Early	Tier I Unreduced	Tier II Early	Tier II Unreduced	Eligible for 30 and Out Provision	Not Eligible for 30 and Out Provision
55	5	35	5	—	40	5
56	10	35	5	—	40	5
57	10	35	5	—	40	5
58	10	35	5	—	40	5
59	14	35	5	—	40	5
60	17	35	10	—	25	25
61	20	35	15	—	25	25
62	25	35	20	—	25	25
63	25	35	20	—	25	25
64	25	35	20	—	25	25
65	—	40	—	45	40	40
66	—	40	—	35	40	40
67	—	30	—	30	40	40
68	—	30	—	30	40	40
69	—	30	—	30	40	40
70	—	30	—	35	60	60
71-74	—	100	—	100	60	60
75-79	—	100	—	100	60	100
80 and over	—	100	—	100	100	100

Salary Scale

Service (Yrs)	Select Salary Increase Before July 1, 2028	Ultimate Salary Increase After June 30, 2028
1	8.85%	9.25%
5	6.35%	6.75%
10	5.60%	6.00%
15	4.35%	4.75%
20	3.45%	3.85%
25	2.95%	3.35%
26 or more	2.85%	3.25%

Valuation Report Highlights
Summary of Key Valuation Results

	Actuarial Valuation as of		
Participant Data	**7/1/2025**	**7/1/2024**	**% Change**
Active members			
Number	86,462	85,962	0.6%
Projected annual earnings for fiscal year (*000s*)	6,769,786	6,501,070	4.1%
Average projected annual earnings for fiscal year 2026	78,298	75,627	3.5%
Average age	44	44	0.7%
Average service	13	12	2.4%
Service retirements	62,910	63,128	(0.3)%
Survivors	7,132	6,920	3.1%
Disability retirements	441	432	2.1%
Deferred retirements	21,701	20,606	5.3%
Non-vested terminated members	42,550	41,476	2.6%
Total	221,196	218,524	1.2%
Liabilities and Funding Ratios *(dollars in thousands)*			
Accrued Benefit Funding Ratio			
Current assets (AVA)	$ 30,187,496	$ 28,322,800	6.6%
Current benefit obligations	34,740,823	33,313,003	4.3%
Funding ratio	86.89%	85.02%	2.2%
Accrued Liability Funding Ratio			
Current assets (AVA)	$ 30,187,496	$ 28,322,800	6.6%
Market Value of Assets (MVA)	31,261,375	29,092,479	7.5%
Actuarial Accrued Liability (AAL)	36,992,230	35,446,800	4.4%
Unfunded Actuarial Accrued Liability (UAAL)	6,804,734	7,124,000	(4.5)%
Funding ratio (AVA)	81.60%	79.90%	2.1%
Funding ratio (MVA)	84.51%	82.07%	3.0%
Projected Benefit Funding Ratio			
Current and expected future assets	$ 45,581,931	$ 42,213,918	8.0%
Current and expected future benefit obligations	45,406,918	43,471,130	4.5%
Funding ratio (AVA)	100.39%	97.11%	3.4%
Contributions *(% of payroll)*			
Normal Cost Rate	11.33%	11.08%	2.3%
UAAL Amortization Payment	6.41%	7.09%	(9.6)%
Expenses	0.31%	0.29%	6.9%
Total Required Contribution (Chapter 356)	18.05%	18.46%	(2.2)%
Statutory Contribution (Chapter 354)	18.49%	17.21%	7.4%
Contribution (Deficiency)/Sufficiency	0.44%	(1.25%)	(135.2)%

Actuary's Selected Commentary

July 1, 2025 Valuation

Teachers Retirement Association (TRA or System) provides retirement, disability, and death benefits to Minnesota public school teachers, administrators, and certain college faculty. This report presents the results of the July 1, 2025 actuarial funding valuation of the System. The primary purposes of performing the actuarial funding valuation are to:

- disclose asset and liability measures as of the valuation date;
- determine the Required Contribution Rate as set forth in Chapter 356 of the Minnesota Statutes;
- determine the sufficiency of the Statutory Contribution Rate as set forth in Chapter 354 of the Minnesota Statutes;
- determine the actuarial experience of the System since the last valuation date;
- assess and disclose the key risks associated with funding the System: and
- analyze and report on trends in System contributions, assets, and liabilities over the past several years.

There have been several changes since the July 1, 2024 actuarial valuation that impacted the results of the July 1, 2025 actuarial valuation. These changes were to the actuarial assumptions and methods as well as benefit provisions.

The 2025 Omnibus Pensions and Retirement bill (HF 1889/SF 2884) did the following:

- Expanded the current special early retirement reductions available at age 62 with at least 30 years of service to ages 60 and 61 with at least 30 years of service.
- Lowered special early retirement reductions for members who retire after reaching age 60 with 30 years of service from 6% per year with augmentation to 5% with augmentation.
- Delayed retired members' eligibility for their first COLA until age 65, including members who retire under special early retirement.
- Increased employer contribution rates by 0.31% above the previous scheduled increase.
- Changed the amortization method for financing the System's Unfunded Actuarial Accrued Liability (UAAL) from a single base being amortized over the period ending June 30, 2048 to a "layered" amortization approach. Under the new method, the UAAL as of July 1, 2024 and the benefit increases enacted in 2025 will each be amortized over the period ending June 30, 2048, but other bases will be amortized over varying periods. See chart on next page for details.

VIA Actuarial Solutions completed their Public Retirement Plan Portability Assumptions Study for the LCPR and the results are contained in their report dated February 19, 2025. As a result of this study, the liability load for inactive non-vested members changed from 9% to 13% and the the liability load for inactive vested members changed from 7% to 6%. VIA Actuarial Solutions also completed their valuation replica of CavMac's July 1, 2024 actuarial valuation report. while VIA stated there were no "meaningful differences" with regard to our valuation results, we did make a small adjustment to our method for estimating monthly benefits owed to inactive vested members based on their feedback.

Source	Amortization Period
July 1, 2024 UAAL	Period ending June 30, 2048
Experience gain or loss	15 years
Assumption or method change	20 years
Benefit changes enacted in 2025	Period ending June 30, 2048
Benefit changes for actives	15 years
Long-term benefit changes for inactives	15 years
Short-term benefit changes for inactives	Number of years during which the benefit change will be in effect
Contributions above or below actuarial rate	15 years

The following table shows a summary of the cost impact on the July 1, 2025 valuation results due to the changes since the prior valuation discussed earlier.

(Dollars in Thousands)

	Before Changes	Omnibus Pension and Retirement Bill	Assumption and Method Changes
Unfunded AAL (UAAL)	$6,386,688	$6,800,105	$6,804,734
Impact		**413,417**	**4,629**
Funded Ratio	82.5%	81.6%	81.6%
Impact		**(0.9)%**	**0.0%**
Total Required Contribution	17.68%	18.04%	18.05%
Impact		**0.36 %**	**0.01 %**
Contribution (Deficiency)/ Sufficiency	0.50 %	0.45 %	0.44 %

The actuarial valuation captures the actual experience that has occurred in the last fiscal year. The valuation results, which provide a "snapshot" view of the System's financial condition on July 1, 2025, reflect net favorable experience for the past plan year as demonstrated by an Unfunded Actuarial Accrued Liability (UAAL) that was lower than expected. The UAAL as of July 1, 2025 is $6.8 billion, compared to an expected UAAL of $7.6 billion. The favorable experience of $820 million was the net result of an experience gain of $837 million on the actuarial value of assets (AVA) and an experience loss of $17 million on the System's liabilities. The rate of return on the market value of assets for fiscal year 2025 was 10.9%, as reported by the State Board of Investment. Due to the application of the asset smoothing method, the rate of return on the Actuarial Value of Assets was 10.1%, resulting in an experience gain on assets. Various factors affected the net liability loss, including unfavorable retirement experience which was partially offset by salary gains from actual salary increases that were lower than expected under the assumptions.

A summary of the key valuations results from the July 1, 2025 actuarial valuation, compared to the July 1, 2024 valuation, is shown in the following table.

	Actuarial Valuation as of	
	July 1, 2025	**July 1, 2024**
Total Required Contribution Rate (Chapter 356)	18.05%	18.46%
Employer Contributions	9.97%	8.91%
Employee Contributions	8.00%	7.75%
Direct Aids (Chapters 354 and 423A)	0.52%	0.55%
Sufficiency/(Deficiency)	0.44%	(1.25)%
Unfunded Actuarial Accrued Liability *(dollars in millions)*	$6,805	$7,124
Funded Ratio (Actuarial Assets)	81.60%	79.90%

Note that in 2024, there was a scheduled increase that reduced the ultimate deficiency.

The prior valuation showed that there was a contribution deficiency of 1.25% of pay. Due to a combination of factors, including the favorable investment experience, the contribution deficiency has become a contribution sufficiency of 0.44% of pay in the current valuation. There are no further contribution rate increases currently scheduled.

Experience for the Last Plan Year

Numerous factors contributed to the change in the System's assets, liabilities and Required Contribution Rate (actuarial contribution rate) between July 1, 2024, and July 1, 2025. The components are examined in the following discussion.

Assets

As of June 30, 2025, TRA had net assets of $31.3 billion, as measured on a market value basis. This represents a $2.2 billion increase from the prior year.

The market value of assets is not used directly in the calculation of the UAAL Funded Ratio and the Required Contribution Rate. An asset valuation method, which smooths the effect of market fluctuations, is used to determine the value of assets used in the valuation report, called the "actuarial value of assets." In this year's valuation, the actuarial value of assets as of June 30, 2025 was $30.2 billion, an increase of $1.9 billion from the prior valuation. The components of change in the asset values are shown in the following table:

(Dollars in Millions)

	Actuarial Value	Market Value
Net Assets, June 30, 2024	**$28,323**	**$29,092**
Employer & Member Contributions	1,142	1,142
Benefit Payments and Administrative Expenses	(2,084)	(2,084)
Investment Income	2,806	3,111
Net Assets, June 30, 2025	**$30,187**	**$31,261**
Rate of Return	**10.1%**	**10.9%**

The State Board of Investment reported a rate of return of 10.9% on the market value of assets for fiscal year 2025. Due to the application of the asset smoothing method, including the scheduled recognition of the deferred investment experience from prior years, the rate of return on the actuarial value of assets was 10.1%. Because this rate of return was higher than the assumed rate of return of 7%, an actuarial gain of $837 million occurred.

The net deferred investment gain (actuarial value of assets minus the market value) is $1.1 billion as of July 1, 2025. Absent unfavorable investment experience, the deferred asset gains are expected to flow through the smoothing method over the next four years, increasing the funded ratio and decreasing the Required Contribution Rate.

Liabilities

The Actuarial Accrued Liability (AAL) is the portion of the present value of future benefits that will not be paid by future normal costs. The difference between this liability and the actuarial value of assets at the same date is called the Unfunded Actuarial Accrued Liability (UAAL). In general, the UAAL is reduced if the contributions to the System exceed the normal cost for the year plus interest on the prior year's UAAL. However, actuarial experience also impacts the UAAL from one year to the next.

The UAAL is shown below as of July 1, 2025:

(Dollars in Millions)

	Actuarial Value	Market Value
Actuarial Accrued Liability	$36,992	$36,992
Value of Assets	$30,187	$31,261
Unfunded Actuarial Accrued Liability	$6,805	$5,731
Funded Ratio	81.60%	84.51%

See pages 95-97 of the report for the detailed development of the UAAL.

Changes in the UAAL occur for various reasons. The net decrease in the UAAL from July 1, 2024, to July 1, 2025, was $319 million. The components of this net change are shown in the table on the next page.

(Dollars in Millions)

Unfunded Actuarial Accrued Liability July 1, 2024	$ 7,124
Expected change from amortization method	22
Actual Contributions vs Required Rate	84
Investment experience on actuarial assets	(837)
Liability experience	17
2025 Omnibus Pension and Retirement Bill	413
Assumption and method changes	5
Other experience	(23)
Subtotal	$ (319)
Unfunded Actuarial Accrued Liability July 1, 2025	**$ 6,805**

Actuarial gains or losses, which result from actual experience that is more or less favorable than anticipated based on the actuarial assumptions, are reflected in the UAAL. These are measured as the difference between the expected UAAL and the actual UAAL, considering changes due to actuarial assumptions and methods or benefit provision changes. Overall, the System experienced an actuarial gain of $820 million, which may be explained by considering the separate experience of assets and liabilities. As noted earlier, there was an $837 million gain on the actuarial value of assets and a $17 million loss on liabilities.

As shown above, various types of experience impacted the UAAL from July 1, 2024 to July 1, 2025, but the most significant was the favorable investment experience during fiscal year 2025. The UAAL is financed as a level percentage of payroll so the dollar amount of the UAAL payments increase each year with assumed payroll increases of 3.0%. As a result of the payment schedule, contributions in the early part of the amortization period are less than the interest on the UAAL and the dollar amount of the UAAL increases. This is illustrated by the expected increase of $22 million shown in the table.

To the extent the Required Contribution Rate is more than the Statutory Contribution Rate, which was the case during the prior year, the UAAL is paid off less rapidly than expected based on the System's amortization schedule. During fiscal year 2025, the contribution deficiency increased the UAAL by $84 million.

An evaluation of the UAAL on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both very large numbers) is reflected. Another way to evaluate the UAAL and the progress made in its funding is to track the funded ratio, the ratio of the actuarial value of assets to the actuarial accrued liability. The funded status information is shown in the following table.

(Dollars in Millions)

Date	Funded Ratio	Unfunded Actuarial Accrued Liability
7/1/21	80.2%	$6,087
7/1/22	82.0%	$5,690
7/1/23	76.9%	$8,104
7/1/24	79.9%	$7,124
7/1/25	81.6%	$6,805

Note that if the funded status were calculated using the market value of assets, the results could differ. The funded ratios and UAAL measures, as shown, are not indicative of whether or not the System could settle all current benefit obligations with existing assets. Furthermore, these results do not, on their own, indicate whether or not future funding of the System will be required, nor the amount.

Contribution Rate

Under the Entry Age Normal cost method, the actuarial contribution rate consists of three components:

- a "normal cost" for the portion of projected liabilities allocated by the actuarial cost method to service of members during the year following the valuation date,
- an "Unfunded Actuarial Accrued Liability contribution" for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets (Unfunded Actuarial Accrued Liability); and

- an amount to cover estimated administrative expenses for the plan year.

Under the Entry Age Normal cost method, the normal cost rate is very stable, absent changes in the actuarial assumptions or plan changes. However, the UAAL contribution rate tends to fluctuate much more. Contribution rates are summarized in the following table. These calculations are based on the actuarial value of assets.

Contribution Rates	July 1, 2025	July 1, 2024
Normal Cost Rate	11.33%	11.08%
UAAL Contribution Rate	6.41%	7.09%
Expenses	0.31%	0.29%
Total Required Contribution Rate	18.05%	18.46%
Statutory Contribution Rate	18.49%	17.21%
Contribution (Deficiency)/ Sufficiency	0.44%	(1.25)%

The impact of the various factors discussed earlier on the *Required Contribution Rate* are shown in the following table.

Required Contribution Rate July 1, 2024	18.46 %
Change in Normal Cost Rate	0.02 %
Actual Contributions vs Required Rate	0.08 %
Investment experience	(0.82)%
Liability experience	0.02 %
Payroll increase different than expected	(0.07)%
2025 Omnibus Pension and Retirement Bill	0.36 %
Assumption and method changes	0.01 %
Other experience	(0.01)%
Required Contribution Rate July 1, 2025	18.05 %

When a system is funded with fixed contribution rates (statutory contribution rate), it is expected that the fixed contribution rate may be either above or below the actuarial contribution rate (Required Contribution Rate for TRA), as determined in the actuarial valuation each year. However, when the statutory contribution rate is consistently lower than the Required Contribution Rate for a long period, it can significantly impact the funding progress of the System and result in an increasing UAAL and declining funded ratio. For TRA, the statutory contribution rate was significantly below the Required Contribution Rate from 2008 to 2017. Over that time, the funded status of the System declined from 92% to 76%. Actual investment experience over the early years of that time period also had a significant impact on the decline in the System's funding. There was a contribution sufficiency during fiscal years 2022 and 2023. However, after lowering the investment return assumption from 7.5% to 7% in 2023, the valuation results have shown a contribution deficiency in the 2023 and 2024 valuations. Currently, there is a contribution sufficiency of 0.44% of pay. However, the UAAL will continue to be significantly impacted from year to year by factors other than statutory contribution levels, such as actual versus expected experience, assumption changes, and funding amounts. We will continue to monitor the Contribution Deficiency/ Sufficiency and projected full funding date in future valuations to ensure the current funding policy will meet the System's goals.

The actuarial contribution rate (Required Contribution Rate) is determined based on the snapshot of the System taken on the valuation date, July 1, 2025. The actuarial contribution rate in future years will change each year as the deferred actuarial investment experience is recognized and other experience (both investment and demographic) impacts the System. The most volatile component of the actuarial contribution rate is typically the actual investment return, although the asset smoothing method mitigates the immediate impact of significantly different returns than assumed.

Summary

The two most impactful events since the prior valuation were favorable investment experience during fiscal year 2025 and the changes prescribed under the 2025 Omnibus Pension and Retirement Bill (HF 1889/SF 2884). The net impact decreased the UAAL by $319 million and the Required Contribution Rate by 0.41% of pay. As a result of the favorable investment experience on the market value of assets during fiscal year 2025, the net deferred investment gain of $770 million in last year's valuation has now increased to $1.1 billion. Absent unfavorable investment experience, the deferred asset gains are expected to flow through the smoothing method over the next four years, increasing the funded ratio and decreasing the Required Contribution Rate.

Due to the application of the asset smoothing method, the return on the actuarial value of assets was 10.1%. Since this return was higher than the assumed rate of return of 7% for the fiscal year ending 2025, there was a $837million actuarial gain on the actuarial value of assets. Coupled with a $17 million loss on the systems liabilities, the net actuarial gain was $820 million.

As mention earlier, the System's utilizes an asset smoothing method in the valuation process. While this is a common procedure for public retirement systems, it is important to identify the potential impact of the deferred investment experience. The asset smoothing method impacts only the timing of when the actual market experience is recognized in the valuation process. The net deferred investment gain of $1.1 billion represents about 3.4% of the market value of assets. The key valuation results from the July 1, 2025 actuarial valuation are shown below, using both actuarial and market value of assets.

	Actuarial Value	Market Value
Statutory Rate	18.49%	18.49%
Required Contribution		
Normal Cost	11.33%	11.33%
UAAL Contribution	6.41%	5.26%
Expenses	0.31%	0.31%
Total Required	18.05%	16.90%
Sufficiency (Deficiency)	0.44%	1.59%
UAAL (*dollars in millions*)	$6,805	$5,731
Funded Ratio	81.60%	84.51%

The long-term financial health of this System, like all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions to the System. Changes made by the 2025 Legislature improved benefits and increased statutory contribution rates. As a result, the System is currently experiencing a small contribution sufficiency of 0.44% of pay. Of course, actual experience over time will unfold differently from that assumed, so additional adjustments may be necessary in the future. It is especially important to note that it is the actual investment returns, not the assumed investment return, that will ultimately determine the cost of providing the promised benefits.

The complete Actuarial Valuation Funding Report is available on the TRA website at

https://minnesotatra.org/financial/annual-reports/

Reconciliation of Member Data*

Fiscal Year Ended June 30, 2025

	Active** Members	Former*** Members	Benefit Recipients**** Service Retirements	Disability Retirements	Survivors	Total
Members on 6/30/2024	85,962	62,082	63,128	432	6,920	218,524
New hires	5,479	—	—	—	—	5,479
Transfer from active to	(5,398)	5,398	—	—	—	—
Transfer from inactive to	1,618	(1,618)	—	—	—	—
Return from zero balance	329	4	—	—	—	333
Return from disability	1	—	—	—	—	1
Refunded	(405)	(1,076)	—	—	—	(1,481)
Refunded (non-repayable)	(11)	(20)	—	—	—	(31)
Retirements	(1,084)	(464)	1,523	(36)	—	(61)
Benefits began	—	—	—	60	711	771
Benefits ended	—	—	—	(4)	(47)	(51)
Deaths	(22)	(105)	(1,745)	(13)	(457)	(2,342)
Adjustments	(7)	50	4	2	5	54
Net changes	500	2,169	(218)	9	212	2,672
Members on 6/30/2025	86,462	64,251	62,910	441	7,132	221,196

* *Recipient counts include all pensions in force, including double counting of multiple benefit types.*
Service retirements include supplemental, and variable optional joint annuitants.

** *Active members include 1 Basic and 86,461 Coordinated members*

*** *Former members include 3 Basic and 64,248 Coordinated members*

**** *Benefit recipients include 2,022 Basic members and 68,461 Coordinated members.*

Former Member Statistics	Vested	Non-Vested	Total
Number	21,701	42,550	64,251
Average Age	48.8	48.4	48.5
Average Service (years)	8.3	0.8	3.3
Average annual benefits, with augmentation to Normal Retirement Date and Combined Service Annuity load	$9,738	N/A	N/A
Average refund value, with Combined Service Annuity load	$45,093	$3,185	$17,339

Actuarial Value of Assets

Fiscal Year Ended June 30, 2025

(Dollars in Thousands)

1.	**Market value of assets available for benefits**				**$**	**31,261,375**
2.	Determination of average balance					
	a. Assets available at July 1, 2024				$	29,092,479
	b. Assets available at June 30, 2025					31,261,375
	c. Net investment income for fiscal year ending June 30, 2025					3,111,259
	d. Average balance *[a. + b. -c.]/2*				$	28,621,298
3.	Expected return *[7% * 2.d.]*				$	2,003,491
4.	Actual return				$	3,111,259
5.	Current year unrecognized asset return *(4.-3.)*				$	1,107,768
6.	Unrecognized asset returns					
			Original Amount	**% Not Recognized**		
	a. Year ended June 30, 2025	$	1,107,768	80%	$	886,214
	b. Year ended June 30, 2024	$	1,356,378	60%	$	813,827
	c. Year ended June 30, 2023	$	333,761	40%	$	133,504
	d. Year ended June 30, 2022	$	(3,798,328)	20%	$	(759,666)
	e. Total return not yet recognized				$	1,073,879
7.	**Actuarial value at June 30, 2025 *(1. - 6.e.)***				**$**	**30,187,496**

Actuarial Valuation Balance Sheet

As of July 1, 2025

The actuarial balance sheet is based on the fundamental equation that, at any given time, the present value of benefits to be paid in the future must be equal to the assets on hand plus the present value of future contributions to be received. The total rate of contribution is determined as that amount which will make the total present and potential assets balance with the total present value of projected benefits.

(Dollars in Thousands)

A.	Actuarial Value of Assets			$ 30,187,496
B.	Expected Future Assets			
	1. Present value of expected future statutory supplemental contributions*			$ 6,979,747
	2. Present value of expected future normal cost contributions			8,414,688
	3. Total Expected Future Assets *(1. + 2.)*			$ 15,394,435
C.	Total Current and Expected Future Assets**			$ 45,581,931
D.	Current Benefit Obligations	Non-Vested Benefits	Vested Benefits	Total
	1. Benefit recipients			
	a. Service retirements	$ —	$ 18,552,548	$ 18,552,548
	b. Disability	—	169,477	169,477
	c. Survivors	—	1,342,275	1,342,275
	2. Deferred retirements with applicable future	—	1,243,067	1,243,067
	3. Former members without vested rights***	135,505	—	135,505
	4. Active members	109,794	13,188,157	13,297,951
	5. Total Current Benefit Obligations	$ 245,299	$ 34,495,524	$ 34,740,823
E.	Expected Future Benefit Obligations			$ 10,666,095
F.	Total Current and Expected Future Benefit Obligations			$ 45,406,918
G.	Unfunded Current Benefit Obligations *(D.5 - A)*			$ 4,553,327
H.	Unfunded Current and Future Benefit Obligations *(F. - C.)*			$ (175,013)

* *Under LCPR guidelines, this amount does not include supplemental payments, which could occur after the expiration of the remaining 23-year amortization period.*

** *Does not reflect deferred investment experience in the asset smoothing method. Total expected future assets on a market value basis is $46,655,810.*

*** *Former members with insufficient service to vest who have not collected a refund of member contributions as of the valuation date.*

Determination of Unfunded Actuarial Accrued Liability (UAAL)

As of July 1, 2025

(Dollars in Thousands)

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
1. Active Members			
a. Retirement Annuities	$ 22,702,071	$ (7,328,476)	$ 15,373,595
b. Disability Benefits	435,278	(191,802)	243,476
c. Survivor Benefits	199,187	(73,283)	125,904
d. Deferred Retirements	612,382	(665,144)	(52,762)
e. Refunds	15,128	(155,983)	(140,855)
f. Total	$ 23,964,046	$ (8,414,688)	$ 15,549,358
2. Deferred Retirements with Applicable Future	1,243,067	—	1,243,067
3. Former Members Without Vested Rights	135,505	—	135,505
4. Benefit Recipients	20,064,300	—	20,064,300
5. Total Actuarial Accrued Liability	$ 45,406,918	$ (8,414,688)	$ 36,992,230
6. Actuarial Value of Assets (page 93, line 7)			$ 30,187,496
7. Unfunded Actuarial Accrued Liability (UAAL)*			$ 6,804,734

* On a Market Value of Assets basis, the Unfunded Actuarial Accrued Liability is $5,730,855.

Determination of Supplemental Contribution Rate

As of July 1, 2025

(Dollars in Thousands)

Amortization Bases	Original Amount	July 1, 2025 Remaining Payments	Outstanding Balance as of July 1, 2025	Annual Contribution*
2024 UAAL Base (Legacy)	$ 7,145,803	23	$ 7,145,803	$ 473,419
2025 Contributions below actuarial rate	84,059	15	84,059	7,467
2025 Experience	(843,174)	15	(843,174)	(74,899)
2025 Benefit Change	413,417	23	413,417	27,389
2025 Assumption Change	4,629	20	4,629	336
Total			$ 6,804,734	$ 433,712

1. Total UAAL Amortization Payments	$ 433,712
2. Projected Payroll for Plan Year Ending June 30, 2026	$ 6,769,786
3. UAAL Amortization Payment Rate	6.41%

* *Contribution amount reflects mid-year timing.*

Changes in Unfunded Actuarial Accrued Liability (UAAL)

Fiscal Year Ended June 30, 2025

(Dollars in Thousands)

			Amount
A.	Unfunded Actuarial Accrued Liability at beginning of year		$ 7,124,000
B.	Changes due to interest requirements and current rate of funding*		
	1.	Normal cost and actual administrative expenses	740,060
	2.	Contributions	(1,142,250)
	3.	Interest on A., B.1 and B.2. and B.3. at 7%	484,841
	4	Total *(B.1. + B.2. + B.3.)*	$ 1,223,759
C.	Expected Unfunded Actuarial Accrued Liability at end of year (*A. + B.3.*)		$ 8,347,759
D.	Increase (decrease) due to actuarial losses (gains) because of experience deviations from		
	1.	Salary increases	$ (102,826)
	2.	Investment return (actuarial assets)	(837,323)
	3.	Mortality of active members	1,867
	4.	Mortality of benefit recipients	(4,651)
	5.	Retirement from active service	80,305
	6.	Other items	42,665
	7.	Total	$ (819,963)
E.	Unfunded Actuarial Accrued Liability at end of year before plan amendments and changes in actuarial assumptions *(C. + D.7.)*		$ 7,527,796
F.	Change in Unfunded Actuarial Accrued Liability due to change in plan amendments		$ 413,417
G.	Change in Unfunded Actuarial Accrued Liability due to change in assumptions		$ 4,629
H.	Unfunded Actuarial Accrued Liability at end of year (*E. + F. + G.*)		$ 7,945,842

* *The contribution levels in effect during FYE 2025 were less than the "interest only" payment on the UAAL, after accounting for normal cost and administrative expenses. This will result in the UAAL increasing unless offset by actuarial gains or other favorable changes.*

Determination of Contribution Sufficiency/(Deficiency) - Total

July 1, 2025

The Actuarial Required Contribution (ARC) is the sum of the normal cost, a supplemental contribution to amortize the UAAL, and an allowance for expenses.

(Dollars in Thousands)

	Percent of Payroll	Dollar Amount
A. Statutory Contributions - Chapter 354		
1. Employee contributions	8.00%	$ 541,586
2. Employer contributions*	9.97%	674,954
3. Supplemental contributions**		
a. 1993 Legislation	0.07%	5,000
b. 1996 Legislation	0.05%	3,256
c. 1997 Legislation	0.19%	12,954
d. 2014 Legislation	0.21%	14,377
4. Total	18.49%	$ 1,252,127
B. Required Contributions - Chapter 356		
1. Normal cost		
a. Retirement benefits	9.90%	$ 670,215
b. Disability benefits	0.25%	16,925
c. Survivor benefits	0.10%	6,770
d. Deferred retirement benefits	0.86%	58,220
e. Refunds	0.22%	14,893
f. Total	11.33%	$ 767,023
2. Supplemental contribution for the amortization of the Unfunded Actuarial Accrued Liability	6.41%	433,712
3. Allowance for expenses	0.31%	$ 20,986
4. Total actuarial contribution for fiscal year ending June 30, 2026***	18.05%	$ 1,221,721
C. Contribution Sufficiency / (Deficiency) (A.4. - B.4.)***	0.44%	$ 30,406

Note: Projected annual payroll for fiscal year beginning on the valuation date: $6,769,786

* *Employer contribution rate is blended to reflect rates of 17.45% of pay for Basic members, 9.81% for pay for Coordinated members not employed by Special School District #1 (Minneapolis Schools), and 13.45% of pay for Coordinated members who are employed by Special School District #1.*

** *Includes contributions from Special School District #1 and the City of Minneapolis, matching state contributions.*

*** *On a market value of assets basis, the total required contribution is 16.90% of payroll and the contribution sufficiency is 1.59% of payroll.*

Schedule of Funded Liabilities by Type

(Dollars in Thousands)

	Aggregate Accrued Liabilities				Portion of Actuarial Accrued Liabilities Covered by Reported Assets		
Valuation as of June 30	(1) Member Contributions	(2) Retires and Beneficiaries	(3) Members (Employer Financed Portion)	Valuation Assets	(1)	(2)	(3)
2016	$ 3,033,160	$ 17,187,332	$ 6,495,724	$ 20,194,279	100%	100%	—%
2017	$ 3,246,851	$ 17,634,270	$ 6,546,581	$ 21,062,789	100%	100%	2.8%
2018	$ 3,442,582	$ 18,424,228	$ 6,776,213	$ 22,022,842	100%	100%	2.3%
2019	$ 3,653,579	$ 18,755,398	$ 6,837,197	$ 22,466,848	100%	100%	0.3%
2020	$ 3,879,281	$ 19,039,591	$ 7,210,308	$ 22,936,908	100%	100%	0.3%
2021	$ 4,114,425	$ 19,372,413	$ 7,328,129	$ 24,728,337	100%	100%	16.9%
2022	$ 4,337,381	$ 19,689,686	$ 7,588,830	$ 25,925,803	100%	100%	25.0%
2023	$ 4,606,884	$ 20,670,139	$ 9,731,270	$ 26,903,914	100%	100%	16.7%
2024	$ 4,928,794	$ 20,145,026	$ 10,372,980	$ 28,322,800	100%	100%	31.3%
2025	$ 5,295,464	$ 20,064,300	$ 11,632,466	$ 30,187,496	100%	100%	41.5%

Schedule of Active Member Valuation Data

(Dollars in Thousands)

Year Ended June 30	Active Members	Annual Covered Payroll	% Increase in Covered Payroll	Average Annual Member Salary
2016	80,530	$4,515,699	4.9%	$56,075
2017	81,811	$4,688,875	3.8%	$57,314
2018	82,495	$4,832,917	3.1%	$58,584
2019	82,965	$5,000,930	3.5%	$60,278
2020	83,149	$5,166,241	3.3%	$62,132
2021	81,821	$5,326,108	3.0%	$65,095
2022	84,308	$5,573,701	4.4%	$66,111
2023	84,983	$5,735,250	2.8%	$67,487
2024	85,962	$6,094,735	5.9%	$71,119
2025	86,462	$6,416,226	5.3%	$73,758

Schedule of Retirees and Beneficiaries
Added To and Removed From Retirement Rolls

Through June 1, 2025 – End of Budget Year for Benefit Payments*

	Added To Rolls		Removed From Rolls		June 1 Payment			
Fiscal Year	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowances	Percent Change from Prior Year
2016								
Retirement	2,700	$ 74,501,674	1,253	$ 40,121,659	57,534	$ 1,559,304,348	$ 27,102	0.9 %
Disability	56	$ 1,333,271	101	$ 1,987,290	538	$ 11,126,018	$ 20,680	4.1 %
Beneficiaries	569	$ 13,400,450	282	$ 6,445,318	5,377	$ 142,825,257	$ 26,562	0.8 %
2017								
Retirement	2,362	$ 67,444,049	1,264	$ 38,365,148	58,632	$ 1,608,549,654	$ 27,436	1.2 %
Disability	73	$ 1,774,135	75	$ 1,683,296	536	$ 11,352,435	$ 21,180	2.4 %
Beneficiaries	512	$ 13,397,711	327	$ 8,017,689	5,562	$ 150,944,018	$ 27,124	2.1 %
2018								
Retirement	2,453	$ 71,176,463	1,352	$ 42,530,337	59,703	$ 1,655,206,770	$ 27,725	1.0 %
Disability	50	$ 1,169,477	71	$ 1,752,096	515	$ 10,959,775	$ 21,181	— %
Beneficiaries	524	$ 12,771,988	318	$ 9,805,060	5,768	$ 156,474,569	$ 27,114	— %
2019								
Retirement	2,534	$ 74,848,967	1,486	$ 48,787,356	60,751	$ 1,684,545,764	$ 27,729	— %
Disability	46	$ 1,064,007	61	$ 1,387,416	500	$ 10,730,297	$ 21,461	1.3 %
Beneficiaries	597	$ 16,566,582	333	$ 9,425,264	6,032	$ 164,750,333	$ 27,308	0.7 %
2020								
Retirement	2,431	$ 75,403,042	1,527	$ 48,401,177	61,654	$ 1,716,225,832	$ 27,836	0.4 %
Disability	45	$ 1,071,593	67	$ 1,693,134	478	$ 10,199,737	$ 21,338	(0.6)%
Beneficiaries	600	$ 15,484,216	375	$ 11,073,721	6,258	$ 170,485,292	$ 27,243	(0.2)%
2021								
Retirement	2,170	$ 70,253,196	1,720	$ 53,949,384	62,104	$ 1,738,042,982	$ 27,986	0.5 %
Disability	50	$ 1,338,348	66	$ 1,619,669	462	$ 10,011,756	$ 21,670	1.5 %
Beneficiaries	671	$ 18,918,195	384	$ 11,429,930	6,545	$ 179,410,505	$ 27,412	0.6 %
2022								
Retirement	2,424	$ 79,292,850	1,691	$ 52,985,417	62,837	$ 1,769,820,491	$ 28,165	0.6 %
Disability	34	$ 1,057,394	61	$ 1,547,973	435	$ 9,603,295	$ 22,077	1.8 %
Beneficiaries	685	$ 16,961,565	406	$ 13,222,404	6,824	$ 184,546,470	$ 27,044	(1.4)%
2023								
Retirement	2,285	$ 77,312,068	1,739	$ 54,928,509	63,383	$ 1,798,182,435	$ 28,370	0.7 %
Disability	50	$ 1,426,283	46	$ 998,381	439	$ 10,114,850	$ 23,041	4.2 %
Beneficiaries	658	$ 17,509,404	447	$ 13,920,956	7,035	$ 189,681,876	$ 26,963	(0.3)%
2024								
Retirement	1,846	$ 60,534,890	1,803	$ 56,847,248	63,426	$ 1,809,752,995	$ 28,533	0.6 %
Disability	50	$ 1,758,581	51	$ 1,239,936	438	$ 10,728,953	$ 24,495	5.9 %
Beneficiaries	690	$ 18,911,269	451	$ 13,705,888	7,274	$ 196,632,846	$ 27,032	0.3 %
2025								
Retirement	1,678	$ 52,814,438	1,782	$ 56,223,881	63,323	$ 1,816,542,530	$ 28,687	0.5 %
Disability	62	$ 2,050,335	50	$ 1,188,771	450	$ 11,702,339	$ 26,005	6.2 %
Beneficiaries	731	$ 19,262,428	489	$ 16,252,292	7,515	$ 201,552,915	$ 26,820	(0.8)%

* *Timing differences exist between the data used for statistical information and that used for actuarial valuation purposes.*

Schedule of Funding Progress *(Unaudited)*

(Dollars in Thousands)

Actuarial Valuation Date	Actuarial Value of Assets (A)	Actuarial Accrued Liability (AAL) (B)	Unfunded AAL (UAAL) (B–A)	Funded Ratio (A / B)	Actual Covered Payroll (Previous FY) (C)	UAAL as Percentage of Covered Payroll (B–A) / C
07/01/16	$20,194,279	$26,716,216	$6,521,937	75.59%	$4,515,699	144.43%
07/01/17	$21,062,789	$27,427,702	$6,364,913	76.79%	$4,688,875	135.74%
07/01/18	$22,022,842	$28,643,023	$6,620,181	76.89%	$4,832,917	136.98%
07/01/19	$22,466,848	$29,246,174	$6,779,326	76.82%	$5,000,930	135.56%
07/01/20	$22,936,908	$30,129,180	$7,192,272	76.13%	$5,166,241	139.22%
07/01/21	$24,728,337	$30,814,967	$6,086,630	80.25%	$5,326,108	114.28%
07/01/22	$25,925,803	$31,615,897	$5,690,094	82.00%	$5,573,701	102.09%
07/01/23	$26,903,914	$35,008,293	$8,104,379	76.85%	$5,735,250	141.31%
07/01/24	$28,322,800	$35,446,800	$7,124,000	79.90%	$6,094,735	116.89%
07/01/25	$30,187,496	$36,992,230	$6,804,734	81.60%	$6,416,226	106.06%

Schedule of Contributions From the Employer and Other Contributing Entities** *(Unaudited)*

(Dollars in Thousands)

Year End June 30	Actuarially Required Contribution Rate (A)	Actual Covered Payroll (B)	Actual Member Contributions (C)	ARC Annual Required Contributions (A x B) - C	Actual* Employer Contribution	Percentage Contributed
2016	17.87%	$4,515,699	$347,256	$459,699	$390,548	84.96%
2017	18.72%	$4,688,875	$361,175	$516,582	$403,378	78.09%
2018	18.43%	$4,832,917	$374,550	$516,157	$414,315	80.27%
2019	17.18%	$5,000,930	$386,669	$472,491	$438,887	92.89%
2020	17.18%	$5,166,241	$396,679	$490,881	$460,810	93.87%
2021	17.65%	$5,326,108	$410,162	$529,896	$486,669	91.84%
2022	16.33%	$5,573,701	$428,993	$481,192	$518,269	107.71%
2023	15.72%	$5,735,250	$442,448	$459,133	$544,351	118.56%
2024	19.77%	$6,094,735	$480,136	$724,793	$756,421	104.36%
2025	18.46%	$6,416,226	$503,821	$680,615	$638,430	93.80%

**Includes contribution from other sources (if applicable).*

***Refer to the 10 year schedule of actuarially determined and actual contributions provided as Required Supplementary Information for additional details on page 50.*

Statistical

MACCRAY Flex Space
Photo by Steve Silverman

Statistical Summary

TRA complies with GASB Statement 44 (GASB 44), Economic Condition Reporting: The Statistical Section, issued in May 2004. The pronouncement establishes and modifies requirements related to the supplementary information presented in this section of the report. This section of the report provides detailed information about TRA as a context for understanding what the information in the financial statement note disclosures and required supplementary information indicates about the Association's overall financial condition.

The schedules and graphs beginning on page 103 show trend information about the growth of TRA assets over the past 10 years. These schedules, and others, provide detailed information about the trends of key sources of additions and deductions to plan assets.

The Contribution Rate chart on page 103 provides historical information on the total member and employer contribution rates.

The schedule of Pension Assets Compared to Pension Liabilities, found on pages 104-105, show the funding progress of the plan for the past 10 years on accumulating assets to cover pension liabilities which will ultimately be due at retirement.

The schedules on pages 106-111 include detailed information regarding the number and type of benefit recipients, and information as to the benefit amount.

The chart on page 112 provides a profile of TRA active members on June 30, 2025, by age and service credit totals.

The chart on page 113 contains information on the total number of members by type.

The schedules on page 114 detail the largest TRA employer units by covered employees and by types of employer.

All data is derived from TRA internal sources and the actuarial consultant.

The projected benefit payments page 117 for the next 25 years have been supplied by TRA's actuarial advisor, CavMac.

10-Year History of Fiduciary Net Position

(Dollars in Thousands)

For Fiscal Year Ending June 30	Fiduciary Net Position		% Change From Prior Year
2016	$	19,424,431	(5.0)%
2017	$	21,258,090	9.4%
2018	$	22,362,087	5.2%
2019	$	22,876,056	2.3%
2020	$	22,744,996	(0.6)%
2021	$	28,361,757	24.7%
2022	$	25,596,344	(9.8)%
2023	$	26,754,503	4.5%
2024	$	29,092,479	8.7%
2025	$	31,261,375	7.5%

10-Year History of Contribution Rates

For Fiscal Year Ending June 30	Basic Program Employee Contribution Rate	Basic Program Employer Contribution Rate *	Basic Program Total Contribution Rate	Coordinated Employee Contribution Rate	Coordinated Employer Contribution Rate *	Coordinated Total Contribution Rate
2016	11.00%	11.50%	22.50%	7.50%	7.50%	15.00%
2017	11.00%	11.50%	22.50%	7.50%	7.50%	15.00%
2018	11.00%	11.50%	22.50%	7.50%	7.50%	15.00%
2019	11.00%	11.71%	22.71%	7.50%	7.71%	15.21%
2020	11.00%	11.92%	22.92%	7.50%	7.92%	15.42%
2021	11.00%	12.13%	23.13%	7.50%	8.13%	15.63%
2022	11.00%	12.34%	23.34%	7.50%	8.34%	15.84%
2023	11.00%	12.55%	23.55%	7.50%	8.55%	16.05%
2024	11.25%	12.75%	24.00%	7.75%	8.75%	16.50%
2025	11.25%	12.75%	24.00%	7.75%	8.75%	16.50%

**In addition to the rates above, an employer contribution to the fund by Special School District No. 1, Minneapolis, is an amount equal to 3.64% of the salary of each teacher who is a Coordinated or Basic member*

10-Year History of Changes in Fiduciary Net Position

(continued on next page)

(Dollars in Thousands)

Fiscal Year Ended June 30	2016	2017	2018	2019
Additions				
Member Contributions	$ 347,256	$ 361,175	$ 374,550	$ 386,669
Employer Contributions	354,961	367,791	378,728	403,300
Direct Aid (State/City/District)	35,587	35,587	35,587	35,587
Net Gain (Loss) From Investing Activity	(23,672)	2,855,217	2,160,111	1,579,099
Other Income, Net	5,530	4,399	4,518	4,237
Total Additions to Fiduciary Net Position	$ 719,662	$ 3,624,169	$ 2,953,494	$ 2,408,892
Deductions				
Pension Benefits	$ 1,718,694	$ 1,767,568	$ 1,820,751	$ 1,865,693
Refunds	11,290	11,240	13,073	14,074
Administrative Expenses	11,338	11,702	15,673	15,156
Total Deductions from Fiduciary Net Position	$ 1,741,322	$ 1,790,510	$ 1,849,497	$ 1,894,923
Net Increase (Decrease)	$ (1,021,660)	$ 1,833,659	$ 1,103,997	$ 513,969
Net Position Held in Trust, Beginning of Year	$ 20,446,091	$ 19,424,431	$ 21,258,090	$ 22,362,087
Net Position Held in Trust, End of Year	$ 19,424,431	$ 21,258,090	$ 22,362,087	$ 22,876,056

10-Year History of Pension Assets vs. Pension Liabilities

(continued on next page)

(Dollars in Thousands)

Fiscal Year Ended June 30	2016	2017	2018	2019
Actuarial Accrued Liability (AAL)	$ 26,716,216	$ 27,427,702	$ 28,643,023	$ 29,246,174
Actuarial Value of Assets (AVA)	20,194,279	21,062,789	22,022,842	22,466,848
Unfunded Actuarial Accrued Liability (UAAL)	$ 6,521,937	$ 6,364,913	$ 6,620,181	$ 6,779,326
Funded Ratio (AVA)	75.59%	76.79%	76.89%	76.82%

10-Year History of Changes in Fiduciary Net Position

(concluded)

(Dollars in Thousands)

2020	2021	2022	2023	2024	2025
$ 396,679	$ 410,162	$ 428,993	$ 442,448	$ 480,136	$ 503,821
425,223	448,829	482,679	508,764	544,667	574,381
35,587	37,840	35,590	35,587	211,754	64,049
939,749	6,684,106	(1,710,746)	2,213,897	3,199,055	3,111,259
3,402	3,702	3,531	1,966	803	912
$ 1,800,640	$ 7,584,639	$ (759,953)	$ 3,202,662	$ 4,436,415	$ 4,254,422
$ 1,902,492	$ 1,937,441	$ 1,973,265	$ 2,010,438	$ 2,059,436	$ 2,043,842
13,815	14,415	16,529	17,531	21,501	21,951
15,393	16,022	15,666	16,534	17,502	19,732
$ 1,931,700	$ 1,967,878	$ 2,005,460	$ 2,044,503	$ 2,098,439	$ 2,085,525
$ (131,060)	$ 5,616,761	$ (2,765,413)	$ 1,158,159	$ 2,337,976	$ 2,168,897
$ 22,876,056	$ 22,744,996	$ 28,361,757	$ 25,596,344	$ 26,754,503	$ 29,092,478
$ 22,744,996	$ 28,361,757	$ 25,596,344	$ 26,754,503	$ 29,092,479	$ 31,261,375

10-Year History of Pension Assets vs. Pension Liabilities

(concluded)

(Dollars in Thousands)

2020	2021	2022	2023	2024	2025
$ 30,129,180	$ 30,814,967	$ 31,615,897	$ 35,008,293	$ 35,446,800	$ 36,992,230
22,936,908	24,728,337	25,925,803	26,903,914	28,322,800	30,187,496
$ 7,192,272	$ 6,086,630	$ 5,690,094	$ 8,104,379	$ 7,124,000	$ 6,804,734
76.13%	80.35%	82.00%	76.85%	79.90%	81.60%

10-Year History of Benefits and Refunds by Type *(continued on next page)*

Fiscal Year Ended June 30

(Dollars in Thousands)

	2016	2017	2018	2019
Pension Benefits				
Annuities	$ 1,687,085	$ 1,741,265	$ 1,789,400	$ 1,834,547
Disabilities	11,967	11,985	11,559	11,296
Survivor Benefits	17,681	12,323	17,855	17,919
Total Pension Benefits	$ 1,716,733	$ 1,765,573	$ 1,818,814	$ 1,863,762
Annuities Redirected to Earnings Limitation Savings Account (ELSA)	$ 1,961	$ 1,995	$ 1,937	$ 1,931
Member Refunds				
Regular	$ 8,284	$ 7,847	$ 8,799	$ 9,839
Death	1,184	1,589	2,050	1,328
ELSA Refunds	1,621	1,632	2,020	2,508
Employer Refunds	201	172	204	399
Total Refunds	$ 11,290	$ 11,240	$ 13,073	$ 14,074
Total Benefits and Refunds	$ 1,729,984	$ 1,778,808	$ 1,833,824	$ 1,879,767

10-Year History of Benefit Recipients by Category

Fiscal Year Ended June 30

Year	Annuitants	Disabilitants	Survivors	Total
2016	57,892	521	5,092	63,505
2017	58,991	517	5,268	64,776
2018	60,128	500	5,476	66,104
2019	61,079	486	5,723	67,288
2020	61,748	469	5,937	68,154
2021	62,369	442	6,222	69,033
2022	62,985	424	6,482	69,891
2023	63,219	429	6,696	70,344
2024	63,128	432	6,920	70,480
2025	62,924	438	7,121	70,483

10-Year History of Benefits and Refunds by Type *(concluded)*

Fiscal Year Ended June 30

(Dollars in Thousands)

2020	2021	2022	2023	2024	2025 *
$ 1,871,712	$ 1,906,057	$ 1,941,354	$ 1,980,199	$ 2,028,431	$ 2,011,627
10,767	10,630	10,010	10,688	11,264	11,997
18,172	18,773	19,729	19,144	19,658	20,124
$ 1,900,650	$ 1,935,460	$ 1,971,093	$ 2,010,031	$ 2,059,353	$ 2,043,748
$ 1,842	$ 1,981	$ 2,172	$ 407	$ 83	$ 94
$ 10,179	$ 11,087	$ 11,103	$ 13,848	$ 16,713	$ 18,944
1,854	1,230	2,137	1,376	2,141	2,733
1,786	1,974	1,915	2,157	1,678	—
(4)	125	1,374	150	969	274
$ 13,815	$ 14,416	$ 16,529	$ 17,531	$ 21,501	$ 21,951
$ 1,916,307	$ 1,951,857	$ 1,989,794	$ 2,027,969	$ 2,080,937	$ 2,065,793

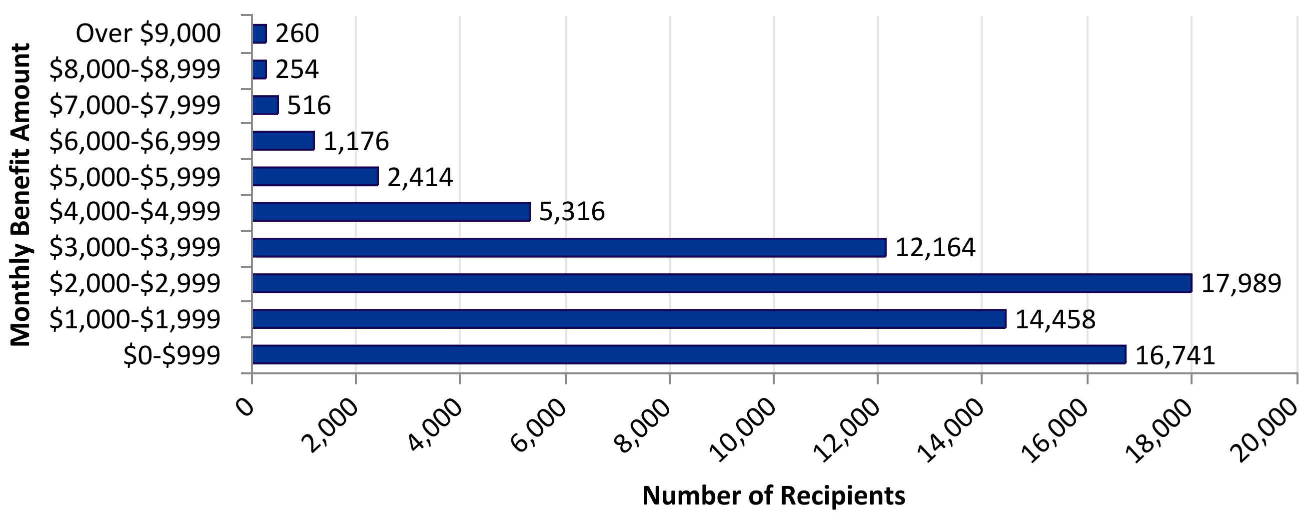
**ELSA withholdings were classified as a liability and ELSA refunds decrease the liability, they are not reported as a separate expense.*

Schedule of Benefit Amounts Paid

For Month of June 2025 — Payment Made June 1, 2025

Monthly Benefit Amount			Number of Recipients	Cumulative Total	Percent	Cumulative Percent
$0	–	$499	9,925	9,925	13.92%	13.92%
$500	–	$999	6,816	16,741	9.56%	23.48%
$1,000	–	$1,499	6,684	23,425	9.38%	32.86%
$1,500	–	$1,999	7,774	31,199	10.91%	43.76%
$2,000	–	$2,499	9,142	40,341	12.82%	56.59%
$2,500	–	$2,999	8,847	49,188	12.41%	69.00%
$3,000	–	$3,499	7,163	56,351	10.05%	79.05%
$3,500	–	$3,999	5,001	61,352	7.02%	86.06%
$4,000	–	$4,499	3,280	64,632	4.60%	90.66%
$4,500	–	$4,999	2,036	66,668	2.86%	93.52%
$5,000	–	$5,499	1,431	68,099	2.01%	95.53%
$5,500	–	$5,999	983	69,082	1.38%	96.91%
$6,000	–	$6,499	729	69,811	1.02%	97.93%
$6,500	–	$6,999	447	70,258	0.63%	98.56%
$7,000	–	$7,499	309	70,567	0.43%	98.99%
$7,500	–	$7,999	207	70,774	0.29%	99.28%
$8,000	–	$8,499	151	70,925	0.21%	99.49%
$8,500	–	$8,999	103	71,028	0.14%	99.64%
$9,000	–	$9,499	80	71,108	0.11%	99.75%
$9,500	–	$9,999	52	71,160	0.07%	99.82%
$10,000	–	$10,499	37	71,197	0.05%	99.87%
$10,500	–	$10,999	25	71,222	0.04%	99.91%
$11,000	–	$11,499	21	71,243	0.03%	99.94%
$11,500	–	$11,999	11	71,254	0.02%	99.95%
$12,000	–	$12,499	10	71,264	0.01%	99.97%
$12,500	–	and over	24	71,288	0.03%	100.00%

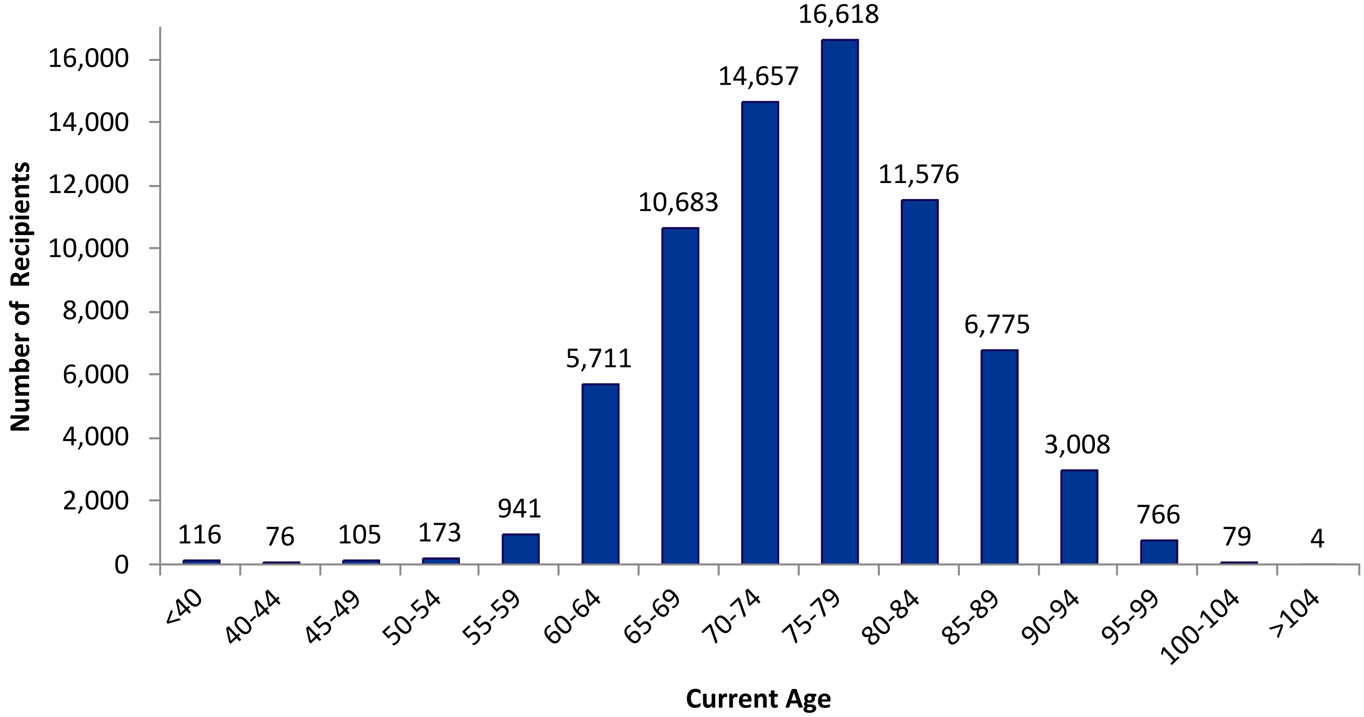
The median monthly TRA benefit amount is $2,438.



Schedule of Benefit Recipients by Current Age

For Month of June 2025 – Payment Made June 1, 2025

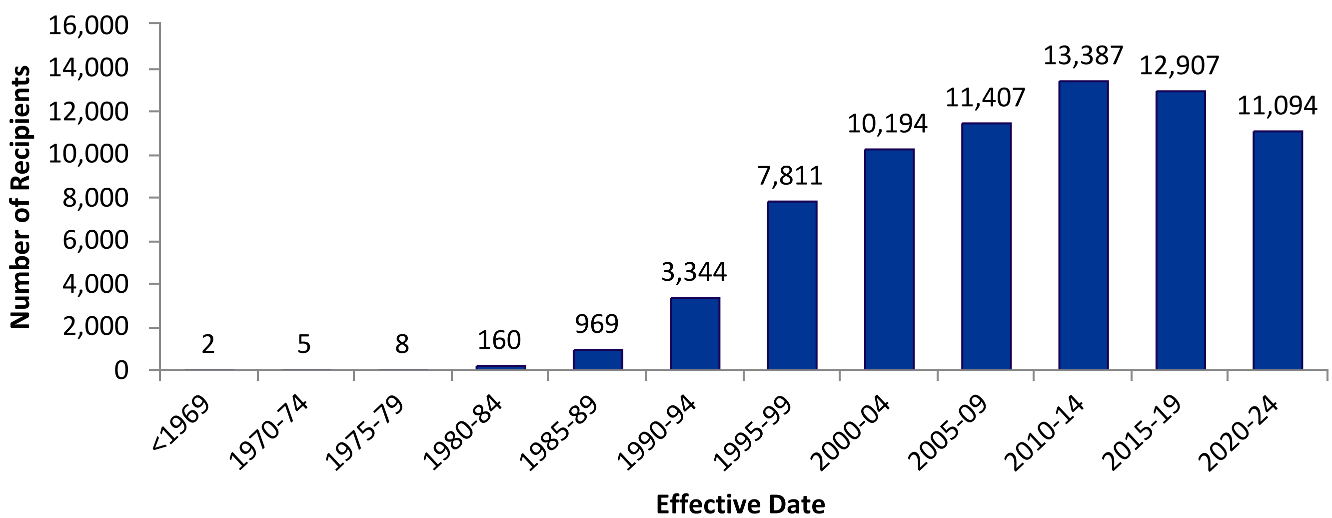
Total Recipients: 71,288



Benefit Recipients by Effective Date of Retirement

For Month of June 2025 – Payment Made June 1, 2025

Total Recipients: 71,288



Schedule of New Retirees and Initial Benefit Paid

For 10 Fiscal Years Ending June 30

	Years of Formula Service							
Fiscal Year	<10	10-15	16-20	21-25	26-30	31-35	>35	Total
2016								
Avg. Monthly Benefit	$ 390	$ 980	$ 1,561	$ 2,147	$ 2,834	$ 3,699	$ 4,312	$ 2,357
Final Average Salary	$ 29,988	$ 46,588	$ 57,103	$ 66,988	$ 71,615	$ 76,136	$ 78,332	$ 61,320
Number of Retirees	478	234	276	368	358	501	365	2,580
2017								
Avg. Monthly Benefit	$ 344	$ 1,016	$ 1,583	$ 2,171	$ 3,028	$ 3,804	$ 4,459	$ 2,455
Final Average Salary	$ 38,355	$ 48,505	$ 61,936	$ 70,094	$ 75,721	$ 78,127	$ 81,997	$ 65,530
Number of Retirees	463	182	264	293	363	519	321	2,405
2018								
Avg. Monthly Benefit	$ 360	$ 1,006	$ 1,603	$ 2,227	$ 2,882	$ 3,963	$ 4,470	$ 2,548
Final Average Salary	$ 43,494	$ 50,267	$ 63,619	$ 70,647	$ 75,591	$ 80,068	$ 81,024	$ 67,818
Number of Retirees	435	191	250	296	373	604	311	2,460
2019								
Avg. Monthly Benefit	$ 348	$ 999	$ 1,654	$ 2,254	$ 2,950	$ 4,017	$ 4,556	$ 2,499
Final Average Salary	$ 41,313	$ 52,352	$ 63,666	$ 70,909	$ 76,494	$ 81,586	$ 83,897	$ 67,563
Number of Retirees	476	196	273	291	317	632	252	2,437
2020								
Avg. Monthly Benefit	$ 356	$ 1,019	$ 1,634	$ 2,326	$ 3,212	$ 4,195	$ 4,780	$ 2,657
Final Average Salary	$ 43,319	$ 51,073	$ 63,519	$ 72,573	$ 79,517	$ 83,464	$ 85,054	$ 69,488
Number of Retirees	450	166	199	280	320	609	231	2,255
2021								
Avg. Monthly Benefit	$ 371	$ 1,163	$ 1,679	$ 2,384	$ 3,214	$ 4,188	$ 4,944	$ 2,760
Final Average Salary	$ 46,291	$ 59,163	$ 67,699	$ 75,110	$ 81,047	$ 83,624	$ 87,000	$ 72,580
Number of Retirees	405	167	227	298	327	584	279	2,287
2022								
Avg. Monthly Benefit	$ 378	$ 1,070	$ 1,764	$ 2,429	$ 3,181	$ 4,329	$ 5,086	$ 2,781
Final Average Salary	$ 45,560	$ 57,077	$ 69,890	$ 76,207	$ 80,087	$ 86,600	$ 90,349	$ 73,209
Number of Retirees	419	189	235	253	304	608	258	2,266
2023								
Avg. Monthly Benefit	$ 386	$ 1,089	$ 1,690	$ 2,428	$ 3,342	$ 4,453	$ 5,195	$ 2,774
Final Average Salary	$ 46,873	$ 57,215	$ 67,453	$ 78,304	$ 84,899	$ 90,340	$ 93,072	$ 74,718
Number of Retirees	392	155	202	256	231	488	229	1,953
2024								
Avg. Monthly Benefit	$ 387	$ 1,160	$ 1,759	$ 2,534	$ 3,470	$ 4,407	$ 5,348	$ 2,763
Final Average Salary	$ 45,622	$ 60,917	$ 68,969	$ 78,637	$ 85,113	$ 90,271	$ 92,249	$ 74,010
Number of Retirees	368	148	172	217	225	348	233	1,711
2025								
Avg. Monthly Benefit	$ 407	$ 1,157	$ 1,937	$ 2,654	$ 3,570	$ 4,310	$ 5,535	$ 2,456
Final Average Salary	$ 46,811	$ 59,673	$ 72,046	$ 80,697	$ 89,708	$ 92,891	$ 96,835	$ 73,292
Number of Retirees	389	161	189	183	265	213	123	1,523

Schedule of Benefit Recipients by Type

For Month of June 2025 — Payment Made June 1, 2025

Monthly Benefit Amount			Number of Recipients	Type of Retirement		
				Retirement	Disability	Beneficiary
$0	–	$1,000	16,752	1,864	93	14,795
$1,001	–	$2,000	14,465	1,926	116	12,423
$2,001	–	$3,000	17,989	1,810	130	16,049
$3,001	–	$4,000	12,155	1,020	74	11,061
$4,001	–	$5,000	5,324	431	34	4,859
$5,001	–	$6,000	2,401	207	2	2,192
$6,001	–	$7,000	1,176	122	1	1,053
$7,001	–	$8,000	513	60	–	453
$8,001	–	$9,000	253	35	–	218
$9,001	–	$10,000	132	22	–	110
$10,001	–	$11,000	62	6	–	56
$11,001	–	$12,000	32	8	–	24
$12,001	–	$13,000	15	1	–	14
$13,001	–	$14,000	7	–	–	7
$14,001	–	$15,000	7	2	–	5
$15,001	–	$16,000	1	–	–	1
$16,001	–	and over	4	1	–	3
		Totals:	71,288	7,515	450	63,323

Membership Data

As of June 30, 2025

Distribution of Active Members*

(Average Earnings in Dollars)

	Years of Service as of June 30, 2025										
Age	**<3****	**3-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40 +**	**Total**
<25	2,710	130	–	–	–	–	–	–	–	–	2,840
Avg. Earnings	38,656	53,738	–	–	–	–	–	–	–	–	39,347
25-29	3,406	3,047	2,077	–	–	–	–	–	–	–	8,530
Avg. Earnings	42,413	55,942	62,405	–	–	–	–	–	–	–	52,114
30-34	1,917	1,443	4,912	1,520	–	–	–	–	–	–	9,792
Avg. Earnings	43,011	58,834	66,494	77,276	–	–	–	–	–	–	62,441
35-39	1,744	944	2,853	4,668	1,004	–	–	–	–	–	11,213
Avg. Earnings	40,541	62,056	70,107	80,599	88,717	–	–	–	–	–	70,865
40-44	1,845	983	2,103	2,844	4,076	1,221	–	–	–	–	13,072
Avg. Earnings	38,560	63,385	73,035	82,290	91,965	98,649	–	–	–	–	77,752
45-49	1,432	715	1,659	1,768	2,095	3,945	1,263	–	–	–	12,877
Avg. Earnings	37,271	62,784	71,913	82,934	90,714	98,596	103,660	–	–	–	83,414
50-54	1,034	519	1,108	1,226	1,286	1,849	3,950	767	–	–	11,739
Avg. Earnings	35,612	59,101	69,997	82,005	88,687	95,575	100,918	104,080	–	–	86,448
55-59	772	370	817	821	908	1,138	2,053	2,853	357	–	10,089
Avg. Earnings	33,789	60,098	67,830	80,079	84,677	91,205	96,317	99,918	101,402	–	86,150
60-64	523	199	406	453	473	584	710	817	394	34	4,593
Avg. Earnings	23,563	52,537	63,975	72,242	80,533	87,755	94,635	96,103	101,592	93,777	78,324
65-69	359	82	131	118	97	102	86	63	44	34	1,116
Avg. Earnings	15,432	43,502	56,113	69,498	85,244	89,003	92,089	95,031	101,218	105,086	57,293
70 +	364	65	53	29	25	22	11	6	6	20	601
Avg. Earnings	10,984	22,089	31,006	48,963	74,147	100,000	81,954	92,905	100,049	108,381	27,916
Total	16,106	8,497	16,119	13,447	9,964	8,861	8,073	4,506	801	88	86,462
Avg. Earnings	37,977	58,431	68,062	80,537	89,635	96,203	99,504	99,587	101,475	101,466	73,758

* *Active members include 1 Basic and 86,461 Coordinated members.*

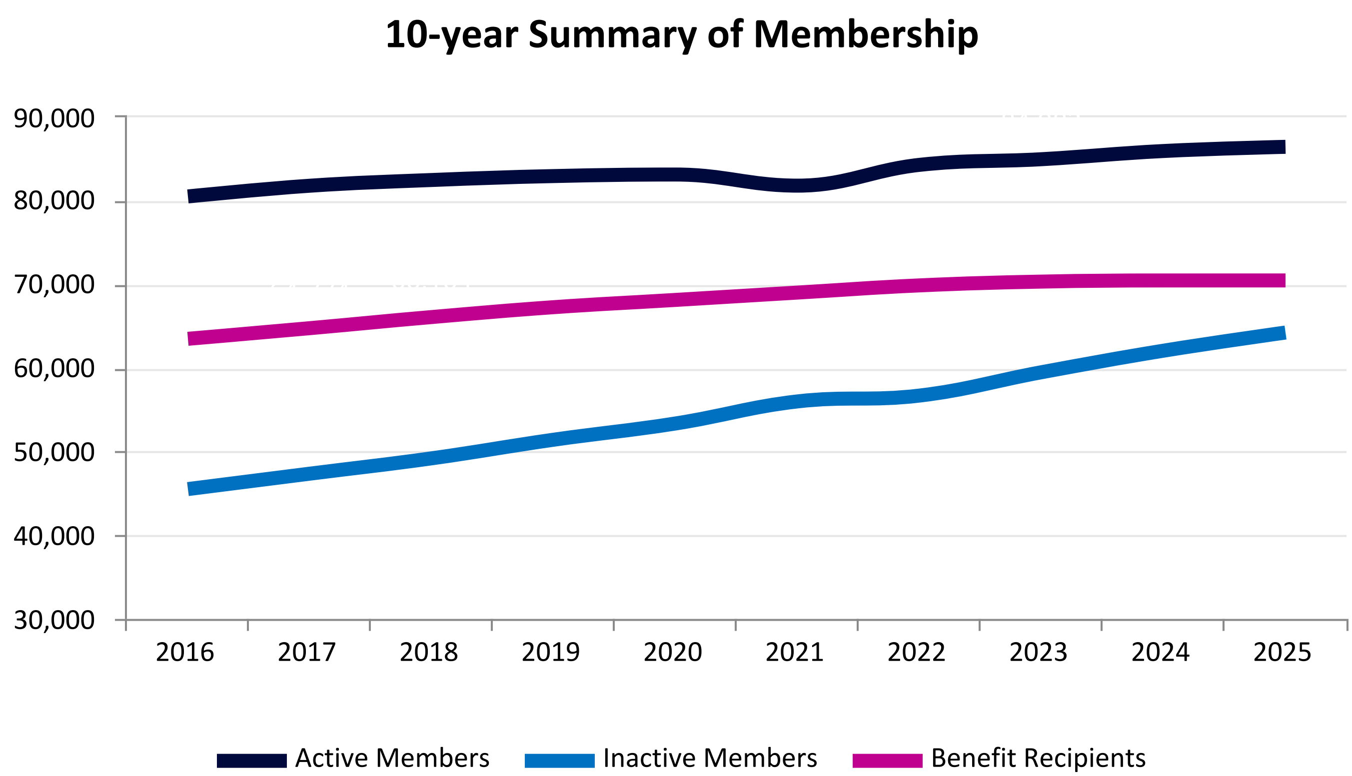
** *This exhibit does not reflect service earned in Combined Service Annuity benefits. It should not be relied upon as an indicator of non-vested status.*

In each cell, the top number is the count of active members for the age/service combination and the bottom number is the amount of average annual earnings. Earnings shown in this exhibit are actual salaries earned during the fiscal year ending June 30, 2025 as reported by TRA.

10-Year Summary of Membership

For Fiscal Year Ended June 30

Year	Active Members	Inactive Members	Benefit Recipients
2016	80,530	45,530	63,503
2017	81,811	47,374	64,774
2018	82,495	49,211	66,104
2019	82,965	51,436	67,285
2020	83,149	53,380	68,154
2021	81,821	56,017	69,033
2022	84,308	56,715	69,891
2023	84,983	59,507	70,344
2024	85,962	62,082	70,480
2025	86,462	64,251	70,483



Principal Participating Employers

Fiscal Year Ended June 30, 2025 and June 30, 2016

Employer Unit Name	2025 Covered Employees	2025 Rank	2025 Percentage of Active Membership	2016 Covered Employees	2016 Rank	2016 Percentage of Active Membership
Anoka-Hennepin - ISD #11	3,487	1	4.63%	3,152	2	3.90%
Minneapolis - Special School District #1	3,031	2	4.03%	4,269	1	5.29%
Rosemount - Apple Valley - Eagan - ISD #196	2,458	3	3.27%	2,580	4	3.20%
Minnesota State	2,300	4	3.06%	2,687	3	3.33%
Osseo - ISD #279	1,745	5	2.32%	1,734	5	2.15%
Rochester - ISD #535	1,619	6	2.15%	1,672	7	2.07%
South Washington County - ISD #833	1,440	7	1.91%	1,731	6	2.14%
Bloomington - ISD #271	1,028	8	1.37%	—	—	—%
Minnetonka - ISD #276	1,021	9	1.36%	1,090	9	1.35%
Robbinsdale - ISD #281	974	10	1.29%	1,204	8	1.49%
St. Cloud - ISD #742	—	—	—%	1,036	10	1.28%

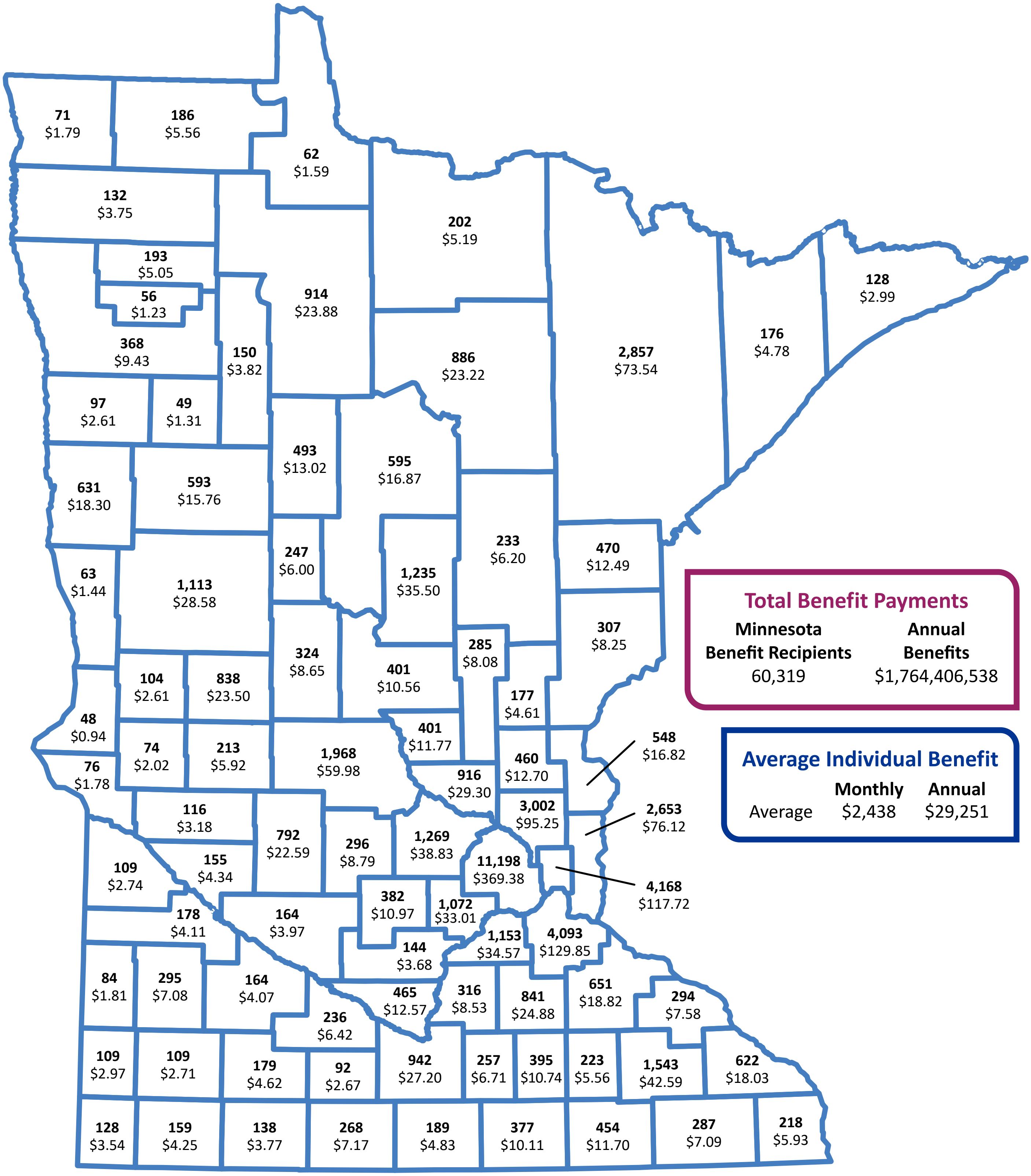
Number of Employer Units

As of Fiscal Year Ended June 30

Year	Independent School Districts	Minnesota State	Charter Schools	State Agencies	Others	Total
2016	373	39	174	4	5	595
2017	373	39	173	4	4	593
2018	374	39	169	4	4	590
2019	376	39	182	4	4	605
2020	375	39	182	4	4	604
2021	373	39	189	4	4	609
2022	372	34	192	4	4	606
2023	372	34	192	4	4	606
2024	369	34	185	4	3	595
2025	369	34	180	5	3	591

Annual Benefit Recipients by County on June 30, 2025

(Dollars in Millions)



Total Benefit Payments

Minnesota Benefit Recipients	Annual Benefits
60,319	$1,764,406,538

Average Individual Benefit

	Monthly	Annual
Average	$2,438	$29,251

Minnesota Benefit Recipients by County as of June 30, 2025

County	Members	Annual Benefit	County	Members	Annual Benefit
Aitkin	233	$ 6,203,276	Martin	268	$ 7,174,496
Anoka	3,002	95,253,862	McLeod	382	10,965,240
Becker	593	15,762,338	Meeker	296	8,786,680
Beltrami	914	23,884,728	Mille Lacs	285	8,079,456
Benton	401	11,767,069	Morrison	401	10,558,733
Big Stone	76	1,778,044	Mower	454	11,700,254
Blue Earth	942	27,195,829	Murray	109	2,713,323
Brown	236	6,421,606	Nicollet	465	12,567,583
Carlton	470	12,486,998	Nobles	159	4,247,719
Carver	1,072	33,010,008	Norman	97	2,613,038
Cass	595	16,870,295	Olmsted	1,543	42,594,941
Chippewa	155	4,337,406	Otter Tail	1,113	28,583,866
Chisago	548	16,819,566	Pennington	193	5,045,448
Clay	631	18,304,692	Pine	307	8,249,924
Clearwater	150	3,816,871	Pipestone	109	2,967,138
Cook	128	2,990,876	Polk	368	9,433,892
Cottonwood	179	4,624,817	Pope	213	5,921,752
Crow Wing	1,235	35,500,506	Ramsey	4,168	117,720,928
Dakota	4,093	129,850,566	Red Lake	56	1,229,726
Dodge	223	5,564,609	Redwood	164	4,070,331
Douglas	838	23,495,105	Renville	164	3,966,818
Faribault	189	4,830,854	Rice	841	24,883,897
Fillmore	287	7,086,175	Rock	128	3,542,618
Freeborn	377	10,109,266	Roseau	186	5,555,268
Goodhue	651	18,815,498	Saint Louis	2,857	73,542,973
Grant	104	2,606,429	Scott	1,153	34,566,934
Hennepin	11,198	369,384,213	Sherburne	916	29,297,721
Houston	218	5,928,314	Sibley	144	3,677,218
Hubbard	493	13,016,389	Stearns	1,968	59,975,179
Isanti	460	12,695,865	Steele	395	10,739,921
Itasca	886	23,220,329	Stevens	74	2,015,262
Jackson	138	3,773,649	Swift	116	3,175,633
Kanabec	177	4,611,701	Todd	324	8,646,004
Kandiyohi	792	22,588,847	Traverse	48	937,397
Kittson	71	1,791,962	Wabasha	294	7,583,177
Koochiching	202	5,186,174	Wadena	247	5,996,324
Lac Qui Parle	109	2,741,398	Waseca	257	6,708,930
Lake	176	4,777,185	Washington	2,653	76,122,713
Lake Of The Woods	62	1,587,908	Watonwan	92	2,672,841
Le Sueur	316	8,525,627	Wilkin	63	1,444,816
Lincoln	84	1,809,214	Winona	622	18,027,209
Lyon	295	7,077,649	Wright	1,269	38,829,392
Mahnomen	49	1,307,229	Yellow Medicine	178	4,111,962
Marshall	132	3,750,921	Grand Total	60,319	$ 1,764,406,538

Projected Benefit Payments
Fiscal Year Ended June 30, 2025

The table below shows estimated benefits expected to be paid over the next 25 years, based on the assumptions used in the valuation. The "Actives" column shows benefits expected to be paid to members currently active on July 1, 2025. The "Retirees" column shows benefits expected to be paid to all other members. This includes those who, as of July 1, 2025, are receiving benefit payments or who terminated employment and are entitled to a deferred benefit.

Cash flows are the expected future non-discounted payments to current members. These numbers exclude refund payouts to current non-vested inactive and assume future retirees and future terminated members make benefit elections according to valuation assumptions.

(Dollars in Thousands)

Year Ending June 30	Active	Retirees	Total
2026	$ 72,609	$ 2,024,302	$ 2,096,911
2027	135,296	1,986,855	2,122,151
2028	198,309	1,953,679	2,151,988
2029	268,215	1,922,732	2,190,947
2030	346,628	1,890,579	2,237,207
2031	434,219	1,858,110	2,292,329
2032	530,811	1,825,187	2,355,998
2033	636,127	1,791,093	2,427,220
2034	748,294	1,755,872	2,504,166
2035	867,121	1,717,644	2,584,765
2036	993,369	1,676,632	2,670,001
2037	1,128,146	1,632,090	2,760,236
2038	1,270,762	1,583,046	2,853,808
2039	1,421,496	1,530,207	2,951,703
2040	1,581,217	1,474,781	3,055,998
2041	1,749,988	1,416,435	3,166,423
2042	1,926,880	1,356,270	3,283,150
2043	2,111,479	1,293,364	3,404,843
2044	2,301,808	1,229,310	3,531,118
2045	2,497,907	1,163,919	3,661,826
2046	2,699,377	1,097,241	3,796,618
2047	2,903,546	1,030,601	3,934,147
2048	3,108,381	964,318	4,072,699
2049	3,313,408	899,009	4,212,417
2050	3,518,581	834,792	4,353,373

Note: *Numbers may not add due to rounding.*

This page left intentionally blank.

TEACHERS RETIREMENT ASSOCIATION

Plan Statement

MACCRAY Classroom
Photo by Steve Silverman

TRA Plan Statement

June 30, 2025

Purpose

Teachers Retirement Association (TRA) was established on July 1, 1931, by the state legislature. Its purpose is to improve educational service and better compensate teachers in order to make the occupation of teaching in Minnesota more attractive to qualified persons by providing a retirement benefit schedule that rewards faithful and continued service.

Administration

TRA is managed by a Board of eight trustees - three are statutorily appointed and five are elected. The statutory trustees are the Commissioner of Education, the Commissioner of the Minnesota Department of Management and Budget (MMB) and a representative of the Minnesota School Boards Association. Four of the five elected trustees are active members and one is a retiree. Administrative management of the fund is entrusted to the Executive Director who is appointed by the Board of Trustees. The Board also contracts with an actuary and uses legal counsel provided by the office of the Attorney General.

Membership

All teachers employed in public elementary and secondary schools, joint powers, charter schools and all other educational institutions maintained by the State of Minnesota (except those teachers employed by the St. Paul Public School district or certain faculty of Minnesota State) are required to be members of TRA.

Teachers employed by Minnesota State may elect TRA coverage within one year of their eligible employment. Newly-tenured Minnesota State members also have a one-year period to elect TRA coverage. If electing TRA, the individual must pay for the past service covered by TRA, and the cost of past service is based on full actuarial cost. No Minnesota State teacher is a member except for purposes of Social Security coverage if that teacher has coverage by the Defined Contribution Retirement Plan administered by the Minnesota State Board.

Retirement Service Credit

Service credit earned for benefit determination is based on a teacher's earned salary relative to an annual base salary established for an employer unit. Minnesota statute defines the base salary for each employer as the lowest salary paid to a full-time Bachelor of Arts (BA) base contract in the previous fiscal year. For example, a school district's annual base salary is determined to be $40,000. A teacher with an earned salary of $30,000 for that year will earn 0.75 year of service credit.

Service credit for Minnesota State members is based on a full-time equivalence method.

No more than one year of service credit may be earned by any member during a fiscal year, and no more than 0.111 may be earned during any one month.

Financing

Benefits are financed by employee contributions, employer contributions, investment earnings and turnover gains. Turn-over gains are employer contributions retained by the fund when members take refunds of their employee contributions.

Vesting

In a pension plan, vesting means a member has earned sufficient service credit to be eligible for a monthly benefit.

TRA members who have performed covered service after May 15, 1989, are vested after three years of service. TRA members who last worked prior to May 16, 1989, require five years or, in some cases, 10 years of service credit earned in order to be eligible for a monthly annuity benefit.

Employee Contributions

TRA members pay a percentage of their gross annual salary as determined by their membership plan. Basic Plan members (without Social Security coverage) contribute 11.25% of their annual salary, while Coordinated Plan members (coordinated with Social Security coverage) contribute 7.75% of their annual salary. Beginning July 1, 2025 the employee contribution rate will increase by 0.25% for both plans.

Employer Contributions

Local school districts and other TRA-covered employer units provide contributions of 12.75% of total salary for members in the Basic Plan and 8.75% of total salary for members in the Coordinated Plan. For Coordinated Plan members, the employer unit also makes the required matching contribution to the Social Security Administration. Beginning July 1, 2025, the employer contribution rate will increase by 1.06% for both plans.

Minneapolis Special School District #1 pays an employer additional contribution of 3.64% of annual salary for TRA members employed by that school district.

TRA also receives approximately $35.6 million annually in state and local direct aid. The aid payments are designed to offset unfunded liabilities assumed with the 2006 merger of the Minneapolis Teachers Retirement Fund Association (MTRFA) and the 2015 merger of the Duluth Teachers Retirement Fund Association (DTRFA). TRA received $28.5 million in fiscal year 2025 as part of the 2024 Omnibus Pensions and Retirement Bill.

Retirement Benefit

The retirement benefit is determined by a formula based on the member’s average salary earned on the highest five successive years of formula service credit, an accumulated percentage factor based on the total years of service credit, and the member’s age at retirement. The retirement benefits for members who were first hired before July 1, 1989, are different from the retirement benefits for members who were first hired after June 30, 1989.

Coordinated Members First Hired *Before* July 1, 1989

For members first hired before July 1, 1989, the retirement benefits (with average salary defined as the average of the highest five successive annual salaries) are the greater of:

The sum of:

- 1.20% of average salary for the first 10 years of allowable service for each year prior to July 1, 2006.
- 1.40% of average salary for each year on or after July 1, 2006;
- 1.70% of average salary for each year of allowable service in excess of 10 years prior to July 1, 2006; and
- 1.90% of average salary for each year of allowable service in excess of 10 years on or after July 1, 2006.
- No actuarial reduction if age plus years of service totals 90. Otherwise, reduction of 0.25% for each month the member is under age 65 (or 60 with 30 years of Allowable Service) at time of retirement. Beginning June 30, 2025, new retirement reduction factors will apply, including special factors for members retiring at age 60 or later with at least 30 years of service.

or the sum of:

- 1.70% of average salary for each year of allowable service prior to July 1, 2006; and
- 1.90% of average salary for each year of allowable service after July 1, 2006.
- Assuming augmentation to normal retirement age at 3% per yer (2.5% per year for members hired on or after July 1, 2006) and actuarial reduction for each month the member is under the full Social Security benefit retirement age (not to exceed age 65). Beginning June 30, 2025, new early retirement reduction factors will apply,

including special factors for members retiring at age 60 or later with at least 30 years of service.

or

- For eligible members: the monthly benefit that is actuarially equivalent of 2.2 times the members' accumulated deductions plus interest thereon.

Benefit reductions for members retiring prior to meeting normal retirement definitions apply. Members who reach age 60 with 30 years of service are eligible for a more favorable set of reduction factors than members who do not reach age 60 and 30 years of service. An extract of the reduction table for members who did not reach 30 years of service is presented below:

Age 60	13.05%
Age 61	9.96%
Age 62	7.12%
Age 63	4.52%
Age 64	2.15%
Age 65	—%

Members who do not reach age 60 with 30 years of service credit are eligible for a different group of factors. Effective July 1, 2024, the following reduction factors will be applied to an eligible member:

Age 55	58%	Age 61	28%
Age 56	54%	Age 62	21%
Age 57	50%	Age 63	14%
Age 58	46%	Age 64	7%
Age 59	42%	Age 65	—%
Age 60	35%		

Coordinated Members First Hired *After* June 30, 1989

For members first hired after June 30, 1989, the retirement benefits (with average salary defined as the average of the highest five successive annual salaries) is the sum of:

- 1.70% of average salary for each year of allowable service prior to July 1, 2006; and
- 1.90% of average salary for each year of allowable service beginning July 1, 2006.
- Assuming augmentation to normal retirement age at 3% per year (2.5% per year for members hired on or after July 1, 2006) and actuarial reduction for each month the member is under normal retirement age. Beginning June 30, 2025, new early retirement reduction factors will apply, including special interest factors for members retiring at age 60 or later with at least 30 years of service,

Reduction factors for members first hired from July 1, 1989 through June 30, 2006 and who reach age 60 with 30 years of service credit:

Age 60	13.05%
Age 61	9.96%
Age 62	7.12%
Age 63	4.52%
Age 64	2.15%
Age 65	—%

Effective July 1, 2024, the following reduction factors are applied to an eligible member first hired from July 1, 1989 through June 30, 2006 and who do not reach age 60 with 30 years of service credit:

Age 55	58%	Age 61	28%
Age 56	54%	Age 62	21%
Age 57	50%	Age 63	14%
Age 58	46%	Age 64	7%
Age 59	42%	Age 65	—%
Age 60	35%		

Reduction factors for members first hired on or after July 1, 2006 and who reach age 60 with 30 years of service credit:

Age 60	15.14%
Age 61	11.70%
Age 62	8.46%
Age 63	5.44%
Age 64	2.63%
Age 65	—%

Effective July 1, 2024, the following reduction factors will be applied to an eligible member first hired after June 30, 2006 and who do not reach age 60 with 30 years of service credit:

Age 55	58%	Age 61	28%
Age 56	54%	Age 62	21%
Age 57	50%	Age 63	14%
Age 58	46%	Age 64	7%
Age 59	42%	Age 65	—%
Age 60	35%		

Effective July 1, 2024, the normal retirement age decreased to age 65.

Basic Members (Former MTRFA)

TRA has 1 active and 3 inactive basic members from the former Minneapolis Teachers Retirement Fund Association (MTRFA) who were transferred to TRA effective June 30, 2006. Under the merger legislation, this group of former MTRFA members retains eligibility for the benefit provisions as provided by the MTRFA Articles of Incorporation and by-laws as they existed on June 30, 2006.

The retirement benefits for these members (with average salary defined as the average of the highest five successive annual salaries) are:

- 2.50% of average salary for each year of teaching service.
- No actuarial reduction applies if the retiring member is age 60 or any age with 30 years of teaching service.

If the member is age 55 with less than 30 years of teaching service, the retirement benefit is the greater of:

a. 2.25% of average salary for each year of teaching service with reduction of 0.25% for each month before the member would be eligible for a normal retirement benefit.

or

b. 2.50% of average salary for each year of teaching service assuming augmentation to the age first eligible for a normal retirement benefit at 3.00% per year, and actuarial reduction for each month before the member would be first eligible for a normal retirement benefit.

An alternative benefit is available to members who are at least age 50 and have seven years of teaching service. The benefit is based on the accumulation of the 6.50% "city deposits" to the retirement fund. Other benefits are also provided under this alternative benefit, depending on the member's age and teaching service.

Basic Members (Non-MTRFA)

As of June 30, 2025, TRA had 1 active members who retains eligibility for the Basic Plan and who does not have eligibility for the provisions for former MTRFA Basic members. The retirement benefits (with average salary defined as the average of the highest five successive annual salaries) are the greater of:

a. 2.2% of average salary for each of the first 10 years of allowable service and 2.7% of average salary for each subsequent year with reduction of 0.25% for each month the member is under age 65 at time of retirement, or under age 60 with 30 years of allowable service. No reduction if age plus years of allowable service totals 90.

b. 2.7% of average salary for each year of allowable service assuming augmentation to age 65 at 3% per year, and actuarial reduction for each month the member is under age 65.

or

c. For eligible members, a money purchase annuity equal to the actuarial equivalent of 2.2 of the member's accumulated deductions plus interest thereon.

All other members in this group have reached normal retirement age and are no longer subject to early retirement penalties.

Deferred Retirement

Members with three or more years of allowable service (10 or more years of allowable service if termination of teaching service occurs before July 1, 1987, and five or more years of allowable service if termination of teaching service occurs after June 30, 1987, but before May 16, 1989) who terminate teaching service in schools covered by the association may have their retirement benefit deferred until they attain age 55 or older.

Members who defer their benefits will receive a deferral increase as follows:

Members hired prior to July 1, 2006	Prior to July 1, 2012: 3% annually through December 31 of the year in which the member would have reached 55 and 5% annually thereafter each year the benefit is deferred After July 1, 2012 until June 30, 2019: 2% After June 30, 2019; 0%
Members hired on or after July 1, 2006	Prior to July 1, 2012: 2.5% After July 1, 2012 to June 30, 2019: 2% After June 30, 2019: 0%

The deferral period must be at least three months. If on a leave of absence, the member is not eligible for the deferral increase on a deferred annuity for any portion of time on leave.

Annuity Plan Options

Six different annuity plan options are available to TRA members that provide monthly benefit payments for as long as the annuitant lives. The No Refund Plan provides the highest possible monthly benefit, but terminates upon the member’s death. A member may choose to provide survivor benefits to a designated beneficiary(ies) by selecting one of the five plans that have survivorship features.

A married member must choose one of the three survivorship plans (plans 4 through 6) listed below at retirement, unless the member's spouse waives the right to this type of annuity.

1. No Refund, For Life of Member
2. Guaranteed Refund of Contributions
3. 15-Years Guaranteed
4. 100% Survivorship with Bounce back
5. 75% Survivorship with Bounce back
6. 50% Survivorship with Bounce back

Annual Post-Retirement Increases

Once retired, each January, if specified by law, a post-retirement increase may be made to a member’s monthly benefit.

Under 2018 legislation and first applicable on January 1, 2019, the annual post-retirement increase is 1% for a five-year period. Beginning January 1, 2024 this amount increases 0.1% each year until the COLA reaches 1.5%. January 1, 2025 increase equals 1.2%.

On January 1,

- a benefit recipient who has been receiving an annuity or benefit for at least 12 full months as of June 30 of the calendar year before the adjustment will receive the full post-retirement increase in statute for that January 1st.
- a benefit recipient who has been receiving an annuity or benefit for at least one full month, but less than 12 months as of June 30 of the calendar year before the adjustment will receive a prorated post-retirement increase.

Combined Service Annuity

Any vested member having combined service credit with any two or more Minnesota public retirement funds that participates in the combined service annuity program, may elect to receive a combined service annuity upon compliance with eligibility requirements for retirement.

Refunds

Upon termination of teaching service and application, TRA will issue a refund of a member's accumulated contributions plus interest compounded annually. Contributions made prior to June 30, 2011 accrue an annual interest rate of 6%. Contributions from July 1, 2011 to June 30, 2018 accrue interest at an annual rate of 4%. Beginning July 1, 2018, contributions will accrue interest at a rate of 3% annually.

A refund will be issued only if the member has officially resigned from employment and the official refund application form is submitted no sooner than 30 days after termination of teaching service.

Repayment of Refunds

Members who return to teaching service after previously withdrawing their contributions may repay these contributions upon completing two years of allowable service. The repayment must include interest of 8.5%, compounded annually from the date of the refund(s) through June 30, 2018. The interest rate for the repayment accrues at 7.5% from July 1, 2018 through June 30, 2023 and then 7% from July 1, 2023 until date of the repayment.

Disability Benefits

An active member who becomes disabled after at least three years of allowable service is eligible to apply for a total and permanent disability benefit provided at least two of the required three years of allowable service are performed after last becoming a member. State statute defines total and permanent disability as the inability to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to be of a long, continued and indefinite duration. An indefinite duration is a period of at least one year. Member must submit required documentation relating to their disability status to TRA each year to continue receiving benefits.

Survivor Benefits of Members Prior to Retirement

Certain benefits are available to the survivor(s) of members who pass away before officially retiring with TRA. Beneficiary designation options vary for single and married members.

Single Members

Non-Vested

- A lump-sum death benefit equal to a member's accumulated deductions plus interest to the date of death is payable to either the designated beneficiary or estate, whichever is applicable. Interest is compounded annually at 4%. Contributions made by the employer are not included in this benefit. A member may designate any person(s), trust, or organization(s) as a beneficiary.

Vested

- For a member without a surviving spouse at the time of death, survivor benefits will automatically be paid for a certain period to all dependent children under the age of 20, unless the member has chosen the lifetime monthly benefit option explained in the next paragraph. These payments are made from the date of death to the date each dependent child attains age 20 if the child is under age 15 on the date of death. If the dependent child is 15 years or older on the date of death, payments will be made for five years. Payments for children under the age of 18 would be made to a custodial parent or court-appointed guardian. A dependent child is a biological or adopted child who is under 20 years of age and who is dependent on the member for more than one-half of his or her financial support.
- A member may designate payment of lifetime monthly benefits for either former spouse(s), or dependent and non-dependent, biological

or adopted child(ren), instead of the above described surviving dependent child(ren) benefits being paid.

- For a member without a former spouse or dependent child(ren) at the time of death, either the designated beneficiary or estate, whichever is applicable, is entitled to a lump-sum death benefit equal to accumulated deductions plus interest to the date of death. Interest on account balances is compounded annually at 4%. Contributions made by the employer are not included in this benefit. A member may designate any person(s), trust, or organization(s) as a beneficiary.

Married Members

A surviving spouse has precedence over any designated beneficiary.

Non-Vested

- A member's spouse is entitled to a lump-sum death benefit equal to the accumulated deductions plus interest to the date of death. Interest on account balances is compounded annually at 4%. Contributions made by the employer are not included in this benefit.

Vested

- A member's surviving spouse may elect to receive a lifetime annuity in lieu of a lump-sum benefit. The lifetime annuity is payable on a monthly basis for the lifetime of the spouse. Payments terminate upon the death of the spouse with no benefits remaining for other beneficiaries.
- Instead of a lifetime annuity, a member's spouse may elect to receive actuarially equivalent payments for a term certain annuity of 5, 10, 15 or 20 years. The amount of the annuity is based upon a formula, the member's age at the time of death and the age of the spouse when benefits begin to accrue, although monthly benefit payments cannot exceed 75% of the member's average High-5 monthly salary.
- A member and their spouse may jointly make a specification to waive the spouse’s benefits so that designated beneficiary(ies) will receive a lifetime survivor annuity benefit. The designated beneficiary may be either the member’s former spouse(s) or the member’s biological or adopted child(ren). Under a joint specification, a designated beneficiary cannot elect a term certain annuity of 5, 10, 15 or 20 years. If a joint specification is not on file, the annuity is payable only to the surviving spouse.

Non-Vested or Vested

- A member and their spouse may jointly make a specification to waive the spouse’s benefits so that any person, trust or organization will receive a lump-sum death benefit equal to the accumulated deductions plus interest to the date of death.

This page left intentionally blank.

TEACHERS RETIREMENT ASSOCIATION

TRA | TEACHERS RETIREMENT ASSOCIATION

A Pension Trust Fund of the State of Minnesota
60 Empire Drive, Suite 400, St. Paul, MN 55103
651-296-2409 | 800-657-3669
minnesotatra.org