STATE OF MINNESOTA Office of the State Auditor



Rebecca Otto State Auditor

LARGE PUBLIC PENSION PLAN INVESTMENT REPORT

For the Year Ended December 31, 2013

Description of the Office of the State Auditor

The mission of the Office of the State Auditor is to oversee local government finances for Minnesota taxpayers by helping to ensure financial integrity and accountability in local governmental financial activities.

Through financial, compliance, and special audits, the State Auditor oversees and ensures that local government funds are used for the purposes intended by law and that local governments hold themselves to the highest standards of financial accountability.

The State Auditor performs approximately 150 financial and compliance audits per year and has oversight responsibilities for over 3,300 local units of government throughout the state. The office currently maintains five divisions:

Audit Practice - conducts financial and legal compliance audits of local governments;

Government Information - collects and analyzes financial information for cities, towns, counties, and special districts;

Legal/Special Investigations - provides legal analysis and counsel to the Office and responds to outside inquiries about Minnesota local government law; as well as investigates allegations of misfeasance, malfeasance, and nonfeasance in local government;

Pension - monitors investment, financial, and actuarial reporting for approximately 700 public pension funds; and

Tax Increment Financing - promotes compliance and accountability in local governments' use of tax increment financing through financial and compliance audits.

The State Auditor serves on the State Executive Council, State Board of Investment, Land Exchange Board, Public Employees Retirement Association Board, Minnesota Housing Finance Agency, and the Rural Finance Authority Board.

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Large Public Pension Plan Investment Report

For the Year Ended December 31, 2013



March 10, 2015

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Table of Contents

Scope and Methodology	Page 1
Executive Summary	3
Understanding Investment Performance Terms	5
Figure 1: 2013 Rates of Return and Benchmark Return	6
2013 Performance Analysis	7
Figure 2: 2013 Rates of Return	14
Funding Ratios	15
Figure 3: Fiscal Year 2013 Funded Ratio Percentage	16
Administrative Expenses	17
Figure 4: Administrative Expenses for Fiscal Year 2013	18
Ten-Year Performance Analysis	19
Figure 5: Ten-Year Average Annual Rates of Return (2004-2013)	20
How to Read the Plan Summaries	23
2013 Plan Summaries Bloomington Fire Department Relief Association Duluth Teachers' Retirement Fund Association St. Paul Teachers' Retirement Fund Association State Board of Investment (for comparison)	25 26 27 28
2013 Appendix Table 1: Historical Rates of Return Table 2: State of Minnesota Contributions Table 3: Employer Contributions Table 4: Employee Contributions Table 5: Average Contribution per Member Table 6: Average of Total Annual Benefits per Retired Member/Beneficiary Table 7: Percent Increase in Average of Total Benefits per Retired	31 32 33 34 35 36
Member/Beneficiary and the Consumer Price Index	37
Table 8: Funded Ratio Percentage	38
Table 9: Unfunded Actuarial Accrued Liability	39

Table 10: Net Assets/Net Position Held in Trust for Pension Benefits	40
Table 11: Net Assets/Net Position per Member	41
Table 12: Unfunded Actuarial Accrued Liability per Member	42
Table 13: Administrative Expenses	43
Table 14: Administrative Expenses per Member	44
Table 15: Members at Fiscal Year End	45
Table 16: Members at Fiscal Year End – Retirees & Beneficiaries	
Receiving Benefits	46
Table 17: Investment Expenses	47

Scope and Methodology

This report reviews the investment performance of Minnesota's large local public pension plans for the 2013 calendar year. The public pension plans included in this report are the Bloomington Fire Department Relief Association, the Duluth Teachers' Retirement Fund Association, and the St. Paul Teachers' Retirement Fund Association.¹ The State Board of Investment (SBI), which is referenced frequently, is not a pension plan, but invests the assets of certain public employee pension plans administered by the Minnesota State Retirement System, the Public Employees Retirement Association, and the Teachers Retirement Association.

These pension plans and the SBI held over \$58.5 billion in assets as of December 31, 2013, which represents the future retirement benefits of hundreds of thousands of public employees.

Limited information for the University of Minnesota Supplemental Benefits Plan is also included in this report. This plan has a total market value of less than \$25 million, so its statutory reporting requirements are less than the reporting requirements for the other plans included in this report. Therefore, only a brief description of activities for the plan is provided, and the plan is not included in the report tables.

The pension plans are required under Minnesota Statutes, section 356.219, to annually report investment information to the Office of the State Auditor, and the State Auditor is required to provide a report to the legislature on the investment performance of these plans. One way to measure investment performance is to calculate a rate of return which can then be used to compare a plan against a benchmark or against other plans. The methodologies used by each of the large plans to calculate rates of return may vary from one another and from the methodology used by the Office of the State Auditor. To obtain analogous comparisons of investment performance, the Office of the State Auditor calculates rates of return using a uniform calculation method.² Using a uniform calculation method allows for a fair comparison of performance among plans.

This report informs lawmakers of the large plans' investment performance, educates fiduciaries and members of the plans, and provides transparency to the public.

¹ The Minneapolis Firefighters' Relief Association and the Minneapolis Police Relief Association are no longer included in this report as both plans were consolidated with the Public Employees Retirement Association in 2011.

² Minnesota Statutes, section 356.219, requires the Office of the State Auditor to compute and report total portfolio and asset class time-weighted rates of return, net of all costs and fees. The Duluth Teachers' Retirement Fund Association and the SBI are permitted by this statute to submit limited reporting information. Therefore, the rates of return included in this report for Duluth Teachers' and the SBI are provided by both respective entities, and are not re-calculated by the Office of the State Auditor.

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Executive Summary

Current Trends

- During 2013, rates of return for the large plans were 19.2 percent (Bloomington Fire and St. Paul Teachers') and 20.7 percent (Duluth Teachers'). All of the plans exceeded their respective benchmarks. The rate of return for the SBI's Combined Funds was 20.2 percent. (Pages 7 through 14)
- Bloomington Fire was the only large plan that ended 2013 with a funding ratio above 100 percent, at 111.0 percent. St. Paul Teachers' and Duluth Teachers' had funding ratios of 60.4 percent and 54.0 percent, respectively. (Page 15)

Long-Term Trends

- The ten-year period from January 2004 through December 2013 was a period of volatility. Bloomington Fire was the only large plan able to exceed their actuarial assumed rate of return over this period. Although the other large plans were not able to meet their actuarial assumed rates of return over this period, most of the plans were able to keep up with or exceed market returns. The best-performing plan over the ten-year period was St. Paul Teachers', which earned 7.5 percent. The SBI's Combined Funds returned 8.1 percent for the period. (Pages 19 and 20)
- The plans with the lowest rates of return for the ten-year period were Duluth Teachers' and Bloomington Fire, with returns of 6.1 percent and 6.2 percent, respectively. Both of these plans exceeded their benchmarks for 2013. (Pages 19 and 20)

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Understanding Investment Performance Terms

Rate of Return

The gain or loss on an investment over a specified time period, usually expressed as a percentage increase over the fair market value at the beginning of the period.

Asset Allocation

Asset allocation describes the practice of distributing the assets of a portfolio among different types of investment classes, such as stocks, bonds, cash, and real estate. By diversifying assets, the goals are to minimize risk and to create a favorable risk/reward ratio for a portfolio. When one asset class declines, the expectation is another will increase and offset the loss.

Passive Investment Strategy

Passive investment strategy or passive management is more commonly called indexing. Indexing is an investment management approach based on investing in the same securities, and in the same proportions, as a specific index. The management style is considered passive because portfolio managers do not make decisions about which securities to buy and sell. Instead, managers simply copy the index by purchasing the same securities included in a particular stock or bond market index.

Active Investment Strategy

Active investment strategy or active management is an attempt to outperform the market as measured by a particular benchmark or index. The aim of active fund management is to outperform, after fees are paid, the index that a particular fund is benchmarked against. Prevailing market trends, the economy, political and other current events, and companyspecific factors, such as earnings growth, all affect an active manager's decisions. Active investing often has higher costs than passive investing. These extra expenses may reduce any extra gains an active manager might earn.

Enhanced Indexing Investment Strategy

Enhanced indexing investment strategy or enhanced indexing is a hybrid strategy used by many of the large plans. Enhanced indexing combines both passive and active investment strategies and attempts to generate rates of return that are slightly higher than that of an index fund or other passive management techniques.

Benchmark

A benchmark is an index to which a plan compares its investments. Market benchmarks are used by individual investors, portfolio managers, and market researchers to determine how well a particular market or market sector performs. Investors look to broad indices as benchmarks to help them gauge not only how well the markets are performing, but also how well the investors are performing as investors.

Why Benchmarks are Important

Measuring investment returns against an appropriate benchmark encourages prudent investment decisions and gives trustees a fair depiction of how a plan's investments are performing. The key to establishing the most accurate benchmark for a portfolio is determining which indices best track investments similar to the asset allocation of the investment policy. An ideal benchmark return would consist of a hypothetical portfolio of indices, invested in the same asset classes and in the same proportion as the actual holdings of the entire portfolio. Indices track different asset classes, such as domestic equity or bonds. An index may also track subsets of an asset class, such as small-capitalization growth domestic equity. Although benchmark indices are not directly available for investment purposes, mutual and collective index funds," these funds are managed with a passive style. Figure 1 below compares the 2013 rates of return and benchmark returns for the large plans and the State Board of Investment (SBI).



Figure 1: 2013 Rates of Return and Benchmark Return

2013 Performance Analysis

Markets overall continued to improve in 2013. The S&P 500 Index, which is a gauge of the large-capitalization U.S. equities market, returned 32.4 percent in 2013. The Russell 3000 Index measures the performance of the largest 3,000 U.S. companies, representing nearly all of the U.S. equity market. The Russell 3000 Index returned 33.6 percent.

International equities also performed well in 2013, returning 15.3 percent as measured by the Morgan Stanley Capital International (MSCI) All-Country World Index excluding the United States (ACW Index ex. U.S.). This index measures the performance of both developed and emerging markets.

Domestic bonds declined in 2013, returning a negative 2.0 percent as measured by the Barclays Capital Aggregate Index. The 2013 negative returns for bonds failed to meet the 4.2 percent return achieved during 2012.

In 2013, economic indicators were mixed as unemployment dropped to 6.7 percent and consumer spending decreased by 0.7 percent. The Consumer Price Index, which measures inflation, rose 1.7 percent.

Bloomington Fire Department Relief Association

The Bloomington Fire Department Relief Association consists of retired and active firefighters of the City of Bloomington. Bloomington Fire is the administrator of a single-employer defined-benefit pension plan available to firefighters, which was established April 1, 1947.² Bloomington Fire is governed by a Board of Trustees made up of six members elected by the members of the plan for three-year terms, and the Mayor, City Treasurer, and Fire Chief, who serve as ex officio voting members of the Board.

Bloomington Fire returned 19.2 percent in 2013, as calculated by the Office of the State Auditor. The return exceeded the plan's benchmark return of 18.2 percent.

Bloomington Fire's investment policy allocates 50.0 percent to domestic equities, 10.0 percent to international equities, 35.0 percent to bonds, and 5.0 percent to cash. The plan's actual allocation for 2013 varied slightly from the policy allocation, with increases in international equities and cash and a reduction in fixed income. From 2012 to 2013, Bloomington Fire increased its allocation to cash by 13.5 percent and decreased its allocation to fixed income by 12.6 percent.

² See Bloomington Fire Department Relief Association December 31, 2013, Financial Statements and Management Letter, page nine.

At the end of 2013, 88.3 percent of Bloomington Fire's total assets were held in the SBI's Supplemental Investment Fund: 32.6 percent of the plan's assets with the SBI were invested in the Common Stock Index Account; 16.1 percent in the Bond Market Account; 14.8 percent in the Money Market Account; 14.2 percent in the Growth Share Account; and 10.6 percent in the International Share Account.

The Common Stock Account is a Russell 3000 Index fund that returned 33.6 percent for the year. The Growth Share Account is an actively-managed domestic equity account that returned 35.9 percent for the year. Both domestic equity accounts met or exceeded their benchmark S&P 500 return of 32.4 percent. The International Share Account, consisting of active, semi-passive, and passive managers, returned 17.8 percent for the year. The account is compared to a composite index that returned 26.7 percent. The Bond Market Account, an actively-managed account, returned negative 1.3 percent, and exceeded its benchmark Barclays Capital Aggregate Index return of negative 2.0 percent.

Wells Fargo Advisors held 10.0 percent of Bloomington Fire's total assets. This account was invested in cash, individual stocks, fixed-income, and mutual funds. The Wells Fargo account returned 17.2 percent.

Bloomington Fire also held investments in an internally-managed account. The account held 1.7 percent of the plan's assets, and was entirely invested in short-term cash investments. Assets held by the internally-managed account decreased by 0.7 percent over the 2012 holdings.

Duluth Teachers' Retirement Fund Association

The Duluth Teachers' Retirement Fund Association was established in 1910 to provide retirement coverage to eligible employees of the Duluth Public Schools.³ Eligible employees include the licensed, certified staff of Duluth Public Schools, certain staff at Lake Superior College hired prior to July 1, 1995 who elected to continue membership with the association, and association staff. Since 1964, the association also offers to members three tax-deferred 403(b) investment funds through payroll deduction with the school district. The association is governed by a nine-member Board of Trustees, which sets policy and oversees operations consistent with the applicable laws. The executive director is the administrative officer for the association.

Duluth Teachers' returned 20.7 percent in 2013, above its benchmark return of 17.1 percent. Above-market returns in domestic equity, fixed-income, and international equity investments contributed to the strong overall return for the plan's total portfolio.

Duluth Teachers' updated its investment policy in December of 2011 to include a Purpose-Driven Portfolio strategy, which established policy weights for each asset class.

³ See Duluth Teachers' Retirement Fund Association 2013 Comprehensive Annual Financial Report Letter of Transmittal, page three.

In this structure, asset allocation is a function of aggregate portfolio goals. Broad asset classes are not the primary focus. Investment allocations are based upon their ability to further the goals of the total portfolio. The policy has four categories: Return Enhancers, Portfolio Stabilizers, Opportunistic, and Economic Hedges.

The Return Enhancers category includes domestic equity, international equity, and private equity. In the investment policy, a target allocation of 65.0 percent of the plan's assets was established for this category. Duluth Teachers' domestic equity portfolio returned 39.4 percent. Investments in large-capitalization stocks were held through a Wells Fargo S&P 500 Index fund, which comprised 13.0 percent of the plan's total assets. The Wells Fargo fund returned 32.4 percent, falling in line with the benchmark S&P 500 Index return of 32.4 percent. The small-capitalization growth segment of domestic equity was managed by Disciplined Growth Investors, which held 15.5 percent of Duluth Teachers' total assets. This fund returned a favorable 49.6 percent compared to a 43.3 percent return from the Russell 2000 Growth Index benchmark. The small- and mid-capitalization portfolio, comprising 8.7 percent of the plan's total assets, was managed by Wellington. The Wellington fund performed well in 2013 returning 35.2 percent, while its Russell 2500 Value Index benchmark provided a 33.3 percent return.

International equity comprised 25.6 percent of the total portfolio. The international equity portfolio returned 16.7 percent during 2013, which outperformed the benchmark MSCI ACW Index ex. U.S. return of 15.3 percent. The largest portion of the international equity portfolio was invested with the Tweedy, Browne Company. Comprising 10.7 percent of the total portfolio, the fund returned 19.6 percent. International equity funds with Vanguard and William Blair returned 23.1 percent and 18.9 percent, respectively. Emerging market equity investments were held with Wellington, which returned 2.4 percent in 2013.

The plan's private equity funds were held by HarbourVest Partners, North Sky Capital, and Permal. Private equity consists of equity securities in operating companies that are not publicly traded on a stock exchange. The assets were invested in venture funds, buyout funds, and international private equity funds. Investments in private equity comprised 10.7 percent of the plan's total assets at the end of the year and returned 10.6 percent.

The Portfolio Stabilizers category includes fixed-income investments, absolute-return strategies, and cash. A target allocation of 20.0 percent was established for this category in 2013. The fixed-income portfolio held 15.8 percent of the plan's total assets at the end of the year. Fixed-income investments managed by Western Asset Management returned 1.7 percent, which exceeded the Barclays Capital Aggregate Index benchmark return of negative 2.0 percent. The Hussman Strategic Growth Fund was also previously classified in the Portfolio Stabilizers category. Duluth Teachers' removed its investments in this risk-controlled equity fund during January of 2013. Duluth Teachers' held 1.6 percent of its total assets in cash at the end of 2013.

The Opportunistic category includes unique or short-term investment opportunities. A target allocation of 5.0 percent was established for this category. The BlackRock Tempus fund returned 9.5 percent. Funds held with Pacific Investment Management Company returned 22.8 percent in 2013. The Opportunistic investments comprised 8.5 percent of the plan's total assets at the end of the year.

The Economic Hedges category includes real assets and real-return bonds. A target allocation of 10.0 percent was established for this category. Duluth Teachers' real estate investments made up 0.6 percent of the plan's total assets. The investments returned 10.4 percent for the year. However, the plan's real estate investment return underperformed compared to the benchmark National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index return of 11.0 percent. The plan's real estate investments consist of the buildings which house the plan's offices. Rental income from the buildings is included by Duluth Teachers' in the calculation of the investment return for real estate, which contributed to the return of the asset class.

St. Paul Teachers' Retirement Fund Association

The St. Paul Teachers' Retirement Fund Association is a non-profit organization formed in 1909.⁴ At the direction and oversight of a ten-member Board of Trustees, St. Paul Teachers' staff manage two tax-qualified, defined-benefit pension programs, a Basic Plan and a Coordinated Plan. These plans cover licensed personnel of the Independent School District (ISD) No. 625, which is the central administrative body for public schools within the City of St. Paul. Basic Plan members do not participate in Social Security through their employment with the ISD. In 1978, the Coordinated Plan commenced and it provides retirement benefits for members who simultaneously participate in Social Security.

St. Paul Teachers' returned 19.2 percent in 2013, as calculated by the Office of the State Auditor, exceeding its benchmark return of 17.1 percent. The plan's market value increased by \$113.5 million. International and domestic equity returns were the main contributors to the plan's overall increase in market value.

The domestic equity holdings of St. Paul Teachers' returned 35.8 percent, which exceeded the S&P 500 Index return of 32.4 percent. St. Paul Teachers' used the S&P 500 Index as the large-capitalization benchmark. The BlackRock Russell 1000 Growth Index fund returned 33.6 percent and exceeded the Russell 1000 Growth Index benchmark of 33.5 percent. This fund was the plan's third largest large-capitalization fund. The Barrow & Hanley fund's rate of return of 35.9 percent exceeded the Russell 1000 Value Index benchmark return of 32.5 percent. The BlackRock Equity S&P 500 Index fund returned 32.4 percent, matching the S&P 500 Index benchmark of 32.4 percent. The lone mid-capitalization fund managed by Wellington Management returned 49.9 percent. The small-capitalization fund managed by Boston Company returned 45.6

⁴ See St. Paul Teachers' Retirement Fund Association June 30, 2013, Financial Statements and Management Letter, page five.

percent. The Dimensional Fund Advisors 6-10 Value fund returned 42.7 percent, compared to its 34.5 percent benchmark return. The Advantus fund returned 2.4 percent, which exceeded the Wilshire Real Estate Securities Index return of 2.2 percent.

Fixed-income investments returned a negative 1.8 percent, exceeding its Barclays Capital Aggregate Index benchmark return of negative 2.0 percent. During 2013, St. Paul Teachers' liquidated three fixed income funds and purchased four new fixed income funds. In February of 2013, St. Paul Teachers' liquidated its holdings in the BlackRock High Yield Fund. In June and August of 2013, St. Paul Teachers' liquidated its holdings in the BGI G/C Index Fund and BlackRock U.S. Debt Index Fund, respectively. In May of 2013, St. Paul Teachers' added two funds to its fixed income portfolio. During the last two quarters of 2013, Brandywine and T. Rowe Price Funds returned 0.1 percent and 1.7 percent, respectively. In June of 2013, St. Paul Teachers' added the Guggenheim Fund, which had a return of 2.8 percent during the last two quarters of 2013. St. Paul Teachers' added the Allianz Cash Overlay Fund in July of 2013. This fund returned 2.7 percent during the last two quarters of 2013. Fixed-income investments made up 18.7 percent of the total portfolio, after accounting for 19.4 percent of the portfolio in 2012.

St. Paul Teachers' international equity portfolio returned 13.2 percent. The plan classifies the international equity managers as either developed or emerging market. The developed market funds, managed by JP Morgan and Morgan Stanley, track the MSCI EAFE Index benchmark, which returned 22.8 percent. The JP Morgan fund fell short of the benchmark, returning 18.8 percent, and the Morgan Stanley fund also fell short of the benchmark with a return of 21.7 percent. The emerging market segment underperformed the developed market holdings of St. Paul Teachers', which reduced the overall return of the plan's international equity portfolio. The emerging market fund managed by Capital International returned 0.4 percent, outperforming the MSCI Emerging Markets Index benchmark of negative 2.3 percent.

Global equity investments for St. Paul Teachers' returned 20.9 percent. The Lazard Thematic Global Fund returned 19.4 percent, falling short of the MSCI ACW Index benchmark of 23.4 percent. Morgan Stanley's Global Franchise Fund and JP Morgan's Focus Fund returned 19.7 percent and 25.5 percent, respectively. Both funds are compared to the MSCI World Index benchmark, which returned 27.4 percent in 2013. In January of 2013, St. Paul Teachers' began investing in Lazard Global Discounted Assets Fund. The fund returned 16.9 percent, missing the MSCI ACW Index benchmark of 23.4 percent.

Real estate holdings for St. Paul Teachers' returned 11.3 percent as calculated by the Office of the State Auditor, compared to its NFI ODCE (net) Index benchmark return of 12.9 percent. The UBS Trumbull Fund returned 10.4 percent in 2013, underperforming the NFI ODCE (net) Index benchmark return of 12.9 percent. In July and August of 2013, St. Paul Teachers' added two additional funds. The UBS Trumbull Growth and Income Fund returned 11.9 percent during the last two quarters of 2013, outperforming the NCREIF Property benchmark of 5.2 percent for the same period. The other real

estate fund purchased during August of 2013 was the Tortoise MLP Fund. This fund returned 8.6 percent for the last quarter of 2013.

Prior to 2013, alternative investments and private equity investments held by St. Paul Teachers' were combined for reporting purposes. For the 2013 reporting year, private equity and alternative investments were separated into their own assets classes. Private Equity investments returned negative 3.6 percent, as calculated by the Office of the State Auditor. Private equity investments included funds managed by RWI Group, North Sky Capital, and Franklin Park. St. Paul Teachers' uses the Russell 3000 +3 percent as a benchmark for its private equity funds. The 2013 benchmark rate of return was 18.8 percent.

St. Paul Teachers' purchased two alternative investment funds during 2013. The Waddell and Reed High Yield Fund was purchased in March of 2013. This fund returned 6.4 percent for the last two quarters of 2013. St. Paul Teachers' purchased the VIA Energy Fund in November of 2013. A rate of return was not reported for this fund because it was held for less than one quarter at year-end. St. Paul Teachers' alternative investments portfolio returned 5.6 percent in 2013, as calculated by the Office of the State Auditor.

St. Paul Teachers' cash portfolio returned 13.6 percent. The cash portfolio includes a cash overlay account managed by the Clifton Group. The cash overlay account overlaid equity returns on cash, contributing to the strong rate of return for the cash portfolio.

St. Paul Teachers' U.S. Treasury Bills portfolio consisted of the Clifton Group TIPS Fund. The fund returned negative 9.4 percent.

State Board of Investment

The State Board of Investment (SBI) was established by Article XI of the Minnesota Constitution to invest state funds. The SBI is responsible for the investment management of various retirement funds, trust funds, and cash accounts. Its membership, as specified in the Constitution, is comprised of the Governor (who is designated as chair of the Board), the State Auditor, the Secretary of State, and the State Attorney General. All investments undertaken by the SBI are governed by the prudent person rule and other standards codified in Minnesota Statutes, Chapter 11A and Chapter 356A.

The SBI's Combined Funds returned 20.2 percent in 2013, exceeding its 18.4 percent benchmark for the year. Each of the SBI's individual asset classes contributed to the above-market total return by surpassing their respective benchmarks.

The SBI's domestic equity portfolio returned 35.1 percent, which was above the benchmark Russell 3000 Index return of 33.6 percent. The portfolio is managed by 17 active money managers, four semi-passive managers, and one passive manager. Each active manager is expected to add value over the long run relative to the Russell style index which reflects its investment approach or style. The semi-passive managers are

expected to add incremental value relative to the Russell 1000 Index, employing a strategy that more closely tracks the benchmark than that of the active managers. The passive manager consistently tracks the Russell 3000 Index.

The fixed-income portfolio of the SBI returned negative 1.3 percent for the year, compared to the negative 2.0 percent benchmark return of the Barclays Capital Aggregate Index. An 18.0 percent allocation to fixed income is provided for in the SBI's investment policy, and the fixed-income portfolio made up 21.2 percent of the SBI's total assets at the end of the year. The SBI targets no more than half of the fixed-income portfolio for active management, while having at least half managed semi-passively. The objective of the five active managers is to outperform the Barclays Capital Aggregate Index by focusing on high quality fixed-income securities across all sectors of the market. The three semi-passive managers have the goal of adding incremental value through superior bond selection and sector allocation rather than through interest rate exposure.

The SBI's international equity portfolio returned 17.8 percent, outperforming its benchmark MSCI ACW Index ex. U.S. return of 15.3 percent. The SBI allocates 15.0 percent to international equities in its investment policy, and at year-end international equities accounted for 15.7 percent of the total assets. The SBI's international equity portfolio has eight active managers, three semi-passive managers, and one passive manager. Six of the eight active managers and the three semi-passive managers invest entirely in developed markets. The remaining two active managers invest solely in emerging markets. SBI's target is to have at least one-third of the portfolio managed actively, no more than one-third managed semi-passively, and at least one-quarter managed passively.

The alternative investments of the SBI returned 15.8 percent in 2013. The actual rate of return is used as the benchmark for this asset class. A target allocation of 20.0 percent is established in the investment policy, with an actual allocation of 12.6 percent to alternative investments at the end of 2013. The majority of the portfolio is allocated to private equity, with assets also being held in yield-oriented investments, resource investments, and real estate.

University of Minnesota Supplemental Benefits Plan

The University of Minnesota Supplemental Benefits Plan is a University-funded definedbenefit plan designed to provide additional retirement benefits for certain groups of individuals.⁵ As of July 1, 2013, the plan had four active members and 151 retirees and survivors who were receiving or were entitled to receive benefits. No additional participants in the plan are expected, as the eligible population is a closed group.

⁵ Plan and membership information was obtained from the University of Minnesota Supplemental Benefits Plan July 1, 2013, Actuarial Valuation, and from the Supplemental Benefits Plan Administrative Policy.

The Supplemental Benefits Plan is invested in the University of Minnesota Group Income Pool (GIP). The GIP is invested in a diversified bond fund, which is measured against the Barclays Capital Aggregate Index (after taxes and un-hedged). The Barclays Capital Aggregate Index returned negative 2.0 percent during 2013. The GIP returned 2.0 percent during the same period. The Supplemental Benefits Plan had a rate of return of 0.9 percent for 2013, as calculated by the Office of the State Auditor. The rate of return calculated by the Office of the State Auditor was for the Supplemental Benefits Plan only, and not for the entire GIP.

Beginning Market Value	\$1,759,911
Net Cash Flows	\$(74,087)
Investment Returns	\$16,913
Ending Market Value	\$1,702,737
OSA One-Year Rate of Return	0.9%
OSA Three-Year Rate of Return	5.2%
Group Income Pool One-Year Rate of Return	2.0%
Benchmark Rate of Return	(2.0)%

Figure 2 below shows the 2013 rates of return for the large plans and the SBI.



Figure 2: 2013 Rates of Return

Funding Ratios

Funding ratios show the relationship between a plan's assets and its liabilities. A funding ratio below 100 percent means the plan does not have a surplus and has unfunded actuarial accrued liabilities.⁶ A plan's liabilities are calculated by an actuary using statutory assumptions based on historical data. Examining the ratio between assets and liabilities can help determine how well-funded the plan is, whether additional contributions to the plan will be needed, and whether future benefit increases would be sustainable. Investment returns, contributions, actuarial assumptions, plan provisions, changes in benefit levels, and historical funding issues can all have a direct influence on the financial health of the plan.

The funding ratios provided in this report are calculated based on each plan's fiscal year. Bloomington Fire has a December 31 fiscal year-end, while Duluth Teachers' and St. Paul Teachers' have a June 30 fiscal year-end.

Bloomington Fire's funding ratio increased 12.3 percent during 2013. Bloomington Fire was the highest-funded large public pension plan, with a funding ratio of 111.0 percent. Because the assets of Bloomington Fire are not smoothed, the funding ratio is subject to greater volatility than the other large plans.⁷ Actuarial smoothing evens out the effect of short-term volatility in the market value of assets.

Duluth Teachers' funding ratio decreased 9.4 percent, for a funding ratio of 54.0 percent. Duluth Teachers' unfunded actuarial accrued liability amount was \$162.0 million.

St. Paul Teachers' funding ratio decreased by 1.6 percent to 60.4 percent. Its unfunded actuarial accrued liability was \$581.1 million.

Figure 3 on the next page illustrates the funded ratios for the large plans.

⁶ The unfunded actuarial accrued liability is the difference between the present value of benefits estimated to be payable to plan members as a result of their service through the valuation date and the actuarial value of plan assets available to pay those benefits.

⁷ The other large plans included in this report have statutorily-required five-year asset-smoothing actuarial valuation of assets. *See* Minn. Stat. § 356.215, subd. 1(f).



Figure 3: Fiscal Year 2013 Funded Ratio Percentage

Administrative Expenses

Pension plans are permitted by state law to pay certain administrative expenses out of the pension plan's assets. These expenses include staff salaries, legal fees, professional services (including audit and actuarial fees), and other items such as travel, postage, and printing. It is important to limit expenses to those that are necessary and reasonable while still maintaining a well-managed pension plan.

The administrative expenses provided in this report are calculated based on each plan's fiscal year.

St. Paul Teachers,' the largest plan, spent the most on administrative expenses, totaling \$751,064, a 2.0 percent increase from 2012. Duluth Teachers,' the next largest plan, spent \$537,013 on administrative expenses, which was a 14.6 percent decrease from the previous year.

Bloomington Fire, the smallest plan, increased its administrative expenses from the previous year by 8.2 percent. Bloomington Fire had the lowest total administrative expenses of the plans, at \$94,617.

Employee salaries made up the largest portion of administrative expenses paid by the plans in 2013. Employee salaries include payroll expenses, plus insurance and benefits for the employees. St. Paul Teachers' paid \$506,357 in employee salaries in 2013. This was a increase of 12.4 percent in the amount paid from the previous year. Duluth Teachers' paid \$242,728 in employee salaries during the fiscal year ending June 30, 2013. This was a 28.2 percent decrease over the amount paid in 2012. Bloomington Fire paid \$46,569 in employee salaries during 2013, which was the same as the amount spent in 2012.

Total administrative expenses on a per-member basis remained fairly constant for each of the plans during 2013 and have remained fairly constant over the past ten years.⁸ Figure 4 on the next page provides further detail on administrative expenses.

⁸ See Table 14 on page 44 of this report.



Figure 4: Administrative Expenses for Fiscal Year 2013

Ten-Year Performance Analysis

The rates of return over the last ten years have remained fairly constant in spite of two years of limited or negative growth in 2008 and 2011. Domestic equity, as measured by the Russell 3000 Index, posted positive returns during eight of the ten years. This tenyear period will allow us to measure the performance of Minnesota's large plans during a period of volatility.

The investment returns of Minnesota's large plans over the ten-year period ending December 31, 2013, can be assessed by using market indices as benchmarks. The U.S. stock market, as measured by the Russell 3000 Index, returned 7.9 percent over the ten-year period. Domestic equity represented the largest asset allocation for each of the large plans.

International equity, as measured by the MSCI EAFE Index, averaged 6.9 percent annually over the ten-year period. Emerging markets averaged an annual return of 11.5 percent over the period, as measured by the MSCI Emerging Markets Index.

The average bond market return over the ten-year period was 4.5 percent, as measured by the Barclays Capital Aggregate Index.

An example of a return that was calculated over the ten-year period is the State Board of Investment's Income Share Account. The target asset allocations for this account were 60.0 percent domestic equities, 35.0 percent bonds, and 5.0 percent cash. The stock component of this account is indexed to the Russell 3000 Index. The bond portion of this account is actively managed and includes corporate bonds, mortgage securities, and government-issued bonds. The Income Share Account represents a balanced fund. Over time this account is expected to average higher rates of return than a fixed-income or money market account. The Income Share Account's average annual rate of return for the ten-year period was 7.1 percent. Bloomington Fire and Duluth Teachers' failed to meet the Income Share Account ten-year rate of return.

Of the large public pension plans, the top performing plan over the ten-year period was St. Paul Teachers', averaging a 7.5 percent annual rate of return. For comparison purposes, the SBI had a ten-year return of 8.1 percent.⁹ Duluth Teachers' had a 6.1 percent rate of return over the ten-year period. Bloomington Fire had a ten-year return of 6.2 percent. Bloomington Fire's actuarial assumed rate of return of 6.0 percent is lower than the actuarial assumed rate of return for the other large plans, so Bloomington Fire's ten-year return matches its different investment and risk objectives. Bloomington Fire was the only plan to exceed its actuarial assumed average annual rates of return over the ten-year period.

⁹ The SBI's basic and post funds were consolidated in 2009.

Figure 5 below shows the ten-year average annual rates of return for the large plans and for the SBI.



Figure 5: Ten-Year Average Annual Rates of Return (2004-2013)

2013 Plan Summaries

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How to Read the Plan Summaries

The plan summaries on pages 25 through 28 of this report contain various acronyms and investment terms that are defined below.

Rates of Return (ROR)

- **OSA One-Year ROR** The pension plan's total return on its assets, as calculated by the Office of the State Auditor. *Note: Under State law, the Duluth Teachers' Retirement Fund Association and the State Board of Investment submit only limited reporting information. The rates of return for these two plans are provided by the plans and are not re-calculated by the Office of the State Auditor.*
- **Plan One-Year ROR** The pension plan's return on its assets as calculated by the plan or its consultant.
- **Benchmark ROR** The rate of return of a hypothetical portfolio invested in the plan's chosen benchmark components in the percentages dictated by the plan's investment policy. Although not perfect, it is a good measure of what return the plan could have achieved during the year.
- Actuarial Assumed ROR The rate of return required for the plan to meet its actuarial assumptions.
- Three-, Five-, and Ten-Year ROR The average annual returns earned by the plan over the specified time period, either calculated by the Office of the State Auditor or reported by the plan. Note: Under State law, the Duluth Teachers' Retirement Fund Association and the State Board of Investment submit only limited reporting information. The rates of return for these two plans are provided by the plans and are not re-calculated by the Office of the State Auditor.

Asset Class

A group of similar investments, such as domestic equity, bonds, cash, or alternative investments. Pension plans invest in different asset classes for diversification purposes. When returns for one asset class decline, another may increase offsetting the loss. In this report, any account or fund that holds investments from more than one asset class is reported as its own asset class.

Benchmark Components and Rates of Return

Benchmark components are the different indices to which the plan compares its investments. Indices track different asset classes, such as domestic equity or bonds. They may also track subsets of an asset class. To evaluate investment performance, it is important to use appropriate indices. The rates of return for each benchmark component are also provided.

Policy Asset Allocation

The percentage allocated to each asset class in the investment policy.

Actual Asset Allocation

The percentage actually invested in each asset class. In the plan summaries that follow, the actual asset allocation is measured as of the year-end.

Beginning Market Value/Ending Market Value

The market value is the price as determined by buyers and sellers in an open market. The dollar amount in the asset class or investment as of the beginning/end of 2013 is the beginning market value/ending market value.

Net Cash Flows

The net amount of cash (or securities) deposited or withdrawn from the asset class or investment during the year.

Investment Return

The net amount of interest, dividends, and appreciation or depreciation the asset class or investment gained or lost during the year.

Rate of Return

The net (after fees) return of the asset class or investment during the year.

Bloomington Fire Department Relief Association For the Year Ended December 31, 2013 (Dollars in Thousands)

	Rates of Return (ROR)	8
OSA (OSA One-Year ROR	19.2 %
Plan C	Plan One-Year ROR	19.3 %
Bench	Benchmark ROR	18.2 %
Actua	Actuarial Assumed ROR - Active	6.0 %
Actua	Actuarial Assumed ROR - Retired	6.0 %
OSA 7	OSA Three-Year ROR	10.4 %
OSA I	OSA Five-Year ROR	12.0 %
OSA 7	OSA Ten-Year ROR	6.2 %

A coot Clace	Invoctment True	Beginning Market Value	Net Cash Flow	Investment Dotum	Ending Market Volue
ADDEL CIADD	THACSUMENT TAKE	INTAL NCL Y ALUC	(cool to tot)	II INON	TATAT NCL Y ALUC
Domestic Equities	Domestic Equities	\$ 58,277	\$ (10,000)	\$ 19,187	\$ 67,464
International Equities	International Equities	13,885	(1,000)	2,368	15,253
Fixed Income	Fixed Income	35,562	(12,000)	(413)	23,149
Cash	Cash	12	21,251	13	21,276
Internally Managed	Balanced	2,908	(474)	41	2,475
Wells Fargo	Balanced	12,270	0	2,108	14,378
	Total	\$ 122,914	\$ (2,223)	\$ 23,304	\$ 143,995

Rate of Return 34.5 % 17.9 % (1.3)% 0.0 % 2.9 % 17.2 %

15.5 % 17.9 % 17.1 %

Domestic Equities International Equities

50.0 % 10.0 % 35.0 % 5.0 %

International Stock

32.4 % 26.7 % (2.0)% 0.0 %

Barclays Capital Aggregate 90-Day U.S Treasury Bill

MSCI World (Net)

S&P 500

Stock

Bonds

Cash

Asset Allocation

Policy

Benchmark Components and Rates of Return Fixed Income

Cash

49.5 %

Asset Allocation

Actual

Rates of Return (ROR)	(
Plan One-Year ROR	20.7 %
Benchmark ROR	17.1 %
Actuarial Assumed ROR - Active	8.0 %
Actuarial Assumed ROR - Retired	8.0 %
Plan Three-Year ROR	11.6 %
Plan Five-Year ROR	13.6 %
Plan Ten-Year ROR	6.1 %

Benchmark Components and Rates of Return	ents n	Policy Asset Allocation		Actual Asset Allocation	
U.S. Custom Equity Index	35.2 %	Domestic Equities	33.0 %	Domestic Equities	37.2 %
S&P 500	32.4 %	Fixed Income	17.0 %	Fixed Income	15.8 %
Barclays Capital Aggregate	(2.0)%	International Equities	25.0 %	International Equities	25.6 %
MSCI ACWI ex. U.S.	15.3 %	Cash	3.0 %	Cash	1.6 %
91-Day U.S. Treasury Bill	0.0 %	Real Assets	10.0 %	Real Assets	0.6 %
NCREIF Property Index	11.0 %	Private Equity	7.0 %	Private Equity	10.7 %
		Opportunistic	5.0 %	Opportunistic	8.5 %

6			Net Cash Flo	M	Investment	Ending	Rate of
Asset Class	Investment Type		(Net of Fees		Return	<u>Market Value</u>	Return
Domestic Equities	Domestic Equities	\$ 66,710	\$ (8,791) \$ 25	(8,791)	\$ 25,270	\$ 83,189	39.4 %
Risk-Controlled Equities	Domestic Equities			(4,100)	(106)	0	
Fixed Income	Fixed Income			(4,359)	644	35,479	1.7 %
International Equities	International Equities			(1,000)	8,215	57,213	16.7 %
Cash	Cash			262	1	3,637	0.4 %
Real Estate	Real Estate			0	13	1,475	10.4 %
Private Equity	Private Equity			(1,979)	2,751	23,911	10.6 %
Opportunistic	Opportunistic			5,010	1,928	18,938	16.2 %

\$ 223,842

\$ 38,716

(14,957)

\$ 200,083

Total

St. Paul Teachers' Retirement Fund Association Year Ending December 31, 2013

(Dollars in Thousands)

Rates of Return (ROR) OSA One-Year ROR 19 Dian One-Year BOD 10	19.2 %	and
	19.2 %	
	19.2 %	MISCI AILC
		Barclay Cap
	19.8 %	NFI ODCE
Benchmark ROR	17.1 %	Russell 3000
Actuarial Assumed ROR - Active	8.0 %	HFRI FOF C
Actuarial Assumed ROR - Retired	8.0 %	
OSA Three-Year ROR 10	10.0 %	
OSA Five-Year ROR	13.1 %	
OSA Ten-Year ROR	7.5 %	

chmark Components d Rates of Return	nts 1	Policy Asset Allocation		Actual Asset Allocation	=
Contry World Free 23.4 %	23.4 %	Global/Domestic Equity	55.0 %	Domestic Equities	4
apital Aggregate	(2.0)%	Global/Domestic Fixed Income	20.0 %	Domestic Fixed Income	1
E (net)	12.9 %	Inflation Hedged/Real Assets	11.0 %	Real Estate	
000 +3%	37.5 %	Private Equity/Alternatives	9.0 %	International Equities	
F Composite Index	9.0 %	Hedge Funds	5.0 %	Global Equities	1
				Alternative Assets	
				Private Equity	
				Cash	

9.1 % 15.1 % 2.6 % 1.5 % 1.3 % 1.8 %

Treasury Bills

43.1 % 18.7 % 6.8 %

22 Asset Class	Investment Type	Beg Marl	Beginning Market Value	Net C (Net	Net Cash Flow (Net of Fees)	Inv	Investment Return	I Mai	Ending Market Value	Rate of Return
Domestic Equities	Domestic Equities	÷	360,218	\$	(44,316)	\$	121,921	\$	437,823	35.8 %
Domestic Fixed Income	Domestic Fixed Income		174,773		17,546		(2,469)	\$	189,850	(1.8)%
Real Estate	Real Estate		73,698		(11,929)		7,505	÷	69,274	11.3 %
International Equities	International Equities		120,751		(41,500)		13,176	\$	92,427	13.2 %
Global Equities	Global Equities		128,194		(2,000)		26,740	÷	152,934	20.9 %
Alternatives	Alternative Assets		0^{-1}		25,300		1,195	÷	26,495	5.6 %
Private Equities	Private Equities		12,938 ¹		2,931		(521)	÷	15,348	(3.6)%
Cash	Cash		11,526		744		1,090	s	13,360	13.6 %
Treasury Bills	Treasury Bills		19,975		0		(1,881)	s	18,094	(9.4)%
	Total	÷	902,073	÷	(53,224)	÷	166,756	÷	1,015,605	

¹ Private Equity was split from Alternative assets during 2013 to create its own asset class.

		Benchmark Components	ents		Policy			Actual	
Rates of Return (ROR)	2 2	and Rates of Return	u.		Asset Allocation	n		Asset Allocation	
		Russell 3000	33.6 %	Do	Domestic Equities	45.0 %	Dome	Domestic Equities	48.3 %
Plan One-Year ROR	20.2 %	Barclays Capital Aggregate	(2.0)%	Fix	Fixed Income	18.0 %	Fixed	Fixed Income	21.2 %
Benchmark ROR	18.4 %	MSCI ACWI ex. U.S.	15.3 %	Inte	International Equities	15.0 %	Intern	International Equities	15.7 %
Actuarial Assumed ROR - Active	8.0 %	Alternative Assets ¹	15.8 %	Alt	Alternative Assets	20.0 %	Altern	Alternative Assets	12.6 %
Actuarial Assumed ROR - Retired	8.0 %	90-Day U.S. Treasury Bill	0.0 %	Cash	sh	2.0 %	Cash		2.2 %
Plan Three-Year ROR	11.5 %								
Plan Five-Year ROR	13.8 %								
Plan Ten-Year ROR	8.1%								
20			- ;			,		;	, ,
Asset Class		Investment Type	Begin Marke	Beginning Market Value	Net Cash Flow (Net of Fees)	Inves Ret	Investment Return	Ending Market Value	Rate of Return
Domestic Equities		Domestic Equities	\$ 22,	22,122,993	\$ (1,987,377)	÷	7,471,835	\$ 27,607,451	35.1 %
Fixed Income		Fixed Income	10,	10,913,207	1,323,479	Ŭ	(152,444)	12,084,242	(1.3)%
International Equities		International Equities	x	8,065,353	(462,192)		1,364,207	8,967,368	17.8 %
Alternatives		Alternative Assets	7.	7,452,039	(1,302,033)		1,070,951	7,220,957	15.8 %
Cash & Disbursement Account		Cash		871,782	306,090		1,894	1,179,766	0.2 %

State Board of Investment For the Year Ended December 31, 2013 (Dollars in Thousands)

¹ The actual rate of return is used as the benchmark for Alternative Assets.

0.3 %

75,210

127

\$ 57,134,994

\$ 9,756,570

\$ (2,090,658)

\$ 49,469,082

Total

Cash

Cash - CD Repo

31,375

43,708

2013 Appendix

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Historical Rates of Return

For Calendar Years 2004 to 2013

Public Pension Plans	2004	2005	2006	2007	-	2009	2010	2011	2012	2013
Bloomington Fire	9.5 %	4.7 %	13.0 %	6.9 %	(25.2)%	15.6 %	13.0 %	0.3 %	12.6 %	
Duluth Teachers'	10.6 %	7.6 %	14.7 %	6.6~%		19.2 %	16.0 %	(0.7)%	15.0 %	
Minneapolis Fire	10.1 %	6.6 %	12.5 %	11.5 %		27.2 %	12.0 %	*	*	*
Minneapolis Police	10.1 %	6.0~%	13.8~%	6.9%		26.7 %	13.9 %	*	*	*
St. Paul Teachers'	14.1 %	9.9 %	15.6 %	8.1%		22.4 %	13.7 %	(0.6)%	12.5 %	
SBI Basic Fund	13.0 %	10.2 %	14.7 %	9.7%		30.30 ¹	14.4.%	15%	137 %	
SBI Post Fund	11.8 %	9.6 %	14.5 %	9.2%	-	0/ 0.07		2		

¹ The SBI Basic and Post Funds were combined in 2009.

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State of Minnesota Contributions

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Years	
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For	

Public Pension Plans		2004		2005		2006		2007		2008
Bloomington Fire (12/31)	\	625,566	S	585,966	\$	606,454	Ś	517,023	$\boldsymbol{\diamond}$	439,902
Duluth Teachers' (6/30)		ı		·		ı		·		ı
Minneapolis Fire (12/31)		2,146,934		1,913,951		1,221,161		1,259,931		1,413,297
Minneapolis Police (12/31)		7,089,022		6,573,582		5,200,521		3,167,214		2,275,349
St. Paul Teachers' (6/30)		3,392,761		3,397,761		3,399,761		3,651,216		3,509,320
Total	÷	13,254,283	÷	12,471,260	÷	10,427,897	÷	8,595,384	÷	7,637,868
Public Pension Plans		2009		2010		2011		2012		2013
Bloomington Fire (12/31)	\$	372,096	$\boldsymbol{\diamond}$	380,275	$\boldsymbol{\diamond}$	356,741	↔	361,567	\mathbf{S}	401,714
Duluth Teachers' (6/30)		346,000		760,000		659,000		553,710		346,000
Minneapolis Fire (12/31)		2,285,077		2,293,859		*		*		*
Minneapolis Police (12/31)		3,424,326		3,575,883		*		*		*
St. Paul Teachers' (6/30)		3,343,013		4,108,442		4,077,140		3,657,839		3,664,607
Total	∻	9,770,512	÷	11,118,459	S	5,092,881	∻	4,573,116	S	4,412,321

Note: This table includes any amount from the State of Minnesota regardless of where it is reported in the financial statements (e.g., as part of Employer Contributions).

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Employer Contributions For Fiscal Years 2004 to 2013

Public Pension Plans		2004		2005		2006		2007		2008
Bloomington Fire (12/31)	\$	2,986,280	S	1,576,139	\	841,138	$\boldsymbol{\diamond}$	·	$\boldsymbol{\diamond}$	ı
Duluth Teachers' (6/30)		2,826,730		2,845,684		2,867,299		2,940,697		2,994,086
Minneapolis Fire (12/31)		2,670		4,737,705		1,348,855		3,030,347		3,336,852
Minneapolis Police (12/31)		20,800,530		24,976,747		5,366,224		3,647,229		3,535,999
St. Paul Teachers' (6/30)		20,378,315		20,435,230	<u> </u>	20,615,130		20,466,200		20,775,392
Total	÷	46,994,525	÷	54,571,505	÷	31,038,646	÷	30,084,473	÷	30,642,329
Public Pension Plans		2009		2010		2011		2012		2013
Bloomington Fire (12/31)	↔	ı	Ś	3,245,667	↔	3,129,651	$\boldsymbol{\diamond}$	1,852,639	$\boldsymbol{\diamond}$	1,911,112
Duluth Teachers' (6/30)		2,954,026		2,866,150		2,798,027		2,878,549		3,013,717
Minneapolis Fire (12/31)		1.837.448		1.377.896		*		*		*

Note: This table includes all city contributions where the city is the employer. The Employer Contributions are calculated by adding 22,779,713 27,704,542 * 21,451,545 26,182,733 * ∽ 26,941,038 21,013,360 * ∽ 11,635,632 21,107,889 40,233,234 1,377,896 ઝ 2,870,590 1,001,448 21,501,237 29,163,301 ∽ Minneapolis Police (12/31) Munneapolis Fire (12/31) St. Paul Teachers' (6/30) Total

* The Minneapolis Firefighters' Relief Association and the Minneapolis Police Relief Association were consolidated with the Public Employees Retirement Association (PERA) in 2011.

the employer regular and special contributions together. Some of the above entities include State of Minnesota contributions as

Employer Contributions for financial reporting purposes, but they have been removed for purposes of this table.

Employee Contributions For Fiscal Years 2004 to 2013

Public Pension Plans	2004	2005	2006	2007	2008
Bloomington Fire (12/31)	\$	•	S.	۲ ۲	•
Duluth Teachers' (6/30)	2,991,801	2,924,264	3,030,418	2,978,435	2,954,062
Minneapolis Fire (12/31)	39,852	12,010	ı	ı	
Minneapolis Police (12/31)	ı	ı	ı	I	ı
St. Paul Teachers' (6/30)	14,307,616	13,586,719	13,453,021	13,438,323	13,642,161
Total	\$ 17,339,269	\$ 16,522,993	\$ 16,483,439	\$ 16,416,758	\$ 16,596,223
Public Pension Plans	2009	2010	2011	2012	2013
Bloomington Fire (12/31)	\$	•	\$	•	\$
Duluth Teachers' (6/30)	2,927,260	2,899,071	2,779,703	2,888,242	3,050,990
Minneapolis Fire (12/31)			*	*	*
Minneapolis Police (12/31)	·	·	*	*	*
St. Paul Teachers' (6/30)	13,863,565	13,831,670	13,745,038	14,117,481	15,163,538
Total	\$ 16,790,825	\$ 16,730,741	\$ 16,524,741	\$ 17,005,723	\$ 18,214,528

Average Contribution per Member For Fiscal Years 2004 to 2013

Public Pension Plans	2004	2005	2006			2009	2010		2012	
Bloomington Fire (12/31)	\$ 12,567	\$ 7,558	\$ 4,975	\$ 1,673	\$ 1,433	\$ 1,216	\$ 11,927	\$ 11,583	\$ 7,120	\$ 7,160
Duluth Teachers' (6/30)	1,776	1,766	1,817			1,843	1,936		1,884	
Minneapolis Fire (12/31)	3,302	10,445	4,125			7,233	6,664		*	
Minneapolis Police (12/31)	29,701	34,257	11,754			7,503	18,687		*	
St. Paul Teachers' (6/30)	3,864	3,776	3,768			3,815	3,842		3,760	3,893

Note: This average is calculated by dividing all Contributions by the number of Members at Fiscal Year End.

Member/Beneficiary	
fits per Retired	004 to 2013
Benefits po	For Fiscal Years 2004 to
Annual	Fc
ge of Total Annua	
Average of T	

Bloomington Fire (12/31)\$ 18,880\$ 19,744\$ 20,193Duluth Teachers' (6/30)15,30915,93116,235Minneapolis Fire (12/31)35,07035,14136,184	2004 2005 20	!	2008	2009	2010	2011	2012	2013
15,309 15,931) 35,070 35,141	\$ 19,744	\$ 20,543	\$ 21,612	\$ 22,515	\$ 22,934	\$ 23,533	\$ 24,206	\$ 24,498
35,070 35,141	15,931		17,408	18,192	18,311	18,065	17,968	17,782
	35,141		39,686	38,537	38,148	*	*	*
Minneapolis Police (12/31) 35,611 37,378 38,	37,378		44,453	41,965	38,151	*	*	*
St. Paul Teachers' (6/30) 29,174 29,349 30	29,349		31,502	31,716	31,656	30,582	31,205	30,673

Note: Beneficiaries include retirees, disabled members and surviving spouses.

Percent Increase in Average of Total Benefits per Retired Member/Beneficiary and the Consumer Price Index

For Fiscal Years 2004 to 2013

Public Pension Plans	2004	2005	2006	2007		2009	2010	2011	2012	2013
Consumer Price Index	2.70 %	3.40 %	3.20 %	2.90 %	3.80 %	(0.30)%	1.60 %	3.20 %	2.10 %	1.50 %
Bloomington Fire (12/31)	(1.13)%	4.57 %	2.27 %	1.74~%		4.18~%	1.86 %	2.61 %	2.86 %	1.21 %
Duluth Teachers' (6/30)	(0.36)%	4.06 %	1.91 %	1.74~%		4.50 %	0.65 %	(1.34)%	(0.54)%	(1.04)%
Minneapolis Fire (12/31)	10.75 %	0.20~%	2.97 %	8.04 %		(2.90)%	(1.01)%	*	*	*
Minneapolis Police (12/31)	4.52 %	4.96 %	3.27 %	8.55 %		(2.60)%	%(60.6)	*	*	*
St. Paul Teachers' (6/30)	1.94 %	0.60 %	3.32 %	1.50~%		0.68~%	(0.19)%	(3.39)%	2.04 %	(1.70)%

Note: Beneficiaries include retirees, disabled members and surviving spouses.

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Funded Ratio Percentage For Fiscal Years 2004 to 2013

I UDIIC I CIISIOII I IAIIS	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bloomington Fire (12/31)	115.12 % 124.16 %	124.16 %	133.93 %	% 130.94 %	91.28 %	99.01 %	105.41 %	102.66 %	98.66 %	6 110.95 %
Duluth Teachers' (6/30)	91.80 % 86.40 %	86.40 %	84.10 %	86.80 %	82.10 %	76.55 %	81.66 %	73.22 %	63.40 %	54.00 %
Minneapolis Fire (12/31) ¹	90.20 %	86.20 %	87.50 %	92.80 %	90.13 %	79.07 %	77.35 %	*	*	*
Minneapolis Police (12/31) ¹	68.60 %	77.30 %	85.70 %	87.90 %	73.50 %	66.87 %	62.75 %	*	*	*
St. Paul Teachers' (6/30)	71.82 %	69.65 %	69.11 %	73.01 %	75.13 %	72.20 %	68.05 %	66.69 %	61.98 %	60.40 %

Note: The Funded Ratio Percentage is calculated by dividing the actuarial value of plan assets by the actuarial accrued liability.

¹ The Minneapolis Firefighters' Relief Association and the Minneapolis Police Relief Association were required to revise the 2008 actuarial valuation pursuant to a court order dated November 20, 2009. The 2008 percentages are the resulting restated Funded Ratio Percentages.

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Unfunded Actuarial Accrued Liability For Fiscal Years 2004 to 2013

Public Pension Plans		2004		2005		2006		2007		2008
Bloomington Fire (12/31)	$\boldsymbol{\diamond}$	(13,307,091)	\$	(20,457,329)	\$	(29,632,941)	\$	(28,864,471)	\$	8,465,842
Duluth Teachers' (6/30)		24,755,000		42,443,000		51,303,000		43,952,000		64,977,000
Minneapolis Fire (12/31)		26,967,000		43,137,000		37,650,000		20,982,000		25,988,000
Minneapolis Police (12/31)		147,279,000		105, 190, 000		62,979,000		51,815,000		117,076,000
St. Paul Teachers' (6/30)		352,600,000		394,539,000		419,701,000		375,576,000		356,089,000
Total	Ś	538,293,909	Ś	564,851,671	÷	542,000,059	Ś	463,460,529	Ś	572,595,842
Public Pension Plans		2009		2010		2011		2012		2013
Bloomington Fire (12/31)	\$	990,413	S	(5,700,134)	S	(2.870.900)	S	1,665,469	\$	(14, 169, 780)

Public Pension Plans	_	2009		2010		2011		2012		2013
Bloomington Fire (12/31)	$\boldsymbol{\diamond}$	990,413	\$	(5,700,134)	$\boldsymbol{\diamond}$	(2, 870, 900)	Ŷ	1,665,469	$\boldsymbol{\diamond}$	(14, 169, 780)
Duluth Teachers' (6/30)		85,555,000		57,341,000		85,993,000		119,410,000		162,026,000
Minneapolis Fire (12/31) ¹		53,230,000		54,749,000		*		*		*
Minneapolis Police (12/31) ¹		137,637,000		151,322,000		*		*		*
St. Paul Teachers' (6/30)		404,360,000		470,186,000		417,157,000		559,286,000		581,054,000
Total	÷	681,772,413	÷	727,897,866	Ś	500,279,100	÷	680,361,469	Ś	728,910,220

¹ The Minneapolis Firefighters' Relief Association and the Minneapolis Police Relief Association were required to revise the 2008 actuarial valuation pursuant to a court order dated November 20, 2009. The 2008 amounts are the resulting restated Unfunded Actuarial Accrued Liabilities.

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Pension Benefits	
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Net Assets/Net Position ¹ I	л

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Public Pension Plans		2004		2005		2006		2007		2008
Bloomington Fire (12/31)	$\boldsymbol{\diamond}$	101,341,890	\diamond	105,139,140	\$	116,978,895	$\boldsymbol{\diamond}$	122,158,440	\$	88,639,493
Duluth Teachers' (6/30)		258,831,515		267,383,556		281,950,173		318,973,530		271,616,844
Minneapolis Fire (12/31)		254,086,792		254,424,228		265,244,602		276,046,212		182,391,932
Minneapolis Police (12/31)		348,910,983		366,406,914		390,831,714		389,025,966		249,250,216
St. Paul Teachers' (6/30)		871,902,589		934,667,364		1,005,745,229		1,156,017,206		1,023,639,596
Total	\$	1,835,073,769	÷	\$ 1,928,021,202	÷	\$ 2,060,750,613	÷	\$ 2,262,221,354	÷	\$ 1,815,538,081

Public Pension Plans		2009		2010		2011		2012		2013
Bloomington Fire (12/31)	$\boldsymbol{\diamond}$	98,707,362	\$	111,072,465	\$	110,822,777	$\boldsymbol{\diamond}$	122,544,916	$\boldsymbol{\diamond}$	143,611,691
Duluth Teachers' (6/30)		179,933,200		192,402,546		213,367,995		194,552,931		205,300,543
Minneapolis Fire (12/31)		211,052,137		217,167,206		*		*		*
Minneapolis Police (12/31)		280,741,244		301,008,825		*		*		*
St. Paul Teachers' (6/30)		773,258,985		815,307,121		950,120,989		881,926,414		933,082,142
Total	\$ 1	1,543,692,928	÷	1,636,958,163	÷	1,274,311,761	Ś	1,199,024,261	÷	1,281,994,376

Note: These Net Assets/Net Position only include any net assets/net position that are "Held in Trust for Pension Benefits."

Resources, Deferred Inflows of Resources, and Net Position, effective for financial statements for periods beginning after December 15, ¹In accordance with Governmental Accounting Standards Board Statement No. 63, Financial Reporting of Deferred Outflows of 2011 the residual measure is renamed as net position, rather than net assets.

Net Assets/Net Position¹ per Member For Fiscal Years 2004 to 2013

Public Pension Plans		2004		2005		2006		2007		2008
Bloomington Fire (12/31)	$\boldsymbol{\diamond}$	350,664	\diamond	363,803	\diamond	401,989	\$	395,335	$\boldsymbol{\diamond}$	288,728
Duluth Teachers' (6/30)		78,984		81,819		86,861		94,371		80,622
Minneapolis Fire (12/31)		383,238		398,784		425,754		454,023		309,139
Minneapolis Police (12/31)		371,577		397,836		434,741		445,110		289,826
St. Paul Teachers' (6/30)		88,482		94,325		101,141		116,171		101,652
Public Pension Plans		2009		2010		2011		2012		2013
Bloomington Fire (12/31)	÷	322,573	÷	365,370	÷	368,182	÷	394,035	÷	444,618
Duluth Teachers' (6/30)		53,266		57,076		63,220		57,989		61,412
Minneapolis Fire (12/31)		370,267		394,133		*		*		*
Minneapolis Police (12/31)		334,614		369,790		*		*		*
St. Paul Teachers' (6/30)		76,206		80,223		91,640		84,540		87,302
Note: This calculation is the result of dividing the Net Assets Held in Trust for Pension Benefits/ Net Position Held in Trust for Pension	result	t of dividing the	Net A	Assets Held in Tr	ust fo	r Pension Benefit	s/ Ne	t Position Held i	n Tru	lst for Pension
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Benefits by the Members at Fiscal Year End.

Resources, Deferred Inflows of Resources, and Net Position, effective for financial statements for periods beginning after December 15, ¹In accordance with Governmental Accounting Standards Board Statement No. 63, Financial Reporting of Deferred Outflows of 2011 the residual measure is renamed as net position, rather than net assets.

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Unfunded Actuarial Accrued Liability per Member

For Fiscal Years 2004 to 2013

Bloomington Fire (12/31) \$	1007	SU02	0007		7007		2008
	(46,045)	\$ (70,787)	\$	(101,831) 9	\$ (93,413)	3) \$	27,576
Duluth Teachers' (6/30)	7,554	12,987		15,805	13,004	4	19,287
Minneapolis Fire (12/31)	40,674	67,613	U	60,433	34,510	0	72,731
Minneapolis Police (12/31)	156,847	114,213		70,055	59,285	5	211,891
St. Paul Teachers' (6/30)	35,782	39,816	7	42,206	37,743	3	35,361
Public Pension Plans	2009	2010	2011		2012		2013
Bloomington Fire (12/31) \$	3,237	\$ (18,750)	÷	(9,538)	\$ 5,355	5	(43,869)
Duluth Teachers' (6/30)	25,327	17,010		25,479	35,592	2	48,467
Minneapolis Fire (12/31)	93,386	99,363	*		*		*
Minneapolis Police (12/31)	164,049	185,899	*		*		*
St. Paul Teachers' (6/30)	39,850	46,264	7	40,235	53,613	3	54,365

Note: This calculation is the result of dividing the Unfunded Actuarial Accrued Liability by the Members at Fiscal Year End.

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Administrative Expenses For Fiscal Years 2004 to 2013

Public Pension Plans		2004		2005		2006		2007		2008
Bloomington Fire (12/31)	S	64,223	\$	64,844	\$	71,254	$\boldsymbol{\diamond}$	74,683	$\boldsymbol{\diamond}$	107,871
Duluth Teachers' (6/30)		448,704		436,507		424,840		456,987		487,944
Minneapolis Fire (12/31)		577,336		668,027		586,587		581,704		692,982
Minneapolis Police (12/31)		769,566		589,491		613,007		529,561		578,932
St. Paul Teachers' (6/30)		515,716		558,574		590,852		695,700		691,157
Total	∻	2,375,545	÷	2,317,443	÷	2,286,540	Ś	2,338,635	Ś	2,558,886
Public Pension Plans		2009		2010		2011		2012		2013
Bloomington Fire (12/31)	\$	77,778	\$	75,288	\$	79,771	$\boldsymbol{\diamond}$	87,482	\$	94,617
Duluth Teachers' (6/30)		505,164		505,672		497,009		628,923		537,013
Minneapolis Fire (12/31)		1,122,885		1,028,608		*		*		*
Minneapolis Police (12/31)		812,279		767,575		*		*		*
St. Paul Teachers' (6/30)		604,724		602,001		722,397		736,446		751,064

* The Minneapolis Firefighters' Relief Association and the Minneapolis Police Relief Association were consolidated with the Public Employees Retirement Association (PERA) in 2011.

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Total

Administrative Expenses per Member

For Fiscal Years 2004 to 2013

Public Pension Plans	2004	2005	2006						I	I
Bloomington Fire (12/31)	\$ 222	\$ 224	\$ 245	\$ 242	\$ 351	\$ 254	\$ 248	\$ 265	\$ 281	\$ 293
Duluth Teachers' (6/30)	137	134	131							
Minneapolis Fire (12/31)	871	1,047	942						*	*
Minneapolis Police (12/31)	820	640	682					*	*	*
St. Paul Teachers' (6/30)	52	56	59	70	69	60	59	70	71	70

Members at Fiscal Year End

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Public Pension Plans	2004	2005	2006	2007			2010	2011	2012	2013
Bloomington Fire (12/31)	289	289	291	309	307	306	304	301	311	323
Duluth Teachers' (6/30)	3,277	3,268	3,246	3,380			3,371	3,375	3,355	3,343
Minneapolis Fire (12/31)	663	638	623	608			551	*	*	*
Minneapolis Police (12/31)	939	921	899	874			814	*	*	*
St. Paul Teachers' (6/30)	9,854	9,909	9,944	9,951			10,163	10,368	10,432	10,688
Total	15,022	15,025	15,003	15,122			15,203	14,044	14,098	14,354
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Note: "Members" is the sum of retired/beneficiary, terminated and active members at fiscal year end.

Public Pension Plans	2004	2005	2006	2007	2008	2009	2010	2011		2013
Bloomington Fire (12/31)	147	149	151	161	160	163	166	171		181
Duluth Teachers' (6/30)	1,137	1,153	1,190	1,227	1,243	1,264	1,295	1,344		1,445
Minneapolis Fire (12/31)	621	601	592	581	563	546	528	*		*
Minneapolis Police (12/31)	921	904	884	860	846	828	806	*		*
St. Paul Teachers' (6/30)	2,361	2,505	2,624	2,738	2,851	2,933	3,044	3,212		3,404
Total	5,187	5,312	5,441	5,567	5,663	5,734	5,839	4,727	4,852	5,030

Members at Fiscal Year End - Retirees & Beneficiaries Receiving Benefits For Fiscal Years 2004 to 2013

Note: Beneficiaries are defined as retirees, disabled members, and surviving spouses.

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Investment Expenses For Fiscal Years 2004 to 2013

Public Pension Plans		2004		2005		2006		2007		2008
Bloomington Fire (12/31)	$\boldsymbol{\diamond}$	78,689	\$	86,305	()	29,588	\$	17,251	$\boldsymbol{\diamond}$	57,751
Duluth Teachers' (6/30)		1,203,295		1,169,704		1,289,870		1,758,675		1,566,292
Minneapolis Fire (12/31)		1,042,816		1,088,434		1,141,368		1,061,056		847,469
Minneapolis Police (12/31)		922,855		645,622		504,973		555,491		521,518
St. Paul Teachers' (6/30)		3,059,912		3,422,410		4,609,937		5,064,712		4,767,302
Total	Ś	6,307,567	÷	6,412,475	÷	7,575,736	÷	8,457,185	÷	7,760,332
Public Pension Plans		2009		2010	_	2011		2012		2013
Bloomington Fire (12/31)	$\boldsymbol{\diamond}$	60,234	\$	93,871	\$	109,000	\$	122,563	$\boldsymbol{\diamond}$	115,426
Duluth Teachers' (6/30)		1,289,965		1,209,193		1,359,608		1,269,821		1,311,857
Minneapolis Fire (12/31)		794,662		835,285		*		*		*
Minneapolis Police (12/31)		468,414		751,593		*		*		*

Note: Investment Expenses excludes securities lending.

* The Minneapolis Firefighters' Relief Association and the Minneapolis Police Relief Association were consolidated with the Public Employees Retirement Association (PERA) in 2011.

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St. Paul Teachers' (6/30)

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