# STATE OF MINNESOTA Office of the State Auditor



Rebecca Otto State Auditor

# LARGE PUBLIC PENSION PLAN INVESTMENT REPORT

For the Year Ended December 31, 2012

#### **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 730 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.

Office of the State Auditor 525 Park Street, Suite 500 Saint Paul, Minnesota 55103 (651) 296-2551 state.auditor@osa.state.mn.us www.auditor.state.mn.us

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# Large Public Pension Plan Investment Report

# For the Year Ended December 31, 2012



December 19, 2013

# Pension Division Office of the State Auditor State of Minnesota

#### **Pension Division**

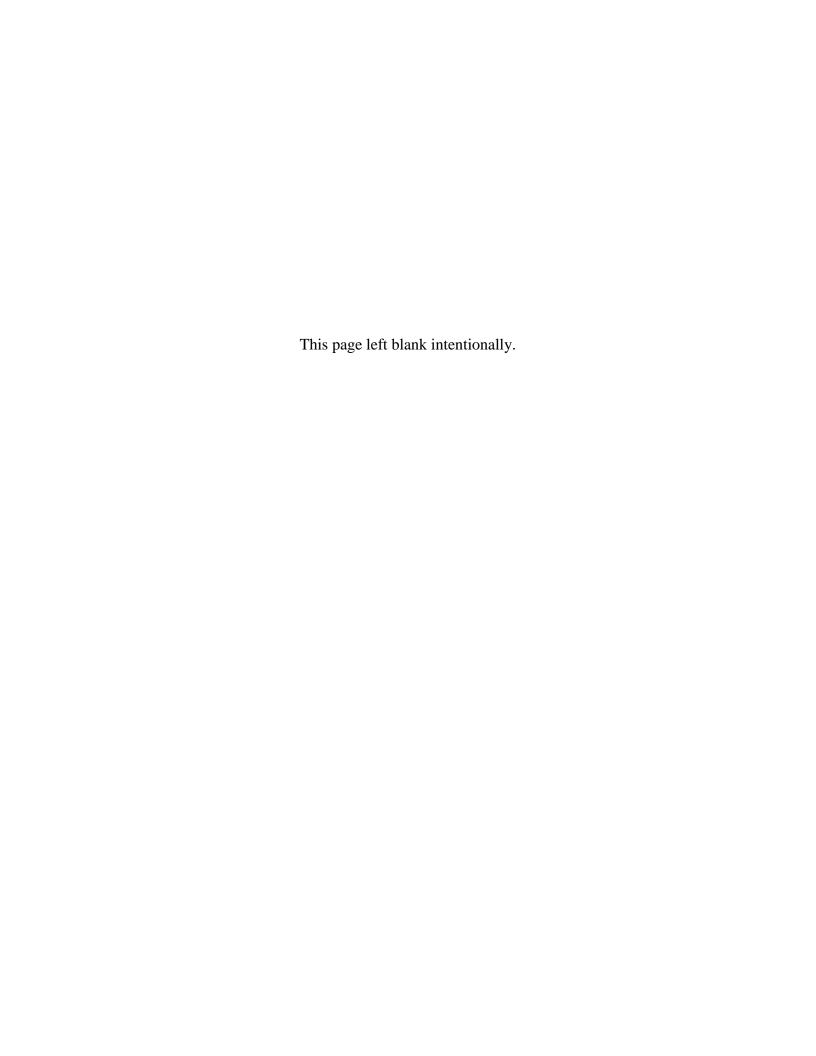
Rose Hennessy Allen, *Pension Director*Aaron Dahl, *Management Analyst*Jim Jensen, *Management Analyst*Michael Johnson, *Management Analyst*Gail Richie, *Office and Administrative Specialist* 

## **Legal Counsel**

**David Kenney** 

#### **Audit Practice Division**

Rick Pietrick, *Audit Director* Amy Ames, *Audit Director* Samantha Lee, *Auditor* 



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# **Scope and Methodology**

This report reviews the investment performance of Minnesota's large local public pension plans for the 2012 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. 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 nearly \$50.7 billion in assets as of December 31, 2012, 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.

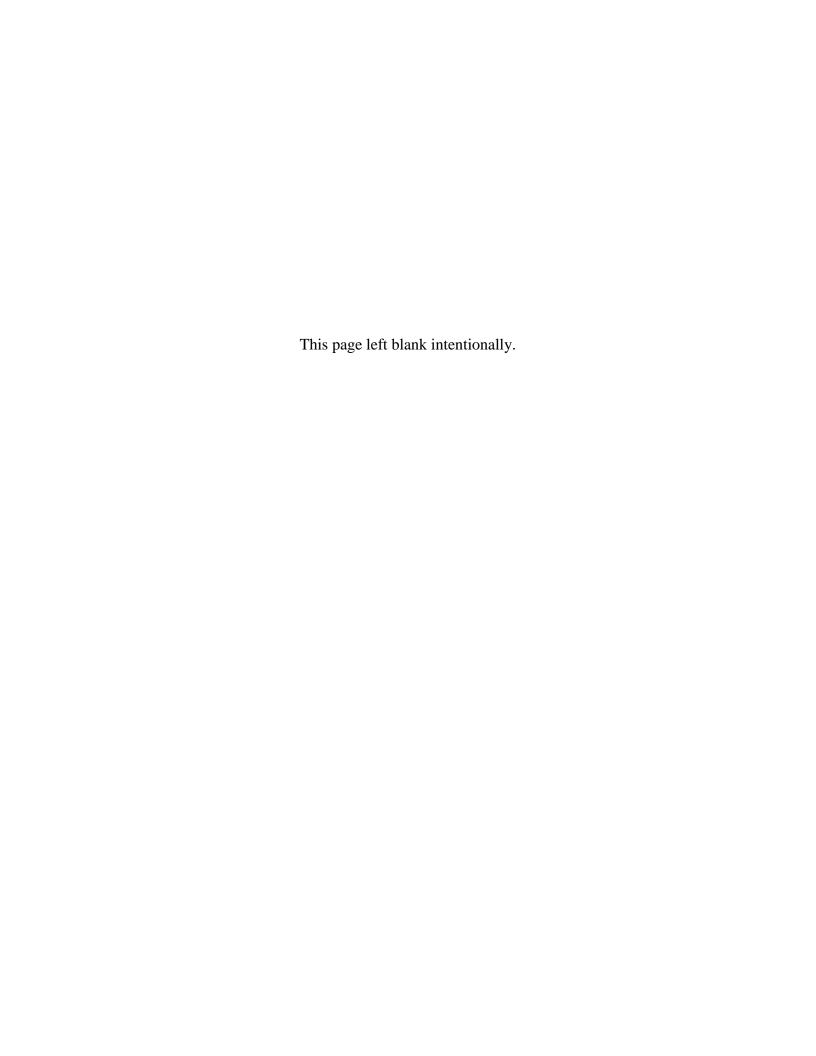
The pension plans are required under Minnesota Statutes, section 356.219, to annually report investment information to the Office of the State Auditor, and the State Auditor is required to provide a report to the legislature on the investment performance of these plans. One way to measure investment 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.<sup>2</sup> 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.

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<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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.



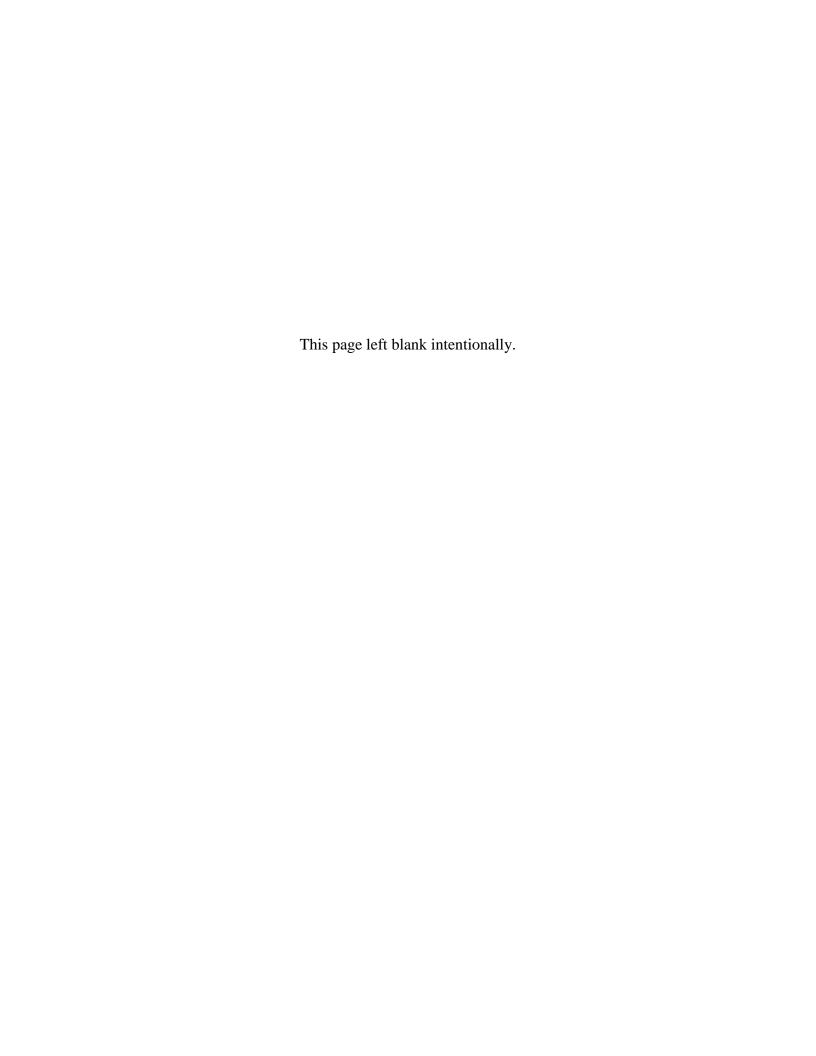
# **Executive Summary**

#### **Current Trends**

- During 2012, rates of return for the large plans ranged from 12.5 percent (St. Paul Teachers') to 15.0 percent (Duluth Teachers'). All of the plans exceeded their respective benchmarks except St. Paul Teachers'. The rate of return for the SBI's Combined Funds was 13.7 percent. (Pages 7 through 14)
- All of the large plans experienced a decrease in their funding ratio during 2012, and each ended the year with a funding ratio below 100 percent. St. Paul Teachers' had a funding ratio of 62.0 percent. Bloomington Fire's and Duluth Teachers' funding ratios were 98.7 percent and 63.4 percent, respectively. (Page 15)

#### **Long-Term Trends**

- The ten-year period from January 2003 through December 2012, provided fluctuating investment growth. All of the large plans were able to exceed their actuarial assumed rates of return over this period, except for Duluth Teachers'. The best-performing plan over the ten-year period was St. Paul Teachers', which earned 8.3 percent. The SBI's Combined Funds returned 8.4 percent for the period. (Pages 19 and 20)
- The plans with the lowest rates of return for the ten-year period were Bloomington Fire and Duluth Teachers', with returns of 6.2 percent and 6.8 percent, respectively. Both of these plans met their benchmarks for 2012. (Pages 19 and 20)



# **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 company-specific 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 which hold the same securities as the index can be obtained. Known as "index funds," these funds are managed with a passive style. Figure 1 below compares the 2012 rates of return and benchmark returns for the large plans and the State Board of Investment (SBI).

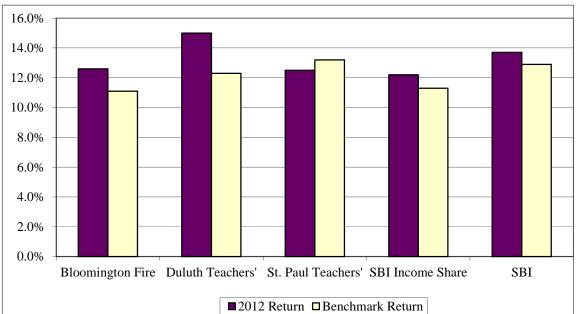


Figure 1: 2012 Rates of Return and Benchmark Return

# 2012 Performance Analysis

Markets generally improved in 2012, following poor market returns in 2011. The S&P 500 Index, which is a gauge of the large-capitalization U.S. equities market, returned 16.0 percent in 2012. 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 16.4 percent.

International equities also performed well in 2012, returning 16.8 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 posted another year of steady returns, returning 4.2 percent as measured by the Barclays Capital Aggregate Index. The 2012 return for bonds failed to meet the 7.8 percent return achieved during 2011.

In 2012, economic indicators improved as unemployment dropped to 7.8 percent and consumer spending increased by 3.5 percent. The increase in spending was greater than the change in the Consumer Price Index, which rose 1.7 percent.

The rates of return provided for each plan are calculated for the calendar year.

## **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. 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 12.6 percent in 2012, as calculated by the Office of the State Auditor. The return exceeded the plan's benchmark return of 11.1 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 2012 closely mirrored the policy allocation, with slightly more in equities and slightly less in bonds and cash. From 2011 to 2012, Bloomington

<sup>&</sup>lt;sup>2</sup> See Bloomington Fire Department Relief Association December 31, 2012, Financial Statements and Management Letter, page nine.

Fire increased its allocation to international equities by 7.9 percent and decreased its allocation to fixed income by 8.1 percent.

At the end of 2012, 87.6 percent of Bloomington Fire's total assets were held in the SBI's Supplemental Investment Fund: 31.9 percent of the plan's assets with the SBI were invested in the Common Stock Index Account; 15.5 percent in the Growth Share Account; 11.3 percent in the International Share Account; and 28.9 percent in the Bond Market Account.

The Common Stock Account is a Russell 3000 Index fund that returned 16.4 percent for the year. The Growth Share Account is an actively-managed domestic equity account that returned 16.8 percent for the year. Both domestic equity accounts exceeded their benchmark S&P 500 return of 16.0 percent. The International Share Account, consisting of active, semi-passive, and passive managers, returned 17.6 percent for the year. The account is compared to a composite index that returned 15.8 percent. The Bond Market Account, an actively-managed account, returned 6.7 percent, and exceeded its benchmark Barclays Capital Aggregate Index return of 4.2 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 10.5 percent.

Bloomington Fire also held investments in an internally-managed account. The account held 2.4 percent of the plan's assets, and was entirely invested in short-term cash investments. Assets held by the internally-managed account increased by 17.4 percent over the 2011 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.<sup>3</sup> 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 15.0 percent in 2012, above its benchmark return of 12.3 percent. Above-market returns in fixed-income and international equity investments contributed to the strong overall return for the plan's total portfolio.

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<sup>&</sup>lt;sup>3</sup> See Duluth Teachers' Retirement Fund Association 2012 Comprehensive Annual Financial Report Letter of Transmittal, page four.

Duluth Teachers' updated its investment policy in December of 2011 to include a Purpose-Driven Portfolio strategy, which establishes policy weights for each asset class. 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 14.3 percent. Investments in large-capitalization stocks were held through a Wells Fargo S&P 500 Index fund, which comprised 11.7 percent of the plan's total assets. The Wells Fargo fund returned 15.9 percent, falling closely in line with the benchmark S&P 500 Index return of 16.0 percent. The small-capitalization growth segment of domestic equity was managed by Disciplined Growth Investors, which held 13.1 percent of Duluth Teachers' total assets. This fund returned a favorable 16.2 percent compared to a 14.6 percent return from the Russell 2000 Growth Index benchmark. The small- and mid-capitalization portfolio, comprising 8.5 percent of the plan's total assets, was managed by Wellington. The Wellington fund performed well in 2012 returning 24.3 percent, while its Russell 2500 Value Index benchmark provided a 19.2 percent return.

Duluth Teachers' international equity portfolio was managed by four new investment managers by the end of 2012. International equity comprised 25.0 percent of the total portfolio. The international equity portfolio returned 21.6 percent during 2012, which outperformed the benchmark MSCI ACW Index ex. U.S. return of 16.8 percent. The largest portion of the international equity portfolio was invested with the Tweedy, Browne Company. Comprising 10.0 percent of the total portfolio, the fund returned 18.4 percent. International equity funds with William Blair and Vanguard returned 24.1 percent and 20.2 percent, respectively. Emerging market equity investments were held with Wellington, which returned 27.3 percent in 2012.

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 11.6 percent of the plan's total assets at the end of the year and returned 13.4 percent.

The Portfolio Stabilizers category includes fixed-income investments, absolute-return strategies, and cash. A target allocation of 25.0 percent was established for this category. The fixed-income portfolio held 19.6 percent of the plan's total assets at the end of the year. Fixed-income investments managed by Western Asset Management returned 9.7 percent, which was more than double the Barclays Capital Aggregate Index benchmark return of 4.2 percent. The Hussman Strategic Growth Fund is also classified in the Portfolio Stabilizers category. This risk-controlled equity fund sought to achieve long-

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term capital appreciation with added emphasis on the protection of capital during unfavorable market conditions. Comprising 2.1 percent of the plan's total assets at the end of the year, the fund struggled in 2012 with a negative 12.6 percent return. The S&P 500 Index benchmark for the fund provided a return of 16.0 percent. Duluth Teachers' held 1.7 percent of its total assets in cash at the end of 2012.

The Opportunistic category includes unique or short-term investment opportunities. A target allocation of 5.0 percent was established for this category. The BlackRock fund returned 9.0 percent. The fund held with Pacific Investment Management Company returned an impressive 40.8 percent in 2012. The Opportunistic investments comprised 6.0 percent of the plan's total assets at the end of the year.

The Economic Hedges category includes real assets and real- and real-return bonds. A target allocation of 5.0 percent was established for this category. Duluth Teachers' real estate investments made up 0.7 percent of the plan's total assets. The investments performed well, returning 8.7 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 10.5 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.<sup>4</sup> 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 12.5 percent in 2012, as calculated by the Office of the State Auditor, falling short of its benchmark return of 13.2 percent. The plan's market value increased by \$41.0 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 15.5 percent, which was below the S&P 500 Index return of 16.0 percent. St. Paul Teachers' used the S&P 500 Index as the large-capitalization benchmark. The Blackrock Russell 1000 Growth Index fund returned 15.4 percent and exceeded the Russell 1000 Growth Index benchmark of

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<sup>&</sup>lt;sup>4</sup> See St. Paul Teachers' Retirement Fund Association June 30, 2012, Financial Statements and Management Letter, page five.

15.3 percent. This fund was the plan's second largest large-capitalization fund. The Barrow & Hanley fund's rate of return of 15.6 percent missed the Russell 1000 Value Index benchmark return of 17.5 percent. The Blackrock Equity S&P 500 Index fund returned 16.0 percent, matching the S&P 500 Index benchmark of 16.0 percent. The lone mid-capitalization fund managed by Wellington Management returned 5.7 percent. The small-capitalization fund managed by Boston Company returned 19.1 percent. The DFA 6-10 Value fund returned 22.4 percent, compared to its 18.1 percent benchmark return. In 2012, St. Paul Teachers' reallocated the Advantus fund from its real estate holdings to its domestic equities account. Advantus returned 19.2 percent, which was just below the FTSE Nareit Composite Index return of 19.3 percent.

Fixed-income investments returned 4.7 percent, exceeding its Barclays Capital U.S. Aggregate Index benchmark return of 4.2 percent. The Blackrock U.S. Debt Index Fund returned 4.3 percent compared to the Barclays Capital U.S. Aggregate Index benchmark of 4.2 percent. St. Paul Teachers' fixed-income portfolio also included a passively-managed fund, the BGI G/C Index Fund, which returned 4.9 percent. In November of 2012, St. Paul Teachers' added BlackRock U.S. High Yield Income Fund to its portfolio. A rate of return was not reported for this fund because it was held for less than one quarter at year end. Fixed-income investments made up 19.4 percent of the total portfolio, after accounting for 18.7 percent of the portfolio in 2011.

St. Paul Teachers' international equity portfolio returned 18.3 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 17.3 percent. The JP Morgan fund exceeded the benchmark, returning 21.3 percent, and the Morgan Stanley fund also exceeded the benchmark with a return of 20.6 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 14.2 percent, missing the MSCI Emerging Markets Index benchmark of 18.6 percent.

Global equity investments for St. Paul Teachers' returned 12.1 percent. The Lazard Thematic Global Fund returned 15.4 percent, falling short of the MSCI ACW Index benchmark of 16.8 percent. St. Paul Teachers' increased it total global equity holdings in 2012 by adding two additional funds. In June of 2012, St. Paul Teachers' began investing in Morgan Stanley's Global Franchise Fund. The fund returned 6.6 percent during the last two quarters of 2012, missing the MSCI World Index benchmark of 9.6 percent. The other global equity fund purchased during September of 2012 was the JP Morgan Focus Fund. This fund returned 3.0 percent for the last quarter of 2012.

Real estate holdings for St. Paul Teachers' returned 8.2 percent as calculated by the Office of the State Auditor, compared to its NFI ODCE (net) Index benchmark return of 9.8 percent. One real estate holding was reclassified to be a domestic equity account during the year, so at year-end St. Paul Teachers' held only one real estate account, UBS Trumbull, which returned 9.9 percent.

Alternative investments returned negative 1.6 percent, as calculated by the Office of the State Auditor. Alternative investments included funds managed by RWI Group, North Sky Capital, Franklin Park, and Force Ten Networks. St. Paul Teachers' uses the weighted actual rate of return for its alternative investments as the benchmark for this asset class.

St. Paul Teachers' cash portfolio returned 10.2 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.

In November of 2012, St. Paul Teachers' increased its holdings of U.S. Treasury Bills by adding the Clifton Group TIPS Fund. The fund returned negative 0.7 percent.

#### **State Board of Investment**

The State Board of Investment (SBI) was established by Article XI of the Minnesota Constitution to invest state funds.<sup>5</sup> 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 13.7 percent in 2012, exceeding its 12.9 percent benchmark for the year. The SBI's domestic equity, fixed-income, international equity, and cash asset classes all contributed to the above-market total return by surpassing their respective benchmarks.

The SBI's domestic equity portfolio returned 16.6 percent, which was slightly above the benchmark Russell 3000 Index return of 16.4 percent. The portfolio is managed by 19 active money managers, four semi-passive managers, and one passive manager. Each active manager is expected to exceed its respective Russell style index over time by an amount appropriate for its active risk level. 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 the active managers. The passive manager consistently tracks the Russell 3000 Index.

The fixed-income portfolio of the SBI returned 6.7 percent for the year, compared to the 4.2 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 22.1 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

<sup>&</sup>lt;sup>5</sup> See Minnesota State Board of Investment 2012 Annual Report, page one.

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 17.6 percent, outperforming its benchmark MSCI ACW Index ex. U.S. return of 16.8 percent. The SBI allocates 15.0 percent to international equities in its investment policy, and at year-end international equities accounted for 16.3 percent of the total assets. The SBI's international equity portfolio has nine active managers, three semi-passive managers, and one passive manager. Seven of the nine 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 12.8 percent in 2012. 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 15.1 percent to alternative investments at the end of 2012. 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 defined-benefit plan designed to provide additional retirement benefits for certain groups of individuals.<sup>6</sup> As of July 1, 2012, the plan had five active members and 171 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.

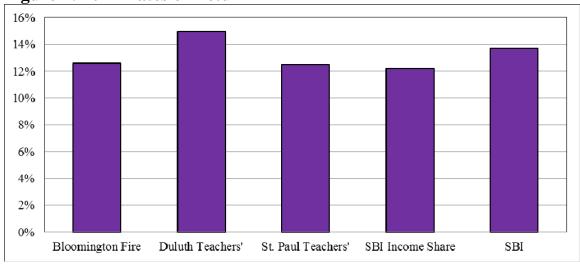
The Supplemental Benefits Plan is invested in the University of Minnesota Group Income Pool (GIP). The GIP is invested in a diversified bond fund, which is measured against the Barclays Capital Aggregate Index (after taxes and un-hedged). The Barclays Capital Aggregate Index returned 4.2 percent during 2012. The GIP returned 11.8 percent during the same period. The Supplemental Benefits Plan had a rate of return of 10.6 percent for 2012, 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.

<sup>&</sup>lt;sup>6</sup> Plan and membership information was obtained from the University of Minnesota Supplemental Benefits Plan July 1, 2012, Actuarial Valuation, and from the Supplemental Benefits Plan Administrative Policy.

Beginning Market Value	\$1,722,165
Net Cash Flows	\$(141,023)
Investment Returns	\$178,769
Ending Market Value	\$1,759,911
OSA One-Year Rate of Return	10.6%
OSA Two-Year Rate of Return	7.4%
Group Income Pool One-Year Rate of Return	11.8%
Benchmark Rate of Return	4.2%

Figure 2 below shows the 2012 rates of return for the large plans and the SBI.

Figure 2: 2012 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. 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 year-end, while Duluth Teachers' and St. Paul Teachers' have a June 30 fiscal year-end.

Bloomington Fire's funding ratio decreased 3.9 percent during 2012. Bloomington Fire was the highest-funded large public pension plan, with a funding ratio of 98.7 percent. Because the assets of Bloomington Fire are not smoothed, the funding ratio is subject to greater volatility than the other large plans.<sup>8</sup>

Duluth Teachers' funding ratio decreased 13.4 percent, for a funding ratio of 63.4 percent. Duluth Teachers' unfunded actuarial accrued liability amount was \$119.4 million.

St. Paul Teachers' funding ratio decreased by 11.4 percent to 62.0 percent. Its unfunded actuarial accrued liability was \$559.3 million.

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

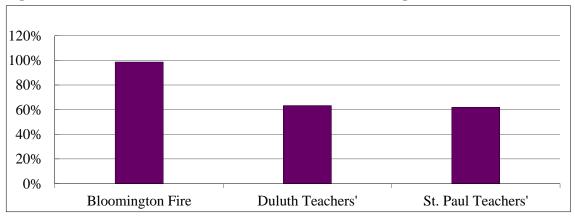
of plan assets available to pay those benefits.

8 The other large plans included in this repor

<sup>&</sup>lt;sup>7</sup> 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

<sup>&</sup>lt;sup>8</sup> 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 2012 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. Administrative expenses are paid out of the pension plan's assets. 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 \$736,446, a 1.9 percent increase from 2011. Duluth Teachers,' the next largest plan, spent \$628,923 on administrative expenses, which was a 26.5 percent increase from the previous year.

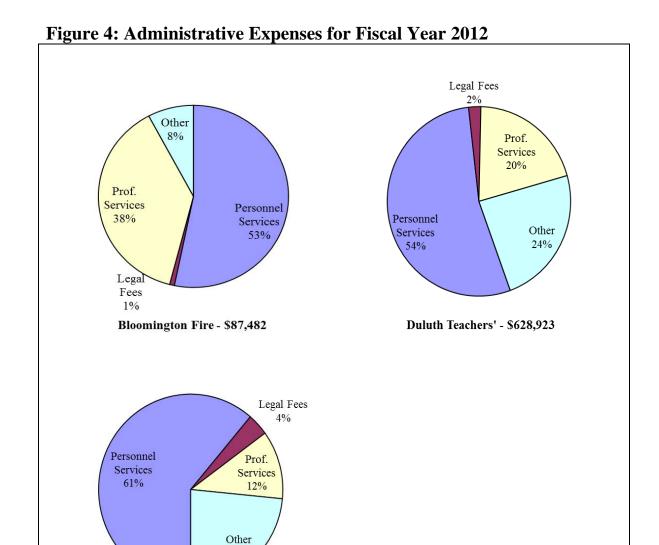
Bloomington Fire, the smallest plan, increased its administrative expenses from the previous year by 9.7 percent. Bloomington Fire had the lowest total administrative expenses of the plans, at \$87,482.

Employee salaries made up the largest portion of administrative expenses paid by the plans in 2012. Employee salaries include payroll expenses, plus insurance and benefits for the employees. St. Paul Teachers' paid \$450,650 in employee salaries in 2012. This was a decrease of 3.6 percent in the amount paid from the previous year. Duluth Teachers' paid \$337,989 in employee salaries during the fiscal year ending June 30, 2012. This was a 23.0 percent increase over the amount paid in 2011. Bloomington Fire paid \$46,569 in employee salaries during 2012, and that was a 3.0 percent increase over the amount spent in 2011.

Total administrative expenses on a per-member basis remained fairly constant for each of the plans during 2012, and have remained fairly constant over the past ten years.<sup>9</sup>

Figure 4 on the next page provides further detail on administrative expenses.

<sup>&</sup>lt;sup>9</sup> See Table 14 on page 44 of this report.



23%

St. Paul Teachers' - \$736,446

# **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 three of the ten years. This ten-year period will allow us to measure the performance of Minnesota's large plans during a time of fluctuating investment growth.

The investment returns of Minnesota's large plans over the ten-year period ending December 31, 2012, can be assessed by using market indices as benchmarks. The U.S. stock market, as measured by the Russell 3000 Index, returned 7.7 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 8.2 percent annually over the ten-year period. Emerging markets averaged an annual return of 16.9 percent over the period, as measured by the MSCI Emerging Markets Index.

The average bond market return over the ten-year period was 5.2 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 tenyear rate of return. All of the plans exceeded their actuarial assumed average annual rates of return over the ten-year period except for Duluth Teachers'.

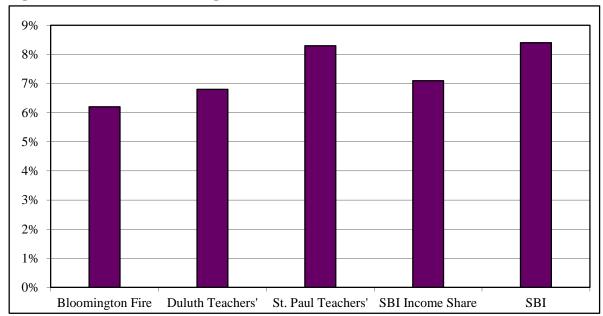
Of the large public pension plans, the top performing plan over the ten-year period was St. Paul Teachers', averaging an 8.3 percent annual rate of return. For comparison purposes, the SBI had a ten-year return of 8.4 percent. Duluth Teachers' had a 6.8 percent rate of return over the ten-year period. 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.

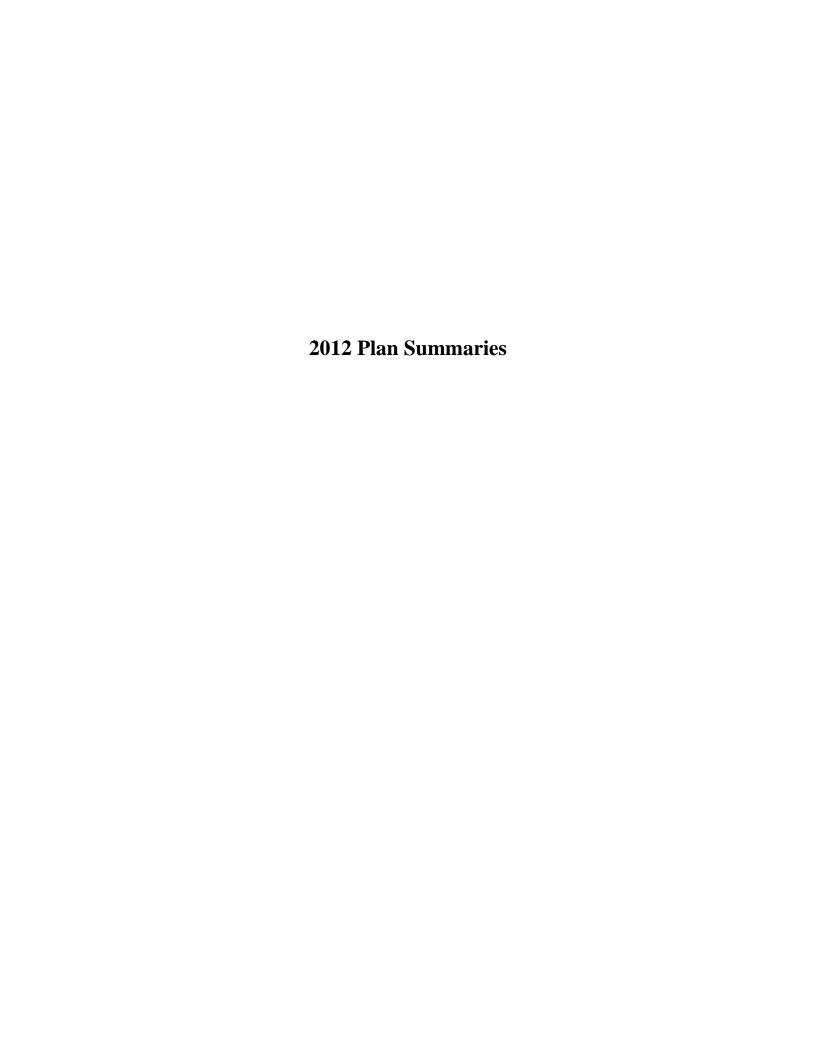
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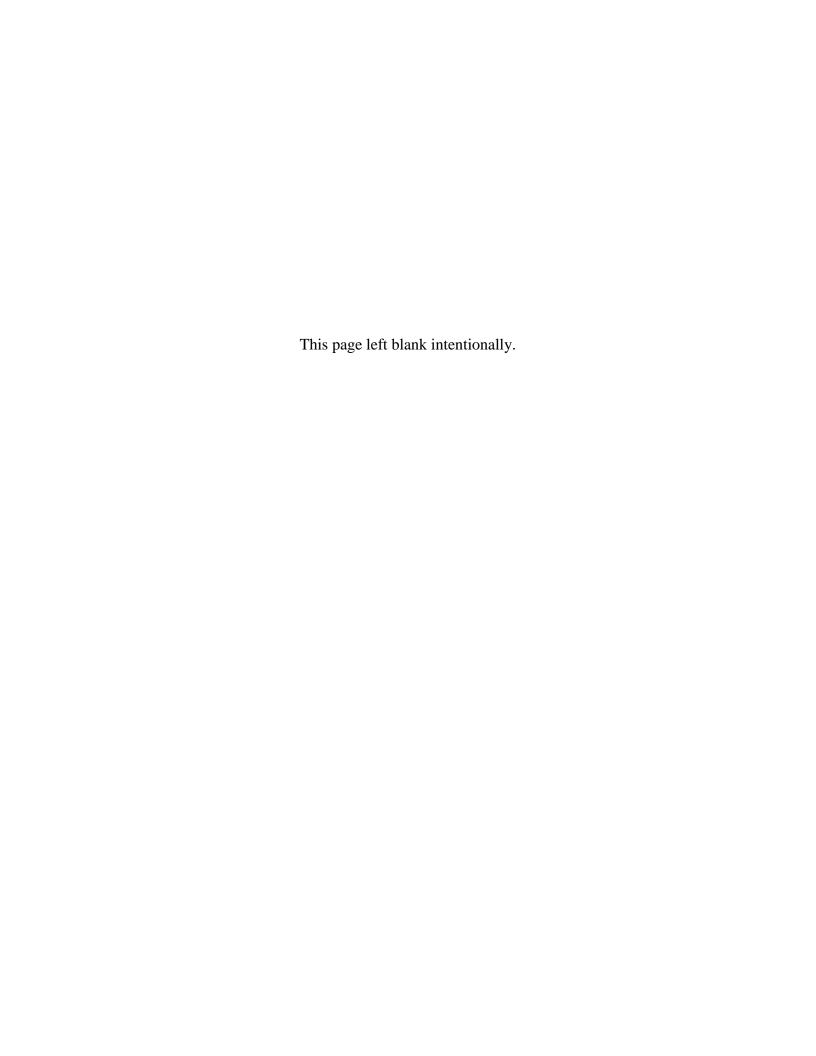
<sup>&</sup>lt;sup>10</sup> The SBI's basic and post funds were consolidated in 2009.

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 (2003-2012)







#### **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 2012 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, 2012

Rates of Return (ROR)	
OSA One-Year ROR	12.6 %
Plan One-Year ROR	12.7 %
Benchmark ROR	11.1 %
Actuarial Assumed ROR - Active	6.0 %
Actuarial Assumed ROR - Retired	6.0 %
OSA Three-Year ROR	8.5 %
OSA Five-Year ROR	2.0 %
OSA Ten-Year ROR	6.2 %

<b>Benchmark Components</b>		Policy		Actual			
and Rates of Retur	<u>'n</u>	Asset Allocation		Asset Allocation			
S&P 500	16.0 %	Stock	50.0 %	Domestic Equities	52.3 %		
MSCI World (Net)	15.8 %	International Stock	10.0 %	International Equities	13.6 %		
Barclays Capital Agg. Bond	4.2 %	Bonds	35.0 %	Fixed Income	30.5 %		
90-Day U.S Treasury Bill	0.1 %	Cash	5.0 %	Cash	3.6 %		

Asset Class	
Domestic Equities	
International Equities	
Fixed Income	
Cash	
Internally Managed	
Wells Fargo	

Investment Type	Beginning <u>Market Value</u>	Net Cash Flow Investment (Net of Fees) Return		Ending <u>Market Value</u>	Rate of Return
Domestic Equities	\$ 50,020	\$ 0	\$ 8,257	\$ 58,277	16.5 %
International Equities	11,809	0	2,076	13,885	17.6 %
Fixed Income	35,748	(2,500)	2,314	35,562	6.7 %
Cash	11	1	0	12	0.0 %
Balanced	2,476	432	0	2,908	0.0 %
Balanced	11,098	4	1,168	12,270	10.5 %
Total	\$ 111,162	\$ (2,063)	\$ 13,815	\$ 122,914	

# **Duluth Teachers' Retirement Fund Association**

For the Year Ended December 31, 2012

Rates of Return (ROR)	
Plan One-Year ROR	15.0 %
Benchmark ROR	12.3 %
Actuarial Assumed ROR - Active	8.0 %
Actuarial Assumed ROR - Retired	8.0 %
Plan Three-Year ROR	10.0 %
Plan Five-Year ROR	0.6 %
Plan Ten-Year ROR	6.8 %

Benchmark Components and Rates of Return		Policy Asset Allocation		Actual Asset Allocation		
U.S. Custom Equity Index	16.5 %	Domestic Equities 33.0 %		Domestic Equities	33.3 %	
S&P 500	16.0 %	Risk-Controlled Equities	5.0 %	Risk-Controlled Equities	2.1 %	
Barclays Capital Aggregate	4.2 %	Fixed Income	17.0 %	Fixed Income	19.6 %	
MSCI ACWI ex. U.S.	16.8 %	International Equities	25.0 %	International Equities	25.0 %	
91-Day U.S. Treasury Bill	0.1 %	Cash	3.0 %	Cash	1.7 %	
NCREIF Property Index	10.5 %	Real Assets	5.0 %	Real Assets	0.7 %	
		Private Equity	7.0 %	Private Equity	11.6 %	
		Opportunistic	5.0 %	Opportunistic	6.0 %	

<b>Investment Type</b>	Beginning Market Value		Net Cash Flow (Net of Fees)		Investment Return		Ending ·ket Value	Rate of Return
Domestic Equities	\$ 64,055	\$	(8,398)	\$	11,053	\$	66,710	14.3 %
Domestic Equities	9,727		(4,455)		(1,066)		4,206	(12.6)%
Fixed Income	39,441		(3,953)		3,706		39,194	9.7 %
International Equities	43,674		(2,866)		9,190		49,998	21.6 %
Cash	5,444		(2,071)		1		3,374	0.0 %
Real Estate	1,461		0		1		1,462	8.7 %
Private Equity	19,131		2,282		1,726		23,139	13.4 %
Opportunistic	10,118		0		1,882		12,000	18.6 %
Total	\$ 193,051	<b>\$</b>	(19,461)	\$	26,493	\$	200,083	

# St. Paul Teachers' Retirement Fund Association

For the Year Ended December 31, 2012

Rates of Return (ROR)	
OSA One-Year ROR	12.5 %
Plan One-Year ROR	13.4 %
Benchmark ROR	13.2 %
Actuarial Assumed ROR - Active	8.0 %
Actuarial Assumed ROR - Retired	8.0 %
OSA Three-Year ROR	8.3 %
OSA Five-Year ROR	2.2 %
OSA Ten-Year ROR	8.3 %

Benchmark Components		Policy	Actual			
and Rates of Return		Asset Allocation	Asset Allocation			
MSCI All Contry World Free	16.8 %	Global/Domestic Equity	55.0 %	Domestic Equities	39.9 %	
Barclay Global Aggregate	4.3 %	Global/Domestic Fixed Income	20.0 %	Domestic Fixed Income	19.4 %	
NFI ODCE (net)	9.8 %	Inflation Hedged/Real Assets	11.0 %	Real Estate	8.2 %	
Russell 3000 +3%	19.4 %	Private Equity/Alternatives	9.0 %	International Equities	13.4 %	
HFRI FOF Composite Index	4.8 %	Hedge Funds	5.0 %	Global Equities	14.2 %	
				Alternative Assets	1.4 %	
				Cash	1.3 %	
				Treasury Bills	2.2 %	

Asset Class	Investment Type	Beginning Market Value		Net Cash Flow (Net of Fees)		Investment Return		Ending Market Value		Rate of Return	
Domestic Equities	Domestic Equities	\$	379,4161	\$	(75,316)	\$	56,118	\$	360,218	15.5 %	
Domestic Fixed Income	Domestic Fixed Income		160,885		6,465		7,423		174,773	4.7 %	
Real Estate	Real Estate		69,6431		(1,562)		5,617		73,698	8.2 %	
International Equities	International Equities		191,685		(94,399)		23,465		120,751	18.3 %	
Global Equities	Global Equities		35,383		82,400		10,411		128,194	12.1 %	
Alternatives	Alternative Assets		10,061		3,105		(228)		12,938	(1.6)%	
Cash	Cash		14,002		(3,751)		1,275		11,526	10.2 %	
Treasury Bills	Treasury Bills		0		20,000		(25)		19,975	(0.7)%	
	Total	\$	861,075	\$	(63,058)	\$	104,056	\$	902,073		

<sup>&</sup>lt;sup>1</sup> Advantus was included in the Domestic Equity composite in 2012, prior to that it was a member of the Real Estate composite.

# **State Board of Investment**

For the Year Ended December 31, 2012

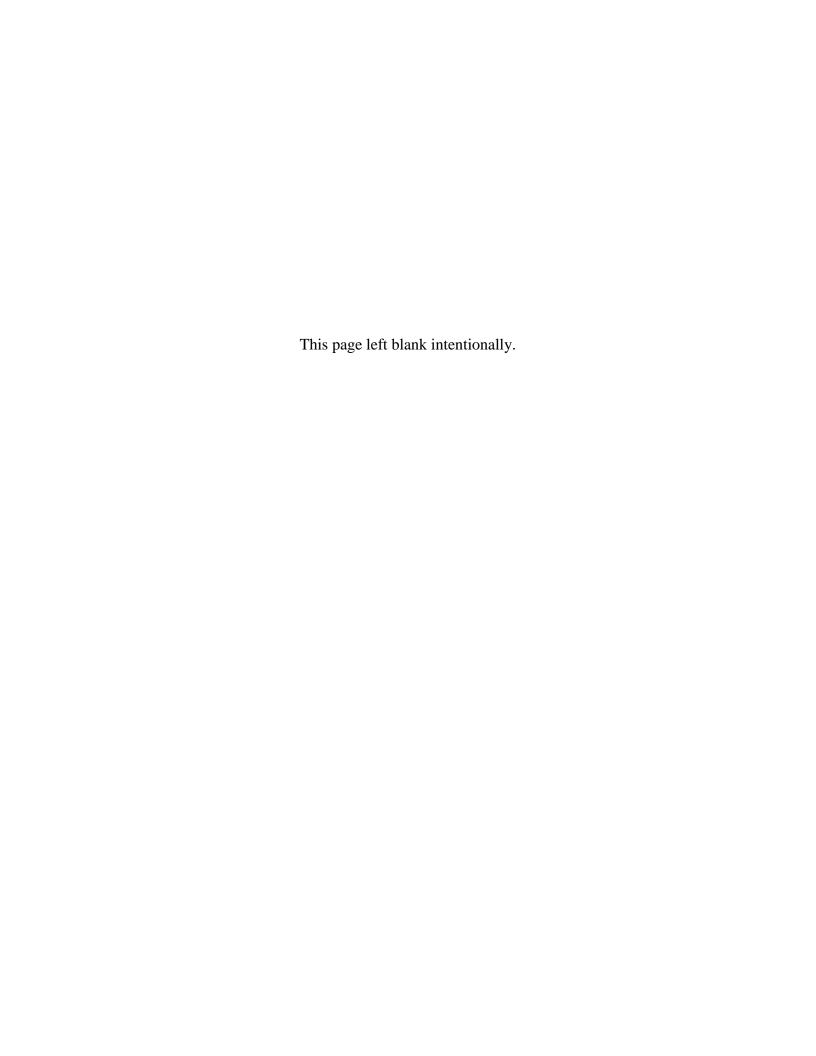
Rates of Return (ROR)	
Plan One-Year ROR	13.7 %
Benchmark ROR	12.9 %
Actuarial Assumed ROR - Active	8.0 %
Actuarial Assumed ROR - Retired	8.0 %
Plan Three-Year ROR	9.7 %
Plan Five-Year ROR	3.2 %
Plan Ten-Year ROR	8.4 %

Benchmark Components and Rates of Return		Policy Asset Allocati	on	Actual Asset Allocation			
Russell 3000	16.4 %	Domestic Equities	45.0 %	Domestic Equities	44.7 %		
Barclays Capital Aggregate	4.2 %	Fixed Income	18.0 %	Fixed Income	22.1 %		
MSCI ACWI ex. U.S.	16.8 %	International Equities	15.0 %	International Equities	16.3 %		
Alternative Assets 1	12.8 %	Alternative Assets	20.0 %	Alternative Assets	15.1 %		
90-Day U.S. Treasury Bill	0.1 %	Cash	2.0 %	Cash	1.8 %		

	Asset Class	<b>Investment Type</b>	Beginning Market Val	<b>,</b>	Investment Return	Ending Market Value	Rate of Return
2	Domestic Equities	Domestic Equities	\$ 20,730,3	\$ (1,955,428)	\$ 3,348,106	\$ 22,122,993	16.6 %
••	Fixed Income	Fixed Income	10,244,8	376 (15,442)	683,773	10,913,207	6.7 %
	International Equities	International Equities	6,363,7	498,621	1,202,985	8,065,353	17.6 %
	Alternatives	Alternative Assets	7,054,2	255 (478,007)	875,791	7,452,039	12.8 %
	Cash & Disbursement Account	Cash	834,6	34,524	2,592	871,782	0.4 %
	Cash - CD Repo	Cash		0 43,517	191	43,708	0.5 %
		Total	\$ 45,227,8	\$ (1,872,215)	\$ 6,113,438	\$ 49,469,082	

<sup>&</sup>lt;sup>1</sup> The actual rate of return is used as the benchmark for Alternative Assets.





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Table 1

# **Historical Rates of Return**

For Calendar Years 2003 to 2012

<b>Public Pension Plans</b>	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Bloomington Fire	19.4 %	9.5 %	4.7 %	13.0 %	6.9 %	(25.2)%	15.6 %	13.0 %	0.3 %	12.6 %
Duluth Teachers'	28.2 %	10.6 %	7.6 %	14.7 %	6.6 %	(35.1)%	19.2 %	16.0 %	(0.7)%	15.0 %
Minneapolis Fire	20.0 %	10.1 %	6.6 %	12.5 %	11.5 %	(28.7)%	27.2 %	12.0 %	*	*
Minneapolis Police	22.3 %	10.1 %	6.0 %	13.8 %	6.9%	(29.5)%	26.7 %	13.9 %	*	*
St. Paul Teachers'	26.7 %	14.1 %	9.9 %	15.6 %	8.1%	(28.2)%	22.4 %	13.7 %	(0.6)%	12.5 %
SBI Basic Fund	22.7 %	13.0 %	10.2 %	14.7 %	9.7%	(26.1)%	20.3% 1	14.4 %	1.5 %	13.7 %
SBI Post Fund	23.5 %	11.8 %	9.6 %	14.5 %	9.2%	(26.2)%	20.570	1-1T /U	1.5 /0	13.7 /0

<sup>&</sup>lt;sup>1</sup> The SBI Basic and Post Funds were combined in 2009.

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

Table 2

**Public Pension Plans** 

#### **State of Minnesota Contributions**

For Fiscal Years 2003 to 2012

2005

2006

2007

2004

2003

Bloomington Fire (12/31)	\$ 495,967	\$ 625,566	\$ 585,966	\$ 606,454	\$ 517,023
Duluth Teachers' (6/30)	-	-	-	-	-
Minneapolis Fire (12/31)	1,328,901	2,146,934	1,913,951	1,221,161	1,259,931
Minneapolis Police (12/31)	5,879,854	7,089,022	6,573,582	5,200,521	3,167,214
St. Paul Teachers' (6/30)	 3,383,761	 3,392,761	 3,397,761	 3,399,761	3,651,216
Total	\$ 11,088,483	\$ 13,254,283	\$ 12,471,260	\$ 10,427,897	\$ 8,595,384
	 _		 _		
<b>Public Pension Plans</b>	 2008	2009	2010	 2011	 2012
Public Pension Plans Bloomington Fire (12/31)	\$ <b>2008</b> 439,902	\$ <b>2009</b> 372,096	\$ <b>2010</b> 380,275	\$ <b>2011</b> 356,741	\$ <b>2012</b> 361,567
	\$	\$	\$	\$	\$ -
Bloomington Fire (12/31)	\$	\$ 372,096	\$ 380,275	\$ 356,741	\$ 361,567
Bloomington Fire (12/31) Duluth Teachers' (6/30)	\$ 439,902	\$ 372,096 346,000	\$ 380,275 760,000	\$ 356,741 659,000	\$ 361,567 553,710
Bloomington Fire (12/31) Duluth Teachers' (6/30) Minneapolis Fire (12/31)	\$ 439,902 - 1,413,297	\$ 372,096 346,000 2,285,077	\$ 380,275 760,000 2,293,859	\$ 356,741 659,000 *	\$ 361,567 553,710 *

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).

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

Table 3

**Public Pension Plans** 

#### **Employer Contributions**

2005

2006

2007

For Fiscal Years 2003 to 2012

2004

2003

Bloomington Fire (12/31)	\$ 742,343	\$ 2,986,280	\$ 1,576,139	\$ 841,138	\$ -
Duluth Teachers' (6/30)	2,933,172	2,826,730	2,845,684	2,867,299	2,940,697
Minneapolis Fire (12/31)	4,270	2,670	4,737,705	1,348,855	3,030,347
Minneapolis Police (12/31)	13,540,305	20,800,530	24,976,747	5,366,224	3,647,229
St. Paul Teachers' (6/30)	 19,986,168	 20,378,315	 20,435,230	 20,615,130	 20,466,200
Total	\$ 37,206,258	\$ 46,994,525	\$ 54,571,505	\$ 31,038,646	\$ 30,084,473
<b>Public Pension Plans</b>	 2008	 2009	 2010	 2011	 2012
Public Pension Plans Bloomington Fire (12/31)	\$ 2008	\$ 2009	\$ <b>2010</b> 3,245,667	\$ <b>2011</b> 3,129,651	\$ <b>2012</b> 1,852,639
	\$ 2008 - 2,994,086	\$ <b>2009</b> - 2,954,026	\$	\$	\$
Bloomington Fire (12/31)	\$ -	\$ -	\$ 3,245,667	\$ 3,129,651	\$ 1,852,639
Bloomington Fire (12/31) Duluth Teachers' (6/30)	\$ - 2,994,086	\$ 2,954,026	\$ 3,245,667 2,866,150	\$ 3,129,651 2,798,027	\$ 1,852,639 2,878,549
Bloomington Fire (12/31) Duluth Teachers' (6/30) Minneapolis Fire (12/31)	\$ 2,994,086 3,336,852	\$ 2,954,026 1,837,448	\$ 3,245,667 2,866,150 1,377,896	\$ 3,129,651 2,798,027 *	\$ 1,852,639 2,878,549 *

Note: This table includes all city contributions where the city is the employer. The Employer Contributions are calculated by adding 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.

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

Table 4

# **Employee Contributions**

<b>Public Pension Plans</b>	 2003	2004	 2005	2006	2007
Bloomington Fire (12/31)	\$ -	\$ -	\$ -	\$ -	\$ -
Duluth Teachers' (6/30)	3,298,902	2,991,801	2,924,264	3,030,418	2,978,435
Minneapolis Fire (12/31)	136,209	39,852	12,010	-	-
Minneapolis Police (12/31)	3,815	-	-	-	-
St. Paul Teachers' (6/30)	 14,222,154	14,307,616	 13,586,719	 13,453,021	13,438,323
Total	\$ 17,661,080	\$ 17,339,269	\$ 16,522,993	\$ 16,483,439	\$ 16,416,758
Public Pension Plans	2008	2009	2010	2011	2012
Bloomington Fire (12/31)	\$ -	\$ -	\$ -	\$ -	\$ -
Duluth Teachers' (6/30)	2,954,062	2,927,260	2,899,071	2,779,703	2,888,242
Minneapolis Fire (12/31)	-	-	-	*	*
Minneapolis Police (12/31)	-	-	-	*	*
St. Paul Teachers' (6/30)	13,642,161	13,863,565	13,831,670	13,745,038	14,117,481
Total	\$ 16,596,223	\$ 16,790,825	\$ 16,730,741	\$ 16,524,741	\$ 17,005,723

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

Table 5

# **Average Contribution per Member**

For Fiscal Years 2003 to 2012

<b>Public Pension Plans</b>	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Bloomington Fire (12/31)	\$ 4,309	\$ 12,567	\$ 7,558	\$ 4,975	\$ 1,673	\$ 1,433	\$ 1,216	\$ 11,927	\$ 11,583	\$ 7,120
Duluth Teachers' (6/30)	1,784	1,776	1,766	1,817	1,751	1,766	1,843	1,936	1,848	1,884
Minneapolis Fire (12/31)	2,130	3,302	10,445	4,125	7,056	8,051	7,233	6,664	*	*
Minneapolis Police (12/31)	20,254	29,701	34,257	11,754	7,797	6,757	7,503	18,687	*	*
St. Paul Teachers' (6/30)	3,921	3,864	3,776	3,768	3,774	3,766	3,815	3,842	3,746	3,760

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

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

Table 6

# Average of Total Annual Benefits per Retired Member/Beneficiary

For Fiscal Years 2003 to 2012

<b>Public Pension Plans</b>	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Bloomington Fire (12/31)	\$ 19,095	\$ 18,880	\$ 19,744	\$ 20,193	\$ 20,543	\$ 21,612	\$ 22,515	\$ 22,934	\$ 23,533	\$ 24,206
Duluth Teachers' (6/30)	15,365	15,309	15,931	16,235	16,517	17,408	18,192	18,311	18,065	17,968
Minneapolis Fire (12/31)	31,666	35,070	35,141	36,184	39,094	39,686	38,537	38,148	*	*
Minneapolis Police (12/31)	34,070	35,611	37,378	38,599	41,899	44,453	41,965	38,151	*	*
St. Paul Teachers' (6/30)	28,618	29,174	29,349	30,323	30,778	31,502	31,716	31,656	30,582	31,205

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

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

Table 7

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

For Fiscal Years 2003 to 2012

<b>Public Pension Plans</b>	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Consumer Price Index	2.30 %	2.70 %	3.40 %	3.20 %	2.90 %	3.80 %	(0.30)%	1.60 %	3.20 %	2.10 %
Bloomington Fire (12/31)	10.10 %	(1.13)%	4.57 %	2.27 %	1.74 %	5.20 %	4.18 %	1.86 %	2.61 %	2.86 %
Duluth Teachers' (6/30)	3.71 %	(0.36)%	4.06 %	1.91 %	1.74 %	5.40 %	4.50 %	0.65 %	(1.34)%	(0.54)%
Minneapolis Fire (12/31)	(16.57)%	10.75 %	0.20 %	2.97 %	8.04 %	1.52 %	(2.90)%	(1.01)%	*	*
Minneapolis Police (12/31)	2.91 %	4.52 %	4.96 %	3.27 %	8.55 %	6.09 %	(5.60)%	(9.09)%	*	*
St. Paul Teachers' (6/30)	2.81 %	1.94 %	0.60 %	3.32 %	1.50 %	2.35 %	0.68 %	(0.19)%	(3.39)%	2.04 %

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

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

Table 8

#### **Funded Ratio Percentage**

For Fiscal Years 2003 to 2012

<b>Public Pension Plans</b>	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Bloomington Fire (12/31)	110.21 %	115.12 %	124.16 %	133.93 %	130.94 %	91.28 %	99.01 %	105.41 %	102.66 %	98.66 %
Duluth Teachers' (6/30)	95.70 %	91.80 %	86.40 %	84.10 %	86.80 %	82.10 %	76.55 %	81.66 %	73.22 %	63.40 %
Minneapolis Fire (12/31) <sup>1</sup>	80.60 %	90.20 %	86.20 %	87.50 %	92.80 %	90.13 %	79.07 %	77.35 %	*	*
Minneapolis Police (12/31) <sup>1</sup>	64.50 %	68.60 %	77.30 %	85.70 %	87.90 %	73.50 %	66.87 %	62.75 %	*	*
St. Paul Teachers' (6/30)	75.57 %	71.82 %	69.65 %	69.11 %	73.01 %	75.13 %	72.20 %	68.05 %	69.99 %	61.98 %

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

<sup>&</sup>lt;sup>1</sup> 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.

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

Table 9

### **Unfunded Actuarial Accrued Liability**

<b>Public Pension Plans</b>	 2003	 2004	 2005	2006		 2007
Bloomington Fire (12/31)	\$ (8,516,589)	\$ (13,307,091)	\$ (20,457,329)	\$	(29,632,941)	\$ (28,864,471)
Duluth Teachers' (6/30)	12,642,000	24,755,000	42,443,000		51,303,000	43,952,000
Minneapolis Fire (12/31)	56,964,000	26,967,000	43,137,000		37,650,000	20,982,000
Minneapolis Police (12/31)	165,122,000	147,279,000	105,190,000		62,979,000	51,815,000
St. Paul Teachers' (6/30)	 290,601,000	 352,600,000	394,539,000		419,701,000	375,576,000
Total	\$ 516,812,411	\$ 538,293,909	\$ 564,851,671	\$	542,000,059	\$ 463,460,529

<b>Public Pension Plans</b>	 2008	 2009	 2010	2011		 2012
Bloomington Fire (12/31)	\$ 8,465,842	\$ 990,413	\$ (5,700,134)	\$	(2,870,900)	\$ 1,665,469
Duluth Teachers' (6/30)	64,977,000	85,555,000	57,341,000		85,993,000	119,410,000
Minneapolis Fire (12/31) <sup>1</sup>	25,988,000	53,230,000	54,749,000		*	*
Minneapolis Police (12/31) <sup>1</sup>	117,076,000	137,637,000	151,322,000		*	*
St. Paul Teachers' (6/30)	356,089,000	 404,360,000	 470,186,000		417,157,000	 559,286,000
Total	\$ 572,595,842	\$ 681,772,413	\$ 727,897,866	\$	500,279,100	\$ 680,361,469

<sup>&</sup>lt;sup>1</sup> 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.

<sup>\*</sup> 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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Table 10

Net Assets/Net Position¹ Held in Trust for Pension Benefits

For Fiscal Years 2003 to 2012

2002

Public Pension Plans	 2003	 2004	 2005	 2006	 2007
Bloomington Fire (12/31)	\$ 91,904,997	\$ 101,341,890	\$ 105,139,140	\$ 116,978,895	\$ 122,158,440
Duluth Teachers' (6/30)	231,247,693	258,831,515	267,383,556	281,950,173	318,973,530
Minneapolis Fire (12/31)	250,351,289	254,086,792	254,424,228	265,244,602	276,046,212
Minneapolis Police (12/31)	323,467,991	348,910,983	366,406,914	390,831,714	389,025,966
St. Paul Teachers' (6/30)	757,639,499	871,902,589	934,667,364	 1,005,745,229	1,156,017,206
Total	\$ 1,654,611,469	\$ 1,835,073,769	\$ 1,928,021,202	\$ 2,060,750,613	\$ 2,262,221,354
Public Pension Plans	 2008	 2009	 2010	 2011	 2012
Bloomington Fire (12/31)	\$ 88,639,493	\$ 98,707,362	\$ 111,072,465	\$ 110,822,777	\$ 122,544,916
Duluth Teachers' (6/30)	271,616,844	179,933,200	192,402,546	213,367,995	194,552,931
Minneapolis Fire (12/31)	182,391,932	211,052,137	217,167,206	*	*
1	102,371,732	211,032,137	217,107,200		
Minneapolis Police (12/31)	249,250,216	280,741,244	301,008,825	*	*
Minneapolis Police (12/31) St. Paul Teachers' (6/30)				* 950,120,989	* 881,926,414

2005

2006

2007

2004

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

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

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

Table 11 **Net Assets/Net Position**<sup>1</sup> **per Member** For Fiscal Years 2003 to 2012

<b>Public Pension Plans</b>	 2003	 2004	 2005	 2006	 2007
Bloomington Fire (12/31)	\$ 314,743	\$ 350,664	\$ 363,803	\$ 401,989	\$ 395,335
Duluth Teachers' (6/30)	66,203	78,984	81,819	86,861	94,371
Minneapolis Fire (12/31)	362,828	383,238	398,784	425,754	454,023
Minneapolis Police (12/31)	337,297	371,577	397,836	434,741	445,110
St. Paul Teachers' (6/30)	79,028	88,482	94,325	101,141	116,171
<b>Public Pension Plans</b>	2008	 2009	2010	2011	2012
Bloomington Fire (12/31)	\$ 288,728	\$ 322,573	\$ 365,370	\$ 368,182	\$ 394,035
Duluth Teachers' (6/30)	80,622	53,266	57,076	63,220	57,989
Minneapolis Fire (12/31)	309,139	370,267	394,133	*	*
Minneapolis Police (12/31)	289,826	334,614	369,790	*	*
St. Paul Teachers' (6/30)	101,652	76,206	80,223	91,640	84,540

Note: This calculation is the result of dividing the Net Assets Held in Trust for Pension Benefits/ Net Position Held in Trust for Pension Benefits by the Members at Fiscal Year End.

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

<sup>\*</sup> 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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Table 12

Unfunded Actuarial Accrued Liability per Member
For Fiscal Years 2003 to 2012

<b>Public Pension Plans</b>	2003		2004		2005		 2006	2007	
Bloomington Fire (12/31)	\$	(29,166)	\$	(46,045)	\$	(70,787)	\$ (101,831)	\$	(93,413)
Duluth Teachers' (6/30)		3,619		7,554		12,987	15,805		13,004
Minneapolis Fire (12/31)		82,557		40,674		67,613	60,433		34,510
Minneapolis Police (12/31)		172,181		156,847		114,213	70,055		59,285
St. Paul Teachers' (6/30)		30,312		35,782		39,816	42,206		37,743

<b>Public Pension Plans</b>	2008		2009	2010	 2011	2012	
Bloomington Fire (12/31)	\$ 27,57	5 \$	3,237	\$ (18,750)	\$ (9,538)	\$	5,355
Duluth Teachers' (6/30)	19,28	7	25,327	17,010	25,479		35,592
Minneapolis Fire (12/31)	72,73	l	93,386	99,363	*		*
Minneapolis Police (12/31)	211,89	l	164,049	185,899	*		*
St. Paul Teachers' (6/30)	35,36	l	39,850	46,264	40,235		53,613

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

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

Table 13

# **Administrative Expenses**

<b>Public Pension Plans</b>	 2003	 2004	 2005	 2006 200		2007
Bloomington Fire (12/31)	\$ 75,953	\$ 64,223	\$ 64,844	\$ 71,254	\$	74,683
Duluth Teachers' (6/30)	444,810	448,704	436,507	424,840		456,987
Minneapolis Fire (12/31)	615,867	577,336	668,027	586,587		581,704
Minneapolis Police (12/31)	582,371	769,566	589,491	613,007		529,561
St. Paul Teachers' (6/30)	 473,934	 515,716	 558,574	 590,852		695,700
Total	\$ 2,192,935	\$ 2,375,545	\$ 2,317,443	\$ 2,286,540	\$	2,338,635

Public Pension Plans	 2008	 2009	2010	 2011 2012		2012
Bloomington Fire (12/31)	\$ 107,871	\$ 77,778	\$ 75,288	\$ 79,771	\$	87,482
Duluth Teachers' (6/30)	487,944	505,164	505,672	497,009		628,923
Minneapolis Fire (12/31)	692,982	1,122,885	1,028,608	*		*
Minneapolis Police (12/31)	578,932	812,279	767,575	*		*
St. Paul Teachers' (6/30)	691,157	604,724	602,001	 722,397		736,446
Total	\$ 2,558,886	\$ 3,122,830	\$ 2,979,144	\$ 1,299,177	\$	1,452,851

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

Table 14

# **Administrative Expenses per Member**

<b>Public Pension Plans</b>	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Bloomington Fire (12/31)	\$ 260	\$ 222	\$ 224	\$ 245	\$ 242	\$ 351	\$ 254	\$ 248	\$ 265	\$ 281
Duluth Teachers' (6/30)	127	137	134	131	135	145	150	150	147	187
Minneapolis Fire (12/31)	893	871	1,047	942	957	1,175	1,970	1,887	*	*
Minneapolis Police (12/31)	607	820	640	682	606	673	968	943	*	*
St. Paul Teachers' (6/30)	49	52	56	59	70	69	60	59	70	71

<sup>\*</sup> The Minneapolis Firefighters' Relief Association and the Minneapolis Police Relief Association were consolidated with the Public Employe Retirement Association (PERA) in 2011.

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# Table 15

#### **Members at Fiscal Year End**

For Fiscal Years 2003 to 2012

<b>Public Pension Plans</b>	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Bloomington Fire (12/31)	292	289	289	291	309	307	306	304	301	311
Duluth Teachers' (6/30)	3,493	3,277	3,268	3,246	3,380	3,369	3,378	3,371	3,375	3,355
Minneapolis Fire (12/31)	690	663	638	623	608	590	570	551	*	*
Minneapolis Police (12/31)	959	939	921	899	874	860	839	814	*	*
St. Paul Teachers' (6/30)	9,587	9,854	9,909	9,944	9,951	10,070	10,147	10,163	10,368	10,432
Total	15,021	15,022	15,025	15,003	15,122	15,196	15,240	15,203	14,044	14,098

Note: "Members" is the sum of retired/beneficiary, terminated and active members at fiscal year end.

<sup>\*</sup> 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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Table 16

Members at Fiscal Year End - Retirees & Beneficiaries Receiving Benefits

For Fiscal Years 2003 to 2012

<b>Public Pension Plans</b>	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Bloomington Fire (12/31)	139	147	149	151	161	160	163	166	171	174
Duluth Teachers' (6/30)	1,107	1,137	1,153	1,190	1,227	1,243	1,264	1,295	1,344	1,386
Minneapolis Fire (12/31)	630	621	601	592	581	563	546	528	*	*
Minneapolis Police (12/31)	935	921	904	884	860	846	828	806	*	*
St. Paul Teachers' (6/30)	2,248	2,361	2,505	2,624	2,738	2,851	2,933	3,044	3,212	3,292
Total	5,059	5,187	5,312	5,441	5,567	5,663	5,734	5,839	4,727	4,852

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

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

**Table 17** 

**Public Pension Plans** 

Bloomington Fire (12/31)

# **Investment Expenses**

2005

86,305

\$

2006

29,588

\$

2007

17,251

\$

For Fiscal Years 2003 to 2012

78,689

2004

\$

Duluth Teachers' (6/30)	959,000	1,203,295	1,169,704	1,289,870	1,758,675
Minneapolis Fire (12/31)	1,001,354	1,042,816	1,088,434	1,141,368	1,061,056
Minneapolis Police (12/31)	932,425	922,855	645,622	504,973	555,491
St. Paul Teachers' (6/30)	 2,774,231	 3,059,912	 3,422,410	 4,609,937	 5,064,712
Total	\$ 5,731,754	\$ 6,307,567	\$ 6,412,475	\$ 7,575,736	\$ 8,457,185
	• • • • •	••••	• • • • •		•••
<b>Public Pension Plans</b>	2008	 2009	2010	2011	2012
Public Pension Plans Bloomington Fire (12/31)	\$ <b>2008</b> 57,751	\$ <b>2009</b> 60,234	\$ <b>2010</b> 93,871	\$ <b>2011</b> 109,000	\$ <b>2012</b> 122,563
	\$ 	\$	\$	\$	\$
Bloomington Fire (12/31)	\$ 57,751	\$ 60,234	\$ 93,871	\$ 109,000	\$ 122,563
Bloomington Fire (12/31) Duluth Teachers' (6/30)	\$ 57,751 1,566,292	\$ 60,234 1,289,965	\$ 93,871 1,209,193	\$ 109,000 1,359,608	\$ 122,563 1,269,821
Bloomington Fire (12/31) Duluth Teachers' (6/30) Minneapolis Fire (12/31)	\$ 57,751 1,566,292 847,469	\$ 60,234 1,289,965 794,662	\$ 93,871 1,209,193 835,285	\$ 109,000 1,359,608 *	\$ 122,563 1,269,821 *

Note: Investment Expenses excludes securities lending.

2003

64,744

\$

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

