A REPORT
TO THE
ARIZONA LEGISLATURE

Financial Audit Division

Procedural Review

Public Safety Personnel, Corrections Officer, and Elected Officials' Retirement System

Fiscal Years 1991 through 2011

STATE OF ARIZONA
OFFICE OF THE
AUDITOR
GENERAL

Debra K. Davenport
Auditor General

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DEBRA K. DAVENPORT, CPA
AUDITOR GENERAL

STATE OF ARIZONA
OFFICE OF THE
AUDITOR GENERAL

MELANIE M. CHESNEY
DEPUTY AUDITOR GENERAL

November 16, 2011

Members of the Arizona Legislature

The Honorable Janice K. Brewer, Governor

Mr. Brian Tobin, Chairman, Board of Trustees,
Public Safety Personnel, Corrections Officer, and
Elected Officials' Retirement System

Mr. Jim Hacking, Administrator, Public Safety Personnel,
Corrections Officer, and Elected Officials' Retirement System

Transmitted herewith is a report of the Auditor General, a procedural review of the Public Safety Personnel, Corrections Officer, and Elected Officials' Retirement System. This review was conducted under the authority granted to the Auditor General under Arizona Revised Statutes §41-1279.03(A)(3). I am also transmitting with this report a copy of the Report Highlights for this review to provide a quick summary for your convenience.

The review focused on the controls established over the System's use of outside legal counsel from fiscal years 2007 through 2011 and the investment practices and returns from fiscal years 1991 through 2010. No recommendations were made as a result of this procedural review.

My staff and I will be pleased to discuss or clarify items in the report.

This report will be released to the public on November 17, 2011.

Sincerely,

Debbie Davenport
Auditor General

cc: Richard J. Petrenka, Trustee
Gregory Ferguson, Trustee
Lauren Kingry, Trustee
Jeff Allen McHenry, Trustee
Randie A. Stein, Trustee

Attachment

2910 NORTH 44th STREET • SUITE 410 • PHOENIX, ARIZONA 85018 • (602) 553-0333 • FAX (602) 553-0051

STATE OF ARIZONA
OFFICE OF THE
AUDITOR GENERAL

Public Safety Personnel, Corrections Officer, and Elected Officials' Retirement System

REPORT
HIGHLIGHTS
PROCEDURAL REVIEW

System has taken reasonable steps to contain its excessive legal costs

Our Conclusion

The Public Safety Personnel Retirement System (PSPRS), Corrections Officer Retirement Plan (CORP), and Elected Officials' Retirement Plan (EORP), collectively referred to as the System, provide retirement, disability, and survivor benefits, and retiree health insurance premiums to members. From 2005 through 2009, the System's legal costs steadily increased. In 2009, new policies and rules were adopted to control legal costs, which resulted in costs falling over 50 percent between 2009 and 2010. From 1991 through 2010, the System's investment portfolio—characterized at times by a high concentration in equities—earned just over 7 percent in annual gains, falling short of the actuarially assumed rate of return during this period. In 2008, the System began to make significant changes to its investment policies. These policy changes have resulted in a more diversified investment portfolio and significantly reduced the effect that any one type of investment could have on investment returns.

2011

Fiscal Years 1991 through 2011

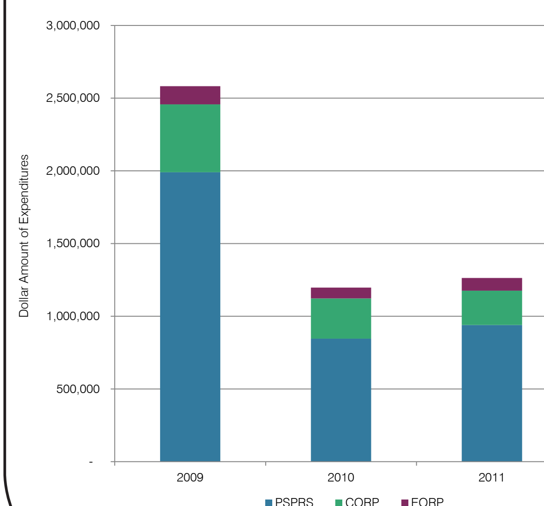
As of March 31, 2009, System's legal expenditures significantly exceeded budgeted amounts—In April 2009, the System's board of trustees (board) reviewed the status of its operating budget and determined that actual fiscal year-to-date legal expenditures of $2.3 million exceeded the budget by the end of March 2009 by over 45 percent. The fiscal year 2009 expenditures were part of a pattern of rising legal expenditures that began in fiscal year 2005.

Main cause of excessive legal fees was an inadequate review of legal invoices submitted for payment—The board's Operations and Audit Subcommittee evaluated the System's procedures for processing legal invoices and reviewed legal invoices paid to the System's outside legal counsel from July 1, 2008 through March 31, 2009. At the time of review, the System's assistant administrator was responsible for reviewing and approving legal invoices for payment. The Subcommittee determined that the procedures surrounding the use and payment of legal services were inadequate.

Board implemented new policies and procedures governing legal expenditures—In June 2009, the board approved a new Procedures and Rules for Requesting, Reviewing, Evaluating, and Approving Legal Expenditures policy. Under the new policy the System's administrator and assistant administrators must approve all requests for legal services except for 1) routine matters agreed upon in advance by the administrator and outside legal counsel, 2) requests for legal services and work product made by the board, and 3) consultations between individual board members and outside legal counsel. Legal invoices for services rendered are reviewed by both the administrator and assistant administrators.

System is taking reasonable steps to efficiently manage its need for legal services—Since the implementation of the new policy at the end of fiscal year 2009, as shown in the figure below, legal expenditures have dropped significantly. To further enhance the System's ability to manage its legal expenditures, the System has contracted with 14 law firms with specialized expertise, and plans to hire in-house legal counsel for more routine matters. Further, the System was assigned an Assistant Attorney General on a part-time basis to perform noninvestment-related legal services.

Actual Expenditures for Legal Fees
Fiscal Years 2009 through 2011

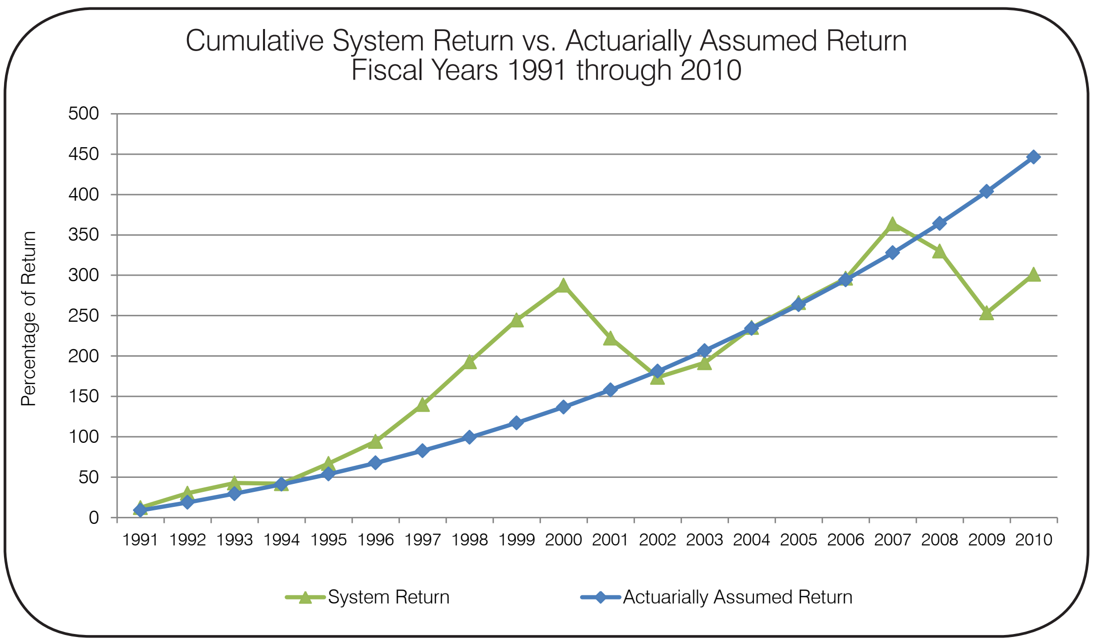


System has diversified its investment portfolio and implemented policy to better manage risk and generate more consistent returns

System's overall investment performance fell short of assumed returns—From fiscal years 1991 through 2010, the System's investment portfolio was managed by an administrator and board of trustees, with guidance provided by a variety of financial services firms. During this period, the System's total investment performance averaged just over 7 percent in annual gains. This performance was nearly 2 percent lower than the actuarially assumed return, the rate of return required for the System to meet its long-term benefit obligations. At times, the System experienced volatile rates of returns due to high concentration in domestic equities with limited constraints on the concentration in certain types of stock, particularly information technology stocks.

The System's actual rate of return exceeded the actuarially assumed rate of return in some years but dropped below it in other years. The overall result, as the figure below shows, is a cumulative rate of return of about 300 percent for fiscal years 1991 through 2010. This means that each dollar in the fund in fiscal year 1991 earned about $3.00 by fiscal year 2010 through the System's investment strategies. To match the actuarially assumed rate of return during this period, however, each dollar in the fund in fiscal year 1991 should have earned about $4.50. As the figure below shows, the System's underperformance resulted primarily from losses experienced in fiscal years 2001 through 2002 and 2008 through 2009.

System implemented new investment policy to diversify its portfolio and minimize risk—In fiscal year 2008, the System began to make significant changes to its investment portfolio, adjusting its asset allocation to lower dependence on U.S. stocks to 50 percent. At the same time, the System increased its exposure to international stocks, accounting for 16 percent of the total portfolio. During fiscal years 2009 and 2010, the System adopted a new asset allocation mix as part of its investment policy, creating a more diverse portfolio with even less reliance on stocks. The revised policy sets a target range for each type of investment and all investments are rebalanced as needed to meet their respective target range.



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INTRODUCTION
Scope and Objectives

The Office of the Auditor General has conducted a procedural review of the Public Safety Personnel Retirement System (PSPRS), Corrections Officer Retirement Plan (CORP), and Elected Officials' Retirement Plan (EORP), collectively referred to as the System. Procedural reviews, which focus more narrowly on certain aspects of agency operations than do full-scale audits, are authorized under Arizona Revised Statutes (A.R.S.) §41-1279.03(A)(3). This procedural review focused on the following two topics:

- The controls established over the System's use of outside legal counsel from fiscal years 2007 through 2011, particularly in light of legal expenditures that greatly exceeded budgeted amounts in fiscal year 2009, and
- The investment practices of the board of trustees and the System's administrator from fiscal years 1991 through 2010 and the investment portfolio performance over the same period.

Public Safety Personnel, Corrections Officer, and Elected Officials' Retirement System

Board of trustees and local boards are responsible for managing retirement plans

The System is overseen by a single board of trustees, which appoints an administrator to carry out its policies. In addition, certain administrative duties for PSPRS and CORP have been delegated in statute to local boards.

- **Role of board of trustees**—The System is overseen by a board of trustees (board) that consists of seven members appointed by the Governor. The seven members represent several different constituencies, as follows:
  - two are members from local boards (discussed below);
  - one is a representative from a state employer;
  - one is a representative from a city employer;
  - one is either an elected county or state official or a judge of the superior court, court of appeals, or supreme court; and
  - two members represent the general public and must be one of the following: a person with at least 10 years' experience as a portfolio manager in a fiduciary capacity; a securities analyst; an employee or principal of a trust institution, investment organization, or endowment fund acting either in a management- or investment-related capacity; a chartered financial analyst in good standing as determined by the association for investment management and research; a professor at the university level teaching economics or investment related subjects; an economist; or any other professional engaged in the field of public or private finances.

  The board is responsible for the investment of each retirement plan's assets, setting employer contribution rates, adopting a budget, hiring personnel to administer the System, setting up and maintaining records and accounts for each member, paying benefits, and the general protection of each retirement plan. The board of trustees was responsible for managing an investment portfolio valued at approximately $5.9 billion at June 30, 2010.

- **Role of administrator**—The administrator of PSPRS, CORP, and EORP is appointed by the board and invests the monies of the retirement plans at the board's direction subject to the investment policies and fund objectives promulgated by the board. The administrator establishes and maintains a system of accounts and records for PSPRS, CORP, and EORP, and hires employees and contracts for professional services to manage operations, investments, and legal affairs.

- **Role of local boards—**Administrative duties for the PSPRS and CORP plans are primarily the responsibility of five-member local boards. These local boards perform such duties as determining timing and amount of eligible benefits, prescribing procedures for filing of applications for benefits, and determining rights of claimants to benefits. The Department of Corrections, Department of Juvenile Corrections, Department of Public Safety, each participating county sheriff's department, each participating city or town, each participating employer of full-time dispatchers, and the judiciary have a local board. PSPRS has 234 local boards and CORP has 26 local boards. The five members of each local board are composed of two members elected by secret ballot by employees participating in PSPRS or CORP in the applicable jurisdiction, two citizens appointed by officials defined in statute (for example, county board of supervisors), and one member defined in statute (for example, chairman of the county board of supervisors or designee). In contrast to the PSPRS and CORP plans, administrative duties for the EORP are the responsibility of the board of trustees.

Retirement Plans

The board of trustees and the administrator administer three retirement plans created by the Arizona State Legislature.

- **Public Safety Personnel Retirement System Plan—**The PSPRS is a retirement plan for full-time certified peace officers and full-time firefighters in the State of Arizona. PSPRS provides a state-wide retirement program to these public safety personnel who are regularly assigned to hazardous duty of the type expected of peace officers or firefighters. PSPRS is designed to meet the special needs of personnel engaged in hazardous-duty situations. PSPRS provides retirement, disability, and survivor benefits, cancer insurance benefits, and retiree health insurance premium subsidies. As of June 30, 2010, PSPRS had over 30,000 members, including nearly 9,000 retirees. See textbox on the next page for demographic information on PSPRS.

- **Corrections Officer Retirement Plan—**The CORP is a retirement plan for full-time state and county correctional and detention officers. CORP provides a state-wide retirement program to correctional and detention officers and is designed to meet the special needs of personnel engaged in the prison and detention environment. Correctional officers employed by the Arizona Department of Corrections (DOC) or youth correctional officers employed by the Arizona Department of Juvenile Corrections (DOJC) are members of CORP. Certain other designated positions within the DOC or DOJC are members of CORP. CORP provides retirement, disability, and survivor benefits, and retiree health insurance premium subsidies. As of June 30, 2010, CORP had nearly 19,000 members, including over 2,900 retirees. See textbox for demographic information on CORP.

- **Elected Officials' Retirement Plan**—The EORP is a retirement plan for judges and state, county, and local elected officials of participating governmental employer units. For example, members of the Arizona Legislature and the 15 county boards of supervisors can choose to participate in EORP. EORP provides retirement, disability, and survivor benefits, and health insurance premium subsidies. As of June 30, 2010, EORP had nearly 1,900 members, including over 900 retirees. See textbox for demographic information on EORP.

Average Monthly Benefit
Retired Members at June 30, 2010

Plan	No. Retirees	Avg. Monthly Benefit
PSPRS	8,954	$3,821
CORP	2,908	$1,999
EORP	921	$3,559

Retired Members at June 30, 2010
(Normal Retirement)

Plan	Avg. Years of Service	Avg. Age at Retirement
PSPRS	23.6	51.0
CORP	19.3	57.1
EORP	14.5	61.0

Source: Auditor General staff analysis of the Statistical Section of fiscal year 2010 annual reports for PSPRS, CORP, and EORP available from www.psprs.com.

CHAPTER 1

The System's board has developed policies and procedures to help ensure that charges for legal services are reasonable, but must remain diligent in monitoring services requested and evaluating the reasonableness of billings for services rendered. In April 2009, the board reviewed the status of its operating budget and determined that legal expenditures were already significantly above budgeted legal expenses for the entire fiscal year. The board determined that the main cause of excessive legal fees was an inadequate review of legal invoices submitted for payment. In response, the board implemented new policies requiring more extensive review by both the administrator and the board. The System has also taken steps to reduce expenses by contracting with specialists who require fewer hours to conduct complicated legal work and is planning to hire in-house legal counsel to handle more routine matters. Due to the Board having implemented policies and procedures to effectively address the problem of excessive legal costs, and because the Board is taking reasonable steps to efficiently manage its need for legal services, the Office of the Auditor General is not making any recommendations about the matters discussed in this chapter.

System has taken reasonable steps to contain its excessive legal costs

Statutes authorize System to use legal counsel to protect fund assets

A.R.S. §38-848(C) states that the System's primary responsibility is to manage the investment of monies that the board administers for the purposes of paying benefits to members and for paying the System's administrative expenses. Statutes provide for the System to employ legal counsel to assist in this process. Specifically, A.R.S. §38-848(H)(7) and (10) state that in order for the board to protect fund assets, it may need to appear before local boards, state courts, or other political subdivisions through legal counsel; and it may need to settle threatened or actual litigation against any of the System's monies. In addition, A.R.S. §38-848(K)(7) states the board should establish procedures and guidelines for contracts with various professionals including legal counsel. Finally, A.R.S. §38-848(L)(6) states that the administrator should, under the board's direction, recommend to the board annual contracts for various professionals including legal counsel.

System has retained same outside legal counsel over many years

The board has retained the same outside legal counsel since 1987. According to A.R.S. §38-848(M), the System is not subject to the Arizona Procurement Code. However, in accordance with A.R.S. §38-848(N), the attorney for the board must be approved by the Attorney General. The System's outside legal counsel has been approved by the Attorney General to be the board's legal counsel since 1987. The current outside legal services contract extends through June 30, 2012, and includes the following services (not exhaustive):

- Advise the board about its legal rights and obligations
- Represent the board and the System's plans in all litigation
- Perform legal due diligence on any of the investments of the System's plans

- Negotiate terms of contracts
- Prepare legal opinions
- Attend board meetings, as requested
- Prepare reports on status of litigation and unregistered investments
- Prepare legislation for the benefit of the System's plans
- Lobby and testify before legislative committees
- Provide legal guidance for members and local boards
- Prepare documents necessary to qualify the System's plans for tax-exempt status under the Internal Revenue Code and to maintain such status

As of March 31, 2009, System legal expenditures significantly exceeded budgeted amounts

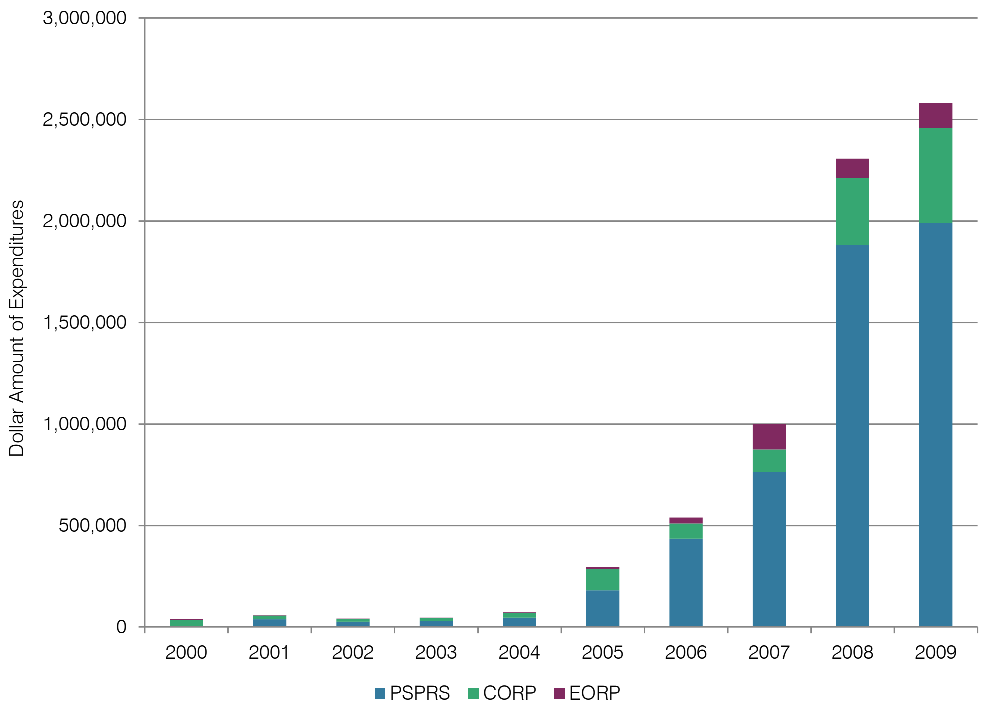
In April 2009, the board reviewed the status of its operating budget and determined that actual fiscal year-to-date legal expenditures of $2.3 million exceeded the budget by the end of March 2009 by over 45 percent. As Figure 1 on page 7 shows, the fiscal year 2009 expenditures were part of a pattern of rising legal expenditures that began in fiscal year 2005. The board's Operations and Audit Subcommittee (subcommittee) was charged with reviewing past legal expenditures to determine the reasons that actual legal expenditures were exceeding budgeted amounts.

Main cause of excessive legal fees was an inadequate review of legal invoices submitted for payment

The subcommittee evaluated the System's procedures for processing legal invoices and reviewed legal invoices paid to the System's outside legal counsel from July 1, 2008 through March 31, 2009. At the time of review, the System's assistant administrator was responsible for reviewing and approving legal invoices for payment. The subcommittee determined that the procedures surrounding the use and payment of legal services were inadequate. The subcommittee raised questions such as the following:

- Who can request legal services or legal work product?

Figure 1: Actual Expenditures for Legal Fees
Fiscal Years 2000 through 2009



Source: Auditor General staff analysis of the fiscal years 2000 through 2009 annual reports for PSPRS, EORP, and CORP available from www.psprs.com.

- Were the projects authorized?
- Who authorized the projects?
- Was the scope clearly defined?
- Are the fees and billable hours reasonable?
- How do we gauge reasonableness?
- Who should review and approve the billings for legal services?
- What is the process at the law firm once a request for legal services is made?
- How do we determine “value added” in the case of multiple attorneys?
- How can we streamline the process internally and externally?

In addition, from the invoices reviewed, the subcommittee identified 23 legal work projects performed totaling $775,738 that had one or more problems. For example, one work project involved outside legal counsel performing a final review of investment policies modified by the board. The subcommittee determined that the final review should have taken approximately 8 hours; however, the billing was for 56 hours with the final review suggesting only some editorial changes. Another work project involved ouwtside legal counsel performing benefit calculations for which they charged approximately 242 hours; however, nearly 44 of those hours were charged for "office conferences" of which it was not clear what value, if any, these office conferences added to the final work product. Table 1 describes each type of problem and the number of work projects affected.

Table 1: Problems with Questionable Charges of 23 Work Projects Performed by Outside Legal Counsel July 1, 2008 through March 31, 2009

Problem	No. of Occurrences
Unauthorized charges	3
Multiple charges for the same billable period	14
Charges excessive for services requested or work product produced	16
Charges for repeated revisions and group reviews	1

Source: *Summary of Legal Fees Analysis*, compiled and provided by PSPRS staff.

The work projects included investment policy review, Sudan/Iran/terror divestment legislation compliance, group trust development, benefit recalculations, deferred employer contributions, furlough/reduced workweek implications on benefits, research on rulemaking authority for the System, legislative drafting, and Internal Revenue Service determination letters and compliance.

As a result of the board's review, the administrator met with outside legal counsel to discuss the questionable work projects. The law firm maintained that all past charges were authorized by the board and properly billed. However, the law firm agreed to evaluate any of the System's concerns with future billings on a month-by-month basis and to apply credits as necessary. The System did not pursue the collection of any potential overpayments that may have been made to outside legal counsel for invoices paid from July 1, 2008 through March 31, 2009.

Board implemented new policies and procedures governing legal expenditures

In June 2009, the board approved a new Procedures and Rules for Requesting, Reviewing, Evaluating, and Approving Legal Expenditures policy that addressed the questions raised by the subcommittee. Under the new policy the System's administrator and assistant administrators must approve all requests for legal services except for 1) routine matters agreed upon in advance by the administrator and outside legal counsel, 2)requests for legal services and work product made by the board, and 3) consultations between individual board members and outside legal counsel. Legal invoices for services rendered are reviewed by both the administrator and assistant administrators. The administrator and assistant administrators identify for further research and resolution by the subcommittee those charges that are not requested or approved in advance, multiple charges for the same billable time period, charges that significantly exceed estimates or appear excessive, charges for hours to correct legal work product "mistakes" that arise through no fault of the System, and charges of repeated revisions and group reviews. Further, all monthly legal fees are now brought before the board at the regular board meeting for final approval prior to payment.

System is taking reasonable steps to efficiently manage its need for legal services

Since the implementation of the new policy at the end of fiscal year 2009, legal expenditures have dropped significantly. Specifically, as shown in Figure 2 on page 10, fiscal year 2010 expenditures were down $1.4 million, or 54 percent, from fiscal year 2009 expenditures. Fiscal year 2011 expenditures increased slightly by $65 thousand, or 5 percent, from fiscal year 2010 expenditures. The administrator stated that the new policy has been working well since its implementation in that charges for legal services are reasonable; however, he believes that the System must remain diligent in monitoring its legal expenditures.

To further enhance the System's ability to manage its legal expenditures, at the end of fiscal year 2011, the System contracted with 14 law firms for legal services in 4 areas: general counsel, tax, pension, and investment services. By using specialized professionals, the System anticipates that fewer hours will be needed by outside legal counsel to perform a particular service as the number of attorneys required to complete that service will be less than the number that would have been required by a firm without the specialized expertise.

Figure 2: Actual Expenditures for Legal Fees
Fiscal Years 2009 through 2011

Source: Auditor General staff analysis of the fiscal years 2009 and 2010 annual reports for PSPRS, EORP, and CORP available from www.psprs.com, and the fiscal year 2011 annual report for PSPRS, EORP, and CORP (unaudited) obtained from PSPRS staff.

In addition, in fiscal year 2012 the System plans to hire in-house legal counsel to handle more routine legal matters. The System plans to employ in-house legal counsel on a salary basis, allowing the System to have greater control over scrutinizing the work performed and limiting hours. Further, in August 2011 the System was assigned an Assistant Attorney General from the Attorney General's Office on a part-time basis to perform noninvestment-related legal services, allowing the System to retain greater control over services performed and the hours required to perform those services.

CHAPTER 2

System has diversified its investment portfolio to better manage risk and generate more consistent returns

In recent years, the System has implemented new investment policies to diversify its investment portfolio, better manage risk, and generate more consistent returns. From fiscal years 1991 through 2010, the System's investments returned an average rate of just over 7 percent—nearly 2 percent below the actuarially assumed rate[1] for the System to meet its long-term obligations[2] (see textbox, page 12, for key financial terms used in this chapter). In the early to mid 1990s, the System maintained a balanced portfolio of stocks and bonds that produced good rates of return. In the late 1990s and early 2000s, performance was strongly affected by a stock portfolio that was highly concentrated in domestic stocks and at times further concentrated in certain sectors, particularly information technology stocks. In 2003 the System adopted a policy of making its stock holdings more reflective of the Standard and Poor's (S&P) 500 Index, and in 2009, it significantly restructured its overall portfolio by adding new types of investments in an effort to create a more diverse mix of asset types. These changes were designed to meet long-term investment goals without exposing monies in the retirement plans to unnecessary volatility and risk. Given the System's changes to better diversify and manage its investment portfolio, the Office of the Auditor General is not making any recommendations about the matters discussed in this chapter.

System's overall investment performance fell short of assumed returns

From fiscal years 1991 through 2010, the System's total investment performance averaged just over 7 percent in annual gains. This performance was nearly 2 percent lower than the actuarially assumed return of almost 9 percent. It was also nearly 1 percent lower than the rate of return achieved by the Arizona State Retirement System (ASRS), the state agency that manages the retirement benefits for the State of Arizona, school districts and charter schools, some cities and towns, all 15 Arizona counties, and numerous special districts. During the same period, the ASRS slightly exceeded its own actuarially assumed rate of return of 8 percent.

The System's actual rate of return exceeded the actuarially assumed rate of return in some years but dropped below it in others. The overall result, as Figure 3 on page 13 shows, is a cumulative rate of return of about 300 percent for fiscal years 1991 through 2010. This means that each dollar in the fund in fiscal year 1991 earned about $3.00 by fiscal year 2010 through the System's investment strategies. To match the actuarially assumed rate of return during this period, however, each dollar in the fund in fiscal year 1991 should have earned about $4.50. As Figure 3 shows, the System's underperformance resulted primarily from losses experienced in fiscal years 2001 through 2002 and 2008 through 2009.

1 The actuarially assumed rate of return is the rate of return required for the System to meet its long-term benefit obligations and represents the expected return on investments. According to the System's administrator, the actuarially assumed rate is recommended by the System's contracted actuarial services firm, subject to approval by the board of trustees. In addition, the actuarial services firm conducts a study every 5 years to determine if the assumed rate is consistent with actual returns and adjusts the assumed rate as needed. Studies may be performed more often as needed.

2 Rate of investment return is one of many factors that affects the overall balance in the System's three retirement plans. Some other factors include salary and payroll growth, contribution levels of employees and employers, number of retirees receiving benefits, and the amount of monthly payments retirees receive. This procedural review focused only on investment performance and did not examine other factors. To the degree that investment performance does not keep pace with actuarial assumptions, however, the System's fund balance—and therefore the amount of money available for current and future benefits—can be affected.

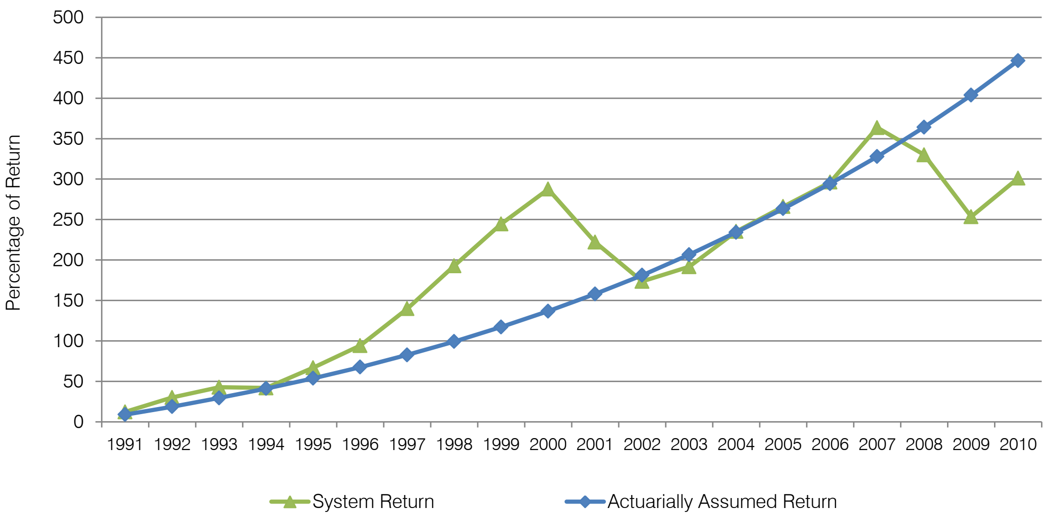
Financial Terms

- **Asset allocation—**The classification of investment types within a portfolio (e.g. stocks, bonds, etc.), usually shown as the percentage of each asset compared to the total; also referred to as asset mix.
- **Benchmark index—**A standard against which the performance of securities can be measured.
- **Market value—**The value of a stock based on the market price of the stock.
- **Realized gain (loss)—**A gain (loss) resulting from selling an asset at a price higher (lower) than the original purchase price.
- **Sector—**A designation assigned to stocks in similar industries (e.g. energy, healthcare, etc.), used to classify stocks by standardized industry definitions.
- **Sector concentration—**The portion of a stock portfolio invested in a specific sector; also known as sector weight.
- **Standard and Poor's (S&P) 500 Index—**An index of 500 stocks chosen for market size, liquidity, and industry grouping, among other factors. The S&P 500 is designed to be a leading indicator of U.S. equities.
- **Unrealized gain (loss)—**A profit (loss) that results from holding an asset at a price higher (lower) than the original purchase price, rather than selling it.

The System's investment approaches since fiscal year 1991 can be separated into four distinct periods, each discussed in further detail in the sections that follow. In brief, they are as follows:

- Fiscal years 1991 through 1995: balance between common stock (equities) and bonds
- Fiscal years 1996 through 2002: concentration in common stock, and more specifically in certain equity sectors
- Fiscal years 2003 through 2007: concentration in common stock, with constraints on sector concentration
- Fiscal years 2008 through 2010: diversification of investments, with emphasis on reduction of risk

Figure 3: Cumulative System Return vs. Actuarially Assumed Return Fiscal Years 1991 through 2010



Source: Auditor General staff analysis of the Investment Section of the fiscal years 1998 through 2010 annual reports for PSPRS, CORP, and EORP available from www.psprs.com. See Appendix A, p. a-i, for explanation of calculations.

Fiscal years 1991 through 1995: Mostly balanced portfolio followed the markets and met investment needs

From fiscal years 1991 through 1995, the System maintained an investment portfolio almost equally divided between stocks and bonds, averaging about 51 and 49 percent of the System's total portfolio, respectively. Over the same period, the System's investments earned an annual return of almost 11 percent, outpacing the actuarially assumed rate of return of 9 percent. During that same period, the ASRS returned an average of almost 12 percent, slightly higher than the System.

The only year during this time period in which the System did not meet the actuarially assumed rate of return was fiscal year 1994. In that year, the overall portfolio lost money, declining by a little under 1 percent as shown in Table 2 on page 14. This was due to poor performance by both the stock and bond portfolios, both of which lost money. However, in comparison to the System's benchmark indexes and the ASRS, the performance was relatively similar. In fiscal year 1994, the System's U.S. stock benchmark gained a little more than 1 percent and the bond benchmark lost almost 1.5 percent. A balanced benchmark index remained almost unchanged, less than 1 percent better than the System's overall returns. In fiscal year 1994, the ASRS gained almost 2 percent, outpacing both the System and the balanced index by a small margin.

Table 2: Percent of Change in Portfolio Compared to Benchmark Indexes and ASRS Fiscal Year 1994

	Stock	Bond	Overall[1]
System	-1.12%	-0.15%	-0.68%
Benchmark	1.24	-1.45	0.25
ASRS	n/a[2]	n/a[2]	1.9

[1] Overall portfolio returns are dependent upon the rate of return for each investment and weight of each investment compared to the total portfolio.

[2] Security specific information not available from the ASRS.

Source: Auditor General staff analysis of the Investment Section of the fiscal year 2001 annual reports for PSPRS, CORP, and EORP available from www.psprs.com and the Historical ASRS Investment Rates of Return available from www.azasrs.gov. See Appendix A, p. a-i, for explanation of calculations.

According to the System's former administrator during this period, from fiscal years 1991 to 1995 investments were managed internally, primarily by the administrator with board approval. The System received investment management advice from a financial services firm. Once the purchase of specific stocks was approved by the board, generally following the recommendation of the financial services firm, the administrator was able to buy and sell them through investment brokers to meet the System's investment objectives.

Fiscal Years 1996 through 2002: High concentration in domestic stocks and over-weighted sectors resulted in a volatile portfolio

From fiscal years 1996 through 2002, the System maintained an investment portfolio primarily consisting of domestic equities with limited constraints on the concentration in certain types of stock. As such, the System's investment return was highly dependent on the U.S. stock market, and more specifically on certain stock market sectors (see textbox on page 15 for sectors and examples), resulting in a volatile portfolio that was consistently well above or well below the chosen benchmarks.

Sector Examples—Standard & Poor's uses the Global Industry Classification System (GICS). The GICS methodology classifies stocks in the following 10 sectors:

Sector	Example
Energy	Exxon Mobil
Materials	Dow Chemical
Industrials	General Electric
Consumer Discretionary	Target Corp
Consumer Staples	Procter & Gamble
Health Care	Johnson & Johnson
Financials	Citigroup
Information Technology	Apple Inc.
Telecommunication Services	AT&T Inc.
Utilities	Duke Energy

Source: Standard and Poor's (S&P) 500 Index data available from www.standardandpoors.com.

During this period, the System's investments continued to be managed internally, primarily by the administrator with board approval and under outside financial guidance. For fiscal year 1996, the outside guidance was provided by the financial services firm used in fiscal years 1991 through 1995. For fiscal years 1997 through 2002, the outside guidance was provided by Standard and Poor's (S&P) (see textbox for more information about S&P's responsibilities). According to the System's administrator during this period, both the financial services firm and S&P recommended stocks for purchase as well as general guidelines for allocating assets between stocks, bonds, and other types of investments.

Standard and Poor's Responsibilities

From fiscal years 1997 through 2004, S&P acted as the System's sole investment advisor. According to the contracts entered into by the System, an S&P senior officer was required to attend, in person or by teleconference, each of the board meetings and provide the following:

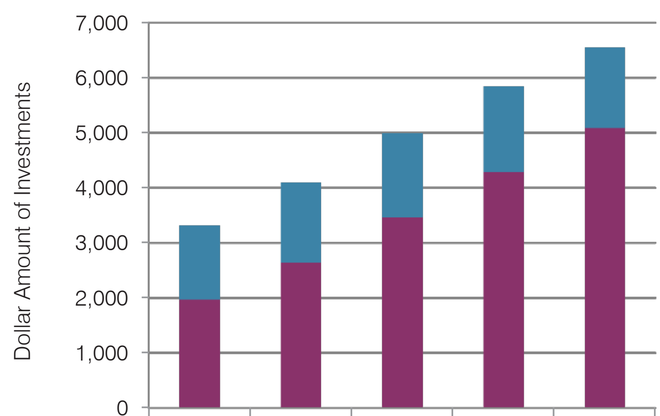
- Review of the individual stocks held by the System;
- Analysis of the diversification of the System;
- Review of the general U.S. investment and economic outlook; and
- Specific buy and sell lists of equities with accompanying written support for S&P's recommendations.

The contracts also stipulated that all investment decisions were at the discretion and the sole responsibility of the System and that S&P was not liable for the performance of the System's stock investments. According to the administrator during this period and review of board minutes, S&P met its contractual obligations.

Source: Auditor General staff analysis of consulting agreements entered into by S&P and the System, effective July 1, 1997 through June 30, 2005.

Fiscal years 1996 through 2000: High concentration in stocks and certain sectors helped the System's portfolio outpace benchmarks—From fiscal years 1996 through 2000, the System maintained a portfolio that relied heavily on common stocks. At June 30, 1996, they accounted for almost 60 percent of all investments. Over the next 4 years, the concentration in stocks grew due to appreciation in the stock market and continued purchases. As shown in Figure 4, by June 30, 2000, the stock portfolio accounted for nearly $5.1 billion, or 78 percent, of all investments. This dependence on stocks meant that as the stock market performed successfully, in large part, so would the System.

Figure 4: Composition of Portfolio
Fiscal Years 1996 through 2000
(In Millions)



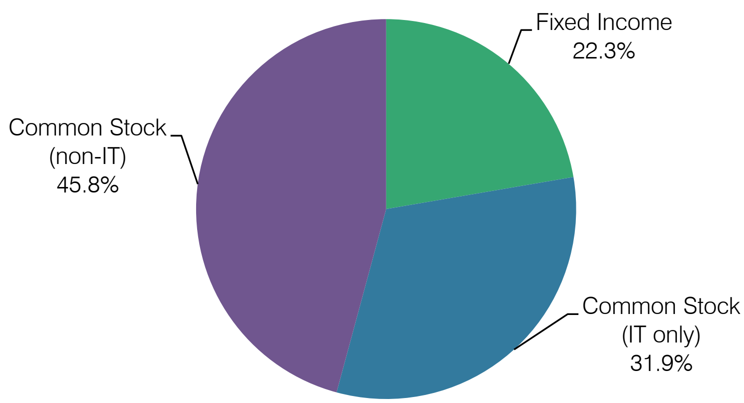
	1996	1997	1998	1999	2000
Fixed Income	$1,349	$1,454	$1,532	$1,556	$1,463
Common Stock	$1,969	$2,644	$3,461	$4,289	$5,087

Source: Auditor General staff analysis of the Investment Section of the fiscal year 2000 annual reports for PSPRS, CORP, and EORP available from www.psprs.com. See Appendix A, p. a-i, for explanation of calculations.

Not only did the System rely heavily on stocks, it concentrated its holdings in certain stock sectors. For example, at June 30, 1998, investments were significantly over-weighted compared to the S&P 500 Index in two sectors, Consumer Staples and Health Care. Each area represented more than 18 percent of the System's stock portfolio, both almost 7 percent above the S&P Index's relative weight. At the same time, the Consumer Discretionary sector was under-weighted compared to the S&P Index by 5 percent. This trend of over- and under-weighting continued through fiscal year 2000, most notably in the Information Technology (IT) sector. At June 30, 1998, the IT sector accounted for just over 16 percent of the System's stock portfolio, about 2 percent more than the S&P Index's relative weight. However, by June 30, 2000, the System's IT stocks accounted for more than 41 percent of the stock portfolio, almost

9 percent more than the S&P Index share for this same sector. As shown in Figure 5, this concentration meant that IT stocks accounted for almost one-third of all system investments, placing an extensive reliance on their performance.

Figure 5: Composition of Portfolio June 30, 2000



Source: Auditor General staff analysis of the fiscal year 2000 annual reports for PSPRS, CORP, and EORP available from www.psprs.com and Standard & Poor's Stock Books. (2000, June). New York: The McGraw-Hill Companies, Inc.

The reliance on U.S. stocks—and specifically on the IT sector—paid significant dividends from fiscal years 1996 through 2000. At the beginning of fiscal year 1996, the System's investment portfolio had a market value of $2.85 billion. Over the 5 years that ended June 30, 2000, the portfolio grew to $6.55 billion in market value, an annual return of more than 18 percent. This growth significantly outpaced the actuarially assumed return of 9 percent and also exceeded gains by the ASRS, which averaged about 17 percent for the same period. The System's returns were primarily the result of success in U.S. stocks. Over the same 5-year, period system stocks returned an average of almost 25 percent per year, helped in large part by the strong performance of IT stocks from fiscal years 1998 through 2000. As shown in Table 3 on page 18, in those 3 years, ten of the System's top-performing investments accounted for almost $1.3 billion in realized and unrealized gains. Of those ten investments, seven investments were classified as IT stocks, and netted over $1 billion in system growth.

Table 3: Top Ten Performing Investments
Fiscal Years 1998 through 2000

Company	Gain[1]	S&P Sector
Cisco Systems	$243,735,681	IT
EMC Corporation	221,690,285	IT
Intel Corporation	156,183,163	IT
Applied Materials	149,299,309	IT
Nortel Networks Corporation	116,649,869	IT
Home Depot	89,750,677	Consumer Discretionary
American International Group	80,288,091	Financials
International Business Machines	74,900,603	IT
Schering-Plough Corporation	74,626,663	Healthcare
Nokia Corporation	67,706,965	IT
Total	$1,274,831,306	

1 Includes both realized and unrealized gains during the period.

Source: Auditor General staff analysis of the fiscal years 1998 through 2000 annual reports for PSPRS, CORP, and EORP available from www.psprs.com and Standard & Poor's Stock Books. (2000, June). New York: The McGraw-Hill Companies, Inc.

Fiscal years 2001 through 2002: Reliance on IT stocks resulted in significant losses—During fiscal years 2001 and 2002, the stock market suffered significant losses, especially stocks in the IT industry. Consequently, the System's portfolio, made up largely of IT stocks, lost significant value. Table 4 on page 19 lists some of the biggest setbacks to the System's stock portfolio during the period. Again, the IT sector dominated the extreme changes with seven of the ten stocks listed accounting for almost $900 million in realized and unrealized losses.

Table 4: Lowest Ten Performing Investments
Fiscal Years 2001 and 2002

Company	Loss[1]	S&P Sector
Cisco Systems	$(206,646,040)	IT
EMC Corporation	(170,326,514)	IT
Intel Corporation	(133,358,625)	IT
Nortel Networks Corporation	(107,452,466)	IT
Sanmina Corporation	(100,443,806)	Industrials
Applied Materials	(99,233,172)	IT
JDS Uniphase Corporation	(91,856,573)	IT
Tyco International Ltd.	(79,741,301)	Industrials
LSI Logic	(72,427,375)	IT
Vodafone Group PLC	(71,785,874)	Telecommunications
Total	$(1,133,271,746)	

1 Includes both realized and unrealized losses during the period.

Source: Auditor General staff analysis of the fiscal years 2001 and 2002 annual reports for PSPRS, CORP, and EORP available from www.psprs.com and Standard & Poor's Stock Books. (2002, June). New York: The McGraw-Hill Companies, Inc.

Overall, the System's stock portfolio suffered losses of more than 25 and 26 percent during fiscal years 2001 and 2002, respectively. In each year, the System's stock losses were significantly worse than the stock benchmark's losses of nearly 15 and 18 percent, respectively. The System's losses resulted in total portfolio decreases of almost 17 percent in fiscal year 2001 and just over 15 percent in fiscal year 2002, far below the actuarially assumed return of 9 percent. In comparison, the ASRS suffered losses of approximately 7 and 8 percent in fiscal years 2001 and 2002, performing significantly better than the System during the down market. As shown in Figure 6 on page 20, by the end of fiscal year 2002, these losses reduced the System's stock portfolio to about $2.7 billion, or 60 percent of the overall $4.5 billion investment portfolio value.

Figure 6: Composition of Portfolio
Fiscal Years 2001 and 2002
(In Millions)

	2001	2002
Fixed Income	$1,742	$1,795
Common Stock	$3,654	$2,715

Source: Auditor General staff analysis of the Investment Section of the fiscal years 2001 and 2002 annual reports for PSPRS, CORP, and EORP available from www.psprs.com. See Appendix A, p. a-i, for explanation of calculations.

The losses were a combined result of the heavy reliance on IT stocks and significant losses in the stock market. The System took legal action to recover some of these losses, but the recoveries were minor in comparison to the size of the losses (see the textbox for more information about the System's efforts to recover losses).

Recovery of Losses

The System's custodial bank is responsible for tracking all legal proceedings regarding any equities that are part of the System's portfolio. As part of that responsibility, some losses discussed previously were recouped as part of class action settlements against the companies. For example, during fiscal year 2004, the System recovered $35,873 from a class action proceeding against Covad Communications; however, the recoupment was extremely immaterial as the losses sustained from investment in Covad Communications stock were more than $124 million. In fiscal year 2008, class action settlements with Broadwing, Inc. and WorldCom, Inc. netted $694,118 and $185,750, respectively. But again, the recovered monies were not significant compared to the losses, $30.4 million for Broadwing and $44.7 million for Worldcom. The System also recovered monies from class action proceedings against Sears and Williams Co., both at a fraction of the investment losses.

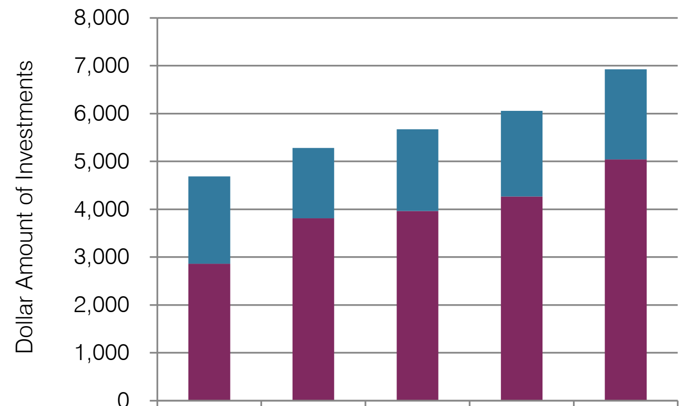
Source: Auditor General staff analysis of the Investment Section of the fiscal years 1998 through 2010 annual reports for PSPRS, CORP, and EORP available from www.psprs.com.

Throughout this period, the System continued to maintain over- and under-weighted balances in certain sectors. The IT sector, once more than 41 percent of the System's portfolio, fell to about 21 percent by the end of fiscal year 2002, yet still more than 7 percent higher than the S&P Index's weight. Energy stocks were also over-weighted, accounting for about 13 percent of the System's stock portfolio, more than 5 percent higher than the S&P Index's weight. In contrast, the Industrials sector was less than 5 percent of the System's stock portfolio, more than 6 percent less than the S&P Index's weight.

Fiscal Years 2003 through 2007: System implemented new investment policy to limit sector concentration of stocks

In October 2003, the System's board implemented a policy to limit the weighting of sectors to more closely match the S&P 500 Index. According to the new policy, sector weights were to remain within 4 percent of the S&P Index's weights, evaluated monthly, and rebalanced as needed. These efforts limited the System's reliance on any one sector and correspondingly reduced the risk that a segment of the stock market could have a disproportionate impact on the System's investment portfolio. However, as shown in Figure 7 on page 22, the System continued to rely heavily on stocks, averaging nearly 70 percent of its portfolio market value in stocks from fiscal years 2003 through 2007. Also during the period, the System's investments remained the responsibility of the administrator with assistance and guidance from the board and several different contracted financial advisors. The board continued to approve investment decisions. Over these 5 years, the System earned an average annual return of just over 11 percent, almost identical to the ASRS return and more than the System's actuarially assumed rate of return of 8.75 percent.

Figure 7: Composition of Portfolio
Fiscal Years 2003 through 2007
(In Millions)



	2003	2004	2005	2006	2007
Fixed Income	$1,824	$1,466	$1,710	$1,788	$1,883
Common Stock	$2,860	$3,813	$3,963	$4,268	$5,040

Source: Auditor General staff analysis of the Investment Section of the fiscal years 2003 through 2007 annual reports for PSPRS, CORP, and EORP available from www.psprs.com. See Appendix A, p. a-i, for explanation of calculations.

Fiscal Years 2008 through 2010: System implemented new investment policy to diversify its portfolio and minimize risk

In fiscal year 2008, the System began to make significant changes to its investment portfolio, adjusting its asset allocation to lower dependence on U.S. stocks to 50 percent. At the same time, the System increased its exposure to international stocks, accounting for 16 percent of the total portfolio. During fiscal years 2009 and 2010, the System adopted a new asset allocation mix as part of its investment policy, creating a more diverse portfolio with even less reliance on stocks. In May 2010, the revised investment policy was approved by the board with the target asset allocations shown in Table 5 on page 23. Throughout the 3-year period, the board remained responsible for approving investment decisions.

Table 5: Asset Allocation Policy
Fiscal Year 2010

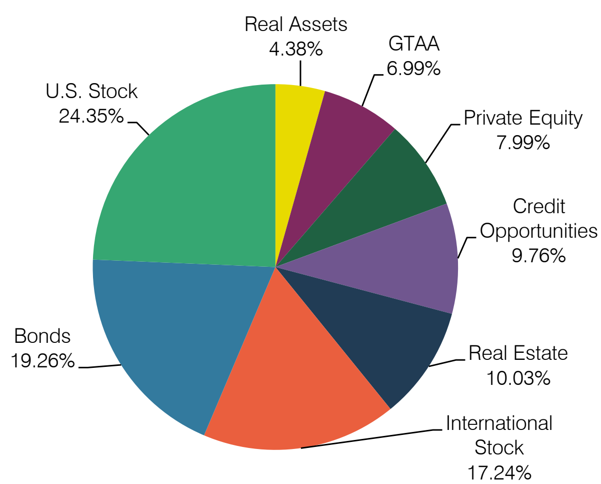
Investment	Target %	Target Range %
Domestic Stock	20%	15-30%
International Stock	15	10-20
Fixed Income	20	15-25
GTAA[1]	8	5-11
Real Estate	8	4-12
Private Equity	8	4-12
Credit Opportunities	9	2-12
Absolute Return	4	0-8
Real Assets	6	2-10
Short Term Investments	2	0-5

[1] GTAA—Global Tactical Asset Allocation

Source: Public Safety Personnel Retirement System Amended and Restated Statement of Investment Policies, May 2010 revision.

By the end of fiscal year 2010, domestic and international stocks accounted for 24 percent and 17 percent, respectively, of the System's investment portfolio, and all investments were rebalanced as needed to meet their respective target range (see Figure 8).

Figure 8: Asset Allocation
As of June 30, 2010



Source: Auditor General staff analysis of the Investment Section of the fiscal year 2010 annual reports for PSPRS, CORP, and EORP available from www.psprs.com.

While the board was implementing the new investment policy it was also working with new consultants. During fiscal year 2009, the board hired a new firm to provide general portfolio advice. In addition, it hired several specialized consultants for guidance regarding the System's alternative investments, such as private equities. Another significant change during this period was the System's decision to move its stock investments entirely to mutual funds so it would no longer be actively managing either its domestic or international stock portfolio. The mutual funds offered more diversified stock market exposure spread across all market sectors. Combined with the adjustments in asset allocation policy, these changes further diversified the System's investment portfolio and significantly reduced the effect any one investment could have on the total system investment return.

However, these efforts did not allow the System to avoid the widespread losses that occurred in domestic and international stock markets and in other types of investments, such as real estate, in fiscal years 2008 and 2009. The S&P 500 index lost approximately 11 and 27 percent in fiscal years 2008 and 2009, respectively. These market losses contributed to total system investment losses of about 7 and 18 percent in fiscal years 2008 and 2009, respectively, far below the actuarially assumed return of 8.5 percent. The markets rebounded in fiscal year 2010, leading to a system gain of more than 13 percent. During the 3-year period, the System averaged almost 4 percent in annual losses. At the same time, the ASRS was also affected by the declining markets and suffered similar losses.

As of June 2010, the System has a diversified portfolio participating in a variety of alternative investments and employing the services of specialized consultants. Although this approach does not shield the System from the kinds of systemic losses that characterized the economy in fiscal years 2008 and 2009, these efforts are expected to reduce any future impact that any one asset class can have on the total investment return.

APPENDIX A

This appendix provides information on the methods auditors used to meet the audit objectives.

The Auditor General and staff express appreciation to Public Safety Personnel, Corrections Officer, Elected Officials' Retirement System Director and staff for their cooperation and assistance throughout the procedural review.

Methodology

Auditors used a variety of methods to study the issues addressed in this report, including conducting interviews with the current and former administrators of the Public Safety Personnel Retirement System (PSPRS), Corrections Officer Retirement Plan (CORP), and Elected Officials' Retirement Plan (EORP), collectively referred to as the System, current staff, and former board of trustee members; reviewing Arizona Revised Statutes; and examining documentation provided by the System. Auditors also obtained data from the System's fiscal years 1998 through 2010 annual reports, audited by independent certified public accounting firms. Auditors specifically used the Investment Performance Data, Summary of Changes in Investment Portfolio, and schedules of Common Stock Acquired, Common Stock Sold, and Common Stock Portfolio for each plan.

In order to ensure the schedules presented in the annual reports were accurate, auditors examined third-party documentation, specifically, the custodian bank's fiscal year-end reports. Auditors randomly selected 50 stocks presented on the custodian bank statements and compared them to the annual reports, ensuring the total shares and market values presented were accurate. Auditors also compared the total value from the custodian bank statements to the annual reports, ensuring the reports materially agreed to the bank statements.

For analysis of the System's investments, fiscal year-end portfolio values were combined for each of the retirement plans (i.e., PSPRS, CORP, and EORP); system portfolio characteristics were calculated based on those totals. For total system investment portfolio returns, auditors weighted the return for each plan in proportion to the total system portfolio. For stocks, the returns were weighted on the proportion of each plan's stock portfolio in proportion to the System's total stock portfolio.

In order to calculate sector weighting for the System's equity portfolio, auditors obtained each stock's Global Industry Classification System classification from the Standard and Poor's Stock Books for each fiscal year. Stocks were grouped by sector and the total market value of each sector was determined. The specific sector weights were then calculated as their proportion to the total stock portfolio market value.

AGENCY RESPONSE

PUBLIC SAFETY PERSONNEL RETIREMENT SYSTEM
CORRECTIONS OFFICER RETIREMENT PLAN
ELECTED OFFICIALS' RETIREMENT PLAN

3010 East Camelback Road, Suite 200
Phoenix, Arizona 85016-4416
www.psprs.com
TELEPHONE: (602) 255-5575
FAX: (602) 255-5572

November 8, 2011

Ms Debra K. Davenport, CPA
Auditor General
State of Arizona
2910 North 44th Street, Suite 410
Phoenix, Arizona 85018

Dear Auditor General Davenport:

On behalf of the Board of Trustees of the Public Safety Personnel Retirement System (PSPRS), I wish to thank you and your staff for forwarding to us for our review and comment a copy of the report of the procedural review of PSPRS that your Office has conducted over the last several months.

Having completed our review, we are pleased to note that the report confirms the appropriateness of the actions that the PSPRS Board and staff have taken over the last several years to address and correct the problems that were the specific focus of the procedural review – namely, the inadequacy of the controls with respect to the review of the billings for legal services that caused legal service costs to rise so dramatically from 2005 through 2009 and the lack of diversification in the System's deployment of assets for investment purposes.

As the report accurately discloses, the new policies and procedures that PSPRS put into place in the spring of 2009 reduced legal expenditures by 54% from FY'09 to FY'10. In addition, our continuing efforts to use a variety of legal service providers, including the Arizona Attorney General's Office, and bring a significant portion of our legal work in-house should further reduce the System's costs for legal services.

With respect to the our efforts to diversify the deployment of assets for investment purposes, the report properly notes that our diversification efforts have substantially reduced the adverse impact that the performance in any one asset class can have on the System's total investment return. As the System has diversified, its reliance on equities in general and U.S. equities in particular has declined dramatically – from over 70% of the total portfolio at the end of FY'06 to just over 41% at the end of FY'10. The Board's diversification efforts were undertaken with the objectives of reducing risk and generating a more stable pattern of investment returns going forward.

We would like to take this opportunity to commend you and your audit staff for the thoroughness of the review and the clarity of the report. We are happy that we were able to be of assistance in this matter and are appreciative of having had the opportunity to facilitate your audit work.

Sincerely,

James M. Hacking
PSPRS Administrator