



A REPORT  
TO THE  
ARIZONA LEGISLATURE

Performance Audit Division

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Performance Audit and Sunset Review

# Arizona State Retirement System

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REPORT NO. 05 – 09



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**Debra K. Davenport**  
Auditor General

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AUDITOR GENERAL

STATE OF ARIZONA  
OFFICE OF THE  
**AUDITOR GENERAL**

WILLIAM THOMSON  
DEPUTY AUDITOR GENERAL

September 14, 2005

Members of the Arizona Legislature

The Honorable Janet Napolitano, Governor

Mr. Paul Matson, Director  
Arizona State Retirement System

Transmitted herewith is a report of the Auditor General, A Performance Audit and Sunset Review of the Arizona State Retirement System (ASRS). This report is in response to a November 20, 2002, resolution of the Joint Legislative Audit Committee. The performance audit was conducted as part of the sunset review process prescribed in Arizona Revised Statutes §41-2951 et seq. I am also transmitting with this report a copy of the Report Highlights for this audit to provide a quick summary for your convenience.

As outlined in its response, ASRS agrees with all of the findings and plans to implement all of the recommendations.

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

This report will be released to the public on September 15, 2005.

Sincerely,

Debbie Davenport  
Auditor General

Enclosure

# PROGRAM FACT SHEET

## Arizona State Retirement System

### Services:

The Arizona State Retirement System (ASRS) provides pension, disability, survivor, and retiree health insurance benefits, and educational services for most public sector employers in Arizona, including state universities, community colleges, public school districts, local and county governments, and the State of Arizona. As of June 30, 2005, ASRS had over 400,000 members, including nearly 70,000 retirees. ASRS provides these services through four different programs:

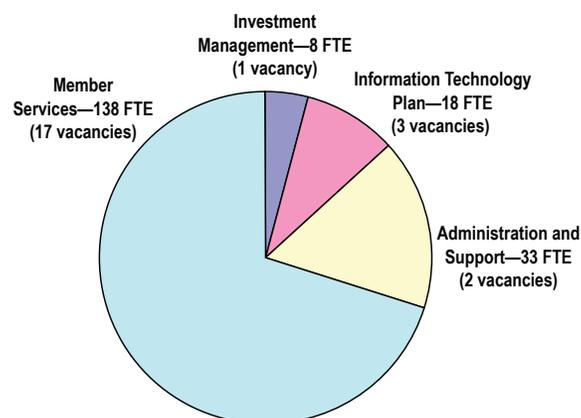
- **Member Services** comprises the Member Services, Financial Services, and Information Services Divisions. These divisions are responsible for the core functions of ASRS including the calculation, disbursement, and coordination of retirement, retiree health insurance, disability, and survivor benefits as well as refunds of member contributions. Member Services also responds to telephone, Internet, and in-person inquiries and provides educational services to members throughout the State.
- **Investment Management** is responsible for overseeing the investment of ASRS Retirement Fund (Fund) assets. ASRS manages 30 percent of the Fund internally and monitors the rest of the Fund's external management.
- **Administration and Support** comprises the various administrative functions needed to support the agency. Its responsibilities include human resources, budgeting, internal auditing, and legal counsel.
- **Information Technology Plan** is a business plan containing the development of the Public Employee Retiree Information System (PERIS), Internet Applications development, implementation of an Electronic Document Imaging Management System (EDIMS), and ongoing maintenance and upgrades to telephone and network technology.

### Facilities and equipment:

ASRS owns two buildings: the 3300 Tower in Phoenix where ASRS' main offices are located, and the building where its Tucson offices are located. The 3300 Tower is a 360,000-square foot office building worth \$23.2 million. The building that ASRS owns in Tucson has nearly 53,000 square feet and is worth \$2.8 million. ASRS also owns typical office and call center equipment.

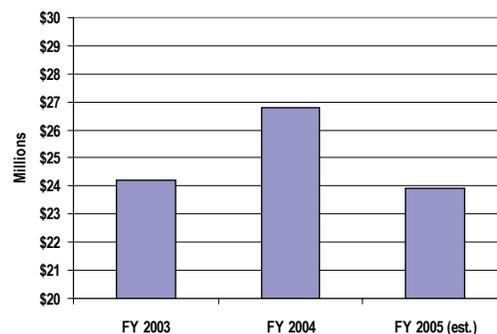
### Program staffing:

**197 FTEs as of June 30, 2005 (including 23 vacancies)**



### Program revenue:

**\$23.9 million (fiscal year 2005, estimated)**



## ASRS board members:

ASRS is overseen by a board of directors that consists of nine members appointed by the Governor and confirmed by the Senate. Of the nine board members, four members must have substantial experience in economics, finance, or investment.

- Five of the board members must be ASRS members and must include an educator, a retired member, and employees of the State and a political subdivision.
- Four other members must represent the public and cannot be ASRS members.

## Vision:

"For the benefit of our members, the Arizona State Retirement System will be a leading state benefit plan administrator in the areas of:

- Core Member Services
- Funded Status
- Investment Performance
- Operational Effectiveness

This will be accomplished while keeping program benefits and associated costs relatively aligned and maintaining actuarial and fiscal integrity."

## Adequacy of goals and performance measures:

ASRS has 18 goals and 111 performance measures for its 4 programs. A review of ASRS' mission, goals, and performance measures indicates that they align with each other. ASRS includes all recognized performance measures: input, output, efficiency, and quality. The performance measures also cover areas central to ASRS' mission such as the timeliness and accuracy of refund calculations and payments, call center operations, and the performance of investments.

While ASRS' internal strategic plan includes goals for the time it takes to pay a new retiree his or her first check and for that first check's accuracy, it does not have externally reported performance measures in these areas. Since these are critical functions, ASRS should consider including measures of the timeliness and accuracy of its initial retirement benefit payments.

Source: Auditor General staff compilation of unaudited information obtained from the Arizona Financial Information System (AFIS) Accounting Event Transaction File for the years ended June 30, 2003 and 2004; agency-prepared financial estimates for the year ended June 30, 2005; Arizona Revised Statutes; and other information provided by ASRS.

# SUMMARY

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The Office of the Auditor General has conducted a performance audit and sunset review of the Arizona State Retirement System (ASRS) pursuant to a November 20, 2002, resolution of the Joint Legislative Audit Committee. This audit was conducted as part of the sunset review process prescribed in Arizona Revised Statutes (A.R.S.) §41-2951 et seq.

Established in 1953, ASRS contributes toward members' long-term financial security by providing retirement, disability, survivor, and retiree health insurance benefits. ASRS is also responsible for managing the investments of its \$22 billion trust fund. Finally, ASRS disseminates information to retirees, members, and employers through its call center, walk-in service centers, retirement seminars, and Director's Outreach meetings, and through various communication mediums such as its Web site, its semi-annual newsletter, and a yearly benefit statement sent to nonretired ASRS members. As of June 30, 2005, ASRS had over 400,000 members, including nearly 70,000 retirees.

## ASRS' investment management generally appropriate (see pages 9 through 19)

ASRS is generally managing its investments appropriately. ASRS invests its \$22 billion trust fund in four types of asset classes: domestic equities, which are stocks in American companies; international equities, which are stocks in international companies; fixed-income instruments such as bonds; and real estate. ASRS' mix of investments is set primarily through a long-term investment approach called strategic asset allocation. The ASRS Board (Board) implements this approach by setting a percentage of total fund assets that each class will hold. The Board complements its long-term asset allocation approach with a short-term approach called tactical asset allocation, which focuses on taking advantage of changing conditions in the economy to achieve more immediate investment returns. Auditors reviewed the investment approaches of four other public funds and found that each fund was similar to the ASRS in its use of both long-term and short-term investment approaches.

As of March 31, 2005, ASRS had exceeded its overall investment goal of a rate of return averaging 8 percent a year over a 10-year period, but its greater reliance on domestic equities means that the rate of return is driven substantially by the stock market's performance. As of March 31, 2005, ASRS devoted approximately 56 percent of its assets to domestic equities, above other pension funds' average of 44.5 percent. According to ASRS, it has a higher allocation to domestic equities because this asset class produces higher long-term returns than those of other asset classes. Measured over 1-, 3-, and 5-year periods ending March 31, 2005, ASRS' rate of return is lower than 8 percent, reflecting the major decreases in domestic equity prices that occurred during these periods. Conversely, for the 10-year period ending March 31, 2005, which includes increases in the price of domestic equities, ASRS performs better in relation to other public pension systems than it does for the 1-, 3- and 5-year periods ending on the same date.

ASRS is just beginning to invest in real estate. In August 2003, the Board approved the allocation of 6 percent of its total assets to be invested in real estate. Since that time, ASRS has laid the groundwork for such investments, hiring a real estate investment consulting firm and an internal real estate investment manager, and designing and adopting a real estate investment program. ASRS has also hired some law firms to provide legal advice and selected some investment management firms for its first round of real estate investments. ASRS plans to invest primarily in high-quality, existing properties that can provide an immediate source of rental income, but will also invest in properties that offer a higher potential for return. ASRS plans to further diversify by investing in real estate nation-wide and in a variety of property types, primarily office buildings, retail establishments, industrial complexes, and multi-family housing.

In 2006, the Board plans to formally review ASRS' asset allocation policy and evaluate the appropriateness of its investments in relation to a desired balance of investment risk and return. As part of its review, the Board plans to consider whether to invest in alternate asset classes such as private equities, venture capital, and hedge funds, in which some other public pension funds have already invested. While each of these asset classes has a significant risk level, they also have potential to yield higher returns than ASRS' current asset classes.

## ASRS should improve its performance in paying some benefits (see pages 21 through 31)

ASRS should improve the timeliness and accuracy of annuity payments to new retirees, as well as the timeliness of its payments of members' refunded contributions. While ASRS has an internal goal of sending new retirees their first annuity check within 60 days of retirement, a 2005 national study found that a

majority of retirees in systems similar to ASRS are being paid within 30 days.<sup>1</sup> However, none of the checks that were sent to new retirees between July 1, 2003 and January 31, 2005, were sent in 30 or fewer days from an individual's retirement date. Instead, most of the checks were sent between 31 and 60 days after retirement, and approximately 25 percent of new retirees during this period did not receive an initial annuity check for more than 60 days after their retirement. This delay could have serious consequences for retirees who are counting on the annuity check as a major source of income.

Auditors found that multiple factors contributed to delays in the issuance of annuity checks, including ASRS' practices of waiting for employers to verify a new retiree's final payroll information, manually calculating benefits, and issuing annuity checks only once per month, as well as a temporary surge in the backlog of service purchase requests. ASRS has an automated benefit calculation system to replace manual calculations and has succeeded in reducing the backlog of members' requests to purchase service credits.

In contrast to the timeliness of paying new retiree annuities, ASRS has had more success in effectively identifying annuities with inaccurate amounts. ASRS has an internal control process, called "final audit," that reviews the calculation of new retirees' benefits. In a random sample of 48 cases, auditors found that the internal audit process identified all the inaccuracies in the cases. Moreover, many of the inaccuracies involved very small amounts, generally under \$10 per month. Two contributing factors to the inaccuracies were the manual calculation of complex salary information and the inadequate procedures provided to staff who perform the calculations. ASRS should continue to take action to improve performance in these areas.

ASRS could also improve its timeliness in making refunds of eligible contributions to members who leave the retirement system. ASRS has an internal goal of paying these refunds within 45 business days of the member's request. However, auditors' review of all refunds processed from July 1, 2004 through December 31, 2004, found that ASRS was meeting its 45-day goal only about 50 percent of the time. While refund recipients may not rely on the payments for their primary income, these members could be experiencing urgent financial hardships and thus may need this money. Two factors appear to have contributed to the lack of timeliness in paying refunds. First, ASRS has a backlog of service audits, which are reviews of a member's contribution history that ASRS requires before making refund payments. Second, staff who process refund requests must use multiple systems to access all necessary data. ASRS plans to integrate these systems in 2006.

<sup>1</sup> This benchmarking study was performed by Cost Effectiveness Measurement, Inc., a private company that annually surveys public retirement systems and provides the compiled data to the participating systems. In the 2005 report referenced here, the company grouped retirement systems into peer groups based on their number of active and retired members.

## ASRS should monitor and assess its plan for improving call center performance (see pages 33 through 39)

ASRS may need to revise its plan to improve response times at its call center. ASRS responds to telephone and e-mail inquiries from the public through its call center. Beginning in June 2004, the call center's customer service began to worsen, as measured by the amount of time callers spent on hold and how many callers hung up before receiving help. Apparently, several factors contributed to this decline, including an increase in incoming calls and a decrease in the number of agents available to answer phones. In response, ASRS increased the number of FTE agents assigned to the call center from 14 to 24, and began hiring the additional staff in July 2005.

Auditors' review of ASRS' plan to hire additional call center agents, as well as call center performance data, indicated that it adds more staff than necessary to manage call volumes. As its baseline for projecting future call volumes, ASRS used an unusually high period of call volume. In addition, others' analysis of the industry model that ASRS used to determine the staff increase indicated that the model has a tendency to overestimate the staff number required to achieve performance goals. Auditors' analysis of the plan and the call center's data suggests that 5 or fewer additional FTEs would be required to meet ASRS' performance goals. ASRS should continue to monitor call center performance and, if actual experience supports this analysis, ASRS should redeploy extra staff to areas needing additional assistance.

## Other Pertinent Information (see pages 41 through 45)

While "the Plan" the Legislature created in 1971 covers most of ASRS' 400,000 members, of which nearly 70,000 are retired, about 300 nonretired members and 1,800 members decided not to switch to the Plan and are still covered under an earlier program, referred to as "the System." ASRS has determined that, as System membership declines, it will likely face significant problems ensuring that liabilities and assets remain adequately balanced. Since many active System members will soon be eligible for retirement, ASRS could stabilize the relationship between assets and liabilities by adopting a more conservative investment philosophy for the System. However, ASRS believes that this would likely result in a reduction of System members' benefits.

ASRS has studied this matter and concluded that the most practical alternative presently available is to transfer liabilities and assets from the System to the newer plan. However, this option would require additional study and legislation to determine the proper balance between the interests of System members and those who are

already covered under the newer plan. ASRS is going to develop a plan that it hopes to complete by the end of 2005 that will address remaining questions about this option.

## Followup to 1994 sunset review (see pages 47 through 50)

This report follows up on several issues examined in a 1994 performance audit and sunset review of ASRS (Report No. 94-3). The 1994 audit warned that conditions that had kept contribution rates low were unlikely to continue. Contribution rates have since risen from 2.0 percent in fiscal year 2003 to 6.9 percent in fiscal year 2006 and are projected to reach 8.6 percent in fiscal year 2007. The recent higher contribution rates were brought on by several factors, including low rates of return on investments from 1999 through 2002, increases in benefits, and changes to actuarial assumptions, including mortality rates. As of June 30, 2004, the Plan's pension fund and Plan and System health benefit funds had assets equal to 91.2 percent of liabilities.

The previous audit also identified the fact that ASRS could reduce management costs by internally managing more assets. According to ASRS, its Investment Management Division now internally manages approximately 30 percent of its assets. Additionally, the 1994 report examined the development of ASRS' new computer system. The audit found that ASRS had problems in implementing this system due to poor planning, inexperienced management and programmers, and failures to include users in development. Since the 1994 audit, several parts of the system have been completed, but further development remained somewhat in flux. ASRS had some concerns about the integration of its financial systems. After an internal review and with the assistance of a consultant, ASRS decided to continue developing its own IT systems.

Finally, the 1994 audit recommended restructuring the long-term disability program by using other state agencies to provide services, thereby saving an estimated \$250,000 per year. ASRS continues to have a contractor provide these services as it does not believe that the State has a program that can offer all of the current LTD program's services at an equal or lower cost.



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# INTRODUCTION & BACKGROUND

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The Office of the Auditor General has conducted a performance audit and sunset review of the Arizona State Retirement System (ASRS) pursuant to a November 20, 2002, resolution of the Joint Legislative Audit Committee. This audit was conducted as part of the sunset review process prescribed in Arizona Revised Statutes (A.R.S.) §41-2951 et seq.

## History and purpose

Established in 1953, ASRS is responsible for contributing toward members' long-term financial security by providing retirement, disability, survivor, and retiree health insurance benefits; and by counseling and disseminating information to members. Active teachers, who had been covered by various other pension plans dating back to 1912, voted to join ASRS in 1954, and transferred to ASRS on January 1, 1955.

Retirement benefits under ASRS are provided under two different programs—an older program referred to as the “System” and a newer program referred to as the “Plan.” The System was the retirement program in place in Arizona from 1953 until 1971. It is a hybrid defined-contribution/defined-benefit plan. Members and their employers contribute a set amount annually to retirement accounts. Upon retirement, members receive guaranteed payments from their accounts and may also receive payments for returns on investment above the assumed rate of return. In 1970, the Legislature passed a law to enact the current Arizona State Retirement System Defined Benefit Plan, or the Plan, if 70 percent or more of state employees and teachers voted to transfer to the new plan. More than 80 percent of eligible members voted for the Plan and most political subdivisions subsequently voted to join. However, the System is still in place for nearly 300 active members and approximately 1,800 retired members who are receiving benefits. (See Other Pertinent Information on pages 41 through 45 for more information.)

**Defined Contribution Plan**—A retirement plan offering a benefit that depends on the total contributions made by the employer and the employee and on the investment returns earned by those contributions. Employees generally bear the investment risk.

**Defined Benefit Plan**—A retirement plan that promises to pay a certain amount for the member's life, usually based on the number of years of service and on the average salary in the period before retirement. Employers generally bear all investment risk.

ASRS provides pension, survivor, disability, and retiree health insurance benefits, and educational services for most public sector employers in Arizona, including state universities, community colleges, public school districts, local and county governments, and the State of Arizona. As of June 30, 2004, there were more than 400,000 members in ASRS, of whom nearly 70,000 are retired.

## ASRS' member benefits

A formula set in statute calculates ASRS plan members' benefits, which can be paid to members upon retirement in a variety of ways. (Benefits for System members are explained in the Other Pertinent Information section, pages 41 through 45.) Members' and employers' contributions pay for benefits. The contribution rate for employees is set at 6.9 percent of compensation for fiscal year 2006 and will increase to 8.6 percent in fiscal year 2007.

**Benefit Calculation**—The Plan pays retirement benefits determined by a formula set in statute:

$$\text{Monthly Retirement Benefit} = \text{Average Monthly Compensation} \\ \times \text{Total Credited Service Time} \times \text{Service Multiplier}$$

Years of Service	Service Multiplier
0.1—19.99	2.10%
20.0—24.99	2.15%
25.0—29.99	2.20%
30.0+	2.30%

The average monthly compensation is equal to the member's highest average salary paid over 36 or 60 consecutive months during the last 10 years of credited service.<sup>1</sup> Credited service is determined from the period of employment during which the employee was a member making the required contributions to the Plan, plus any other service purchased (see below for a discussion of service purchase). The Service Multiplier is a graded multiplier determined by years of credited service.

**Service purchase**—If a member previously worked for the federal government, another state, or a state's political subdivision, the member can buy credit, called service purchase, for this time by paying ASRS an amount equal to the benefit derived. This amount of time is then added to the member's service time for the purposes of calculating benefits upon retirement. Legislation passed in 2004 required members to purchase prior service at the *actuarial present value* starting in August of 2004 instead of the past value they had been using. Additionally, as allowed by law, ASRS started charging members 8 percent interest in July 2004 when paying for service purchases through a payroll deduction agreement.

<sup>1</sup> The number of years used to determine average monthly compensation varies depending on when a member began service with the participating employer. For members beginning service in 1984, the average monthly compensation is determined by taking the highest average monthly compensation for 36 months of consecutive service during the last 120 months of credited service. Members who began service prior to 1984 may instead choose to use the average monthly compensation as determined by taking the highest average monthly compensation for 60 months of consecutive credited service during the last 120 months of credited service, including lump sum payments of vacation and other pay at the time of termination.

The volume of requests to purchase service increased significantly in June 2004 and contributed to a significant backlog of requests waiting to be completed. The spike in requests occurred because the changes that went into effect that summer increased the costs of purchasing service. Members submitted requests before the changes took effect in order to save themselves money. This backlog reached a high of over 9,000 in September 2004; however, the agency created a special team to reduce the backlog of open requests. As of July 21, 2005, ASRS had reduced the backlog to 201 outstanding service purchase requests that had not been completed within ASRS' time frame goal.

**Benefit payment options**—There are several options for how members can receive their retirement benefits. Members can choose to receive a life annuity, life annuity with a period certain, life annuity with a partial lump sum payment, or a joint and survivor annuity.

- The life annuity option pays the highest monthly benefit of all the options, but does not guarantee benefits for the member's beneficiary after the member's death.
- The life annuity with period certain options pays a reduced lifetime benefit to a member, but guarantees a minimum number of payments. If the member dies before the guaranteed number of payments are made, the member's beneficiary receives the remaining payments.
- The joint and survivor annuity has three options that pay a reduced benefit to a member. Upon the member's death, the member's beneficiary receives a life-long monthly benefit at one of the three chosen percentages. Because the ASRS pays a benefit for the rest of the member's life and then the beneficiary's life after the member's death, the monthly benefit amount lowers.
- Members also have the option of taking a portion of their retirement income in a lump sum payment equal to up to 36 months of the member's calculated life annuity benefit. The annuity amount is adjusted to a reduced amount to offset the lump sum payment.

## ASRS' investments

As of March 31, 2005, ASRS had approximately \$22 billion in assets, which are invested in four major asset classes: domestic stocks, international stocks, fixed income instruments, and real estate (see Table 1, page 5).<sup>1</sup>

<sup>1</sup> This amount is the market value of ASRS assets.

Domestic stocks are publicly issued shares of American companies, such as General Electric and Microsoft. International stocks are publicly traded shares of companies such as Nestle', Vodafone, and Mitsubishi that are from any country other than the United States.<sup>1</sup> Fixed income investments are investments that produce a stream of revenue for ASRS, such as bonds. In 2003, ASRS also began implementing its program for investing in real estate (see Finding 1, pages 9 through 19).

## Organization and staffing

ASRS is overseen by a board of directors (Board) that consists of nine members appointed by the Governor and confirmed by the Senate. Five of the board members are required to be ASRS members and must include an educator, a retired member, and employees of the State and a political subdivision. Four other members represent the public and cannot be ASRS members. Of the nine board members, four are to have substantial experience in economics, finance, or investment. The Board is responsible for overseeing the administration of ASRS, setting investment goals, objectives, and policies, allocating assets to meet the investment goals, and reviewing the performance of the investment managers to ensure their attainment of and adherence to the Board's investment goals, objectives, and policies.

ASRS provides services through four programs. These four programs had 197 FTEs, including 23 vacancies, as of June 30, 2005:

- Member Services (138 FTE, 17 vacant) comprises the Member Services, Financial Services, and Information Services Divisions. These divisions are responsible for the core functions of ASRS including the calculation, disbursement, and coordination of retirement, retiree health insurance, disability, and survivor benefits as well as refunds of member contributions. Member Services also responds to telephone, Internet, and in-person inquiries and provides educational services to members throughout the State.
- Investment Management (8 FTE, 1 vacant) is responsible for overseeing the investment of ASRS Retirement Fund (Fund) assets. ASRS manages about 30 percent of the Fund internally and monitors the rest of the Fund's external management.
- Administration and Support (33 FTE, 2 vacant) comprises the various administrative functions needed to support the agency. Its responsibilities include human resources, budgeting, internal auditing, and legal counsel.

<sup>1</sup> Nestle' is a food and beverage company headquartered in Switzerland. Vodafone is mobile telecommunications company headquartered in Great Britain. Mitsubishi, headquartered in Japan, is a holding company overseeing all the operations of several subsidiaries.

- The Information Technology Plan (18 FTE, 3 vacant) is a business plan containing the development of the Public Employee Retiree Information System (PERIS), Internet applications development, implementation of an Electronic Document Imaging Management System (EDIMS), and ongoing maintenance and upgrades to telephone and network technology.

## Budget

Table 1 shows ASRS' actual revenues and expenditures for fiscal years 2003 and 2004, and estimated revenues and expenditures for fiscal year 2005. Funds for ASRS' operating costs are appropriated by the Legislature from the State Retirement Pension Fund, which consists of member and employer contributions, member purchases of service credit, and investment income. In fiscal year 2005, estimated administrative expenditures were \$23.9 million; an estimated \$6.3 million of this was spent on professional and outside services, which includes expenses for computer support, audit, consulting and legal fees, and actuary and benefit consulting.

**Table 1:** Arizona State Retirement System Administration  
Schedule of Revenues and Expenses, in Thousands  
Years Ended June 30, 2003, 2004, and 2005  
(Unaudited)

	<b>2003</b> <b>(Actual)</b>	<b>2004</b> <b>(Actual)</b>	<b>2005</b> <b>(Estimated)</b>
Revenues:			
State Retirement Pension Fund <sup>1</sup>	<u>\$24,182</u>	<u>\$26,834</u>	<u>\$23,907</u>
Administrative expenses:			
Personal services and related benefits	\$8,788	\$10,487	\$10,885
Professional and outside services	6,823	11,234	6,342
Other operating	<u>8,571</u>	<u>5,113</u>	<u>6,680</u>
Total expenditures	<u>\$24,182</u>	<u>\$26,834</u>	<u>\$23,907</u>

<sup>1</sup> Amount is the portion of the State Retirement Pension Fund paying for the agency operations. The Fund's revenue primarily consists of member and employer contributions, member purchases of service credit, and investment income.

Source: Auditor General staff analysis of the Arizona State Retirement System *Comprehensive Annual Financial Report* for the years ended June 30, 2003 and 2004, and agency-prepared estimates for the year ended June 30, 2005 (actual 2005 amounts were not available at the time of this report).

## Scope and methodology

This audit focused on the management of the Retirement System Trust Fund, aspects of ASRS' customer service, and the System. This report presents three findings and associated recommendations, as follows:

- ASRS has managed its investments reasonably through appropriate use of asset allocation approaches and through development and implementation of a plan to guide its real estate investments (see Finding 1, pages 9 through 19).
- ASRS needs to improve the timeliness of benefits paid to new retirees and members choosing to withdraw their funds and the accuracy of benefits paid to new retirees (see Finding 2, pages 21 through 31).
- ASRS needs to monitor and assess its plan to improve the performance of its call center (see Finding 3, pages 33 through 39).

In addition, the report presents information about the financial status, outlook, and possible changes to the previous retirement program, the System, that was in place in Arizona from 1953 to 1971 (see pages 41 through 45), follow-up information related to recommendations made in the previous sunset audit, which was issued in 1994 (see pages 47 through 50), and information related to the 12 sunset factors defined in A.R.S.§41-2954 (see pages 51 through 58).

Several methods were used to study the issues addressed in this audit. Methods used in all areas included interviews with agency management and staff and other stakeholders, including national retirement associations. Auditors also reviewed Arizona Revised Statutes, the Arizona Administrative Code, and ASRS' policy and procedure handbook. In addition, the following methods were used in reviewing each specific area:

- **Investment management**—To determine the reasonableness of ASRS' investment management, auditors primarily compared ASRS' approach with practices used in similar organizations and the industry in general. To learn Arizona's system, auditors interviewed ASRS staff, including its executive director, chief investment officer (CIO), and attorney general representative, as well as outside consultants. Auditors also interviewed several members of the ASRS Board, including members of the Board's Investment Committee and Real Estate Committee. To gather comparative information, auditors interviewed (1) the Chief Investment Officers of the Kentucky Retirement Systems, the Illinois Teacher's Retirement System, the Maryland State Retirement and Pension System, and the Texas Permanent School Fund,<sup>1</sup> (2) a staff member from the Government Finance Officer's Association (GFOA) who is familiar with pension plans and an investment consultant who advises GFOA's Committee on

<sup>1</sup> These states were selected based on ASRS' recommendation that these retirement funds most closely resembled ASRS.

Retirement and Benefits Administration; (3) a pension consultant with an academic background; and (4) the research director for the National Association of State Retirement Administrators. In addition to conducting interviews, auditors reviewed information from the Government Finance Officers Association regarding asset allocation. Further, auditors reviewed various documents produced by ASRS related to its investment performance, such as its Market Value Report, and documents produced by ASRS' investment consultant related to asset allocation and investment performance.

As part of their work on investment management, auditors also reviewed ASRS' real estate investment program and the procurement information related to the ASRS' real estate consultant and legal counsel. Finally, auditors attended meetings of the ASRS Board and the Board's Investment Committee, including a strategic analysis session held on April 23, 2005.

- To evaluate the timeliness and accuracy of benefits paid to new retirees, auditors interviewed ASRS staff and reviewed ASRS documents such as training materials. Auditors assessed ASRS' performance in this area by obtaining and evaluating several data components, including:
  - Information from ASRS' primary data system, PERIS, on the received and paid dates for all refund requests received from July 2004 through December 2004.
  - PERIS data for all new retiree requests received from July 2003 through January 2005, including data fields such as received, retirement, and approved dates.
  - Master paper records of 48 randomly selected retirement files processed between July 2004 and January 2005.
  - Ten randomly selected benefit estimates performed between January 2003 and December 2004.

To gain an understanding of members' concerns, auditors reviewed all complaint letters from ASRS members between May and December 2004, as well as the results of the monthly member satisfaction surveys conducted by an outside vendor from January 2004 through March 2005. Finally, auditors reviewed ASRS' tracking and reporting mechanisms for the service purchase and service audit functions to verify backlogs in those areas.

- To evaluate the performance of the ASRS call center, auditors reviewed data from the call center's software management system, *CMS Supervisor*, on all calls received from January 2003 through May 2005. The data consisted of several factors, including call volume, number of calls answered, and average amount of time each caller spent on hold and speaking to an agent. To evaluate why members call ASRS, auditors reviewed the data stored in the agency's "call-reason" tracking system, *Cognos*, for all calls received from October 2003 through February 2005. Auditors also reviewed personnel data from ASRS' human resources data system, *ASDERS*, for all call center agents employed in the call center from January 2003 through February 2005, in order to evaluate shifts in experience levels. Auditors also interviewed staff with other state pension systems to compare performance and strategies among similar systems.<sup>1</sup> Finally, auditors evaluated the quantitative model used to project call center staffing needs by conducting a literature review.
- To gather information about the System, auditors reviewed actuarial valuations of the System for fiscal years 2003 and 2004, and an internal agency report, and interviewed agency management as well as ASRS' contracted actuary.
- Information used in the Introduction and Background was collected from the *ASRS Comprehensive Annual Financial Report* for the year ended June 30, 2004; interviews with the contracted actuary, the *ASRS Member Handbook*; the *Arizona Master List of State Government Programs* for fiscal years 2003-2005; previous Office of the Auditor General audit reports; and other unaudited agency documents.

The audit was performed in accordance with government auditing standards. All members of the audit team are also members of ASRS. Government auditing standards allow auditors to audit a pension plan of which they are members provided the auditors have no control over the management of the plan, including investments and benefits, and that membership in the plan is a benefit open to other auditors in equivalent positions in the same organization. Both of these conditions were met for this audit.

The Auditor General and staff express appreciation to the ASRS director and staff for their cooperation and assistance throughout the audit.

<sup>1</sup> These states include Iowa, Illinois, Ohio, Oregon, South Carolina, Virginia, and Washington. These states were identified as ASRS' peer retirement systems by Cost Effectiveness Measurement, Inc. as part of their *Defined Benefit Administration Benchmarking Analysis* from March 2005.

# FINDING 1

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## ASRS' investment management generally appropriate

ASRS is generally managing its investments appropriately. Auditors reviewed the investment approaches of four other public pension funds and found that each fund was similar to the ASRS in its use of both long-term and short-term investment approaches. Relative to most other public pension funds, however, the Board's investment approach is more weighted toward investing in domestic equities. Over the past 10 years, the Board has been able to exceed its target rate of return of 8 percent a year, though investment returns were much lower during the years that broad domestic equity indexes dropped. The Board decided to further diversify its investment portfolio to include real estate as an investment area in the summer of 2003. In 2006, the Board plans to formally review ASRS' asset allocation policy and consider different assets for investment, including privately issued equities and hedge funds.

## ASRS invests for long-term while addressing short-term needs

ASRS' assets are invested by the Board primarily through a long-term investment approach called strategic asset allocation. Additionally, the Board allows itself the flexibility to adapt to changing market conditions through an approach called tactical asset allocation. Other state pension funds reviewed by auditors also used a blend of strategic and tactical asset allocation.

**Board primarily uses strategic asset allocation**—The Board's primary approach to investing its assets is called strategic asset allocation. Strategic asset allocation is an investment approach used to generate steady, positive returns for as long as is necessary to pay liabilities, such as the monthly benefits paid to retirees. The Board has decided that meeting these obligations requires ASRS to achieve an

Strategic asset allocation attempts to achieve steady long-term returns.

A policy target is the percentage of fund assets that is invested in a specific asset class.

8 percent rate of return on its total investment portfolio. This portfolio consists of four classes of assets: domestic equities, international equities, fixed-income instruments such as bonds, and most recently, real estate.

The Board implements a strategic asset allocation approach by setting policy targets for each asset class. A policy target is the percentage of fund assets that is invested in a specific asset class. The Board determines these targets based on which combination of policy targets will best balance achieving an 8 percent rate of return with maintaining an acceptable level of risk. One of the Board's investment consultants performs an analysis of various policy targets to help the Board assess which are best for each asset class. This analysis considers such factors as the expected investment return for each asset class, the risk associated with each asset class, correlations among asset classes, and whether any new asset classes should be added to the funds portfolio. Additionally, the investment consultant helps the Board decide how much of its assets should be actively managed or overseen by an investment manager, and how much should be passively managed or tied to the performance of a financial index. The consultant performs this analysis by assessing historical returns from investment managers and factors in the current economic climate, such as interest rates, inflation, and corporate profitability. ASRS reports that its investment staff work with the consultant in developing each of the foregoing analyses and recommendations.

According to the ASRS director, the Board reviews its strategic asset allocation every 3 years, and the next asset-allocation review is scheduled in 2006. During its review in 2003, the Board reviewed its policy targets and the possible inclusion of new asset classes. Auditors' review indicated that strategic asset allocation reviews could reasonably occur every 2-5 years. Consequently, ASRS' 3-year allocation review time frame is reasonable.

**Board adapts to changing market conditions through tactical asset allocation**—In addition to strategic asset allocation, the Board uses tactical asset allocation, which focuses on taking advantage of changing conditions in the economy to achieve more-immediate investment results as a complement to its long-term asset allocation strategy. These short-term results can help to increase investment returns beyond those projected under the strategic asset allocation.

The Board uses tactical asset allocation in two ways. First, ASRS has a program, called Global Tactical Asset Allocation (GTAA), in which the Board has dedicated about 10 percent of its assets. Within the GTAA program, assets are distributed among three of the four asset classes; the GTAA program does not include investments in real estate (see Figure 1, page 11). The GTAA program uses external money managers to invest ASRS' funds to generate a return on investments above what is expected under the basic strategic asset allocation. For example, one ASRS

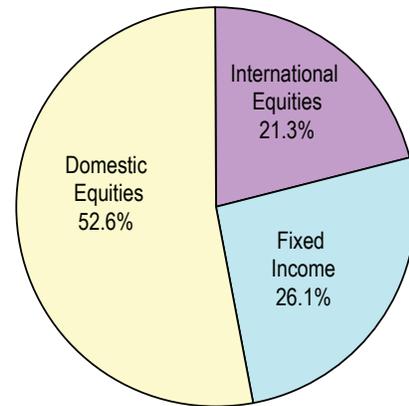
Tactical asset allocation attempts to achieve returns over the short term.

The GTAA program is designed to achieve a higher return than ASRS' investments as a whole.

GTAA manager's goal is 3 percentage points higher than the total ASRS benchmark.<sup>1</sup> Both GTAA managers use sophisticated investment strategies, such as investing in futures, to add value to their portfolios.

Separate from the GTAA program, ASRS also uses tactical asset allocation by using the ranges set by the Board in its strategic asset allocation to move above or below the Board's policy targets (see Table 2). These ranges allow ASRS to hold more of an asset if it is performing well or less of an asset if it is performing poorly. For example, if the market value of ASRS' domestic equities increases relative to other asset classes, then the percentage of assets held in domestic equities also increases. In this case, ASRS would not want to reduce the amount of assets in a strongly performing asset class just to ensure that it always stays at the policy target. ASRS can use each range fully or not at all.

**Figure 1:** Global Tactical Asset Allocation (GTAA) Actual Program Asset Allocation As of March 31, 2005



Source: Auditor General staff analysis of the unaudited *Arizona State Retirement System Market Value Report* as of March 31, 2005.

**Blending of strategic and tactical asset allocation a common practice**—The blended use of strategic asset allocation and tactical asset allocation is generally accepted as the appropriate way of governing investment decisions for public pension funds. Auditors interviewed Chief Investment Officers (CIOs) at four state pension funds, and all reported that their fund primarily used strategic asset allocation.<sup>2</sup> One CIO stated that it makes sense for funds with long-term liabilities to invest for the long term. Another CIO stated that strategic asset allocation allows the fund to better keep their investment in-line with their liabilities.<sup>3</sup> Similar to ASRS, these funds also used tactical asset allocation. For example, like ASRS, these funds allow ranges around the policy targets. One CIO stated that this allows his fund the flexibility to sell some of an asset if it needs funds to pay benefits.

**Table 2:** Total ASRS Asset Allocation As of March 31, 2005

Asset Classes	Target Percentage	Percentage Ranges	Actual Percentage
Domestic equities	53%	+/-5%	55.9%
International equities	15	+/-5	18.1
Fixed income	26	+/-5	25.9
Real estate <sup>1</sup>	6	+/-2	0.1

<sup>1</sup> Investment in the real estate asset class is in the process of being implemented (see page 14).

Source: Auditor General staff analysis of unaudited portions of ASRS' *Comprehensive Annual Financial Report* for Fiscal Year 2004 and the unaudited *Arizona State Retirement System Market Value Report* as of March 31, 2005.

<sup>1</sup> According to the ASRS, its total benchmark for the GTAA program is a hybrid of different benchmarks, with 56 percent coming from the domestic equity benchmark, 28 percent from the domestic fixed income benchmark, and 16 percent from the international equity benchmark.

<sup>2</sup> The four funds are the Illinois Teacher's Retirement System, the Kentucky Retirement Systems, the Maryland State Retirement and Pension System, and the Texas Permanent School Fund. According to ASRS, these funds are similar in size to ASRS and have a similar level of investment in different asset areas.

<sup>3</sup> Funds with higher liabilities may need higher investment returns, which can be obtained through riskier investments such as public equities or alternative investments such as private equities.

## ASRS' investment returns closely related to domestic stock market performance

ASRS' total investment returns over the last 10 years are strongly correlated with ASRS' returns on its investments in domestic equities. ASRS' current 56 percent level of investment in domestic equities is considerably higher than the 44.5 percent level reported for public pension funds as a whole. Consequently, during periods of poor performance by domestic equities, ASRS total investment returns are lower than in years of good performance by domestic equities. However, for the 10-year period from April 1, 1995 to March 31, 2005, ASRS' investment performance has exceeded the actuarial rate of return.<sup>1</sup>

ASRS allocation to domestic equities is higher than many other public pensions—The ASRS Board has decided to allocate the majority of its assets to domestic equities, and its investment in domestic equities is considerably higher than the average of many other public pension funds. According to ASRS, ASRS invests heavily in domestic equities because this asset class produces long-term returns that are generally higher than those of other asset classes. In addition, ASRS has also focused on public markets, which typically have lower investment management fees. The policy targets for domestic equities call for ASRS to have equity investment of 53 percent; however, when accounting for the ranges around the policy targets this percentage can be higher. As of March 31, 2005, ASRS had invested 56 percent of its assets in domestic equities. In March 2005, an investment advisory firm released a report that compared funding levels and asset allocations of 125 public pension funds. This report stated that the average combined allocation to domestic equities for the 125 public pension funds was 44.5 percent.

Investment in equities affects ASRS investment returns compared to benchmarks—The performance of ASRS' investments is generally correlated with the performance of its domestic equities. Consequently, ASRS' performance compared to major benchmarks is also correlated with the performance of its domestic equities. According to the ASRS director, ASRS uses several methods to measure its total investment returns. Four of the main benchmarks are as follows:

- The 8 percent rate of return actuarial goal set by the Board.
- The Strategic Asset Allocation (SAA) benchmark is a combined benchmark that measures the performance of ASRS' four asset classes. The performance of each of these classes is weighted in the SAA benchmark according to their policy target as approved by the Board.

<sup>1</sup> ASRS assumes an 8 percent rate of return, called the actuarial rate of return, on its investments when determining what its contribution rate should be. ASRS does not need to have an 8 percent return every year, but wants to achieve this return over a period of years. According to ASRS' consulting actuary, the ASRS is currently assessing returns over a 5-year period to see if they are at 8 percent. However, beginning in 2007, ASRS will use periods that grow by 1 year annually until 2012. Beginning in 2012, ASRS will begin using a rolling 10-year period to determine how closely its actual rate of return matches the actuarial rate of return.

ASRS invests most of its assets in domestic equities.

- Benchmarks for investment performance in each of the asset areas, such as the S&P 500 index, which serves as the benchmark for domestic equities. The Board adopts these benchmarks after discussion with its investment consultant and with ASRS' internal investment staff.
- Investment returns relative to those of other public pension plans.

Auditors found that, over the longer term, ASRS has been achieving its desired overall rate of return, while short-term results have been more mixed and have been generally reflective of changes in the stock market. When assessing ASRS investment returns, auditors reviewed investment returns over the following periods: 1 year, 3 years, 5 years, and 10 years. Specifically, auditors found that ASRS' investment returns were higher than 8 percent, the actuarial rate of return, for the 10-year period, but not for the 1-, 3-, and 5-year periods (see Table 3). Similarly, ASRS' returns versus other pension plans were higher over the past year and the past 10 years than they were over the past 3- and 5-year periods (see Table 4). However, ASRS generally surpassed its own investment benchmarks for each of the four time periods reviewed (see Table 5, page 14). The ASRS also surpassed its SAA benchmark for the four time periods reviewed (see Table 3).

These returns are all in-line with expectations that, since ASRS has invested approximately 56 percent of its assets in

Over the period from 1995 to 2004, ASRS' investment returns exceeded its actuarial goal of 8 percent.

**Table 3:** Total Investment Returns Compared To 8 Percent Goal and SAA As of March 31, 2005

	Percentage Returns	Percentage Comparison To Actuarial Goal	Percentage Comparison To SAA
1 year	6.7%	-1.3%	+0.1%
3 years	6.2	-1.8	+0.5
5 years	1.6	-6.4	+0.9
10 years	10.0	+2.0	+1.3

Source: Auditor General staff analysis of unaudited *Pension Plan Presentation Report First Quarter 2005* prepared by Mercer Consulting and unaudited strategic asset allocation benchmark information provided by ASRS.

**Table 4:** Investment Performance Compared To Other Public Pension Funds by Reporting Agency Periods Ending March 31, 2005<sup>1</sup>

Reporting Agency	Years			
	1	3	5	10
<b>Russell/Mellon Public Funds</b>				
Number	61	57	52	39
Median return	7.7%	7.6%	3.5%	9.6%
Percentile <sup>2</sup>	72	86	93	34
<b>Wilshire Public Funds</b>				
Number	77	74	73	58
Median return	7.0%	6.7%	3.0%	9.5%
Percentile	50	73	77	37
<b>Callan Associates Public Funds</b>				
Number	86	81	75	52
Median return	6.8%	6.9%	3.3%	9.3%
Percentile	49	72	88	23

<sup>1</sup> Each of these three reporting agencies ranks pension fund performance within different groups of pension funds. As a result, the performance of ASRS is somewhat different for each reporting group.

<sup>2</sup> For each reporting agency, percentile refers to the relationship of ASRS returns to the returns of other funds reported. Percentile is listed on a scale from 1 to 100 with 1 being the best.

Source: Auditor General staff analysis of unaudited *Pension Plan Presentation Report First Quarter 2005* prepared by Mercer Consulting.

**Table 5:** ASRS Investment Return Percentages Compared To Asset Class Benchmarks<sup>1</sup> Periods Ending March 31, 2005

	Years			
	1	3	5	10
ASRS Domestic equity	7.5%	4.2%	-1.4%	11.4%
S&P 500	6.7	2.7	-3.2	10.8
ASRS Fixed income	1.3	6.0	7.2	7.4
Lehman Brothers Aggregate Bond	1.1	6.0	7.1	7.1
ASRS International equity	12.9	11.1	0.5	7.7
Morgan Stanley-EAFE <sup>2</sup>	15.5	12.1	-0.8	5.7

<sup>1</sup> Benchmarks are shaded.

<sup>2</sup> EAFE stands for Europe, Australia, Far East.

Source: Auditor General staff analysis of unaudited *Pension Plan Presentation Report First Quarter 2005* prepared by Mercer Consulting and unaudited 10-year return data provided by ASRS and compiled by Mercer.

domestic equities, ASRS' total investment returns will be strongly correlated with the price of those equities (see Figure 2). Based on information provided by ASRS, during the period from 1995-1999, stock prices, as expressed in broad markets such as the Wilshire 5000, rose significantly, which positively correlated with ASRS' returns from the same period. However, beginning in 2000, stock prices declined dramatically from the highs of the late 1990s. This decline is mirrored in ASRS' returns over the 5-year period from 2000-2004 and the 3-year period 2002-2004, which are lower than ASRS' 10-year returns from 1995-2004. Additionally, ASRS' returns from 2004 are down, which coincides with a decline in stock prices for that year.

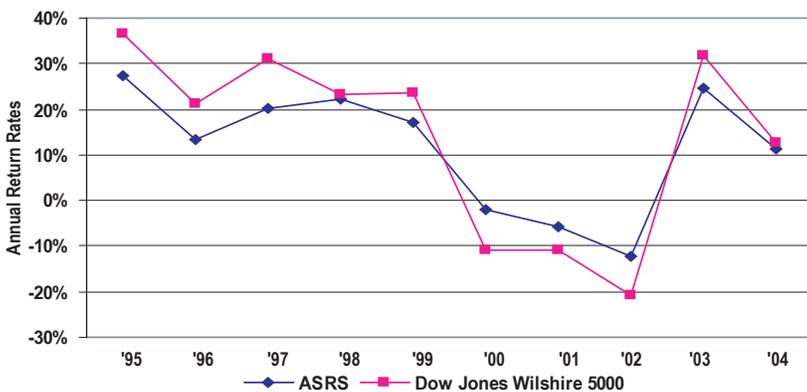
## ASRS has developed real estate investment plan

The ASRS Board approved investment in real estate in August 2003, correcting what one board member called an "investment deficiency." The ASRS Board approved the allocation of 6 percent of its total assets to investment in real estate, taking 4 percent of fixed income investments and 2 percent of international equity investments to fund the real estate investments. Since that time,

ASRS has developed a real estate investment program to guide the process. This program set out the main areas in which ASRS' real estate investment will occur. In addition to developing an investment program, ASRS has also laid the groundwork for implementing and maintaining the program.

Real estate investment plan provides various methods of diversification—In addition to using real estate as a method of diversifying its overall investments, ASRS plans to diversify within its real estate investment program as well (see Figure 3, page 16). It plans to achieve this diversity in three main ways:

**Figure 2:** Annual Return Rates for ASRS Compared To Dow Jones Wilshire 5000 Calendar Years 1995 through 2004



Source: Auditor General staff analysis of unaudited information provided by ASRS that was gathered by Russell/Mellon and Mercer.

- **Investing in Core and Non-Core Assets**—ASRS plans to invest in two main property areas, called Core and non-Core. Core assets will represent the majority of its real estate assets. Core assets are high-quality existing properties that are already substantially leased and producing a generally stable stream of income. The real estate investment program sets a policy target for the Core asset area of 70 percent, with an allowable range of 10 percent above or below this weight. Non-Core assets include existing properties that are of lower quality, or are not substantially leased. Non-Core assets are riskier investments than Core assets. The higher risk of non-Core assets means that there is a higher likelihood of negative returns on non-Core assets than on Core assets. However, the higher risk also means that non-Core assets offer a higher potential for return than Core assets. The real estate investment program sets a policy target for the non-Core asset area of 30 percent, with an allowable range of 10 percent above or below this weight.
- **Investing in Different Property Types**—ASRS plans to further diversify its real estate assets by investing in four main property types. ASRS plans to invest in property types that include office buildings, industrial facilities, retail facilities, and multi-family structures, such as apartments. The real estate investment program sets different policy targets and allowable ranges for the different property types. The property type that can receive the largest amount of assets is office properties, in which the policy target is 30 percent and the allowable range is 15 percent above or below. The other major property types have policy targets at either 20 or 25 percent, and allowable ranges of 10 percent above or below. ASRS may also invest up to 10 percent of assets in other types of properties, such as public storage facilities or manufactured housing.
- **Investing throughout the Country**—ASRS also plans to diversify its real estate investments by spreading its assets over four main geographic areas. The real estate program divides the United States into four areas—the West, South, East, and Midwest. Within each of the areas, the program sets a policy target of 25 percent and has allowable ranges of 20 percent above or below. According to ASRS' real estate consulting firm, these relatively large allowable ranges give ASRS needed flexibility to focus resources on areas where ASRS has determined it is most likely to capitalize on favorable market conditions.

Most real estate investments will be in Core assets.

ASRS can make heavier investments in regions with favorable real estate conditions.

**ASRS making progress toward implementation of the Real Estate Program**—ASRS has hired outside advisors and an internal real estate investment expert, but has not yet signed contracts with real estate investment managers. The first part of the real estate investment program was added in December 2003, when ASRS hired its real estate consulting firm. In this role, ASRS' consulting firm assists ASRS in monitoring the performance of real estate investment managers and determining appropriate areas for investment. Shortly after hiring the consulting firm, ASRS hired an internal real estate portfolio manager. This staff member worked with the consulting firm and the CIO to design the real estate program. ASRS has also

Figure 3:

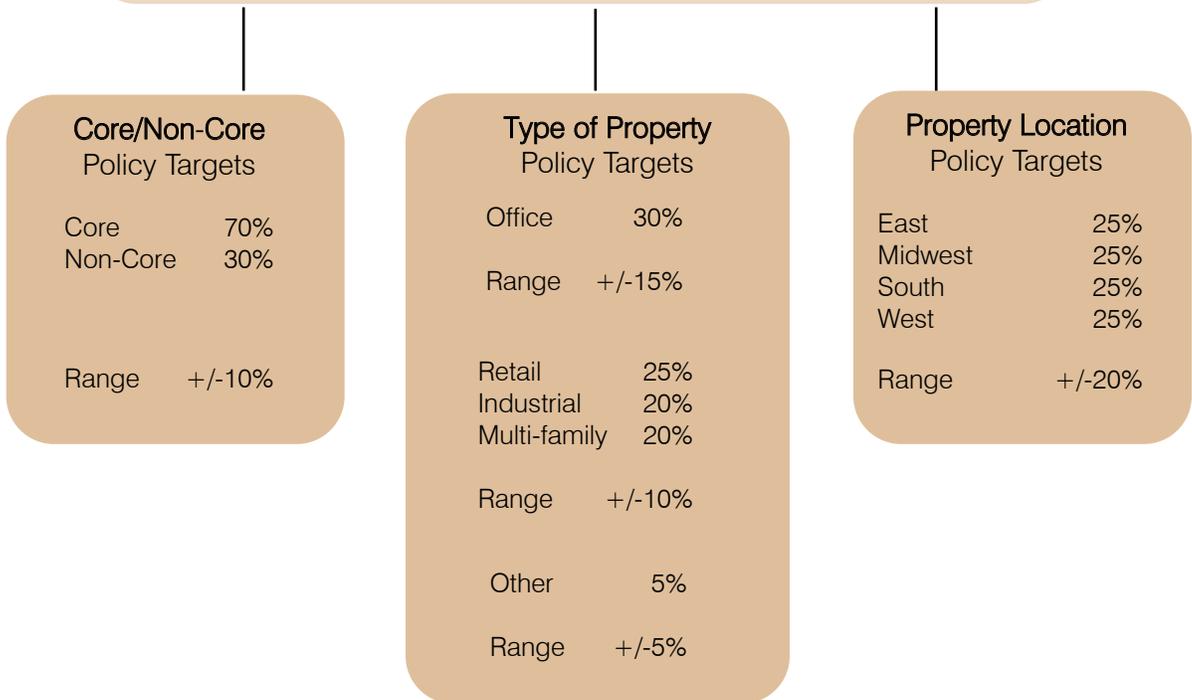
## ASRS Real Estate Investment Strategy

ASRS plans to allocate approximately 6 percent of its total assets to investment in real estate. This 6 percent investment will be diversified across different areas:

- Core (lower risk) and non-Core (higher risk) investments
- Type of property
- Property location

For example, if the ASRS bought an office building in Phoenix that had most of its space leased and was producing a generally stable stream of income, this building would count as a Core investment, as an Office property investment, and as an investment in the West.

Within each of these three areas, the Board has set specific policy targets and an allowable range around each of the targets.



Source: Auditor General staff analysis of ASRS Real Estate Investment Program.

♦

hired four legal firms to handle duties such as drafting and negotiating contracts, providing legal opinions on issues related to the real estate investment program, and helping to structure investments so as to minimize liability to the State.

ASRS has selected three managers that it plans to use for the first round of real estate investments. However, as of May 26, 2005, these managers have not yet signed contracts with ASRS. According to an ASRS official, a major obstacle for these managers is contract conditions regarding liability insurance that Arizona's state procurement regulations mandate, but are not considered standard for the real estate investment industry. ASRS is working with its real estate consulting firm and real estate legal counsel to draft contracts that satisfy both state requirements and the potential real estate managers. These external investment managers will be able to start making investments as soon as they sign their contracts. According to ASRS, once the managers sign their contracts, they will have up to 3 years to fully invest all monies that are available to them. This time frame allows managers to hold out for investments that are more likely to yield a good return.

ASRS has selected three real estate managers, but has not yet signed contracts with them.

**ASRS real estate investment policies and procedures not yet implemented**—While it has made progress in implementing the real estate investment program, ASRS has not yet approved its real estate investment policies and procedures. A draft version of the policies and procedures has been created, but as of April 2005, ASRS' Real Estate Committee was still in the process of reviewing them. These policies and procedures, which cover such issues as who has authority to sign contracts for ASRS with investment managers and who has the authority to release funds that these managers can invest, are appropriate for a fund that is just beginning to invest in real estate. Since the first investments are anticipated to occur very soon, the Real Estate Committee should adopt its currently drafted policies and procedures as soon as possible.

In addition to adopting its draft real estate investment policies and procedures, ASRS could develop additional policies and procedures. Auditors compared ASRS' draft version to policies and procedures developed by the California Public Employee Retirement System (CalPERS) and the Illinois State Board of Investment (ISBI), and determined that there were additional policies and procedures that the ASRS could develop. Specifically, CalPERS' procedures include specific criteria for potential investment properties, and ISBI's procedures include the roles and responsibilities of their investment advisor, which is similar to ASRS' real estate investment consulting firm. ASRS should use procedures developed by other state pension plans to help guide its future development of real estate investment policy and procedures.

## Other potential asset areas

In 2006, the Board may consider other possible asset areas.

While the ASRS has recently diversified its investments by adding the real estate asset class, there still are other asset classes available for investment. According to the ASRS director, in its next asset allocation review in 2006, the Board may discuss whether or not to invest in new asset areas, such as private equity, venture capital, or hedge funds. Some other public pension funds have already invested in these asset classes:

- **Private equity**—Private equities are shares of equities issued by companies that are not publicly traded. One common way of investing in private equity is through a partnership. A partnership is formed by a general partner, who has experience in private equity investing. The general partner sells interest in the partnership to financial investors, such as the ASRS, who become limited partners. Limited partners provide financing when the general partner identifies investment opportunities. Private equities offer a potentially higher return than the publicly traded equities in which ASRS currently invests. Higher private equity returns could be an important source of new revenues if a Mercer representative's prediction of lower-than-8-percent returns for equities over the next 10 years proves true. Further, ASRS would not be the only fund that invests in private equities. State pension funds in California, Illinois, Virginia, and Colorado are among the public pension funds that have already invested in private equities.<sup>1</sup>

Private equities offer a higher possible return than public equities.

There are also significant risks associated with private equities. Because private equities are issued by companies that are not publicly traded, these companies are not subject to the same level of regulation by the federal Securities and Exchange Commission. Consequently, information about these private companies is not as readily available as information about public companies. For example, many private companies do not issue annual reports or discuss their performance or financial condition.

- **Venture capital**—Venture capital is a form of private equity in which investors provide financing for business ideas at the early stages of their development. Venture capital offers a potentially higher rate of return than some other areas of private equity investment, according to an investment manager familiar with it. Additionally, other public pension funds have already made venture capital investments.<sup>2</sup> However, venture capital investments also involve a higher risk, and therefore the returns from venture capital investments are uncertain. Further, successful venture capital investments could take years to provide a positive return.

<sup>1</sup> These funds include the California Public Employees Retirement System, the Illinois Teachers' Retirement System, the Virginia Retirement System, and the Colorado Public Employees Retirement Association.

<sup>2</sup> Two of these funds are the Florida State Board of Administration and the Massachusetts Pension Reserves Investment Management Board, which both invest pension assets for funds in their respective states.

- **Hedge funds**—Hedge funds are managed fund pools, similar to mutual funds. However, unlike mutual funds, whose investments are limited, hedge funds can invest in any asset, even professional sports franchises.<sup>1</sup> According to a representative from an alternative investment evaluation and marketing firm, there are approximately 7,000 hedge funds available, although the actual number is unknown. Like private equity and venture capital, hedge funds offer the potential to achieve higher returns than are realized with publicly traded equities. Additionally, several state pension plans have already invested in hedge funds.<sup>2</sup>

Hedge funds can invest in any asset area.

According to some investment experts, however, there are also some significant disadvantages to investing in hedge funds. One concern about hedge funds relates to the benchmarks for hedge fund performance. Reporting to these benchmarks is optional, and there is a coincidence between the poor performance of a hedge fund and its lack of reporting to a benchmark. As a result, the data regarding the overall performance of hedge funds is skewed. Another concern is that hedge fund managers can charge very high fees for their services, including a percentage of the investment gains. Some hedge fund managers may charge 20 percent or more of investment gains.<sup>3</sup> This could significantly reduce the amount that ASRS would realize from any positive hedge fund returns.

## Recommendations:

1. The ASRS Real Estate Committee should adopt its draft policies and procedures for investment in real estate.
2. ASRS should use procedures developed by other state pension plans to help guide its future development of real estate investment procedures.

<sup>1</sup> BBC News. May 19, 2005. "Anti-Glazer fans vow 'last stand'." <http://news.bbc.co.uk/1/hi/business/4562347.stm> (May 25, 2005.)

<sup>2</sup> These plans include the Alaska State Pension Investment Board, the California Public Employees' Retirement System, the State of Michigan Retirement Systems, the Pennsylvania State Employees' Retirement System, and the Virginia Retirement System.

<sup>3</sup> Litterman, Bob, Quantitative Resources Group, Goldman Sachs Asset Management. *Modern Investment Management: An Equilibrium Approach*. Hoboken, N.J.: John Wiley and Sons, Inc., 2003.



# FINDING 2

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## ASRS should improve its performance in paying some benefits

ASRS should improve the timeliness and accuracy of annuity payments to new retirees, as well as the timeliness of refunded contribution payments to members. While ASRS' goal is to make an initial annuity payment to each new retiree within 60 calendar days, a 2005 national study found that a majority of retirees of systems similar to ASRS are being paid within 30 days. In addition, while ASRS quality control staff is appropriately identifying inaccuracies in new retirees' annuities, the number of errors made in calculating these annuities should be reduced. Finally, ASRS sends out only half of members' refunded contributions within its goal of 45 business days, while more than 8 percent of members wait an additional month to receive their refund payment. ASRS should continue to take action to improve its performance in each of these areas.

### ASRS pays benefits to members

ASRS provides several types of monetary benefits to its members, including retirement annuities and contribution refunds. Annuities are paid to members upon retirement, and can be continued to a survivor upon the member's death. As discussed in this report's Introduction and Background section (see page 2), annuity amounts are determined by several factors, including the member's length of service and salary history, and a graded multiplier set by statute. As illustrated in Table 6 (see page 22), the amount of retirement annuities paid to members increased from approximately \$695 million in fiscal year 2000 to over \$1.2 billion in fiscal year 2004. This was an increase of nearly 80 percent in dollars paid out, while the volume of retirees increased approximately 23 percent over the same period, reflecting an increase in the average annuity amount.

**Table 6:** Pensions and Refunded Contributions Paid  
Fiscal Years 2000 through 2004

Fiscal Year	Number of Retirees	Pensions Paid in Thousands	Number of Refund Recipients	Refunded Contributions Paid in Thousands
2000	55,959	\$ 695,426	7,845	\$70,755
2001	58,580	809,133	7,457	98,535
2002	60,951	924,172	6,041	42,765
2003	64,114	1,067,481	5,155	35,976
2004	68,560	1,238,966	5,125	36,212

Source: Auditor General staff analysis of ASRS data, as reported in the ASRS annual audited financial statement for fiscal year 2004 and as provided by ASRS' Senior Management Analyst.

As Table 6 also shows, the amount of refund payments has decreased since fiscal year 2000, falling from over \$70 million to just over \$36 million in fiscal year 2004, while the volume has decreased by 35 percent. Refunds are available to members who terminate employment with a participating employer prior to retirement. Upon termination and prior to retirement, members may choose to request a "refund" of their retirement contributions to ASRS, and receive these funds directly or roll them over to a qualified retirement account. Members are not required to request a refund of their contributions, and instead can leave them with ASRS until they are eligible for retirement. The amount of the refund payment is the total contributions paid by the member during his or her employment, as well as the interest earned on those contributions. If a member has more than 5 years of service, the refund payment will also include a percentage of contributions paid by his or her employer, beginning at 25 percent for 5 years of service and rising to 100 percent for 10 or more years of service.

## ASRS should improve timeliness of new retiree payments

While ASRS is largely meeting its goal for paying annuities to new retirees within 60 calendar days of retirement, it is not paying any new retirees within 30 days, as many of its peer systems are able to do. There are several factors contributing to challenges in paying annuities to new retirees on a timely basis, including employer payroll verification, calculation of the annuity amount, a single monthly payment date, and a prior backlog in service purchases.<sup>1</sup> ASRS is already taking action to address each of these factors and should continue to ensure its technology-based solutions for this area are implemented by the end of calendar year 2006.

ASRS is taking action to improve timeliness.

<sup>1</sup> Active ASRS members may purchase certain types of credited service (including military service, other public service employment, and time spent on a leave of absence from an ASRS employer) that will be included in calculating their retirement annuity.

ASRS is not timely in initiating annuities for new retirees—ASRS is generally having success in meeting its goal of paying annuities to new retirees within 60 days after retirement. However, a 2005 national study showed that retirement systems similar to ASRS disbursed initial annuity payments to an average of 75 percent of their new retirees within 30 days of the members’ final employment paycheck.<sup>1</sup> As illustrated in Table 7, from July 2003 through January 2005, ASRS did not pay any of its new retirees within 30 days. ASRS is paying approximately 74 percent of its new retirees within its goal, but more than a quarter are not receiving their first annuity check for at least 2 months after retiring. In the worst cases, several members waited more than 6 months to receive their first annuity payment.

While ASRS generally is meeting its goal of paying new retirees within 60 days, it is important that it improve its performance in this area. The timely delivery of these payments is crucial for many retired members. If a new retiree is relying on his or her ASRS annuity payment as a primary source of income in retirement, any delays in initiating these payments could seriously impact their financial situation. In one case a member had to wait more than 7 months after her retirement date to receive her first annuity check, while her service purchase transaction and partial lump sum distribution were being completed. Additionally, an incorrect partial lump sum amount was paid to her, which required an additional 2 months to correct. ASRS reports that it issues hardship advances in some cases.

Several factors contribute to delays in paying new retirees—Several factors contribute to the challenges in paying new retiree benefits in a timely fashion. ASRS should continue its efforts to address these factors, and should consider adopting new strategies to further enhance efficiency of processing new retirees. Specifically:

- **Employer payroll verification**—ASRS currently waits for employers to report and verify final payroll information for members employed within the past 3 years before calculating and paying annuity benefits, and an ASRS supervisor indicates that this is a primary cause for delays in issuing new retiree annuities. This final payroll information determines the member’s total service credit and could change his or her highest average monthly salary, both key factors in calculating the member’s retirement annuity amount. An ASRS supervisor also states that waiting for this information can add as much as several weeks to the processing of a member’s retirement application when employers do not provide the verification in a timely fashion. For example, if an employer does not

**Table 7: Time Frame for Paying New Retirees July 2003 through January 2005**

Calendar Days	Number of New Retirees	Percentage of Total
30 or less	-	-
31–45	3,619	49.8%
46–60	1,773	24.4
61 or more	<u>1,870</u>	<u>25.8</u>
Totals	<u>7,262</u>	<u>100.0%</u>

Source: Auditor General staff analysis of data from all retirement applications received and processed by ASRS from July 1, 2003 through January 31, 2005.

<sup>1</sup> This benchmarking study was performed by Cost Effectiveness Measurement, Inc., a private company that annually surveys public retirement systems and provides the compiled data to the participating systems. In the 2005 report referenced here, the company grouped retirement systems into peer groups based on their number of active and retired members.

submit the verification form for a member by ASRS' deadline each month, that member's annuity payment cannot be processed until the following month.

In contrast, many of ASRS' peers have been able to pay their new retirees more quickly, and have initiated retirement annuities prior to receiving employer verification. For example, the South Carolina Retirement System reported to auditors that it pays annuities to nearly 90 percent of its new retirees within 30 days of retirement, while the Illinois Municipal Employees Retirement Fund noted in an interview with the auditors that its members wait an average of only 18 days after retirement before receiving their first annuity payment. Both retirement systems stated that they do not wait for a verification of the final payroll data from the members' employers before initiating annuity payments.

Following this practice used by these other states would not appear to create a pattern of substantial errors in ASRS' initial payments. Although the payroll information for ASRS members available at the time of their retirement may be different from the information that is later verified from the employer, auditors' analysis of a sample indicated that it differs only slightly. This sample of ten benefit estimates, which were performed between January 1, 2003 and December 31, 2004, by ASRS staff prior to the member's retirement, demonstrated that monthly annuity amounts based on the data available at retirement differed by less than 2 percent from those calculated after the employer verification.

Benefit estimates differed by less than 2 percent from finalized annuities.

ASRS has initiated action on this issue. By the end of calendar year 2006, ASRS intends to fully incorporate the processing of new retirees into PERIS, its computer system.<sup>1</sup> Once this occurs, ASRS will implement its goal of paying new retirees within 10 days, and will no longer wait for employer payroll verification before initiating annuity payments. According to ASRS management, until processing new retirees is automated, initiating annuities based on estimates would require staff to process each new retiree's file twice instead of once, placing too large a burden on staff resources. ASRS should ensure project completion by December 2006 to reduce the amount of time new retirees wait for their first annuity payment.

- **Manual calculation of highest average monthly salary (AMS)**—This process, a key step in determining a member's annuity amount, can be time-consuming and cause delays in issuing members' initial annuity checks. ASRS staff review the final 10 years' payroll history for each member to identify the 3 or 5 years encompassing their highest salaries, depending on whether the member began service before or after 1984. Staff must then examine the data from each pay period within those years to manually calculate the highest AMS. As payroll data prior to 1999 is not available in the current data system, this task involves

<sup>1</sup> ASRS' main data system is its Public Employee Retirement Information System (PERIS), which is used to store and manage data on all ASRS members.

accessing data available only on microfiche or in archived files for many members. An ASRS supervisor reported that this can take several days if another staff group is using the file.

ASRS reported that it has addressed this issue by designing an automated process for calculating the AMS. According to ASRS, this automated calculation was implemented in new retiree processing in July 2005 and will also be included in the overall automation of the new retiree functions scheduled to be incorporated into its computer system in 2006. ASRS is also in the process of converting all of its old data currently stored in paper and microfiche format to an electronic imaged format, to be available for viewing directly through the computer system. ASRS reported that this process is also scheduled to be completed by June 2006. ASRS should ensure that it completes these projects to decrease the amount of time new retirees wait for their first annuity payment.

- Single monthly payment date**—ASRS currently issues, through its custodial bank, all annuity payments for new retirees only once each month. As illustrated in the text box below, members' initial annuities are paid within a wide range of timeliness, depending on the specific retirement date selected by the member. For example, a member retiring on September 1 would be scheduled to receive the first check in 36 days, while a member retiring on September 2 would wait at least 67 days for the first check.

As reported in a 2005 national study, several other state retirement systems are able to pay their new retirees more quickly, and auditors confirmed that some pursue a different strategy than ASRS.<sup>1</sup> For example, both the Washington State Department of Retirement Systems and the South Carolina Retirement System reported to auditors that they use two pay dates each month for issuing annuity payments to new retirees. As a result, both of these systems initiate annuities to new retirees within 30 days of retirement.

While ASRS believes that scheduling two payment dates each month is not possible until the process is automated, auditors concluded that it may be

A new retiree selecting a retirement date between August 2 and September 1 of 2005 will be processed in September, while a member retiring on September 2 will be processed in October. The scheduled payment date for the first set of applications is October 7, while the payment date for the September 2 retiree will be November 8, as illustrated below.

Retirement Date	Payment Date	Number of Days To Receive First Payment
8/2	10/7	66
9/1	10/7	36
9/2	11/8	67

<sup>1</sup> This benchmarking study was performed by Cost Effectiveness Measurement, Inc.

Establishing two annuity payments per month may be possible using existing processes.

possible earlier. ASRS indicated that establishing multiple pay dates per month could occur only after the new retiree process is fully automated, which is scheduled to happen by the end of calendar year 2006. One component of the planned automation is a “disbursement engine” that will capture and distribute payment data, and that will provide flexibility to the payment scheduling process that ASRS states it currently lacks. According to ASRS management, this automation is necessary for it to schedule two payments per month because all of its current manual processes are built on a single monthly payment model, and that increasing payment frequency would involve redesigning the process. Management also indicated that this would delay the automation of the new retiree process scheduled to be completed next year.

However, auditors’ review of the process suggested that establishing two annuity payment dates per month may be possible using the existing processes, and may not involve a significant redirection of existing resources. Auditors concluded that adding a second payment date approximately 1 week after the existing payment date for new retirees would not create any new manual processes. Additionally, ASRS has determined that paying annuities more than once each month would not incur additional charges from its custodial bank. ASRS should study the cost of implementing a second monthly pay date for new retirees’ annuities, weighing any potential impact upon currently scheduled IT projects against the benefit of reducing new retirees’ wait times for receiving annuity payments.

- **Service purchase backlog**—For some members who were attempting to purchase additional service before or at retirement, a backlog in processing service purchase requests caused delays in processing their retirement applications and in sending the members’ first annuity checks. Many members’ retirement applications could not be processed until their service purchase transactions were completed. For example, several members who waited more than 6 months to receive their first annuity checks were delayed due to their request to receive their benefits in a lump sum form to pay for their service purchase transactions. According to ASRS records, a significant backlog developed in the summer of 2004 in completing service purchase requests (see Introduction and Background, pages 2 through 3). By September 2004, the number of requests awaiting processing had reached over 9,000.

ASRS successfully implemented a plan to reduce this backlog. Recognizing the negative impact the backlog was having on several areas within ASRS, management formed a special team in November 2004 dedicated to reducing the backlog. This team was composed of member services and financial services staff members and focused on issuing cost invoices to members, which is the first step in replying to a service purchase request. This team was

in place until March 2005, and by the end of that month, the backlog had been reduced to just over 1,000 requests. As of July 21, 2005, the backlog had been further reduced to 201 requests that had not been processed within ASRS' time frame goal.

ASRS successfully addressed the service purchase backlog.

## ASRS should improve accuracy of initial new retiree payments

In contrast to the timeliness of paying new retiree annuities, ASRS has had more success in effectively identifying annuities with inaccurate amounts through its internal control process. However, auditors' review found several errors committed during the processing of new retirees. There appear to be two primary factors causing these inaccuracies, and ASRS should continue to take action to address them.

**ASRS identifying annuities with inaccurate amounts**—ASRS has a “final audit” process that effectively verifies the accuracy of all new annuities approximately 3 months after a member's retirement. This process reviews each new retiree's file to determine if the annuity amount requires an adjustment due to a change of information since the member's retirement or an error in the initial retirement processing. For example, an employer could submit a revised payroll verification form after a member has retired if it had posted incorrect contribution amounts on behalf of the member. Also, the staff who initially processed the new retiree application could have made an error in calculating the member's highest average monthly salary or length of service.

The final audit process appears to be correctly identifying inaccurate annuities, and the inaccuracies generally appear to be minimal. Auditors' analysis of a random sample of 48 new retirees' final audits conducted between July 2004 and January 2005 indicated that inaccuracies are being properly identified.<sup>1</sup> Specifically:

The final audit process correctly identifies inaccuracies in annuities, which are generally minimal.

- The analysis found that the final audit process appropriately identified inaccuracies, or the lack thereof, in all 48 sampled files. Auditors selected and verified the accuracy of 23 files for which the final audit confirmed the originally calculated annuity amount. Of the 25 files selected because the final audit identified a discrepancy in the annuity amount, 13 were caused either by a subsequent change to the member's information or a difference in the rounding functions used by the new retiree and final audit processing spreadsheets. The remaining 12 discrepancies were caused by an error made during the processing of the member's retirement application, 9 of which were made by ASRS staff in manually selecting the appropriate pay periods to calculate the

<sup>1</sup> Auditors requested documents for a random sample of 50 new retirees, but documents for 2 of the sampled new retirees could not be located.

member's highest average monthly salary. Prior to auditors' request for error rate data, ASRS had not consistently tracked the number of errors made in processing new retirees. Though ASRS staff began tracking this information during the audit, a historical error rate cannot be calculated or verified.

- The differences in annuity amounts identified in the 25 sampled final audits that contained discrepancies in the monthly annuity amount were less than 2 percent for 22 of the files, ranging from \$0.01 to \$35.61, and were less than \$10 for 21 of the 25 files. When ASRS identifies an inaccuracy, it corrects the annuity amount for all future payments. It also adjusts the member's next annuity payment to address any underpayments and most overpayments since the initial annuity payment.<sup>1</sup>

Two factors contribute to difficulties in determining correct annuity amounts—Two primary factors appear to contribute to the challenges in calculating accurate new retiree annuity amounts. ASRS should continue its efforts to address these factors. Specifically:

- **Manual calculation of highest average monthly salary (AMS)**—ASRS staff currently review the last 10 years of payroll history for each member to manually calculate the highest AMS. Due to the complexities that can exist in a member's payroll history from such factors as gaps in employment and multiple pay period frequencies, this process has led to some incorrect AMS calculations. For example, the payroll history for teachers may include large "balance-of-contract" payments and/or gaps in payroll periods, as many are paid on a 9-month schedule, which can make it difficult to select the appropriate range of months needed to comprise the required 3 or 5 years of salary history.

ASRS designed an automated function for calculating the AMS and reported that it was implemented in new retiree processing in July 2005. Auditors reviewed the methodology used in designing this new function and concluded it was sound and adhered to statute.

- **Inadequate procedural guidance**—Auditors analyzed the official procedure documents for the new retiree process and found these documents do not provide sufficient guidance for staff in some areas of processing retirement applications, including the calculation of the highest AMS. For example, payouts of accumulated vacation time prior to a member's retirement are not eligible to be included in the calculation of the highest AMS for some members, but the procedures do not state this. Also, the procedures do not provide instructions on how to select the appropriate range of months in calculating the highest AMS, given the complexities previously mentioned.

ASRS reported that it is in the process of developing revised procedures for the new retiree process, including calculating the highest AMS, to ensure the

<sup>1</sup> Overpayments of \$10 or more are billed to the member through ASRS' accounts receivable department.

procedures correspond to current practices. ASRS stated that its new retiree staff use a set of informal guidelines for the calculation of retirement annuities, and ASRS intends to incorporate these guidelines into the official procedures. Auditors reviewed these informal guidelines, and found they provide additional, though still not complete, guidance for this process. An ASRS supervisor also reported that once the automated function for calculating the highest AMS is implemented, it will incorporate the revised process in the formal procedures and will deliver training sessions to all appropriate staff. ASRS should ensure it updates its official procedures and provides training sessions to new retiree staff once this new function is operational.

Informal guidelines provide additional, though incomplete, guidance.

## ASRS should improve timeliness of refund payments

ASRS is not consistently meeting its time frame goals for paying requested refunds to members terminating employment prior to retirement. It is meeting its goal of paying these benefits within 45 business days for only half of all refund requests, which can have significant negative impacts on affected members. Two primary factors appear to contribute to these challenges, and ASRS should continue its efforts to address these issues.

**ASRS not consistently issuing refunds in a timely fashion—ASRS is not consistently meeting its time frame goals for paying refunds.** According to ASRS' strategic plan, ASRS strives to make refund payments to members within 45 business days of their request. However, as illustrated by Table 8, it is meeting that deadline for only approximately half of all refund requests.

While refund payment recipients may differ from new retirees in that they are not relying on the payments for their primary income, members who forfeit their contributions could be experiencing urgent financial hardships and thus may need this money. In its member satisfaction surveys conducted during calendar year 2004, the timeliness of refund payments ranked the lowest among the three main types of benefit payments (retirement, refund, and survivor), with 26 percent of surveyed members reporting they were dissatisfied with the amount of time it took to receive their refunded contributions.

**Table 8:** Time Frame for Paying Refund Contributions July 2004 through December 2004

Business Days	Months	Number of Refunded Contributions	Percentage of Total
45 or less (internal goal)	< 2	1,363	50.3%
46–60	2–3	1,122	41.4
61 or more	> 3	<u>228</u>	<u>8.4</u>
Totals		<u>2,173</u>	<u>100.0%</u>

Source: Auditor General staff analysis of data from all refund requests received and processed by ASRS from July 1, 2004 through December 31, 2004.

Two factors contribute to delays in paying refunds—Two primary factors appear to contribute to challenges with paying refunds in a timely fashion. ASRS should continue in its efforts to address these factors. Specifically:

- **Service audits**—According to ASRS staff, it requires a service audit for every member requesting a refund before a payment is issued. A service audit is a confirmation of a member's total service credit, done by examining the member's detailed contribution and service purchase history to ensure ASRS' data system reflects the accurate service and salary figures. In October 2003, ASRS implemented a service audit function in its computer system, which automatically runs for all contribution data received after 1999, and all service purchases initiated after May 2004. However, for members with data from earlier times, the service audit must be completed manually, using data from paper or microfiche files. ASRS reported that the service audits completed from November 2003 through April 2005 took an average of 28 days to complete.

Despite this average, ASRS staff noted that some of these manual service audits have taken more than 3 months to complete and that this is the primary cause of delays in making refund payments. Auditors' review of the time frame data for paying refunds showed that of the six refunds that took at least 4 months to complete, untimely service audits caused four of the delays. In one case, the service audit was not completed until 128 days after the member submitted the refund application, and the payment was issued 20 days after the completion of the audit.

ASRS has a backlog of manual service audits that have been requested but not yet completed. According to an ASRS staff member, one source of this backlog was ASRS' effort to reduce the backlog in service purchase requests, when ASRS reassigned staff from service audits to service purchases. ASRS reported that since it has effectively reduced the backlog of service purchase requests, it has reassigned a nine-person member services staff team to focus on the service audits that still require manual reviews. In the first month of the team's operation, ASRS reported that the backlog was reduced from over 3,500 to 2,322 pending service audits.

- **Multiple data systems**—ASRS still relies on its legacy computer system for processing all refund payments. ASRS staff must look up information and enter payment data in both the legacy system and its main computer system to complete refund requests, which creates unnecessary delays and increases the potential for data entry errors. ASRS reported that it has already begun work to fully incorporate the refund function into its new computer system, and is scheduled to finish the project by April 2006. ASRS should work to ensure it finishes this project on time to reduce the amount of time members wait for their refunded contributions.

ASRS had reduced the service audit backlog from over 3,500 to 2,322 as of May 31, 2005.

## Recommendations:

1. To improve the timeliness of paying new retiree annuities, ASRS should:
  - a. Complete the incorporation of the new retiree function into its main data system by December 2006 to allow it to initialize annuities based on currently available data instead of waiting for employer verification of final payroll details.
  - b. Complete its ongoing project to convert members' paper and microfiche files to electronic images by June 2006.
  - c. Study the cost of implementing a second monthly pay date for new retirees' annuities, weighing any potential impact upon currently scheduled IT projects against the benefit of reducing new retirees' wait times for receiving annuity payments.
2. To improve the accuracy of paying new retiree annuities, ASRS should update all procedure documents related to processing new retirees, and provide training to its staff for the automated calculation of the highest average monthly salary once this new function is operational.
3. To improve the timeliness of paying refunds, ASRS should complete its efforts to fully incorporate this function into its main computer system by April 2006.



# FINDING 3

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## ASRS should monitor and assess its plan for improving call center performance

Revisions are likely needed in a plan ASRS developed to improve response times at its call center. In June 2004, waiting times for callers began increasing substantially, causing more callers to hang up before a customer service agent became available to handle their call. The delays appear to have resulted from several factors, including an increase in calls and a decrease in staff. ASRS' plan to address the problem called for adding substantially more staff. Auditors' review of this plan, as well as call center performance data, indicated that it is based on several faulty assumptions, including projected call volumes and the number of staff required to answer those calls. As a result, the plan may add more staff than will be needed to meet its performance objectives for the call center.

### ASRS call center assists members

In April 2002, ASRS established a centralized call center at its Phoenix office. While ASRS had always responded to incoming telephone and e-mail inquiries from members and the public, the agency chose to provide service through a dedicated call center staff group. As of May 2005, the call center was staffed by 14 full-time agents answering the phones, plus 2 supervisors. The call center uses industry-standard software to manage and capture data on incoming calls and to record the nature of the inquiries. The reasons members call include questions regarding health insurance, benefit payment schedules and amounts, annual member statements, service purchase transactions, and address changes.

### Call center performance has worsened

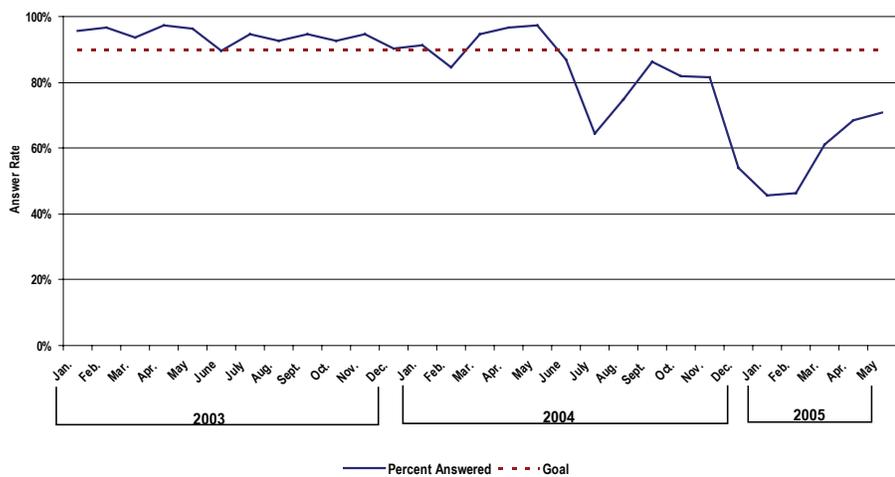
Since June 2004, the ASRS call center has not met its goals for the percentage of answered calls or the time a caller waits to talk to an agent, and member satisfaction

with the call center performance as measured by customer satisfaction surveys has also declined. Several factors probably contributed to this situation. ASRS could address one of the factors by exploring ways of gathering more data about the specific reasons for members' calls.

**Answer rates and wait times have worsened**—Since June 2004, the ASRS call center's customer service performance has fallen significantly. The agency measures the quality of service provided to its members by the call center in several ways, including the answer rate—the percentage of all incoming calls that agents answer before members hang up—and the wait time—how long members wait on hold before reaching an agent. The call center's software package calculates and tracks these measures. As illustrated by Figure 4, the call answer rate has worsened significantly since June 2004. Prior to then, the call center answered an average of 94 percent of all calls, exceeding its goal of 90 percent. However, that average fell to 69 percent from June 2004 through May 2005.

Callers are spending more time on hold, and the answer rate has fallen.

**Figure 4: Average Answer Rate <sup>1</sup>**  
January 2003 through May 2005



<sup>1</sup> Answer rate is the percentage of incoming calls answered by a call center agent before the caller hangs up.

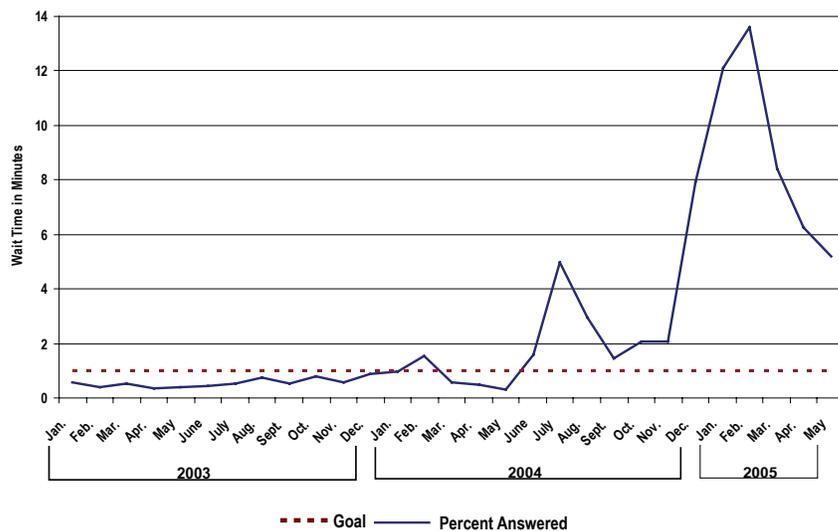
Source: Auditor General staff analysis of data from ASRS' call center software package.

Similarly, as illustrated by Figure 5 (see page 35), wait time performance has worsened. While callers reached an agent in an average of 37 seconds before June 2004, again exceeding the goal of 60 seconds, they waited more than 5 minutes on average from June 2004 through May 2005.

Member satisfaction with call center has worsened—ASRS, through an outside vendor, surveys a sample of approximately 250 of its members each month to ascertain their level of satisfaction with many facets of customer service, including the call center. As illustrated in Figure 6, the survey data for calendar year 2004 shows a growing level of dissatisfaction with the performance of the call center. While only 7 percent and 6 percent of survey respondents expressed dissatisfaction with the timeliness of answering calls in the first and second quarters of calendar year 2004, that percentage rose to 10 percent in the third quarter and 16 percent in the fourth. More recently, the monthly surveys for January and February 2005 reported 41 percent and 48 percent dissatisfaction rates with the timeliness of answering calls.

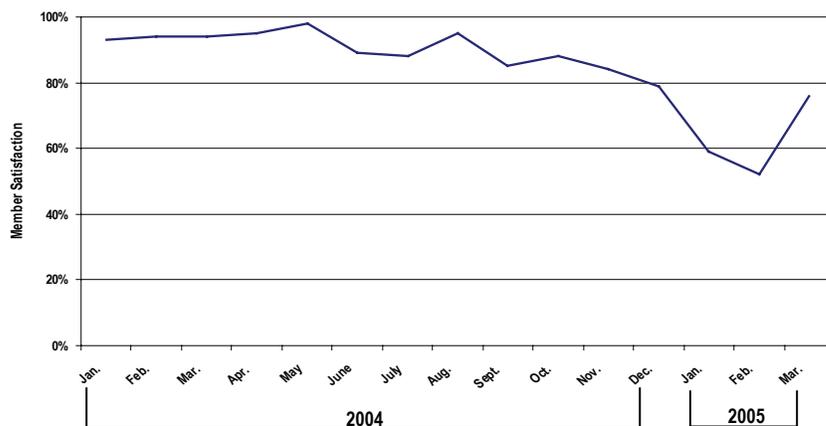
Several factors may be contributing to low performance—Multiple factors are likely having a negative impact on call center performance. Since June 2004, the volume of incoming calls has increased significantly, the average number of staff answering phones has decreased, and the amount of time required to handle each call has increased.

Figure 5: Average Wait Times, in Minutes  
January 2003 through May 2005



Source: Auditor General staff analysis of data from ASRS' call center software package.

Figure 6: Member Satisfaction for Call Center Timeliness  
January 2004 through March 2005



Source: Auditor General staff analysis of data from the ASRS monthly member satisfaction surveys for January 2004 through March 2005.

Call volume reached a peak of 30,000 in January 2005.

ASRS should more specifically track reasons for incoming calls.

- **Call volume increased**—Over the past year, ASRS experienced a large increase in the number of incoming calls. Beginning in June 2004, the volume of telephone inquiries received by the call center rose significantly, reaching a peak of almost 30,000 in January 2005. While the average monthly number of incoming calls from January 2003 through May 2004 was just over 16,000, the average increased by 33 percent, to almost 22,000, from June 2004 through May 2005.

According to ASRS, the rise in service purchase requests and subsequent backlog that developed in the summer of 2004 (see Introduction and Background, pages 2 through 3) is the primary cause for this increase in call volume. However, the information available from the call center's software package is currently not detailed enough to determine if ASRS is correct in this assumption. Auditors' analysis of data from the call center's software package found that the nature of calls, as recorded by the agents immediately following each call, has remained fairly stable throughout 2004 and 2005, and that calls regarding service purchase have not significantly increased over this period. However, ASRS management said that many of the calls recorded under other reasons (for example, new retiree checks or refund payments) were indirectly related to the service purchase backlog. The call center software currently has no data for assessing these relationships. To better understand the reasons for calls, and therefore project possible trends in call volumes, ASRS should explore ways of more specifically tracking both the primary and secondary reasons for incoming calls.

- **Number of agents decreased**—The number of agents at the call center decreased over the same time period. Prior to June 2004, the call center had an average of almost 11 agents answering the phones at any given time. From June 2004 through May 2005, the average had fallen to below nine agents answering the phones. ASRS management indicated that it has been difficult to attract and maintain a sufficient number of staff in the call center. Auditors' analysis of the staffing level during this period, as compared to the call volume and answer rate, suggests that maintaining their full complement of agents would have significantly mitigated the decrease in performance as call volume rose.
- **After-call work takes more time**—Additionally, the time needed to finish up work related to calls, after the call is over, has increased, though the amount of time spent talking to the caller has remained fairly stable at an average of 4 minutes. Prior to June 2004, agents had been taking less than a minute on average to wrap up any call-related work after completing the call. From June 2004 through May 2005, it took nearly 90 seconds on average to complete the same work. This "after-call work" includes such activities as preparing requested forms to send to members, recording the reason for and notes about the call, and communicating with other ASRS staff to address callers' concerns. While the addition of 30 seconds is not a large amount of time for an individual call, that

increase takes on greater magnitude when multiplied by the 10,000–17,000 calls that ASRS answers each month. Auditors' analysis suggests that this cumulative increase accounts for almost one agent FTE's time each month.

While agency management indicated this rise in after-call work was likely due to the learning curve of newly hired staff and the increase in the number of newer staff, auditors' analysis of the call center's staffing history did not find support for that statement. Specifically, a review of the call center's staffing history indicated that staff experience levels appear to be very similar during the periods of January 2003–May 2004 and June 2004–February 2005. As a result, it does not appear that staff working in the call center during the period of higher after-call work are less experienced than before.

## Performance improvement plan likely calls for too many staff

ASRS should monitor and assess its staffing plan intended to improve the call center's performance. Recognizing the worsening call center performance levels, ASRS developed a plan to enhance performance by hiring 10 additional FTEs. However, auditors' review of the plan identified several deficiencies and suggested that ASRS may not need 10 additional staff to meet its performance objectives.

Plan calls for 10 additional staff—ASRS recognized the decrease in its call center performance, and used a model to develop a staffing plan to remedy the situation. This plan calls for an increase in the number of call center agents from 14 to 24 FTEs, and sets a higher pay grade for the 10 additional FTEs. ASRS used a quantitative model to determine the number of agents required to achieve its desired service level of answering 80 percent of calls within 20 seconds.<sup>1</sup> One component of the model is call-volume projections, and ASRS based these projections on a 15 percent increase over the July to December 2004 call volume. Even though this period had an abnormally high volume of calls when compared to previous 6-month periods, ASRS projected the volume would continue to rise as service purchase transactions were concluded and the number of new retirees rose.

In addition to adding new staff, ASRS also decided to change its staffing strategy away from a reliance on staff provided by temporary personnel agencies to directly hiring permanent, higher-pay-grade employees. The plan called for ASRS to hire the 10 additional FTEs as grade 19 employees, an increase costing approximately \$3,750 more per position than the existing grade 15 positions.<sup>2</sup> ASRS allocated 10

ASRS is shifting from temporary to permanent staff in the call center.

<sup>1</sup> ASRS used the "Erlang C" model in its staffing analysis. This model inputs projected call volume, desired answer rate and wait time, and expected call length. It then uses a logarithmic function to calculate the number of agents required to match the inputs. This model is widely used in call centers.

<sup>2</sup> The available evidence does not clearly indicate the extent to which hiring staff at a higher pay grade will affect results. ASRS officials indicated they have had some difficulty in retaining call center employees and would be able to provide better service with higher-grade positions. While higher salary levels might encourage retention, neither ASRS' monthly member surveys nor its internal call center quality review process have identified problems with employees' skills or experience levels.

of the new positions approved by the Legislature and Governor in its fiscal year 2006 budget to the call center.

**Plan's projections are likely overstated**—While ASRS has already initiated its plan to improve call center performance by hiring 10 additional FTEs, auditors' review of the plan and call center data suggests that ASRS may not need this number of FTEs. Specifically, auditors' analysis indicates that 5 or fewer agents should be sufficient to meet ASRS' performance goals for the call center. ASRS should monitor its call volume to confirm this analysis; if it is shown to be accurate, ASRS should redeploy any excess staff to other areas requiring assistance.

ASRS management indicated they would redeploy some of these 10 new FTEs to other functions if fewer agents were needed in the call center. However, as of July 2005, other areas identified by ASRS appear to be performing adequately with the current number of staff. For example, while the agency was struggling with issuing cost letters for service purchases in 2004 within their performance goal, data from mid-2005 shows they had improved and were able to issue the cost letters within their goal of 40 business days. Additionally, ASRS reports that during 2005, it has significantly reduced its backlog of service audits from nearly 4,000 to under 800. Therefore, if staff are redeployed to other areas, ASRS should ensure those areas are in need of assistance at that time.

Auditors identified two problems with the plan's projections, one dealing with call volumes, the other with the model used to develop the plan.

- First, the call volume ASRS used as the starting assumption for the quantitative model's projections was too high. The 6-month period (July–December 2004) used as the base for the model reflected the highest call volume since ASRS began tracking this type of data, and was nearly 30 percent higher than the same period in 2003. While the agency believes that the service purchase backlog was primarily responsible for this large increase in call volume, it also believes that this volume will continue to rise as ASRS' overall volume of services provided to members increases. However, the call volume has already decreased 40 percent from January to May 2005. Additionally, auditors' analysis of past call-volume trends found that the average increase over all other comparable 6-month periods was less than 8 percent. These analyses suggest that the ASRS' call-volume projections were too high, and therefore fewer staff could answer a lower expected volume of calls.

Additionally, the call center's performance during previous peaks in call volume does not support ASRS' decision to hire 10 additional FTEs. Prior to the increase in call volume beginning in June 2004, October 2003 had the highest volume in any month since ASRS began measuring performance with its current software. During October 2003, the call center answered over 92 percent of that month's

22,287 calls with an average of 11 agents answering the phones. The staffing assumptions used by ASRS management suggest that 14 FTEs would be sufficient to have an average of 11 agents answering the phones at any given time.<sup>1</sup> Even if future call volumes were to meet ASRS' projections of an average of fewer than 25,000 calls each month, it is not reasonable to expect it would require 24 FTEs to adequately answer these calls.

- Second, industry literature suggested the quantitative model used by the agency has a tendency to overestimate the number of staff required to meet the service level targets. For instance, the model assumes that all callers will wait on hold indefinitely until an agent is available to answer their call. If some percentage of callers hang up, the resulting volume of calls requiring an agent response decreases, as does the number of staff required. ASRS established a goal of answering at least 90 percent of incoming calls, acknowledging that some callers will hang up before reaching an agent.

## Recommendations:

1. To provide more accurate call volume projections to assist in future staffing plans, ASRS should consider the feasibility of tracking both the primary and secondary reasons for incoming calls.
2. If the call center is able to achieve its performance objectives with fewer staff than required by the staffing plan, ASRS should redeploy any excess staff to other areas requiring assistance.

<sup>1</sup>. According to the call center manager, the number of available agents, as tracked by the call center's software package, is generally lower than the number of FTE agents employed in the call center, due to such absences as vacations, illnesses, daily breaks, and staff meetings.



# OTHER PERTINENT INFORMATION

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Auditors have compiled information about the financial status, outlook, and possible changes to the previous retirement program known as the “System” that was in place in Arizona from 1953 to 1971.<sup>1</sup> As System membership continues to decline, ASRS has determined that it will face problems ensuring that liabilities and assets remain adequately balanced. Maintaining the status quo with the System would likely require significant benefit cuts. In order to avoid this, ASRS has studied three options.

## History and structure of the System

ASRS has existed in various forms since 1953 and has operated the current pension plan since 1971. In 1953, the Legislature created ASRS to provide retirement and other benefits for state employees, including university faculty and employees of the State’s political subdivisions. Active teachers voted to join the ASRS in 1954 and transferred to ASRS on January 1, 1955.

In 1970, the Legislature agreed to enact the current Arizona State Retirement System Fixed Benefit Plan (Plan) if 70 percent or more of state employees and teachers voted to transfer to the new plan. More than 80 percent of members voted to replace the System with the Plan, which became effective July 1, 1971. Most political subdivisions subsequently voted to join. Since the transition to the Plan, System members have been given several chances to switch over to the Plan, and many have taken advantage of such opportunities. As of June 30, 2004, there were still about 2,100 System members, nearly 300 of whom were not retired. According to ASRS, these members have likely chosen to stay in the System probably because it is financially advantageous. As of June 30, 2004, the System had \$544.7 million in assets and \$510.8 million in liabilities. ASRS invests System assets in equities, bonds, and real estate, along with assets from the Plan.

**Defined Contribution Plan**—A retirement plan offering a benefit that depends on the total contributions made by the employer and the employee and on the investment returns earned by those contributions. Employees generally bear the investment risk.

**Defined Benefit Plan**—A retirement plan that promises to pay a certain amount for a member’s lifetime, usually based on the number of years of service and on the average salary in the period before retirement. Employers generally bear all investment risk.

<sup>1</sup> Much of the information in this section of the report is based on findings and conclusions reached in a study conducted for ASRS by its contracted actuary.

The System is a retirement program that contains elements of both defined contribution and defined benefit plans. Each member and employer contributes an amount set by statute (currently 7 percent of the employee's compensation) into the member's account, and interest on the balance (set at 8 percent since 1985) is added as well. When System members retire, their account balance is converted into a guaranteed annuity that then pays them a specified benefit amount on a monthly basis. If investment income exceeds the assumed 8 percent rate of return before a member retires, then he or she receives additional credits to the account, known as supplemental credits. According to ASRS, the average unguaranteed portion of nonretired members' benefits is 59.9 percent. Upon a member's retirement, these supplemental credits are added to the guaranteed portion of benefits, but they are not themselves guaranteed.<sup>1</sup> Finally, any investment gains to the System's investments that occur after a member's retirement are paid to retired members in the form of a 13th check either in November or December.

## Forthcoming problems identified

As System membership continues to decline, ASRS has determined that it will face problems ensuring that liabilities and assets remain adequately balanced. In addition, System administration will become increasingly inefficient. As a result, ASRS believes that it will have to reduce benefits if it wants to ensure System stability with no major changes. Specifically, ASRS has determined that within the next 15 years, the System will lose all of its contributing members and those remaining will be only members who are drawing benefits. As of June 30, 2004, there were nearly 300 nonretired members in the System and over 1,800 retired members. The youngest System member is about 52 and should retire around 2015. Most members and beneficiaries are expected to die within the next 30 years.

### Declining membership makes System stability difficult to maintain—

As the System loses contributing members and in turn as mortality gains and losses become increasingly volatile, ASRS has concluded that it will become more difficult to maintain an adequate balance between assets and liabilities. Part of this problem arises from high variability in mortality gains and losses. A mortality gain occurs when a retiree dies before the System's assumptions, then the System experiences a surplus as it has collected more money than it expected to pay out to the retiree. In contrast, if members live longer than expected, the System in turn experiences a mortality loss as it has to pay out more money than it collected. When membership is large, these gains and losses tend to offset each other. However, as membership continues to get smaller, these gains and losses become more volatile, and there is a greater chance that gains and losses will not offset each other.

ASRS believes ensuring the stability of the System will be difficult without major changes.

<sup>1</sup> The Board can adjust nonguaranteed benefits to make sure that liabilities do not exceed the assets available. The Board may increase benefits if actuarial assets exceed 105 percent of actuarial liabilities, and decrease benefits if funding falls below 95 percent of actuarial liabilities. Benefits can also be changed to reflect changes in mortality rate and interest rate assumptions.

**System changes could reduce benefits**—Another concern is that a more conservative investment philosophy for the System may be needed to ensure that it can continue to pay its benefits given shorter liability durations. Since all System members will retire in the near future, there is a need for more stable investment returns for System members. A more conservative investment philosophy would require lowering the assumption relating to investment returns, which may require a reduction in member benefits. According to ASRS, for a nonretired member, such a change could mean reducing nonguaranteed benefit levels up to 23 percent.

Changing to a more conservative investment philosophy could reduce benefits up to 23 percent for a System member.

In addition to considering reducing the assumed rate of investment return to ensure that all member benefits are able to be paid, ASRS has recently updated its mortality assumptions. Specifically, according to ASRS, System members are living longer than ASRS' current mortality assumptions predict. A study performed by ASRS' actuary showed that actual deaths among System members from July 1, 1999 to June 30, 2001, have been only 77 percent of expected deaths. As a result, the Board modified its mortality assumptions effective with the fiscal year 2004 valuation of the System. These changes had no effect on already-retired System members, but nonretired members will see reductions in benefits of roughly 2.5 to 5.0 percent depending on age at retirement.

**Declining membership will make administration less efficient**—ASRS has concluded that the System will become increasingly difficult to effectively manage as membership declines. With fewer members, the administrative burden from each System member will grow and could become excessive in relation to the number of members receiving benefits. For example, ASRS will still need to perform functions such as investing assets, performing annual valuations, and paying benefits regardless of the number of System members.

**ASRS sees options for System maintenance as undesirable**—ASRS believes that changing to a more conservative investment strategy is needed to ensure stability in the long run, but it will likely result in sharp cuts in members' benefits if implemented. Recent changes to assumptions about member mortality have already reduced benefits for nonretired members. In addition, more than half of members' benefit amounts are not guaranteed and are likely to be reduced in the near future. This is an unattractive option, and ASRS has studied other possibilities for managing the System and whether they might better resolve these issues.

## Potential System changes

ASRS has identified several options to respond to the problems associated with the System's declining membership. These options range from transferring remaining System members over to the Plan, to paying out remaining liabilities in a lump sum, to making no large changes. The following section presents the different options

ASRS considered and each option's strengths and weaknesses. ASRS considers the transferring of liabilities and assets from the System to the Plan as the most practical alternative presently available. However, it would require legislation and additional study to determine the proper balance between the interests of Plan and System members. Nevertheless, according to ASRS, its advantages may outweigh its disadvantages. ASRS is continuing to study how to address all of the issues pertaining to this option.

**Transfer System assets and liabilities into Plan**—This option would have ASRS calculate the present value of each retired System member's annuity payments and supplemental credits and transfer this amount into the Plan. The Plan would in turn provide the member a guaranteed monthly pension with the same value as the System's benefits. Nonretired members would continue to make contributions and receive interest and supplemental credits, and upon retirement they would receive the equivalent pension amount from the Plan.

The advantage to moving people from the System to the Plan is that ASRS would no longer need separate administration for the two different retirement benefit plans. In addition, System members would benefit, as all of their benefits would now be guaranteed. According to ASRS, most System members would probably prefer to receive 90 to 95 percent of their benefits on a fully guaranteed basis, rather than 100 percent of their benefits with approximately 60 percent subject to future reductions.

However, while there are advantages, there are also some potential problems with this option. First, if the System is not fully funded (actuarial assets equal to actuarial liabilities), then any shortfall would need to be covered in some way either through a subsidy or through benefit cuts. Also, this approach would require legislation because the Plan and System provide benefit increases on a different basis. Obtaining legislation that properly covers the contingency of moving System members to the Plan is no sure thing, which adds uncertainty to the process. Further, there may be constitutional issues involved, because the Constitution prohibits the impairment of public retirement system benefits. ASRS is going to develop a System Implementation Plan that it hopes to complete by the end of 2005 that will study and address questions about legislation and constitutional issues. Finally, the strategy would likely have to be offered to System members on a voluntary basis. In this case, if some System members chose not to switch, administration of the System would have to continue.

**Transfer assets and liabilities to insurer**—Another option for ASRS would be to seek out an insurer to take over the System's liabilities and provide benefits to members. Any insurer who took over these liabilities would have to be able to continue supplemental credits as well as receiving contributions from still-active members. This option would eliminate the ongoing administrative burden to ASRS as described earlier. There are disadvantages, though. First, insurers may not want to take over administration of an ongoing program. Generally, insurers take over

pension plans only after benefit amounts have been determined, and in this case they have not. In addition, insurers use interest rates and mortality assumptions to estimate how long people will live and how long they will collect benefits that are less favorable than ASRS' assumptions. As a result, even if fully funded, the System would likely require additional state funding in order to pay insurers enough to take over the liabilities. Another disadvantage is that making this change would require legislative changes, which is an uncertain process, as statute requires ASRS to administer the System.

**Provide lump sum settlement in lieu of continuing annuities**—A third option for the System is for ASRS to calculate the present value of members' remaining annuity and supplemental credits and pay this amount to retirees in a lump sum. ASRS would continue to credit nonretired members' retirement accounts with contributions, interest, and supplemental credits, and then upon retirement, pay the retiree with a lump sum. One advantage of this option is that it simplifies System administration for retired members and eliminates administration for nonretired members once they reach retirement. As long as the System is fully funded, then this option incurs no further costs.

The primary drawback to this plan is that System members would likely not accept it since they would be made worse off under this option as compared to under the System. Specifically, the System's basis for providing annuities is better than those that members could buy themselves from private providers with their lump sum settlements. According to ASRS and its actuary, there are legal issues with this option as well since they feel statute requires that members receive benefits in the form of an annuity. If statute were changed to allow for lump sum payments, the annuities that members could buy with their payments would not be as generous as the benefits they receive from ASRS. This might raise a constitutional issue, as the Arizona Constitution prohibits cuts in benefits. In that case, lump sum payments would have to be offered on a voluntary basis. Under such circumstances, many people may elect to continue receiving annuities, and then the advantages of offering the lump sum payments would be lost.



# FOLLOWUP TO 1994 SUNSET REVIEW

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The Office of the Auditor General previously conducted a performance audit and sunset review of ASRS in 1994 (see Report No. 94-3). The 1994 report had four findings and related recommendations. This current audit updates the findings and recommendations in that report.

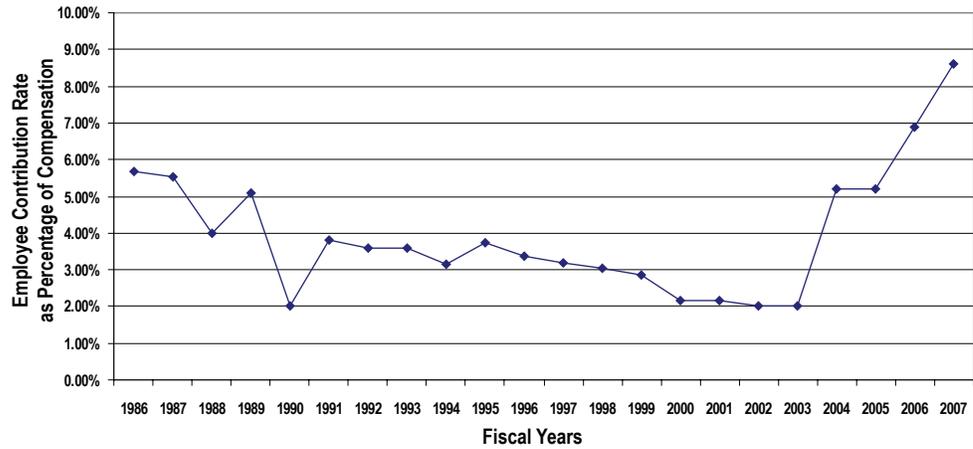
**Contribution rates have been increasing**—The 1994 audit found that the factors allowing improvement of benefits and a low contribution rate were unlikely to continue. These factors included better-than-expected investment returns; changes in actuarial assumptions about employee salaries, retirement rates, and withdrawal rates; and changes in various actuarial assumptions and methods. These factors combined to create a funding surplus and allowed the Legislature to improve benefits. For example, between 1989 and 1992, the Legislature granted benefit increases totaling 11.3 percent to retired members. The funding surplus also helped keep contribution rates lower than 4 percent of participants' pay. The report noted that these conditions and events would not likely continue and predicted that, if benefit enhancements continued and financial performance met projections, by 2002 contribution rates would need to rise by 70 percent, and ASRS would go from a surplus to being less than 85 percent funded. This would mean that liabilities for benefits would be 15 percent greater than available assets.<sup>1</sup> As of June 30, 2004, the Plan's pension fund and Plan and System health benefit funds had assets equal to 91.2 percent of liabilities.

Contribution rates remained low for slightly longer than the audit predicted, but they are now more than double the rate in 1994. As Figure 7 (see page 48) shows, the contribution rates continued to decline through fiscal year 2003, then they rose to 5.2 percent of participants' salaries for fiscal years 2004 and 2005, rose to 6.9 percent for fiscal year 2006, and are projected to rise again to 8.6 percent for fiscal year 2007. Contribution rates are determined by ASRS' external actuary. The rates are set so that enough money is collected to cover the cost of benefits earned by active members during the current year while also taking into consideration the relationship between assets and liabilities for past service. If there is an excess of assets above what is needed to cover liabilities, then the excess is used to offset the cost of benefits and keep contribution rates lower. However, in years where assets fall short, then

Contribution rates are projected to increase to 8.6 percent for fiscal year 2007.

<sup>1</sup> Assets and liabilities refer to actuarially accrued assets and liabilities. The actuarially accrued liability generally represents the portion of the present value of fully projected benefits attributable to service that has been earned as of the valuation date. Actuarial assets are equal to market assets, plus or minus a 10-year phase-in of an excess or shortfall in actual investment returns.

**Figure 7: Member Contribution Rate  
Fiscal Years 1986 through 2007**



Source: Auditor General staff analysis of data from Arizona State Retirement System *Actuarial Valuation* as of June 30, 2004, and Arizona State Retirement System *Weekly Report* for the week ending Friday, June 3, 2005.

contribution rates need to increase in order to cover the cost of currently accumulating benefits as well as shortfalls in assets for past service. Shortfalls can occur when investments perform at lower-than-expected rates.

According to ASRS, the recent higher contribution rates were brought on by several factors including lower rates of return on investments from 1999 through 2002, increases in benefits, and changes to member demographics and actuarial assumptions. Specifically, the fund had investment returns at lower-than-expected rates because of poor stock market performance. In addition, several benefit increases over the past 10 years have increased Plan costs. For example, in 2000, the multiplier used in calculating retirement benefits increased from 2.0 to 2.1. In 2001, the Legislature instituted a graded multiplier that rewards longer periods of service with higher multipliers, which in turn leads to higher benefit payouts. Finally, ASRS' actuary has also had to change some of the assumptions used when valuing the Plan. For example, ASRS has updated its mortality assumptions to reflect more recent experience, leading to an increase in contribution rates.

These factors combined to increase the contribution rate 6.60 percentage points between fiscal years 2003 and 2007. The poor market performance of the actuarial assets accounts for a 2.02 percentage point increase in the contribution rate. Actual liability experience (deviations from demographic assumptions about mortality and other factors) accounts for a 2.00 percentage point increase. Legislative and administrative changes, including increases to benefits, raised the contribution rate

by 1.84 percentage points. Several other factors, including changes to methods and assumptions and phasing in increases through fiscal year 2007, account for a net 1.07 percentage point increase in the contribution rate. Specifically, changes in the mortality rate and other assumptions account for .65 percentage points of this increase. However, changes made by ASRS and the Legislature in 2004, mostly relating to how service purchase costs are calculated, cut the increase in the contribution rate by .33 percentage points. ASRS estimates that these changes will reduce the contribution rate that would otherwise apply by another .37 percentage points over the next several years.

**Potential cost-savings through greater internal management of assets**—The 1994 audit found that ASRS could reduce management costs by internally managing more assets. In 1994, ASRS had the statutory authority to manage up to 20 percent of its assets internally, but it did not manage any. ASRS spent \$10 million in fiscal year 1993 on external investment managers, and the report estimated that within 10 years, the cost of outside investment managers could increase 50 percent or more. The report recommended that ASRS begin managing a portion of its pension fund investment internally and that the Legislature increase the percentage of assets ASRS could manage.

Both recommendations have been implemented. Today, as the result of changes to statute in 1997, ASRS has the authority to manage up to 50 percent of assets internally. According to ASRS, its Investment Management Division now internally manages approximately 30 percent of its assets. The investment returns of ASRS' internal managers are evaluated versus a benchmark for each area in which ASRS manages funds. Based on performance data for the quarter ending March 31, 2005, ASRS' internally managed portfolios are generally performing well versus their benchmarks for both the short-term and the life of the portfolio. However, when internally managed portfolios are not performing well, the ASRS Board may decide to move these funds to an external investment manager. For example, in August 2004, the Board decided to transfer an approximately \$1.1 billion portfolio of internally managed fixed income investments to an external investment manager. This decision was due to multiple factors, including the underperformance of the internal portfolio compared to the applicable benchmark over the period that ASRS managed the investments; the increased risk associated with managing the portfolio due to the increasing volatility of the bond market; and the higher-than-acceptable amount of staff resources demanded by the portfolio.

ASRS now manages approximately 30 percent of its assets internally.

**Problems in implementing a new information system**—The 1994 report examined the steps ASRS was taking to implement its new computer system, which it had begun in 1991. The audit found that ASRS had problems in implementing the new system and was hampered by poor planning, inexperienced management, inexperienced programmers, and failures to include users in development. The project was halted in 1993 because of concerns about sufficiency of remaining funding, missed completion dates, and inadequate project development. In 1994, ASRS decided to change direction in the development of its computer system and

began development of the Public Employee Retirement Information System (PERIS). PERIS would incorporate the failed system's concepts while also seeking to integrate all ASRS systems into one network. The audit recommended that ASRS address project issues by using experienced project management, implementing a formal system of development methodology, training programmers, and completing important components of its business plan for system development.

Since the 1994 audit, according to ASRS, several parts of PERIS have been completed. These include member and employer demographic databases, contribution reporting and accounting, and health insurance. In fiscal year 2001, ASRS adopted an IT plan that would reduce reliance on paper files and integrate functions and data. ASRS has updated the IT plan since originally adopting it to include more functions. In addition to continuing PERIS development, the plan also includes the development of an integrated Financial Management System, an Electronic Document Imaging Management system, Web-based applications, upgrades and maintenance to network and telephone systems, and project management. According to ASRS, it has spent a total of \$19.4 million on the IT plan through the end of 2004. The IT plan runs through 2007 with an estimated total cost of \$39 million, at which time ASRS expects to have finished developing these various projects.

Further development remained somewhat in flux. ASRS has had some concerns about the integration of its financial systems. In early 2005, ASRS created a committee to review its IT systems and had an outside consultant help determine whether to continue developing PERIS or to buy some off-the-shelf software from a vendor. In June 2005, ASRS decided to continue developing its own IT systems.

**Long-term disability costs**—The 1994 audit recommended restructuring the long-term disability program, saving an estimated \$250,000 per year. State statutes required that an outside vendor administer the program, but auditors identified two state services—the Disability Determination Services Administration and the Rehabilitation Services Administration, both within the Department of Economic Security—that could provide similar services at less cost. The report recommended that the Legislature eliminate this requirement. It also recommended that ASRS examine whether the other state programs could administer the program if the requirement were eliminated.

Although the statutory requirement for an outside vendor has been changed, ASRS still contracts with a vendor to administer the program. In 1995, the Legislature relaxed the requirements that ASRS contract with a private entity to administer the LTD program. ASRS said, however, that it does not believe that the State has a program that can offer all of the current LTD program's services at an equal or lower cost.

ASRS has spent \$19.4 million on its IT plan through the end of 2004.

# SUNSET FACTORS

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In accordance with Arizona Revised Statutes (A.R.S.) §41-2954, the Legislature should consider the following 12 factors in determining whether the Arizona State Retirement System should be continued or terminated:

## 1. The objective and purpose in establishing ASRS.

ASRS was established by A.R.S. §38-713 in 1953 and has a variety of duties related to retirement benefits. A.R.S. §38-712(A) lists the primary intent of ASRS as:

- 1) Providing an incentive in the recruitment and retention of employees of the highest possible quality.
- 2) Contributing toward providing a total compensation package that is generally equivalent to comparable employment in other public and private organizations in this state.
- 3) Providing a retirement system that encourages employees to remain in service for periods of time that will provide public employers with the full benefit of the training and experience gained by the employees.
- 4) Providing an orderly method of promoting and maintaining a high level of service to the public through an equitable separation procedure that is available to employees at retirement or on becoming disabled.
- 5) Providing a base retirement benefit that is less than one hundred per cent of a member's post-retirement income requirements, recognizing that personal savings and social security also contribute toward total post-retirement income requirements.

ASRS' vision is:

"For the benefit of our members, the Arizona State Retirement System will be a leading state benefit plan administrator in the areas of:

- Core Member Services
- Funded Status
- Investment Performance
- Operational Effectiveness

This will be accomplished while keeping program benefits and associated costs relatively aligned and maintaining actuarial and fiscal integrity."

A nine-member board oversees the administrative and investment activities of the agency, which include collecting and refunding contributions from members and employers, disbursing benefits to qualified members, and investing monies in a safe and prudent manner. ASRS also offers health insurance and long-term disability benefits to members.

**2. The effectiveness with which ASRS has met its objectives and purpose and the efficiency with which it has operated.**

ASRS has met its objective of effective investment management through its generally appropriate use of acceptable asset allocation approaches and through the development of its real estate investment program (see Finding 1, pages 9 through 19). The ASRS Board primarily uses a strategic asset allocation approach to allocate the amounts of its approximately \$22 billion fund that it invests in different assets. This approach allows it to focus on investing for the long term. The Board's approach also includes tactical asset allocation, which allows it to take advantage of changing market conditions. Auditors' review found that some other state pension funds also used a blend of strategic and tactical asset allocation.

In addition to its overall investment approach, ASRS has made progress in implementing its real estate investment program. The ASRS Board approved the investment of approximately 6 percent of its fund in real estate assets. To accomplish this directive, ASRS has hired a real estate consultant, internal real estate asset manager, and real estate legal counsel. Additionally, ASRS has developed and the Board has approved a program to set the strategy for investment in real estate. ASRS has selected real estate managers for its initial investments; however, as of May 26, 2005, the managers had not yet signed

their contracts due to their concerns related to the state-mandated liability provisions in the contracts. ASRS is working with its real estate consultant and legal counsel to create contracts to satisfy state mandates, and also to conform to industry standards for real estate investment.

Although ASRS is generally effective in its investment management activities, it needs to improve some areas of customer service (see Finding 2, pages 21 through 31). Specifically, ASRS is not timely in sending new retirees their pension benefits. While one-half of all new retirees receive their first annuity check within 45 days, approximately 25 percent of new retirees do not receive their first check for two or more months. A recent national study found that a majority of retirees of systems similar to ASRS are being paid within 30 days. Additionally, ASRS staff are committing errors in the initial calculation of new retirees' annuities, though the agency has implemented an effective process to identify and correct inaccuracies in pension benefit amounts. Finally, ASRS is paying only half of requested refunds within its goal of 45 days. To improve in this area, ASRS should take a variety of actions, including automating benefit calculations and updating procedures.

ASRS also has acknowledged that its call center's performance has worsened recently (see Finding 3, pages 33 through 39). ASRS' call center experienced a significant increase in incoming calls beginning in June 2004. This rise in volume was accompanied by longer wait times for calls to be answered and an increasing number of callers hanging up before their calls were answered. To manage the problem, ASRS management developed a staffing plan that recommended adding ten new call center positions. However, auditors' review of the plan indicated that ASRS may not need all of these positions to achieve its performance goals for the call center.

ASRS has received a Certificate of Achievement from the Government Finance Officers Association every year since 1989 for its Comprehensive Annual Financial Report.

In 2004, the Board adopted a Governance Handbook that sets forth the roles and responsibilities for the Board.

### **3. The extent to which ASRS has operated within the public interest.**

ASRS has operated in the public interest through many of its activities. ASRS' Web site has many useful features for ASRS retirees, active members, and employers. For example, ASRS' Web site provides active members with an online tool to estimate their retirement benefits. ASRS also provides annual statements to its members that show the amount of money that each has contributed and the amount of credited service that each member has.

Additionally, ASRS operates a call center and walk-in centers in Phoenix and Tucson, where it serves its retirees and members who have questions about their current or future benefits. ASRS also answers questions through e-mail. In addition, ASRS conducts retirement seminars for ASRS members who are close to retirement to answer general and individual questions about retirement benefits. Similarly, starting in 2005, the ASRS director conducted periodic outreach sessions throughout the State. During these sessions, the director and ASRS board members or staff who may attend address ASRS retirees, active members, and employers about any topic related to ASRS.

ASRS has also acted in the public interest by adopting a conflict-of-interest policy that set guidelines for addressing business relationships between its investment consultants and managers. ASRS' investment consultants provide the Board with information about the performance of ASRS' investment managers, make recommendations about the future use of investment managers, and aid ASRS' internal investment management staff when it searches for new investment managers. The purpose of the conflict-of-interest policy is to learn if any business relationships exist between the investment managers and consultants, since these relationships may compromise ASRS investment consultants' ability to offer objective advice to ASRS regarding the hiring and retention of investment managers. According to the policy, investment consultants must disclose to ASRS if they have any business relationship with investment managers. Likewise, investment managers must disclose all business relationships with consultants. According to this policy, ASRS should not use the services of an investment consultant who receives compensation from investment managers. This policy also calls for the investment consultant functions of reporting on manager performance and advising on a manager search to be separated between different consultants if there appears to be a conflict of interest in one consultant performing both functions. However, the chief investment officer and ASRS director can overrule this provision if they deem it in ASRS' interest.

ASRS has further acted in the public interest by taking steps to mitigate contribution rate increases for members and employers. For example, in 2004 ASRS acted to reduce the interest paid on contributions that inactive members withdraw from ASRS from 8 percent to 4 percent. ASRS estimated that if this interest rate reduction had not been implemented, the contribution rate increase of 1.7 percent would have increased by another 0.3 percent. ASRS' actuary estimates the cumulative effect of these steps to be a savings in current value of over \$2 billion in current and future contributions from members and employers.

4. **The extent to which the rules adopted by ASRS are consistent with legislative mandate.**

According to the Governor's Regulatory Review Council (GRRC), ASRS has failed to promulgate all rules required by statute. GRRC identified several statutes that required rules that ASRS has not promulgated; ASRS is aware that rules are needed in these areas and plans to begin the rule-making process.

- **A.R.S. §38-715(C)(3)**—Set procedures for members and beneficiaries to follow when filing applications for benefits.
- **A.R.S. §38-730(B)**—Set standards for how retirement service credits of an employee can be transferred from non-ASRS employers to an ASRS employer.
- **A.R.S. §38-771.01(K)(3) and (5)**—Establish options for how members may receive retirement benefits that the board may provide rather than taking annuity payments.
- **A.R.S. §38-797.05(A)**—Determine the amount of total employer contributions necessary to pay one-half of all benefits under the LTD program and the costs of administering the LTD program.
- **A.R.S. §41-1033(A)**—Specify how a person can request an agency to make a final rule or review agency practice that a person thinks should be a rule.

5. **The extent to which ASRS has encouraged input from the public before adopting its rules and the extent to which it has informed the public as to its actions and their expected impact on the public.**

ASRS keeps the public informed about proposed rules as well as other actions it takes. For example, ASRS publishes proposed rules in the *Arizona Administrative Register*. In addition, according to ASRS, it also holds public meetings on potential rules, even when the public does not request them. ASRS management states that they prefer to meet with stakeholder groups during rule development before formally adopting rules.

The ASRS Board has also complied with the State's open meeting laws. The Board has posted public meeting notices at least 24 hours in advance at the required location, made agendas available to the public, maintained meeting minutes, and has the required statement of where meeting notices will be posted on file with the Secretary of State. The Board has also used executive sessions appropriately.

ASRS has a variety of ways of communicating with members and employers. First, ASRS publishes a semiannual newsletter, *Financial Horizons*, which it sends to all retired and active members. It has also developed a member handbook that describes the benefits and services available to members. In addition, ASRS posts a Weekly Report on its Web site that updates action being taking within the Legislature that affects ASRS and its members. Further, ASRS has two resources for employers; the employer handbook, which is an instruction manual for employers; and employer updates that it sends out to employers periodically. Finally, ASRS' Web site has all of these publications in addition to contact information, drafts of rules, annual reports, and schedules of upcoming meetings.

**6. The extent to which ASRS has been able to investigate and resolve complaints that are within its jurisdiction.**

ASRS has a process for resolving and adjudicating member complaints. In calendar year 2004, ASRS reports that it received and responded to 318 complaints from members. Members can appeal adverse ASRS decisions to the director and eventually the Board itself. If the member is not satisfied with the Board's decision, he or she may appeal the decision to the courts.

According to ASRS, it does not typically receive complaints about third parties. It will, however, receive member complaints against employers who failed to make contributions to ASRS. ASRS has internal polices to investigate employers, make determinations about whether employers fulfilled their obligations, and use statute to direct employers to make contributions that are owed.

**7. The extent to which the attorney general or any other applicable agency of state government has the authority to prosecute actions under enabling legislation.**

ASRS is not a regulatory agency, but there are a few instances where ASRS has legal authority to pursue enforcement action. Specifically, it is a felony to knowingly provide ASRS with false information, and the Attorney General can prosecute offenders. Also, as mentioned in Sunset Factor 6, ASRS can take action against employers who fail to make contributions for members. According to ASRS' Attorney General representative, the Attorney General has sufficient authority to represent ASRS in any matter.

**8. The extent to which ASRS has addressed deficiencies in its enabling statutes, which prevent it from fulfilling its statutory mandate.**

ASRS has taken action to address deficiencies in its statutes. Specifically, ASRS sought three legislative changes during the 2005 session. First, ASRS sought to amend A.R.S. §38-747 to provide that a payroll deduction agreement must be transferred when a member changes employment between participating ASRS employers. This was passed by the Legislature and enacted in Laws 2005, Chapter 231. Second, ASRS wanted the option to access the Arizona Health Care Cost Containment System healthcare provider networks in order to provide health insurance for ASRS members. House Bill 2473 did pass out of one committee, but no further action was taken. Third, ASRS wanted a technical correction to statute concerning retired members returning to work after reaching normal retirement age in order to conform with federal law; however, this did not pass.

**9. The extent to which changes are necessary in the laws of ASRS to adequately comply with the factors in the sunset laws.**

No legislative changes were identified during this audit.

**10. The extent to which the termination of ASRS would significantly harm the public health, safety, or welfare.**

Terminating ASRS would significantly harm the public. ASRS provides monthly pension benefits to nearly 70,000 retiree members with more than 400,000 total members in ASRS. Even if ASRS were eliminated, its functions would have to continue. The Arizona State Constitution specifies that membership in a public retirement system is a contractual relationship, and benefits cannot be "diminished or impaired." If ASRS were eliminated, another entity would have to take over responsibility for providing benefits to ASRS members and assume the \$25.9 billion in accumulated liabilities that ASRS has to its members.

**11. The extent to which the level of regulation exercised by ASRS is appropriate and whether less or more stringent levels of regulation would be appropriate.**

Since ASRS is not a regulatory agency, this factor does not apply.

12. The extent to which ASRS has used private contractors in the performance of its duties and how effective use of private contractors could be accomplished.

ASRS uses private contractors for a wide variety of services in four main areas:

- **Investments and Finance**—ASRS uses private investment managers to manage approximately \$15.6 billion of its invested assets and uses private investment consultants to aid both in assessing the performance of investment managers and in investment manager searches. ASRS also uses a private real estate consultant to help guide its real estate investments and has contracted with attorneys to provide legal counsel related to real estate investments. Additionally, ASRS uses a private financial institution as its custodial bank. The bank handles transfers of funds and issues benefit checks to ASRS retirees.
- **Administration**—ASRS uses private contractors to administer its Long-Term Disability Program, the health insurance program, and dental insurance program for retirees.
- **Information Technology (IT)**—ASRS has contracted with IT specialists to aid with the implementation of its \$39 million IT Plan. ASRS uses consultants in a variety of areas. For example, ASRS contracts with a private company to perform imaging of its service purchase-related documents. According to ASRS, the imaging project will enhance the timeliness with which ASRS can approve member requests to purchase credit for prior eligible employment.
- **Printing and Mailing Services**—According to ASRS, it uses private contractors to print and mail both its member benefit statements and its semiannual *Financial Horizons* newsletter. ASRS also contracts with a private company to print its Comprehensive Annual Financial Report.

The audit did not identify any additional opportunities for ASRS to use private contractors.

# AGENCY RESPONSE





# ARIZONA STATE RETIREMENT SYSTEM

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September 8, 2005

Ms. Deborah K. Davenport, Auditor General  
Office of the Auditor General  
2910 N. 44<sup>th</sup> St., Ste. 410  
Phoenix, AZ 85018

Dear Ms. Davenport:

Enclosed is the Arizona State Retirement System (ASRS) response to the findings contained in the performance audit and sunset review from the Office of the Auditor General.

I would like to commend the staff of the Office of the Auditor General on their professionalism and responsiveness during the course of this audit. They ensured that the audit process proceeded smoothly with a minimum of disruption to daily operations. It has been a pleasure to work with them.

As noted in our response, the ASRS is generally in agreement with all of the findings and their recommendations and will work to implement them in a timely fashion.

Sincerely,

Paul Matson  
Director

## **Finding 1: ASRS' investment management generally appropriate**

1. The ASRS Real Estate Committee should adopt their draft policies and procedures for investment in real estate.

*The finding of the Auditor General is agreed to and the audit recommendation will be implemented.*

2. The ASRS should use procedures developed by other state pension plans to help guide its future development of real estate investment procedures.

*The finding of the Auditor General is agreed to and the audit recommendation will be implemented.*

## **Finding 2: ASRS should improve its performance in paying some benefits**

1. To improve the timeliness of paying new retiree annuities, ASRS should:
  - a. Complete the incorporation of the new retiree function into its main data system by December 2006 to allow it to initialize annuities based on currently available data instead of waiting for employer verification of final payroll details.
  - b. Complete its ongoing project to convert members' paper and microfiche files to electronic images by June 2006.
  - c. Study the cost of implementing a second monthly pay date for new retirees' annuities, weighing any potential impact upon currently scheduled IT projects against the benefit of reducing new retirees' wait times for receiving annuity payments.

*The findings of the Auditor General are agreed to and the audit recommendations will be implemented.*

*Fast and reliable benefit processing is a critical business objective for the ASRS, and a cornerstone of the agency's business re-engineering and technology efforts. Once the ASRS' efforts in these areas are fully complete, members of the ASRS will experience benefit payment processing service that is equal to or better than its peer retirement systems.*

*As suggested, we will study whether it is feasible and cost effective to implement recommendation 1c in a way that will provide a more immediate benefit to members, yet avoid disruption to planned efforts to improve this process.*

2. To improve the accuracy of paying new retiree annuities, ASRS should update all procedure documents related to processing new retirees, and provide training to its staff for the automated calculation of the highest average monthly salary once this new function is operational.

*The finding of the Auditor General is agreed to and the audit recommendation will be implemented.*

*Revisions of desk procedures related to the processing of new retirees are currently under development. For example, a new automated calculation of the highest average monthly salary was implemented in July 2005. Training associated with the new salary calculation has been completed for some staff, and is in the process of being completed for others. This new calculation, and also the revised desk procedures, will be incorporated into our efforts to further automate and re-engineer this business process in 2006.*

3. To improve the timeliness of paying refunds, ASRS should complete its efforts to fully incorporate this function into its main computer system by April 2006.

*The finding of the Auditor General is agreed to and the audit recommendation will be implemented.*

*Automation and process re-engineering efforts are underway and are proceeding as planned. It is our expectation that the entire refund process will be significantly improved when this effort is complete, including reducing the turnaround time for some payments to as few as ten business days.*

### **Finding 3: ASRS should monitor and assess its plan for improving call center performance**

1. To provide more accurate call volume projections to assist in future staffing plans, ASRS should consider the feasibility of tracking both the primary and secondary reasons for incoming calls.

*The finding of the Auditor General is agreed to and the audit recommendation will be implemented.*

*We agree that it is beneficial in many ways to have data regarding the reason(s) for a member's call. Accordingly, we will work to improve our reporting in this area. Any changes made to our reporting capabilities must carefully weigh the benefit of receiving additional data versus the additional time it may take for call center agents to record the data.*

2. If the call center is able to achieve its performance objectives with fewer staff than required by the staffing plan, ASRS should redeploy any excess staff to other areas requiring assistance.

*The finding of the Auditor General is agreed to and the audit recommendation will be implemented.*

*At this time, it is evident to us that both a higher number and more highly skilled staff are needed to improve call center performance. However, should the ASRS meet its performance goals for the call center with fewer staff than anticipated, staff will be utilized to improve the timeliness of its service audit process, walk-in service, responses to member e-mails, correspondence, and appeals.*

## Performance Audit Division reports issued within the last 24 months

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<b>03-08</b>	Arizona Department of Commerce	<b>04-10</b>	Arizona Department of Transportation, Motor Vehicle Division—Information Security and E-government Services
<b>03-09</b>	Department of Economic Security—Division of Children, Youth and Families, Child Protective Services—Caseloads and Training	<b>04-11</b>	Arizona Department of Transportation, Motor Vehicle Division—Sunset Factors
<b>04-L1</b>	Letter Report—Arizona Medical Board	<b>04-12</b>	Board of Examiners of Nursing Care Institution Administrators and Assisted Living Facility Managers
<b>04-L2</b>	Letter Report—Gila County Transportation Excise Tax	<b>05-L1</b>	Letter Report—Department of Health Services—Ultrasound Reviews
<b>04-L3</b>	Letter Report—Department of Economic Security—Population Estimates	<b>05-01</b>	Department of Economic Security—Division of Employment and Rehabilitation Services—Unemployment Insurance Program
<b>04-01</b>	Arizona Tourism and Sports Authority	<b>05-02</b>	Department of Administration—Financial Services Division
<b>04-02</b>	Department of Economic Security—Welfare Programs	<b>05-03</b>	Government Information Technology Agency (GITA) & Information Technology Authorization Committee (ITAC)
<b>04-03</b>	Behavioral Health Services' HB2003 Funding for Adults with Serious Mental Illness	<b>05-04</b>	Department of Economic Security—Information Security
<b>04-04</b>	Department of Emergency and Military Affairs and State Emergency Council	<b>05-05</b>	Department of Economic Security—Service Integration Initiative
<b>04-05</b>	Department of Environmental Quality—Water Quality Division	<b>05-06</b>	Department of Revenue—Audit Division
<b>04-06</b>	Department of Environmental Quality—Waste Programs Division	<b>05-07</b>	Department of Economic Security—Division of Developmental Disabilities
<b>04-07</b>	Department of Environmental Quality—Air Quality Division	<b>05-08</b>	Department of Economic Security—Sunset Factors
<b>04-08</b>	Department of Environmental Quality—Sunset Factors		
<b>04-09</b>	Arizona Department of Transportation, Motor Vehicle Division— State Revenue Collection Functions		

## Future Performance Audit Division reports

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Foster Care Review Board

Department of Administration—Information Services Division