PERFORMANCE AUDIT

ARIZONA STATE RETIREMENT SYSTEM

Report to the Arizona Legislature
By the Auditor General
September 1994
Report 94-3

STATE OF ARIZONA
OFFICE OF THE
AUDITOR GENERAL

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September 26, 1994

Members of the Arizona Legislature

The Honorable Fife Symington, Governor

Mr. LeRoy Gilbertson, Director
Arizona State Retirement System

Transmitted herewith is a report of the Auditor General, A Performance Audit of the Arizona State Retirement System. This report is in response to a May 5, 1993, resolution of the Joint Legislative Audit Committee. This performance audit was conducted as part of the Sunset review set forth in A.R.S. §§41-2951 through 41-2957.

We found that better than expected investment returns and some one-time gains from changes in actuarial assumptions and methodologies have left the Arizona State Retirement System (ASRS) in an enviable financial position. ASRS has had a healthy surplus which has allowed it to provide very competitive benefits while maintaining low contribution rates. However, these conditions are unlikely to continue. We also found that while ASRS has recently taken some initial steps to address the development of its new computer system — an issue that has been of concern to many legislators and others — ASRS has yet to make several key decisions that will likely determine

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the success or failure of the system. Finally, to further improve ASRS operations we recommend that it begin managing some investments internally. This is done by most major funds in the country and would save ASRS several million dollars annually.

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

This report will be released to the public on September 27, 1994.

Sincerely,

Douglas R. Norton

Douglas R. Norton
Auditor General

SUMMARY

The Office of the Auditor General has conducted a performance audit and Sunset review of the Arizona State Retirement System pursuant to a May 5, 1993 resolution of the Joint Legislative Audit Committee. The audit is part of the Sunset review set forth in Arizona Revised Statutes §§41-2951 through 41-2957.

The Arizona State Retirement System (ASRS) administers retirement benefits to state employees and employees of other participating political subdivisions, servicing over 300 Arizona employers. Besides retirement benefits, the ASRS offers long-term disability coverage, and medical and dental insurance, to its retired and disabled members. The system is overseen by a seven-member board with support from the five-member Investment Advisory Council which provides recommendations on investment management. In fiscal year 1993-94, the ASRS has 123 authorized FTEs and a budget of $19.5 million, including $12.3 million for investment costs.

The ASRS retirement fund is financially sound. Our review found that the ASRS' benefits, funding levels, and investment performance compare favorably to similar systems in other states. For example, Arizona ranks 11th among the 50 states when comparing benefits provided to state employees. In addition, the system ranked ninth in a comparison of the financial health of public pension funds. As of June 30, 1993, the ASRS had a fund surplus of approximately $850 million; total actuarial assets were valued at $9.77 billion and its actuarily accrued liabilities were $8.92 billion. Finally, the ASRS's average annual investment return of 13.2 percent over the past 10 years exceeds the 11.6 percent median return of other public pension funds monitored by the system's investment advisor.

Factors Enabling The ASRS To Improve Benefits While Maintaining Low Contribution Rates Are Unlikely To Continue In The Future (see pages 5 to 10)

The ASRS cannot continue to both enhance member benefits and maintain low contribution rates indefinitely. A funding surplus, which has allowed the agency to accomplish both these ends, was created by circumstances that are unlikely to be repeated. For example, a better-than-expected investment return between fiscal years 1988 and 1993 was earned on fund assets, resulting in additional income of approximately $1.1 billion. This additional income has allowed the Legislature to provide benefit improvements to active and retired members, while maintaining low contribution rates for active members and employers.

According to consultants hired by our Office to review the ASRS' actuarial methods and funding status, gains like these cannot be expected to continue. As such, future benefit enhancements could significantly impact the system's financial health, resulting in increased contribution rates.

The ASRS Can Eventually Cut Investment Management Costs By Several Million Dollars Annually (see pages 11 to 16)

The system can reduce its rising investment management costs without jeopardizing performance by developing its own internal investment management program. Despite having the authority to manage 20 percent of its assets in-house, the ASRS has chosen 14 external money managers to invest its nearly $11 billion in total assets. Monies paid for these services totaled $10.3 million in fiscal year 1993. Moreover, these costs are expected to rise, and could reach $15 million or more by the year 2004.

We found that the ASRS could cut these administrative expenses several million dollars annually by managing a portion of the system's assets itself. Sophisticated, yet inexpensive, computer programs could be used by the ASRS to replicate certain investment strategies employed by its external money managers at a reduced cost. More traditional (i.e., nonquantitative) investment strategies could also be implemented internally. Once an effective in-house investment program is well established, the ASRS should request the Legislature to increase the percentage of assets that can be managed internally as designated under A.R.S. §38-752.01.G.

ASRS Is Taking Several Positive Steps Towards Implementing Its New Computer System; However, The Success Of Its Efforts May Hinge On How It Ultimately Addresses Several Key Issues (see pages 17 to 21)

Several important issues still need to be addressed to help ensure successful development of a new computer system at ASRS. Processing inefficiencies, such as manual calculation of tens of thousands of benefit estimates and payments amounts, prompted the ASRS to develop a new computer system in 1991. However, after spending approximately $2.9 million of a $4.1 million budget, the project was suspended in 1993 amid concerns about sufficient project funding, missed completion dates, and inadequate project development. Poor planning and management, including the failure to develop a formal planning process; utilize an experienced project manager; hire experienced programmers; and involve system users caused the project to go awry.

Recently, new agency management has resumed project development by implementing a formal planning process and drafting a business plan. Three critical issues yet to be resolved include: 1) selecting an experienced project manager; 2) implementing a formal system development methodology; and 3) completing the sections of the business plan addressing the system's goals and the system's hardware and software requirements.

The ASRS Could Save $250,000 Annually By Restructuring Its Long-Term Disability Program (see pages 23 to 25)

Using a private vendor to administer the state's long-term disability program has been unnecessarily costly to ASRS members. Our review showed that the ASRS could save $250,000 annually by managing the program in-house. Specifically, we found that the ASRS has a variety of administrative options, including the use of existing, and less expensive, state-sponsored disability services such as those offered by the Department of Economic Security. However, to allow the ASRS to self-administer its program, A.R.S. §38-781.31 should be amended to eliminate the requirement that the ASRS use an outside vendor.

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INTRODUCTION AND BACKGROUND

The Office of the Auditor General has conducted a performance audit and Sunset review of the Arizona State Retirement System pursuant to a May 5, 1993, resolution of the Joint Legislative Audit Committee. The review is part of the Sunset review set forth in Arizona Revised Statutes §§41-2951 through 41-2957.

The Arizona State Retirement System (ASRS) was created in 1953 to provide retirement benefits to state employees, as well as employees of other participating political subdivisions. The system serves over 300 Arizona employers, including all state agencies, 14 of Arizona's 15 counties, a majority of the state's community colleges, and numerous municipalities and school districts. The ASRS' plan has more than 207,000 members, including nearly 43,000 retirees and disabled members. In addition to retirement benefits, the ASRS offers long-term disability coverage, and medical and dental insurance to its retired and disabled members. The system is overseen by a seven-member board with support from the five-member Investment Advisory Council which provides recommendations on investment management. In fiscal year 1993-94, the ASRS has 123 authorized FTEs and a budget of $19.5 million, including $12.3 million for investment costs.

The ASRS Offers Competitive Benefits At A Reasonable Cost

Benefits provided to ASRS members compare favorably with those offered by similar systems in other states. An April 1990 report prepared for the Legislative Council Study Committee on the Arizona State Retirement System by an independent actuarial and consulting firm ranked the ASRS' overall retirement benefits first among the 68 public employee retirement systems it examined. A 1992 study by the Wisconsin Retirement Research Committee also indicates that the ASRS offers an attractive benefits package for the cost. The Rhode Island Office of the General Treasurer recently completed a comparison of retirement benefits in all 50 states and found that only 10 states provided a higher level of benefits than Arizona.

Specifically, the formula used to determine retirement benefits for ASRS members is generous. Plan members receive 2 percent of their final average salary for each year of service upon normal retirement.[1] Nationwide, members of public pension plans similar to the ASRS receive an average of 1.8 percent of their final average salary for each year of credited service.

In addition, provisions for normal and early retirement are similar to other major public employee retirement systems. Like most other systems surveyed in the Wisconsin study, the ASRS has adopted multiple combinations of age and service that qualify for full benefits. The ASRS members can retire with full benefits at age 65, at age 62 with at least ten years of service, or when the employee's age and years of credited service equal 80. The system also offers one of the most flexible early retirement policies. Members can retire with reduced benefits as early as age 50 if they have at least 5 years of service.

Furthermore, the system's employee contribution rate is lower than most other major public employee retirement systems across the country that were surveyed. Like most public pension systems, the ASRS requires members to contribute to the plan. For fiscal year 1994, employees and employers each contributed 3.14 percent of the employee's salary to the system. The Wisconsin Retirement Research Committee reports that few systems had lower employee contribution rates. In fact, a majority of the 72 major public pension plans requiring employee contributions had contribution rates greater than 5 percent.[2] Since fiscal year 1988 the ASRS' employee contribution rate has exceeded 5 percent only once.

Prudent Funding Mechanisms And Solid Investment Performance Have Enabled The ASRS To Meet Its Pension Obligations

While providing attractive benefits at a relatively low cost, the ASRS has maintained a strong financial position. The system has ample resources to meet its current pension obligations. Establishment of sound funding policies ensures that contributions are sufficient to satisfy future benefit commitments. Solid investment performance has also contributed to the fund's financial well-being.

The ASRS has more than enough funds to meet its pension obligations. In June 1993, the system's actuary valued the ASRS' total actuarial assets at $9.77 billion and its actuarily accrued liabilities at $8.92 billion. The system is currently in an overfunded position,

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(1) The final average salary (FAS) of ASRS members is based on an employee's highest 36 months' compensation in the last 10 years of service. Many other public retirement systems use FAS in the retirement benefit calculation, although the formula varies somewhat from system to system.

To illustrate how retirement benefits are calculated, a person retiring with a FAS of $30,000 and 20 years of service would receive 40 percent (2 percent per year times 20 years of service) of $30,000, or $12,000 annually.

(2) The Wisconsin Retirement Research Committee surveyed a total of 85 major statewide public retirement systems. Thirteen of these systems do not require employees to contribute to their pension plan.

with assets exceeding liabilities by approximately $850 million. A May 1993 study by Wilshire Associates, a national investment consulting firm, compared system funding levels (assets as a percentage of projected benefit obligations) and found that the ASRS ranked 9th among the 50 states and the District of Columbia.

Prudent funding mechanisms have been established to ensure that sufficient resources are set aside for current and future benefit obligations. ASRS benefits are funded in advance, using accepted actuarial methods and assumptions.[1] Statutes require these assumptions to be reviewed at least every five years to determine if they accurately reflect the actual experience of the system. These assumptions have been found to be consistent with industry-wide practices. Each year an actuarial valuation is performed to determine required employee and employer contribution rates, to describe the plan's current financial position, and to analyze changes in the plan's condition.

The system's strong investment performance has significantly contributed to its sound financial position. Over the past 10 years, the market value of the system's assets has grown 252 percent, from approximately $3.1 billion to nearly $10.8 billion.[2] While the contributions received by the system closely approximated benefit payments during this period, investment income of $6.6 billion was largely responsible for the fund's growth. Over the past ten years the system's investments have returned an average of 13.2 percent annually, which compares favorably with the 11.6 percent median annualized rate of return for other public pension funds monitored by the system's investment advisor. ASRS' domestic fixed-income investments have performed particularly well in the past 10 years, outperforming the Lehman Brothers Aggregate Bond Index by an average of 2.2 percent annually.[3] Performance of the system's domestic stock investments has been comparable to major market indexes. Since fiscal year 1984 these investments have returned an average of 13.5 percent annually. During this period, the Standard and Poor's 500 and Wilshire 5000 stock indexes had annualized returns of 14.4 percent and 13.3 percent, respectively.

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(1) An actuarial method is a procedure used to determine the present value of pension benefits to be paid in the future, and allocate the value and cost of these benefits to a specific time period. Forecasting system assets and liabilities requires that the ASRS make assumptions concerning future economic and demographic trends.

(2) The $10.8 billion market value of the fund is higher than the $9.77 billion actuarial value because the ASRS' actuary uses a somewhat more conservative method in the valuation of system assets. According to ASRS' 1993 annual actuarial valuation report, the actuarial value of assets is equal to the market value of assets less a five-year phase-in of the excess (shortfall) between expected investment return and actual income.

(3) Fixed-income investments include government, corporate, or municipal bonds, and preferred stocks which pay fixed dividends or interest.

Audit Scope

Our audit report of the Arizona State Retirement System presents findings and recommendations in four areas:

- The need to consider the system's funding status and future contribution rates when making decisions about future benefit improvements.
- The need to control investment costs by taking on greater responsibility for the management of pension fund assets.
- The need to address previous implementation concerns to achieve success with implementation of its new computer system.
- The need to restructure its Long-Term Disability program to take advantage of existing state services and reduce costs.

This audit was conducted in accordance with government auditing standards.

The Auditor General and staff express appreciation to the ASRS' governing board, investment advisory council, director, and staff for their cooperation and assistance throughout this audit.

FINDING I

FACTORS ENABLING THE ASRS TO IMPROVE BENEFITS WHILE MAINTAINING LOW CONTRIBUTION RATES ARE UNLIKELY TO CONTINUE

The Arizona State Retirement System (ASRS) cannot continue to maintain low contribution rates and enhance member benefits indefinitely. A funding surplus has allowed the agency to accomplish both these ends since fiscal year 1987. The ASRS and lawmakers will not have the same latitude in granting future benefits since the factors that caused the current surplus were either one-time events or are unlikely to continue.

As part of our audit of the ASRS, we reviewed the system's actuarial methods and funding status. To assist us with our review, we contracted with Buck Consultants, one of the Country's largest independent actuarial firms. This consultant evaluated policies, decisions, and actuarial assumptions affecting contribution levels and the system's overall funding status. Copies of the report summarizing the consultant's findings are available for review upon request.

A Funding Surplus Has Allowed The ASRS To Maintain Low Contributions And Enhance Benefits

By accruing assets greater than its liabilities, the ASRS has been able to take steps benefiting both active and retired members of the system. A variety of factors have allowed the ASRS to maintain a fund surplus since 1987, which enabled the system to maintain low contribution rates while improving benefits.

The ASRS has developed a funding surplus. Retirement plans generally strive to become fully funded so that they are prepared to meet total benefit obligations to members. In fiscal year 1987 the ratio of fund assets to liabilities reached 102.4 percent. Since that time, the asset-to-liability ratio has grown to 109.5 percent, when, as of June 30, 1993, the ASRS reported a fund surplus of approximately $850 million.

The ASRS' funding surplus is due to a variety of factors — We found that the system has been able to maintain a surplus position through a unique set of circumstances that are unlikely to be repeated. These include:

- **Better-Than-Expected Investment Returns** — The ASRS' rate of return on investments has exceeded actuarial assumptions over the past five years. Although the ASRS' actuary has historically assumed a rate of return of 8 percent, the actual rate of return between fiscal years 1988 and 1993 averaged more than 12 percent. As a result, actual returns on investments exceeded projected earnings by approximately $1.1 billion (see Table 1, page 7).

  This trend in investment returns cannot be expected to continue, however. According to the independent actuary hired by our Office, the ASRS' decision to retain an assumption of 8 percent, despite recent investment performance, is a sound one. Our consulting actuary reports that "although recent rates of investment return have exceeded the actuarial assumption, recent rates have been higher than historical averages and are appropriately presumed to be higher than reasonable expectations for the future."

- **Changes In Assumptions** — In 1988, changes were made to actuarial assumptions relating to employee salaries, retirement rates, and withdrawal rates. These changes lowered the estimated cost of the system's benefit obligation to members. Although new assumptions were adopted in 1992, as shown in Table 1 (page 7), these changes produced a net increase to the surplus of $363.5 million.

- **Changes In Methodology** — Since fiscal year 1988, three changes have been made to the ASRS' actuarial methods that have improved the system's funding status (see Table 1, page 7).

  1. In fiscal year 1989 the decision was made to change the technique used to calculate the system's future benefit costs. The switch to a less conservative method added $281.4 million to the fund's surplus.

  2. In 1991, the actuarial calculations methodology was revised. Technical modifications were made involving the accrual of liability for the new grading of the health insurance premium supplement and various other benefit liabilities. This change resulted in a one-time gain of $154.4 million.

  3. In 1992 the ASRS changed the manner used to establish the monetary value of its assets from book value to market value. The result immediately increased the value of the system's assets by approximately $344.1 million.

According to our independent actuary, while these changes in methodology were appropriate, they resulted in one-time gains that will not be recurring.

TABLE 1

The Arizona State Retirement System
Summary of Actuarial Gains and Decreases
Fiscal Years 1988 Through 1993
(in Millions)

	Fiscal Year						
	1988	1989	1990	1991	1992	1993	Total
Excess Investment Return	$ 29.9	$150.1	$284.4	$ 36.1	$212.2	$401.2	$1,113.9
Changes In Assumptions	568.2	–	–	–	(204.7)	–	363.5
Demographic Experience	65.7	26.1	44.0	2.9	(37.5)	(88.1)	13.1
Changes in Methodology	–	281.4	–	154.4	344.1	–	779.9
Contribution Rate Reduction	(70.8)	–	(184.2)	–	–	–	(255.0)
Benefit Improvements	(448.2)	(240.8)	(146.5)	(68.9)	(283.6)	–	(1,188.0)
Net Annual Total	$144.8	$216.8	$(2.3)	$124.5	$ 30.5	$313.1	$ 827.4

( ) = Decreases

Source: Consultant and Auditor General staff review of ASRS Actuarial Valuation Reports for fiscal years 1988 through 1993.

Positive impact of overfunding — The asset gains resulting from the system's solid investment performance and other factors discussed above have enabled the ASRS and state lawmakers to take steps benefiting both active and retired members of the system. For example, a portion of the ASRS' accumulated surplus monies are used to reduce contributions needed from active members and employers. Consequently, as Table 2 on page 8 shows, required contribution levels have declined as the surplus has grown.

TABLE 2

The Arizona State Retirement System
Comparison of Funding Surplus and
Employee and Employer Contribution Rates
Fiscal Years 1987 Through 1993

Fiscal Year	Funding Surplus (in millions)	Actuary Recommended Contribution Rate	Actual Contribution Rate
1987	$129.4	5.53%	5.53%
1988	291.6	5.16	4.00
1989	509.7	5.09	5.09
1990	551.6	4.69	3.00
1991	653.9	3.82	3.82
1992	631.9	3.60	3.60
1993	849.2	3.59	3.59
1994	N/A	4.09	3.14

Source: Arizona State Retirement System Financial Report for fiscal year 1993.

The funding surplus also allowed the Legislature to reduce contribution rates below the level recommended by the system's actuary three times in the past seven years. Although, as shown in Table 1 (see page 7), these contribution rate reductions resulted in shortfalls of approximately $71 million in 1988 and $184 million in 1990, actuarial gains during this period more than offset the effect of these rate reductions.(1)

Additionally, ASRS and the Legislature have appropriately used the accumulated monies to fund over a billion dollars in benefit improvements for active and retired members (see Table 1 page 7). For example:

- **Health Premiums** — In 1988, legislation passed requiring the system to pay a portion of group health premiums for retired and disabled members with at least ten years of service. The system was also instructed to pay part of the premium

(1) Our consulting actuaries estimate that the reduction for fiscal year 1994 will result in a shortfall of approximately $80 million.

for members' dependents. More limited subsidies were authorized by 1990 legislation for those with five to nine years of credited service.

- **Cost-of-Living Adjustments** — Ad hoc cost-of-living adjustments (COLAs) were granted four times between 1989 and 1992. These benefit adjustments increased the base benefits of retired members by 2 percent in 1989; 2 percent in 1990; 2.3 percent in 1991; and 5 percent in 1992. In April 1994, legislation was passed establishing a mechanism for funding future COLAs from excess investment earnings.

- **Rule of 80** — Between May 1990 and July 1992 legislation was passed reducing the number of points (sum of member's age and years of service) needed by members for normal retirement eligibility from 85 to 80.

- **Minimum Average Compensation** — Legislation was enacted in 1989 requiring the ASRS to recalculate retirement benefits for all members retired before June 30, 1989, who had 10 years of credited service using a minimum average compensation of $1,000 per month.

- **Early Retirement Window** — The value of benefit packages was increased for those members who retired between May 15 and November 14, 1989.

- **Tax Equity Allowance** — Between 1989 and 1992, retired members received a tax equity benefit allowance consisting of a permanent increase of 3 percent in base benefits.

By using surplus monies to both maintain low contribution rates and fund benefit improvements, the ASRS and state lawmakers have acted in the best interest of all retirement system members. According to our consulting actuary, the accumulated surplus belongs, in general terms, to both active and retired members of the system. Since both these groups have benefited from that surplus, our actuary believes the system has achieved a"commendable" balance between the two groups.

Less Potential For Future Benefit Improvements

Despite the retirement system's current sound condition, in the future the ASRS and lawmakers will not have the same latitude for making plan improvements without affecting contribution rates or the fund surplus. As noted on page 5, the factors which have enabled the ASRS to sustain its current overfunded position are unlikely to be repeated. This means that the system's current surplus of approximately $850 million, large as it may seem, could erode quickly.

To show the extent of the recent benefit improvements, and how favorable the conditions have been which allowed them, we asked our consulting actuary to project the impacts of instituting similar benefit changes in the next six years. Our consulting actuary projects that if a similar pattern of benefit improvements was made in the future, and if financial performance is at the projected level, by the year 2002 required contributions would rise 70 percent and the system would move from a surplus to being less than 85 percent funded.

Even modest improvements could be fairly significant. For example, if ASRS increased its contribution toward retiree and dependent health care to maintain current subsidy levels in relation to total premium payments, required employee and employer contributions would be approximately 14 percent higher than they would otherwise be by 2002.

FINDING II

THE ASRS COULD EVENTUALLY CUT INVESTMENT MANAGEMENT COSTS BY SEVERAL MILLION DOLLARS ANNUALLY

The Arizona State Retirement System (ASRS) could reduce its investment management costs without jeopardizing performance. Complete reliance on external money managers to invest retirement fund assets is expensive, with annual costs climbing to more than $10 million last year. Other public pension funds successfully manage either a portion or most of their assets in-house at less cost while maintaining a comparable return. By developing its own internal investment management program, ASRS could eventually reduce investment management costs by several million dollars annually.

The ASRS Has Authority To Internally Manage Up To 20 Percent Of Its Assets

Arizona Revised Statutes (A.R.S.) §38-752.01.G. authorize the ASRS' Investment Advisory Council to designate up to 20 percent of the system's assets for internal management. At present, however, the ASRS does not manage any of its fund assets in-house. The ASRS contracts out management of all investments. Fund assets, which now exceed $11 billion, are invested in a highly diversified portfolio by 14 external money managers. These managers, hired by the ASRS' Investment Advisory Council with approval from the retirement system's governing board, invest in stocks, bonds, and other assets using a variety of investment strategies. Monies to pay external money managers come directly from the pension fund. Although the overall performance of the ASRS' external money managers has been excellent, the high cost of these services led us to question whether exclusive reliance on outside investors represents a cost-efficient use of pension funds.

Already Expensive, External Investment Management Costs Will Continue To Rise

The ASRS' dependence on outside money managers to invest retirement fund assets is costly. Money managers generally receive a fee based on a percentage of the assets they invest. Since the system's assets are constantly growing, external investment manager fees represent an ever-increasing expense for the ASRS. The $10.3 million in management fees paid out during fiscal year 1993, for instance, is nearly 3 times the amount paid to outside managers 10 years ago. Without intervention, this upward trend will continue. We estimate investment management costs, already nearly double the amount spent for all other administrative functions performed by the ASRS, could increase to $15 million or more annually in 10 years.

Other Public Pension Funds Have Established Successful Internal Investment Programs

Nationwide, public pension systems have implemented effective internal investment programs. Our survey of systems in other states found they successfully manage some or most pension assets in-house. Moreover, most public pension funds with assets greater than those of the ASRS have instituted some form of internal investment program.

Other pension systems successfully manage investments in-house — We surveyed officials in 11 agencies with internal investment programs and found that these programs have been quite successful, both in terms of management costs and investment performance, as compared to Arizona. For example, the ASRS paid external managers $10.3 million in fiscal year 1993 to oversee its nearly $11 billion in investments. In contrast, the Public Employees' Retirement Association of Colorado has a budget of approximately $2.5 million to manage more than $11 billion in assets in-house. The South Dakota Investment Council actively manages 97 percent of its $2.7 billion in assets internally for approximately half the rate the ASRS pays for active investment management services.

In addition to reduced costs, we found these systems employ a wide range of investment strategies in-house while maintaining a good rate of return.[1] For example:

- **Utah Retirement System** — The system has managed an indexed stock portfolio for more than 10 years. This portfolio, which includes approximately $900 million in assets, is managed by a single portfolio manager at a total cost of approximately $100,000 annually. According to the system's December 1993 fund performance report, the portfolio has had annualized returns of 14.4 percent over the past five years, closely reflecting the 14.5 percent annualized returns of the Standard and Poor's 500 during the same period.

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(1) Our survey of public pension systems found a wide range of investment strategies are employed in-house. Indexing strategies are being used to manage both stock and bond portfolios. In addition, the systems we surveyed use both quantitative and more traditional (i.e., nonquantitative) investment techniques to implement investment strategies. Quantitative methods, like Tactical Asset Allocation (TAA), rely heavily on computers in making investment decisions. Traditional investment techniques rely more on the research and judgment of portfolio managers and research staff.

- **California State Teachers' Retirement System** — A $21.3 billion fixed income bond portfolio is managed in-house at an estimated cost of $420,000 annually. The portfolio has had annualized returns of 12.63 percent over the past five years, closely tracking the 12.67 percent annualized performance of Solomon Brothers' large Pension Bond Index during the five-year period ending June 30, 1993.

- **South Dakota Investment Council** — The council actively manages 97 percent of its $2.7 billion in assets internally. Assets are managed using a variety of quantitative and traditional investment strategies. Over the past ten years the council's investment performance has been quite good. The annualized rate of return for the South Dakota Retirement Fund during this period was 13.4 percent, slightly better than the ASRS' total annualized return of 13.2 percent for the same period.

- **The Public Employees' Retirement Association of Colorado** — As noted above, the association manages approximately $11.2 billion of its assets internally. A $2.5 billion indexed stock portfolio managed by in-house staff has returned an average of 12.5 percent annually over the past four years, closely tracking the 12.6 percent annualized performance of the Standard and Poor's 500 during the same period. In addition, stock portfolios actively managed by association employees have had annualized returns of between 12.7 and 13.2 percent during the four-year period ending June 30, 1993.

  The association also actively manages a large domestic bond portfolio internally. This portfolio's 11.7 percent annualized returns for the past ten years are similar to the Lehman Bond Index's average annual return of 11.8 percent for the same time period.

- **Washington State Investment Board** — The Board actively manages a $9 billion domestic fixed-income portfolio internally, for less than $500,000 annually. This fixed-income portfolio's 12 percent annualized performance over the past five years exceeded the Lehman Aggregate Bond Index's 11.3 percent annualized performance during the same time period.

Most larger pension funds utilize in-house management — Arizona is one of the few large public pension funds that does not currently manage a portion of its assets internally. We found that 23 of the 30 public pension funds listed by the Institute for Fiduciary Education as being larger than the ASRS have implemented some type of internal investment program. With current assets greater than $11 billion, Arizona's retirement system is becoming one of the nation's larger public pension plans. In the January 24, 1994, issue of *Pensions & Investments,* the ASRS ranked 50th in total assets among the nation's 1,000 largest public and private pension funds. These assets will continue to grow, and our review found that the fund could reach $18 billion by the year 2004.[1]

The ASRS Could Eventually Save Millions By Instituting An Internal Investment Program

The ASRS should develop an internal investment program. An initial conservative approach of utilizing safe, lower-risk investment strategies could produce significant cost savings. To help ensure program success, the ASRS needs to retain experienced investment professionals to oversee portfolios managed in-house.

Internal management of assets could reduce costs — The ASRS could lower investment management costs by establishing an in-house investment program. A conservative approach utilizing investment strategies successfully used by other states and suggested by the ASRS' investment advisor could produce significant cost savings.

The system should approach the implementation of an internal investment program cautiously, being conservative in the amount of assets invested and the types of strategies used. In general, the Investment Advisory Council and the ASRS staff should carefully consider how internal investment can best be done to reduce costs and maintain performance by studying the various investment strategies that could be employed in-house, and the factors impacting their likelihood of success. A number of the pension systems we surveyed indicated that in-house management efforts had been gradually implemented over time.

Two lower-risk conservative strategies the ASRS should consider are Indexing and Tactical Asset Allocation (TAA). Currently, the system is paying external managers much more money to perform these same programs than what it would cost to do them in-house. Several states successfully utilize the indexing strategy. ASRS' investment advisor suggests the system could not only perform indexing in-house, but could perform TAA in-house as well.

Initially, the fund should invest a small portion of its assets in-house. This would, along with a conservative investment strategy, allow the fund to demonstrate program success without a significant risk to fund assets. Once successful in-house investing is demonstrated, the fund can request from the Legislature statutory change to increase the amount allowed to be invested in-house. Currently, the law allows the ASRS to invest up to 20 percent of the fund's total assets in-house. There are two fund portfolios

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(1) The forecast, drawn from an asset/liability study conducted by the ASRS' actuary and reported in December 1992, is based on assumptions that the ASRS will continue to have the same asset mix throughout the forecast period and will perform in the 50th percentile of possible returns. Actually, the ASRS' recent performance has exceeded the 95th-percentile projections. If this performance continues, the fund could exceed $29.7 billion by the year 2004.

which would be particularly suited for the fund to partially or fully manage in-house using indexing and TAA.

- **Portfolio A** — The ASRS paid an external manager approximately $660,000 to use an indexing strategy to invest nearly $2.4 billion of the system's assets in fiscal year 1993. The objective of an indexing strategy is to match the performance of the market by creating a portfolio of stocks or bonds that replicates a market index, such as the Standard and Poor's 500 Stock Index or the Lehman Aggregate Bond Index.

  Our review found that the ASRS could reduce this annual cost to an estimated $260,000 with little risk to current performance levels. This can be accomplished because indexing is not a labor-intensive activity (we estimate the portfolio could be managed by one well-qualified person), and because of the availability of computer technology that would allow the ASRS to set up and maintain portfolios which effectively track the investment performance of a particular market index.

- **Portfolio B** — The ASRS could save an estimated $2.2 million by bringing responsibility for the investment of its tactical asset allocation (TAA) portfolio in-house. This portfolio relies heavily on quantitative methods to determine the mix of stocks, bonds, and cash within the portfolio. Stocks and bonds are then invested using indexing strategies like those described above. The ASRS paid an external money manager approximately $2.5 million in fiscal year 1993 to oversee this $2 billion account.

  Our review found that the ASRS could reduce this annual cost to an estimated $270,000. As with indexing, available computer technology offers the ASRS the opportunity to effectively implement this investment strategy in-house. Software programs can be used to assist with both asset allocation and indexing. Given the availability of this technology, we believe the portfolio could be managed internally by a single experienced portfolio manager.

Hire experienced investment professionals — Quality in-house investment staff are a key component of a successful internal program. Experienced portfolio managers can provide sound investment judgment, thus lowering the risk of low investment return. Experienced professionals can also help reduce investment transaction costs. Seasoned securities traders can often obtain more favorable purchase and sales prices than inexperienced staff when making bond transactions. To help ensure program success, the ASRS should establish competitive salaries for portfolio management positions. Salaries paid for these positions in other states appear high ($100,000) compared to an average state employee salary. In reality, however, the savings gained and the lessened risk from hiring quality professionals to perform in-house investing far outweigh these salary amounts.

RECOMMENDATIONS

1. The ASRS should begin managing a portion of its pension fund investments internally to reduce overall investment management costs.

2. Once an effective internal investment management program has become well established, the system should request the Legislature to increase the percentage of assets that can be managed internally by modifying current restrictions in A.R.S. §38-752.01.G.

FINDING III

ASRS IS TAKING SEVERAL POSITIVE STEPS TOWARDS IMPLEMENTING ITS NEW COMPUTER SYSTEM; HOWEVER, THE SUCCESS OF ITS EFFORTS MAY HINGE ON HOW IT ULTIMATELY ADDRESSES SEVERAL KEY ISSUES

The ASRS continues to lack a usable computer system even though it recognized the need to improve its computer capabilities nearly five years ago. Despite spending approximately $2.9 million to develop a new computer system, implementation was halted in mid-1993 when major concerns surfaced. The ASRS has resumed system development and has recently taken several steps to address some of the causes of the previous problems. However, some key issues to successful implementation must still be addressed in the near future.

The ASRS Needs A Modern Computer System

An adequate computer system is long overdue at the ASRS. Operational needs, coupled with significant agency growth over the years, have resulted in an organization whose needs greatly exceed existing automated capabilities. Simply put, existing systems are insufficient to enable the ASRS to efficiently perform many important functions, such as tracking contribution information, calculating benefits, and maintaining accounting and investment information. This situation has been costly to the ASRS and has impacted the agency's ability to assist members. For example:

- Tens of thousands of benefit estimates and actual benefit payment amounts must be manually calculated each year because the agency has yet to automate this function. Currently, 22 employees are used to perform these time-consuming calculations. Furthermore, in an attempt to catch errors common when manual calculations are performed, additional staff are needed to verify, or audit, the original figures.

- Lack of an automated filing system slows down the agency's ability to respond to member inquiries. Manual files must be located and retrieved, so that it sometimes takes days to provide staff with information needed to properly counsel members. In some cases, files are never found and ASRS staff must manually re-create them.

Initial Attempt To Implement A New System Failed

The agency's initial effort to implement an effective computer system was unsuccessful. Implementation was halted when major concerns about project development arose. Primary reasons for problems were management's failure to properly plan for a new system and subsequent poor management decisions during implementation.

The ASRS recognized the need to update its computer capabilities in 1989, when a consultant study of the agency's current and future information technology needs found the ASRS' EDP systems inadequate and incapable of meeting agency requirements. In 1991, the agency began development of an EDP system to address these shortcomings. Known as "ASTARS" (Arizona State Automated Retirement System), the new system was intended to automate many agency functions. Specifically, the goals for ASTARS were to improve the ASRS' member services and public image; to increase the accuracy and efficiency of information maintained and reported by the agency; to increase productivity; and to reduce computer and applications maintenance costs.

ASTARS project halted in 1993 — Planned as a two-to-three year, $4.1 million project, ASTARS development was suspended in mid-1993. Efforts to develop the computer system began in 1991, and ASRS had expended approximately $2.9 million of the $4.1 million budget (for hardware, software, programming, and consultants). Agency management and the system's governing board determined that completion of the project would be difficult due to several concerns. Concerns about the sufficiency of remaining project funding, missed completion dates, and inadequate project development led to the decision to suspend the project.

Poor planning and management doomed project success — Although advised by experts to do so, management failed to establish a plan and process to guide system development and implementation. In addition, once project development began, poor management decision-making impeded implementation efforts. Examples of poor planning and management include:

- **Failure to develop a formal planning process** — Former agency management did not follow its consultant's recommendation to construct a formal plan before any major system development occurred. Consultants found that the agency's EDP unit lacked a formal planning process, including components such as an effective data processing steering committee and systems development methodology that would help the ASRS guide project development efforts. Despite consultant advice, management forged ahead with system development without first having a formal plan or adequate steering committee in place.

- **Inexperienced project management** — Consultants also stated that to be effectively implemented, major systems development like ASTARS should be managed by a leader experienced in both the development of retirement information systems and management of large projects. The EDP manager who was overseeing the project had no experience with retirement information systems.

- **Inexperienced programmers** — A task force formed to assess the failings of ASTARS found that the programmers hired by ASRS management to develop the project were inexperienced in both retirement system processing and the programming language selected for the system.

- **Failure to involve system users** — System users were not adequately included in the ASTARS development process. As a result, the project design was completed without much user involvement. User input is critical because it helps ensure that a new system will accurately reflect the agency's needs and requirements.

Status of Current Development Efforts

The ASRS has taken steps to revitalize its system development project. While the initial steps appeared to be replicating past mistakes, in the past four months ASRS has shifted the approach and direction of the project. Now, the success of the project appears to hinge on how well ASRS is able to address several key issues which will arise in the near future.

Initial efforts to restart ASTARS — With the hiring of a new agency director, ASRS initially moved to restart the ASTARS project. The director intended to move forward with the project, utilizing the same hardware and software components as originally planned. ASRS employed a project leader and developed a plan outlining the steps and costs needed to complete the project. Project development plans were made and contacts were made with other states to gather information about their experiences with similar computer system conversions.

We found several problems with these initial efforts to restart the project. For example:

- Although some planning had occurred, a complete EDP strategic planning process and EDP plan were still missing. A strategic planning process brings together agency top management, various program managers, and EDP staff to act as a steering committee to formulate an overall EDP vision for the agency and provide guidance on development of specific projects. An EDP plan includes components like a formal systems development methodology that would provide a "road map" of activities and events necessary to ensure proper development, operation, maintenance, and enhancement of ASTARS.

- ASRS still planned to use inexperienced project management and development personnel. Despite the consequences of having inexperienced project management oversee previous project efforts, the ASRS had again initially assigned the project to someone with no previous retirement system processing experience;

- Problems still existed with the availability of sufficiently qualified and experienced programmers; and

- System users were yet to be included in the development process.

Recent changes — In the past four months ASRS has changed its approach and the direction of the project. Renaming the project the Public Employees Retirement Information System (PERIS), ASRS has expanded the concept of the system to encompass the ASTARS objectives and to integrate all the agency's systems into one network. It has also moved to address some of the causes of the problems which arose with the ASTARS project. ASRS is currently formulating a business plan to govern the project and has developed a functioning, high-level steering committee to oversee the project. Ongoing efforts are also being made to include users in the development process.

Open questions — Although ASRS has taken some positive steps to redirect its systems development efforts, there are still several important issues to be addressed which will directly impact the success of the project. Three of these issues are: 1) the employment of experienced project management personnel, 2) the successful implementation of CASE tools for performing the analysis and programming; and 3) formulation and refinement of a "business plan" to guide application development.

- **Experienced project management** — An important cause of the failure of the development of ASTARS was the lack of a project manager with experience in retirement information systems. ASRS' initial efforts to restart ASTARS also failed to address this need. ASRS currently plans to hire a consultant to help provide this expertise for the PERIS system. The qualifications of the consultant ASRS selects will significantly impact the effective implementation of the system.

- **Programming with CASE tools** — The failings of ASTARS also had root in the inexperience of the programmers both in retirement system processing and the programming language used. Plans for the implementation of the PERIS system have now shifted to the use of Computer Assisted Software Engineering (CASE) tools for the programming. These tools help automatically generate computer programs and can, in the hands of programmers experienced in their use, reduce programming time. However, an expert familiar with CASE tools tells us that a formal systems development methodology to define the business application requirements and specific experience using CASE tools are important factors in their successful implementation. ASRS plans to implement the system using its existing staff and this staff does not have experience in using CASE tools. In addition, they lack a formal systems development methodology. Thus, PERIS' implementation will be directly affected by how effectively ASRS trains its programmers in the use of these tools and the effectiveness of their systems development methodology.

- **Business plan** — Another reason for ASTAR's failure was lack of a formal business plan to guide application development efforts. Current agency top management is in the process of formulating a business plan. The plan, however, is incomplete, and key components still need to be determined. For example, specific tasks/benefits/outcomes that ASRS wants the new system to accomplish still need to be identified. Other items requiring extensive analysis that still need to be considered and accounted for in the plan including items related to systems methodology, hardware and software.

RECOMMENDATIONS

To ensure the implementation of a computer system that meets the needs of agency personnel, customers, and management, the ASRS should address certain project issues. Specifically the ASRS must:

- Utilize project management with experience developing and implementing retirement information systems;
- Implement a formal system development methodology;
- Train programmers to effectively use CASE tools programming software; and
- Complete important components of its business plan for system development.

FINDING IV

THE ASRS COULD SAVE $250,000 ANNUALLY BY RESTRUCTURING ITS LONG-TERM DISABILITY PROGRAM

Using a private vendor to administer the state's long-term disability program has been costly to ASRS members. Reorganizing the program to take advantage of more cost-efficient alternatives would reduce expenses by an estimated $250,000 a year without jeopardizing current service levels.

The state provides monthly long-term disability benefits to eligible retirement system members unable to perform their job responsibilities for at least six consecutive months. As of June 30, 1993, benefits were paid to more than 1,400 members and new applications averaged about 50 a month. Previously administered by the Department of Administration, the ASRS became responsible for paying disability benefits which commenced on or after July 1, 1988. To expedite the program's implementation, the ASRS was mandated to contract with a private insurance company to administer this program. Fees for this contract are paid with state retirement fund monies.

LTD Can Be Managed More Cost Efficiently

Contracting with a private vendor to manage the state's long-term disability (LTD) program has resulted in a needless expense to ASRS members. The ASRS could reduce costs by an estimated $250,000 a year if it utilized other alternatives, including existing, and less expensive, state-sponsored disability services. Moreover, these options would allow the agency to maintain current contracted service levels.

Contracted service costs are rising — LTD program administration costs have grown steadily since the ASRS was assigned responsibility for overseeing this function, and further increases are expected in the years ahead. The ASRS requires its LTD program vendor to provide a variety of services, including:

- Eligibility determination;
- Benefit processing;

- Appeals to the Social Security Administration; [1]

- Vocational rehabilitation;

- Case management, including legal services and the periodic review of active claims.

The cost to provide these services increased from $434,500 to nearly $530,700 between fiscal year 1992 and fiscal year 1993. This trend is expected to continue. By fiscal year 1996, it is anticipated that annual administrative costs will increase to more than $632,000.

Reorganization will reduce costs – The ASRS could lower these expenses if it were allowed to restructure the delivery of LTD services. While contracting is often cost beneficial to state agencies, using a private vendor to administer the ASRS' LTD program has proven to be more expensive than necessary. Our review found that the ASRS could reduce administrative costs from $553,000 in fiscal year 1994 to an estimated $304,000 (excluding start-up costs) if it utilized other alternatives, including existing and less expensive state-sponsored services.This is an estimated annual savings of nearly $250,000.

For example, instead of contracting with a private insurance company, the ASRS could coordinate its effort with the Department of Economic Security (DES), which offers an array of LTD services. Specifically, DES has two divisions, the Disability Determination Services Administration (DDSA), and the Rehabilitation Services Administration (RSA), which are capable of performing most services currently provided by the ASRS' private contractor including 1) the determination of LTD eligibility, 2) vocational rehabilitative services, and 3) Social Security claims assistance.

The DES programs have a good reputation for service delivery. For example, the DDSA makes eligibility determination decisions on Social Security claims. According to the Social Security Administration's regional Program Administrator, the DDSA operates above national standards. With the help of DES program officials, we estimated that the total cost for securing these services from the DES would be $235,200 a year (this amount covers personnel and other program costs).

Such exclusive reliance on the DES is not the only option available to the ASRS, however. Our review of other state and local disability programs showed that the ASRS could implement a medical committee or advisor to determine LTD eligibility.[2] Although service costs varied, we found that this option would be more economical than current practices.

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(1) LTD benefit payments can be reduced by amounts received under the United States Social Security Act.

(2) We contacted 15 state and local disability programs. Specifically, we obtained information on six surrounding state programs, and the LTD programs of five comparably sized state retirement systems (New Jersey, Ohio, Michigan, Virginia, and Alabama). We also contacted four local retirement systems (City of Phoenix, City of Tucson, Public Safety, and Elected Officials).

For example, the City of Phoenix incurs minimal expense using a medical review panel because its committee is made up of volunteers who are reimbursed for their expenses only.

Regardless of how the ASRS chooses to restructure the program, we estimate that the Retirement System will need two full-time claims insurance representatives to assist in case management functions such as the periodic review of active claims. The ASRS already has one FTE committed to its program; one additional FTE at an mid-level annual starting salary (grade 19) and ERE cost of approximately $38,770 would be needed. Additionally, we estimate the agency would incur approximately $30,000 annually in other program costs including printing and shipping of claims forms, benefit checks and booklets.

Other services currently provided by the contractor can be performed in-house at minimal costs. For example, the agency's in-house counsel could provide contracted legal services at no additional cost to the system. In addition, ASRS staff could be used to automate benefit processing. We estimate it would cost approximately $15,000 to automate this function.

Restructuring the LTD program will require statutory changes. Currently, A.R.S. §38-781.31 mandates that the ASRS use a private contractor to administer the state's LTD program. This legislation will need to be modified to allow the agency's new administrative method.

RECOMMENDATIONS

1. The Legislature should consider amending A.R.S. §38-781.31 to eliminate the requirement that the ASRS use an outside vendor to administer its LTD program.

2. The ASRS should examine the services offered by DES and administrative options used by other disability programs to determine which combination of services best fits its needs.

3. If granted statutory authority for LTD program administration, the ASRS should consider requesting one additional FTE to assist in carrying out this function.

SUNSET FACTORS

In accordance with 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. Objective and purpose in establishing the agency.

A.R.S. §38-781 identifies the following specific reasons for establishing the Arizona State Retirement System: 1) to ensure a source of income for retired and disabled employees of Arizona's public employers, 2) to provide an incentive for Arizona public employers in the recruitment and retention of employees, 3) to contribute toward the provision of a total compensation package, 4) to create an incentive for employees to remain in service long enough to provide employers with the full benefit of the training and experience gained by the employees, and 5) to promote and maintain a high level of service to the public through an equitable separation procedure.

A seven-member board and a five-member investment council oversee the administrative and investment activities of the system, which include collecting and refunding contributions from members and employers, disbursing benefits to qualified members, and investing monies in a safe and prudent manner. The system also offers health insurance and long-term disability benefits to its members, and administers an outreach education program.

2. The effectiveness with which the agency has met its objectives and purpose and the efficiency with which the agency has operated.

In general, the Arizona State Retirement System appears to be effective in providing retirement income and other benefits to eligible employees at a reasonable cost. Specifically, the agency administers a retirement benefit program to more than 300 local, county, and state employers and about 207,000 active, retired, and inactive members. The agency provides monthly benefit payments to nearly 43,000 retired and disabled individuals and manages an investment portfolio of approximately $10.8 billion to meet the monthly benefit payments of present and future retirees. In addition, the ASRS sponsors health insurance for a growing number of retirees. The ASRS also offers pre-retirement seminars to educate members about retirement planning. During fiscal year 1993, approximately 2,900 active members attended a pre-retirement seminar.

Over the years, benefits offered have been expanded and improved while contribution rates have decreased. For example, employer contribution rates have been cut one-half over the last 10 years, from 7 percent in fiscal year 1984 to 3.14 percent in fiscal year 1994. During this same time period, benefits provided have increased. For example, the agency now provides disability benefits and administers a subsidized health insurance program. According to agency staff, the cost of providing these increased benefits has been kept low due to the system's solid investment performance. In fact, a 1992 study by the Wisconsin Retirement Research Committee indicates that the ASRS offers an attractive benefit package for the cost.

However, we found the agency is not operating as efficiently as possible. For example, we found the ASRS could realize significant cost savings, possibly millions of dollars, by performing some investment activities in-house rather than through outside investment managers (see Finding II, page 11). In addition, the retirement system has spent approximately $2.9 million on a new computer system which it has yet to implement (see Finding III, page 17). Furthermore, ASRS could save $250,000 annually by restructuring its long-term disability program (see Finding IV, page 23).

3. The extent to which the Arizona State Retirement System has operated within the public interest.

The agency has operated within the public interest by providing a commendable retirement program at a reasonable cost. Members, employers, and taxpayers all benefit from the agency's operation. Members benefit from the prudent operation of a retirement system that has accumulated sufficient assets to provide retirement benefits to all eligible members. Employers have benefited by being able to offer potential and existing employees an attractive retirement package at a reasonable cost. In fact, an April 1990 report prepared for the Legislative Council Study Committee on the Arizona State Retirement System by an independent actuarial and consulting firm ranked ASRS' overall retirement benefits first among the 68 public employee retirement systems examined. In addition, the system's solid investment performance has contributed to lower contribution requirements, which benefit employers, employees, and taxpayers alike.

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

The ASRS is in the midst of making substantial changes to their rules. In 1992, the agency proposed repealing ten rules, amending six others, and adopting four rules. The proposed changes will eliminate rules which address responsibilities that the ASRS no longer has, clarify language in existing rules, and establish needed guidelines for various functions. Although changes in the agency's top leadership and other factors interrupted the agency's rule-making efforts, the ASRS staff recently took steps to resume changing ASRS' rules.

5. **The extent to which the 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.**

The ASRS has encouraged input from the public before promulgating its rules. In December 1993, for example, the ASRS adopted R2-8-123 and R2-8-126, addressing actuarial assumptions and valuations and annuity conversion factors. Documentation provided by the ASRS' legal advisor indicates that all required notices were posted and the public was afforded the opportunity to comment on the proposed rules.

The ASRS uses several avenues to keep the public informed of its actions. The ASRS Board and Investment Advisory Council hold regular meetings to discuss administrative matters and investments. Our review found these meetings are appropriately posted in compliance with the open meeting law. In addition, the ASRS employs education outreach staff whose responsibilities include keeping all members apprised of events that may impact them. The ASRS also publishes a quarterly newsletter to inform members about various issues of interest.

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

A.R.S. §38-743.E.1 provides any person dissatisfied with their ASRS rights, benefits, or obligations the opportunity for a hearing before the Board. However, the Board has received very few appeals over the years. According to an agency representative, fewer than five appeals per year are received.

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

The ASRS retains an in-house representative from the Attorney General's Office, and violations of agency statutes are referred to the Attorney General for enforcement.

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

According to the ASRS staff, numerous technical and administrative changes have been made to agency statutes over the years and several bills were passed in the 1994 legislative session. For example, S.B. 1042 addressed amendments needed to conform state statutes with federal law and to clarify ambiguities in existing laws. In addition, S.B. 1121 defined and clarified the roles of the Board and the Investment Advisory Council to ensure coordinated oversight of investments. According to the

ASRS' legal advisor, there are no deficiencies in their enabling statutes that prevent them from fulfilling their statutory mandate.

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

If internal investment efforts recommended in Finding II prove successful, the ASRS should request the Legislature to increase the percentage of assets that can be managed internally (see page 11). A.R.S. §38-752.01.G. currently restricts the ASRS from managing more than 20 percent of the system's assets internally.

In addition, the Legislature should consider amending A.R.S. §38-781.31 to eliminate the requirement that the ASRS use an outside vendor to administer its LTD program. We found the ASRS could reduce costs associated with the Long-Term Disability program by an estimated $270,000 a year if it utilized other alternatives, including existing and less expensive state-sponsored disability services (see Finding IV, page 23).

Furthermore, although statutory changes are not required, the ASRS Board needs to adopt rules addressing the LTD program in order to comply with the Administrative Procedures Act. A.R.S. §38-781.31 directs the Board to establish the LTD program. The Board has adopted and published provisions regarding the LTD program in a booklet entitled *Long-Term Disability Income Program;* however, according to the ASRS legal counsel, until the Board promulgates these provisions as rules they are not valid.

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

The Legislature could terminate the agency, however, a member's retirement or disability benefit may not be changed since members of the ASRS have a constitutionally protected property interest in the funds. Even if the agency was terminated, the state would still need an administrative mechanism to distribute benefits.

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

Since the agency is not regulatory, this factor does not apply.

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

The ASRS uses private sector contractors for various services, including:

- Actuarial projections for pension funding.
- Investment management of trust assets.
- Health insurance coverage for retired members.
- Long-term disability for members.
- Independent audit of financial statements.
- Performance measurement of investment managers.

However, we found decreasing the use of private contractors in two of these areas would be a more effective use of retirement fund monies. The ASRS' complete reliance on external money managers to invest retirement fund assets is expensive. If the ASRS took on more responsibility for the management of its assets, several million dollars could be saved annually (see Finding II, page 11). In addition, ASRS currently uses a private vendor to manage the state's Long-Term Disability program. However, we found ASRS could reduce costs by an estimated $250,000 a year if it utilized other alternatives (see Finding IV, page 23).

ARIZONA STATE RETIREMENT SYSTEM

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LEROY GILBERTSON
DIRECTOR

September 19, 1994

Mr. Douglas R. Norton, Auditor General
Auditor General's Office
2910 North 44th Street, Suite 410
Phoenix, Arizona 85018

Re: Performance Audit
1993 Arizona State Retirement System (ASRS)

Dear Mr. Norton:

As requested in your letter of September 2, 1994, we are providing a written response to your findings regarding the above referenced.

We have reviewed your report and agree with your Findings. **However, we disagree with many of the comments encompassed within Finding III.**

Specifically, your comments that the Director initially intended to move forward with the ASTARS project as originally planned are simply wrong. As subsequent actions clearly show, the conclusion reached by your field auditors was obviously based on an incomplete understanding of the Director's plans for developing a new ASRS information system. The comments that begin immediately following the Status of Current Development Efforts section of the report (page 19) up to the section entitled Recent Changes (page 20) are not germane to the current efforts underway. Therefore, we question why the comments are included in the report and ask that they be removed.

Finding I: **Factors enabling the ASRS to improve benefits while maintaining low contribution rates are unlikely to continue.**

We are in agreement with your finding with the following observations:

- The ASRS obtained legislation during the last session that will provide a rolling 30 year valuation period that phases in gradually, two years at a time, until the full 30 year period is reached. This valuation period will place the ASRS on a realistic funding level and prevent unexpected surges in contribution rates (Employer and Employee).

- The State of Arizona's population is expected to grow 40-60% over the next 20 years. Although the same growth is not expected in the ASRS membership, there will be a steady growth that will mitigate the necessity for a sharp increase in contribution rates.

Finding II: The ASRS could eventually cut investment management costs by several million dollars annually.

We are in agreement with your finding with the following observation:

- Large public retirement funds, such as the ASRS, cannot realistically expect returns much above what the Capital Markets generate. Therefore, internal investment management is most effective in the area of managing a portfolio of equity and/or fixed income securities that will normally be held for a long period of time.

Finding III: The ASRS is taking several positive steps towards implementing its new computer system; however, the success of its efforts may hinge on how it ultimately addresses several key issues.

We agree that ASRS needs to develop a modern information system, and that we are taking steps to be successful in that endeavor.

The issues related to 1) project management, 2) implementing a formal system development methodology, 3) training the ASRS staff in the effective utilization of CASE tools and 4) completion of system development components of the PERIS Business Plan will be addressed as follows:

- A project consultant with experience in implementing retirement information systems will be retained.

- A formal system development methodology will be implemented simultaneously with the selection of a CASE tool.

- A formal training program in the effective utilization of a CASE tool for the ASRS Information System staff, will commence immediately upon the selection of a CASE tool.

- The PERIS Business Plan is a dynamic document and thus will address specific system development components once a CASE tool and a Relational Database Management System are selected.

Finding IV: The ASRS could save $250,000 annually by restructuring its long-term disability program.

We agree in principle with your finding and have instructed the staff to take the steps necessary to verify your conclusion that administrative costs could be reduced if ASRS utilized existing state-sponsored services.

Implementation of this recommendation, therefore, will depend on the results ASRS staff's investigation. The Director has extensive experience administering long-term disability programs and has found them to be first, very expensive in terms of staff involvement and administration, and second, depending upon volunteers from the medical community is not an effective or efficient way to administer a long-term disability program.

Thank you.

Sincerely yours,

Merlin K. DuVal

Merlin K. DuVal, M.D.
Board Chairman

Ray Rottas

Mr. Ray Rottas
Board Vice Chairman

Reginald Barr

Dr. Reginald Barr
Board Member

Susan R. Burns

Mrs. Susan R. Burns
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