

Arizona State Retirement System A Component Unit of the State of Arizona


Comprehensive Annual Financial Report For the Year Ended June 30, 2005

## Our 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.

## Our Values

Our organizational culture will be based upon the following Values:
Service: A commitment to service excellence will permeate the organization.

Professionalism: A highly capable workforce will promote a professional and respectful environment and lead the organization.

Improvement: A climate of continuous quality improvement and enhanced efficiencies will drive the organization.

Diversity: Engagement of diversity by the appreciation, recognition, and support for all people will propel the organization to ever greater achievement.

Results: A results-oriented approach to operations will energize the organization.

## Arizona State Retirement System

 A Component Unit of the State of ArizonaDr. Keith Meredith, Chair
Mr. Karl L. Polen J r., Vice Chair

## Report prepared by the Arizona State Retirement System staff



Comprehensive Annual Financial Report For the Year Ended June 30, 2005

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## Introductory Section



## Certificate of Achievement for Excellence in Financial Reporting



The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to Arizona State Retirement System for its comprehensive annual financial report for the fiscal year ended J une 30, 2004. This was the 16th consecutive year that the government has achieved this prestigious award.

## Letter From the Chairman



## Arizona State Retirement System

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7660 East Broadway Boulevard • Suite 108 • Tucson, AZ 85710-3776 • Phone (520) 239-3100
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November 4, 2005

The Honorable J anet Napolitano
Governor of Arizona
State Capitol
1700 W. Washington St.
Phoenix, Arizona 85007
Dear Governor Napolitano:
On behalf of the Arizona State Retirement System Board of Trustees (the Board), it is my pleasure to present you with the fifty-second Comprehensive Annual Financial Report of the Arizona State Retirement System (the ASRS). This report provides an in-depth review of the financial statements, investment information, actuarial calculations and statistical data of the Arizona State Retirement System. The report also includes 10 -year summaries of a variety of indicators that affect or reflect the ASRS operations.
The actuarial valuation performed by Mellon Human Resources \& Investor Solutions as of June 30, 2004 indicates that the ASRS defined benefit plan achieved an actuarial funded status of 91.2 percent.
During the fiscal year ended J une 30, 2005, the total rate of return on investments was 8.5 percent. The annualized 10 -year rate of return was 9.4 percent. Each of these rates of return exceeds our actuarially-assumed rate of return of 8 percent. The ASRS Fund stood at just over $\$ 22.4$ billion.
The contribution rate, as determined through actuarial study, is designed to ensure the ASRS remains adequately funded to meet current and future obligations to our retirees. The actuarially recommended rate for fiscal year 2005-06 is 7.4 percent for both the employer and employee, which includes 6.9 percent for the pension plan and 0.50 percent for the Long Term Disability plan. The contribution rate is scheduled to increase for the 2006-07 fiscal year to 9.1 percent, which includes 8.6 percent for the pension plan and 0.50 for the Long Term Disability plan.

The ASRS continues to face a number of challenges. The Defined Benefit Plan and the Long Term Disability Plan remain underfunded. Rising health care costs continue to place stresses on our retiree health insurance program. Due to a variety of factors, including benefit enhancements, lower midterm investment returns and changing demographics, the pension plan contribution rate continues on an upward trend.

## Letter From the Chairman

We intend to keep a watchful eye on any proposed benefit enhancements in the near future in an effort to hold down the contribution rate as much as possible. Actuarial projections show the contribution rate surpassing the 10 percent range within the next few years.

The ASRS continues to be engaged in program and policy review and, when appropriate, will be seeking legislative changes to ensure the ASRS operates efficiently and effectively. This is an on-going process of program, policy and legislative review. Changes that have been implemented have resulted in significant cost reductions to the ASRS. Members have benefited through contribution rates kept significantly lower - fully 1.4 percent - than had recent changes not been implemented.
Our members can be confident that the ASRS is poised to meet our obligation of providing the full range of benefits when they retire. Recently, the ASRS was ranked as the $100^{\text {th }}$ largest pension plan in the world - public or private - by a survey published in Pensions \& Investments magazine.
I would like to note that the total membership of the ASRS, including active, inactive and retired members, reached a record 442,790 as of J une 30, 2005. Also during the most recent fiscal year, more than 80,582 retirees, survivors and disabled members received in excess of $\$ 1.4$ billion in benefits. The Board is committed to prudent management of the ASRS assets for the benefit of our members. At the same time, we are aware of our responsibilities to the State of Arizona, its taxpayers, and our member employers.

The Board of Trustees appreciates the cooperation extended to it by the Governor's Office and the State Legislature, which enables and empowers us to meet the challenges we face in today's economic climate. The Board pledges to continue to administer the affairs of the ASRS in the most competent and efficient manner possible.

Respectfully submitted,


Dr. Keith Meredith
Board Chair
Arizona State Retirement System

# Letter of Transmittal from the Director 



## Arizona State Retirement System

3300 North Central Avenue • PO Box 33910 • Phoenix, AZ 85067-3910 • Phone (602) 240-2000

Toll Free Outside Metro Phoenix and Tucson 1-800-621-3778

November 4, 2005

Dr. Keith Meredith, Chair
Arizona State Retirement System Board of Trustees
3300 North Central Avenue, 14th Floor
Phoenix, Arizona 85012

Dear Dr. Meredith:
I am pleased to present the fifty-second Comprehensive Annual Financial Report (CAFR) of the Arizona State Retirement System (ASRS), a component unit of the State of Arizona, for the fiscal year ended J une 30, 2005.

Title 38 of the Arizona Revised Statutes requires the ASRS Board of Trustees (ASRS Board) to submit an annual report to the Governor and the Legislature within eight months of the close of each fiscal year. This report complies with all legal requirements governing the preparation and content of annual reports.

Responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, rests with the ASRS management. Management relies on a comprehensive framework of internal controls to provide reasonable, rather than absolute assurance that the financial statements are free of any material misstatements.
Deloitte \& Touche LLP has issued an unqualified ("clean") opinion on the ASRS financial statements for the year ended June 30, 2005. The Independent Auditors' Report is located at the front of the financial section of this report.

Management's discussion and analysis (MD\&A) immediately follows the Independent Auditors' Report and provides a narrative introduction, overview, and analysis of the basic financial statements. MD\&A complements this letter of transmittal and should be read in conjunction with it.

## History and Overview

The ASRS was created in 1953 to provide defined contribution retirement benefits to employees of the state of Arizona, Arizona universities, and political subdivisions. During calendar year 1954, Arizona teachers voted to join the ASRS effective J anuary 1, 1955. In 1970, the state legislature authorized the creation of a defined benefit plan, contingent upon the election to transfer a minimum 70 percent

## Letter of Transmittal from the Director

of the ASRS membership. More than 80 percent voted to transfer to the defined benefit plan, which became effective July 1, 1971.
At FYE 2005, total ASRS membership, including active, inactive, and retired members is 442,790. ASRS employer members total 735, which includes school districts, charter schools, state colleges and universities, and local, county and state governments.
In addition to pension benefits, the ASRS provides a health insurance premium benefit and sponsors medical and dental coverage for retired members. Active members receive long-term disability insurance coverage equal to two-thirds of pay at the time of disablement.

During FY 2004-05, more than 80,582 retired annuitants, their survivors, and disabled members received a monthly benefit totaling in excess of $\$ 119.6$ million. More than 31,024 retired members are enrolled in the ASRS-sponsored medical or dental plans.
All expenditures of the ASRS are appropriated by the Arizona State Legislature with the exception of investment fees, consulting fees necessary to meet the ASRS Board's investment objectives, rent and retiree payroll. For FY 2004-05, the ASRS had an appropriated lump sum operating budget of approximately $\$ 23.8$ million.
ASRS Board Trustees are appointed to three-year terms by the governor and confirmed by the Arizona State Senate. Four trustees of the ASRS Board must have a minimum of 10 years investment experience. There is no limit on the number of terms an ASRS Board Trustee may serve. During FY 2004-05, Governor J anet Napolitano appointed the following ASRS Board Trustees to the Board:

- Mr. David Byers, appointed as a representative of state employees; term to expire on J anuary 16, 2006.
- Mr. Christopher Harris, appointed as a representative of the public; term to expire on J anuary 21, 2008.
- Mr. Michael Townsend, re-appointed as a representative of political subdivisions, term to expire on J anuary 21, 2008.
- Mr. Steve Zeman, appointed as a representative of retirees, term to expire on J anuary 21, 2008.


## Major Initiatives

## Investments:

- Began implementing an institutional real estate investment program; eight (8) real estate managers and one (1) internally managed REIT portfolio were selected for hire. Funding of real estate managers will begin in the third quarter of calendar year 2005. The real estate investment program will serve to enhance the pension plan's return and diversification.
- Initiated a comprehensive review of the ASRS International Equity Asset Class for the purpose of broadening the diversification of the asset class.
- Modified and tested an ASRS Investment Management Business Continuation Plan. The Plan enables the ASRS Investment Division to continue its operations without interruption in the event of an unexpected closure of its business offices.


## Letter of Transmittal from the Director

- Implemented a Board-adopted conflict of interest policy and procedure for investment consultants. The new policy and procedure ensures that the ASRS will benefit from the independent judgment of its investment consultants.


## Benefits:

- During FY 2004-05, the ASRS negotiated a freeze in medical plan premiums, no changes in plan provisions, expanded medical and ancillary health services, and increased choice of medical plans in rural Arizona for Medicare eligible retirees through calendar year end 2006. This freeze in plan premiums caps a 5 year period during which the ASRS has maintained premiums at 2002 levels. In an era of annual double-digit rate increases for health care plans experienced by both private and public sector employers, the ASRS is quite proud of its efforts to maintain premiums and manage its various retiree medical plans effectively.


## Administration:

- Members received re-engineered account statements during FY 2004-05. The statements have more precise calculations and estimates than previous statements and provide members with more information than ever before about their account transactions. Our new statement was one of those recently recognized as a "Best Practice" example by Cost Effectiveness Measurement Inc, an independent firm that reviewed more than 60 examples from five countries. By the end of calendar year 2005, the statements will be available via the web.
- Senate Bill 1521 adjusts the setting of the ASRS contribution rate from a biennial to an annual basis effective J une 30, 2007. It also modified biennial rate requirements to allow the rate to be stepped in over a two year period for FYE 2006 and 2007. The step-in provisions allow for employers and employees to plan for the rate increase in their budgets and also ensure that the ASRS collects the correct amount of contributions over the two year period, keeping the pension plan actuarially sound.


## Investment Policies

An integral part of the overall investment policy is the strategic asset allocation policy, which is designed to optimize returns while minimizing risk. Funds are managed by internal and external investment money managers. The total portfolio is kept diversified between broad asset classes of U.S. equities, U.S. fixed income, international equities and real estate.

The ASRS Investment Management Division (IMD) oversaw 26 externally-managed portfolios and managed 5 portfolios internally. Of these 31 total portfolios, 14 external and 4 internal portfolios outperformed their benchmarks. For FYE J une 30, 2005, the ASRS achieved an 8.5 percent rate-ofreturn which outperformed the ASRS total fund benchmark and actuarial assumed rate by 0.7 percent and 0.5 percent, respectively.

The ASRS adheres to all statutory requirements set forth by Arizona state law. In addition the ASRS establishes investment guidelines for its external investment managers and a complete set of policies,

## Letter of Transmittal from the Director

procedures, compliance requirements, and oversight of internal investment management to ensure that investment assets are prudently managed. Both internal and external compliance procedures are in place. Oversight and direction responsibilities reside with the ASRS Board. Details of investments are contained in the Investment Section of this report.

## Funding

Any excess of additions, which include contributions and investment earnings, over deductions, which include benefits and administrative expenses, is accumulated by the ASRS in order to meet future benefit obligations due to retirees and beneficiaries. State statutes require the ASRS to conduct an annual actuarial valuation of its plan assets and liabilities. Legislation passed by the State legislature during FY 2005 changed actuarial determination of contribution rates from a biennial process to an annual one effective June 30, 2007.

The funding objective of the ASRS is to maintain reasonably stable contribution rates and to achieve an ultimate funded status of 100 percent. According to the ASRS' most recently available actuarial valuation, dated June 30, 2004, the actuarial value of plan assets was $\$ 23.6$ billion and the actuarial accrued liability was $\$ 25.9$ billion. The unfunded actuarial accrued liability of $\$ 2.3$ billion results in an actuarial funding ratio of 91.2 percent. The change in funding percentage from last year's 96.8 percent is primarily due to continued recognition of investment losses for fiscal years 2001, 2002 and 2003.

A detailed discussion of funding is provided in the Actuarial Section of this report. Funding status and progress for the ASRS based on the most currently available valuation is presented in the Required Supplementary Information, Schedule of Funding Progress.
In order to both increase the funded status of the pension plan as well as mitigate future increases in contribution rates, the ASRS has been engaged in significant program and policy review. While this is an on-going process - program, policy and legislative initiatives have been successfully implemented that have reduced total contributions to the ASRS by more than $\$ 100$ million per year, which is equivalent to approximately $\$ 1.0$ billion in liability savings for the group of all current employees, or approximately $\$ 2.4$ billion in liability savings for the group of all current and future employees. These very significant savings will reduce future increases in contribution rates to both employees and employers by an average of approximately 1.4 percent in total each year.

## Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the ASRS for its CAFR for the fiscal year ended June 30, 2004. The ASRS has received this prestigious award in each of the last 16 years.

To be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized CAFR that satisfies both accounting principles generally accepted in the United States of America and applicable legal requirements. A Certificate of Achievement is valid only for one year. We believe this report continues to conform to the Certificate of Achievement Program requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

## Letter of Transmittal from the Director

## Acknowledgments

This report represents the culmination of hours of hard work by the ASRS General Accounting and Strategic Planning staff. It is intended to provide complete and reliable information for decision making, to insure compliance with legal requirements, and is a means of measuring the responsible stewardship of the assets of the ASRS.

I would like to express my gratitude to the ASRS Board for its support for and leadership in planming and conducting the financial affairs of the ASRS in a responsible and progressive manner. The ASRS Board, along with the ASRS Executive and Senior Management and the entire staff of the ASRS has been instrumental in maintaining the quality of service and performance which has become the standard for the ASRS.

Respectfully submitted,


Paul Mason
Director

## Organizational Chart



## ASRS Board of Trustees



Dr. Keith Meredith Chair
Tucson, Member at Large


J aime Gutierrez
Tucson, Educators


Christopher Harris
Phoenix, Public


Anne Mariucci
Phoenix, Public


Michael Townsend
Flagstaff,
Political Subdivisions


Lawrence
Trachtenberg Scottsdale, Public


Steven Zeman
Phoenix, Retirees

## Executive Staff




Gary R. Dokes
Chief
Investment Officer


Anthony Guarino
Deputy Director, Chief Operations Officer

## Outside Professional Services

ACTUARY<br>Buck Consultants, LLC<br>(formerly Mellon Human Resources \& Investor Solutions)

Phoenix, AZ

## LONG TERM DISABILITY BENEFITS

VPA
Calabasas, CA

## CUSTODIAL BANK

Mellon Global Securities Services
Pittsburgh, PA

INDEPENDENT AUDITORS
Deloitte \& Touche LLP
Phoenix, AZ

## GENERAL INVESTMENT CONSULTANT

William M. Mercer Investment Consulting, Inc.
Los Angeles, CA

## INVESTMENT MANAGERS

Investment managers are listed in the Schedule of Broker Commissions
see page 69

## Summary of 2005 Retirement Legislation

## House Bill (HB) 2472 - Payroll Deduction Agreements

- Mandates that an ASRS member's Payroll Deduction Agreement must continue when the member transfers employment between participating ASRS employers.
- Specifies the federal retirement or deferred compensation plans in which university employees, school and community college districts can participate.
- Requires employers to invest contributions in appropriate federal retirement or deferred compensation plan if their employee chooses to participate in a salary reduction contribution or the governing board elects to make non-elective employer contributions.
- Limits the use of public monies to purchase any annuity or deferred compensation to specific purposes.
- Allows monies contributed for the replacement of unused leave pay to buy out negotiated contracts or to provide early retirement incentives to be contributed in a federal retirement or deferred contribution plan.
- Treats accumulated vacation or annual leave, sick leave, compensatory time or other forms of termination pay as compensation for certain ASRS members.
- Specifies that an individual's long-term disability will not be offset by a Public Safety Personnel Retirement System, Corrections Officer Retirement Plan or Elected Officials Retirement Plan pension annuity.
- Corrects a typographical error from previous section to bring state statute into compliance with federal Iaw.
- Effective Aug. 12, 2005.


## HB 2562 - Investments

- Requires the ASRS to submit each year the list of U.S. companies that have, or are reasonably known to have, business activities in or with countries as designated by Section 6J of the federal Export Administration Act, and the total amount invested in each.
- Effective Aug. 12, 2005


## Summary of 2005 Retirement Legislation

## HB 2621 - Retiree Health Insurance Rural Subsidy

- Extends the rural healthcare subsidy for an additional two years for areas in the state where a health services organization which is not a PPO or indemnity plan is not available.
- Eliminates the additional rural benefit supplement for retirees in the Arizona retirement systems who are not eligible for Medicare.
- Appropriates $\$ 28,000$ for administrative expenses.
- Passed with an emergency clause; effective July 1, 2005.


## HB 2772 - State Budget Procedures - ASRS Contribution Rates

- Changes the time period the ASRS contribution rate is set from biennial to annual.
- Notwithstanding the change, sets the contribution rate for the next two fiscal years on a stepped basis with 6.9 percent pension contribution rate for fiscal year 200506 , and 8.6 percent for fiscal year 2006-07.
- Temporarily raises the floor (lowest allowable contribution rate) from 2 percent to 4 percent for the next two years.
- Effective July 1, 2005.


## Senate Bill 1360 - Retiree Health Insurance Committee

- A Retiree Health Insurance Committee is formed to evaluate the options for retiree health insurance coverage analyzed by the private entity retained by the Legislative Council pursuant to Laws 2004, Chapter 325, Sec. 8 (H2542).
- A report by this Committee is due by the end of 2005.
- Effective Aug. 12, 2005.



## Financial Section



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## Independent Auditors' Report

## Deloitte.

Deloitte \& Touche LLP
Suite 1200
2901 N. Central Avenue Phoenix, AZ 85012-2799

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Operations Committee of the<br>Arizona State Retirement System Board and Auditor General of the State of Arizona<br>Phoenix, Arizona

We have audited the accompanying statement of net assets of the funds of the Arizona State Retirement System (ASRS), a component unit of the State of Arizona, as of J une 30, 2005 and the related statement of changes in net assets of the funds for the year then ended. These basic financial statements are the responsibility of the ASRS' management. Our responsibility is to express an opinion on these basic financial statements based on our audit. The comparative totals as of and for the year ended J une 30, 2004 presented in the basic financial statements are included for additional analysis only.
We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the ASRS' internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, such basic financial statements present fairly, in all material respects, the net assets of the funds of ASRS as of J une 30, 2005, and the changes in net assets of the funds for the year then ended in conformity with accounting principles generally accepted in the United States of America.

The Management's Discussion and Analysis and Required Supplementary Information as listed in the table of contents are not required parts of the basic financial statements but are supplementary information required by the Governmental Accounting Standards Board (GASB). This supplementary information is the responsibility of ASRS' management. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplemen-

## Independent Auditors' Report

teary information. However, we did not audit such information and we do not express an opinion on it.

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The Introductory Section, Additional Supplementary Information, Investment Portfolio Section, Actuarial Section and Statistical Section as listed in the foregoing table of contents are also presented for the purposes of additional analysis and are not required part of the basic financial statements. The Additional Supplementary Information as listed in the foregoing table of contents under the Financial Section have been subjected to the auditing procedures applied by us in the audit of the basic financial statements and, in our opinion, are fairly stated in all material respects in relation to the basic financial statements taken as a whole. The Introductory Section, Investment Portfolio Section, Actuarial Section and Statistical Section have not been subjected to the auditing procedures applied in our audit of the basic financial statements and, accordingly, we express no opinion on them.

## Debitte \& Touche LLP

November 4, 2005

## Management's Discussion and Analysis

This section presents management's discussion and analysis (MD\&A) of the Arizona State Retirement System's (ASRS) plan net assets and changes in plan net assets for the fiscal year ended J une 30, 2005. It is presented as a narrative overview and analysis. The discussion and analysis should be read in conjunction with the Letter of Transmittal included in the Introductory Section of the ASRS' Comprehensive Annual Financial Report (CAFR), the basic financial statements and notes to the basic financial statements presented in the Financial Section of the CAFR.

## Financial Highlights

During FY 2005, ASRS assets grew primarily as the result of continuing positive returns in financial markets. Over this period the ASRS' investment results outperformed its assumed actuarial investment rate of return of 8 percent and its strategic asset allocation benchmark of 7.8 percent.

- The ASRS rate of return on investments for FY 2005 was 8.5 percent compared to 17.5 percent FY 2004. The decrease in the rate of return reflects a slowing of returns in the global securities markets during the fiscal year.
- The ASRS combined total net assets increased by 5.5 percent at J une 30, 2005 compared to FYE 2004. The increase in the net assets is due to continued positive returns from the global securities markets during the fiscal year.
- During FY 2005, approximately $\$ 2$ billion of the ASRS investment portfolio was moved into commingled accounts. Of
that amount, approximately $\$ 1$ billion was fixed income assets and \$1 billion international equity. The international equity amount reflects the defunding of 2 external managers and the temporary housing of those assets during a search for new managers.
- The ASRS received a total of $\$ 885$ million in employee and employer contributions during FY 2005 compared to $\$ 827$ million in FY 2004. The 7.1 percent increase is due primarily to an increase in active membership.
- The ASRS paid $\$ 1.6$ billion in pension, disability, health insurance and survivor benefits during FY 2005 compared to $\$ 1.4$ billion in FY 2004. The 12.9 percent increase is due to an increase in retirements, number of deaths and enhanced retirement benefits such as the optional partial lump sum disbursement.
- As of June 30, 2004, the most recent actuarial valuation, the Retirement and Health Benefit Supplement Funds combined were 91.2 percent funded. This compares to a combined funding ratio of 96.8 percent as of June 30, 2003. The change in funding percentage is primarily due to continued recognition of investment losses for fiscal years 2001, 2002 and 2003.


## Overview of the Financial Statements

The MD\&A is intended to serve as an introduction and overview of the ASRS financial section of the CAFR which comprise the following components: 1) basic financial statements, 2) notes to the basic financial

## Management's Discussion and Analysis

statements, 3) required supplementary information and 4) other supplementary information. Collectively, this information presents the combined net assets held in trust for pension benefits which includes HBS and LTD for each of the funds administered by the ASRS as of J une 30, 2005. This financial information also summarizes the combined changes in net assets held in trust for pension benefits for the year then ended. The information available in each of these sections is briefly summarized as follows:

1. Fund financial statements. For the fiscal year ended J une 30, 2005, financial statements are presented for the funds administered by the ASRS. These fiduciary funds are used to account for resources held for the benefit of the ASRS members.

- The Combined Statement of Plan Net Assets is presented as of J une 30, 2005 with combined total comparative information as of J une 30, 2004. These financial statements reflect the resources available to pay benefits to members, including retirees and beneficiaries, at the end of the years reported. Net investments totaled $\$ 23$ billion at FYE 2005 compared to $\$ 22$ billion at FYE 2004. The 5.3 percent increase was primarily due to positive returns in the global securities markets. Receivables of $\$ 2.2$ billion reflect no change compared to last year's \$2.2 billion. Liabilities of $\$ 4.9$ billion represents a decrease of 5.4 percent compared to $\$ 5.1$ billion last year. This decrease is a result of moving $\$ 2$ billion of fixed income and international equity assets to commingled funds
which are not eligible for direct ASRS custody bank lending.
- The Combined Statement of Changes in Plan Net Assets is presented for the year ended J une 30, 2005 with comparative information for the year ended J une 30, 2004. These financial statements reflect the changes in resources available to pay benefits to retirees and other beneficiaries for the FY 2005 and 2004.

2. Notes to the Basic Financial Statements. The notes to the Basic Financial Statements provide additional information that is essential to a full understanding of the data provided in the basic financial statements. The notes to the basic financial statements can be found on pages 26-43 of this report.
3. Required Supplementary Information. The required supplementary information consists of two schedules and related notes concerning actuarial information, funded progress and required contributions of the defined benefit pension systems administered by the ASRS.
4. Additional Supplementary Information. These schedules include a Combining Schedule of Net Assets and Changes in Net Assets for the ASRS Plan and System retirement programs, detailed information about additions and deductions, administrative expenses incurred by the ASRS administered funds, cash receipts and cash disbursements and professional and investment expenses. The ASRS Plan, a defined benefit plan, and the System, a defined contribution plan, are separate

## Management's Discussion and Analysis

components administered within the same pension plan.

## Financial Analysis of the ASRS Funds

The ASRS administers retirement, health and long term disability benefits for teachers and state, county and other public municipal employees. ASRS benefits are funded by member and employer contributions and by earnings on investments. The ASRS has three funds, Retirement, Health Benefit Supplement (HBS) and Long Term Disability (LTD), to which the contributions are distributed according to actuarially determined contribution rates.

Plan Net Assets. The total ASRS net assets held in trust for benefits at J une 30, 2005 were $\$ 22.6$ billion, a 5.5 percent increase from $\$ 21.4$ billion at J une 30,2004 . The increase in net assets is primarily due to an increase in the global securities markets during the fiscal year. The retirement fund net assets were $\$ 21.6$ billion compared to $\$ 20.5$ billion last year, a 5.4 percent increase. The HBS fund net assets were $\$ 872$ million at year end compared to $\$ 808$ million in FYE 2004, a 7.9 percent increase. The LTD fund net assets were $\$ 164$ million at year end compared to $\$ 138$ million last year, an 18.8 percent increase.

Changes in Net Assets. For the 2005 fiscal year, employer and member contributions totaled $\$ 885$ million, a 7.1 percent increase over the 2004 fiscal year contributions of $\$ 827$ million. An increase in active membership is primarily responsible for the increased contributions.

For FY 2005, the ASRS recognized net investment income of $\$ 1.8$ billion which compares to net investment income of $\$ 3.2$ billion in the previous year. This 43.8 percent decrease in investment income is due to a slowing of returns in the global securities markets during the fiscal year.
Deductions from the ASRS net assets held in trust for benefits consist primarily of pension, disability, health insurance and survivor benefits, member refunds and administrative expenses. For the 2005 fiscal year, pension, disability, health insurance and survivor benefits totaled $\$ 1.6$ billion, an increase of 12.9 percent from the $\$ 1.4$ billion paid during FY 2004. Pension payments totaled $\$ 1.4$ billion in FY 2005 compared to $\$ 1.2$ billion in the previous year. The 16.7 percent increase is explained by a 6.7 percent increase in retirees, 75,650 compared to 70,878 in 2004, and the partial lump sum benefit which allows members to take up to 36 months of retirement payments in a lump sum at retirement. Partial lump sum payments totaled $\$ 81.6$ million for the 2005 fiscal year compared to $\$ 58$ million last year. Refunds and transfers to other plans totaled $\$ 48.7$ million in 2005, a 26.5 percent increase from the $\$ 38.5$ million paid out in 2004. For FY 2005, the cost of administering the ASRS benefits totaled $\$ 25.3$ million, a decrease of 5.6 percent from the $\$ 26.8$ million paid in FY 2004. This decrease is a result of a general decrease in administrative expenses due to a reduced appropriated administrative budget.

The following tables show the ASRS net assets and changes in net assets for fiscal years 2005 and 2004:

## Management's Discussion and Analysis

## Net Assets

(In thousands)

|  | 2005 | $\mathbf{2 0 0 4}$ | Change | \% Change |
| :--- | ---: | ---: | ---: | ---: |
| Assets |  |  |  |  |
| Cash and receivables | $\$ 2,190,345$ | $\$ 2,232,468$ | $(\$ 42,123)$ | $(1.9 \%)$ |
| Investments at fair value | $23,000,280$ | $22,049,392$ | 950,888 | $4.3 \%$ |
| Securities lending | $2,279,978$ | $2,289,996$ | $(10,018)$ | $(0.4 \%)$ |
| Total assets | $27,470,603$ | $26,571,856$ | 898,747 | $3.4 \%$ |

## Liabilities

| Payables for investments | $2,583,240$ | $2,850,761$ | $(267,521)$ | $(9.4 \%)$ |
| :--- | ---: | ---: | ---: | ---: |
| Securities Lending | $2,279,978$ | $2,289,996$ | $(10,018)$ | $(0.4 \%)$ |
| $\quad$ Total liabilities | $4,863,218$ | $5,140,757$ | $(277,539)$ | $(5.4 \%)$ |
| Total Net Assets | $\mathbf{\$ 2 2 , 6 0 7 , 3 8 5}$ | $\mathbf{\$ 2 1 , 4 3 1 , 0 9 9}$ | $\mathbf{\$ 1 , 1 7 6 , 2 8 6}$ | $\mathbf{5 . 5 \%}$ |

## Changes in Net Assets

(In thousand
Additions

| Employee contributions | $\$ 442,643$ | $\$ 413,462$ | $\$ 29,181$ | $7.1 \%$ |
| :--- | ---: | ---: | ---: | ---: |
| Employer contributions | 442,643 | 413,458 | 29,185 | $7.1 \%$ |
| Member reimbursements and transfers |  |  |  |  |
| from other plans | 141,932 | 113,944 | 27,988 | $24.6 \%$ |
| Investment and securities lending income | $1,878,072$ | $3,280,722$ | $(1,402,650)$ | $(42.8 \%)$ |
| Investment and securities lending expense | $(74,680)$ | $(51,937)$ | $(22,743)$ | $43.8 \%$ |
| $\quad$ Total additions | $2,830,610$ | $4,169,649$ | $(1,339,039)$ | $(32.1 \%)$ |

## Deductions

| Retirement and disability benefits | 1,558,332 | 1,381,622 | 176,710 | 12.8\% |
| :---: | :---: | :---: | :---: | :---: |
| Survivor benefits | 18,402 | 14,859 | 3,543 | 23.8\% |
| Refunds and transfers | 48,745 | 38,548 | 10,197 | 26.5\% |
| Administration and other | 28,845 | 33,409 | $(4,564)$ | (13.7\%) |
| Total deductions | 1,654,324 | 1,468,438 | 185,886 | 12.7\% |
| Net Change | 1,176,286 | 2,701,211 | $(1,524,925)$ | (56.5\%) |
| Net assets beginning of year | 21,431,099 | 18,729,888 | 2,701,211 | 14.4\% |
| Net assets end of year | \$22,607,385 | \$21,431,099 | \$1,176,286 | 5.5\% |

# Management's Discussion and Analysis 

Net Assets by Fund -J une 30, 2005


Funded Status. Actuarial valuations of the ASRS assets and benefit obligations for the retirement and health benefit supplement funds combined are performed annually. The most recent actuarial valuation available is as of J une 30, 2004.

At J une 30, 2004 the total funded status of the ASRS retirement and health benefit supplement funds decreased to 91.2 percent from 96.8 percent at FYE 2003. At FYE 2004 ASRS actuarial liabilities exceeded actuarial assets for the retirement and health benefit supplement funds by $\$ 2.3$ billion. This compares to a deficit of actuarial assets
over actuarial liabilities of $\$ 787$ million at FYE 2003. This decrease in funded status is related primarily to recognition of investment losses in fiscal years 2001, 2002 and 2003 and to a change in actuarial assumptions.
Investments. During the FY 2005, the ASRS funds remained broadly diversified with investments in domestic and international equities, domestic fixed income, and cash equivalent securities. According to statutory restrictions, no more than 80 percent of the fund may be invested in equity securities, and no more than 20 percent may be invested solely in international equity securities.

# Management's Discussion and Analysis 

The Retirement and HBS funds are combined in a commingled investment pool. Investment income is allocated to the HBS Fund in accordance with its respective ownership share of the total investment pool. The LTD investments are held in a separate fund.

At J une 30, 2005, the ASRS held net investments of $\$ 22.6$ billion, an increase of $\$ 1.0$ billion from FYE 2004. The $\$ 1.0$ billion increase in total investments is primarily due to an increase in the global securities markets. The combined investment portfolio experienced a return of 8.5 percent compared to the benchmark return of 7.8 percent. During the implementation of ASRS's real estate program, an interim benchmark is being used. The interim benchmark consists of 56 percent S\&P 500, 28 percent Lehman Brother Aggregate and 16 percent MSCI EAFE indices which prorates the 6 percent allocation to institutional real estate.
At June 30, 2005, the ASRS held $\$ 12.6$ billion in domestic equities and $\$ 3.9$ billion in international equities, an increase of 6.7 percent in domestic equities and a 2.6 percent increase in international equities from FYE 2004. The FY 2005 rate of return for ASRS domestic equities was 8.1 percent compared to 22.6 percent in FY 2004 reflecting a slower increase in the domestic equity markets. The ASRS domestic equities benchmark, S\&P 500, had a return of 6.3 percent for FY 2005.

The FY 2005 rate of return for ASRS international equities was 11.1 percent compared to 34.3 percent in FY 2004, reflecting a slower increase in the international equity markets.

The ASRS international equities benchmark, MSCI EAFE, had a rate of return of 14.1 percent for FY 2005. The benchmarks for both domestic and international equities are representative of the returns that could be expected in a similar investing environment.
At J une 30, 2005, the ASRS held $\$ 5.7$ billion in domestic fixed income securities, an increase of $\$ 100.0$ million from FYE 2004. The rate of return was 6.9 percent compared to 0.2 percent in the previous year, reflecting an increase in performance in the fixed income markets. The ASRS domestic income benchmark, the Lehman Aggregate, had a rate of return of 6.8 percent for FY 2005. This benchmark is representative of the returns that could be expected in a similar investing environment.

The ASRS earns additional investment income by lending investment securities. This is done on a pooled basis by our custodial bank, Mellon Trust. The borrowers provide collateral and generally use the borrowed securities to cover short sales and failed trades. Direct custody securities lending income for FY 2005 was $\$ 5.7$ million compared to $\$ 6.6$ million for FY 2004. The 13.6 percent decline in securities lending income is a result of the movement of approximately $\$ 2.0$ billion in assets into commingled funds, removing them from lending eligibility.

Additional information is available upon request. Please direct your request to the ASRS, 3300 North Central Ave., Phoenix, AZ 85012.

## Basic Financial Statements

## Combined Statement of Plan Net Assets

J une 30, 2005 with Comparative Totals for 2004 (Dollars in Thousands)

|  | Retirement Fund | Health Benefit Supplement Fund (Note 8) | Long-Term Disability Fund (Note 8) | Combined |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 2005 | 2004 |
| ASSETS: |  |  |  |  |  |
| Cash (Note 3) | \$14,680 | \$ | \$3,683 | \$18,363 | \$19,145 |
| RECEIVABLES: |  |  |  |  |  |
| Accrued interest \& dividends | 52,966 | 2,137 | - | 55,103 | 65,186 |
| Securities sold (Note 3) | 490,785 | 19,798 | - | 510,583 | 309,235 |
| Forward contracts (Note 5) | 1,512,678 | 61,021 | - | 1,573,699 | 1,817,679 |
| Contributions (Note 7) | 17,252 | 2,040 | 1,855 | 21,147 | 18,474 |
| Due from Other Funds | - | - | 7,023 | 7,023 | 1,030 |
| Other | 2,883 | 65 | 1,479 | 4,427 | 1,719 |
| Total Receivables | 2,076,564 | 85,061 | 10,357 | 2,171,982 | 2,213,323 |
| INVESTMENTS AT FAIR VALUE (Note 3) |  |  |  |  |  |
| Temporary investments | 1,961,075 | 79,110 | - | 2,040,185 | 1,993,462 |
| Temporary investments from securities lending collateral (Note 4) | 2,191,570 | 88,408 | - | 2,279,978 | 2,289,996 |
| U. S. government obligations | 2,465,262 | 99,449 | - | 2,564,711 | 3,143,563 |
| Corporate bonds | 2,479,642 | 100,029 | 37,522 | 2,617,193 | 2,204,732 |
| Common and preferred stocks | 15,031,542 | 606,372 | 113,503 | 15,751,417 | 14,680,860 |
| Real estate mortgages \& contracts | 25,736 | 1,038 | - | 26,774 | 26,775 |
| Total investments | 24,154,827 | 974,406 | 151,025 | 25,280,258 | 24,339,388 |
| TOTAL ASSETS | 26,246,071 | 1,059,467 | 165,065 | 27,470,603 | 26,571,856 |
| LIABILITIES: |  |  |  |  |  |
| Payable for securities purchased (Note 3) | 946,302 | 38,174 | - | 984,476 | 1,021,706 |
| Payable for securities lending collateral <br> (Note 4) | 2,191,570 | 88,408 | - | 2,279,978 | 2,289,996 |
| Forward contracts payable (Note 5) | 1,516,815 | 61,188 | - | 1,578,003 | 1,821,026 |
| Due to other funds | 7,023 | - | - | 7,023 | 1,030 |
| Other | 13,447 | 60 | 231 | 13,738 | 6,999 |
| Total Liabilities | 4,675,157 | 187,830 | 231 | 4,863,218 | 5,140,757 |
| NET ASSETS HELD IN TRUST FOR PENSION |  |  |  |  |  |
| BENEFITS | \$21,570,914 | \$871,637 | \$164,834 | \$22,607,385 | \$21,431,099 |

The accompanying notes are an integral part of these statements.

Financial Section

## Basic Financial Statements

## Combined Statement of Changes in Plan Net Assets

For the Year Ended J une 30, 2005 with Comparative Totals for 2004 (Dollars in Thousands)

## ADDITIONS

Contributions:
Member contributions (Note 7)
Employer contributions (Note 7)
Transfers from other plans
Member reimbursements

Total contributions
Income from investment activities:
Net appreciation in fair value
Interest
Dividends
Real estate
Other
Total income from investment activities

| Retirement | Health Benefit <br> Supplement <br> Fund | Long-Term <br> Disability <br> Fund | Combined |  |
| :---: | :---: | :---: | :---: | :---: |

Less investment activity expenses:
Investment management fees and monitoring
services

Total investment activity expenses
Net income from investment activities

| 26,516 | 1,060 | - | 27,576 | 24,824 |
| ---: | ---: | ---: | ---: | ---: |
| 5,777 | 231 | - | 6,008 | 5,061 |
| 32,293 | 1,291 | - | 33,584 | 29,885 |
| $1,715,548$ | 68,532 | 13,651 | $1,797,731$ | $3,222,166$ |

From securities lending activities (Note 4):
Securities loan program

| 44,959 | 1,798 | - | 46,757 | 28,670 |
| ---: | ---: | ---: | ---: | ---: |
| 39,516 | 1,580 | - | 41,096 | 22,051 |
| 5,443 | 218 | - | 5,661 | 6,619 |
| $1,720,991$ | 68,750 | 13,651 | $1,803,392$ | $3,228,785$ |
| $2,584,895$ | 154,100 | 91,615 | $2,830,610$ | $4,169,649$ |

## DEDUCTIONS

Retirement and disability benefits
Survivor benefits
Refunds to withdrawing members, including interest
Administrative expenses

| $1,406,547$ | 89,602 | 62,183 | $1,558,332$ | $1,381,622$ |
| ---: | ---: | ---: | ---: | ---: |
| 18,402 | - | - | 18,402 | 14,859 |
| 44,164 | - | - | 44,164 | 36,212 |
| 21,940 | 875 | 2,460 | 25,275 | 26,834 |
| 4,581 | - | - | 4,581 | 2,336 |
| 3,536 | 34 | - | 3,570 | 6,575 |
| $1,499,170$ | 90,511 | 64,643 | $1,654,324$ | $1,468,438$ |
| $1,085,725$ | 63,589 | 26,972 | $1,176,286$ | $2,701,211$ |
|  |  |  |  |  |
| $20,485,189$ | 808,048 | 137,862 | $21,431,099$ | $18,729,888$ |
| $\$ 21,570,914$ | $\$ 871,637$ | $\$ 164,834$ | $\$ 22,607,385$ | $\$ 21,431,099$ |

The accompanying notes are an integral part of these statements.

## Notes to the Basic Financial Statements

## 1. Description of the System

Organization - The Arizona State Retirement System (ASRS) is a component unit of the State of Arizona. The ASRS is a cost-sharing, multiple-employer, defined benefit pension plan established by the State of Arizona to provide pension benefits for employees of the State and employees of participating political subdivisions and school districts. The ASRS is administered in accordance with Title 38, Chapter 5 of the Arizona Revised Statutes (A.R.S.).

The ASRS administers the Arizona State Retirement System (the System, a defined contribution plan) and the Arizona State Retirement Plan (the Plan, a defined benefit plan). The System and Plan are separate components of the same pension plan. The System was established by the Arizona Legislature in 1953 to provide retirement and other benefits for state employees and teachers, together with employees of political subdivisions that elected coverage. In 1943, the Legislature had established the Arizona Teachers' Retirement System (the Teachers' System) to provide benefits for teachers. After the establishment of the ASRS, teachers who were, or later became, eligible through employment to be covered by the ASRS were transferred to the System. The Teachers' System then became inactive, except for continuation of retirement benefits already being paid and obligations to teacher members who did not become eligible for the ASRS.

The Plan, enacted by the Legislature in 1970, became effective July 1, 1971. Effective July 1,1981 , all non-retired members of the System became members of the Plan as prescribed by Laws of 1980, Chapter 238.
A.R.S. 38-783 and A.R.S. 38-797 require separate accounts be established for health insurance premium benefits and long-term disability benefits, respectively. Effective J uly 1, 1995, the ASRS has established an account for each benefit program and has reported those funds in the basic financial statements.
Reporting Entity - The financial statements of the ASRS include the financial activities of all the above funds. The ASRS Retirement Board (the Board), appointed by the governor and confirmed by the Arizona State Senate, oversees the ASRS.

Contributions - Participating employers and their employees contribute percentages of employees' salaries for retirement annuities and survivor annuities in accordance with Arizona Revised Statutes. Employee contributions are excluded from gross income for federal and state income tax purposes. Employers collect contributions from the employees, add their matching share and remit the total amounts to the Plan.

State statutes allow the purchase of eligible service credit for which no benefit could be paid by another qualified plan. Purchasable services include military service, leave of absence, previously forfeited service under ASRS and other public service employment.

## Notes to the Basic Financial Statements

At J une 30, 2005, the number of participating employers and employees totaled:
EMPLOYER UNITS:
School Districts ..... 233
Charter Schools ..... 184
Cities and Towns ..... 72
Counties ..... 14
Special Districts ..... 81
Community College Districts ..... 10
Universities ..... 3
State Government ..... 1
TOTAL ..... 598*
EMPLOYEE MEMBERS:
Retirees (including Beneficiaries) ..... 75,650
Non Active Fully Vested ..... 149,933
Long-Term Disability recipients ..... 4,932
CURRENT EMPLOYEES:
Active Fully Vested** ..... 212,275
TOTAL442,790

* The 598 Employer Reporting Units represent 735 total employers.
** Plan members are deemed fully vested when retirement contributions are made.

Benefits - The Plan provides benefits under formulas and provisions described in Arizona state law. Benefits and administrative expenses are paid from funds contributed by members and employers and from earnings on the invested funds. The Plan provides for retirement, disability, health insurance premium supplemental benefits, and survivor benefits.

Retirement benefits are calculated on the basis of age, average monthly compensation, and service credit, which is established on a fiscal year basis (J uly 1 to J une 30). Members are eligible for full retirement benefits on (a) their 65th birthday, (b) their 62nd birthday and completion of at least 10 years of credited service, or (c) the first day that the sum

## Notes to the Basic Financial Statements

of their age plus total credited service equals 80. The benefit is based on a percentage of average monthly compensation multiplied by the years of service credit.

The percentage of average monthly compensation varies with years of service credit according to the following schedule:

- 0-19.99 years -2.1 percent
- 20-24.99 years -2.15 percent
- 25-29.99 years - 2.2 percent
- 30 or more years of service - 2.3 percent Average monthly compensation is defined as the period of 36 consecutive months during which a participant receives the highest compensation within the last 120 months of service during which the employee made retirement contributions as required by law. The compensation does not include lump sum payments on termination of employment for accumulated vacation or annual leave, sick leave, compensatory time or any other form of termination pay. Members who began participation in the Plan prior to J anuary 1, 1984, may choose to have average monthly compensation determined based upon the period of 60 consecutive months during which the member receives the highest compensation within the last 120 months of service, including lump sum payments as described above. Persons who attain age 50 with at least five years of total credited service may take an early retirement, but the amount of their retirement benefit is actuarially reduced.

Effective J uly 1, 1988, members of the ASRS are eligible for a Long Term Disability (LTD) benefit in the event they become unable to perform their work. The monthly benefit is equal to two-thirds of their monthly earn-
ings. Participants continue to earn service credit up to their normal retirement dates. For those on disability after J une 30, 1999, the years of service credited can not exceed the greater of 30 years or the total years of service credited on the start of their disability.

The Retiree Group Insurance Program offers health insurance coverage for retired and disabled members who are no longer covered by insurance administered by their former member employers. Commencing J anuary 1, 1989, retired and disabled members of ASRS became eligible for the Health Insurance Premium Supplement Benefit Program. A detailed explanation of both programs is presented in the additional benefits section (Note 8).

Termination - Upon termination of employment, members can elect to receive all of their contributions made to the Plan, plus accrued interest at 8 percent (changing to 4 percent effective July 1, 2005). Members can receive a percentage of employer contributions to the plan based on years of service as follows:

- 5 to 5.9 years of service - 25 percent of employer contributions
- 6 to 6.9 years of service -40 percent of employer contributions
- 7 to 7.9 years of service -55 percent of employer contributions
- 8 to 8.9 years of service - 70 percent of employer contributions
- 9 to 9.9 years of service - 85 percent of employer contributions
- 10 or more years of service -100 percent of employer contributions


## Notes to the Basic Financial Statements

Withdrawal of such accumulated contributions results in forfeiture of the member's accrued benefits in the Plan; however, state law provides for reinstatement of a member's forfeited service upon repayment of the accumulated contributions plus interest if a former member returns to covered service.

## 2. Summary of Significant Accounting Policies

Basis of Accounting - The financial statements are prepared using the accrual basis of accounting under which expenses are recorded when the liability is incurred and revenues are recorded in the accounting period in which they are earned and become measurable. Employee contributions are recognized in the period in which contributions are due. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions. Contributions from employees and employers for service through J une 30 are accrued. These contributions are considered to be fully collectible and, accordingly, no allowance for uncollectible receivables is reflected in the financial statements.

Benefit and refund payments are recognized when due and payable in accordance with the terms of the plan.

Investment income is recognized when earned and refunds and other expenditures are recorded when incurred.

## New Accounting Pronouncements

The ASRS implemented GASB Statement No. 40, Deposit and Investment Risk Disclosures, for the year ended J une 30, 2005. GASB No. 40 amends GASB No. 3, Deposits with Financial Institutions, Investments (includ-
ing Repurchase Agreements), and Reverse Repurchase Agreements by expanding the disclosure requirements for credit risk, interest rate risk and foreign currency risk.
The following statements have been issued by GASB, but not yet implemented by the ASRS:
In November 2003, GASB issued Statement No. 42, Accounting and Financial Reporting for Impairment of Capital Assets and for Insurance Recoveries. The statement establishes guidance for accounting and reporting for the impairment of capital assets and for insurance recoveries.

In May 2004, GASB issued Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. GASB Statement No. 43 addressed the financial reporting for other postemployment benefits plans.

In J une 2004, the GASB issued Statement No. 44, Economic Condition Reporting: The Statistical Section. The adoption of GASB Statement No. 44 will require some additional information and schedules in the statistical section of Comprehensive Annual Financial Report (CAFR).

In August 2004, GASB issued Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions. GASB No. 45 required that employer governments to account for and report that annual cost of other postemployment benefits the same manner as they do for pensions.

In December 2004, GASB issued Statement No. 46, Net Assets Restricted by Enabling Legislation-an Amendment of GASB Statement No. 34. The Statement defines legally enforceable in the requirement of

## Notes to the Basic Financial Statements

reporting certain net assets as restricted net assets.

In December 2004, GASB issues Technical Bulletin No. 2004-2, Recognition of Pension and Other Postemployment Benefit Expenditures/ Expense and Liabilities by CostSharing Employers. The Bulletin clarifies the requirements of GASB Statement No. 27, Accounting for Pensions by State and Local Governmental Employers and Statement No. 45 for recognition of pension and other postemployment benefit (OPEB) expenditures/ expense and liabilities by cost-sharing employers.
In J une of 2005, GASB issued Statement No. 47, Accounting for Termination Benefits. GASB 47 gives accounting and reporting guidance for early retirement incentives, severance payments for involuntary terminations and termination benefits affecting defined benefit postemployment benefits.
The effective date of these statements ranges from fiscal years beginning after December 15, 2004 to fiscal years beginning after December 15, 2006.

The ASRS is in the process of evaluating the above statements.

Investments - Investments include U.S. government and government agency obligations, real estate, commercial mortgages, corporate bonds and equity obligations.

Investments other than commercial mortgages are reported at fair values determined by the custodial agents. The agents' determination of fair values includes, among other things, using pricing services or prices quoted by independent brokers at current exchange rates. The ASRS invests in two types of derivatives, currency forward contracts and futures contracts. The fair value of currency
forward contracts is determined by interpolating the spot rate and the forward rates based upon number of days to maturity. The interpolated rate is used to determine the unrealized gain/ loss at the valuation date. The fair value of futures contracts is determined by calculating the difference between the closing Bloomberg market price on valuation date and the original futures trade price. Futures are settled daily. The fair value of real estate investments is based on independent appraisals or estimated value.

Commercial mortgages have been valued on an amortized cost basis, which approximates fair value. No allowance for loan loss has been provided as all Ioans are considered by management to be fully collectible. Shortterm investments are reported at cost plus accrued interest, which approximates fair value. For investments where no readily ascertainable fair value exists, management, in consultation with their investment advisors, has determined the fair values for the individual investments based on anticipated maturity dates and current interest rates commensurate with the investment's degree of risk.

Security transactions and any resulting gains or losses are accounted for on a trade date basis.

Net investment income includes net appreciation (depreciation) in the fair value of investments, interest income, dividend income and total investment expense, which includes investment management and custodial fees and all other significant investment related costs.

There are certain market risks, credit risks, liquidity risks, foreign currency exchange risks, and event risks which may subject ASRS to economic changes occurring in certain industries, sectors, or geographies.

## Notes to the Basic Financial Statements

HBS and retirement investments are pooled. Realized and unrealized gains are allocated monthly based on net investment balances at the end of the month.

Capital Assets - The ASRS does not record property and equipment (principally office furniture and fixtures) as assets, but includes the cost of such items in administrative expenditures in the year purchased due to the insignificant total cost.

Federal Income Tax Status - During the year ended J une 30, 2005, the ASRS qualified under Section 401(a) of the Internal Revenue Code (IRC) and was exempt from federal income taxes under Section 501(a) of the IRC.
Actuarial Valuation - The information included in the required supplemental schedules is based on the actuarial valuations performed as of J une 30, 2004, which is the latest available information. Significant actuarial assumptions used in the valuations are included in the notes to the required supplemental schedules.
Use of Estimates - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Comparative Data - The accompanying financial statements include certain prioryear summarized comparative information in total but not by fund. Such information should be read in conjunction with the ASRS' financial statements for the year ended

J une 30, 2004, from which the summarized information was derived.

## 3. Cash And Investments

Cash - Cash deposits are subject to custodial risk. Custodial risk is the risk that in the event of a bank failure, ASRS's deposits may not be returned to it. Arizona state statutes require state agency deposits to be covered by collateral pledged by the bank. The board has not adopted a more restrictive policy. At J une 30, 2005 \$100,000 of the ASRS' cash deposits were covered with federal depository insurance funds. The remainder was collateralized with securities held by the pledging bank's trust department in the ASRS' name.

Investments - Investments are subject to a number of risks including custodial credit risk, concentration of credit risk, credit quality risk, interest rate risk and foreign currency risk. Statutes enacted by the Arizona State Legislature (the Statutes) authorize the ASRS to make investments in accordance with the "Prudent Expert" rule. Section 38-719 (B) of the Arizona Revised Statutes interprets the rule to be that investment management shall discharge the duties of their position with the care, skill, prudence and diligence, under the circumstances then prevailing, that a prudent person acting in enterprise of a like character and with like aims as that of the system, subject to certain statutory limitations and restrictions. Within this broad framework, the ASRS has chosen to invest in short-term securities, obligations of the U.S. government or agencies of the U.S. government, corporate bonds, common and preferred stocks (domestic and foreign), mortgages and real estate.

The Statutes place the following restrictions on the ASRS' investment fund portfolio:

## Notes to the Basic Financial Statements

1. No more than 80 percent of the ASRS' total assets may be invested at any given time in corporate stocks or equity equivalents, based on cost value of the stocks or equity equivalents irrespective of capital appreciation.
2. No more than 5 percent of the ASRS' assets may be invested in securities issued by any one institution, agency or corporation, other than securities issued as direct obligations of or fully guaranteed by the U.S. government or mortgage backed securities and agency debentures issued by federal agencies. During 2005, ASRS did not own securities of any organization that was more than 5 percent of ASRS' assets.
3. No more than 5 percent of the voting stock of any one corporation may be owned.
4. No more than 20 percent of the ASRS' assets may be invested in foreign equity securities, and those investments shall be made only by investment managers with demonstrated expertise in such investments.
5. No more than 10 percent of the ASRS' assets may be invested in bonds or other evidences of indebtedness of those multinational development banks in which the United States is a member nation, including the International Bank for Reconstruction and Development, the African Development Bank, the Asian Development Bank, and the InterAmerican Development Bank.
6. No more than 1 percent of ASRS assets may be invested in economic development projects authorized as eligible for such investment by the Arizona State Department of Commerce. During fiscal year 2005 the ASRS had no investments in economic development projects.

The Board has not formally adopted more restrictive policies for the various types of risks. The Management of ASRS believes it has complied with the above guidelines. Management does expect the money managers to abide by contract requirements much more restrictive than the statute.

## Notes to the Basic Financial Statements

The following table shows the investments by investment type:

Investments at J une 30, 2005
(Dollars in Thousands)

Investment
Temporary Investments including US Treasury Bills
Foreign Bonds including Temporary Investments
Total Temporary Investments
Domestic Corporate Bonds
Domestic Common and Preferred Stock
Foreign Common and Preferred Stock
Total Common and Preferred Stock
US Government Obligations
US Agency Obligations
Total US Government Obligations
Real Estate Mortgages \& Contracts
U. S. Government Obligations
U. S. Agency Obligations

Corporate Obligations - Domestic
Preferred and Common Stock- Domestic
Preferred and Common Stock -Foreign
Total Securities Lending Obligations
TOTAL INVESTMENTS AT FAIR VALUE
*Short Term Investment Receivables
**Short Term Investment Payables

INVESTMENTS AT FAIR VALUE - NET
*Includes \$1,668 other receivables
**Includes \$3,228 other liabilities

Fair Value
\$2,030,099
10,086
$2,040,185$

2,617,193

14,713,922
$1,037,495$
$15,751,417$ 707,622
$1,857,089$
$2,564,711$ 26,774

548,608
483,740
62,382
983,148

| 202,100 |
| ---: |
| $2,279,978$ |

$25,280,258$

2,141,053
$(4,845,787)$
\$22,575,524 $\xlongequal{-\$ 22,575,524}$

## Notes to the Basic Financial Statements

Due to the flow of securities to and from transfer agents and the security lending program, securities occasionally cannot be delivered for a sale or received for a purchase, resulting in a "failed" transaction. Securities with trade dates in J une and settlement dates in J uly result in "outstanding" transactions. Since these securities have contractually changed ownership, receivables and payables result from these transactions. Such transactions resulted in a receivable for securities sold of $\$ 510.6$ million and a payable for securities purchased of $\$ 984.5$ million at J une 30, 2005.

Custodial Credit Risk: For an investment, custodial credit risk is the risk that, in the event of a failure of a counter party, the ASRS will not be able to recover the value of its investment or the collateral securities that are in the possession of an outside party. All securities are registered in the name of the ASRS including loaned securities.

Concentration of Credit Risk: Concentration of credit risk is the risk of substantial loss if
investments are concentrated in one issuer. Arizona state statute requires that no more than 5 percent of the assets can be invested in one issuer, except for the US government and its agencies. The Board has not adopted a more restrictive policy. No investments, other than short term mutual funds, account for 5 percent or more of their assets.

Credit Quality Risk: Credit quality risk is the risk that the issuer will not fulfill its obligations to the purchaser of its debt instruments. Arizona state statutes are not specific as to the credit ratings of the investments of the ASRS. The statutes require the Prudent Expert Rule. The Board has not adopted a formal policy on credit ratings. The present management policy is to set standards for each portfolio manager based on an assessment of their expertise. The following table presents the fixed income investments at June 30, 2005 categorized to give an indication of the level of risk assumed by ASRS:

# Notes to the Basic Financial Statements 

## Debt Securities

Fair Value at J une 30, 2005
(Dollars in Thousands)

| Investment | Fair Value | AAA/P1 | AA | A | BBB | BB | B | Not Rated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Asset Backed Securities | \$240,254 | \$227,061 | \$5,476 | \$5,244 | \$1,462 | \$ | \$1,011 | \$ - |
| Bond Funds | 322,906 | - | - | - | - | - | - | 322,906 |
| CMO's of Government Sponsored Entities | 74,599 | 74,599 | - | - | - | - | - | - |
| Commercial Mortgage Backed Securities | 211,200 | 209,733 | 1,177 | 290 | - | - | - | - |
| Commercial Paper | 122,644 | 122,644 | - | - | - | - | - | - |
| Corporate Bonds | 838,230 | 74,074 | 107,544 | 283,144 | 311,459 | 38,278 | 23,728 | 3 |
| Dollar Denominated Debt of Foreign Companies | 57,330 | - | 3,299 | 37,556 | 12,373 | 2,162 | 1,940 | - |
| Dollar Denominated Debt of Foreign Countries | 71,347 | 35,124 | 15,037 | 2,744 | 17,352 | - | 1,090 | - |
| Fixed Income Strips incl US strips | 8,142 | 8,142 | - | - | - | - | - | - |
| GNMA Pools | 138,092 | 138,092 | - | - | - | - | - | - |
| Government Sponsored Entity Debt | 462,654 | 444,976 | 17,678 | - | - | - | - | - |
| Indexed Linked Government Bond Funds | 774,263 | - | - | - | - | - | - | 774,263 |
| Indexed Linked Treasury Bonds | 37,381 | 37,381 | - | - | - | - | - | - |
| Municipal Bonds | 2,370 | 881 | 1,489 | - | - | - | - | - |
| Non-government Backed CMO's | 117,806 | 117,593 | 165 | 48 | - | - | - | - |
| Pools of Government Sponsored Entities | 1,283,948 | 1,283,948 | - | - | - | - | - | - |
| Short Term Money Markets | 1,787,462 | - | - | - | - | - | - | 1,787,462 |
| US Treasury Debt including treasury bills | 635,320 | 635,320 | - | - | - | - | - | - |
| Total Domestic Debt Securities | 7,185,948 | 3,409,568 | 151,865 | 329,026 | 342,646 | 40,440 | 27,769 | 2,884,634 |
| Corporate Bonds | 8,742 | - | - | - | - | - | - | 8,742 |
| Government Bonds | 14,626 | 9,793 | - | - | 4,833 | - | - | - |
| Provincial Bonds | 2,687 | - | 2,687 | - | - | - | - | - |
| Margin Accounts | 10,086 | - | - | - | - | - | - | 10,086 |
| Total Foreign Debt Securities | 36,141 | 9,793 | 2,687 | - | 4,833 | - | - | 18,828 |
| Total Debt Securities | \$7,222,089 | \$3,419,361 | \$154,552 | \$329,026 | \$347,479 | \$40,440 | \$27,769 | \$2,903,462 |

## Notes to the Basic Financial Statements

Interest Rate Risk: Interest rate risk is the risk that debt securities will lose value due to rising interest rates. Arizona state statutes are silent regarding interest rate risk. The board has not adopted a specific formal policy for the interest rate risk. It does set more restrictive requirements in its contracts with money managers. The Arizona State Retirement System uses effective duration
to identify and manage its interest rate risk. Effective duration measures the expected change in value of a fixed income security for a given change in interest rate. The method takes in to account the likely timing and amounts of variable cash flows for bonds with call options and prepayment provisions. The following table shows the effective duration by investment type:

Interest Rate Risk Fair Value at J une 30, 2005
(Dollars in Thousands)

## INVESTMENT <br> Domestic Fixed Income Investments

Asset Backed Securities
Bond Funds
CMO's of Government Sponsored Entities
Commercial Mortgage Backed Securities
Commercial Paper
Corporate Bonds
Dollar Denominated Debt of Foreign Companies
Dollar Denominated Debt of Foreign Countries

Fixed Income Strips
GNMA Pools
Government Sponsored Entity Debt
Indexed Linked Government Bond Funds
Indexed Linked Treasury Bonds
Municipal Bonds
Non-government Backed CMO's
Pools of Government Sponsored Entities
Short Term Investments
US Treasury Debt
Total Domestic Debt Securities

## Foreign Debt Securities

| Corporate Bonds | 8,742 | 0.13 |
| :--- | ---: | ---: |
| Government Bonds | 14,626 | 11.34 |
| Provincial Bonds | 2,687 | 7.32 |
| Margin Accounts | 10,086 | 0.08 |
| Total Foreign Debt Securities | 36,141 | 5.19 |
| Total Debt Securities | $\$ 7,222,089$ |  |
|  |  |  |

# Notes to the Basic Financial Statements 

Foreign Currency Risk: Foreign currency risk is the risk that changes in the foreign exchange rate will adversely impact the fair value of an investment. The ASRS is allowed to invest part of its assets in foreign investments. According to Arizona state statutes, no more than 20 percent of ASRS assets may be invested in foreign equity securities and the investments must be made by investment
managers with expertise in those investments. The Board has not adopted a formal policy that is more restrictive. Management does have certain policies in the contracts with the money managers permitted to invest in foreign denominated securities. The following table shows the system's exposure to foreign currency risk (in US dollars):

## Foreign Currency Risk Fair Value at J une 30, 2005

(Dollars in Thousands)

| Currency Type | Temporary <br> Investments | Fixed Income | Equities | Total |
| :--- | :---: | ---: | ---: | ---: |
| Australian Dollar | $\$ 1,418$ | $\$-$ | $\$$ | - |
| British Pound Sterling | 176 | - | 164,307 | $\$ 1,418$ |
| Canadian Dollar | 880 | - | 8,809 | 9,483 |
| Danish Krone | - | - | 1,569 | 1,569 |
| Euro Currency Unit | 2,339 | 7,685 | 468,552 | 478,576 |
| Hong Kong Dollar | 247 | - | - | 247 |
| Japanese Yen | 1,599 | 8,742 | 252,583 | 262,924 |
| New Mexican Peso | 288 | 4,833 | - | 5,121 |
| New Taiwan Dollar | - | - | 6,008 | 6,008 |
| New Zealand Dollar | 2,233 | 4,795 | 13,302 | 20,330 |
| Singapore Dollar | 2 | - | 24,561 | 24,563 |
| Swiss Franc | 904 | - | 97,804 | 98,708 |
| Total | $\mathbf{\$ 1 0 , 0 8 6}$ | $\mathbf{\$ 2 6 , 0 5 5}$ | $\mathbf{\$ 1 , 0 3 7 , 4 9 5}$ | $\mathbf{\$ 1 , 0 7 3 , 6 3 6}$ |

## 4. Securities Lending Program

Arizona Revised Statutes Section 38-715(D)(3) allow the ASRS to participate in a securities lending program. The ASRS' custodial bank enters into agreements with counterparts to loan securities and have the same securities redelivered at a later date. All securities are eligible for loan (U.S fixed income securities,
U.S equities, international equities) with a higher percentage of U.S. Treasuries on Ioan than most other security types. The ASRS currently receives as collateral at least 102 percent of the market value of the loaned securities and maintains collateral at no less than 100 percent for the duration of the loan. At year-end, the ASRS had no credit risk exposure to borrowers because the amount the

# Notes to the Basic Financial Statements 

ASRS owes the borrowers exceeds the amount the borrowers owe the ASRS. Securities loaned are initially fully collateralized by cash (USD and Euro), irrevocable letters of credit, U.S. Government or Agency securities, or sovereign debt. Initial cash collateral may be reinvested (under certain constraints) in:
a) instruments issued or fully guaranteed by the U.S. Government, Federal agencies, or sponsored agencies or sponsored corporations
b) instruments issued by domestic corporations including corporate notes and floating rate notes
c) obligations of approved domestic and foreign banks
d) U.S. dollar-denominated instruments issued by sovereigns, sovereign supported credits, and instruments of foreign banks and corporations
e) yankee securities
f) repurchase agreements
g) insurance company funding agreements, guaranteed investment contracts and bank investment contracts
h) asset-backed securities
i) money market mutual funds

The ASRS records the cash collateral received and the same amount as an obligation for securities on loan. Any cash collateral received is invested in short-term investments. The maturities of the investments are closely matched to those of the security loans to avoid interest rate exposure. The ASRS receives a spread for its lending activities. Investments made with cash collateral are classified as an asset on the Statement
of Plan Net Assets. A corresponding liability is recorded as the ASRS must return the cash collateral to the borrower upon expiration of the Ioan. At J une 30, 2005, the ASRS had $\$ 2.3$ billion outstanding as payable for securities on loan. The ASRS does not have the ability to pledge or sell the collateral unless there is a borrower default. There are no restrictions on the dollar amount of security loans that may be made by the ASRS. The ASRS is indemnified against gross negligence and borrower default by the lending agents. There were no defaults during the current fiscal year.

## 5. Derivatives

A derivative instrument is a financial instrument or other contract with all three of the following characteristics:
a) It has (1) one or more underlyings and (2) one or more notional amounts or payment provisions or both. Those terms determine the amount of the settlement or settlements, and, in some case whether or not a settlement is required.
b) It requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors.
c) Its terms require or permit net settlement, it can readily be settled net by means outside the contract, or it provides for delivery of an asset that puts the recipient in a position not substantially different from net settlement.

Generally, derivatives are subject to both market risk and counterparty risk. The derivatives utilized by ASRS managers typi-

## Notes to the Basic Financial Statements

cally have no greater market risk than their physical counterparts, and in many cases are offset by exposure elsewhere in the portfolio.

The ASRS believes that it is unlikely that any of the derivatives used by its managers could have a material adverse effect on the financial conditions of the ASRS.

## 6. Funding Status and Progress

Significant actuarial assumptions used in the J une 30, 2004 Actuarial Valuation, the most recent actuarial valuation available, include:
a) a rate of return on investment of present and future assets of 8 percent, compounded annually
b) projected salary increases ranging from 4.5 percent to 9.5 percent per year
c) rates of disability
d) rates of withdrawal
e) rates of retirement
f) mortality rates
g) mortality rates after disability
h) valuation of assets using fair value less ten-year phase-in (five-year phase-in before FY 2002) of excess (shortfall) investment income
i) projected unit-credit funding method

For the current year, there were no changes in the actuarial funding or methods. There were two changes in actuarial assumptions. They were:

- Method of calculating service purchase cost changed from normal cost to actuarial present value.
- Interest accruals on forfeited balances changed from 8 percent to 4 percent after June 30, 2005.


## 7. Contributions Required and Contributions Made

The A.R.S. provides statutory authority for determining the employees' and employers' contribution amounts as a percentage of covered payrolls. Employers are required to contribute at the same rate as employees. Through FYE 2005, the actuarial computation is made two years in advance, based on the J une 30 information (the rate for FYE 2005 was based on J une 30, 2002 information). New legislation which became law as of July 1, 2005 requires annual contribution rate calculations for all fiscal years beginning after fye 2007. The actuarial assumptions used in this measure are those adopted by the ASRS' Board on November 2003. The contribution rates were actuarially determined using the Projected Unit Credit (PUC) funding method, the use of which was established by legislative action in 1989. Each employer and each member contribute at a rate of one-half the percent of pay needed to pay the normal cost of the Plan and to amortize the unfunded actuarial accrued liability over a rolling 30 year period.

## Notes to the Basic Financial Statements

The contribution rates for the years ended June 30, 2005 and 2004, actuarially determined in 2002, were as follows:

|  | For the contribution period ended J une 30, 2005 |  | For the contribution period ended J une 30, 2004 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (2002 Valuation) |  | (2002 Valuation) |  |
|  | Amount | Percent of Covered Payroll | Amount | Percent of Covered Payroll |
| Normal cost | \$831,499, 553 | 11.90\% | \$831,499, 553 | 11.90\% |
| Amortization of (over) under-funded past service liability | $(104,840,085)$ | (1.50)\% | $(104,840,085)$ | (1.50)\% |
|  | 726,659,468 | 10.40\% | 726,659,468 | 10.40\% |
| Long Term Disability | 72,854,831 | 1.00\% | 72,854,831 | 1.00\% |
| Actuarial Total | \$799,514,299 | 11.40\% | \$799,514,299 | 11.40\% |
| Contributions made as a percentage of the current year covered payroll: |  |  |  |  |
| Employers' share | \$442,642,857 | 5.70\% | \$413,457,804 | 5.70\% |
| Employees' share | 442,642,857 | 5.70\% | 413,462,100 | 5.70\% |
| Current Year Total | \$885,285,714 | 11.40\% | \$826,919,904 | 11.40\% |

The statutory contribution rate and the actuarially determined contribution rate for the year ended J une 30, 2005 is 5.7 percent ( 5.2 percent retirement and .50 percent longterm disability) for both the employers' and employees' portion. This was determined by the 2002 actuarial valuation. This rate is applied to the covered payroll to determine the employee and employer contributions. GASB Statement No. 25 defines covered payroll as all elements included in compensation paid to active employees on which contributions to a pension plan are based.

## 8. Additional Benefits

In addition to the pension benefits described, the ASRS offers the Retiree Group Insurance Program and the Health Insurance Premium Benefit Program to eligible retired and disabled members. A retired member is defined as a member actively receiving an annuity benefit and a disabled member is defined as a member receiving a Long-Term Disability (LTD) benefit through the LTD program administered by the ASRS or through their former member employer's group LTD plan. The employees and member employers

# Notes to the Basic Financial Statements 

each contributed .50 percent of compensation in FY 2005 and .50 in FY 2004 to the LTD fund.

Pursuant to A.R.S. 38-782, the Retiree Group Insurance Program makes available group health insurance coverage to eligible retired and disabled members and their dependents. Retired and disabled members of the ASRS, University Optional Retirement Plans, the Public Safety Personnel Retirement System, the Elected Officials' Retirement Plan, and the Corrections Officer Retirement Plan are eligible for health insurance benefits through the ASRS. More than 44,000 coverage agreements currently exist for retired and disabled members and their dependents.

Pursuant to A.R.S. 38-783, retired and disabled members with at least five years of credited service are eligible to participate in the Health Insurance Premium Benefit Program. This assistance is provided to those members who elect group coverage through either the Retiree Group Insurance Program or their former member employer. The employers' retirement contribution in FY 2005 and in FY 2004 of 5.2 percent of compensation included 1.10 percent for the Health Premium Insurance Supplement.

The following chart illustrates the maximum amount of the monthly available benefit for eligible members and their dependents:

| Years of Credited Service | Percent of Premium Benefit | Without Medicare |  | With Medicare A \& B |  | Combinations |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Retiree Only | Retiree \& Dependents | Retiree Only | Retiree \& Dependents | Retiree \& Dependent, One with Medicare, the other without | Retiree \& Dependent with Medicare, other dependent without |
| 5.0-5.9 | 50 percent | \$75 | \$130 | \$50 | \$85 | \$107.50 | \$107.50 |
| 6.0-6.9 | 60 percent | 90 | 156 | 60 | 102 | 129.00 | 129.00 |
| 7.0-7.9 | 70 percent | 105 | 182 | 70 | 119 | 150.50 | 150.50 |
| 8.0-8.9 | 80 percent | 120 | 208 | 80 | 136 | 172.00 | 172.00 |
| 9.0-9.9 | 90 percent | 135 | 234 | 90 | 153 | 193.50 | 193.50 |
| 10.0+ | 100 percent | 150 | 260 | 100 | 170 | 215.00 | 215.00 |

Members who retire after December 31, 2003, can elect to receive a reduced premium benefit so that an eligible contingent annuitant may continue to receive a premium benefit after the member's death.

For qualified retirees who are participating in a medical program provided by the ASRS or an ASRS employer and who live in
areas of Arizona where no managed care (HMO) program is offered, the 2003 Arizona Legislature passed, and the Governor signed, legislation to provide an additional temporary premium benefit effective July 1, 2003 through J une 30, 2005. These additional increases are listed in the table below:

## Notes to the Basic Financial Statements

| Years of Credited Service | Percent of Premium Benefit | Without Medicare |  | With Medicare A \& B |  | Combinations |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Retiree Only | Retiree \& Dependents | Retiree Only | Retiree \& Dependents | Retiree \& Dependent, One with Medicare, the other without | Retiree \& Dependent with Medicare, other dependent without |
| 5.0-5.9 | 50 percent | \$150 | \$300 | \$85 | \$175 | \$235 | \$235 |
| 6.0-6.9 | 60 percent | 180 | 360 | 102 | 210 | 282 | 282 |
| 7.0-7.9 | 70 percent | 210 | 420 | 119 | 245 | 329 | 329 |
| 8.0-8.9 | 80 percent | 240 | 480 | 136 | 280 | 376 | 376 |
| 9.0-9.9 | 90 percent | 270 | 540 | 153 | 315 | 423 | 423 |
| 10.0+ | 100 percent | 300 | 600 | 170 | 350 | 470 | 470 |

The ASRS reimbursed approximately $\$ 89.6$ million and $\$ 83.6$ million towards the cost of group health insurance coverage for the years ended J une 30, 2005 and 2004, respectively.

## 9. Contingent Liabilities

The ASRS is also a party in various litigation matters. While the final outcome cannot be determined at this time, management is of the opinion that the final obligation, if any, for these legal actions will not have a material adverse effect on the ASRS' financial position or results of operations.

## 10. Transfers To and From Other Funds

Due to/ from other funds includes LTD cash deposits held at Bank of America at year end and amounts that need to be transferred after the year end contribution reconciliation.

## 11. Required Supplementary Schedules

Historical trend information designed to provide information about the ASRS' progress in accumulating sufficient assets to pay benefits when due is required supplementary information. Required supplementary information for the years available in accordance with the parameters of GASB Statement No. 25 is included immediately following the notes to the financial statements.

## 12. Retirement Plans

All eligible retirement system employees are covered by the Arizona State Retirement Plan. The Plan is a cost-sharing, multipleemployer, defined benefit pension plan established by the State of Arizona to provide pension benefits for employees of the State and employees of participating political subdivisions and school districts. The ASRS is administered in accordance with Title 38, Chapter 5 of the Arizona Revised Statutes (A.R.S.).

## Notes to the Basic Financial Statements

The ASRS Retirement Plan provides retirement and disability benefits, annual cost of living adjustments and survivor benefits to members and their beneficiaries. A.R.S. 38-783 and A.R.S. 38-797 require separate accounts be established for health insurance premium benefits and long-term disability (LTD) benefits, respectively.

Effective July 1, 1995, the ASRS has established an account for each benefit program and has reported those funds in the combined financial statements. The financial statements of the ASRS include the financial activities of all the above funds. The ASRS Retirement Board, appointed by the governor and confirmed by the Arizona State Senate, manages the ASRS.

The contribution rate is established and may be amended by the Board of Trustees. The statutory contribution rate for the years ended J une 30, 2005 and 2004 was 5.7 percent ( 5.2 percent retirement and .5 percent LTD). All eligible employees were required to contribute 5.7 percent of their annual covered salary, and the ASRS, as the employer, was required to match these contributions.

The ASRS annual regular 2005 base salary was $\$ 8,164,531$. The employer contributions to the Retirement Plan totaled $\$ 465,378$ for 2005, $\$ 458,864$ for 2004 and $\$ 192,137$ for 2003. The contributions were equal to the required contributions. ASRS collects the contributions and remits them to the Plan.

Employee contributions are excluded from gross income for federal and state income tax purposes, and earn interest at the rate of 8 percent per annum. Prior to July 1, 2005, upon termination of employment, member contributions made to the Plan, plus accrued interest at 8 percent per annum, are refundable. After June 30, 2005 contributions made to the Plan plus accrued interest of 4 percent per annum are refundable upon termination of employment.

The Plan provides benefits under formulas and provisions described in the law. Benefits and administrative expenses are paid from funds contributed by members and employers and from earnings on the invested funds. The Plan provides for retirement, disability, health insurance premium benefits, and survivor benefits.

Retirement benefits are calculated on the basis of age, average monthly compensation, and service credit, which is established on a fiscal year basis (J uly 1 to J une 30). The benefit is based on a percentage of average monthly compensation multiplied by the years of service credit.

Eligible retirement system employees are eligible for a LTD benefit in the event they become unable to perform their work. The Retiree Group Insurance Program offers health insurance coverage for both retired and disabled members.

## Required Supplementary Information

## Required Supplementary Information

For Year Ended J une 30, 2005
(In Millions)
Schedule of Funding Progress

| Actuarial Valuation Date | Actuarial Value of Assets | Actuarial Accrued Liability Projected Unit-Credit b | (Overfunded) Unfunded Actuarial Accrued Liability | Funded Ratio | Covered Payroll | (Overfunded) Unfunded Actuarial Accrued Liability as a Percentage of Covered Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| 30-J un | a |  | (b-a) | (a/b) | c | [(b-a)/c] |
| 1999 | \$18,043 | \$15,476 | $(\$ 2,567)$ | 116.60\% | \$5,488 | (46.8\%) |
| 2000 | 20,292 | 16,854 | $(3,438)$ | 120.40 | 5,894 | (58.3) |
| 2001 | 21,888 | 19,012 | $(2,876)$ | 115.10 | 6,357 | (45.2) |
| 2002 | 22,642 | 21,285 | $(1,357)$ | 106.40 | 6,989 | (19.4) |
| 2003 | 22,572 | 22,935 | 363 | 98.40 | 7,297 | 5.0 |
| 2004 | 22,659 | 24,506 | 1,847 | 92.50 | 7,486 | 24.7 |

The accrued actuarial assets for the Health Benefit Supplement have been excluded from this presentation.

Schedule of Employer Contributions

| Year <br> Ended <br> June 30 | Employer <br> Contributions <br> Required* | Percentage <br> Contributed |
| :---: | :---: | :---: |
| 2000 | $\$ 152,957,449$ | $100 \%$ |
| 2001 | $163,441,724$ | 100 |
| 2002 | $168,212,536$ | 100 |
| 2003 | $177,156,746$ | 100 |
| 2004 | $413,457,702$ | 100 |
| 2005 | $442,642,857$ | 100 |
|  |  |  |
| *ncludes contributions for long-term disability. |  |  |
| See notes to required supplementary information. |  |  |

## Notes to Required Supplementary Information

## 1. Actuarial Methods and Assumptions For Valuations Performed

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated.

The Projected Unit Credit (PUC) method is the actuarial cost method used in the valuation for the period ended J une 30, 2004. The unfunded actuarial accrued liability is amortized over a 30 -year rolling period. The amortization method is the Level Dollar Method. The actuarial value of assets is the market value adjusted to phase in the recognition of investment gains and losses over a period of time. For years before fiscal 2002, the period is five years. For 2002 and later years, the period is ten years. The investment return rate assumption is 8 percent per annum, compounded annually. The inflation rate assumption is 4.25 percent per annum. Members' salaries are assumed to increase at from 4.50 percent to 9.50 percent per annum, depending on the length of service. The permanent benefit increase (PBI) reserve was $\$ 687.2$ million as of J une 30, 2004, before the payment of the 2004 PBI and Enhanced PBI.

## Significant Factors Affecting Identification of Trends

## 1999

## Enhanced Refund Option

Employees who terminate prior to eligibility for retirement may elect to receive a refund of their employee contributions with interest. If the employee has at least five years of service, the employee is also entitled to a share of the employer contributions with interest. The share is 25 percent with five
years of service and increases 15 percent for each additional year of service to a maximum of 100 percent for 10 or more years of service.

Benefit Multiplier Increased to $\mathbf{2 . 1}$ percent The benefit multiplier increased from 2.0 percent to 2.1 percent effective J uly $1,2000$.

## 5 percent Ad Hoc Increase

A 5 percent retiree ad hoc increase for retirees and beneficiaries effective July 1, 2000.

## Increase in Maximum Service While on LTD

 Increase in the maximum amount of service that may be accrued while on LTD from 25 to 30 years.
## Changes in Permanent Benefit Increase COLA

a) The maximum aggregate COLA was increased from 3 percent to 4 percent.
b) The threshold for determining "Excess Earnings" was lowered from 9 percent to 8 percent.
c) The limitation of the COLA to the increase in the CPI was removed.

## 2000

The age restriction on eligibility for the PBI was removed.

## 2001

## Return to Work

Permits retired members of the ASRS to return to work and still be eligible to receive retirement benefits if they have been terminated from employment for a period of 12 months. The members who take this option will not be eligible for LTD benefits nor will they contribute to the ASRS or accrue

## Notes to Required Supplementary Information

additional benefits during the period of reemployment. This act is repealed J une 30, 2003.

This is similar to the bill passed in 2000 allowing retired teachers to return to work, and it does not affect the requirements of that program.

## Transferring Credits

Permits an inactive member who has not retired to transfer credited service from one state plan to their current or former retirement plan if the inactive member is not eligible for membership in the ASRS and has not withdrawn contributions from the ASRS.

## Health Insurance Premium Benefit

Increases the health insurance premium benefit for members of the eligible state retirement systems by the following amounts:

- Medicare eligible member from $\$ 65$ to \$100
- Non-Medicare eligible member from $\$ 95$ to $\$ 150$
- Non-Medicare family coverage from \$175 to $\$ 260$
- Medicare eligible family coverage from \$115 to \$170
- Combination Medicare and non-Medicare eligible from \$145 to \$215


## Rural Health Insurance Premium Benefit

 In addition to the premium benefit paid to ASRS retired and disabled members, provides for retired and disabled members who live in areas of the state not served by a managed care program (HMO) and who have 10 years of credited service in the following amounts:- Medicare eligible member \$170 per month
- Non-Medicare eligible member $\$ 300$ per month
- Non-Medicare family coverage $\$ 600$ per month
- Medicare eligible family coverage $\$ 350$ per month
- Combination Medicare and non-Medicare eligible $\$ 470$ per month
Also provides that a retired or disabled member may elect to purchase individual coverage and receive a payment of the increased subsidy through the member's employer if the employer assumes the administrative function associated with the payment including verification that the payment is used for health insurance.


## Supplemental Defined Contribution (DC) Plans

Repeals the provisions for the alternate DC retirement programs established in 1998 for exempt state employees (non-merit service employees), legislative agency employees and certain term limited elected officials. Persons already participating in those programs are grandfathered into them.
Provides that the ASRS, the Public Safety Personnel Retirement System (PSPRS) and their employers may establish a 401(a) defined contribution supplementary program. Employers may elect to match contributions to the supplementary program on an annual basis. Employer and member contributions to the supplement are vested immediately with the member.

## Modified Deferred Retirement Option Plan (DROP) Program

Permits an employer to offer a member who has reached normal retirement ( 80 points, age 62 with 10 years, or age 65) a contract to work up to an additional three years. Retirement contributions are not made to ASRS during the contract period; however LTD contributions still continue to be paid

## Notes to Required Supplementary Information

to the ASRS. During the contract period, the member and employer contribute to a supplemental DC Plan at a rate negotiated between the member and the employer. Upon completing the additional service, the employee must purchase an equivalent amount of service from the ASRS in order to receive credit for the three years worked.

## Partial Lump Sum Option

Beginning July 1, 2002, a member may elect a partial lump sum payment at retirement equal to not more than 36 months of the member's calculated retirement benefit. The life annuity amount then would be adjusted actuarially to a reduced amount to offset the lump sum payment.

## Graded Multiplier

Provides a variable multiplier in the retirement benefit formula, increasing with years of service according to the following:

- 00.00 to 19.99 Years of Service: 2.10 \%
- 20.00 to 24.99 Years of Service: $2.15 \%$
- 25.00 to 29.99 Years of Service: 2.20 \%
- 30.00 or More Years of Service: 2.30 \%


## Supplemental Defined Contribution (DC) Retirement Plan

Permits the four state retirement plans to establish a 401(a) defined contribution program as a supplement to the state defined benefit programs. Repeals the alternative DC programs for term-limited state elected officials and state employees exempted from state personnel rules. Employees may make contributions to IRS limits with a match by the employer. Each employer member of the ASRS would be permitted to choose its own match rate.

## Permanent Benefit Increase (PBI) Enhancement

Provides that interest at a rate of 8 percent be paid on the funds held in reserve for the PBI. The interest accrued to the reserve is used to fund an enhanced PBI based on the number of years a member has been retired. A member who has at least 10 years of service would be eligible for an incremental increase for each five years of retirement.

## PSPRS membership; park rangers

Transfers state and county park rangers from the ASRS to the PSPRS.

## Community colleges; optional retirement; contributions

Permits a community college that has an optional retirement program to increase employer and employee contributions to seven percent. It provides a window for ASRS members to transfer to the optional programs from October 1, 2001 through December 31, 2001. The ASRS shall transfer their contributions plus interest to the optional program.

## Removal of requirement that purchase of military service be only for which the member is not receiving a benefit.

Allows for ASRS members to purchase military service time for which they may already be receiving benefits.

## Pop-Up for members choosing a life certain option

Allows for retirees that choose the 5, 10, or 15 period certain options to rescind the election of and thereafter, receive a straight life annuity, including postretirement increases. The member may again elect a period certain and life annuity subject to the same provision previously elected by the member.

# Notes to Required Supplementary Information 

## 2002

No material changes.

## 2003

## Change to Phase-in Period

Prior to the 2002 valuation, actuarial assets were equal to market, less a five-year phasein of the excess of expected investment return over actual investment return. For 2002 and future years, the Board changed the five-year phase-in period to a ten-year period. So, the 2002 valuation recognizes only 10 percent of the 2002 investment loss. The years prior to 2002 remain on their original five-year schedules.

## Extension of the Rural Health Insurance Subsidy

The Arizona Legislature passed legislation that extends the Rural Health Insurance Subsidy for a period of two additional years.

## 2004

## Service Purchase Program

The Arizona Legislature revised the method of calculating the cost of service purchases, so that future purchases would be made at true actuarial present value. ASRS began to charge interest at 8 percent per annum for service purchases under payroll deduction agreements.

## Early Retirement Incentive Programs

The Arizona Legislature provided that employers that participate in ASRS and offer early retirement incentives to their employees must notify ASRS of the incentives. ASRS will determine the cost of the incentives and the employers will pay the cost.

## Long-Term Disability Program

The Arizona Legislature revised and clarified LTD provisions so that disabled members will be required to participate in rehabilitation programs and to pursue obtaining Social Security disability benefits. In addition, the legislation limited the receipt of disability benefits on the basis of a member's "own occupation" to 24 months, rather than to 24 consecutive months.

## 2005

## Refund of Contributions

The Board reduced the rate of interest accruals on forfeited balances from 8 percent to 4 percent effective July 1, 2005.

## The Arizona Legislature:

- Changed contribution rate calculations from biennial to annual for all fiscal years beginning after FYE 2007. It also modified biennial rate requirements to allow the rate to be stepped in over a two year period for FYE 2006 and 2007.
- Eliminated the rural benefit supplement for retirees in the Arizona retirement system who are not eligible for Medicare.


## Additional Supplementary Information

## Combining Schedule of Retirement Net Assets

J une 30, 2005
(Dollars in Thousands)

|  | Retirement Plan | Retirement System | $\begin{gathered} \text { Combined } \\ 2005 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| ASSETS: |  |  |  |
| Cash | \$14,680 | \$ | \$14,680 |
| RECEIVABLES: |  |  |  |
| Accrued interest \& dividends | 51,635 | 1,331 | 52,966 |
| Securities sold | 478,455 | 12,330 | 490,785 |
| Forward contracts | 1,474,675 | 38,003 | 1,512,678 |
| Contributions | 17,252 | - | 17,252 |
| Other | 2,810 | 73 | 2,883 |
| Total Receivables | 2,024,827 | 51,737 | 2,076,564 |
| INVESTMENTS AT FAIR VALUE : |  |  |  |
| Temporary investments | 1,911,807 | 49,268 | 1,961,075 |
| Temporary investments from securities lending collateral | 2,136,511 | 55,059 | 2,191,570 |
| U. S. government obligations | 2,403,327 | 61,935 | 2,465,262 |
| Corporate bonds | 2,417,346 | 62,296 | 2,479,642 |
| Common and preferred stocks | 14,653,903 | 377,639 | 15,031,542 |
| Real estate mortgages \& contracts | 25,089 | 647 | 25,736 |
| Total investments | 23,547,983 | 606,844 | 24,154,827 |
| TOTAL ASSETS | 25,587,490 | 658,581 | 26,246,071 |
| LIABILITIES: |  |  |  |
| Payable for securities purchased | 922,528 | 23,774 | 946,302 |
| Payable for securities lending collateral | 2,136,511 | 55,059 | 2,191,570 |
| Forward contracts payable | 1,478,708 | 38,107 | 1,516,815 |
| Due to other funds | 7,023 | - | 7,023 |
| Other | 13,326 | 121 | 13,447 |
| Total Liabilities | 4,558,096 | 117,061 | 4,675,157 |
| NET ASSETS HELD IN TRUST FOR PENSION BENEFITS | \$21,029,394 | \$541,520 | \$21,570,914 |

In accordance with GASB 25, for financial reporting purposes the Retirement Plan and The Retirement System are presented in one column, Retirement Fund, in the ASRS basic financial statements because they are administered within a single pension plan. The Combining Schedule of Retirement Net Assets and Changes in Retirement Net Assets are presented here to provide members with more detailed information about the two plan components.

## Additional Supplementary Information

## Combining Schedule of Changes in Retirement Net Assets

For the Year Ended J une 30, 2005
(Dollars in Thousands)

|  | Retirement Plan $\quad$ Retirement System $\quad$ Combined 2005 |
| :--- | :--- | :--- | :--- |

## ADDITIONS

Contributions

> Member contributions Employer contributions Transfers from other plans Member reimbursements

Total Contributions
Income from investment activities
Net appreciation in fair value Interest Dividends Real Estate Other
Total income from investment activities
Less investment activity expenses
Investment management fees and monitoring services Real estate
Total investment activity expenses
Net income from investment activities

| $\$ 403,269$ | $\$ 392$ | $\$ 403,661$ |
| ---: | ---: | ---: |
| 317,919 | 392 | 318,311 |
| 1,773 | - | 1,773 |
| 140,159 | - | 140,159 |
| 863,120 | 784 | 863,904 |
|  |  |  |
| $1,282,196$ | 34,165 | $1,316,361$ |
| 211,349 | 5,631 | 216,980 |
| 198,716 | 5,295 | 204,011 |
| 5,725 | 153 | 5,878 |
| 4,491 | 120 | 4,611 |
| $1,702,477$ | 45,364 | $1,747,841$ |

From securities lending activities
Securities loan program
Securities loan interest expense
Net income from securities lending activities
Total net investment income
TOTAL ADDITIONS
DEDUCTIONS
Retirement and disability benefits
Survivor benefits
Refunds to withdrawing members, including interest
Administrative expenses
Transfers to other plans
Other
TOTAL DEDUCTIONS
NET INCREASE (DECREASE)
Net assets held in trust for pension benefits:
Beginning of year
End of year

| 25,828 | 688 | 26,516 |
| ---: | ---: | ---: |
| 5,627 | 150 | 5,777 |
| 31,455 | 838 | 32,293 |
| $1,671,022$ | 44,526 | $1,715,548$ |
|  |  |  |
| 43,792 | 1,167 | 44,959 |
| 38,490 | 1,026 | 39,516 |
| 5,302 | 141 | 5,443 |
| $1,676,324$ | 44,667 | $1,720,991$ |
| $2,539,444$ | 45,451 | $2,584,895$ |
|  |  |  |
| $1,360,661$ | 45,886 | $1,406,547$ |
| 18,402 | - | 18,402 |
| 42,026 | 2,138 | 44,164 |
| 21,374 | 566 | 21,940 |
| 4,581 | - | 4,581 |
| 3,530 | 6 | 3,536 |
| $1,450,574$ | 48,596 | $1,499,170$ |
| $1,088,870$ | $(3,145)$ | $1,085,725$ |
|  |  |  |
| $19,940,524$ | 544,665 | $20,485,189$ |
| $\$ 21,029,394$ | $\$ 541,520$ | $\$ 21,570,914$ |

In accordance with GASB 25, for financial reporting purposes the Retirement Plan and The Retirement System are presented in one column, Retirement Fund, in the ASRS basic financial statements because they are administered within a single pension plan. The Combining Schedule of Retirement Net Assets and Changes in Retirement Net Assets are presented here to provide members with more detailed information about the two plan components.

## Additional Supplementary Information

## Schedule of Additions by Source

(Dollars in Thousands)

| Year | Employee <br> Contribution <br> Made | Employer <br> Contribution <br> Made | Net Investment <br> Income | Member <br> Reimbursements <br> and Other | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1996* | $\$ 172,848$ | $\$ 172,848$ | $\$ 2,063,878$ | $\$ 4,376$ | $\$ 2,413,951$ |
| 1997 | 173,508 | 173,508 | $2,832,718$ | 11,481 | $3,191,215$ |
| 1998 | 176,769 | 176,769 | $3,405,203$ | 15,462 | $3,774,202$ |
| 1999 | 179,087 | 179,087 | $2,848,321$ | 46,171 | $3,252,665$ |
| 2000 | 152,957 | 152,958 | $2,035,312$ | 35,348 | $2,376,575$ |
| 2001 | 163,442 | 163,442 | $(1,528,691)$ | 37,687 | $(1,164,120)$ |
| 2002 | 168,213 | 168,213 | $(1,768,077)$ | 51,350 | $(1,380,302)$ |
| 2003 | 177,157 | 177,157 | 368,631 | 93,552 | 816,497 |
| 2004 | 413,462 | 413,458 | $3,228,785$ | 113,944 | $4,169,649$ |
| 2005 | 442,643 | 442,643 | $1,803,392$ | 141,932 | $2,830,610$ |

*Investment income restated at fair value for 1996. Investment income reported at fair value for subsequent years.

Schedule of Deductions by Type
(Dollars in Thousands)

| Year | Benefits | Refunds | Administration, <br> Transfers and Other | Total |
| :--- | ---: | ---: | :---: | ---: |
| 1996 | $\$ 542,525$ | $\$ 26,376$ | $\$ 8,245$ | $\$ 577,146$ |
| 1997 | 596,308 | 31,282 | 12,308 | 639,898 |
| 1998 | 652,567 | 29,769 | 12,541 | 694,877 |
| 1999 | 713,871 | 26,108 | 15,353 | 755,332 |
| 2000 | 787,553 | 70,754 | 19,744 | 878,052 |
| 2001 | 909,615 | 98,535 | 24,640 | $1,032,790$ |
| 2002 | $1,069,044$ | 42,765 | 28,105 | $1,139,914$ |
| 2003 | $1,222,564$ | 35,976 | 37,877 | $1,296,418$ |
| 2004 | $1,396,481$ | 36,212 | 35,745 | $1,468,438$ |
| 2005 | $1,576,734$ | 44,164 | 33,426 | $1,654,324$ |

## Additional Supplementary Information

## Schedule of Administrative Expenses

For Year Ended J une 30, 2005
(Dollars in Thousands)

|  | Retirement and Health Benefit Supplement | Long-Term Disability | $\begin{aligned} & \text { Combined } \\ & 2005 \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Personnel Services |  |  |  |
| Salaries | \$8,713 | \$ | \$8,713 |
| Retirement Contributions | 427 | - | 427 |
| Other Employee Related Expenses | 1,739 | - | 1,739 |
| Total Personnel Services | 10,879 | - | 10,879 |
| Professional Services |  |  |  |
| Actuary \& Benefit Consulting | 913 | - | 913 |
| Audit, Consulting \& Legal Fees | 429 | - | 429 |
| Retiree Payroll Costs | 1,412 | - | 1,412 |
| Programming Costs | 4,189 | - | 4,189 |
| Other Outside Services | 870 | 2,460 | 3,330 |
| Total Professional Services | 7,813 | 2,460 | 10,273 |
| Communications |  |  |  |
| Postage | 291 | - | 291 |
| Printing | 121 | - | 121 |
| Telephone | 253 | - | 253 |
| Advertising | 27 | - | 27 |
| Total Communications | 692 | - | 692 |
| Miscellaneous |  |  |  |
| Board \& Council | 6 | - | 6 |
| Office Rent | 1,638 | - | 1,638 |
| Furniture \& Equipment | 851 | - | 851 |
| Software \& Support | 405 | - | 405 |
| Repair \& Maintenance | 95 | - | 95 |
| Equipment Rental | 1 | - | 1 |
| Travel | 67 | - | 67 |
| Operating Supplies | 108 | - | 108 |
| Insurance | 115 | - | 115 |
| Dues \& Subscriptions | 37 | - | 37 |
| Education \& Training | 104 | - | 104 |
| Miscellaneous | 4 | - | 4 |
| Total Miscellaneous | 3,431 | - | 3,431 |
| TOTAL | \$22,815 | \$2,460 | \$25,275 |

## Additional Supplementary Information

Schedule of Cash Receipts and Cash Disbursements
Year Ended J une 30, 2005
(Dollars in Thousands)
CASH BALANCE, beginning of year ..... \$19,145
RECEIPTS:
Member contributions ..... 440,924
Employer contributions ..... 442,412
Purchase of back service (membership reimbursements) ..... 140,159
Transfers from other retirement systems ..... 1,773
Short-term securities matured and sold ..... 8,317,838
Investments matured and sold ..... 29,966,321
Building revenue ..... 5,660
Securities lending program ..... 46,765
Interest ..... 233,714
Dividends ..... 214,244
Miscellaneous ..... 3,580
TOTAL RECEIPTS39,813,390
DISBURSEMENTS:
Retirement, disability and subsidy payments ..... 1,558,254
Death benefits ..... 18,402
Refunds to withdrawing members ..... 44,164
Transfers to other retirement systems ..... 4,581
Short-term investments purchased ..... 10,284,801Investment purchases27,803,710
Securities lending program charges ..... 41,097
Investment manager fees ..... 27,576
Building expenses ..... 6,008
Administrative expenses ..... 22,700
Miscellaneous ..... 2,879
TOTAL DISBURSEMENTS39,814,172
CASH BALANCE, end of year

## Additional Supplementary Information

## Schedule of Professional Consultant Fees

For Year Ended J une 30, 2005
(Dollars in Thousands)

## Professional/Consultant

VOLUNTARY PLAN ADMINISTRATION
MELLON BANK TRUST \& INVESTMENTS
COMSYS INFORMATION TECHNOLOGY
KELLY SERVICES INC
H L YOH CO LLC
COVANSYS CORPORATION
ABLEST INC
MELLON CONSULTANTS INC
SPHERION CORPORATION
WELLS FARGO BUSINESS CREDITORS
GLOTEL
DATA MAVENS INC
ATTORNEY GENERAL OFFICE
STAFFMARK INC
KEANE INC
INT TECHNOLOGIES LLC
ICC INTERNATIONAL
ANALYSTS INTERNATIONAL CO
MERCER HUMAN RESOURCE
COMPUTER INFORMATION TECHNOLOGIES
DELOITTE \& TOUCHE LLP
TECH KNOWLEDGY STORE LLC
MILLIMAN USA
FIRST NATIONAL
COST EFFECTIVENESS MEASUREMENT INC
CHARLES W WHETSTINE
RIDENOUR HIENTON HARPER
WATSON WYATT \& COMPANY
AVAYA INC
PROVALIANT INC
BEHAVIOR RESEARCH CENTER
OTHER CONSULTING FEES

Nature Of Service
LTD ADMINISTRATIVE SERVICES
PENSION PAYMENT SERVICES
IT CONSULTING SERVICES
TEMPORARY AGENCY
IT CONSULTING SERVICES
IT CONSULTING SERVICES
IT CONSULTING SERVICES


ACTUARIAL SERVICES 420
IT CONSULTING SERVICES 356
IT CONSULTING SERVICES 347
IT CONSULTING SERVICES 317
IT CONSULTING SERVICES 297
LEGAL SERVICES 289
TEMPORARY AGENCY 237
IT CONSULTING SERVICES 234
IT CONSULTING SERVICES 190
IT CONSULTING SERVICES 184
IT CONSULTING SERVICES 136
INVESTMENT CONSULTING 90
IT CONSULTING SERVICES 86
AUDIT SERVICES 85
IT CONSULTING SERVICES 79
IT CONSULTING SERVICES 60
IT CONSULTING SERVICES 38
PLAN ADMINISTRATIVE CONSULTING 30
LEGAL SERVICES 28
LEGAL SERVICES 28
PLAN ADMINISTRATIVE CONSULTING 26
IT CONSULTING SERVICES 25
IT CONSULTING SERVICES 23
CONSULTING SERVICES 12
MISCELLANEOUS CONSULTING SERVICES 7
\$10,273

## Additional Supplementary Information

## Schedule of Total Investment Income by Manager

For Year Ended J une 30, 2005
(Dollars in Thousands)

| Manager | Market Appreciation (Depreciation) | Interest | Dividends | Real Estate/ Other | Total Investment Income |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ASRS INTERNAL | \$261,363 | \$115, 032 | \$86,582 | \$10,844 | \$473,821 |
| BANK OF IRELAND | 30,226 | 63 | 2,852 | - | 33,141 |
| BANK OF NEW YORK | 98,675 | 128 | 30,043 | - | 128,846 |
| BARCLAYS GLOBAL INVESTORS | 264,707 | 54 | 7 | - | 264,768 |
| BLACKROCK | 19,573 | 38,955 | - | - | 58,528 |
| BRANDES | 104,030 | 427 | 28,901 | - | 133,358 |
| BRIDGEWATER | 92,605 | 24,147 | 496 | - | 117,248 |
| BYRAM | 17,630 | 75 | 2,946 | - | 20,651 |
| CAPITAL GUARDIAN INTERNATIONAL | 62,672 | 80 | 5,132 | - | 67,884 |
| COLUMBIA MANAGEMENT COMPANY | $(26,912)$ | 9 | 20 | - | $(26,883)$ |
| CRM | 12,456 | 131 | 1,869 | - | 14,456 |
| DIMENSIONAL FUND ADVISORS | 48,713 | 91 | 3,830 | - | 52,634 |
| FIDELITY FUND ADVISORS | 8,265 | 21,932 | - | - | 30,197 |
| FORTSMANN-LEFF ASSOC | 8,084 | 66 | 325 | - | 8,475 |
| FRANKLIN PORTFOLIO | 84,912 | 81 | 19,460 | - | 104,453 |
| FRONTIER CAPITAL | 4,903 | 81 | 290 | - | 5,274 |
| GOLDMAN SACHS | 81,918 | 2,150 | 4,494 | - | 88,562 |
| INTECH | 7,275 | 44 | 5,690 | - | 13,009 |
| J P MORGAN | 19,396 | 21,864 | - | - | 41,260 |
| LSV ASSET MANAGEMENT | 58,842 | 54 | 10,980 | - | 69,876 |
| MELLON DOMESTIC | 40,993 | - | 964 | - | 41,957 |
| STATE STREET GLOBAL | 52,069 | 72 | 5,664 | - | 57,805 |
| TIMESQUARE | 8,175 | 111 | 216 | - | 8,502 |
| WELLINGTON MGT CO | 22,017 | 63 | 1,413 | - | 23,493 |
|  | \$1,382,587 | \$225,710 | \$212,174 | \$10,844 | \$1,831,315 |

## Additional Supplementary Information

## Schedule of Total Investment Expenses

For the Year Ended J une 30, 2005
(Dollars in Thousands)

|  | MANAGEMENT AND MONITORING FEES | REAL ESTATE EXPENSE | TOTAL |
| :---: | :---: | :---: | :---: |
| AMERICAN STOCK EXCHANGE | \$ 1 | \$ - | \$ 1 |
| ASRS INTERNAL | - | 6,008 | 6,008 |
| BANK OF IRELAND | 569 | - | 569 |
| BANK OF NEW YORK | 1,005 | - | 1,005 |
| BARCLAYS GLOBAL | 1,263 | - | 1,263 |
| BARRA INC | 108 | - | 108 |
| BATTERY MARCH | 141 | - | 141 |
| BLACKROCK | 1,392 | - | 1,392 |
| BLOOMBERG | 108 | - | 108 |
| BRANDES | 4,138 | - | 4,138 |
| BRIDGEWATER | 3,882 | - | 3,882 |
| BYRAM | 676 | - | 676 |
| CAPITAL GUARDIAN | 1,234 | - | 1,234 |
| COLUMBIA MANAGEMENT | 59 | - | 59 |
| COURTLAND PARTNERS LTD | 223 | - | 223 |
| CRAMER ROSENTHAL MCGYNN DIMENSIONAL FUND ADVISORS | 509 740 | - | 509 740 |
| FIDELITY | 592 | - | 592 |
| FORSTMANN-LEFF ASSOCIATES | 241 | - | 241 |
| FOSTER PEPPER | 29 | - | 29 |
| FRANKLIN PORTFOLIO | 1,245 | - | 1,245 |
| FRONTIER CAPITAL | 604 | - | 604 |
| GOLDMAN SACHS | 2,907 | - | 2,907 |
| INTECH | 1,384 | - | 1,384 |
| J.P. MORGAN | 1,019 | - | 1,019 |
| LEWIS \& ROCA | 10 | - | 10 |
| LEXIS NEXIS | 2 | - | 2 |
| LSV ASSET MANAGEMENT | 1,305 | - | 1,305 |
| MARKET AXESS CORP | 7 | - | 7 |
| MELLON | 213 | - | 213 |
| MERCER HUMAN RESOURCE | 226 | - | 226 |
| MOODYS | 39 | - | 39 |
| MORNINGSTAR INC | 1 | - | 1 |
| NEW YORK STOCK EXCHANGE | 5 | - | 5 |
| RIDENOUR HIENTON HARPER | 76 | - | 76 |
| STATE STREET BANK | 643 | - | 643 |
| SUNGARD | 4 | - | 4 |
| TIMES SQUARE CAPITAL | 269 | - | 269 |
| TRADEWEB LLC | 12 | - | 12 |
| WELLINGTON MANAGEMENT | 695 | - | 695 |
|  | \$ 27,576 | \$ 6,008 | \$ 33,584 |



## Investment Section



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# Investment Report 

# U.S. Economy and Capital Markets - FY 2004-05 <br> By Lawrence Trachtenberg, Investment Committee Chairman, and Gary R. Dokes, Chief Investment Officer 

## 3 ${ }^{\text {rd }}$ Quarter 2004

Economic growth was moderate during the third quarter, with GDP coming in at 4 percent. While a slowdown in employment growth and inflation figures tempered near-term inflationary fears, crude oil prices nearing $\$ 50$ per barrel raised concerns of inflationary forces re-emerging in the future. The Fed continued with its tightening at a "measured pace," and hiked short-term rates by 25 basis points at both Fed meetings during the quarter, leaving the Fed Funds rate at 1.75 percent at quarter end.

Domestic equities were lower for the quarter as geo-political concerns, tighter monetary policy and higher oil prices led to lower earnings growth expectations. Large cap and small cap stocks lost value during the quarter, with the S\&P 500 index losing 1.87 percent, the Russell 1000 index down by 1.81 percent and the Russell 2000 negative by 2.86 percent. International equities fared slightly better, losing only 0.2 percent.

The decrease in inflationary fears helped the bond market during the quarter, even in the face of continued Fed rate hikes. The Lehman Aggregate Bond Index returned 3.2 percent during the quarter, with corporate bonds outpacing Treasury issues.
$4^{\text {th }}$ Quarter 2004
Steady economic growth continued in the fourth quarter, with a 3.8 percent GDP growth rate. Crude oil prices retreated to $\$ 43$ per
barrel and other inflation figures were relatively benign. The Fed continued raising rates at a 25 basis point per meeting pace, and the Fed Funds rate stood at 2.25 percent at year end. Despite Asian central bank activity, the U.S. Dollar declined against major currencies, driven by low domestic savings rates and budget and current account deficits.
Equities rallied in the fourth quarter, helped along by a smooth U.S. election, an increase in mergers and acquisitions, and a softening in oil prices. The S\&P 500 index rose 9.2 percent for the quarter, to finish the year up 10.9 percent. Small cap stocks outpaced large cap stocks for the sixth straight year, with the Russell 2000 index gaining 14.1 percent for the quarter and 18.3 percent for the year. Helped by foreign currency appreciation versus the U.S. Dollar, international equities outperformed domestic equities for the quarter and year. As measured by the MSCI EAFE index, international equities rose $15.4 \%$ for the quarter and 20.7 percent for the year.

The domestic fixed income market overcame a rise in short-term yields to finish slightly higher for the year. The Lehman Aggregate Bond index ended the quarter 1.0 percent higher and the year 4.3 percent higher. The yield curve continued to flatten through the end of the quarter, and for the year, the short end of the curve rose 125 basis points, the middle of the curve fell by 3 basis points, and the long end of the curve fell by 22 basis points.

## Investment Report

## $1^{\text {st }}$ Quarter 2005

Fears of inflation built during the first quarter, as the price of oil rose 27.5 percent. Higher energy costs helped the Producer Price Index jump by 2.1 percent, which in turn caused core consumer prices to post their biggest increase in two years. The Fed hiked interest rates twice more in the quarter, as the Fed Funds rate hit 2.75 percent. Rising interest rates caused the dollar to rally during the quarter, and GDP growth, after an initial estimate of 3.1 percent, came in at a more robust 3.8 percent increase.

Investor concerns over rising commodity prices, inflation and slowing corporate earnings growth led to a decrease in major equity indices during the quarter. The S\&P 500 index ended down 2.2 percent, the Russell 2000 index ended down 5.3 percent, and the MSCI EAFE index ended flat at -0.1 percent for the quarter. While the overall market finished lower, select sectors, such as energy, utilities, materials and consumer staples were able to register gains during the quarter.
The Lehman Aggregate Bond index fell 0.5 percent during the quarter, weighed down by rising prices, inflation fears, and negative headlines. GM's profit warning in March sparked a flight to quality trade into Treasury securities, leading to large losses in corporate issues. The long end of the Treasury curve continued to be well bid as the curve continued to flatten.

## $2^{\text {nd }}$ Quarter 2005

The initial estimate of second quarter GDP growth came in at 3.4 percent, indicating an economy still on solid ground. The unemployment rate fell to 5.0 percent in J une, though jobs growth data trailed last year's figures. Oil continued to trend higher during the quarter, though a relatively benign CPI reading indicated that inflation was still under control. The Fed raised short-term rates twice during the quarter, leaving the Fed Funds rate at 3.25 percent at quarter end.
Positive economic data during the quarter led to a rebound in domestic equities. The S\&P 500 gained 1.4 percent during the quarter, led by utility stocks, with growth stocks outpacing value stocks. Small cap stocks outperformed large caps, as the Russell 2000 advanced 4.32 percent. While international equities increased in local currency terms, the strength of the dollar relative to other currencies caused a decrease in the MSCI EAFE index of 0.8 percent.
Despite continued Fed rate hikes and downgrades of Ford and GM debt to non-investment grade status, the Lehman Brothers Aggregate Bond index posted a gain of 3.0 percent during the quarter. The 10-year Treasury bond closed the quarter with a yield of 3.9 percent. The Treasury yield curve continued to flatten, as spread between the 2-year and 10-year Treasury bonds narrowed to 28 basis points.

## Investment Report

## Investment Goals

For the period ending J une 30, 2005 the following were the ASRS Investment Goals:

1. Retain safety as the principle consideration in the investment of the ASRS assets.
2. Achieve the actuarial investment return of 8 percent.
3. Maintain a minimum funded status of 100 percent.
4. Support excess earnings Permanent Benefit Increase (PBI) (formerly known as cost of living allowance or COLA)
5. Maintain a relatively stable contribution rate.

## Asset Allocation Targets

Effective October 2003, the ASRS determined the asset allocation policy targets and ranges are as follows:

| U.S. Equity | $53 \%+1-5 \%$ |
| :--- | ---: |
| U.S. Fixed Income | $26 \%+1-5 \%$ |
| International Equity | $15 \%+1-5 \%$ |
| Real Estate | $6 \%+1-2 \%$ |

The Real Estate allocation is pro-rated into the other asset classes until investments are made into this asset class.

## Investment Policies

The ASRS adheres to all statutory requirements set forth by Arizona state Iaw, which applies upper limits to the portions of the fund that may be invested in any single entity, international equities, or total equities. The ASRS has also established investment guidelines for its external investment managers and a complete set of policies, procedures, compliance requirements, and oversight of internal investment management to ensure that investment assets are prudently managed. Both internal and external audit procedures are in place. Oversight and direction responsibilities are ensconced with the Board.

## Investment Results

The Total Fund returned 8.5 percent in the fiscal year ended J une 30, 2005.

## Performance Accounting/ Computation Standards

The ASRS investment performance rates of return are calculated on a total return basis, using time-weighted rates of return, based upon market values. Performance is
calculated on an accrual basis provided that the accrual information is available from the custodian or record-keeper. The rates of return are generated by asset class and include cash holdings.
Below are rates of return on the overall portfolio, as well as specific asset classes, along with the benchmarks used to compare performance.

Annualized Rates of Return

| (Retirement \& HBS Funds) |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\mathbf{1}$ Year | $\mathbf{3}$ Year | $\mathbf{5}$ Year | $\mathbf{1 0}$ Year |
| ASRS Total Fund | $8.5 \%$ | $9.2 \%$ | $2.2 \%$ | $9.4 \%$ |
| ASRS Domestic Equity | $8.1 \%$ | $9.7 \%$ | $(0.4 \%)$ | $10.7 \%$ |
| $\quad$ S\&P 500 Index | $6.3 \%$ | $8.3 \%$ | $(0.2 \%)$ | $9.9 \%$ |
| ASRS Domestic Fixed Income | $6.9 \%$ | $5.8 \%$ | $7.4 \%$ | $6.9 \%$ |
| $\quad$ Lehman Aggregate Index | $6.8 \%$ | $5.8 \%$ | $7.4 \%$ | $6.8 \%$ |
| ASRS International Equity | $11.1 \%$ | $11.7 \%$ | $0.5 \%$ | $7.4 \%$ |
| $\quad$ MCSI EAFE Index | $14.1 \%$ | $12.5 \%$ | $(0.2 \%)$ | $5.6 \%$ |


| Historical Rates of Return <br> (Retirment \& HBS Funds) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Return | Fiscal Year | Return | Fiscal Year | Return |  |  |  |  |  |
| $2004-05$ | $8.50 \%$ | $1996-97$ | $20.60 \%$ | $1988-89$ | $14.33 \%$ |  |  |  |  |  |
| $2003-04$ | $17.50 \%$ | $1995-96$ | $16.70 \%$ | $1987-88$ | $3.10 \%$ |  |  |  |  |  |
| $2002-03$ | $2.40 \%$ | $1994-95$ | $17.78 \%$ | $1986-87$ | $11.80 \%$ |  |  |  |  |  |
| $2001-02$ | $(8.20 \%$ | $1993-94$ | $1.89 \%$ | $1985-86$ | $31.50 \%$ |  |  |  |  |  |
| $2000-01$ | $(6.70 \%)$ | $1992-93$ | $16.74 \%$ | $1984-85$ | $32.10 \%$ |  |  |  |  |  |
| $1999-00$ | $10.00 \%$ | $1991-92$ | $14.62 \%$ | $1983-84$ | $(5.20 \%$ |  |  |  |  |  |
| $1998-99$ | $16.80 \%$ | $1990-91$ | $7.99 \%$ | $1982-83$ | $40.30 \%$ |  |  |  |  |  |
| $1997-98$ | $21.30 \%$ | $1989-90$ | $9.52 \%$ | $1981-82$ | $2.40 \%$ |  |  |  |  |  |

## Investment Results

| Monthly Returns <br> (Retirment \& HBS Funds) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month | Total Fund | US Equity | Fixed <br> Income | International <br> Equity |
| Jul 2004 | $-2.47 \%$ | $-3.86 \%$ | $0.99 \%$ | $-3.22 \%$ |
| Aug 2004 | $0.69 \%$ | $0.29 \%$ | $1.94 \%$ | $0.02 \%$ |
| Sep 2004 | $1.45 \%$ | $1.95 \%$ | $0.30 \%$ | $2.13 \%$ |
| Oct 2004 | $1.77 \%$ | $1.51 \%$ | $0.88 \%$ | $3.88 \%$ |
| Nov 2004 | $3.68 \%$ | $4.90 \%$ | $-0.71 \%$ | $6.37 \%$ |
| Dec 2004 | $2.73 \%$ | $3.34 \%$ | $0.91 \%$ | $0.35 \%$ |
| Jan 2005 | $-1.55 \%$ | $-2.48 \%$ | $0.62 \%$ | $-1.94 \%$ |
| Feb 2005 | $1.92 \%$ | $2.29 \%$ | $-0.53 \%$ | $4.26 \%$ |
| Mar 2005 | $-1.61 \%$ | $-1.80 \%$ | $-0.55 \%$ | $-2.52 \%$ |
| Apr 2005 | $-1.54 \%$ | $-2.69 \%$ | $1.29 \%$ | $-2.41 \%$ |
| May 2005 | $2.50 \%$ | $3.93 \%$ | $1.04 \%$ | $0.22 \%$ |
| Jun 2005 | $0.78 \%$ | $0.90 \%$ | $0.55 \%$ | $0.93 \%$ |



## Investment Results

Ten Year Review of Investment Income
(Dollars in Thousands)

| Fiscal Year | Investment <br> Income | Market <br> Appreciation | Investment <br> Expense | Net Income From <br> Investments |
| :---: | :---: | :---: | :---: | :---: |
| $1995-96$ | $\$ 523,566$ | $\$ 1,562,575$ | $\$ 22,990$ | $\$ 2,063,151$ |
| $1996-97$ | 566,750 | $2,282,015$ | 22,264 | $2,826,501$ |
| $1997-98$ | 325,329 | $3,094,012$ | 22,377 | $3,396,964$ |
| $1998-99$ | 394,337 | $2,474,779$ | 26,215 | $2,842,901$ |
| $1999-00$ | 416,594 | $1,625,595$ | 28,273 | $2,013,916$ |
| $2000-01$ | 527,329 | $(2,038,932)$ | 27,525 | $(1,539,128)$ |
| $2001-02$ | 485,535 | $(2,228,394)$ | 25,218 | $(1,768,077)$ |
| $2002-03$ | 442,870 | $(51,437)$ | 22,801 | 368,632 |
| $2003-04$ | 447,623 | $2,811,047$ | 29,885 | $3,228,785$ |
| $2004-05$ | 454,389 | $1,382,587$ | 33,584 | $1,803,392$ |

## Asset Allocation

## Schedule Of Investments

(Dollars in Thousands)

|  | Investments at Fair Value | Receivables | Payables | Total | \% of Tota |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Corporate Equity Securities | \$15,751,417 | \$ - | \$ | \$15,751,417 | 69.8\% |
| Fixed Income Securities |  |  |  |  |  |
| Corporate Debt Securities | 2,617,193 | - | - | 2,617,193 | 11.6 |
| US Treasury \& Govt Securities | 2,564,711 | - |  | 2,564,711 | 11.4 |
| Real Estate \& Mortgages | 26,774 | - | - | 26,774 | 0.1 |
| Securities Lending | 2,279,978 | - | $(2,279,978)$ | - | 0.0 |
| Temporary Investments* | 2,040,185 | 2,141,053 | $(2,565,809)$ | 1,615,429 | 7.2 |
| Total Fixed Income Securities | 9,528,841 | 2,141,053 | $(4,845,787)$ | 6,824,107 | 30.2 |
| Total Investments | \$25,280,258 | \$2,141,053 | \$(4,845,787) | \$22,575,524 | 100.0\% |

*Includes 1,668 other receivables and $\$ 3,228$ other liabilities

## Equity Portfolio Profile

## Equity Portfolio Profile

(Dollars in Thousands)

| Equity Sub-Sector Allocation | Percent Of Fund | Dollar Value |
| :--- | :---: | ---: |
| US Large Cap Equity | $43.89 \%$ | $\$ 9,909,283$ |
| US Mid Cap Equity | 5.73 | $1,293,922$ |
| US Small Cap Equity | $\underline{5.03}$ | $\underline{1,135,459}$ |
|  | Total US Equity | $\mathbf{5 4 . 6 6 \%}$ |
| $\mathbf{1 2 , 3 3 8 , 6 6 4}$ |  |  |
|  | International Equity | $\underline{\mathbf{1 5 . 1 2 \%}}$ |
| Total Equity | $\underline{\underline{\mathbf{6 9 . 7 7 \%}}}$ | $\underline{\mathbf{3 , 4 1 2 , 7 5 2}}$ |
|  |  |  |

## Ten Largest Domestic Equity Holdings

EXXON MOBIL CORP
GENERAL ELEC CO COM
MICROSOFT CORP COM
CITIGROUP INC COM
BANK OF AMERICA CORP
J OHNSON \& JOHNSON COM
WAL MART STORES INC COM
PFIZER INC COM STK USD0. 05
INTEL CORP
CHEVRON CORPORATION COM

Total
\% Of Domestic Equity Portfolio
1.92\%
1.61
1.23
1.09
1.08
1.00
0.86
0.82
0.78
0.72
$11.11 \%$

## Equity Portfolio Profile

## Distribution By Market Sector

|  | ASRS Domestic Equity | S\&P $\mathbf{5 0 0}$ Index |
| :--- | :---: | :---: |
| Financials | $20.04 \%$ | $20.33 \%$ |
| Health Care | 12.19 | 13.39 |
| Utilities | 3.74 | 3.47 |
| Consumer Discretionary | 14.52 | 11.43 |
| Consumer Staples | 8.73 | 10.12 |
| Energy | 8.24 | 8.78 |
| Information Technology | 14.61 | 15.14 |
| Materials | 3.63 | 2.95 |
| Telecommunication Services | 2.42 | 3.19 |
| Industrials | 11.86 | 11.19 |
| Total | $\mathbf{1 0 0 . 0 0 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ |

## Ten Largest International Equity Holdings

NESTLE SA CHF1
UNILEVER NV CVA NLG1. 12
DEUTSCHE TELEKOM AG NPV (REGD)
NIPPON TEL \& TEL CORP Y50000
BT GROUP ORD GBPO. 05
MORRISON (W) SUPMKT ORD 10P
MILLEA HOLDINGS IN NPV
GLAXOSMITHKLINE ORD GBP0. 25
AKZO NOBEL NV EUR2
BP PLC SPONSORED ADR
Total
\% Of International Equity Portfolio
1.33\%
1.14
1.07
0.88
0.86
0.85
0.83
0.80
0.79
0.77
9.32\%

## Summary Of Broker Commissions

| Domestic Equity | $\$ 5,692,175$ |
| :--- | ---: |
| International Equity | $1,730,829$ |

Note: A detail listing of investments is available upon request. Direct inquiries to: ASRS, 3300 North Central Avenue, Phoenix, AZ 85012.

## Fixed Income Portfolio Profile

## Distribution By Sector

|  | Percent |
| :--- | :---: |
| US Treasury \& Government Agency | $32.9 \%$ |
| Corporates | 22.1 |
| Mortgage Backed Securities | 39.4 |
| Asset Backed Securities | 5.6 |
| Total | $\mathbf{1 0 0 . 0 \%}$ |

## Distribution By Coupon

|  | Percent |
| :--- | :---: |
| $0.00 \%-6.50 \%$ | $51.6 \%$ |
| $6.51 \%-7.50 \%$ | 37.5 |
| $7.51 \%-9.00 \%$ | 8.9 |
| $>9.00 \%$ | 2.0 |
| Total | $\mathbf{1 0 0 . 0 \%}$ |

## Distribution By Maturity

|  | Percent |
| :--- | :---: |
| 0 to 2 years | $20.7 \%$ |
| 2 to 3 years | 2.9 |
| 3 to 4 years | 5.6 |
| 4 to 5 years | 6.3 |
| 5 to 6 years | 3.8 |
| 6 to 8 years | 4.1 |
| >8 years | 56.6 |
| Total | $\mathbf{1 0 0 . 0 \%}$ |

## Fixed Income Portfolio Profile

## Ten Largest Domestic Fixed Income Holdings

|  | Coupon | Maturity | Par Value | Market Value | Percent |
| :--- | :---: | :---: | :---: | :---: | :---: |
| COMMIT TO PUR FNMA SF MTG | $5.50 \%$ | $7 / 1 / 2035$ | $\$ 130,700$ | $\$ 132,451,380$ | $2.91 \%$ |
| U S TREASURY NOTES | $3.75 \%$ | $3 / 31 / 2007$ | 100,525 | $100,677,798$ | 2.21 |
| FNMA POOL \#0786458 | $5.00 \%$ | $5 / 1 / 2034$ | 58,651 | $58,668,883$ | 1.29 |
| U S TREASURY NOTES | $3.38 \%$ | $11 / 15 / 2008$ | 57,000 | $56,422,590$ | 1.24 |
| U S TREASURY BONDS | $11.25 \%$ | $2 / 15 / 2015$ | 34,500 | $54,467,565$ | 1.20 |
| U S TREASURY NOTES | $2.63 \%$ | $11 / 15 / 2006$ | 55,000 | $54,274,000$ | 1.19 |
| COMMIT TO PUR FNMA SF MTG | $6.00 \%$ | $8 / 1 / 2035$ | 51,900 | $53,148,820$ | 1.17 |
| U S TREASURY NOTES | $3.13 \%$ | $1 / 31 / 2007$ | 50,865 | $50,462,149$ | 1.11 |
| FNMA POOL \#O796020 | $6.00 \%$ | $9 / 1 / 2034$ | 48,983 | $50,229,890$ | 1.10 |
| FEDERAL HOME LN MTG CORP DEB | $5.00 \%$ | $7 / 15 / 2014$ | 46,000 | $48,545,019$ | 1.07 |
| Total |  |  |  |  | $\mathbf{1 4 . 4 9 \%}$ |

Note: A detail listing of investments is available upon request. Direct inquiries to: ASRS, 3300 North Central Avenue, Phoenix, AZ 85012.

## Schedule of Broker Commissions - Domestic Equity Trades

| Domestic Broker Name | Total Dollar Amount Of Trades | Number Of Shares | Average Commission Per Share | Commission |
| :---: | :---: | :---: | :---: | :---: |
| ABEL NOSER CORP, NEW YORK | \$63,730,625 | 1,699,968 | \$0.02 | \$31,575 |
| ACCESS SEC INC, STAMFORD | 114,016,804 | 2,857,800 | 0.04 | 109,616 |
| AVIAN SECURITIES INC, BOSTON | 17,894,669 | 951,648 | 0.04 | 41,967 |
| B TRADE SVCS LLC, NEW YORK | 83,871,813 | 3,082,155 | 0.02 | 53,958 |
| BAIRD, ROBERT W \& CO INC, MILWAUKEE | 15,209,837 | 425,770 | 0.05 | 20,896 |
| BANC OF AMERICA SECS LLC, CHARLOTTE | 27,883,447 | 1,005,010 | 0.05 | 45,148 |
| bear stearns \& CO INC, NY | 377,940,573 | 22,146,494 | 0.02 | 357,106 |
| BEAR STEARNS SEC CORP, BROOKLYN | 531,267,176 | 13,530,522 | 0.02 | 329,407 |
| BERNSTEIN SANFORD C \& CO, NEW YORK | 20,732,430 | 627,020 | 0.04 | 23,359 |
| BOSTON INSTITUTIONAL SVCS INC, | 30,070,223 | 1,075,895 | 0.05 | 51,298 |
| BRIDGE TRADING CO, ST LOUIS | 17,472,467 | 754,600 | 0.05 | 36,502 |
| CANTOR FITZGERALD \& CO INC, NEW YORK | 147,151,413 | 4,247,015 | 0.04 | 157,030 |
| CAP INSTL SVCS INC-EQUITIES, DALLAS | 123, 207,989 | 3,627,779 | 0.03 | 116,883 |
| CIBC WORLD MARKETS CORP, NEW YORK | 42,930,535 | 1,217,087 | 0.04 | 52,004 |
| CITATION GROUP, NY | 45,938,339 | 1,678,684 | 0.05 | 81,878 |
| CITIGROUP GBL MKTS INC, NEW YORK | 32,812,226 | 1,522,797 | 0.03 | 41,535 |
| CREDIT SUISSE, NEW YORK | 177,189,422 | 5,314,415 | 0.04 | 236,400 |
| DEUTSCHE BANC ALEX BROWN INC, NEW | 161,762,398 | 4,091,290 | 0.02 | 92,015 |
| EXECUTION SERVICES INC, NEW YORK | 173,060,954 | 5,277,802 | 0.04 | 201,098 |
| FIDELITY CAP MKTS (DIV OF NFSC), | 161,589,207 | 5,153,677 | 0.04 | 218,496 |
| FRANCIS P MAGLIO \& CO INC, NEW YORK | 30,014,312 | 725,862 | 0.03 | 18,380 |
| GOLDMAN SACHS \& CO, NY | 179,902,607 | 4,803,298 | 0.03 | 140,882 |
| GOLDMAN SACHS EXECUTION \& CLEARING, | 11,364,891 | 455,800 | 0.01 | 5,103 |
| GUZMAN \& CO, NEW YORK | 115,113,560 | 2,413,209 | 0.02 | 49,518 |
| INSTINET CORP, NY | 313,501,851 | 10,260,479 | 0.02 | 193,219 |
| INVESTMENT TECHNOLOGY GROUPS, NEW | 326,928,345 | 9,402,152 | 0.02 | 193,853 |
| J EFFERIES \& CO INC, NEW YORK | 195,588,458 | 5,325,242 | 0.03 | 140,912 |
| J NK SECURITIES INC, NEW YORK | 110,021,830 | 3,560,745 | 0.03 | 88,900 |
| J ONES \& ASSOCIATES INC, WESTLAKE | 32,986,299 | 1,200,326 | 0.05 | 53,698 |
| LA BRANCHE FINANCIAL SVCS/ HBI, NEW | 267,940,143 | 7,081,045 | 0.03 | 208,480 |
| LEHMAN BROS INC, NEW YORK | 276,260,867 | 7,819,834 | 0.03 | 238,556 |
| LIQUIDNET INC, BROOKLYN | 70,017,552 | 2,731,506 | 0.02 | 55,070 |

## Schedule of Broker Commissions - Domestic Equity Trades

|  | Total Dollar <br> Domestic Broker Name |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Number OfCommission |  |  |  |  |
| LYNCH J ONES \& RYAN INC, HOUSTON | $64,130,679$ | $2,402,248$ | 0.05 | 116,040 |
| MCDONALD \& CO, NEW YORK | $11,110,455$ | 385,855 | 0.05 | 19,373 |
| MERRILL LYNCH PIERCE FENNER SMITH | $303,826,462$ | $9,091,965$ | 0.04 | 368,959 |
| MERRILL LYNCH PROFESSIONAL CLRG, | $143,633,810$ | $5,115,117$ | 0.03 | 152,476 |
| MORGAN J P SECS INC, NEW YORK | $22,253,292$ | 848,837 | 0.05 | 38,800 |
| MORGAN STANLEY \& CO INC, NY | $61,808,539$ | $1,654,560$ | 0.04 | 63,539 |
| NUTMEG SECURITIES, WESTPORT | $17,872,010$ | 979,070 | 0.05 | 49,284 |
| PRUDENTIAL EQUITY GROUP, NEW YORK | $57,304,583$ | $1,693,290$ | 0.04 | 70,297 |
| PULSE TRADING LLC, BOSTON | $15,801,450$ | 740,987 | 0.02 | 11,919 |
| RAYMOND J AMES \& ASSOC INC, ST | $28,602,029$ | $1,530,381$ | 0.05 | 72,402 |
| RBC CAPITAL MARKETS CORP, NEW YORK | $13,140,157$ | 348,275 | 0.05 | 15,840 |
| ROCHDALE SECURITIES CORP | $74,150,553$ | $2,659,227$ | 0.04 | 115,449 |
| ROSENBLATT SECURITIES INC, J ERSEY CITY | $154,987,563$ | $3,565,300$ | 0.02 | 71,306 |
| SG COWEN \& CO LLC, NEW YORK | $10,467,867$ | 344,983 | 0.05 | 16,886 |
| SCHWAB CHARLES \& CO INC, SAN | $40,337,926$ | $1,649,001$ | 0.04 | 58,822 |
| SUNTRUST CAPITAL MARKETS INC, | $13,667,847$ | 539,337 | 0.05 | 26,004 |
| THOMAS \& WEISEL INC, SAN FRANCISCO | $15,573,141$ | 545,333 | 0.05 | 26,598 |
| UBS SECURITIES LLC, STAMFORD | $115,507,592$ | $3,826,065$ | 0.03 | 127,634 |
| WACHOVIA CAPITAL MARKETS LLC, | $14,112,891$ | 422,600 | 0.05 | 19,938 |
| WEEDEN \& CO, NEW YORK | $146,893,698$ | $4,592,297$ | 0.02 | 102,660 |
| OTHERS | $254,365,843$ | $10,438,795$ |  | 463,207 |
| TOTAL |  |  | $\$ 5,692,175$ |  |

[^0]
## Schedule of Broker Commissions - Foreign Equity Trades

| Domestic Broker Name | Total Dollar Amount Of Trades | Number Of Shares | Average Commission Per Share | Commission |
| :---: | :---: | :---: | :---: | :---: |
| NATEXIS BLEICHROEDER INC, NEW YORK | \$280,723,835 | 12,517,799 | \$0.02 | \$280,800 |
| CREDIT SUISSE (EUROPE), LONDON | 144,137,114 | 7,749,211 | 0.01 | 53,296 |
| CREDIT SUISSE, NEW YORK | 123,916,334 | 9,432,809 | 0.02 | 147,556 |
| CREDIT SUISSE EQUITIES, LONDON | 74,281,716 | 10,735,036 | 0.00 | 23,778 |
| GOLDMAN SACHS \& CO, NY | 68,583,034 | 6,270,555 | 0.02 | 153,608 |
| SALOMON BROS INTL LTD, LONDON | 51,770,115 | 2,122,699 | 0.04 | 87,118 |
| MERRILL LYNCH PIERCE FENNER, | 47,257,716 | 9,062,331 | 0.01 | 44,815 |
| MERRILL LYNCH INTL LONDON EQUITIES | 40,639,025 | 5,847,280 | 0.01 | 56,337 |
| DEUTSCHE BANC ALEX BROWN INC, NEW | 39,192,376 | 1,623,690 | 0.04 | 60,313 |
| UBS SECURITIES LLC, STAMFORD | 36,870,816 | 1,070,456 | 0.04 | 42,768 |
| CITIGROUP GBL MKTS/ SALOMON, NEW YORK | 34,767,828 | 5,684,614 | 0.01 | 48,215 |
| LEHMAN BROS INTL, LONDON | 33,084,501 | 1,054,326 | 0.05 | 53,070 |
| ABN AMRO SECS LLC, NEW YORK | 32,190,697 | 3,122,008 | 0.02 | 53,905 |
| MORGAN STANLEY \& CO INC, NY | 29,887,340 | 3,140,272 | 0.01 | 45,033 |
| UBS EQUITIES, LONDON | 22,668,138 | 902,230 | 0.04 | 33,444 |
| DRESDNER KLEINWORT BENSON, NEW YORK | 21,994,558 | 3,888,518 | 0.01 | 31,590 |
| MIZUHO SECURITIES USA INC. NEW YORK | 21,864,836 | 1,411,224 | 0.01 | 16,779 |
| BEAR STEARNS \& CO INC, NY | 21,199,732 | 1,294,326 | 0.02 | 31,634 |
| SOCIETE GENERALE, NEW YORK | 20,533,582 | 742,680 | 0.04 | 32,830 |
| NOMURA SECS INTL INC, NEW YORK | 17,331,189 | 1,140,430 | 0.02 | 17,290 |
| UBS WARBURG LLC, STAMFORD | 14,348,514 | 1,781,532 | 0.02 | 41,277 |
| MERRILL LYNCH INTL (3L GLOSS), LONDON | 13,633,162 | 578,465 | 0.04 | 24,691 |
| J P MORGAN SECS LTD, LONDON | 13,567,581 | 684,850 | 0.02 | 16,678 |
| UNION BANK SWITZERLAND SECS, LONDON | 13,416,033 | 2,493,427 | 0.01 | 18,038 |
| MORGAN STANLEY \& CO INTL, LONDON | 13,272,221 | 1,053,974 | 0.02 | 18,069 |
| LEHMAN BROS INC, NEW YORK | 12,820,219 | 2,630,617 | 0.01 | 14,600 |
| GOLDMAN SACHS INTL, LONDON | 11,971,259 | 390,860 | 0.03 | 13,365 |
| DEUTSCHE BK AG (INTL EQUITIES), LONDON | 11,307,226 | 778,118 | 0.02 | 12,914 |
| HOARE GOVETT SECS LTD, LONDON | 10,712,556 | 720,807 | 0.02 | 14,559 |
| OTHERS | 148,474,655 | 10,717,531 |  | 242,459 |
| TOTAL |  |  |  | \$1,730,829 |

Note: A detail listing of broker commissions is available upon request. Direct inquiries to: ASRS, 3300 North Central Avenue, Phoenix, AZ 85012.


## Actuarial Section



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## Actuarial Certification

## Actuarial Certification Statement

This is to certify that Mellon Human Resources \& Investor Solutions has prepared an actuarial valuation of the Arizona State Retirement Plan as of J une 30, 2004.
Actuarial calculations have been made with respect to a total of 415,650 members $-205,482$ active employees, 136,435 inactive members, and 69,049 retired members and beneficiaries, and 4,684 members on long term disability. In addition, there are 705 System retirees receiving ad hoc benefits from Plan assets.

The actuarial calculations establish a total benefit cost of 15.50 percent of the annual compensation of employees. The total normal cost rate is 13.02 percent of compensation, and the required amortization payment determined in accordance with Section $38-737$ is 2.50 percent of compensation.
The actuarial cost factors as of J une 30, 2004 are as follows:
I. Actuarial accrued liabilities
A. Liabilities due to member's benefits

1. Active members
a. Retirement benefits
b. Health insurance premium supplement
\$10,893, 474,050
c. Disability deferred retirement benefits

878,900,986
d. Pre-retirement death benefits
e. Withdrawal benefits

214,579,320
248,143, 268
342,756,931
f. Total active members
2. Inactive members
3. Retired members and beneficiaries
4. Disabled members (deferred retirement)
5. Benefit increases for other-than-plan participants
6. Total present value of benefits
B. Other miscellaneous liabilities and reserves
C. Reserve for future PBIs
D. Total actuarial accrued liability
II. Actuarial value of assets
III. Unfunded actuarial accrued liability (Item I -- Item II)
IV. Amortization of unfunded actuarial accrued liability (per Section 38-737)
V. Normal cost for the year 974,455,203
VI. Total contribution for the year (Item IV + Item V)
VII. Total covered payroll (projected to 2004/ 2005 plan year)
VIII. Total contribution for fiscal years 2006 and 2007 as a percentage of covered payroll
A. Employee Portion
B. Employer Portion
C. Total

$$
\begin{array}{r}
\$ 12,577,854,555 \\
918,524,304 \\
11,374,777,957 \\
348,086,799 \\
11,867,731 \\
\hline
\end{array}
$$

\$25,231,111,346
0
687,218,159
\$25,918,329,505
23,642,904,763
2,275,424,742
187,139, 751

1,161,594,954
7,485,590,038

| 401(a) Account | 401(h) Account | Total |
| ---: | ---: | ---: |
| $7.75 \%$ | $0.00 \%$ | $7.75 \%$ |
| $6.61 \%$ | $1.14 \%$ | $7.75 \%$ |
| $14.36 \%$ | $1.14 \%$ | $15.50 \%$ |

## Actuarial Certification

The Board adopted a new asset valuation method on November 15, 2002, to be effective for valuations on and after J une 30, 2002.

On November 21, 2003, the Board adopted assumptions to be effective for valuations on and after J une 30, 2003.

These assumptions are as follows:

1. Investment yield - $8 \%$ per annum.
2. Salary increases

| Years of Service | Merit <br> Component | Total Salary Increase |
| :---: | :---: | :---: |
| 1 | 5.00\% | 9.50\% |
| 2 | 4 | 8.5 |
| 3 | 2.5 | 7 |
| 4 | 1.8 | 6.3 |
| 5 | 1.4 | 5.9 |
| 6 | 1.25 | 5.75 |
| 7 | 1 | 5.5 |
| 8 | 0.8 | 5.3 |
| 9 | 0.75 | 5.25 |
| 10 | 0.5 | 5 |
| 11 to 19 | 0.25 | 4.75 |
| 20 or more | 0 | 4.5 |

3. Rates of disability

| Age | Males |  | Females |
| :---: | :---: | :---: | :---: |
|  | $0.06 \%$ |  | $0.07 \%$ |
| 30 |  | $0.07 \%$ |  |
| 40 |  | $0.21 \%$ |  |
| 50 |  | $0.51 \%$ |  |
| 60 | $1.20 \%$ |  | $0.49 \%$ |
|  |  |  | $1.09 \%$ |

4. Rates of withdrawal - Sample ages and years of service

| Age | Years of Service: Male Members |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 5 | 8 | 10+ |
| 20 | 36.42\% | 28.95\% | 13.64\% | 7.11\% | 12.77\% |
| 30 | 20.55 | 16.12 | 9.43 | 5.14 | 5.65 |
| 40 | 16.98 | 10.11 | 6.65 | 4.00 | 2.27 |
| 50 | 16.92 | 9.04 | 5.02 | 3.45 | 1.55 |
| 60 | 18.24 | 9.63 | 3.71 | 2.61 | 1.08 |

## Actuarial Certification

| Age | Years of Service: Female Members |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 5 | 8 | 10+ |
| 20 | 30.53\% | 26.40\% | 20.77\% | 13.80\% | 21.48\% |
| 30 | 19.37 | 16.52 | 10.89 | 8.11 | 8.21 |
| 40 | 16.93 | 11.74 | 6.61 | 4.61 | 2.39 |
| 50 | 14.57 | 9.27 | 5.22 | 2.87 | 1.67 |
| 60 | 14.32 | 9.39 | 4.66 | 2.37 | 0.88 |

5. Rates of retirement - Sample ages and years of service

| Age | Years of Service |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 10-14 | 20-24 | 25 | 30 | 31+ |
| 50 | 3.00\% | 4.00\% | 7.00\% | 17.50\% | 12.50\% |
| 55 | 3 | 6 | 16.25 | 17.5 | 12.5 |
| 60 | 7 | 23.75 | 26.75 | 35 | 30 |
| 62 | 30 | 40 | 43 | 55 | 50 |
| 65 | 30 | 30 | 33 | 35 | 30 |
| 66+ | 30 | 30 | 33 | 35 | 30 |

6. Mortality rates - 1994 GAM - Static, Projected to 2005 with Projection Scale AA, with no setback.
7. Mortality rates after disability - Post disablement mortality rates are based on experience of other large public sector system and ASRS' own experience.
8. Valuation assets - Market value less ten year phase-in of Excess (Shortfall) Investment income.
9. Funding method - Projected unit-credit.

Qualified actuaries have performed the actuarial calculations in accordance with accepted actuarial procedures, based on the current provisions of the Plan and on the actuarial assumptions adopted by the Board.

ASRS prepared all trend data schedules in the financial section and the supporting schedules in the actuarial section of its Comprehensive Annual Financial Report.


Charles E. Chittenden, FSA, EA, MAAA
Principal and Consulting Actuary

# Actuarial Valuation of the Plan as of June 30, 2004 

October 4, 2005

Retirement Board
Arizona State Retirement System
3300 North Central Avenue
14th Floor
Phoenix, Arizona 85012

Dear Retirement Board Members:
We certify that the information contained in the attached 2004 actuarial valuation report is accurate and fairly presents the actuarial position of the Arizona State Retirement Plan (the Plan) as of J une 30, 2004.
We have made all calculations for this report in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, the report's results comply with the requirements of the Arizona Constitution and statutes and, where applicable, the Internal Revenue Code, the Employee Retirement Income Security Act of 1974 (ERISA), and the Statements of the Governmental Accounting Standards Board. The undersigned actuaries are independent. They are both Enrolled Actuaries and Fellows of the Society of Actuaries. Eva Yum is a Fellow of the Canadian Institute of Actuaries and Charlie Chittenden is a member of the American Academy of Actuaries. Both are experienced in performing valuations for large public retirement systems.

## Actuarial Valuations

The primary purpose of the valuation report is to determine the required member and employer contribution rates, to describe the current financial condition of the Plan, and to analyze changes in the Plan's condition. In addition, the report provides information that ASRS requires in connection with Governmental Accounting Standards Board Statement Number 25 (GASB No. 25), and it summarizes census data.

Valuations are performed annually, as of J une 30, the last day of both the Plan year and ASRS' fiscal year.

## Funding Objectives

The actuarial valuation calculates the contribution rates payable by members and participating employers. These rates, when applied to payroll, yield contribution amounts sufficient to provide for the normal cost and to amortize the Unfunded Actuarial Accrued Liability (UAAL) over the period specified in the statutes. The rates calculated in even numbered years are in effect

# Actuarial Valuation of the Plan as of June 30, 2004 

for the next two Plan years. For example, the rate calculated in J une 30, 2004 valuation report ( 7.75 percent for each member and each employer) will apply in the fiscal years beginning July 1, 2005, and July 1, 2006. The rates calculated in odd-numbered years are purely advisory until J une 2008.

## Funding Progress

The actual contribution rate in fiscal 2004 and 2005 is 5.20 percent for each member and each employer, as the 2002 valuation report calculated. This 2003 valuation calculates a hypothetical rate of 6.96 percent. This 2004 valuation calculates a rate of 7.75 percent, to become effective July 1, 2005. These rates do not include contributions to the LTD program. Actual contributions have matched the calculated contributions in recent years and we assume that members and employers will continue to contribute the actuarially determined amounts. Contributing these amounts ensures the realization of funding objectives.
Section 38-737 specifies that the UAAL is to be amortized over a rolling 30-year period once the surplus disappears. As of J une 30, 2003, the ASRS Plan no longer has a surplus, so the amortization period for this valuation (and all future valuations) is 30 years.

## Benefit Provisions

This valuation reflects two changes in Plan provisions:

- The legislature changed the basis for service purchase calculations to actuarial present value, instead of average normal cost, and
- The Board reduced the interest rate to be credited on withdrawn contributions from 8 percent to 4 percent, effective for withdrawals after J une 30, 2005.

Section 11 gives details of benefit provisions.

## Assumptions and Methods

We performed an experienced study for the five-year period ended J une 30, 2002, and recommended assumption changes based on the findings. On November 21, 2003, the Board adopted our recommended actuarial assumptions, to be effective J une 30, 2003. On November 15, 2002, the Board adopted a change in the method of valuing actuarial assets - namely, the Board removed the requirement that actuarial assets be within 20 percent of market value and prospectively changed the period for recognizing investment gains or losses from five to ten years. Section 9 of this report provides details of the assumptions and methods. The assumptions are internally consistent and are reasonably based on the actual experience of the Plan. These assumptions are in full compliance with GASB No. 25.

## Actuarial Valuation of the Plan as of June 30, 2004

## Data

ASRS staff supplied census data for retired, active, and inactive participants as of June 30, 2004. We have not audited these data, but have examined them for reasonableness and consistency with the prior year's data. ASRS staff also supplied asset information.

## Trend Data and Supporting Schedules

ASRS prepared all trend data schedules in the financial section of ASRS' Comprehensive Annual Financial Report (CAFR). ASRS also prepared all supporting schedules in the actuarial section of the CAFR.

We look forward to discussing this report with you at your convenience.

Sincerely,


Charles E. Chittenden, FSA, MAAA, EA
Principal and Consulting Actuary


Eva S. Yum, FSA, EA
Director and Consulting Actuary

## General Actuarial Information

The following charts will serve to indicate some of the more important statistics regarding the retirement program; each chart will identify each membership category separately where possible.

As of J une 30, 2004

|  |  | Political <br> Subdivision |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Active Members | State Employees | Teachers | Employees | Total |
| Number of members (active) | 44,589 | 65,967 | 94,926 | 205,482 |
| Average age | 45.4 | 44.0 | 44.8 | 44.7 |
| Average annual salary | $\$ 35,461$ | $\$ 40,253$ | $\$ 29,775$ | $\$ 34,372$ |
| Average years of service | 9.1 | 10.2 | 7.2 | 8.6 |

As of J une 30, 2004

| Retired Members | State Employees | Teachers | Political <br> Subdivision <br> Employees | Total |
| :--- | :---: | :---: | :---: | :---: |
| Number of retirees | 17,591 | 21,276 | 30,064 | 68,931 |
| Average age | 70.3 | 67.8 | 69.8 | 69.3 |
| Average monthly benefit | $\$ 1,307$ | $\$ 2,124$ | $\$ 1,141$ | $\$ 1,487$ |
| Average years of service | 17.6 | 23.5 | 16.9 | 19.1 |

Of all plan retirees at July $1,2004,56.8$ percent received annuities of $\$ 1,000$ or more per month. 9.8 percent receives less than $\$ 300$ per month. Of the retirees 15.4 percent are less than 60.0 years old and 53.4 percent are less than 75 .

One of the most critical factors bearing on retirement costs is that of changes in the average salary level of active participants. The following chart will show, for five fiscal years (fiscal year ending J une 30, 2004), the average salary level for state employees, for teachers, and for political subdivision employees other than teachers, and the average for all groups combined.

|  | $\mathbf{1 9 9 9 - 0 0}$ | $\mathbf{2 0 0 0} \mathbf{- 0 1}$ | $\mathbf{2 0 0 1 - 0 2}$ | $\mathbf{2 0 0 2 - 0 3}$ | $\mathbf{2 0 0 3 - 0 4}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| State employees | $\$ 31,380$ | $\$ 32,392$ | $\$ 33,746$ | $\$ 35,262$ | $\$ 35,461$ |
| Teachers | $\$ 35,356$ | $\$ 36,634$ | $\$ 39,302$ | $\$ 40,119$ | $\$ 40,253$ |
| Political subdivision employees | $\$ 25,924$ | $\$ 27,116$ | $\$ 28,470$ | $\$ 29,181$ | $\$ 29,775$ |
| All groups | $\$ 30,163$ | $\$ 31,281$ | $\$ 33,130$ | $\$ 33,998$ | $\$ 34,372$ |

## General Actuarial Information

## Financing Objective

The financing objective of the Arizona State Retirement System is to maintain reasonable stable contribution rates and to achieve an ultimate funded status of 100 percent. As of J une 30, 2004, the date of the most recent actuarial valuation, this funding level is 91.2 percent. When the present actuarial asset of $\$ 23.642$ billion is compared to the actuarial liabilities, the asset side of the actuarial balance sheet is below the amount of actuarial liabilities by the amount of $\$ 2.275$ billion.

A statutory change effective in 1998 requires that an actuarial valuation be performed only following even-numbered years, rather than annually. This biannual valuation recommends contribution rates for a two-year period. Effective July 1, 2005, additional statutory changes require annual valuations after fiscal year ended J une 30, 2007. The 2004 valuation determined a contribution rate of 7.75 percent, which would have applied for fiscal years ended J une 30, 2006 and J une 30, 2007. The legislature set the rates for these two years at 6.9 percent and 8.6 percent respectively, so that the same total contribution rate, 15.5 percent, would be paid during the biennium. The contribution rates recommended in the valuation for the fiscal year ended J une 30, 2004 will remain in effect through the fiscal year that ends J une 30, 2005. These rates are described below.

## Normal Costs and Required Contribution Rates

The Plan's normal cost for fiscal year (FY) 2003-2004 is 13.02 percent and for FY 2002-2003 is 13.03 percent. The normal cost represents the present value cost, expressed as a percentage of pay, of the current level of benefits provided by the Plan. The Plan has a positive unfunded actuarial accrued liability (an actuarial deficit), which is treated as a debit on the Plan's required contribution rate. Because of the actuarial deficit, the required contribution rate is higher than the normal cost. If the actuarial value of assets and liabilities was equal, the required contribution rate would be the same as the normal cost. Components of the normal cost are as follows:

| Retirement benefits | $9.73 \%$ |
| :--- | ---: |
| Health insurance premium supplement | 0.72 |
| Survivor benefits | 0.29 |
| Withdrawals | 0.83 |
| Long-term disability benefit | 0.33 |
| Total, normal cost | 11.90 |
| Amortization of the UAAL | $(1.50)$ |
| Required contribution rate for 2003/ 2004 | $10.40 \%$ |
| Shared by employee and employer |  |
| Required contribution rate for 2003/ 2004 | $10.40 \%$ |
| Shared by employee and employer | Divided by 2 |
| Required matching contribution rate | $5.20 \%$ |

# General Actuarial Information 

## Asset Valuation

The ASRS actuary determines the actuarial value of assets by recognizing investment gains and losses over a period of time. For gains and losses that occurred before fiscal 2002, the period is five years. For gains and losses that occurred in fiscal 2002, or later years, the period is ten years. The gradual recognition of investment gains and losses reduces volatility in the year-toyear level of contribution rates.

## Long-Term Disability Benefit

In addition to pension, health insurance, and survivor benefits, the ASRS also offers a long-term disability benefit.

Effective October 1, 1995, to comply with Internal Revenue Code requirements, liabilities associated with the long-term disability benefit were separated from the Plan. No assets were transferred to the LTD fund. Accordingly, the objectives of the funding method that the Board adopted for the LTD program have been:

- To produce a positive cash flow
- To maintain reasonably stable contribution rates
- To build up the assets gradually

The funding method splits the liability for all incurred LTD claims at the valuation date into Current Costs and Amortization components, as explained below:

## Current Cost Component

This component equals expected cash payments for benefits and expenses for the 12-month period following the valuation date, less expected income from LTD assets for that period.

## Amortization Component

This component equals an amortization payment for the excess of the total liability for LTD claims expected to be paid more than one year after the valuation date over the market value of LTD assets. The amortization period is a rolling 15 -year period.
The LTD contribution rate for fiscal year 2004 and fiscal year 2003 is 1.00 percent, shared equally by employees and employers. Of this amount, 0.74 percent funds current liabilities, and 0.26 percent amortizes the liabilities transferred from the Plan in 1995. The program's liabilities are scheduled to be amortized on a rolling 15-year period.

As of J une 30, 2004 and J une 30, 2003, LTD assets were $\$ 137.9$ million, $\$ 110.2$ million respectively. Benefit payments were 59.0 million for fiscal year 2004 and 54.7 million for fiscal year 2003.

## Excerpt from Table 17 Actuarial Valuation, J une 30, 2004

The Arizona State Retirement Plan makes provision for the retirement, disability, and death and survivor benefits to all employees of the State, instrumentalities of the State and certain political subdivisions. The major provisions of the Plan may be summarized as follows:

## Summary of Benefit Provisions

## A. RETIREMENT BENEFITS

1. Normal Retirement Date (the earliest of the following):
a) an employee's sixty-fifth birthday,
b) an employee's sixty-second birthday and completion of at least ten years of credited service, or
c) the first day immediately following the day that the sum of the employee's age and his years of total credited service equals eighty.
2. Monthly Life Annuity

The product of a benefit multiplier (as determined below) and the participant's best 36 -month average compensation (in last 120 months) multiplied by his or her years of total credited service.

Note: Members hired after the effective date of the adoption of the graded multiplier have a maximum benefit equal to 80 percent of their 36 -month final average earnings.

## Years of Credited Service Benefit Multiplier

| Less than 20 | $2.10 \%$ |
| :---: | :--- |
| 20.0 to 24.99 | $2.15 \%$ |
| 25.0 to 29.99 | $2.20 \%$ |
| 30 or more | $2.30 \%$ |

3. Normal Retirement Benefits

The sum of the monthly life annuity and any prior service benefits to which the employee was entitled under the System.
4. Early Retirement

Age 50 with 5 or more years of credited service.
5. Early Retirement Benefits

If not eligible for normal retirement and at least age 50 with 5 years of total credited service, normal retirement benefit earned to the date of retirement, reduced according to the following table:
Provided, however, that if the employee meets the Rule of 77 (but not the Rule of 80), the reduction will be 3 percent for each unit below 80.

| Years of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 |
| Se | 65 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $5-10$ | $35 \%$ | $40 \%$ | $45 \%$ | $50 \%$ | $55 \%$ | $60 \%$ | $65 \%$ | $70 \%$ | $75 \%$ | $80 \%$ | $85 \%$ | $88 \%$ | $91 \%$ | $94 \%$ | $97 \%$ |
| $10-19$ | $44 \%$ | $49 \%$ | $54 \%$ | $59 \%$ | $64 \%$ | $69 \%$ | $74 \%$ | $79 \%$ | $84 \%$ | $89 \%$ | $94 \%$ | $97 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |
| $100 \%$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $20+$ | $50 \%$ | $55 \%$ | $60 \%$ | $65 \%$ | $70 \%$ | $75 \%$ | $80 \%$ | $85 \%$ | $90 \%$ | $95 \%$ | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |
|  | $100 \%$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Summary of Benefit Provisions

6. Normal Form of Benefit

Straight life annuity payable monthly with benefits commencing on the day following the date of termination of employment.
7. Optional Forms:
a) joint and contingent annuity (with Pop-up) with either 100 percent, 66-2/3 percent or 50 percent of the reduced retirement income payable for the life of the contingent annuitant upon the death of the retiring participant,
b) period certain and life annuity with either five or ten years of payments guaranteed,
c) partial lump sum up to 36 months of benefit and an actuarially reduced remaining benefit, or
d) social security leveling option combined with any of the other forms of payment.
8. Minimum Benefit

The minimum monthly benefit payable to a retired member who is at least age 75 and who has 20 or more years of service is $\$ 600$.

## B. DISABILITY BENEFITS (for disability after J une 30, 1988)

1. Long Term Disability

Monthly benefit equal to two-thirds of monthly compensation, reduced by any social security disability or workers' compensation benefits, payable commencing six months after date of disability until the earlier of:
a) date of cessation of total disability, or
b) normal retirement date.

This benefit is paid by a separate LTD plan.
2. Disability Payments if Participant Remains Disabled Through Normal Retirement Date

Monthly benefit participant would have received if service had continued to normal retirement date assuming the participant's salary remained at the level it was at his or her date of disability, also provided that the amount of total credited service is limited to 30 years unless he or she had more than 30 years at date of disability.
3. The minimum monthly benefit payable to a disabled participant is $\$ 50.00$.

## C. DISABILITY BENEFITS (for disability before July 1, 1988)

1. Eligibility

## Summary of Benefit Provisions

Age 50 with 5 years of service.
2. Benefit Amount

A life annuity that can be provided by the employee's contribution account. Disability payments after normal or early retirement eligibility are reduced by the actuarial value of the disability payments made up to the date of normal or early retirement eligibility.

## D. PRE-RETIREMENT DEATH BENEFITS

1. Eligibility

Applicable if death occurs prior to retirement.
2. Benefit

Any one of the following, at the option of the beneficiary:
a) a lump sum equal to the sum of (i) and (ii):
i) two times participant's contributions to the plan, with interest, and
ii) the amount of the participant's employee and employer accounts, along with supplemental credits, if any, transferred from the System to the Plan, with interest
b) if (a) is greater than $\$ 5,000$, the beneficiary may elect to receive a monthly income for five or ten years certain and life thereafter which is actuarially equivalent to the amount in (a).
3. Death of an Active Participant After 15 Years of Credited Service or After Eligibility for Early Retirement

Beneficiary receives a benefit in the form of a survivor annuity equal to the benefit that would have been payable to the beneficiary if the participant had retired on the date of his or her death and elected to receive an annuity payable in the form of joint and 100 percent survivor with the beneficiary named as the joint pensioner.

## E. VESTING OF BENEFITS

1. Vesting

A participant is fully vested in his or her accrued benefit.
2. Benefits Upon Vesting

A fully vested participant is entitled to either:

## Summary of Benefit Provisions

a) the enhanced refund option, or
b) the retirement benefit payable at normal retirement earned to the date of participant's termination.
The enhanced refund option allows employees who terminate prior to eligibility for retirement to receive a refund of their employee contributions with interest. In addition, if an employee has at least five years of service, he or she is also entitled to a share of the employer contributions with interest. The share is 25 percent for employees with five years of service and increases 15 percent for each additional year of service up to a maximum of 100 percent for ten or more years of service. The Board reduced the interest rate to be credited on refund of contributions from 8 percent to 4 percent, effective J une 30, 2005.

## F. RETIREE HEALTH INSURANCE PREMIUM SUPPLEMENT

1. Eligibility

Retirement or disability after 5 years of credited service and covered by an employersponsored group insurance program for which the retired or disabled member must pay part of the cost. Employees who elect the enhanced refund option are not eligible for this benefit.
2. Benefit

The benefit is payable only with respect to allowable health insurance premiums for which the participant is responsible. The maximum benefits for participants with 10 or more years of service are:
a) with respect to premiums paid for retirees with member only coverage:
$\$ 150$ per month if the retiree is under age 65
$\$ 100$ per month if the retiree is 65 or over
b) with respect to premiums paid for retirees with family coverage:
$\$ 260$ per month if the member and dependents are under age 65
$\$ 170$ per month if the member and dependents are 65 or over
$\$ 215$ per month if the member is over age 65 and the dependent is under age 65
$\$ 215$ per month if the member is under age 65 and the dependent is over age 65
For employees with five to nine years of service the benefits are the same dollar amounts as above multiplied by a vesting fraction equal to 10 percent for each completed year of service (i.e., 50 percent to 90 percent).

## Summary of Benefit Provisions

See Section W for a discussion of the temporary benefit payable to retirees in "Rural" coverage areas.

## G. AUTOMATIC COST OF LIVING ADJ USTMENT BASED ON EXCESS INVESTMENT EARNINGS

1. Permanent Benefit Increase (PBI)

Retirees who have been retired one year and LTD members are eligible for a COLA up to a maximum aggregate of a 4 percent increase. The COLA is paid from a reserve of "Excess Investment Earnings." If there are no "Excess Investment Earnings" in reserve then no COLA is paid.
2. Permanent Benefit Increase Enhancement

Provides retired members with at least ten years of service who have been retired five or more years an additional benefit. For each complete 5 -year period the member has been retired an incremental benefit is paid if monies to pay the benefit are available. This benefit is funded by an interest credit of 8.0 percent of the reserve for future PBIs.

## H. EMPLOYEE AND EMPLOYER CONTRIBUTIONS

The contribution rate for the biennium beginning on July $1^{\text {st }}$ of the odd numbered year is based on the results of the most recent actuarial valuation as of the last day of the even numbered plan year preceding the biennium. Participants' contribution rate is equal to the required employer contribution rate. For the biennium J uly 1, 2003 to J une 30, 2005, the required contribution rate is 5.20 percent. For the biennium J uly 1, 2005 to J une 30, 2007, the actuarially determined contribution rate is 7.75 percent. By legislation the contribution rates will be 6.90 percent for FYE J une 30, 2006 and 8.60 percent for FYE J une 30, 2007.

## I. LEGISLATED PLAN CHANGES ENACTED BY THE 1989 LEGISLATURE OF THE STATE OF ARIZONA

1. Projected United Credit (PUC) Funding Method

Beginning with the J une 30, 1989 actuarial valuation, the total employee and employer contributions payable beginning July 1, 1990 shall be determined using the Projected Unit-Credit (PUC) funding method.
2. $\$ 12,000$ Minimum Average Compensation for Current Retirees

Recalculation of the retirement benefit for all plan members retired before J une 30, 1989 who had 10 years of credited service using a minimum average compensation of one thousand dollars per month.

## Summary of Benefit Provisions

## 3. 2.0 Percent Ad Hoc COLAs

Effective July 1, 1989, all members retired on or before J une 30, 1988 shall receive a 2.0 percent permanent benefit increase to their December 31, 1988 base benefit.

Effective July 1, 1990, all members retired on ore before J une 30,1989 shall receive a 2.0 percent permanent benefit increase to their J une 30, 1990 base benefit.
4. Early Retirement Window

During the period of May 15, 1989 through November 14, 1989 a member who is eligible for either Normal Retirement or Early Retirement with age plus credited service at least equal to 80, may retire and receive a benefit calculated using a 2.2 percent multiplier instead of the 2.0 percent multiplier in effect at that time.
5. 3.0 Percent Tax Equity Allowance

Retroactive to the later of J anuary 1, 1989 or the date payments commence, each member retiring on or before September 14, 1989 shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0 percent in his or her J anuary 1, 1989 base benefit.

## J. LEGISLATED PLAN CHANGES ENACTED BY THE 1990 LEGISLATURE OF THE STATE OF ARIZONA

1. Rule of 82

Effective May 1, 1990, the number of points (sum of member's age and years of service) required to be eligible for normal retirement shall be reduced from 85 to 82 . Also, the early retirement reduction factor for employees with 77 or more points but less than 82 points shall be 3 percent for each point or fraction thereof less than 82.
2. 3.0 Percent Tax Equity Allowance

Each member who retires between September 15, 1989 and September 14, 1990 shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0 percent in his or her base benefit, retroactive to the date of retirement.
3. Graded Vesting for Health Insurance Premium Supplement

The Health Insurance Premium Supplement is extended to those qualifying members with between five and nine years of service. The member will be eligible to receive 10 percent of the benefit for each completed year of service (i.e., 50 percent to 90 percent).

## Summary of Benefit Provisions

## K. LEGISLATED PLAN CHANGES ENACTED BY THE 1991 LEGISLATURE OF THE STATE OF ARIZONA

1. 3.0 Percent Tax Equity Allowance

Each member who retires between September 15, 1990 and September 14, 1991 shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0 percent in his or her base benefit, retroactive to the date of retirement.
2. Recalculation of Retiree Benefits Using 2.0 Percent Benefit Multiplier

Each retired member with at least 10 years of service who retired prior to J une 30, 1985 shall have his or her benefit recomputed. The recomputed benefit shall be equal to 2 percent times final average earnings times credited service plus an additional $\$ 2$ for each year of service. The retired member will receive the larger of the recalculated benefit or his/ her current benefit. This increase is effective October 1, 1991.
3. 2.3 Percent Ad Hoc Increase

Effective July 1, 1991 all members retired on or before J une 30, 1990 shall receive a 2.3 percent permanent benefit increase in their J une 30, 1991 base benefit.
4. Rule of 80

Effective July 1, 1992, the number of points (sum of member's age and years of service) required to be eligible for normal retirement shall be reduced from 82 to 80. (For continuation purposes this legislation is not reflected until the 1993/94 fiscal year).
5. Pop-up Option

A pop-up option is added for retiring members who first participate in the Plan on or after December 31, 1991.

## L. LEGISLATED PLAN CHANGES ENACTED BY THE 1992 LEGISLATURE OF THE STATE OF ARIZONA

1. 3.0 Percent Tax Equity Allowance

Each member who retires between September 15, 1991 and September 14, 1992 shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0 percent in his or her base benefit, retroactive to the date of retirement.
2. Minimum Retiree Benefit

Each retiree of the Arizona State Retirement Plan who is at least age 75 on December 31, 1992 and who had at least ten years of service upon retirement from the plan ten years of service upon retirement from the plan shall be eligible for a minimum benefit. If the eligible retiree had at least ten years of service but less than fifteen years, his minimum benefit is $\$ 350$ a month. If the eligible retiree had at least fifteen years of

## Summary of Benefit Provisions

service but less than twenty, his minimum benefit is $\$ 500$. If the eligible retiree had at least twenty years of service his minimum benefit is $\$ 600$. The minimum benefit shall be compared to the retiree's current benefit (including all ad hoc increases).
3. 5 Percent Ad Hoc Increase

Effective November 1, 1992 all members retired on or before October 31, 1992 shall receive a 5 percent permanent benefit increase in their October 31, 1992 benefit.
4. Forfeited Service Repurchase

Any present active member who has previously forfeited service has until December 31, 1994 to repurchase the forfeited service by paying the Plan the employee and employer contributions (accumulated with interest) which would have been contributed during the member's period of forfeited service.
5. Repurchase of Service Due to Reduction in Force

Any present active member who was terminated prior to December 31, 1992 as a result of a required reduction in force may purchase the credited service for the following period of unemployment if the member had five or more years of service at the time of termination and resumed employment with a participating employer within two years of termination. The cost of the repurchase is the total of the employee and employer contribution (accumulated with interest) which would have been contributed during the member's period of unemployment.
6. Change in Section 38-781. 05 Funding Method

Section 38-781.05 of the plan was amended so that the funding period for the Plan would continue to be the period between valuation and J une 30, 2003 as long as the Plan has a negative Unfunded Actuarial Accrued Liability. If the Plan were to have a positive UAAL, then the old funding mechanism would apply.

## M. LEGISLATED PLAN CHANGES ENACTED BY THE 1993 LEGISLATURE OF THE STATE OF ARIZONA

1. No benefit changes were passed by the 1993 Legislature. However, the Legislature passed legislation to reduce the required contribution rate of 4.09 percent down to 3.14 percent.

## N. LEGISLATED PLAN CHANGES ENACTED BY THE 1994 LEGISLATURE OF THE STATE OF ARIZONA

1. Minimum LTD Benefit

Each member on long term disability will receive a minimum monthly benefit of $\$ 50$.

## Summary of Benefit Provisions

2. Minimum Retiree Benefit

Each retiree of the Arizona State Retirement Plan who is at least age 75 and who had 20 or more years of service at retirement will receive a minimum monthly benefit of $\$ 600$.
3. Pop-up Benefit

Members who retired prior to J anuary 1, 1992 and who elected a J oint and Survivor option shall receive a "Pop-up" in their retirement income if their beneficiary predeceases them.
4. Excess Investment Earnings COLA

Retirees at least age 55 who have been retired at least one year and members on long-term disability are eligible to receive a cost-of-living adjustment equal to one-half the increase in CPI for the prior calendar year. The COLA will be paid from a reserve of Excess Investment Earnings. If there are no Excess Investment Earnings in reserve, no COLA will be granted.
5. Change in Section 38-737 Funding Period

Section 38-737 was amended to change the funding period of the Plan to a rolling 30 -year period. The change is to be phased-in over the next nineteen years. If the Plan ceases to have a surplus, the funding period would immediately go to 30-years.

## O. LEGISLATED PLAN CHANGES ENACTED BY THE 1995 LEGISLATURE OF THE STATE OF ARIZONA

1. Change in Maximum Increase Provided by Excess Investment Earnings COLA

The maximum COLA payable from Excess Investment Earnings was increased from 50 percent to 100 percent of the increase in the CPI.
2. Removal of LTD Benefit from the Plan

The Legislature established a new LTD program and removed the LTD benefit from the Plan. Liabilities for current LTD recipients will be transferred to the new LTD program effective October 1, 1995.
3. Creation of Separate Account for the Health Premium Supplement

The Health Premium Supplement benefit is to be separated into a 401(h) account. The assets and liabilities associated with the Health Premium Supplement will be accounted for separately.

## Summary of Benefit Provisions

## P. LEGISLATED PLAN CHANGES ENACTED BY THE 1996 LEGISLATURE OF THE STATE OF ARIZONA

1. No material changes.

## Q. LEGISLATED PLAN CHANGES ENACTED BY THE 1997 LEGISLATURE OF THE STATE OF ARIZONA

1. Creation of family Health Supplement. Allows unused portion of the Health Supplement of a member or dependent to be used to pay the other recipient's health insurance premium.
2. The calculation methodology for the Excess Investment Earnings COLA was modified.
3. The contribution rate will be determined on a biennial cycle beginning with the 2000 fiscal year.
R. LEGISLATED PLAN CHANGES ENACTED BY THE 1998 LEGISLATURE OF THE STATE OF ARIZONA
4. No material changes.

## S. LEGISLATED PLAN CHANGES ENACTED BY THE 1999 LEGISLATURE OF THE STATE OF ARIZONA

1. Enhanced Refund Option

Employees who terminate prior to eligibility for retirement may elect to receive a refund of their employee contributions with interest. If the employee has at least five years of service, the employee is also entitled to a share of the employer contributions with interest. The share is 50 percent with five years of service and increases 10 percent for each additional year of service to a maximum of 100 percent for ten or more years of service.
2. Benefit Multiplier Increased to 2.1 percent

The benefit multiplier increased from 2.0 percent to 2.1 percent effective J uly 1, 2000.
3. 5 Percent Ad Hoc Increase

A 5 percent retiree ad hoc increase for retirees and beneficiaries effective July 1, 2000.

## Summary of Benefit Provisions

4. Increase in Maximum Service While on LTD

Increase in the maximum amount of service that may be accrued while on LTD from 25 to 30.
5. Changes in Permanent Benefit Increase COLA
a) The maximum aggregate COLA was increased from 3 percent to 4 percent.
b) The threshold for determining "Excess Earnings" was lowered from 9 percent to 8 percent.
c) The limitation of the COLA to the increase in the CPI was removed.

## T. LEGISLATED PLAN CHANGES ENACTED BY THE 2000 LEGISLATURE OF THE STATE OF ARIZONA

1. The age restriction on the Permanent Benefit Increase was eliminated.

## U. LEGISLATED PLAN CHANGES ENACTED BY THE 2001 LEGISLATURE OF THE STATE OF ARIZONA

1. Health Insurance Premium Benefit Increase

Increases the health insurance premium benefit for eligible members as follows:

- Benefit for Medicare eligible member with member only coverage increased from \$65 to \$100
- Benefit for non-Medicare eligible member with member only coverage increased from \$95 to \$150
- Benefit for family coverage where member and dependent are non-Medicare eligible increased from \$175 to \$260
- Benefit for family coverage where member and dependent are Medicare eligible increased from \$115 to \$170
- Benefit for family coverage where member is Medicare eligible and dependent is non-Medicare eligible increased from $\$ 145$ to $\$ 215$
- Benefit for family coverage where member is non-Medicare eligible and dependent is Medicare eligible increased from \$145 to \$215


## Summary of Benefit Provisions

## 2. Graded Multiplier

Provides a graded multiplier in the retirement benefit formula, increasing with years of service according to the following:

| 0.00 to 19.99 Years of Service | $2.10 \%$ |
| :--- | :--- |
| 20.00 to 24.99 Years of Service | $2.15 \%$ |
| 25.00 to 29.99 Years of Service | $2.20 \%$ |
| 30.00 or More Years of Service | $2.30 \%$ |

3. Employer Option Service Purchase Incentive

Permits an employer to offer a member who is eligible to retire under the Rule of 80 a contract to work an additional three years of employment. No contributions are made to ASRS during the contract. If the employee completes the contract, then they receive an additional three years of service with the option to purchase three more years of service.
4. Permanent Benefit Increase Enhancement

Provides that interest at a rate of $8 \%$ be credited on the funds held in reserve for the permanent benefit increase (PBI). This interest will then be used to fund an additional increase for retirees who have at least 10 years of service and who have been retired at least five years. The increase is incremental for each five years of retirement.
5. Temporary Rural Health Insurance Premium Benefit In addition to the premium benefit paid to ASRS retired and disabled members, the Legislature granted a temporary benefit for retired and disabled members who live in areas of the state not served by a managed care program (HMO) and who have 10 years of credited service in the following amounts:

- Benefit for Medicare eligible member with member only coverage of $\$ 170$ per month
- Benefit for non-Medicare eligible member with member only coverage of $\$ 300$ per month
- Benefit for Medicare eligible members with Medicare eligible dependent with family coverage of $\$ 350$ per month
- Benefit for non-Medicare eligible members with non-Medicare eligible dependent with family coverage of $\$ 600$ per month
- Benefit for Medicare eligible members with non-Medicare eligible dependent with family coverage of $\$ 470$ per month
- Benefit for non-Medicare eligible members with Medicare eligible dependent with family coverage of $\$ 470$ per month


## Summary of Benefit Provisions

6. Partial Lump Sum Option

Allows a retiring member to receive a portion of his benefit in a lump sum payment. The lump sum is limited to a maximum of 36 monthly payments. The member's monthly annuity is actuarially reduced to reflect the lump sum payment.
7. Maximum Benefit

Members who are hired after the date the graded multiplier became law have a maximum benefit equal to 80 percent of the member's 36 -month final average earnings.

## V. LEGISLATED PLAN CHANGES ENACTED BY THE 2002 LEGISLATURE OF THE STATE OF ARIZONA

1. No material changes.

## W. LEGISLATED PLAN CHANGES ENACTED BY THE 2003 LEGISLATURE OF THE STATE OF ARIZONA

1. Temporary Rural Health Insurance Premium Benefit

The Legislature extended the additional temporary Rural Health Insurance Subsidy for two years, beginning July 1, 2003 and ending J une 30, 2005. The full benefit is provided to retired and disabled members who live in areas of the state not served by a Health Maintenance Organization (HMO) and who have 10 years of credited service. The Rural Health Insurance Subsidy now requires "minimum out-of-pocket" payments ranging from $\$ 100$ to $\$ 425$ per month, depending on the plan and coverage selected.

| Rural Health Insurance <br> Subsidy | Insurance Coverage Without <br> Medicare Parts A \& B |  | Insurance Coverage With <br> Medicare Parts A \& B |  |
| :--- | :---: | :---: | :---: | :---: |
| Uuly 1, 2003-J une 30, 2005 | Single | Family | Single | Family |
| Required Minimum Out-of- <br> Pocket Payment | $\$ 125$ | $\$ 425$ | $\$ 100$ | $\$ 200$ |
| Rural Health Insurance <br> Subsidy (Maximums) | Up to $\$ 300$ | Up to $\$ 600$ | Up to $\$ 170$ | Up to $\$ 350$ |

*Combination plans that include Medicare eligible and non-Medicare eligible retiree and dependent coverage require a $\$ 400$ monthly out-of-pocket payment.

## Summary of Benefit Provisions

## X. LEGISLATED PLAN CHANGES ENACTED BY THE 2004 LEGISLATURE OF THE STATE OF ARIZONA

1. Service Purchase Program

The Arizona Legislature revised the method of calculating the cost of service purchases, so that future purchases would be made at true actuarial present value.
2. Early Retirement Incentive Programs

The Arizona Legislature provided that employers that participate in ASRS and offer early retirement incentives to their employees must notify ASRS of the incentives. ASRS will determine the cost of the incentives and the employers will pay the cost.
3. Long-Term Disability Program

The Arizona Legislature revised and clarified LTD provisions so that disabled members will be required to participate in rehabilitation programs and to pursue obtaining Social Security disability benefits. In addition, the legislation limited the receipt of disability benefits on the basis of a member's "own occupation" to 24 months, rather than to 24 consecutive months.

# Statement of Actuarial Methods and Assumptions Used in Determining Cost <br> (Adopted by Board Action on November 21, 2003) <br> Effective as of June 30, 2003 

## A. ACTUARIAL ASSUMPTIONS

1. Investment Yield Rate
$8 \%$ per annum, compounded annually

## 2. Mortality

a) Pre-retirement

1994 GAM - Static Table, Projected to 2005 with Projected Scale AA, with no age setback. Rates at representative ages are shown below.

RATES OF MORTALITY (ACTIVE)

| Age | Male Participants | Female Participants |
| :---: | :---: | :---: |
| 20 | 0.000411 | 0.000238 |
| 25 | 0.000592 | 0.000249 |
| 30 | 0.000758 | 0.000314 |
| 35 | 0.000805 | 0.000423 |
| 40 | 0.000981 | 0.000600 |
| 45 | 0.001366 | 0.000815 |
| 50 | 0.002112 | 0.001183 |
| 55 | 0.003583 | 0.002100 |
| 60 | 0.006679 | 0.004201 |
| 65 | 0.012447 | 0.008173 |
| 70 | 0.020095 | 0.012993 |

b) Post-retirement

Non Disabled rates are based on the 1994
GAM - Static Table, Projected to 2005 with Projection Scale AA with no age setback. Disabled rates are based on the experience of other large public sector retirement systems and ASRS' own experience. Rates at representative ages are shown below:

# Statement of Actuarial Methods and Assumptions <br> Used in Determining Cost <br> (Adopted by Board Action on November 2i, 2003) <br> Effective as of June 30, 2003 

RATES OF MORTALITY

|  | Non-Disabled | Disabled | Non-Disabled | Disabled |
| :---: | :---: | :---: | :---: | :---: |
| Age | Male Participants |  | Female Participants |  |
|  |  |  |  |  |
| 20 | 0.000411 | 0.034940 | 0.000238 | 0.026939 |
| 25 | 0.000592 | 0.038887 | 0.000249 | 0.027444 |
| 30 | 0.000758 | 0.051102 | 0.000314 | 0.038302 |
| 35 | 0.000805 | 0.063544 | 0.000423 | 0.053927 |
| 40 | 0.000981 | 0.058807 | 0.000600 | 0.056984 |
| 45 | 0.001366 | 0.040921 | 0.000815 | 0.037586 |
| 50 | 0.002112 | 0.034742 | 0.001183 | 0.025696 |
| 55 | 0.003583 | 0.031356 | 0.002100 | 0.022836 |
| 60 | 0.006679 | 0.031109 | 0.004201 | 0.018029 |
| 65 | 0.012447 | 0.030861 | 0.008173 | 0.013934 |
| 70 | 0.020095 | 0.033730 | 0.012993 | 0.012993 |

3. Disability Rates Sample rates are shown below.

RATES OF DECREMENT DUE TO DISABILITY

| Age | Male Participants | Female Participants |
| :---: | :---: | :---: |
| 20 | 0.000575 | 0.000734 |
| 25 | 0.000638 | 0.000804 |
| 30 | 0.000730 | 0.001014 |
| 35 | 0.001096 | 0.001563 |
| 40 | 0.002111 | 0.002111 |
| 45 | 0.003358 | 0.003171 |
| 50 | 0.005128 | 0.004865 |
| 55 | 0.007715 | 0.007022 |
| 60 | 0.011992 | 0.010913 |

## Statement of Actuarial Methods and Assumptions Used in Determining Cost <br> (Adopted by Board Action on November 21, 2003) <br> Effective as of June 30, 2003

4. Withdrawal Rates
(for causes other than death, disability, or retirement)

Select and ultimate withdrawal rates are used. Rates at representative ages are shown below.

RATES OF DECREMENT DUE TO WITHDRAWAL
Years of Service

| Age | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male Employees |  |  |  |  |  |  |  |  |  |  |  |
| 20 | 0.3731 | 0.3642 | 0.2895 | 0.2545 | 0.1508 | 0.1364 | 0.0910 | 0.0840 | 0.0710 | 0.0760 | 0.1277 |
| 30 | 0.2267 | 0.2055 | 0.1612 | 0.1547 | 0.0917 | 0.0943 | 0.0710 | 0.0680 | 0.0510 | 0.0510 | 0.0565 |
| 40 | 0.1931 | 0.1698 | 0.1011 | 0.1015 | 0.0601 | 0.0665 | 0.0550 | 0.0540 | 0.0400 | 0.0380 | 0.0227 |
| 50 | 0.1892 | 0.1692 | 0.0904 | 0.0820 | 0.0458 | 0.0502 | 0.0460 | 0.0350 | 0.0340 | 0.0310 | 0.0155 |
| 60 | 0.2219 | 0.1824 | 0.0963 | 0.0848 | 0.0445 | 0.0371 | 0.0330 | 0.0330 | 0.0260 | 0.0240 | 0.0108 |
| 70 | 0.2604 | 0.2282 | 0.1320 | 0.1229 | 0.0616 | 0.0549 | 0.0360 | 0.0310 | 0.0220 | 0.0200 | 0.0180 |
| Female Employees |  |  |  |  |  |  |  |  |  |  |  |
| 20 | 0.3316 | 0.3053 | 0.2640 | 0.2596 | 0.2101 | 0.2077 | 0.1680 | 0.1405 | 0.1380 | 0.1285 | 0.2148 |
| 30 | 0.2015 | 0.1937 | 0.1652 | 0.1456 | 0.1094 | 0.1089 | 0.0930 | 0.0813 | 0.0811 | 0.0760 | 0.0821 |
| 40 | 0.1720 | 0.1693 | 0.1174 | 0.0930 | 0.0666 | 0.0661 | 0.0563 | 0.0482 | 0.0461 | 0.0417 | 0.0239 |
| 50 | 0.1698 | 0.1457 | 0.0927 | 0.0722 | 0.0528 | 0.0522 | 0.0426 | 0.0335 | 0.0287 | 0.0227 | 0.0167 |
| 60 | 0.1805 | 0.1432 | 0.0939 | 0.0731 | 0.0508 | 0.0466 | 0.0357 | 0.0275 | 0.0237 | 0.0190 | 0.0088 |
| 70 | 0.1916 | 0.1666 | 0.1199 | 0.0955 | 0.0622 | 0.0508 | 0.0363 | 0.0293 | 0.0311 | 0.0358 | 0.0144 |

## 5. Salary Scales

Years of Service
(1)
1
2
3
4
5
6
7
8
9
10
11 to 19
20 or more

Merit Component
(2)

| $5.00 \%$ | $9.50 \%$ |
| :--- | :--- |
| $4.00 \%$ | $8.50 \%$ |
| $2.50 \%$ | $7.00 \%$ |
| $1.80 \%$ | $6.30 \%$ |
| $1.40 \%$ | $5.90 \%$ |
| $1.25 \%$ | $5.75 \%$ |
| $1.00 \%$ | $5.50 \%$ |
| $0.80 \%$ | $5.30 \%$ |
| $0.75 \%$ | $5.25 \%$ |
| $0.50 \%$ | $5.00 \%$ |
| $0.25 \%$ | $4.75 \%$ |
| $0.00 \%$ | $4.50 \%$ |

*Total salary increase rate $=$ inflation (or growth) rate $(4.25 \%)+$ productivity increase rate $(0.25 \%)+$ merit component

# Statement of Actuarial Methods and Assumptions Used in Determining Cost <br> (Adopted by Board Action on November 2i, 2003) <br> Effective as of June 30, 2003 

## 6. Retirement Age:

Select and ultimate retirement rates are used. Rates at representative ages and years of service are shown below:

Rates of Decrement Due to Retirement

Years of Service

| Age | $\mathbf{0 - 4}$ | $\mathbf{5 - 9}$ | $\mathbf{1 0 - 1 4}$ | $\mathbf{1 5 - 1 9}$ | $\mathbf{2 0 - 2 4}$ | $\mathbf{2 5}$ | $\mathbf{2 6 - 2 9}$ | $\mathbf{3 0}$ | $\mathbf{3 1 +}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50 | 0.0000 | 0.0200 | 0.0300 | 0.0350 | 0.0400 | 0.0700 | 0.0625 | 0.1750 | 0.1250 |
| 55 | 0.0000 | 0.0200 | 0.0300 | 0.0350 | 0.0600 | 0.1625 | 0.1300 | 0.1750 | 0.1250 |
| 60 | 0.0000 | 0.0400 | 0.0700 | 0.0900 | 0.2375 | 0.2675 | 0.2000 | 0.3500 | 0.3000 |
| 62 | 0.0000 | 0.0500 | 0.3000 | 0.3400 | 0.4000 | 0.4300 | 0.4000 | 0.5500 | 0.5000 |
| 65 | 0.0300 | 0.1000 | 0.3000 | 0.3000 | 0.3000 | 0.3300 | 0.3000 | 0.3500 | 0.3000 |
| $66+$ | 0.0300 | 0.1000 | 0.3000 | 0.3000 | 0.3000 | 0.3300 | 0.3000 | 0.3500 | 0.3000 |

## 7. Future Retirees Eligible for the Health Insurance Premium Supplement

It is assumed that 75 percent of future retirees will be eligible to receive the postretirement health insurance premium supplement and that 60 percent of those retirees will be eligible for the dependent premium supplement.

## 8. Proportion of Vested Termination Members Who Will Not Withdraw Their Contributions

It is assumed that members who terminate with 5 or more years of service (but prior to eligibility for retirement) will choose to receive the enhanced refund option if the value of the enhanced refund option is greater than the present value of the deferred benefit, otherwise the employees are assumed to elect to receive the deferred benefit. If the employee is assumed to elect the enhanced refund option, then it is also assumed that the employee forfeits the supplement.
Employees who terminate with less than five years of service are assumed to withdraw their employee contributions with interest.
Employees who terminate eligible for early retirement are assumed to commence payments.

# Statement of Actuarial Methods and Assumptions Used in Determining Cost <br> (Adopted by Board Action on November 21, 2003) Effective as of June 30, 2003 

## 9. Service Purchase

Members can buy service at average normal cost rate, although members who buy service are above average in age. We assume a load of 2.15 percent on years of credit service earned per year.

## B. Actuarial Value of Assets

The actuarial value of assets is equal to the market value of assets less a ten-year phasein (five-year phase-in prior to J une 30, 2002) of the Excess (Shortfall) between expected investment return and actual income.

## C. Actuarial Funding Method

Costs are determined under the projected unit-credit method. The unfunded actuarial accrued liability is funded on a level dollar basis over the period of time described in Section 38-737. For the J une 30, 2003 actuarial valuation, the period is 30 years.

## Schedule of Plan Active Member Valuation Data

Last 6 Years

| Valuation As of <br> June 30 | Number | Contributing Active Members |  |  |
| :---: | :---: | ---: | ---: | ---: |
| Annual Payroll | Annual <br> Average Pay | Increase in <br> Average Pay |  |  |
| 1999 | 176,368 | $\$ 5,487,933,600$ | $\$ 31,116$ | $3.0 \%$ |
| 2000 | 183,924 | $5,750,294,662$ | 31,265 | 0.0 |
| 2001 | 191,252 | $6,356,698,800$ | 33,237 | 3.7 |
| 2002 | 198,970 | $6,989,339,000$ | 35,128 | 5.7 |
| 2003 | 202,398 | $7,296,827,756$ | 36,052 | 2.6 |
| 2004 | 205,482 | $7,485,590,038$ | 36,429 | 1.0 |

## Schedule of Plan Retirees Added To and Removed From Rolls

Last 6 Years

| Year | Retirants and <br> Beneficiaries <br> Ended | Retirants and <br> Beneficiaries <br> Removed <br> from Rolls | Rolls | Retirants and <br> Beneficiaries <br> End of Year | Percentage <br> Increase <br> in Annual <br> Benefits |
| :---: | ---: | ---: | ---: | ---: | ---: | | Average |
| ---: |
| Benefit |

## Schedule of Unfunded (Over) Accrued Liabilities - Plan

Last 10 Years

| Year <br> Ended <br> June <br> 30 | Aggregate Accrued Liabilities Plan | Actuarial Value of Net Plan Assets | Assets as a \% of Accrued Liabilities Plan | Unfunded (over) Accrued Liabilities Plan (UAL) | Active Member Payroll | UAL as a \% of Active Member Payroll |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1995 | \$10,303, 617,000 | \$11,520,933, 300 | 112\% | (\$1,217, 316, 300) | \$4,228, 264, 800 | (28.8\%) |
| 1996 | 11,110,688,400 | 12,578,870,100 | 113 | $(1,468,181,700)$ | 4,465,496,000 | (32.9) |
| 1997 | $12,385,445,400$ | 14,169,191,400 | 114 | $(1,783,746,000)$ | 4,674,843,500 | (38.2) |
| 1998 | 13,638,356,506 | 16,168,476,400 | 119 | $(2,530,119,894)$ | 4,968, 476, 529 | (50.9) |
| 1999 | 16,121, 899, 529 | 18, 760, 959, 854 | 116 | $(2,639,060,325)$ | 5,487, 933,600 | (48.1) |
| 2000 | 17, 548, 523, 131 | 21,126, 877,491 | 120 | $(3,578,354,360)$ | 5,750, 294,662 | (62.2) |
| 2001 | 20,268,514,444 | 22,855,143,539 | 113 | $(2,586,629,095)$ | $6,356,698,800$ | (40.7) |
| 2002 | $22,586,920,751$ | 23,623, 015,969 | 105 | $(1,036,095,218)$ | 6,989, 339,000 | (14.8) |
| 2003 | $24,303,639,447$ | 23,516,898,511 | 97 | 786, 740,936 | 7,296,827,756 | 10.8 |
| 2004 | $25,918,329,505$ | 23,642,904,763 | 91 | 2,275, 424,742 | 7,485,590,038 | 30.4 |

## Solvency Test

Last 10 Years
Aggregate Accrued Liabilities for

| Year <br> Ended J une 30 | (1) | (3) |  |  | Portion of Accrued |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Active <br> Member Contributions | Retirees and Beneficiaries | Active <br> Members <br> (Employer <br> Financed <br> Portion) | Net Assets Available for Benefits | Porti <br> Liabi by <br> Availab <br> (1) | of Ac ies Co Net Ass efor (2) | rued <br> ered ts nefits (3) |
| 1995 | \$2,465, 878,000 | \$4,257,018,600 | \$3,580,720,400 | \$11,520,933,300 | 100\% | 100\% | 134.0\% |
| 1996 | 2,422,775,000 | 4,740,637,300 | 3,947,275,600 | 12,578,870,100 | 100 | 100 | 137.2 |
| 1997 | 2,442,205,300 | 5,122,420,700 | 4,820,819,400 | 14,169, 191,400 | 100 | 100 | 137.0 |
| 1998 | 2,571,206,900 | 5,530,497,100 | 5,536,652,506 | 16,168,476,400 | 100 | 100 | 145.7 |
| 1999 | 2,679,011,640 | 6,454,089,795 | 6,988,798,093 | 18,760,959,854 | 100 | 100 | 137.8 |
| 2000 | 2,758,428,341 | 8,817,967,086 | 7,233,553,039 | 21,126,877,491 | 100 | 100 | 132.0 |
| 2001 | 2,876,445,119 | 9,589,562,912 | 7,427,960,808 | 22,855,143,539 | 100 | 100 | 139.8 |
| 2002 | 3,046,008,125 | 10,597,364,389 | 8,943,548,237 | 23,623,015,969 | 100 | 100 | 112.0 |
| 2003 | 3,110,690,039 | 11,428,652,014 | 9,764,297,394 | 23,516,898,511 | 100 | 100 | 91.9 |
| 2004 | 3,407,611,954 | 12,421,950,646 | 10,088,766,905 | 23,642,904,763 | 100 | 100 | 77.4 |

Schedule of Recommended vs. Actual Plan Contributions
Last 10 Years

| Year Ended <br> June 30 | Active Member <br> Payroll | Employee <br> Contributions | Employer Retirement <br> Contribution Rate - Actual | Actuary Recommended <br> Contribution |
| :---: | ---: | ---: | :---: | :---: |
| 1995 | $\$ 4,432,000,000$ | $\$ 158,559,931$ | $3.75 \%$ |  |
| 1996 | $4,632,000,000$ | $150,854,417 *$ | 3.36 | $3.75 \%$ |
| 1997 | $4,836,000,000$ | $150,500,186 *$ | 3.20 | 3.95 |
| 1998 | $5,164,000,000$ | $152,375,838 *$ | 3.05 | 3.20 |
| 1999 | $5,488,000,000$ | $152,916,525$ | 2.85 | 3.05 |
| 2000 | $5,750,000,000$ | $124,930,657$ | 2.17 | 2.85 |
| 2001 | $6,564,000,000$ | $133,504,099$ | 2.00 | 2.17 |
| 2002 | $6,989,000,000$ | $135,274,945$ | 2.00 | 2.00 |
| 2003 | $7,297,000,000$ | $142,356,325$ | 5.20 | 2.00 |
| 2004 | $7,486,000,000$ | $377,436,100$ | 5.20 | 5.20 |

[^1]
## Analysis of Financial Experience for the Plan

Last 10 Years
(In Millions)

| Year <br> Ended <br> June <br> u0 | Unfunded <br> Actuarial <br> Liability <br> (UAAL), <br> Prior Year | Normal <br> Cost for <br> the Year | Contribu- <br> tions for <br> the Year | Interest <br> at 8\% on <br> UAAL | Normal <br> Cost | On <br> Contri- <br> butions | Total | Expected <br> UAAL | Actual <br> UAAL | (Loss) for <br> the Year |
| :---: | :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1995 | $(\$ 872.43)$ | $\$ 448.92$ | $(\$ 324.93)$ | $(\$ 69.79)$ | $\$ 35.91$ | $(\$ 13.00)$ | $(\$ 46.88)$ | $(\$ 795.31)$ | $(\$ 1,217.32)$ | $\$ 422.01$ |
| 1996 | $(1,217.32)$ | 460.39 | $(299.72)$ | $(97.39)$ | 36.83 | $(11.99)$ | $(72.54)$ | $(1,129.19)$ | $(1,468.18)$ | 338.99 |
| 1997 | $(1,468.18)$ | 482.42 | $(309.39)$ | $(117.45)$ | 38.59 | $(12.38)$ | $(91.24)$ | $(1,386.39)$ | $(1,783.75)$ | 397.36 |
| 1998 | $(1,783.75)$ | 506.17 | $(321.35)$ | $(142.70)$ | 40.49 | $(12.85)$ | $(115.06)$ | $(1,713.98)$ | $(2,530.12)$ | 816.14 |
| 1999 | $(2,530.12)$ | 540.46 | $(347.97)$ | $(202.41)$ | 43.24 | $(13.92)$ | $(173.09)$ | $(2,510.72)$ | $(2,639.06)$ | 128.34 |
| 2000 | $(2,639.06)$ | 601.15 | $(283.77)$ | $(211.12)$ | 48.09 | $(11.35)$ | $(174.38)$ | $(2,496.06)$ | $(3,578.35)$ | $1,082.29$ |
| 2001 | $(3,578.35)$ | 631.66 | $(367.20)$ | $(286.27)$ | 50.53 | $(14.69)$ | $(250.42)$ | $(3,564.30)$ | $(2,586.63)$ | $(977.67)$ |
| 2002 | $(2,586.63)$ | 746.91 | $(321.78)$ | $(206.93)$ | 59.75 | $(12.87)$ | $(160.05)$ | $(2,321.54)$ | $(1,036.10)$ | $(1,285.44)$ |
| 2003 | $(1,036.10)$ | 831.73 | $(375.52)$ | $(82.89)$ | 66.54 | $(15.02)$ | $(31.37)$ | $(611.26)$ | 786.74 | $(1,397.97)$ |
| 2004 | 786.74 | 950.78 | $(865.97)$ | 62.94 | 76.06 | $(34.64)$ | 104.36 | 975.91 | $2,275.42$ | $(1,299.51)$ |

## Statistical Section



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## List of Employers

## Public Schools

Agua Fria UHS Dist. 216
Aguila Elem. Dist. 63
Ajo Unified Dist. 15
Alhambra Elem. Dist. 68
Alpine Elem. Dist. 7
Altar Valley Dist. 51
Amphitheater Unified Dist. 10
Antelope UHS Dist. 50
Apache Elem. Dist. 42
Apache J unction Unified Dist. 43
Arlington Elem. Dist. 47
Ash Creek Elem. Dist. 53
Ash Fork Unified Dist. 31
Avondale Elem. Dist. 44
Bagdad Unified Dist. 20
Balsz Elem. Dist. 31
Beaver Creek Elem. Dist. 26
Benson Elem. Dist. 9
Benson UHS Dist. 9
Bicentennial UHS Dist. 76
Bisbee Unified Dist. 2
Blue Elem. Dist. 22
Blue Ridge Unified Dist. 32
Bonita Elem. Dist. 16
Bouse Elem. Dist. 26
Bowie Unified Dist. 14
Buckeye Elem. Dist. 33
Buckeye UHS Dist. 201
Bullhead City Elem. Dist. 15
Camp Verde Unified Dist. 28
Canon Elem. Dist. 50
Cartwright Elem. Dist. 83
Casa Grande Elem. Dist. 4
Casa Grande UHS Dist. 82
Catalina Foothills Unified Dist. 16
Cave Creek Unified Dist. 93
Cedar Unified Dist. 25
Chandler Unified Dist. 80
Chevelon Butte Elem. Dist. 5
Chinle Unified Dist. 24
Chino Valley Unified Dist. 51
Chloride Elem. Dist. 11
Clarkdale-J erome Elem. Dist. 3

Clifton Unified Dist. 3
Cobre Valley Institute
Cochise Elem. Dist. 26
Cochise Technology Dist. \#01
Coconino Assoc of Vocational and Ind. Tech
Colorado City Unified Dist. 14
Colorado River Union H.S. Dist. 2
Combs (J.O.) Elem. Dist. 44
Concho Elem. Dist. 6
Congress Elem. Dist. 17
Continental Elem. Dist. 39
Coolidge Unified Dist. 21
Cottonwood-Oak Creek Elem. Dist. 6
Crane Elem. Dist. 13
Creighton Elem. Dist. 14
Crown King Elem. Dist. 41
Dan Hinton School
Deer Valley Unified Dist. 97
Double Adobe Elem. Dist. 45
Douglas Unified Dist. 27
Duncan Unified Dist. 2
Dysart Unified Dist. 89
Eagle Elem. Dist. 45
East Valley Technical Institute
Elfrida Elem. Dist. 12
Eloy Elem. Dist. 11
Esperanza Academy Accommodation School
Fisher (Ruth) Elem. Dist. 90
Flagstaff Unified Dist. 1
Florence Unified Dist. 1
Flowing Wells Unified Dist. 8
Ft. Huachuca Accom School
Ft. Thomas Unified Dist. 7
Fountain Hills Unified Dist. 98
Fowler Elem. Dist. 45
Fredonia-Moccasin Unified Dist. 6
Gadsden Elem. Dist. 32
Ganado Unified Dist. 20
Gila Bend Unified Dist. 24
Gila County Special Services
Gila Institute for Technology
Gilbert Unified Dist. 41
Glendale Elem. Dist. 40
Glendale UHS Dist. 205

## List of Employers

Globe Unified Dist. 1
Grand Canyon Unified Dist. 4
Hackberry Elem. Dist. 3
Hayden-Winkelman Unified Dist. 41
Heber Overgaard USD No. 6
Higley Elem. Dist. 60
Hillside Elem. Dist. 35
Holbrook Unified Dist. 3
Humboldt Unified Dist. 22
Hyder Elem. Dist. No. 16
Indian Oasis-Baboquivari 40
Isaac Elem. Dist. 5
J oseph City Unified Dist. 2
Kayenta Unified Dist. 27
Kingman Elem. Dist. 4
Kirkland Elem. Dist. 23
Klondyke School Dist. 09
Kyrene Elem. Dist. 28
Lake Havasu Unified Dist. 1
Laveen Elem. Dist. 59
Liberty Elem. Dist. 25
Litchfield Elem. Dist. 79
Littlefield Elem. Dist. 9
Littleton Elem. Dist. 65
Madison Elem. Dist. 38
Maine Cons. Elem. Dist. 10
Mammoth-San Manuel Unified Dist. 8
Marana Unified Dist. 6
Maricopa Unified Dist. 20
Mayer Unified Dist. 43
McNary Elem. Dist. 23
McNeal Elem. Dist. 55
Mesa Unified Dist. 4
Miami Unified Dist. 40
Mingus UHS Dist. 4
Mobile Elem. Dist. 86
Mohave Educational Svcs Coop
Mohave UHS Dist. 30
Mohave Valley Elem. Dist. 16
Mohawk Valley Elem. Dist. 17
Morenci Unified Dist. 18
Morristown Elem. Dist. 75
Murphy Elem. Dist. 21
Naco Elem. Dist. 23

Nadaburg Elem. Dist. 81
Navajo County Accomodation Schools
Nogales Unified Dist. 1
Oracle Elem. Dist. 2
Osborn Elem. Dist. 8
Owens Whitney Elem. Dist. 6
Page Unified Dist. 8
Palo Verde Elem. Dist. 49
Paloma Elem. Dist. 94
Palominas Elem. Dist. 49
Paradise Valley Dist. 69
Parker Unified Dist. 27
Patagonia Elem. Dist. 6
Patagonia UHS Dist. 20
Payson Unified Dist. 10
Peach Springs Elem. Dist. 8
Peach Springs High School 7
Pearce Elem. Dist. 22
Pendergast Elem. Dist. 92
Peoria Unified Dist. 11
Phoenix Elem. Dist. 1
Phoenix UHS Dist. 210
Picacho Elem. Dist. 33
Pima Unified Dist. 6
Pine Elem. Dist. 12
Pinon Unified Dist. 4
Pomerene Elem. Dist. 64
Prescott Unified Dist. 1
Quartzsite Elem. Dist. 4
Queen Creek Unified Dist. 95
Rainbow School
Ray Unified Dist. 3
Red Mesa Unified Dist. 27
Red Rock Elem. Dist. 5
Riverside Elem. Dist. 2
Roosevelt Elem. Dist. 66
Round Valley Unified Dist. 10
Sacaton Elem. Dist. 18
Safford Unified Dist. 1
Sahuarita Unified Dist. 30
St. David Unified Dist. 21
St. Johns Unified Dist. 1
Salome Cons. Elem. Dist. 30
San Carlos Unified Dist. 20

## List of Employers

San Fernando Elem. Dist. 35
San Simon Unified Dist. 18
Sanders Unified Dist. 18
Santa Cruz Elem. Dist. 28
Santa Cruz Valley Dist. 35
Santa Cruz Valley UHS Dist. 840
Scottsdale Unified Dist. 48
Sedona - Oak Creek School Dist. 9
Seligman Unified Dist. 40
Sentinel Elem. Dist. 71
Show Low Unified Dist. 10
Sierra Vista Unified Dist. 68
Skull Valley Elem. Dist. 15
Snowflake Unified Dist. 5
Solomonville Elem. Dist. 5
Somerton Elem. Dist. 11
Sonoita Elem. Dist. 25
Stanfield Elem. Dist. 24
Sunnyside Unified Dist. 12
Superior Unified Dist. 15
Tanque Verde Unified Dist. 13
Tempe Elem. Dist. 3
Tempe UHS Dist. 213
Thatcher Unified Dist. 4
Tolleson Elem. Dist. 17
Tolleson UHS Dist. 214
Toltec Elem. Dist. 22
Tombstone Unified Dist. 1
Tonto Basin School Dist. 33
Topock Elem. Dist. 12
Tuba City Unified Dist. 15
Tucson Unified Dist. 1
Union Elem. Dist. 62
Vail Elem. Dist. 20
Valentine Elem. Dist. 22
Valley UHS Dist. 22
Vernon Elem. Dist. 9
Villa Oasis Inter School
Walnut Grove School District
Washington Elem. Dist. 6
Wellton Elem. Dist. 24
Wenden Elem. Dist. 19
Western Maricopa Education Center
Whiteriver Unified Dist. 20

Wickenburg Unified Dist. 9
Willcox Unified Dist. 13
Williams Unified Dist. 2
Williamson Valley Elem. Dist. 2
Wilson Elem. Dist. 7
Window Rock Unified Dist. 8
Winslow Unified Dist. 1
Yarnell Elem. Dist. 52
Yavapai County Accomodation School Dist \#99
Young Elem. Dist. 5
Yuma County Accommodation School
Yucca Elem. Dist. 13
Yuma Elem. Dist. 1
Yuma UHS Dist. 70

## Charter Schools

Accelerated Learning Center
Accelerated Learning Center Laboratory
Acclaim Charter School
Academy of Excellence, Inc.
Academy of Tucson
Adalberto Guerrero Middle School
Aha Macav High School
American Heritage Academy Chart. School
AmeriSchools
Arizona Charter Academy
Arizona Conservatory for Arts \& Academics
Arizona Montessori Charter School
Arizona School for the Arts
Arizona Southwest Preparatory Academy
AZ Agribusiness \&Equine Center Chart. Sch.
AZ Institute of Bus. and Technology (AIBT)
Aztec Academy
Aztlan Academy, Inc.
Ball Charter School
Basis Middle School
Benchmark Elementary
Benjamin Franklin Charter School
Blackwater Comm School (K-2)
Blackwater Comm School (3-4)
Burke Basic Charter School
Canyon Rose Academy
Career Pathways Academy
Carmel Comm. Integrated Arts Chart. Sch.

## List of Employers

Carpe Diem Collegiate High School
Casey Country Day Charter School Central Arizona Valley Inst of Technology Challenge School, Inc.
Children Reaching for the Sky
Chester Newton Charter and Montessori Sch.
City High School
Cl Wilson Academy
Country Gardens Charter School
Davis Education Center
Desert Technology High School
Desert Rose Academy
Desert Springs Academy Charter School
Destiny Schools, Inc.
Discovery Academy of St. Johns
Discovery Plus Academy Charter School
Dobson Academy
Dragonflye Charter School
EAGLE Academy Charter School
Eagles Aerie Schools
East Valley Academy Charter Sch.
Ecotech Agricultural Charter School
Edge EDE Charter School
EDU Preneurship Charter School
EDU-Prize Charter School
Enterprise Academy Charter School
Esperanza Montessori Academy
Excalibur Charter School
Excel Education Centers Chino Valley, LLC
Excel Education Centers Cottonwood, LLC
Excel Education Centers Flagstaff, LLC
Excel Education Centers Fort Mohave, LLC
Excel Education Centers Prescott, LLC
Excel Education Centers Prescott Valley, LLC
Excel Education Centers San Carlos, LLC
Entity Z Accounts
Flagstaff Arts \& Leadership Academy
Flagstaff J r. Academy Charter School
Franklin Phonetic Primary School
Gan Yaladeem, the Looking Glass
Genesis Academy Charter School
Gila County Transition Charter School
Gila Preparatory
G.R.A.D.E. Charter School

Great Expectation Charter School
Happy Valley School, Inc.
Ha:San Preparatory and Leadership School
Humanistic Ed Authentic Rigorous Transcendent
Heritage Academy Inc.
Horizon Charter School
Humanities and Science Institute Inc.
Intelli-School Charter School
Intelli-School Charter School (PAS Charter)
Intelli-School Charter School (RSD Charter)
Intelli-School Charter School (SC J ensen )
International Commerce Institute Inc.
J WJ Academy
J ames Sandoval Preparatory High School
J uniper Tree Academy
Khalsa School
Kids at Hope Academy, Inc.
Kingman Academy of Learning
Lake Havasu Charter School
Lake Powell Academy Inc.
La Paloma Academy
Learning Crossroads Basic Academy
Learning Institute
Life Skills Center of Arizona
Luz Academy of Tucson
Masada Charter School, Inc
MESA (Mountain English Spanish Academy)
Metropolitan Arts Institute
Mexicayotl Academy
Mingus Mountain Academy
Mingus Springs Charter School
Mohave Accelerated Learning Center
Mohave Accelerated Elem School
Mohave Educational Services, Inc
Mountain Rose Academy, Inc.
Mountain Oak School Charter School, Inc.
Mountain School, Inc.
Mountainaire Academy, LLC
Multi-Dimensional Literacy Corp
New School for the Arts
New School for the Arts Middle School
New West Charter School
Northern AZ Academy for Career Development
Northern Arizona Voc. Institute of Technology

## List of Employers

Northland Preparatory Academy
North Star Charter School
Northwest Az Tech Institute of Vocational Ed
Nosotros Academy
Paradise Education Center
Paramount Academy
Park View Middle School
Pathfinder Academy, LLC
Pathways Charter Schools, Inc
Paulden Elementary School
PCAE-Edge
Peak School, Inc.
Phoenix Academy of Performing Arts South
Phoenix School of Academic Excellence
Pima Prevention Partnership
Pine Forest Charter School
Pinnacle Ed Day Star Academy, LLC
Pinnacle Ed East Valley No 1, LLC
Pinnacle Ed East Valley No. 2, LLC
Pinnacle Ed Freedom Academy, LLC
Pinnacle Ed Kino Academy, LLC
Pinnacle Ed Pinal, LLC
Pinnacle Ed Westmark Arizona Ave., LLC
Pinnacle Ed Westmark Chandler Blvd, LLC
Point Educational Services
Presidio School
Project YES Middle School, LLC
Redwood Elementary Acdemy, LLC
Renaissance Education Consort, Inc.
Salt River Pima-Maricopa Indian Chart. Sch
Scholars' Academy Charter School
Scottsdale Educational Enrichment School
Sedona Charter School
Self Development Charter School
Sequoia Charter School
Sequoia Choice School, LLLP
Sequoia Ranch School, LLC
Sequoia School LLC Charter School
Sequoia Sch for Deaf and Hard of Hearing LLC
Sequoia Village School
Sierra Oaks Schools, Inc.
Skyline Technical High School
Skyview Charter School
Sonoran Desert School

Southern AZ Community Academy Charter Sch
Southside Community School
Starshine Academy
Stepping Stones Academy
Sunnyside Charter and Montessori School
Superior School
Tag Elementary Inc.
Telani Lake Elementary Sch Academy
Telesis Center for Learning, Inc.
Tertulia Charter School
Tolchi' Kooh Charter School Inc.
Tri-City Prep High School
Tri-City Vo-Tech High School
Tucson Country Day School
Tucson Preparatory School
Triumphant Learning Center
Valley Academies Inc.
Valley Academy for Career \& Technology Ed
Ventana Academic School
Visions Unlimited Academy Inc.
Westwind Academy
Willow Creek
Wilson High School
Young Scholars Academy Chart. Sch. Corp.

## Colleges

Arizona Western College
Central Arizona College
Cochise College
Coconino County Community College
Eastern Arizona College
Maricopa County Comm.
Mohave Community College
Northland Pioneer College
Pima Community College
Yavapai College

## Uni versities

Arizona State University
Northern Arizona University
University of Arizona
Cities and Towns
City of Apache J unction
City of Avondale

## List of Employers

City of Benson
City of Bisbee
City of Casa Grande
City of Chandler
City of Coolidge
City of Cottonwood
City of Douglas
City of El Mirage
City of Eloy
City of Flagstaff
City of Glendale
City of Globe
City of Goodyear
City of Holbrook
City of Kingman
City of Lake Havasu
City of Litchfield Park
City of Mesa
City of Maricopa
City of Nogales
City of Peoria
City of Prescott
City of Safford
City of San Luis
City of Scottsdale
City of Sedona
City of Show Low
City of Sierra Vista
City of Somerton
City of South Tucson
City of Surprise
City of Tempe
City of Tolleson
City of Tombstone
City of Willcox
City of Williams
City of Winslow
City of Yuma
Town of Buckeye
Town of Camp Verde
Town of Carefree
Town of Chino Valley
Town of Clarkdale
Town of Clifton

Town of Duncan
Town of Eager
Town of Florence
Town of Fredonia
Town of Gila Bend
Town of Gilbert
Town of Guadalupe
Town of Hayden
Town of Kearny
Town of Miami
Town of Oro Valley
Town of ParadiseValley
Town of Parker
Town of Patagonia
Town of Payson
Town of Pima
Town of Queen Creek
Town of Sahuarita
Town of Snowflake
Town of Springerville
Town of Superior
Town of Taylor
Town of Thatcher
Town of Wellton
Town of Wickenburg
Town of Youngtown
Counties
Apache County
Cochise County
Coconino County
Gila County
Graham County
Greenlee County
Maricopa County
Mohave County
Navajo County
Pima County
Pinal County
Santa Cruz County
Yavapai County
Yuma County

## Other

Apache Jct. Fire District

## List of Employers

Arizona Association of Counties
Arizona City Sanitary District
Arizona Counties Insurance Pool
Arizona Interscholastic Association
Arizona Municipal Water Users Assoc
Arizona Prosecuting Attorney Advisory Council
Avra Valley Fire District
Buckeye Valley Fire District
Buckeye Water Conservation \& Drainage Dist
Bullhead City Fire District
Central Arizona Assoc of Governments (CAAG)
Central Arizona Project
Central Yavapai Fire District
Chino Valley Fire District
Christopher Kohls Fire District
City of Eloy Housing Authority
City of Yuma Housing Authority
Colorado River Sewage System
County Supervisors Association of Arizona
Crown King Fire District
Diamond Star Fire District
Drexel Heights Fire District
El Frida Fire District
Eloy Fire District
Fire District of Sun City West
Flagstaff Housing Authority
Fort Mojave Mesa Fire Department
Gila Resources
Green Valley Domestic Water Improvement
District
Golder Ranch Fire District
Groom Creek Fire District
Harquahala Valley Irrigation District
Heber-Overgaard Fire District
Lakeside Fire District
League of Arizona Cities and Towns
Linden Fire District
Marana Domestic Water Improvement District Maricopa Association of Governments (MAG)
Maricopa Integrated Health System
Maricopa Special Health Care District
Maricopa Water District
Metropolitan Domestic Water Improve. Dist. Montezuma-Rimrock Fire District

New Magma Irrigation and Drainage District Northern Apache County Special Healthcare District
Northern Arizona Assoc. of Governments
(NACOG)
Northwest Fire District
Phoenix and Tucson Job Corps
Picture Rock Fire District
Pima Association of Governments (PAG)
Pima Home Health
Pinetop Volunteer Fire District
Pinewood Fire Department
Pinewood Sanitary District
Ponderosa Domestic Water Improvement Dist.
Posada del sol Health
Puerco Valley Fire District
Queen Valley Domestic Water Impr. Dist.
Queen Valley Sanitary District
Roosevelt Irrigation District
San Carlos Irrigation \& Drain
Sedona-Oakcreek Airport Authority, Inc
Southeastern Arizona Governments
Organization (SEAGO)
State of Arizona
Sun City Fire District
Sun Lakes Fire District
Summit Fire District
Superstition Mtn Community Facilities Dist
Three Points Fire District
Tourism and Sports Authority
Tucson Airport Authority
Tusayan Fire District
Verde Valley Fire District
Water Utilities Community District
Western Arizona Council of Governments
Whetstone Fire District
White Mountain Regional Corp
White Mountain Summer Home Water
Improvement District
Williams Gateway Airport Authority
Yuma County Airport Authority
Yuma Mesa Irrigation District

Source: Arizona State Retirement System

## Contributions Received

(Dollars in Milions)


## Actual Contribution Rates <br> In Percentage of Payroll*

|  | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employer | 3.85 | 3.69 | 3.54 | 3.34 | 2.66 | 2.66 | 2.49 | 2.49 | 5.7 | 5.7 |
| Employee | 3.85 | 3.69 | 3.54 | 3.34 | 2.66 | 2.66 | 2.49 | 2.49 | 5.7 | 5.7 |

*Represents contribution rates for the Plan and includes long-term liability. System members and their employers each pay a $7.5 \%$ contribution rate, which includes $0.50 \%$ for long-term disability. In addition, employers pay 1.1\%for health insurance.

## Total Benefit Payments (Dollars in Millions)



YEAR ENDED JUNE 30

Total Reserves for Benefits
At Market*
(Dollars in Millions)

*For 1996, total reserves for benefits have previously been reported at cost. These reserves have been restated to fair value in accordance with GASB 25, amended by GASB 31.

## Non-Retired \& Retired Members



The category of retired members includes survivors of former members, who have qualified for monthly benefit payments rather than for single death benefit payments.

Revenues by Source
(Dollars In Thousands)

| Fiscal Year | Employer/ Employee Contribution Rate* | Employer/ Employee Long-Term Disability Rate* | Employee Contributions as a Percent of Covered Payroll | Employer Contribution Amount | Employee Contribution Amount | Member Reimbursements and Other | Net Investment Income | Total Additions |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 | 3.36\% | 0.49\% | 100.00\% | \$172,848 | \$172,848 | \$4,376 | \$2,063,878 | \$2,413,951 |
| 1997 | 3.20 | 0.49 | 100.00 | 173,508 | 173,508 | 11,481 | 2,832,718 | 3,191,215 |
| 1998 | 3.05 | 0.49 | 100.00 | 176,769 | 176,769 | 15,462 | 3,405,203 | 3,774,202 |
| 1999 | 2.85 | 0.49 | 100.00 | 179,087 | 179,087 | 46,171 | 2,848,321 | 3,252,665 |
| 2000 | 2.17 | 0.49 | 100.00 | 152,957 | 152,958 | 35,348 | 2,035,312 | 2,376,575 |
| 2001 | 2.17 | 0.49 | 100.00 | 163,442 | 163,442 | 39,535 | $(1,528,691)$ | $(1,162,273)$ |
| 2002 | 2.00 | 0.49 | 100.00 | 168,213 | 168,213 | 50,833 | $(1,768,077)$ | $(1,380,819)$ |
| 2003 | 2.00 | 0.50 | 100.00 | 177,157 | 177,157 | 93,552 | 368,631 | 816,497 |
| 2004 | 5.20 | 0.50 | 100.00 | 413,458 | 413,462 | 113,944 | 3,228,784 | 4,169,649 |
| 2005 | 5.20 | 0.50 | 100.00 | 442,643 | 442,643 | 141,932 | 1,803,392 | 2,830,610 |

*Represents contribution rates for the Plan. System members and their employers each pay a $7.5 \%$ contribution rate, which includes $0.50 \%$ for long-term disability. In addition, employers pay 1.1\%for health insurance.

## Expenses by Type <br> (Dollars in Thousands)

| Fiscal Year | Benefit <br> Payments | Administrative <br> and Other | Total |
| :---: | ---: | :---: | ---: |
| 1996 | $\$ 568,901$ | $\$ 8,245$ | $\$ 577,146$ |
| 1997 | 627,591 | 12,308 | 639,898 |
| 1998 | 682,336 | 12,541 | 694,877 |
| 1999 | 739,979 | 15,353 | 755,332 |
| 2000 | 858,308 | 19,744 | 878,052 |
| 2001 | $1,008,150$ | 24,640 | $1,032,790$ |
| 2002 | $1,111,809$ | 28,105 | $1,139,914$ |
| 2003 | $1,258,540$ | 37,878 | $1,296,418$ |
| 2004 | $1,432,693$ | 35,745 | $1,468,438$ |
| 2005 | $1,620,898$ | 33,426 | $1,654,324$ |

Benefit Payments by Type<br>(Dollars in Thousands)

| Fiscal <br> Year | Retirement <br> Benefits | Death <br> Benefits | Long-Term <br> Disability | Health Benefit <br> Supplement | Refunds of <br> Contributions | Total |
| :---: | ---: | ---: | :---: | :---: | :---: | ---: |
| 1996 | $\$ 480,697$ | $\$ 13,593$ | $\$ 20,281$ | $\$ 27,953$ | $\$ 26,377$ | $\$ 568,901$ |
| 1997 | 522,525 | 13,583 | 30,052 | 30,149 | 31,282 | 627,591 |
| 1998 | 574,230 | 10,558 | 35,112 | 32,668 | 29,769 | 682,336 |
| 1999 | 627,612 | 11,485 | 39,839 | 34,935 | 26,108 | 739,979 |
| 2000 | 695,426 | 13,256 | 41,220 | 37,651 | 70,755 | 858,308 |
| 2001 | 809,133 | 14,134 | 45,848 | 40,500 | 98,535 | $1,008,150$ |
| 2002 | 924,172 | 14,078 | 54,804 | 75,990 | 42,765 | $1,111,809$ |
| 2003 | $1,067,481$ | 15,861 | 54,688 | 84,534 | 35,976 | $1,258,540$ |
| 2004 | $1,238,966$ | 14,859 | 58,976 | 83,680 | 36,212 | $1,432,693$ |
| 2005 | $1,406,547$ | 18,402 | 62,183 | 89,602 | 44,164 | $1,620,898$ |

# Average Benefit Payments for Retirees Under the Plan * 

YEARS OF CREDITED SERVICE

|  | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45+ | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal year 1995 |  |  |  |  |  |  |  |  |  |  |  |
| Average monthly benefit | \$125 | \$232 | \$454 | \$717 | \$1,069 | \$1,598 | \$2,034 | \$2,004 | \$1,399 | \$1,135 | \$878 |
| Number of retirees | 855 | 7,345 | 9,444 | 7,965 | 7,274 | 6,065 | 3,287 | 853 | 260 | 30 | 43,378 |
| AVERAGE CREDITED SERVICE |  |  |  |  |  |  |  |  |  |  | 17.9 |
| Fiscal year 1996 |  |  |  |  |  |  |  |  |  |  |  |
| Average monthly benefit | \$123 | \$239 | \$470 | \$741 | \$1,118 | \$1,669 | \$2,119 | \$2,125 | \$1,506 | \$1,230 | \$920 |
| Number of retirees | 918 | 7,781 | 9,849 | 8,334 | 7,791 | 6,654 | 3,498 | 884 | 240 | 26 | 45,975 |
| AVERAGE CREDITED SERVICE |  |  |  |  |  |  |  |  |  |  | 17.9 |
| Fiscal year 1997 |  |  |  |  |  |  |  |  |  |  |  |
| Average monthly benefit | \$0 | \$244 | \$481 | \$759 | \$1,151 | \$1,719 | \$2,172 | \$2,197 | \$1,613 | \$1,270 | \$945 |
| Number of retirees | 1,034 | 8,446 | 10,611 | 8,967 | 8,421 | 7,296 | 3,756 | 947 | 240 | 25 | 49,743 |
| AVERAGE CREDITED SERVICE |  |  |  |  |  |  |  |  |  |  | 18.0 |
| Fiscal year 1998 |  |  |  |  |  |  |  |  |  |  |  |
| Average monthly benefit | \$122 | \$254 | \$499 | \$789 | \$1,196 | \$1,785 | \$2,248 | \$2,318 | \$1,749 | \$1,565 | \$982 |
| Number of retirees | 1,149 | 8,788 | 11,050 | 9,305 | 8,786 | 7,718 | 3,908 | 965 | 226 | 22 | 51,917 |
| AVERAGE CREDITED SERVICE |  |  |  |  |  |  |  |  |  |  | 18.0 |
| Fiscal year 1999 |  |  |  |  |  |  |  |  |  |  |  |
| Average monthly benefit | \$120 | \$259 | \$511 | \$806 | \$1,230 | \$1,846 | \$2,332 | \$2,448 | \$1,969 | \$1,771 | \$1,024 |
| Number of retirees | 1,251 | 9,180 | 11,581 | 9,653 | 9,393 | 8,475 | 4,294 | 1,039 | 217 | 21 | 55,104 |
| AVERAGE CREDITED SERVICE |  |  |  |  |  |  |  |  |  |  | 18.2 |
| Fiscal year 2000 |  |  |  |  |  |  |  |  |  |  |  |
| Average monthly benefit | \$125 | \$278 | \$550 | \$872 | \$1,328 | \$2,013 | \$2,541 | \$2,732 | \$2,339 | \$2,011 | \$1,125 |
| Number of retirees | 1,321 | 9,454 | 12,076 | 10,061 | 9,944 | 9,169 | 4,683 | 1,106 | 207 | 17 | 58,038 |
| AVERAGE CREDITED SERVICE |  |  |  |  |  |  |  |  |  |  | 17.6 |
| Fiscal year 2001 |  |  |  |  |  |  |  |  |  |  |  |
| Average monthly benefit | \$130 | \$293 | \$600 | \$939 | \$1,414 | \$2,119 | \$2,694 | \$2,956 | \$2,694 | \$2,671 | \$1,211 |
| Number of retirees | 1,338 | 9,450 | 12,164 | 10,033 | 10,115 | 9,611 | 4,891 | 1,120 | 180 | 18 | 58,920 |
| AVERAGE CREDITED SERVICE |  |  |  |  |  |  |  |  |  |  | 18.2 |
| Fiscal year 2002 |  |  |  |  |  |  |  |  |  |  |  |
| Average monthly benefit | \$142 | \$317 | \$664 | \$1,042 | \$1,578 | \$2,368 | \$2,990 | \$3,286 | \$3,195 | \$3,958 | \$1,371 |
| Number of retirees | 1,397 | 9,357 | 12,188 | 10,145 | 10,443 | 10,023 | 5,399 | 1,193 | 182 | 19 | 60,346 |
| AVERAGE CREDITED SERVICE |  |  |  |  |  |  |  |  |  |  | 18.6 |
| Fiscal year 2003 |  |  |  |  |  |  |  |  |  |  |  |
| Average monthly benefit | \$149 | \$328 | \$695 | \$1,068 | \$1,571 | \$2,312 | \$2,957 | \$3,314 | \$3,535 | \$4,335 | \$1,401 |
| Number of retirees | 1,555 | 9,744 | 12,811 | 10,568 | 11,103 | 10,838 | 6,477 | 1,373 | 203 | 25 | 64,697 |
| AVERAGE CREDITED SERVICE |  |  |  |  |  |  |  |  |  |  | 18.9 |
| Fiscal year 2004 |  |  |  |  |  |  |  |  |  |  |  |
| Average monthly benefit | \$139 | \$345 | \$726 | \$1,109 | \$1,629 | \$2,384 | \$3,092 | \$3,499 | \$3,863 | \$4,413 | \$1,487 |
| Number of retirees | 1,716 | 10,153 | 13,268 | 10,984 | 11,747 | 11,567 | 7,607 | 1,611 | 248 | 30 | 68,931 |
| AVERAGE CREDITED SERVICE |  |  |  |  |  |  |  |  |  |  | 19.1 |

Source: Buck Consultants, LLC. *Statistics are not available for System retirees of the ASRS

## Retirement Benefit Options

## Life Annuity - Refund Provision

Provides member monthly benefit for life. If death occurs before all member contributions, plus interest, have been paid, the remaining balance will be paid in a lump sum or at the same monthly amount in effect at the time of the member's death to the designated beneficiary.

## Life Annuity - Five Years Certain

Provides member monthly benefit for life. If death occurs before the retired member receives 60 monthly payments, the remaining monthly payments (or balance of the 60 payments) will be paid to the retired member's designated beneficiary. Members under the age of 103 at retirement are eligible to choose this option.

## Life Annuity - Ten Years Certain

Provides member monthly benefit for life. If death occurs before the retired member receives 120 monthly payments, the remaining monthly payments (or balance of the 120 monthly payments) will be paid to the retired member's designated beneficiary. Members under the age of 91 are eligible to choose this option.

## Life Annuity - Fifteen Years Certain

Provides member monthly benefit for life. If death occurs before the retired member receives 180 monthly payments, the remaining monthly payments (or balance of the 180 monthly payments) will be paid to the designated beneficiary. Members under the age of 84 are eligible to choose this option.

## J oint Annuity - 100 Percent To Contingent Survivor

Provides member monthly benefit for life then also provides a life annuity equal to 100 percent of the member's monthly benefit for one designated beneficiary should the beneficiary survive the member. Members may choose this option (1) if the beneficiary is the member's spouse, or (2) if the beneficiary is not the spouse and the member is not more than 10 years older than the beneficiary.

## J oint Annuity - 66 2/3 Percent To Contingent Survivor

Provides member monthly benefit for life then also provides a life annuity equal to $662 / 3$ percent of the member's monthly benefit for one designated beneficiary should the beneficiary survive the member. Members may choose this option (1) if the beneficiary is the member's spouse, or (2) if the beneficiary is not the spouse and the member is not more than 24 years older than the beneficiary.

## J oint Annuity - 50 Percent To Contingent Survivor

Provides member monthly benefit for life then also provides a life annuity equal to 50 percent of the member's monthly benefit for one designated beneficiary should the beneficiary survive the member.
Members who choose a joint annuity payment option may rescind the option at any time and revert to the Life Annuity - Refund Provision or change the contingent annuitant. A member who reverted to the life annuity may later change back to the same joint annuity option originally elected and name the same or a new contingent annuitant. The member's benefit will be adjusted to reflect any change made.

## Retired Members by Type of Benefit Options Year Ended J une 30, 2005

| Options* |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Amount of Monthly <br> Benefit | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ |
| \$1-299 | 4,797 | 308 | 393 | 520 | 1,395 | 117 | 213 |
| $300-499$ | 4,189 | 382 | 590 | 452 | 1,330 | 170 | 258 |
| $500-999$ | 9,207 | 872 | 1,504 | 943 | 2,699 | 616 | 954 |
| $1000-1499$ | 6,090 | 760 | 1,319 | 562 | 2,172 | 674 | 924 |
| $1500-1999$ | 3,773 | 449 | 696 | 439 | 1,573 | 539 | 732 |
| $2000 \&$ Over | 9,915 | 743 | 1,201 | 1,248 | 4,399 | 1,668 | 2,068 |
| Totals | 37,971 | 3,514 | 5,703 | 4,164 | 13,568 | 3,784 | 5,149 |

[^2]1 Life annuity - refund provision
2 Life annuity - 5 years certain and life
3 Life annuity - 10 years certain and life
4 Life annuity - 15 years certain and life
5 Joint annuity - 100 percent to contingent survivor
6 Joint annuity - $662 / 3$ percent to contingent survivor
7 Joint annuity - 50 percent to contingent survivor

The above schedule does not include system retirees


[^0]:    Note: A detail listing of broker commissions is available upon request. Direct inquiries to: ASRS, 3300 North Central Avenue, Phoenix, AZ 85012.

[^1]:    * Excludes contributions of $\$ 884,669, \$ 905,200$ and $\$ 926,800$ for ASRS System members who contributed 7.49 percent during 1998, 1997 and 1996 respectively.

[^2]:    * Options key

