

# ARIZONA STATE RETIREMENT SYSTEM

A COMPONENT UNIT OF THE STATE OF ARIZONA • DELIVERING SERVICE WITH PRIDE



2011 Comprehensive Annual Financial Report  
**For Fiscal Year Ended June 30, 2011**



DELIVERING SERVICE WITH...

# PRIDE

## 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
- Investment Performance
- Funded Status
- Operational Effectiveness

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

## OUR VALUES

### **Professionalism.**

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

### **Results.**

A results-oriented approach to operations will *energize* 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.

### **Excellence.**

A commitment to service excellence will *permeate* the organization.



**ARIZONA STATE  
RETIREMENT SYSTEM**



# Arizona State Retirement System

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A COMPONENT UNIT OF THE STATE OF ARIZONA



*Mr. David Byers, Chair*  
*Mr. Thomas Connelly, Vice Chair*

*Report Prepared by the Staff of the*  
*Arizona State Retirement System*

*Paul Matson, Director*

**2011**  
Comprehensive Annual Financial Report  
for Fiscal Year Ended June 30, 2011



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# ARIZONA STATE RETIREMENT SYSTEM



A COMPONENT UNIT OF THE STATE OF ARIZONA • DELIVERING SERVICE WITH PRIDE

## Introductory Section 2011



# CERTIFICATE OF ACHIEVEMENT FOR EXCELLENCE IN FINANCIAL REPORTING

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## Certificate of Achievement for Excellence in Financial Reporting

Presented to

### The Arizona State Retirement Systems

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
June 30, 2010

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



President

Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Arizona State Retirement System for its comprehensive annual financial report for the fiscal year ended June 30, 2010. This was the 22<sup>nd</sup> consecutive year that the Arizona State Retirement System has achieved this prestigious award.

# PUBLIC PENSION STANDARDS AWARD FOR PLAN FUNDING AND ADMINISTRATION

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Public Pension Coordinating Council

***Public Pension Standards Award  
For Funding and Administration  
2011***

Presented to

***Arizona State Retirement System***

In recognition of meeting professional standards for  
plan funding and administration as  
set forth in the Public Pension Standards.

*Presented by the Public Pension Coordinating Council, a confederation of*

National Association of State Retirement Administrators (NASRA)  
National Conference on Public Employee Retirement Systems (NCPERS)  
National Council on Teacher Retirement (NCTR)

A handwritten signature in black ink, reading 'Alan H. Winkle'.

Alan H. Winkle  
Program Administrator

The National Association of State Retirement Administrators (NASRA), National Conference on Public Employee Retirement Systems (NCPERS), and the National Council on Teacher Retirement (NCTR) awarded a Public Pension Standards Award to the Arizona State Retirement System for plan design and administration as set forth in the Public Pension Standards for 2011. The Public Pension Standards are intended to reflect minimum expectations for public retirement system management and administration, as well as serve as a benchmark by which all defined benefit public plans should be measured. This is the 7th consecutive year that the Arizona State Retirement System has received this prestigious award.

# 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  
7660 EAST BROADWAY BOULEVARD • SUITE 108 • TUCSON, AZ 85710-3776 • PHONE (520) 239-3100  
TOLL FREE OUTSIDE METRO PHOENIX AND TUCSON 1 (800) 621-3778  
EMAIL ADDRESS: ASKMAC@AZASRS.GOV • WEB ADDRESS: WWW.AZASRS.GOV

*Paul Matson*  
Director

October 24, 2011

To: The Arizona State Retirement System Board of Trustees

On the behalf of the ASRS staff, I am pleased to present the fifty-eighth Comprehensive Annual Financial Report of the Arizona State Retirement System (ASRS), a component unit of the State of Arizona, for the fiscal year ended June 30, 2011.

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 the 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.

Heinfeld, Meech & Co., P.C. has issued an unqualified (“clean”) opinion on the ASRS financial statements for the year ended June 30, 2011. 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 January 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 of the ASRS membership. More than 80 percent voted to transfer to the defined benefit plan, which became effective July 1, 1971.

At June 30, 2011, total ASRS membership, including active, inactive, disabled and retired members is 538,774. There are 704 employer units participating in the ASRS, including school districts, charter schools, state colleges and universities, and local, county and state government.

Active non-state employees are also eligible to participate in an ASRS sponsored Supplemental Salary Deferral Plan (SSDP) and/or Supplemental Retirement Savings Plan (SRSP). The SSDP is a supplemental defined contribution plan

qualified under 403 (b) and 457 (b) of the Internal Revenue Code. The SRSP is a supplemental defined contribution plan qualified under 401 (a) of the Internal Revenue Code.

In addition to pension benefits, the ASRS provides a health insurance premium benefit and sponsors medical and dental coverage for retired and disabled members and their eligible dependents and children. Active members also receive long-term disability insurance coverage equal to two-thirds of pay at the time of disablement.

During FY 2010-11, more than 111,957 retired annuitants, their survivors, and disabled members received in excess of \$2.3 billion in benefits. As of June 30, 2011, there were 44,755 retired members and their families enrolled in the ASRS-sponsored medical program and 35,884 retired members and their families enrolled in dental plans through the ASRS.

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 and each trustee who represents an ASRS member group shall have no less than five years of administrative management experience. There is no limit on the number of terms an ASRS Board Trustee may serve. During FY 2010-11, there were no new ASRS Board Trustees appointed.

## **Major Initiatives for Fiscal Year 2010-11**

### **Investments**

- **Assumed Interest Rate:** Confirmed ASRS current actuarial interest rate of 8 percent, which is used to evaluate ASRS long-term investment performance, as well as determine funded status and contribution rates.
- **Opportunistic Private Investment Strategic Plan:** Developed an Opportunistic Private Investment (OPI) Strategic Plan to tactically invest in select private equity and real estate investments that might not otherwise be pursued through ASRS existing private equity and real estate programs.
- **Implementation of ASRS Strategic Allocation Plan:** Continued implementation of ASRS Strategic Asset Allocation Policy (SAAP): including funding of two Commodities mandates and restructuring ASRS non-US Equity allocation which resulted in new mandates in large- and small-cap developed markets and in emerging markets.
- **Long Term Disability Asset Allocation Policy:** Modified ASRS Long-Term Disability (LTD) Program Strategic Asset Allocation Policy.

### **Benefits Processing**

- **Remittance Advice Elimination:** In January 2011, the ASRS discontinued sending monthly remittance advices to retirees. Retirees now have the option of viewing their monthly advice on the website or receiving a paper advice in December of each year, or any time the net payment amount changes. This initiative is expected to save the ASRS \$300,000 or more each year.

- **Debit Card Implementation:** In May 2011, the ASRS discontinued providing paper checks to retirees living in the U.S. Retirees were given the option of enrolling in direct deposit or electing to receive a debit card. The result is that more than 98 percent of retirees are now paid through direct deposit. This initiative is expected to save the ASRS approximately \$100,000 per year in postage and labor (ASRS staff) costs.
- **Refund Smart Form:** The ASRS implemented its first Smart Form in April 2011, for the refund process. In the first month, 25 percent of all refunding members utilized the online application. Since that time, utilization has increased each month, with 50 percent of all applicants using the application at the end of the fiscal year. This effort is anticipated to provide members with a faster, more efficient refund process, while also reducing labor (ASRS staff) costs associated with imaging and paper processing.

### Services

- **More Registered Members:** Approximately 30,000 additional members registered with the ASRS website this fiscal year. As a result, the ASRS has approximately 113,000 total registered members as of June 30, 2011.
- **Webcasts:** The ASRS implemented its own YouTube channel this year, posting a series of webcasts for employers related to the online enrollment process and for members related to completing retirement paperwork.
- **Secure Email:** The ASRS implemented a secure email system in December 2010, which will make the email process more efficient by permitting the communication of personal data by secure email.
- **Instant Messaging:** The ASRS implemented a pilot program for instant messaging when it implemented the Refund Smart Form, which is expected to provide members with another channel for communicating with an ASRS benefit advisor. As new web applications are implemented, this service will be expanded.

### Administration

- **Service Objectives:** The ASRS continued to meet or exceed most of its established service objectives, with 88 percent of its measured operational and administrative objectives marked as achieved in FY11. Members likewise continue to express overall satisfaction with the service provided by ASRS staff.
- **Funded Status of Health Benefit Supplement:** The funded status of the ASRS health insurance program is currently higher than any other state program in the country.
- **Comparisons to Benchmarking:** An international pension administration benchmarking firm has compared the ASRS data to a peer group of comparable size and found that the ASRS provides high levels of service at a cost that is below the average of its peer group.
- **Benefit Modifications:** The ASRS continues to take a leadership role in identifying issues related to ASRS benefits and programs and suggesting possible alternatives for policymakers to consider. Changes implemented to date are expected to reduce long-term liabilities by \$5 billion or more.
- **Biennial Risk Assessment:** The current biennial risk assessment was completed in May 2011. Management continues to identify areas of potential risk for the agency and implement risk mitigation strategies in areas where a weakness has been identified. A new risk assessment was completed and implemented in July 2011.
- **Online 1099's:** Implemented on-line view access and download access of 1099's.

## **Investment Policies**

An integral part of the overall investment policy is the Strategic Asset Allocation Policy (SAAP), which is designed to optimize returns while minimizing risk. The ASRS maintains its investment assets in accordance with Board approved SAAP. Investment assets are managed in 126 externally managed and 6 internally managed portfolios, which are diversified in U.S. equities, U.S. fixed income, international equities, real estate, private equity, opportunistic and commodity investments.

After deducting investment expenses, the ASRS obtained the following one, three, five, ten year and inception net rates of return for periods ended June 30, 2011:

### **Annualized Rates of Return** (Net of Fees)

(Retirement & Health Benefit Supplement)

	<b>1 Year</b>	<b>3 Year</b>	<b>5 Year</b>	<b>10 Year</b>	<b>Inception</b> (June 30, 1975)
ASRS Total Fund	24.6%	5.2%	4.8%	5.2%	10.0%

The ASRS has investment guidelines for its internal and 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 compliance procedures are in place. 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.

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, 2010, the actuarial value of total plan assets (pension and health benefit supplement) was \$28.8\* billion and the actuarial accrued liability was \$37.6\* billion. The unfunded actuarial accrued liability of \$8.8 billion results in an actuarial funding ratio of 76.7\* percent for the total plan. The decrease in actuarial funding percentage from last year's 79.3\* percent is primarily due to recognition of investment losses in fiscal years 2002 and 2003 and the investment loss of fiscal years 2008 and 2009.

The market value of total plan assets (pension and health benefit supplement) was \$23.1\* billion and the actuarial accrued liability was \$37.6\* billion. The unfunded market value of assets accrued liability of \$14.5 billion results in a market value of assets funding ratio of 61.6\* percent for the total plan. The increase in market value of assets funding percentage from last year's 57.1\* percent is primarily due to the rate of return on market assets of 14.5% during fiscal year 2010 versus expected earnings of 8%.

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 Notes to the Financial Statements.

## Funded Status and Contribution Rate Projections

Although the ASRS funds are a well-diversified and professionally managed portfolio of investments, they incurred significant losses in the years ended June 30, 2008 and June 30, 2009. These losses have the effect of reducing the actuarial value and market value of assets funded status of the funds. As a result, the combined pension and health benefit supplement contribution rate is expected to increase for approximately the next seven years.

\*2010 Results include System Liabilities and assets for members who retired or will retire on or after July 1, 1981.

## Cost Saving Initiatives

In order to both increase the funded status of the pension plan as well as mitigate future increases in contribution rates, the ASRS, over the last 8 years, has been engaged in significant program and policy review. While this is an on-going process - the program, policy and legislative initiatives that have been implemented are estimated to have reduced total contributions to the ASRS by approximately \$296 million per year, which is equivalent to \$5.0 billion in liability savings for the group of all current employees, or approximately \$7.6 billion in liability savings for the group of all current and future employees. Over the long term, these very significant savings will reduce future increases in contribution rates to both employee and employers by an average of approximately 3.13 percent in total each year.

## Estimated Impact of ASRS Cost Reduction Initiatives

As of June 30, 2010 Valuation Date (Amount in Millions of Dollars)

Action	Reduction in Total Contribution Rate	Annual Reduction in Total Contribution Amount	Present Value of Savings on Closed Group Basis	Present Value of Savings on Open Group (No Growth) Basis
<b>COST SAVINGS INITIATIVES CONTAINED IN CURRENT VALUATION &amp; REFLECTED IN LOWER CURRENT CONTRIBUTION RATE</b>				
Change basis for service purchases from normal cost to actuarial present value (APV)	0.60%	\$ 56.52	\$ 980.00	\$ 2,085.01
Correction of Permanent Benefit Increase (PBI) reserve	0.04%	3.77	78.71	78.71
Decrease interest credited on withdrawn contributions from 8% to 4%	0.27%	25.43	465.51	873.50
<b>Sub-Total, Savings in Current Valuation</b>	<b>0.91%</b>	<b>\$ 85.72</b>	<b>\$ 1,524.22</b>	<b>\$ 3,037.22</b>
<b>COST SAVINGS INITIATIVES CONTAINED IN FUTURE EXPERIENCE</b>				
Long Term Disability (LTD) program design changes	0.02%	\$ 1.88	\$ 44.20	\$ 61.30
Reimbursements for early retirement incentives	0.18%	16.96	346.12	471.25
Increase interest rate on payroll deduction agreements (PDAs) from 0% to 8%	0.16%	15.07	312.00	425.17
Pop-up restrictions	0.41%	40.37	695.26	982.06
Rescinding modified Deferred Retirement Option Plan (mDROP)	0.50%	47.06	846.50	1,193.86
LTD changes to offsets and pre-existing condition period	0.15%	14.13	172.92	383.39
Recapture of unclaimed monies	0.01%	0.60	10.26	14.76
Eliminate 80% cap on retirement benefits	0.04%	3.77	54.05	84.22
Require 20/20 Rule for dual employment situations	0.04%	3.49	55.63	55.63
Eliminate enhanced refunds	0.16%	15.07	331.85	331.85
Replace Rule of 80 with Rule of 85	0.30%	28.26	278.02	278.02
Replace 36-month average salary with 60-month average	0.25%	23.55	303.29	303.29
<b>Sub-Total, Savings Emerging in Experience</b>	<b>2.22%</b>	<b>210.21</b>	<b>3,450.10</b>	<b>4,584.80</b>
<b>GRAND TOTAL</b>	<b>3.13%</b>	<b>\$ 295.93</b>	<b>\$ 4,974.32</b>	<b>\$ 7,622.02</b>

## **Budget Savings**

The ASRS planned and implemented strategies to reduce our agency expenditures. As a result, the ASRS realized reductions to the operating budget totaling \$700,000 for FY 2011 and \$3.3 million over the past five years..

## **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, 2010. The ASRS has received this prestigious award in each of the last 22 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.

In addition, the Public Pension Coordinating Council awarded a Pension Standards Award for 2011 to the ASRS for meeting professional standards and plan design and administration. To be awarded the Pension Standards Award, a public employee retirement system must certify that it meets requirements in six areas of assessment. Those areas are comprehensive benefits program, funding adequacy, actuarial, audit, investments and communications. The Pension Standards Award is valid for one year. This is the seventh year the ASRS has received this award.

## **Acknowledgements**

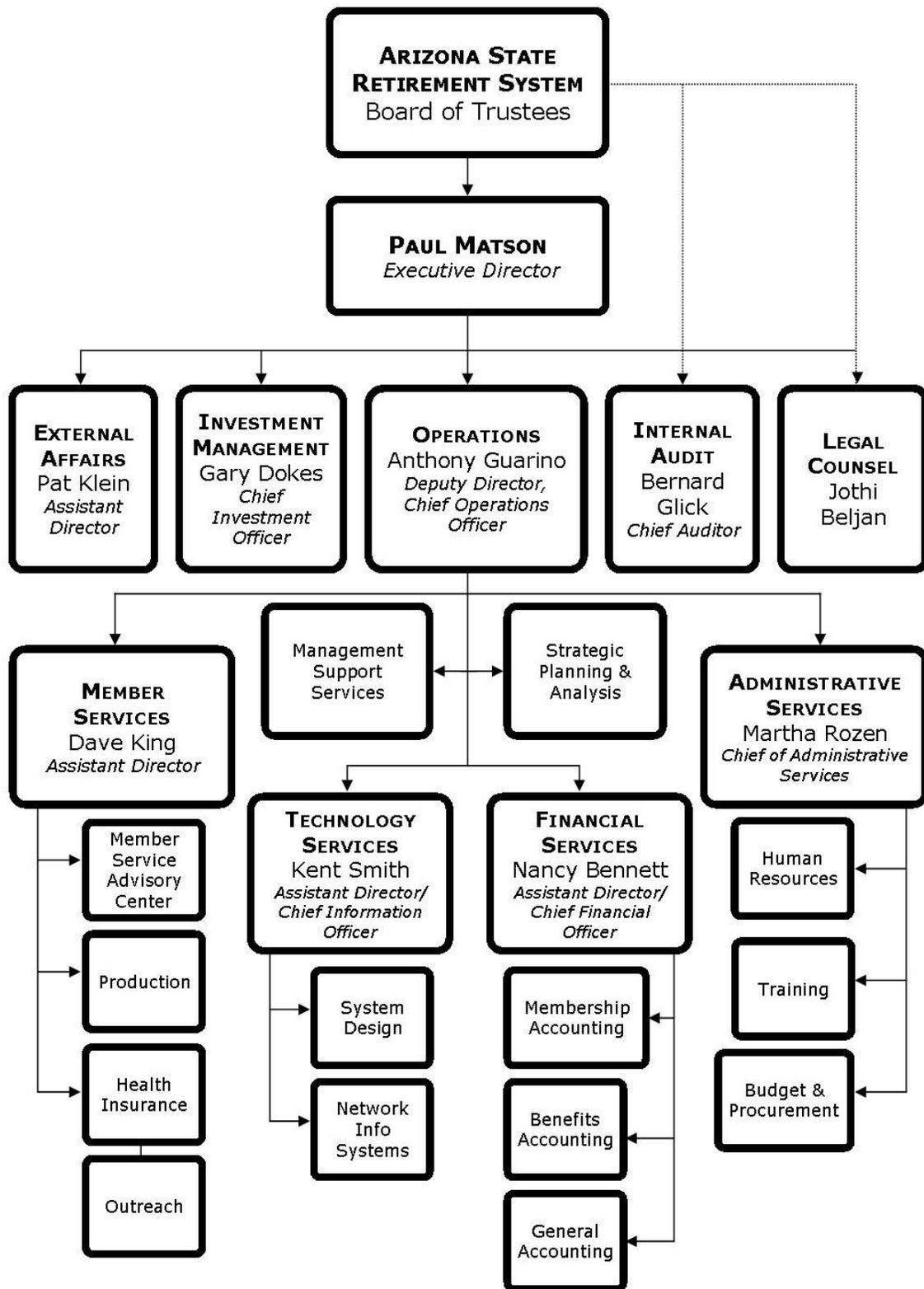
This report represents the culmination of hours of hard work by the ASRS General Accounting and Investment Management Division staff. It is intended to provide complete and reliable information for decision making, to ensure compliance with legal requirements, and is a means of measuring the responsible 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 planning 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 high quality of service and performance, which has become the standard for the ASRS.

Respectfully submitted,

Paul Matson, Executive Director

# ORGANIZATION CHART



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## ASRS BOARD OF TRUSTEES

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**David Byers**  
**Chair**  
*Phoenix, State  
Employee*



**Thomas Connelly**  
**Vice Chair**  
*Phoenix, Public*



**Christopher  
Harris**  
*Phoenix, Public*



**Dr. Dennis  
Hoffman**  
*Phoenix, Educators*



**Thomas Manos**  
*Phoenix, Member at  
Large*



**Kevin McCarthy**  
*Phoenix, Public*



**Michael  
Townsend**  
*Flagstaff, Political  
Subdivisions*



**Lawrence  
Trachtenberg**  
*Scottsdale, Public*



**Steven Zeman**  
*Phoenix, Retirees*

## EXECUTIVE STAFF

---



**PAUL MATSON**

*Director*



**GARY R. DOKES**

*Chief Investment Officer*



**ANTHONY GUARINO**

*Deputy Director,  
Chief Operations Officer*

# CHIEF OUTSIDE PROFESSIONAL SERVICES

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## **ACTUARY**

*Buck Consultants, LLC*  
Phoenix, AZ

## **LONG TERM DISABILITY BENEFITS**

*Sedgwick CMS Company*  
Calabasas, CA

## **CUSTODIAL BANK**

*State Street Bank and Trust Co.*  
Boston, MA

## **INDEPENDENT AUDITORS**

*Heinfeld, Meech & Co., P.C.*  
Tucson, AZ

## **GENERAL INVESTMENT CONSULTANT**

*NEPC, LLC*  
Cambridge, MA

## **PRIVATE REAL ESTATE CONSULTANT**

*The Townsend Group*  
Cleveland, OH

## **PRIVATE EQUITY CONSULTANT**

*Meketa Investment Group*  
Boston, MA

## **INVESTMENT MANAGERS**

*Investment Managers are listed in the Schedule of Investment Fees*  
See Page 84-88

# SUMMARY OF 2011 RETIREMENT LEGISLATION

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The 50th Legislature, First Regular Session adjourned April 20, 2011. Below is a brief summary of bills that have been passed into law that affect ASRS members and employers. To view legislation in its entirety, visit the Arizona Legislature's website at [www.azleg.gov](http://www.azleg.gov). All bills listed below are effective on the general effective date (July 20, 2011) unless otherwise noted.

## **SB 1614 – NOW: state budget procedures; 2011-2012**

(Laws 2011, Chapter 26)

### **Employer and Employee Contributions**

- Retroactive to July 1, 2011, requires employees to contribute 53 percent and employers to contribute 47 percent of the total cost for the Defined Benefit Plan and LTD plan, instead of the current 50/50 split.
- Requires state agencies, boards, departments, and commissions; school districts; charter schools; and universities to remit the dollar difference between the 50 percent cost and the 47 percent cost to the State General Fund in FY2012, and reduces school district and charter school budgets by that amount.
- Permits an agency director to require covered employees to work fewer hours to comply with lower appropriations.
- Eliminates the one remaining mandatory state employee furlough day for FY2011 and the six scheduled in FY2012, but permits agency directors to continue using furloughs to reduce costs.
- Contains language relating to state employee eligibility for benefits that was repealed and replaced by HB 2024.
- Contains a retroactivity clause for the contribution rate shifts.

## **HB 2024 - ASRS; amendments**

(Laws 2011, Chapter 277)

### **Eligibility for New State Employees**

- States that a new state employee hired after the effective date is not eligible for state benefits until the employee has worked regularly for at least 90 days.
- States that a new state employee hired after the effective date is not eligible for the ASRS Defined Benefit Plan or LTD Plan before the 27th week of employment.
- States that the new state employee shall become an ASRS member on the 27th week of employment if membership criteria are met under ASRS statutes [engaged to work 20/20, covered under the Social Security 218 Agreement, and not otherwise in an excluded position].
- States that the 27-week waiting period does not apply to a state employee who is already a member of the ASRS.
- Defines “state employee” as a person who is employed by a State agency, department, board, or commission; a State university; the judicial branch; the AZ Corporation Commission; or the Legislature.

### **Long-Term Disability Plan**

- Requires disability claims to be submitted within 12 months of the date of disability, unless the member can show good cause for filing late.

- Permits the ASRS to suspend benefits or terminate claims when a member refuses to provide requested information (such as social security wage statements or medical documents, etc.) to the ASRS.
- Requires the ASRS to retroactively reinstate the benefit or claim for which the member is entitled after the information is received.

### **Employer Collections**

- Allows the ASRS to intercept monies due to an employer from any department or agency of this state for any amounts due to the ASRS, not just amounts due from delinquent contributions.
- Requires an employer to report monies intercepted by the ASRS according to applicable accounting and financial standards.

### **Member Outreach**

- Clarifies the statutory requirement that the ASRS be present in each county at least once per year for member outreach to include electronic methods of presentation.

### **Transfers**

- Conforms the “Charter City” (e.g., City of Phoenix and City of Tucson) transfers to the §38-922 transfer methodology (i.e., same as PSPRS and CORP transfers).
- Requires a Fund to use a funded status of 100 percent if the Fund is more than 100 percent funded.

### **Qualified Domestic Relations Orders**

- Terminates an alternate payee’s benefit under a QDRO if the alternate payee predeceases the member.

### **Survivor Benefits**

- Conforms the pre-retirement survivor benefit statute to account for the new contribution rate split contained in SB1614.
- Clarifies that a natural or adopted child of any age who is disabled qualifies for the enhanced survivor benefit calculation.
- Defines “disabled” as being “incapable of self-sustaining employment by reason of mental or physical handicap and [being] chiefly dependent on the member for support.”
- Removes references to “stepchild” and instead uses the term “adopted.”

### **Lump Sum Retirement Threshold**

- Changes the Lump Sum retirement threshold from \$20 to an amount determined by the Board.
- Clarifies that a member who receives a lump sum benefit continues to have rights to the ASRS Health Insurance Program, but not rights to a future Permanent Benefit Increase.

## **SUMMARY OF 2011 RETIREMENT LEGISLATION (CONTINUED)**

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### **Service Purchase**

- Clarifies the definition of “compensation” for service purchases to address situations where the member has neither five pay periods of salary nor 12 months of credited service on record with the ASRS.
- Clarifies Leave of Absence statutes to prevent a member from purchasing time in the ASRS for which the member can still receive a benefit in another retirement system.

### **Federal Conforming Changes**

- Allows members to roll their ASRS accounts to a Roth IRA, effective January 1, 2008.
- Clarifies the period for which a member may receive service for a military call-up is the date the member returns to employment or should have returned to employment under Federal regulations, and also extends the period for service-related hospitalizations from one to two years.
- Clarifies that a member who is not currently working for an employer and who is receiving differential wage payments is not considered as having a severance from employment.

### **Miscellaneous**

- Permits the ASRS to conduct Rulemaking to implement the changes in the bill.
- States that the ASRS’ FY2011 Administrative Appropriations are non-lapsing.
- States that amounts appropriated to ASRS in FY2012 for the implementation of the contribution rate split contained in SB1612 are non-lapsing.

## **SB 1609 - retirement systems; plans; plan design**

(Laws 2011, Chapter 357)

### **Felony Forfeitures (all 4 plans)**

- Requires a court to order the forfeiture of retirement benefits if a member is convicted of or pleads no contest to a Class 1, 2, 3, 4, or 5 felony that was committed in the course of their public employment.
- States that the member will receive a return of the member’s contributions, plus interest, in a lump sum upon the ordered forfeiture.
- States that during an appeal of a conviction an order of forfeiture is not stayed, and for an active member, the employee and employer must continue making contributions, and for a retired member, the benefit is suspended and the assets held in trust by the retirement system.
- States that if the member is successful on appeal, no rights are forfeited and benefits are reinstated.
- Permits a judge to award some or all of the member’s forfeited benefits to a spouse, dependent, or former spouse taking into consideration:
  1. The role, if any, the person had in the illegal conduct.
  2. The degree of knowledge, if any, the person had about the illegal conduct.
  3. The community property nature of the benefits involved.
  4. The extent to which the person was relying on the forfeited benefits.

- States that a person subject to the forfeiture order is not eligible for membership in a public retirement plan in the future.
- States that the member forfeits benefits in the retirement system in which the member was contributing at the time of the illegal conduct.
- Requires the court to provide a copy of the order to the appropriate retirement system.
- States that the forfeiture provision does not apply to a member whose most recent retirement is before the effective date, unless the member has resumed making contributions.
- Prohibits the court from ordering the forfeiture of rights and benefits earned or for felonies committed before the effective date.

### **ASRS General Provisions**

- Removes the 85 point-based (age + years of service) normal retirement age for members hired on or after July 1, 2011, and replaces it with two new normal retirement ages. New hires will have four normal retirement age options: age 65, age 62 plus 10 years of service, age 60 plus 25 years of service and age 55 plus 30 years of service.
- Adjusts the Early Retirement Decrements to account for the removal of the 85 points normal retirement age.
- Repeals an obsolete section of law that allows an elected officer of a city or town to elect membership in ASRS.
- Limits the amount of Other Public Service, Leave of Absence Service and Military Service (except USERRA or Heart Act purchases) service credit that a member may purchase to 60 months for each type of purchase.
- Increases the amount of service credit a member must have with the ASRS prior to initiating a request to purchase Other Public Service, Leave of Absence Service and Military Service (except USERRA or Heart Act purchases) from five to 10 years.
- Requires a member who wishes to purchase Military Service (except USERRA or Heart Act purchases) to not be eligible for a military retirement benefit for the time the member wishes to purchase.

### **ASRS Return to Work—Alternate Contribution Rate**

- Beginning July 1, 2012, requires employers to pay an Alternate Contribution Rate (ACR) for members who return to work in any capacity and in a position ordinarily filled by an employee of the employer.
- Charges the ACR starting the first day after retirement for a member who reached normal retirement and for a member who is an early retiree working less than 20/20 for as long as that member stays in service and for any future employment periods during which the member does not suspend their benefits and resume active membership.
- States that the retired member does not accrue credited service, member service (for UORP), account balances, retirement benefits or LTD Program benefits, and the time is not later eligible for service purchase.
- Requires employers to pay the ACR on behalf of any retiree that it employs regardless of 20/20 status, direct/leasing/contracting arrangement, or whether the retiree satisfied the 12-month break in service without working in a leased or contract arrangement.
- States that the ACR is calculated as the greater of 2 percent or the total “deficit” payment (the ASRS Past Service Funding Requirement Rate plus the LTD Past Service Funding Requirement Rate).
- Caps the ACR at the employer’s portion of the Total ASRS Contribution Rate (Defined Benefit + LTD).
- Requires the ASRS actuary to calculate the ACR annually.

## **SUMMARY OF 2011 RETIREMENT LEGISLATION (CONTINUED)**

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- States that the ACR shall be payable on the compensation (for direct hire), gross salary (for leased employee), or contract fee (for independent contractor), as defined in the bill.
- Requires the ASRS to determine how frequently the ACR is paid and how the monies are submitted to the ASRS.
- States that late contributions are subject to interest (8 percent) and may be recovered in court or by state revenue offsets.
- Requires employers to submit any reports, data, paperwork, or materials required by the ASRS to determine the function, utilization, efficacy, or operation of the return to work program.
- Includes a Legislative Intent clause that states the purpose of the legislation is to mitigate the potential actuarial impact that retired members who return to work might have on the Trust Fund.

### **ASRS Return to Work—Violations**

- Clarifies the period for which a member shall repay suspended pensions to the ASRS starts with:
  - the date the ASRS notifies the member in writing that their employment violated the statute,
  - the date the ASRS determines the member knew or should have known that their employment violated the statute,
  - or any other time period that approximates the duration of the violation, as determined by the ASRS.
- Requires an employer that employed a member whose pension was suspended to pay the ASRS the ACR starting with the date the member returned to employment. The employer is required to make the ACR payment through the earlier of:
  - The date the member terminates employment,
  - The date the employer begins making the ACR payment required by the new Return to Work statute, or
  - The date the member resumes active membership in the ASRS.

### **Defined Contribution and Retirement Study Committee**

- Establishes a Defined Contribution and Retirement Study Committee made up of the State Board of Investment, three Senators, three Representatives, one ASRS Trustee, and one PSPRS Trustee.
- Requires the Committee to study and make recommendations regarding:
  - The feasibility and cost of transferring existing members of the Defined Benefit Plan to a new Defined Contribution Plan, as well as implementing a Defined Contribution Plan for new hires.
  - The advantages and disadvantages of ASRS and PSPRS-sponsored supplemental retirement plans and the feasibility of merging the supplemental plans.
  - The definitions of compensation, average yearly salary and salary of all four plans, especially with respect to salary “spiking.”
  - The advantages and disadvantages of the local board system within PSPRS and CORP and the feasibility of establishing a single-employer model.
  - The procedures for granting disability by the local boards of PSPRS and CORP, the actuarial impact of those procedures, and the feasibility of having PSPRS Administration make those determinations.
- Permits the Committee to use consultants, actuaries, and attorneys, and exempts the Committee from the requirements of the Procurement Code.

## **SUMMARY OF 2011 RETIREMENT LEGISLATION (CONTINUED)**

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- Requires the Committee to meet twice and issue an interim report before December 31, 2011, and submit a final report with recommendations by December 31, 2012.
- Appropriates \$50,000 from the ASRS Administration Account and \$50,000 from PSPRS to fund the Study Committee.

### **Miscellaneous**

- Authorizes the ASRS to conduct Rulemaking to implement the bill.
- Appropriates \$250,000 from the ASRS administration account to the ASRS. The appropriation is non-lapsing.
- Applies the changes to ASRS' normal retirement date retroactively to June 30, 2011.
- Permits the ASRS to use the monies appropriated by Laws 2010, Chapter 50 ["Plan Design"] for the administrative implementation of this bill as well.

# ARIZONA STATE RETIREMENT SYSTEM



A COMPONENT UNIT OF THE STATE OF ARIZONA • DELIVERING SERVICE WITH PRIDE

## Financial Section 2011



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# INDEPENDENT AUDITORS' REPORT

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HEINFELD, MEECH & CO., P.C.  
CERTIFIED PUBLIC ACCOUNTANTS



The Honorable Janice K. Brewer, Governor  
State of Arizona

Board of Trustees  
Arizona State Retirement System

We have audited the accompanying Statement of Plan Net Assets of the funds of the Arizona State Retirement System (ASRS), a component unit of the State of Arizona, as of and for the year ended June 30, 2011, and the related Statement of Changes in Plan Net Assets of the funds for the year then ended. These basic financial statements are the responsibility of ASRS's management. Our responsibility is to express an opinion on these financial statements based on our audit. The comparative totals as of and for the year ended June 30, 2010, presented in the basic financial statements are included for additional analysis only. Our audit report dated December 2, 2010, expressed an unqualified opinion on these statements; however, we have not performed any auditing procedures on this information since the date of our report.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. 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 examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes 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, the financial statements referred to above present fairly, in all material respects, the net assets of the funds of the Arizona State Retirement System, a component unit of the State of Arizona, as of June 30, 2011, 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.

In accordance with Government Auditing Standards, we have also issued our report dated October 24, 2011, on our consideration of the Arizona State Retirement System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be considered in assessing the results of our audit.

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 24 through 29 and the Schedule of Funding Progress and Schedule of Employer Contributions on pages 52 and 59 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the ASRS's financial statements as a whole. The accompanying supplementary information such as the Introductory Section, Additional Supplementary Information, Investment Section, Actuarial Section, and Statistical Section are presented for purposes of additional analysis and are not a required part of the financial statements. The Additional Supplementary Information, as listed in the table of contents under the Financial Section, is the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the financial statements. The Additional Supplementary Information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Additional Supplementary Information is fairly stated in all material respects in relation to the financial statements as a whole. The Introductory Section, Investment Section, Actuarial Section, and Statistical Section have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

*Heinfeld, Meech & Co., P.C.*

HEINFELD, MEECH & CO., P.C.  
Certified Public Accountants

October 24, 2011

# MANAGEMENT'S DISCUSSION AND ANALYSIS

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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 June 30, 2011. 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's Comprehensive Annual Financial Report (CAFR), and the basic financial statements and notes to the basic financial statements presented in the Financial Section of the CAFR.

## Financial Highlights

During FY 2011, ASRS assets increased primarily as the result of positive conditions in the domestic and international equity markets. As a result, over this period the ASRS's investments out-performed the assumed 8 percent actuarial investment rate of return.

- The ASRS rate of return on investments for FY 2011 was 24.6 percent compared to 14.9 percent for FY 2010. The increase in the rate of return reflects the positive conditions in the global securities markets during the fiscal year 2011.
- The ASRS combined total net assets held in trust for pension benefits increased by 21 percent at FYE June 30, 2011 compared to FYE 2010. The increase in the combined total net assets is primarily due to positive returns in the global securities markets during the fiscal year.
- The ASRS paid \$2.3 billion in pension, disability, health insurance and survivor benefits during FY 2011 compared to \$2.2 billion in FY 2010. The 6 percent increase is due to a 7 percent increase in the total number of retirees.
- As of June 30, 2010, the most recent actuarial valuation, the Retirement and Health Benefit Supplement Funds combined were 76.7 percent funded. This compares to a combined funding ratio of 79.3 percent as of June 30, 2009. The change in funding percentage is primarily due to continued recogni-

tion of investment losses for fiscal years 2002 and 2003, as well as to the investment losses in fiscal years 2008 and 2009.

## 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 is comprised of the following components: 1) basic financial statements, 2) notes to the basic financial statements, 3) required supplementary information and 4) other supplementary schedules. Collectively, this information presents the combined net assets held in trust for pension benefits which includes health benefit supplements and long term disability for each of the funds administered by the ASRS as of June 30, 2011. 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 June 30, 2011, financial statements are presented for the funds administered by the ASRS. These fiduciary funds are held for the benefit of the ASRS members.
  - The Combined Statement of Plan Net Assets is presented as of June 30, 2011 with combined total comparative information as of June 30, 2010. This financial statement reflects the resources available to pay benefits to members, including retirees and beneficiaries, at the end of the fiscal year.
  - The Combined Statement of Changes in Plan Net Assets is presented for the year ended June 30, 2011 with comparative information for the year ended June 30, 2010. This statement reflects the changes in resources available to pay benefits to retirees and other beneficiaries for year.

- 2) **Notes to the Basic Financial Statement.** 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 36-55 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 Schedules.** 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 and investment expenses by manager. The ASRS Plan, a defined benefit plan, and the System, a defined contribution plan with guaranteed benefits, are separate 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 June 30, 2011 were \$28.3 billion, a 21 percent increase from \$23.4 billion at June 30, 2010. The increase in net assets is primarily due to positive returns in the global securities markets during the fiscal year. The

retirement fund net assets were \$26.8 billion compared to \$22.1 billion last year, a 21 percent increase. The HBS fund net assets were \$1.2 billion at year end compared to \$1.0 billion at FYE 2010, a 20 percent increase. The LTD fund net assets were \$281 million at year end compared to \$250 million last year, a 12 percent increase.

Net investments totaled \$28.3 at FYE 2011 compared to \$23.4 billion at FYE 2010. The 21 percent increase is primarily due to positive returns in the global securities markets. Cash, receivables and prepaids of \$1.1 billion reflects an 8 percent increase compared to last year's \$1.0 billion and is primarily due to an increase in forward contracts receivables. Liabilities of \$2.2 billion represents a decrease of 38 percent compared to \$3.6 billion last year. This is primarily due to a decrease in payable for securities lending collateral resulting from a change in the collateral mix.

**Changes in Net Assets.** For the 2011 fiscal year, employer and member contributions totaled \$1.7 billion, consistent with the 2010 fiscal year contributions of \$1.7 billion. The slight drop in active membership was offset by a 5 percent increase in contribution rates resulting in level contribution income between fiscal years 2010 and 2011.

For FY 2011, the ASRS recognized net investment income of \$5.7 billion which compares to net investment income of \$3.0 billion in the previous year. This 88 percent increase is due to positive returns in the global equity 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 2011 fiscal year, pension, disability, health insurance and survivor benefits totaled \$2.3 billion, an increase of 6 percent over the \$2.2 billion paid during FY 2010. The 6 percent increase is explained by an increase in total retirees. Refunds and transfers to other plans totaled \$187 million dollars in 2011, a 13 percent increase from the \$166 million paid out in 2010. The increase is due primarily to a 17 percent increase in refunds due to the current economic environment. For

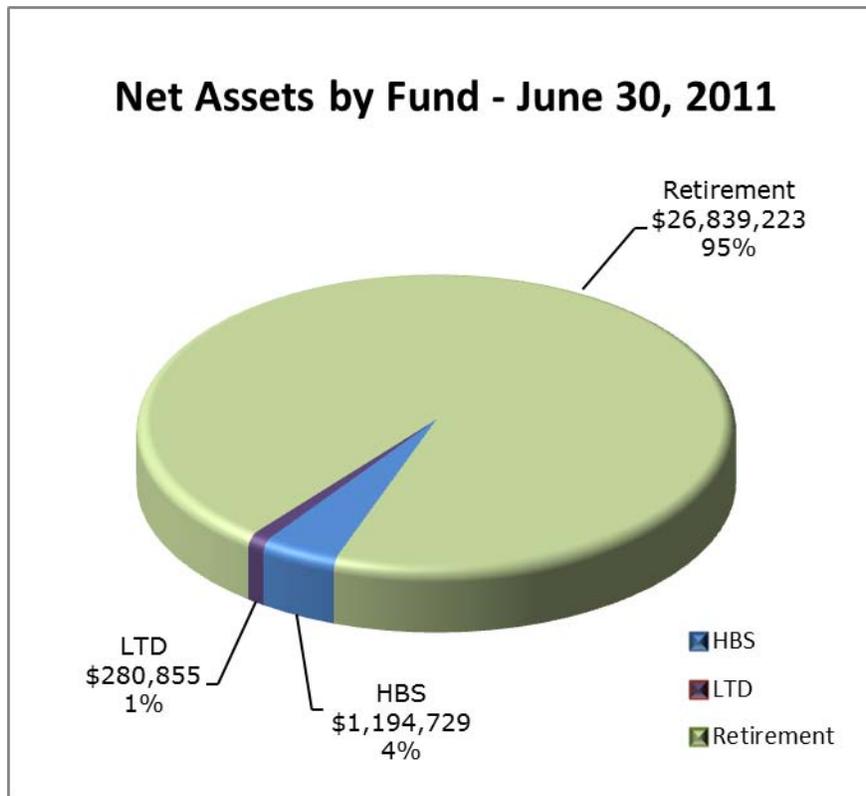
## MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

FY 2011, the cost of administering the ASRS benefits totaled \$31 million, a decrease of 3 percent from the \$32 million paid in FY 2010. This decrease is primarily due to a decrease in payroll expense due to an additional payroll period in FY 2010.

The following tables show the principal ASRS net assets and changes in net assets for fiscal years 2011 and 2010, in thousands of dollars:

<b>Net Assets</b>	<b>2011</b>	<b>2010</b>	<b>Change</b>	<b>% Change</b>
<b>ASSETS</b>				
Cash, receivables and prepaids	\$ 1,114,771	\$ 1,030,361	\$ 84,410	8.2%
Investments at fair value	28,541,753	23,604,607	4,937,146	20.9%
Securities lending	880,893	2,360,532	(1,479,639)	-62.7%
<b>Total assets</b>	<b>30,537,417</b>	<b>26,995,500</b>	<b>3,541,917</b>	<b>13.1%</b>
<b>LIABILITIES</b>				
Payables and other liabilities	1,341,717	1,242,034	99,683	8.0%
Securities lending	880,893	2,360,532	(1,479,639)	-62.7%
<b>Total Liabilities</b>	<b>2,222,610</b>	<b>3,602,566</b>	<b>(1,379,956)</b>	<b>-38.3%</b>
<b>TOTAL NET ASSETS</b>	<b>\$28,314,807</b>	<b>\$23,392,934</b>	<b>\$ 4,921,873</b>	<b>21.0%</b>

<b>Change in Net Assets</b>	<b>2011</b>	<b>2010</b>	<b>Change</b>	<b>% Change</b>
<b>ADDITIONS</b>				
Employee contributions	\$ 854,976	\$ 844,847	\$ 10,129	1.2%
Employer contributions	859,399	858,431	968	0.1%
Service credit purchase and transfers in	70,812	73,973	(3,161)	-4.3%
Investment and security lending income	5,833,161	3,144,567	2,688,594	85.5%
Investment and security lending expense	(128,709)	(116,351)	(12,358)	-10.6%
<b>Total additions</b>	<b>7,489,639</b>	<b>4,805,467</b>	<b>2,684,172</b>	<b>55.9%</b>
<b>DEDUCTIONS</b>				
Retirement and disability benefits	2,324,602	2,188,250	136,352	6.2%
Survivor benefits	23,949	26,472	(2,523)	-9.5%
Refunds and transfers	186,975	165,599	21,376	12.9%
Administration and other	32,240	32,666	(426)	-1.3%
<b>Total deductions</b>	<b>2,567,766</b>	<b>2,412,987</b>	<b>154,779</b>	<b>6.4%</b>
<b>NET CHANGE</b>	<b>4,921,873</b>	<b>2,392,480</b>	<b>2,529,393</b>	<b>105.7%</b>
Net assets beginning of year	23,392,934	21,000,454	2,392,480	11.4%
<b>Net assets end of year</b>	<b>\$28,314,807</b>	<b>\$23,392,934</b>	<b>\$ 4,921,873</b>	<b>21.0%</b>



**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 June 30, 2010.

- At June 30, 2010 the total funded status of the ASRS retirement and health benefit supplement funds decreased to 76.7 percent from 79.3 percent at FYE 2009. At FYE 2010 ASRS actuarial liabilities exceeded actuarial assets for the retirement and health benefit supplement funds by \$8.8 billion. This compares to an excess of actuarial liabilities over actuarial assets of \$7.4 billion at FYE 2009. This decrease in funded status is due primarily to the recognition of investment losses in fiscal years 2002 and 2003 and the investment losses in fiscal years 2008 and 2009.

**Investments.** During the FY 2011, the ASRS investments were broadly diversified in domestic and international equities, domestic fixed income, real estate, private equity, opportunistic, commodities and cash equivalent instruments. According to statutory restrictions, no more than 80 percent of ASRS assets may be invested at any given time in corporate stocks or equity equivalents, and no more than 30 percent of ASRS assets may be invested in foreign securities. These investments remained within statutory guidelines.

The Retirement and HBS funds are combined in commingled investment pools. Investments for each fund are allocated daily via a fluctuating dollar unitization methodology. Realized and unrealized gains are allocated daily using the same methodology. The LTD investments are held and managed in a separate fund.

## MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

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At June 30, 2011, the ASRS held net investments of \$28.3 billion, an increase of \$4.9 billion from FY 2010. The combined investment portfolio experienced a return of 24.6 percent compared to the Interim Total Fund Benchmark return of 24.4 percent. The increase in net investments from FY10 to FY11 is primarily due to higher valuations of the global securities markets, particularly equities and strong manager performance within the ASRS Global Tactical Asset Allocation (GTAA) program.

The ASRS held \$13.0 billion in domestic equities and \$4.9 billion in international equities on June 30, 2011, an increase of 10.7 percent in domestic equities and a 39.8 percent increase in international equities from FY 2010. Market performance and the reallocation of assets account for the change in value. The FY 2011 rate of return for ASRS domestic equities was 33.8 percent compared to 17.8 percent in FY 2010. By comparison, the ASRS domestic equities benchmark, comprised of a combination of S&P 400, S&P 500 and the S&P 600 indices, had a return of 32.7 percent for FY 2011. The FY 2011 rate of return for ASRS international equities was 29.8 percent compared to 10.5 percent in FY 2010. Comparatively, the ASRS international equities benchmark, comprised of the MSCI EAFE, MCSI EAFE Small Cap and the MSCI EM indices, had a rate of return of 30.8 percent for FY 2011. The underperformance of the Fund's international equities class was largely a result of the stock selections made by external portfolio managers.

Domestic fixed income securities held by the Fund were \$6.0 billion at June 30, 2011, an increase of \$430.0 million, from FY 2010. The rate of return was 5.0 percent compared to 11.1 percent in the previous year, as the result of largely unchanged interest rates and the narrowing of credit spreads during FY 2011. The ASRS domestic fixed income benchmark, the Barclay-Aggregate Index, returned 4.6 percent for FY 2011.

At June 30, 2011, the ASRS held \$580.0 million in commodities securities managed by two commodity managers. Each manager experienced a return of 26.1 percent and 16.0 percent, respectively, outperforming their bench-

mark, the DJUBS Commodity Index, which returned -21.0 percent and 12.8 percent, over the respective managers' inception date.

At June 30, 2011, the ASRS held \$1.2 billion in real estate assets, an increase of \$442.8 million from FY 2010. The one-year net of fees rate of return was 19.5 percent compared to a 0.5 percent return in FY 2010. The program benchmark, the NFI-ODCE Index, was 20.1 percent for the same period. The real estate program is five years old and not fully matured. The ASRS portfolio utilizes leverage, which was 52.0 percent as of June 30, 2011. The NFI-ODCE Index is an index comprised of primarily core institutional quality real estate with moderate leverage and reported net of fees. The ASRS portfolio, like many institutional real estate investors, has a large percentage invested in non-core real estate, which entails higher leasing and development risk and which have cash flows that are generated later in their life cycle. This negatively impacted the performance of the portfolio during the recession, but the performance has improved in a recovering economy.

At June 30, 2011, the ASRS held \$822.1 million in private equity investments, an increase of \$341.4 million from FY 2010. On a relative basis over the long-term (10 years or longer), the ASRS Strategic Investment Policy benchmarks the private equity program against and expects the program's performance to generate a minimum internal rate of return equal to the Russell 2000 Index, net of all investment management fees and expenses. For the year ending June 30, 2011, the one-year net of fees rate of return was 17.1 percent. For the same period, the Russell 2000 Index returned 25.8 percent. The program is still relatively young with more than 50 percent of its committed capital yet to be drawn down and invested. As is characteristic of private equity programs in their nascent stages of development, unrealized valuations and management fees create a disproportionate amount of return dispersion relative to their impact over the life of a fund.

At June 30, 2011, the ASRS held \$379.6 million in opportunistic funds, an increase of \$69.0 million from FY 2010. The performance of ASRS opportunistic investments are evaluated primarily on a net-of-fees absolute rate of return basis; in aggregate, these investments, inception-to-date, have returned 9.7 percent primarily as the result continued tightening of Securitized Credit (Commercial Mortgage Backed Securities, non-agency RMBS, Asset Backed Securities) and other credit spreads relative to the timing of the purchase price of securities made within these strategies.

The ASRS earns additional investment income by lending investment securities. State Street Bank & Trust, which is the ASRS's custodial bank acts as agent on behalf of the ASRS for securities lending transactions related to the securities held in custody at State Street. Borrowers provide collateral, either securities or cash, in excess of the value of loaned securities and generally use the borrowed securities to initiate short sales or cover failed trades. The net income from security lending program for FY 2011 was \$13.8 million compared to \$12.5 million for FY 2010. This increase is due to increased loan demand as a result of increased market volatility.

### Current Market Conditions

The backdrop of slowing global growth in combination with sizeable fiscal deficits present challenges for fiscal and monetary policymakers. Equity markets rallied strongly during most of FY 2011, but have stalled since on concerns over escalating sovereign debt problems in the Euro-zone, pocketed unrest in the Middle East and the protracted weakness of the domestic U.S. economy. Although risks of recession are higher in this environment, most projections are for slow, but not stellar growth over the next year. This setting is reasonably favorable for financial assets.

The ASRS continues to implement the Strategic Asset Allocation policy and will allocate assets tactically within guidelines as market opportunities present themselves.

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Additional information is available upon request.

Please direct your request to the:

ASRS Financial Services Division  
3300 North Central Avenue  
Phoenix, AZ 85012.

## BASIC FINANCIAL STATEMENTS

### Combined Statement of Plan Net Assets

For the Year Ended June 30, 2011 with Comparative Totals for 2010  
(Dollars in Thousands)

	Retirement Fund	Health Benefit Supplement Fund (Note 8)	Long Term Disability Fund (Note 8)	Combined	
				2011	2010
<b>ASSETS</b>					
Cash (Note 3)	\$ 5,494	\$ 211	\$ -	\$ 5,705	\$ 4,264
<b>RECEIVABLES</b>					
Accrued interest & dividends	61,736	2,740	-	64,476	65,081
Securities sold (Note 3)	131,158	5,821	-	136,979	186,494
Forward contracts (Note 5)	810,087	35,951	-	846,038	711,480
Contributions (Note 7)	41,003	1,309	1,108	43,420	42,071
Due from other funds (Note 11)	-	6,039	2,173	8,212	7,543
Other	6,726	125	3,090	9,941	13,428
<b>Total receivables</b>	<b>1,050,710</b>	<b>51,985</b>	<b>6,371</b>	<b>1,109,066</b>	<b>1,026,097</b>
<b>INVESTMENTS AT FAIR VALUE (Note 3)</b>					
Temporary investments	2,229,908	96,569	2,638	2,329,115	1,320,643
Temporary investments from securities lending collateral (Note 4)	843,461	37,432	-	880,893	2,360,532
U. S. government obligations	3,626,318	161,077	-	3,787,395	3,378,261
Corporate bonds	2,072,764	95,347	-	2,168,111	2,146,826
Common and preferred stocks	16,873,536	745,809	272,096	17,891,441	15,246,974
Derivatives	776	34	-	810	213
Real estate	1,114,341	48,814	-	1,163,155	720,310
Private equity	786,764	35,338	-	822,102	480,748
Opportunistic investments	363,430	16,194	-	379,624	310,632
<b>Total investments</b>	<b>27,911,298</b>	<b>1,236,614</b>	<b>274,734</b>	<b>29,422,646</b>	<b>25,965,139</b>
<b>TOTAL ASSETS</b>	<b>28,967,502</b>	<b>1,288,810</b>	<b>281,105</b>	<b>30,537,417</b>	<b>26,995,500</b>
<b>LIABILITIES</b>					
Payable for securities purchased (Note 3)	449,971	19,969	-	469,940	500,545
Payable for securities lending collateral (Note 4)	843,461	37,432	-	880,893	2,360,532
Forward contracts payable (Note 5)	793,014	35,193	-	828,207	695,488
Due to other funds (Note 11)	8,211	-	1	8,212	7,543
Other	33,622	1,487	249	35,358	38,458
<b>TOTAL LIABILITIES</b>	<b>2,128,279</b>	<b>94,081</b>	<b>250</b>	<b>2,222,610</b>	<b>3,602,566</b>
<b>NET ASSETS HELD IN TRUST FOR PENSION/OPEB BENEFITS</b>	<b>\$ 26,839,223</b>	<b>\$ 1,194,729</b>	<b>\$ 280,855</b>	<b>\$ 28,314,807</b>	<b>\$ 23,392,934</b>

The accompanying notes are an integral part of these statements.

**BASIC FINANCIAL STATEMENTS (CONTINUED)**

**Combined Statement of Changes in Plan Net Assets**

For the Year Ended June 30, 2011 with Comparative Totals for 2010

(Dollars in Thousands)

Additions	Health Benefit Supplement Fund (Note 8)		Long Term Disability Fund (Note 8)		Combined	
	Retirement Fund				2011	2010
<b>CONTRIBUTIONS</b>						
Member contributions (Note 7)	\$ 833,287	\$ -	\$ 21,689	\$ 854,976	\$ 844,847	
Employer contributions (Note 7)	786,662	51,048	21,689	859,399	858,431	
Transfers from other plans	6,427	-	-	6,427	2,953	
Purchased Service	64,385	-	-	64,385	71,020	
<b>Total Contributions</b>	<b>1,690,761</b>	<b>51,048</b>	<b>43,378</b>	<b>1,785,187</b>	<b>1,777,251</b>	
<b>INCOME FROM INVESTMENT ACTIVITIES</b>						
Net appreciation in fair value (public)	4,629,673	206,321	57,388	4,893,382	2,484,029	
Interest	207,282	9,248	5	216,535	225,817	
Dividends	265,894	11,868	-	277,762	267,330	
Real Estate	181,336	8,062	-	189,398	(19,656)	
Private Equity	123,495	5,559	-	129,054	77,317	
Opportunistic Investments	67,190	2,987	-	70,177	81,079	
Other	40,832	1,820	-	42,652	15,972	
<b>Total income from investment activities</b>	<b>5,515,702</b>	<b>245,865</b>	<b>57,393</b>	<b>5,818,960</b>	<b>3,131,888</b>	
<b>LESS INVESTMENT ACTIVITY EXPENSES</b>						
Management fees and monitoring services (public)	(59,008)	(2,633)	(649)	(62,290)	(48,426)	
Real estate expense	(24,172)	(1,078)	-	(25,250)	(37,491)	
Private equity expense	(28,004)	(1,262)	-	(29,266)	(24,561)	
Opportunistic investments expense	(10,987)	(488)	-	(11,475)	(5,692)	
<b>Total investment activity expenses</b>	<b>(122,171)</b>	<b>(5,461)</b>	<b>(649)</b>	<b>(128,281)</b>	<b>(116,170)</b>	
<b>Net income from investment activities</b>	<b>5,393,531</b>	<b>240,404</b>	<b>56,744</b>	<b>5,690,679</b>	<b>3,015,718</b>	
<b>FROM SECURITIES LENDING ACTIVITIES (NOTE 4)</b>						
Security lending income	13,593	608	-	14,201	12,679	
Security lending expenses						
Interest (expense) / rebate	1,316	59	-	1,375	1,303	
Management fees	(1,726)	(77)	-	(1,803)	(1,484)	
Total securities lending activities expense	(410)	(18)	-	(428)	(181)	
<b>Net income from securities lending activities</b>	<b>13,183</b>	<b>590</b>	<b>-</b>	<b>13,773</b>	<b>12,498</b>	
<b>Total net investment income</b>	<b>5,406,714</b>	<b>240,994</b>	<b>56,744</b>	<b>5,704,452</b>	<b>3,028,216</b>	
<b>TOTAL ADDITIONS</b>	<b>7,097,475</b>	<b>292,042</b>	<b>100,122</b>	<b>7,489,639</b>	<b>4,805,467</b>	
<b>Deductions</b>						
Retirement and disability benefits	2,166,779	91,699	66,124	2,324,602	2,188,250	
Survivor benefits	23,949	-	-	23,949	26,472	
Refunds to withdrawing members, including interest	180,719	-	-	180,719	154,144	
Administrative expenses	27,286	1,209	2,676	31,171	32,323	
Transfers to other plans	6,256	-	-	6,256	11,455	
Other	223	-	846	1,069	343	
<b>TOTAL DEDUCTIONS</b>	<b>2,405,212</b>	<b>92,908</b>	<b>69,646</b>	<b>2,567,766</b>	<b>2,412,987</b>	
<b>NET INCREASE</b>	<b>\$ 4,692,263</b>	<b>\$ 199,134</b>	<b>\$ 30,476</b>	<b>\$ 4,921,873</b>	<b>\$ 2,392,480</b>	
<b>NET ASSETS HELD IN TRUST FOR PENSION/OPEB BENEFITS</b>						
Beginning of year	22,146,960	995,595	250,379	23,392,934	21,000,454	
<b>End of year</b>	<b>\$ 26,839,223</b>	<b>\$ 1,194,729</b>	<b>\$ 280,855</b>	<b>\$ 28,314,807</b>	<b>\$ 23,392,934</b>	

The accompanying notes are an integral part of these statements.

# NOTES TO THE BASIC FINANCIAL STATEMENTS

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## 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, 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, Article 2 of the Arizona Revised Statutes (A.R.S.). The Long Term Disability Program is administered in accordance with Title 38, Chapter 5, Article 2.1.

The ASRS is a qualified governmental pension plan pursuant to I.R.C. §414. The ASRS plan has two components, the Plan and the System. The Arizona State Retirement System's accumulated plan assets are used to pay benefits of either component of members. The System is a defined contribution plan with guaranteed benefits and the Plan is a defined benefit 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 July 1, 1995, the ASRS has established an account for each benefit program and has reported those funds in the basic financial statements. Both the Health Benefit Supplement Fund (HBS) and the Long Term Disability Fund (LTD) are cost-sharing, multiple-employer post-employment benefit plans. Although the investments of the HBS Fund are commingled with investments of the Retirement Fund, only the HBS Fund's assets may be used for the payment of HBS benefits to eligible members.

**Reporting Entity** – The financial statements of the ASRS include the financial activities of all the above funds. The ASRS Retirement Board of Trustees (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, survivor annuities, health insurance supplements and long term disability in accordance with Arizona Revised Statutes. Employee contributions toward retirement benefits are excluded from gross income for Federal and State income tax purposes. However, employee contributions for long term disability are fully taxable. Employers collect contributions from the employees, add their matching share and remit the total amounts to the ASRS. (See Note 14 addressing significant legislative changes effective July 1, 2011.)

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 the ASRS and other public service employment.

Costs of administering the funds are appropriated by the State legislature and financed through contributions and investment earnings.

**NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)**

At June 30, 2011 and June 30, 2010, the number of participating employers and employees totaled:

<b>Employer Units</b>	<b>2011</b>	<b>2010</b>
School Districts	243	243
Charter Schools	151	156
Cities and Towns	78	78
Counties	15	15
Special Districts	94	93
Community College Districts	10	10
Universities	3	3
State Government	1	1
<b>Total</b>	<b>595 *</b>	<b>599</b>
<b>Employee Members</b>		
Retirees (including Beneficiaries)	107,172	100,233
Non Active Fully Vested	210,601	210,684
Long Term Disability recipients	4,785	4,797
Current Employees - Active	216,216	220,342
<b>Total</b>	<b>538,774</b>	<b>536,056</b>

\* The 595 Employer Reporting Units represent 704 total employers. Of the retirees noted above, 63,965 are receiving health insurance premium benefits.

**Benefits** – The ASRS 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 ASRS 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 (July 1 to June 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 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. (See Note 14 addressing significant legislative changes effective July 1, 2011.)

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

<b>Years of Service</b>	
0-19.99 years -	2.10 percent
20-24.99 years -	2.15 percent
25-29.99 years -	2.20 percent
30 or more years -	2.30 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. (See Note 14 addressing significant legislative changes effective July 1, 2011.)

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.

## NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)

Members who began participation in the Plan prior to January 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. For members who joined the ASRS on or after August 9, 2001, the monthly annuity is limited to no more than 80 percent of the average monthly compensation. 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. (See Note 14 addressing significant legislative changes effective July 1, 2011.)

Effective July 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 earnings. Participants continue to earn service credit up to their normal retirement dates. Members with LTD commencement dates after June 30, 1999 are limited to 30 years of service or the service on record as of the effective disability date if their service is higher than 30 years.

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 January 1, 1989, retired and disabled members of ASRS became eligible for the Health Insurance Premium Supplement Benefit Program (HBS). Effective July 29, 2010, members must have insurance provided by either their former employer or ASRS in order to be eligible for HBS. A detailed explanation of both the LTD and HBS 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 4 percent.

Members can receive a percentage of employer contributions to the plan based on years of service as follows:

Years of Service	% of Employer Contributions
5 to 5.9	25%
6 to 6.9	40%
7 to 7.9	55%
8 to 8.9	70%
9 to 9.9	85%
10 or more	100%

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. (See Note 14 addressing significant legislative changes effective July 1, 2011.)

## 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. Contributions from employees and employers for service through June 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 retirement health benefit supplement and long term disability plan.

Investment income derived from publically traded investments is recognized when earned and investment and other expenditures are recorded when incurred. Investment income and expenses derived from private investments are recognized on a quarterly lag.

## NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)

**Investments** – Investments include domestic and international equities, domestic fixed income, real estate, private equity, opportunistic, commodities and cash equivalent instruments.

Publically traded investments are reported at fair values determined by the custodial agent. The agents' determination of fair values includes, among other things, utilization of pricing services or prices quoted by independent brokers at current exchange rates.

ASRS's derivative instruments which consist of futures, forward contracts, options, swaps, rights and warrants, are measured at fair value and reported on the Statement of Plan Net Assets. Changes in fair values of derivative instruments are reported as net appreciation of fair value on the Statement of Changes in Plan Net Assets.

Private real estate, private equity and opportunistic investments are valued based upon the partnerships' March 2011 financial statements adjusted for cash flows through June 30, 2011.

Short-term 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 from investment activities includes net appreciation in the fair value of investments, interest income, dividend income, real estate, private equity and opportunistic investment income and total investment expense. This includes investment management, real estate, private equity and opportunistic investment expenses 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.

HBS and Retirement investments are pooled. However, investments for each fund are allocated daily via a fluctuating dollar unitization methodology. Realized and unrealized gains are allocated daily using the same methodology.

**Capital Assets** – Capitalization thresholds have been established as follows:

Furniture and fixtures	\$ 1,000,000
Computers and other equipment	\$ 1,000,000
Internally developed computer software	\$10,000,000
Externally purchased software	\$ 1,000,000
Websites	\$ 1,000,000

As of the year ended June 30, 2011, the ASRS did not have any capitalizable expenditures at or above the above stated thresholds.

**Federal Income Tax Status** – During the year ended June 30, 2011, 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 June 30, 2010, 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 prior-year summarized comparative information in total but not by fund. Such information should be read in conjunction with the ASRS’s financial statements for the year ended June 30, 2010, from which the summarized information was derived.

**New Accounting Pronouncements** – GASB Statement No. 59 was issued and is effective for periods beginning after June 15, 2010. It amends GASB Statements No. 25, 31, 40 and 53 regarding financial reporting and disclosure requirements of certain financial instruments and external investment pools. As the ASRS had already incorporated applicable provisions of GASB Statement No. 59, there is no effect on our financial statements.

### 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 do not require ASRS deposits to be collateralized. The board has not adopted a more restrictive policy. In addition, the FDIC insures ASRS cash deposits up to \$250,000 per member based on the ratio of the member’s account balance to the ASRS net assets.

**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 Person” 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, derivatives, commodities, real estate, private equity and opportunistic investments.

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

1. No more than 80 percent of the ASRS’s 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’s 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.
3. No more than 5 percent of the voting stock of any one corporation may be owned.
4. No more than 30 percent of the ASRS’s assets may be invested in foreign 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’s 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 Inter-American

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.
7. No investments in companies that do business in Sudan, Iran, or other State Sponsors of Terrorism countries under certain conditions.

Subject to the limitations noted above, the Board may authorize the Director to make investments that are designated by the Board and that do not exceed 50 percent of the assets of the investment account measured at cost.

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. 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 June and settlement dates in July 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 \$137 million and a payable for securities purchased of \$470 million at June 30, 2011.

**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 U.S. 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 the ASRS assets.

## NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)

### Investments by Investment Type

At June 30, 2011

(Dollars in Thousands)

Investment	Retirement HBS	LTD	2011 Fair Value
TEMPORARY INVESTMENTS			
Cash and Cash Equivalents	\$ 1,745,287	\$ 2,638	\$ 1,747,925
Foreign Currency	127,400		127,400
Temporary Investments including U.S. T-bills	453,790		453,790
<b>Total Temporary Investments</b>	<b>2,326,477</b>	<b>2,638</b>	<b>2,329,115</b>
TEMPORARY INVESTMENTS FROM SECURITIES LENDING COLLATERAL			
U. S. Government Obligations	23,670		23,670
U. S. Agency Obligations	38,670		38,670
Corporate Obligations – Domestic	21,639		21,639
Corporate Obligations – Foreign	107		107
Preferred and Common Stock – Domestic	420,621		420,621
Preferred and Common Stock – Foreign	376,186		376,186
<b>Total Securities Lending Collateral</b>	<b>880,893</b>	<b>-</b>	<b>880,893</b>
CORPORATE BONDS	2,168,111		2,168,111
COMMON AND PREFERRED STOCK			
Preferred Stock	11,445		11,445
Common Stock	17,607,900	272,096	17,879,996
<b>Total Common and Preferred Stock</b>	<b>17,619,345</b>	<b>272,096</b>	<b>17,891,441</b>
DERIVATIVES	810		810
U.S. GOVERNMENT BONDS	3,787,395		3,787,395
REAL ESTATE INVESTMENTS	1,163,155		1,163,155
PRIVATE EQUITY INVESTMENTS	822,102		822,102
OPPORTUNISTIC INVESTMENTS	379,624		379,624
<b>TOTAL INVESTMENTS AT FAIR VALUE</b>	<b>29,147,912</b>	<b>274,734</b>	<b>29,422,646</b>
Short Term Investment Receivables	1,050,474		1,050,474
Short Term Investment Payables	(2,194,681)		(2,194,681)
<b>INVESTMENTS AT FAIR VALUE - NET</b>	<b>\$28,003,705</b>	<b>\$ 274,734</b>	<b>\$28,278,439</b>

**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 Person

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, 2011 categorized to give an indication of the level of risk assumed by ASRS:

**Debt Securities**

**Credit Quality Risk (Fixed Income Securities)**

At June 30, 2011

(Dollars in Thousands)

Quality Rating	Fair Value	Fair Value as percent of Total Debt Securities Investments
AAA	\$ 2,857,041	47.97%
AA	188,054	3.16%
A	406,982	6.83%
BBB	380,039	6.38%
BB	140,464	2.36%
B	363,675	6.11%
CCC	163,782	2.75%
CC	45,585	0.77%
C	4,324	0.07%
NR*	48,713	0.82%
NA**	1,356,847	22.78%
<b>Total***</b>	<b>\$ 5,955,506</b>	<b>100.00%</b>

\* NR total of \$48,713 represents those securities that are not rated.

\*\* NA represents those securities that are not applicable to the rating disclosure requirement. The fair value of \$1,356,847 is classified as Corporate Bonds totaling \$126,083 and Government Bonds totaling \$1,230,764 in the Basic Financial Statements.

\*\*\* Total of \$5,955,506 represents the total corporate bonds of \$2,168,111 and total government bonds of \$3,787,395 as denoted on the Basic Financial Statements.

See Subsequent Event disclosure in Note 15.

## NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)

**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 interest rate risk. It does set more restrictive requirements in its contracts with money managers. The ASRS uses effective duration to identify and man-

age 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 into 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

At June 30, 2011

(Dollars in Thousands)

Investment	Fair Value	Effective Duration (in years)
DOMESTIC FIXED INCOME INVESTMENTS		
Asset Backed Securities	\$ 286,087	0.9
Commercial Mortgage Backed	285,625	3.3
Corporate Bonds	1,544,134	4.4
Non-Government Backed CMO's	52,265	4.6
<b>Total Corporate Bonds</b>	<b>2,168,111</b>	
GOVERNMENT BONDS		
Government Related	345,384	7.1
Government Agencies CMO's	55,179	0.9
Government Bonds	2,001,713	7.5
Government Mortgage Backed	1,385,119	23.3
<b>Total Government Bonds</b>	<b>3,787,395</b>	
<b>TOTAL DEBT SECURITIES</b>	<b>\$ 5,955,506</b>	

## NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)

**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 30 percent of ASRS assets may be invested

in foreign 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 exposure to foreign currency risk (U.S. dollars):

### Foreign Currency Risk

At June 30, 2011

(Dollars in Thousands)

Currency Type	Temporary Investments	Fixed Income	Equities	Real Estate	Private Equity	Total
Australian Dollar	\$ 9	\$ -	\$ 88,721	\$ -	\$ -	\$ 88,730
Brazilian Real	-	180	6,662	-	-	6,842
Canadian Dollar	78	8,969	55,616	-	-	64,663
Danish Krone	83	-	21,468	-	-	21,551
Euro Currency	5,539	31,726	483,161	-	110,450	630,876
Hong Kong Dollar	178	-	73,371	-	-	73,549
Israeli Shekel	53	-	2,251	-	-	2,304
Japanese Yen	3,379	-	372,975	-	-	376,354
Mexican Peso	-	-	736	-	-	736
New Taiwan Dollar	114	-	12,396	-	-	12,510
New Zealand Dollar	46	-	4,543	-	-	4,589
Norwegian Krone	29	-	12,102	-	-	12,131
Philippine Peso	-	-	515	-	-	515
Polish Zloty	-	-	647	-	-	647
Pound Sterling	981	1,864	414,802	24,795	-	442,442
Singapore Dollar	253	-	42,500	-	-	42,753
South Korean WON	-	-	14,354	-	-	14,354
Swedish Krona	149	-	53,689	-	-	53,838
Swiss Franc	650	-	184,861	-	-	185,511
Thailand Baht	-	-	1,383	-	-	1,383
<b>Total</b>	<b>\$ 11,541</b>	<b>\$ 42,739</b>	<b>\$ 1,846,753</b>	<b>\$ 24,795</b>	<b>\$ 110,450</b>	<b>\$ 2,036,278</b>

#### **4. Securities Lending Program**

Arizona Revised Statutes Section 38-715(D)(3) allows the ASRS to participate in a securities lending program. The ASRS's 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. and international equities) with a higher percentage of U.S. equities on loan 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 counter party risk to borrowers because the amount the 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, sovereign debt, corporate bonds and equities. 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) Repurchase agreements,
- f) Insurance company funding agreements, guaranteed investment contracts and bank investment contracts,
- g) Money market mutual funds.

The ASRS records the cash collateral received and the same amount as an obligation for securities on loan. 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 activi-

ties. 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 loan. At June 30, 2011, the fair value of securities on loan was \$3.45 billion; \$858.3 million in cash collateralized loans and \$2.59 billion in non-cash collateralized loans. Cash of \$880.9 million received as collateral for securities loaned was reinvested and had a net asset value of \$880.0 million as of June 30, 2011. The securities lending payable at June 30, 2011, was \$880.9 million. 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 but is not indemnified against cash collateral reinvestment risk.

#### **5. Derivatives**

A derivative instrument is a financial instrument or other contract with all three of the following characteristics:

- a) It has one or more underlying and one or more notional amounts or payment provisions or both. Those terms determine the amount of the settlement or settlements, and, in some cases 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.

ASRS's derivatives are considered "Investment Derivative Instruments" as defined in GASB 53 "Accounting and Financial Reporting for Derivative Instruments".

## NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)

All funds are considered fiduciary funds.

ASRS's derivative instruments which consist of futures contracts, forward contracts, options, swaps, rights and warrants are measured at fair value and reported on the Statement of Plan Net Assets. Changes in fair values of derivative instruments are reported as net appreciation of fair value on the Statement of Changes in Plan Net Assets.

The fair value balances and notional amounts of derivative instruments outstanding at June 30, 2011, classified by type, and the changes in fair value of derivative instruments for the year then ended as reported in the June 30, 2011 financial statements are as follows:

### Investment Derivatives by Type

(Dollars in Thousands)

Investment Derivatives	Changes in Fair Value (1)		Fair Value at June 30, 2011		
	Classification	Amount (2)	Classification	Amount (3)	Notional (4)
Commodity Futures Long	Net Appreciation in Fair Value	\$ 101,948	Not Applicable	\$ -	\$ 120,887
Commodity Futures Short	Net Appreciation in Fair Value	(12,865)	Not Applicable	-	(8,349)
Credit Default Swaps Written	Net Appreciation in Fair Value	686	Temporary Investments, Derivatives	311	21,300
Fixed Income Futures Long	Net Appreciation in Fair Value	51,726	Not Applicable	-	134,765,312
Fixed Income Futures Short	Net Appreciation in Fair Value	(10,487)	Not Applicable	-	(649,452)
Fixed Income Options Bought	Net Appreciation in Fair Value	(21)	Not Applicable	-	-
Fixed Income Options Written	Net Appreciation in Fair Value	1,675	Temporary Investments, Derivatives	(824)	(168,100)
Foreign Currency Futures Long	Net Appreciation in Fair Value	102,160	Not Applicable	-	249,365
Foreign Currency Futures Short	Net Appreciation in Fair Value	(18,303)	Not Applicable	-	(259,763)
Foreign Currency Options Written	Net Appreciation in Fair Value	169	Not Applicable	-	(2,800)
Futures Options Bought	Net Appreciation in Fair Value	(151)	Not Applicable	-	-
Futures Options Written	Net Appreciation in Fair Value	1,153	Not Applicable	-	-
Foreign Currency Forwards	Net Appreciation in Fair Value	17,790	Forward Contracts Receivable	(466)	805,529
Index Futures Long	Net Appreciation in Fair Value	124,563	Not Applicable	-	7,255
Index Futures Short	Net Appreciation in Fair Value	(9,398)	Not Applicable	-	(155)
Pay Fixed Interest Rate Swaps	Net Appreciation in Fair Value	(2,347)	Derivatives	(355)	12,900
Receive Fixed Interest Rate Swaps	Net Appreciation in Fair Value	14	Temporary Investments	180	18,435
Rights	Net Appreciation in Fair Value	990	Common Stock and Preferred Stock	124	494
Warrants	Net Appreciation in Fair Value	(529)	Common Stock and Preferred Stock	1,296	720
<b>Total</b>		<b>\$ 348,773</b>		<b>\$ 266</b>	<b>\$134,913,578</b>

(1) Excludes futures margin payments.

(2) Negative values (in brackets) refer to losses.

(3) Negative values refer to liabilities.

(4) Notional may be a dollar amount or size of underlying futures and options; negative values refer to short positions.

## NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)

The fair value of derivative instruments reported by ASRS are based on quoted market prices off national exchanges. The fair value of foreign currency forward contracts are based on mathematical models and are valued using a pricing service, which uses published Reuter's foreign currency rates as the primary source for the calculation.

**Credit Risk** - The credit quality ratings of counterparties as described by nationally recognized statistical rating organizations and the counterparties related risk concentration as of the end of the reporting period are as follows:

### Counterparty Risk and Ratings

(Dollars in Thousands)

Counterparty Name	Total	Risk Concentration	RATINGS		
			S&P	Fitch	Moody's
Bank of America	\$ 198	4.33%	A+	A+	Aa3
Barclays	235	5.14%	AA-	AA-	Aa3
BNP Paribas SA	131	2.86%	AA	AA-	Aa2
Citibank N.A.	561	12.26%	A+	A+	A1
Credit Suisse London	109	2.38%	A+	AA-	Aa1
Deutsche Bank London	293	6.40%	A+	AA-	Aa3
Goldman Sachs International	395	8.64%	A	A+	A1
HSBC Bank USA	53	1.16%	AA	AA	Aa3
JP Morgan Securities, Inc.	202	4.41%	A+	AA-	Aa3
JP Morgan Chase Bank N.A.	6	0.13%	AA-	AA-	Aa1
Mellon Bank N.A.	4	0.09%	AA-	AA-	Aa2
Morgan Stanley and Co., Inc.	250	5.46%	A	A	A2
Royal Bank of Scotland PLC	652	14.25%	A+	AA-	Aa3
Standard Chartered Bank	17	0.37%	A+	AA-	A1
State Street Bank and Trust Co.	33	0.72%	AA-	A+	Aa2
USB AG	1,437	31.40%	A+	A+	Aa3
<b>Total</b>	<b>\$ 4,576</b>	<b>100.00%</b>			

The maximum amount of loss due to credit risk that the ASRS would incur if the counterparties to the derivative instrument failed to perform according to the terms of the contract, without respect to any collateral or other security or netting arrangement, is the total unrealized gain of derivatives at the end of the reporting period.

ASRS has no general investment policy requiring collateral or other security to support derivative instruments. Each investment manager hired has discretion with respect to derivative investments and risk control. Each invest-

ment manager is governed by its Investment Manager Agreement.

ASRS has no general investment policy with respect to netting arrangements. ASRS's investment managers have master netting arrangements to allow net settlement with the same counterparty in the event the counterparty defaults on its obligations.

ASRS's derivatives do not have contingent features.

## NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)

The aggregate fair value of investment derivative instruments in asset positions at June 30, 2011 was \$4.6 million. This represents the maximum amount of loss in case of default of all counterparties for the aggregated (positive) fair value of over-the-counter positions as of June 30, 2011. There was no collateral received or netting arrangements in place at June 30, 2011 with counterparties that would reduce this exposure.

**Interest Rate Risk:** The ASRS has exposure to interest rate risk due to the investment in an interest rate swap agreement. The required risk disclosures are included in the Interest Rate Risk schedule in Note 3. The fair value balance and notional amount of the interest rate swap outstanding at June 30, 2011, for the year then ended as reported in the June 30, 2011 financial statements are as follows:

### Interest Rate Risk for Interest Rate Swap

(In Thousands)

Asset ID	Asset Description	Interest Rate	Fair Value	Notional
<b>PAY FIXED INTEREST RATE SWAPS</b>				
99S08QH82/ 99S08QH90	SWU0372Q0 IRS USD R V 03MLIBOR / SWU0372Q0 IRS USD P F 4.25000	4.25%	\$ (231)	\$ 7,200
99S08RPT5/ 99S08RPU2	SWU0498Q9 IRS USD R V 03MLIBOR / SWU0498Q9 IRS USD P F 3.50000	3.50%	(35)	1,600
99S08TYN4/ 99S08TYO2	SWU0523Q8 IRS USD R V 03MLIBOR / SWU0523Q8 IRS USD P F 3.50000	3.50%	(89)	4,100
<b>Total Pay Fixed Interest Rate Swaps</b>			\$ (355)	\$ 12,900
<b>RECEIVE FIXED INTEREST RATE SWAPS</b>				
99S05JST3/ 99S05JSU0	SWU058948 IRS BRL R F 11.57000 / SWU058948 IRS BRL P V 00MCETIP	11.57%	\$ 202	\$ 10,882
99S083U504/ 99S083U62	SWU0AOPQ2 IRS BRL R F 11.49000 / SWU0AOPQ2 IRS BRL P V 00MBRC DI	11.49%	(22)	7,553
<b>Total Receive Fixed Interest Rate Swaps</b>			\$ 180	\$ 18,435

**Foreign Currency Risk:** ASRS is exposed to foreign currency risk on its foreign currency forward contracts and future contracts. The required risk disclosures are included in the Foreign Currency Risk schedule in Note 3.

disability, valuation of assets using fair value less ten year phase-in, investment income, and the projected unit credit funding method. The unfunded accrued liability is amortized over a thirty year rolling period.

### 6. Funding Status and Progress

Significant actuarial assumptions used in the June 30, 2010 Actuarial Valuation for the Retirement and the Health Insurance Premium Benefit Plans, the most recent actuarial valuation available, include: a rate of return on investment of present and future assets of 8 percent, compounded annually, projected salary increases ranging from 4.5 percent to 9.5 percent per year, inflation rate assumption of 3.75 percent, rates of disability, rates of withdrawal, rates of retirement, mortality rates, mortality rates after

Significant actuarial assumptions used in the June 30, 2010 Actuarial Valuation for the Long Term Disability Plan, the most recent actuarial valuation available, are the same as those used in the valuation of the Retirement Plan and the Health Insurance Premium Benefit Plan. The Long Term Disability Plan valuation uses the projected unit credit method of funding. Assets are valued at market, plus (or minus) an adjustment to reflect investment gains (or losses) over a ten year period. The unfunded actuarial accrued liability is amortized over a rolling fifteen years in level dollar payments.

## NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)

All assumptions used in the actuarial valuations are based on five year experience studies. The ASRS Board approves all substantive actuarial assumptions and methods.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment and mortality. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

The funded status of each plan as of the most recent actuarial valuation date is as follows (dollar amounts in millions):

Actuarial Valuation	Actuarial Value of Assets	Actuarial Liability Projected Unit-Credit	Unfunded Actuarial Liability	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll
June 30	a	b	(b - a)	(a/b)	c	[(b-a)/c]
<b>RETIREMENT PLAN</b>						
2010	\$ 27,572	\$ 36,073	\$ 8,501	76.4%	\$ 9,420	90.2%
<b>HEALTH INSURANCE PREMIUM BENEFIT</b>						
2010	\$ 1,251	\$ 1,485	\$ 234	84.2%	\$ 9,420	2.5%
<b>LONG TERM DISABILITY PROGRAM</b>						
2010	\$ 319	\$ 477	\$ 158	66.9%	\$ 9,420	1.7%

The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a thirty year rolling period for the Retirement and HBS plans and over fifteen years in level dollar payments for the LTD plan.

The funding progress and the ARC have been actuarially determined in accordance with the parameters of GASB Statement 25 for the Retirement Plan and GASB Statement 43 for the Health Benefit Supplement and LTD Plans.

Projections of benefits for financial reporting purposes are based on the substantive plan and include the types of benefit costs between the employer and plan members to

The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multi-year trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Schedules of employer contributions, also presented as required supplementary information following the notes to the financial statements, present trend information about the amounts contributed to the plan by employers in comparison to the annual required contribution (ARC).

that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

### 7. Contributions Required and Contributions Made

The Arizona State Statutes provide statutory authority for determining the employees' and employers' contribution amounts as a percentage of covered payrolls. Employers are required to contribute at the same total rate as employees. (See Note 14 addressing significant legislative changes effective July 1, 2011.) Employees' contributions are applied towards the Retirement Plan and LTD. Employ-

## NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)

ers' contributions are applied towards the Retirement Plan, Health Insurance Premium Supplement Plan and the LTD Plan. There is no legal or contractual maximum contribution rate for employees or employers.

Legislation, which became law as of July 1, 2005, requires annual contribution rate calculations for all fiscal years beginning after fiscal year end 2007. The actuarial assumptions used in this measure are those adopted by the ASRS's Board in April, 2008. The contribution rates for the retirement, the health insurance premium supplement and the long term disability plans were actuarially deter-

mined using the projected unit credit (PUC) funding method.

Each employer and each member contribute at a rate of one-half the total percent of pay needed to pay the normal cost of the Plan and to amortize the unfunded actuarial accrued liability over a rolling thirty year period for the retirement plan and the health insurance supplement plan. The long term disability plan uses a rolling fifteen year period to reflect the shorter duration of LTD benefits.

The contribution rates for the years ended June 30, 2011 and 2010 were as follows:

	(2009 Valuation)		(2008 Valuation)	
	For the contribution period ending June 30, 2011		For the contribution period ending June 30, 2010	
	Amount	Percent of Covered Payroll	Amount	Percent of Covered Payroll
<b>RETIREMENT</b>				
Normal cost	\$ 1,234,664,757	12.55%	\$ 1,205,102,668	12.42%
Amortization of under-funded past service liability	591,883,524	6.06%	478,028,422	4.92%
<b>Retirement Total</b>	<b>1,826,548,281</b>	<b>18.61%</b>	<b>1,683,131,090</b>	<b>17.34%</b>
<b>HEALTH PREMIUM BENEFIT TOTAL</b>				
Normal cost	41,883,708	0.43%	46,380,771	0.48%
Amortization of under-funded past service liability	15,302,394	0.16%	17,025,499	0.18%
<b>Health Premium Benefit Total</b>	<b>57,186,102</b>	<b>0.59%</b>	<b>63,406,270</b>	<b>0.66%</b>
<b>LONG TERM DISABILITY</b>				
Normal cost	33,519,857	0.34%	46,423,979	0.48%
Amortization of under-funded past service liability	17,853,806	0.16%	30,103,585	0.32%
<b>Long Term Disability Total</b>	<b>51,373,663</b>	<b>0.50%</b>	<b>76,527,564</b>	<b>0.80%</b>
<b>ACTUARIAL TOTAL</b>	<b>1,935,108,046</b>	<b>19.70%</b>	<b>1,823,064,924</b>	<b>18.80%</b>
<b>CONTRIBUTIONS MADE AS A PERCENTAGE OF THE CURRENT YEAR COVERED PAYROLL</b>				
Employers' Retirement *	782,266,766	9.01%	749,541,622	8.34%
Employees' Retirement *	833,205,706	9.60%	808,814,419	9.00%
Employers' Health Premium Benefit	51,047,543	0.59%	59,393,099	0.66%
Employers' Long Term Disability	21,689,214	0.25%	35,938,596	0.40%
Employees' Long Term Disability	21,689,310	0.25%	35,938,596	0.40%
<b>Total</b>	<b>\$ 1,709,898,539</b>	<b>19.70%</b>	<b>\$ 1,689,626,332</b>	<b>18.80%</b>

\* Values shown do not include System assets and liabilities. Retirement contributions from the employer for the year ended June 30, 2011 reflect total employer contributions of \$786,581,145 less \$4,314,379 billed to employers for early termination incentive offers. Retirement contributions from the employer for the year ended June 30, 2010 reflect total employer contributions of \$763,005,105 less \$13,463,483 of unfunded employer liabilities.

**NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)**

The statutory contribution rate and actuarially determined contribution rate for the year ended June 30, 2010 was 9.4 percent for both the employees’ and employers’ portion. (Employees paid 9.00 percent retirement and .40 percent long term disability. Employers paid 8.34 percent retirement, .66 percent for the health insurance premium supplement and .40 percent for long term disability.) This rate was determined by the 2008 actuarial valuation. It is applied to the covered payroll to determine the employee and employer contributions. The statutory contribution rate and the actuarially determined contribution rate for the year ended June 30, 2011 was 9.85 percent for both the employees’ and employers’ portion. (Employees paid 9.60 percent retirement and .25 percent long term disability. Employers paid 9.01 percent for retirement, .59 percent for the health insurance premium supplement and .25 percent for long term disability.) This rate was determined by the 2009 actuarial valuation. It 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.

Early termination incentive offers billed to employers of \$4.31 million are included in total employer contributions for the year ended June 30, 2011. Pursuant to A.R.S. §38-749, employers must pay any unfunded liability resulting from termination incentive programs that they offer if the incentive results in an actuarial unfunded liability to ASRS. The unfunded liabilities were calculated by ASRS’s actuary. The following summarizes total employer contributions for the Plan for the years ended June 30, 2011 and 2010:

	2011	2010
Employer contributions	\$ 782,266,766	\$ 749,541,622
Unfunded liabilities	<u>4,314,379</u>	<u>13,463,483</u>
	<u>\$ 786,581,145</u>	<u>\$ 763,005,105</u>

**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 an LTD benefit through the LTD program administered by the ASRS. The employees and member employers each contributed .25 percent of compensation to the LTD fund in FY 2011 and .40 percent in FY 2010.

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. As of June 30, 2011, more than 44,755 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 ASRS Retiree Group Insurance Program or their former member employer.

In FY 2011 the employer’s retirement contribution of 9.60 percent of compensation included .59 percent for the Health Premium Insurance Supplement.

## NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)

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. The ASRS reim-

bursed approximately \$92.0 million and \$88.0 million towards the cost of group health insurance coverage for the years ended June 30, 2011 and 2010, respectively.

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

### 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's financial position or results of operations.

### 10. Commitments

In connection with the purchase of various limited partnership interests in real estate, private equity and opportunistic investment portfolios, the ASRS has remaining unfunded commitments of approximately \$689.9 million, \$1.4 billion and \$394.6 million, respectively, as of June 30, 2011.

### 11. Due To and From Other Funds

Due to/from other funds includes amounts that need to be transferred after the year end resulting from allocations of contribution revenue as well as allocations of pooled cash.

### 12. Required Supplementary Schedules

Historical trend information designed to provide information about the ASRS's progress in accumulating sufficient assets to pay benefits when due is required supplementary information. Required Supplementary Information prepared in accordance with the parameters of GASB Statement No. 25 and GASB Statement No. 43 is included immediately following the Notes to the Financial Statements.

### **13. Retirement Plans**

All eligible ASRS employees participate in the Arizona State Retirement System. 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, Article 2 of the Arizona Revised Statutes (A.R.S.). The Long Term Disability Program is administered in accordance with Title 38, Chapter 5, Article 2.1.g.

The ASRS Retirement Plan provides retirement, disability benefits 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 a fund 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 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. The contribution rates for the Retirement, the HBS and the LTD plans are actuarially determined using the Projected Unit Credit (PUC) funding method. There is no legal or contractual maximum contribution rate for employees or employers. The statutory contribution rates for the years ended June 30, 2011 and June 30, 2010, were 9.85 percent (9.60 percent retirement and .25 percent LTD) and 9.40 (9.00 percent retirement and .4 percent LTD), respectively. All eligible ASRS employees were required to contribute 9.60 percent of their annual covered salary, and the ASRS, as the employer, was required to match these contributions.

The contributions were equal to the required contributions. The ASRS collects the contributions and remits them to the Plan. Employee contributions, except for LTD, are excluded from gross income for federal and state income tax purposes and earn interest at the rate of 8 percent per annum.

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.

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

Qualified ASRS 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.

Refer to Note 6 of these financial statements for current information regarding the funding status and progress of the retirement, health insurance premium benefit and the long term disability plans.

## NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)

The ASRS, as the employer, made contributions for the past three years as follows:

Fiscal Year	Salary Base	Retirement Contributions	HBS Contributions	LTD Contributions	Total Contributions	% of Required Contributions
2011	\$10,170,663	\$ 915,762	\$ 59,958	\$ 26,090	\$ 1,001,810	100%
2010	10,894,788	907,516	71,814	44,780	1,024,110	100%
2009	10,567,948	845,150	101,542	51,979	998,671	100%

### 14. Significant New Legislation

The 50<sup>th</sup> Legislature of the State of Arizona adjourned April 20, 2011. Below is a partial summary of bills passed that affect ASRS members and employers:

- Effective July 1, 2011, members will be required to contribute 53% and employers to contribute 47% of the total cost of the contributions instead of the current 50/50 split.
- For members with an initial membership date on or after July 1, 2011, the average monthly compensation will be defined as the average of the highest consecutive 60 months in the last 120 months.
- The normal retirement age for members hired after July 1, 2011 will be age 65; age 62 with 10 years of service; age 60 with 25 years of service; or age 55 with 30 years of service. This will replace the 85 point-based (age + years of service) normal retirement calculation.
- Members with an initial membership date on or after July 1, 2011 will not receive any portion of the employer contributions if they withdraw their account balance prior to retirement. This will not apply to terminations due to an employer reduction in force or position elimination, in which case the current ASRS vesting schedule will apply.
- Beginning July 1, 2012, employers will be required to pay an Alternative Contribution Rate (ACR) for members who retire and return to work in any capacity and in a position ordinarily filled by an employee of an employer. The ACR will be paid by the employer, not the returning member.

### 15. Subsequent Event

On August 5, 2011, Standard & Poor's, one of the three major rating agencies, downgraded the U.S. debt rating from AAA to AA+. The ASRS utilizes the lowest credit rating among the three rating agencies (Standard & Poor's, Moody and Fitch) to prepare its "Credit Quality Risk" disclosure contained in Note 3 to the Basic Financial Statements.

## REQUIRED SUPPLEMENTARY INFORMATION

### Schedule of Funding Progress

For Year Ended June 30, 2011

(Dollars in Millions)

Actuarial Valuation Date June 30	Actuarial Value of Assets a	Actuarial Accrued Liability Projected Unit-Credit b	Unfunded Actuarial Accrued Liability (b - a)	Funded Ratio (a/b)	Covered Payroll c	Unfunded Actuarial Accrued Liability as a Percentage of Covered Payroll [(b-a)/c]
RETIREMENT FUND *						
2005	\$ 22,808	\$ 26,486	\$ 3,678	86.1 %	\$ 8,032	45.8 %
2006	23,767	28,192	4,426	84.3	8,312	53.2
2007	25,310	30,390	5,080	83.3	9,162	55.4
2008	26,613	32,425	5,812	82.1	9,708	59.9
2009	27,094	34,290	7,196	79.0	9,835	73.2
2010	27,572	36,073	8,501	76.4	9,420	90.2
HEALTH INSURANCE PREMIUM BENEFIT						
2005	\$ 1,028	\$ 1,456	\$ 428	70.6 %	\$ 8,032	5.3 %
2006	1,085	1,505	420	72.1	8,312	5.1
2007	1,167	1,605	438	72.7	9,162	4.8
2008	1,239	1,446	207	85.7	9,708	2.1
2009	1,266	1,452	186	87.2	9,835	1.9
2010	1,251	1,485	234	84.2	9,420	2.5
LONG TERM DISABILITY PROGRAM						
2005	\$ 165	\$ 577	\$ 413	28.6 %	\$ 8,032	5.1 %
2006	194	575	380	33.8	8,312	4.6
2007	232	604	373	38.3	9,162	4.1
2008	275	553	278	49.7	9,708	2.9
2009	311	476	165	65.3	9,835	1.7
2010	319	477	158	66.9	9,420	1.7

\* 2010 results include System liabilities and assets for members who retired or will retire on or after July 1, 1981.

See Notes to Required Supplementary Information.

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**REQUIRED SUPPLEMENTARY INFORMATION (CONTINUED)**

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**Schedule of Employer Contributions**

For Year Ended June 30, 2011

(Dollars in Thousands)

	<b>RETIREMENT FUND</b>		<b>HEALTH INSURANCE PREMIUM BENEFIT</b>		<b>LONG TERM DISABILITY PROGRAM</b>	
	<b>Annual Required Contribution</b>	<b>Percentage Contributed</b>	<b>Annual Required Contribution</b>	<b>Percentage Contributed</b>	<b>Annual Required Contribution</b>	<b>Percentage Contributed</b>
2006	\$ 477,472	100%	\$ 93,461	100%	\$ 41,188	100%
2007	663,544	100	103,473	100	44,518	100
2008	759,482	100	99,027	100	47,171	100
2009	754,044	100	90,490	100	47,213	100
2010*	749,636	100	59,393	100	35,939	100
2011**	782,347	100	51,048	100	21,689	100

\* The 2010 required contributions from the employer for the retirement fund reflect total employer contributions of \$763,099,507 less \$13,463,483 of unfunded employer liabilities.

\*\* The 2011 required contributions from the employer for the retirement fund reflect total employer contributions of \$786,661,694 less \$4,314,379 of unfunded employer liabilities.

See Notes to Required Supplementary Information.

# NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

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## 1. Actuarial Methods and Assumptions for Valuations Performed (for most recent actuarial valuation)

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 valuations for the period ended June 30, 2010. The unfunded actuarial accrued liability is amortized over a 30-year rolling period for the Retirement Fund and the Health Insurance Premium Benefit. The Long Term Disability (LTD) Program's unfunded actuarial accrued liability is amortized over a rolling 15-year period to reflect the shorter duration of LTD benefits. 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 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 3.75 percent per annum. Members' salaries are assumed to increase at a rate of 4.50 percent to 9.50 percent per annum, depending on the length of service. The permanent benefit increase (PBI) reserve was zero as of June 30, 2010, as a result of the payment of the 2005 PBI.

## Significant Factors Affecting Identification of Trends

### 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 additional benefits during the period of re-employment. This act was repealed June 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.

**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:

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%

**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.

**Purchase of Military Service**

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

**Pop-Up and Life Certain Option**

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

**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 phase-in 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 Premium Benefit**

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

**2004**

**Service Purchase Program**

The 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 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 liability associated with the cost of the incentives and the employers will pay the cost.

**Long Term Disability Program**

The Legislature revised and clarified LTD provisions so that disabled members will be required, when appropriate, 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 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.
- Pegged the contribution rates for fiscal year 2006 and fiscal year 2007 at 6.90 percent and 8.60 percent respectively. After fiscal year 2007, contribution rates are to be determined annually.
- Eliminated the Rural Health Insurance Premium Benefit for retirees in the ASRS health insurance program who are not eligible for Medicare.

**Temporary Rural Health Insurance Premium Benefit**

The Legislature extended the temporary Rural Health Insurance Subsidy for a two year period, from July 1, 2005, to June 30, 2007. The benefit is provided to Medicare-eligible retirees and disabled members who live in Arizona counties with no Health Maintenance Organization (HMO) service area and who have at least 10 years of credited service.

**2006**

The Legislature limited the ability of ASRS retirees to rescind their elections after retirement. Specifically, members who have chosen a form with a death benefit can “pop up” once to the single life form, but are then not allowed to “pop down” to a death benefit form.

**2007****Long Term Disability Program**

The Legislature changed the Long Term Disability Program Social Security disability offsets and pre-existing condition requirements. The Social Security disability offsets were changed from 64 to 85 percent and the Social Security retirement benefits were changed from 83 to 85 percent. The pre-existing condition requirement was changed from three months to six months.

**Extension of the Rural Health Insurance Premium Benefit**

The Legislature extended the temporary Rural Health Insurance Premium Benefit for two years.

**Membership**

The Legislature exempted post-doctoral scholars from ASRS membership.

**Service Credit**

The Legislature expanded eligibility for Active Military Service Credit.

**2008****Service Purchase Program**

The Legislature modified one of the salary calculations used for service purchases and clarified the salary calcu-

lations used for leave of absence purchases.

**Membership**

The Legislature clarified that a member who purchases previously forfeited service credit is subject to the benefit structure and duties in place when the person again becomes a member.

**Overpayment Recovery**

The Legislature required the ASRS to recover overpaid money by reducing a benefit owed to any member, beneficiary, or alternate payee.

**Unclaimed Property**

The Legislature exempted the ASRS from statutory unclaimed property procedures and instituted notice and people search requirements.

**Transfers Out**

The Legislature modified procedures related to transfers out of the system, specifically with respect to existing Payroll Deduction Agreements for service purchases.

**Divestment**

The Legislature enacted bills providing for mandatory engagement with and potential divestment from companies that have either invested, since August 5, 1996, \$20 million or more in any year in Iran’s petroleum energy sector or meet specific Sudan-related business operations criteria. The Legislature also required the ASRS to create a policy regarding investments in countries designated as “State Sponsors of Terrorism” by the U.S. State Department.

**2009**

**Defined Benefit Plan Design**

The Legislature eliminated the 80 percent cap on monthly benefits. The cap applied to members hired after August 9, 2001 and is now eliminated for all ASRS members. The legislation also clarified that non-retired survivor benefits are triggered by a member's death regardless of whether the member was employed at the time of death.

**Service Purchase**

The Legislature, effective July 1, 2010, required members to have five years of service credit in ASRS before initiating a service purchase. The legislation also allowed a member to purchase time worked for a government of a U.S. commonwealth, insular area or overseas possession. The legislation also repealed an earlier law that provided for a sunset of the revised military call-up disability service purchase provisions, and instead extended the provisions indefinitely.

**Return to Work**

The Legislature allowed retired members who return to work with a suspension of benefits to choose a different annuity option when they again retire if the member resumed work for at least 60 consecutive months. The legislation also allowed retired members to immediately return to work without suspension if the member returned to a different position that does not require participation in the ASRS and the member participates in another state pension program.

**Early Termination Incentives**

The Legislature limited exceptions to the Employer Termination Incentive Program (ERTIP) definition by eliminating reclassifications and merit or cost of living increases (leaving promotion as the only exception.) The legislation removed the requirement that in order to qualify as an ERTIP, an agreement to terminate must be in writing and instead broadens the meaning to include anything of value provided by an employer that is conditioned on the member's termination. In addition, enhanced payments of vacation, sick or compensatory leave will count as ERTIP incentive payments.

**Ineligible Persons**

The Legislature required an employer that employs and makes contributions for a person who works for a third-party organization (and does not meet ASRS membership) – if the ASRS or a court determines that ASRS must pay a benefit to the person – to pay any unfunded liability resulting to ASRS after ASRS subtracts the person's account balance from the present value of the benefit.

**Dual Employment**

The Legislature eliminated a member's ability to contribute via a second employer (ER), beginning January 1, 2010, unless the member meets the 20/20 membership criteria with respect to the second ER. The Legislature established an exception if the employee had been employed by the second ER between January 1, 2005 and December 31, 2009, continues or resumes employment before January 1, 2012, and does not leave employment for more than 30 consecutive days during their service year.

### **Long Term Disability Program**

The Legislature cross-referenced the LTD Program definitions with the ASRS Defined Benefit Plan statutes to ensure conformity between the programs and also clarified the calculation of the LTD contribution rate.

### **Rural Health Insurance Premium Benefit**

The Legislature did not extend the temporary Rural Health Insurance Premium Benefit, allowing the program to expire June 30, 2009.

### **2010 (most recent actuarial valuation)**

#### **Benefit Formula**

The Legislature changed the Normal Retirement Date definition from 80 to 85 points (age plus years of service) for a member whose membership commences on or after July 1, 2011. Early retirement decrements were also modified to conform to the 85 point normal retirement for a member whose membership commences on or after July 1, 2011.

The Average Monthly Compensation definition used in a retiring member's retirement benefit calculation was modified from the highest consecutive 36 months in the last 120 months to the average of the highest consecutive 60 months in the last 120 months for members whose membership commences on or after July 1, 2011.

#### **Withdrawal of Account**

Employer contribution refunds are eliminated for a member whose membership begins on or after July 1, 2011 when the member terminates employment and chooses to withdraw their account balance. There is an exception for any member who was terminated due to an employer reduction in force or a position elimination, in which case the current refund vesting schedule will apply.

### **Long Term Disability Program Appeals**

Effective July 29, 2010, a change in the appeals process was made so that a person appealing an ASRS decision under the LTD Program (usually a decision of an Administrative Law Judge) is permitted to request that the ASRS Board hear the appeal in executive session, rather than in a Public Hearing. The request must be made at least 48 hours in advance. Further, minutes of and discussions held at an executive session are confidential except from the appellant for use in the appellant's further appeal to the Superior Court.

### **Health Insurance Supplement (Premium Benefits)**

Effective July 29, 2010, the Legislature removed the ability of a retiree to secure individual health insurance coverage and receive the health insurance supplement. After July 29, 2010 in order to receive the health insurance supplement, the retiree must be enrolled in either the ASRS's Retiree Health Insurance program or an Employer's Group Health Insurance.

### **Miscellaneous**

Effective July 29, 2010, the Legislature made miscellaneous changes to the plan to conform to federal law.

## ADDITIONAL SUPPLEMENTARY INFORMATION

### Combining Schedule of Retirement Net Assets

For the Year Ended June 30, 2011

(Dollars in Thousands)

	Retirement Plan	Retirement System	Combined 2011
<b>ASSETS</b>			
Cash	\$ 5,485	\$ 9	\$ 5,494
<b>RECEIVABLES</b>			
Accrued interest & dividends	60,800	936	61,736
Securities sold	129,170	1,988	131,158
Forward contracts	797,807	12,280	810,087
Contributions	41,003	-	41,003
Due from other funds	-	-	-
Other	6,664	62	6,726
<b>Total receivables</b>	<b>1,035,444</b>	<b>15,266</b>	<b>1,050,710</b>
<b>INVESTMENTS AT FAIR VALUE</b>			
Temporary investments	2,189,446	40,462	2,229,908
Temporary investments from securities lending collateral	830,675	12,786	843,461
U. S. government obligations	3,545,179	81,139	3,626,318
Corporate bonds	2,037,908	34,856	2,072,764
Common and preferred stocks	16,654,244	219,292	16,873,536
Derivatives	762	14	776
Real estate	1,090,901	23,440	1,114,341
Private equity	786,764	-	786,764
Opportunistic investments	356,476	6,954	363,430
<b>Total investments</b>	<b>27,492,355</b>	<b>418,943</b>	<b>27,911,298</b>
<b>TOTAL ASSETS</b>	<b>\$ 28,533,284</b>	<b>\$ 434,218</b>	<b>\$ 28,967,502</b>
<b>LIABILITIES</b>			
Payable for securities purchased	443,150	6,821	449,971
Payable for securities lending collateral	830,675	12,786	843,461
Forward contracts payable	780,993	12,021	793,014
Due to other funds	5,129	3,082	8,211
Other	33,080	542	33,622
<b>Total liabilities</b>	<b>2,093,027</b>	<b>35,252</b>	<b>2,128,279</b>
<b>NET ASSETS HELD IN TRUST FOR PENSION BENEFITS</b>	<b>\$ 26,440,257</b>	<b>\$ 398,966</b>	<b>\$ 26,839,223</b>

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 (CONTINUED)**

**Combining Schedule of Changes in Retirement Net Assets**

For the Year Ended June 30, 2011

(Dollars in Thousands)

Additions	Retirement Plan	Retirement System	Combined 2011
<b>CONTRIBUTIONS</b>			
Member contributions	\$ 833,206	\$ 81	\$ 833,287
Employer contributions	786,581	81	786,662
Transfers from other plans	6,427	-	6,427
Purchased Service	64,385	-	64,385
<b>Total Contributions</b>	<b>1,690,599</b>	<b>162</b>	<b>1,690,761</b>
<b>INCOME FROM INVESTMENT ACTIVITIES</b>			
Net appreciation in fair value (public)	4,557,672	72,001	4,629,673
Interest	204,203	3,079	207,282
Dividends	261,997	3,897	265,894
Real Estate	178,776	2,560	181,336
Private Equity	123,495	-	123,495
Opportunistic Investments	66,216	974	67,190
Other	40,231	601	40,832
<b>Total income from investment activities</b>	<b>5,432,590</b>	<b>83,112</b>	<b>5,515,702</b>
<b>LESS INVESTMENT ACTIVITY EXPENSES</b>			
Management fees and monitoring services (public)	(58,151)	(857)	(59,008)
Real estate expense	(23,827)	(345)	(24,172)
Private equity expense	(28,004)	-	(28,004)
Opportunistic investments expense	(10,825)	(162)	(10,987)
<b>Total investment activity expenses</b>	<b>(120,807)</b>	<b>(1,364)</b>	<b>(122,171)</b>
<b>Net income from investment activities</b>	<b>5,311,783</b>	<b>81,748</b>	<b>5,393,531</b>
<b>FROM SECURITIES LENDING ACTIVITIES</b>			
Security lending income	13,387	206	13,593
Security lending expenses			
Interest (expense) / rebate	1,296	20	1,316
Management fees	(1,700)	(26)	(1,726)
Total securities lending activities expense	(404)	(6)	(410)
<b>Net income from securities lending activities</b>	<b>12,983</b>	<b>200</b>	<b>13,183</b>
<b>Total net investment income</b>	<b>5,324,766</b>	<b>81,948</b>	<b>5,406,714</b>
<b>TOTAL ADDITIONS</b>	<b>\$ 7,015,365</b>	<b>\$ 82,110</b>	<b>\$ 7,097,475</b>
<b>Deductions</b>			
Retirement and disability benefits	2,120,207	46,572	2,166,779
Survivor benefits	23,930	19	23,949
Refunds to withdrawing members, including interest	177,035	3,684	180,719
Administrative expenses	26,878	408	27,286
Transfers to other plans	6,256	-	6,256
Other	222	1	223
<b>TOTAL DEDUCTIONS</b>	<b>2,354,528</b>	<b>50,684</b>	<b>2,405,212</b>
<b>NET INCREASE</b>	<b>4,660,837</b>	<b>31,426</b>	<b>4,692,263</b>
<b>NET ASSETS HELD IN TRUST FOR PENSION BENEFITS</b>			
Beginning of year	21,779,420	367,540	22,146,960
<b>End of year</b>	<b>\$ 26,440,257</b>	<b>\$ 398,966</b>	<b>\$ 26,839,223</b>

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** (CONTINUED)**Schedule of Additions by Source**

(Dollars in Thousands)

<b>Year</b>	<b>Employee Contributions Made</b>	<b>Employer Contributions Made</b>	<b>Net Investment Income (Loss)</b>	<b>Purchased Service and Other</b>	<b>Total</b>
2002	\$ 168,213	\$ 168,213	\$ (1,768,077)	\$ 51,350	\$ (1,380,301)
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
2006	612,121	612,121	2,230,939	125,751	3,580,932
2007	811,480	811,535	4,310,518	107,548	6,041,081
2008	904,984	905,680	(2,072,441)	95,226	(166,551)
2009	891,753	891,747	(4,673,490)	72,436	(2,817,554)
2010	844,847	858,431	3,028,216	73,973	4,805,467
2011	854,976	859,399	5,704,452	70,812	7,489,639

**Schedule of Deductions by Type**

(Dollars in Thousands)

<b>Year</b>	<b>Benefits</b>	<b>Refunds</b>	<b>Administration Transfers and Other</b>	<b>Total</b>
2002	\$ 1,069,044	\$ 42,765	\$ 28,105	\$ 1,139,914
2003	1,222,564	35,976	37,877	1,296,417
2004	1,396,481	36,212	35,745	1,468,438
2005	1,576,734	44,164	33,426	1,654,324
2006	1,703,215	60,313	39,395	1,802,923
2007	1,824,865	77,910	47,703	1,950,478
2008	1,944,283	104,387	210,432	2,259,102
2009	2,072,813	120,689	38,834	2,232,336
2010	2,214,722	154,144	44,121	2,412,987
2011	2,348,551	180,719	38,496	2,567,766

**ADDITIONAL SUPPLEMENTARY INFORMATION (CONTINUED)**

**Schedule of Professional Consultant Fees**

For Year Ended June 30, 2011

(Dollars in Thousands)

<b>Professional/Consultant</b>	<b>Nature Of Service</b>	<b>Expenses</b>
Sedgwick Claims Management Services	LTD Administrative Services	\$ 2,672
Comsys Information Technology Services	IT And Other Consulting Services	1,589
State Street Bank And Trust Company	Pension Payment Services And Custodial Bank Services	1,229
Buck Consultants, LLC	Actuarial Services	810
Meketa Investment Group	Investment Consulting Services	595
New England Pension Consultants	Investment Consulting Services	503
DLJ Mb Advisors, Inc.	Investment Back Office Services	448
Lumea Staffing, Inc.	Temporary Staffing Services	342
The Townsend Group	Investment Consulting Services	315
Cox Castle And Nicholson	Investment Legal Services	190
Enterprise Networks Solutions, Inc.	IT And Other Consulting Services	173
Arizona State Attorney General Office	Legal Services	144
Institutional Shareholder	Investment Consulting Services	119
Heinfeld Meech And Co PC	Audit Services	85
Provincia Staffing, LLC	Temporary Staffing Services	79
Callan Associates, Inc.	Investment Consulting Services	75
Morrison & Foerster	Investment Legal Services	62
Jennings Strous and Salmon PLC	Legal Services	57
Charles W Whetstine	Legal Services	51
Setter Capital Inc	Investment Consulting Services	50
Foley And Lardner, LLP	Investment Legal Services	37
Mercer Investment Consulting	Investment Consulting Services	37
Foster Pepper and Shefelman, PLLC	Investment Legal Services	35
CEM Benchmarking, Inc.	Plan Administration Consulting	35
Wilmer Cutler Pickering Hale and Dorr, LLP	Investment Legal Services	32
Lexis Nexis	Research Services	20
Fairfax Data Systems	IT And Other Consulting Services	19
Other Consulting Fees (Less Than Fifteen Thousand Dollars)		50
<b>TOTAL</b>		<b>\$ 9,853</b>

**ADDITIONAL SUPPLEMENTARY INFORMATION** (CONTINUED)**Schedule of Administrative Expenses**

For Year Ended June 30, 2011

(Dollars in Thousands)

	<b>Retirement and Health Benefit Supplement</b>	<b>Long-Term Disability</b>	<b>2011</b>
<b>PERSONNEL SERVICES</b>			
Salaries	\$ 11,091	\$ -	\$ 11,091
Retirement Contributions	976	-	976
Other Employee Related Expenses	3,255	-	3,255
<b>Total Personnel Services</b>	<b>15,322</b>	<b>-</b>	<b>15,322</b>
<b>PROFESSIONAL SERVICES</b>			
Actuary & Benefit Consulting	810	-	810
Audit, Consulting & Legal Fees	865	-	865
Programming Costs	1,446	4	1,450
Other Outside Services	4,056	2,672	6,728
<b>Total Professional Services</b>	<b>7,177</b>	<b>2,676</b>	<b>9,853</b>
<b>COMMUNICATIONS</b>			
Postage and Delivery	663	-	663
External Printing	85	-	85
Telephone	346	-	346
Advertising	7	-	7
<b>Total Communications</b>	<b>1,101</b>	<b>-</b>	<b>1,101</b>
<b>MISCELLANEOUS</b>			
Office Rent	2,168	-	2,168
Furniture & Equipment	516	-	516
Software & Support	1,156	-	1,156
Repair & Maintenance	74	-	74
Travel	93	-	93
Operating Supplies	54	-	54
Insurance	157	-	157
Dues & Subscriptions	590	-	590
Education & Training	82	-	82
Miscellaneous	5	-	5
<b>Total Miscellaneous</b>	<b>4,895</b>	<b>-</b>	<b>4,895</b>
<b>TOTAL</b>	<b>\$ 28,495</b>	<b>\$ 2,676</b>	<b>\$ 31,171</b>

**ADDITIONAL SUPPLEMENTARY INFORMATION (CONTINUED)**

**Schedule of Total Investment Expense by Manager**

Equity and Fixed Income

For Year Ended June 30, 2011

(Dollars in Thousands)

	<b>Management Fees</b>	<b>Other Fees</b>	<b>Total</b>
Aberdeen Asset Management	\$ 856	\$ 262	\$ 1,118
ASRS Internal	-	71	71
Blackrock Core Active Bond Fund B	48	-	48
Blackrock Custom US Debt Fund	182	-	182
Blackrock Dow Jones/UBS	17	-	17
Blackrock EAFE Country Fund U/A	712	-	712
Blackrock EAFE Equity Index Fund B	20	-	20
Blackrock Global - EX US Alpha Tilts Fund	531	-	531
Blackrock Index Fund A	38	-	38
Blackrock Intermediate Govt/Credit Bond Index Fund	5	-	5
Blackrock International Alpha Tilts Fund B	119	-	119
Blackrock MSCI EAFE Small Cap	281	-	281
Blackrock MSCI Emerging Markets Free B	274	-	274
Blackrock Russell 1000 Index Fund B	36	-	36
Blackrock Russell 2000 Index Fund B	7	-	7
Blackrock Russell 3000 Alpha Tilts Fund B	250	-	250
Blackrock US Debt Index Fund B	20	-	20
Blackrock US High Yield Bond Index Fund B	6	-	6
Blackrock US Real Estate Securities Fund B	19	-	19
Blackrock US Tips Fund	45	-	45
Brandes Investment Partners International Equity	2,672	1,157	3,829
Bridgewater Associates Global Tactical Asset Allocation	11,118	-	11,118
Cargill, Inc.	3,806	-	3,806
Champlain Investment Partners	1,115	-	1,115
Columbia Management Investment Advisors, LLC	739	-	739
Copper Rock Capital Partners	647	-	647
Cramer Rosenthal McGynn Mid Cap Value	681	1	682
Credit Suisse Alternative Capital, Inc.	5,547	-	5,547
Dimensional Fund Advisors Equity Fund	727	-	727
Dimensional Fund Advisors International Small Cap	1,448	117	1,565
Eaton Vance Investment Managers	645	-	645
European Investors, Inc.	352	56	408
Forum Securities, Ltd.	469	81	550
Franklin Templeton Investments	417	66	483
Gresham Investment Management	966	116	1,082
Guggenheim Partners Management	1,635	-	1,635
Hansberger Global Investors, LC	1,959	419	2,378
Hyperion	93	-	93
Intech Investment Management	2,252	-	2,252
Ironbridge Capital Management	898	-	898
Jacobs Levy Equity Management	851	720	1,571
LSV Asset Management - US Large Cap Value Account	1,165	-	1,165
LSV Asset Management - Emerging Markets Equity Fund LP	635	-	635
MFS Investment Management	832	213	1,045
Pacific Investment Management Company	1,592	12	1,604
QS Investors - FI	294	-	294
QS Investors - EAFE	532	91	623
QS Investors - IGAP	211	558	769
QS Investors - S&P 500	1,631	5	1,636
Sankaty Advisors, LLC	59	-	59
Segall Bryant & Hamill Investments	311	-	311
Shenkman Capital Management	866	5	871
State Street Global Advisors - S&P Mid Cap Fund	8	-	8
Timesquare Capital Management	4,116	8	4,124
Walter Scott & Partners	416	102	518
Wellington Management Co. - Mid Cap Opportunities	2,239	-	2,239
William Blair & Company	820	-	820
<b>Total</b>	<b>\$ 58,230</b>	<b>\$ 4,060</b>	<b>\$ 62,290</b>

**ADDITIONAL SUPPLEMENTARY INFORMATION** (CONTINUED)**Schedule of Total Investment Expense by Manager**

Private Equity

For Year Ended June 30, 2011

(Dollars in Thousands)

	<b>Management Fees</b>	<b>Other Fees</b>	<b>Total</b>
ACCELL-KKR Capital Partners III, LP	\$ 474	\$ 18	\$ 492
Apollo Investment Fund VII, LP	443	100	543
Arlington Capital Partners III, LP	124	153	277
Atlas Venture Fund VIII, L.P.	243	48	291
Blackstone Capital Partners VI, LP	240	64	304
Bridgepoint Europe IV 'D', LP	580	53	633
CMEA Ventures VII, LP	165	19	184
Crown European Buyout Opportunities II, LP	201	353	554
CVC European Equity Partners V (C), LP	502	62	564
Energy Capital Partners II-A, LP	837	(25)	812
First Reserve Fund XII, LP	987	13	1,000
IDG Ventures SF, LP	237	16	253
JLL Partners Fund VI, LP	508	154	662
Kinderhook Capital Fund III, LP	556	452	1,008
Levine Leichtman Capital Partners IV, LP	1,150	105	1,255
Linconshire Equity Fund IV-A, LP	600	7	607
Linden Capital Partners II, LP	828	209	1,037
Littlejohn Fund IV-A, LP	634	746	1,380
LLR Equity Partners III, LP	600	8	608
Maranon Mezzanine Fund, LP	264	74	338
Montreux Equity Partners IV, LP	169	71	240
Nautic Partners IV, LP	456	18	474
New Atlantic Ventures Fund III, LP	235	63	298
New Mountain Partners III, LP	568	188	756
Oakhill Capital Partners III, LP	1,434	228	1,662
Onex Partners III, LP	505	510	1,015
Partners Group Secondary 2008, LP	927	752	1,679
Paul Capital Partners IX, LP	625	376	1,001
Peninsula Technology Ventures, LP	226	45	271
Pine Brook Capital Partners, LP	864	89	953
Platinum Equity Capital Partner II, LP	-	87	87
Quantum Energy Partners V, LP	875	111	986
Saybrook Corporate Opportunity Fund, LP	400	-	400
Seidler Equity Partners IV, LP	1,016	205	1,221
Silver Lake Partners III, LP	246	7	253
TCW/Crescent Mezzanine Partners V, LP	778	-	778
The Resolute Fund II, LP	488	62	550
Thomas H Lee Equity Fund VI, LP	146	17	163
Warburg Pincus Private Equity X, LP	571	199	770
Wayzata Opportunities Fund II, LP	636	590	1,226
White Deer Energy, LP	940	-	940
Yucaipa American Alliance Fund II, LP	338	403	741
<b>Total</b>	<b>\$ 22,616</b>	<b>\$ 6,650</b>	<b>\$ 29,266</b>

**ADDITIONAL SUPPLEMENTARY INFORMATION (CONTINUED)**

**Schedule of Total Investment Expense by Manager**

Real Estate

For Year Ended June 30, 2011

(Dollars in Thousands)

	<b>Management Fees</b>	<b>Other Fees</b>	<b>Total</b>
AEW Core Property Trust (U.S.), Inc.	\$ 556	\$ -	\$ 556
AEW Value Investors II, LP	340	-	340
Alcion Real Estate Partners Tax-Exempt Parallel Fund II, LP	750	-	750
ASRS Internal	-	5,920	5,920
Blackstone Real Estate Partners VI, LP	675	-	675
Carlyle Realty Partners V, LP	734	-	734
CB Richard Ellis Strategic Partners U.S. Value 5, LP	467	1,476	1,943
CB Richard Ellis Strategic Partners U.S. Opportunity 5, LP	233	-	233
CIM Fund III, LP	563	-	563
CIM Urban REIT, LLC	755	-	755
CIM VI (Urban REIT), LLC	2	-	2
Colony Investors VIII, LP	567	-	567
Dune Real Estate Fund, LP	623	88	711
Dune Real Estate Fund II, LP	678	205	883
Five Arrows Realty Securities IV, LP	810	(1,173)	(363)
Five Arrows Realty Securities V, LP	232	6	238
Five Mile Capital Partners II, LP	750	517	1,267
H/2 Special Opportunities II, L.P.	51	367	418
Harrison Street Real Estate Partners III, LP	673	-	673
Heitman Value Partners II, LP	85	-	85
Hines US Core Office Fund, LP	80	-	80
Investco Asian Real Estate Partners II (USD), LP	571	263	834
Lone Star Fund VI (US), LP	310	1,263	1,573
Lone Star Real Estate Fund (US), LP	180	-	180
PLA Residential III, LP	683	-	683
PLA Retail Fund I, LP	903	13	916
PRISA II	505	-	505
RREEF Global Opportunities Fund II, LLC	585	160	745
Tishman Speyer Real Estate Venture VI, LP	205	(41)	164
Tishman Speyer Real Estate Venture VII, LP	610	118	728
TRECAP Commercial Realty Partners III, LP	516	-	516
Waterton Residential Property Venture XI, LP	57	-	57
Westbrook Real Estate Fund VII, LP	569	-	569
Westbrook Real Estate Fund VIII, LP	750	-	750
<b>Total</b>	<b>\$ 16,068</b>	<b>\$ 9,182</b>	<b>\$ 25,250</b>

**ADDITIONAL SUPPLEMENTARY INFORMATION** (CONTINUED)

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**Schedule of Total Investment Expense by Manager**

Opportunistic

For Year Ended June 30, 2011

(Dollars in Thousands)

	<b>Management Fees</b>	<b>Other Fees</b>	<b>Total</b>
Blackrock Credit Investors II, LP	\$ 83	\$ 2,649	\$ 2,732
Blackrock Mortgage Investors, LP	750	507	1,257
Blackstone/GSO Capital Solutions Fund, LP	-	3,428	3,428
Oaktree Opportunities Fund VIII, LP	1,051	-	1,051
TCW Capital	18	-	18
TCW Capital Trust	2,989	-	2,989
<b>Total</b>	<b>\$ 4,891</b>	<b>\$ 6,584</b>	<b>\$ 11,475</b>

# ARIZONA STATE RETIREMENT SYSTEM



A COMPONENT UNIT OF THE STATE OF ARIZONA • DELIVERING SERVICE WITH PRIDE

## Investment Section 2011



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## U.S. Economy and Capital Markets FY 2010-11

*By Thomas Connelly, Investment Committee Chairman, and  
Gary R. Dokes, Chief Investment Officer*

### 3rd Quarter 2010

The economy showed signs that the worst may be in the past, as reflected in strong equity market returns. However, a persistently high level of unemployment and downward trending consumer confidence showed that challenges still exist in the path to recovery. GDP expanded by 3.5% for the quarter. The unemployment rate remained at 9.6% for the quarter. The CPI Index rose by 1.1% year-over-year. The Fed Funds rate remained unchanged during the quarter with a range of 0.00% to 0.25%.

The domestic large cap and international equity markets rose sharply during the quarter. The S&P 500 Index was up 11.3% with returns in between mid caps and small caps. The S&P MidCap Index was up 13.1% during the quarter and the S&P SmallCap Index increased 9.6%. Growth outperformed value across the cap spectrums. International equity markets were stronger than domestic markets. The MSCI EAFE Index improved 16.5% for the quarter. The MSCI ACWI ex U.S. Index rose by 16.6% for the quarter. Norway and Austria both increased more than 29.0% in the developed markets while the emerging markets were paced by Asia and Latin American-based stocks in Emerging markets outperformed their developed market counterparts. The MSCI EM Index appreciated 18.2%.

The Barclays Aggregate Index lagged the domestic equity markets but advanced 2.5% during the quarter. High yield rallied strongly while corporates was the top performing sector in the Barclays Aggregate Index as investors searched for yield. Long duration bonds outperformed intermediate term issues. Lower-quality issues outperformed higher-quality issues in the investment credit space. Mortgages returned 0.6% while Treasuries advanced 2.7%.

REITs exhibited strong performance for the quarter; the FTSE NAREIT Index rose 12.8%. Private real estate fared worse; the NCREIF Property Index was up 3.3% for the quarter.

### 4th Quarter 2010

The fears of a double dip recession abated with increases in industrial production, consumer spending and GDP. The equity market rally continued, even in the face of elevated unemployment and housing market challenges. GDP expanded 3.1% for the quarter. The unemployment rate held steady at 9.6% for the third quarter. The CPI index rose by 1.5% year-over-year. The Fed Funds rate remained unchanged during the quarter with a range of 0.00% to 0.25%.

The developed domestic and international equity markets both posted strong gains for the quarter. The S&P 500 increased 10.8% during the fourth quarter, underperforming small caps and mid caps. The S&P MidCap Index rose 13.5% while the S&P SmallCap Index rose 16.2%. Growth outperformed value across the cap spectrums. International equity markets were also in positive territory. The MSCI EAFE Index increased 6.6% for the quarter. The MSCI ACWI ex U.S. Index rose by 7.2%. Stocks in the Nordic region outpaced those in Europe (particularly the “PIIGS” – Portugal, Italy, Ireland, Greece, and Spain) in the developed markets. Emerging markets outperformed their developed market counterparts. The MSCI EM Index appreciated 7.4%.

The Barclays Aggregate Index performed worse than the developed equity markets and declined 1.3% during the quarter. Shorter-term issues outperformed longer-term issues. High yield again exhibited strong performance with CMBS and corporate being the strongest investment grade performers. Lower-quality issues

outperformed higher-quality issues in the investment credit space. Mortgages returned 0.2% during the quarter while Treasuries fell 2.6% during the quarter.

REITs exhibited positive performance; the FTSE NAREIT Index declined 7.4% for the quarter. Private real estate fared worse; the NCREIF Property Index was up 3.9% for the quarter.

### **1st Quarter 2011**

Despite the earthquake in Japan and unrest in the Middle East and North Africa, global equity markets remained strong. Unemployment dipped while GDP growth tapered off. GDP expanded 2.2% for the quarter. The unemployment rate fell to 8.9% from 9.6% in the fourth quarter. The CPI Index rose 2.3% year-over-year. The Fed Funds rate was left unchanged with a range of 0.00% to 0.25%.

The equity markets had volatile but strong quarter domestically and internationally. The S&P 500 increased 5.9% during the first quarter, underperforming mid caps and small caps. The S&P MidCap Index rose 9.4% while the S&P SmallCap Index appreciated 7.7%. Growth outperformed value across the cap spectrums. International equity markets were also in positive territory. The MSCI EAFE Index increased 3.4% for the quarter. The MSCI ACWI ex U.S. Index rose by 3.4%. In the developed markets, the “PIIGS” rebounded while emerging markets were led by Eastern European based securities. Emerging markets fared worse than their developed counterparts. The MSCI EM Index rose 2.1% for the quarter.

The Barclays Aggregate Index lagged the equity markets but advanced 0.4% during the quarter. Intermediate-term issues outperformed shorter-term issues. Lower-quality issues outperformed higher-quality issues in the investment credit space as high yield rallied. Mortgages returned 0.6% while Treasuries rose by 0.2%.

REITs posted positive returns in the second quarter; the FTSE NAREIT Index increased 7.5%. Private real estate fared worse; the NCREIF Property Index was up 4.6%.

### **2nd Quarter 2011**

While the economy posted another quarter of growth and strong corporate earnings, it also marked the third consecutive quarter of slower growth as housing and unemployment overhangs persisted. GDP expanded 1.6% for the quarter. The unemployment rate ticked back up to 9.1% in the first quarter from 8.9%. The CPI Index increased 3.6% year-over-year. The Fed Funds rate was left unchanged with a range of 0.00% to 0.25%.

The rally in domestic equity sputtered in the second quarter. The S&P 500 Index rose 0.1% for the quarter. Large cap stocks outperformed both mid and small caps. The S&P 400 MidCap Index declined 0.7% and the S&P 600 SmallCap Index decreased 0.2%. Growth outperformed value across the cap spectrums. International equity markets also fell back but remained in positive territory for the quarter. The MSCI EAFE Index rose 1.6% for the quarter. The MSCI ACWI ex U.S. Index increased by 0.4%. Europe was the strongest region of the developed and emerging markets despite the issues in Greece. Emerging markets lagged their developed counterparts. The MSCI EM Index decreased 1.1% for the quarter.

The Barclays Aggregate Index rose 2.3% during the second quarter and outperformed equity markets. Longer-term issues outperformed shorter-term issues. Bonds had similar performance across the quality spectrum. Higher-quality issues outperformed lower-quality issues in the investment credit space. Mortgages gained 2.3% while Treasuries rose 2.4% during the quarter. REITs were modestly positive in the second quarter; the FTSE NAREIT Index rose 2.9%. Private real estate fared better; the NCREIF Property Index increased by 3.4%.

**Investment Goals**

1. Achieve a total fund rate of return equal to or greater than the actuarial assumed interest rate.
2. Achieve a total fund rate of return equal to or greater than the asset allocation benchmark.
3. Achieve a total fund rate of return equal to or greater than the amount projected in the most recent asset allocation study.
4. Achieve asset class net rates of return equal to or greater than their respective broad asset class benchmarks.
5. Achieve portfolio-level net rates of return equal to or greater than their respective portfolio benchmarks.
6. Ensure sufficient monies are available to meet cash flow requirements.

**Asset Allocation Targets**

As of June 30, 2011, the ASRS asset allocation policy targets and ranges are as follows:

U.S. Equity	40%	(30-50%)
U.S. Fixed Income	26%	(16-36%)
International Equity	18%	(8-28%)
Real Estate	6%	(4-8%)
Private Equity	7%	(5-9%)
Opportunistic	0%	(0-10%)
Commodities	3%	(0-10%)
<b>TOTAL</b>	<b>100%</b>	

**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. The ASRS maintains its investment assets in accordance with Board approved Strategic Asset Allocation Policy. Investment assets are managed in 126 externally managed and 6 internally managed portfolios, which are diversified in U.S. equities, U.S. fixed income, international equities, real estate, private equity, opportunistic investments and commodity investments.

The ASRS adheres to all statutory requirements set by Arizona State law. In addition the ASRS established investment guidelines for its internal and 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 compliance procedures are in place. Oversight and direction responsibilities reside with the ASRS Board. Details of investments are located at the end of this report.

**Investment Results Summary**

For the fiscal year ended June 30, 2011, the ASRS posted a 24.6% gain, which outperformed the ASRS actuarial assumed investment rate of return of 8% by 16.6%.

## INVESTMENT RESULTS

### 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. Investment amounts are reflected at Fair Market Value. Private Real Estate, Private Equity and Opportunistic Investments are valued on a quarter lag basis adjusted for cash flows.

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 the rates of return on the overall portfolio, as well as specific asset classes, along with the benchmark used to compare performance.

### Annualized Rates of Return (Net of Fees) (Retirement & HBS)

Time Weighted Returns	1 Year	3 Year	5 Year	10 Year	Inception
<b>Total Fund</b>	<b>24.6%</b>	<b>5.2%</b>	<b>4.8%</b>	<b>5.2%</b>	<b>10.0%</b>
SAA Policy Benchmark	24.4%	4.4%	5.0%	4.9%	9.8%
Domestic Equity	33.8%	5.7%	4.3%	4.1%	11.0%
S&P Custom Index	32.7%	4.6%	4.0%	3.3%	11.1%
Domestic Fixed Income	5.0%	7.3%	6.9%	6.0%	8.9%
BC Aggregate Index	4.6%	6.7%	6.7%	5.8%	n/a
International Equity	29.8%	0.6%	3.0%	6.3%	6.7%
MSCI Custom Index	30.8%	0.2%	4.2%	7.3%	6.2%
Commodities	n/a	n/a	n/a	n/a	22.6%
DJUBS Commodity Index	n/a	n/a	n/a	n/a	17.9%
Real Estate	19.5%	-9.5%	n/a	n/a	-2.0%
NFI-ODCE Index	20.1%	-9.0%	n/a	n/a	2.3%
Private Equity	17.1%	3.0%	n/a	n/a	-3.7%
Russell 2000	25.8%	8.6%	n/a	n/a	6.4%
Opportunistic	18.6%	n/a	n/a	n/a	9.7%

### Historical Rates of Return\* (Net of Fees) (Retirement & HBS)

Fiscal Year	Return	Fiscal Year	Return	Fiscal Year	Return
2010-11	24.6%	2002-03	2.4%	1994-95	17.8%
2009-10	14.9%	2001-02	-8.2%	1993-94	1.9%
2008-09	-18.1%	2000-01	-6.7%	1992-93	16.7%
2007-08	-7.6%	1999-00	10.0%	1991-92	14.6%
2006-07	17.8%	1998-99	16.8%	1990-91	8.0%
2005-06	9.8%	1997-98	21.3%	1989-90	9.5%
2004-05	8.5%	1996-97	20.6%	1988-89	14.3%
2003-04	17.5%	1995-96	16.7%	1987-88	3.1%

\* Return on Private Equity Investments have not been included in Total Fund Performance for FY 2008 or 2009.

## INVESTMENT RESULTS (CONTINUED)

### Ten Year Review of Investment Income

(Dollars in Thousands)

Fiscal Year	Income	+ Net Apprec/(Depr)	- Expense	= Net Income
2001-2002	\$ 485,535	\$ (2,228,394)	\$ 25,218	\$ (1,768,077)
2002-2003	442,870	(51,437)	22,801	368,632
2003-2004	447,623	2,811,047	29,885	3,228,785
2004-2005	454,389	1,382,587	33,584	1,803,392
2005-2006	523,997	1,758,899	51,957	2,230,939
2006-2007	604,320	3,766,089	59,891	4,310,518
2007-2008	654,878	(2,645,900)	81,419	(2,072,441)
2008-2009	285,665	(4,855,030)	104,125	(4,673,490)
2009-2010	647,859	2,484,029	116,170	3,015,718
2010-2011	925,578	4,893,382	128,281	5,690,679

### Net Income from Investments

(Dollars in Millions)



## ASSET ALLOCATION

### Summary of Investments

(Dollars in Thousands)

	Investments at Fair Value	Receivables	Payables	Total	% of Total
Temporary Investments	\$ 2,329,115	\$ 1,047,493 *	\$ 1,313,788 **	\$ 2,062,820	7.29%
Temporary Investments from Securities Lending	880,893		880,893	-	0.00%
Common and preferred stocks	17,891,441	-	-	17,891,441	63.29%
Fixed Income Securities:					
Corporate Bonds	2,168,111	-	-	2,168,111	7.67%
U.S. Government Obligations	3,787,395	-	-	3,787,395	13.38%
Derivatives	810	-	-	810	0.00%
Real Estate	1,163,155	2,968	-	1,166,123	4.12%
Private Equity	822,102	13	-	822,115	2.91%
Opportunistic	379,624	-	-	379,624	1.34%
<b>Total Investments</b>	<b>\$ 29,422,646</b>	<b>\$ 1,050,474</b>	<b>\$ 2,194,681</b>	<b>\$ 28,278,439</b>	<b>100.0%</b>

*RECEIVABLES INCLUDE:		**PAYABLES INCLUDE:	
Accrued Interest & Dividends	\$ 64,476	Payable for Securities Purchased	\$ 469,940
Securities Sold	136,979	Forward Contract Payable	828,207
Forward Contracts Receivables	846,038	Other Payables	15,641
<b>Total</b>	<b>\$ 1,047,493</b>	<b>Total</b>	<b>\$ 1,313,788</b>

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

## EQUITY PORTFOLIO PROFILE

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### Equity Sub-Sector Allocation

(Dollars in Thousands)

	<b>% of Equity Portfolio</b>	<b>Fair Value</b>
US Large Cap Equity	53.96%	\$ 9,654,878
US Mid Cap Equity	9.39	1,679,987
US Small Cap Equity	9.41	1,683,423
<b>Total US Equity</b>	<b>72.76</b>	<b>13,018,288</b>
International Equity	27.24	4,873,153
<b>TOTAL EQUITY</b>	<b>100.00%</b>	<b>\$ 17,891,441</b>

### Ten Largest Domestic Equity Holdings

	<b>% of Domestic Equity Portfolio</b>
Exxon Mobil, Corp.	1.72%
Apple, Inc.	1.37
Chevron Corp.	1.01
Intl Business Machines Corp.	0.92
AT&T, Inc.	0.83
Pfizer, Inc.	0.82
JP Morgan Chase & Co.	0.78
General Electric Co.	0.78
Microsoft Corp.	0.78
The Coca Cola Co.	0.71
<b>Total</b>	<b>9.72%</b>

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

**Distribution by Market Sector**

	<b>ASRS Domestic Equity</b>	<b>S&amp;P 500 Index</b>
Consumer Discretionary	12.30%	11.00%
Consumer Staples	8.90	10.30
Energy	11.50	12.50
Financials	15.80	15.20
Healthcare	11.70	11.50
Industrials	12.60	11.40
Information Technology	16.90	17.80
Materials	4.40	3.80
Telecommunication Services	2.60	3.10
Utilities	3.30	3.40
<b>Total</b>	<b>100.00%</b>	<b>100.00%</b>

**Ten Largest International Equity Holdings**

	<b>International Equity</b>
Canon, Inc	0.67%
Nestle SA Reg	0.59
Eni SPA	0.54
Vodafone Group, PLC	0.53
Standard Chartered, PLC	0.52
Roche Holding AG Genusschein	0.49
Fanuc Corp	0.45
Novartis AG Reg	0.43
Adidas AG	0.43
Takeda Pharmaceutical Co, LTD	0.39
<b>Total</b>	<b>5.04%</b>

**Summary of Broker Commissions**

(Dollars in Thousands)

<b>Summary of Broker Commissions</b>	<b>Commission</b>
Domestic Equity	\$ 4,406
International Equity	\$ 1,802

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

## FIXED INCOME PORTFOLIO PROFILE

### Distribution by Sector

	Percent
Asset Backed Securities	4.80%
Commercial Mortgage Backed	4.80%
Corporate Bonds	25.93%
Non-Government Backed CMO's	0.88%
Government Related	5.80%
Government Agencies CMO's	0.92%
Government Bonds (Treasury)	33.61%
Government Mortgage Backed	23.26%
<b>Total</b>	<b>100.00%</b>

### Distribution by Maturity

	Percent
0 - 2 years	7.10%
2 to 3 years	5.01%
3 to 4 years	8.11%
4 to 5 years	9.44%
5 to 6 years	9.30%
6 to 8 years	32.15%
> 8 years	28.89%
<b>TOTAL</b>	<b>100.00%</b>

### Distribution by Coupon

	Percent
0.00% - 6.5%	90.72%
6.51% - 7.50%	3.19%
7.51% - 9.0%	3.70%
> 9.00%	2.39%
<b>Total</b>	<b>100.00%</b>

### Ten Largest Domestic Fixed Income Holdings

(Dollars in Thousands)

	Coupon	Maturity	Par Value	Fair Value	Percent
FNMA TBA JUL 30 SINGLE FAMILY	5.00%	12/1/2099	\$ 116,750	\$ 124,047	2.08%
US TREASURY NOTE	4.63%	2/15/2040	76,500	79,786	1.34
FED HM LN PC POOL A93995	4.50%	9/1/2040	57,288	59,266	1.00
US TREASURY NOTE	3.63%	5/15/2013	55,000	58,271	0.98
FNMA POOL AE6805	4.50%	11/1/2040	49,060	50,830	0.85
US TREASURY NOTE	3.50%	2/15/2018	45,000	48,278	0.81
US TREASURY NOTE	3.13%	4/30/2017	45,000	47,584	0.80
US TREASURY NOTE	2.38%	5/31/2018	41,800	41,578	0.70
US TREASURY NOTE	4.13%	5/15/2015	37,000	41,057	0.69
US TREASURY NOTE	11.25%	2/15/2015	29,000	39,426	0.66
<b>Total</b>			<b>\$ 552,398</b>	<b>\$ 590,123</b>	<b>9.91%</b>

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

**Real Estate Portfolio Profile**  
**Ten Largest Real Estate Managers**

(Dollars in Thousands)

	<b>Fair Value</b>	<b>% of Real Estate Portfolio</b>
AEW Core Property Trust (U.S.), Inc.	\$ 163,890	14.09%
CIM Urban REIT, LLC	73,781	6.34%
Five Arrows Realty Securities IV, LP	68,311	5.87%
PLA Retail Fund I, LP	66,629	5.73%
Lone Star Fund VI (US), LP	57,300	4.93%
CB Richard Ellis Strategic Partners U.S. Value 5, LP	50,582	4.35%
PLA Residential III, LP	49,833	4.28%
Blackstone Real Estate Partners, VI, LP	46,617	4.01%
Prisa II	46,120	3.97%
CB Richard Ellis Strategic Partners U.S. Opportunity 5, LP	34,229	2.94%
<b>Total</b>	<b>\$ 657,292</b>	<b>56.51%</b>

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

## PORTFOLIO PROFILE

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### Private Equity Portfolio Profile Ten Largest Private Equity Managers

(Dollars in Thousands)

	Fair Value	% of Private Equity Portfolio
Partners Group Secondary 2008, LP	\$ 54,184	6.59%
Oak Hill Capital Partners III, LP	43,791	5.33
Wayzata Opportunities Fund II, LP	41,861	5.08
Warburg Pincus Private Equity X, LP	39,996	4.87
First Reserve Fund XII, LP	36,965	4.50
Levine Leichtman Capital Partners IV, LP	36,132	4.40
TCW/Crescent Mezzanine Partners V, LP	36,129	4.39
Thomas H. Lee Equity Fund VI, LP	35,855	4.36
Yucaipa American Alliance Fund II, LP	35,007	4.26
CVC European Equity Partners V (C), LP	31,530	3.84
<b>Total</b>	<b>\$ 391,450</b>	<b>47.62%</b>

### Opportunistic Portfolio Profile Opportunistic Managers

(Dollars in Thousands)

	Fair Value	% of Opportunistic Portfolio
TCW Capital Trust	\$ 157,858	41.58%
Blackrock Mortgage Investors, LP	92,262	24.30%
Blackstone/GSO Capital Solutions Fund, LP	61,604	16.24%
Oaktree Opportunities Fund VIII, LP	41,087	10.82%
Blackrock Credit Investors II, LP	25,098	6.61%
TPG Specialty Lending, Inc.	1,715	0.45%
<b>Total</b>	<b>\$ 379,624</b>	<b>100.00%</b>

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

## SCHEDULE OF BROKER COMMISSIONS

### Domestic Equity Trades

(Dollars in Thousands)

Broker Name	Dollar Amount of Trades	Number of Shares	Average Commission Per Share	Dollar Amount of Commission
Baird Robert W. & Company Inc.	\$ 57,662	1,744	\$ 0.04	\$ 73
Barclays Capital, Inc.	17,123	1,222	0.01	12
Barclays Capital Inc./LE	291,231	11,079	0.01	120
Barclays Capital LE	27,733	959	0.04	37
BNP Paribas Brokerage Securities, Inc.	258,518	10,591	0.01	107
BNY Brokerage	15,737	619	0.04	27
BNY Convergenx	67,628	2,025	0.03	65
BNY Convergenx LJR	248,571	5,913	0.02	102
BNY ESI & Co., Inc.	40,057	1,088	0.04	43
BTIG, LLC	28,720	1,403	0.05	64
Canaccordgenuity Inc.	10,984	358	0.03	12
Cantor Fitzgerald & Co.	44,690	1,575	0.03	45
Capital Institutional Svcs Inc. Equities	135,788	4,467	0.02	85
Carr Securities Corporation	13,348	599	0.02	12
Citigroup Global Markets, Inc.	866,521	39,516	0.01	402
Cowen Andcompany, LLC	13,672	841	0.04	30
Credit Suisse Securities (USA) LLC	829,044	25,369	0.01	320
Deutsche Bank Securities, Inc.	153,405	4,033	0.03	118
Fidelity Capital Markets	107,937	3,559	0.03	120
Fox River Execution Technology, LLC	83,659	2,094	0.01	15
Friedman Billings & Ramsey	12,162	339	0.04	15
Goldman Sachs & Co.	60,601	9,399	0.01	54
Goldman Sachs International	32,186	1,079	0.01	14
Guzman & Co.	146,037	2,879	0.03	73
Instinet	282,986	14,535	0.01	215
Investment Technology Group, Inc.	1,160,108	44,147	0.01	268
ISI Group, Inc.	12,156	630	0.02	14

## SCHEDULE OF BROKER COMMISSIONS (CONTINUED)

### Domestic Equity Trades – continued

(Dollars in Thousands)

Broker Name	Dollar Amount of Trades	Number of Shares	Average Commission Per Share	Dollar Amount of Commission
J.P. Morgan Securities, Inc.	\$ 52,169	1,771	\$ 0.04	\$ 66
Jefferies & Company, Inc.	239,620	6,662	0.02	136
Jones Trading Institutional Services, LLC	11,476	421	0.03	13
Keefe Bruyette & Woods, Inc.	10,570	474	0.04	21
Keybanc Capital Markets, Inc.	21,810	601	0.04	27
Knight Equity Markets L.P.	178,673	4,090	0.04	150
Lazard Capital Markets, LLC	13,994	448	0.04	20
Leerink Swann And Company	14,799	287	0.05	14
Liquidnet, Inc.	154,459	4,460	0.02	85
Merrill Lynch Pierce Fenner & Smith, Inc.	207,543	6,000	0.01	70
Morgan Stanley & Co., Inc.	74,488	3,319	0.03	87
Nomura Securities International, Inc.	578,071	18,764	0.01	188
Oppenheimer & Co., Inc.	28,966	881	0.04	40
Pershing, LLC	11,020	308	0.04	13
Piper Jaffray	21,905	621	0.04	27
Pulse Trading, LLC	18,937	581	0.03	15
Raymond James And Associates Inc.	26,414	749	0.04	33
RBC Capital Markets	43,048	1,537	0.03	49
Rosenblatt Securities, LLC	176,549	4,590	0.02	92
Sanford C Bernstein Co., LLC	26,052	1,341	0.02	33
Stephens, Inc.	13,394	359	0.04	15
Sterne Agee & Leach, Inc.	11,337	369	0.05	18
Stifel Nicolaus & Co., Inc.	43,258	1,363	0.05	62
Suntrust Capital Markets, Inc.	12,440	396	0.04	17
UBS Securities, LLC	191,451	9,092	0.01	92
Unx, Inc.	53,858	2,798	0.02	56
Weeden & Co.	270,494	6,838	0.02	143
Wells Fargo Securities, LLC	35,510	1,241	0.04	52
William Blair & Co., LLC	26,363	780	0.04	32
Williams Capital Group, LP	22,316	570	0.02	13
Various Other Brokers	204,222	11,172	0.02	265
<b>Total</b>	<b>\$ 7,813,430</b>	<b>284,945</b>	<b>\$ 0.02</b>	<b>\$ 4,406</b>

Note: A detailed listing of broker commissions is available upon request.

Direct inquiries to: ASRS, 3300 North Central Avenue, Phoenix, AZ 85012

## SCHEDULE OF BROKER COMMISSIONS (CONTINUED)

### Foreign Equity Trades

(Dollars in Thousands)

Broker Name	Dollar Amount of Trades	Number of Shares	Average Commission Per Share	Dollar Amount of Commission
Barclays Capital	\$ 22,378	1,254	\$ 0.024	\$ 30
BNP Paribas Securities Services	17,135	1,057	0.027	28
Citigroup Global Markets, Inc.	17,268	777	0.033	26
Citigroup Global Markets Limited	38,070	1,698	0.016	28
CLSA Singapore PTE Ltd.	23,195	538	0.060	32
Credit Suisse Securities (Europe) Ltd.	28,863	2,522	0.011	28
Credit Suisse Securities (USA) LLC	833,295	44,743	0.008	350
CS First Boston (Hong Kong) Limited	11,536	2,627	0.006	17
Daiwa Securities America, Inc.	10,162	1,106	0.013	15
Deutsche Bank Securities, Inc.	230,071	30,047	0.005	151
Exane S.A.	24,038	1,083	0.033	36
External Swap DVP	209,161	11,348	0.000	4
G Trade Services Ltd.	10,104	656	0.011	7
Goldman Sachs & Co.	188,051	11,523	0.010	115
HSBC Bank, PLC	12,373	844	0.023	19
HSBC Securities (USA) Inc.	16,239	11,395	0.003	31
Instinet Australia Clearing Srvc Pty Ltd.	13,837	1,614	0.001	2
Instinet, LLC	18,394	633	0.003	2
Instinet Pacific Limited	13,204	3,330	0.000	1
Instinet Singapore Services Pt	14,623	4,383	0.000	1
Instinet U.K. Ltd	272,472	18,262	0.003	46
JP Morgan Clearing Corp.	19,858	1,526	0.008	13
JP Morgan Securities Limited	13,261	1,706	0.012	21
Knight Clearing Services, LLC	15,602	367	0.030	11
Macquarie Capital (Europe) Ltd	11,296	310	0.054	17
Macquarie Securities Limited	22,359	3,424	0.010	34
Merrill Lynch International	54,497	3,039	0.028	84
Merrill Lynch Pierce Fenner Smith, Inc. NY	48,380	4,882	0.011	53
Morgan Stanley Co., Inc.	65,853	10,295	0.010	104
Nomura Securities International, Inc.	25,920	2,911	0.013	37
Sanford C. Bernstein, Ltd	16,290	627	0.027	17
UBS AG	50,695	3,483	0.022	76
UBS Securities Asia, Ltd	24,206	882	0.045	40
Various Other Brokers	230,806	42,609	0.008	326
<b>Total</b>	<b>\$2,623,492</b>	<b>227,501</b>	<b>\$ 0.008</b>	<b>\$ 1,802</b>

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

## SCHEDULE OF INVESTMENT FEES

### Equity and Fixed Income

Excluding Securities Lending

(Dollars in Thousands)

	<b>Assets Managed at Fair Value at June 30, 2011</b>	<b>Management &amp; Other Fees</b>
Aberdeen Asset Management	\$ 411,302	\$ 1,118
ASRS Internal	10,342,809	71
Blackrock Russell 3000 Alpha Tilts Fund B	-	250
Blackrock International Alpha Tilts Fund B	-	119
Blackrock Core Active Bond Fund B	-	48
Blackrock Custom US Debt Fund	1,070,995	182
Blackrock Dow Jones/UBS	8,564	17
Blackrock EAFE Country Fund U/A	1,926,001	712
Blackrock EAFE Equity Index Fund B	36,787	20
Blackrock Global-EX US Alpha Tilts Fund	7	531
Blackrock Index Fund A	630,232	38
Blackrock Intermediate Govt/Credit Bond Index Fund	21,869	5
Blackrock MSCI EAFE Small Cap	127,554	281
Blackrock MSCI Emerging Markets Free B	310,442	274
Blackrock Russell 1000 Index Fund B	110,815	36
Blackrock Russell 2000 Index Fund B	17,065	7
Blackrock US Debt Index Fund B	62,424	20
Blackrock US High Yield Bond Index Fund B	5,621	6
Blackrock US Real Estate Securities Fund B	16,780	19
Blackrock US Tips Fund	-	45
Brandes Investment Partners International Equity	413,445	3,829
Bridgewater Associates Global Tactical Asset Allocation	2,599,716	11,118
Cargill, Inc.	233,667	3,806
Champlain Investment Partners	139,686	1,115
CC Media Holdings, Inc. Class A	1,455	-
Columbia Management Investment Advisers, LLC	136,358	739
Copper Rock Capital Partners	-	647
Cramer Rosenthal McGynn Mid Cap Value	154,704	682
Credit Suisse Alternative Capital, Inc.	254,049	5,547

**SCHEDULE OF INVESTMENT FEES (CONTINUED)**

**Equity and Fixed Income – continued**

Excluding Securities Lending

(Dollars in Thousands)

	<b>Assets Managed at Fair Value at June 30, 2011</b>	<b>Management &amp; Other Fees</b>
Dimensional Fund Advisors Equity Fund	520,436	727
Dimensional Fund Advisors International Small Cap	218,569	1,565
Eaton Vance Investment Managers	233,335	645
European Investors, Inc.	58,838	408
Forum Securities, Ltd.	70,326	550
Franklin Templeton Investments	192,930	483
Gresham Investment Management	359,142	1,082
Guggenheim Partners Management	250,398	1,635
Hansberger Global Investors, LC	449,812	2,378
Hyperion	-	93
Intech Investment Management	741,431	2,252
Ironbridge Capital Management	-	898
Jacobs Levy Equity Management	213,226	1,571
LSV Asset Management - US Large Cap Value Account	650,084	1,165
LSV Asset Management - Emerging Markets Equity Fund LP	178,547	635
MFS Investment Management	-	1,045
Pacific Investment Management Company	677,079	1,604
QS Investors - FI	141,772	294
QS Investors - EAFE	80,090	623
QS Investors - IGAP	34,126	769
QS Investors - S&P 500	242,493	1,636
Sankaty Advisors, LLC	375,760	59
Segall Bryant & Hamill Investments	-	311
Shenkman Capital Management	134,799	871
State Street Global Advisors - S&P Mid Cap Fund	-	8
Timesquare Capital Management	506,496	4,124
Walter Scott & Partners	196,983	518
Wellington Management, Co. - Mid Cap Opportunities	450,791	2,239
William Blair & Company	167,062	820
<b>Total</b>	<b>\$ 26,176,872</b>	<b>\$ 62,290</b>

## SCHEDULE OF INVESTMENT FEES (CONTINUED)

### Real Estate

(Dollars in Thousands)

	<b>Net Assets Managed at Fair Value at June 30, 2011</b>		<b>Management &amp; Other Fees</b>
AEW Core Property Trust (U.S.), Inc.	\$	163,890	\$ 556
AEW Value Investors II, LP		21,987	340
Alcion Real Estate Partners Tax-Exempt Parallel Fund II, LP		5,156	750
ASRS Internal		34,149	5,920
Blackstone Real Estate Partners VI, LP		46,617	675
Carlyle Realty Partners V, LP		32,486	734
CB Richard Ellis Strategic Partners U.S. Value 5, LP		50,582	1,943
CB Richard Ellis Strategic Partners U.S. Opportunity 5, LP		34,229	233
CIM Fund III, LP		32,845	563
CIM Urban REIT, LLC		73,781	755
CIM VI (Urban REIT), LLC		759	2
Colony Investors VIII, LP		22,237	567
Dune Real Estate Fund II, LP		19,642	883
Dune Real Estate Fund, LP		33,365	711
Five Arrows Realty Securities IV, LP		68,311	(363)
Five Arrows Realty Securities V, LP		21,441	238
Five Mile Capital II LOPO Co. Investment, LP		8,780	-
Five Mile Capital Partners II, LP		29,209	1,267
H/2 Special Opportunities II, LP		23,984	418
Harrison Street Real Estate Partners III, LP		12,283	673
Heitman Value Partners II, LP		13,840	85
Hines US Core Office Fund, LP		13,097	80
Investco Asian Real Estate Partners II (USD), LP		19,038	834
Lone Star Fund VI (US), LP		57,300	1,573
Lone Star Real Estate Fund (US), LP		20,221	180
PLA Residential III, LP		49,833	683
PLA Retail Fund I, LP		66,629	916
Prisa II		46,120	505
RREEF Global Opportunities Fund II, LLC		24,795	745
Tishman Speyer Real Estate Venture VI, LP		12,610	164
Tishman Speyer Real Estate Venture VII, LP		25,022	728
TRECAP Commercial Realty Partners III, LP		27,708	516
Waterton Residential Property Venture XI, LP		(1,221)	57
Westbrook Real Estate Fund VII, LP		32,888	569
Westbrook Real Estate Fund VIII, LP		19,542	750
<b>Total</b>	<b>\$</b>	<b>1,163,155</b>	<b>\$ 25,250</b>

## SCHEDULE OF INVESTMENT FEES (CONTINUED)

### Private Equity

(Dollars in Thousands)

	<b>Net Assets Managed at Fair Value at June 30, 2011</b>	<b>Management &amp; Other Fees</b>
ACCEL-KKR Capital Partners III, LP	\$ 16,784	\$ 492
Apollo Investment Fund VII, LP	30,004	543
Arlington Capital Partners III, LP	209	277
Atlas Venture Fund VIII, LP	4,815	291
Blackstone Capital Partners VI, LP	(64)	304
Bridgepoint Europe IV 'D', LP	14,077	633
Catalyst Fund Limited Partnership III	18,218	-
Centerbridge Capital Partners, LP	9,223	-
CMEA Ventures VII, LP	4,758	184
Crown European Buyout Opportunities II, LP	11,658	554
CVC European Equity Partners V (C), LP	30,530	564
Energy Capital Partners II-A, LP	12,224	812
First Reserve Fund XII, LP	36,965	1,000
IDG Ventures SF, LP	4,850	253
JLL Partners Fund VI, LP	13,549	662
Kinderhook Capital Fund III, LP	12,388	1,008
Levine Leichtman Capital Partners IV, LP	36,132	1,255
Linconshire Equity Fund IV-A, LP	3,302	607
Linden Capital Partners II, LP	(12)	1,037
Littlejohn Fund IV-A, LP	5,010	1,380
LLR Equity Partners III, LP	14,481	608
Maranon Mezzanine Fund, LP	12,051	338
Montreux Equity Partners IV, LP	6,477	240
Nautic Partners IV, LP	24,461	474
New Atlantic Ventures Fund III, LP	4,624	298
New Mountain Partners III, LP	21,976	756
Oakhill Capital Partners III, LP	43,791	1,662
Onex Partners III, LP	18,404	1,015
Partners Group Secondary 2008, LP	54,184	1,679
Paul Capital Partners IX, LP	21,440	1,001
Peninsula Technology Ventures, LP	5,343	271
Pine Brook Capital Partners, LP	19,382	953
Platinum Equity Capital Partners II, LP	24,109	87
Quantum Energy Partners V, LP	1,103	986
Saybrook Corporate Opportunity Fund, LP	10,267	400
Seidler Equity Partners IV, LP	2,813	1,221

## SCHEDULE OF INVESTMENT FEES (CONTINUED)

### Private Equity – continued

(Dollars in Thousands)

	<b>Net Assets Managed at Fair Value at June 30, 2011</b>		<b>Management &amp; Other Fees</b>
Silver Lake Partners III, LP	22,290		253
TCW/Crescent Mezzanine Partners V, LP	36,129		778
The Resolute Fund II, LP	15,927		550
The Veritas Capital Fund IV, LP	21,490		-
Thomas H Lee Equity Fund VI, LP	35,855		163
Warburg Pincus Private Equity X, LP	38,996		770
Waud Capital Partners QP III, LP	4,734		-
Wayzata Opportunities Fund II, LP	40,861		1,226
White Deer Energy, LP	21,287		940
Yucaipa American Alliance Fund II, LP	35,007		741
<b>Total</b>	<b>\$ 822,102</b>		<b>\$ 29,266</b>

### Opportunistic

(Dollars in Thousands)

	<b>Net Assets Managed at Fair Value at June 30, 2011</b>		<b>Management &amp; Other Fees</b>
Blackrock Credit Investors II, LP	\$ 25,098		\$ 2,732
Blackrock Mortgage Investors, LP	92,262		1,257
Blackstone/GSO Capital Solutions Fund, LP	61,604		3,428
Oaktree Opportunities Fund VIII, LP	41,087		1,051
TCW Capital	-		18
TCW Capital Trust	157,858		2,989
TPG Specialty Lending, Inc.	1,715		-
<b>Total</b>	<b>\$ 379,624</b>		<b>\$ 11,475</b>

# ARIZONA STATE RETIREMENT SYSTEM



A COMPONENT UNIT OF THE STATE OF ARIZONA • DELIVERING SERVICE WITH PRIDE

## Actuarial Section 2011



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# ACTUARIAL CERTIFICATION - PLAN AND HBS (COMBINED)

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## Arizona State Retirement Plan Actuarial Valuation - June 30, 2010

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### Actuarial Certification ARIZONA STATE RETIREMENT PLAN Actuarial Certification Statement

This is to certify that Buck Consultants has prepared an actuarial valuation of the Arizona State Retirement Plan as of June 30, 2010. The Plan provisions are described in Title 38, Chapter 4, Article 2 of the Arizona Revised Statutes. All benefits described in the statutes are reflected in this valuation, except that future PBI and enhanced PBI awards are not valued.

Actuarial calculations have been made with respect to a total of 529,166 members – 213,530 active members, 209,605 inactive members, 101,307 retired members and beneficiaries, and 4,724 members on long term disability. In addition, there are 303 System retirees receiving only ad hoc benefits, 544 System retirees receiving only health insurance benefits, and 152 System retirees receiving both ad hoc benefits and health insurance benefits from the Plan.

The actuarial calculations establish a total benefit cost of 21.00% of the annual compensation of members. The total normal cost rate is 13.33% of compensation and the required amortization payment determined in accordance with Section 38-737 is 7.63% of compensation. An additional 0.04% of pay is for rounding the employer and member rate to the nearest 0.05%.

#### Actuarial Valuation of the Plan as of June 30, 2010

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 actuary is independent. He is an Enrolled Actuary, Fellow of the Society of Actuaries and Member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. He is experienced in performing valuations for large public retirement systems and fully qualified to provide actuarial services to the State of Arizona. This report has been prepared in accordance with all applicable Actuarial Standards of Practice.

#### 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 Numbers 25 and 43 (GASB Nos. 25 and 43) and it summarizes census data.

Valuations are performed annually as of June 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 rate calculated becomes effective for the next fiscal year.

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### **Arizona State Retirement Plan Actuarial Valuation - June 30, 2010**

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For example, the rate calculated in the June 30, 2010, valuation report (10.50% for each member and each employer) is applicable for the fiscal year beginning July 1, 2011.\*

#### Funding Progress

The 2009 valuation determined the rate for fiscal 2011 as 9.60%. The 2010 valuation calculates a rate of 10.50% to become effective July 1, 2011. These rates do not include contributions to the LTD program. Actual contributions have matched the calculated contributions in recent years except for temporary differences, 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 of the Arizona Revised Statutes specifies that the UAAL is to be amortized over a rolling 30-year period.

#### Benefit Provisions

This valuation reflects the following changes in Plan provisions:

1. Members hired on or after July 1, 2011, will have an Average Monthly Compensation that is the average of the highest consecutive 60 months in the last 120 months. These members also have a Normal Retirement Date at 85 points instead of 80 points, and they will receive no enhanced refund unless the position is eliminated or there is a reduction in force.\*\*
2. A person appealing an ASRS decision under the LTD Program may request that the Board hear the appeal in an Executive Session, rather than in a Public Hearing. Request for an Executive Session must be made 48 hours in advance.
3. Retirees can no longer purchase individual health care coverage and receive the Health Benefit Supplement (HBS), unless the retiree is already receiving payment under the previous provisions.
4. Internal Revenue Code 415 Compensation Regulations and military differential wage payments from the HEART Act of 2008 have been updated as required by the IRS.

Section 11 gives details of benefit provisions.

\* Subsequent to the completion of this actuarial valuation, the 50<sup>th</sup> Arizona State Legislature enacted legislation which changed the member/employee contribution rate percentages to 53% for members and 47% for employers. The legislation became effective July 20, 2011.

\*\* Subsequent to the completion of this actuarial valuation, the 50<sup>th</sup> Arizona State Legislature enacted legislation which removes the 85 point-based (age + years of service) normal retirement age for members hired on or after July 1, 2011, and replaces it with two new normal retirement ages. New hires will have four normal retirement age options: age 65, age 62 plus 10 years of service, age 60 plus 25 years of service and age 55 plus 30 years of service.

### Arizona State Retirement Plan Actuarial Valuation - June 30, 2010

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#### Assumptions and Methods

We performed an experience study for the five-year period ended June 30, 2007, and recommended assumption changes based on the findings. On April 18, 2008, the Board adopted revised actuarial assumptions to be effective June 30, 2008. On November 23, 2009, the Board adopted further revised actuarial assumptions to be effective June 30, 2009.

On November 15, 2002, the Board adopted a change in the method of valuing actuarial assets. The Board removed the requirement that actuarial assets be within 20% 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 Statement Nos. 25 and 43.

#### Data

ASRS staff supplied census data for retired, active, and inactive members as of June 30, 2010. 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.

**Arizona State Retirement Plan  
Actuarial Valuation – June 30, 2010**

The actuarial cost factors as of June 30, 2010, for the total Plan are as follows:

	401(a) Account	401(h) Account	Total
I. Actuarial accrued liabilities			
A. Liabilities due to member's benefits			
1. Active members			
a. Retirement benefits	\$ 13,538,597,293	\$ 0	\$ 13,538,597,293
b. Health insurance premium supplement	0	781,117,298	781,117,298
c. Disability deferred retirement benefits	424,876,263	0	424,876,263
d. Pre-retirement death benefits	371,993,251	0	371,993,251
e. Withdrawal benefits	1,019,004,764	0	1,019,004,764
f. Total active members	\$ 15,354,471,571	\$ 781,117,298	\$ 16,135,588,869
2. Inactive members	1,471,571,725	51,348,992	1,522,920,717
3. Retired members and beneficiaries	18,182,684,259	612,691,570	18,795,375,829
4. Disabled members (deferred retirement)	622,736,622	33,908,251	656,644,873
5. Benefit increases for other-than-plan members	2,498,150	6,276,238	8,774,388
6. Post-1981 System members	438,557,390	0	438,557,390
7. Total present value of benefits	\$ 36,072,519,717	\$ 1,485,342,349	\$ 37,557,862,066
B. Other miscellaneous liabilities and reserves	0	0	0
C. Reserve for future PBIs	0	0	0
D. Total actuarial accrued liability	\$ 36,072,519,717	\$ 1,485,342,349	\$ 37,557,862,066
II. Actuarial value of assets <sup>1</sup>	27,571,999,406	1,251,145,282	28,823,144,688
III. Unfunded actuarial accrued liability (Item I – Item II)	8,500,520,311	234,197,067	8,734,717,378
IV. Amortization of unfunded actuarial accrued liability (per Section 38-737)	699,150,795	19,262,240	718,413,035
V. Normal cost for the year	1,215,140,371	40,276,497	1,255,416,868
VI. Total contribution for the year (Item IV + Item V)	\$ 1,914,291,166	\$ 59,538,737	\$ 1,973,829,903
VII. Total covered payroll (projected to 2010/2011 plan year)	\$ 9,419,951,810	\$ 9,419,951,810	\$ 9,419,951,810
VIII. Total contribution for fiscal year 2012 as a percentage of covered payroll			
A. Member portion	10.50%	0.00%	10.50%
B. Employer portion	9.87%	0.63%	10.50%
C. Total	20.37%	0.63%	21.00%

<sup>1</sup> Includes System assets and liabilities for members who retired or will retire on or after July 1, 1981 for 401(a).

\* Subsequent to the completion of this actuarial valuation, the 50<sup>th</sup> Arizona State Legislature enacted legislation which changed the member/employee contribution rate percentages to 53% for members and 47% for employers. The legislation became effective July 20, 2011.

## ACTUARIAL CERTIFICATION – PLAN AND HBS (CONTINUED)

### Arizona State Retirement Plan Actuarial Valuation - June 30, 2010

The Board adopted a new asset valuation method (described in Section 9B) on November 15, 2002, to be effective for valuations on and after June 30, 2002.

On November 23, 2009, the Board adopted assumptions to be effective for valuations on and after June 30, 2009. These assumptions are as follows:

1. Investment yield - 8% per annum net of all expenses.

2. Salary increases

Years of Service	Merit Component	Total Salary Increase
1	5.00%	9.50%
2	4.00	8.50
3	2.50	7.00
4	1.80	6.30
5	1.40	5.90
6	1.25	5.75
7	1.00	5.50
8	0.80	5.30
9	0.75	5.25
10	0.50	5.00
11 to 19	0.25	4.75
20 or more	0.00	4.50

\* Total salary increase rate = inflation (or growth) rate (3.75%)  
+ productivity increase rate (0.75%)  
+ merit component

3. Rates of disability

Age	Males	Females
20	0.04%	0.06%
30	0.05	0.08
40	0.16	0.16
50	0.38	0.36
60	0.90	0.82

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

Age	Years of Service				
	Male Members				
	1	2	5	8	10+
20	20.50%	15.00%	9.25%	5.75%	17.24%
30	20.50	15.00	9.25	5.75	7.63
40	20.50	15.00	9.25	5.75	3.06
50	20.50	15.00	9.25	5.75	2.09
60	20.50	15.00	9.25	5.75	1.46

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**ACTUARIAL CERTIFICATION – PLAN AND HBS (CONTINUED)**

**Arizona State Retirement Plan  
Actuarial Valuation - June 30, 2010**

Age	Years of Service				
	Female Members				
	1	2	5	8	10+
20	20.50%	15.00%	9.25%	5.75%	29.00%
30	20.50	15.00	9.25	5.75	11.08
40	20.50	15.00	9.25	5.75	3.23
50	20.50	15.00	9.25	5.75	2.25
60	20.50	15.00	9.25	5.75	1.19

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

Age	Years of Service			
	0-4	5	6-9	10-19
50	0.00%	10.00%	5.00%	5.00%
55	0.00	10.00	5.00	5.00
60	0.00	9.00	9.00	9.00
62	0.00	15.00	15.00	33.00
65	30.00	30.00	30.00	30.00
70	22.00	22.00	22.00	22.00

Age	20	25	30	31+
50	7.00%	8.67%	35.00%	20.00%
55	7.00	25.00	35.00	13.63
60	35.00	25.00	35.00	24.00
62	35.00	25.00	35.00	33.00
65	35.00	25.00	35.00	30.00
70	35.00	25.00	35.00	22.00

Deferred vested members are assumed to retire at their normal retirement age.

6. Mortality rates – 1994 GAM Static, Projected to 2010 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. Future Retirees Eligible for the Health Insurance Premium Supplement – It is assumed that 70% of future retirees will be eligible to receive the post-retirement health insurance premium supplement and that 35% of those retirees will be eligible for the dependent premium supplement.

**Arizona State Retirement Plan  
Actuarial Valuation - June 30, 2010**

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9. Portion of members who will not withdraw their contributions – It is assumed that active members who terminate (prior to eligibility for retirement) and deferred vested members who have already terminated 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 members are assumed to elect to receive the deferred benefit. If the member is assumed to elect the enhanced refund option, then it is also assumed that the member forfeits the health insurance premium supplement.

Members who terminate eligible for early retirement are assumed to commence payments immediately.

10. Spouse Assumptions – We assume that 100% of the members are married. We also assume that the husband is three years older than the wife.
11. Modified Cash Refund Assumption – We assume that members who elect a single life annuity will receive accumulated benefit payments equal to their contributions after three years of being in receipt.

The asset valuation method is the market value less ten year phase-in of excess (shortfall) investment income. See Section 9B.

The funding method is the projected unit-credit method as prescribed in Arizona Revised Statutes Section 38.757A.

The actuarial calculations have been performed by qualified actuaries 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.

Sincerely,



Charles E. Chittenden, FSA, EA, MAAA

## GENERAL ACTUARIAL INFORMATION - PLAN AND HBS (COMBINED)

The following charts prepared by the actuary 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 June 30, 2010

<b>Active Members</b>	<b>Higher Education Members</b>	<b>Other Education Members</b>	<b>City Members</b>	<b>County Members</b>	<b>State Members</b>	<b>Political Subdivision Members</b>	<b>Total Active Members</b>
Number of Members (active)	23,884	116,000	17,702	22,324	27,424	6,196	213,530
Average age	46.7	44.8	44.9	46.6	47.0	45.6	45.5
Average annual salary	\$50,110	\$39,170	\$55,362	\$47,306	\$47,218	\$56,238	\$44,115
Average years of service	9.5	8.9	9.4	9.3	10.3	7.4	9.2

As of June 30, 2010

<b>Retired Members</b>	<b>Higher Education Members</b>	<b>Other Education Members</b>	<b>City Members</b>	<b>County Members</b>	<b>State Members</b>	<b>Political Subdivision Members</b>	<b>Total Retired Members</b>
Number of Retirees	12,068	54,212	6,180	10,884	16,985	978	101,307
Average age	71.1	69.4	67.4	69.9	69.9	66.6	69.6
Average monthly benefit	\$1,773	\$1,720	\$1,775	\$1,269	\$1,361	\$1,529	\$1,619
Average years of service	19.2	20.6	19.1	16.9	18.3	16.4	19.5

Of all plan retirees at June 30, 2010, 58.1% received annuities of more than \$1,000 per month. 12.2% received less than \$300 per month. Of the retirees 13.5% are less than 60.0 years old, 59.8% are between 60 and 75 years old, and 26.7% are over 75 years old.

### Funding Objective

The funding objective of the Arizona State Retirement System is to maintain reasonably stable contribution rates and to achieve an ultimate funded status of 100%. As of June 30, 2010, the date of the most recent actuarial valuation, this funding level is 76.7%. When the present actuarial asset value of \$ 28.823 billion is compared to the actuarial liabilities of \$ 37.558 billion, actuarial liabilities exceed actuarial assets by the amount of \$ 8.735 billion.

As of fiscal year 2008, statutory changes require annual actuarial valuations, not the biannual valuation required by a prior statutory change effective in 1998. The rates determined by the Plan, System and HBS (combined) valuations do not include contributions to the LTD program.

**GENERAL ACTUARIAL INFORMATION – PLAN AND HBS (CONTINUED)**

**Normal Costs and Required Contribution Rates** (measured as of June 30, 2010)

The Plan’s normal cost, for fiscal year (FY) 2009-2010 was 13.33% and for FY 2008-2009 was 12.98%. 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 were equal, the required contribution rate would be the same as the normal cost. Because liabilities exceed assets, the required contribution rate is higher than the normal cost. Components of the normal cost are as follows:

<b>Components of Normal Cost *</b>	
Retirement benefits	9.84%
Health insurance premium supplement	0.43%
Survivor benefits	0.35%
Withdrawals	2.33%
Long-term disability benefit	0.38%
<b>Total, Normal Cost</b>	<b>13.33%</b>
Amortization of the UALL	7.63%
<b>Required contribution rate for FY 2012</b>	<b>20.96%</b>
SHARED BY EMPLOYEE AND EMPLOYER	Divided by 2
Required contribution rate for FY 2012	10.48%
Required matching contribution rate shared by member and employer to the nearest 0.05%	10.50% <sup>1</sup>

\* 2010 results include System liabilities and assets for members who retired or will retire on or after July 1, 1981.

**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-to-year level of contribution rates.

<sup>1</sup> Subsequent to the completion of this actuarial valuation, the 50<sup>th</sup> Arizona State Legislature enacted legislation which changed the member/employee contribution rate percentages to 53% for members and 47% for employers. The legislation became effective July 20, 2011.

## **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 was 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

As determined by the 2010 and 2009 actuarial reports, the LTD contribution rate is .50%, shared equally by employees and employers. These rates are effective for FY 2012 and 2011.<sup>1</sup>

## **Summary of Actuarial Method for Long-Term Disability Benefit**

The actuarial cost method changed, effective for the 2005 valuation, to the projected unit credit method. Assets are valued at market, less (or plus) an adjustment to reflect investment gains (or losses) over a 10-year period. This method applies to gains and losses incurred in fiscal 2006 and later years. The unfunded actuarial accrued liability is amortized over 15 years in level dollar payments.

<sup>1</sup> Subsequent to the completion of this actuarial valuation, the 50<sup>th</sup> Arizona State Legislature enacted legislation which changed the employee LTD contribution rate to 0.26% and the employer LTD contribution rate to 0.23%. The legislation became effective July 20, 2011.

# SUMMARY OF THE BENEFIT PROVISIONS

## PLAN AND HBS (COMBINED)

---

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:

### 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 equal 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. Members who commenced membership prior to 1984 can use a 60-month average and include additional types of compensation, if doing so produces a larger result.

<b>Years of Credited Service</b>	<b>Benefit Multiplier</b>
Less than 20	2.10%
20.0 to 24.99	2.15%
25.0 to 19.99	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.

**SUMMARY OF THE BENEFIT PROVISIONS – PLAN AND HBS (CONTINUED)**

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**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% for each unit below 80.

Years of Service	Age at Date of Retirement															
	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65
5-10	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	88%	91%	94%	97%	100%
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%

**6. Normal Form of Benefit**

Straight life annuity with cash refund feature 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%, 66-2/3% or 50% 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 pop-up) with either five, ten, or fifteen years of payments guaranteed, or
- c) a 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.

## **SUMMARY OF THE BENEFIT PROVISIONS – PLAN AND HBS (CONTINUED)**

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### **B. DISABILITY BENEFITS** (for disability after June 30, 1988)

#### **1. Long-Term disability**

Monthly benefit equal to two-thirds of monthly compensation, reduced by percentages of other income received 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**

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 member'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% 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:

- a) the enhanced refund option for members hired before July 1, 2011 or for members terminated due to an Employer Reduction in Force or position elimination for members hired on or after July 1, 2011, 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% for employees with five years of service and increases 15% for each additional year of service up to a maximum of 100% for ten or more years of service. The board reduced the interest rate to be credited on refund of contributions from 8% to 4%, effective June 30, 2005.

## **F. RETIREE HEALTH INSURANCE PREMIUM SUPPLEMENT**

### **1. Eligibility**

Retirement or disability after 5 years of credited service and covered by an employer-sponsored 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. There is no benefit payable after the retiree dies. 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 members 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).

## **G. AUTOMATIC COST OF LIVING ADJUSTMENT 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 of a 4% 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% of the reserve for future PBIs.

PBI and enhanced PBI benefits are reflected in the valuation as soon as they are awarded. Future PBI and enhanced PBI are not included in the valuation.

**H. EMPLOYEE AND EMPLOYER CONTRIBUTIONS**

The contribution rate for the fiscal year beginning on July 1st is based on the results of the most recent actuarial valuation as of the last day of the preceding plan year. Member's contribution rate is equal to the required employer contribution rate. The contribution rate for fiscal year 2011 is 9.60 % for each member and each employer, based on the 2009 actuarial valuation. The contribution rate for fiscal year 2012 will be 10.50% based on the 2010 valuation.<sup>1</sup>

<sup>1</sup> Subsequent to the completion of this actuarial valuation, the 50<sup>th</sup> Arizona State Legislature enacted legislation which changed the member/employee contribution rate percentages to 53% for members and 47% for employers. The legislation became effective July 20, 2011.

# STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS

## PLAN AND HBS (COMBINED)

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ADOPTED BY BOARD ACTION ON NOVEMBER 23, 2009  
EFFECTIVE AS OF JUNE 30, 2009

### A. Actuarial Assumptions

#### 1. Investment Yield Rate

8% per annum compounded annually, net of investment expenses

#### 2. Mortality

a) Pre-retirement

Assumption: 1994 GAM – Static, Projected to 2010 With Projection Scale AA, with no setback.  
Rates at representative ages are shown below:

<b>Rates of Mortality (Active)</b>		
AGE	MALE PARTICIPANTS	FEMALE PARTICIPANTS
20	0.000373	0.000219
25	0.000563	0.000232
30	0.000739	0.000299
35	0.000785	0.000400
40	0.000943	0.000557
45	0.001280	0.000752
50	0.001929	0.001085
55	0.003255	0.002017
60	0.006162	0.004097
65	0.011600	0.007970
70	0.018633	0.012672

**STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS – PLAN AND HBS (CONTINUED)**

b) Post-retirement

Assumptions: Non-Disabled rates are based on the 1994 GAM – Static, Projected to 2010 with Projection Scale AA with no 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.

<b>Rates of Mortality</b>				
	<b>Male Participants</b>		<b>Female Participants</b>	
<b>AGE</b>	<b>NON-DISABLED</b>	<b>DISABLED</b>	<b>NON-DISABLED</b>	<b>DISABLED</b>
20	0.000373	0.051100	0.000219	0.027440
25	0.000563	0.063540	0.000232	0.038300
30	0.000739	0.058810	0.000299	0.053930
35	0.000785	0.040920	0.000400	0.056980
40	0.000943	0.034740	0.000557	0.037590
45	0.001280	0.031360	0.000752	0.025700
50	0.001929	0.031110	0.001085	0.022840
55	0.003255	0.030860	0.002017	0.024605
60	0.006162	0.033730	0.004097	0.026507
65	0.011600	0.048250	0.007970	0.028555
70	0.018633	0.055540	0.012672	0.030762

**3. Disability Rates**

<b>Rates of Decrement Due to Disability</b>		
<b>AGE</b>	<b>MALE PARTICIPANTS</b>	<b>FEMALE PARTICIPANTS</b>
20	0.000431	0.000551
25	0.000479	0.000603
30	0.000548	0.000760
35	0.000822	0.001172
40	0.001583	0.001583
45	0.002519	0.002378
50	0.003846	0.003649
55	0.005786	0.005266
60	0.008994	0.008185

**STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS – PLAN AND HBS (CONTINUED)**

**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.

<b>Rates of Decrement Due to Withdrawal</b>											
AGE	YEARS OF SERVICES										
	0	1	2	3	4	5	6	7	8	9	10+
MALE EMPLOYEES											
20	0.2775	0.2050	0.1500	0.1250	0.1025	0.0925	0.0800	0.0700	0.0575	0.0525	0.1724
30	0.2775	0.2050	0.1500	0.1250	0.1025	0.0925	0.0800	0.0700	0.0575	0.0525	0.0763
40	0.2775	0.2050	0.1500	0.1250	0.1025	0.0925	0.0800	0.0700	0.0575	0.0525	0.0306
50	0.2775	0.2050	0.1500	0.1250	0.1025	0.0925	0.0800	0.0700	0.0575	0.0525	0.0209
60	0.2775	0.2050	0.1500	0.1250	0.1025	0.0925	0.0800	0.0700	0.0575	0.0525	0.0146
70	0.2775	0.2050	0.1500	0.1250	0.1025	0.0549	0.0800	0.0700	0.0575	0.0525	0.0243
FEMALE EMPLOYEES											
20	0.2775	0.2050	0.1500	0.1250	0.1025	0.0925	0.0800	0.0700	0.0575	0.0525	0.2900
30	0.2775	0.2050	0.1500	0.1250	0.1025	0.0925	0.0800	0.0700	0.0575	0.0525	0.1108
40	0.2775	0.2050	0.1500	0.1250	0.1025	0.0925	0.0800	0.0700	0.0575	0.0525	0.0323
50	0.2775	0.2050	0.1500	0.1250	0.1025	0.0925	0.0800	0.0700	0.0575	0.0525	0.0225
60	0.2775	0.2050	0.1500	0.1250	0.1025	0.0925	0.0800	0.0700	0.0575	0.0525	0.0119
70	0.2775	0.2050	0.1500	0.1250	0.1025	0.0925	0.0800	0.0700	0.0575	0.0525	0.0194

**5. Salary Scales**

A select and ultimate salary scale made up of a merit component and general salary increase component as follows:

<b>Years of Service</b>	<b>Merit Component</b>	<b>Total Salary Increase*</b>
1	5.00%	9.50%
2	4.00%	8.50%
3	2.50%	7.00%
4	1.80%	6.30%
5	1.40%	5.90%
6	1.25%	5.75%
7	1.00%	5.50%
8	0.80%	5.30%
9	0.75%	5.25%
10	0.50%	5.00%
11 to 19	0.25%	4.75%
20 or more	0.00%	4.50%

\*Total salary increase rate = inflation (or growth) rate (3.75%) + productivity increase rate (0.75%) + merit component

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**STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS – PLAN AND HBS (CONTINUED)**

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**6. Retirement Age**

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

<b>Rates of Decrement Due to Retirement</b>								
YEARS OF SERVICE - ALL MEMBERS								
AGE	0-4	5	6-9	10-19	20	25	30	31+
50	0.000	0.100	0.050	0.050	0.070	0.087	0.350	0.200
55	0.000	0.100	0.050	0.050	0.070	0.250	0.350	0.136
60	0.000	0.090	0.090	0.090	0.350	0.250	0.350	0.240
62	0.000	0.150	0.150	0.330	0.350	0.250	0.350	0.330
65	0.300	0.300	0.300	0.300	0.350	0.250	0.350	0.300
70	0.220	0.220	0.220	0.220	0.350	0.250	0.350	0.220

Deferred vested members are assumed to retire at normal retirement age.

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

It is assumed that 70% of future retirees will be eligible to receive the post-retirement health insurance premium supplement and that 35% 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 active members who terminate (prior to eligibility for retirement) and deferred vested members who have already terminated 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 members are assumed to elect to receive the deferred benefit. If the member is assumed to elect the enhanced refund option, then it is also assumed that the member forfeits the health insurance premium supplement.

Members who terminate eligible for early retirement are assumed to commence payments.

**9. Spouse Assumptions**

We assume that 100% of the members are married. We also assume that the husband is three years older than the wife.

**10. Modified Cash Refund Assumption**

We assume that members who elect a single life annuity will receive accumulated benefit payments equal to their contributions after three years of being in receipt.

## **B. Actuarial Value of Assets**

The actuarial value of assets is equal to the market value of assets less a ten-year phase in (five-year phase-in prior to June 30, 2002) of the Excess (Shortfall) between expected investment return and actual income on the market value of assets. There is no corridor around market value within which the actuarial value is required to fall.

## **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 actuarial valuation as of June 30, 2010, the period is 30 years.

## **D. Data for Valuation**

In preparing the actuarial valuation as of June 30, 2010, the actuary has relied on data and assets provided by the staff of the Arizona State Retirement System. While not verifying the data at their source, the actuary has performed tests for consistency and reasonableness.

## PLAN AND HBS (COMBINED) SCHEDULES

### Schedule of Plan Active Member Valuation Data

Last 6 Years

<b>Contributing Active Members</b>				
VALUATION AS OF JUNE 30	NUMBER	ANNUAL PAYROLL	ANNUAL AVERAGE PAY	INCREASE IN AVERAGE PAY
2005	212,202	\$ 8,032,457,947	\$ 37,853	3.9
2006	217,676	8,311,869,615	38,185	0.9
2007	224,001	9,161,803,726	40,901	7.1
2008	226,415	9,708,352,896	42,879	4.8
2009	222,515	9,834,810,345	44,198	3.1
2010	213,530	9,419,951,810	44,115	(0.2)

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

Last 6 Years

Valuation as of June 30	Retirants and Beneficiaries Added to Rolls		Retirants and Beneficiaries Removed from Rolls		Retirants and Beneficiaries Rolls End of Year		% Increase in Annual Allowance*	Average Annual Allowances
	NO.	ANNUAL ALLOWANCES	NO.	ANNUAL ALLOWANCES	NO.	ANNUAL ALLOWANCES		
2005	7,005	\$ 136,009,712	2,083	\$ 29,472,225	73,853	\$ 1,336,563,347	8.7%	\$ 18,098
2006	7,143	170,867,676	2,498	32,717,257	78,498	1,474,713,766	10.3%	18,787
2007	7,393	144,536,847	2,297	30,532,270	83,594	1,588,718,343	7.7%	19,005
2008	7,784	148,885,733	2,422	33,418,979	88,956	1,704,185,097	7.3%	19,158
2009	7,958	153,218,995	2,490	30,033,184	94,424	1,827,370,908	7.2%	19,353
2010	9,360	176,419,906	2,477	35,666,261	101,307	1,968,124,553	7.7%	19,427

\*Percentages calculated. (Current year Average Benefit minus Prior year Average Benefit divided by Prior year Average Benefit.)

### Schedule of HBS Retirees Added to and Removed From Rolls

Last 2 Years\*\*

Valuation as of June 30	Retirants and Beneficiaries Added to Rolls		Retirants and Beneficiaries Removed from Rolls		Retirants and Beneficiaries Rolls End of Year		Increase in Annual Allowance	Average Annual Allowances
	NO.	ANNUAL ALLOWANCES	NO.	ANNUAL ALLOWANCES	NO.	ANNUAL ALLOWANCES		
2009	N/A	N/A	N/A	N/A	54,753	\$ 82,222,248	N/A	\$ 1,502
2010	5,689	\$ 10,358,376	2,647	\$ 6,487,680	57,795 *	86,092,944	4.7%	1,490

\* Includes 696 System members receiving HBS benefits and 1,776 members receiving LTD benefits and HBS benefits.

\*\* Information not available for prior years

**PLAN AND HBS SCHEDULES (CONTINUED)**

**Schedule of Unfunded (Over) Accrued Liabilities (Plan and HBS combined)**

Last 10 Years

<b>Year Ended June 30</b>	<b>Aggregate Accrued Liabilities Plan</b>	<b>Actuarial Value of Net Plan Assets</b>	<b>Assets as a % of Accrued Liabilities Plan</b>	<b>Unfunded (overfunded) Accrued Liabilities Plan (UAL)</b>	<b>Active Member Payroll</b>	<b>UAL as a % of Active Member Payroll</b>
2001	\$20,268,514,444	\$ 22,855,143,539	113%	\$ (2,586,629,095)	\$6,356,698,800	-40.70%
2002	22,586,920,751	23,623,015,969	105%	(1,036,095,218)	6,989,339,000	-14.80%
2003	24,303,639,447	23,516,898,511	97%	786,740,936	7,296,827,756	10.80%
2004	25,918,329,505	23,642,904,763	91%	2,275,424,742	7,485,590,038	30.40%
2005	27,942,601,285	23,836,519,123	85%	4,106,082,162	8,032,457,947	51.10%
2006	29,696,631,262	24,851,522,776	84%	4,845,108,486	8,311,869,615	58.30%
2007	31,995,671,426	26,476,687,905	83%	5,518,983,521	9,161,803,726	60.20%
2008	33,870,864,745	27,851,825,730	82%	6,019,039,015	9,708,352,896	62.00%
2009	35,742,538,572	28,360,159,450	79%	7,382,379,122	9,834,810,345	75.10%
2010	37,557,862,066	28,823,144,688	77%	8,734,717,378	9,419,951,810	92.70%

**Solvency Test (Plan)**

Last 10 Years

<b>Year End June 30</b>	<b>Aggregate Accrued Liabilities for:</b>		<b>ACTIVE MEMBERS (EMPLOYER FINANCED PORTION) (3)</b>	<b>Net Assets Available for Benefits</b>	<b>Portion of Accrued Liabilities Covered by Net Assets Available for Benefits</b>		
	<b>ACTIVE MEMBER CONTRIBUTIONS (1)</b>	<b>RETIREES AND BENEFICIARIES (2)</b>			(1)	(2)	(3)
2001	\$ 2,876,445,119	\$ 9,184,997,812	\$6,980,343,913 *	\$ 21,888,183,666	100%	100%	100.0%
2002	3,046,008,125	10,141,767,789	8,097,396,037 *	22,641,693,322	100%	100%	100.0%
2003	3,110,690,039	10,911,141,534	8,912,910,871 *	22,572,007,289	100%	100%	95.9%
2004	3,407,611,954	11,888,766,685	9,209,865,919 *	22,659,396,325	100%	100%	79.9%
2005	3,717,945,957	12,970,620,699	9,797,630,212 *	22,808,290,293	100%	100%	62.5%
2006	4,168,243,157	13,998,186,812	10,025,660,085 *	23,766,572,590	100%	100%	55.9%
2007	5,533,036,906	15,191,806,375	9,665,632,410	25,309,888,063	100%	100%	47.4%
2008	6,256,502,949	16,357,773,654	9,810,200,566	26,612,440,139	100%	100%	40.8%
2009	7,054,925,502	17,455,947,713	9,779,242,657	27,093,788,614	100%	100%	26.4%
2010**	7,704,328,621	19,246,476,421	9,121,714,675	27,571,999,406	100%	100%	6.8%

\* Plan Liabilities for 2006 and earlier include HBS liabilities for inactive members.

\*\* 2010 results include System liabilities and assets for members who retired or will retire on or after July 1, 1981

**Solvency Test (HBS)**

Last 10 Years

Year End June 30	Aggregate Accrued Liabilities for:			Net Assets Available for Benefits	Portion of Accrued Liabilities Covered by Net Assets Available for Benefits		
	ACTIVE MEMBER CONTRIBUTIONS (1)	RETIREES AND BENEFICIARIES (2)	ACTIVE MEMBERS (EMPLOYER FINANCED PORTION) (3)		(1)	(2)	(3)
2001	\$ -	\$ 404,565,100	\$ 822,162,500 *	\$ 966,959,873	100%	100%	68.4%
2002	-	455,596,600	846,152,200 *	981,322,647	100%	100%	62.1%
2003	-	517,510,480	851,386,523 *	944,891,222	100%	100%	50.2%
2004	-	533,183,961	878,900,986 *	983,508,438	100%	100%	51.2%
2005	-	552,285,029	904,119,388 *	1,028,228,830	100%	100%	52.6%
2006	-	578,560,443	925,980,765 *	1,084,950,186	100%	100%	54.7%
2007	-	598,088,408	1,007,107,327	1,166,799,842	100%	100%	56.5%
2008	-	619,808,594	826,578,982	1,239,385,591	100%	100%	75.0%
2009	-	627,536,754	824,885,946	1,266,370,836	100%	100%	77.4%
2010	-	652,876,059	832,466,290	1,251,145,282	100%	100%	71.9%

\* HBS Liabilities for 2006 and earlier are included in Plan liabilities for inactive members.

**Schedule of Recommended vs. Actual Plan Contributions**

Last 10 Years (Dollars in Thousands)

Year Ended June 30	Active Member Payroll	Employee Contributions	Employer Retirement Contribution Rate - Actual	Actuary Recommended Contribution
2001	\$6,564,000,000	\$ 133,504,099	2.00%	2.00%
2002	6,989,000,000	135,274,945	2.00%	2.00%
2003	7,297,000,000	142,356,325	5.20%	5.20%
2004	7,486,000,000	377,436,100	5.20%	5.20%
2005	8,032,000,000	403,269,191	5.20%	5.20%
2006	8,312,000,000	570,581,044	6.90%**	7.75%**
2007	9,162,000,000	766,624,734	8.60%**	7.75%**
2008	9,708,000,000	857,502,851	9.10%	9.10%
2009	9,835,000,000	844,405,884	8.95%	8.95%
2010	9,420,000,000	808,814,419	9.00%	9.00%

\*\* The 7.75% rate was determined in the 2004 valuation and would have applied to the 2006/2007 biennium. The Legislature adopted a stair-step approach to increasing contribution rates and set the rate at 6.9% for fiscal year 2006 and 8.6% for fiscal year 2007.

## PLAN AND HBS SCHEDULES (CONTINUED)

### Analysis of Financial Experience for the Plan

Last 10 Years (Dollars in Millions)

Year Ended June 30	Unfunded Actuarial Liability (UAAL) Prior Year	Normal Cost for the Year	Contributions for the Year	Interest at 8% on UAAL	On Normal Cost	On Contributions	Total	Expected UAAL	Actual UAAL	Gain (Loss) for the Year*
2001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$(2,846.40)	N/A
2002	(2,846.40)	701.14	(317.73)	(227.71)	56.09	(12.71)	(184.33)	(2,647.32)	(1,356.52)	(1,290.80)
2003	(1,356.52)	781.41	(371.27)	(108.52)	62.51	(14.85)	(60.86)	(1,007.24)	362.74	(1,369.98)
2004	362.74	900.43	(786.31)	29.02	72.03	(31.45)	69.60	546.46	1,846.85	(1,300.39)
2005	1,846.85	958.24	(861.35)	147.75	76.66	(34.45)	189.95	2,133.69	3,677.91	(1,544.22)
2006	3,677.91	1,023.15	(1,171.73)	294.23	81.85	(46.87)	329.22	3,858.54	4,425.52	(566.98)
2007	4,425.52	1,116.57	(1,527.70)	354.04	89.33	(61.11)	382.26	4,396.65	5,080.59	(683.94)
2008	5,080.59	1,165.17	(1,616.67)	406.45	93.21	(64.67)	434.99	5,064.08	5,812.04	(747.96)
2009	5,812.04	1,205.10	(1,598.33)	464.96	96.41	(63.93)	497.44	5,916.24	7,196.33	(1,280.08)
2010**	7,196.33	1,234.67	(1,571.82)	575.71	98.77	(62.87)	611.61	7,470.79	8,500.52	(1,029.73)

\* Gain/Loss includes assumption and plan changes.

\*\* 2010 results include System liabilities and assets for members who retired or will retire on or after July 1, 1981

### Analysis of Financial Experience for HBS

Last 10 Years (Dollars in Millions)

Year Ended June 30	Unfunded Actuarial Liability (UAAL) Prior Year	Normal Cost for the Year	Contributions for the Year	Interest at 8% on UAAL	On Normal Cost	On Contributions	Total	Expected UAAL	Actual UAAL	Gain (Loss) for the Year
2001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$ 259.77	N/A
2002	259.77	45.77	(4.04)	20.78	3.66	(0.16)	24.28	325.78	320.42	5.36
2003	320.42	50.32	(4.26)	25.63	4.03	(0.17)	29.49	395.97	424.00	(28.03)
2004	424.00	50.35	(79.66)	33.92	4.03	(3.19)	34.76	429.46	428.57	0.89
2005	428.57	51.98	(85.35)	34.29	4.16	(3.41)	35.03	430.23	428.17	2.06
2006	428.17	52.31	(93.46)	34.25	4.18	(3.74)	34.70	421.72	419.59	2.13
2007	419.59	55.04	(103.47)	33.57	4.40	(4.14)	33.83	404.99	438.39	(33.40)
2008	438.39	53.73	(99.03)	35.07	4.30	(3.96)	35.41	428.50	207.00	221.50
2009	207.00	46.38	(90.48)	16.56	3.71	(3.62)	16.65	179.55	186.05	(6.50)
2010	186.05	41.88	(59.39)	14.88	3.35	(2.38)	15.85	184.39	234.20	(49.81)

Values shown for valuation dates on or after June 30, 2010, for the above two schedules, include System assets and liabilities for members who retired or will retire on or after July 1, 1981.

## History of Contribution Rates

Fiscal Year Beginning July 1	Calculated Rates		Actual Rates		Total Rate	
	MEMBER	EMPLOYER	MEMBER	EMPLOYER	CALCULATED	ACTUAL
1980	7.00%	6.28%	7.00%	7.00%	13.28%	14.00%
1981	7.00%	6.29%	7.00%	7.00%	13.29%	14.00%
1982	7.00%	5.79%	7.00%	7.00%	12.79%	14.00%
1983	7.00%	6.04%	7.00%	7.00%	13.04%	14.00%
1984	6.27%	6.27%	6.27%	6.27%	12.54%	12.54%
1985	5.67%	5.67%	5.67%	5.67%	11.34%	11.34%
1986	5.53%	5.53%	5.53%	5.53%	11.06%	11.06%
1987	5.16%	5.16%	4.00%	4.00%	10.32%	8.00%
1988	5.09%	5.09%	5.09%	5.09%	10.18%	10.18%
1989	4.69%	4.69%	2.00%	2.00%	9.38%	4.00%
1990	3.82%	3.82%	3.82%	3.82%	7.64%	7.64%
1991	3.60%	3.60%	3.60%	3.60%	7.20%	7.20%
1992	3.59%	3.59%	3.59%	3.59%	7.18%	7.18%
1993	4.09%	4.09%	3.14%	3.14%	8.18%	6.28%
1994	3.75%	3.75%	3.75%	3.75%	7.50%	7.50%
1995	3.95%	3.95%	3.36%	3.36%	7.90%	6.72%
1996	3.20%	3.20%	3.20%	3.20%	6.40%	6.40%
1997	3.05%	3.05%	3.05%	3.05%	6.10%	6.10%
1998	2.85%	2.85%	2.85%	2.85%	5.70%	5.70%
1999	2.17%	2.17%	2.17%	2.17%	4.34%	4.34%
2000	2.73%*	2.73%*	2.17%	2.17%	5.46%*	4.34%
2001	1.92%	1.92%	2.00%	2.00%	3.84%	4.00%
2002	3.86%*	3.86%*	2.00%	2.00%	7.72%*	4.00%
2003	5.20%	5.20%	5.20%	5.20%	10.40%	10.40%
2004	6.96%*	6.96%*	5.20%	5.20%	13.92%*	10.40%
2005	7.75%	7.75%	6.90%**	6.90%**	15.50%	13.80%**
2006	8.70%*	8.70%*	8.60%**	8.60%**	17.40%*	17.20%**
2007	9.10%	9.10%	9.10%	9.10%	18.20%	18.20%
2008	8.94%	8.94%	8.95%	8.95%	17.88%	17.90%
2009	9.00%	9.00%	9.00%	9.00%	18.00%	18.00%
2010	9.58%	9.58%	9.60%	9.60%	19.15%	19.20%
2011***	10.48%	10.48%	10.50%	10.50%	20.96%	21.00%

\* Hypothetical Rate. 1997 Legislature mandated that rate be determined on biennial cycle beginning with fiscal year 2000. Rates above are from the annual actuarial report.

\*\* The 7.75% rate was determined in the 2004 valuation and would have applied to the 2006/2007 biennium. The Legislature adopted a stair-step approach to increasing contribution rates and set the rate at 6.9% for the fiscal year 2006 and 8.6% for fiscal year 2007.

\*\*\* 2010 results include System liabilities and assets for members who retired and will retire on or after July 1, 1981.

# ACTUARIAL CERTIFICATION – LTD

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A Xerox Company

January 18, 2011

Retirement Board  
Arizona State Retirement System  
3300 North Central Avenue  
14<sup>th</sup> Floor  
Phoenix, AZ 85012

## **Valuation of the ASRS Long Term Disability Program as of June 30, 2010**

Dear Retirement Board Members:

We certify that the information contained in the attached 2010 actuarial valuation report is accurate and fairly presents the actuarial position of the Arizona State Retirement System Long Term Disability Program (the LTD Program) as of June 30, 2010.

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, members of the American Academy of Actuaries and Fellows of the Society of Actuaries. Both are experienced in performing valuations for large public retirement systems and are fully qualified to provide actuarial services to the State of Arizona.

### 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 LTD Program, and to analyze changes in the LTD Program's condition. In addition, the report provides information that ASRS requires for its Comprehensive Annual Financial Report and it summarizes census data.

Valuations are performed annually as of June 30 which is the last day of both the LTD Program year and ASRS' fiscal year.

Tabor Center, 1200 17th Street, Suite 1200 • Denver, CO 80202  
720.359.7700 • 720.359.7701 (fax)

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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 fund the normal cost plus the amortization of unfunded actuarial accrued liability over a rolling 15-year period. Contribution rates are set annually, based on the valuation of the preceding year. The rate calculated in this report (0.25% for each employer and employee) will apply in the fiscal year beginning July 1, 2011. The LTD program is meeting its funding objectives.<sup>1</sup>

Experience Studies

Most of the assumptions of the LTD program are also assumptions of the ASRS defined benefit plan (the Plan). The actuary performs experience studies for ASRS every five years. The most recent experience analysis was completed in the first quarter of 2008 using experience from July 1, 2002 to June 30, 2007. Revised actuarial assumptions were approved and implemented for the June 30, 2008 valuation. Further revised actuarial assumptions were approved and implemented for the June 30, 2009 valuation.

Benefit Provisions

There have been no changes in benefit provisions since the last valuation.

The terms of the LTD Program are summarized on pages 13 to 15 of this report. There is no provision for LTD benefits to increase for cost-of-living adjustments.

Assumptions and Methods

As a result of the experience analysis conducted on actual plan experience from July 1, 2002 to June 30, 2007, revised pre- and post-retirement mortality assumptions were adopted for the June 30, 2008 valuation. Further revised actuarial assumptions were adopted by ASRS for the June 30, 2009 valuation. Rates of retirement, rates of disability and rates of withdrawal were updated to rates recommended as a result of the last experience analysis. These assumptions were first effective for the valuation as of June 30, 2009.

The actuary originates the assumptions, in consultation with the ASRS Director and other ASRS staff members, and recommends the assumptions to the Board which makes the ultimate decision on which assumptions and methods to use.

The Board elected to use the projected unit credit method. Under this method, actuarial gains (or losses) are subtracted from (or added to) the unfunded actuarial accrued liability.

<sup>1</sup> Subsequent to the completion of this actuarial valuation, the 50<sup>th</sup> Arizona State Legislature enacted legislation which changed the employee LTD contribution rate to 0.26% and the employer LTD contribution rate to 0.23%. The legislation became effective July 20, 2011.

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Data

ASRS staff and Sedgwick (the administrator of the LTD program) supplied census data for participants as of June 30, 2010. 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, EA, MAAA  
Principal and Consulting Actuary



Michelle Reding DeLange, FSA, EA, MAAA  
Director, Retirement Actuary

## GENERAL ACTUARIAL INFORMATION – LTD

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Effective October 1, 1995, to comply with Internal Revenue Code requirements, liabilities associated with the long-term disability benefit was 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 following table summarizes the key results of the June 30, 2010, actuarial valuation of the Arizona State Retirement System (ASRS) Long Term Disability (LTD) Program.

Amount in 000's	2009	2010
Normal Cost	\$ 33,520	\$ 30,456
Actuarial Accrued Liability	476,276	477,266
Valuation Assets	311,232	319,308
Funded Status on Valuation Assets	65.35%	66.90%
Market Value of Assets	222,808	250,378
Funded Status on Market Value of Assets	46.78%	52.46%
Unfunded Actuarial Accrued Liability (UAAL)	165,044	157,958
Past Service Cost	17,854	17,087
Annual Required Contribution (ARC)	51,374	47,544
Payroll	9,834,810	9,419,952
ARC as % of payroll for each employer and each member	0.26%	0.25%
UAAL as % of payroll	1.70%	1.70%

The following chart will serve to indicate some of the more important statistics regarding the long-term disability program.

Number of LTD Open Claim Members	4,724
Average Age	54.3
Average Monthly Benefit	\$ 1,292

## SUMMARY OF BENEFIT PROVISIONS – LTD

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The Arizona State Retirement System (ASRS) Long Term Disability (LTD) Program began on July 1, 1995. The program covers ASRS LTD Program participants who become disabled on or after July 1, 1995. ASRS members who were receiving LTD benefits prior to July 1, 1995, were transferred to the program on October 1, 1995. Contributions began July 1, 1995, and are paid 50% by employers and 50% by active members.<sup>1</sup>

Below we have summarized the main provisions of the LTD Program.

**Effective Date:** The plan was established effective July 1, 1995.

**Participation:** To be eligible, members must be actively at work and engaged to work at least 20 weeks in a fiscal year and at least 20 hours each week. Coverage is contingent on payment of premiums.

**Contributions:** Members are required to contribute to the LTD Program in accordance with the schedule ratified each year by the Board. The current rate is .25% of payroll. Employers have equal contributions<sup>1</sup>, and the Board allocates all contributions to the LTD Program's depository.

**Qualifications for Benefit:** Monthly benefits are not payable until a member has been totally disabled for a period of six consecutive months. Monthly benefits are not payable to a member whose disability is due to the following:

1. an intentionally self-inflicted injury
2. war, whether declared or not
3. an injury incurred while engaged in a felonious criminal act or enterprise
4. for employees hired on or after July 1, 1998, any injury, sickness, or pregnancy for which you received medical treatment within three months prior to the effective date coverage began under the LTD Income Plan. Except for any employee who becomes an active contributing member on or after July 1, 2008 and receives medical treatment within six months prior to the date coverage begins under the LTD Income Plan. This exclusion does not apply to a disability commencing after a person has been an active contributing member of a participating employer for twelve continuous months.

Monthly benefits are not payable to a member who is receiving retirement benefits from ASRS.

**Totally Disabled:** A member is considered totally disabled if:

1. during the first thirty months of a period of disability, the member is unable to perform all duties of the position held by the member when the member became totally disabled; and
2. for a member who has received monthly benefits for 24 or more total months, that a member is unable to perform any work for compensation or gain for which the member is reasonably qualified by education, training, or experience.

<sup>1</sup> Subsequent to the completion of this actuarial valuation, the 50<sup>th</sup> Arizona State Legislature enacted legislation which changed the employee LTD contribution rate to 0.26% and the employer LTD contribution rate to 0.23%. The legislation became effective July 20, 2011.

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**SUMMARY OF BENEFIT PROVISIONS - LTD (CONTINUED)**

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**Benefit Amount:** Benefits payable from the plan equal two-thirds of a member's monthly compensation at the time of disability. Benefits are offset by:

1. 85% of social security disability benefits that the member or the member's dependents are eligible to receive;
2. 85% of social security retirement benefits that the member is eligible to receive;
3. all of any worker's compensation benefits;
4. all of any payments for a veteran's disability if both of the following apply:
  - a) the veteran's disability payment is for the same condition or a condition related to the condition currently causing the member's total disability;
  - b) the veteran's disability is due to service in the armed forces of the United States;
5. all of any other benefits by reason of employment that are financed partly or wholly by an employer, including payments for sick leave; and
6. 50% of any salary, wages, commissions, or similar pay that the member receives or is entitled to receive from any gainful employment in which the member engages.

**Benefit Period:** Monthly benefits cease to be payable to a member at the earliest of the following:

1. the date the member ceases to be totally disabled;
2. the date the member ceases to be under the direct care of a doctor or refuses to undergo any medical examination requested by the company selected by the Board to administer the LTD Program;
3. the date the member withdraws employee contributions with interest and ceases to be a member; and
4. the later of following:
  - a) the member's normal retirement date;
  - b) the month following 60 months of payments if disability occurs before age 65;
  - c) the month following attainment of age 70 if disability occurs at age 65 or after but before age 69;
  - d) the month following twelve-months of payments if disability occurs at or after age 69.

**Expenses:** Expenses associated with the operation of the LTD Program are payable by the LTD Program. The fee schedule is as follows:

Administrative:	\$13,000 / month
New Claims Fee:	\$420 / claim
Claims Management:	\$29 / claim / month

**Changes in Plan Terms Since the Prior Valuation:** No changes have been made since the last valuation on June 30, 2009.

# STATEMENT OF ACTUARIAL METHODS AND ASSUMPTIONS – LTD

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We have prepared this report on our actuarial valuation of the assets and liabilities of the Arizona State Retirement System LTD Program as of June 30, 2010, in accordance with generally accepted actuarial principles, and with the requirements of GASB #43.

The actuarial assumptions and methods on which our valuation has been based are, in our opinion, appropriate for the purpose of our current valuation. The ASRS Board has adopted them in its meetings of November 23, 2009.

We have not audited the data or the asset information used in this valuation, but believe them to be complete and accurate.

## Summary of Actuarial Methods

The actuarial cost method is the projected unit credit method. Assets are valued at market, less (or plus) an adjustment to reflect investment gains (or losses) over a 10-year period starting as of June 30, 2006. The unfunded actuarial accrued liability is amortized over a rolling 15 years in level dollar payments.

## Summary of Actuarial Assumptions

As a result of the experience analysis conducted on actual plan experience from July 1, 2002 to June 30, 2007, revised pre- and post-retirement mortality assumptions were adopted for the June 30, 2008 valuation. Further revised actuarial assumptions were adopted by ASRS for the June 30, 2009 valuation. Rates of retirement, rates of disability and rates of withdrawal were updated to rates recommended as a result of the last experience analysis. These assumptions are first effective for the valuation as of June 30, 2009.

The actuary originates the assumptions, in consultation with the ASRS Director and other ASRS staff members, and recommends the assumptions to the Board which makes the ultimate decision on which assumptions and methods to use.

The Board elected to use the projected unit credit method. Under this method, actuarial gains (or losses) are subtracted from (or added to) the unfunded actuarial accrued liability.

The assumptions unique to the LTD valuation were as follows:

## Actuarial Assumptions

### 1. Discount Rate

8% per annum, net of investment expenses

### 2. Rates of Termination of Claims in Payment Due to Death or Recovery

1987 Commissioners' Group Long Term Disability Valuation Table (1987 CGDT), applicable to plans with a six-month elimination period.

**3. Disability Incidence Rates for Active Members**

Age and sex based rates as developed for the Plan. Rates at representative ages are given below:

<b>Age</b>	<b>Males</b>	<b>Females</b>
20	0.04%	0.06%
30	0.05%	0.08%
40	0.16%	0.16%
50	0.38%	0.36%
60	0.90%	0.82%

**4. Offsets for Disabled Members**

We are assuming that the amounts the administrator reports as offsets (other than overpayment offsets) will continue to apply to each member's benefit until that benefit expires. For members within first three years of receipt of LTD benefits, we have adjusted benefit amounts to reflect future offsets, assuming 90% of members will have offsets after 3 years.

We assume that these offsets reduce the gross benefits by 40% since that is the average reduction for current open claims. We also assume that the weighted average months of overpayment is equal to 19 months.

These assumptions are reviewed annually.

**5. Offsets for Active Members**

We assume that LTD Program benefits, after all applicable offsets are 60% of the benefits before the offsets. This is the percentage that applies for currently disabled members and is based on the experience study as of June 30, 2007.

**6. Administrative Expense Reserve for Active Members**

2.8% of projected claim liabilities. This is the percentage that applies for currently disabled members.

**7. Elimination Period**

A 3% reduction in liabilities is applied to reflect the six-month elimination period for benefits.

**8. Changes in Assumptions Since the Prior Valuation**

No changes have been made since the last valuation on June 30, 2009.

*All other assumptions are the same as those used in the valuation of the Plan.*

## LTD SCHEDULES

### Schedule of Benefit Recipients Added to and Removed from Rolls

Last 6 Years

Valuation as of June 30	Retirants and Beneficiaries Added to Rolls		Retirants and Beneficiaries Removed from Rolls		Retirants and Beneficiaries Rolls End of Year		% Increase in Annual Allowance	Average Annual Allowances
	NO.	ANNUAL ALLOWANCES	NO.	ANNUAL ALLOWANCES	NO.	ANNUAL ALLOWANCES		
2005	926	\$ 15,285,111	671	\$ 11,000,763	4,939	\$ 65,583,564	7.0%	\$ 13,279
2006	840	16,021,268	761	12,191,399	5,018	69,413,433	5.8%	13,833
2007	800	15,958,305	747	13,060,111	5,071	72,311,627	4.2%	14,260
2008	640	12,610,021	829	16,270,484	4,882	68,651,164	-5.1%	14,062
2009	723	15,966,067	893	13,502,776	4,712	71,114,455	3.6%	15,092
2010	789	17,200,407	777	15,066,829	4,724	73,248,033	3.0%	15,506

### Schedule of Unfunded (Over) Accrued Liabilities

Last 6 Years

(Dollars in Thousands)

Year Ended June 30	Actuarial Accrued Liabilities Plan	Actuarial Value of Net Plan Assets	Assets as a % of Accrued Liabilities Plan	Unfunded (over funded) Accrued Liabilities Plan (UAL)	Active Member Payroll	UAL as a % of Active Member Payroll
2005	\$ 577,405	\$ 164,834	28.5%	\$ 412,572	\$ 8,032,458	5.10%
2006	574,701	194,297	33.8%	380,404	8,311,870	4.60%
2007	604,486	231,685	38.3%	372,800	9,161,804	4.10%
2008	553,185	274,902	49.7%	278,283	9,708,353	2.90%
2009	476,276	311,232	65.4%	165,044	9,834,810	1.70%
2010	477,266	319,308	66.9%	157,958	9,419,952	1.70%

**Solvency Test**

Last 6 Years

(Dollars in Thousands)

Year End June 30	Aggregate Accrued Liabilities for:							
	ACTIVE MEMBER CONTRIBUTIONS (1)	RETIREES AND BENEFICIARIES (2)	ACTIVE MEMBERS (EMPLOYER FINANCED PORTION) (3)	Net Assets Available for Benefits	Portion of Accrued Liabilities Covered by Net Assets Available for Benefits			
					(1)	(2)	(3)	
2005	-	\$ 258,735	\$ 318,670	\$ 164,834	100%	64%	0%	
2006	-	247,577	327,124	194,297	100%	78%	0%	
2007	-	274,947	329,539	231,685	100%	84%	0%	
2008	-	233,871	319,315	274,902	100%	100%	13%	
2009	-	235,921	240,355	311,232	100%	100%	31%	
2010	-	242,098	235,168	319,308	100%	100%	33%	

**Schedule of Recommended vs. Actual LTD Contributions**

Last 10 Years

(Dollars in Thousands)

Year Ended June 30	Active Member Payroll	Employee Contributions	Employer LTD Contribution Rate - Actual	Actuary Recommended Contribution
2001	\$ 6,564,000	\$ 32,820	0.50%	0.50%
2002	6,989,000	34,945	0.50%	0.50%
2003	7,297,000	36,485	0.50%	0.50%
2004	7,486,000	37,430	0.50%	0.50%
2005	8,032,000	40,160	0.50%	0.50%
2006	8,312,000	41,560	0.50%	0.50%
2007	9,162,000	45,810	0.50%	0.50%
2008	9,708,000	48,540	0.50%	0.50%
2009	9,834,810	49,174	0.50%	0.50%
2010	9,419,952	37,680	0.40%	0.40%

## LTD SCHEDULES (CONTINUED)

### Analysis of Financial Experience for LTD

As of June 30, 2010

	Lives	Reserves
<b>1. CHANGE IN OPEN CLAIMS RESERVES</b>		
The increase in the reserves for payments not yet due on disabled lives may be summarized as follows:		
(a) Open Claims Reserve Liability on July 1, 2009	4,712	\$ 229,352,711
(b) Change in reserve on 3,935 continuing disabled lives	N/A	(27,645,931)
(c) Reserves released on terminated lives	(777)	(19,116,646)
(d) Reserves added on new lives	789	52,950,535
(e) Open Claims Reserve Liability on June 30, 2010 = (a) + (b) + (c) + (d)	4,724	\$ 235,540,669
<b>2. DEVELOPMENT OF LIABILITY (GAIN)/LOSS</b>		
(a) Actuarial Accrued Liability as of July 1, 2009		\$ 476,275,688
(b) Normal Cost for 2009/2010		33,519,857
(c) Expected Benefit Payments for 2009/2010		69,644,000
(d) Expected Actuarial Accrued Liability on June 30, 2010 = ( a ) + ( b ) x 1.08 - ( c ) x ( 1 + .08 x 13/24 )		477,917,282
(e) Change in Plan Terms		N/A
(f) Change in Assumptions		N/A
(g) Liability (Gain)/Loss		(651,509)
(h) Actual Actuarial Accrued Liability on June 30, 2010 = (d) + (e) + (f) + (g)		\$ 477,265,773
<b>3. SOURCES OF LIABILITY (GAIN)/LOSS</b>		
(a) Offset (Gain)/Loss		\$ (856,726)
(b) Liability for members who were terminated in last year's valuation		12,141,727
(c) More Terminations than Expected		(2,934,738)
(d) Fewer LTD Retirees than Expected		(7,450,925)
(e) Salary Gain on Continuing Actives		(9,416,664)
(f) New Active Entrants		4,421,143
(g) Other (Gain)/Loss		3,444,674
(h) Liability (Gain)/Loss = (a) + (b) + (c) + (d) + (e) + (f) + (g)		\$ (651,509)

4. DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS		
(a) Excess (Shortfall) of Investment Income:		
(i) Current Year		\$ 10,543,678
(ii) Current Year - 1		(68,696,736)
(iii) Current Year - 2		(44,661,134)
(iv) Current Year - 3		11,421,699
(v) Current Year - 4		1,895,241
(b) Deferral of Excess (Shortfall):		
(i) Current Year (90% Deferral)		9,489,310
(ii) Current Year - 1 (80% Deferral)		(54,957,389)
(iii) Current Year - 2 (70% Deferral)		(31,262,794)
(iv) Current Year - 3 (60% Deferral)		6,853,019
(v) Current Year - 3 (50% Deferral)		947,621
(vi) Total Deferred for the Year		(68,930,233)
(c) Market Value of Assets as of June 30, 2010		250,377,817
(d) Actuarial Value of Assets as of June 30, 2010 = (c) - (b)(vi)		\$ 319,308,050
5. DEVELOPMENT OF ASSET (GAIN)/LOSS		
(a) Actuarial Value of Assets as of July 1, 2009		\$ 311,231,629
(b) Contributions		71,877,192
(c) Actual Benefit Payments for 2009/2010		69,710,335
(d) Administrative Expenses		2,819,659
(e) Expected Investment Income at 8% Return =		
((a) x .08) + ((b) x .08 x 1/2) - ((c) x .08 x 13/24)		24,752,837
(e) Expected Actuarial Assets as of June 30, 2010 = (a) + (b) - (c) - (d) + (e)		335,331,664
(f) Gain/(Loss) on Actuarial Assets		16,023,614
(g) Actuarial Assets as of June 30, 2010 = (f) - (g)		\$ 319,308,050
The asset loss occurred because investment earnings on actuarial assets were less than expected. The actual net return on actuarial assets was 2.82%, compared to the assumption of 8%. The actual net return on market value of assets was 12.77%, compared to the assumption of 8%.		
6. ANALYSIS OF SEDGWICK OFFSETS		
	AMOUNT OF MONTHLY OFFSETS	NUMBER WITH OFFSETS
Description of Offset from Sedgwick as of June 30, 2010		
Social Security Disability	\$ 2,378,771	3,459
Social Security Retirement	143,371	169
Other	446,539	918
<b>Total</b>	<b>\$2,968,681</b>	<b>4,546</b>
Description of Offset from Sedgwick as of June 30, 2009		
Social Security Disability	\$ 2,230,183	3,464
Social Security Retirement	135,014	165
Other	462,421	990
<b>Total</b>	<b>\$2,827,618</b>	<b>4,619</b>

# SUMMARY OF LEGISLATIVE PLAN CHANGES

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

### 1. Projected Unit Credit (PUC) Funding Method

Beginning with the June 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 June 30, 1989 who had 10 years of credited service using a minimum average compensation of one thousand dollars per month.

### 3. 2.0% Ad Hoc COLAs

- Effective July 1, 1989, all members retired on or before June 30, 1988 shall receive a 2.0% permanent benefit increase to their December 31, 1988 base benefit.
- Effective July 1, 1990, all members retired on or before June 30, 1989 shall receive a 2.0% permanent benefit increase to their June 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% multiplier instead of the 2.0% multiplier in effect at that time.

### 5. 3.0% Tax Equity Allowance

Retroactive to the later of January 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% in his or her January 1, 1989 base benefit.

## B. 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% for each point or fraction thereof less than 82.

### 2. 3.0% 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% 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% of the benefit for each completed year of service (i.e., 50% to 90%).

**C. LEGISLATED PLAN CHANGES ENACTED BY THE 1991 LEGISLATURE OF THE STATE OF ARIZONA**

**1. 3.0% 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% in his or her base benefit, retroactive to the date of retirement.

**2. Recalculation of Retiree Benefits Using 2.0% Benefit Multiplier**

Each retired member with at least 10 years of service who retired prior to June 30, 1985 shall have his or her benefit recomputed. The recomputed benefit shall be equal to 2% 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% Ad Hoc Increase**

Effective July 1, 1991 all members retired on or before June 30, 1990 shall receive a 2.3% permanent benefit increase in their June 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.

**D. LEGISLATED PLAN CHANGES ENACTED BY THE 1992 LEGISLATURE OF THE STATE OF ARIZONA**

**1. 3.0% 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% in his or her base benefit, retroactive to the date of retirement.

## **SUMMARY OF LEGISLATIVE PLAN CHANGES (CONTINUED)**

---

### **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 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% Ad Hoc Increase**

Effective November 1, 1992 all members retired on or before October 31, 1992 shall receive a 5% 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 June 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.

## **E. 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% down to 3.14%.

## **F. 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.

**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 January 1, 1992 and who elected a Joint and Survivor option shall receive a "Pop-up" in their retirement income if their beneficiary pre-deceases 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.

**G. 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% to 100% 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.

**H. LEGISLATED PLAN CHANGES ENACTED BY THE 1996 LEGISLATURE OF THE STATE OF ARIZONA**

**1. No material changes.**

**I. 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.**

**J. LEGISLATED PLAN CHANGES ENACTED BY THE 1998 LEGISLATURE OF THE STATE OF ARIZONA**

**1. No material changes.**

**K. 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% with five years of service and increases 10% for each additional year of service to a maximum of 100% for ten or more years of service.

**2. Benefit Multiplier Increased to 2.1%**

The benefit multiplier increased from 2.0% to 2.1% effective July 1, 2000.

**3. 5% Ad Hoc Increase**

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

**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% to 4%.
- b) The threshold for determining "Excess Earnings" was lowered from 9% to 8%.
- c) The limitation of the COLA to the increase in the CPI was removed.

**L. LEGISLATED PLAN CHANGES ENACTED BY THE 2000 LEGISLATURE OF THE STATE OF ARIZONA**

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

**M. 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

**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.

## **SUMMARY OF LEGISLATIVE PLAN CHANGES (CONTINUED)**

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### **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

### **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% of the member's 36-month final average earnings.

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

### **1. No material changes.**

**O. LEGISLATED PLAN CHANGES ENACTED BY THE 2003 LEGISLATURE OF THE STATE OF ARIZONA**

**1. Additional Temporary Health Insurance Premium Benefit (Rural Subsidy)**

The Legislature extended the additional temporary Rural Health Insurance Subsidy for two years, beginning July 1, 2003 and ending June 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.

<b>Rural Health Insurance Subsidy</b>	<b>Insurance Coverage without Medicare Parts A &amp; B</b>		<b>Insurance Coverage with Medicare Parts A &amp; B*</b>	
	<b>SINGLE</b>	<b>FAMILY</b>	<b>SINGLE</b>	<b>FAMILY</b>
JUNE 1, 2003 - JUNE 30, 2005				
Required Minimum Out-of-Pocket Payment	\$125	\$425	\$100	\$200
Rural Health Insurance 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.

**P. 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 purchased 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 the 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 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.

**Q. LEGISLATED PLAN CHANGES ENACTED BY THE 2005 LEGISLATURE OF THE STATE OF ARIZONA**

**1. Temporary Rural Health Insurance Premium Benefit**

The Legislature extended the temporary Rural Health Insurance Subsidy for the next two years, from July 1, 2005 to June 30, 2007. The benefit is provided to Medicare-eligible retirees and disabled members who live in Arizona counties with no Health Maintenance Organization (HMO) service area and who have 10 years of credited service.

**2. Contribution Rates**

The Legislature pegged the contribution rates for fiscal 2006 and 2007 at 6.90% and 8.60%, respectively. After fiscal 2007, contribution rates are to be determined annually.

**R. LEGISLATED PLAN CHANGES ENACTED BY THE 2006 LEGISLATURE OF THE STATE OF ARIZONA**

**1. Elections After Retirement**

Legislature limited the ability of ASRS retirees to rescind their elections after retirement. Specifically, members who have chosen a form with a death benefit can “pop up” once to the single life form, but are then not allowed to “pop down” to a death benefit form. ASRS will implement this provision upon receipt of a private letter ruling from the Internal Revenue Service.

**2. Conformance with Certain Federal Regulations**

State statutes were modified to conform to federal regulations regarding military service purchases, optional forms of retirement benefits, and minimum required distributions.

**3. Repeal of Deferred Retirement Option Plan**

The Legislature repealed the modified Deferred Retirement Option Plan (DROP).

## **S. LEGISLATED PLAN CHANGES ENACTED BY THE 2007 LEGISLATURE OF THE STATE OF ARIZONA**

### **1. Social Security Offsets and Pre-Existing Condition Period**

Offset percentages for Social Security disability benefits were increased from 64% to 85% and for Social Security retirement benefits from 83% to 85% for members who become disabled on or after July 1, 2008. The pre-existing condition period is increased from three months to six months for members hired on or after July 1, 2008. ASRS is required to recover overpayments by reducing future benefits to a member, beneficiary, or alternate payee.

### **2. Temporary Rural Health Insurance Premium Benefit**

The Legislature extended the temporary Rural Health Insurance Subsidy for two years from July 1, 2007 to June 30, 2009. The benefit is provided to Medicare-eligible retirees and disabled members who live in Apache, Gila, Mohave, or Navajo counties if they have ten years of credited service.

### **3. Exemption of Post-Doctoral Scholars**

Effective September 19, 2007, post-doctoral scholars are exempted from ASRS membership.

### **4. Expanded Eligibility for Active Military Service Credit**

Effective July 1, 2007, the term “presidential” call-up is changed to “military” call-up. It applies death and disability benefits to those that occur during active military service rather than just to those that are a result of active service. The law allows a member who becomes disabled during or as a result of active service to receive service credit (paid by the employer) from the date active service began through one year after the member’s date of disability if the member cannot return to work. The disability provision expires June 30, 2009.

## **T. LEGISLATED PLAN CHANGES ENACTED BY THE 2008 LEGISLATURE OF THE STATE OF ARIZONA**

### **1. Unclaimed Property Exemption and Procedures**

Legislation exempted ASRS from unclaimed property statutes. ASRS members will forfeit their benefits if they do not claim them by the time they reach age 73½. If such a member later claims his benefit, his benefit will be restored with interest if applicable. ASRS will send notices to members beginning at age 65 ½, and will make efforts to find lost members.

### **2. Divestment from Companies Investing in Iran or Doing Business in Sudan**

ASRS must engage with and potentially divest from companies that have invested, since August 5, 1996, \$20 million or more in any year in Iran’s petroleum energy sector or that meet specific Sudan-related business operations criteria. Additionally, ASRS must divest from companies that violate paragraph 6(j) of the Export Administration Act.

## **SUMMARY OF LEGISLATIVE PLAN CHANGES (CONTINUED)**

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### **3. Transfer Procedures**

For voluntary transfers, the legislation allowed retired or disabled members to elect whether to remain with ASRS or to transfer to another system and specified how a transfer will affect payroll deduction agreements. For a transfer that is mandated by either statute or an employer, the legislation required retired or disabled members to remain with ASRS and specified how a transfer will affect payroll deduction agreements.

### **4. Transfer Out Bills**

These bills expanded the ASRS credited service that a dispatcher may transfer to CORP and extended the time-frame for ASRS to transfer assets from 60 to 90 days. They expanded the definition of designated position to include State detention officers and provided that all prior ASRS service will transfer to CORP unless the employee irrevocably elects to remain with ASRS. They allowed the local board of the judiciary to designate certain positions within the Administrative Office to the Courts for membership in CORP.

### **5. Plan Administration**

This bill modified one of the salary calculations used for service purchases to be the average of the three pay periods (out of the last five) that remain after the pay periods with the highest and lowest pay are removed. It clarified that the salary calculations used for other public service purchases are also used for leave of absence purchases. It granted the ASRS Board rulemaking authority over the Plan, LTD program, and transfers. It clarified that a member who purchases forfeited service credit is subject to the benefit structure in place when the person again becomes a member. Finally, it required ASRS to recover overpayments by reducing benefits owed to a member, beneficiary, or alternate payee.

### **6. Federal Conforming Changes**

The Legislature made changes to comply with federal laws and IRS regulations, most notably the Economic Growth and Tax Relief Reconciliation Act of 2001.

**U. LEGISLATED PLAN CHANGES ENACTED BY THE 2009 LEGISLATURE OF THE STATE OF ARIZONA**

**1. Service Purchase**

Effective July 1, 2010, members will be required to have five years of service credit in ASRS before initiating a service purchase.

**2. 80% Cap on Benefits**

Effective July 1, 2010, the maximum limit on ASRS pensions of 80% of 36-month final average earnings is eliminated.

**3. Return to Work**

Retired members who return to work with a suspension of benefits and work for at least 60 consecutive months will be permitted to choose a new optional form of benefit when they again retire.

Retired members are allowed to return to work without suspension if the member returns to a different position that does not require participation and the member participates in another program.

**4. Administration**

ASRS is exempt from State Personnel Management and Personnel Board provisions and the State classification and compensation statute.

**5. Early Termination Incentives**

The scope of the early termination incentive statute is broadened and exceptions are limited.

**6. Dual Employment**

Contributions from a second employer will count, beginning January 1, 2010, only if member meets 20/20 membership criteria with respect to the second employer, with certain exceptions.

**V. LEGISLATED PLAN CHANGES ENACTED BY THE 2010 LEGISLATURE OF THE STATE OF ARIZONA**

**1. Average Monthly Compensation**

The Average Monthly Compensation used in the retiring member's retirement benefit calculation is changed from the average of the highest consecutive 36 months in the last 120 months to the average of the highest consecutive 60 months in the last 120 months for a member whose membership commences on or after July 1, 2011.

**2. Normal Retirement Date**

The Normal Retirement Date definition is changed from 80 to 85 points (age plus years of service) for a member whose membership commences on or after July 1, 2011.

**3. Early Retirement Deductions**

The Early Retirement reductions were also modified to conform to the 85 point normal retirement for a member whose membership commences on or after July 1, 2011 by adjusting the period over which the reduction is calculated.

**4. Employer Contribution Refunds**

Employer contribution refunds are eliminated for a member hired on or after July 1, 2011 except for a member who was terminated due to an Employer Reduction in Force or position eliminated, in which case the member will receive the current refund vesting schedule.

**5. Long-Term Disability Plan Appeals**

A person appealing an ASRS decision under the LTD Program (usually a decision of an Administrative Law Judge) may request that the ASRS Board hear the appeal in Executive Session, rather than in a Public Hearing. The request for Executive Session must be made at least 48 hours in advance and the Board shall then conduct the hearing in Executive Session. The Board is required to follow existing Executive Session procedures established in the Open Meeting Law statutes. Minutes of and discussions held at an Executive Session are confidential except from the appellant for use in the appellant's further appeal to the Superior Court.

**6. Health Insurance**

A retiree may no longer purchase individual health care coverage and receive the Health Benefit Supplement (HBS). [NOTE: this provision will not eliminate the HBS or ASRS insurance enrollees or retirees enrolled in their former Employer's insurance.] ASRS may continue to pay the HBS to a retiree who is receiving the payment under the current statutory provisions (one retiree).

**7. Compensation**

I.R.C. 415 Compensation Regulations and military differential wage payments from the Heroes Earnings Assistance and Relief Tax Act of 2008 (HEART Act) have been updated as required by the Internal Revenue Service.

# ARIZONA STATE RETIREMENT SYSTEM



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## Statistical Section 2011



## V. Statistical Section

This part of the Arizona State Retirement System’s Comprehensive Annual Financial Report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required summary information says about the ASRS’s overall financial health.

### **Financial Trends**

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## Net Assets

### Last 10 Fiscal Years (Dollars in Thousands)

		Fiscal Year																			
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011										
<b>Retirement Net Assets</b>																					
ASSETS																					
Cash, Receivables, and Prepaids	\$	307,934	\$ 414,382	\$ 2,139,601	\$ 2,091,244	\$ 2,396,175	\$ 2,197,053	\$ 2,095,722	\$ 867,888	\$ 975,021	\$ 1,056,204										
Investments at Fair Value		20,120,799	20,659,916	23,291,652	24,154,827	25,699,691	30,978,445	29,021,366	23,379,787	24,620,142	27,911,298										
<b>Total Assets</b>		<b>20,428,733</b>	<b>21,074,298</b>	<b>25,431,253</b>	<b>26,246,071</b>	<b>28,095,866</b>	<b>33,175,498</b>	<b>31,117,088</b>	<b>24,247,675</b>	<b>25,595,163</b>	<b>28,967,502</b>										
LIABILITIES																					
Investments Payable		2,081,206	3,149,294	4,938,242	4,654,687	4,853,112	6,078,211	6,368,470	4,313,128	3,404,191	2,086,445										
Other Payables		569	3,423	7,822	20,470	23,108	27,729	31,431	54,094	44,012	41,834										
<b>Total Liabilities</b>		<b>2,081,775</b>	<b>3,152,717</b>	<b>4,946,064</b>	<b>4,675,157</b>	<b>4,876,220</b>	<b>6,105,940</b>	<b>6,399,901</b>	<b>4,367,222</b>	<b>3,448,203</b>	<b>2,128,279</b>										
<b>TOTAL NET ASSETS</b>		<b>\$18,346,958</b>	<b>\$17,921,581</b>	<b>\$20,485,189</b>	<b>\$21,570,914</b>	<b>\$23,219,646</b>	<b>\$27,069,558</b>	<b>\$24,717,187</b>	<b>\$19,880,453</b>	<b>\$22,146,960</b>	<b>\$26,839,223</b>										
<b>HBS Net Assets</b>																					
ASSETS																					
Cash, Receivables, and Prepaids	\$	12,276	\$ 15,451	\$ 85,226	\$ 85,061	\$ 96,084	\$ 90,106	\$ 94,213	\$ 45,385	\$ 48,532	\$ 52,196										
Investments at Fair Value		843,856	805,430	917,308	974,406	1,081,538	1,335,221	1,273,867	1,046,717	1,101,174	1,236,614										
<b>Total Assets</b>		<b>856,132</b>	<b>820,881</b>	<b>1,002,534</b>	<b>1,059,467</b>	<b>1,177,622</b>	<b>1,425,327</b>	<b>1,368,080</b>	<b>1,092,102</b>	<b>1,149,706</b>	<b>1,286,810</b>										
LIABILITIES																					
Investments Payable		87,285	122,775	194,486	187,770	204,237	261,980	279,619	193,139	152,374	92,594										
Other Payables		-	-	-	60	3,639	394	475	1,770	1,737	1,487										
<b>Total Liabilities</b>		<b>87,285</b>	<b>122,775</b>	<b>194,486</b>	<b>187,830</b>	<b>207,876</b>	<b>262,374</b>	<b>280,094</b>	<b>194,909</b>	<b>154,111</b>	<b>94,081</b>										
<b>TOTAL NET ASSETS</b>		<b>\$ 768,847</b>	<b>\$ 698,106</b>	<b>\$ 808,048</b>	<b>\$ 871,637</b>	<b>\$ 969,746</b>	<b>\$ 1,162,953</b>	<b>\$ 1,087,986</b>	<b>\$ 897,193</b>	<b>\$ 995,595</b>	<b>\$ 1,194,729</b>										
<b>LTD Net Assets</b>																					
ASSETS																					
Cash, Receivables, and Prepaids	\$	5,184	\$ 4,145	\$ 7,641	\$ 14,040	\$ 15,241	\$ 10,565	\$ 12,331	\$ 11,998	\$ 6,808	\$ 6,371										
Investments at Fair Value		90,048	108,364	130,428	151,025	180,983	233,148	233,062	215,151	243,823	274,734										
<b>Total Assets</b>		<b>95,232</b>	<b>112,509</b>	<b>138,069</b>	<b>165,065</b>	<b>196,224</b>	<b>243,713</b>	<b>245,393</b>	<b>227,149</b>	<b>250,631</b>	<b>281,105</b>										
LIABILITIES																					
Investments Payable		-	-	-	-	-	-	-	-	-	-										
Other Payables		1,228	2,308	207	231	222	227	222	4,341	252	250										
<b>Total Liabilities</b>		<b>1,228</b>	<b>2,308</b>	<b>207</b>	<b>231</b>	<b>222</b>	<b>227</b>	<b>222</b>	<b>4,341</b>	<b>252</b>	<b>250</b>										
<b>TOTAL NET ASSETS</b>		<b>\$ 94,004</b>	<b>\$ 110,201</b>	<b>\$ 137,862</b>	<b>\$ 164,834</b>	<b>\$ 196,002</b>	<b>\$ 243,486</b>	<b>\$ 245,171</b>	<b>\$ 222,808</b>	<b>\$ 250,379</b>	<b>\$ 280,855</b>										

**Changes in Net Assets**  
**Last 10 Fiscal Years** (Dollars in Thousands)

Retirement Change in Net Assets	Fiscal Year									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>ADDITIONS</b>										
Member Contributions	\$ 135,275	\$ 142,356	\$ 377,436	\$ 403,661	\$ 570,933	\$ 766,962	\$ 857,813	\$ 844,540	\$ 808,908	\$ 833,287
Employer Contributions Purchased	131,234	138,100	297,770	318,311	477,472	663,544	759,482	754,044	763,099	786,662
Service/Transfers	50,832	93,552	113,944	141,932	125,751	107,548	95,226	72,436	73,973	70,812
Net Investment Income (Loss)	(1,762,370)	354,735	3,096,779	1,720,991	2,126,272	4,105,644	(1,963,259)	(4,433,461)	2,872,297	5,406,714
<b>Total Additions</b>	<b>(1,445,029)</b>	<b>728,743</b>	<b>3,885,929</b>	<b>2,584,895</b>	<b>3,300,428</b>	<b>5,643,698</b>	<b>(250,738)</b>	<b>(2,762,441)</b>	<b>4,518,277</b>	<b>7,097,475</b>
<b>DEDUCTIONS</b>										
Retirement Benefits	924,172	1,067,481	1,238,966	1,406,547	1,538,992	1,650,818	1,768,219	1,888,931	2,031,119	2,166,779
Survivor Benefits	14,078	15,861	14,859	18,402	17,125	21,590	22,648	30,378	26,472	23,949
Refunds due to Separation	42,765	35,976	36,212	44,164	60,313	77,910	104,387	120,689	154,144	180,719
Transfers Out	8,617	7,457	2,336	4,581	5,129	10,117	177,176	5,706	11,455	6,256
Administration and Other	16,708	27,345	29,948	25,476	30,137	33,351	29,203	28,589	28,580	27,509
<b>Total Deductions</b>	<b>1,006,340</b>	<b>1,154,120</b>	<b>1,322,321</b>	<b>1,499,170</b>	<b>1,651,696</b>	<b>1,793,786</b>	<b>2,101,633</b>	<b>2,074,293</b>	<b>2,251,770</b>	<b>2,405,212</b>
<b>NET CHANGE</b>	<b>(2,451,369)</b>	<b>(425,377)</b>	<b>2,563,608</b>	<b>1,085,725</b>	<b>1,648,732</b>	<b>3,849,912</b>	<b>(2,352,371)</b>	<b>(4,836,734)</b>	<b>2,266,507</b>	<b>4,692,263</b>
Net assets beginning of year	20,798,327	18,346,958	17,921,581	20,485,189	21,570,914	23,219,646	27,069,558	24,717,187	19,880,453	22,146,960
<b>NET ASSETS END OF YEAR</b>	<b>\$18,346,958</b>	<b>\$17,921,581</b>	<b>\$20,485,189</b>	<b>\$21,570,914</b>	<b>\$23,219,646</b>	<b>\$27,069,558</b>	<b>\$24,717,187</b>	<b>\$19,880,453</b>	<b>\$22,146,960</b>	<b>\$26,839,223</b>

## Changes in Net Assets

### Last 10 Fiscal Years (Dollars in Thousands)

	Fiscal Year									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>HBS Change in Net Assets</b>										
ADDITIONS										
Employer Contributions	\$ 4,041	\$ 4,256	\$ 79,662	\$ 85,350	\$ 93,461	\$ 103,473	\$ 99,027	\$ 90,490	\$ 59,393	\$ 51,048
Net Investment Income (Loss)	1,811	10,436	114,906	68,750	86,587	174,348	(87,559)	(192,303)	128,258	240,994
<b>Total Additions</b>	<b>5,852</b>	<b>14,692</b>	<b>194,568</b>	<b>154,100</b>	<b>180,048</b>	<b>277,821</b>	<b>11,468</b>	<b>(101,813)</b>	<b>187,651</b>	<b>292,042</b>
DEDUCTIONS										
Health Premium Benefits	75,990	84,534	83,680	89,602	80,827	83,236	85,132	87,723	87,983	91,699
Administration and Other	47	899	946	909	1,112	1,378	1,303	1,257	1,266	1,209
<b>Total Deductions</b>	<b>76,037</b>	<b>85,433</b>	<b>84,626</b>	<b>90,511</b>	<b>81,939</b>	<b>84,614</b>	<b>86,435</b>	<b>88,980</b>	<b>89,249</b>	<b>92,908</b>
<b>NET CHANGE</b>	<b>(70,185)</b>	<b>(70,741)</b>	<b>109,942</b>	<b>63,589</b>	<b>98,109</b>	<b>193,207</b>	<b>(74,967)</b>	<b>(190,793)</b>	<b>98,402</b>	<b>199,134</b>
Net assets beginning of year	839,032	768,847	698,106	808,048	871,637	969,746	1,162,953	1,087,986	897,193	995,595
<b>NET ASSETS END OF YEAR</b>	<b>\$ 768,846</b>	<b>\$ 698,106</b>	<b>\$ 808,048</b>	<b>\$ 871,637</b>	<b>\$ 969,746</b>	<b>\$ 1,162,953</b>	<b>\$ 1,087,986</b>	<b>\$ 897,193</b>	<b>\$ 995,595</b>	<b>\$ 1,194,729</b>
<b>LTD Change in Net Assets</b>										
ADDITIONS										
Member Contributions	\$ 32,938	\$ 34,801	\$ 36,026	\$ 38,982	\$ 41,188	\$ 44,518	\$ 47,171	\$ 47,213	\$ 35,939	\$ 21,689
Employer Contributions	32,938	34,800	36,026	38,982	41,188	44,518	47,171	47,213	35,939	21,689
Net Investment Income (Loss)	(7,519)	3,461	17,100	13,651	18,080	30,526	(21,623)	(47,726)	27,661	56,744
<b>Total Additions</b>	<b>58,357</b>	<b>73,062</b>	<b>89,152</b>	<b>91,615</b>	<b>100,456</b>	<b>119,562</b>	<b>72,719</b>	<b>46,700</b>	<b>99,539</b>	<b>100,122</b>
DEDUCTIONS										
Disability Benefits	54,804	54,688	58,976	62,183	66,695	69,221	68,284	65,781	69,148	66,124
Administration and Other	2,732	2,177	2,515	2,460	2,593	2,857	2,750	3,282	2,820	3,522
<b>Total Deductions</b>	<b>57,536</b>	<b>56,865</b>	<b>61,491</b>	<b>64,643</b>	<b>69,288</b>	<b>72,078</b>	<b>71,034</b>	<b>69,063</b>	<b>71,968</b>	<b>69,646</b>
<b>NET CHANGE</b>	<b>821</b>	<b>16,197</b>	<b>27,661</b>	<b>26,972</b>	<b>31,168</b>	<b>47,484</b>	<b>1,685</b>	<b>(22,363)</b>	<b>27,571</b>	<b>30,476</b>
Net assets beginning of year	93,183	94,004	110,201	137,862	164,834	196,002	243,486	245,171	222,808	250,379
<b>NET ASSETS END OF YEAR</b>	<b>\$ 94,004</b>	<b>\$ 110,201</b>	<b>\$ 137,862</b>	<b>\$ 164,834</b>	<b>\$ 196,002</b>	<b>\$ 243,486</b>	<b>\$ 245,171</b>	<b>\$ 222,808</b>	<b>\$ 250,379</b>	<b>\$ 280,855</b>

**Actual Contribution Rates  
Last 10 Fiscal Years**

<b>Retirement*</b>										
<b>Contribution Rates</b>	<b>Fiscal Years</b>									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Member	2.00	2.00	5.20	5.20	6.90	8.60	9.10	8.95	9.00	9.60
Employer	1.94	1.94	4.10	4.10	5.77	7.55	8.05	7.99	8.34	9.01

<b>HBS</b>										
<b>Contribution Rates</b>	<b>Fiscal Years</b>									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Employer	0.06	0.06	1.10	1.10	1.13	1.05	1.05	0.96	0.66	0.59

<b>LTD</b>										
<b>Contribution Rates</b>	<b>Fiscal Years</b>									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Member	0.49	0.49	0.50	0.50	0.50	0.50	0.50	0.50	0.40	0.25
Employer	0.49	0.49	0.50	0.50	0.50	0.50	0.50	0.50	0.40	0.25

\* The above schedule does not include System retirees.  
Source: Buck Consultants, LLC

# OPERATIONS

## Members by Type of Benefit As of June 30, 2011

Retirement Monthly Benefit**	Options*						
	1	2	3	4	5	6	7
Under \$300	8,503	282	368	684	2,040	178	349
\$300 - \$499	5,925	304	442	523	1,822	221	410
\$500 - \$999	12,086	712	1,144	1,022	3,543	711	1,259
\$1000 - \$1,499	8,202	551	960	648	2,881	796	1,149
\$1,500 - \$1,999	5,575	372	578	490	2,315	728	975
\$2,000 & Over	15,949	683	1,327	1,562	7,340	2,426	3,272
<b>Totals</b>	<b>56,240</b>	<b>2,904</b>	<b>4,819</b>	<b>4,929</b>	<b>19,941</b>	<b>5,060</b>	<b>7,414</b>

\* OPTIONS KEY

1. Life Annuity
2. Life Annuity – guaranteed 5 years
3. Life Annuity – guaranteed 10 years
4. Life Annuity – guaranteed 15 years
5. Joint Annuity – 100 percent to contingent survivor
6. Joint Annuity – 66 2/3 percent to contingent survivor
7. Joint Annuity – 50 percent to contingent survivor

\*\* Most recent information available is 2010.

Source: Buck Consultants, LLC

HBS Monthly Benefits	Members
\$1-199	60,489
\$200-299	3,281
\$300-399	120
\$400 & Over	75
<b>Total</b>	<b>63,965</b>

Source: ASRS Pension Administration System

LTD MONTHLY BENEFIT	MEMBERS
\$1-299	18
\$300-499	38
\$500-999	436
\$1,000-1,499	1,175
\$1,500-1,999	1,242
\$2,000 & over	1,876
<b>TOTAL</b>	<b>4,785</b>

Source: Sedgwick CMS

## Average Benefit Payments Last 10 Fiscal Years

Retirement	Years of Credited Service									
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45+
<b>FISCAL YEAR 2001</b>										
Average Monthly Benefit	\$ 130	\$ 293	\$ 600	\$ 939	\$1,414	\$2,119	\$2,694	\$2,956	\$2,694	\$2,671
Number of Retirees	1,338	9,450	12,164	10,033	10,115	9,611	4,891	1,120	180	18
<b>FISCAL YEAR 2002</b>										
Average Monthly Benefit	\$ 142	\$ 317	\$ 664	\$1,042	\$1,578	\$2,368	\$2,990	\$3,286	\$3,195	\$3,958
Number of Retirees	1,397	9,357	12,188	10,145	10,443	10,023	5,399	1,193	182	19
<b>FISCAL YEAR 2003</b>										
Average Monthly Benefit	\$ 149	\$ 328	\$ 695	\$1,068	\$1,571	\$2,312	\$2,957	\$3,314	\$3,535	\$4,335
Number of Retirees	1,555	9,744	12,811	10,568	11,103	10,838	6,477	1,373	203	25
<b>FISCAL YEAR 2004</b>										
Average Monthly Benefit	\$ 139	\$ 345	\$ 726	\$1,109	\$1,629	\$2,384	\$3,092	\$3,499	\$3,863	\$4,413
Number of Retirees	1,716	10,153	13,268	10,984	11,747	11,567	7,607	1,611	248	30
<b>FISCAL YEAR 2005</b>										
Average Monthly Benefit	\$ 125	\$ 326	\$ 687	\$1,742	\$1,995	\$2,460	\$2,894	\$3,035	\$3,082	\$2,817
Number of Retirees	1,697	10,290	13,540	19,674	16,813	8,394	2,815	550	77	3
<b>FISCAL YEAR 2006</b>										
Average Monthly Benefit	\$ 126	\$ 334	\$ 702	\$1,746	\$2,079	\$2,541	\$3,001	\$3,190	\$3,427	\$3,255
Number of Retirees	1,889	10,789	13,986	19,845	18,680	9,419	3,215	592	81	2
<b>FISCAL YEAR 2007</b>										
Average Monthly Benefit	\$ 121	\$ 329	\$ 697	\$1,743	\$2,101	\$2,572	\$3,034	\$3,268	\$3,616	\$4,542
Number of Retirees	2,124	11,416	14,534	20,663	20,232	10,474	3,454	615	78	4
<b>FISCAL YEAR 2008</b>										
Average Monthly Benefit	\$ 122	\$ 339	\$ 717	\$1,106	\$1,655	\$2,425	\$3,273	\$3,776	\$4,422	\$4,760
Number of Retirees	2,952	12,530	15,527	13,045	14,970	14,789	12,392	2,347	361	43
<b>FISCAL YEAR 2009</b>										
Average Monthly Benefit	\$ 195	\$ 339	\$ 715	\$1,105	\$1,663	\$2,435	\$3,321	\$3,862	\$4,453	\$4,845
Number of Retirees	3,385	13,236	16,321	13,658	15,995	15,587	13,314	2,499	380	49
<b>FISCAL YEAR 2010*</b>										
Average Monthly Benefit	\$ 119	\$ 338	\$ 714	\$1,108	\$1,674	\$2,445	\$3,342	\$3,900	\$4,533	\$5,040
Number of Retirees	4,011	14,223	17,233	14,418	17,150	16,581	14,549	2,691	399	52

The above schedule does not include System retirees.

Average final salary information is not available.

\* Most recent information available.

Source: Buck Consultants, LLC

**Average Benefit Payments  
Last 6 Fiscal Years**

<b>HBS</b>	<b>Years of Credited Service</b>					
	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10 or more</b>
<b>FISCAL YEAR 2006</b>						
Average Monthly Benefit	\$ 65	\$ 71	\$ 81	\$ 86	\$ 103	\$ 130
Number of HBS Participants	1,008	861	872	869	895	47,117
<b>FISCAL YEAR 2007</b>						
Average Monthly Benefit	\$ 57	\$ 69	\$ 83	\$ 89	\$ 96	\$ 130
Number of HBS Participants	1,046	877	903	885	891	49,368
<b>FISCAL YEAR 2008</b>						
Average Monthly Benefit	\$ 61	\$ 72	\$ 76	\$ 89	\$ 97	\$ 130
Number of HBS Participants	1,082	917	911	934	897	51,167
<b>FISCAL YEAR 2009</b>						
Average Monthly Benefit	\$ 61	\$ 70	\$ 78	\$ 89	\$ 100	\$ 130
Number of HBS Participants	1,123	941	916	951	906	53,198
<b>FISCAL YEAR 2010</b>						
Average Monthly Benefit	\$ 61	\$ 67	\$ 76	\$ 86	\$ 97	\$ 127
Number of HBS Participants	1,149	941	928	998	924	54,589
<b>FISCAL YEAR 2011</b>						
Average Monthly Benefit	\$ 59	\$ 67	\$ 75	\$ 87	\$ 92	\$ 126
Number of HBS Participants	1,252	1,018	999	1,057	983	58,656

Note: Information prior to 2006 is not available.  
Source: ASRS Pension Administration System

**Average Benefit Payments  
Last 6 Fiscal Years**

<b>LTD</b>	
<b>FISCAL YEAR 2006</b>	
Average Monthly Benefit	\$1,689
Number of LTD Participants	4,968
<b>FISCAL YEAR 2007</b>	
Average Monthly Benefit	\$1,743
Number of LTD Participants	4,976
<b>FISCAL YEAR 2008</b>	
Average Monthly Benefit	\$1,823
Number of LTD Participants	4,957
<b>FISCAL YEAR 2009</b>	
Average Monthly Benefit	\$1,886
Number of LTD Participants	4,672
<b>FISCAL YEAR 2010</b>	
Average Monthly Benefit	\$1,966
Number of LTD Participants	4,797
<b>FISCAL YEAR 2011</b>	
Average Monthly Benefit	\$1,931
Number of LTD Participants	4,785

Note: Long term disability payments are based on salary and not years of credited service.  
Information prior to 2006 is not available.

Source: Sedgwick CMS

**OPERATIONS (CONTINUED)**

**Principal Participating Employers  
Current Year and Nine Years Ago**

Participating Employer	2011			2002		
	COVERED EMPLOYEES	RANK	% OF MEMBERSHIP	COVERED EMPLOYEES	RANK	% OF MEMBERSHIP
Dept Of Administration	27,687	1	13%	31,419	1	16%
Maricopa County	8,777	2	4%	9,490	3	5%
Mesa Unified Dist 4	8,414	3	4%	8,076	4	4%
University Of Arizona	7,110	4	3%	7,129	6	4%
Tucson Unified Dist 1	6,997	5	3%	7,734	5	4%
Maricopa County Community College District	6,548	6	3%	4,480	9	2%
Arizona State University	5,557	7	3%	4,741	8	2%
Pima County	5,548	8	2%	6,363	7	3%
Gilbert Unified Dist 41	4,546	9	2%			
Chandler Unified Dist 80	3,975	10	2%			
Maricopa County School Office				14,815	2	7%
Maricopa Country Health Services				3,889	10	2%
*All other	131,057		61%	101,837		51%
<b>Total</b>	<b>216,216</b>		<b>100%</b>	<b>199,973</b>		<b>100%</b>

\* In 2011, "All Other" consisted of:

TYPE	NUMBER	EMPLOYEES
Public Schools	239	87,626
Charter Schools	151	4,589
Cities	78	17,427
Counties	13	8,339
Higher Education	10	5,939
Other	94	7,137
<b>Total</b>	<b>585</b>	<b>131,057</b>

Note: All participating employers participate in the retirement, HBS and LTD Plans.

Source: ASRS Pension Administration System



**ARIZONA STATE RETIREMENT SYSTEM**  
A Component Unit of the State of Arizona

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**3300 North Central Avenue  
Phoenix, AZ 85012**

**7660 E. Broadway Blvd., Suite 108  
Tucson, AZ 85710**