



**A** rizona

**S** tate

**R** etirement

**S** ystem

**Appropriated Budget Request**

Fiscal Year 2022

**ORIGINAL**

*August 31, 2020*

August 31, 2020

The Honorable Doug Ducey  
Governor, State of Arizona  
1700 W. Washington  
Phoenix, AZ 85007

Dear Governor Ducey:

The Arizona State Retirement System (ASRS) is pleased to present the budget request for Fiscal Year (FY) 2022.

Historically, the ASRS has been able to develop and implement fiscally responsible budgets that are flexible and support key agency strategic objectives and priorities. The operational costs to administer the programs managed by the ASRS are funded from the ASRS Trust Fund; the agency continues to be mindful that dollars not utilized for various expenses are dollars that remain in the Trust Fund for the benefit of our members, and also result in lower future contribution rates for employees and employers. Over the past three fiscal years, the ASRS has been able to revert approximately \$2 million in appropriated dollars back to the ASRS Trust Fund.

## Our Vision

*For the benefit of members, the ASRS will be a top performing benefit plan administrator with a solid reputation and sustainable plan design in the areas of:*

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

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

The ASRS remains committed to analyzing processes, enhancing technology and seeking alternatives to managing service demands while maintaining high levels of member satisfaction, maximizing resources, and constraining costs. A recent analysis comparing public pension funds indicates that the ASRS's administrative costs per member are well below the peer average - affirming that the ASRS has a productive and cost-effective operation. More information on how the ASRS compares to its peer institutions can be found in the *Reference Materials* section of this submission.

The FY 2022 ASRS budget request is structured to provide for only the essential resources required to achieve macro-level priorities and to meet statewide requirements. Information technology provides the framework for the ASRS business model. As the landscape continues to change and gain sophistication, IT organization, skills, processes, and tools, particularly as they relate to security levels and risk mitigation, need to continue to progress to effectively support and align business and service requirements.

With the simultaneous goal of preventing future and possibly greater expenses, the ASRS has identified required activities, as well as ongoing costs for FY 2022 and beyond, that necessitate a request for an increase in the ASRS base operating appropriations to ensure sufficient funding to continue business operations without disruption. The ASRS will deploy and implement

necessary modifications and upgrades for core applications and complete the migration of its infrastructure for data, systems, servers, and processes from its current physical data center to a cloud environment in support of the state's Cloud First policy.

As approved by the ASRS Operations, Audit, and Legislative Committee and the ASRS Board of Trustees, staff believe this request will position the agency in FY 2022 for continued success in providing high-quality service to its members and ensuring the overall long-term viability of the benefit programs managed by the ASRS.

We look forward to reviewing this budget request with you, the Arizona State Legislature, and the respective budget offices in the coming months.

Sincerely,

A handwritten signature in blue ink that reads "Paul Matson". The signature is fluid and cursive, with the first name "Paul" and last name "Matson" clearly legible.

Paul Matson  
Director



# State of Arizona Budget Request

State Agency

## Arizona State Retirement System

A.R.S. Citation: § 38-711

### Appropriated Funds

	FY 2021 Approp	FY 2022 Fund. Issue	FY 2022 Total Budget
Total Amount Requested:	24,920.8	775.0	25,695.8
Retirement System Appropriated	23,120.8	775.0	23,895.8
LTD Trust Fund	1,800.0	0.0	1,800.0

### Governor DUCEY:

This and the accompanying budget schedules, statements and explanatory information constitute the operating budget request for this agency for Fiscal Year 2022.

To the best of my knowledge all statements and explanations contained in the estimates submitted are true and correct.

Agency Head: **Paul Matson**

Title: **Executive Director**

(signature)

Phone: **(602) 240-5364**

Prepared By: **Chris Gustafson**

Email Address: **christopherg@azasrs.gov**

Date Prepared:

### Non-Appropriated Funds

	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Budget
Total Amount Planned:	108,847.2	906.0	109,753.2
Arizona State Retirement System	108,847.2	906.0	109,753.2

Total:	133,768.0	1,681.0	135,449.0
--------	-----------	---------	-----------

## Revenue Schedule

<b>Agency:</b>	Arizona State Retirement System
----------------	---------------------------------

<b>Fund:</b>	RT1401 Retirement System Appropriated
--------------	---------------------------------------

AFIS Code	Category of Receipt and Description	FY 2020	FY 2021	FY 2022
4699	MISCELLANEOUS RECEIPTS	21,940.2	24,353.7	23,895.8
<b>Fund Total:</b>		21,940.2	24,353.7	23,895.8

## Revenue Schedule

<b>Agency:</b>	Arizona State Retirement System
----------------	---------------------------------

<b>Fund:</b>	RT1407 Arizona State Retirement System
--------------	--

AFIS Code	Category of Receipt and Description	FY 2020	FY 2021	FY 2022
4699	MISCELLANEOUS RECEIPTS	177,044.1	113,773.6	109,753.2
<b>Fund Total:</b>		177,044.1	113,773.6	109,753.2

## Revenue Schedule

**Agency:** Arizona State Retirement System

**Fund:** RT1408 LTD Trust Fund

<b>AFIS Code</b>	<b>Category of Receipt and Description</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
4699	MISCELLANEOUS RECEIPTS	1,363.3	1,800.0	1,800.0
<b>Fund Total:</b>		1,363.3	1,800.0	1,800.0

## Revenue Schedule

**Agency:** RTA Arizona State Retirement System

**Fund:** RT1401 Retirement System Appropriated Fund

**Justification:** Funding for the Appropriated Operating expenditures for the ASRS is from the ASRS administrative account. Proceeds are deposited (revenue) as needed based on periodic expenditure projections rather than a single deposit of the full appropriation at the beginning of a fiscal year.

## Revenue Schedule

**Agency:** RTA Arizona State Retirement System

**Fund:** RT1407 Arizona State Retirement System-Non Appropriated Fund

**Justification:** Funding for the Non-Appropriated Operating expenditures for the ASRS is from the ASRS administrative account. Proceeds are deposited (revenue) as needed based on periodic expenditure projections rather than a single deposit at the beginning of a fiscal year.

## Revenue Schedule

**Agency:** RTA Arizona State Retirement System

**Fund:** RT1408 LTD Trust Fund

**Justification:** Funding for this appropriation is from the LTD Trust Fund. Proceeds are deposited (revenue) as needed based on periodic expenditure projections rather than a single deposit of the full appropriation at the beginning of a fiscal year.

## Sources and Uses of Funds

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Fund:</b>	<b>RT1401 Retirement System Appropriated</b>

<b>Cash Flow Summary</b>	<b>Actual FY 2020</b>	<b>Estimate FY 2021</b>	<b>Estimate FY 2022</b>
Balance Forward from Prior Year	707.1	0.0	0.0
Revenue (From Revenue Schedule)	21,940.2	24,353.7	23,895.8
Total Available	22,647.3	24,353.7	23,895.8
Total Appropriated Disbursements	22,647.3	24,353.7	23,895.8
Total Non-Appropriated Disbursements	0.0	0.0	0.0
Balance Forward to Next Year	0.0	0.0	0.0

<b>Appropriated Expenditure</b>	<b>Actual FY 2020</b>	<b>Estimate FY 2021</b>	<b>Estimate FY 2022</b>
<b>Expenditure Categories</b>			
Personal Services	11,867.4	13,635.9	13,635.9
Employee Related Expenses	4,507.5	5,437.8	5,437.8
Prof. And Outside Services	1,815.3	1,255.4	1,630.4
Travel - In State	17.0	30.0	30.0
Travel - Out of State	16.6	49.0	49.0
Food	0.0	0.0	0.0
Aid to Organizations and Individuals	0.0	0.0	0.0
Other Operating Expenses	2,839.5	2,323.2	2,723.2
Equipment	362.2	389.5	389.5
Capital Outlay	0.0	0.0	0.0
Debt Service	0.0	0.0	0.0
Cost Allocation	0.0	0.0	0.0
Transfers	3.3	0.0	0.0
<b>Expenditure Categories Total:</b>	<b>21,428.8</b>	<b>23,120.8</b>	<b>23,895.8</b>
Non-Lapsing Authority from Prior Years	1,218.5	1,213.2	0.0
Administrative Adjustments	0.0	19.7	0.0
Capital Projects (Land, Buildings,Improvements)	0.0	0.0	0.0
Appropriated 27th Pay Roll	0.0	0.0	0.0
Legislative Fund Transfers	0.0	0.0	0.0
IT Project Transfers	0.0	0.0	0.0
<b>Appropriated Expenditure Total:</b>	<b>22,647.3</b>	<b>24,353.7</b>	<b>23,895.8</b>
<b>Appropriated FTE:</b>	<b>215.9</b>	<b>215.9</b>	<b>215.9</b>

<b>Non-Appropriated Expenditure</b>	<b>Actual FY 2020</b>	<b>Estimate FY 2021</b>	<b>Estimate FY 2022</b>
<b>Expenditure Categories</b>			
Personal Services	0.0	0.0	0.0
Employee Related Expenses	0.0	0.0	0.0
Prof. And Outside Services	0.0	0.0	0.0
Travel - In State	0.0	0.0	0.0
Travel - Out of State	0.0	0.0	0.0
Food	0.0	0.0	0.0
Aid to Organizations and Individuals	0.0	0.0	0.0
Other Operating Expenses	0.0	0.0	0.0
Equipment	0.0	0.0	0.0
Capital Outlay	0.0	0.0	0.0
Debt Service	0.0	0.0	0.0
Cost Allocation	0.0	0.0	0.0
Transfers	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Cap Transfer due to Fund Balance	0.0	0.0	0.0
Residual Equity Transfer	0.0	0.0	0.0
Prior Commitments or Obligated Expenditures	0.0	0.0	0.0
Non Appropriated 27th Pay Roll	0.0	0.0	0.0
<b>Non-Appropriated Expenditure Total:</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Non-Appropriated FTE:</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

## Sources and Uses of Funds

Agency: Arizona State Retirement System

### Fund Description

OSP: Revenues consist of monies appropriated from retirement contributions that are used for the administration of the State Retirement System.

## Sources and Uses of Funds

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Fund:</b>	<b>RT1407 Arizona State Retirement System</b>

<b>Cash Flow Summary</b>	<b>Actual FY 2020</b>	<b>Estimate FY 2021</b>	<b>Estimate FY 2022</b>
Balance Forward from Prior Year	190.8	0.0	0.0
Revenue (From Revenue Schedule)	177,044.1	113,773.6	109,753.2
Total Available	177,234.9	113,773.6	109,753.2
Total Appropriated Disbursements	0.0	0.0	0.0
Total Non-Appropriated Disbursements	177,234.9	113,773.6	109,753.2
Balance Forward to Next Year	0.0	0.0	0.0

<b>Appropriated Expenditure</b>	<b>Actual FY 2020</b>	<b>Estimate FY 2021</b>	<b>Estimate FY 2022</b>
<b>Expenditure Categories</b>			
Personal Services	0.0	0.0	0.0
Employee Related Expenses	0.0	0.0	0.0
Prof. And Outside Services	0.0	0.0	0.0
Travel - In State	0.0	0.0	0.0
Travel - Out of State	0.0	0.0	0.0
Food	0.0	0.0	0.0
Aid to Organizations and Individuals	0.0	0.0	0.0
Other Operating Expenses	0.0	0.0	0.0
Equipment	0.0	0.0	0.0
Capital Outlay	0.0	0.0	0.0
Debt Service	0.0	0.0	0.0
Cost Allocation	0.0	0.0	0.0
Transfers	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Non-Lapsing Authority from Prior Years	0.0	0.0	0.0
Administrative Adjustments	0.0	0.0	0.0
Capital Projects (Land, Buildings,Improvements)	0.0	0.0	0.0
Appropriated 27th Pay Roll	0.0	0.0	0.0
Legislative Fund Transfers	0.0	0.0	0.0
IT Project Transfers	0.0	0.0	0.0
<b>Appropriated Expenditure Total:</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Appropriated FTE:</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

<b>Non-Appropriated Expenditure</b>	<b>Actual FY 2020</b>	<b>Estimate FY 2021</b>	<b>Estimate FY 2022</b>
<b>Expenditure Categories</b>			
Personal Services	2,573.9	2,272.1	2,551.4
Employee Related Expenses	822.2	891.0	922.2
Prof. And Outside Services	169,191.5	100,284.4	100,778.3
Travel - In State	0.5	0.0	0.0
Travel - Out of State	10.6	20.0	20.0
Food	0.0	0.0	0.0
Aid to Organizations and Individuals	0.0	0.0	0.0
Other Operating Expenses	4,635.0	5,299.7	5,401.3
Equipment	1.2	80.0	80.0
Capital Outlay	0.0	0.0	0.0
Debt Service	0.0	0.0	0.0
Cost Allocation	0.0	0.0	0.0
Transfers	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	<b>177,234.9</b>	<b>108,847.2</b>	<b>109,753.2</b>
Cap Transfer due to Fund Balance	0.0	0.0	0.0
Residual Equity Transfer	0.0	0.0	0.0
Prior Commitments or Obligated Expenditures	0.0	4,926.4	0.0
Non Appropriated 27th Pay Roll	0.0	0.0	0.0
<b>Non-Appropriated Expenditure Total:</b>	<b>177,234.9</b>	<b>113,773.6</b>	<b>109,753.2</b>
<b>Non-Appropriated FTE:</b>	<b>25.0</b>	<b>25.0</b>	<b>25.0</b>

## Sources and Uses of Funds

**Agency:** Arizona State Retirement System

### Fund Description

OSPB: Revenues consist of retirement contributions that are limited in use by statute to expenditures such as investment management fees, consulting fees, rent, retiree payroll, costs for administering the health insurance program for retirees, and legal counsel.

# Sources and Uses of Funds

Agency: RTA Arizona State Retirement System

## RT1407 Fund Explanation

**Explanation:** Funding for the Non-Appropriated Operating expenditures for the ASRS is from the ASRS administrative account. Proceeds are deposited (revenue) as needed from the ASRS Administrative Account based on periodic expenditure projections rather than a single deposit at the beginning of a fiscal year. Thus, the cash balance is not an accurate indicator of anticipated expenditures or remaining funds.

For revenue projections, ASRS utilizes amounts that will ensure a non-negative balance forward for future years. For reporting purposes, ASRS utilizes an alternate approach for submission of information in BUDDIES for Fund RT1407 as follows:

In AFIS Fund RT1407, the ASRS processes health insurance premium benefit payments (withheld from retirement annuity payments) retirees owe to their employers. The ASRS is serving in a payroll administrator capacity for this activity. The accounting for this activity is captured in our internal financial management system and is properly presented in the ASRS Comprehensive Annual Financial Report (CAFR). In AFIS Fund RT1407, the activity is sizeable and appears as revenue/expense activity (FY 2020 \$47M+). However, as the activity is largely a payroll withholding function and because the proper accounting for this activity is captured in our financial management system, ASRS does not report this activity in the expenditure portions of BUDDIES (in the same manner that ASRS does not report pension benefit payment information).

Conversely, ASRS does report in the expenditure portions of BUDDIES the external investment management fees the ASRS incurs (FY 2020 \$75M+). These payments are not processed through AFIS but rather via the external ASRS Custody Bank. Some investment management fees, specifically related to private markets, are not included due to the nature of the investments and contingent variables. Estimated annual performance incentive and other certain fees and expenses that are contractually agreed upon are not projected and are only reported, on a cash basis, when identified and paid (FY 2020 \$84M+).

These two modifications are done in an effort to more accurately present ASRS operating expenditure activity. Therefore, revenue amounts are adjusted to better represent the cash/expenditure activity presented.

## Sources and Uses of Funds

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Fund:</b>	<b>RT1408 LTD Trust Fund</b>

<b>Cash Flow Summary</b>	<b>Actual FY 2020</b>	<b>Estimate FY 2021</b>	<b>Estimate FY 2022</b>
Balance Forward from Prior Year	55.0	0.0	0.0
Revenue (From Revenue Schedule)	1,363.3	1,800.0	1,800.0
Total Available	1,418.3	1,800.0	1,800.0
Total Appropriated Disbursements	1,418.3	1,800.0	1,800.0
Total Non-Appropriated Disbursements	0.0	0.0	0.0
Balance Forward to Next Year	0.0	0.0	0.0

<b>Appropriated Expenditure</b>	<b>Actual FY 2020</b>	<b>Estimate FY 2021</b>	<b>Estimate FY 2022</b>
<b>Expenditure Categories</b>			
Personal Services	0.0	0.0	0.0
Employee Related Expenses	0.0	0.0	0.0
Prof. And Outside Services	1,418.3	1,800.0	1,800.0
Travel - In State	0.0	0.0	0.0
Travel - Out of State	0.0	0.0	0.0
Food	0.0	0.0	0.0
Aid to Organizations and Individuals	0.0	0.0	0.0
Other Operating Expenses	0.0	0.0	0.0
Equipment	0.0	0.0	0.0
Capital Outlay	0.0	0.0	0.0
Debt Service	0.0	0.0	0.0
Cost Allocation	0.0	0.0	0.0
Transfers	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	<b>1,418.3</b>	<b>1,800.0</b>	<b>1,800.0</b>
Non-Lapsing Authority from Prior Years	0.0	0.0	0.0
Administrative Adjustments	0.0	0.0	0.0
Capital Projects (Land, Buildings,Improvements)	0.0	0.0	0.0
Appropriated 27th Pay Roll	0.0	0.0	0.0
Legislative Fund Transfers	0.0	0.0	0.0
IT Project Transfers	0.0	0.0	0.0
<b>Appropriated Expenditure Total:</b>	<b>1,418.3</b>	<b>1,800.0</b>	<b>1,800.0</b>
<b>Appropriated FTE:</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

<b>Non-Appropriated Expenditure</b>	<b>Actual FY 2020</b>	<b>Estimate FY 2021</b>	<b>Estimate FY 2022</b>
<b>Expenditure Categories</b>			
Personal Services	0.0	0.0	0.0
Employee Related Expenses	0.0	0.0	0.0
Prof. And Outside Services	0.0	0.0	0.0
Travel - In State	0.0	0.0	0.0
Travel - Out of State	0.0	0.0	0.0
Food	0.0	0.0	0.0
Aid to Organizations and Individuals	0.0	0.0	0.0
Other Operating Expenses	0.0	0.0	0.0
Equipment	0.0	0.0	0.0
Capital Outlay	0.0	0.0	0.0
Debt Service	0.0	0.0	0.0
Cost Allocation	0.0	0.0	0.0
Transfers	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Cap Transfer due to Fund Balance	0.0	0.0	0.0
Residual Equity Transfer	0.0	0.0	0.0
Prior Commitments or Obligated Expenditures	0.0	0.0	0.0
Non Appropriated 27th Pay Roll	0.0	0.0	0.0
<b>Non-Appropriated Expenditure Total:</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Non-Appropriated FTE:</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

# Sources and Uses of Funds

**Agency:** Arizona State Retirement System

**Fund Description**

OSP: Revenues consist of monies appropriated from long-term disability contributions that are used to pay costs associated with the Long-Term Disability program.

## Funding Issues List

**Agency:** Arizona State Retirement System

FY 2022

Priority	Funding Issue Title	Total FTE	Total Amount	General Fund	Other Apropr. Funds	Non-App Funds
1	Cloud Migration and Related Expenditures	0.0	775.0	0.0	775.0	0.0
2	Continuously Appropriated Funding	0.0	906.0	0.0	0.0	906.0
	<b>Total:</b>	0.0	1,681.0	0.0	775.0	906.0
	<b>Decision Package Total:</b>	0.0	1,681.0	0.0	775.0	906.0

## Funding Issue Detail

**Agency:** Arizona State Retirement System

**Issue:** 1 Cloud Migration and Related Expenditures

<b>Program:</b>	Member Services	<b>Calculated ERE:</b>	\$0.00
<b>Fund:</b>	RT1401-A Retirement System Appropriated (Appropriated)	<b>Uniform Allowance:</b>	\$0.00

Expenditure Categories	FY 2022
FTE	0.0
Personal Services	0.0
Employee Related Expenses	0.0
<b>Subtotal Personal Services and ERE:</b>	<u>0.0</u>
Professional & Outside Services	375.0
Travel In-State	0.0
Travel Out-of-State	0.0
Food	0.0
Aid to Organizations & Individuals	0.0
Other Operating Expenditures	400.0
Equipment	0.0
Capital Outlay	0.0
Debt Services	0.0
Cost Allocation	0.0
Transfers	0.0
<b>Program / Fund Total:</b>	<u>775.0</u>

**Issue:** 2 Continuously Appropriated Funding

<b>Program:</b>	Investment Management	<b>Calculated ERE:</b>	\$53.20
<b>Fund:</b>	RT1407-N Arizona State Retirement System (Non-Appropriated)	<b>Uniform Allowance:</b>	\$0.00

Expenditure Categories	FY 2022
FTE	0.0
Personal Services	244.0
Employee Related Expenses	56.3
<b>Subtotal Personal Services and ERE:</b>	<u>300.3</u>
Professional & Outside Services	(3.1)
Travel In-State	0.0
Travel Out-of-State	0.0
Food	0.0
Aid to Organizations & Individuals	0.0
Other Operating Expenditures	146.6
Equipment	0.0
Capital Outlay	0.0
Debt Services	0.0
Cost Allocation	0.0
Transfers	0.0
<b>Program / Fund Total:</b>	<u>443.8</u>

## Funding Issue Detail

**Agency:** Arizona State Retirement System

**Issue:** 2 Continuously Appropriated Funding

<b>Program:</b>	Administration and Support	<b>Calculated ERE:</b>	\$0.00
<b>Fund:</b>	RT1407-N Arizona State Retirement System (Non-Appropriated)	<b>Uniform Allowance:</b>	\$0.00

Expenditure Categories	FY 2022
FTE	0.0
Personal Services	0.0
Employee Related Expenses	0.0
<b>Subtotal Personal Services and ERE:</b>	<b>0.0</b>
Professional & Outside Services	0.0
Travel In-State	0.0
Travel Out-of-State	0.0
Food	0.0
Aid to Organizations & Individuals	0.0
Other Operating Expenditures	9.0
Equipment	0.0
Capital Outlay	0.0
Debt Services	0.0
Cost Allocation	0.0
Transfers	0.0
<b>Program / Fund Total:</b>	<b>9.0</b>

<b>Program:</b>	Member Services	<b>Calculated ERE:</b>	\$7.70
<b>Fund:</b>	RT1407-N Arizona State Retirement System (Non-Appropriated)	<b>Uniform Allowance:</b>	\$0.00

Expenditure Categories	FY 2022
FTE	0.0
Personal Services	35.3
Employee Related Expenses	(25.1)
<b>Subtotal Personal Services and ERE:</b>	<b>10.2</b>
Professional & Outside Services	497.0
Travel In-State	0.0
Travel Out-of-State	0.0
Food	0.0
Aid to Organizations & Individuals	0.0
Other Operating Expenditures	(54.0)
Equipment	0.0
Capital Outlay	0.0
Debt Services	0.0
Cost Allocation	0.0
Transfers	0.0
<b>Program / Fund Total:</b>	<b>453.2</b>

## Summary of Expenditure and Budget Request for All Funds

**Agency:** Arizona State Retirement System

<b>Appropriated</b>		<b>FY 2020 Actual</b>	<b>FY 2021 Expd. Plan</b>	<b>FY 2022 Fund. Issue</b>	<b>FY 2022 Total Request</b>
Cost Center/Program:					
1	Member Services	18,513.7	20,023.0	775.0	20,798.0
2	Administration and Support	4,076.5	4,584.6	0.0	4,584.6
3	Investment Management	256.9	313.2	0.0	313.2
		22,847.1	24,920.8	775.0	25,695.8
<b>Expenditure Categories</b>					
	FTE	215.9	215.9	0.0	215.9
	Personal Services	11,867.4	13,635.9	0.0	13,635.9
	Employee Related Expenses	4,507.5	5,437.8	0.0	5,437.8
	Professional and Outside Services	3,233.6	3,055.4	375.0	3,430.4
	Travel In-State	17.0	30.0	0.0	30.0
	Travel Out of State	16.6	49.0	0.0	49.0
	Food	0.0	0.0	0.0	0.0
	Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
	Other Operating Expenses	2,839.5	2,323.2	400.0	2,723.2
	Equipment	362.2	389.5	0.0	389.5
	Capital Outlay	0.0	0.0	0.0	0.0
	Debt Service	0.0	0.0	0.0	0.0
	Cost Allocation	0.0	0.0	0.0	0.0
	Transfers	3.3	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>		22,847.1	24,920.8	775.0	25,695.8

## Summary of Expenditure and Budget Request for All Funds

**Agency:** Arizona State Retirement System

<b>Non-Appropriated</b>		<b>FY 2020 Actual</b>	<b>FY 2021 Expd. Plan</b>	<b>FY 2022 Fund. Issue</b>	<b>FY 2022 Total Request</b>
<b>Cost Center/Program:</b>					
1	Member Services	4,784.7	4,672.6	453.2	5,125.8
2	Administration and Support	600.9	692.5	9.0	701.5
3	Investment Management	171,849.3	103,482.1	443.8	103,925.9
		177,234.9	108,847.2	906.0	109,753.2
<b>Expenditure Categories</b>					
	FTE	25.0	25.0	0.0	25.0
	Personal Services	2,573.9	2,272.1	279.3	2,551.4
	Employee Related Expenses	822.2	891.0	31.2	922.2
	Professional and Outside Services	169,191.5	100,284.4	493.9	100,778.3
	Travel In-State	0.5	0.0	0.0	0.0
	Travel Out of State	10.6	20.0	0.0	20.0
	Food	0.0	0.0	0.0	0.0
	Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
	Other Operating Expenses	4,635.0	5,299.7	101.6	5,401.3
	Equipment	1.2	80.0	0.0	80.0
	Capital Outlay	0.0	0.0	0.0	0.0
	Debt Service	0.0	0.0	0.0	0.0
	Cost Allocation	0.0	0.0	0.0	0.0
	Transfers	0.0	0.0	0.0	0.0
	<b>Expenditure Categories Total:</b>	177,234.9	108,847.2	906.0	109,753.2

## Summary of Expenditure and Budget Request for All Funds

<b>Agency:</b>	Arizona State Retirement System
----------------	---------------------------------

<b>Agency Total for All Funds:</b>	200,082.0	133,768.0	1,681.0	135,449.0			
------------------------------------	-----------	-----------	---------	-----------	--	--	--

## Summary of Expenditure and Budget Request for Selected Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Fund:</b>	RT1401 Retirement System Appropriated (Appropriated)

	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
Cost Center/Program:				
1 Member Services	17,095.4	18,223.0	775.0	18,998.0
2 Administration and Support	4,076.5	4,584.6	0.0	4,584.6
3 Investment Management	256.9	313.2	0.0	313.2
	21,428.8	23,120.8	775.0	23,895.8
<b>Expenditure Categories</b>				
FTE	215.9	215.9	0.0	215.9
Personal Services	11,867.4	13,635.9	0.0	13,635.9
Employee Related Expenses	4,507.5	5,437.8	0.0	5,437.8
Professional and Outside Services	1,815.3	1,255.4	375.0	1,630.4
Travel In-State	17.0	30.0	0.0	30.0
Travel Out of State	16.6	49.0	0.0	49.0
Food	0.0	0.0	0.0	0.0
Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
Other Operating Expenses	2,839.5	2,323.2	400.0	2,723.2
Equipment	362.2	389.5	0.0	389.5
Capital Outlay	0.0	0.0	0.0	0.0
Debt Service	0.0	0.0	0.0	0.0
Cost Allocation	0.0	0.0	0.0	0.0
Transfers	3.3	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	21,428.8	23,120.8	775.0	23,895.8
<b>Fund Total:</b>	21,428.8	23,120.8	775.0	23,895.8

## Summary of Expenditure and Budget Request for Selected Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Fund:</b>	RT1407 Arizona State Retirement System (Non-Appropriated)

	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
Cost Center/Program:				
1 Member Services	4,784.7	4,672.6	453.2	5,125.8
2 Administration and Support	600.9	692.5	9.0	701.5
3 Investment Management	171,849.3	103,482.1	443.8	103,925.9
	177,234.9	108,847.2	906.0	109,753.2
<b>Expenditure Categories</b>				
FTE	25.0	25.0	0.0	25.0
Personal Services	2,573.9	2,272.1	279.3	2,551.4
Employee Related Expenses	822.2	891.0	31.2	922.2
Professional and Outside Services	169,191.5	100,284.4	493.9	100,778.3
Travel In-State	0.5	0.0	0.0	0.0
Travel Out of State	10.6	20.0	0.0	20.0
Food	0.0	0.0	0.0	0.0
Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
Other Operating Expenses	4,635.0	5,299.7	101.6	5,401.3
Equipment	1.2	80.0	0.0	80.0
Capital Outlay	0.0	0.0	0.0	0.0
Debt Service	0.0	0.0	0.0	0.0
Cost Allocation	0.0	0.0	0.0	0.0
Transfers	0.0	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	177,234.9	108,847.2	906.0	109,753.2
<b>Fund Total:</b>	177,234.9	108,847.2	906.0	109,753.2

## Summary of Expenditure and Budget Request for Selected Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Fund:</b>	RT1408 LTD Trust Fund (Appropriated)

	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
Cost Center/Program:				
1 Member Services	1,418.3	1,800.0	0.0	1,800.0
	1,418.3	1,800.0	0.0	1,800.0
<b>Expenditure Categories</b>				
Personal Services	0.0	0.0	0.0	0.0
Employee Related Expenses	0.0	0.0	0.0	0.0
Professional and Outside Services	1,418.3	1,800.0	0.0	1,800.0
Travel In-State	0.0	0.0	0.0	0.0
Travel Out of State	0.0	0.0	0.0	0.0
Food	0.0	0.0	0.0	0.0
Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
Other Operating Expenses	0.0	0.0	0.0	0.0
Equipment	0.0	0.0	0.0	0.0
Capital Outlay	0.0	0.0	0.0	0.0
Debt Service	0.0	0.0	0.0	0.0
Cost Allocation	0.0	0.0	0.0	0.0
Transfers	0.0	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	1,418.3	1,800.0	0.0	1,800.0
<b>Fund Total:</b>	1,418.3	1,800.0	0.0	1,800.0

## Summary of Expenditure and Budget Request for Selected Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Fund:</b>	RT1408 LTD Trust Fund (Appropriated)

	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
<b>Agency Total for Selected Funds</b>	200,082.0	133,768.0	1,681.0	135,449.0

## Program Summary of Expenditures and Budget Request

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	Member Services

	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
<b>Program Summary</b>				
1-1 Member Services	23,298.4	24,695.6	1,228.2	25,923.8
1-2 SLI One-Time IT Expenses	0.0	0.0	0.0	0.0
<b>Program Summary Total:</b>	23,298.4	24,695.6	1,228.2	25,923.8
<b>Expenditure Categories</b>				
0000 FTE Positions	200.0	200.0	0.0	200.0
6000 Personal Services	10,648.9	11,627.1	35.3	11,662.4
6100 Employee Related Expenses	4,130.8	4,941.8	(25.1)	4,916.7
6200 Professional and Outside Services	4,108.2	4,098.9	872.0	4,970.9
6500 Travel In-State	15.9	22.0	0.0	22.0
6600 Travel Out of State	6.4	29.0	0.0	29.0
6700 Food	0.0	0.0	0.0	0.0
6800 Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
7000 Other Operating Expenses	4,036.7	3,527.3	346.0	3,873.3
8000 Equipment	351.5	449.5	0.0	449.5
8100 Capital Outlay	0.0	0.0	0.0	0.0
8600 Debt Service	0.0	0.0	0.0	0.0
9000 Cost Allocation	0.0	0.0	0.0	0.0
9100 Transfers	0.0	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	23,298.4	24,695.6	1,228.2	25,923.8
<b>Fund Source</b>				
<b>Appropriated Funds</b>				
RT1401-A Retirement System Appropriated (Appropriated)	17,095.4	18,223.0	775.0	18,998.0
RT1408-A LTD Trust Fund (Appropriated)	1,418.3	1,800.0	0.0	1,800.0
	18,513.7	20,023.0	775.0	20,798.0
<b>Non-Appropriated Funds</b>				
RT1407-N Arizona State Retirement System (Non-Appropriated)	4,784.7	4,672.6	453.2	5,125.8
	4,784.7	4,672.6	453.2	5,125.8
<b>Fund Source Total:</b>	23,298.4	24,695.6	1,228.2	25,923.8

## Program Group Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	Member Services

	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
--	-------------------	-----------------------	------------------------	--------------------------

<b>Fund:</b>	RT1401-A Retirement System Appropriated (Appropriated)
--------------	--

### Program Expenditures

COST CENTER/PROGRAM BUDGET UNIT					
1-1	Member Services	17,095.4	18,223.0	775.0	18,998.0
1-2	SLI One-Time IT Expenses	0.0	0.0	0.0	0.0
	Total	17,095.4	18,223.0	775.0	18,998.0

### Appropriated Funding

#### Expenditure Categories

FTE Positions		186.0	186.0	0.0	186.0
Personal Services		9,224.2	10,575.2	0.0	10,575.2
Employee Related Expenses		3,665.0	4,431.3	0.0	4,431.3
Professional and Outside Services		1,320.0	823.2	375.0	1,198.2
Travel In-State		15.9	22.0	0.0	22.0
Travel Out of State		6.4	29.0	0.0	29.0
Food		0.0	0.0	0.0	0.0
Aid to Organizations and Individuals		0.0	0.0	0.0	0.0
Other Operating Expenses		2,512.4	1,972.8	400.0	2,372.8
Equipment		351.5	369.5	0.0	369.5
Capital Outlay		0.0	0.0	0.0	0.0
Debt Service		0.0	0.0	0.0	0.0
Cost Allocation		0.0	0.0	0.0	0.0
Transfers		0.0	0.0	0.0	0.0

<b>Expenditure Categories Total:</b>	17,095.4	18,223.0	775.0	18,998.0
--------------------------------------	----------	----------	-------	----------

<b>Fund RT1401-A Total:</b>	17,095.4	18,223.0	775.0	18,998.0
-----------------------------	----------	----------	-------	----------

<b>Program 1 Total:</b>	17,095.4	18,223.0	775.0	18,998.0
-------------------------	----------	----------	-------	----------

## Program Group Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	Member Services

	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
--	-------------------	-----------------------	------------------------	--------------------------

<b>Fund:</b>	RT1407-N Arizona State Retirement System (Non-Appropriated)
--------------	---

### Program Expenditures

COST CENTER/PROGRAM BUDGET UNIT					
1-1	Member Services	4,784.7	4,672.6	453.2	5,125.8
	Total	4,784.7	4,672.6	453.2	5,125.8

### Non-Appropriated Funding

#### Expenditure Categories

	FTE Positions	14.0	14.0	0.0	14.0
	Personal Services	1,424.7	1,051.9	35.3	1,087.2
	Employee Related Expenses	465.8	510.5	(25.1)	485.4
	Professional and Outside Services	1,369.9	1,475.7	497.0	1,972.7
	Travel In-State	0.0	0.0	0.0	0.0
	Travel Out of State	0.0	0.0	0.0	0.0
	Food	0.0	0.0	0.0	0.0
	Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
	Other Operating Expenses	1,524.3	1,554.5	(54.0)	1,500.5
	Equipment	0.0	80.0	0.0	80.0
	Capital Outlay	0.0	0.0	0.0	0.0
	Debt Service	0.0	0.0	0.0	0.0
	Cost Allocation	0.0	0.0	0.0	0.0
	Transfers	0.0	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>		4,784.7	4,672.6	453.2	5,125.8
<b>Fund RT1407-N Total:</b>		4,784.7	4,672.6	453.2	5,125.8
<b>Program 1 Total:</b>		4,784.7	4,672.6	453.2	5,125.8

## Program Group Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	Member Services

	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
--	-------------------	-----------------------	------------------------	--------------------------

<b>Fund:</b>	RT1408-A LTD Trust Fund (Appropriated)
--------------	--

### Program Expenditures

COST CENTER/PROGRAM BUDGET UNIT					
1-1	Member Services	1,418.3	1,800.0	0.0	1,800.0
	Total	1,418.3	1,800.0	0.0	1,800.0

### Appropriated Funding

#### Expenditure Categories

Personal Services	0.0	0.0	0.0	0.0
Employee Related Expenses	0.0	0.0	0.0	0.0
Professional and Outside Services	1,418.3	1,800.0	0.0	1,800.0
Travel In-State	0.0	0.0	0.0	0.0
Travel Out of State	0.0	0.0	0.0	0.0
Food	0.0	0.0	0.0	0.0
Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
Other Operating Expenses	0.0	0.0	0.0	0.0
Equipment	0.0	0.0	0.0	0.0
Capital Outlay	0.0	0.0	0.0	0.0
Debt Service	0.0	0.0	0.0	0.0
Cost Allocation	0.0	0.0	0.0	0.0
Transfers	0.0	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	<b>1,418.3</b>	<b>1,800.0</b>	<b>0.0</b>	<b>1,800.0</b>
<b>Fund RT1408-A Total:</b>	<b>1,418.3</b>	<b>1,800.0</b>	<b>0.0</b>	<b>1,800.0</b>
<b>Program 1 Total:</b>	<b>1,418.3</b>	<b>1,800.0</b>	<b>0.0</b>	<b>1,800.0</b>

## Program Budget Unit Summary of Expenditures and Budget Request for All Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	Member Services

Expenditure Categories	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
0000 FTE	200.0	200.0	0.0	200.0
6000 Personal Services	10,648.9	11,627.1	35.3	11,662.4
6100 Employee Related Expenses	4,130.8	4,941.8	(25.1)	4,916.7
6200 Professional and Outside Services	4,108.2	4,098.9	872.0	4,970.9
6500 Travel In-State	15.9	22.0	0.0	22.0
6600 Travel Out of State	6.4	29.0	0.0	29.0
6700 Food	0.0	0.0	0.0	0.0
6800 Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
7000 Other Operating Expenses	4,036.7	3,527.3	346.0	3,873.3
8000 Equipment	351.5	449.5	0.0	449.5
8100 Capital Outlay	0.0	0.0	0.0	0.0
8600 Debt Service	0.0	0.0	0.0	0.0
9000 Cost Allocation	0.0	0.0	0.0	0.0
9100 Transfers	0.0	0.0	0.0	0.0
<hr/>				
<b>Expenditure Categories Total:</b>	23,298.4	24,695.6	1,228.2	25,923.8
<hr/>				
Fund Source				
<b>Appropriated Funds</b>				
RT1401-A Retirement System Appropriated (Appropriated)	17,095.4	18,223.0	775.0	18,998.0
RT1408-A LTD Trust Fund (Appropriated)	1,418.3	1,800.0	0.0	1,800.0
<hr/>				
	18,513.7	20,023.0	775.0	20,798.0
<b>Non-Appropriated Funds</b>				
RT1407-N Arizona State Retirement System (Non-Appropriated)	4,784.7	4,672.6	453.2	5,125.8
<hr/>				
	4,784.7	4,672.6	453.2	5,125.8
<hr/>				
<b>Fund Source Total:</b>	23,298.4	24,695.6	1,228.2	25,923.8

## Program Budget Unit Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b> Arizona State Retirement System					
		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2022</b>
		<b>Actual</b>	<b>Expd. Plan</b>	<b>Fund. Issue</b>	<b>Total Request</b>
<b>Program:</b> Member Services					
<b>Fund:</b> RT1401-A Retirement System Appropriated					
<b>Appropriated</b>					
0000	FTE	186.0	186.0	0.0	186.0
6000	Personal Services	9,224.2	10,575.2	0.0	10,575.2
6100	Employee Related Expenses	3,665.0	4,431.3	0.0	4,431.3
6200	Professional and Outside Services	1,320.0	823.2	375.0	1,198.2
6500	Travel In-State	15.9	22.0	0.0	22.0
6600	Travel Out of State	6.4	29.0	0.0	29.0
6700	Food	0.0	0.0	0.0	0.0
6800	Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
7000	Other Operating Expenses	2,512.4	1,972.8	400.0	2,372.8
8000	Equipment	351.5	369.5	0.0	369.5
8100	Capital Outlay	0.0	0.0	0.0	0.0
8600	Debt Service	0.0	0.0	0.0	0.0
9000	Cost Allocation	0.0	0.0	0.0	0.0
9100	Transfers	0.0	0.0	0.0	0.0
<b>Appropriated Total:</b>		17,095.4	18,223.0	775.0	18,998.0
<b>Fund Total:</b>		17,095.4	18,223.0	775.0	18,998.0
<b>Program Total For Selected Funds:</b>		17,095.4	18,223.0	775.0	18,998.0

## Program Budget Unit Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b> Arizona State Retirement System					
		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2022</b>
		<b>Actual</b>	<b>Expd. Plan</b>	<b>Fund. Issue</b>	<b>Total Request</b>
<b>Program:</b> Member Services					
<b>Fund:</b> RT1407-N Arizona State Retirement System					
<b>Non-Appropriated</b>					
0000	FTE	14.0	14.0	0.0	14.0
6000	Personal Services	1,424.7	1,051.9	35.3	1,087.2
6100	Employee Related Expenses	465.8	510.5	(25.1)	485.4
6200	Professional and Outside Services	1,369.9	1,475.7	497.0	1,972.7
6500	Travel In-State	0.0	0.0	0.0	0.0
6600	Travel Out of State	0.0	0.0	0.0	0.0
6700	Food	0.0	0.0	0.0	0.0
6800	Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
7000	Other Operating Expenses	1,524.3	1,554.5	(54.0)	1,500.5
8000	Equipment	0.0	80.0	0.0	80.0
8100	Capital Outlay	0.0	0.0	0.0	0.0
8600	Debt Service	0.0	0.0	0.0	0.0
9000	Cost Allocation	0.0	0.0	0.0	0.0
9100	Transfers	0.0	0.0	0.0	0.0
<b>Non-Appropriated Total:</b>		4,784.7	4,672.6	453.2	5,125.8
<b>Fund Total:</b>		4,784.7	4,672.6	453.2	5,125.8
<b>Program Total For Selected Funds:</b>		4,784.7	4,672.6	453.2	5,125.8

## Program Budget Unit Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b>	Arizona State Retirement System			
	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2022</b>
	<b>Actual</b>	<b>Expd. Plan</b>	<b>Fund. Issue</b>	<b>Total Request</b>
<b>Program:</b>	Member Services			
<b>Fund:</b>	RT1408-A LTD Trust Fund			
	<b>Appropriated</b>			
6000	0.0	0.0	0.0	0.0
6100	0.0	0.0	0.0	0.0
6200	1,418.3	1,800.0	0.0	1,800.0
6500	0.0	0.0	0.0	0.0
6600	0.0	0.0	0.0	0.0
6700	0.0	0.0	0.0	0.0
6800	0.0	0.0	0.0	0.0
7000	0.0	0.0	0.0	0.0
8000	0.0	0.0	0.0	0.0
8100	0.0	0.0	0.0	0.0
8600	0.0	0.0	0.0	0.0
9000	0.0	0.0	0.0	0.0
9100	0.0	0.0	0.0	0.0
<b>Appropriated Total:</b>	1,418.3	1,800.0	0.0	1,800.0
<b>Fund Total:</b>	1,418.3	1,800.0	0.0	1,800.0
<b>Program Total For Selected Funds:</b>	1,418.3	1,800.0	0.0	1,800.0

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Member Services</b>

	FY 2020 Actual	FY 2021 Expd. Plan
FTE	200.0	200.0
<b>Expenditure Category Total</b>	<b>200.0</b>	<b>200.0</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	186.0	186.0
	<b>186.0</b>	<b>186.0</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	14.0	14.0
	<b>14.0</b>	<b>14.0</b>
<b>Fund Source Total</b>	<b>200.0</b>	<b>200.0</b>
<hr/>		
Personal Services	10,648.9	11,627.1
Boards and Commissions	0.0	0.0
<b>Expenditure Category Total</b>	<b>10,648.9</b>	<b>11,627.1</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	9,224.2	10,575.2
	<b>9,224.2</b>	<b>10,575.2</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	1,424.7	1,051.9
	<b>1,424.7</b>	<b>1,051.9</b>
<b>Fund Source Total</b>	<b>10,648.9</b>	<b>11,627.1</b>
<hr/>		
Employee Related Expenses	4,130.8	4,941.8
<b>Expenditure Category Total</b>	<b>4,130.8</b>	<b>4,941.8</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	3,665.0	4,431.3
	<b>3,665.0</b>	<b>4,431.3</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	465.8	510.5
	<b>465.8</b>	<b>510.5</b>
<b>Fund Source Total</b>	<b>4,130.8</b>	<b>4,941.8</b>
<hr/>		
Professional and Outside Services		4,098.9
External Prof/Outside Serv Budg And Appn	0.0	
External Investment Services	0.0	
Other External Financial Services	1,441.1	
Attorney General Legal Services	0.0	
External Legal Services	68.5	
External Engineer/Architect Cost - Exp	0.0	
External Engineer/Architect Cost- Cap	0.0	
Other Design	0.0	
Temporary Agency Services	1,991.7	
Hospital Services	0.0	
Other Medical Services	0.0	
Institutional Care	0.0	
Education And Training	0.0	
Vendor Travel	3.8	
Professional & Outside Services Excluded from Cost Alloca	0.0	
Vendor Travel - Non Reportable	0.0	
External Telecom Consulting Services	0.0	
Costs related to those in custody of the State	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Member Services</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Non - Confidential Specialist Fees	0.0	
Confidential Specialist Fees	0.0	
Outside Actuarial Costs	370.1	
Other Professional And Outside Services	233.0	
<b>Expenditure Category Total</b>	<b>4,108.2</b>	<b>4,098.9</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	1,320.0	823.2
RT1408-A LTD Trust Fund (Appropriated)	1,418.3	1,800.0
	<b>2,738.3</b>	<b>2,623.2</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	1,369.9	1,475.7
	<b>1,369.9</b>	<b>1,475.7</b>
<b>Fund Source Total</b>	<b>4,108.2</b>	<b>4,098.9</b>
<hr/>		
Travel In-State	15.9	22.0
<b>Expenditure Category Total</b>	<b>15.9</b>	<b>22.0</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	15.9	22.0
	<b>15.9</b>	<b>22.0</b>
<b>Fund Source Total</b>	<b>15.9</b>	<b>22.0</b>
<hr/>		
Travel Out of State	6.4	29.0
<b>Expenditure Category Total</b>	<b>6.4</b>	<b>29.0</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	6.4	29.0
	<b>6.4</b>	<b>29.0</b>
<b>Fund Source Total</b>	<b>6.4</b>	<b>29.0</b>
<hr/>		
Food	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Aid to Organizations and Individuals	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Other Operating Expenses		3,527.3
Other Operating Expenditures Budg Approp	0.0	
Other Operating Expenditures Excluded from Cost Allocati	0.0	
Risk Management Charges To State Agency	133.0	
Risk Management Deductible - Indemnity	0.0	
Risk Management Deductible - Legal	0.0	
Risk Management Deductible - Medical	0.0	
Risk Management Deductible - Other	0.0	
Gen Liab- Non Physical-Taxable- Self Ins	0.0	
Gross Proceeds Payments To Attorneys	0.0	
General Liability- Non-Taxable- Self Ins	0.0	
Medical Malpractice - Self-Insured	0.0	
Automobile Liability - Self Insured	0.0	
General Property Damage - Self- Insured	0.0	
Automobile Physical Damage-Self Insured	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Member Services</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Liability Insurance Premiums	0.0	
Property Insurance Premiums	0.0	
Workers Compensation Benefit Payments	0.0	
Self Insurance - Administrative Fees	0.0	
Self Insurance - Premiums	0.0	
Self Insurance - Claim Payments	0.0	
Self Insurance - Pharmacy Claims	0.0	
Premium Tax On Altcs	0.0	
Other Insurance-Related Charges	0.0	
Internal Service Data Processing	0.0	
Internal Service Data Proc- Pc/Lan	0.0	
External Programming-Mainframe/Legacy	0.0	
External Programming- Pc/Lan/Serv/Web	0.0	
External Data Entry	0.0	
Othr External Data Proc-Mainframe/Legacy	0.0	
Othr External Data Proc-Pc/Lan/Serv/Web	8.5	
Pmt for AFIS Development & Usage	11.5	
Internal Service Telecommunications	0.0	
External Telecom Long Distance-In-State	351.0	
External Telecom Long Distance-Out-State	0.0	
Other External Telecommunication Service	0.0	
Electricity	0.0	
Sanitation Waste Disposal	0.0	
Water	0.0	
Gas And Fuel Oil For Buildings	0.0	
Other Utilities	0.0	
Building Rent Charges To State Agencies	0.0	
Priv Lease To Own Bld Rent Chrgs To Agy	0.0	
Cert Of Part Bld Rent Chrgs To Agy	0.0	
Rental Of Land And Buildings	1,141.9	
Rental Of Computer Equipment	0.0	
Rental Of Other Machinery And Equipment	0.0	
Miscellaneous Rent	0.0	
Interest On Overdue Payments	0.0	
All Other Interest Payments	0.0	
Internal Acct/Budg/Financial Svcs	0.0	
Other Internal Services	0.0	
Repair And Maintenance - Buildings	0.0	
Repair And Maintenance - Vehicles	0.0	
Repair And Maint - Mainframe And Legacy	0.0	
Repair And Maint-Pc/Lan/Serv/Web	0.0	
Repair And Maintenance - Other Equipment	41.1	
Other Repair And Maintenance	0.0	
Software Support And Maintenance	1,758.1	
Uniforms	0.0	
Inmate Clothing	0.0	
Security Supplies	0.0	
Office Supplies	22.5	
Computer Supplies	27.2	
Housekeeping Supplies	0.0	
Bedding And Bath Supplies	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Member Services</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Drugs And Medicine Supplies	0.0	
Medical Supplies	0.0	
Dental Supplies	0.0	
Automotive And Transportation Fuels	0.0	
Automotive Lubricants And Supplies	0.0	
Rpr And Maint Supplies-Not Auto Or Build	0.0	
Repair And Maintenance Supplies-Building	0.0	
Other Operating Supplies	0.6	
Publications	0.0	
Aggregate Withheld Or Paid Commissions	0.0	
Lottery Prizes	0.0	
Lottery Distribution Costs	0.0	
Material for Further Processing	0.0	
Other Resale Supplies	0.0	
Loss On Sales Of Capital Assets	0.0	
Loss on Sales of Investments	0.0	
Employee Tuition Reimbursement-Graduate	0.0	
Employee Tuition Reimb Under-Grad/Other	12.7	
Conference Registration-Attendance Fees	6.3	
Other Education And Training Costs	13.1	
Advertising	0.0	
Sponsorships	0.0	
Internal Printing	0.0	
External Printing	60.1	
Photography	0.0	
Postage And Delivery	234.7	
Document shredding and Destruction Services	0.2	
Translation and Sign Language Services	0.8	
Distribution To State Universities	0.0	
Other Intrastate Distributions	0.0	
Awards	0.0	
Entertainment And Promotional Items	0.0	
Dues	51.4	
Books- Subscriptions And Publications	160.4	
Costs For Digital Image Or Microfilm	0.0	
Revolving Fund Advances	0.0	
Credit Card Fees Over Approved Limit	0.0	
Relief Bill Expenditures	0.0	
Surplus Property Distr To State Agencies	0.0	
Security Services	0.0	
Judgments - Damages	0.0	
ICA Payments to Claimants Confidential	0.0	
Jdgmnt-Confidential Restitution To Indiv	0.0	
Judgments - Non-Confidential Restitution	0.0	
Judgments - Punitive And Compensatory	0.0	
Pmts Made to Resolve/Disputes/Avoid Costs of Litigation	0.0	
Pmts For Contracted State Inmate Labor	0.0	
Payments To State Inmates	0.0	
Bad Debt Expense	0.0	
Interview Expense	0.0	
Employee Relocations-Nontaxable	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Member Services</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Employee Relocations-Taxable	0.0	
Non-Confidential Invest/Legal/Law Enf	0.0	
Conf/Sensitive Invest/Legal/Undercover	0.0	
Fingerprinting, Background Checks, Etc.	0.0	
Other Miscellaneous Operating	1.6	
<b>Expenditure Category Total</b>	<b>4,036.7</b>	<b>3,527.3</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	2,512.4	1,972.8
	<b>2,512.4</b>	<b>1,972.8</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	1,524.3	1,554.5
	<b>1,524.3</b>	<b>1,554.5</b>
<b>Fund Source Total</b>	<b>4,036.7</b>	<b>3,527.3</b>

Current Year Expenditures		449.5
Capital Equipment Budget And Approp	0.0	
Vehicles Capital Purchase	0.0	
Vehicles Capital Leases	0.0	
Furniture Capital Purchase	0.0	
Depreciable Works Of Art & Hist Treas/Coll Capital Purcha	0.0	
Non Depr Works Of Art & Hist Treas/Coll Cap Purchase	0.0	
Furniture Capital Leases	0.0	
Computer Equipment Capital Purchase	0.0	
Computer Equipment Capital Lease	0.0	
Telecommunication Equip-Capital Purchase	0.0	
Telecommunication Equip-Capital Lease	0.0	
Other Equipment Capital Purchase	0.0	
Other Equipment Capital Leases	0.0	
Purchased Or Licensed Software-Website	0.0	
Internally Generated Software-Website	0.0	
Development in Progress	0.0	
Right-Of-Way/Easement/Extraction Rights	0.0	
Oth Int Assets purchased, licensed or internally generate	0.0	
Other intangible assets acquired by capital lease	0.0	
Other Capital Asset Purchases	0.0	
Leasehold Improvement-Capital Purchase	0.0	
Other Capital Asset Leases	0.0	
Non-Capital Equip Budget And Approp	0.0	
Vehicles Non-Capital Purchase	0.0	
Vehicles Non-Capital Leases	0.0	
Furniture Non-Capital Purchase	15.0	
Works Of Art And Hist Treas-Non Capital	0.0	
Furniture Non-Capital Leases	0.0	
Computer Equipment Non-Capital Purchase	322.8	
Computer Equipment Non-Capital Lease	0.0	
Telecomm Equip Non-Capital Purchase	0.0	
Telecomm Equip Non-Capital Leases	0.0	
Other Equipment Non-Capital Purchase	13.7	
Weapons Non-Capital Purchase	0.0	
Other Equipment Non-Capital Lease	0.0	
Purchased Or Licensed Software/Website	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Member Services</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Internally Generated Software/Website	0.0	
LICENSES AND PERMITS	0.0	
Right-Of-Way/Easement/Extraction Exp	0.0	
Other Intangible Assets - Purchased, Licensed or Internall	0.0	
Noncapital Software/Web By Capital Lease	0.0	
Other Intangible Assets Acquired by Capital Lease	0.0	
Other Long Lived Tangible Assets to be Expenses	0.0	
Non-Capital Equipment Excluded from Cost Allocation	0.0	
<b>Expenditure Category Total</b>	<b>351.5</b>	<b>449.5</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	351.5	369.5
	<b>351.5</b>	<b>369.5</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	0.0	80.0
	<b>0.0</b>	<b>80.0</b>
<b>Fund Source Total</b>	<b>351.5</b>	<b>449.5</b>
<hr/>		
Capital Outlay	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Debt Service	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Cost Allocation	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Transfers	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>

<b>Employee Retirement Coverage</b>
-------------------------------------

Retirement System	FTE	Personal Services	Fund#
Arizona State Retirement System	183.5	10,420.4	RT1401-A
Arizona State Retirement System	14.0	1,051.9	RT1407-N
Defined Contributions	1.0	87.5	RT1401-A
ASRS – return to work	1.5	67.3	RT1401-A

<b>Combined Regular &amp; Elected Positions At/Above FICA Maximum of \$142,800</b>
--

Total FTE	Personal Services	FTE's not eligible for Health, Dental & Life
0.0	0.0	0.3

## Program Budget Unit Summary of Expenditures and Budget Request for All Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	SLI One-Time IT Expenses

Expenditure Categories	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
0000 FTE	0.0	0.0	0.0	0.0
6000 Personal Services	0.0	0.0	0.0	0.0
6100 Employee Related Expenses	0.0	0.0	0.0	0.0
6200 Professional and Outside Services	0.0	0.0	0.0	0.0
6500 Travel In-State	0.0	0.0	0.0	0.0
6600 Travel Out of State	0.0	0.0	0.0	0.0
6700 Food	0.0	0.0	0.0	0.0
6800 Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
7000 Other Operating Expenses	0.0	0.0	0.0	0.0
8000 Equipment	0.0	0.0	0.0	0.0
8100 Capital Outlay	0.0	0.0	0.0	0.0
8600 Debt Service	0.0	0.0	0.0	0.0
9000 Cost Allocation	0.0	0.0	0.0	0.0
9100 Transfers	0.0	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	0.0	0.0	0.0	0.0

Fund Source	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
<b>Appropriated Funds</b>				
RT1401-A Retirement System Appropriated (Appropriated)	0.0	0.0	0.0	0.0
<b>Fund Source Total:</b>	0.0	0.0	0.0	0.0

## Program Budget Unit Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b> Arizona State Retirement System					
		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2022</b>
		<b>Actual</b>	<b>Expd. Plan</b>	<b>Fund. Issue</b>	<b>Total Request</b>
<b>Program:</b> SLI One-Time IT Expenses					
<b>Fund:</b> RT1401-A Retirement System Appropriated					
<b>Appropriated</b>					
0000	FTE	0.0	0.0	0.0	0.0
6000	Personal Services	0.0	0.0	0.0	0.0
6100	Employee Related Expenses	0.0	0.0	0.0	0.0
6200	Professional and Outside Services	0.0	0.0	0.0	0.0
6500	Travel In-State	0.0	0.0	0.0	0.0
6600	Travel Out of State	0.0	0.0	0.0	0.0
6700	Food	0.0	0.0	0.0	0.0
6800	Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
7000	Other Operating Expenses	0.0	0.0	0.0	0.0
8000	Equipment	0.0	0.0	0.0	0.0
8100	Capital Outlay	0.0	0.0	0.0	0.0
8600	Debt Service	0.0	0.0	0.0	0.0
9000	Cost Allocation	0.0	0.0	0.0	0.0
9100	Transfers	0.0	0.0	0.0	0.0
<b>Appropriated Total:</b>		0.0	0.0	0.0	0.0
<b>Fund Total:</b>		0.0	0.0	0.0	0.0
<b>Program Total For Selected Funds:</b>		0.0	0.0	0.0	0.0

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>SLI One-Time IT Expenses</b>

	FY 2020 Actual	FY 2021 Expd. Plan
FTE	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	0.0	0.0
<b>Fund Source Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Personal Services	0.0	0.0
Boards and Commissions	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Employee Related Expenses	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Professional and Outside Services		0.0
External Prof/Outside Serv Budg And Appn	0.0	
External Investment Services	0.0	
Other External Financial Services	0.0	
Attorney General Legal Services	0.0	
External Legal Services	0.0	
External Engineer/Architect Cost - Exp	0.0	
External Engineer/Architect Cost- Cap	0.0	
Other Design	0.0	
Temporary Agency Services	0.0	
Hospital Services	0.0	
Other Medical Services	0.0	
Institutional Care	0.0	
Education And Training	0.0	
Vendor Travel	0.0	
Professional & Outside Services Excluded from Cost Alloca	0.0	
Vendor Travel - Non Reportable	0.0	
External Telecom Consulting Services	0.0	
Costs related to those in custody of the State	0.0	
Non - Confidential Specialist Fees	0.0	
Confidential Specialist Fees	0.0	
Outside Actuarial Costs	0.0	
Other Professional And Outside Services	0.0	
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Travel In-State	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Travel Out of State	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Food	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>SLI One-Time IT Expenses</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Aid to Organizations and Individuals	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Other Operating Expenses		0.0
Other Operating Expenditures Budg Approp	0.0	
Other Operating Expenditures Excluded from Cost Allocati	0.0	
Risk Management Charges To State Agency	0.0	
Risk Management Deductible - Indemnity	0.0	
Risk Management Deductible - Legal	0.0	
Risk Management Deductible - Medical	0.0	
Risk Management Deductible - Other	0.0	
Gen Liab- Non Physical-Taxable- Self Ins	0.0	
Gross Proceeds Payments To Attorneys	0.0	
General Liability- Non-Taxable- Self Ins	0.0	
Medical Malpractice - Self-Insured	0.0	
Automobile Liability - Self Insured	0.0	
General Property Damage - Self- Insured	0.0	
Automobile Physical Damage-Self Insured	0.0	
Liability Insurance Premiums	0.0	
Property Insurance Premiums	0.0	
Workers Compensation Benefit Payments	0.0	
Self Insurance - Administrative Fees	0.0	
Self Insurance - Premiums	0.0	
Self Insurance - Claim Payments	0.0	
Self Insurance - Pharmacy Claims	0.0	
Premium Tax On Altcs	0.0	
Other Insurance-Related Charges	0.0	
Internal Service Data Processing	0.0	
Internal Service Data Proc- Pc/Lan	0.0	
External Programming-Mainframe/Legacy	0.0	
External Programming- Pc/Lan/Serv/Web	0.0	
External Data Entry	0.0	
Othr External Data Proc-Mainframe/Legacy	0.0	
Othr External Data Proc-Pc/Lan/Serv/Web	0.0	
Pmt for AFIS Development & Usage	0.0	
Internal Service Telecommunications	0.0	
External Telecom Long Distance-In-State	0.0	
External Telecom Long Distance-Out-State	0.0	
Other External Telecommunication Service	0.0	
Electricity	0.0	
Sanitation Waste Disposal	0.0	
Water	0.0	
Gas And Fuel Oil For Buildings	0.0	
Other Utilities	0.0	
Building Rent Charges To State Agencies	0.0	
Priv Lease To Own Bld Rent Chrgs To Agy	0.0	
Cert Of Part Bld Rent Chrgs To Agy	0.0	
Rental Of Land And Buildings	0.0	
Rental Of Computer Equipment	0.0	
Rental Of Other Machinery And Equipment	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>SLI One-Time IT Expenses</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Miscellaneous Rent	0.0	
Interest On Overdue Payments	0.0	
All Other Interest Payments	0.0	
Internal Acct/Budg/Financial Svcs	0.0	
Other Internal Services	0.0	
Repair And Maintenance - Buildings	0.0	
Repair And Maintenance - Vehicles	0.0	
Repair And Maint - Mainframe And Legacy	0.0	
Repair And Maint-Pc/Lan/Serv/Web	0.0	
Repair And Maintenance - Other Equipment	0.0	
Other Repair And Maintenance	0.0	
Software Support And Maintenance	0.0	
Uniforms	0.0	
Inmate Clothing	0.0	
Security Supplies	0.0	
Office Supplies	0.0	
Computer Supplies	0.0	
Housekeeping Supplies	0.0	
Bedding And Bath Supplies	0.0	
Drugs And Medicine Supplies	0.0	
Medical Supplies	0.0	
Dental Supplies	0.0	
Automotive And Transportation Fuels	0.0	
Automotive Lubricants And Supplies	0.0	
Rpr And Maint Supplies-Not Auto Or Build	0.0	
Repair And Maintenance Supplies-Building	0.0	
Other Operating Supplies	0.0	
Publications	0.0	
Aggregate Withheld Or Paid Commissions	0.0	
Lottery Prizes	0.0	
Lottery Distribution Costs	0.0	
Material for Further Processing	0.0	
Other Resale Supplies	0.0	
Loss On Sales Of Capital Assets	0.0	
Loss on Sales of Investments	0.0	
Employee Tuition Reimbursement-Graduate	0.0	
Employee Tuition Reimb Under-Grad/Other	0.0	
Conference Registration-Attendance Fees	0.0	
Other Education And Training Costs	0.0	
Advertising	0.0	
Sponsorships	0.0	
Internal Printing	0.0	
External Printing	0.0	
Photography	0.0	
Postage And Delivery	0.0	
Document shredding and Destruction Services	0.0	
Translation and Sign Language Services	0.0	
Distribution To State Universities	0.0	
Other Intrastate Distributions	0.0	
Awards	0.0	
Entertainment And Promotional Items	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>SLI One-Time IT Expenses</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Dues	0.0	
Books- Subscriptions And Publications	0.0	
Costs For Digital Image Or Microfilm	0.0	
Revolving Fund Advances	0.0	
Credit Card Fees Over Approved Limit	0.0	
Relief Bill Expenditures	0.0	
Surplus Property Distr To State Agencies	0.0	
Security Services	0.0	
Judgments - Damages	0.0	
ICA Payments to Claimants Confidential	0.0	
Jdgmnt-Confidential Restitution To Indiv	0.0	
Judgments - Non-Confidential Restitution	0.0	
Judgments - Punitive And Compensatory	0.0	
Pmts Made to Resolve/Disputes/Avoid Costs of Litigation	0.0	
Pmts For Contracted State Inmate Labor	0.0	
Payments To State Inmates	0.0	
Bad Debt Expense	0.0	
Interview Expense	0.0	
Employee Relocations-Nontaxable	0.0	
Employee Relocations-Taxable	0.0	
Non-Confidential Invest/Legal/Law Enf	0.0	
Conf/Sensitive Invest/Legal/Undercover	0.0	
Fingerprinting, Background Checks, Etc.	0.0	
Other Miscellaneous Operating	0.0	
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>

Current Year Expenditures		0.0
Capital Equipment Budget And Approp	0.0	
Vehicles Capital Purchase	0.0	
Vehicles Capital Leases	0.0	
Furniture Capital Purchase	0.0	
Depreciable Works Of Art & Hist Treas/Coll Capital Purcha	0.0	
Non Depr Works Of Art & Hist Treas/Coll Cap Purchase	0.0	
Furniture Capital Leases	0.0	
Computer Equipment Capital Purchase	0.0	
Computer Equipment Capital Lease	0.0	
Telecommunication Equip-Capital Purchase	0.0	
Telecommunication Equip-Capital Lease	0.0	
Other Equipment Capital Purchase	0.0	
Other Equipment Capital Leases	0.0	
Purchased Or Licensed Software-Website	0.0	
Internally Generated Software-Website	0.0	
Development in Progress	0.0	
Right-Of-Way/Easement/Extraction Rights	0.0	
Oth Int Assets purchased, licensed or internally generate	0.0	
Other intangible assets acquired by capital lease	0.0	
Other Capital Asset Purchases	0.0	
Leasehold Improvement-Capital Purchase	0.0	
Other Capital Asset Leases	0.0	
Non-Capital Equip Budget And Approp	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>SLI One-Time IT Expenses</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Vehicles Non-Capital Purchase	0.0	
Vehicles Non-Capital Leases	0.0	
Furniture Non-Capital Purchase	0.0	
Works Of Art And Hist Treas-Non Capital	0.0	
Furniture Non-Capital Leases	0.0	
Computer Equipment Non-Capital Purchase	0.0	
Computer Equipment Non-Capital Lease	0.0	
Telecomm Equip Non-Capital Purchase	0.0	
Telecomm Equip Non-Capital Leases	0.0	
Other Equipment Non-Capital Purchase	0.0	
Weapons Non-Capital Purchase	0.0	
Other Equipment Non-Capital Lease	0.0	
Purchased Or Licensed Software/Website	0.0	
Internally Generated Software/Website	0.0	
LICENSES AND PERMITS	0.0	
Right-Of-Way/Easement/Extraction Exp	0.0	
Other Intangible Assets - Purchased, Licensed or Internall	0.0	
Noncapital Software/Web By Capital Lease	0.0	
Other Intangible Assets Acquired by Capital Lease	0.0	
Other Long Lived Tangible Assets to be Expenses	0.0	
Non-Capital Equipment Excluded from Cost Allocation	0.0	
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Capital Outlay	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Debt Service	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Cost Allocation	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Transfers	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>

<b>Combined Regular &amp; Elected Positions At/Above FICA Maximum of \$142,800</b>
--

Total FTE	Personal Services	FTE's not eligible for Health, Dental & Life
0.0	0.0	0.0

## Program Summary of Expenditures and Budget Request

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	Administration and Support

	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
<b>Program Summary</b>				
2-1 Administration and Support	4,677.4	5,277.1	9.0	5,286.1
<b>Program Summary Total:</b>	4,677.4	5,277.1	9.0	5,286.1
<b>Expenditure Categories</b>				
0000 FTE Positions	29.9	29.9	0.0	29.9
6000 Personal Services	2,431.0	2,798.9	0.0	2,798.9
6100 Employee Related Expenses	797.8	955.1	0.0	955.1
6200 Professional and Outside Services	724.6	707.2	0.0	707.2
6500 Travel In-State	1.1	8.0	0.0	8.0
6600 Travel Out of State	10.2	20.0	0.0	20.0
6700 Food	0.0	0.0	0.0	0.0
6800 Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
7000 Other Operating Expenses	698.7	767.9	9.0	776.9
8000 Equipment	10.7	20.0	0.0	20.0
8100 Capital Outlay	0.0	0.0	0.0	0.0
8600 Debt Service	0.0	0.0	0.0	0.0
9000 Cost Allocation	0.0	0.0	0.0	0.0
9100 Transfers	3.3	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	4,677.4	5,277.1	9.0	5,286.1
<b>Fund Source</b>				
<b>Appropriated Funds</b>				
RT1401-A Retirement System Appropriated (Appropriated)	4,076.5	4,584.6	0.0	4,584.6
	4,076.5	4,584.6	0.0	4,584.6
<b>Non-Appropriated Funds</b>				
RT1407-N Arizona State Retirement System (Non-Appropriat	600.9	692.5	9.0	701.5
	600.9	692.5	9.0	701.5
<b>Fund Source Total:</b>	4,677.4	5,277.1	9.0	5,286.1

## Program Group Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	Administration and Support

	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
--	-------------------	-----------------------	------------------------	--------------------------

<b>Fund:</b>	RT1401-A Retirement System Appropriated (Appropriated)
--------------	--

### Program Expenditures

COST CENTER/PROGRAM BUDGET UNIT					
2-1	Administration and Support	4,076.5	4,584.6	0.0	4,584.6
	Total	4,076.5	4,584.6	0.0	4,584.6

### Appropriated Funding

#### Expenditure Categories

	FTE Positions	29.9	29.9	0.0	29.9
	Personal Services	2,431.0	2,798.9	0.0	2,798.9
	Employee Related Expenses	797.8	955.1	0.0	955.1
	Professional and Outside Services	495.3	432.2	0.0	432.2
	Travel In-State	1.1	8.0	0.0	8.0
	Travel Out of State	10.2	20.0	0.0	20.0
	Food	0.0	0.0	0.0	0.0
	Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
	Other Operating Expenses	327.1	350.4	0.0	350.4
	Equipment	10.7	20.0	0.0	20.0
	Capital Outlay	0.0	0.0	0.0	0.0
	Debt Service	0.0	0.0	0.0	0.0
	Cost Allocation	0.0	0.0	0.0	0.0
	Transfers	3.3	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>		4,076.5	4,584.6	0.0	4,584.6
<b>Fund RT1401-A Total:</b>		4,076.5	4,584.6	0.0	4,584.6
<b>Program 2 Total:</b>		4,076.5	4,584.6	0.0	4,584.6

## Program Group Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	Administration and Support

	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
--	-------------------	-----------------------	------------------------	--------------------------

<b>Fund:</b>	RT1407-N Arizona State Retirement System (Non-Appropriated)
--------------	---

### Program Expenditures

COST CENTER/PROGRAM BUDGET UNIT					
2-1	Administration and Support	600.9	692.5	9.0	701.5
	Total	600.9	692.5	9.0	701.5

### Non-Appropriated Funding

#### Expenditure Categories

	FTE Positions	0.0	0.0	0.0	0.0
	Personal Services	0.0	0.0	0.0	0.0
	Employee Related Expenses	0.0	0.0	0.0	0.0
	Professional and Outside Services	229.3	275.0	0.0	275.0
	Travel In-State	0.0	0.0	0.0	0.0
	Travel Out of State	0.0	0.0	0.0	0.0
	Food	0.0	0.0	0.0	0.0
	Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
	Other Operating Expenses	371.6	417.5	9.0	426.5
	Equipment	0.0	0.0	0.0	0.0
	Capital Outlay	0.0	0.0	0.0	0.0
	Debt Service	0.0	0.0	0.0	0.0
	Cost Allocation	0.0	0.0	0.0	0.0
	Transfers	0.0	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>		600.9	692.5	9.0	701.5
<b>Fund RT1407-N Total:</b>		600.9	692.5	9.0	701.5
<b>Program 2 Total:</b>		600.9	692.5	9.0	701.5

## Program Budget Unit Summary of Expenditures and Budget Request for All Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	Administration and Support

Expenditure Categories	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
0000 FTE	29.9	29.9	0.0	29.9
6000 Personal Services	2,431.0	2,798.9	0.0	2,798.9
6100 Employee Related Expenses	797.8	955.1	0.0	955.1
6200 Professional and Outside Services	724.6	707.2	0.0	707.2
6500 Travel In-State	1.1	8.0	0.0	8.0
6600 Travel Out of State	10.2	20.0	0.0	20.0
6700 Food	0.0	0.0	0.0	0.0
6800 Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
7000 Other Operating Expenses	698.7	767.9	9.0	776.9
8000 Equipment	10.7	20.0	0.0	20.0
8100 Capital Outlay	0.0	0.0	0.0	0.0
8600 Debt Service	0.0	0.0	0.0	0.0
9000 Cost Allocation	0.0	0.0	0.0	0.0
9100 Transfers	3.3	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	4,677.4	5,277.1	9.0	5,286.1
<b>Fund Source</b>				
<b>Appropriated Funds</b>				
RT1401-A Retirement System Appropriated (Appropriated)	4,076.5	4,584.6	0.0	4,584.6
	4,076.5	4,584.6	0.0	4,584.6
<b>Non-Appropriated Funds</b>				
RT1407-N Arizona State Retirement System (Non-Appropriated)	600.9	692.5	9.0	701.5
	600.9	692.5	9.0	701.5
<b>Fund Source Total:</b>	4,677.4	5,277.1	9.0	5,286.1

## Program Budget Unit Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b> Arizona State Retirement System					
		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2022</b>
		<b>Actual</b>	<b>Expd. Plan</b>	<b>Fund. Issue</b>	<b>Total Request</b>
<b>Program:</b> Administration and Support					
<b>Fund:</b> RT1401-A Retirement System Appropriated					
<b>Appropriated</b>					
0000	FTE	29.9	29.9	0.0	29.9
6000	Personal Services	2,431.0	2,798.9	0.0	2,798.9
6100	Employee Related Expenses	797.8	955.1	0.0	955.1
6200	Professional and Outside Services	495.3	432.2	0.0	432.2
6500	Travel In-State	1.1	8.0	0.0	8.0
6600	Travel Out of State	10.2	20.0	0.0	20.0
6700	Food	0.0	0.0	0.0	0.0
6800	Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
7000	Other Operating Expenses	327.1	350.4	0.0	350.4
8000	Equipment	10.7	20.0	0.0	20.0
8100	Capital Outlay	0.0	0.0	0.0	0.0
8600	Debt Service	0.0	0.0	0.0	0.0
9000	Cost Allocation	0.0	0.0	0.0	0.0
9100	Transfers	3.3	0.0	0.0	0.0
<b>Appropriated Total:</b>		4,076.5	4,584.6	0.0	4,584.6
<b>Fund Total:</b>		4,076.5	4,584.6	0.0	4,584.6
<b>Program Total For Selected Funds:</b>		4,076.5	4,584.6	0.0	4,584.6

## Program Budget Unit Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b> Arizona State Retirement System					
		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2022</b>
		<b>Actual</b>	<b>Expd. Plan</b>	<b>Fund. Issue</b>	<b>Total Request</b>
<b>Program:</b> Administration and Support					
<b>Fund:</b> RT1407-N Arizona State Retirement System					
<b>Non-Appropriated</b>					
0000	FTE	0.0	0.0	0.0	0.0
6000	Personal Services	0.0	0.0	0.0	0.0
6100	Employee Related Expenses	0.0	0.0	0.0	0.0
6200	Professional and Outside Services	229.3	275.0	0.0	275.0
6500	Travel In-State	0.0	0.0	0.0	0.0
6600	Travel Out of State	0.0	0.0	0.0	0.0
6700	Food	0.0	0.0	0.0	0.0
6800	Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
7000	Other Operating Expenses	371.6	417.5	9.0	426.5
8000	Equipment	0.0	0.0	0.0	0.0
8100	Capital Outlay	0.0	0.0	0.0	0.0
8600	Debt Service	0.0	0.0	0.0	0.0
9000	Cost Allocation	0.0	0.0	0.0	0.0
9100	Transfers	0.0	0.0	0.0	0.0
<b>Non-Appropriated Total:</b>		600.9	692.5	9.0	701.5
<b>Fund Total:</b>		600.9	692.5	9.0	701.5
<b>Program Total For Selected Funds:</b>		600.9	692.5	9.0	701.5

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Administration and Support</b>

	FY 2020 Actual	FY 2021 Expd. Plan
FTE	29.9	29.9
<b>Expenditure Category Total</b>	<b>29.9</b>	<b>29.9</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	29.9	29.9
<b>Fund Source Total</b>	<b>29.9</b>	<b>29.9</b>
<hr/>		
Personal Services	2,431.0	2,798.9
Boards and Commissions	0.0	0.0
<b>Expenditure Category Total</b>	<b>2,431.0</b>	<b>2,798.9</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	2,431.0	2,798.9
<b>Fund Source Total</b>	<b>2,431.0</b>	<b>2,798.9</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	0.0	0.0
<b>Fund Source Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Employee Related Expenses	797.8	955.1
<b>Expenditure Category Total</b>	<b>797.8</b>	<b>955.1</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	797.8	955.1
<b>Fund Source Total</b>	<b>797.8</b>	<b>955.1</b>
<hr/>		
Professional and Outside Services		707.2
External Prof/Outside Serv Budg And Appn	0.0	
External Investment Services	0.0	
Other External Financial Services	0.0	
Attorney General Legal Services	206.1	
External Legal Services	277.8	
External Engineer/Architect Cost - Exp	0.0	
External Engineer/Architect Cost- Cap	0.0	
Other Design	0.0	
Temporary Agency Services	0.0	
Hospital Services	0.0	
Other Medical Services	0.0	
Institutional Care	0.0	
Education And Training	0.0	
Vendor Travel	0.0	
Professional & Outside Services Excluded from Cost Alloca	0.0	
Vendor Travel - Non Reportable	0.0	
External Telecom Consulting Services	0.0	
Costs related to those in custody of the State	0.0	
Non - Confidential Specialist Fees	0.0	
Confidential Specialist Fees	0.0	
Outside Actuarial Costs	229.3	
Other Professional And Outside Services	11.4	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Administration and Support</b>

	FY 2020 Actual	FY 2021 Expd. Plan
<b>Expenditure Category Total</b>	<b>724.6</b>	<b>707.2</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	495.3	432.2
	<b>495.3</b>	<b>432.2</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	229.3	275.0
	<b>229.3</b>	<b>275.0</b>
<b>Fund Source Total</b>	<b>724.6</b>	<b>707.2</b>
<hr/>		
Travel In-State	1.1	8.0
<b>Expenditure Category Total</b>	<b>1.1</b>	<b>8.0</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	1.1	8.0
	<b>1.1</b>	<b>8.0</b>
<b>Fund Source Total</b>	<b>1.1</b>	<b>8.0</b>
<hr/>		
Travel Out of State	10.2	20.0
<b>Expenditure Category Total</b>	<b>10.2</b>	<b>20.0</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	10.2	20.0
	<b>10.2</b>	<b>20.0</b>
<b>Fund Source Total</b>	<b>10.2</b>	<b>20.0</b>
<hr/>		
Food	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Aid to Organizations and Individuals	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Other Operating Expenses		767.9
Other Operating Expenditures Budg Approp	0.0	
Other Operating Expenditures Excluded from Cost Allocati	0.0	
Risk Management Charges To State Agency	149.3	
Risk Management Deductible - Indemnity	0.0	
Risk Management Deductible - Legal	0.0	
Risk Management Deductible - Medical	0.0	
Risk Management Deductible - Other	0.0	
Gen Liab- Non Physical-Taxable- Self Ins	0.0	
Gross Proceeds Payments To Attorneys	0.0	
General Liability- Non-Taxable- Self Ins	0.0	
Medical Malpractice - Self-Insured	0.0	
Automobile Liability - Self Insured	0.0	
General Property Damage - Self- Insured	0.0	
Automobile Physical Damage-Self Insured	0.0	
Liability Insurance Premiums	0.0	
Property Insurance Premiums	0.0	
Workers Compensation Benefit Payments	0.0	
Self Insurance - Administrative Fees	0.0	
Self Insurance - Premiums	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Administration and Support</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Self Insurance - Claim Payments	0.0	
Self Insurance - Pharmacy Claims	0.0	
Premium Tax On Altcs	0.0	
Other Insurance-Related Charges	0.0	
Internal Service Data Processing	0.0	
Internal Service Data Proc- Pc/Lan	0.0	
External Programming-Mainframe/Legacy	0.0	
External Programming- Pc/Lan/Serv/Web	0.0	
External Data Entry	0.0	
Othr External Data Proc-Mainframe/Legacy	0.0	
Othr External Data Proc-Pc/Lan/Serv/Web	0.0	
Pmt for AFIS Development & Usage	0.0	
Internal Service Telecommunications	0.0	
External Telecom Long Distance-In-State	0.0	
External Telecom Long Distance-Out-State	0.0	
Other External Telecommunication Service	0.0	
Electricity	0.0	
Sanitation Waste Disposal	0.0	
Water	0.0	
Gas And Fuel Oil For Buildings	0.0	
Other Utilities	0.0	
Building Rent Charges To State Agencies	0.0	
Priv Lease To Own Bld Rent Chrgs To Agy	0.0	
Cert Of Part Bld Rent Chrgs To Agy	0.0	
Rental Of Land And Buildings	371.6	
Rental Of Computer Equipment	0.0	
Rental Of Other Machinery And Equipment	0.0	
Miscellaneous Rent	0.0	
Interest On Overdue Payments	0.0	
All Other Interest Payments	0.0	
Internal Acct/Budg/Financial Svcs	0.0	
Other Internal Services	0.0	
Repair And Maintenance - Buildings	0.0	
Repair And Maintenance - Vehicles	0.0	
Repair And Maint - Mainframe And Legacy	0.0	
Repair And Maint-Pc/Lan/Serv/Web	0.0	
Repair And Maintenance - Other Equipment	0.8	
Other Repair And Maintenance	0.0	
Software Support And Maintenance	0.0	
Uniforms	0.0	
Inmate Clothing	0.0	
Security Supplies	0.0	
Office Supplies	9.5	
Computer Supplies	1.1	
Housekeeping Supplies	0.0	
Bedding And Bath Supplies	0.0	
Drugs And Medicine Supplies	0.0	
Medical Supplies	0.0	
Dental Supplies	0.0	
Automotive And Transportation Fuels	0.0	
Automotive Lubricants And Supplies	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Administration and Support</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Rpr And Maint Supplies-Not Auto Or Build	0.0	
Repair And Maintenance Supplies-Building	0.0	
Other Operating Supplies	0.0	
Publications	0.0	
Aggregate Withheld Or Paid Commissions	0.0	
Lottery Prizes	0.0	
Lottery Distribution Costs	0.0	
Material for Further Processing	0.0	
Other Resale Supplies	0.0	
Loss On Sales Of Capital Assets	0.0	
Loss on Sales of Investments	0.0	
Employee Tuition Reimbursement-Graduate	0.0	
Employee Tuition Reimb Under-Grad/Other	3.4	
Conference Registration-Attendance Fees	3.8	
Other Education And Training Costs	8.1	
Advertising	3.1	
Sponsorships	0.0	
Internal Printing	0.0	
External Printing	22.6	
Photography	2.0	
Postage And Delivery	18.8	
Document shredding and Destruction Services	3.0	
Translation and Sign Language Services	0.0	
Distribution To State Universities	0.0	
Other Intrastate Distributions	0.0	
Awards	2.8	
Entertainment And Promotional Items	0.0	
Dues	69.6	
Books- Subscriptions And Publications	29.1	
Costs For Digital Image Or Microfilm	0.0	
Revolving Fund Advances	0.0	
Credit Card Fees Over Approved Limit	0.0	
Relief Bill Expenditures	0.0	
Surplus Property Distr To State Agencies	0.0	
Security Services	0.0	
Judgments - Damages	0.0	
ICA Payments to Claimants Confidential	0.0	
Jdgmnt-Confidential Restitution To Indiv	0.0	
Judgments - Non-Confidential Restitution	0.0	
Judgments - Punitive And Compensatory	0.0	
Pmts Made to Resolve/Disputes/Avoid Costs of Litigation	0.0	
Pmts For Contracted State Inmate Labor	0.0	
Payments To State Inmates	0.0	
Bad Debt Expense	0.0	
Interview Expense	0.0	
Employee Relocations-Nontaxable	0.0	
Employee Relocations-Taxable	0.0	
Non-Confidential Invest/Legal/Law Enf	0.0	
Conf/Sensitive Invest/Legal/Undercover	0.0	
Fingerprinting, Background Checks, Etc.	0.0	
Other Miscellaneous Operating	0.1	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Administration and Support</b>

	FY 2020 Actual	FY 2021 Expd. Plan
<b>Expenditure Category Total</b>	<b>698.7</b>	<b>767.9</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	327.1	350.4
	<b>327.1</b>	<b>350.4</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	371.6	417.5
	<b>371.6</b>	<b>417.5</b>
<b>Fund Source Total</b>	<b>698.7</b>	<b>767.9</b>

Current Year Expenditures		20.0
Capital Equipment Budget And Approp	0.0	
Vehicles Capital Purchase	0.0	
Vehicles Capital Leases	0.0	
Furniture Capital Purchase	0.0	
Depreciable Works Of Art & Hist Treas/Coll Capital Purcha	0.0	
Non Depr Works Of Art & Hist Treas/Coll Cap Purchase	0.0	
Furniture Capital Leases	0.0	
Computer Equipment Capital Purchase	0.0	
Computer Equipment Capital Lease	0.0	
Telecommunication Equip-Capital Purchase	0.0	
Telecommunication Equip-Capital Lease	0.0	
Other Equipment Capital Purchase	0.0	
Other Equipment Capital Leases	0.0	
Purchased Or Licensed Software-Website	0.0	
Internally Generated Software-Website	0.0	
Development in Progress	0.0	
Right-Of-Way/Easement/Extraction Rights	0.0	
Oth Int Assets purchased, licensed or internally generate	0.0	
Other intangible assets acquired by capital lease	0.0	
Other Capital Asset Purchases	0.0	
Leasehold Improvement-Capital Purchase	0.0	
Other Capital Asset Leases	0.0	
Non-Capital Equip Budget And Approp	0.0	
Vehicles Non-Capital Purchase	0.0	
Vehicles Non-Capital Leases	0.0	
Furniture Non-Capital Purchase	10.7	
Works Of Art And Hist Treas-Non Capital	0.0	
Furniture Non-Capital Leases	0.0	
Computer Equipment Non-Capital Purchase	0.0	
Computer Equipment Non-Capital Lease	0.0	
Telecomm Equip Non-Capital Purchase	0.0	
Telecomm Equip Non-Capital Leases	0.0	
Other Equipment Non-Capital Purchase	0.0	
Weapons Non-Capital Purchase	0.0	
Other Equipment Non-Capital Lease	0.0	
Purchased Or Licensed Software/Website	0.0	
Internally Generated Software/Website	0.0	
LICENSES AND PERMITS	0.0	
Right-Of-Way/Easement/Extraction Exp	0.0	
Other Intangible Assets - Purchased, Licensed or Internall	0.0	
Noncapital Software/Web By Capital Lease	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Administration and Support</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Other Intangible Assets Acquired by Capital Lease	0.0	
Other Long Lived Tangible Assets to be Expenses	0.0	
Non-Capital Equipment Excluded from Cost Allocation	0.0	
<b>Expenditure Category Total</b>	<b>10.7</b>	<b>20.0</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	10.7	20.0
<b>Fund Source Total</b>	<b>10.7</b>	<b>20.0</b>
<hr/>		
Capital Outlay	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Debt Service	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Cost Allocation	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Transfers	3.3	0.0
<b>Expenditure Category Total</b>	<b>3.3</b>	<b>0.0</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	3.3	0.0
<b>Fund Source Total</b>	<b>3.3</b>	<b>0.0</b>

<b>Employee Retirement Coverage</b>			
Retirement System	FTE	Personal Services	Fund#
Arizona State Retirement System	26.7	2,368.3	RT1401-A
ASRS – return to work	3.2	430.6	RT1401-A

<b>Combined Regular &amp; Elected Positions At/Above FICA Maximum of \$142,800</b>			
Total FTE	Personal Services	FTE's not eligible for Health, Dental & Life	
2.0	455.4	0.5	

## Program Summary of Expenditures and Budget Request

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	Investment Management

	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
<b>Program Summary</b>				
3-1 Investment Management	172,106.2	103,795.3	443.8	104,239.1
<b>Program Summary Total:</b>	172,106.2	103,795.3	443.8	104,239.1
<b>Expenditure Categories</b>				
0000 FTE Positions	11.0	11.0	0.0	11.0
6000 Personal Services	1,361.4	1,482.0	244.0	1,726.0
6100 Employee Related Expenses	401.1	431.9	56.3	488.2
6200 Professional and Outside Services	167,592.3	98,533.7	(3.1)	98,530.6
6500 Travel In-State	0.5	0.0	0.0	0.0
6600 Travel Out of State	10.6	20.0	0.0	20.0
6700 Food	0.0	0.0	0.0	0.0
6800 Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
7000 Other Operating Expenses	2,739.1	3,327.7	146.6	3,474.3
8000 Equipment	1.2	0.0	0.0	0.0
8100 Capital Outlay	0.0	0.0	0.0	0.0
8600 Debt Service	0.0	0.0	0.0	0.0
9000 Cost Allocation	0.0	0.0	0.0	0.0
9100 Transfers	0.0	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	172,106.2	103,795.3	443.8	104,239.1
<b>Fund Source</b>				
<b>Appropriated Funds</b>				
RT1401-A Retirement System Appropriated (Appropriated)	256.9	313.2	0.0	313.2
	256.9	313.2	0.0	313.2
<b>Non-Appropriated Funds</b>				
RT1407-N Arizona State Retirement System (Non-Appropriated)	171,849.3	103,482.1	443.8	103,925.9
	171,849.3	103,482.1	443.8	103,925.9
<b>Fund Source Total:</b>	172,106.2	103,795.3	443.8	104,239.1

## Program Group Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	Investment Management

	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
--	-------------------	-----------------------	------------------------	--------------------------

<b>Fund:</b>	RT1401-A Retirement System Appropriated (Appropriated)
--------------	--

### Program Expenditures

COST CENTER/PROGRAM BUDGET UNIT					
3-1	Investment Management	256.9	313.2	0.0	313.2
	Total	256.9	313.2	0.0	313.2

### Appropriated Funding

#### Expenditure Categories

	212.2	261.8	0.0	261.8
Personal Services	44.7	51.4	0.0	51.4
Employee Related Expenses	0.0	0.0	0.0	0.0
Professional and Outside Services	0.0	0.0	0.0	0.0
Travel In-State	0.0	0.0	0.0	0.0
Travel Out of State	0.0	0.0	0.0	0.0
Food	0.0	0.0	0.0	0.0
Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
Other Operating Expenses	0.0	0.0	0.0	0.0
Equipment	0.0	0.0	0.0	0.0
Capital Outlay	0.0	0.0	0.0	0.0
Debt Service	0.0	0.0	0.0	0.0
Cost Allocation	0.0	0.0	0.0	0.0
Transfers	0.0	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>	256.9	313.2	0.0	313.2
<b>Fund RT1401-A Total:</b>	256.9	313.2	0.0	313.2
<b>Program 3 Total:</b>	256.9	313.2	0.0	313.2

## Program Group Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	Investment Management

	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
--	-------------------	-----------------------	------------------------	--------------------------

<b>Fund:</b>	RT1407-N Arizona State Retirement System (Non-Appropriated)
--------------	---

### Program Expenditures

#### COST CENTER/PROGRAM BUDGET UNIT

3-1	Investment Management	171,849.3	103,482.1	443.8	103,925.9
	Total	171,849.3	103,482.1	443.8	103,925.9

### Non-Appropriated Funding

#### Expenditure Categories

FTE Positions	11.0	11.0	0.0	11.0
Personal Services	1,149.2	1,220.2	244.0	1,464.2
Employee Related Expenses	356.4	380.5	56.3	436.8
Professional and Outside Services	167,592.3	98,533.7	(3.1)	98,530.6
Travel In-State	0.5	0.0	0.0	0.0
Travel Out of State	10.6	20.0	0.0	20.0
Food	0.0	0.0	0.0	0.0
Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
Other Operating Expenses	2,739.1	3,327.7	146.6	3,474.3
Equipment	1.2	0.0	0.0	0.0
Capital Outlay	0.0	0.0	0.0	0.0
Debt Service	0.0	0.0	0.0	0.0
Cost Allocation	0.0	0.0	0.0	0.0
Transfers	0.0	0.0	0.0	0.0

<b>Expenditure Categories Total:</b>	171,849.3	103,482.1	443.8	103,925.9
--------------------------------------	-----------	-----------	-------	-----------

<b>Fund RT1407-N Total:</b>	171,849.3	103,482.1	443.8	103,925.9
-----------------------------	-----------	-----------	-------	-----------

<b>Program 3 Total:</b>	171,849.3	103,482.1	443.8	103,925.9
-------------------------	-----------	-----------	-------	-----------

## Program Budget Unit Summary of Expenditures and Budget Request for All Funds

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	Investment Management

Expenditure Categories	FY 2020 Actual	FY 2021 Expd. Plan	FY 2022 Fund. Issue	FY 2022 Total Request
0000 FTE	11.0	11.0	0.0	11.0
6000 Personal Services	1,361.4	1,482.0	244.0	1,726.0
6100 Employee Related Expenses	401.1	431.9	56.3	488.2
6200 Professional and Outside Services	167,592.3	98,533.7	(3.1)	98,530.6
6500 Travel In-State	0.5	0.0	0.0	0.0
6600 Travel Out of State	10.6	20.0	0.0	20.0
6700 Food	0.0	0.0	0.0	0.0
6800 Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
7000 Other Operating Expenses	2,739.1	3,327.7	146.6	3,474.3
8000 Equipment	1.2	0.0	0.0	0.0
8100 Capital Outlay	0.0	0.0	0.0	0.0
8600 Debt Service	0.0	0.0	0.0	0.0
9000 Cost Allocation	0.0	0.0	0.0	0.0
9100 Transfers	0.0	0.0	0.0	0.0
<b>Expenditure Categories Total:</b>				
	172,106.2	103,795.3	443.8	104,239.1
<b>Fund Source</b>				
<b>Appropriated Funds</b>				
RT1401-A Retirement System Appropriated (Appropriated)	256.9	313.2	0.0	313.2
	256.9	313.2	0.0	313.2
<b>Non-Appropriated Funds</b>				
RT1407-N Arizona State Retirement System (Non-Appropriated)	171,849.3	103,482.1	443.8	103,925.9
	171,849.3	103,482.1	443.8	103,925.9
<b>Fund Source Total:</b>				
	172,106.2	103,795.3	443.8	104,239.1

## Program Budget Unit Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b> Arizona State Retirement System					
		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2022</b>
		<b>Actual</b>	<b>Expd. Plan</b>	<b>Fund. Issue</b>	<b>Total Request</b>
<b>Program:</b> Investment Management					
<b>Fund:</b> RT1401-A Retirement System Appropriated					
<b>Appropriated</b>					
6000	Personal Services	212.2	261.8	0.0	261.8
6100	Employee Related Expenses	44.7	51.4	0.0	51.4
6200	Professional and Outside Services	0.0	0.0	0.0	0.0
6500	Travel In-State	0.0	0.0	0.0	0.0
6600	Travel Out of State	0.0	0.0	0.0	0.0
6700	Food	0.0	0.0	0.0	0.0
6800	Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
7000	Other Operating Expenses	0.0	0.0	0.0	0.0
8000	Equipment	0.0	0.0	0.0	0.0
8100	Capital Outlay	0.0	0.0	0.0	0.0
8600	Debt Service	0.0	0.0	0.0	0.0
9000	Cost Allocation	0.0	0.0	0.0	0.0
9100	Transfers	0.0	0.0	0.0	0.0
<b>Appropriated Total:</b>		256.9	313.2	0.0	313.2
<b>Fund Total:</b>		256.9	313.2	0.0	313.2
<b>Program Total For Selected Funds:</b>		256.9	313.2	0.0	313.2

## Program Budget Unit Summary of Expenditures and Budget Request for Selected Funds

<b>Agency:</b> Arizona State Retirement System					
		<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2022</b>
		<b>Actual</b>	<b>Expd. Plan</b>	<b>Fund. Issue</b>	<b>Total Request</b>
<b>Program:</b> Investment Management					
<b>Fund:</b> RT1407-N Arizona State Retirement System					
<b>Non-Appropriated</b>					
0000	FTE	11.0	11.0	0.0	11.0
6000	Personal Services	1,149.2	1,220.2	244.0	1,464.2
6100	Employee Related Expenses	356.4	380.5	56.3	436.8
6200	Professional and Outside Services	167,592.3	98,533.7	(3.1)	98,530.6
6500	Travel In-State	0.5	0.0	0.0	0.0
6600	Travel Out of State	10.6	20.0	0.0	20.0
6700	Food	0.0	0.0	0.0	0.0
6800	Aid to Organizations and Individuals	0.0	0.0	0.0	0.0
7000	Other Operating Expenses	2,739.1	3,327.7	146.6	3,474.3
8000	Equipment	1.2	0.0	0.0	0.0
8100	Capital Outlay	0.0	0.0	0.0	0.0
8600	Debt Service	0.0	0.0	0.0	0.0
9000	Cost Allocation	0.0	0.0	0.0	0.0
9100	Transfers	0.0	0.0	0.0	0.0
<b>Non-Appropriated Total:</b>		171,849.3	103,482.1	443.8	103,925.9
<b>Fund Total:</b>		171,849.3	103,482.1	443.8	103,925.9
<b>Program Total For Selected Funds:</b>		171,849.3	103,482.1	443.8	103,925.9

## Program Expenditure Schedule

Agency:	Arizona State Retirement System	
Program:	Investment Management	
	FY 2020 Actual	FY 2021 Expd. Plan
FTE	11.0	11.0
<b>Expenditure Category Total</b>	<b>11.0</b>	<b>11.0</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	11.0	11.0
<b>Fund Source Total</b>	<b>11.0</b>	<b>11.0</b>
<hr/>		
Personal Services	1,361.4	1,482.0
Boards and Commissions	0.0	0.0
<b>Expenditure Category Total</b>	<b>1,361.4</b>	<b>1,482.0</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	212.2	261.8
<b>Fund Source Total</b>	<b>212.2</b>	<b>261.8</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	1,149.2	1,220.2
<b>Fund Source Total</b>	<b>1,149.2</b>	<b>1,220.2</b>
<hr/>		
Employee Related Expenses	401.1	431.9
<b>Expenditure Category Total</b>	<b>401.1</b>	<b>431.9</b>
<b>Appropriated</b>		
RT1401-A Retirement System Appropriated (Appropriated)	44.7	51.4
<b>Fund Source Total</b>	<b>44.7</b>	<b>51.4</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	356.4	380.5
<b>Fund Source Total</b>	<b>356.4</b>	<b>380.5</b>
<hr/>		
Professional and Outside Services		98,533.7
External Prof/Outside Serv Budg And Appn	0.0	
External Investment Services	163,363.9	
Other External Financial Services	1,411.4	
Attorney General Legal Services	0.0	
External Legal Services	2,787.6	
External Engineer/Architect Cost - Exp	0.0	
External Engineer/Architect Cost- Cap	0.0	
Other Design	0.0	
Temporary Agency Services	0.0	
Hospital Services	0.0	
Other Medical Services	0.0	
Institutional Care	0.0	
Education And Training	0.0	
Vendor Travel	0.0	
Professional & Outside Services Excluded from Cost Alloca	0.0	
Vendor Travel - Non Reportable	0.0	
External Telecom Consulting Services	0.0	
Costs related to those in custody of the State	0.0	
Non - Confidential Specialist Fees	0.0	
Confidential Specialist Fees	0.0	
Outside Actuarial Costs	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Investment Management</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Other Professional And Outside Services	29.4	
<b>Expenditure Category Total</b>	<b>167,592.3</b>	<b>98,533.7</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	167,592.3	98,533.7
<b>Fund Source Total</b>	<b>167,592.3</b>	<b>98,533.7</b>
<hr/>		
Travel In-State	0.5	0.0
<b>Expenditure Category Total</b>	<b>0.5</b>	<b>0.0</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	0.5	0.0
<b>Fund Source Total</b>	<b>0.5</b>	<b>0.0</b>
<hr/>		
Travel Out of State	10.6	20.0
<b>Expenditure Category Total</b>	<b>10.6</b>	<b>20.0</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	10.6	20.0
<b>Fund Source Total</b>	<b>10.6</b>	<b>20.0</b>
<hr/>		
Food	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Aid to Organizations and Individuals	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Other Operating Expenses		3,327.7
Other Operating Expenditures Budg Approp	0.0	
Other Operating Expenditures Excluded from Cost Allocati	0.0	
Risk Management Charges To State Agency	0.0	
Risk Management Deductible - Indemnity	0.0	
Risk Management Deductible - Legal	0.0	
Risk Management Deductible - Medical	0.0	
Risk Management Deductible - Other	0.0	
Gen Liab- Non Physical-Taxable- Self Ins	0.0	
Gross Proceeds Payments To Attorneys	0.0	
General Liability- Non-Taxable- Self Ins	0.0	
Medical Malpractice - Self-Insured	0.0	
Automobile Liability - Self Insured	0.0	
General Property Damage - Self- Insured	0.0	
Automobile Physical Damage-Self Insured	0.0	
Liability Insurance Premiums	0.0	
Property Insurance Premiums	0.0	
Workers Compensation Benefit Payments	0.0	
Self Insurance - Administrative Fees	0.0	
Self Insurance - Premiums	0.0	
Self Insurance - Claim Payments	0.0	
Self Insurance - Pharmacy Claims	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Investment Management</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Premium Tax On Altcs	0.0	
Other Insurance-Related Charges	0.0	
Internal Service Data Processing	0.0	
Internal Service Data Proc- Pc/Lan	0.0	
External Programming-Mainframe/Legacy	0.0	
External Programming- Pc/Lan/Serv/Web	0.0	
External Data Entry	0.0	
Othr External Data Proc-Mainframe/Legacy	0.0	
Othr External Data Proc-Pc/Lan/Serv/Web	0.0	
Pmt for AFIS Development & Usage	0.0	
Internal Service Telecommunications	0.0	
External Telecom Long Distance-In-State	0.2	
External Telecom Long Distance-Out-State	0.0	
Other External Telecommunication Service	0.0	
Electricity	0.0	
Sanitation Waste Disposal	0.0	
Water	0.0	
Gas And Fuel Oil For Buildings	0.0	
Other Utilities	0.0	
Building Rent Charges To State Agencies	0.0	
Priv Lease To Own Bld Rent Chrgs To Agy	0.0	
Cert Of Part Bld Rent Chrgs To Agy	0.0	
Rental Of Land And Buildings	36.5	
Rental Of Computer Equipment	0.0	
Rental Of Other Machinery And Equipment	0.0	
Miscellaneous Rent	0.0	
Interest On Overdue Payments	0.0	
All Other Interest Payments	0.0	
Internal Acct/Budg/Financial Svcs	0.0	
Other Internal Services	0.0	
Repair And Maintenance - Buildings	0.0	
Repair And Maintenance - Vehicles	0.0	
Repair And Maint - Mainframe And Legacy	0.0	
Repair And Maint-Pc/Lan/Serv/Web	0.0	
Repair And Maintenance - Other Equipment	5.1	
Other Repair And Maintenance	0.0	
Software Support And Maintenance	13.2	
Uniforms	0.0	
Inmate Clothing	0.0	
Security Supplies	0.0	
Office Supplies	0.1	
Computer Supplies	0.0	
Housekeeping Supplies	0.0	
Bedding And Bath Supplies	0.0	
Drugs And Medicine Supplies	0.0	
Medical Supplies	0.0	
Dental Supplies	0.0	
Automotive And Transportation Fuels	0.0	
Automotive Lubricants And Supplies	0.0	
Rpr And Maint Supplies-Not Auto Or Build	0.0	
Repair And Maintenance Supplies-Building	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Investment Management</b>

	FY 2020 Actual	FY 2021 Expd. Plan
Other Operating Supplies	0.0	
Publications	0.0	
Aggregate Withheld Or Paid Commissions	0.0	
Lottery Prizes	0.0	
Lottery Distribution Costs	0.0	
Material for Further Processing	0.0	
Other Resale Supplies	0.0	
Loss On Sales Of Capital Assets	0.0	
Loss on Sales of Investments	0.0	
Employee Tuition Reimbursement-Graduate	0.0	
Employee Tuition Reimb Under-Grad/Other	0.0	
Conference Registration-Attendance Fees	4.9	
Other Education And Training Costs	0.0	
Advertising	0.0	
Sponsorships	0.0	
Internal Printing	0.0	
External Printing	0.0	
Photography	0.0	
Postage And Delivery	0.3	
Document shredding and Destruction Services	0.0	
Translation and Sign Language Services	0.0	
Distribution To State Universities	0.0	
Other Intrastate Distributions	0.0	
Awards	0.0	
Entertainment And Promotional Items	0.0	
Dues	10.3	
Books- Subscriptions And Publications	2,668.5	
Costs For Digital Image Or Microfilm	0.0	
Revolving Fund Advances	0.0	
Credit Card Fees Over Approved Limit	0.0	
Relief Bill Expenditures	0.0	
Surplus Property Distr To State Agencies	0.0	
Security Services	0.0	
Judgments - Damages	0.0	
ICA Payments to Claimants Confidential	0.0	
Jdgmnt-Confidential Restitution To Indiv	0.0	
Judgments - Non-Confidential Restitution	0.0	
Judgments - Punitive And Compensatory	0.0	
Pmts Made to Resolve/Disputes/Avoid Costs of Litigation	0.0	
Pmts For Contracted State Inmate Labor	0.0	
Payments To State Inmates	0.0	
Bad Debt Expense	0.0	
Interview Expense	0.0	
Employee Relocations-Nontaxable	0.0	
Employee Relocations-Taxable	0.0	
Non-Confidential Invest/Legal/Law Enf	0.0	
Conf/Sensitive Invest/Legal/Undercover	0.0	
Fingerprinting, Background Checks, Etc.	0.0	
Other Miscellaneous Operating	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	<b>Arizona State Retirement System</b>
<b>Program:</b>	<b>Investment Management</b>

	FY 2020 Actual	FY 2021 Expd. Plan
<b>Expenditure Category Total</b>	<b>2,739.1</b>	<b>3,327.7</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	2,739.1	3,327.7
<b>Fund Source Total</b>	<b>2,739.1</b>	<b>3,327.7</b>

Current Year Expenditures		0.0
Capital Equipment Budget And Approp	0.0	
Vehicles Capital Purchase	0.0	
Vehicles Capital Leases	0.0	
Furniture Capital Purchase	0.0	
Depreciable Works Of Art & Hist Treas/Coll Capital Purcha	0.0	
Non Depr Works Of Art & Hist Treas/Coll Cap Purchase	0.0	
Furniture Capital Leases	0.0	
Computer Equipment Capital Purchase	0.0	
Computer Equipment Capital Lease	0.0	
Telecommunication Equip-Capital Purchase	0.0	
Telecommunication Equip-Capital Lease	0.0	
Other Equipment Capital Purchase	0.0	
Other Equipment Capital Leases	0.0	
Purchased Or Licensed Software-Website	0.0	
Internally Generated Software-Website	0.0	
Development in Progress	0.0	
Right-Of-Way/Easement/Extraction Rights	0.0	
Oth Int Assets purchased, licensed or internally generate	0.0	
Other intangible assets acquired by capital lease	0.0	
Other Capital Asset Purchases	0.0	
Leasehold Improvement-Capital Purchase	0.0	
Other Capital Asset Leases	0.0	
Non-Capital Equip Budget And Approp	0.0	
Vehicles Non-Capital Purchase	0.0	
Vehicles Non-Capital Leases	0.0	
Furniture Non-Capital Purchase	0.0	
Works Of Art And Hist Treas-Non Capital	0.0	
Furniture Non-Capital Leases	0.0	
Computer Equipment Non-Capital Purchase	1.2	
Computer Equipment Non-Capital Lease	0.0	
Telecomm Equip Non-Capital Purchase	0.0	
Telecomm Equip Non-Capital Leases	0.0	
Other Equipment Non-Capital Purchase	0.0	
Weapons Non-Capital Purchase	0.0	
Other Equipment Non-Capital Lease	0.0	
Purchased Or Licensed Software/Website	0.0	
Internally Generated Software/Website	0.0	
LICENSES AND PERMITS	0.0	
Right-Of-Way/Easement/Extraction Exp	0.0	
Other Intangible Assets - Purchased, Licensed or Internall	0.0	
Noncapital Software/Web By Capital Lease	0.0	
Other Intangible Assets Acquired by Capital Lease	0.0	
Other Long Lived Tangible Assets to be Expenses	0.0	
Non-Capital Equipment Excluded from Cost Allocation	0.0	

## Program Expenditure Schedule

<b>Agency:</b>	Arizona State Retirement System
<b>Program:</b>	Investment Management

	FY 2020 Actual	FY 2021 Expd. Plan
<b>Expenditure Category Total</b>	<b>1.2</b>	<b>0.0</b>
<b>Non-Appropriated</b>		
RT1407-N Arizona State Retirement System (Non-Appropriated)	1.2	0.0
<b>Fund Source Total</b>	<b>1.2</b>	<b>0.0</b>
<hr/>		
Capital Outlay	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Debt Service	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Cost Allocation	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>
<hr/>		
Transfers	0.0	0.0
<b>Expenditure Category Total</b>	<b>0.0</b>	<b>0.0</b>

### Employee Retirement Coverage

Retirement System	FTE	Personal Services	Fund#
Arizona State Retirement System	0.0	261.8	RT1401-A
Arizona State Retirement System	11.0	1,220.2	RT1407-N

### Combined Regular & Elected Positions At/Above FICA Maximum of \$142,800

Total FTE	Personal Services	FTE's not eligible for Health, Dental & Life
3.0	536.2	0.0

## Administrative Costs

**Agency:** Arizona State Retirement System

### Administrative Costs Summary

Common Administrative Area	FY 2021
Personal Services	2,798.9
ERE	955.1
All Other	1,523.1
<b>Administrative Costs Total:</b>	<b>5,277.1</b>

### Administrative Cost / Total Expenditure Ratio

	Request	Admin %
FY 2021	135,449.0	3.9%

**2020 - 2022 ARIZONA MASTER LIST OF STATE GOVERNMENT PROGRAMS**

RTA 0.0	<b>Agency Summary</b>
	STATE RETIREMENT SYSTEM
Paul Matson, Director (602) 240-2031 A.R.S. § 38-712 Plan Contact: Sara Orozco, Strategic Planning Manager (602) 240-2020	

**Mission:**

*To benefit our members, the Arizona State Retirement System (ASRS) is a leading state benefit plan administrator in the areas of core member services, funded status, investment performance, and operational effectiveness, while keeping program benefits and associated costs relatively aligned and maintaining actuarial and fiscal integrity.*

**Description:**

The Arizona State Retirement System (ASRS) provides pension, retiree health insurance, and long-term disability benefits to most public sector employers in Arizona, including State universities and community colleges, public school districts, and State and local governments.

RTA 1.0	<b>Program Summary</b>
	MEMBER SERVICES
Anthony Guarino, Deputy Director, Chief Operations Officer Director's Office (602) 240-2077 A.R.S. § 38-712	

**Mission:**

*To benefit our members, the Arizona State Retirement System (ASRS) will be a leading state benefit plan administrator in the areas of core member services, funded status, investment performance, and operational effectiveness, while keeping program benefits and associated costs relatively aligned and maintaining actuarial and fiscal integrity.*

**Description:**

The Member Services Program is comprised of the Member Services, Financial Services, and Technology Services Divisions of the ASRS. These three divisions are collectively responsible for delivering services to ASRS members.

◆ **Goal 1** To ensure member disbursements will be distributed timely, accurately, and cost-effective, resulting in high levels of member satisfaction.

**Objective:** 1 FY2020: New Retirement processing will be timely, accurate and will satisfy members while being high performing and cost effective when compared to peers  
FY2021: New Retirement processing will be timely, accurate and will satisfy members while being high performing and cost effective when compared to peers  
FY2022: New Retirement processing will be timely, accurate and will satisfy members while being high performing and cost effective when compared to peers

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Number of months in which 90% or more of new retirees receive initial payment within 10 business days of retirement	0	12	12
Percent of overall member satisfaction with the retirement application process for new retirees (objective 90%)	91	90	90

**Objective:** 2 FY2020: Pension Payroll will be processed timely and accurately while being high performing and cost effective when compared to peers.  
FY2021: Pension Payroll will be processed timely and accurately while being high performing and cost effective when compared to peers.  
FY2022: Pension Payroll will be processed timely and accurately while being high performing and cost effective when compared to peers.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Number of months in which 100% of monthly pension payments are disbursed on the first day of the month	12	12	12

**Objective:** 3 FY2020: Forfeiture processing will be timely, accurate and will satisfy members while being high performing and cost effective when compared to peers.  
FY2021: Forfeiture processing will be timely, accurate and will satisfy members while being high performing and cost effective when compared to peers.  
FY2022: Forfeiture processing will be timely, accurate and will satisfy members while being high performing and cost effective when compared to peers.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Number of months in which 90% or more of forfeitures are disbursed within 5 business days of request	12	12	12
Percent of overall member satisfaction with the forfeiture process (objective 90%)	92	90	90

**Objective:** 4 FY2020: Survivor Benefit processing will be timely, accurate and will satisfy members.  
FY2021: Survivor Benefit processing will be timely, accurate and will satisfy members.  
FY2022: Survivor Benefit processing will be timely, accurate and will satisfy members.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Percent of overall member satisfaction with the survivor benefit process (objective 90%)	88	90	90

Number of months in which 90% of survivor benefit annuity calculations are finalized within the first month possible following receipt of all documentation and information	12	12	12
---	----	----	----

Number of months in which 90% of survivor benefit lump sum payments are disbursed to beneficiaries within 10 days of receipt of required documentation and information	4	12	12
--	---	----	----

◆ **Goal 2** To offer, for the sole benefit of all eligible members, health insurance plans which are cost competitive, accessible, efficient, and provide strong customer service

**Objective:** 1 FY2020: Health and dental plans will be cost competitive with respect to the benefit package within each marketplace  
FY2021: Health and dental plans will be cost competitive with respect to the benefit package within each marketplace  
FY2022: Health and dental plans will be cost competitive with respect to the benefit package within each marketplace

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Percent of members that are satisfied with the cost of medical insurance plans for the benefits received	95	90	90
Percent of eligible members participating in an ASRS medical insurance plan	22	25	25
Percent of medical insurance performance guarantees that are met and enforced	100	100	100
Percent of members that are satisfied with the cost of dental insurance plans for the benefits received	90	90	90
Percent of eligible members participating in an ASRS dental insurance plan	34	35	35

◆ **Goal 3** To administer a Long Term Disability plan that is competitive, efficient and satisfies members

**Objective:** 1 FY2020: The ASRS Long Term Disability program will be cost effective.  
FY2021: The ASRS Long Term Disability program will be cost effective.  
FY2022: The ASRS Long Term Disability program will be cost effective.

**2020 - 2022 ARIZONA MASTER LIST OF STATE GOVERNMENT PROGRAMS**

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Percent change in administrative expenses per disabled member	0	-1	0
Percent of long term disability performance guarantees that are met and enforced	0	100	0

**Objective:** 2 FY2020: The ASRS Long Term Disability plan will satisfy members and staff.  
 FY2021: The ASRS Long Term Disability plan will satisfy members and staff.  
 FY2022: The ASRS Long Term Disability plan will satisfy members and staff.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Percent of members that are satisfied with the LTD approval process based on the quarterly survey conducted by vendor	96	100	100
Percent of members that are satisfied with the LTD maintenance process based on the quarterly survey conducted by vendor	95	100	100

◆ **Goal 4** To provide members and employers with timely and accurate service that results in high levels of customer satisfaction.

**Objective:** 1 FY2020: Members who call or send secure messages to the ASRS will receive timely, accurate responses to their inquiries and be highly satisfied with their overall customer service experience.  
 FY2021: Members who call or send secure messages to the ASRS will receive timely, accurate responses to their inquiries and be highly satisfied with their overall customer service experience.  
 FY2022: Members who call or send secure messages to the ASRS will receive timely, accurate responses to their inquiries and be highly satisfied with their overall customer service experience.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Number of months which 70% or more of member calls are answered within 20 seconds	12	12	12
Percentage of overall member satisfaction with Telephone Service at the Arizona State Retirement System (objective 90%)	98	90	90
Number of months which 90% or higher of member secure messages are answered within one business day	12	12	12
Percentage of overall member satisfaction with walk-in counseling (objective 90%)	90	90	90

**Objective:** 2 FY2020: Employers will receive timely, accurate responses to their inquiries and be highly satisfied with their overall customer service experience  
 FY2021: Employers will receive timely, accurate responses to their inquiries and be highly satisfied with their overall customer service experience.  
 FY2022: Employers will receive timely, accurate responses to their inquiries and be highly satisfied with their overall customer service experience.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Number of months which 90% or more of employer secure messages are answered within two business days	10	12	12

◆ **Goal 5** To provide members and business users with technology that is high-performing and able to support evolving business needs.

**Objective:** 1 FY2020: ASRS staff will be highly satisfied with the business applications needed to perform their daily job functions.  
 FY2021: ASRS staff will be highly satisfied with the business applications needed to perform their daily job functions.  
 FY2022: ASRS staff will be highly satisfied with the business applications needed to perform their daily job functions.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Percent of overall user satisfaction with core business applications	83	90	90
Percent of overall user satisfaction with non-core business applications	86	90	90

◆ **Goal 6** To ensure contributions and data received from members and employers will be processed and managed efficiently and effectively.

**Objective:** 1 FY2020: Contributions and data received from members and employers will be processed and managed efficiently and effectively  
 FY2021: Contributions and data received from members and employers will be processed and managed efficiently and effectively  
 FY2022: Contributions and data received from members and employers will be processed and managed efficiently and effectively

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Number of months in which 90% or higher of members receive a service purchase cost invoice within 5 days	12	12	12
Percent of members satisfied with the service purchase process	84	90	90
Percent of employers satisfied with the contribution process	84	90	90
Percent of active member accounts that have a complete demographic profile	95	98	98
Percent of inactive members that have a valid birthdate and address	85	90	90

**Program Summary**

RTA 2.0  
 ADMINISTRATION AND SUPPORT  
 Anthony Guarino, Deputy Director, Chief Operations Officer  
 Director's Office (602) 240-2077  
 A.R.S. § 38-712

**Mission:**

*To benefit our members, the Arizona State Retirement System (ASRS) will be a leading state benefit plan administrator in the areas of core member services, funded status, investment performance, and operational effectiveness, while keeping program benefits and associated costs relatively aligned and maintaining actuarial and fiscal integrity.*

**Description:**

The Administration and Support Program contains the various administrative processes necessary to support the ongoing administration of the ASRS.

◆ **Goal 1** To ensure responsible governance in the administration of ASRS and its benefit programs

**Objective:** 1 FY2020: The ASRS will create and maintain mutually beneficial partnerships with its employer partners through effective communication, education, and training.  
 FY2021: The ASRS will create and maintain mutually beneficial partnerships with its employer partners through effective communication, education, and training.  
 FY2022: The ASRS will create and maintain mutually beneficial partnerships with its employer partners through effective communication, education, and training.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Employers respond positively when asked "How do you rate the ASRS as an organization?"	87	90	90

Deferred- waiting for the ER Survey to go out in the fall of 2019

**Objective:** 2 FY2020: Foster trust and confidence among ASRS stakeholders and constituent groups with proactive communications on ASRS initiatives, news and programs.  
 FY2021: Foster trust and confidence among ASRS stakeholders and constituent groups with proactive communications on ASRS initiatives, news and programs.  
 FY2022: Foster trust and confidence among ASRS stakeholders and constituent groups with proactive communications on ASRS initiatives, news and programs.

**2020 - 2022 ARIZONA MASTER LIST OF STATE GOVERNMENT PROGRAMS**

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Members respond positively when asked if "ASRS operates in my best interest"	91	90	90
Members respond positively when asked if "My retirement is secure with the ASRS"	94	90	90
Stakeholders respond positively when asked if "The ASRS acts ethically"	89	90	90

**Objective:** 3 FY2020: Produce financial statements and reporting schedules that are in accordance with accounting principles generally accepted in the U.S. and GASB pronouncements.  
 FY2021: Produce financial statements and reporting schedules that are in accordance with accounting principles generally accepted in the U.S. and GASB pronouncements.  
 FY2022: Produce financial statements and reporting schedules that are in accordance with accounting principles generally accepted in the U.S. and GASB pronouncements.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Obtain an unmodified opinion from the independent auditors on the ASRS' annual audited financial statements (CAFR) (Measure as % complete)	0	100	0
Obtain an unmodified opinion from the independent auditors on the ASRS' GASB 68 reporting schedules (Measured as % complete)	0	100	0
Obtain an unmodified opinion from the independent auditors on the ASRS' GASB 75 reporting schedules (Measured as % complete)	0	100	0

◆ **Goal 2** To recruit, retain and develop a high-performing and engaged workforce that is capable of achieving agency goals and implement workforce plans that prepare future leaders and ensure continuity in key positions.

**Objective:** 1 FY2020: Retain high-performing and engaged employees who consistently meet or exceed expectations.  
 FY2021: Retain high-performing and engaged employees who consistently meet or exceed expectations.  
 FY2022: Retain high-performing and engaged employees who consistently meet or exceed expectations.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Total rolling annual turnover rate compared to the State of Arizona	12.7	18	12
Engagement score from ADOA employee engagement survey	0	9	0

RTA 3.0	<b>Program Summary</b>
	<b>INVESTMENT MANAGEMENT</b>
	Karl Polen, Chief Investment Officer
	Investment Management Division (602) 240-2014
	A.R.S. § 38-719

**Mission:**

*To benefit our members, the Arizona State Retirement System (ASRS) will be a leading state benefit plan administrator in the areas of core member services, funded status, investment performance, and operational effectiveness, while keeping program benefits and associated costs relatively aligned and maintaining actuarial and fiscal integrity.*

**Description:**

The Investment Management Program is responsible for overseeing the investment of the ASRS assets.

◆ **Goal 1** To achieve a total fund rate of return equal to or greater

than the actuarial assumed interest rate.

**Objective:** 1 FY2020: Achieve a 20-year rolling annual rate of return equal to or greater than 7.5%.  
 FY2021: Achieve a 20-year rolling annual rate of return equal to or greater than 7.5%.  
 FY2022: Achieve a 20-year rolling annual rate of return equal to or greater than 7.5%

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Percentage of investment returns	0	7.5	0
20-Year rolling annual rate of return on total fund assets (%)	0	0	0

◆ **Goal 2** To achieve a total fund rate of return equal to or greater than the Asset Allocation Benchmark.

**Objective:** 1 FY2020: Achieve annual rolling investment rates of return equal to or greater than the return of the Asset Allocation Benchmark.  
 FY2021: Achieve annual rolling investment rates of return equal to or greater than the return of the Asset Allocation Benchmark.  
 FY2022: Achieve annual rolling investment rates of return equal to or greater than the return of the Asset Allocation Benchmark.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Annualized rate of return	0	0	0
Excess return measured against strategic asset allocation benchmark	0	0	0

**Objective:** 2 FY2020: Achieve 3-year rolling annual investment rates of return equal to or greater than the return of the Asset Allocation Benchmark.  
 FY2021: Achieve 3-year rolling annual investment rates of return equal to or greater than the return of the Asset Allocation Benchmark.  
 FY2022: Achieve 3-year rolling annual investment rates of return equal to or greater than the return of the Asset Allocation Benchmark.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
3-year rolling annual rate of return	0	0	0
3-Year excess return measured against strategic asset allocation benchmark	0	0	0

◆ **Goal 3** To achieve asset class net rates of return equal to or greater than their respective broad asset class benchmarks.

**Objective:** 1 FY2020: Achieve annual rolling investment asset class net rates of return equal to or greater than their respective broad asset class benchmarks.  
 FY2021: Achieve annual rolling investment asset class net rates of return equal to or greater than their respective broad asset class benchmarks.  
 FY2022: Achieve annual rolling investment asset class net rates of return equal to or greater than their respective broad asset class benchmarks.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Annualized rate of return for total equity	0	0	0
Excess total equity return measured against benchmark	0	0	0
Annualized rate of return for interest rate sensitive	0	0	0
Excess interest rate sensitive return measured against benchmark	0	0	0
Annualized rate of return for total credit	0	0	0
Excess total credit return measured against benchmark	0	0	0
Annualized rate of return for real estate (IRR)	0	0	0
Excess real estate return measured against benchmark	0	0	0

**2020 - 2022 ARIZONA MASTER LIST OF STATE GOVERNMENT PROGRAMS**

**Objective:** 2 FY2020: Achieve 3-year rolling annual investment asset class net rates of return equal to or greater than their respective broad asset class benchmarks.  
 FY2021: Achieve 3-year rolling annual investment asset class net rates of return equal to or greater than their respective broad asset class benchmarks.  
 FY2022: Achieve 3-year rolling annual investment asset class net rates of return equal to or greater than their respective broad asset class benchmarks.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
3-year rolling annual rate of return for total equity	0	0	0
3-year rolling annual excess total equity return measured against benchmark	0	0	0
3-year rolling annual rate of return for interest rate sensitive	0	0	0
3-year rolling annual excess interest rate sensitive return measured against benchmark	0	0	0
3-year rolling annual rate of return for total credit	0	0	0
3-year rolling annual excess total credit return measured against benchmark	0	0	0
3-year rolling annual rate of return for real estate	0	0	0
3-year rolling annual excess real estate return measured against benchmark	0	0	0

◆ **Goal 4** To ensure sufficient monies are available to meet cash flow requirements.

**Objective:** 1 FY2020: Ensure all pension benefits, health insurance, member refunds, administrative payments, and other requirements are made from available cash balances and without utilizing alternate liquidity options.  
 FY2021: Ensure all pension benefits, health insurance, member refunds, administrative payments, and other requirements are made from available cash balances and without utilizing alternate liquidity options.  
 FY2022: Ensure all pension benefits, health insurance, member refunds, administrative payments, and other requirements are made from available cash balances and without utilizing alternate liquidity options.

<b>Performance Measures</b>	<b>FY 2020 Actual</b>	<b>FY 2021 Estimate</b>	<b>FY 2022 Estimate</b>
Total market value of ASRS fund assets (in billions)	0	0	0
Total annual benefit payments (in billions)	0	0	0
Percentage of liability funded	0	0	0

Arizona State  
Retirement System

# Strategic Plan

Priorities, Goals, and  
Key Performance Indicators

For Fiscal Years  
2019 to 2023





# Table of Contents.

Introduction .....	2
Strategic Planning Model .....	3
Mission & Vision .....	4
Values .....	5
Strategic Priorities .....	6
#1. <i>Maintain Sustainable Benefit Plans</i> .....	7
#2. <i>Achieve Investment Goals</i> .....	10
#3. <i>Enhance Risk Management Capabilities</i> .....	11
#4. <i>Optimize Operational Effectiveness</i> .....	13
#5. <i>Provide Outstanding Customer Service</i> .....	15
#6. <i>Ensure Operational Continuity</i> .....	20

# Introduction.

The ASRS uses a strategic planning cycle that contains three organizing principles:

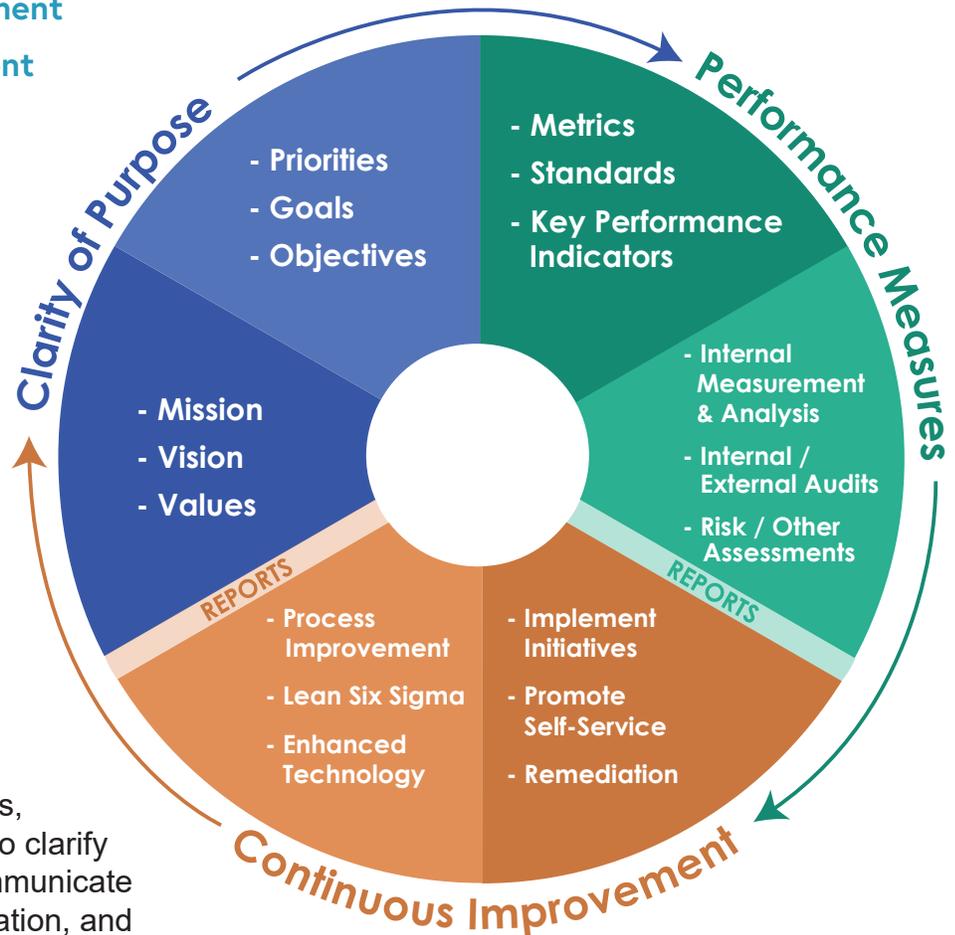
1. Clarity of Purpose
2. Performance Measurement
3. Continuous Improvement

This cycle, similar to process improvement methodologies like the DMAIC process used in six sigma, has been used at the ASRS since the late 1990's. Over two decades, this process has helped the ASRS transform itself from a manual, paper-driven enterprise into a cost-effective, technologically savvy benefit provider with high levels of customer service to members and employers.

## Clarity of Purpose

The ASRS, like other organizations, uses traditional planning devices to clarify its purpose, define its culture, communicate what it strives to be as an organization, and identify its priorities and goals for the current planning cycle. At the highest level, the ASRS achieves clarity through its mission, which is outlined in statute. Our vision statement, adopted by the Board, outlines the kind of organization ASRS wants to be. Our values describe the culture we want within our organization and describe how we want employees to interact with each other and also with our various stakeholders.

Our priorities, identified by Executive Management and approved by the Board, help us clarify what the agency will be focusing on during the strategic planning period, which typically lasts five years. Priorities consist of key areas the agency wants to enhance and optimize, and also areas the agency wants to monitor and maintain during the strategic planning period. Priorities are typically identified through discussions with executive management and through the review of various performance measures and outcomes of continuous improvement initiatives.



Priorities are operationalized through the development of goals and objectives. For each of the broad functional areas of the agency, we identify what the high level goal is that we want to accomplish. Each of these goals has a series of key performance indicators, or KPI's. KPI's are designed so that if all of the KPI's are met within a goal, then the agency should be comfortable in assuming that it has achieved its goal. If a collection of goals has been achieved within a priority, then a priority has been achieved.

## Performance Measurement

We've all heard the phrase "what gets measured gets managed". At the ASRS, performance is monitored using various types of measures and reports. For example, customer service measurements include turnaround times, volumes, and customer satisfaction. Cost effectiveness measurements include examining our agency's performance when compared to similar organizations. Fiscal health measurements include reviewing independent assessments of funded status, investment returns and financial statements. Operational risk measurements include examining risk or other assessments and internal or external audits. Employee engagement measurements include examining customer and employee satisfaction.

For each of these measurements, risk tolerances are identified to provide supervisors and managers with guidance on not just the standard of performance we desire to achieve, but also our level of risk tolerance for performance that falls outside of the standard. Taken together, the performance standard and risk tolerance provide the corridor of performance that management deems to be acceptable before remediation activities need to be considered.

## Continuous improvement

Through performance measurement, management is able to identify opportunities to improve service, satisfy customers, be more cost-effective, or mitigate risk. To address these opportunities, new initiatives are recommended and prioritized. These initiatives could be as simple as deploying additional resources to a business function to address increased service demand, or implementing a complex, multi-year technology project to make our agency more cost-effective. Sometimes, the initiative takes the form of further analysis. For example, peer benchmarking surveys are examined each year to identify how our different services compare to peer retirement systems. This allows the agency to identify outliers for further study. A process improvement team is in place and available to examine business processes to identify opportunities to reduce redundant or unnecessary steps. Remediation plans are developed to mitigate risks that have been identified. As these improvements are implemented, performance continues to be measured, and new priorities emerge, starting the cycle once more.

In this strategic plan, the agency is migrating its strategic plan reporting to a new web-based tool. This new tool is expected to improve our ability to capture, view, store, and share performance data throughout the agency. A similar tool is being implemented for the agency's enterprise-wide risk program.

# Our Mission.

*Arizona's Revised Statutes § 38-712 outlines the purpose of the ASRS:*

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

In general, the statutory mission refers to the following programs managed by the ASRS:

1. The Defined Benefit Plan (The Plan).
2. The System (the plan in place prior to the DB plan which is closed to new participants).
3. A Retiree Health Insurance program and premium benefit supplement.
4. The Long Term Disability (LTD) program for disabled members.
5. Optional, Supplemental Defined Contribution Plans to employers.

# Our Vision.

*For the benefit of our members, the Arizona State Retirement System will be a top performing benefit plan administrator with a solid reputation and sustainable plan design.*

The agency will be a leader in the areas of:

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

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

# Our Values.

Our organizational culture will be based upon the following **PRIDE** 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.



# Strategic Priorities.

*The ASRS has identified six priorities for the next 5 years:*

- 1. Maintain Sustainable Benefit Plans**
- 2. Achieve Investment Goals**
- 3. Enhance Risk Management Capabilities**
- 4. Optimize Operational Effectiveness**
- 5. Provide Outstanding Customer Service**
- 6. Ensure Operational Continuity**

# Priority #1:

## Maintain Sustainable Benefit Plans



**Goal #1:** Ensure the cost-effectiveness and sustainability of ASRS benefit programs.

### Key Performance Indicators

- a) Employees and employers contribute the required defined benefit plan contribution and the plan is projected to achieve full funded status over the amortization period
- b) Contribution rates for the defined benefit plan are relatively stable over time and trend toward normal cost
- c) Employers indicate that the defined benefit plan contribution rate is affordable and manageable for the future benefit received
- d) Experience studies will ensure that actuarial assumptions and methods accurately portray the actuarial condition of the plan
- e) Actuarial audits will confirm the assumptions, procedures, methods and conclusions of the retained actuary are technically sound and conform to the appropriate Standards of Practice as promulgated by the Actuarial Standards Board
- f) Employers contribute the required health benefit supplement contribution and the plan is projected to achieve full funded status over the amortization period
- g) Contribution rates for the health benefit supplement are relatively stable over time and trend toward normal cost
- h) Percent of total active membership on long term disability
- i) Employees and employers contribute the required long term disability program contribution and the plan is projected to achieve full funded status over the amortization period
- j) Contribution rates for the long term disability program are relatively stable over time and trend toward normal cost

# Priority #1:

## Maintain Sustainable Benefit Plans

 **Goal #2:** Ensure responsible governance in the administration of ASRS and its benefit programs.

### Key Performance Indicators

- a) Successful completion of annual governance responsibilities as demonstrated in governance handbook
- b) Legislative initiatives introduced by or affecting the ASRS achieve the agency's desired outcome (pass or fail)
- c) Complete an assessment of risks associated with current legislation, rules, and business practices and report results, including recommended remediation strategies
- d) Few member and employer appeals are overturned at OAH or courts
- e) Percent of the agency's Key Performance Indicators (KPI) met within risk tolerance
- f) Obtain an unmodified opinion from the independent auditors on the ASRS' annual audited financial statements (CAFR)
- g) Obtain an unmodified opinion from the independent auditors on the ASRS' GASB 68 reporting schedules
- h) Obtain an unmodified opinion from the independent auditors on the ASRS' GASB 75 reporting schedules

# Priority #1:

## Maintain Sustainable Benefit Plans

 **Goal #3:** Communicate in a way that informs, educates and fosters trust and confidence among members, employers, and other stakeholders.

### Key Performance Indicators

- a) Members respond positively when asked if “ASRS operates in my best interest”
- b) Members respond positively when asked if “My retirement is secure with the ASRS”
- c) Stakeholders respond positively when asked if “The ASRS acts ethically”
- d) Stakeholders respond positively when asked if “the ASRS acts in the states best interest”
- e) Employers respond positively when asked “How do you rate the ASRS as an organization?”

## Priority #2:

# Achieve Investment Goals

 **Goal #4:** Design, implement, and maintain an investment management program that maximizes rates of return for acceptable of levels of risk.

### Key Performance Indicators

- a) Develop, approve and implement an Asset Allocation program that is expected to achieve a 20-year rolling average annual rate of return at or above the actuarial assumed rate
- b) Total fund net return compared to peer universe
- c) 1 year total fund net rate of return compared to Strategic Asset Allocation Benchmark
- d) 3-year total fund net rate of return compared to Strategic Asset Allocation Benchmark
- e) 1 year asset class net rates of return compared to respective Asset Allocation Benchmark
- f) 3 year asset class net rates of return compared to respective Asset Allocation Benchmark

## Priority #3:

# Enhance Risk Management Capabilities

 **Goal #5:** Develop and maintain a robust security program that ensures appropriate data security, privacy protection, and cash controls.

### Key Performance Indicators

- a) Independent assessment of the agency's overall information security program maturity level when measured against the Gartner maturity model
- b) Number of unacceptable risks identified with a score of 15 or higher in internal risk assessment that have not been addressed within 12 months
- c) Maturity level identified in annual internal information risk maturity assessment
- d) Agency's vulnerability risk score compared to other state agencies with assets (computers, servers, etc.) of 500 or more when measured by the Risk Sense tool
- e) Number and severity of security-related issues identified through static code analysis software
- f) Implement dynamic application analysis software; develop performance standards related to use of this tool
- g) Percent of Security Plan priorities, action items and milestones achieved
- h) Independent assessment of the agency's overall privacy program maturity when measured against the Gartner maturity model and within the GAPP framework every other year
- i) Percent of Privacy Plan priorities, action items, and milestones achieved
- j) Independent assessment of the agency's cash controls every three years
- k) Percent of cash control remediation plan, priorities, action items and milestones achieved

## Priority #3:

# Enhance Risk Management Capabilities

 **Goal #6:** An enterprise-wide risk management (ERM) program will provide reasonable assurance that the agency has identified and is managing and mitigating risks most likely to impede the agency's ability to meet its mission, vision, goals and objectives.

### Key Performance Indicators

- a) Provide Executive Management Team (EMT) with an overview of agency ERM practices, priorities, risk appetites, incidents where risks fell outside of accepted risk levels, and corresponding mitigation actions
- b) Follow up on emergency response plan tests, report progress on identified plans of action
- c) Review the agency's emergency response plan (including incident response plans, procedures and events) and ensure DEMA requirements are satisfied
- d) An internal audit plan is formulated based on agency risks, goals, objectives, standards and metrics
- e) Percentage of scheduled internal audit and consulting plan completed

# Priority #4:

## Optimize Operational Effectiveness

 **Goal #7:** Manage budgets and implement strategies designed to improve operational effectiveness and/or make the ASRS more cost effective.

### Key Performance Indicators

- a) Total annual administrative expense variance (including special line item expenditures for service/security enhancements and anticipated cost reductions)
- b) Percent reduction in base administrative expenses from July 1, 2017 to June 30, 2020 (excluding special line item expenditures)
- c) Pension operations service score compared to peers as measured by CEM benchmarking
- d) Pension operations cost per member and annuitant compared to peers as measured by CEM benchmarking
- e) Relative service versus relative cost score measured in CEM pension administration benchmarking study
- f) Percent of Lean report priorities, action items and milestones achieved
- g) Percent of technology plan priorities, action items and milestones achieved

# Priority #4:

## Optimize Operational Effectiveness

 **Goal #8:** Provide members and business users with technology that is high-performing, and able to support evolving business needs.

### Key Performance Indicators

- a) Core applications and components are kept up to date
- b) Number of core applications that had an unplanned downtime of 0.5% or more during business hours
- c) Percent of overall user satisfaction with core business applications (PERIS, POL, PWEB, imaging)
- d) Percent of overall user satisfaction with non-core business applications (MUNIS, office suite, IQ, COTS products)
- e) Determine and implement industry best practices, including staff size and structure, costs and reporting for development teams in organizations of similar size and complexity
- f) Research and implement productivity measures for system development, including improved ROI analysis
- g) Take steps to plan for a reduction in system development teams from 8 to 6 by July 2021, ensuring security and business needs continue to be met

# Priority #5:

## Provide Outstanding Customer Service

 **Goal #9:** Members and employers will receive timely and accurate service that results in high levels of customer satisfaction.

### Key Performance Indicators

- a) Percent of member calls answered within 20 seconds
- b) Percent of member secure messages answered within business day
- c) Percent of overall satisfaction with member calls
- d) Percent of overall satisfaction with member secure messaging
- e) Percent of counseled members who are satisfied overall
- f) Percent of employer secure messages answered within 2 business days
- g) Percent of overall satisfaction with employer secure messaging
- h) Percent of employers responding positively (response 4-5) that ASRS contributes to a total compensation package that helps their organization attract new employees
- i) Percent of employers responding positively (response 4-5) that ASRS contributes to a total compensation package that helps their organization retain employees
- j) Number of employers engaged by ASRS to discuss potential risk events identified through data review and analysis
- k) Number of employers engaged by ASRS that require a remediation plan due to non-compliance
- l) Percent of employer remediation plans successfully executed within 12 months of notification
- m) Percent of employers that repeat non-compliance after remediation efforts

# Priority #5:

## Provide Outstanding Customer Service

 **Goal #10:** Member disbursements will be distributed timely, accurately, and cost-effectively, resulting in high levels of member satisfaction.

### Key Performance Indicators

- a) Percent of new retiree applicants that receive their first payment within 10 business days of their retirement date
- b) Percent of members satisfied with the new retiree process
- c) Percent of pension payments disbursed to annuitants on or before the first business day of each month
- d) Percent of forfeiture benefits paid within 5 business days of receipt of request and any additional required documents and information
- e) Percent of members satisfied with the forfeiture process
- f) Percent of survivor benefit annuity calculations finalized within in the first month possible following receipt of all documentation and information
- g) Percent of lump sum payments disbursed to beneficiaries within 10 business days of receipt of required documentation and information
- h) Percent of beneficiaries satisfied with the survivor benefit process

# Priority #5:

## Provide Outstanding Customer Service

 **Goal #11:** Contributions and data received from members and employers will be processed and managed efficiently and effectively.

### Key Performance Indicators

- a) Percent of members that receive a service purchase cost invoice within 5 business days
- b) Percent of members satisfied with the service purchase process
- c) Percent of employers satisfied with the contribution process
- d) Percent of active member accounts that have a complete demographic profile containing a valid Social Security Number, name, birth date, and address
- e) Percent of inactive members that have a valid birth date and address

## Priority #5:

# Provide Outstanding Customer Service



**Goal #12:** For the sole benefit of all eligible members, the ASRS will offer health insurance plans which have the following characteristics:

1. Cost Competitive, with respect to each marketplace
2. Accessible, with respect to provider networks
3. Efficient, with respect to enrollment and in-plan navigation
4. Strong Customer Service, from vendors and ASRS staff

### Key Performance Indicators

- a) Report to EMT on cost competitiveness of the health insurance plans compared with like plans and/or marketplaces including opportunities for improvements, recommendations, action items and milestones
- b) Percent of members that are satisfied with the cost of health insurance plans for the benefits received
- c) Percent of eligible members participating in an ASRS health insurance plan
- d) Percent of health insurance performance guarantees that are met and enforced
- e) Percent of members that are satisfied with the cost of dental insurance plans for the benefits received
- f) Percent of eligible members participating in an ASRS dental insurance plan

## Priority #5:

# Provide Outstanding Customer Service



**Goal #13:** The ASRS will administer a Long Term Disability plan that is competitive, efficient and satisfies members.

### Key Performance Indicators

- a) Percent change in administrative expenses per disabled member
- b) Percent of long term disability performance guarantees that are met and enforced
- c) Percent of members that are satisfied with the LTD approval process based on the quarterly survey conducted by vendor
- d) Percent of members that are satisfied with the LTD maintenance process based on the quarterly survey conducted by vendor

# Priority #6: Ensure Operational Continuity

 **Goal #14:** Recruit, retain and develop a high-performing and engaged workforce that is capable of achieving agency goals and implement workforce plans that prepare future leaders and ensure continuity in key positions.

## Key Performance Indicators

- a) Total annualized rolling turnover rate compared to the State of AZ and BLS turnover rates
- b) Percent of voluntary separations with a tenure of five or more years (excludes separation due to retirement)
- c) Percent of employees receiving salaries within ten percent of identified target compensation
- d) Ratio of engaged to disengaged employees as measured in ADOA engagement survey
- e) Percent of key positions in workforce plan with at least 2 candidates identified



# Arizona State Retirement System

3300 N Central Avenue, Phoenix AZ 85012



# FUNDING ISSUE 1: OPERATING BUDGET – CLOUD MIGRATION AND RELATED EXPENDITURES

---

## **Description of Issue**

Information technology provides the framework for the ASRS business model. As the landscape continues to change and gain sophistication, IT organization, skills, processes, and tools, particularly as they relate to security levels and risk mitigation, need to continue to progress to effectively support and align business and service requirements.

In 2019, the Arizona Department of Administration (ADOA) Strategic Enterprise Technology Office (ASET) implemented a Cloud First policy. This initiative requires the use of cloud technologies for infrastructure, platforms, and software. The ASRS has been taking steps to achieve enhanced operational efficiency, as well as position the agency for a successful migration to the cloud, by re-designing the ASRS application architecture and ensuring platforms and applications are upgraded to be supported and compatible within the new environment. In conjunction with finalizing the transition to the cloud, additional required actions for core applications also will be taken in FY 2022. While operations in the cloud may potentially realize longer-term savings to the ASRS, the initial cost of conversion and presence in the cloud will require additional investment.

## **Proposed Solution**

In FY 2022, to ensure sufficient funding to sustain business operations without disruption, the ASRS requests an increase of \$775,000 in appropriations to support the Cloud First policy, to appropriately maintain core applications, and to improve current processes for continued efficient performance. The additional appropriations will fund the following:

- 1) **Cloud Migration and Services** - The ASRS will migrate its infrastructure for data, systems, servers, and processes from its current physical data center to a cloud environment. Transition costs to the cloud will require \$225,000 for consulting resources to successfully manage and complete the migration.

In addition to the identified deployment costs, the database services, network connectivity, storage, backup and other utility management monthly invoiced costs are estimated to total \$300,000 in FY 2022. This amount only represents costs associated with an incremental presence in the cloud and a partial year of service as operations are migrated. Once fully transitioned to the cloud in FY 2023, the estimated Other Operating Expenses will be between \$730,000 and \$775,000 annually.

- 2) **Document Management System** - The ASRS will necessarily upgrade the current version of its document workflow application, which is necessary to eliminate any disruption in service. The conversion will require \$150,000 to implement.
- 3) **Data Subsetting** - The ASRS will purchase a software product compatible with core applications to allow development teams to utilize only the relevant section of the ASRS's database rather than the full system when working on improvements or programming changes. This product will enable the ASRS to work on improvements without affecting the entire database or creating business disruption; it will also further enhance data security. The initial purchase requires an outlay of \$100,000; subsequent licensing renewals will be approximately \$25,000 plus market increases annually.

The ASRS believes the \$775,000 request for these information technology actions in FY 2022 will be comparable to the estimated ongoing Other Operating Expenditures the agency will experience for cloud services and software licensing and support into FY 2023. Beginning in FY 2023, the ASRS will be able to begin to evaluate the actual experienced costs under the Cloud First policy and other

technology developments to determine whether a future request for a decrease or an increase in base operating appropriations would be judicious. The timeline to complete cloud migration could accelerate depending upon the speed of implementation; if that were to be the case, the agency would be able to better estimate the actual or anticipated ongoing cost for the Cloud First policy and its affect upon the ASRS sooner.

### **Alternatives Considered**

A request for a special line item appropriation for the three specific information technology activities costs outlined; and then in FY 2023, a budget request for the costs associated with the ongoing conformance with the state's Cloud First policy.

### **Impact of Not Funding**

The agency will be unable to migrate to the cloud as mandated and will be out of compliance with the state's Cloud First policy.

Additionally, the document-management system application currently in use will lose its support without the upgrade as scheduled. This would adversely affect participating employers and members as retirement-related transactions and actions would experience significant disruption.

## FUNDING ISSUE 2: CONTINUOUSLY APPROPRIATED FUNDING

---

### **Description of Issue**

In accordance with A.R.S. § 38-721(C), expenditures for certain investment and administrative costs are continuously appropriated in the amount deemed necessary by the ASRS Board.

The ASRS utilizes continuously appropriated dollars for the following expenses to complement ASRS operations and member service functions.

### **1. Investment management and related consulting fees necessary to meet the Board's investment objectives**

- Internal investment management - ASRS Investment Management Division (IMD) staff salaries and employee benefits, travel, education and training, rent, and other operational costs.
- External investment management
  - Public Markets investment management fees and transactional and other fees, which include foreign taxes and commissions on derivatives and other incidental costs. Quarterly investment management fees are calculated based on the market value of the investments, using the assumption of a 7.5% annual rate of return less estimated net cash flows of 2.5%. Accordingly, the fees are directly correlated with both investment performance as well as net cash flows.
  - Private Markets investment management fees and performance incentive and carried interest fees, which are only paid if earned - upon successful performance of the manager after other return criteria are met – or incurred, and other contractually agreed-upon fees and expenses. Investment management fees are calculated based on the percentage of committed capital to the program. The fees are correlated to capital commitments in the program and are calculated on a cash basis. Due to the nature of the investments and contingent variables, estimated annual performance incentive and other fees are not projected and are only reported, on a cash basis, when identified and paid.
- Consulting fees - investment-related consulting and legal fees, electronic information services and subscriptions, custodial banking administrative fees, and external auditing service fees.

### **2. Administrative costs**

- Rent – costs required as tenants for occupancy at 3300 N Central Avenue in Phoenix and in the leased office space in Tucson.
- Actuarial fees – costs for consulting services related to plan design, health benefits, administration, and valuations.
- Pension Payroll - costs associated with administering and safeguarding retiree

## FUNDING ISSUE 2: CONTINUOUSLY APPROPRIATED FUNDING

---

pension benefits, disbursements and personally identifiable information (PII) for ASRS member and employer accounts.

For the ASRS to successfully meet its statutory purpose, it is critical for the agency to establish and maintain an effective data, transactional and network security program. Over the past several years, the ASRS has allocated resources to concentrate on data and network security as well as on reducing risks. A dedicated development and support security team is focused on the prevention of fraud, with activities and work efforts centered around enhancing the functions, applications, and processes related to disbursements to further safeguard pension-related benefits. To align budgetary funding source with statutory structure, the ASRS utilizes continuously appropriated funds for the associated costs of the ASRS security program in the Personal Services, Employee Related Expenditures, and Professional and Outside Services categories.

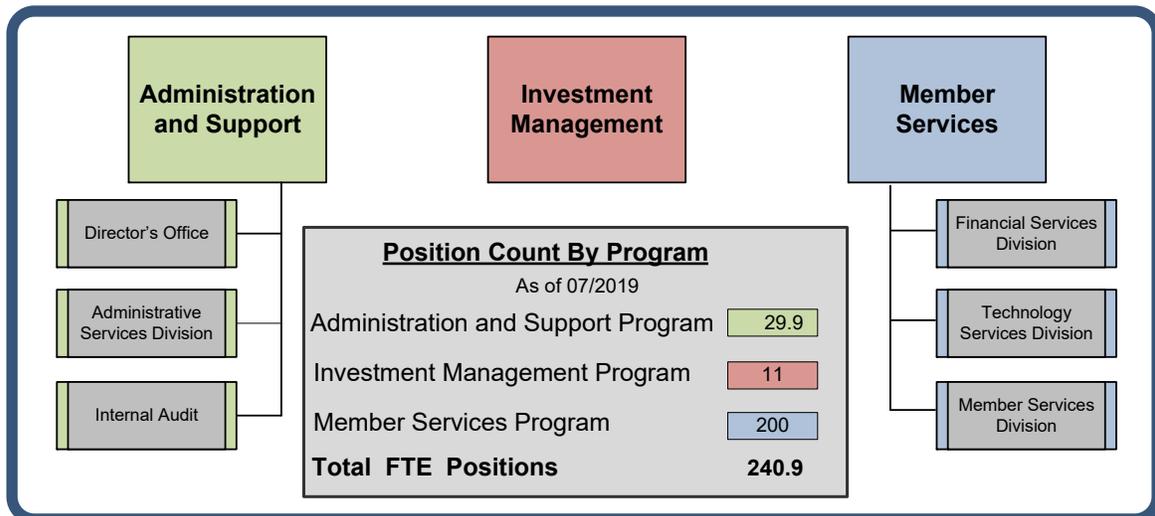
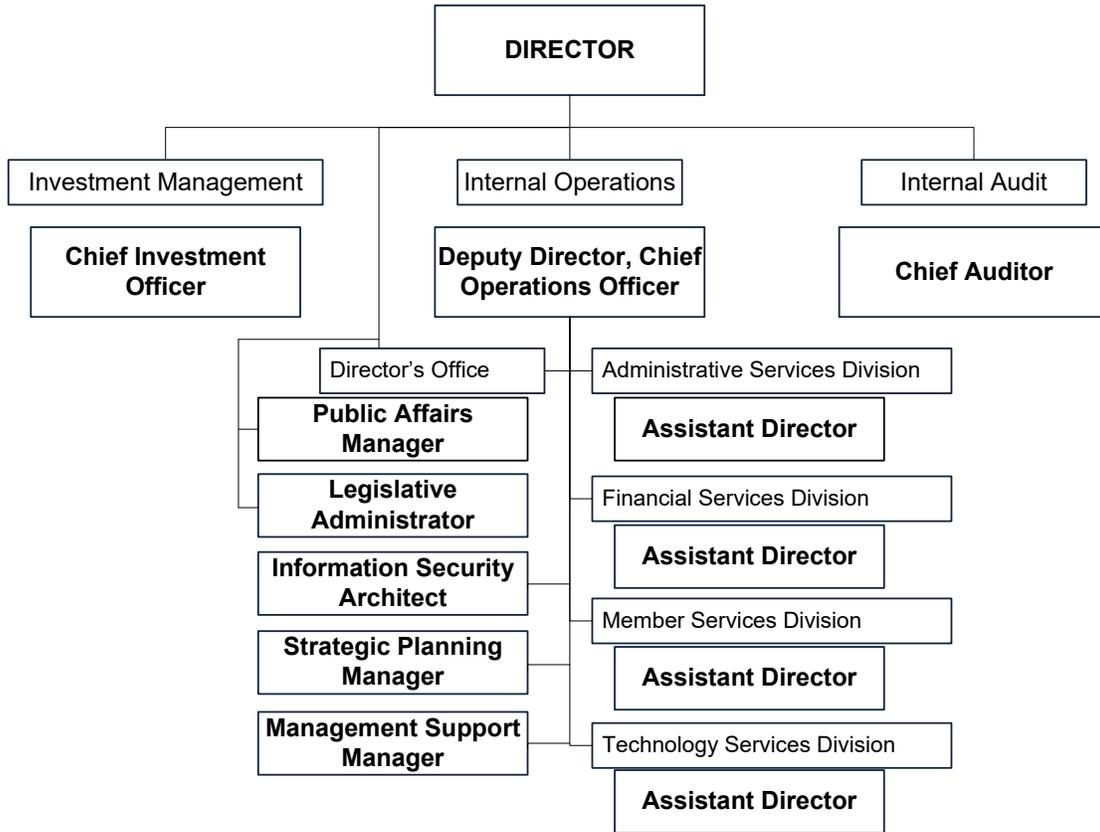
In FY 2022, the ASRS will also dedicate resources to the following projects:

- The Information Protection and Security project (Approved PIJ RT19002) - to increase the security of Personally Identifiable Information (PII) and to create a stronger data logging system and monitoring tools for internal applications. This will reduce access and exposure to PII during the course of performing business functions, as well as improve the ASRS's privacy and security posture. Initial work on this three-plus-year project begins in FY 2021. Expenditures include FTE Personal Services and Employee Related Expenditures, Professional and Outside Services, and Equipment purchases.
- Pension Payroll Calculation project (PIJ submission in process) - to update and re-engineer the pension payroll application coding to achieve efficiency in producing timely and accurate payments. The current payroll processing applications are written in aging code and are batch based, which increases support costs and creates delays. FY 2022 will represent the first year of the approximately three-year project. Expenditures include FTE Personal Services and Employee Related Expenditures and may include Professional and Outside Services.
- Disbursements projects – to provide enhancements to processes and systems related to pension payroll and disbursements to improve security, service, and performance, such as automating complex transactions and service audits. Expenditures include FTE Personal Services and Employee Related Expenditures and may include Professional and Outside Services.

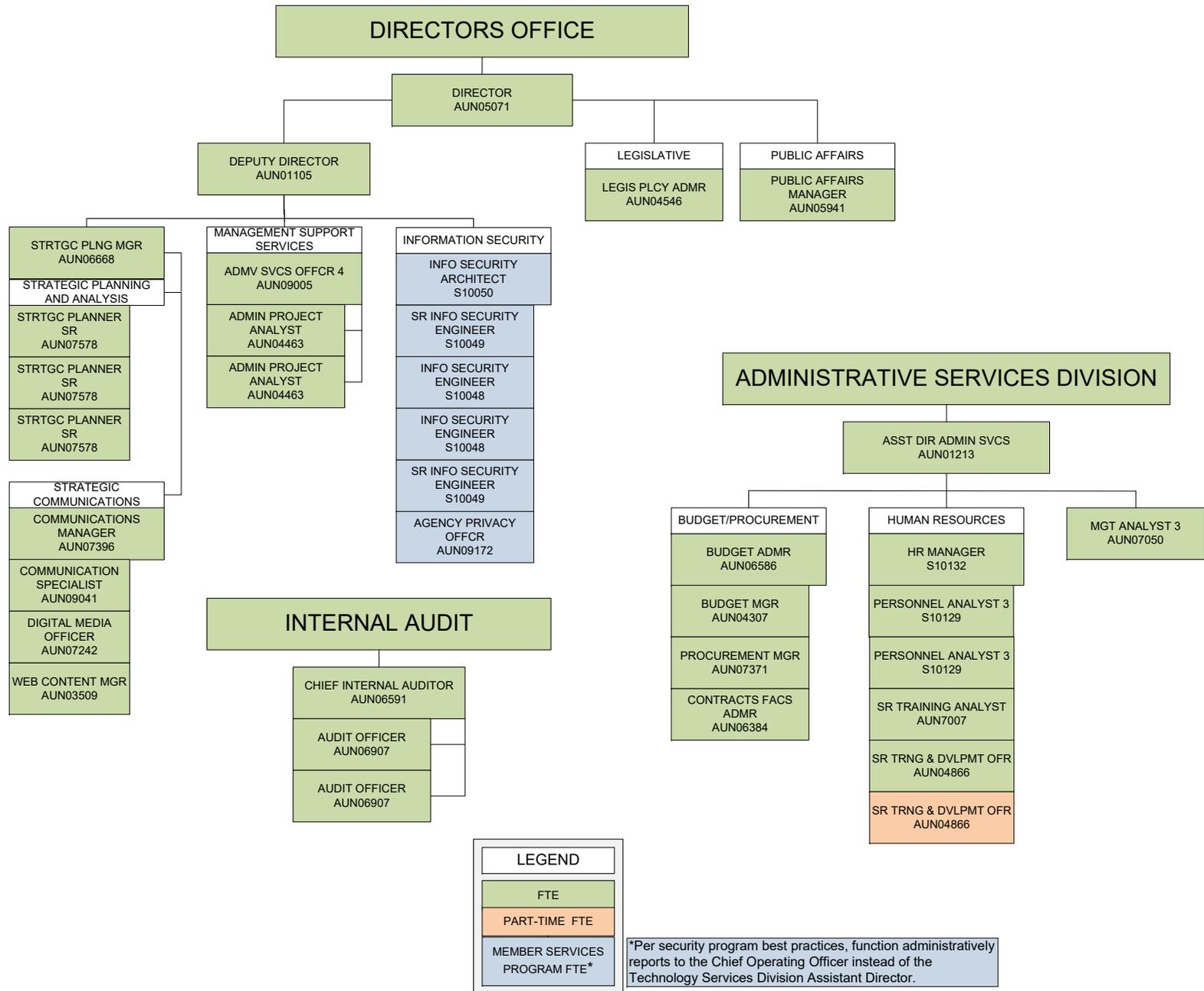
### **Proposed Solution**

For FY 2022, current projections indicate the ASRS will utilize an estimated \$109,753,200 of continuously appropriated funds. Investment management and related consulting fees comprise approximately 95% of the expected expenditures, while administrative and other costs that support the member services program represent the remaining 5%.

# Arizona State Retirement System

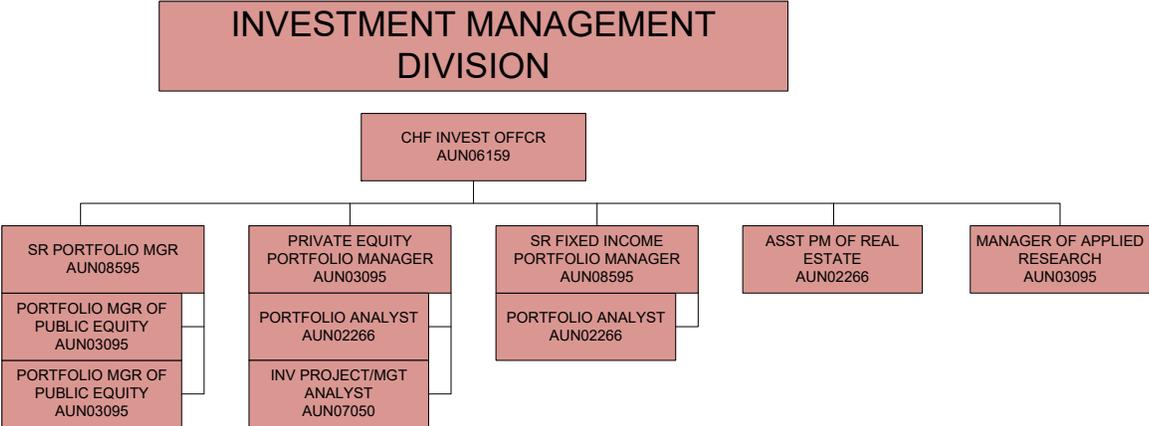


# ADMINISTRATION AND SUPPORT PROGRAM





# INVESTMENT MANAGEMENT PROGRAM



### Funded Status

Total Fund (Market Value)  
**\$41.83 billion**

### Total Plan Funded Status

(Actuarial value as of June 30, 2018)  
**72.3%**

### Rates of Return

Total Fund Net Rate of Return  
(Fiscal year end June 30, 2019)  
**6.6%**

10-Year Rate of Return  
**10.4%**

Rate of Return Since Inception  
**9.7%**

### Contribution Rates

FY2019-20 Contribution Rate  
(Effective July 1, 2019)  
Covers pension, retiree health insurance benefit, LTD  
**12.11%**

FY2020-21 Contribution Rate  
(Effective July 1, 2020)  
Covers pension, retiree health insurance benefit, LTD  
**12.22%**



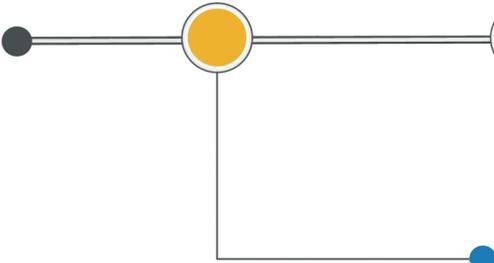
## Total Fund



## Returns



## Contributions

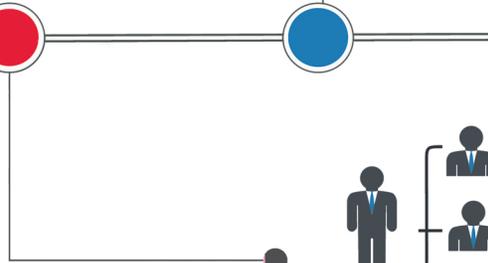


## Members

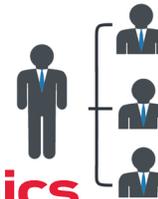


### Membership

Total Membership **608,150**  
Employer Participants **667**  
(Including state agencies)



## Demographics



### About Our Members

Active Members **211,945**  
Average Age **45.5**  
Average Annual Salary **\$49,655**

Inactive Members **233,309**

Retired Members and  
Survivor Beneficiaries **159,569**

LTD Members **3,327**



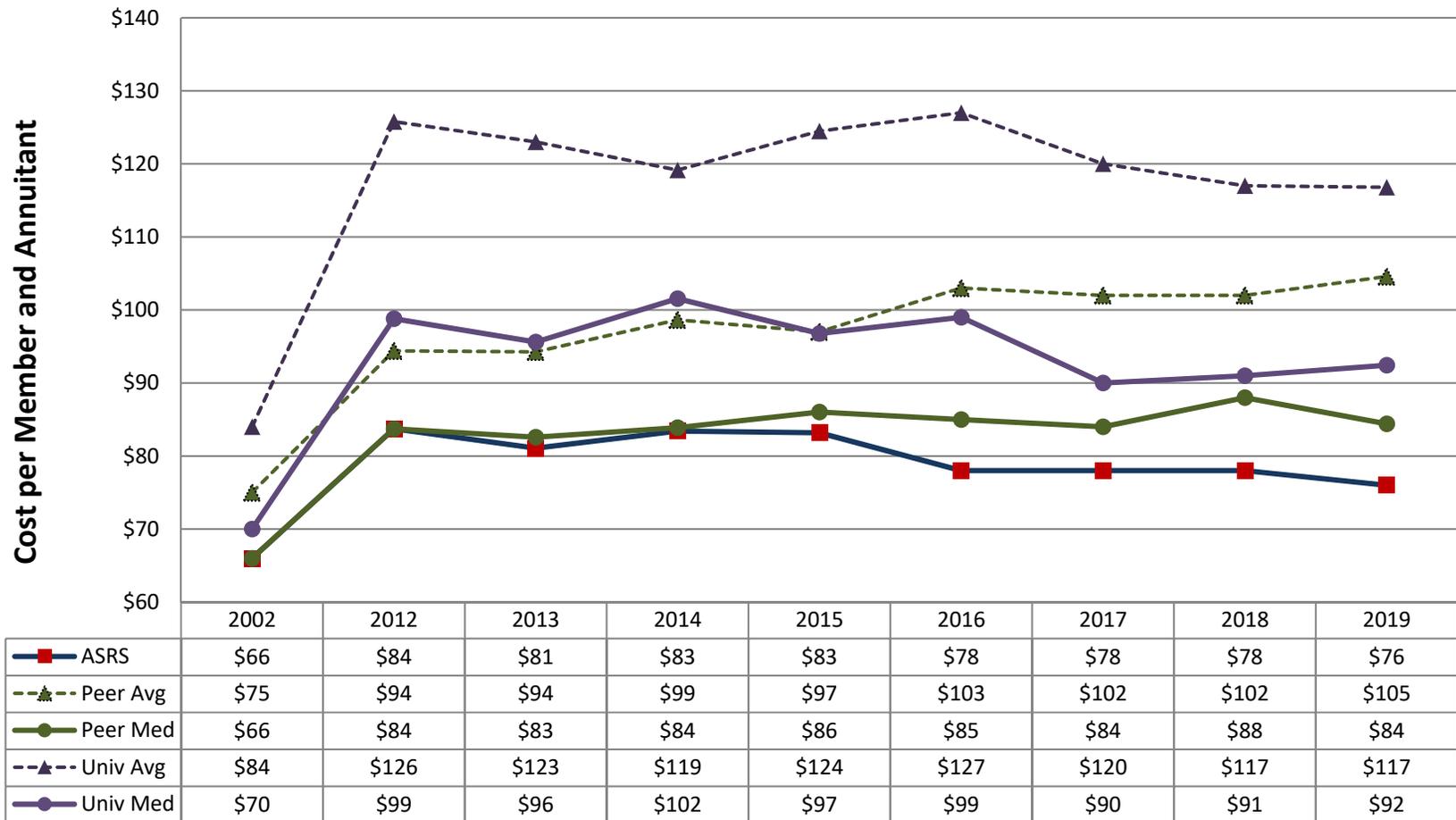
## Recipients



### About Our Benefit Recipients

Average Monthly  
Retirement Benefit **\$1,690**  
Average Annual Retirement **\$20,304**  
Average Age **71.4**

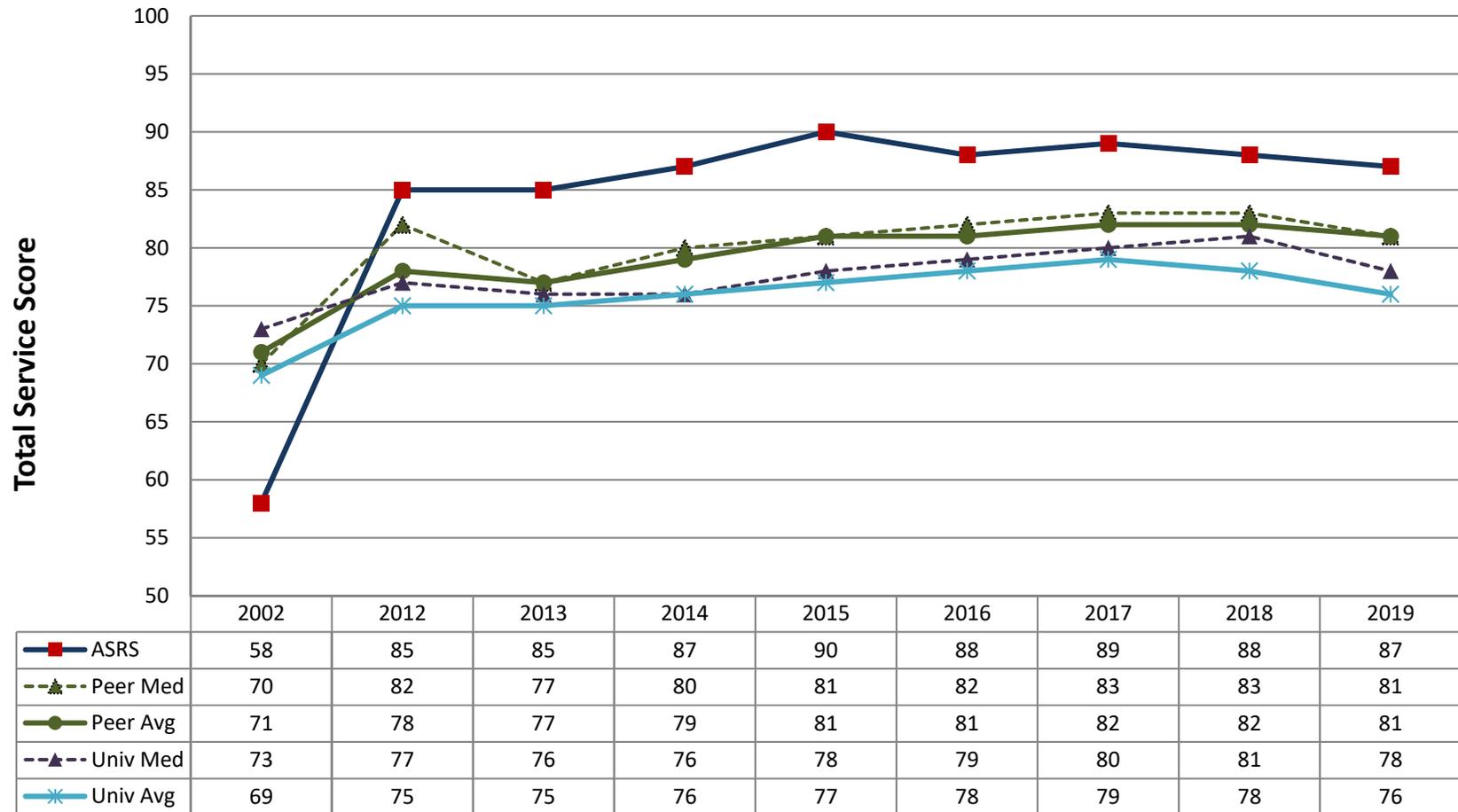
# Trends in Total Pension Administration Cost (as of June 30, 2019)



**ASRS Objective:** Lowest Quartile Cost. Currently below medians and averages, and driving costs lower.

Data is from CEM Benchmarking, which is a company that measures cost and service levels of pension systems across the US and internationally.

# Trends in Pension Administration Service Levels (as of June 30, 2019)



**ASRS Objective:** Highest Quartile Service. Currently above medians and averages, and driving service levels higher.

Data is from CEM Benchmarking, which is a company that measures cost and service levels of pension systems across the US and internationally.

ARIZONA STATE RETIREMENT SYSTEM  
ANNUAL ACTUARIAL VALUATION – FUNDING  
AS OF JUNE 30, 2019



December 13, 2019

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

**Re: Actuarial Valuation for Funding Purposes as of June 30, 2019**

Members of the Board:

We certify that the information contained in this report is accurate and fairly presents the actuarial position of the Arizona State Retirement System as of June 30, 2019. This report was prepared at the request of the Board and is intended for use by ASRS staff and those designated or approved by the Board. This report may be provided to parties other than ASRS only in its entirety and only with the permission of the Board.

### **Actuarial Valuation**

The primary purposes of the actuarial valuation report are to determine the employer and member contribution rates, describe the current financial condition of ASRS, analyze changes in the condition of ASRS, and provide various summaries of the data.

### **Plan Provisions**

Our actuarial valuation as of June 30, 2019 reflects the benefit and contribution provisions set forth in Title 38 Chapter 5 Article 2 of the Arizona Revised Statutes. The current plan provisions are outlined in Appendix I of this report.

### **Actuarial Assumptions and Methods**

The assumptions and methods applied in this actuarial valuation were adopted by the Board of Trustees on October 27, 2017 based on the Report on the Actuarial Experience Study covering a five-year period from July 1, 2011 to June 30, 2016, dated October 18, 2017. We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ASRS.

The results of the actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods. A review of the impact of a different set of assumptions on the funded status of the plan is outside the scope of this actuarial valuation.

The current actuarial assumptions and methods are outlined in Appendix III of this report.

## Data

The valuation was based upon information as of June 30, 2019, furnished by ASRS staff, concerning system benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by ASRS staff.

## Certification

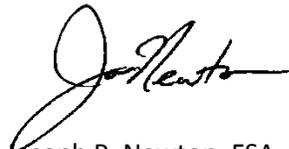
All of our work conforms with generally accepted actuarial principles and practices, and to the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of, where applicable, the Internal Revenue Code and ERISA.

The signing actuaries are independent of the plan sponsor. Ryan Falls and Joe Newton are Enrolled Actuaries, Fellows of the Society of Actuaries, and Members of the American Academy of Actuaries and Paul Wood is an Associate of the Society of Actuaries and a Member of the American Academy of Actuaries. All three meet the Qualification Standards of the American Academy of Actuaries. Finally, each of the undersigned are experienced in performing valuations for large public retirement systems.

Respectfully submitted,  
**Gabriel, Roeder, Smith & Company**



R. Ryan Falls, FSA, EA, MAAA  
Senior Consultant and Actuary



Joseph P. Newton, FSA, EA, MAAA  
Pension Market Leader and Actuary



Paul T. Wood, ASA, FCA, MAAA  
Consultant and Actuary

# Table of Contents

		<u>Page</u>
	Cover Letter	
<b>Section A</b>	Executive Summary.....	2
<b>Section B</b>	Discussion.....	5
<b>Section C</b>	Tables	
Table 1	Development of Employer Cost.....	9
Table 2	Actuarial Present Value of Future Benefits.....	10
Table 3	Analysis of Normal Cost .....	11
Table 4	Historical Summary of Active Member Data .....	12
Table 5	Reconciliation of Plan Net Assets.....	13
Table 6A	Development of Actuarial Value of Assets – 401(a) .....	14
Table 6B	Development of Actuarial Value of Assets – 401(h) .....	15
Table 6C	Development of Actuarial Value of Assets - System.....	16
Table 7	History of Investment Return Rates.....	17
Table 8	History of Cash Flow .....	18
Table 9	Total Experience Gain or Loss .....	19
Table 10	Schedule of Funded Liabilities by Type .....	20
Table 11	Schedule of Funding Progress.....	21
Table 12	Schedule of Plan Retirees and Beneficiaries Added to and Removed from Rolls .....	22
Table 13	Permanent Benefit Increase Calculation .....	23
Table 14A	Amortization Bases – 401(a) .....	24
Table 14B	Amortization Bases – 401(h).....	25
<b>Appendices</b>		
Appendix I	Summary of Plan Provisions.....	27
Appendix II	Historical Changes to the Plan Provisions.....	34
Appendix III	Summary of Actuarial Assumptions and Methods .....	50
Appendix IV	Detailed Summaries of Membership Data.....	57
Appendix V	Risk Associated with Measuring the Accrued Liability and Actuarially Determined Contribution.....	68
Appendix VI	Glossary.....	72

## **SECTION A**

---

### **EXECUTIVE SUMMARY**

## Executive Summary

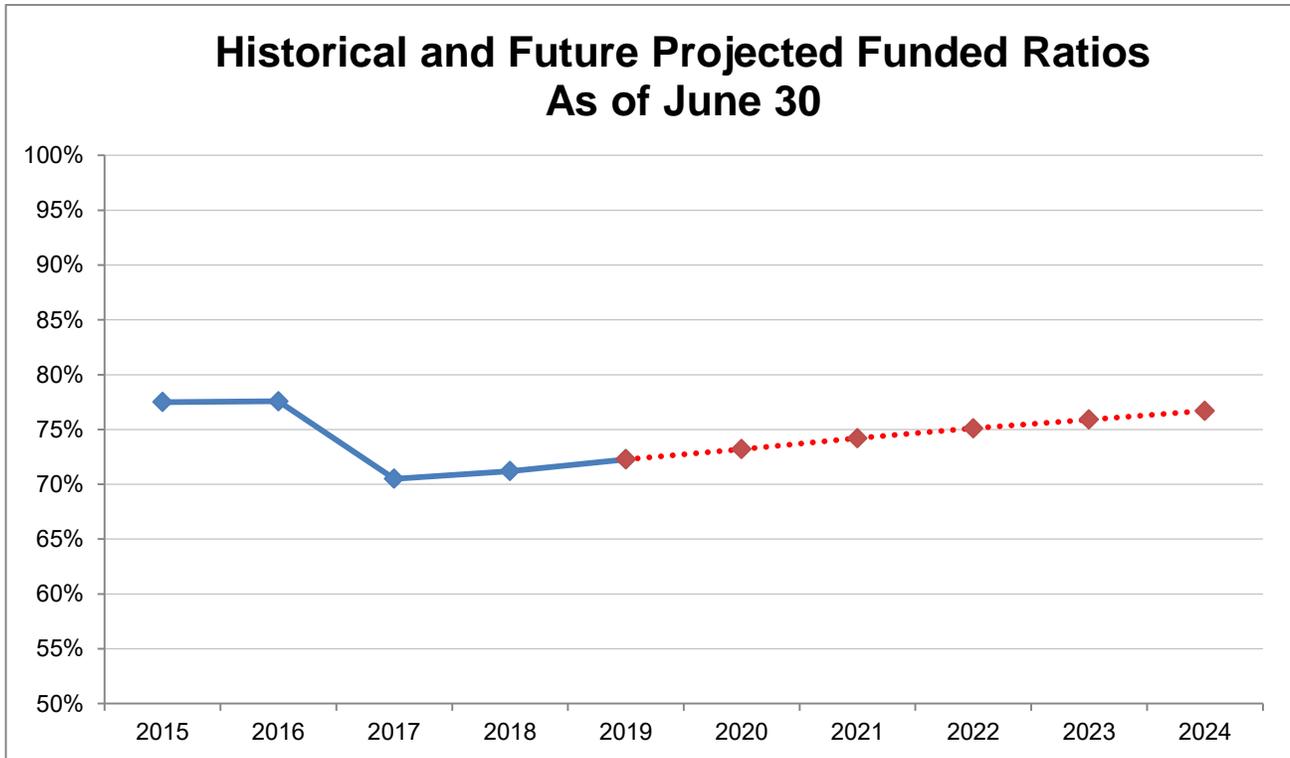
Item	2019	2018
<b>Membership</b> <ul style="list-style-type: none"> <li>• Number of               <ul style="list-style-type: none"> <li>- Active members</li> <li>- Retirees, beneficiaries, and disableds*</li> <li>- Inactive non-retired members</li> <li>- Long term disabled (LTD)</li> <li>- Total</li> </ul> </li> <li>• Valuation Payroll for subsequent fiscal year</li> </ul>	208,244 151,878 239,073 3,189 <hr style="width: 100px; margin-left: 0;"/> 602,384 \$ 10,340,300,426	207,119 146,956 233,484 3,358 <hr style="width: 100px; margin-left: 0;"/> 590,917 \$ 9,921,214,513
<b>Contribution rates - Before Phase In Policy</b> <ul style="list-style-type: none"> <li>• Members</li> <li>• Employers</li> </ul>	FYE 2021 12.39% 12.39%	FYE 2020 12.63% 12.63%
<b>Contribution rates - After Phase In Policy</b> <ul style="list-style-type: none"> <li>• Members</li> <li>• Employers</li> </ul>	FYE 2021 12.04% 12.04%	FYE 2020 11.94% 11.94%
<b>Assets</b> <ul style="list-style-type: none"> <li>• Market value (MVA)**</li> <li>• Actuarial value (AVA)**</li> <li>• Return on market value</li> <li>• Return on actuarial value</li> </ul>	\$ 41,556,800,159 \$ 40,568,589,169 6.3% 8.2%	\$ 40,166,794,468 \$ 38,592,895,025 9.6% 8.2%
<b>Actuarial Information on AVA (smoothed) Basis</b> <ul style="list-style-type: none"> <li>• Actuarial accrued liability**</li> <li>• Unfunded actuarial accrued liability (UAAL)**</li> <li>• Funded ratio</li> </ul>	\$ 56,127,566,734 \$ 15,558,977,565 72.3%	\$ 54,176,737,273 \$ 15,583,842,248 71.2%
<b>Actuarial Information on MVA Basis</b> <ul style="list-style-type: none"> <li>• Unfunded actuarial accrued liability (UAAL)**</li> <li>• Funded ratio</li> </ul>	\$ 14,570,766,575 74.0%	\$ 14,009,942,805 74.1%

\* Excludes System members and members currently receiving benefits from the LTD Program

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

*The Board made the policy decision to phase in the impact to the contribution of the assumption changes over a five year period. This phase in resulted in a total contribution rate of 24.08% of total payroll effective July 1, 2020. This policy provides for a smooth transition to the higher contribution rates over a reasonable period of time.*

The following chart illustrates the recent history and outlook of the funded status of ASRS over the next five years:



June 30,	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Funded Ratio	77.5%	77.6%	70.5%	71.2%	72.3%	73.2%	74.2%	75.1%	75.9%	76.7%
UAAL (in billions)	\$10.0	\$10.3	\$15.4	\$15.6	\$15.6	\$15.5	\$15.3	\$15.2	\$15.1	\$14.9
EE/ER Contribution	11.34%	11.34%	11.64%	11.94%	12.04%	12.14%	12.22%	12.17%	12.12%	12.09%

The projections beyond 2019 are based on the same assumptions, methods and provisions used for the June 30, 2019 valuation. The contribution rates above reflect the Board’s phase in policy.

The significant decline in 2017 was due to the changes in assumptions, most notably the decrease in the investment return assumption to 7.50%. Prospectively, the funded status is expected to improve annually. Assuming the market value of assets earns 7.50% per year; ASRS is projected to reach full funding in 2047.

## **SECTION B**

---

### **DISCUSSION**

# Discussion

## Introduction

The results of the June 30, 2019 actuarial valuation of the Arizona State Retirement System are presented in this report.

The primary purposes of this actuarial valuation report are to determine the employer and member contribution rates, describe the current financial condition of ASRS, analyze the changes in the condition of ASRS, and provide various summaries of the data.

The total contribution rate for fiscal year ending June 30, 2021, is 24.08% of payroll. This contribution rate is shared equally between the employer and the employee.

All of the tables referenced in the following discussion appear in Section C of this report.

## Plan Provisions

There were no changes to the plan provisions during the past year that impact the valuation. The current plan provisions are outlined in Appendix I of this report and a history of changes made to the plan provisions are outlined in Appendix II.

## Actuarial Assumptions and Methods

The assumptions and methods applied in this actuarial valuation were adopted by the Board of Trustees on October 27, 2017 based on the Report on the Actuarial Experience Study covering a five-year period from July 1, 2011 to June 30, 2016, dated October 18, 2017. There were no changes to the actuarial assumption and methods during the past year except as noted below.

The Board approved the following changes to the methods as a result of the recent Actuarial Audit:

- Implement a 25 year amortization period for unexpected changes in the unfunded actuarial accrued liability in the future
- Implement a 30% corridor where the actuarial value of assets is limited to be within 70% and 130% of the market value of assets
- Consider including recent experience in the phase-in method for contribution rate calculations

We believe the assumptions are internally consistent and are reasonable, based on the actual experience of ASRS.

The results of the actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods. A review of the impact of a different set of assumptions on the funded status of ASRS is outside the scope of this actuarial valuation.

The current actuarial assumptions and methods are outlined in Appendix III of this report.

## Funding Adequacy

The financial objectives of the Plan are to: (1) maintain reasonably stable contribution rates, and (2) achieve an ultimate funded status of 100%. In order to achieve these objectives, the Board has adopted a layered, closed 25-year amortization period with level percent of pay payments for the 401(a) portion of the Plan and a 15-year period for the 401(h) portion. Furthermore, the Board made the policy decision in 2017 to phase in the impact to the contribution of the assumption changes over a five year period beginning with fiscal year 2019. This policy provides for a smooth transition to the ultimate contribution rates over a reasonable period of time.

The actuarial valuation includes a calculation of 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 the unfunded actuarial accrued liability. Contribution rates are set annually, based on the valuation of the preceding year. The rate calculated in this report (24.08% of payroll) will apply in the fiscal year beginning July 1, 2020. The rate calculated as part of the prior valuation (23.88% of payroll) applied in the fiscal year that began July 1, 2019. Employers and employees share equally in the contribution rate determined as part of the valuation.

The unfunded actuarial accrued liability (UAAL) of ASRS was \$15.6 billion as of June 30, 2018 and June 30, 2019. Table 9 provides a summary of the changes in the UAAL and Tables 14A and 14B provide the amortization schedule for the current UAAL. Additionally, the funded ratio of ASRS—actuarial value of assets divided by the actuarial accrued liability—increased from 71.2% to 72.3% as of June 30, 2019. The funded status is one of many metrics used to show trends and develop future expectations about the health of a retirement system. The funded status measure itself is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations or assessing the need for or the amount of future contributions since it does not reflect normal cost contributions, the timing of amortization payments, or future experience other than expected.

## ASRS Assets

This report contains several tables that summarize key information with respect to the ASRS assets.

The total market value of assets increased from \$40.2 billion to \$41.6 billion (including the System assets) as of June 30, 2019. Table 5 reconciles the changes in the fund during the year.

Table 6A, 6B, and 6C shows the development of the actuarial value of assets for the 401(a), 401(h), and the System, respectively. Rather than use the ASRS' market value of assets, the valuation reflects a smoothed asset value. The actuarial value of assets is equal to the market value of assets less a ten-year phase-in of the difference between the expected investment return and actual income on the market value of assets. The actuarial value is currently 2.4% less than the market value.

The approximate investment return for the fiscal year ending June 30, 2019 was 6.3% when measured on market value and 8.2% when measured on actuarial value. Table 7 shows a history of return rates. The ASRS ten-year average market return, net of investment-related expenses is 10.3%. Prior to 2017, the annual returns were also net of administrative expenses.

Table 8 provides a history of the contributions paid into ASRS and the administrative expenses and benefit

payments that have been paid out of ASRS. This table shows that ASRS paid administrative expenses and benefit payments, in excess of contributions received, of \$1.1 billion (or 2.6% of assets) in fiscal year 2019.

## **Data**

The valuation was based upon information as of June 30, 2019, furnished by ASRS staff, concerning system benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by ASRS staff.

The tables in Appendix III show key census statistics for the various groups included in the valuation.

## **Permanent Benefit Increase**

The determination of the “Excess Investment Earnings” held in reserve for future Permanent Benefit Increases (PBIs) is shown in Table 13. There are now assets available for future PBIs. Since the investment return (on the actuarial value of assets) of 8.2% is above 8% for fiscal year 2019, “Excess Investment Earnings” will be reserved for future PBIs.

**SECTION C**

---

**TABLES**

# Table 1

## Development of Employer Cost

	June 30, 2019			June 30, 2018
	401(a)	401(h)	Total	Total
I. Actuarial accrued liabilities (AAL)				
A. Liabilities due to members' benefits				
1. Active members				
a. Retirement benefits	\$ 20,253,369,918	\$ 0	\$ 20,253,369,918	\$ 19,575,137,058
b. Health insurance premium supplement	0	615,293,766	615,293,766	613,320,829
c. Disability deferred retirement benefits	407,539,379	0	407,539,379	388,496,217
d. Pre-retirement death benefits	482,514,244	0	482,514,244	455,262,570
e. Withdrawal benefits	(1,023,256,449)	0	(1,023,256,449)	(1,001,621,928)
f. Total active members	<u>\$ 20,120,167,092</u>	<u>\$ 615,293,766</u>	<u>\$ 20,735,460,858</u>	<u>\$ 20,030,594,746</u>
2. Inactive members	2,728,313,841	103,136,490	2,831,450,331	2,629,068,417
3. Retired members and beneficiaries	30,296,682,222	801,780,428	31,098,462,650	30,064,030,641
4. Formerly disabled members now receiving benefits	1,123,094,699	39,540,613	1,162,635,312	1,134,872,720
5. Benefit increases for other-than-plan members	310,210	3,423,901	3,734,111	3,633,102
6. Post-1981 System members	295,823,472	0	295,823,472	314,537,647
7. Total actuarial accrued liabilities	<u>\$ 54,564,391,536</u>	<u>\$ 1,563,175,198</u>	<u>\$ 56,127,566,734</u>	<u>\$ 54,176,737,273</u>
II. Actuarial value of assets	<u>\$ 38,879,899,247</u>	<u>\$ 1,688,689,922</u>	<u>\$ 40,568,589,169</u>	<u>\$ 38,592,895,025</u>
III. Unfunded actuarial accrued liability (Item I. – Item II.)	<u>\$ 15,684,492,289</u>	<u>\$ (125,514,724)</u>	<u>\$ 15,558,977,565</u>	<u>\$ 15,583,842,248</u>
IV. Amortization of unfunded actuarial accrued liability (per Section 38-737)				
A. Unfunded AAL amortization at beginning of fiscal year 2021	\$ 1,068,581,850	\$ (9,610,570)	\$ 1,058,971,280	\$ 1,044,280,182
B. Interest to middle of year on A	39,347,393	(353,881)	38,993,512	38,452,556
C. Expected alternate contributions	(32,748,261)	(159,126)	(32,907,387)	(31,458,321)
D. Total unfunded actuarial accrued liability amortization (A+B+C)	<u>\$ 1,075,180,982</u>	<u>\$ (10,123,577)</u>	<u>\$ 1,065,057,405</u>	<u>\$ 1,051,274,417</u>
V. Normal cost for the year				
A. Normal cost at beginning of fiscal year 2021	\$ 1,431,877,690	\$ 48,460,167	\$ 1,480,337,857	\$ 1,438,117,937
B. Interest to middle of year on A	52,724,697	1,784,404	54,509,101	52,954,476
C. Assumed Administrative Expenses	25,629,617	867,403	26,497,020	25,423,112
D. Total normal cost for the year (A+B)	<u>\$ 1,510,232,004</u>	<u>\$ 51,111,974</u>	<u>\$ 1,561,343,978</u>	<u>\$ 1,516,495,525</u>
VI. Total contribution for the year (Item IV. + Item V.)	<u>\$ 2,585,412,986</u>	<u>\$ 40,988,397</u>	<u>\$ 2,626,401,383</u>	<u>\$ 2,567,769,942</u>
VII. Total covered payroll (projected to 2020/2021 plan year)	<u>\$ 10,598,807,937</u>	<u>\$ 10,598,807,937</u>	<u>\$ 10,598,807,937</u>	<u>\$ 10,169,244,876</u>
VIII. Total contribution for fiscal year 2021 as a percentage of covered payroll (Before Phase in Policy)				
A. Member portion	12.39%	0.00%	12.39%	12.63%
B. Employer portion	12.00%	0.39%	12.39%	12.63%
C. Total	<u>24.39%</u>	<u>0.39%</u>	<u>24.78%</u>	<u>25.26%</u>
IX. Total contribution for fiscal year 2021 as a percentage of covered payroll (After Phase In Policy)				
A. Member portion	12.04%	0.00%	12.04%	11.94%
B. Employer portion	11.65%	0.39%	12.04%	11.94%
C. Total	<u>23.69%</u>	<u>0.39%</u>	<u>24.08%</u>	<u>23.88%</u>
X. Funded Status				
A. Funded Status on Actuarial Value of Assets	71.3%	108.0%	72.3%	71.2%
B. Market Value of Assets	\$ 39,825,119,543	\$ 1,731,680,616	\$ 41,556,800,159	\$ 40,166,794,468
C. Funded Status on Market Value of Assets	73.0%	110.8%	74.0%	74.1%

*The Board made the policy decision to phase in the impact to the contribution of the assumption changes over a five year period. This resulted in a total contribution rate of 24.08% of total payroll effective July 1, 2020. This policy provides for a smooth transition to the higher contribution rates over a reasonable period of time.*

## Table 2

### Actuarial Present Value of Future Benefits

	401(a)	401(h)
1. Active Members		
a. Retirement benefits	\$ 25,022,852,220	\$ 838,475,056
b. Disability deferred retirement benefits	666,965,418	33,464,761
c. Pre-retirement death benefits	693,242,610	0
d. Withdrawal benefits	2,602,689,066	18,245
e. Total	<b>\$ 28,985,749,314</b>	<b>\$ 871,958,062</b>
2. Inactive members	\$ 2,728,313,841	\$ 103,136,490
3. Retired members and beneficiaries	30,296,682,222	801,780,428
4. Formerly disabled members now receiving benefits	1,123,094,699	39,540,613
5. Benefit increases for other-than-plan members	310,210	3,423,901
6. Post-1981 System members	295,823,472	0
7. Total Actuarial Present Value of Future Benefits	<b>\$ 63,429,973,758</b>	<b>\$ 1,819,839,494</b>

### Table 3

## Analysis of Normal Cost

	401(a)	401(h)
1. Gross Normal Cost Dollar		
a. Retirement benefits	\$ 835,368,088	\$ 47,380,450
b. Disability deferred retirement benefits	44,357,777	2,862,543
c. Pre-retirement death benefits	37,630,716	0
e. Termination	567,245,806	1,578
f. Administrative Expenses	25,629,617	867,403
g. Total	<b>\$ 1,510,232,004</b>	<b>\$ 51,111,974</b>
2. Gross Normal Cost Rate		
a. Retirement benefits	7.88%	0.44%
b. Disability deferred retirement benefits	0.42%	0.03%
c. Pre-retirement death benefits	0.36%	0.00%
e. Termination	5.35%	0.00%
f. Administrative Expenses	0.24%	0.01%
g. Total	<b>14.25%</b>	<b>0.48%</b>

**Table 4**  
**Historical Summary of Active Member Data**

Valuation as of June 30	Active Members		Covered Payroll		Average Salary		Average Age	Average Service
	Number	Percent Increase	Amount in \$ Millions	Percent Increase	\$ Amount	Percent Increase		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2009	222,515	N/A	9,835	N/A	44,198	N/A	45.2	8.8
2010	213,530	-4.0%	9,420	-4.2%	44,115	-0.2%	45.5	9.2
2011	208,939	-2.2%	9,061	-3.8%	43,365	-1.7%	45.7	9.4
2012	203,994	-2.4%	8,869	-2.1%	43,475	0.3%	45.8	9.6
2013	202,693	-0.6%	8,753	-1.3%	43,182	-0.7%	45.7	9.6
2014	203,201	0.3%	8,909	1.8%	43,841	1.5%	45.7	9.6
2015	203,252	0.0%	9,072	1.8%	44,636	1.8%	45.7	9.6
2016	204,162	0.4%	9,264	2.1%	45,375	1.7%	45.6	9.6
2017	206,055	0.9%	9,598	3.6%	46,581	2.7%	45.4	9.4
2018	207,119	0.5%	9,921	3.4%	47,901	2.8%	45.4	9.4
2019	208,244	0.5%	10,340	4.2%	49,655	3.7%	45.5	9.4

## Table 5

### Reconciliation of Plan Net Assets

	401(a)	401(h)
1. Market value of assets at beginning of year	\$ 38,243,603,129	\$ 1,674,894,828
2. Revenue for the year		
a. Contributions for the year		
i. Employer	\$ 1,180,958,615	\$ 47,386,008
ii. Member	1,194,093,363	0
iii. Member reimbursement of member contributions	16,252,278	13,149
iv. Total	\$ 2,391,304,256	\$ 47,399,157
b. Investment income for the year (net of investment expenses)	\$ 2,384,425,432	\$ 105,788,437
c. Total revenue	\$ 4,775,729,688	\$ 153,187,594
3. Disbursements for the year		
a. Retirement and disability benefits	\$ 3,083,159,450	\$ 95,240,619
b. Death benefits	47,296,996	0
c. Refunds	261,944,069	0
d. Transfers from other plans	(1,306,982)	0
e. Transfers to PSPRS	163,279	0
f. Other	(358,305)	0
g. Administrative expenses	26,642,698	1,161,187
h. Total disbursements	\$ 3,417,541,205	\$ 96,401,806
4. Increase in net assets (Item 2c - Item 3h)	\$ 1,358,188,483	\$ 56,785,788
5. Market value of assets at end of year (Item 1 + Item 4)	\$ 39,601,791,612	\$ 1,731,680,616
6. Actual net investment income (Item 2b)	\$ 2,384,425,432	\$ 105,788,437
7. Estimated dollar weighted market yield	6.34%	6.43%

## Table 6A

### Development of Actuarial Value of Assets – 401(a)

	Year Ending June 30, 2019					
1. Market value of assets at beginning of year	\$ 38,243,603,129					
2. Net new investments						
a. Contributions	\$ 2,391,304,256					
b. Benefits paid	(3,392,400,515)					
c. Administrative expenses, transfers, and other	(25,140,690)					
d. Subtotal	(1,026,236,949)					
3. Market value of assets at end of year	\$ 39,601,791,612					
4. Net earnings (3-1-2)	\$ 2,384,425,432					
5. Assumed investment return rate	7.50%					
6. Expected return	\$ 2,819,867,141					
7. Excess return (4-6)	\$ (435,441,709)					
8. Development of amounts to be recognized as of June 30, 2019:						
Remaining Deferrals						
Fiscal Year End	of Excess (Shortfall) of Investment Income	Offsetting of Gains/(Losses)	Net Deferrals Remaining	Years Remaining	Recognized for this valuation	Remaining after this valuation
	(1)	(2)	(3) = (1) + (2)	(4)	(5) = (3) / (4)	(6) = (3) - (5)
2010	\$ 0	\$ 0	\$ 0	1	\$ 0	\$ 0
2011	0	0	0	2	0	0
2012	0	0	0	3	0	0
2013	0	0	0	4	0	0
2014	0	0	0	5	0	0
2015	0	0	0	6	0	0
2016	0	0	0	7	0	0
2017	829,358,426	(435,441,709)	393,916,717	8	49,239,590	344,677,127
2018	670,404,280	0	670,404,280	9	74,489,364	595,914,916
2019	(435,441,709)	435,441,709	0	10	0	0
	\$ 1,064,320,997	\$ 0	\$ 1,064,320,997		\$ 123,728,954	\$ 940,592,043
9. Actuarial value of assets as of June 30, 2019 (Item 3 - Item 8)	\$ 38,661,199,569					
10. Market value of assets						
a. Excluding System assets	\$ 39,601,791,612					
b. Including System assets	\$ 39,825,119,543					
11. Actuarial value of assets						
a. Excluding System assets	\$ 38,661,199,569					
b. Including System assets	\$ 38,879,899,247					

## Table 6B

### Development of Actuarial Value of Assets – 401(h)

							Year Ending June 30, 2019
1. Market value of assets at beginning of year							\$ 1,674,894,828
2. Net new investments							
a. Contributions							\$ 47,399,157
b. Benefits paid							(95,240,619)
c. Administrative expenses, transfers, and other							(1,161,187)
d. Subtotal							(49,002,649)
3. Market value of assets at end of year							\$ 1,731,680,616
4. Net earnings (3-1-2)							\$ 105,788,437
5. Assumed investment return rate							7.50%
6. Expected return							\$ 123,514,722
7. Excess return (4-6)							\$ (17,726,285)
8. Development of amounts to be recognized as of June 30, 2019:							
	Fiscal	Remaining Deferrals of Excess (Shortfall)		Net Deferrals	Years	Recognized for	Remaining after
	Year	of Investment	Offsetting of	Remaining	Remaining	this valuation	this valuation
	End	Income	Gains/(Losses)	Remaining	Remaining	this valuation	this valuation
		(1)	(2)	(3) = (1) + (2)	(4)	(5) = (3) / (4)	(6) = (3) - (5)
2010	\$	0	\$ 0	\$ 0	1	\$ 0	\$ 0
2011		0	0	0	2	0	0
2012		0	0	0	3	0	0
2013		0	0	0	4	0	0
2014		0	0	0	5	0	0
2015		0	0	0	6	0	0
2016		0	0	0	7	0	0
2017		37,192,774	(17,726,285)	19,466,489	8	2,433,311	17,033,178
2018		29,202,206	0	29,202,206	9	3,244,690	25,957,516
2019		(17,726,285)	17,726,285	0	10	0	0
	\$	48,668,695	\$ 0	\$ 48,668,695		\$ 5,678,001	\$ 42,990,694
9. Actuarial value of assets as of June 30, 2019 (Item 3 - Item 8)							\$ 1,688,689,922
10. Market value of assets							
a. Excluding System assets							\$ 1,731,680,616
b. Including System assets							\$ 1,731,680,616
11. Actuarial value of assets							
a. Excluding System assets							\$ 1,688,689,922
b. Including System assets							\$ 1,688,689,922

## Table 6C

### Development of Actuarial Value of Assets – System

	Year Ending June 30, 2019					
1. Market value of assets at beginning of year	\$ 248,346,180					
2. Net new investments						
a. Contributions	\$ 14,756					
b. Benefits paid	(39,363,126)					
c. Administrative expenses, transfers, and other	(159,575)					
d. Subtotal	(39,507,945)					
3. Market value of assets at end of year	\$ 223,350,266					
4. Net earnings (3-1-2)	\$ 14,512,031					
5. Assumed investment return rate	7.50%					
6. Expected return	\$ 17,048,031					
7. Excess return (4-6)	\$ (2,536,000)					
8. Development of amounts to be recognized as of June 30, 2019:						
Remaining Deferrals						
Fiscal of Excess (Shortfall)						
Year of Investment	Offsetting of	Net Deferrals	Years	Recognized for	Remaining after	
End	Income	Gains/(Losses)	Remaining	this valuation	this valuation	
	(1)	(2)	(3) = (1) + (2)	(4)	(5) = (3) / (4)	(6) = (3) - (5)
2010	\$ 0	\$ 0	\$ 0	1	\$ 0	\$ 0
2011	0	0	0	2	0	0
2012	0	0	0	3	0	0
2013	0	0	0	4	0	0
2014	0	0	0	5	0	0
2015	0	0	0	6	0	0
2016	0	0	0	7	0	0
2017	1,401,091	(1,401,091)	0	8	0	0
2018	6,342,214	(1,134,909)	5,207,305	9	578,589	4,628,716
2019	(2,536,000)	2,536,000	0	10	0	0
	\$ 5,207,305	\$ 0	\$ 5,207,305		\$ 578,589	\$ 4,628,716
9. Actuarial value of assets as of June 30, 2019 (Item 3 - Item 8)	\$ 218,721,550					
10. Allocation of System assets						
a. Percent of total System liability for members retiring after July 1, 1981						99.99%
b. Market value of assets allocated to Plan					\$	223,327,931
c. Actuarial value of assets allocated to Plan					\$	218,699,678

## Table 7

### History of Investment Return Rates

Year Ending June 30,	401(a) (Excluding System Assets)	401(h)
Returns on market value of assets:		
2010	14.57%	14.44%
2011	24.80%	24.68%
2012	1.11%	1.03%
2013	12.95%	12.70%
2014	19.28%	19.22%
2015	2.49%	2.62%
2016	0.61%	0.77%
2017	13.59%	13.46%
2018	9.61%	9.59%
2019	6.34%	6.43%
Returns on actuarial value of assets:		
2010	2.03%	1.07%
2011	4.04%	3.01%
2012	6.16%	6.01%
2013	6.66%	6.49%
2014	7.64%	7.55%
2015	7.88%	7.75%
2016	6.61%	6.60%
2017	6.08%	6.07%
2018	8.22%	8.23%
2019	8.16%	8.18%

Market returns are net of investment-related expenses. Prior to 2017, the annual returns were also net of administrative expenses.

**Table 8**  
**History of Cash Flow – 401(a) and 401(h) Combined**

Year Ending June 30,	Contributions	Distributions and Expenditures			External Cash Flow for the Year	Market Value of Assets	External Cash Flow as Percent of Market Value
		Benefit Payments and Refunds	Administrative Expenses	Total			
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)
2010	\$ 1,702.2	\$ (2,241.3)	\$ (29.0)	\$ (2,270.3)	\$ (568.1)	\$ 22,775	-2.5%
2011	1,735.2	(2,412.9)	(28.1)	(2,441.0)	(705.8)	27,835	-2.5%
2012	1,863.9	(2,580.5)	(32.0)	(2,612.5)	(748.6)	27,215	-2.8%
2013	1,987.2	(2,712.7)	(33.9)	(2,746.6)	(759.4)	29,951	-2.5%
2014	2,047.0	(2,868.7)	(27.0)	(2,895.7)	(848.7)	34,802	-2.4%
2015	2,109.9	(2,988.9)	(27.3)	(3,016.2)	(906.3)	34,800	-2.6%
2016	2,122.4	(3,113.2)	(23.8)	(3,137.0)	(1,014.6)	34,020	-3.0%
2017	2,200.4	(3,236.3)	(29.0)	(3,265.3)	(1,064.9)	37,518	-2.8%
2018	2,247.6	(3,357.1)	(27.9)	(3,385.0)	(1,137.4)	39,918	-2.8%
2019	2,438.7	(3,486.1)	(27.8)	(3,513.9)	(1,075.2)	41,333	-2.6%

Dollar amounts in millions, Excludes System assets

Column (7) = Column (2) + Column (6).

**Table 9**  
**Total Experience Gain or Loss**

Item (1)	401(a) (2)	401(h) (3)
<b>A. Calculation of total actuarial gain or loss</b>		
1. Unfunded actuarial accrued liability (UAAL), previous year	\$ 15,562,042,327	\$ 21,799,921
2. Normal cost for the year (includes Admin expenses)	1,431,281,777	49,885,646
3. Expected contributions for the year	(2,482,594,642)	(55,151,772)
4. Interest at 7.5%		
a. On UAAL	\$ 1,167,153,175	\$ 1,634,994
b. On normal cost and admin	52,702,754	1,836,893
c. On contributions	(91,414,268)	(2,030,802)
d. Total	<u>\$ 1,128,441,661</u>	<u>\$ 1,441,085</u>
5. Assumption change (Gains)/Losses	0	0
6. Legislative changes	0	0
7. Expected UAAL (Sum of Items 1 through 7)	15,639,171,123	17,974,880
8. Actual UAAL	15,684,492,289	(125,514,724)
9. Total (gain)/loss for the year (Item 9 - Item 8)	\$ 45,321,166	\$ (143,489,604)
<b>B. Source of gains and losses</b>		
	% of AAL	% of AAL
10. Asset (Gain)/Loss for the year	\$ (237,370,489) 0.44%	\$ (10,657,623) 0.68%
11. Pay Increases (Less)/Greater than Expected	274,430,340 0.50%	0 0.00%
12. Form of Payment Elections of Terminated Members	(118,551,648) 0.22%	0 0.00%
13. Non-Retired Demographic (Gains)/Losses	30,513,723 0.06%	(7,210,303) 0.46%
14. Post-Retirement Mortality (Gains)/Losses	25,767,461 0.05%	863,642 0.06%
15. Contribution Phase-In (Gains)/Losses	94,636,587 0.17%	8,038,082 0.51%
16. Other (Gains)/Losses	<u>(24,104,808) 0.04%</u>	<u>(134,523,402) * 8.61%</u>
17. Total (Sum of Items 10 through 17)	\$ 45,321,166 0.08%	\$ (143,489,604) 9.18%

*\*Includes refinements to the 401(h) data*

## Table 10

### Schedule of Funded Liabilities by Type

Aggregate Accrued Liabilities for:		Active Members (Employer Financed Portion)			Portion of Accrued Liabilities Covered by Net Assets		
Year End June 30,	Member Contributions (1)	Retirees and Beneficiaries (2)	Net Assets Available for Benefits	Available for Benefits			
	(1)	(2)	(3)	(1)	(2)	(3)	
<b>401(a) Portion of the Plan</b>							
2010	\$ 7,704,328,621	\$ 19,246,476,421	\$ 9,121,714,675	\$ 27,571,999,406	100%	100%	7%
2011	8,374,149,814	20,541,081,742	8,135,947,783	27,983,517,225	100%	95%	0%
2012	9,110,894,718	21,699,459,353	7,639,934,669	28,948,010,913	100%	91%	0%
2013	9,917,301,188	23,684,426,598	6,310,027,446	30,110,632,566	100%	85%	0%
2014	10,780,693,824	24,689,077,682	5,879,545,497	31,547,987,085	100%	84%	0%
2015	11,714,896,096	25,757,665,962	5,495,566,397	33,112,994,638	100%	83%	0%
2016	12,699,053,783	26,593,566,522	5,242,386,763	34,269,819,276	100%	81%	0%
2017	13,581,097,101	29,520,334,512	7,517,329,299	35,268,099,197	100%	73%	0%
2018	13,582,910,298	30,602,701,708	8,360,825,498	36,984,395,177	100%	76%	0%
2019	15,655,836,656	31,715,910,603	7,192,644,277	38,879,899,247	100%	73%	0%
<b>401(h) Portion of the Plan</b>							
2010	\$ 0	\$ 652,876,059	\$ 832,466,290	\$ 1,251,145,282	100%	100%	72%
2011	0	669,593,178	834,596,496	1,247,433,042	100%	100%	69%
2012	0	674,713,116	827,369,335	1,281,566,359	100%	100%	73%
2013	0	738,731,217	746,089,038	1,324,596,696	100%	100%	79%
2014	0	734,450,033	742,246,895	1,374,129,582	100%	100%	86%
2015	0	833,901,538	771,529,022	1,446,698,253	100%	100%	79%
2016	0	802,948,944	766,968,521	1,491,554,110	100%	100%	90%
2017	0	863,850,246	706,389,116	1,538,757,137	100%	100%	96%
2018	0	914,372,402	715,927,367	1,608,499,848	100%	100%	97%
2019	0	844,744,942	718,430,256	1,688,689,922	100%	100%	117%

**Table 11**  
**Schedule of Funding Progress – 401(a) and 401(h) Combined**

Year End June 30,	Actuarial Accrued Liabilities	Actuarial Value of Net Assets	Assets as a % of Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (UAL)	Covered Employee Payroll	UAL as a % of Covered Employee Payroll
2010	\$ 37,557,862,066	\$ 28,823,144,688	76.7%	\$ 8,734,717,378	\$ 9,419,951,810	92.7%
2011	38,555,369,013	29,230,960,267	75.8%	9,324,408,746	9,060,630,604	102.9%
2012	39,952,371,191	30,229,577,272	75.7%	9,722,793,919	8,868,678,184	109.6%
2013	41,396,575,487	31,435,228,262	75.9%	9,961,347,225	8,752,783,004	113.8%
2014	42,826,013,931	32,922,116,667	76.9%	9,903,897,264	8,908,620,792	111.2%
2015	44,573,559,015	34,559,692,891	77.5%	10,013,866,124	9,072,376,682	110.4%
2016	46,104,924,533	35,761,373,386	77.6%	10,343,551,147	9,263,859,477	111.7%
2017	52,189,000,274	36,806,856,334	70.5%	15,382,143,940	9,598,270,045	160.3%
2018	54,176,737,273	38,592,895,025	71.2%	15,583,842,248	9,921,214,513	157.1%
2019	56,127,566,734	40,568,589,169	72.3%	15,558,977,565	10,340,300,426	150.5%

## Table 12

### Schedule of Plan Retirees and Beneficiaries Added to and Removed from Rolls

Year End June 30,	Added To Rolls			Removed From Rolls			Rolls - End of Year		
	Number	Annual Allowance	Average Annual Allowance	Number	Annual Allowance	Average Annual Allowance	Number	Annual Allowance	Average Annual Allowance
<b>401(a) Portion of the Plan</b>									
2010	9,360	\$ 176,419,906	\$ 18,848	2,477	\$ 35,666,261	\$ 14,399	101,307	\$1,968,124,553	\$ 19,427
2011	9,288	179,066,507	19,279	2,599	38,511,310	14,818	107,996	2,108,679,750	19,538
2012	9,227	171,972,274	18,638	2,792	41,695,405	14,934	114,431	2,238,956,619	19,566
2013	9,489	175,974,484	18,545	3,045	47,326,711	15,542	120,875	2,367,604,392	19,587
2014	8,385	160,478,869	19,139	3,005	45,575,405	15,167	126,255	2,482,507,856	19,663
2015	8,695	169,138,375	19,452	3,414	52,490,287	15,375	131,536	2,599,155,944	19,760
2016	7,887	155,932,683	19,771	3,397	54,560,473	16,061	136,026	2,700,528,154	19,853
2017	9,616	200,106,997	20,810	3,525	56,592,938	16,055	142,117	2,844,042,213	20,012
2018	8,651	174,489,286	20,170	3,812	59,196,232	15,529	146,956	2,959,335,267	20,138
2019	8,746	179,217,085	20,491	3,824	58,010,878	15,170	151,878	3,080,541,474	20,283
<b>401(h) Portion of the Plan</b>									
2010	5,689	\$ 10,358,376	\$ 1,821	2,647	\$ 6,487,680	\$ 2,451	57,795	\$ 86,092,944	\$ 1,490
2011	6,047	10,459,392	1,730	3,199	7,707,744	2,409	60,643	88,844,592	1,465
2012	5,867	9,754,788	1,663	3,285	8,936,184	2,720	63,225	89,663,196	1,418
2013	5,861	9,434,508	1,610	4,159	9,127,908	2,195	64,927	89,969,796	1,386
2014	5,609	8,620,656	1,537	3,350	8,597,436	2,566	67,186	89,993,016	1,339
2015	7,429	15,954,804	2,148	3,119	7,965,132	2,554	71,496	97,982,688	1,370
2016	8,132	12,166,768	1,529	2,430	10,554,272	4,343	77,198	99,595,184	1,290
2017	9,895	17,824,796	1,801	5,831	11,688,084	2,004	81,262	105,731,896	1,301
2018	8,250	17,966,659	2,178	8,315	14,688,189	1,766	81,197	109,010,366	1,343
2019	9,033	11,122,032	1,231	6,294	20,892,748	3,319	83,936*	99,239,650	1,182

\*Includes 468 System members receiving HBS benefits and 802 members receiving LTD benefits and HBS benefits.

## Table 13

### Permanent Benefit Increase Calculation

#### Determination of PBI, EPBI effective July 1, 2019

1. Actuarial Present Value (APV) for all Retirees and Beneficiaries as of June 30, 2018 (401(a) Only)*	\$ 28,437,436,780
2. Rate of Return on Actuarial Value of Assets for Fiscal Year Ending June 30, 2018	8.22%
3. Excess Earnings Available for PBI	
a. Carry-over From Prior Year	\$ 0
b. Current Year (Item 1 x [Item 2 – 8%, minimum 0])	62,562,361
c. Total Excess Earnings Available for PBI (Item 3.a + Item 3.b)	<u>\$ 62,562,361</u>
4. Preliminary PBI % (Item 3.c / Item 1)	0.22%
5. Actual PBI % (Item 4, but not greater than 4% and equal to 0% if less than 1%)	0.00%
6. Target Cost of 2019 PBI (Item 1 x Item 5)	\$ 0
7. APV of \$1 Per Year of Service for Eligible Group	0
8. Per Year of Service Factor for 2019 PBI (Item 6 / Item 7)	0
9. Excess Investment Earnings to be Carried Forward to Next Year	62,562,361
10. Determination of EPBI (8% of Item 3.c)	5,004,989

#### Determination of Reserves for Future PBIs:

11. Actuarial Present Value (APV) for all Retirees and Beneficiaries as of June 30, 2019 (401(a) only)*	\$ 30,136,024,601
12. Rate of Return on Actuarial Value of Assets for Fiscal Year Ending June 30, 2019	8.16%
13. Excess Earnings Reserves for Future PBIs	
a. Carry Over From Prior Year (Item 9 + Item 10)	\$ 67,567,350
b. Current Year (Item 11 x [Item 12 – 8%, minimum 0])	48,217,639
c. Total Excess Earnings Reserves for Future PBIs	<u>\$ 115,784,989</u>

*\*Does not include the PBI assumption*

## Table 14A

### Amortization Bases – 401(a)

Initially established in 2013, an Amortization Base, or “payment schedule,” is established each time the Unfunded Actuarial Accrued Liability (UAAL) changes different than expected. As a result, a structured set of amounts are established with each actuarial valuation that are expected to eliminate the UAAL over a period consistent with the Board’s funding policy. As of June 30, 2019, the UAAL is \$15.7 billion and the following Amortization Bases have been established to eliminate the UAAL. Further, this table indicates that the expected UAAL as of June 30, 2020 is \$15.7 billion. Amortization payments are assumed to increase by 2.5% per year until the base is extinguished.

Date Established	Purpose	Initial Amount	Remaining Balance as of June 30, 2019	2019/2020 Amortization Payment	Remaining Balance as of June 30, 2020	Years Remaining as of June 30, 2020	2020/2021 Amortization Payment
June 30, 2013	Fresh Start Base	\$ 9,801,122,666	\$ 9,279,758,458	633,647,302	\$ 9,294,569,493	23	\$ 649,488,485
June 30, 2014	Experience (Gain)/Loss	86,726,009	83,271,250	5,564,836	83,534,395	24	5,703,957
June 30, 2015	Experience (Gain)/Loss	148,009,725	143,947,211	9,428,135	144,608,007	25	9,663,838
June 30, 2016	Experience (Gain)/Loss	499,389,318	535,459,318	34,417,631	538,619,814	26	35,278,072
June 30, 2016	Audit Recommendations	13,713,495	9,621,351	3,361,020	6,729,856	2	3,445,045
June 30, 2017	Experience (Gain)/Loss	713,854,844	773,701,892	48,863,048	779,201,757	27	50,084,625
June 30, 2017	Assumption Changes	4,441,863,599	4,814,253,628	304,043,599	4,848,475,781	27	311,644,689
June 30, 2018	Experience (Gain)/Loss	(783,242)	(841,985)	(52,305)	(848,906)	28	(53,613)
June 30, 2019	Experience (Gain)/Loss	45,321,166	45,321,166	0	48,720,253	24	3,326,752
	Total		\$ 15,684,492,289	\$ 1,039,273,266	\$ 15,743,610,450		\$ 1,068,581,850

## Table 14B

### Amortization Bases – 401(h)

Initially established in 2013, an Amortization Base, or “payment schedule,” is established each time the Unfunded Actuarial Accrued Liability (UAAL) changes different than expected. As a result, a structured set of amounts are established with each actuarial valuation that are expected to eliminate the UAAL over a period consistent with the Board’s funding policy. As of June 30, 2019, the UAAL is \$(125.5) million and the following Amortization Bases have been established to eliminate the UAAL. Further, this table indicates that the expected UAAL as of June 30, 2020 is \$(140.3) million. Amortization payments are assumed to increase by 2.5% per year until the base is extinguished.

Date Established	Purpose	Initial Amount	Remaining Balance as of June 30, 2019	2019/2020 Amortization Payment	Remaining Balance as of June 30, 2020	Years Remaining as of June 30, 2020	2020/2021 Amortization Payment
June 30, 2013	Fresh Start Base	\$ 160,224,559	\$ 117,903,219	15,730,507	\$ 109,835,665	8	\$ 16,123,770
June 30, 2014	Experience (Gain)/Loss	(51,756,215)	(40,921,367)	(5,023,134)	(38,590,600)	9	(5,148,712)
June 30, 2015	Experience (Gain)/Loss	60,631,880	51,017,833	5,818,858	48,588,898	10	5,964,330
June 30, 2016	Experience (Gain)/Loss	(73,311,634)	(73,038,085)	(7,803,321)	(70,127,371)	11	(7,998,404)
June 30, 2017	Experience (Gain)/Loss	(12,670,659)	(13,243,063)	(1,334,377)	(12,801,837)	12	(1,367,736)
June 30, 2017	Assumption Changes	(20,723,637)	(21,659,836)	(2,182,455)	(20,938,185)	12	(2,237,016)
June 30, 2018	Experience (Gain)/Loss	(1,938,438)	(2,083,821)	(199,162)	(2,026,008)	13	(204,141)
June 30, 2019	Experience (Gain)/Loss	(143,489,604)	(143,489,604)	0	(154,251,324)	14	(14,742,661)
	Total		\$ (125,514,724)	\$ 5,006,916	\$ (140,310,762)		\$ (9,610,570)

## **APPENDIX I**

---

### **SUMMARY OF PLAN PROVISIONS**

# Summary of Plan Provisions for the Arizona State Retirement System

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

## ***Member 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. The member's contribution rate is equal to the required employer contribution rate. The contribution rate for fiscal year 2020 is 11.94% for each member and each employer, based on the 2018 actuarial valuation. The contribution rate for fiscal year 2021 will be 12.04% based on this valuation. Interest was credited at 8.00% until it was lowered to 4% beginning July 1, 2005 and subsequently lowered again to 2% beginning July 1, 2013 for return of contributions upon withdrawal.

## ***Average Monthly Compensation***

The average of the highest consecutive 36 months in the last 120 months for a member whose membership commences before July 1, 2011, and 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. 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.

## ***Benefit Multiplier***

Applicable multiplier applies to all years of past service.

Years of Credited Service	Multiplier
Less than 20	2.10%
20.00 to 24.99	2.15%
25.00 to 29.99	2.20%
30.00 or more	2.30%

## ***Normal Retirement***

*Eligibility:* The earliest of the following:

- a. Age 65, or
- b. Age 62 and 10 years of credited service, or
- c. *For members hired before July 1, 2011:* The first day immediately following the day that the sum of the member's age and years of total credited service equals eighty; and  
*For members hired on or after July 1, 2011:* Age 60 with 25 years of credited service or age 55 with 30 years of credited service.

*Benefits:* The product of Benefit Multiplier, the member's Average Monthly Compensation, and years of total credited service. Normal Retirement benefit also includes any prior service benefits to which the member was entitled under the System.

***Early Retirement***

*Eligibility:* Age 50 with 5 years of credited service

*Benefits:* Normal Retirement Benefit reduced according to the table on the following page.

Age At Date Of Retirement																
Years of Service	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65
<b>Members Hired Before July 1, 2011</b>																
5-9.99	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	88%	91%	94%	97%	100%
10-17.99	44%	49%	54%	59%	64%	69%	74%	79%	84%	89%	94%	97%	100%	100%	100%	100%
18	44%	49%	54%	59%	64%	69%	74%	79%	84%	91%	94%	97%	100%	100%	100%	100%
19	44%	49%	54%	59%	64%	69%	74%	79%	91%	94%	97%	100%	100%	100%	100%	100%
20	50%	55%	60%	65%	70%	75%	80%	91%	94%	97%	100%	100%	100%	100%	100%	100%
21	50%	55%	60%	65%	70%	75%	91%	94%	97%	100%	100%	100%	100%	100%	100%	100%
22	50%	55%	60%	65%	70%	91%	94%	97%	100%	100%	100%	100%	100%	100%	100%	100%
23	50%	55%	60%	65%	91%	94%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%
24	50%	55%	60%	91%	94%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
25	50%	55%	91%	94%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
26	50%	91%	94%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
27	91%	94%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
28	94%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
29	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
30+	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<b>Members Hired On Or After July 1, 2011</b>																
5-9.99	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	88%	91%	94%	97%	100%
10-24.99	44%	49%	54%	59%	64%	69%	74%	79%	84%	89%	94%	97%	100%	100%	100%	100%
25-29.99	44%	49%	54%	59%	64%	69%	74%	79%	84%	89%	100%	100%	100%	100%	100%	100%
30+	44%	49%	54%	59%	64%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

## ***Vesting of Benefits***

*Eligibility:* A member is fully vested in their accrued benefit.

*Benefits:* A fully vested member 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 refund option for members hired on or after July 1, 2011 who are not terminated due to an Employer Reduction in Force or position eliminated, or,
- c. the retirement benefit payable at Normal Retirement earned to the date of member's termination.

The enhanced refund option allows members who terminate prior to eligibility for retirement to receive a refund of their member contributions with interest. In addition, if a member 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 members 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 withdrawal of contributions from 8% to 4% effective June 30, 2005, and from 4% to 2% effective June 30, 2013.

The refund option is the same as the enhanced refund option except it does not include any share of the employer contributions with interest.

## ***Disability Benefits (for disability after June 30, 1988)***

*Long Term Disability Benefit:*

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,
- b. or Normal Retirement date.

This benefit is paid by a separate LTD plan.

*Disability Benefit if Member Remains Disabled Through Normal Retirement Date:*

Monthly benefit member would have received if service had continued to normal retirement date assuming the member'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 the member had more than 30 years at date of disability.

The minimum monthly benefit payable to a disabled member is \$50.

## ***Disability Benefits (for disability before July 1, 1988)***

*Eligibility:* Age 50 with 5 years of credited service.

*Benefits:* A life annuity that can be provided by the member's accumulated 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.

### ***Pre-Retirement Death Refund Alternative***

*Eligibility:* Death prior to retirement.

*Benefits:* Any one of the following, at the option of the beneficiary:

- a. a lump sum equal to the sum of (i) and (ii):
  - (i) the sum of the member's combined (member and employer) accumulated contribution balance with compound interest at a rate determined by the board through the day of the payment of the benefit, and
  - (ii) the amount of the member's combined (member and employer) accumulated account, along with any supplemental credits transferred from the System to the Plan with compound interest at a rate determined by the board through the day of the payment of the benefit.
- b. The beneficiary may elect to receive a monthly income, in the single life form, which is actuarially equivalent to the amount in (a).

### ***Retiree Health Insurance Premium Supplement***

*Eligibility:* Retirement or disability after five 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. Members who elect the enhanced refund option are not eligible for this benefit.

*Benefits:* The benefit is payable only with respect to allowable health insurance premiums for which the member is responsible. The maximum benefits for members with ten or more years of credited 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 dependent are under age 65
  - \$170 per month if the member and dependent 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% for each completed year of service (i.e., 50% to 90%).

Members may also choose to receive an optional premium benefit, where their premium benefit is reduced, but may be continued to the retiree's beneficiary. This optional premium benefit is only available to retirees who elect a joint and contingent or period certain form of payment.

### ***Automatic Benefit Adjustments Based On Excess Investment Earnings***

#### ***Permanent Benefit Increase (PBI)***

Retirees who have been retired one year are eligible for a PBI up to a maximum of a 4% increase. The PBI is paid from a reserve of "Excess Investment Earnings." If there are no "Excess Investment Earnings" in the reserve, then no PBI is paid.

### *Permanent Benefit Increase Enhancement (EPBI)*

Provides retired members with at least ten years of service who have been retired five or more years an additional benefit. For each complete five-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.

Due to legislation enacted in the 2013 legislative session, PBIs and EPBIs will not be awarded to members hired on or after September 13, 2013.

### ***Forms of Payment***

The normal form of payment is a benefit payable for the life of the member with any remaining member account balance paid at time of death. Joint and contingent, period certain and partial lump-sum options are available on an actuarially equivalent basis.

### ***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 credited service is \$600.

## **APPENDIX II**

---

### **HISTORICAL CHANGES TO THE PLAN PROVISIONS**

# Historical Changes to the Plan Provisions

## 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 member 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 ten 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 members 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 ten 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.

### *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 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 member and employer contributions (accumulated with interest) that 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 member and employer contribution (accumulated with interest) that 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**

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 the 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**

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**

No material changes.

## **K. Legislated Plan Changes Enacted by the 1999 Legislature of the State of Arizona**

### *1. Enhanced Refund Option*

Members who terminate prior to eligibility for retirement may elect to receive a refund of their member contributions with interest. If the member has at least five years of service, the member 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 years.

### *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**

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 and additional three years of employment. No contributions are made to ASRS during the contract. If the member 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 ten years of service and who have been retired at least five years. The increase is incremental for each five years of retirement.

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

In addition to the premium benefit paid to ASRS retired and disabled members, the Legislature granted a temporary benefit for retired and disabled members who live in areas of the state not served by a managed care program (HMO) and who have ten 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**

No material changes.

### **O. Legislated Plan Changes Enacted by the 2003 Legislature of the State of Arizona**

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

The Legislature extended the temporary Rural Health Insurance Subsidy for the next two years from July 1, 2003, to June 30, 2005. The 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 ten 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.

### **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 purchases would be made at true actuarial present value.

#### *2. Early Retirement Incentive Programs*

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

### **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 ten years of credited service.

## *2. Contribution Rates*

The contribution rates for fiscal 2006 and 2007 are 6.90% and 8.60%, respectively.

## **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.

### *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).

### *4. Early Termination Incentive Programs*

The change made in the 2004 legislature to early retirement incentive programs was extended to early termination programs.

## **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. 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. Allows 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 65½, 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.

## *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 timeframe 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 of 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 September 30, 2009, 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 + years of service) for a member whose membership commences on or after July 1, 2011.

### *3. Early Retirement Reductions*

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 elimination, 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 elect to 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.

## **W. Legislated Plan Changes Enacted by the 2011 Legislature of the State of Arizona**

### *1. Eligibility for New State Employees*

State employees hired after July 20, 2011, will not be eligible for the ASRS Plan or LTD program before their 27th week of employment, unless they are already members of ASRS.

### *2. Normal Retirement Age*

For members whose membership commenced on or after July 1, 2011, the 85-point requirement is removed and replaced by two rules: age 60 and 25 years of credited service or age 55 and 30 years of credited service. Early retirement reductions are adjusted to reflect these new rules.

### *3. Service Purchase Rules*

Purchases of Other Public Service, Leave of Absence Service, and Military Service (except USERRA or Heart Act purchases) are limited to 60 months for each type of purchase, and a member is required to have ten years of credited service before initiating a request to purchase such service.

### *4. Return-to-Work Rules*

Employers are required to pay an Alternate Contribution Rate (ACR) for retired members who return to work on or after July 1, 2012, in any capacity and in a position ordinarily filled by an employee of the employer. The ACR is the greater of 2% or the contribution rate to fund the deficits of the Plan and LTD program, but not greater than the employer's portion of the total contribution rate for the Plan and LTD program.

### *5. Split of Contributions*

Retroactive to July 1, 2011, responsibility for making contributions to the ASRS Plan and LTD programs is changed from 50% employees and 50% employers to 53% employees and 47% employers. Pre-retirement survivor benefits are based on the sum of employee and employer balances, rather than twice the employee balance.

## **X. Legislated Plan Changes Enacted by the 2012 Legislature of the State of Arizona**

### *1. Forms of Pension*

Partial lump-sum payments are to be based on single-life annuity form of payment. Level Income Alternative option is eliminated for new retirements after July 1, 2013.

### *2. Service Purchase Rules*

This provision reduces the credited service requirement to purchase Other Public Service, Leave of Absence time, or Military Service to five years.

### *3. Health Benefit Supplements*

For new retirees and disabilities after August 1, 2012, this provision eliminates health supplements for retirees and disabled members who are covered under an active employee plan, either as an insured or as a dependent, except that if the member is a dependent and the ASRS employer is not subsidizing the premium that the retiree or disabled member must pay, the member is entitled to a single coverage subsidy.

### *4. Long-Term Disability Plan*

This provision caps total income at 100% of member's pre-disability pay for new disabilities after August 1, 2012. It also requires objective medical evidence to support claims.

### *5. Split of Contributions*

This provision revises the split of contributions between members and employers to be a 50%/50% split, and provides for the return to members of the contribution amounts in excess of 50% that members had previously contributed.

### *6. Employers that Cease Participation in ASRS*

This provision requires ASRS to charge employers for their share of the unfunded actuarial liabilities in the Plan and LTD programs if the employers cease to participate because of privatization, bankruptcy, or a change from public to private status. It is effective for cessations that occur on or after January 2, 2013.

### *7. Opt-out of ASRS for Members First Hired before July 1, 2015*

Members who first become employees of an ASRS employer on or after Age 65 and before July 1, 2015, can irrevocably elect not to participate in ASRS. ASRS must report on this provision by December 31, 2014.

### *8. Spousal Consent*

Married members must select their spouses as their beneficiaries and must select an option with at least 50% continuation to their spouses, unless spouses waive these requirements in writing. This provision applies to retirements, beneficiary designations, or beneficiary changes that occur on or after July 1, 2013.

## **Y. Legislated Plan Changes Enacted by the 2013 Legislature of the State of Arizona**

### *1. Amortization*

The legislation allows the ASRS Board to determine the periods over which to amortize deficits or surpluses.

### *2. Benefits*

The legislation removed the requirement that a survivor's benefit must exceed \$5,000 to qualify for an annuity election. It limits the annuity option for the survivor to the single-life option, provided the annuity amount is greater than an amount selected by the ASRS Board (presently \$100 per month).

The legislation eliminated the present value calculation that was available upon the death of a member who had reached early retirement eligibility or had 15 years of service.

### *3. Permanent Benefit Increases*

The legislation eliminates Permanent Benefit Increases for members hired after September 13, 2013.

### *4. Health Insurance Program*

The legislation permits the ASRS Board to establish a self-insured health insurance program and an account to administer such a program, provided the self-insured program offers all the benefits required by Title 20.

## **Z. Legislated Plan Changes Enacted by the 2014 Legislature of the State of Arizona**

### *1. Charter Schools*

The legislation allows charter schools that obtain their charters through a university to become members of the ASRS retroactive to July 1, 2011.

### *2. Section 218 Agreements*

The legislation eliminates the requirement that employees of ASRS employers must be covered by the state's Section 218 agreement with the Social Security Administration. It also repeals the ASRS defined contribution plan established by Laws 013, Chapter 216.

### *3. Elected Officials*

Retroactive to January 1, 2014, a state elected official who was elected or appointed before December 31, 2013, and who is a member of ASRS because he previously elected not to participate in the Elected Officials' Retirement Plan (EORP) is no longer required to elect to continue or resume participation in ASRS in writing and is a member of ASRS without election.

### *4. Applicable Interest Rate*

The legislation confirms the ASRS practice of using a "stability period" to set and maintain the "applicable interest rate" for a year. The look-back month that is used to determine the applicable interest rate is the third full calendar month preceding the first day of the stability period.

### *5. Compensation for LTD Benefit Determinations*

The legislation changes the definition of "monthly compensation" to be the median of the last six pay periods of compensation, excluding the highest two and lowest two such pay periods. If the member was employed for fewer than six pay periods, "monthly compensation" is the median monthly compensation based on the pay periods that the member worked.

### *6. Background Checks*

The legislation allows ASRS to perform background and credit checks on current and prospective employees.

## **AA. Legislated Plan Changes Enacted by the 2015 Legislature of the State of Arizona.**

### *1. Actuarial Valuation Methods*

The legislation gives the Arizona State Retirement System Board of Trustees authority to change the actuarial valuation method of the Plan beginning June 30, 2016. Prior to the passage of this legislation the ASRS was required by statute to use the Projected Unit Credit method.

### *2. Service Purchase*

The legislation modifies service purchase laws so that they are consistent with Arizona case law whereby the right to purchase service was defined as a benefit by the Arizona Court of Appeals. As a result, legislation delineated service purchase rights that individuals hired on or after July 20, 2011 could purchase no more than 60 months of credited service and individuals hired on or after July 1, 2010 must have at least 5 years of service to initiate a service purchase request.

### *3. Participation Opt-out*

Legislation passed in 2012 allowed individuals 65 years of age or older and with no prior ASRS membership to opt-out of participation in the Plan. The ability to opt-out was to expire on July 1, 2015. The legislation removed the July 1, 2015 sunset on the election, thereby permitting the opt-out provision in perpetuity.

## **AB. Legislated Plan Changes Enacted by the 2016 Legislature of the State of Arizona.**

### *1. Retention of Service Credit*

HB 2104 is an emergency measure that provides for the retention of credited service for certain members of the Arizona State Retirement System (ASRS) who were potentially mis-enrolled in the ASRS and who became eligible participants in the ASRS on July 24, 2014 following the passage of Laws Chapter 2014, Chapter 44.

#### Provisions of HB 2104

- i. Stipulates that an employee in a position that was exempt from ASRS membership retains credited service for the period of employment that the employer remitted ASRS contributions on the employees' behalf.
- ii. Allows, retroactive to July 1, 2015, a retired ASRS member to return to work as a state elected official who is subject to term limits and still be eligible to receive retirement benefits.
- iii. Contains an emergency clause.
- iv. Makes technical and conforming changes.

### *2. Rulemaking exemptions*

HB 2159 provides the Arizona State Retirement System (ASRS) and the ASRS Board (Board) an exemption from rulemaking in the areas of actuarial, investments, and accounting.

#### Provisions of HB 2159

- i. Exempts ASRS and the Board from rulemaking for actuarial assumptions and calculations, investment strategy and decisions and accounting methodology, except that these decisions are subject to the Uniform Administrative Hearing Procedures.
- ii. Contains a retroactive effective date of January 1, 1987.
- iii. Includes a purpose statement.
- iv. Makes technical and conforming changes.

## **AC. Legislated Plan Changes Enacted by the 2017 Legislature of the State of Arizona.**

HB2167 (2017) establishes Internal Revenue Code conforming language to A.R.S. § 38-738 for the purposes of employer credits and contributions not withheld. Additionally, stipulates that a member who previously received a return of contribution may only receive an adjustment of employer contributions or service credits for qualifying employment and compensation occurring after the member's most recent return of contributions. *Effective Date: August 9, 2017*

SB1052 (2017) requires the ASRS to withhold any overpayments and federally required taxes from a member's Partial Lump Sum distribution or return of contributions before distributing funds to the member. *Effective Date: August 9, 2017*

#### **AD. Legislated Plan Changes Enacted by the 2018 Legislature of the State of Arizona.**

SB1054 expanded the list of ASRS non-participating employers to include an employer that dissolves and an employer that is no longer enrolling new employees in the ASRS or is no longer contributing to ASRS on behalf of current employees due to legislative action or due to a reduction in the number of actively contributing employees by 30 percent or more over a 3-year period or any reduction in the number of actively contributing employees by 50 percent or more over any period of time. The ASRS shall also create a separate fund and determine the contribution requirements for an employer deemed to be non-participatory.

#### **AE. Legislated Plan Changes Enacted by the 2019 Legislature of the State of Arizona.**

SB1016 expands the requirement that an employer pay to the ASRS any unfunded liability resulting from providing benefits or credits to a person who is ineligible by statute for ASRS membership to apply if an employer pays contributions to the ASRS on behalf of any person who is ineligible by rule for ASRS membership, or on compensation that is not eligible by statute or rule for ASRS contributions. The definition of "unfunded liability" is modified to establish a calculation for determining the unfunded liability for contributions on compensation that is not eligible by statute or rule for ASRS contributions.

SB1018 redefines compensation for members whose membership begins on or after January 1, 2020.

1. Maintains the current definition of compensation for members whose membership began on or before December 31, 2019.
2. Modifies the definition of compensation for members whose membership began on or after January 1, 2020 to include only gross wages paid to a member by the employer for services rendered during the period considered as credited service, including amounts reported as other compensation on the member's federal W-2 form, including pretax deductions, except for the following:
  - a. Payments made for accrued leave not being used to replace regular work hours, whether paid in a lump sum or in installments.
  - b. Payments made on termination from employment, whether paid in a lump sum or in installments or as a bonus or incentive for termination or retirement.
  - c. Employer-paid contributions that are made to, and any distributions from, plans, programs or arrangements qualified under certain sections of the Internal Revenue Code.
  - d. Payments for allowances.
  - e. Reimbursements for employee business or personal expenses.
  - f. Employer-paid contributions for coverage under, or distributions from, an accident, health or life insurance plan, program or arrangement.
  - g. Payments made in lieu of any employer-paid insurance coverage.
  - h. Workers' compensation, unemployment compensation and disability payments.
  - i. Merit awards pursuant to statute.
  - j. Payments paid pursuant to a court order or settlement agreement to satisfy a claim even though the amount of the payment is based on previous salary or wage levels, except if the court order or settlement agreement directs salary or wages to be paid for a specific period of time, the payment is compensation for that specific period of time.
  - k. Payments made in the form of goods or services in lieu of gross wages.
  - l. Any other payment that is not reported as other compensation on the member's federal W-2 statement for actual services rendered.
  - m. Payments in excess of the Internal Revenue Code limits established in statute.
  - n. Payments for any other employment benefit.
  - o. Payments for which employer or employee contributions have not been paid.

SB1213 makes changes to A.R.S. § 38-766.02 to indicate that an employer is not required to pay an Alternate Contribution Rate for a retired member if the employer is remitting contributions on behalf of an active member serving in that same position. SB1213 also makes changes to EORP, CORP, and PSPRS laws relating to return to work members.

## **APPENDIX III**

---

### **SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS**

# Summary of Actuarial Assumptions and Methods

The assumptions and methods were adopted by the Board of Trustees on October 27, 2017, based on the Report on the Actuarial Experience Study covering a five-year period from July 1, 2011 to June 30, 2016, dated October 18, 2017.

## *I. Valuation Date*

The valuation date is June 30 of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

## *II. Actuarial Cost Method*

The actuarial valuation uses the Entry Age Normal actuarial cost method. Under this method, the total contribution rate is the sum of (i) the normal cost rate, and (ii) a rate that will amortize the unfunded actuarial liability.

1. The valuation is prepared on the projected benefit basis. The present value of each participant's expected benefit payable at retirement or termination is determined, based on age, service, sex, compensation, and the interest rate assumed to be earned in the future (7.50%). The calculations take into account the probability of a participant's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service benefit. Future salary increases are also anticipated. The present value of the expected benefits payable on account of the active participants is added to the present value of the expected future payments to retired participants and beneficiaries to obtain the present value of all expected benefits payable from the Plan on account of the present group of participants and beneficiaries.
2. The contributions required to support the benefits of the Plan are determined following a level funding approach, and consist of a normal cost contribution and an unfunded accrued liability contribution, plus a component to cover administrative expenses.
3. The normal contribution is determined using the Entry Age Normal method. Under this method, a calculation is made to determine the average uniform and constant percentage rate of employer contribution which, if applied to the compensation of each new participant during the entire period of his anticipated covered service, would be required in addition to the contributions of the participant to meet the cost of all benefits payable on their behalf.
4. The unfunded accrued liability contributions are determined by subtracting the actuarial value of assets from the actuarial accrued liability. Amortization bases are established each year and amortized based on the funding policy. The current year amortization base is determined by taking the current unfunded liability less the outstanding amounts of prior year bases.

III. Actuarial Value of Assets

The actuarial value of assets is based on the market value of assets with a ten-year phase-in of actual investment return in excess of (less than) expected investment income. Offsetting unrecognized gains and losses are immediately recognized, with the shortest remaining bases recognized first and the net remaining bases continue to be recognized on their original timeframe. Expected investment income is determined using the assumed investment return rate and the market value of assets (adjusted for receipts and disbursements during the year). The returns are computed net of investment-related expenses. In no event will this amount exceed 130% of market value or be less than 70% of market value.

IV. Actuarial Assumptions

**Investment Return:** 7.50% per year, net of investment-related expenses (composed of an assumed 2.30% inflation rate and a 5.20% real rate of return)

**Administrative Expenses:** The actual administrative expenses for the ASRS Plan are assumed to be 0.25% of payroll.

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

Years of Service	Merit Component	Total Salary Increase*
(1)	(2)	(3)
0	4.50%	7.20%
1	3.50%	6.20%
2	2.75%	5.45%
3	2.25%	4.95%
4	2.00%	4.70%
5	1.75%	4.45%
6	1.50%	4.20%
7	1.10%	3.80%
8	1.00%	3.70%
9	0.90%	3.60%
10	0.80%	3.50%
11	0.70%	3.40%
12	0.60%	3.30%
13	0.50%	3.20%
14	0.40%	3.10%
15	0.30%	3.00%
16	0.20%	2.90%
17	0.20%	2.90%
18	0.10%	2.80%
19	0.00%	2.70%
20 or more	0.00%	2.70%

\*Total salary increase - wage inflation (or growth) rate (2.70%) + merit component

**Payroll Growth:** 2.50% per year, compounded annually (for projecting valuation payroll).

**Decrement Timing:** All decrements – mortality, service retirement, disability retirement, and termination of employment for reasons other than death or retirement – are assumed to occur at the middle of the valuation year.

**Mortality Decrements:**

Service Retirees, Beneficiaries, and Inactive Members

Rates are based on the 2017 State Retirees of Arizona (SRA) mortality table. Generational mortality improvements in accordance with the Ultimate MP scales and projected from the year 2017.

Disability Retirees

Rates are based on the RP-2014 Disabled Retiree Mortality. Generational mortality improvements in accordance with the Ultimate MP scales are projected from the year 2014.

Active Members

Rates are based on the RP-2014 Active Member Mortality table. Generational mortality improvements in accordance with the Ultimate MP scales are projected from the year 2014.

Age	2019 Rates of Mortality					
	Males			Females		
	Non-disabled	Disabled	Employee	Non-disabled	Disabled	Employee
20	0.000386	0.006762	0.000386	0.000154	0.002122	0.000154
25	0.000461	0.008061	0.000460	0.000165	0.002266	0.000165
30	0.000430	0.007527	0.000430	0.000208	0.002856	0.000207
35	0.000497	0.008710	0.000497	0.000272	0.003746	0.000272
40	0.000597	0.010458	0.000597	0.000376	0.005187	0.000377
45	0.000925	0.016204	0.000925	0.000624	0.008606	0.000625
50	0.001603	0.019395	0.001603	0.001048	0.011323	0.001048
55	0.002651	0.022224	0.002651	0.001591	0.013769	0.001591
60	0.004400	0.025300	0.004458	0.002322	0.016166	0.002322
65	0.007799	0.030132	0.007871	0.004814	0.019838	0.003515
70	0.013823	0.038369	0.013175	0.009026	0.026821	0.006000
75	0.024502	0.051626	0.022052	0.016919	0.039033	0.010240
80	0.043429	0.072861	0.036909	0.031717	0.058045	0.017479

**Service Retirement Decrements:** Rates at representative ages and years of service are shown below:

Sample Retirement Rates For Members Hired Before July 1, 2011						
Age	Years of Service					
	5	10	15	20	25	30
50	6.0%	6.0%	6.0%	6.0%	6.0%	25.0%
55	7.0%	7.0%	7.0%	7.0%	20.0%	25.0%
60	10.0%	10.0%	10.0%	20.0%	15.0%	25.0%
62	15.0%	25.0%	25.0%	25.0%	25.0%	25.0%
65	30.0%	30.0%	30.0%	30.0%	30.0%	25.0%
70	25.0%	27.5%	25.0%	25.0%	25.0%	25.0%
75	27.5%	27.5%	27.5%	27.5%	27.5%	25.0%
80	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Sample Retirement Rates For Members Hired On or After July 1, 2011							
Age	Years of Service						
	5	10	15	20	25	30	35
50	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
55	7.0%	7.0%	7.0%	7.0%	7.0%	50.0%	90.0%
60	10.0%	10.0%	10.0%	10.0%	40.0%	65.0%	25.0%
62	15.0%	25.0%	25.0%	25.0%	40.0%	25.0%	25.0%
65	30.0%	30.0%	30.0%	30.0%	30.0%	25.0%	25.0%
70	25.0%	27.5%	25.0%	25.0%	25.0%	25.0%	25.0%
75	27.5%	27.5%	27.5%	27.5%	27.5%	25.0%	25.0%
80	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Current deferred vested members are assumed to retire at their earliest unreduced retirement age. Future deferred vested members are assumed to retire at age 65 if they have less than 10 years of service and age 62 if they have 10 or more years of service.

**Disability Retirement Decrements:**

Sample rates for eligible members:

Annual Rates per 100 Members	
Age	Unisex
20	0.0454
25	0.0502
30	0.0606
35	0.0925
40	0.1468
45	0.2271
50	0.3384
55	0.3970
60	0.4317

**Termination Decrements for Reasons Other Than Death or Retirement:**

Termination rates for members not eligible for service retirement, based on years of completed service (rates are zero for members eligible for service retirement):

Annual Rates of Termination Based on Years of Completed Service				
Service	Entry Age Less Than or Equal to 35		Entry Age Greater Than 35	
	Males	Females	Males	Females
0	23.00%	24.30%	17.50%	21.10%
1	18.80%	20.00%	14.80%	17.40%
2	15.70%	16.90%	12.60%	14.60%
3	13.60%	14.70%	11.00%	12.60%
4	11.90%	13.00%	9.80%	11.10%
5	10.50%	11.70%	8.80%	9.90%
6	9.40%	10.50%	8.00%	8.80%
7	8.40%	9.50%	7.20%	7.90%
8	7.50%	8.60%	6.60%	7.10%
9	6.70%	7.80%	6.00%	6.40%
10	6.00%	7.00%	5.50%	5.70%
11	5.30%	6.40%	5.10%	5.10%
12	4.70%	5.80%	4.60%	4.60%
13	4.20%	5.20%	4.20%	4.10%
14	3.70%	4.70%	3.80%	3.60%
15	3.20%	4.20%	N/A	N/A
16	2.70%	3.70%	N/A	N/A
17	2.30%	3.30%	N/A	N/A
18	1.90%	2.90%	N/A	N/A
19	1.50%	2.50%	N/A	N/A
20+	1.10%	2.10%	N/A	N/A

**Withdrawal of Employee Contributions:** Active members that terminate with a vested benefit are assumed to choose the most valuable option available to them at the time of termination and deferred vested members are assumed to choose the most valuable option available to them at the time of earliest retirement. The options to choose from are a withdrawal of contributions or deferred annuity. If the member is assumed to elect a refund option, then it is also assumed that the member forfeits the health insurance premium supplement.

**Future Retirees Eligible for the Health Insurance Premium Supplement:** It is assumed that 60% of future retirees will elect to receive the post-retirement health insurance premium supplement and that 40% of those retirees will elect the dependent premium supplement. These assumptions also apply to members who have been retired less than one year and did not elect a Health Insurance Premium Supplement.

**Beneficiary Characteristics:** 100% of members are assumed to be married. The husband is assumed to be three years older than the wife.

#### **Census Data and Assets**

- The valuation was based on members of ASRS as of June 30, 2019 and does not take into account future members.
- All census data was supplied by ASRS and was subject to reasonable consistency checks.
- There were data elements that were modified for some members as part of the valuation in order to make the data complete. However, the number of missing data items was immaterial.
- Asset data was supplied by ASRS.

#### **Other Actuarial Valuation Procedures**

- No provision was made in this actuarial valuation for the limitations of Internal Revenue Code Section 415.
- Internal Revenue Code Section 401(a)(17) limits were applied to individual salaries. The limit for 2019 is \$280,000 and is assumed to increase annually at the inflation rate.
- Valuation payroll (earnings applied to the current valuation year) is the expected payroll for the fiscal year following the valuation date.
- Optional Form Load – A load of 0.174% has been added to the non-retired 401(a) liabilities to account for the election of optional forms other than a single life annuity.
- Members who elect a single life annuity are assumed to receive accumulated benefit payments equal to their contributions after three years of being in receipt.
- All beneficiaries of pre-retirement deaths are assumed to elect a return of contributions and not elect 401(h) benefits.
- Alternate Contribution Rate – The past service contribution rate is adjusted to consider alternate contribution rate payments. We reduce the amortization amount by the anticipated amount of alternate contributions, and adjust for interest.
- Adjustment for Contribution Timing – Contribution rates are increased by  $\frac{1}{2}$  of a year's interest to reflect the fact that contributions are made throughout the fiscal year and are further adjusted to reflect the one year lag.
- Future Permanent Benefit Increases (PBIs) – Future PBIs are assumed to be 0.30% per year. In an effort to support contribution stability, assumed PBIs are accumulated across successive valuations and reduced when actual PBIs are paid.

## **APPENDIX IV**

---

### **DETAILED SUMMARIES OF MEMBERSHIP DATA**

# Detailed Summaries of Membership Data

Page

Table A	Schedule of Missing Dates of Birth and Gender .....	58
Table B	Summary of Active Membership .....	59
Table C	Summary of Retired Membership .....	59
Table D	Summary of Inactive Membership.....	59
Table E	Active Members Age and Service schedule .....	60
Table F	Distribution of Retired Members and Beneficiaries by Age and Years of Service .....	61
Table G	Distribution of New Retired Members and Beneficiaries by Age and Years of Service ..	62
Table H	Members in Active Service as of June 30, 2019, by Annual Salary.....	63
Table I	Number of Retirees by Benefit Option and Monthly Amount .....	64
Table J	Health Insurance Benefit Counts .....	65
Table K	Data Reconciliation .....	66

**Table A**  
**Schedule of Missing Dates of Birth and Gender**

ASRS Members Missing Date of Birth						
		2015	2016	2017	2018	2019
<b>Active</b>						
	New	3,295	4,390	4,359	4,233	4,937
	Continuing	1,113	1,948	2,655	3,141	3,497
	<b>Total</b>	<b>4,408</b>	<b>6,338</b>	<b>7,014</b>	<b>7,374</b>	<b>8,434</b>
<b>Inactive</b>						
	New	1,455	1,003	1,113	2,622	2,778
	Continuing	25,969	26,263	27,620	27,413	28,964
	<b>Total</b>	<b>27,424</b>	<b>27,266</b>	<b>28,733</b>	<b>30,035</b>	<b>31,742</b>
<b>Retired</b>						
	New	0	1	3	3	1
	Continuing	0	1	0	1	2
	<b>Total</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>3</b>
<b>Total</b>						
	New	4,750	5,394	5,475	6,858	7,716
	Continuing	27,082	28,212	30,275	30,555	32,463
	<b>Total</b>	<b>31,832</b>	<b>33,606</b>	<b>35,750</b>	<b>37,413</b>	<b>40,179</b>

ASRS Members Missing Gender						
		2015	2016	2017	2018	2019
<b>Active</b>						
	New	3,251	4,414	4,379	4,213	4,927
	Continuing	1,086	1,866	2,599	3,118	3,464
	<b>Total</b>	<b>4,337</b>	<b>6,280</b>	<b>6,978</b>	<b>7,331</b>	<b>8,391</b>
<b>Inactive</b>						
	New	1,427	1,010	1,116	2,694	3,126
	Continuing	3,318	5,249	7,215	7,734	9,788
	<b>Total</b>	<b>4,745</b>	<b>6,259</b>	<b>8,331</b>	<b>10,428</b>	<b>12,914</b>
<b>Retired</b>						
	New	0	6	12	7	3
	Continuing	0	0	0	10	15
	<b>Total</b>	<b>0</b>	<b>6</b>	<b>12</b>	<b>17</b>	<b>18</b>
<b>Total</b>						
	New	4,678	5,430	5,507	6,914	8,056
	Continuing	4,404	7,115	9,814	10,862	13,267
	<b>Total</b>	<b>9,082</b>	<b>12,545</b>	<b>15,321</b>	<b>17,776</b>	<b>21,323</b>

Missing dates of birth are populated based on the member's current service in the data and the average entry age of the active group. Missing genders are populated based on the average gender by employer.

**Table B**  
**Summary of Active Membership**

	Count		Average Age		Average Service		Average Salary	
	2018	2019	2018	2019	2018	2019	2018	2019
Male	65,917	65,764	46.5	46.6	9.6	9.6	\$ 55,581	\$ 57,469
Female	141,202	142,480	45.0	45.0	9.4	9.4	44,316	46,048
<b>Total</b>	<b>207,119</b>	<b>208,244</b>	<b>45.4</b>	<b>45.5</b>	<b>9.4</b>	<b>9.4</b>	<b>\$ 47,901</b>	<b>\$ 49,655</b>

**Table C**  
**Summary of Retired Membership**

	2018	2019
Number	146,956	151,878
Total Monthly Allowance	\$ 246,611,272	\$ 256,711,790
Average Monthly Allowance	\$ 1,678	\$ 1,690
Average Age	71.1	71.4
Average Service	19.4	19.4

**Table D**  
**Summary of Inactive Membership**

	2018	2019
Number	233,484	239,073
Average Age	47.5	47.7

**Table E**

**Active Members – Distribution of Count and Average Annual Salary by Age and Service**

Current Age	Years of Service										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up		
<b>Under 25</b>	2,159	5,388	164	0	1	0	0	0	0	0	0	<b>7,712</b>
	\$24,912	\$31,232	\$28,417	\$0	\$51,376	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$29,405</b>
<b>25 to 29</b>	2,271	11,164	3,541	82	0	0	0	0	0	0	0	<b>17,058</b>
	\$33,102	\$41,433	\$45,278	\$43,636	\$0	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$41,133</b>
<b>30 to 34</b>	1,719	8,536	6,847	2,352	80	0	0	0	0	0	0	<b>19,534</b>
	\$36,358	\$43,426	\$50,692	\$52,126	\$51,301	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$46,431</b>
<b>35 to 39</b>	4,805	12,441	5,713	5,926	2,085	83	0	0	0	0	0	<b>31,053</b>
	\$28,676	\$39,217	\$52,421	\$57,711	\$59,188	\$56,454	\$0	\$0	\$0	\$0	\$0	<b>\$44,931</b>
<b>40 to 44</b>	1,405	7,444	5,619	4,920	4,680	1,379	25	0	0	0	0	<b>25,472</b>
	\$39,065	\$44,543	\$50,994	\$59,193	\$64,169	\$65,695	\$59,884	\$0	\$0	\$0	\$0	<b>\$53,260</b>
<b>45 to 49</b>	1,268	6,551	5,407	5,153	4,515	4,010	993	28	0	0	0	<b>27,925</b>
	\$37,851	\$44,357	\$49,373	\$56,036	\$62,497	\$70,329	\$71,059	\$71,177	\$0	\$0	\$0	<b>\$54,827</b>
<b>50 to 54</b>	1,123	5,468	4,695	4,915	4,113	3,800	2,504	436	12	0	0	<b>27,066</b>
	\$38,464	\$44,832	\$48,442	\$52,830	\$58,171	\$65,308	\$74,192	\$74,241	\$60,231	\$0	\$0	<b>\$54,745</b>
<b>55 to 59</b>	968	4,902	4,322	4,652	4,594	3,486	1,987	898	187	8	8	<b>26,004</b>
	\$38,229	\$44,024	\$48,170	\$50,501	\$54,010	\$61,142	\$70,802	\$73,784	\$68,210	\$68,352	\$68,352	<b>\$52,970</b>
<b>60 to 64</b>	536	3,298	3,069	3,304	3,229	2,306	1,496	734	299	97	97	<b>18,368</b>
	\$33,821	\$42,730	\$47,342	\$51,374	\$54,060	\$57,443	\$64,590	\$72,446	\$73,012	\$67,796	\$67,796	<b>\$52,228</b>
<b>65 to 69</b>	167	1,172	1,118	1,125	840	596	449	232	123	87	87	<b>5,909</b>
	\$29,034	\$37,452	\$45,802	\$52,299	\$56,109	\$63,440	\$65,625	\$76,061	\$74,959	\$79,316	\$79,316	<b>\$51,948</b>
<b>70 &amp; up</b>	86	509	459	388	261	153	117	77	33	60	60	<b>2,143</b>
	\$19,015	\$29,141	\$35,155	\$48,336	\$52,760	\$55,964	\$64,190	\$70,959	\$76,012	\$85,669	\$85,669	<b>\$44,010</b>
<b>Total</b>	<b>16,507</b>	<b>66,873</b>	<b>40,954</b>	<b>32,817</b>	<b>24,398</b>	<b>15,813</b>	<b>7,571</b>	<b>2,405</b>	<b>654</b>	<b>252</b>	<b>252</b>	<b>208,244</b>
	<b>\$32,528</b>	<b>\$41,454</b>	<b>\$49,160</b>	<b>\$54,547</b>	<b>\$58,730</b>	<b>\$64,342</b>	<b>\$70,284</b>	<b>\$73,557</b>	<b>\$71,922</b>	<b>\$76,046</b>	<b>\$76,046</b>	<b>\$49,655</b>

**Table F**

**Retired Members and Beneficiaries - Distribution of Count and Average Annual 401(a) Annuity by Age and Service**

Current Age	Years of Service										Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	Over 45	
<b>Below 55</b>	34 \$209	166 \$299	289 \$530	285 \$696	256 \$1,054	711 \$2,686	609 \$3,450	31 \$2,397	6 \$1,644	2 \$1,505	<b>2,389</b> <b>\$1,999</b>
<b>55-59</b>	18 \$218	535 \$328	855 \$640	713 \$894	1,508 \$1,868	2,646 \$2,798	2,374 \$3,801	101 \$3,786	9 \$4,336	0 \$0	<b>8,759</b> <b>\$2,401</b>
<b>60-64</b>	27 \$160	2,019 \$367	3,112 \$771	2,809 \$1,166	4,511 \$1,842	4,157 \$2,647	4,352 \$3,669	428 \$4,431	59 \$4,565	0 \$0	<b>21,474</b> <b>\$2,043</b>
<b>65-69</b>	1,511 \$217	5,214 \$400	6,281 \$795	5,407 \$1,201	6,486 \$1,779	5,720 \$2,547	5,988 \$3,556	914 \$4,352	158 \$5,361	11 \$5,750	<b>37,690</b> <b>\$1,756</b>
<b>70-74</b>	2,189 \$162	5,614 \$378	6,239 \$766	4,678 \$1,182	5,659 \$1,748	5,075 \$2,498	4,628 \$3,410	1,080 \$4,262	194 \$5,260	25 \$5,668	<b>35,381</b> <b>\$1,608</b>
<b>75-79</b>	1,693 \$121	3,699 \$345	4,085 \$712	3,285 \$1,101	3,749 \$1,668	2,961 \$2,378	2,132 \$3,269	711 \$3,936	166 \$4,698	28 \$5,803	<b>22,509</b> <b>\$1,422</b>
<b>80-84</b>	857 \$109	2,043 \$343	2,601 \$720	2,130 \$1,142	2,204 \$1,716	1,577 \$2,390	1,040 \$3,120	302 \$3,808	80 \$4,651	13 \$5,973	<b>12,847</b> <b>\$1,362</b>
<b>85-89</b>	399 \$128	1,263 \$357	1,422 \$764	1,163 \$1,186	1,110 \$1,736	916 \$2,411	592 \$2,954	139 \$3,615	24 \$5,008	6 \$4,738	<b>7,034</b> <b>\$1,351</b>
<b>90-94</b>	119 \$146	503 \$374	651 \$803	521 \$1,187	480 \$1,690	367 \$2,233	207 \$2,846	66 \$3,363	9 \$5,954	5 \$6,469	<b>2,928</b> <b>\$1,323</b>
<b>Over 95</b>	33 \$158	144 \$386	178 \$815	173 \$1,186	160 \$1,575	105 \$1,956	49 \$2,706	19 \$2,369	5 \$5,002	1 \$4,984	<b>867</b> <b>\$1,241</b>
<b>Total</b>	<b>6,880</b> <b>\$156</b>	<b>21,200</b> <b>\$370</b>	<b>25,713</b> <b>\$755</b>	<b>21,164</b> <b>\$1,152</b>	<b>26,123</b> <b>\$1,755</b>	<b>24,235</b> <b>\$2,542</b>	<b>21,971</b> <b>\$3,498</b>	<b>3,791</b> <b>\$4,129</b>	<b>710</b> <b>\$4,981</b>	<b>91</b> <b>\$5,647</b>	<b>151,878</b> <b>\$1,690</b>

## Table G

### New Retired Members and Beneficiaries - Distribution of Count and Average Annual 401(a) Annuity by Age and Service

Current Age	Years of Service										Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	Over 45	
<b>Below 55</b>	9 \$271	34 \$270	56 \$535	73 \$793	73 \$1,401	273 \$3,030	202 \$3,770	7 \$3,027	3 \$1,366	0 \$0	<b>730</b> <b>\$2,488</b>
<b>55-59</b>	2 \$603	128 \$403	184 \$752	164 \$1,147	509 \$2,002	307 \$2,892	311 \$4,103	27 \$4,553	6 \$5,103	0 \$0	<b>1,638</b> <b>\$2,268</b>
<b>60-64</b>	3 \$176	376 \$410	614 \$915	579 \$1,364	545 \$1,963	276 \$2,794	257 \$3,795	69 \$4,507	19 \$4,931	0 \$0	<b>2,738</b> <b>\$1,726</b>
<b>65-69</b>	442 \$212	548 \$432	454 \$896	391 \$1,399	323 \$1,905	227 \$2,613	156 \$3,557	45 \$4,436	25 \$6,972	2 \$6,857	<b>2,613</b> <b>\$1,315</b>
<b>70-74</b>	76 \$166	131 \$341	150 \$770	80 \$1,432	73 \$1,886	44 \$2,468	42 \$2,996	14 \$3,852	8 \$5,428	3 \$5,495	<b>621</b> <b>\$1,245</b>
<b>75-79</b>	15 \$153	43 \$277	37 \$611	36 \$1,064	31 \$1,448	24 \$1,943	16 \$2,666	6 \$2,681	0 \$0	2 \$6,519	<b>210</b> <b>\$1,135</b>
<b>80-84</b>	7 \$155	22 \$438	23 \$640	18 \$1,211	18 \$1,263	13 \$2,406	18 \$1,680	3 \$2,586	1 \$4,850	1 \$4,067	<b>124</b> <b>\$1,195</b>
<b>85-89</b>	0 \$0	13 \$391	10 \$755	7 \$926	5 \$1,814	6 \$1,598	5 \$2,181	0 \$0	0 \$0	0 \$0	<b>46</b> <b>\$1,058</b>
<b>90-94</b>	3 \$337	3 \$365	4 \$528	2 \$1,029	6 \$1,358	3 \$1,593	2 \$2,406	1 \$3,322	0 \$0	0 \$0	<b>24</b> <b>\$1,139</b>
<b>Over 95</b>	0 \$0	0 \$0	0 \$0	0 \$0	1 \$1,099	0 \$0	0 \$0	1 \$3,435	0 \$0	0 \$0	<b>2</b> <b>\$2,267</b>
<b>Total</b>	<b>557</b> <b>\$207</b>	<b>1,298</b> <b>\$404</b>	<b>1,532</b> <b>\$848</b>	<b>1,350</b> <b>\$1,308</b>	<b>1,584</b> <b>\$1,913</b>	<b>1,173</b> <b>\$2,797</b>	<b>1,009</b> <b>\$3,748</b>	<b>173</b> <b>\$4,273</b>	<b>62</b> <b>\$5,661</b>	<b>8</b> <b>\$5,913</b>	<b>8,746</b> <b>\$1,708</b>

## Table H

### Members in Active Service as of June 30, 2019, by Annual Salary

Annual Salary	Number of Members	Percent of Total
Less than \$10,000	4,283	2.1%
\$10,000 - \$14,999	9,781	4.7%
\$15,000 - \$19,999	13,105	6.3%
\$20,000 - \$24,999	10,553	5.1%
\$25,000 - \$29,999	11,625	5.6%
\$30,000 - \$34,999	13,056	6.3%
\$35,000 - \$39,999	14,949	7.2%
\$40,000 - \$44,999	15,223	7.3%
\$45,000 - \$49,999	19,964	9.6%
\$50,000 - \$54,999	21,382	10.3%
\$55,000 - \$59,999	17,137	8.2%
\$60,000 - \$64,999	12,722	6.1%
\$65,000 - \$69,999	9,573	4.6%
\$70,000 - \$74,999	7,184	3.4%
\$75,000 - \$79,999	5,496	2.6%
\$80,000 - \$84,999	4,301	2.1%
\$85,000 - \$89,999	3,538	1.7%
\$90,000 and Over	14,372	6.9%
<b>Total</b>	<b>208,244</b>	<b>100.0%</b>

## Table I

### Number of Retirees by Benefit Option and Monthly Amount

Monthly Amount	Optional Form of Benefit							Total
	1	2	3	4	5	6	7	
Under \$300	13,612	178	256	746	3,084	246	999	<b>19,121</b>
\$300 - \$499	9,920	153	277	553	2,480	298	921	<b>14,602</b>
\$500 - \$999	19,746	378	596	984	4,820	794	2,059	<b>29,377</b>
\$1,000 - \$1,499	13,638	245	424	605	3,795	873	1,856	<b>21,436</b>
\$1,500 - \$1,999	9,890	167	306	450	3,033	898	1,625	<b>16,369</b>
\$2,000 - \$2,499	7,812	132	240	395	2,745	770	1,572	<b>13,666</b>
\$2,500 - \$2,999	6,154	107	214	327	2,268	636	1,199	<b>10,905</b>
\$3,000 - \$3,499	4,949	82	145	248	1,981	611	988	<b>9,004</b>
\$3,500 - \$3,999	3,351	40	84	194	1,414	455	682	<b>6,220</b>
\$4,000 and Over	5,888	46	149	240	2,547	932	1,376	<b>11,178</b>
<b>Total</b>	<b>94,960</b>	<b>1,528</b>	<b>2,691</b>	<b>4,742</b>	<b>28,167</b>	<b>6,513</b>	<b>13,277</b>	<b>151,878</b>

Optional	
Form Code	Description
1	Life annuity
2	Life annuity – 5 years certain and life
3	Life annuity – 10 years certain and life
4	Life annuity – 15 years certain and life
5	Joint annuity – 100% to contingent survivor
6	Joint annuity – 66 2/3% to contingent survivor
7	Joint annuity – 50% to contingent survivor

## Table J

### Health Insurance Benefit Counts

Current HIB Benefit	Count	Monthly Premium Supplement	Average Monthly Premium Supplement
Single, Non-Medicare	11,858	\$1,343,303	\$113
Single, Medicare	38,821	2,770,396	71
Family, Both Non-Medicare	5,707	937,950	164
Family, One Medicare, One Non-Medicare	5,617	795,596	142
Family, Both Medicare	21,933	2,422,726	110
	83,936	\$8,269,971	\$99

These counts include retired members who are assumed to take a HIB benefit in the future.

## Table K

### Data Reconciliation

	Active Members	Inactive	Retirees, Beneficiaries and QDRO	Long Term Disability	Total
<b>Total at June 30, 2018</b>	<b>207,119</b>	<b>233,484</b>	<b>146,956</b>	<b>3,358</b>	<b>590,917</b>
Terminations	(15,641)	15,641	0	0	0
Refund	(6,665)	(6,425)	0	(24)	(13,114)
Transfer Out	(10)	(13)	0	0	(23)
Disabled	(360)	(87)	0	447	0
Retirements	(5,848)	(1,624)	7,472	0	0
Returned from LTD	32	144	361	(537)	0
New QDRO	0	0	121	0	121
New Beneficiary	0	0	770	0	770
Deaths	(146)	(466)	(3,574)	(56)	(4,242)
Benefit Expiration	0	0	(156)	0	(156)
Data Adjustments	0	3	(14)	1	(10)
New Entrants Terminated with Account Balance	0	3,369	0	0	3,369
Rehires	5,011	(4,953)	(58)	0	0
New Entrants	<u>24,752</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>24,752</u>
<b>Net Change</b>	<b>1,125</b>	<b>5,589</b>	<b>4,922</b>	<b>(169)</b>	<b>11,467</b>
<b>Total at June 30, 2019</b>	<b>208,244</b>	<b>239,073</b>	<b>151,878</b>	<b>3,189</b>	<b>602,384</b>

## **APPENDIX V**

---

### **RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION**

## RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns;
2. Asset/Liability mismatch – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
3. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
4. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
5. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
6. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution rate shown on page 9 may be considered as a minimum contribution rate that complies with the Board’s funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

### PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	<u>June 30, 2019</u>	<u>June 30, 2018</u>	<u>June 30, 2017</u>
Ratio of the market value of assets to total payroll	4.0	4.0	3.9
Ratio of actuarial accrued liability to payroll	5.4	5.5	5.4
Ratio of actives to retirees and beneficiaries	1.4	1.4	1.4
Ratio of net cash flows to market value of assets	-3%	-3%	-3%
Duration of the actuarial accrued liability	11.4	11.5	11.5

### RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 4.0 times the payroll, a return on assets 5% different than assumed would equal 20% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

### RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 5.5 times the payroll, a change in liability 2% other than assumed would equal 11% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

### RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

### RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

### **DURATION OF ACTUARIAL ACCRUED LIABILITY**

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

### **ADDITIONAL RISK ASSESSMENT**

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability

## **APPENDIX VI**

---

### **GLOSSARY**

## Glossary

**Actuarial Accrued Liability (AAL):** That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.

**Actuarial Assumptions:** Assumptions as to future experience under the Fund. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- future rates of investment earnings and future investment and administrative expenses;
- characteristics of members not specified in the data, such as marital status;
- characteristics of future members;
- future elections made by members; and
- other relevant items.

**Actuarial Cost Method or Funding Method:** A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ARC.

**Actuarial Gain or Actuarial Loss:** A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the Fund's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

**Actuarially Equivalent:** Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

**Actuarial Present Value (APV):** The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

- a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.),
- b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and
- c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

**Actuarial Present Value of Future Plan Benefits:** The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would be provide sufficient assets to pay all projected benefits and expenses when due.

**Actuarial Valuation:** The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB.

**Actuarial Value of Assets or Valuation Assets:** The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ARC.

**Actuarially Determined:** Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

**Amortization Method:** A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.

**Amortization Payment:** That portion of the pension plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

**Actuarially Determined Contribution (ADC) or Annual Required Contribution (ARC):** A calculated contribution for a defined benefit pension plan for the reporting period, most often determined based on the funding policy of the plan. Typically the calculated contribution has a normal cost payment and an amortization payment.

**Closed Amortization Period:** A specific number of years that is counted down by one each year and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.

**Decrements:** Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.

**Defined Benefit Plan:** An employer-sponsored retirement benefit that provides workers, upon attainment of designated age and service thresholds, with a monthly benefit based on the employee's salary and length of service. The value of a benefit from a defined benefit plan is generally not affected by the return on the assets that are invested to fund the benefit.

**Defined Contribution Plan:** A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

**Employer Normal Cost:** The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.

**Experience Study:** A periodic review and analysis of the actual experience of the Fund which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

**Funded Ratio:** The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA.

**Funding Period or Amortization Period:** The term "Funding Period" is used in two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ARC. This funding period is chosen by the Board of Trustees. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on the statutory employer contribution rate, and assuming no future actuarial gains or losses.

**GASB:** The Governmental Accounting Standards Board is an organization that exists in order to promulgate accounting standards for governmental entities.

**Normal Cost:** That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

**Open Amortization Period:** An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.

**Unfunded Actuarial Accrued Liability:** The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

**Valuation Date or Actuarial Valuation Date:** The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.

# FINANCIAL HORIZONS

An annual publication



of the ASRS • Aug. 2019

## A Look at the ASRS Approach to Business

by Paul Matson, Executive Director

Here at your ASRS we generally agree with the adage that “What gets measured gets managed.” As a result, we measure and analyze an array of activities that fall into the following general categories: investment performance, member satisfaction, service standards & cost structure, and staff engagement, to ensure top tier performance. When there is not top tier performance – we take positive and supportive action.

Here’s a glimpse of our approach and results.

### Investment Performance

The ASRS manages a portfolio of

approximately \$40 billion in support of your pension, health insurance, long-term disability, and defined contribution plans. These assets are invested broadly according to a strategic asset allocation plan. Once benefit levels are determined, investment performance is the main driver in keeping down the contribution rates paid by our members and employers, and ensuring our plans are sustainable in perpetuity for the benefit of our members.

We measure performance of the various investments against industry benchmarks (such as the S&P500), as well as against a peer universe.

The ASRS investment returns consistently

rank in the top tenth percentile when compared with our peer group, as indicated in the table below.

By producing returns at a rate above the peer median, the ASRS has added approximately an additional \$520 million to the fund last year, and an additional \$5.8 billion over the past 10 years. These significant dollar amounts are in addition to the amounts that would be generated if the ASRS had generated median investment performance. These significant dollar amounts are important for the following reasons: 1. They cause contribution rates to be lower than they

*Director, continued page five*

Annualized Investment Returns as of June 30, 2018	1 Year	3 Years	5 Years	10 Years	Inception (June 30, 1975)
ASRS Actual Returns	9.4%	7.8%	8.9%	7.4%	9.7%
Peer Median Returns	8.0%	6.7%	7.5%	6.1%	N/A
Excess Return Above Peers	1.4%	1.1%	1.4%	1.3%	N/A
ASRS Performance Ranking among Peer Plans	Top 10th percentile	Top 7th percentile	Top 8th percentile	Top 6th percentile	N/A

Data source: NEPC and InvestorForce. All returns listed net of fees.

# A LOOK AT THE NUMBERS...

Each year, the ASRS compiles a Comprehensive Annual Financial Report, detailing the funding status and position of the overall ASRS trust fund and our various plans. Below is a snapshot of some of the over arching numbers. Note that these numbers are for fiscal year which ended June 30, 2018. Reports for fiscal year 2019, which ended just this past June, are still being compiled.

The full report, as well as a reader-friendly summary - the Popular Annual Financial Report - can be found on our website at [AzASRS.gov/AnnualReports](http://AzASRS.gov/AnnualReports). Here is a brief summary of some of our numbers:

## DEMOGRAPHICS

- Active Members: **210,136**
  - Average Age: **45.4**
  - Average Annual Salary: **\$47,901**
- Inactive Members: **232,568**
- Retired Members & Survivor Beneficiaries: **150,420**
- Long Term Disability (LTD) Members: **3,488**

## BENEFIT RECIPIENTS

- Average Monthly Retirement Benefit: **\$1,678**
- Average Age: **71**

## FUNDED STATUS

- \$38 Billion: **71.2% Funded**  
*An increase of 0.7% from the previous year*

## MEMBERS

- Total Members: **596,612**
- Participating Employers: **673**

For more information:  
**Annual Reports** at [AzASRS.gov](http://AzASRS.gov)

## NEW CONTRIBUTION RATES *(for fiscal year beginning July 1, 2019)*

The rate at which an employee pays into their pension account, as well the rate employers pay towards their employee's pension accounts. These adjust yearly based on experience as well as projections and assumptions.

	Pension & Health Benefit Supplement	LTD Plan	TOTAL
Employee	11.94%	0.17%	12.11%
Employer	11.94%	0.17%	12.11%

## ASRS Board of Trustees

by Dave Cannella, Media Relations

The Arizona State Retirement System is governed by a nine-member Board of Trustees, appointed by the Governor and confirmed by the state Senate.

The Board acts as a fiduciary of the ASRS trust fund with powers and duties outlined in state statute.

The Board generally meets six times per year in a public meeting at the ASRS Phoenix office. Topics reviewed and discussed by the Board include investment management, actuarial methods & assumptions, contribution rates, budgets, technology, legislation, policies, and governance. There is also time in each meeting for calls to the public during which anyone may address the Board.

In addition to the Board of Trustees,

there are three committees of the Board: the Investment Committee, the Operations, Audit & Legislative Committee, and the Appeals Committee.

Meeting agendas and discussion materials are posted to the ASRS website, [AzASRS.gov](http://AzASRS.gov). Meeting minutes are also kept there, along with short biographies of each trustee, and board governance materials. All can be found on the *Board of Trustees* page, under the *About Us* tab. |

# An Alternative Savings Plan for ASRS Members

by Dave Cannella, Media Relations

*A low-fee savings plan that offers an additional way to achieve financial independence*

In addition to your pension, long-term disability and retiree health insurance benefits, the ASRS offers another program many of our active members find to be of value – the ASRS Supplemental Savings Deferral Plan – or SSDP for short.

This professionally managed, low-administrative fee savings plan is a great way to supplement your post-employment income, keeping in mind that there are no provisions for regular increases to your pension once you begin collecting it.

The SSDP is qualified under Section 457 of the Internal Revenue Code.

The plan allows employees who work for an employer who has adopted the ASRS SSDP an opportunity to contribute tax deferred money into an account, which then grows tax-deferred until withdrawal.

Overseen by the ASRS and administered by Nationwide Retirement Solutions, the SSDP is professionally managed and offers a variety of investment options to suit both the interested investor as well as those who would like a simple

one-choice retirement date investment solution. The SSDP has a very low administrative cost of 0.06% of assets. A low administrative cost can make a big difference to your savings over time.

This plan is not available to employees of the State of Arizona, but the State of Arizona offers a similar plan which has an equally low administrative cost.

To learn more about the SSDP, visit [AzASRS.gov](http://AzASRS.gov) and the *Supplement Your Savings* page, which includes a short informational video. |



# A Summary of Recent ASRS Legislation

by Jessica Thomas, Government Relations Officer

The 54th Legislature, First Regular Session adjourned sine die on May 28, 2019 and the general effective date for legislation that was passed and signed by the Governor is August 27, 2019. The legislature passed two bills that have a relatively minor impact on members and retirees. Below is a brief summary. You can also find more detailed information about these bills and other retirement-related bills in the 2019 Legislative Summary book at [AzASRS.gov](http://AzASRS.gov), on the *Legislation* page under the *About Us* tab.

**Senate Bill 1018:** ASRS; Compensation; Definition



This bill makes changes to **A.R.S. § 38-711** to define “compensation” for new members as of January 1, 2020. Certain types of pay that are not included as salary and wages on the member’s federal W-2 tax form, will not be considered as “compensation” for ASRS purposes.

**Senate Bill 1079:** ASRS; Long-Term Disability (LTD) Program

This bill makes changes to **A.R.S. § 38-797.07** to remove redundant definitions, change the definition of “disability,” and limit the amount of available disability benefits to no more

than 100% of the member’s pre-disability compensation. It also authorizes the ASRS or its contracted administrator to investigate information related to the falsification of information or records related to the LTD Program.

Be sure to visit our website to see all the latest legislative updates, state statutes, and administrative rules related to the ASRS and public retirement plans.

- Follow legislative sessions on ASRS’ Bill Tracker.
- Check Arizona Revised Statutes.
- Check ASRS administrative rules.

Look for the *Legislation* and *Rules* sections on [AzASRS.gov](http://AzASRS.gov) for details and links. |

**P**ensions are not as common as they used to be, which can lead to not fully understanding what you're a part of, how it benefits you, and how to best take advantage of the benefits available to you. To further that understanding, let's take a look at what the Arizona State Retirement System is, and what it isn't.

For starters, the ASRS is what's called a "Defined Benefit Plan." In technical terms, it's a 401(a) plan that is governed by Arizona statute and IRS rules. A more simple explanation: it's a mandatory-participation retirement plan that provides ASRS retirees with benefit payments for the rest of their life. The basic

structure for retirement is as follows: ASRS members and employers both pay contributions to the ASRS, the ASRS in turn invests those contributions and pays members who meet retirement eligibility a lifetime benefit payment. That benefit amount can vary based on your age at retirement, years of service, and average monthly compensation. It's not determined by your account balance with the ASRS or the performance of ASRS investments.

*(Note: For a more comprehensive look at how your pension is calculated and how to potentially increase your pension before you retire, make sure to read the "The Affect of 'When' on Your Pension" article on page 6.)*

When most people think of a retirement savings plan offered by an employer, they think of a 401(k) savings plan. Instead of being a "Defined **Benefit** Plan" like the ASRS benefit, a 401(k) is classified as a "Defined **Contribution** Plan." It's a subtle but important distinction, and

they each operate very differently. For a 401(k) plan, the funds available to you when you're ready to retire are solely based on your account balance and the performance of investments over the life of the account. Keep in mind that those investment decisions are managed by you, the employee, unlike investment

what they actually paid into the ASRS over their career with contributions. This is made possible through the investing of member and employer contributions. Furthermore, Article 29 of the Arizona Constitution protects your ASRS benefit from being 'diminished or impaired.'

That's not to say a 401(k) isn't a valuable savings tools – it's just important to know the differences. The ASRS even actively suggests members have retirement savings outside of their pension, to help supplement their future retirement benefit. An ASRS pension is designed to be one of a three part strategy for retirement: your ASRS pension, Social

# HOW WELL DO YOU KNOW YOUR PENSION?

by Nathaniel Brengle, Communications & Sara Orozco, Strategic Planning

decisions with your ASRS pension, which are professionally managed by the ASRS. There's also no guarantee that the money in a 401(k) will last as long as a person may need it to. Once the balance of the account has been fully paid out, that's the end of the benefit.

**"IN FACT, IT IS QUITE TYPICAL FOR ASRS RETIREES TO RECEIVE MULTIPLE TIMES MORE IN PENSION PAYMENTS THAN WHAT THEY ACTUALLY PAID INTO THE ASRS OVER THEIR CAREER WITH CONTRIBUTIONS."**

Security, and personal savings. This is partially to help guard against future rising living costs. While your ASRS pension is guaranteed for your lifetime, it does not include any means of automatic increases, such as cost-of-living increases. This means you could expect your retirement benefit to be the same amount after you've been retired for 20 years as it was when you were retired for two years.

Curious to know how much your pension might be when *you* retire? It's easy to find out. If you go to **AzASRS.gov** and select the *Estimate Your Benefits* page from the *Members* drop-down menu, you'll find additional information on how your pension is calculated, including an interactive tool you can use to estimate an ASRS pension. For a more detailed estimate based on your actual salary, log into your secure MyASRS account at **AzASRS.gov** and view the *Your Benefit Estimates* section. |

HOW YOUR PENSION WORKS



MEMBER & EMPLOYER CONTRIBUTIONS POOLED TOGETHER



RETIREMENT BENEFITS PAID OUT TO 150K PLUS RETIREES FOR THE REST OF THEIR LIFE!

## DID YOU KNOW?

There are a number of other benefits included with your membership in the ASRS!

### Long Term Disability (LTD)

If you become disabled while working as an ASRS member, you may qualify to receive a monthly long term disability benefit. If approved, the ASRS will pay you a benefit equal to 66 2/3% of your salary, less any benefit offsets. These benefits will continue to be paid until you: return to work, cease to meet the definition of disability, pass away, or reach retirement eligibility.

### Retiree Health Insurance

When you retire (or become disabled), you become eligible to enroll in an ASRS sponsored health insurance program. The ASRS has health insurance plans geared to retirees who have reached Medicare eligibility, as well as those who have not.

### Health Insurance Premium Benefit Supplement

Retirees with five or more years of service who are enrolled in a health insurance program sponsored by the ASRS or an ASRS employer are eligible to receive a premium benefit supplement each month to help reduce retiree health insurance premiums.

### Service Purchase

Active members may be eligible to purchase additional ASRS service credit in order to increase their total ASRS benefit.

**For additional information** on all of the above benefits (and more!) visit [AzASRS.gov](http://AzASRS.gov) and browse the *Members* and *Retirees* sections. |

## Director's Message, continued

would otherwise be for our active members 2. They increase the likelihood that the ASRS will be able to generate a future Permanent Benefit Increase (PBI) for our retirees 3. They increase the security of all future pension payments

### Member Satisfaction

We track member satisfaction across the spectrum - including phone calls, emails, in-person meetings, and online and in-person educational programs. Members have consistently provided an overall satisfied or very satisfied rating above 90 percent in most all interactions with us.

### Service Standards & Cost Structure

The ASRS participates in an annual global benchmarking survey, which compares our performances against a group of public pension plans across the United States. In the most recent survey, conducted by CEM Benchmarking, the ASRS was shown to be a top-tier provider of services, while maintaining a lower-tier cost structure. Specifically, the ASRS total pension administration cost was \$78 per active member and annuitant, which was \$24 below the peer average of \$102. In addition, the ASRS administration cost has been decreasing in recent years, compared with increased costs of our peer group.

And, at the same time, the ASRS total service score was 88, notably above the

peer average of 82.

### Staff Engagement

As a state agency, the ASRS is highly cognizant of both whom we serve and the fiscal responsibility we have in managing your trust fund. Our successes are the direct result of the efforts of our entire staff.



We are truly doing more with less and are accomplishing this with a highly engaged staff, as evidenced by the most recent Engagement Survey conducted independently by the Arizona Department of Administration. The survey was conducted independently and confidentially. This year, our engagement score was 9.5 – which places the ASRS in the category of an outstanding organization, as indicated below:

- Average Organization: 1.8
- Outstanding Organization: 9.0
- **ASRS: 9.5**

And so the statistics are in – whether it is top tier investment performance, top tier customer service, strong cost effectiveness, or a highly engaged workforce – the ASRS is meeting the high standards that have been set.

And we are very proud to serve each of you – our retirees, active employees, and former employees who maintain credited service at the ASRS. |

# The Affect of "When?" on Your Pension



by Katie Daigneault, Strategic Planning

When considering retirement there are a lot of factors to think about, but did you know that the decision of *when* to retire effects your pension benefit? The ASRS uses the following fairly simple formula to calculate the Straight Life annuity, the highest paying retirement option to calculate your base line monthly benefit:

$$\text{Average Monthly Compensation} \times \text{Years of Service} \times \text{Graded Multiplier} = \text{Monthly Pension}$$

Let's take a look at each part of the equation separately to get a better understanding of how the timing of your retirement effects your pension benefit.

## AVERAGE MONTHLY COMPENSATION

To start calculating your pension, the ASRS looks at your last ten years of your contribution history. For people who became a member on 7/1/2011 or later, we'll then take the average of your highest consecutive 60 months within those 10 years. For those who were members prior to that (but after 1/1/1984), it's your highest consecutive 36 months within those 10 years.

## GRADED MULTIPLIER

Wondering what that "graded multiplier" is? The graded multiplier is one of the major factors used to determine how your pension is calculated. Therefore, it is an important piece in deciding when to retire. The graded multiplier is tiered based on your total years of service. As you accrue more service, you qualify for a higher multiplier of your final average monthly compensation, which increases your benefit. When selecting your retirement

date it is important to look at your service and review if you are close to the next graded multiplier threshold. If you are, it could be worth it to work longer to reach the next graded multiplier and increase your benefit for your lifetime.

GRADED MULTIPLIER TABLE	
YRS OF SERVICE	MULTIPLIER
0 - 19.99	2.10%
20 - 24.99	2.15%
25 - 29.99	2.20%
30 OR HIGHER	2.30%

## YEARS OF SERVICE & AGE

Although your years of service are updated with each contribution applied to your account, the ASRS cannot guarantee your total years of service until a detailed audit is performed on your account, triggered by the processing of your retirement application. We suggest members consider working an additional month past their target retirement date to build a cushion and cover any needed adjustments that could be found during the audit.

When looking at how many years of service you may need to reach normal retirement, remember that your age also becomes a factor. A great way to evaluate your options is to play with the personalized benefit estimator in your secure MyASRS account. Keep in mind that members who retire early

will received a reduced benefit for their lifetime based on their age and total credited service at retirement.

## YOUR PENSION BENEFIT OPTIONS

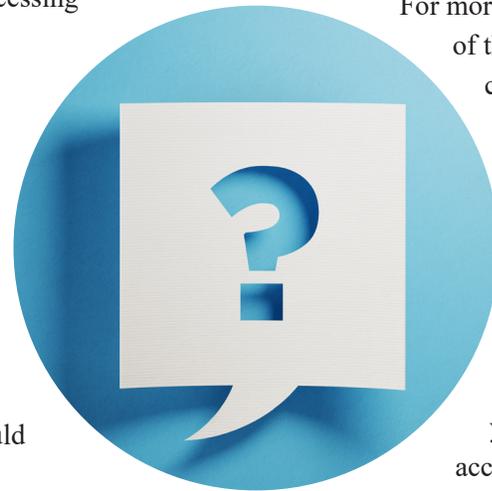
Another major factor to consider is the *annuity option* you decide to select. The ASRS offers seven annuity options, and the option you select will have an effect on the amount of your pension benefit.

All of the annuity options provide a guaranteed lifetime payment to the member along with different options for survivor benefits. If you choose an annuity option to guarantee a benefit to a beneficiary upon your passing, then your monthly benefit will be reduced. The amount of the reduction is determined based on factors such as the annuity option selected and the age of your beneficiary.

For more information on any of the above, make sure to check out *Retirement Central* or the *Member Tool Kit* pages of **AzASRS.gov**.

Also, remember that the ASRS provides a personalized Benefit Estimate tool in your secure MyASRS account at **AzASRS.gov**.

This tool is one of the best ways for you to determine when the best time for you to retire may be. You can see general estimates for your first point of normal retirement or you can customize the estimate based on a date you select. Login to your secure account click 'Retirement' under 'Your Benefit Estimates' to check and customize your own personalized estimate. |



# Member Education from the ASRS

Information for you, no matter how close or far you think retirement may be.

## EARLY CAREER

### Route 1: Your Journey Begins

Are you new to the ASRS? Watch this ten-minute video that explains what Member benefits the ASRS provides to you. Want to learn more? Check out the Member Education section on the website.

Be sure to **set up your myASRS secure account** today to access your account details and sign up for meetings in the future

## MID-CAREER

### Route 2: Map Your Progress

Retirement may still be far off, but start planning now with our interactive **eLearning**. Use this tool to help you navigate toward your retirement path.

### Route 3: Destination in Sight

When you are three years away from retirement, attend this meeting. You will learn how your benefits are calculated and how you can get ready for retirement.

## LATE CAREER

### Know Your Insurance

If you are considering ASRS retiree group health insurance for when you retire, attend this meeting within a year of retirement to learn about ASRS health insurance enrollment and plan coverage details from our plan providers.

### Route 4: Next Exit – Retirement

Six months from retirement you should attend this meeting and get the details on the retirement application process and payment schedules.

**Visit [AzASRS.gov/content/member-education](http://AzASRS.gov/content/member-education) for more info**

*\*Note: Route 3, Route 4, and Know Your Insurance meetings are available both in-person and via webinar. Log into your myASRS account to see upcoming meetings and register!*



**Attending a group meeting or webinar allows you to:**

- Ask questions
- Hear other questions that you didn't even think of
- Manage your retirement planning
- Understand how your retirement income is calculated
- Learn how to finalize the process

**GPS - Guide to Pre-Retirement Services... dynamic interactive online application that will help you chart your future.**

Arizona State Retirement System  
*Financial Horizons*  
PO Box 33910  
Phoenix AZ 85067-3910

AzASRS.gov

In Phoenix:  
602-240-2000

In Tucson:  
520-239-3100

Toll-Free:  
800-621-3778



Facebook  
or Twitter:

**AzASRS**

LinkedIn: **ASRS**



An agency of the  
State of Arizona

# FINANCIAL HORIZONS

An annual  
publication  
of the  
Arizona State  
Retirement  
System

- A Look at the ASRS Approach to Business *Page 1*
- An Alternative Savings Plan for Members *Page 3*
- A Summary of Recent ASRS Legislation *Page 3*
- How Well Do You Know Your Pension? *Page 4*
- The Affect of "When?" on Your Pension *Page 6*
- And more!

## Comments?

*Financial Horizons* is published annually and mailed to all members and retirees of the Arizona State Retirement System. We welcome comments from our readers!

Publications Editor  
P.O. Box 33910  
Phoenix, AZ 85067-3910

Or email us at:

DigitalCommunications@  
AzASRS.gov

## Member Statements on MyASRS *Have you accessed your member statement online?*



Active and inactive members can view and print a copy of their Member Statement online at any time. This real-time statement includes beneficiary information, a summary of service credit, estimated monthly pension amounts, information on refund, survivor and disability benefits. The ASRS recommends members log into their myASRS account at least once a year to review their statement information and earliest estimated normal retirement date.



# POPULAR ANNUAL FINANCIAL REPORT



2019

For fiscal  
year ended  
June 30,  
2019



Your money. Your future. Secure for your lifetime.



# A MESSAGE FROM THE DIRECTOR



I am pleased to present the 2019 Popular Annual Financial Report (PAFR) for the Arizona State Retirement System (ASRS) for the fiscal year ended June 30, 2019.

The information presented here is a reader-friendly summary of financial

data derived from the Comprehensive Annual Financial Report (CAFR) which is prepared on the accrual basis of accounting and presented in conformity with Generally Accepted Accounting Principles (GAAP). The PAFR is not intended to supplement the CAFR and does not include all information and disclosures required by GAAP; rather, it is a concise summary of the financial health of the ASRS for fiscal year 2019. The ASRS Executive Management is responsible for ensuring timely and accurate financial reporting, as well as maintaining the financial sustainability and health of the funds that support retirement benefits, long term disability and health benefit supplement programs for our members. I am pleased to report that the ASRS continues to issue timely and accurate financial reporting, as demonstrated by the continued receipt of the awards for excellence in financial reporting for 30 consecutive years, and each of the programs offered by the ASRS are sustainable. Detailed information regarding the activities and financial health of the ASRS, can be found in our June 30, 2019 CAFR, which is available on our website at [AzASRS.gov](http://AzASRS.gov).

## Overview

The ASRS is a cost-sharing, multiple-employer, defined benefit pension plan that provides benefits to approximately 608,000 current and former public employees in the state. At June 30, 2019, there were 564 employer units participating in the ASRS, including school districts, charter schools, state colleges and universities, and local, county and state government.

In addition to pension benefits, the ASRS provides a health insurance premium benefit supplement (Health Benefit Supplement, HBS), and a long term disability benefit. The ASRS also sponsors medical and dental coverage for retired and disabled members, and their eligible dependents and children.

During fiscal year 2019, more than 159,000 retirees, their survivors, and 3,300 disabled members received approximately \$3.3 billion in benefits.

## Highlights

The ASRS achieved a one-year total fund rate of return of 6.6% during fiscal year 2019, which added approximately \$2.5 billion dollars in value to the investment portfolio. The annualized rates of return for the three, five, and ten year periods are 9.9%, 6.6%, and 10.4%. These investment returns were driven primarily by higher asset valuations, private market interest rates, and an effective asset allocation policy. In the current fiscal year, a new Strategic Asset Allocation was adopted which is designed to identify strategies which can generate excess returns. In addition, the ASRS recently completed an actuarial experience study, which resulted in changes to certain assumptions, including increasing the expected longevity of our members and decreasing the investment rate of return assumption. Consequently, contribution rates are expected to increase gradually for several more years before gradually beginning to fall.

Kind regards,

Paul Matson,  
Executive Director





Government Finance Officers Association

# Award for Outstanding Achievement in Popular Annual Financial Reporting

Presented to

**Arizona State Retirement System**

For its Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2018**

*Christopher P. Morill*

Executive Director/CEO

The Government Finance Officers Association of the United States and Canada (GFOA) has given an award for “Outstanding Achievement in Popular Annual Financial Reporting” to Arizona State Retirement System for its Popular Annual Financial Report publication for the fiscal year ended June 30, 2018. This Award is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government popular reports.

In order to receive this award, a government unit must publish a Popular Annual Financial Report, whose contents conform to program standards of creativity, presentation, understandability and reader appeal. An award for “Outstanding Achievement in Popular Annual Financial Reporting” is valid for a period of one year. Arizona State Retirement System has received this award for the last 7 consecutive years. We believe our current report continues to conform to the Popular Annual Financial Reporting requirements, and we are submitting it to the GFOA.



# TABLE OF CONTENTS

---

## Funded Status | page 4

*Defined Benefit Program Funding Ratio*  
*Net Pension & OPEB Liability of Employers*

## Investments Summary | page 5

*Target Asset Allocation*  
*Market Value of Investments by Fund*  
*Retirement Fund Market Value of Investments*  
*Portfolio Returns and Benchmarks*  
*One-Year Returns*

## Financial Summary | page 7

*Fiduciary Net Position*  
*Changes in Fiduciary Net Position*

## Member Data | page 8

*Member Composition by Status*  
*Active Members by Employer Type*  
*Active Member Averages*  
*Retired Member Averages*

## Glossary | page 9



# FUNDED STATUS

## Defined Benefit Program Funding Ratio

The funding ratio is the ratio of the actuarial value of assets<sup>†</sup> available to pay retirement benefits divided by the present value of anticipated future retirement benefit payments. The actuarial value of assets is determined by a smoothing formula to eliminate short-term market fluctuations and will differ from the market value of investments. Changes in the actuarial assumptions caused a decrease in the 2017 pension funding ratio. Changes included a reduction in the discount rate from 8.0% to 7.5%, updated life expectancies, the inclusion of Permanent Benefit Increase (PBI) assumptions, and a switch to the Entry Age Normal actuarial cost method.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Pension	79.0%	76.4%	75.5%	75.3%	75.4%	76.3%	77.1%	77.0%	69.7%	70.4%
Health Benefit Supplement (HBS)	87.2%	84.2%	82.9%	85.3%	89.2%	93.1%	90.1%	95.0%	98.0%	98.7%
Long Term Disability (LTD)	65.4%	66.9%	67.5%	67.3%	85.7%	85.0%	79.1%	70.1%	80.4%	75.8%

## Net Pension and OPEB<sup>†</sup> Liability of Employers

(in thousands)

The net pension and OPEB liability (asset) of employers is determined using actuarial methods required by the Governmental Accounting Standards Board (GASB<sup>†</sup>) and allows for more comparability of data across government pension plans. The net pension and OPEB liability (asset) of employers represents the present value of the total pension and OPEB liability, less the fiduciary net position of the plan. The value of investment assets for accounting purposes differ from those the ASRS uses for funding purposes. Accordingly, the resulting funding ratio determined under the ASRS accounting methodology is different from the ratio determined by the actuarial funding methodology.

Year Ended June 30, 2019

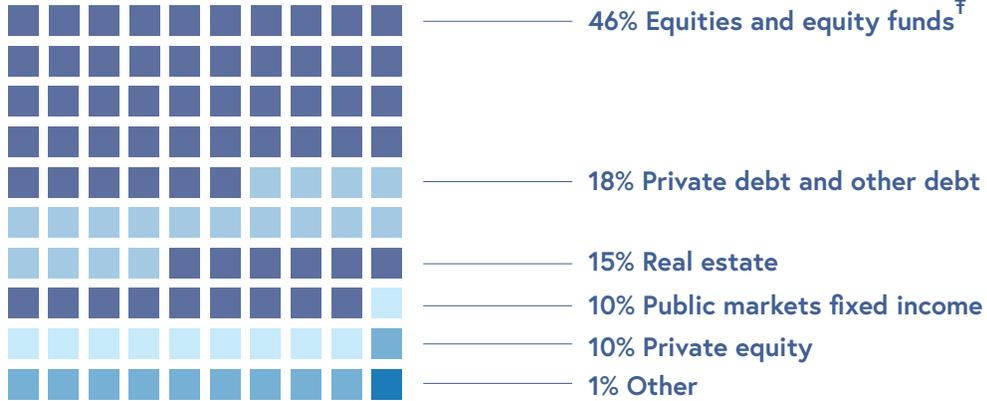
	Pension	HBS <sup>†</sup>	LTD <sup>†</sup>
Total Pension and OPEB Liability	\$54,376,305	\$1,704,045	\$239,935
Plan Fiduciary Net Position	\$39,825,142	\$1,731,681	\$174,791
Net Pension and OPEB Liability (Asset) of Employers	\$14,551,163	(\$27,636)	\$65,144
Plan Fiduciary Net Position as a Percentage of Total Pension and OPEB Liability	73%	102%	73%
Covered-Employee Payroll	\$10,264,999	\$10,264,999	\$10,264,999
Net Pension and OPEB Liability (Asset) of Employers as a Percentage of Covered Employee Payroll	142%	(0.3%)	0.6%



# INVESTMENTS SUMMARY

## Investment Asset Allocation

The ASRS has a highly diversified portfolio with investments in public and private markets and across market sectors. To the right are the ASRS' actual asset allocations as of June 30, 2019.



## Market Value of Investments by Fund

In addition to the retirement fund, the ASRS also has funds for the administration of the health benefit supplement (HBS), and long term disability (LTD) programs. Approximately 95% of the ASRS' investments are held by the retirement fund. Amounts exclude reinvested securities lending collateral.

- Retirement Fund:** 95.2% - \$39,672,000,000
- HBS:** 4.4% - \$1,817,000,000
- LTD:** 0.4% - \$166,000,000

## Total Fund<sup>†</sup> Market Value of Investments

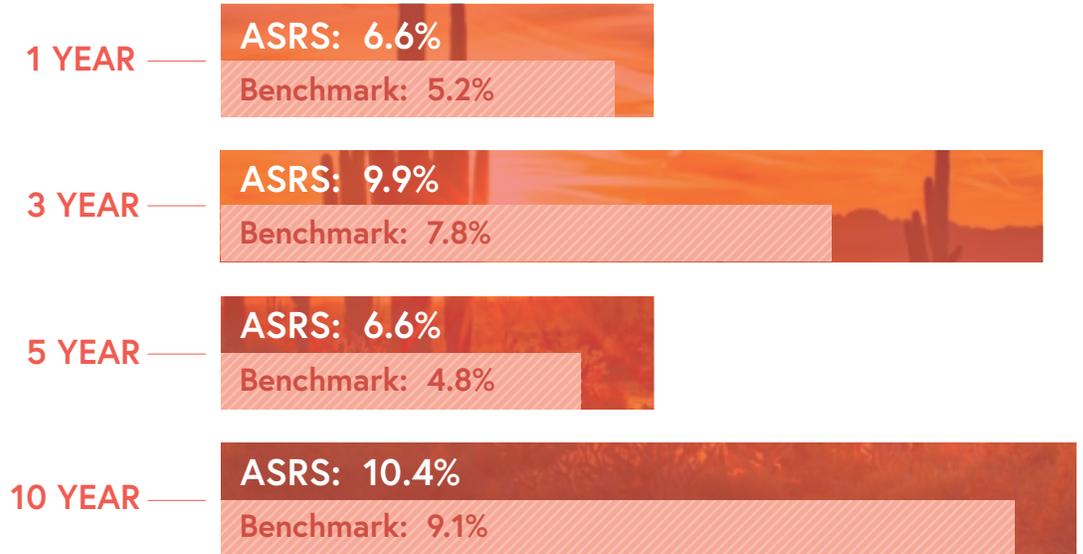


Represents the market value of investments at fiscal year end over the last 10 years. Contributions, benefit payments and investment returns are significant drivers of changes in the market value of investments from year to year.

# INVESTMENTS SUMMARY (cont'd)

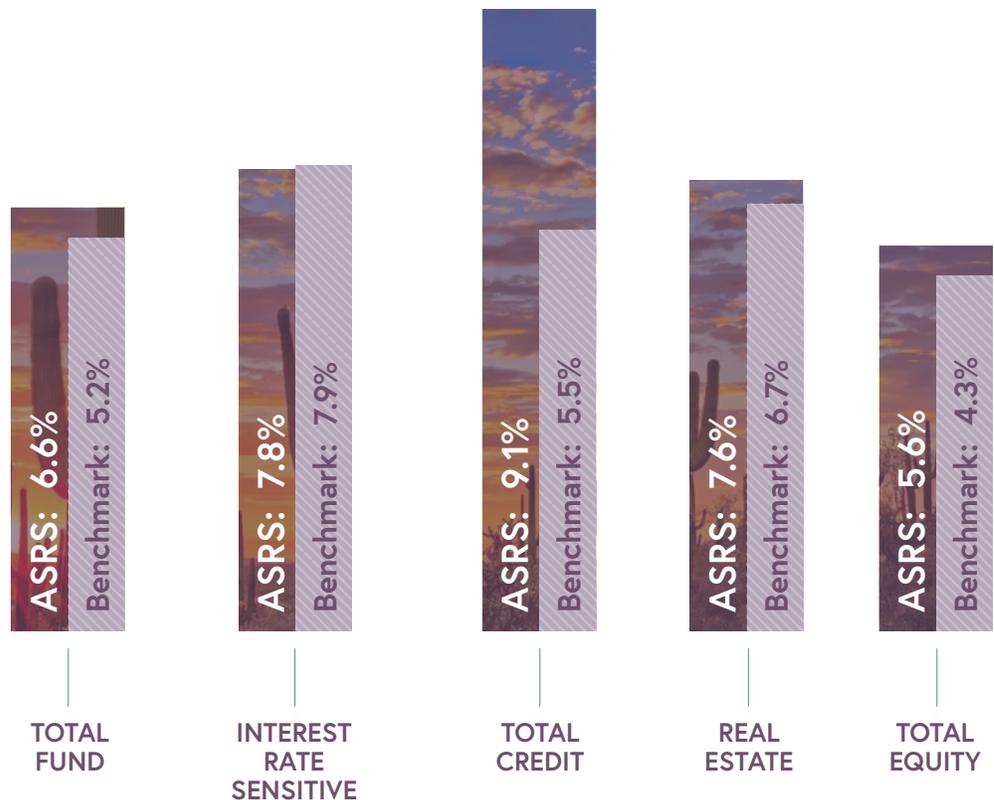
## Portfolio Returns and Benchmarks

ASRS funds are well-diversified, professionally managed, and high-performing - ranking in the top 20th, 10th, 13th, and 4th percentiles of our peers for the 1, 3, 5 and 10 year periods. The ASRS has also outperformed its 1-year, 3-year, 5-year and 10-year time weighted return benchmarks<sup>†</sup>.



## One-Year Returns

Total fund, total credit, real estate, and total equity returns outperformed their respective benchmarks during the fiscal year 2019.



# FINANCIAL SUMMARY

Includes the Retirement Fund, Health Benefit Supplement Fund, and Long Term Disability Fund. The tables below present summarized information. Please refer to the ASRS June 30, 2019, Comprehensive Annual Financial Report (CAFR) <sup>†</sup> for more detailed information.

## Combined Fiduciary Net Position *(in thousands)*

This statement presents the assets and liabilities that comprise the ASRS' net position as of June 30, 2019, and 2018.

	2019	2018	Change	Change %
<b>Assets</b>				
Cash, Receivables, & Prepaid Benefits	\$223,333	\$713,082	(\$489,749)	(68.7)%
Investments	\$41,655,165	\$39,968,355	\$1,686,810	4.2%
Securities Lending	\$143,604	\$109,089	\$34,515	31.6%
<b>Total Assets</b>	<b>\$42,022,102</b>	<b>\$40,790,526</b>	<b>\$1,231,576</b>	<b>3.0%</b>
<b>Liabilities</b>				
Payables & Other Liabilities	\$39,056	\$215,237	(\$176,181)	(81.9)%
Securities Lending	\$143,604	\$109,089	\$34,515	31.6%
<b>Total Liabilities</b>	<b>\$182,660</b>	<b>\$324,326</b>	<b>(\$141,666)</b>	<b>(43.7)%</b>
<b>Net Position Restricted For Pension / OPEB Benefits <sup>†</sup></b>	<b>\$41,839,442</b>	<b>\$40,466,200</b>	<b>\$1,373,242</b>	<b>3.4%</b>

## Combined Changes in Fiduciary Net Position *(in thousands)*

This statement presents information to illustrate how the fiduciary net position changed as a result of financial activity (i.e. contributions, investment activity, and benefit payments)

	2019	2018	Change	Change %
<b>Additions</b>				
Member Contributions	\$1,210,534	\$1,115,175	\$95,359	8.6%
Employer Contributions	\$1,244,985	\$1,143,911	\$101,074	8.8%
Service Credit Purchase & Other	\$27,579	\$24,636	\$2,943	11.9%
Net Investment Income	\$2,517,739	\$3,579,763	(\$1,062,024)	(29.7)%
<b>Total Additions</b>	<b>\$5,000,837</b>	<b>\$5,863,485</b>	<b>(\$862,648)</b>	<b>(14.7)%</b>
<b>Deductions</b>				
Benefit Payments	\$3,335,482	\$3,199,212	\$136,270	4.3%
Refunds & Transfers	\$262,138	\$259,776	\$2,362	0.9%
Administration & Other	\$29,975	\$30,309	(\$334)	(1.1)%
<b>Total Deductions</b>	<b>\$3,627,595</b>	<b>\$3,489,297</b>	<b>\$138,298</b>	<b>4.0%</b>
<b>NET CHANGE</b>	<b>\$1,373,242</b>	<b>\$2,374,188</b>	<b>(\$1,000,946)</b>	<b>(42.2)%</b>
<b>Net Position Restricted For Pension / OPEB Benefits</b>				
Net Position Beginning Of Year	\$40,466,200	\$38,092,012	\$2,374,188	6.2%
Net Position End Of Year	\$41,839,442	\$40,466,200	\$1,373,242	3.4%



# MEMBER DATA

Membership in the ASRS is comprised of employees of the State of Arizona and other participating employers, including public and charter schools, institutions of higher education, cities, counties, and special districts. Members include all participants who have contributions on account with ASRS.

## Active Members by Employer Type *(as of June 30, 2019)*



**51% Public Schools**  
(109,024)



**9% Cities & Towns** (18,261)



**8% Universities** (16,586)



**12% State Agencies**  
(26,234)



**4% Community Colleges** (8,634)



**10% Counties**  
(21,571)



**3% Special Districts** (6,541)



**3% Charter Schools** (5,094)

### Member Composition by Status

*(as of June 30, 2019)*



The following tables summarize member averages determined from the ASRS' June 30, 2018, actuarial valuation.

### Active Member Averages

	2018
Active Plan Members	207,119
Average Years of Service	9.4
Average Annual Salary	\$47,901
Average Age	45.4

### Retired Member Averages

	2018
Retired Plan Members	146,956
Average Monthly Annuity <sup>†</sup>	\$1,678
Average Years of Service	19.4
Average Age	71.1

# GLOSSARY

---

**Actuarial Value of Assets:** The value of the fund's assets as of a given date, used by the actuary for valuation purposes. The ASRS uses a smoothed value in order to reduce year-to-year volatility when determining contribution rates.

**Average Monthly Annuity:** The average monthly payment to ASRS retirees.

**Benchmarks:** Benchmarks vary by asset class. See the ASRS June 30, 2019 Comprehensive Annual Financial Report for more information on benchmarks.

**Comprehensive Annual Financial Report (CAFR):** This detailed financial report can be found at [www.AzASRS.gov/content/annual-reports](http://www.AzASRS.gov/content/annual-reports)

**Equity Funds / Fixed Income Funds:** In addition to investing in equity and fixed income instruments, the ASRS also invests in equity and fixed income commingled funds.

**Government Accounting Standards Board (GASB):** The source of Generally Accepted Accounting Principles used by state and local governments.

**HBS:** Health Benefit Supplement program.

**Inactive Member:** A member who still has contributions on account with the ASRS, but is no longer accruing service with an ASRS employer.

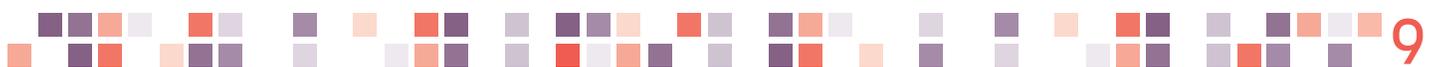
**LTD:** Long Term Disability program.

**Net Position Restricted for Benefits:** The residual assets available to pay benefits after deducting liabilities from assets.

**OPEB:** Other Post-Employment Benefits - benefits, other than pension benefits, that a member may be eligible to receive.

**Time-weighted rate of returns:** A measure of the compound rate of growth in a portfolio.

**Total Fund:** The Total Fund represents the combined activities and balances of all funds, including Retirement, HBS, and LTD.





# ARIZONA STATE RETIREMENT SYSTEM

A component unit of the State of Arizona

3300 N. Central Avenue  
Phoenix, AZ 85012

4400 E Broadway Blvd, Suite 200  
Tucson, AZ 85711

Visit us online at  
[AzASRS.gov](http://AzASRS.gov)

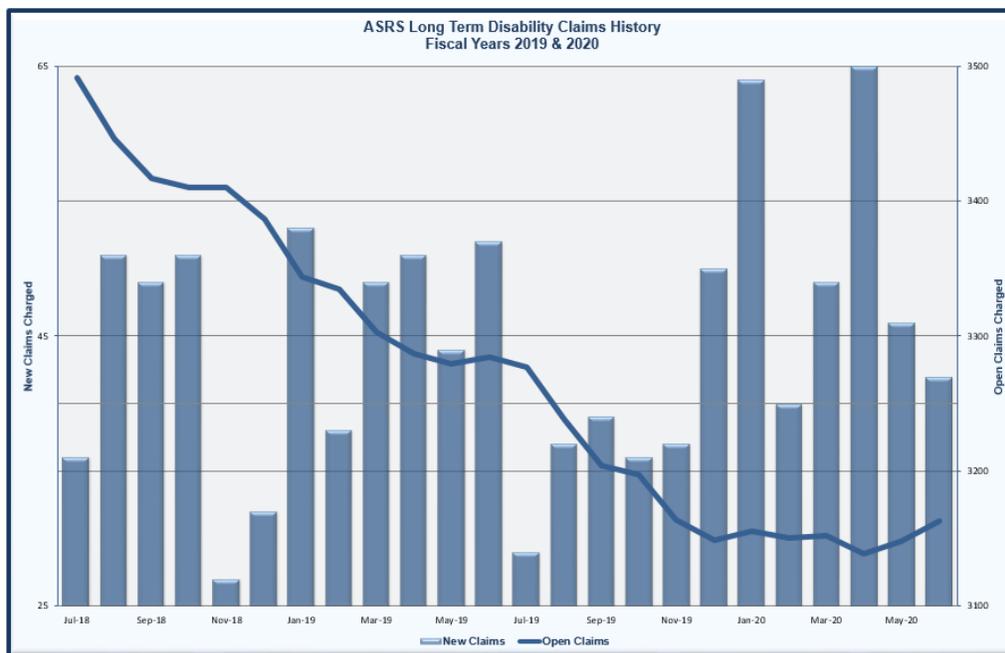


*An agency of the State of Arizona*

## OVERVIEW - LONG TERM DISABILITY ADMINISTRATION FUNDING

Pursuant to Arizona Revised Statutes (A.R.S.) § 38-797, the ASRS Long Term Disability (LTD) Program is a mandatory contributory plan with benefits designed to be a source of income during periods of disability, as defined by statute. LTD coverage is provided to all active members of the ASRS but is not provided to retirees or dependents. The ASRS collects required contributions from employers and active members each pay period and holds such contributions in the LTD Trust Fund, which is designated solely for the purpose of paying benefits and costs of administering this program.

Over the past several fiscal years, the ASRS has continued to pay less in annual administrative fees to the contracted third-party administrator that currently manages the ASRS LTD Program. In addition, the number of ASRS members receiving an LTD benefit has continued to slightly decline, as illustrated below.



	Open Claims	New Claims
Jul-18	3491	36
Aug-18	3446	51
Sep-18	3417	49
Oct-18	3410	51
Nov-18	3410	27
Dec-18	3387	32
Jan-19	3344	53
Feb-19	3335	38
Mar-19	3303	49
Apr-19	3287	51
May-19	3279	44
Jun-19	3284	52
	Open Claims	New Claims
Jul-19	3277	29
Aug-19	3238	37
Sep-19	3204	39
Oct-19	3197	36
Nov-19	3164	37
Dec-19	3149	50
Jan-20	3155	64
Feb-20	3150	40
Mar-20	3152	49
Apr-20	3139	65
May-20	3148	46
Jun-20	3163	42

Should program costs exceed the LTD budget appropriation, statute allows for the payments from the LTD Administration Trust Fund on a continuously appropriated basis. Through past dialogue, the Governor's Office of Strategic Planning and Budget, the Joint Legislative Budget Committee, the Arizona Department of Administration General Accounting Office – State Comptroller, and counsel from the Arizona Attorney General's office are aware of this flexibility for required payments to effectively administer the LTD program.