



ARIZONA STATE RETIREMENT SYSTEM

AGA 2021 Annual Retirement/Tax Meeting

Topics

1. Background Information
2. Financial Status
3. Investment Performance
4. Projected Funded Status
5. Projected Contribution Rates

1. Background Information

ASRS Provided Programs

1. Defined Benefit Pension Plan
2. Health Insurance Program & Supplement
3. Long Term Disability Program
4. Supplemental Savings Plans

ASRS Statistics | June 30, 2020

- ❑ **Total Membership: 619,400**
 - Active Members: 215,000
 - Inactive Members: 241,200
 - Retirees & Survivor Beneficiaries: 160,000
 - Long Term Disability Members: 3,200
- ❑ **Annual Distributions: \$3.4 billion**
- ❑ **Annual Contributions: \$2.6 billion**
- ❑ **Average Annual Retirement Benefit: \$20,820***
- ❑ **Average Years of Service of Retiree: 19.3 years**
- ❑ **Average Age of Retiree: 71.9 years**
- ❑ ***Employees pay 50% of all costs***

* includes beneficiaries and alternate payees

Key Reasons for Changes in Funded Status

- 1. Change from EAN to PUC (1989)**
→Low contribution rates during 1990+
- 2. Benefit enhancements prior to 2002**
- 3. Certain expensive and ineffective plan design features (most remedied)**
- 4. Negative investment returns during FY2001-03 and FY2008-09**
- 5. Improving life expectancies of retirees**
- 6. Reduction in discount rate**
- 7. Pre-funding possible future PBIs**

2. Financial Status

Funded Status Summary | June 30, 2020

	FUNDED STATUS	
	Actuarial Value of Assets (AVA)	Market Value of Assets (MVA)
Pension Plan (includes HBS)	72.8% Inception 1975 = 37.5%	70.1%
LTD	73.1% Inception 1996 = 17.6%	67.9%

* Health Benefit Supplement AVA Funded Status is 113.6%, and MVA Funded Status is 109.6%.
 Arizona appears to have the highest funded status for state retiree health benefit plans.
 Inception Funded Status 1995 = 52.8%.

Contribution Rates

	Pension	Health Insurance Supplement	Pension + Health Insurance Supplement	LTD	Total
Effective July 1, 2020					
Employee	12.04%	0.00%	12.04%	0.18%	12.22%
Employer	11.65%	0.39%	12.04%	0.18%	12.22%
Effective July 1, 2021					
Employee	12.22%	0.00%	12.22%	0.19%	12.41%
Employer	12.01%	0.21%	12.22%	0.19%	12.41%

3. Investment Performance

Investment Returns | June 30, 2020

Annualized Rates of Return					
ASRS Total Fund	1 Year	3 Year	5 Year	10 Year	Inception (07/01/1975)
Net of Investment Fees	0.8%	5.5%	6.1%	8.9%	9.5%
Median Fund (Net)*	1.3%	5.0%	5.4%	7.8%	N/A
Percentile Ranking*	59 th	26 th	22 nd	10 th	N/A

* InvMetrics Public Funds greater than \$1 billion, where lower percentiles indicate higher ranking.

Investment Returns | June 30, 2019

Annualized Rates of Return					
ASRS Total Fund	1 Year	3 Year	5 Year	10 Year	Inception (07/01/1975)
Net of Investment Fees	6.6%	9.9%	6.6%	10.4%	9.7%
Median Fund (Net)*	5.4%	8.7%	5.6%	9.0%	N/A
Percentile Ranking*	20 th	10 th	13 th	4 th	N/A

* InvestorForce Public Funds greater than \$1 billion, where lower percentiles indicate higher ranking.

Investment Returns | June 30, 2018

Annualized Rates of Return					
ASRS Total Fund	1 Year	3 Year	5 Year	10 Year	Inception (07/01/1975)
Net of Investment Fees	9.4%	7.8%	8.9%	7.4%	9.7%
Median Fund (Net)*	8.0%	6.7%	7.5%	6.1%	N/A
Percentile Ranking*	10 th	7 th	8 th	6 th	N/A

* InvestorForce Public Funds greater than \$1 billion, where lower percentiles indicate higher ranking.

ASRS Strategic Asset Allocation Policy

Asset Allocation				
	Target	Low	High	Benchmark
Equities	50	35	65	ACWI-IMI
Real Estate	20	10	30	ODCE net
Credit	20	10	30	S&P/LSTA+250
Interest Rate Sensitive Bonds	10	0	20	Bloomberg Barclays Ag
Other	0	0	10	Investment Specific
Cash	0	0	5	90 day TBill

DB Plan & DC Plan Comparison

Typical Defined Benefit	Pro/Con	Typical Defined Contribution
+ Guaranteed lifetime benefit	+/- Individualized investment decision making	+ Less complex
+ Predictability of future retirement benefit	+/- All risk held by employee	+ More portable
+ Greater retirement equity		
+ Less expensive per benefit level*		

*See Subsequent Slide

* "Our entire approach to DC has been to try to replicate DB features within DC plans," said Fontaine. Trends in DC, Evolution of Retirement Planning, www.pionline.com

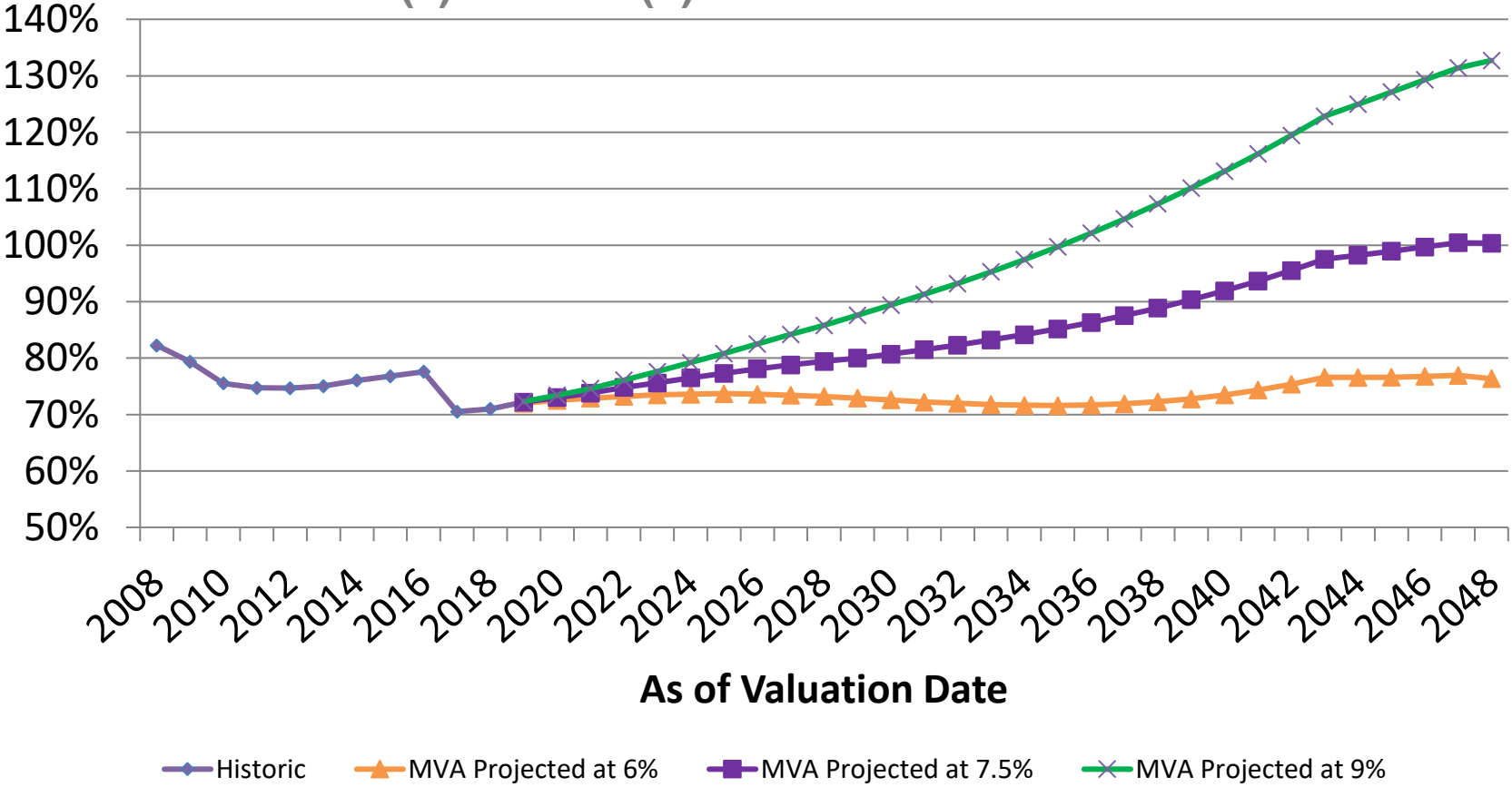
Why are Large DBs Typically Less Expensive?

- DB typically results in lower cost per level of retirement benefit because:
 - DB typically has higher rates of return
 - Professional asset allocation
 - Greater time horizon and risk tolerance
 - Greater diversification
 - DB participants need not plan for outliving assets
 - Therefore less savings required

4. Projected Funded Status

Sensitivity to Investment Returns – Projected Funded Status

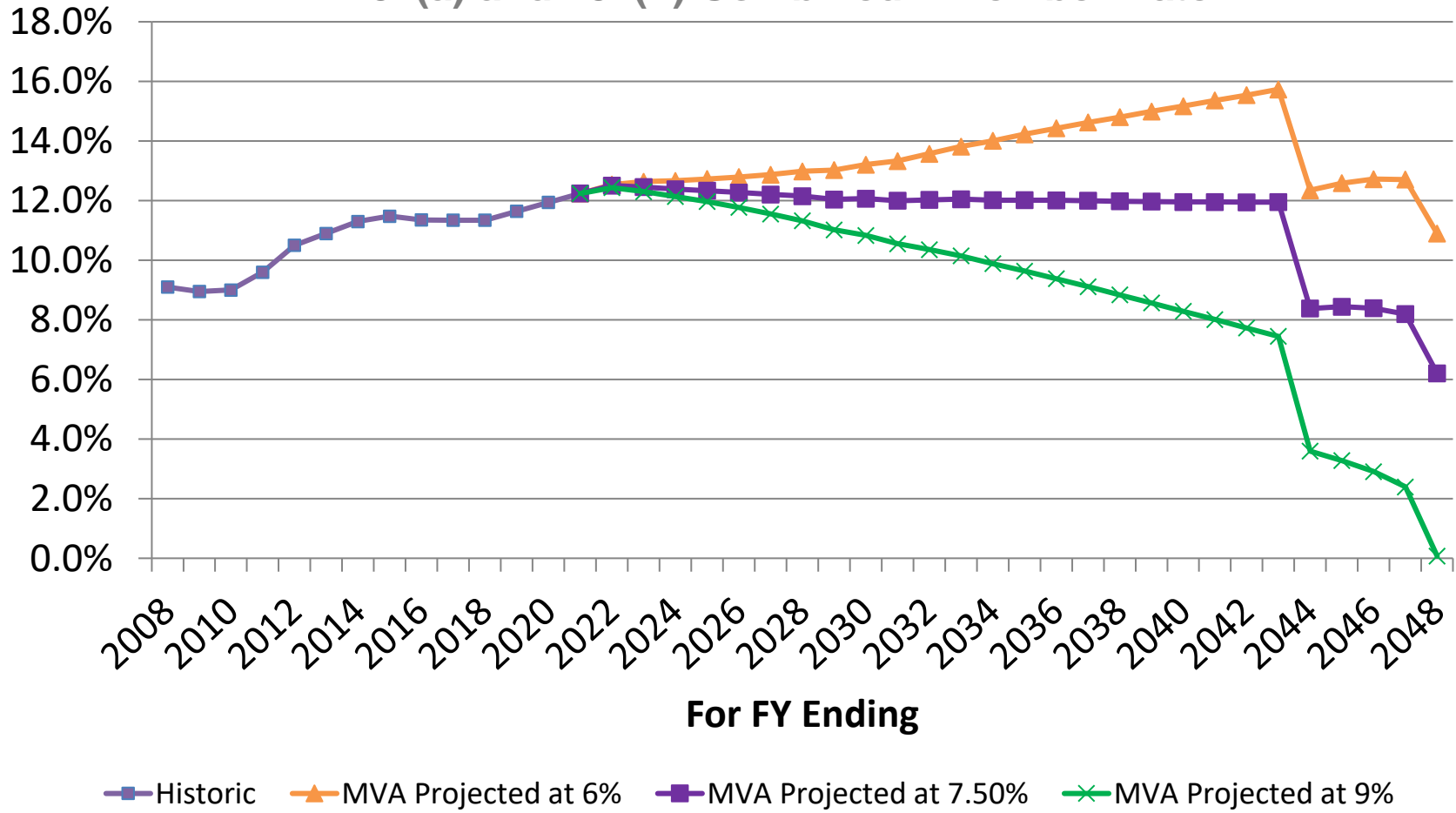
401(a) and 401 (h) Combined – AVA Basis



5. Projected Contribution Rates

Sensitivity to Investment Returns – Projected Contribution Rates

401(a) and 401(h) Combined – Member Rate



State and local spending on pensions as a percentage of total government direct general spending FY 2018

ASRS	2.28%
All Arizona Pensions	4.34%
National Average	5.16%

Source: NASRA based on U.S. Census Bureau data and ASRS CAFR