

November 14, 2023

# Actuarial Summary Report

Oklahoma State Pension Commission

*Fiscal Year ending June 30, 2023*



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# Executive Summary



# Executive Summary

## Overview

RVK reviewed the Fiscal Year 2023 actuarial reports for each underlying plan within the Oklahoma State Pension Commission. This presentation summarizes several key plan metrics from FY 2023 as well as historical trends over the prior 20 years. The metrics include in the report are: funded status levels, asset balance changes, liabilities, and contributions. RVK also incorporated data obtained from RVK's semi-annual Public Fund Survey as well as Public Plans Data, which is an organization that collects data on more than 5,000 US public pension plans.

The information presented in this report is based on Actuarial Valuation reports for the Fiscal Year ending on June 30, 2023. The actuaries for each Plan provided all plan-specific data used in this presentation. RVK is not an actuarial firm and does not provide the actuarial services that generated the plan-specific data. This being the case, the information contained herein does not constitute a statement of actuarial opinion and may not be used in place of valuation results and recommendations provided by the plan actuary.

## Funded Status Highlights

- 1. Change in Funded Status** – For the fiscal year ending June 30, 2023, The funded status of the plans increased by 0.4% based on the actuarial value of assets. Based on the market value of assets, the funded status of the plans increased by 2.2%:
  - **Actuarial Value of Assets Increase** – An increase of approximately \$1.4 billion (~3.5%) in the actuarial value of assets was the primary driver of improved funded status of the plans. This is a result of smoothing of gains from previous fiscal years to reduce the volatility of unfunded liabilities.
  - **Market Value of Assets Increase** – Market results over the FY 2023 rebounded compared to the second half of FY 2022, with both equity and fixed income assets experiencing improved returns. The market value of assets increased by approximately \$2.2 billion (~5.8%).
  - **Liability Increase** – Liabilities increased by approximately \$1.4 billion (~3.0%) over the last year partially offsetting the increase in the actuarial value of assets.
- 2. Positive Impact of Excess Contributions** – In FY 2023, pension plan contributions exceeded the actuarially required contributions, contributing to a portion of market value gains.

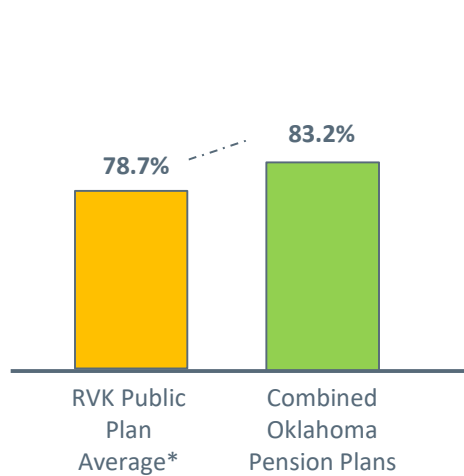
# Executive Summary (continued)

## Contribution Highlights

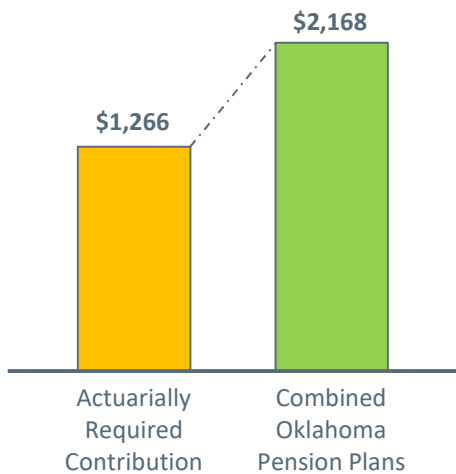
- 1. Annual Contribution Increase** – Total contributions for the fiscal year were approximately \$2.17 Billion, which was a 5.8% increase relative to the prior fiscal year. Contributions from the State (\$976 M) and employers (\$559 M) were the primary drivers of contribution increase.
- 2. Actual Contributions Exceeded Required Contributions** – For the past Fiscal Year, the actual contribution exceeded the actuarially required contribution. Since 2012, total plan contributions have been higher than the actuarial requirement.

## Key Metrics for Oklahoma Pension Plans

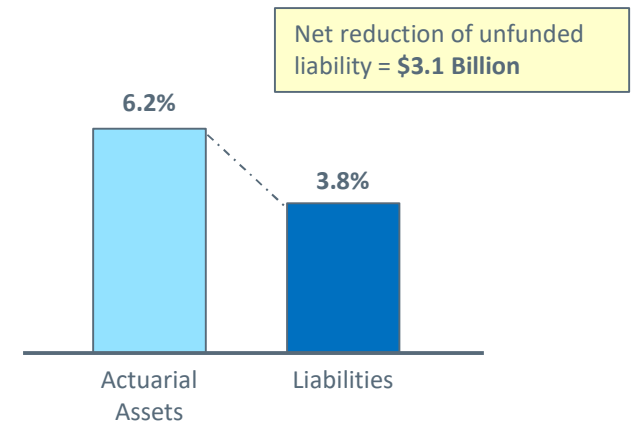
**Funded Status (AV) vs. RVK Survey Median**



**Total Contributions FY 2023 (\$ Millions)**



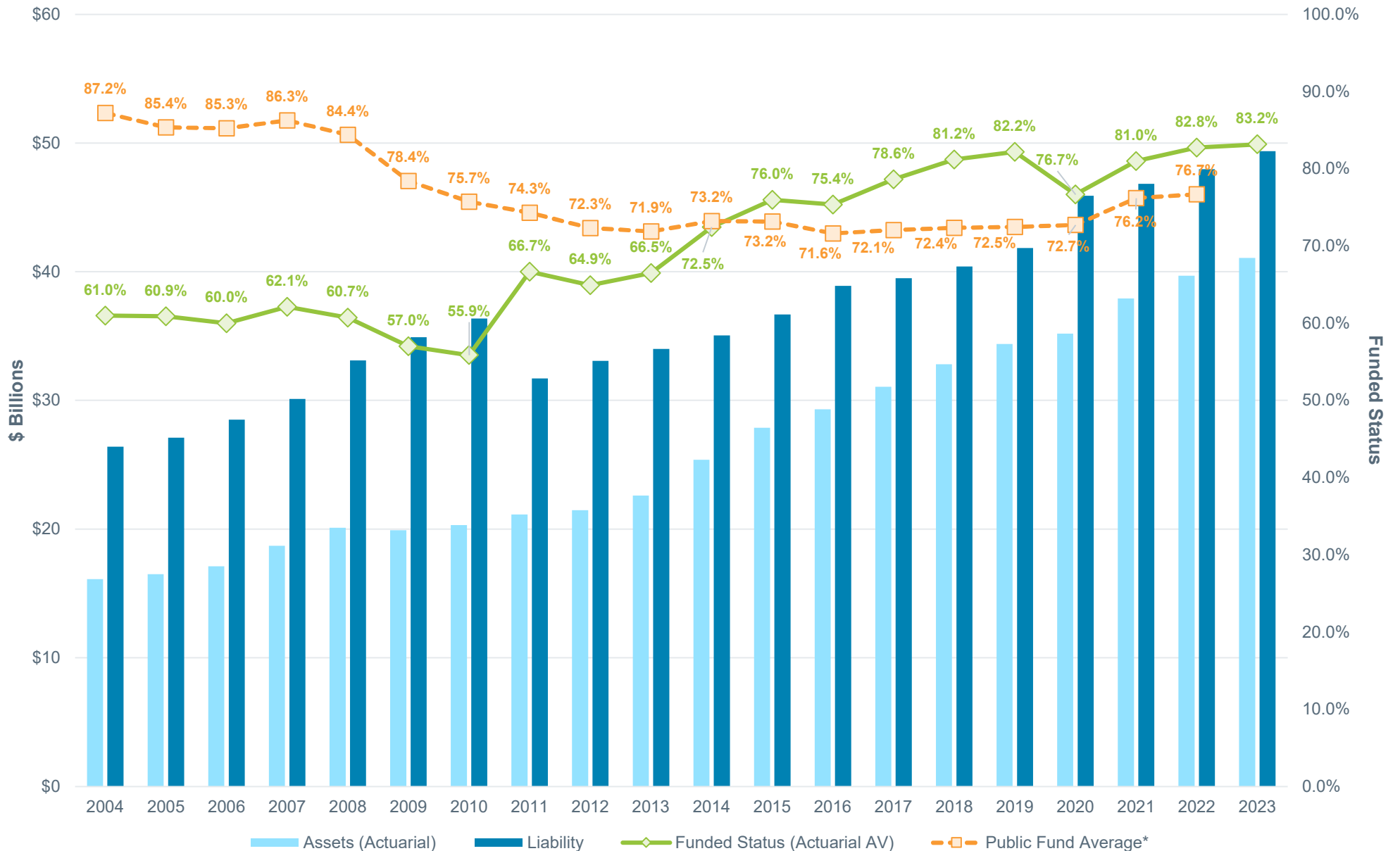
**10-Year Asset vs. Liability Growth Rate (FY 2013 – 2023)**



\*Source: RVK Public Pension Plan Survey

# OKSPC Funded Status

## Aggregate Funded Status (Actuarial Values)

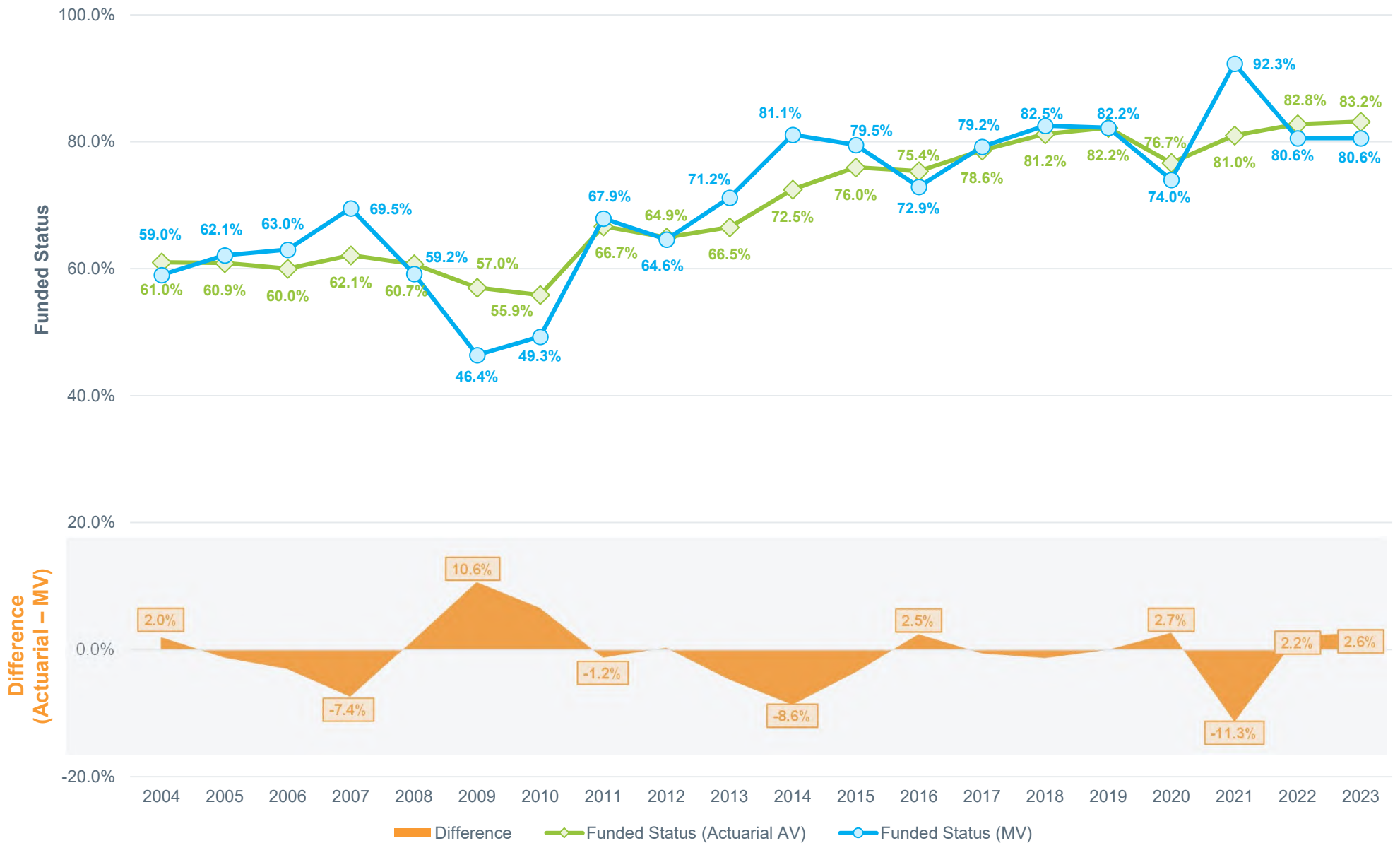


Data as of June 30, 2023.

\*Source: Public Plans Data (2023). 2023 Public Fund data is currently unavailable.

# OKSPC Funded Status

## Aggregate Funded Status (Actuarial Assets vs Market Values)



# OKSPC Funded Status

## Individual Plan Funded Status Summary

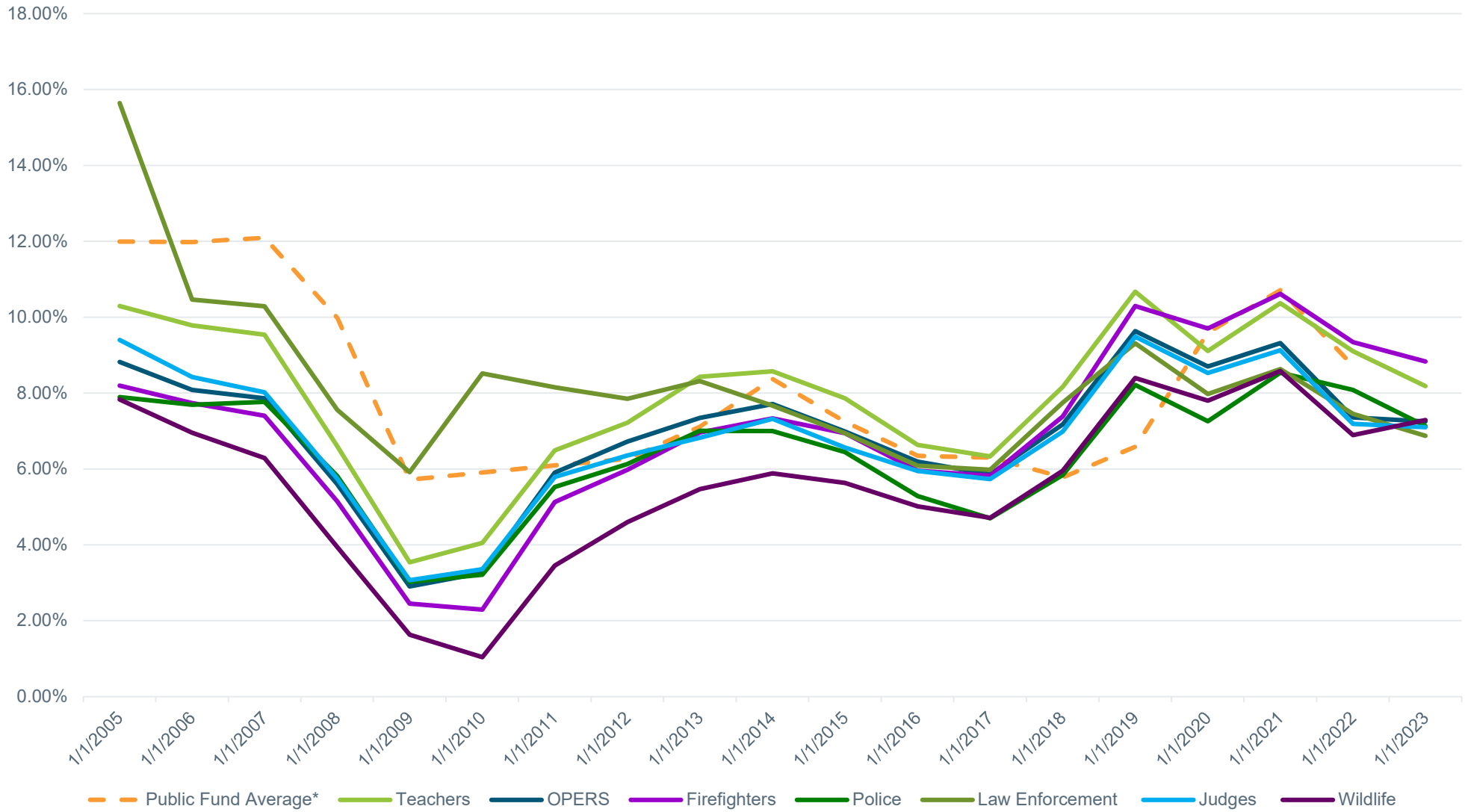
Plan	Actuarial Value of Assets (\$M)	Actuarial Accrued Liability (\$M)	Market Value of Assets (\$M)	Funded Status (per Actuarial Assets)	Funded Status (per MV Assets)	Change YoY (Actuarial)	Change YoY (MV)
Teachers	\$21,405	\$28,510	\$20,854	75.08%	73.15%	1.54%	2.49%
Public Employees	\$11,557	\$11,482	\$11,152	100.66%	97.13%	-0.88%	3.84%
Firefighters	\$3,222	\$4,427	\$3,137	72.78%	70.85%	-0.25%	1.36%
Police	\$3,175	\$2,993	\$3,023	106.08%	101.02%	0.67%	-1.72%
Law Enforcement	\$1,179	\$1,440	\$1,102	81.84%	76.52%	-9.70%	-7.45%
Judges	\$396	\$381	\$381	104.12%	100.08%	-6.74%	-1.57%
Wildlife	\$132	\$143	\$129	92.33%	90.40%	0.18%	5.48%



# OKSPC Rates of Return

## Individual Plan Rates of Return

### Rolling 10-Year Return

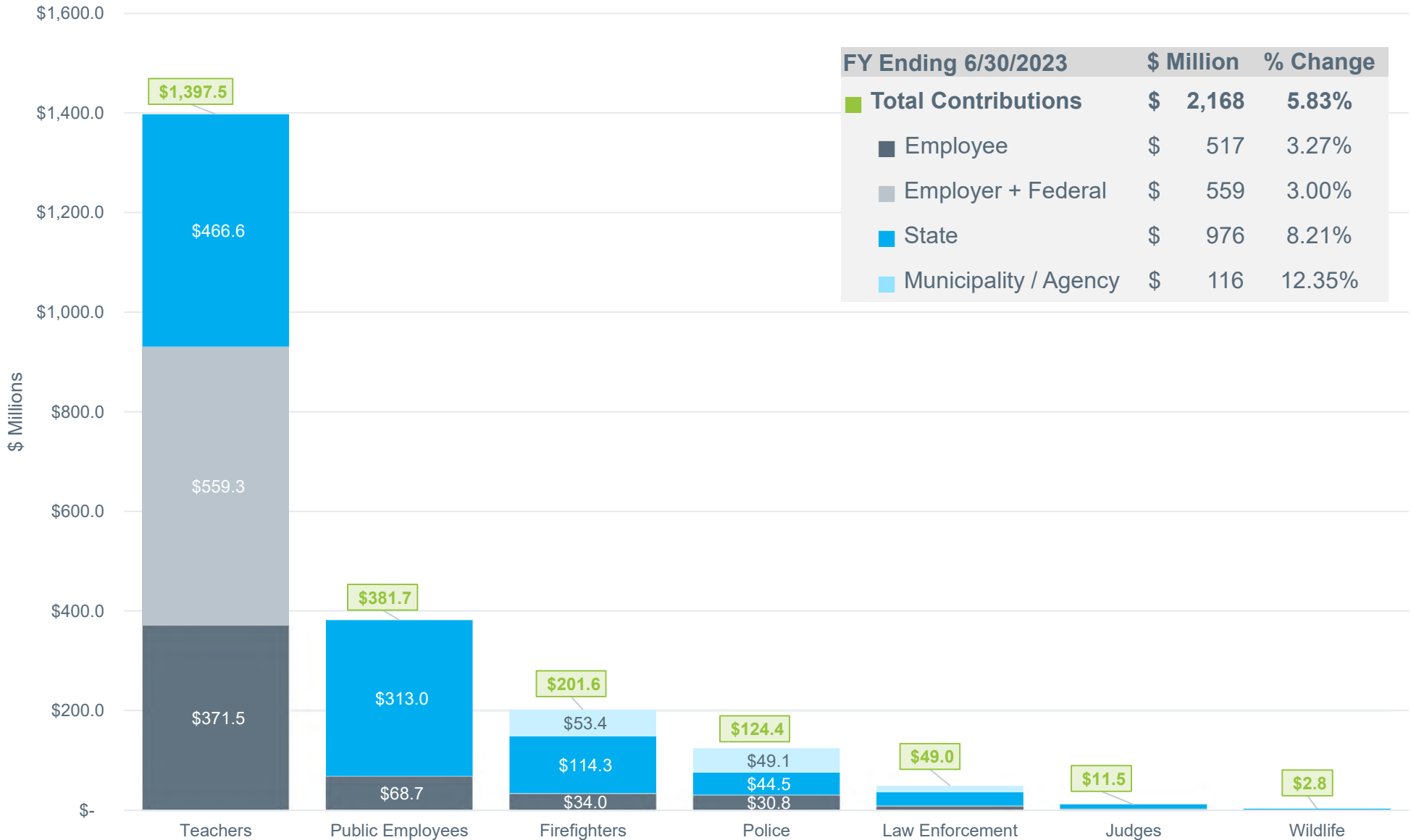


Data as of June 30, 2023.

\*Source: Public Plans Data (2023). 2023 data is currently unavailable.

# OKSPC Contributions

## Individual Plan 2023 Contributions



FY Ending 6/30/2023	\$ Million	% Change
Total Contributions	\$ 2,168	5.83%
Employee	\$ 517	3.27%
Employer + Federal	\$ 559	3.00%
State	\$ 976	8.21%
Municipality / Agency	\$ 116	12.35%

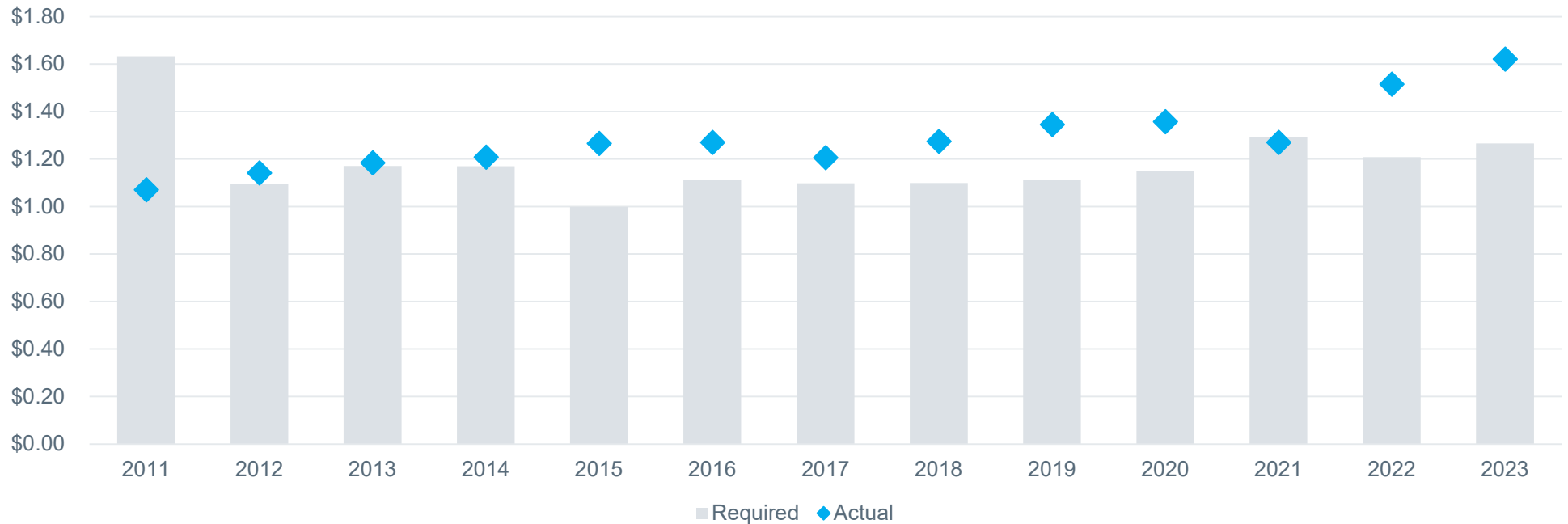
Teachers "Employer + Federal" contribution includes grant matching funds.

# OKSPC Historical Contributions

## Historical State and Employer Contributions

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Required</b>	\$1.63	\$1.09	\$1.17	\$1.17	\$1.00	\$1.11	\$1.10	\$1.10	\$1.11	\$1.15	\$1.29	\$1.21	\$1.27
<b>Actual</b>	\$1.07	\$1.14	\$1.18	\$1.21	\$1.27	\$1.27	\$1.21	\$1.27	\$1.35	\$1.36	\$1.27	\$1.52	\$1.62
<b>% Actual vs Required</b>	<b>65.5%</b>	<b>104.3%</b>	<b>101.1%</b>	<b>103.3%</b>	<b>126.8%</b>	<b>114.2%</b>	<b>109.8%</b>	<b>116.0%</b>	<b>121.1%</b>	<b>118.3%</b>	<b>98.2%</b>	<b>125.47%</b>	<b>128.02%</b>

Historical Contributions



# OKSPC Actuarially Determined Contribution Rates

	Teachers	Public Employees	Firefighters	Police	Law Enforcement	Judges	Wildlife
Total Normal Cost	10.4%	11.1%	21.8%	20.4%	23.6%	27.5%	13.4%
Expenses	0.1%	0.6%	1.1%	0.7%	1.6%	0.8%	0.0%
<b>*Total ADC</b>	<b>10.5%</b>	<b>11.7%</b>	<b>22.9%</b>	<b>21.1%</b>	<b>25.2%</b>	<b>28.3%</b>	<b>13.4%</b>
Employee Contribution	7.0%	4.3%	9.0%	8.0%	8.0%	8.0%	5.0%
<b>*Total Employer ADC</b>	<b>3.5%</b>	<b>7.4%</b>	<b>13.9%</b>	<b>13.1%</b>	<b>17.2%</b>	<b>20.3%</b>	<b>8.4%</b>
Employer Contribution	9.3%	16.5%	14.1%	13.0%	11.2%	22.0%	22.6%
<b>Total State ADC</b>	<b>8.4%</b>	<b>16.5%</b>	<b>32.2%</b>	<b>0.0%</b>	<b>26.5%</b>	<b>22.0%</b>	<b>22.6%</b>

\*Calculation excludes Amortization of UAAL percentage.

# GASB 67 : Funding Position and Contributions

## Funding Position:

	Net Position	Total Pension Liability (\$M)	Unfunded Accrued Liability (\$M)	Funded Status	Discount Rate
Teachers	\$20,384	\$28,090	\$7,706	72.57%	7.00%
Public Employees	\$10,716	\$11,173	\$458	95.91%	6.50%
Firefighters	\$3,137	\$4,427	\$1,290	70.85%	7.50%
Police	\$3,023	\$2,993	(\$31)	101.02%	7.50%
Law Enforcement	\$1,099	\$1,429	\$330	76.91%	7.50%
Judges	\$377	\$378	\$1	99.75%	6.50%
Wildlife	\$129	\$143	\$14	90.40%	7.00%
<b>Total</b>	<b>\$38,864</b>	<b>\$48,633</b>	<b>\$9,768</b>	<b>79.91%</b>	

## Contributions:

	ADEC	Actual Contributions	Contribution Deficiency/Excess	Covered Payroll	ADEC % Payroll	Actual % Payroll
Teachers	\$945	\$1,024	\$79	\$5,336	17.70%	19.19%
Public Employees	\$97	\$296	\$199	\$1,527	6.38%	19.40%
Firefighters	\$152	\$157	\$6	\$344	44.06%	45.74%
Police	\$35	\$94	\$59	\$378	9.27%	24.77%
Law Enforcement	\$36	\$39	\$3	\$114	31.65%	34.24%
Judges	(\$1)	\$8	\$9	\$36	-2.39%	22.67%
Wildlife	\$2	\$2	(\$0)	\$11	22.19%	21.28%

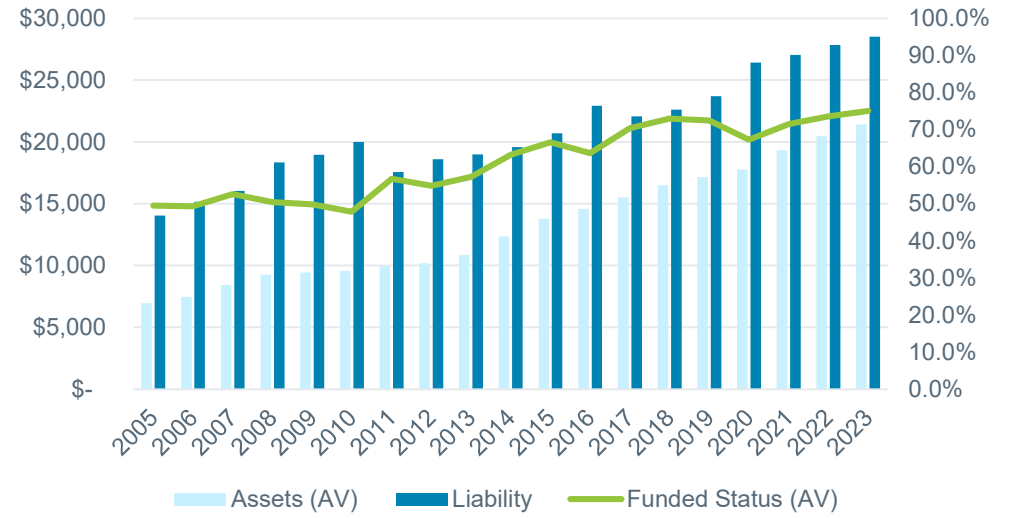
# Individual Plan Highlights



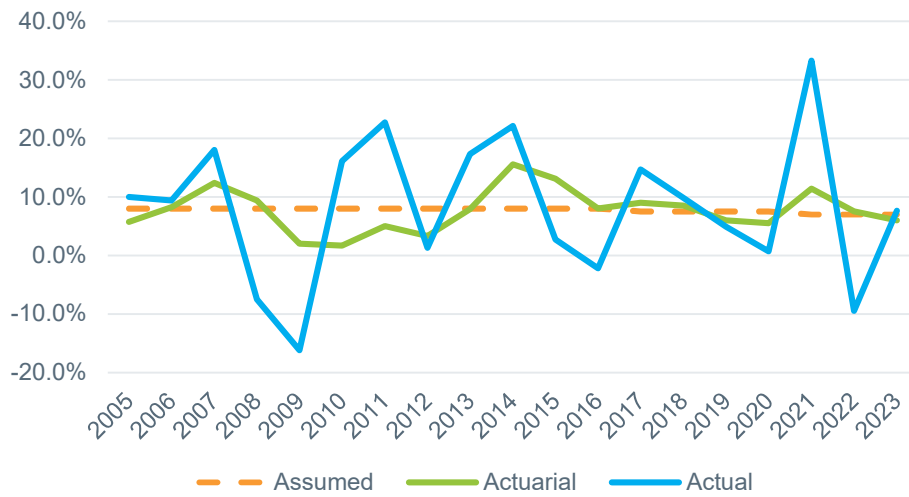
# Teachers

	2023	2022	Change
<b>Assets (AV)</b>	\$21,405 M	\$20,469 M	<b>+ \$936 M</b>
<b>Liability</b>	\$28,510 M	\$27,835 M	<b>+ \$675 M</b>
<b>Funded Status (AV)</b>	75.1%	73.5%	<b>+ 1.5%</b>
<b>Assets (MV)</b>	\$20,854 M	\$19,669 M	<b>+ \$1,185 M</b>
<b>Funded Status (MV)</b>	73.1%	70.7%	<b>+ 2.5%</b>

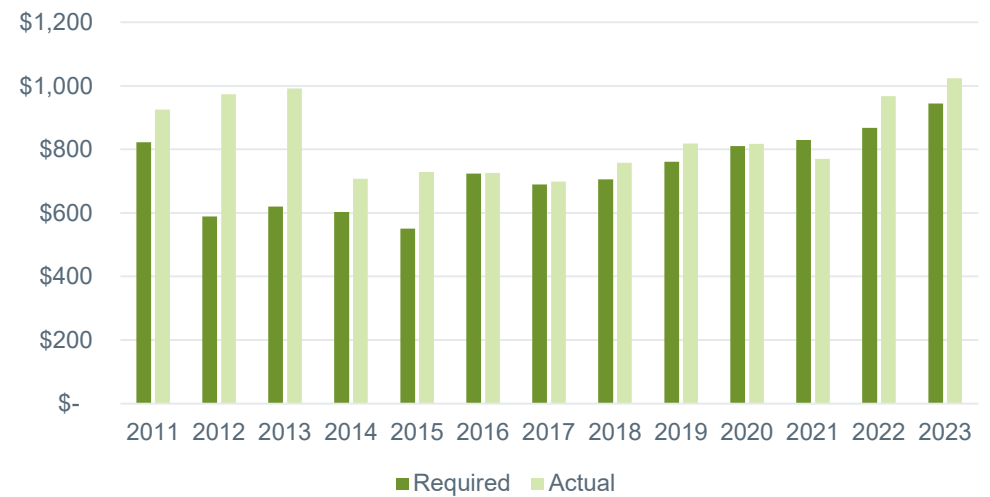
### Historical Funded Status



### Rate of Return (Annual)



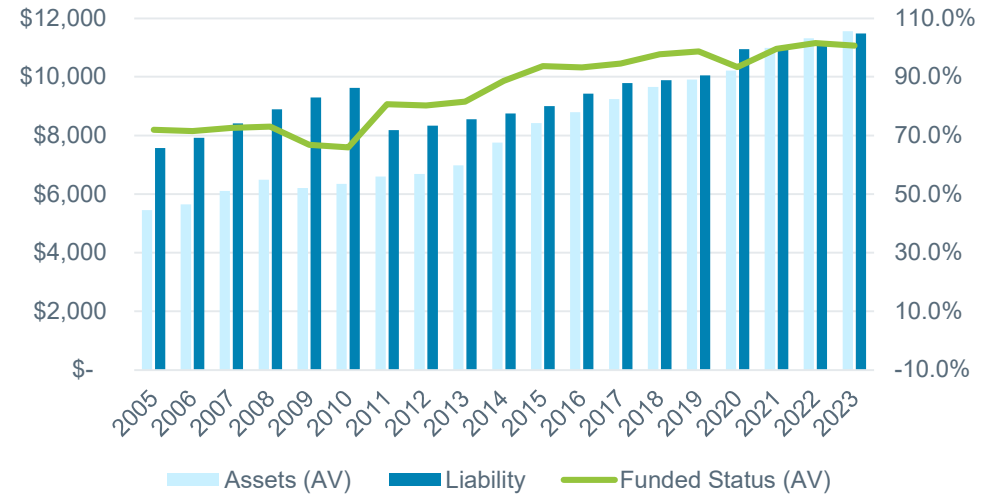
### Historical Contributions



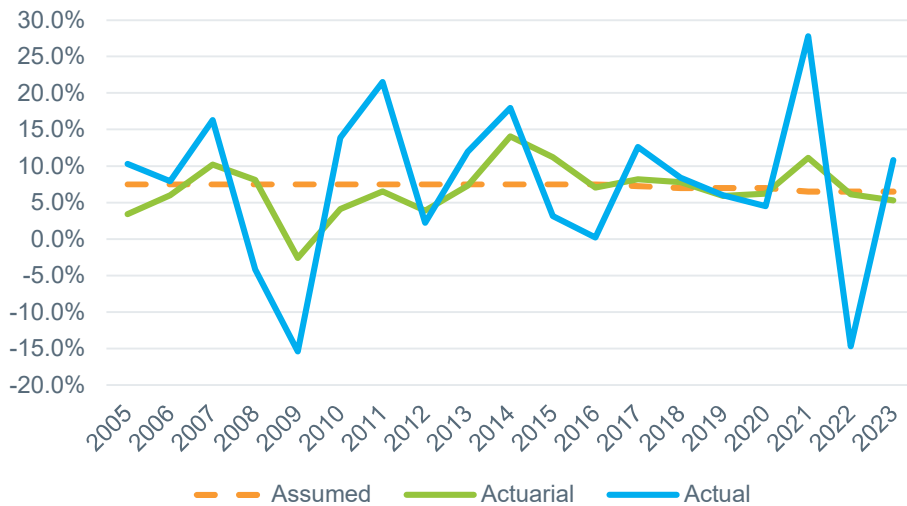
# Public Employees

	2023	2022	Change
<b>Assets (AV)</b>	\$11,557 M	\$11,312 M	+ \$246 M
<b>Liability</b>	\$11,482 M	\$11,140 M	+ \$342 M
<b>Funded Status (AV)</b>	100.7%	101.5%	- 0.9%
<b>Assets (MV)</b>	\$11,152 M	\$10,393 M	+ \$759 M
<b>Funded Status (MV)</b>	97.1%	93.3%	+ 3.8%

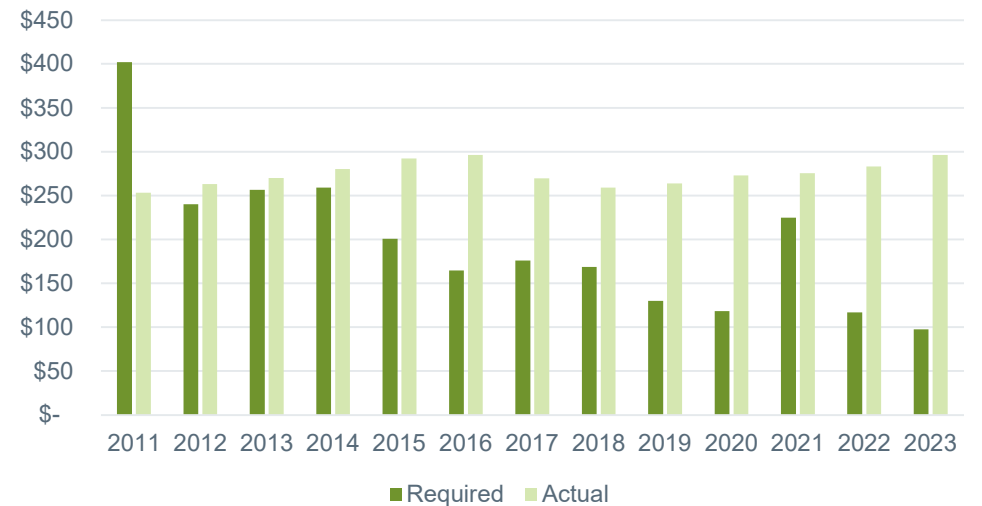
### Historical Funded Status



### Rate of Return (Annual)



### Historical Contributions

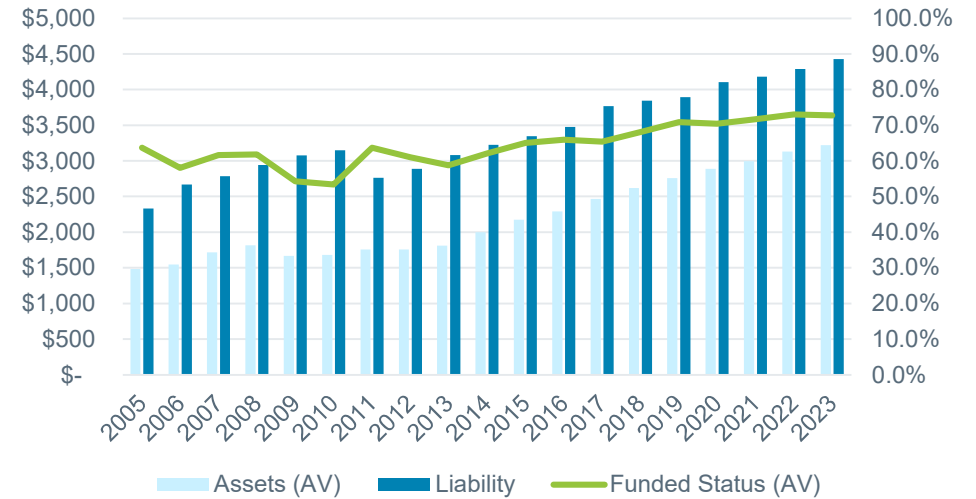




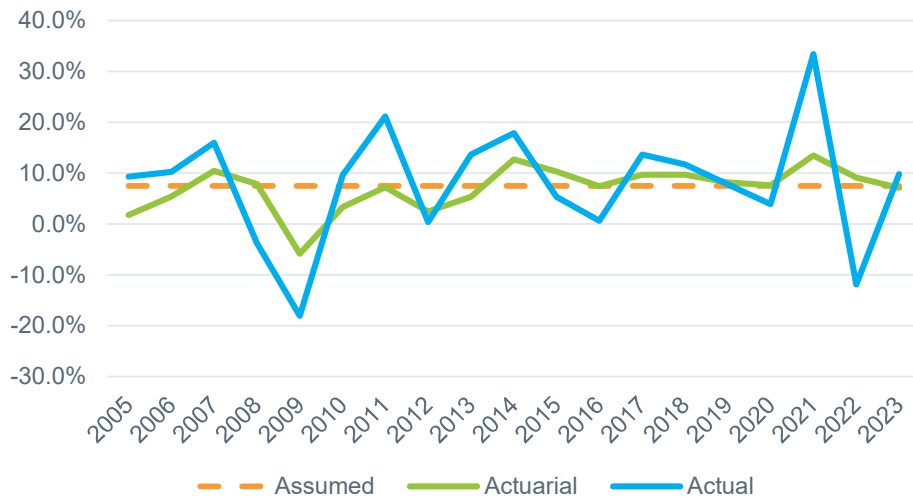
# Firefighters

	2023	2022	Change
<b>Assets (AV)</b>	\$3,222 M	\$3,130 M	<b>+ \$92 M</b>
<b>Liability</b>	\$4,427 M	\$4,286 M	<b>+ \$141 M</b>
<b>Funded Status (AV)</b>	72.8%	73.0%	<b>- 0.3%</b>
<b>Assets (MV)</b>	\$3,137 M	\$2,978 M	<b>+ \$159 M</b>
<b>Funded Status (MV)</b>	70.9%	69.5%	<b>+ 1.4%</b>

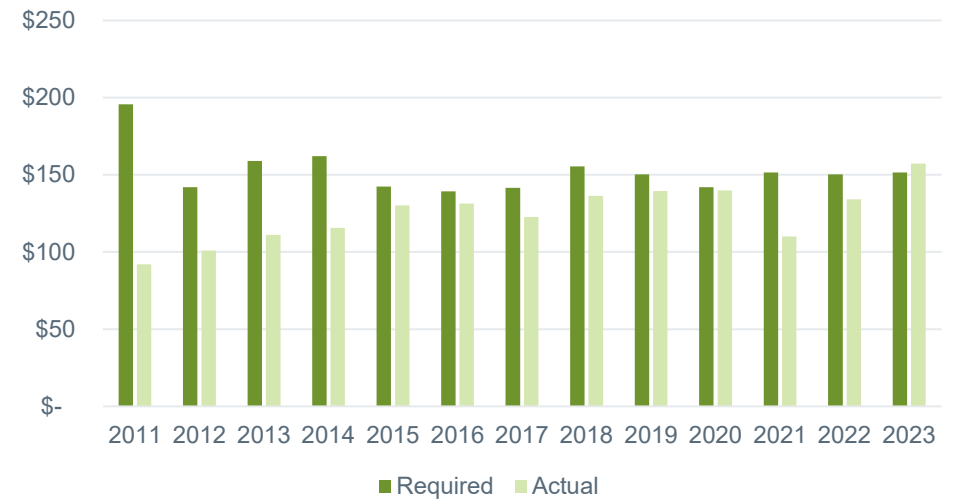
### Historical Funded Status



### Rate of Return (Annual)



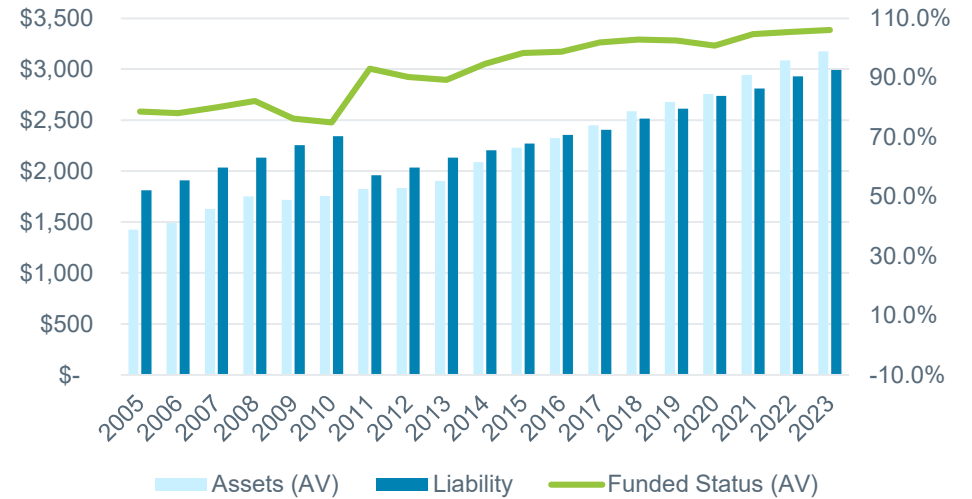
### Historical Contributions



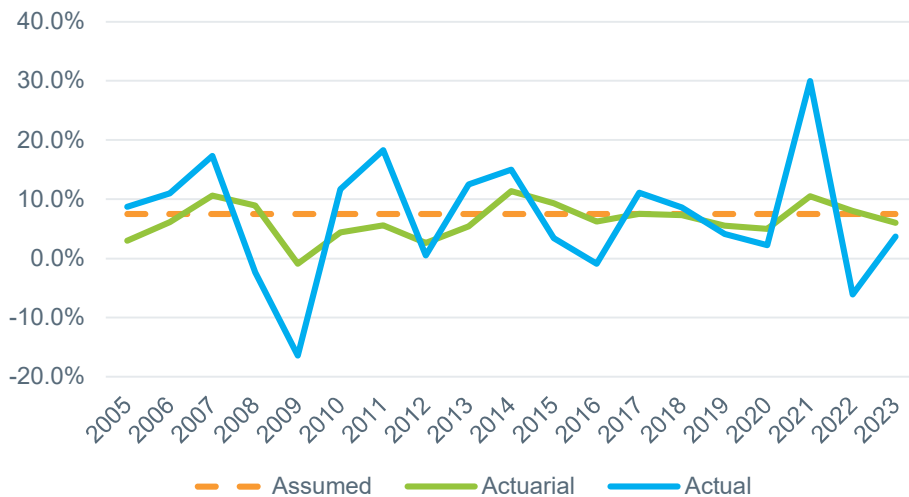
# Police

	2023	2022	Change
<b>Assets (AV)</b>	\$3,175 M	\$3,087 M	<b>+ \$87 M</b>
<b>Liability</b>	\$2,993 M	\$2,929 M	<b>+ \$64 M</b>
<b>Funded Status (AV)</b>	106.1%	105.4%	<b>+ 0.7%</b>
<b>Assets (MV)</b>	\$3,023 M	\$3,009 M	<b>+ \$14 M</b>
<b>Funded Status (MV)</b>	101.0%	102.7%	<b>- 1.7%</b>

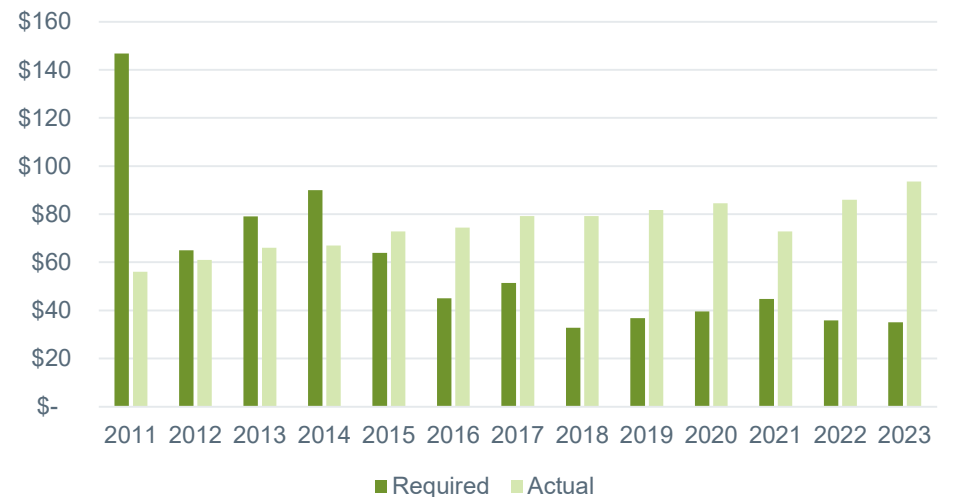
### Historical Funded Status



### Rate of Return (Annual)



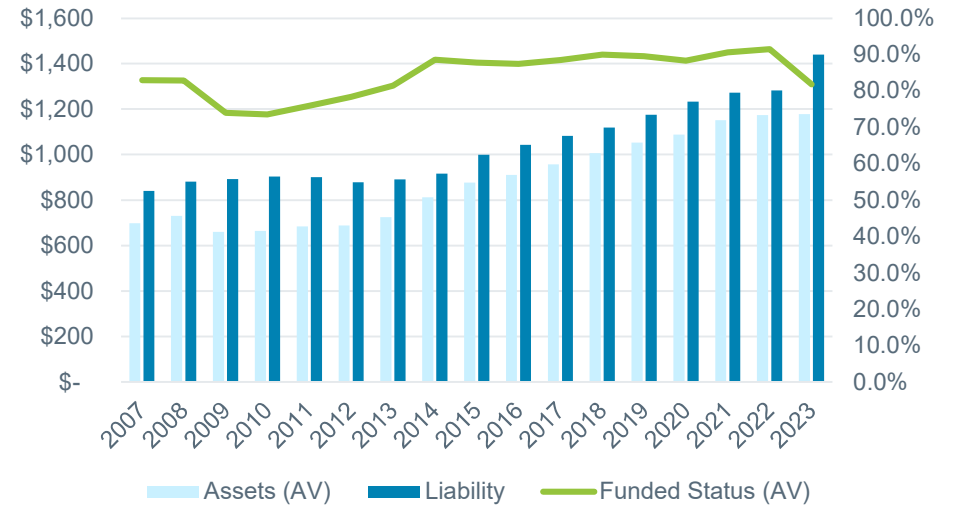
### Historical Contributions



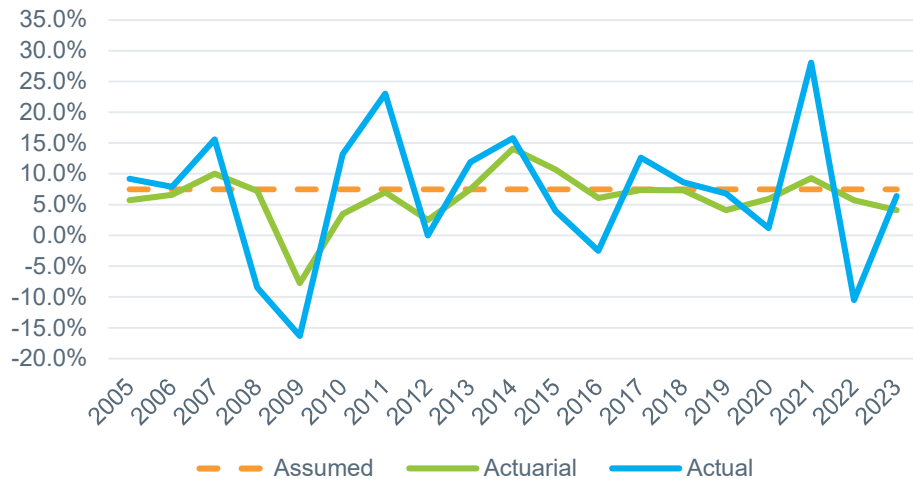
# Law Enforcement

	2023	2022	Change
<b>Assets (AV)</b>	\$1,179 M	\$1,174 M	<b>+ \$5 M</b>
<b>Liability</b>	\$1,440 M	\$1,282 M	<b>+ \$158 M</b>
<b>Funded Status (AV)</b>	81.8%	91.5%	<b>- 9.7%</b>
<b>Assets (MV)</b>	\$1,102 M	\$1,077 M	<b>+ \$25 M</b>
<b>Funded Status (MV)</b>	76.5%	84.0%	<b>- 7.4%</b>

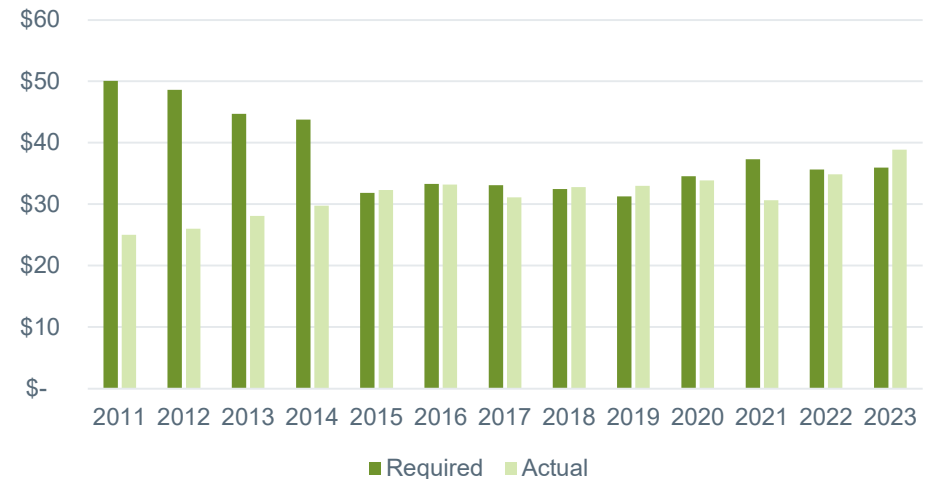
### Historical Funded Status



### Rate of Return (Annual)



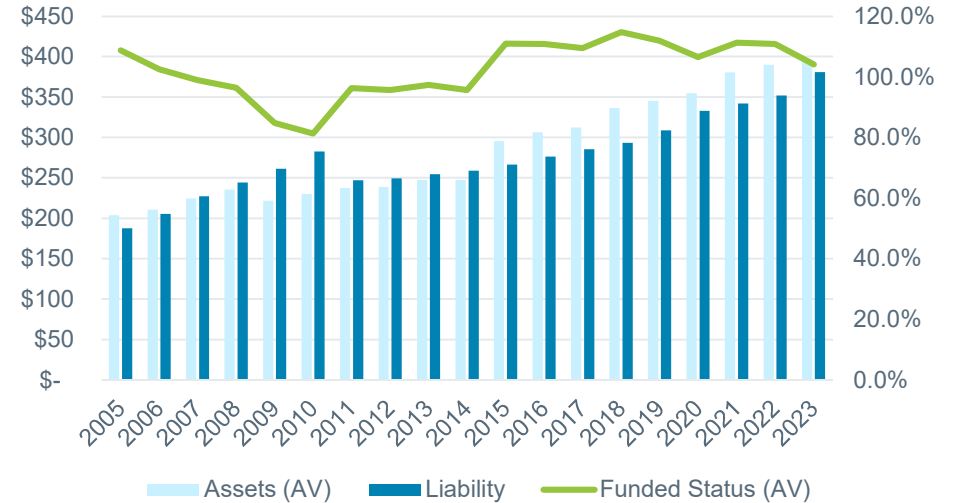
### Historical Contributions



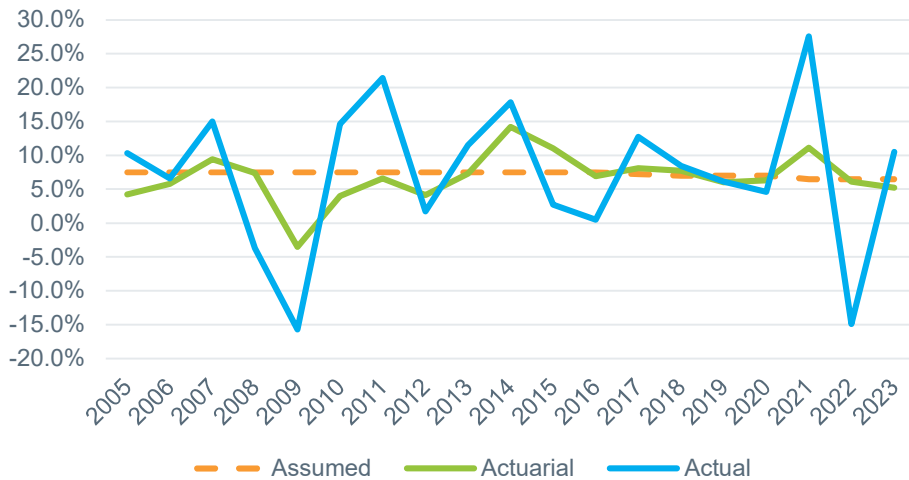
# Judges

	2023	2022	Change
<b>Assets (AV)</b>	\$396 M	\$390 M	+ \$6 M
<b>Liability</b>	\$381 M	\$352 M	+ \$29 M
<b>Funded Status (AV)</b>	104.1%	110.9%	- 6.8%
<b>Assets (MV)</b>	\$381 M	\$358 M	+ \$23 M
<b>Funded Status (MV)</b>	100.1%	101.6%	- 1.6%

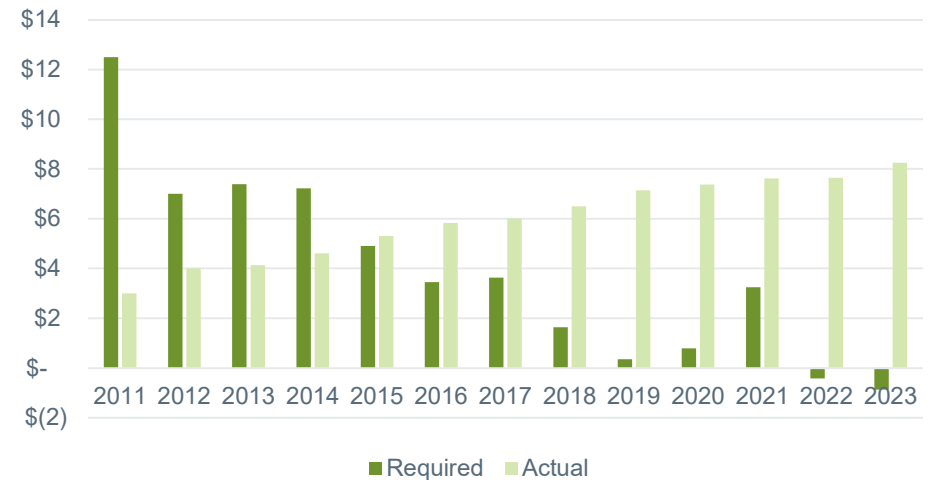
### Historical Funded Status



### Rate of Return (Annual)



### Historical Contributions



# Appendix



# RVK Public Funds Survey

RVK conducts a semi-annual survey of public pension plans, aggregating various portfolio and actuarial factors. Below is the list of participants from the latest edition:

Pennsylvania State Employees' Retirement System  
Montana Teachers' Retirement System  
State of New Jersey Pension Fund  
Merced County Employees' Retirement Association  
Alameda County Employees' Retirement Association  
Nevada Public Employees' Retirement System  
Fire and Police Pension Association of Colorado  
Montana Public Employees' Retirement System  
New York State Common Retirement Fund  
Teachers' Retirement System of the State of Illinois  
State Teachers Retirement System of Ohio  
California State Teachers' Retirement System  
New Mexico State Investment Council  
Iowa Public Employees' Retirement System  
Kansas Public Employees' Retirement System  
Employees Retirement System of Texas  
Los Angeles Fire and Police Pension System  
Mendocino County Employees' Retirement Association  
Ventura County Employees' Retirement Association  
Wyoming Retirement System  
Public School and Education ERS of Missouri  
Sonoma County Employees' Retirement Association  
Marin County Employees' Retirement Association  
Orange County Employees' Retirement System  
Police Retirement System of Kansas City, Missouri  
San Mateo County Employees' Retirement Association  
Fresno County Employees' Retirement Association  
City of Austin Employees' Retirement System  
West Virginia Investment Management Board  
City of Fresno Retirement Systems  
The Navajo Nation Permanent Fund  
Santa Barbara County Employees' Retirement System  
San Bernardino County Employees' Retirement Association  
The Navajo Nation Retirement Plan  
City of Milwaukee Employees' Retirement System  
Texas Permanent School Fund  
New Mexico Land Grant Permanent Fund

Contra Costa County Employees' Retirement Association  
Kern County Employees' Retirement Association  
Los Angeles City Employees' Retirement System  
San Diego City Employees' Retirement System  
Public Employees Retirement Association of New Mexico  
Kansas City Employees' Retirement System  
San Diego County Employees Retirement Association  
State of Michigan Retirement Systems  
Civilian Employees' Retirement System of the Police Department of Kansas City, Missouri  
Arlington County Employees' Retirement System  
Ohio Public Employees' Retirement System  
Virginia Retirement System  
Gila River Indian Community Retirement Plan  
Los Angeles Water & Power Employees Retirement Plan  
Chicago Teachers' Pension Fund  
Commissioners of the Land Office, State of Oklahoma  
North Carolina Retirement System  
South Dakota Retirement System  
North Dakota Board of University and School Lands  
Idaho Endowment Fund Investment Board  
Anchorage Police & Fire Retirement System  
San Diego Transit Corporation Employee Retirement  
Municipality of Anchorage Trust Fund  
Municipality of Anchorage Pre-Funding Program  
City of Plano Retirement Security Plan  
City of Plano Other Post-Employment Benefits Trust  
**Oklahoma Fire Fighters Pension & Retirement System**  
**Oklahoma Public Employees Retirement System**  
**Oklahoma Teachers Retirement System**  
**Oklahoma Law Enforcement Pension & Retirement System**  
**Oklahoma Police Pension and Retirement System**  
**Oklahoma Wildlife Conservation Retirement System**  
**Oklahoma Uniform Retirement System for Justices and Judges**  
City of Jacksonville Retirement System  
City of Fresno Fire & Police Retirement System  
City of Jacksonville Police and Fire Retirement Fund  
Vermont Pension Investment Committee