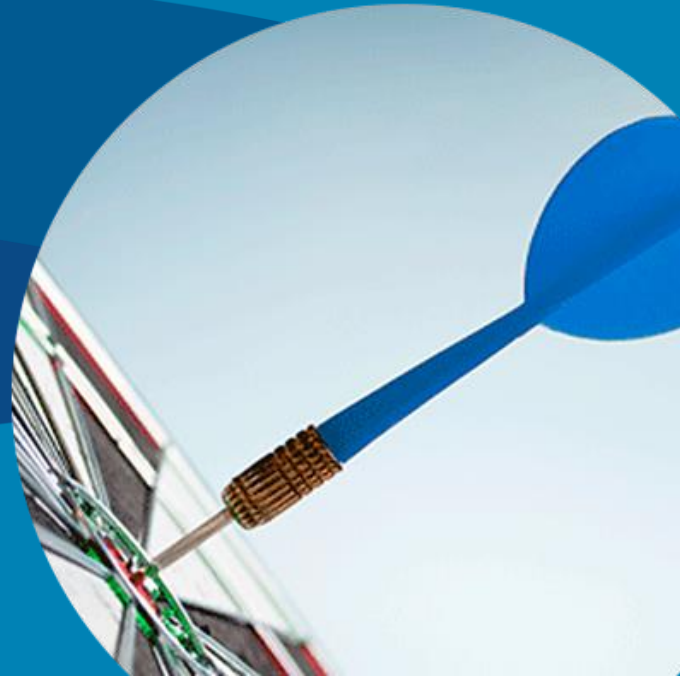




# Employees' Retirement System of the State of Hawaii

2021 Valuation Results  
January 10, 2022



# Purpose of the Actuarial Valuation

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- Annual health checkup of ERS
- The ***primary*** purpose is to assess the current contribution funding policy set in statute
  - Determine whether the current contribution rates are expected to fully amortize the UAAL over a period of 30 years or less
  - Recommend changes if found not adequate
- Funding Period: the estimated number of years it will take to fully pay off the current UAAL assuming current contributions remain in place and all assumptions are met

# Sources of Impact

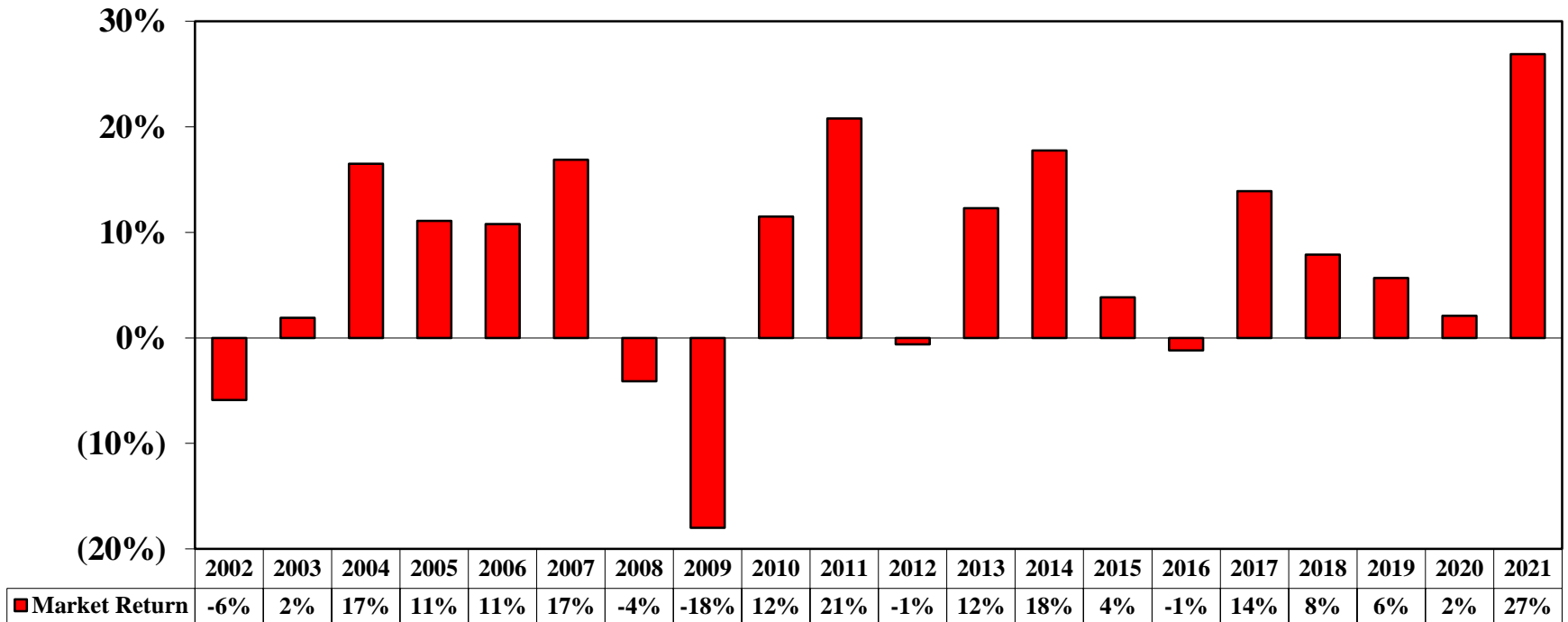
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- **Investments** outperformed 7.00% assumption on market basis
  - Smoothing technique will defer some of the outperformance into future years (approximately \$2.0 billion)
  - Gain on actuarial value of assets of \$675 million
- **Liabilities** grew faster than expected
  - Primarily due to salary increases larger than current expectations for All Others Employee group (1.6% larger than expected)
  - Small gain on liabilities for Police and Firefighters employees group
- **Contributions** in dollars are expected to be modestly lower due to headcount contractions

# Act 17 (SB 936) Contribution Rates

Employer Contribution Rates by Fiscal Years	General Employees	Special Categories (Police Officers, Firefighters and Corrections Officers)
7/1/2016 – 6/30/2017	17.00%	25.00%
7/1/2017 – 6/30/2018	18.00%	28.00%
7/1/2018 – 6/30/2019	19.00%	31.00%
7/1/2019 – 6/30/2020	22.00%	36.00%
7/1/2020 – 6/30/2021	24.00%	41.00%
7/1/2021 – 6/30/2022 and beyond	<b>24.00%</b>	<b>41.00%</b>

# Estimated Yields on Market Value of Assets



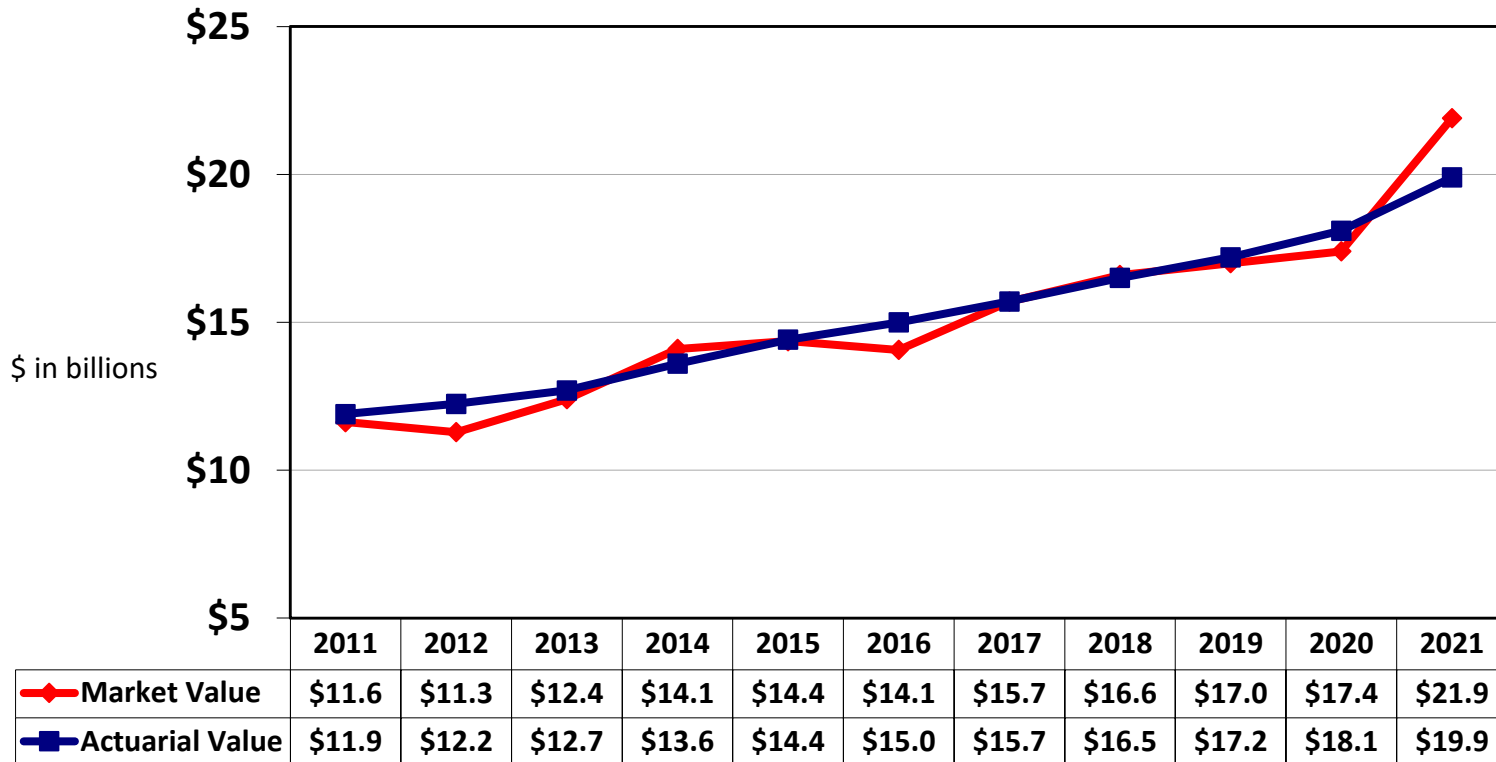
Current assumed investment return is 7.0% per year

11.0% average return for 5 year period ending June 30, 2021

8.5% average return for 10 year period ending June 30, 2021

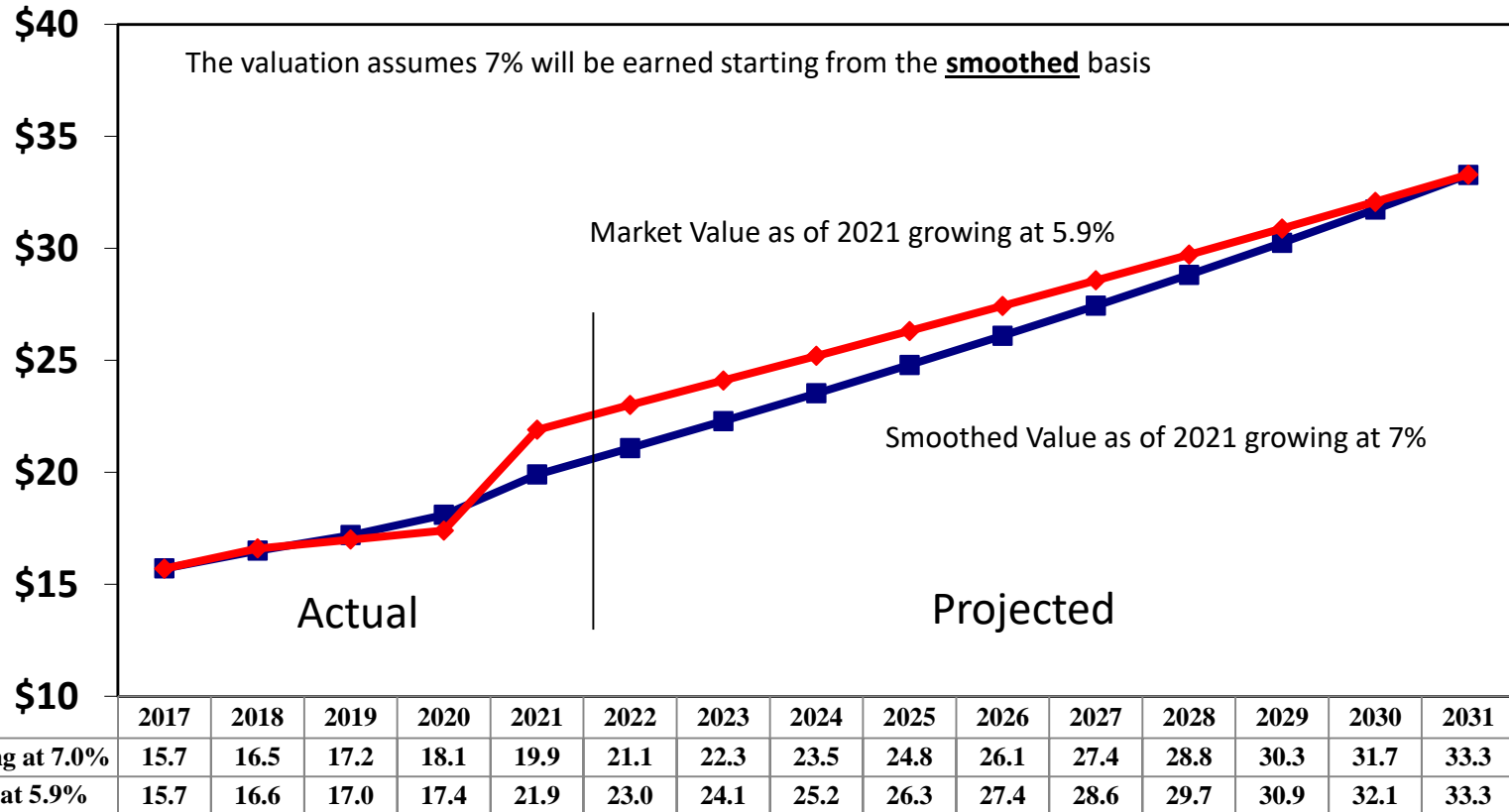
7.0% average return for 20 year period ending June 30, 2021

# Market and Actuarial (Smoothed) Values of Assets



Actuarial Value is a 4-year smoothed version of the Market Value

# Projected Growth of Market and Actuarial Assets



\$ in billions



# 2021 Actuarial Valuation Results

Valuation Year	2019	2020	Expected 2021	Actual 2021
<b>Based on Smoothed Asset Value</b>				
UAAL (\$ Billions)	\$14.07	\$14.61	\$14.75	\$14.23
Actuarial Funded Ratio	55.2%	55.3%	56.5%	58.3%
Funding Period in years*	26	26	25	<b>24</b>
<b>Based on Market Value</b>				
Actuarial Funded Ratio	54.9%	53.2%	55.8%	64.3%
Funding Period in years*	26	26	25	19

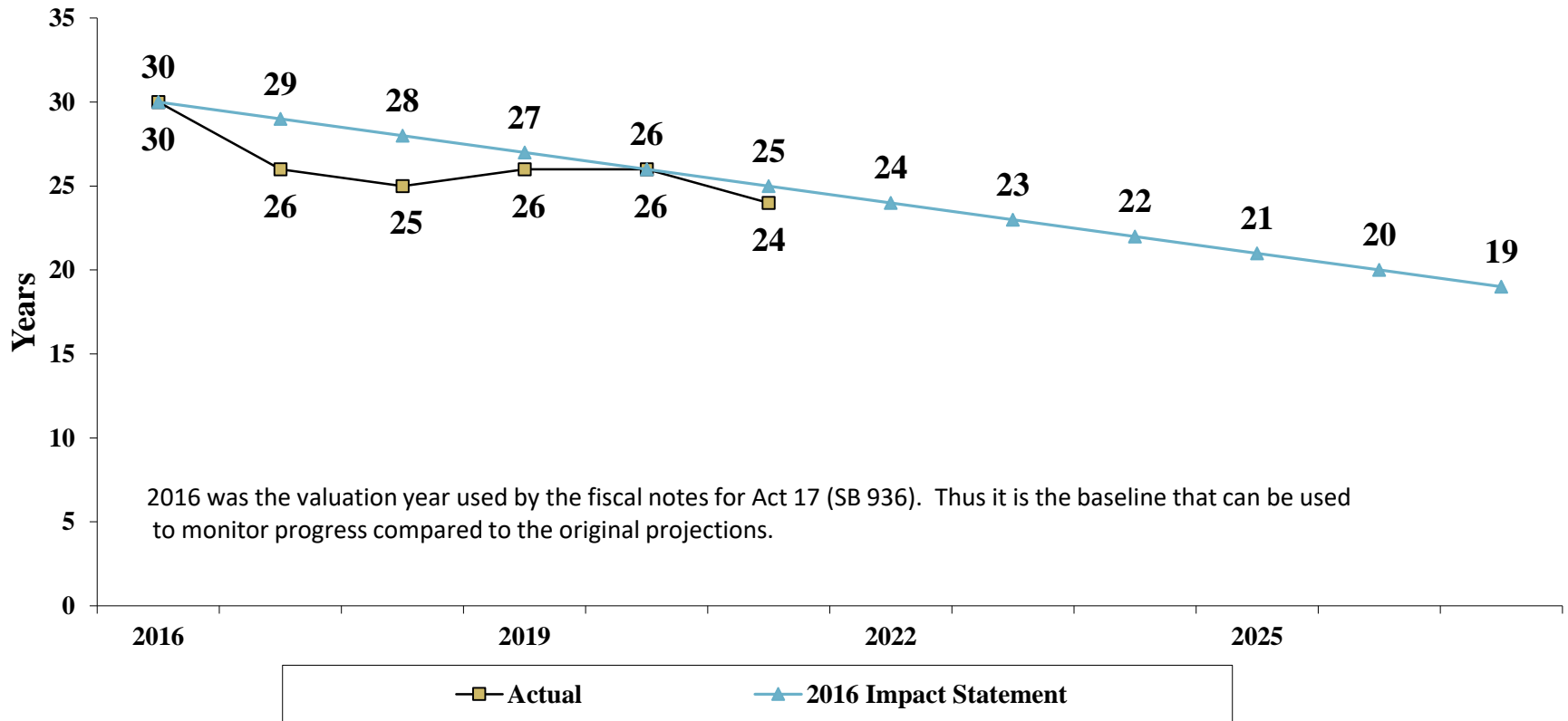
Expected 2021 based on 2020 valuation results and data. Actual 2021 reflects 2021 results and 2021 data.

\*Based on open group projection, recognizing new benefits for members hired after June 30, 2012





# Projection of Funding Period from 2016 Legislative Impact Statement vs Actual Valuation Outcomes



Assumes all assumptions met, including 7.00% return each year on the June 30, 2021 *smoothed* value of assets

# By Employee Group

Valuation Year	2019	2020	Expected 2021	Actual 2021
<b>Police and Fire Employees (11% of Payroll)</b>				
UAAL (\$ Billions)	\$2.50	\$2.65	\$2.68	\$2.46
Actuarial Funded Ratio	58.7%	58.8%	60.2%	63.3%
Funding Period in years*	28	28	27	<b>25</b>
<b>All Other Employees (89% of Payroll)</b>				
UAAL (\$ Billions)	\$11.57	\$11.96	\$12.07	\$11.77
Actuarial Funded Ratio	54.3%	54.5%	55.6%	57.1%
Funding Period in years*	25	25	24	<b>23</b>

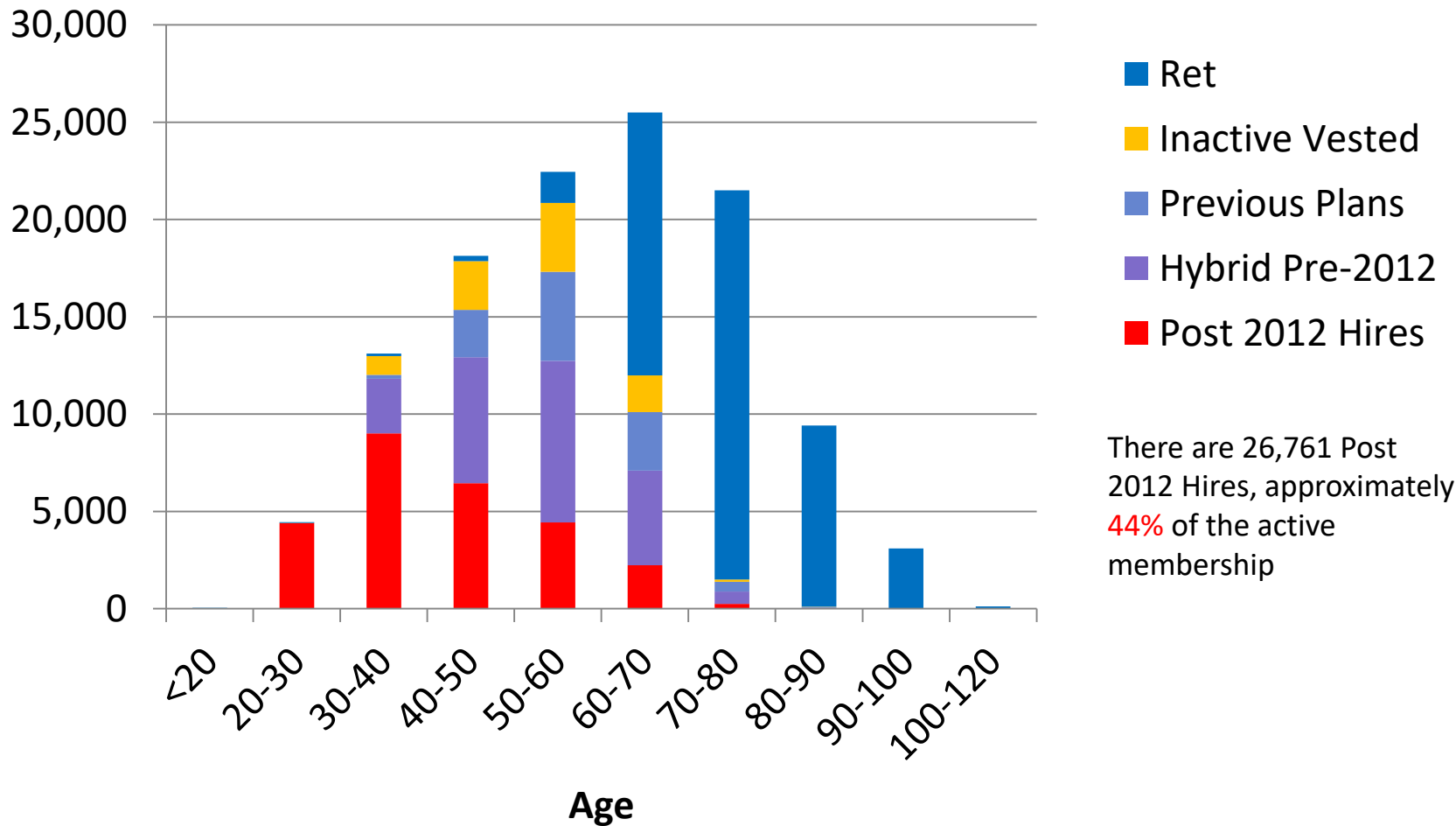
Expected 2021 based on 2020 valuation results and data. Actual 2021 reflects 2021 results and 2021 data.

\*Based on open group projection, recognizing new benefits for members hired after June 30, 2012



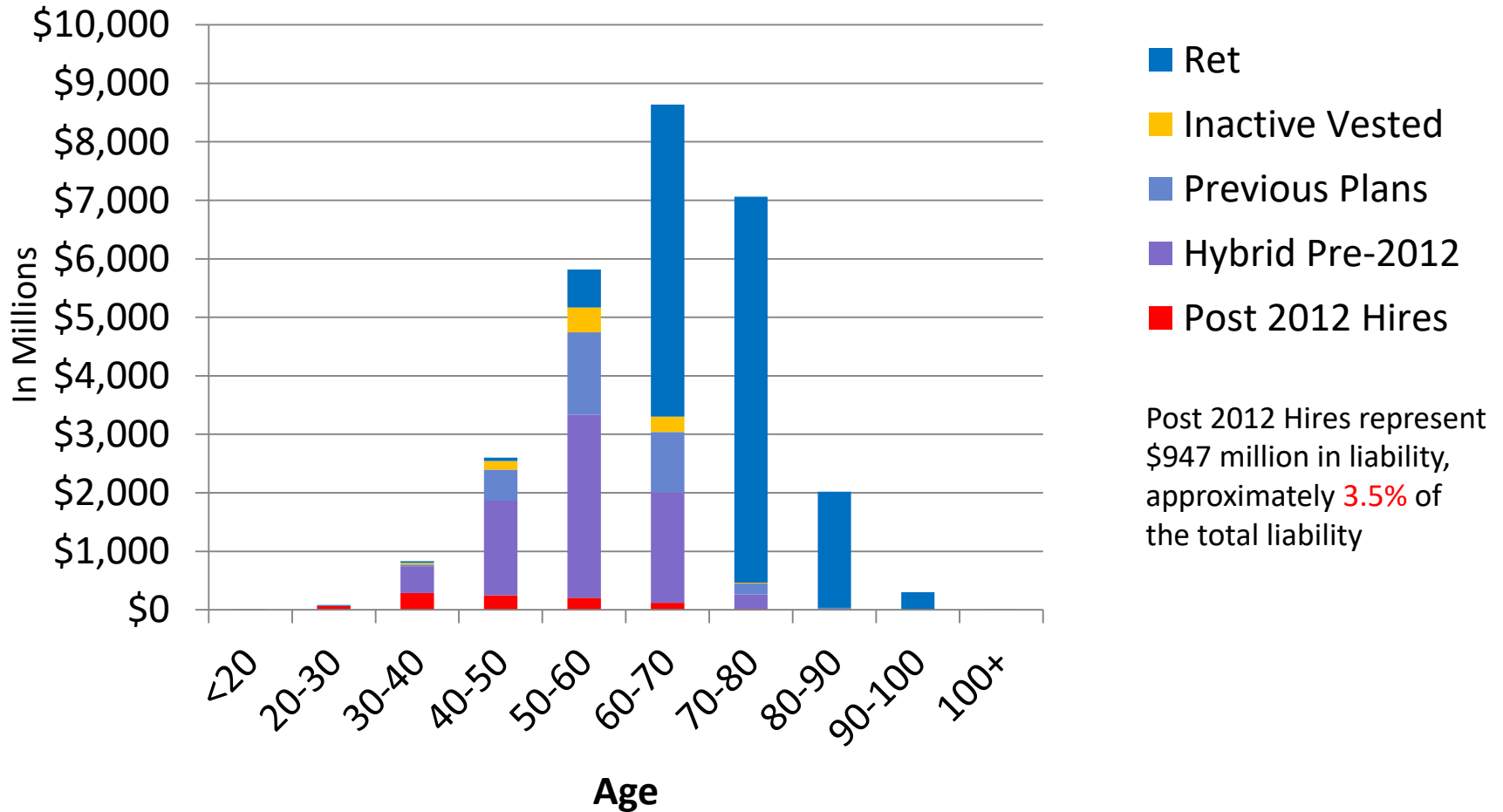
# Impact of New Benefit Tiers:

## All Other Employees: Counts by group and by age

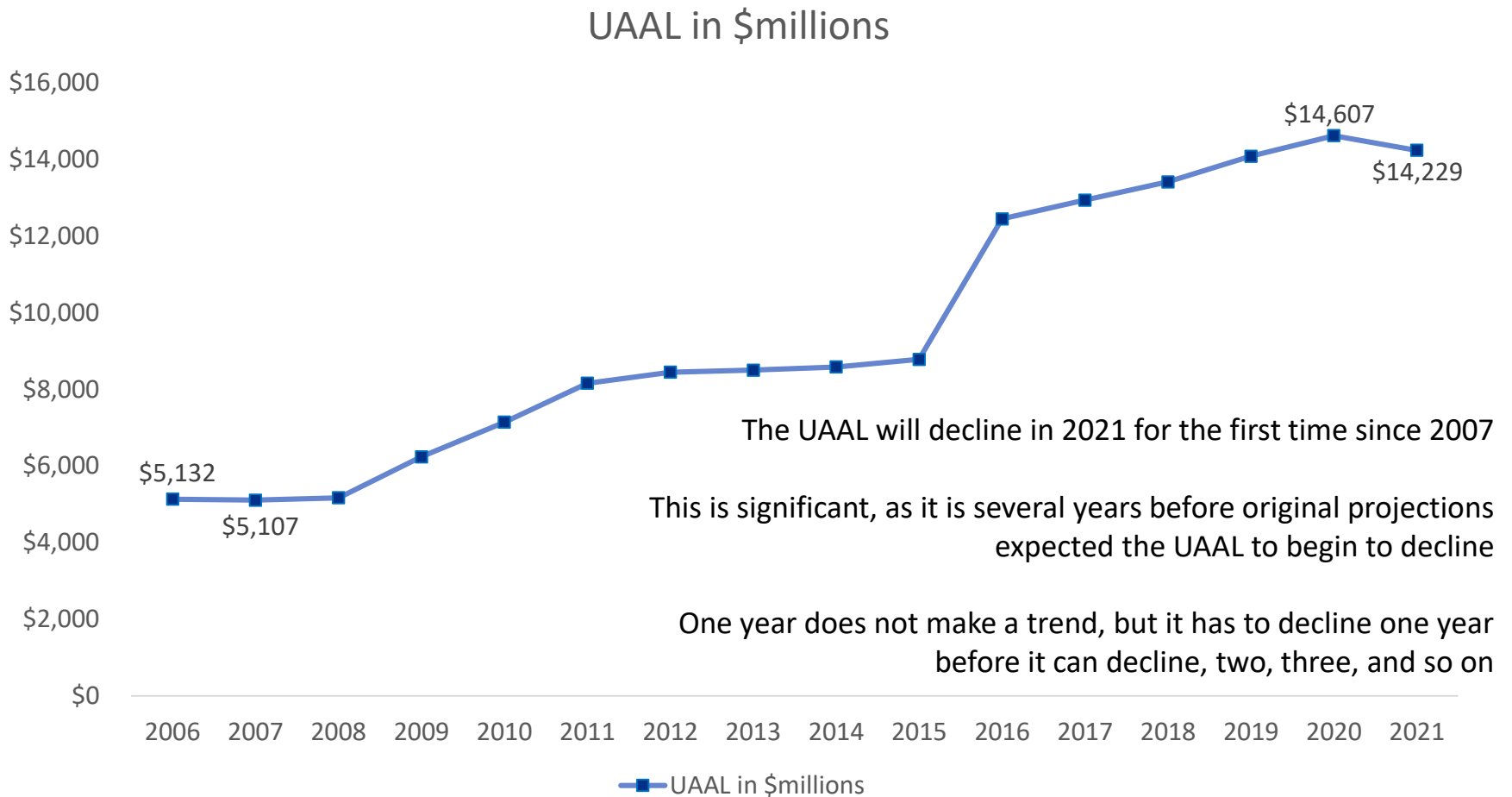


# Impact of New Benefit Tiers:

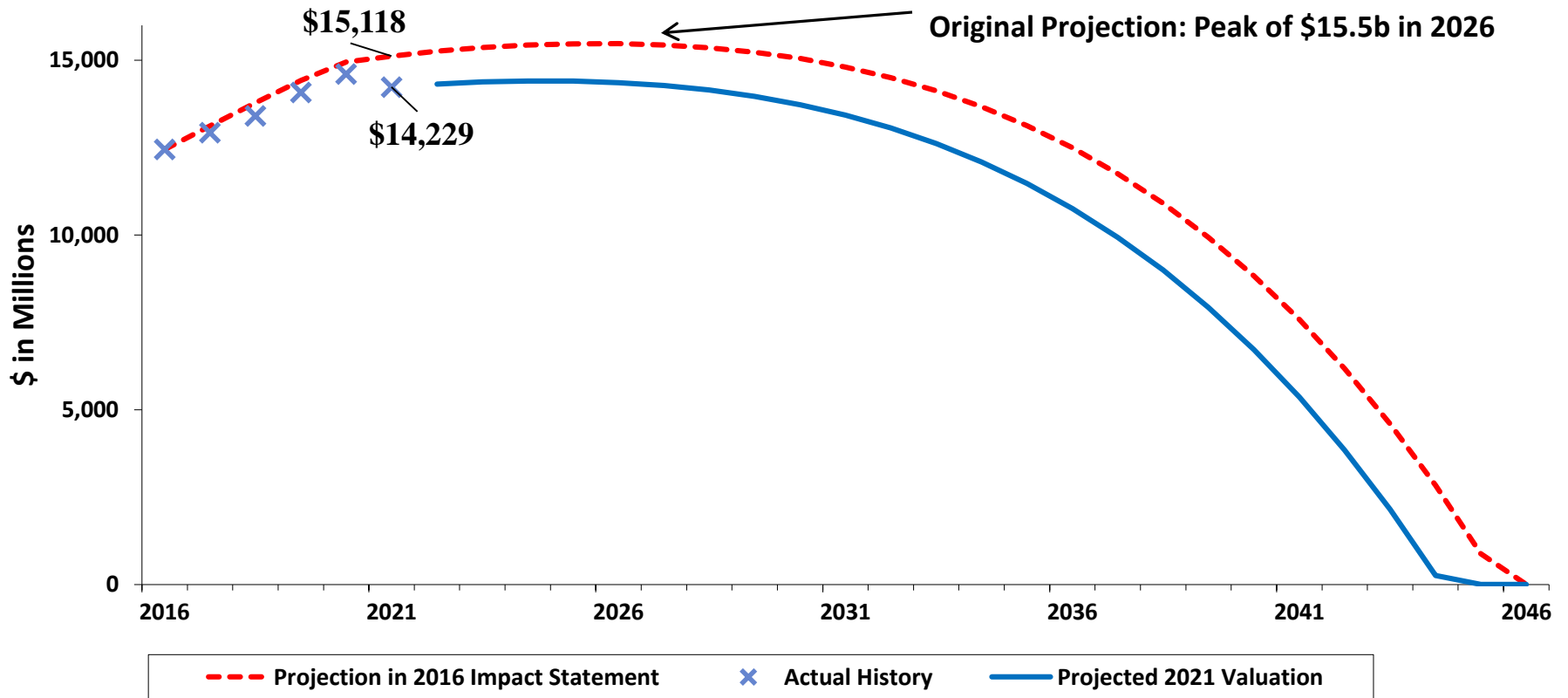
All Other Employees: **Liability** by group and by age



# History of the ERS Unfunded Actuarial Accrued Liability

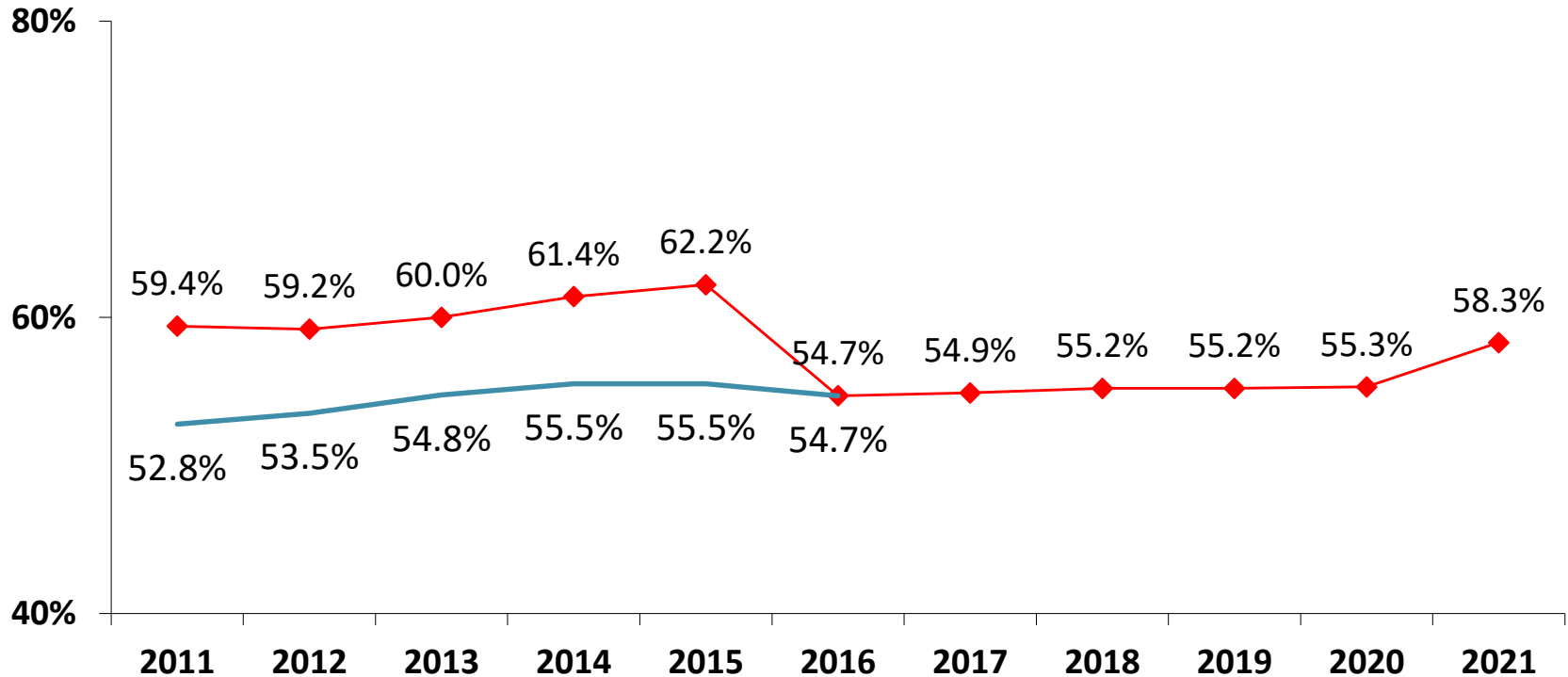


# Actual vs Projected UAAL



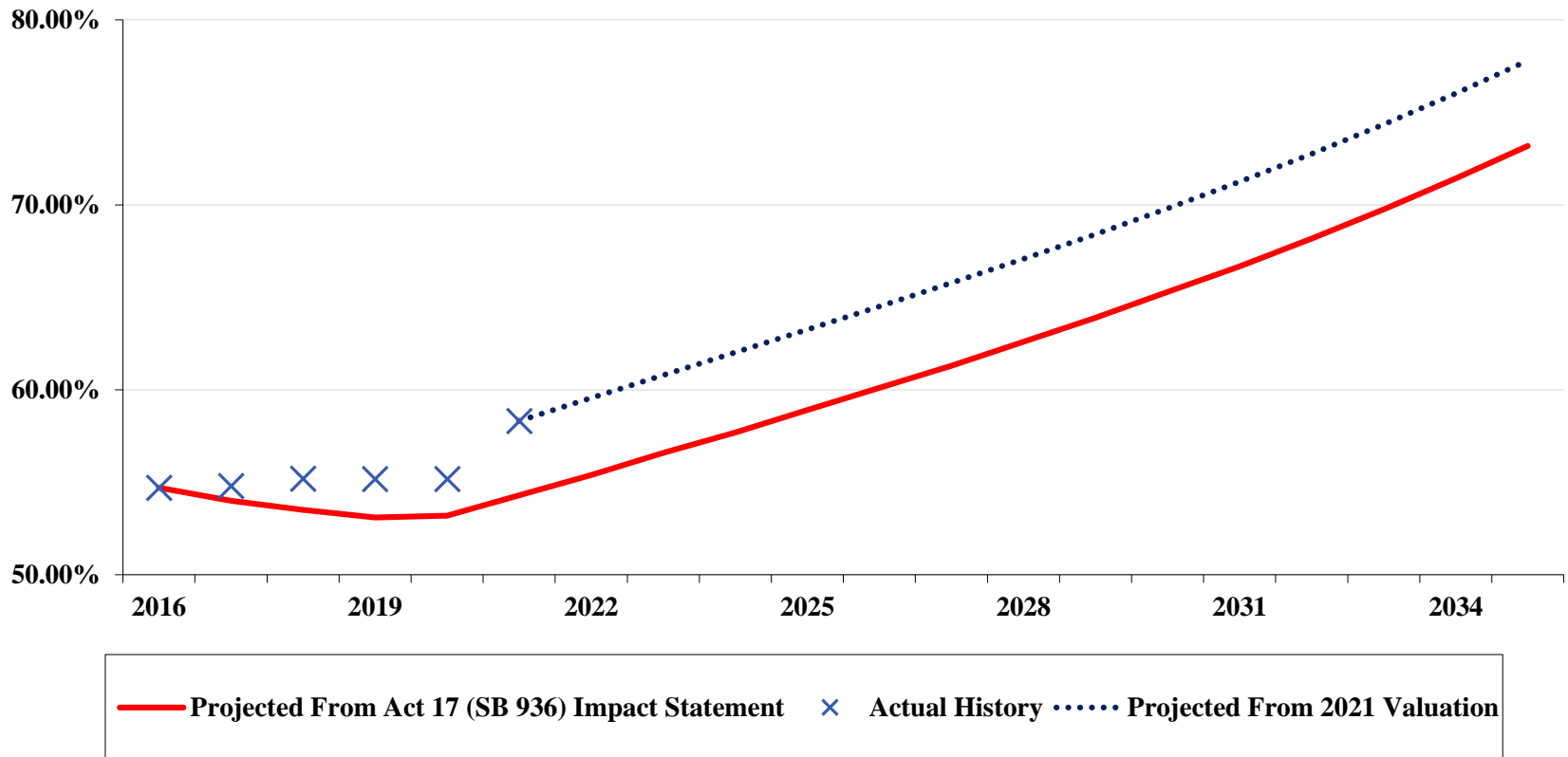
# History of Funded Ratio

Funded Ratio is the Ratio of the Assets to the Liabilities



◆ Actual History    — Pre-2016 Restated based on Current Assumptions

# Projection of Funded Ratio Compared to Original Legislative Communications



Assumes all assumptions met, including a 7.00% return each year on the current *smoothed* value of assets



# Probabilities of Future Outcomes

	From 2020 Valuation	From 2021 Valuation
Fully Funded by 2046 (Date from Act 17)	55.1%	57.0%
Fully Funded Within 30 Years from Valuation Date	62.1%	65.9%
Funding Period Never Breaches 30 Years	80.9%	84.1%

Both scenarios use a 7% expected median return with a 10% standard deviation, projected off of smoothed assets

Both assume no changes to contribution rates at any point

# Valuation Summary

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- The strong FY21 investment performance, along with the disciplined commitment to follow the contribution schedule from Act 17 (SB 936) have continued the process of strengthening the financial outlook for ERS.
- The scheduled employer contribution rates are expected to be adequate to satisfy Hawaii Revised Statutes §88-122(e)(1). The Statutory Stress Test shows this is true even with substantial adverse experience.
- However, all of the positive outlook assumes the scheduled contribution rates occur and investment income objectives are achieved. It is imperative that the currently scheduled funding strategies are sustained.
- Next experience study before June 30, 2022 valuation based on this valuation data as of June 30, 2021