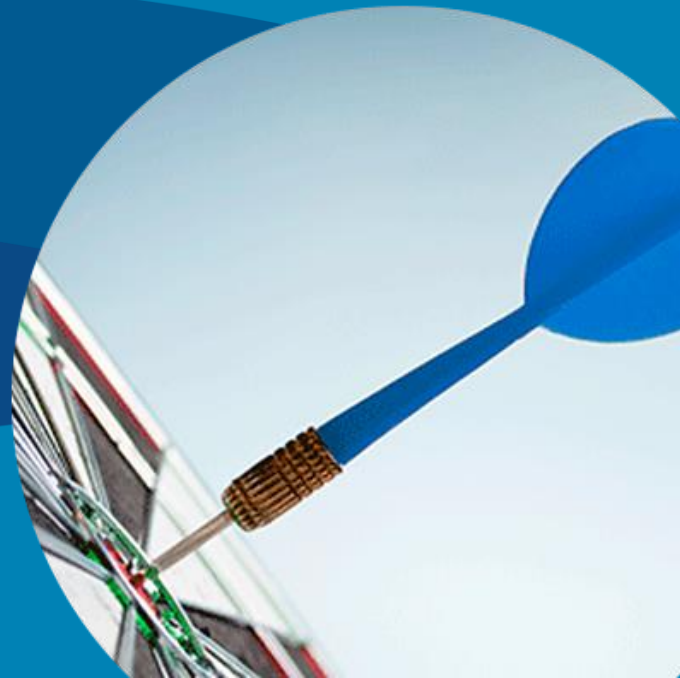




# Employees' Retirement System of the State of Hawaii

2020 Valuation Results

January 11, 2021



# Agenda

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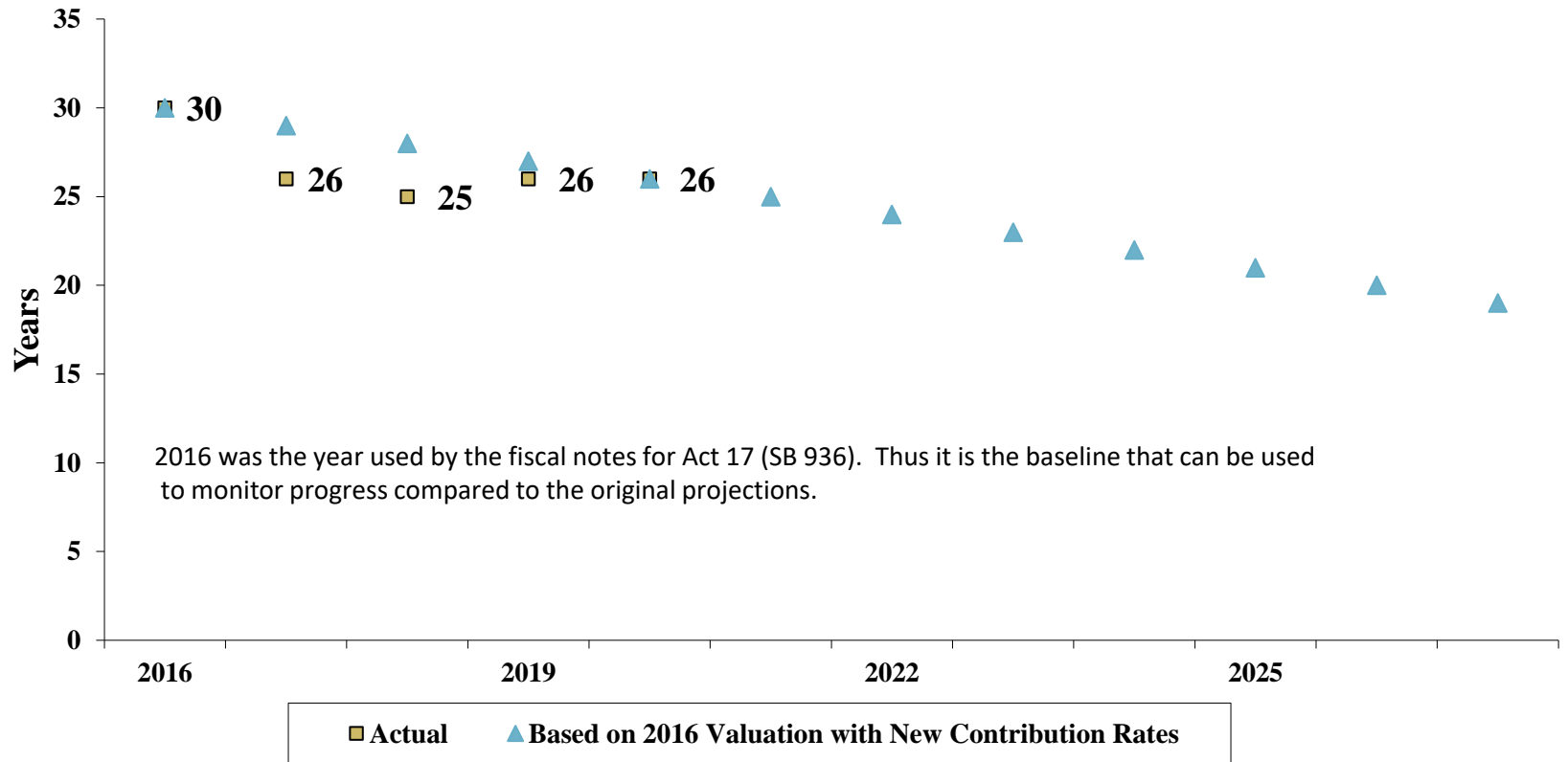
- Purpose of Valuation
- Valuation Results
- Details on Funding Period
- Comparison of Projections to Previous Years
- Projections Under Alternative Scenarios
- Closing Remarks

# Purpose of the Actuarial Valuation

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- The ***primary*** purpose of the annual actuarial valuation is to either (1) set or (2) assess the adequacy of the contribution **funding** policy
  - “Funding” or “contribution allocation procedure”
- The funding policy is the pattern of contributions, not necessarily the contributions in a given year
- For ERS, the funding policy has mostly a fixed contribution rate from members and employers
  - Maximum Funding Period of 30 Years
- Thus, for ERS, the primary purpose of the annual actuarial valuation is to assess whether the current funding policy is expected to fully amortize the UAAL over a period of 30 years or less

# Projection of Funding Period from 2016 Valuation vs Actual Valuation Outcomes



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

# 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%
Current Valuation Date →	<b>7/1/2020 – 6/30/2021</b>	<b>24.00%</b>	<b>41.00%</b>

The 26 year estimated funding period assumes that the current contribution rates will continue for the next 26 years. If the contribution rates are reduced (even temporarily) this will extend the funding period perhaps beyond the 30-year statutory requirement.



# 2020 Preliminary Actuarial Valuation Results

Valuation Year	2018	2019	Expected 2020	Actual 2020
<b>Based on Smoothed Asset Value</b>				
UAAL (\$ Billions)*	\$13.41	\$14.07	\$14.33	\$14.65
Actuarial Funded Ratio*	55.2%	55.2%	56.1%	55.2%
Funding Period in years**	25	26	25	<b>26</b>
<b>Based on Market Value</b>				
Actuarial Funded Ratio*	55.5%	54.9%	55.8%	52.5%
Funding Period in years**	25	26	25	28

Expected 2020 based on 2019 valuation results and data. Actual 2020 reflects 2020 results and 2020 data.

\*Preliminary valuation results

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



# By Employee Group

Valuation Year	2018	2019	Expected 2020	Actual 2020
<b>Police and Fire Employees (11% of Payroll)</b>				
UAAL (\$ Billions)*	\$2.31	\$2.50	\$2.56	\$2.66
Actuarial Funded Ratio*	59.0%	58.7%	59.7%	58.6%
Funding Period in years**	26	28	27	<b>28</b>
<b>All Other Employees (89% of Payroll)</b>				
UAAL (\$ Billions)	\$11.09	\$11.57	\$11.77	\$11.99
Actuarial Funded Ratio*	54.3%	54.3%	55.2%	54.3%
Funding Period in years**	25	25	24	<b>25</b>

Expected 2020 based on 2019 valuation results and data. Actual 2020 reflects 2020 results and 2020 data.

\*Preliminary valuation results

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



# Sources of Impact

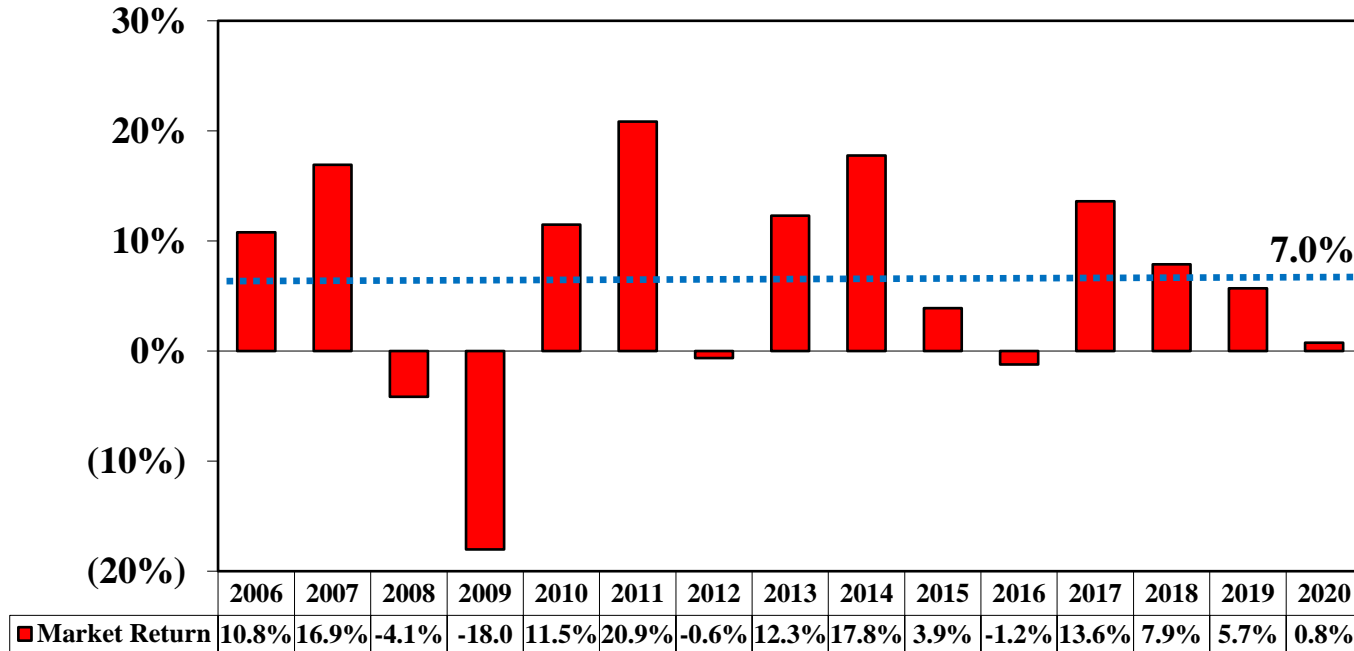
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- **Investments** underperformed 7.00% assumption on market basis
  - Smoothing technique will defer some of underperformance into future years (approximately \$900m)
  - Loss on actuarial value of assets of almost \$300 million
- **Liabilities** grew faster than expected
  - Primarily due to salary increases larger than current expectations for Police/Fire Employees (1.9% larger than expected)
  - Small gain on liabilities for All Other employees group
- **Contributions** in dollars are expected to be modestly higher due to salary increases and head count increases for both groups
  - However, much of this data is through March 31<sup>st</sup>. The future counts and amounts could be damped by the impact from COVID-19 pandemic **and possible hiring freezes or furloughs.**



# Estimated Yields on Market Value of Assets

## Market Returns



2020 return and averages below are based on preliminary financial results

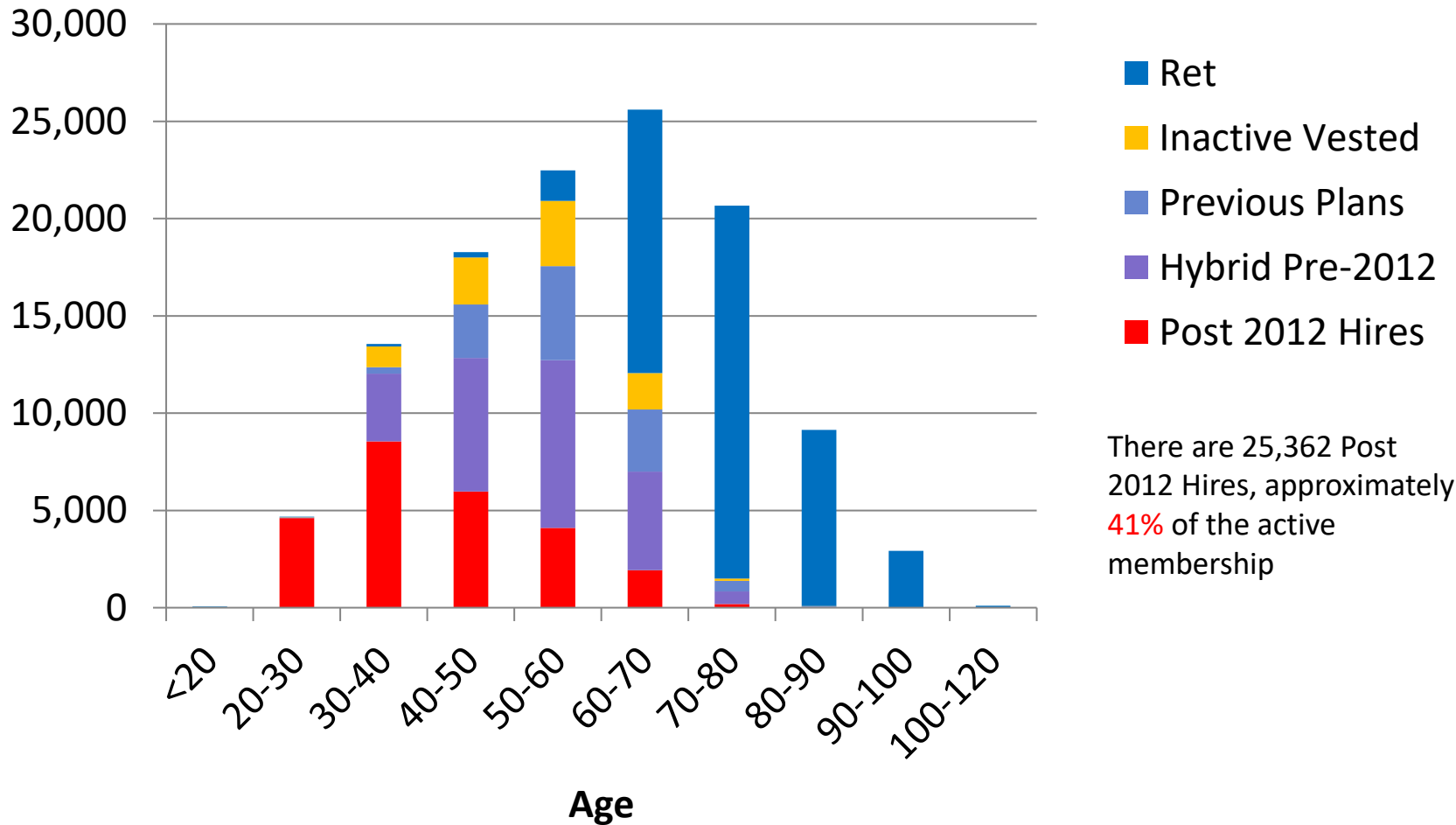
5.2% average return for 5-year period ending June 30, 2020

7.9% average return for 10-year period ending June 30, 2020

6.1% average return for 15-year period ending June 30, 2020

# Impact of New Benefit Tiers:

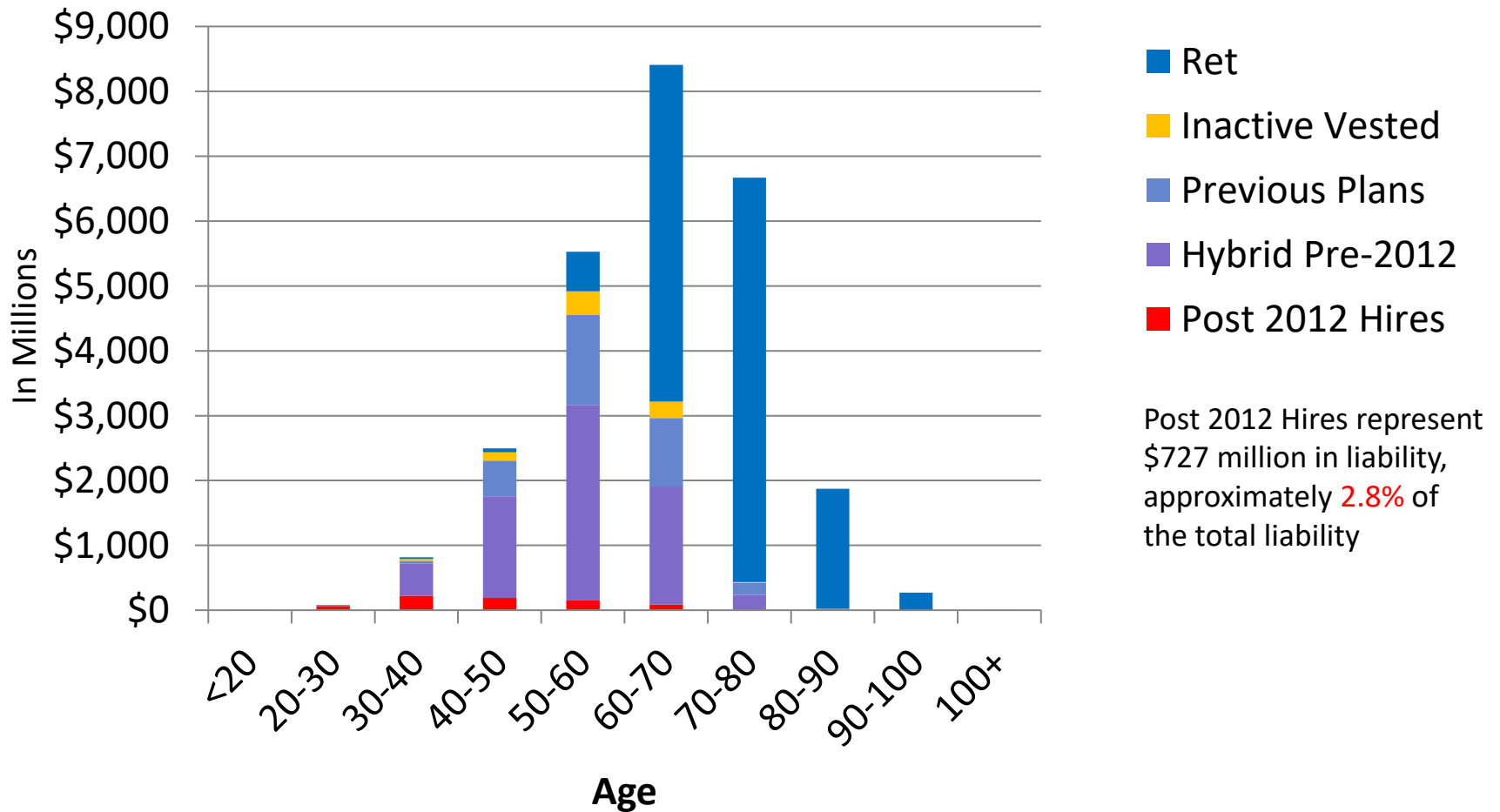
## All Other Employees: Counts by group and by age



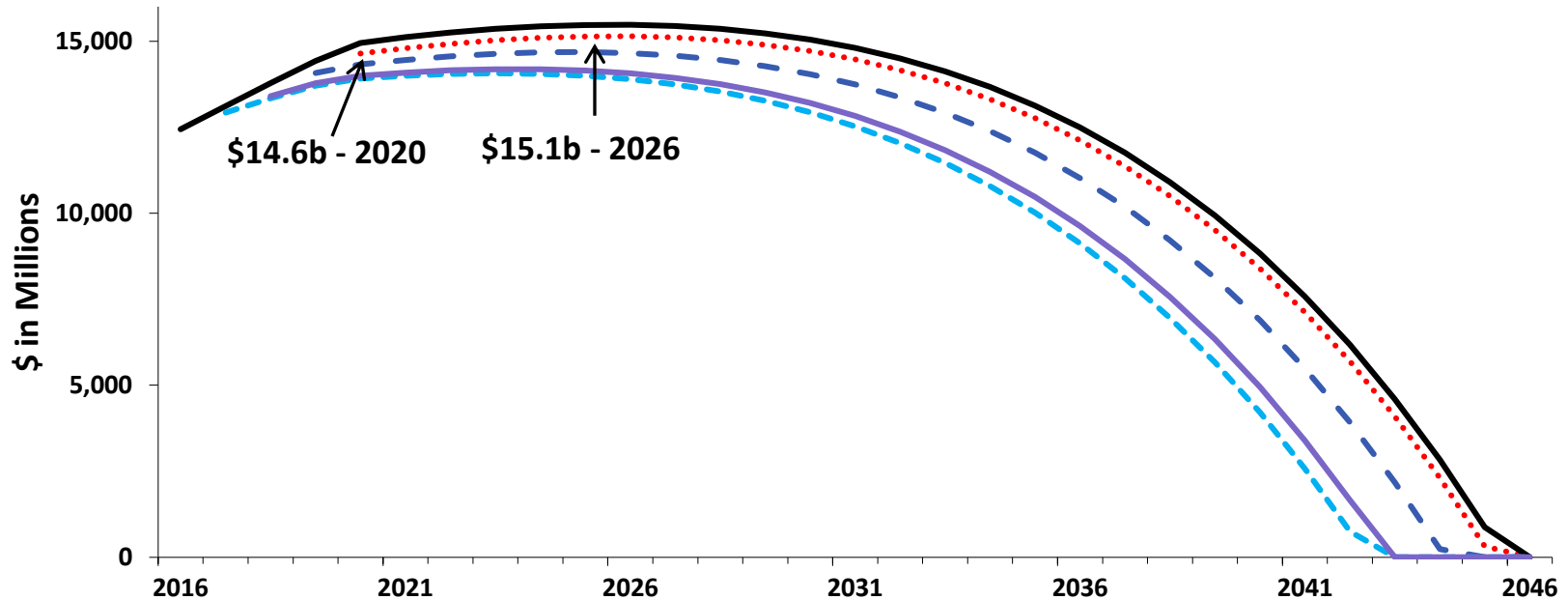
There are 25,362 Post 2012 Hires, approximately 41% of the active membership

# Impact of New Benefit Tiers:

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



# Projection of UAAL (June 30, 2020)

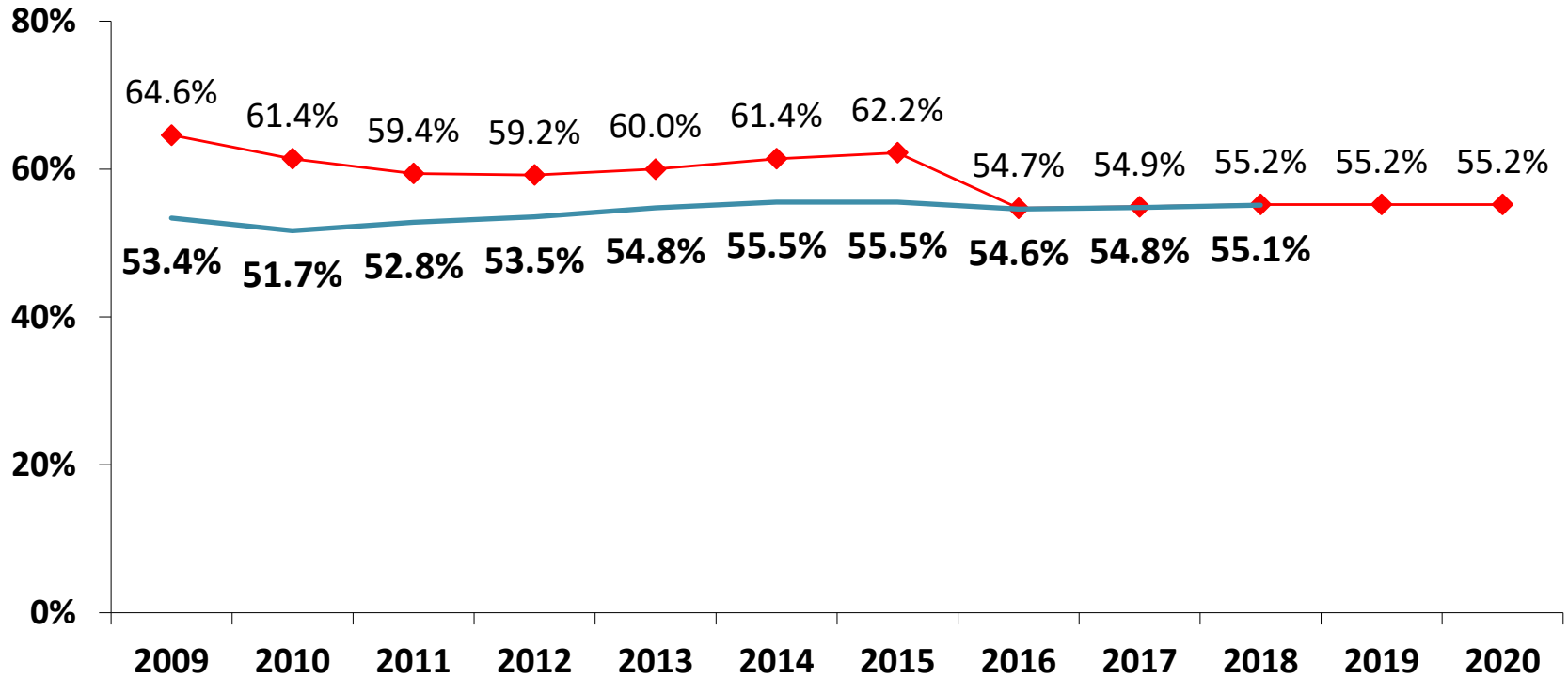


- ..... 2020 Valuation
- 2019 Valuation
- 2016 Valuation with New Employer Contribution Rates
- 2017 Valuation
- 2018 Valuation

Projections are based on smoothed value of assets as of the valuation date and assumed 7% return on assets in all future years



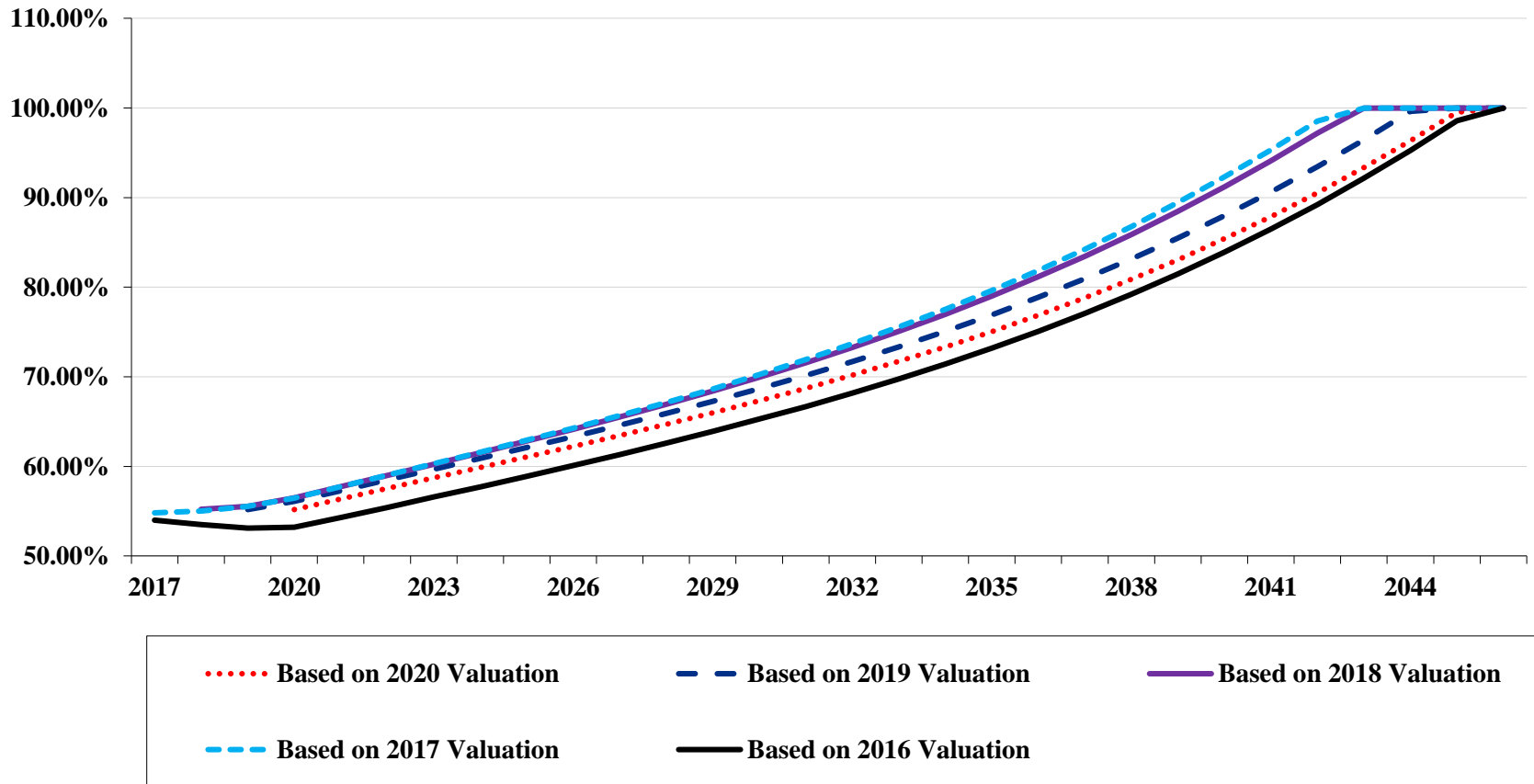
# History of Funded Ratio



◆ Actual — Restated based on Current Assumptions

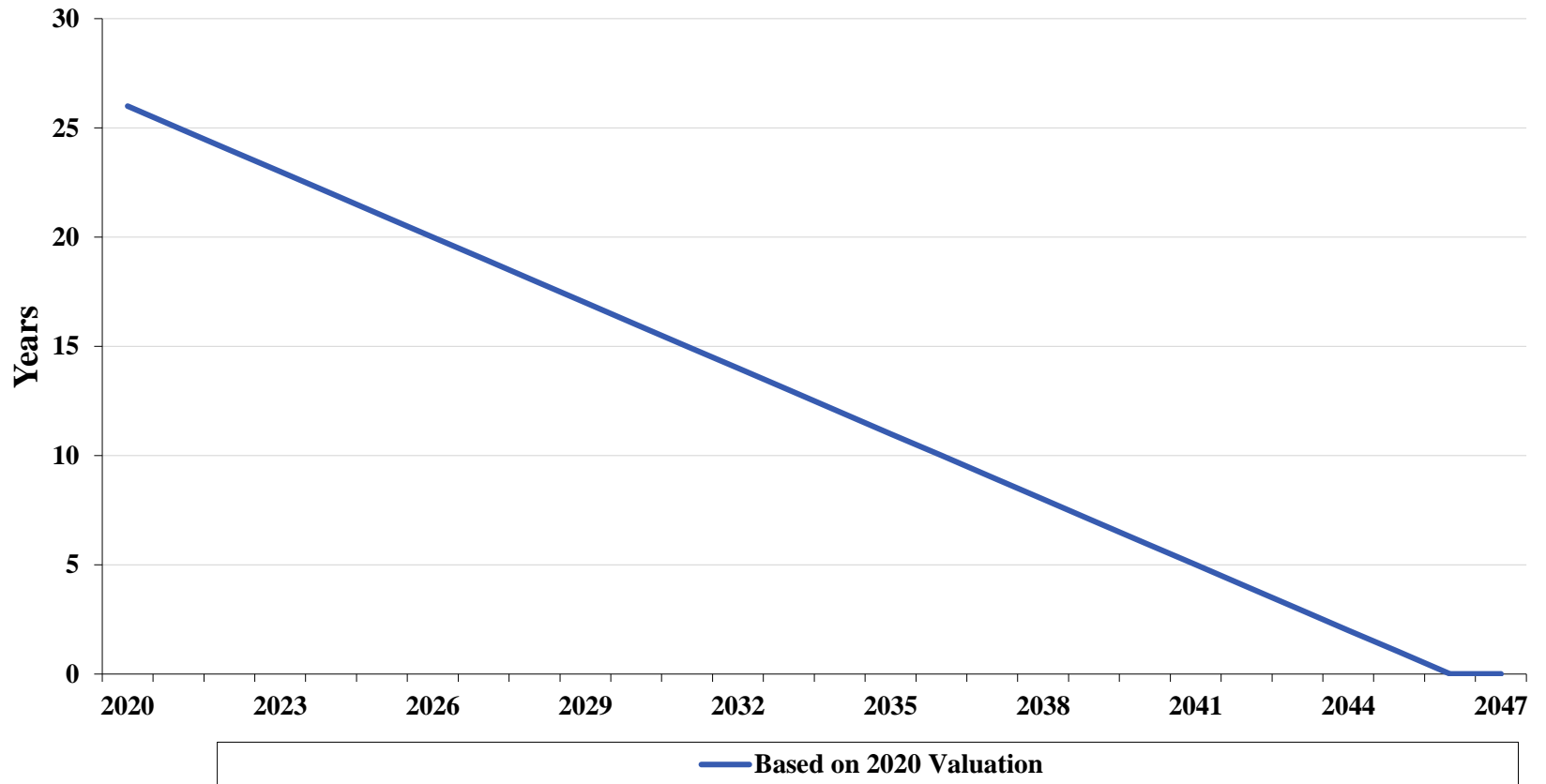
Funded Ratio is Actuarial Value of Assets divided by Actuarial Accrued Liabilities

# Projection of Funded Ratio from 2019 Valuation



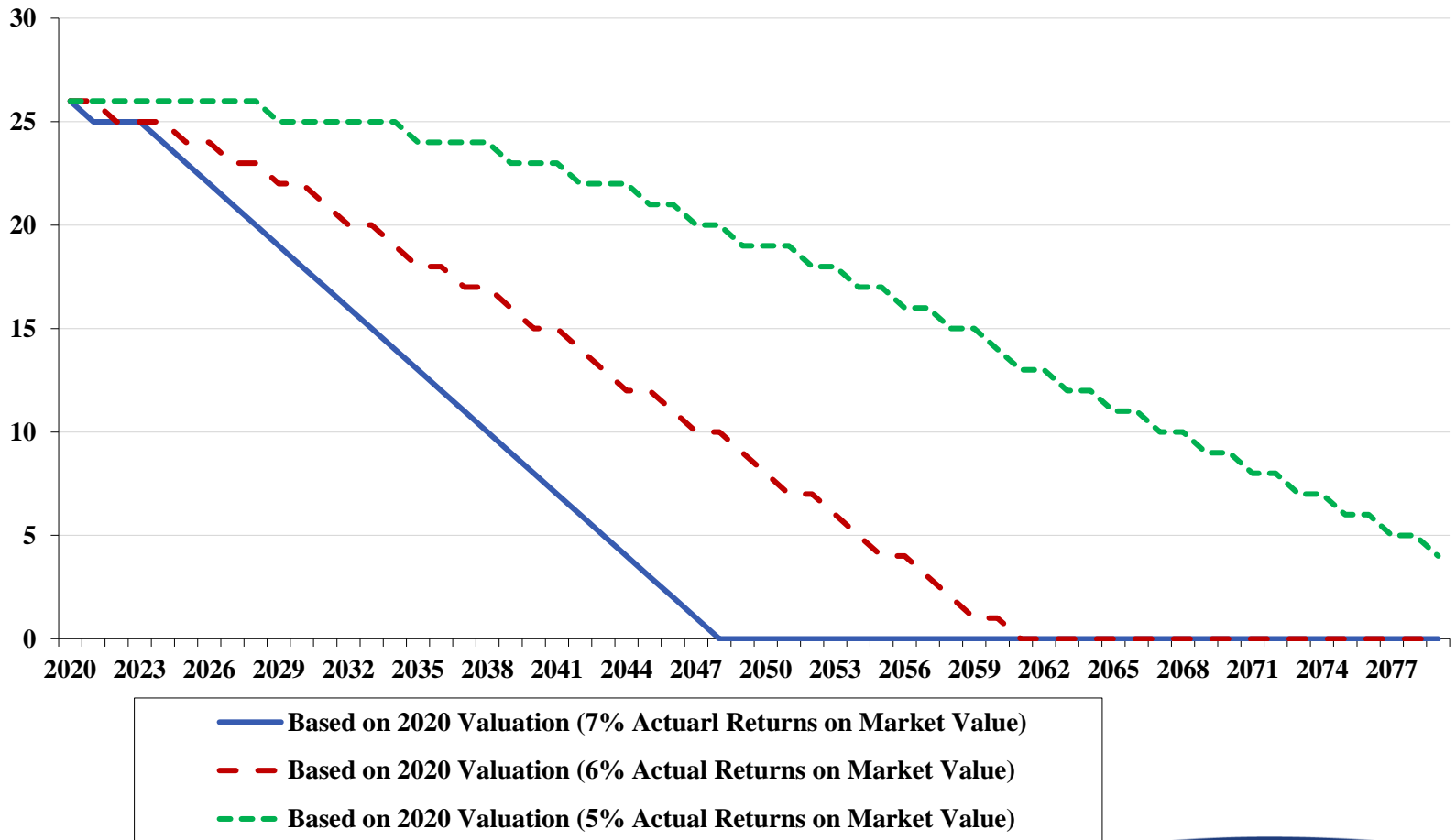
Assumes all assumptions met, including a 7.00% return each year on the current *smoothed* value of assets

# Projection of Funding Period from 2020 Valuation



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

# Projection of Funding Period Sensitivity from Investment Returns





# Stress Test Summary

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- Actuarial valuation results show System is on target to be fully funded in less than 30 years
  - Primarily due to legislated employer contribution increases
- Stress tests show that System is sustainable in a low return environment
  - Although date of achieving full funded status would be extended

# Valuation Summary

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- While it does not show in the current UAAL and funded ratio, the current actuarial assumptions and the contribution commitment from Act 17 (SB 936) have materially strengthened the outlook for ERS
- The scheduled employer contribution rates are expected to be adequate to satisfy Hawaii Revised Statutes §88-122(e)(1), 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 implemented and sustained.
- UAAL is anticipated to grow until the funding period reaches 20 years (approximately 2026).