

# State Board of Administration

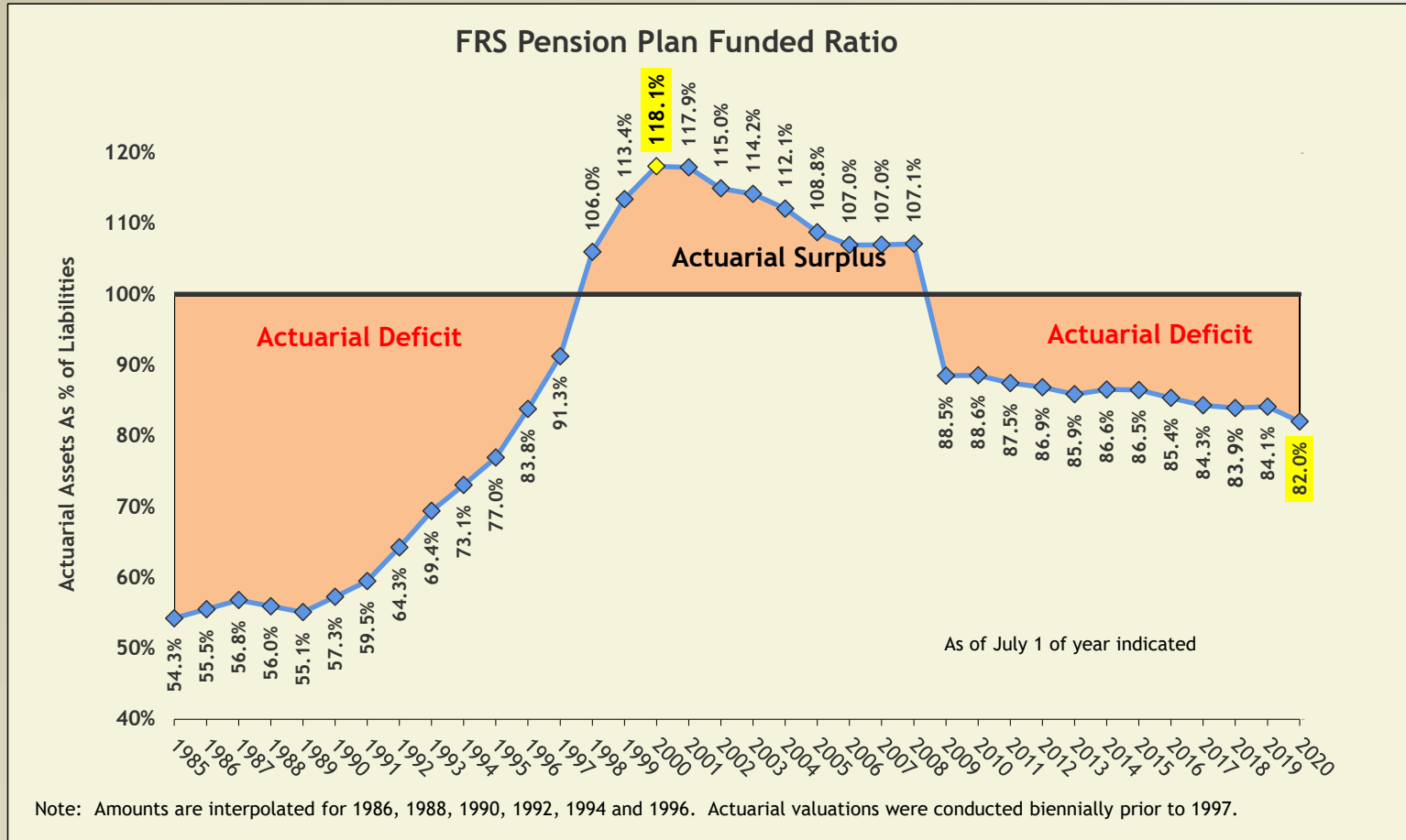
## FRS Pension Plan Review

Actuarial Assumptions Estimating Conference

October 7, 2021

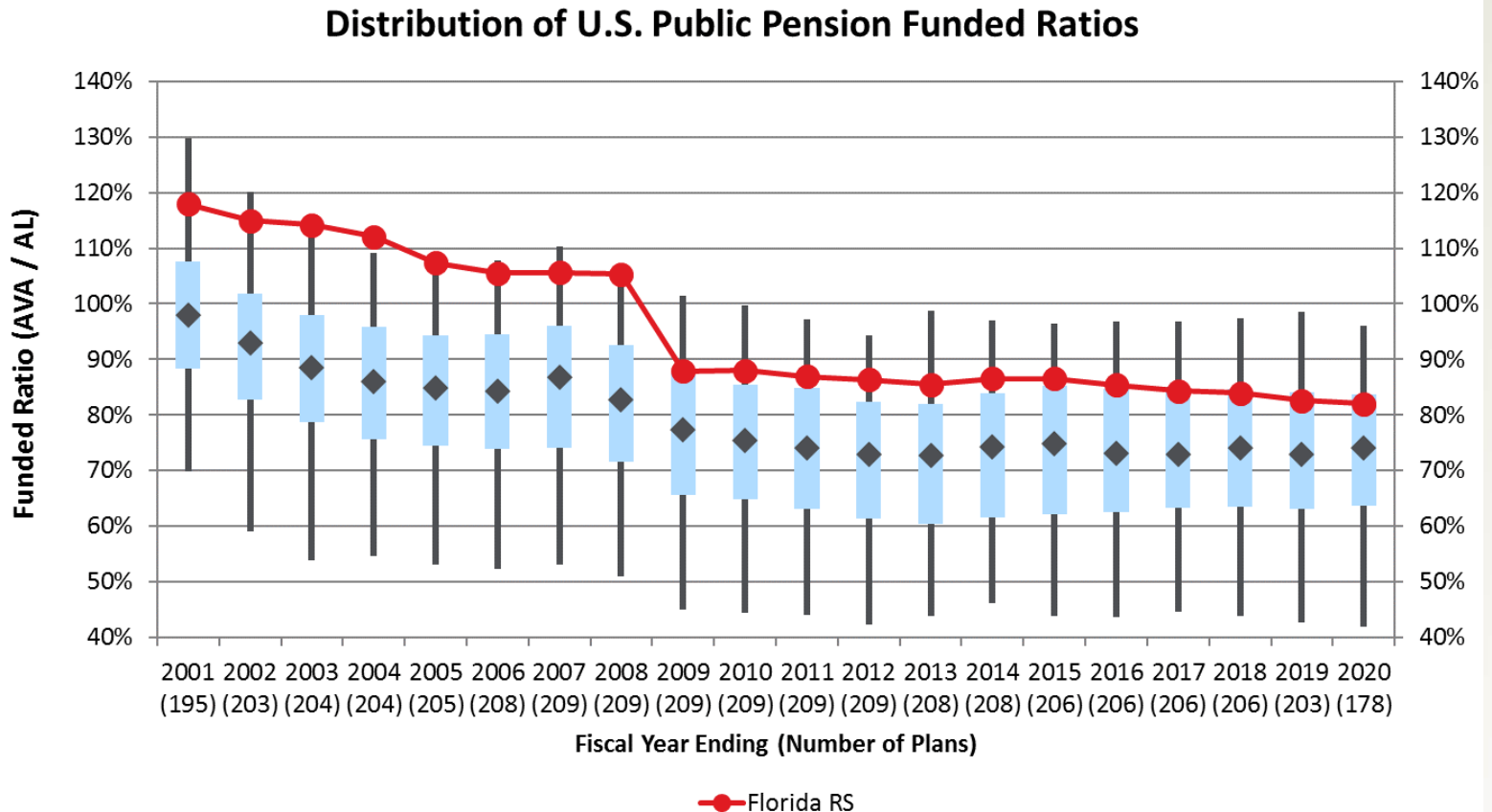


# FRS Pension Plan's Funded Status



- The “Global Financial Crisis” that began in 2007 led to marked to market asset value declines, creating an unfunded liability.
- The FRS Pension Plan’s funded status continues to be in deficit.

# Florida Retirement System Public Plan Peer Comparison Funded Ratio (Based on Actuarial Value of Assets)

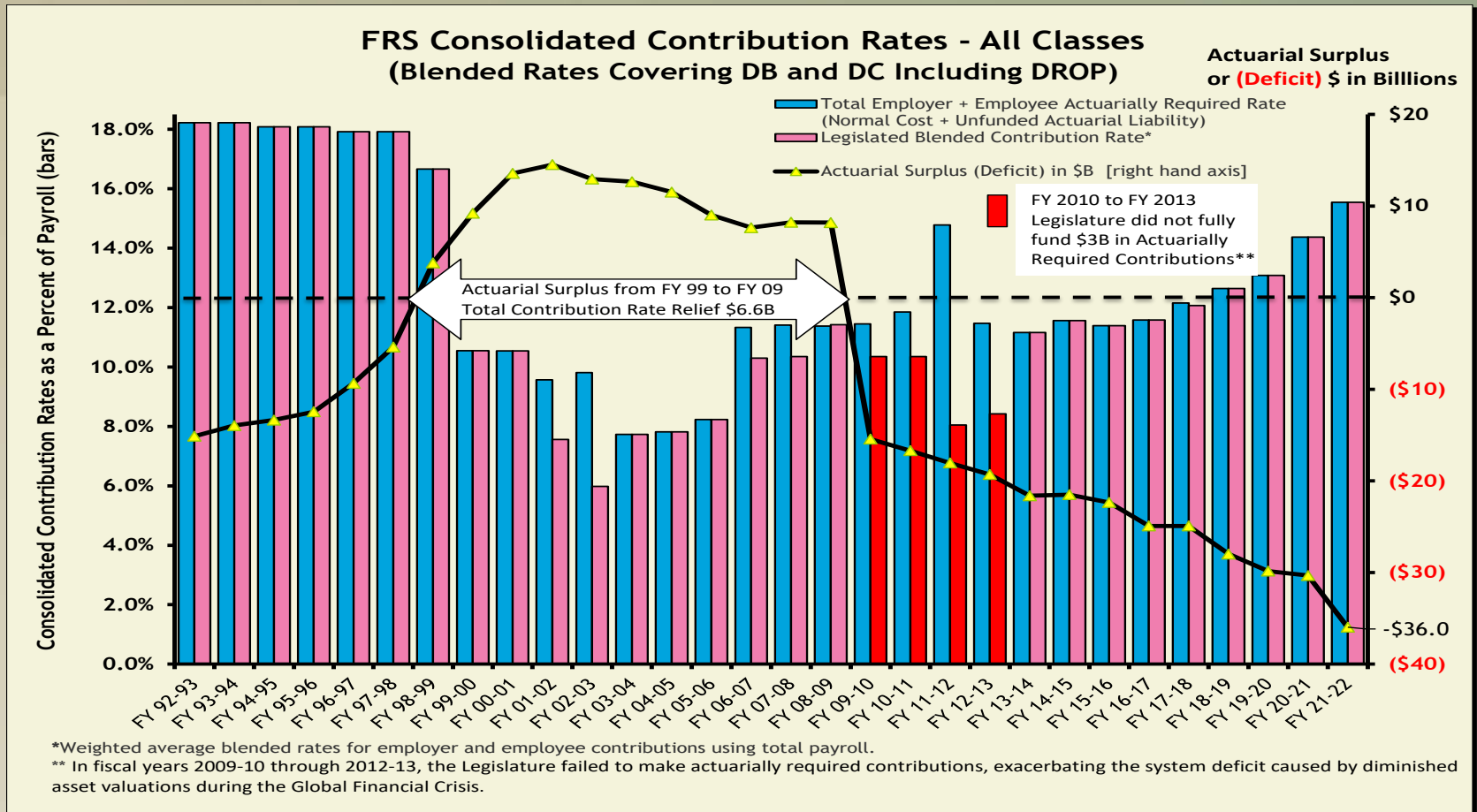


- The median funded ratio as of FYE 2020 was 74% based on the latest survey data.
- FRS' FYE 2020 funded ratio (82%) fell just below the 75<sup>th</sup> percentile relative to peers<sup>1</sup>.
- FRS' funded ratio relative to the peer median funded ratio has declined.

Sources: Public Plans Data ([publicplansdata.org](http://publicplansdata.org)) as of August 2021

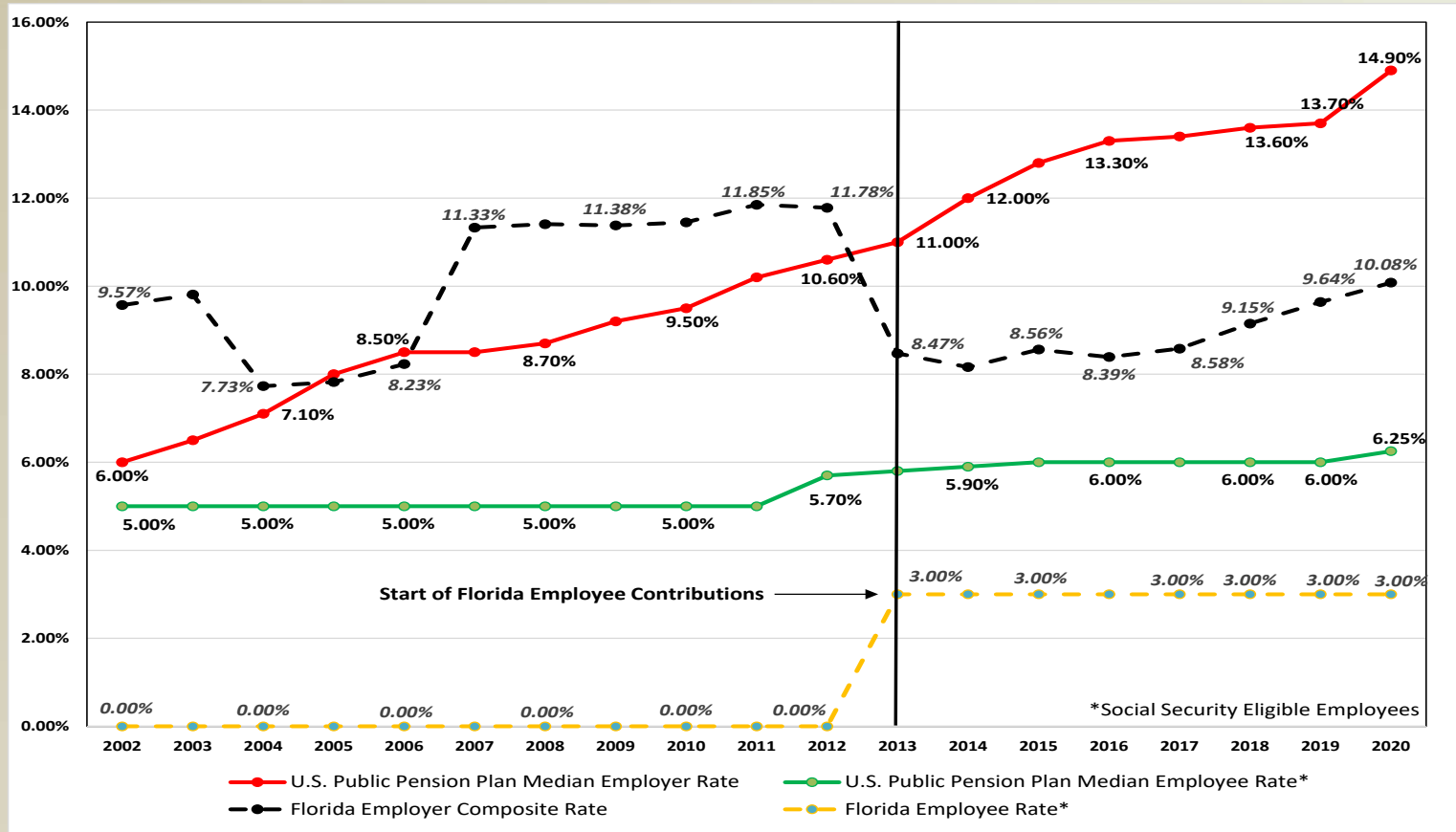
<sup>1</sup>Peers defined as public funds published within [publicplansdata.org](http://publicplansdata.org) as of August 2021; Number of plans per year are shown in parentheses

# Contributions and Funded Status



- 11-years of actuarial surpluses from 1998 thru 2008 and employers saving a cumulative \$6.6B through reduced contributions.
- \$3B in actuarially required contribution rates were not funded due to budgetary constraints from 2010 to 2013. Missed an opportunity to gain an estimated \$7.8B in asset value as of June 30, 2021.
- Plan contributions have been approximately \$270M to \$1.9B less (actuarial return assumption vs. SBA return forecast) than they should have been every year for the past ten years (cumulative total \$10.9B).

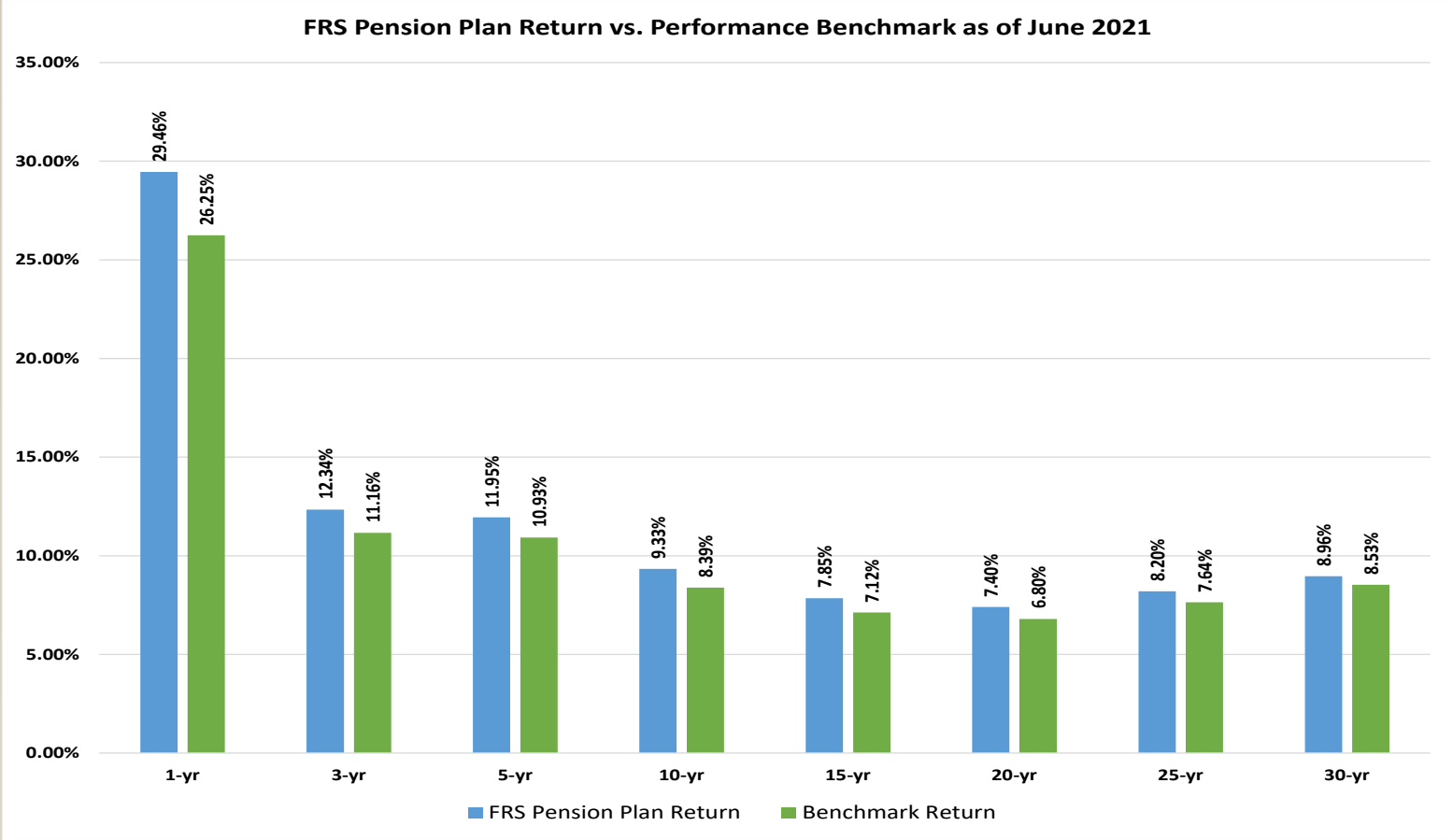
# Florida's Contribution Rates Continue to Be Significantly Lower Than Other States



Source: NASRA (National Association of State Retirement Administrators)

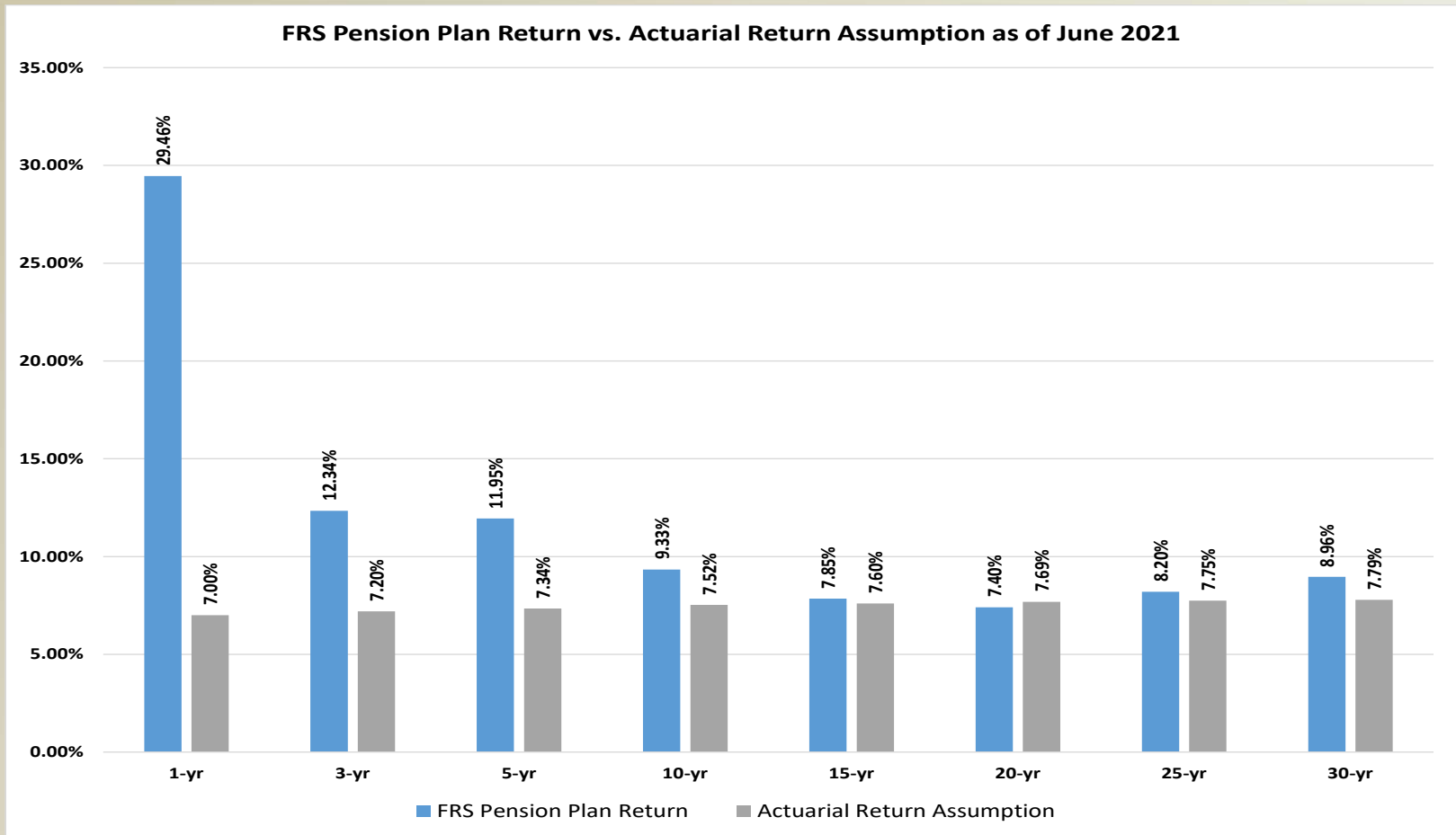
- When employees started contributing 3%, employers' composite contribution rate was lowered by more than 3%.
- FRS' composite contribution rate (2020) was 13.08% and the median U.S. public pension plan contribution rate (2020) was 21.15%.

# FRS Pension Plan Return vs. Performance Benchmark



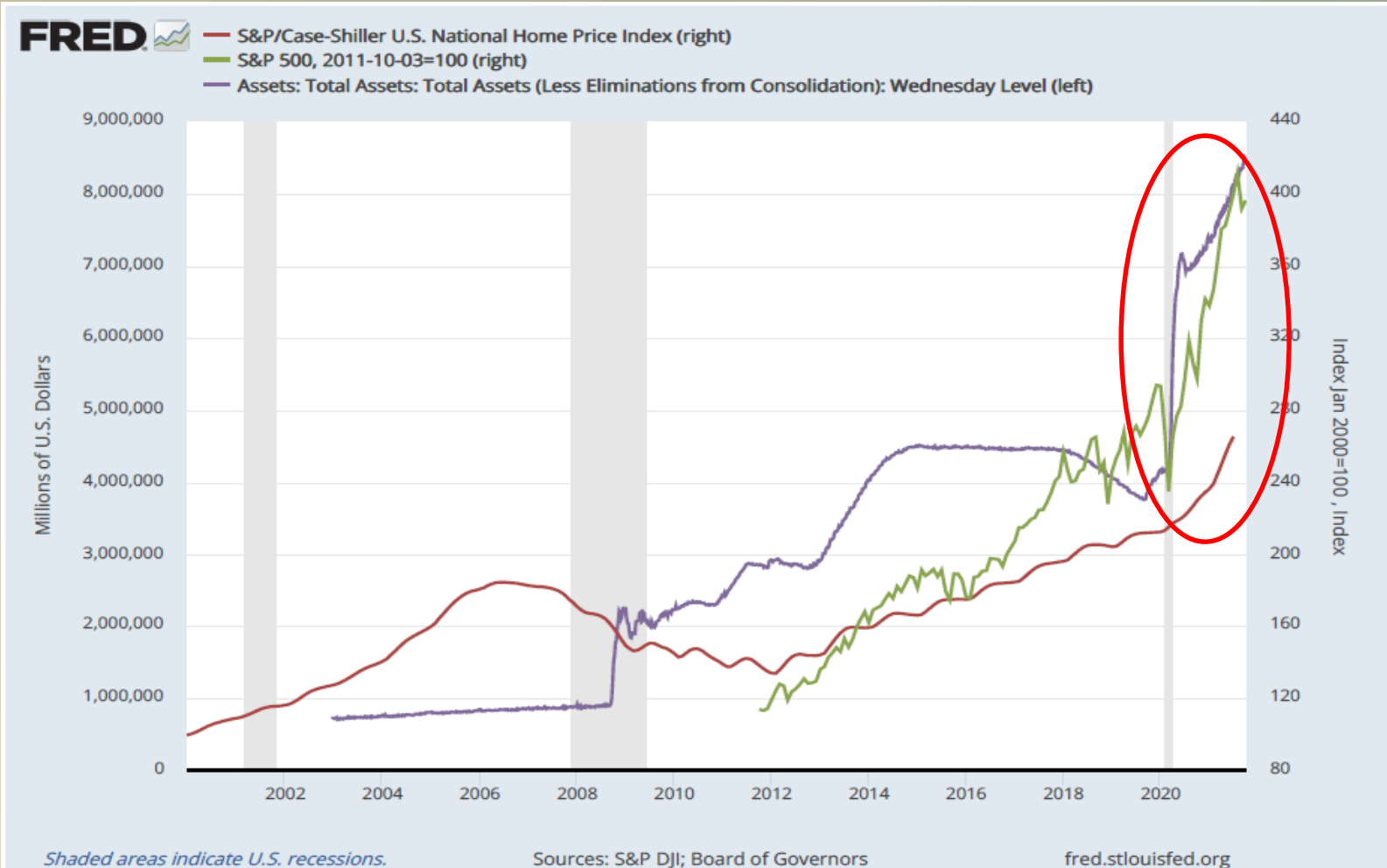
- The FRS Pension Plan has outperformed its performance benchmark over all time periods.
- Current equity markets are now near all-time highs despite the global pandemic and continuation of higher returns in this space appears increasingly unlikely.

# FRS Pension Plan Return vs. Actuarial Return Assumptions



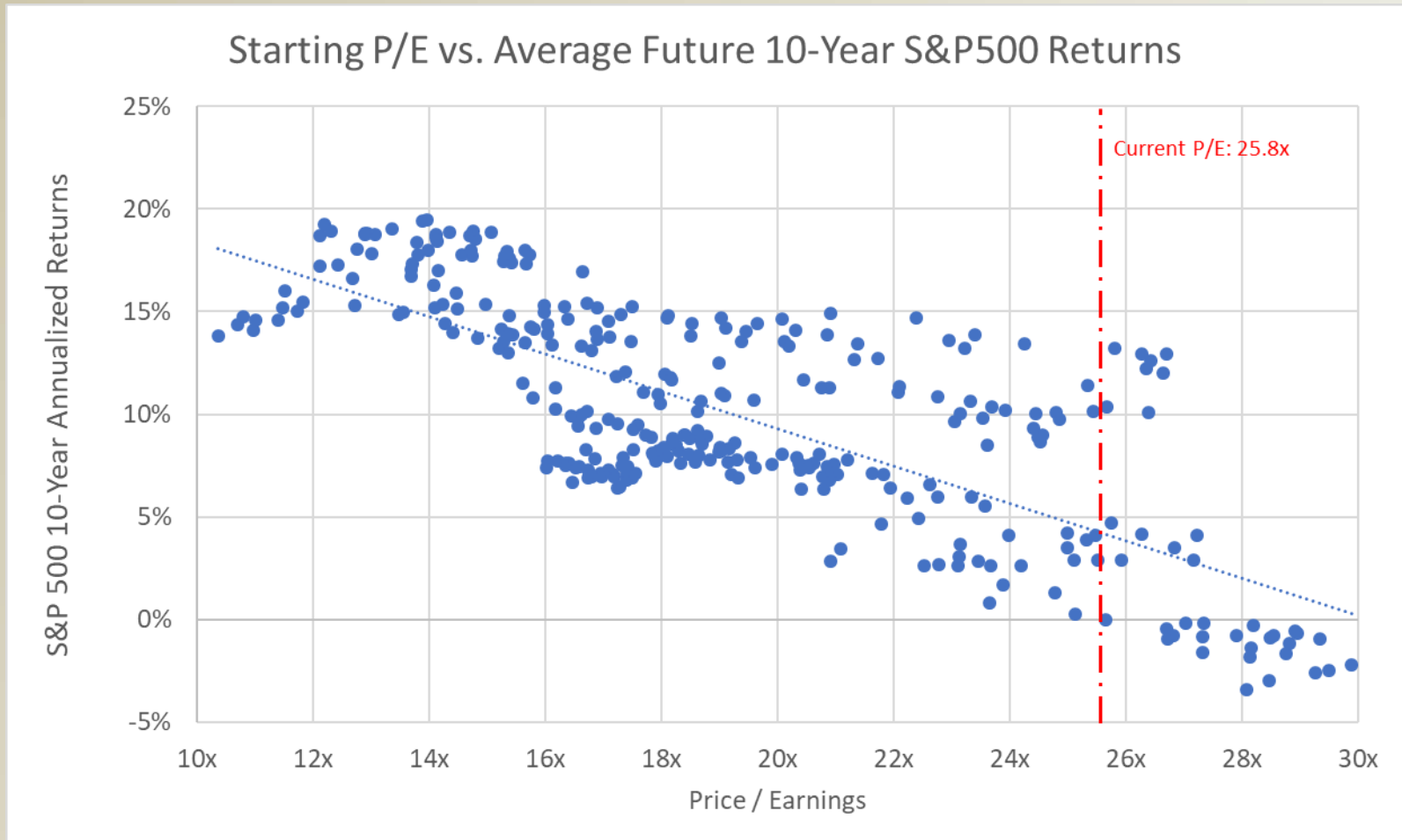
- Except for the 20 year period, the Pension Plan has exceeded the actuarial return assumptions.
- SBA is projecting a long-term nominal return assumption of 6.13%.

# Unprecedented Monetary Stimulus Fueling Asset Values

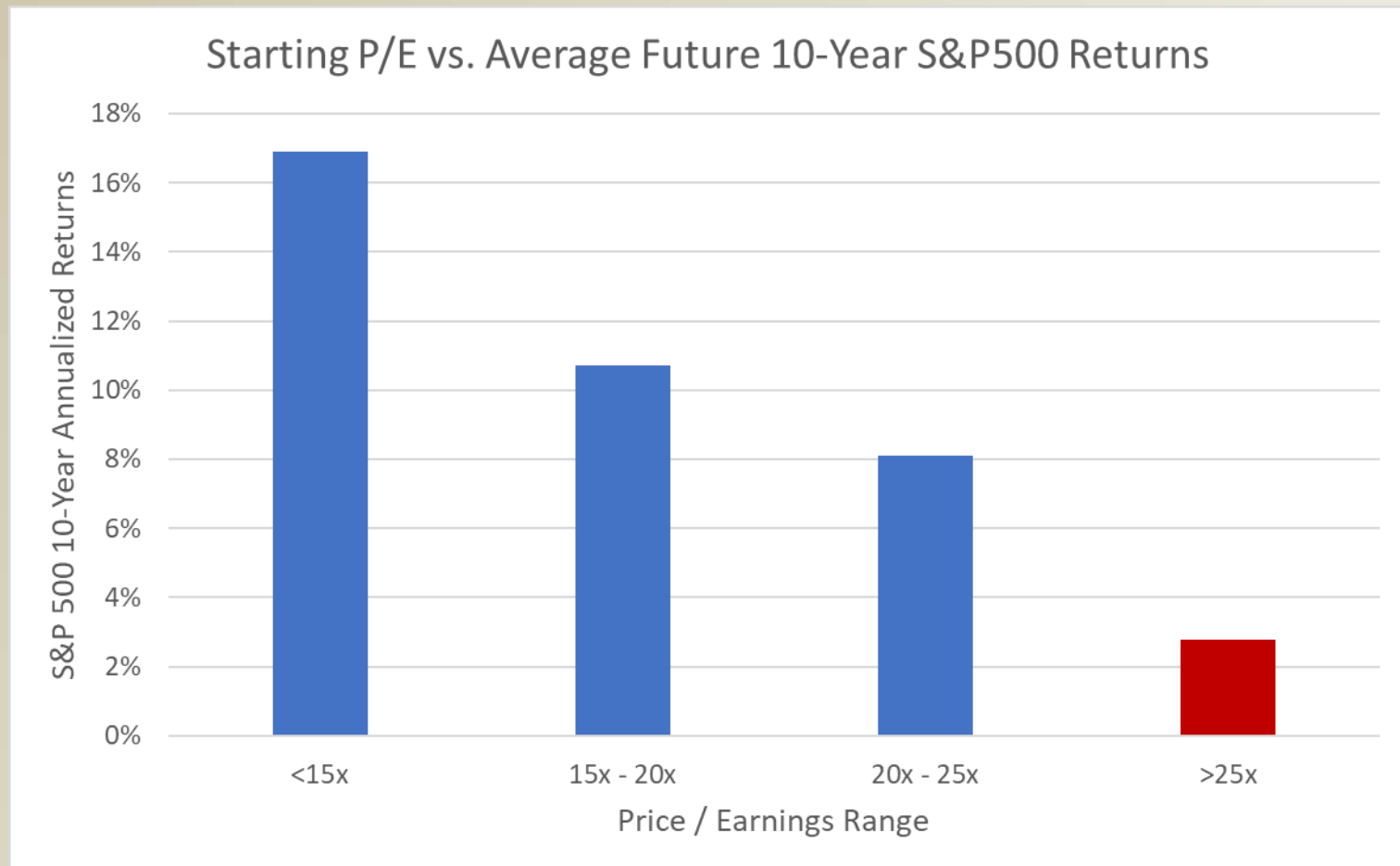




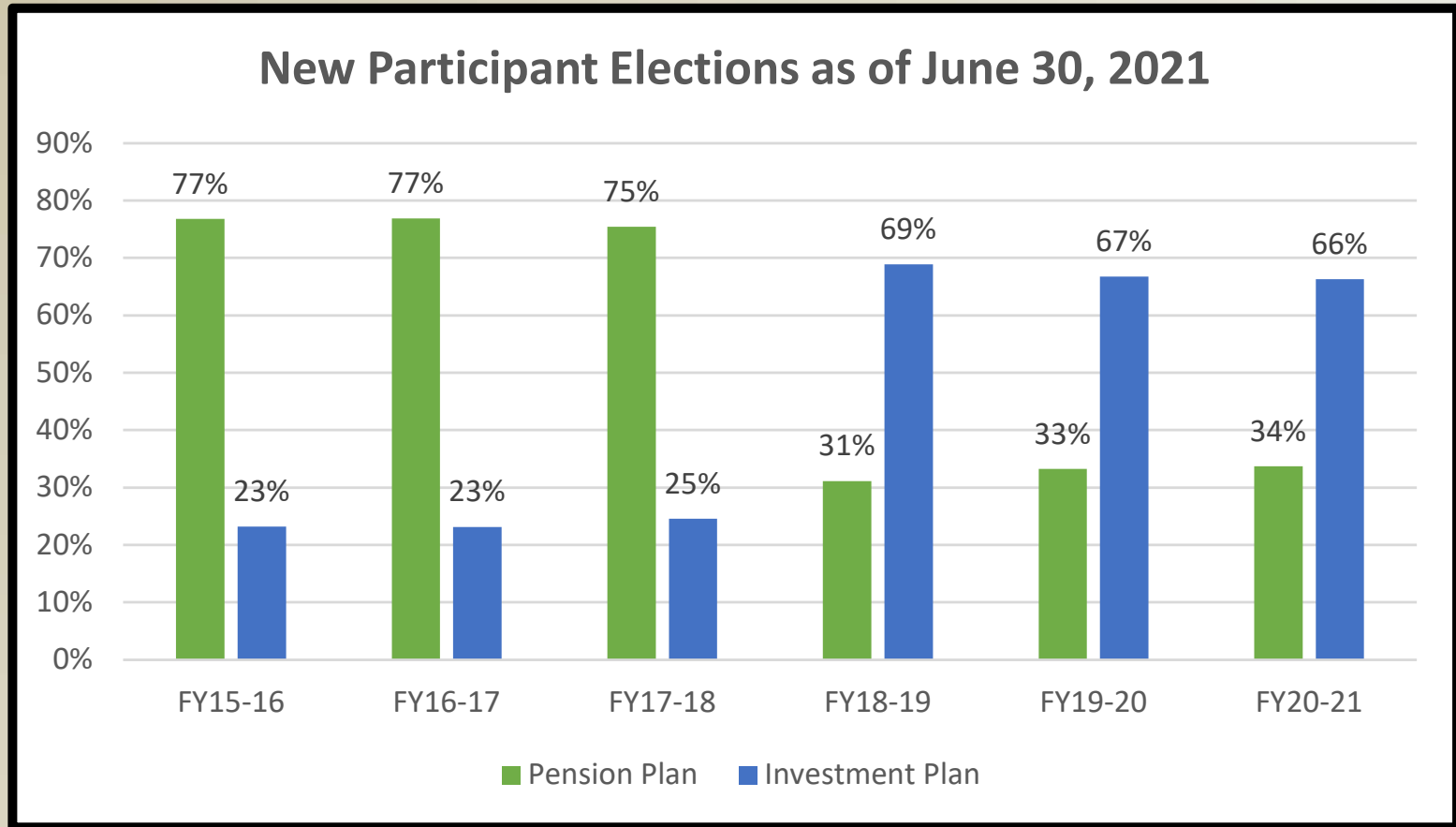
# High Equity Valuations Are Associated with Lower Future Returns



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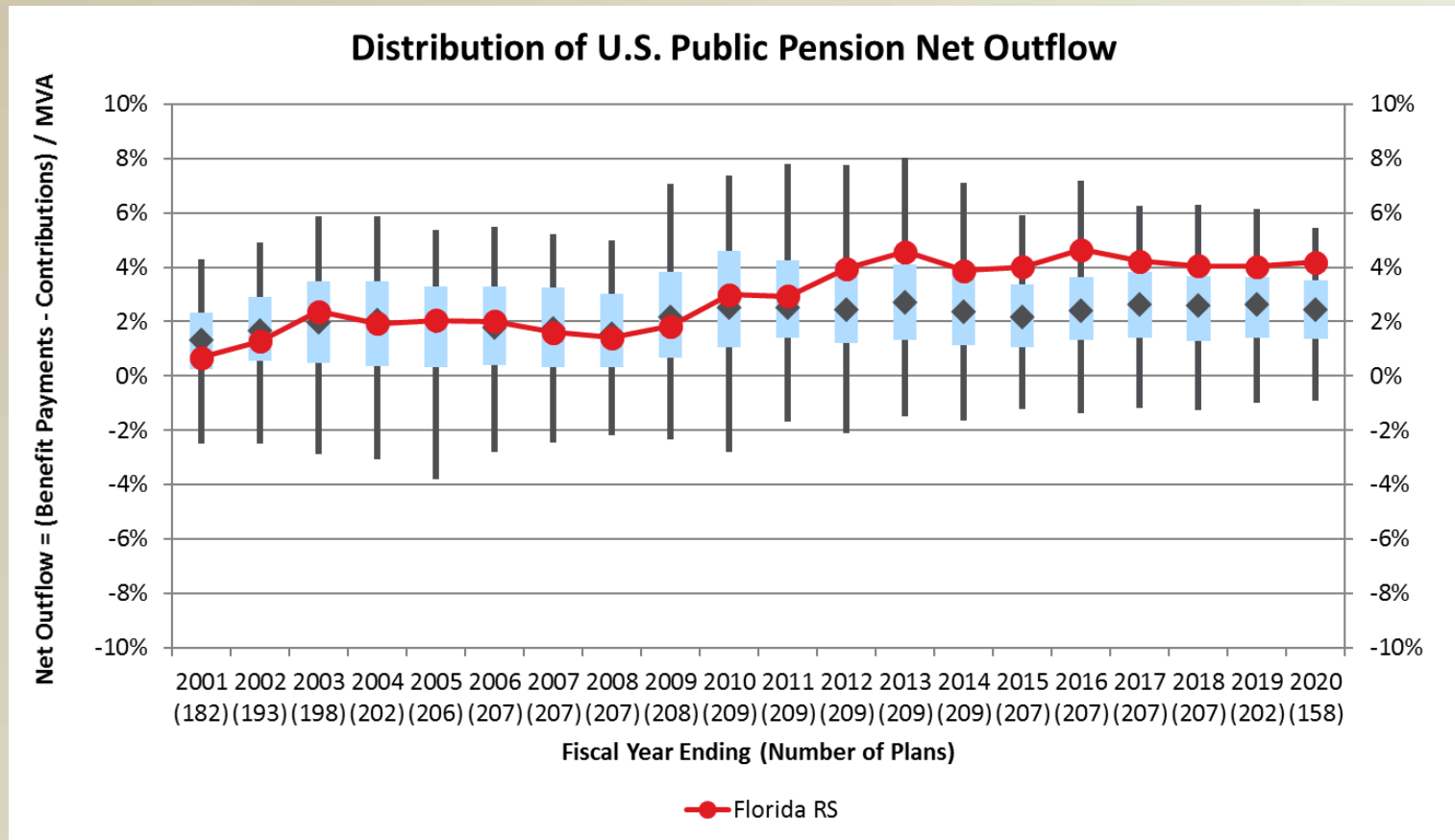
# Since the Default Change Went into Effect, A Dramatic Shift in New Participant Elections



- A significantly lower number of new hires going into the Pension Plan will accelerate the Pension Plan's maturity and net cash outflows. Eventually the Pension Plan will need to be de-risked, which may drive asset allocation in the future toward more liquid and less return seeking assets.

# Florida Retirement System Public Plan Peer Comparison

## Net Outflow versus Peers<sup>1</sup>



- The median net outflow as of FYE 2020 was 2.4% based on the latest survey data.
- FRS' FYE 2020 net outflow (4.2%) fell between the 75<sup>th</sup> and 95<sup>th</sup> percentile relative to its peers.
- Higher net outflows, contribute to higher funding and liquidity risks.

Sources: Public Plans Data ([publicplansdata.org](http://publicplansdata.org)) as of August 2021

<sup>1</sup>Peers defined as public funds published within [publicplansdata.org](http://publicplansdata.org) as of August 2021; Number of plans per year are shown in parentheses

# Investment Policy and Investment Objective

- Pursuant to Section 215.475, F.S., the SBA must invest FRS Defined Benefit plan assets in conformance with an Investment Policy Statement (IPS) developed by the Executive Director and approved by the Trustees.
- The IPS sets the investment objectives of the fund, which are to:
  - Provide investment returns sufficient to ensure timely payment of promised benefits to current and future beneficiaries and keep plan cost at a reasonable level.
  - Target a long-term annual real return approximating 4.0%
  - Reasonably control annual return volatility, i.e. risk
- SBA must implement the IPS, subject to Section 215.47, F.S., which, along with providing a legal list of permitted investments, also imposes on the SBA the fiduciary duties of
  - Loyalty
  - Prudence
  - Diversification

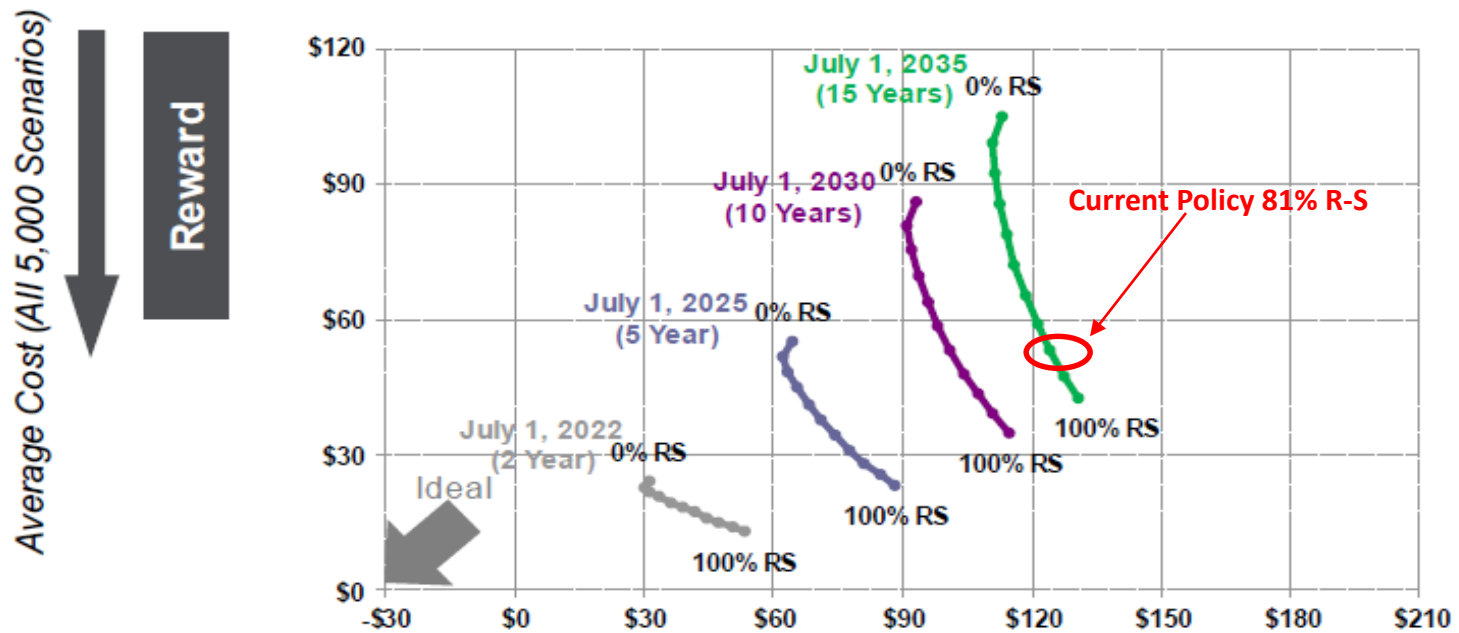
# Investment Policy and Investment Objective

- Pursuant to the IPS, SBA has to manage, cost, liquidity, risk and return
- It does this by targeting a diversified mix of risk and non-risk assets, based on capital market assumptions that Aon will discuss in more detail, that seeks to minimize plan cost (i.e. maximizing investment returns) while also minimizing catastrophic risk of underfunding.
- The ratio of risk to non-risk assets is established through stochastic modeling that uses a set of baseline assumptions about investment returns, volatility and inflation to create several thousand, distinct scenarios which are then used to model an expected distribution of plan cost and funded status. Especially bad outcomes are more heavily weighted.
- Based on this analysis, the SBA determines the specific mix of risk and non-risk assets that in its judgement most prudently satisfies the objectives and constraints of the IPS and the SBA's fiduciary responsibilities.
- This specific mix of assets then becomes the SBA's asset allocation.

# Investment Policy and Investment Objective

## Economic Cost

Present Value of Contributions plus AL Funding Shortfall/(Surplus)\* at 7.00%, \$millions



Average Risk (Worst 1,000 Scenarios)

# Investment Policy and Investment Objective

	Expected Nominal Return	Expected Nominal Volatility
60% Return-Seeking	5.36%	9.82%
70% Return-Seeking	5.75%	11.33%
<b>Current Policy (81% R-S)</b>	<b>6.13%</b>	<b>12.99%</b>
90% Return-Seeking	6.47%	14.43%
100% Return-Seeking	6.80%	16.01%

Based on Aon's current capital market assumptions, even 100% risk seeking asset allocation is not expected to meet the current actuarially assumed rate of return. A 100% risk seeking asset allocation would entail over 70% equity risk and 0% fixed income, and would be far outside the norm as compared to peer plans.

	Public Equity	Private Equity	Strategic Investments	Real Estate	Fixed Income	Cash
<b>Current Policy (81% R-S)</b>	53%	6%	12%	10%	18%	1%
90% Return-Seeking	59%	7%	13%	11%	9%	1%
100% Return-Seeking	66%	7%	15%	12%	0%	0%



# Investment Policy and Investment Objective

- The FRS Pension Plan's investment objectives:
  3. To achieve this, a long-term real return approximating 4.0% per annum (compounded and net of investment expenses) should be attained -
    - a. A real return objective instead of a nominal return objective.
    - b. An investment objective defined as a nominal amount will force risk levels to change as inflation ebbs and flows. To illustrate:

	High Inflation	Low Inflation
Nominal Return Objective	8.0%	8.0%
Inflation	5.5%	3.5%
Real Return Objective	2.5%	4.5%

Nearly Double

- c. Ever changing levels of risk will constantly alter (not so long-term) asset allocation mix.
- d. A real return objective will target a consistent long-term asset allocation mix and risk level.

# Considerations

- Mandate adopting an actuarial rate of return assumption that corresponds to a rate deemed reasonable by the plan's actuary (Milliman) as reported (per GASB 67) in the State of Florida's annual CAFR.
- Reduce the amortization period for UAL to not more than 20 years. The Conference of Consulting Actuaries has recommended that an amortization period of 20 years or less as a best practice for public pension plans<sup>1</sup>.
- Switch amortizing unfunded liabilities (UAL) from level percentage of payroll to level dollar method. Under current methodology (level % of payroll) there is a possibility of negative amortization and greater long-term costs.
- Increase employer and employee contribution rates. FRS employers and employees currently contribute 12.54% (composite rate) and 3.00%, respectively. The median public pension plan employer and employee contribution rates are 14.9% and 6.25%, respectively.

<sup>1</sup>Conference of Consulting Actuaries, Public Plans Community (CCA PPC), Actuarial Funding Policies and Practices for Public Pension Plans, October 2014