



PERA

Investments and Pensions Oversight Committee

Representative Tomás E. Salazar, Chair

Senator George K. Muñoz, Vice-Chair

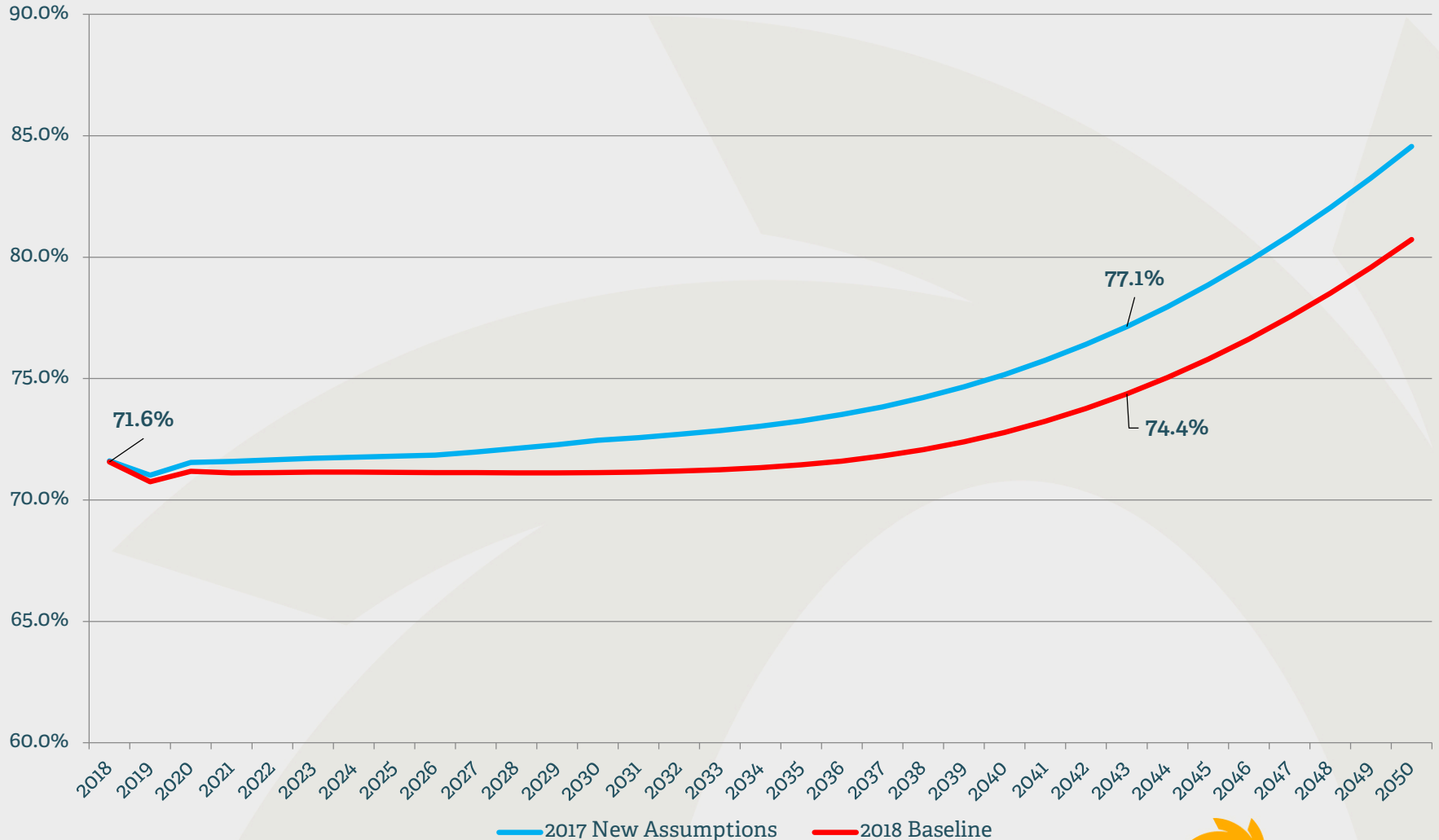
November 26, 2018

James Maxon, MPA, Chair

Wayne Propst, Executive Director

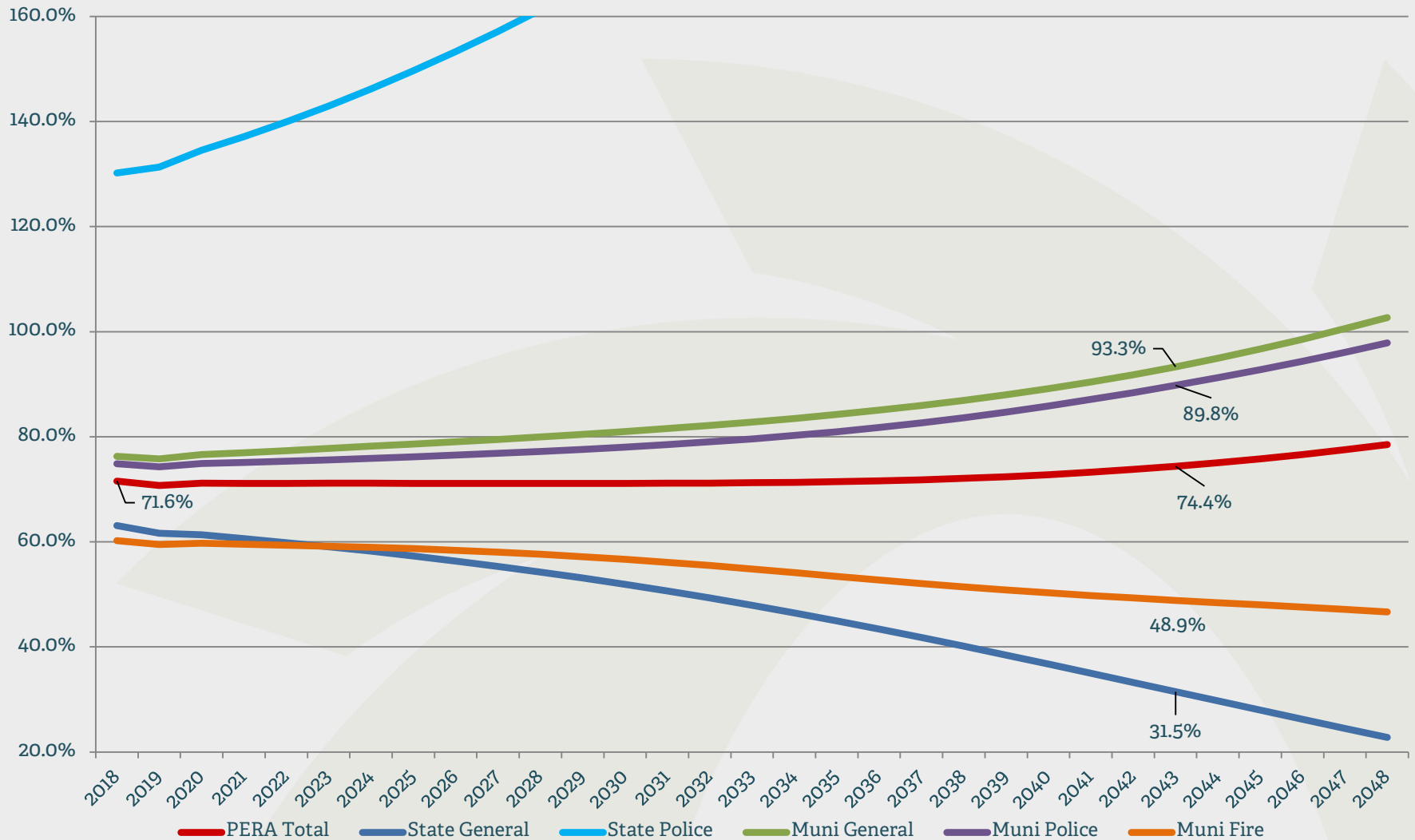
Projected Funded Ratio

2018 Baseline vs. 2017 New Assumptions



2018 Projected Funded Ratio by Division

2043 Highlighted

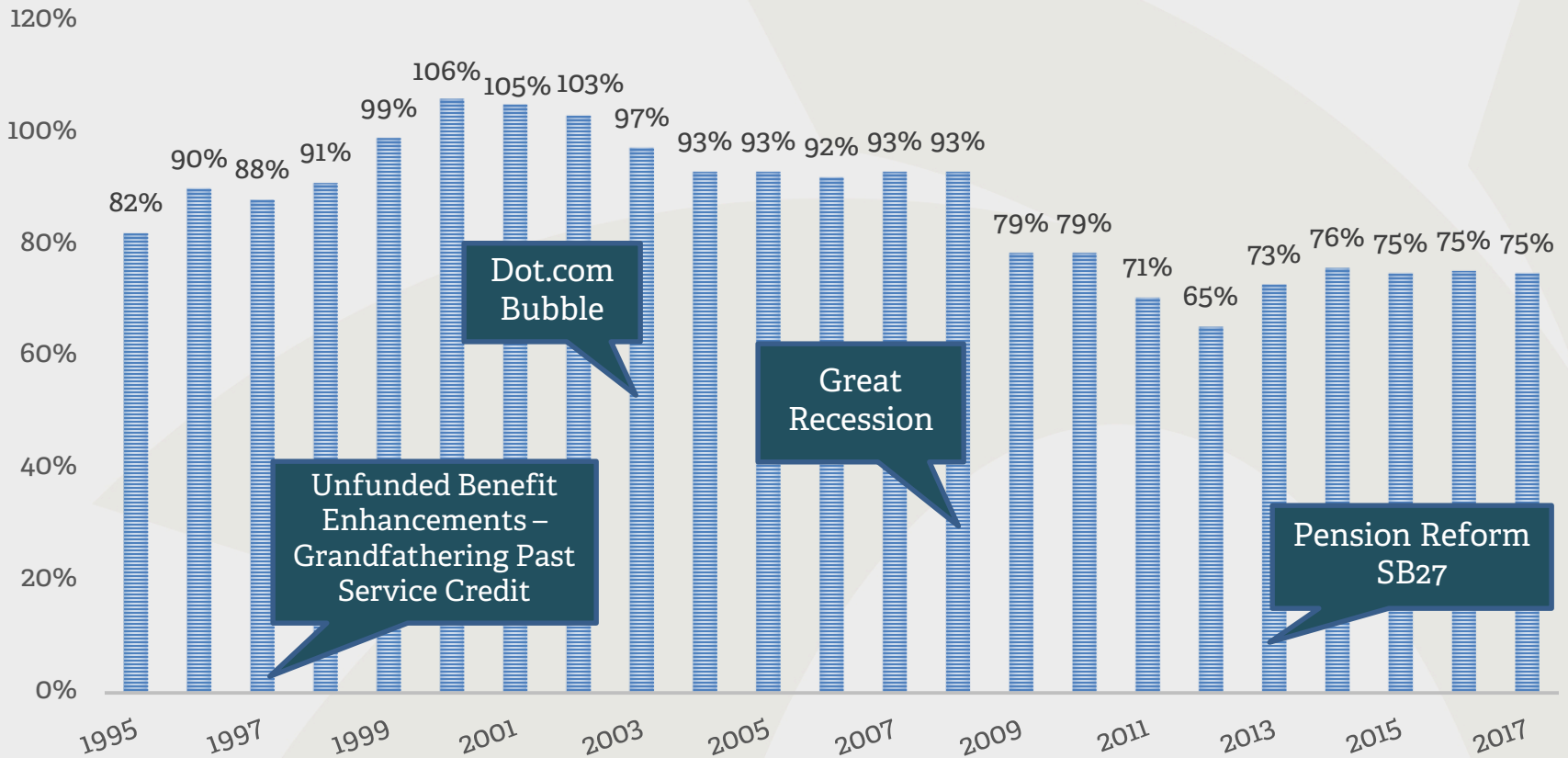


Our Challenges

- **\$6 Billion Unfunded Liability Not Going Away**
- **Expected 10-Year Low Investment Return Environment**
 - Path Dependency
- **Inability to “Invest Our Way Out”**
- **A “Math” Problem with “Human” Implications**
 - Pig in the Python

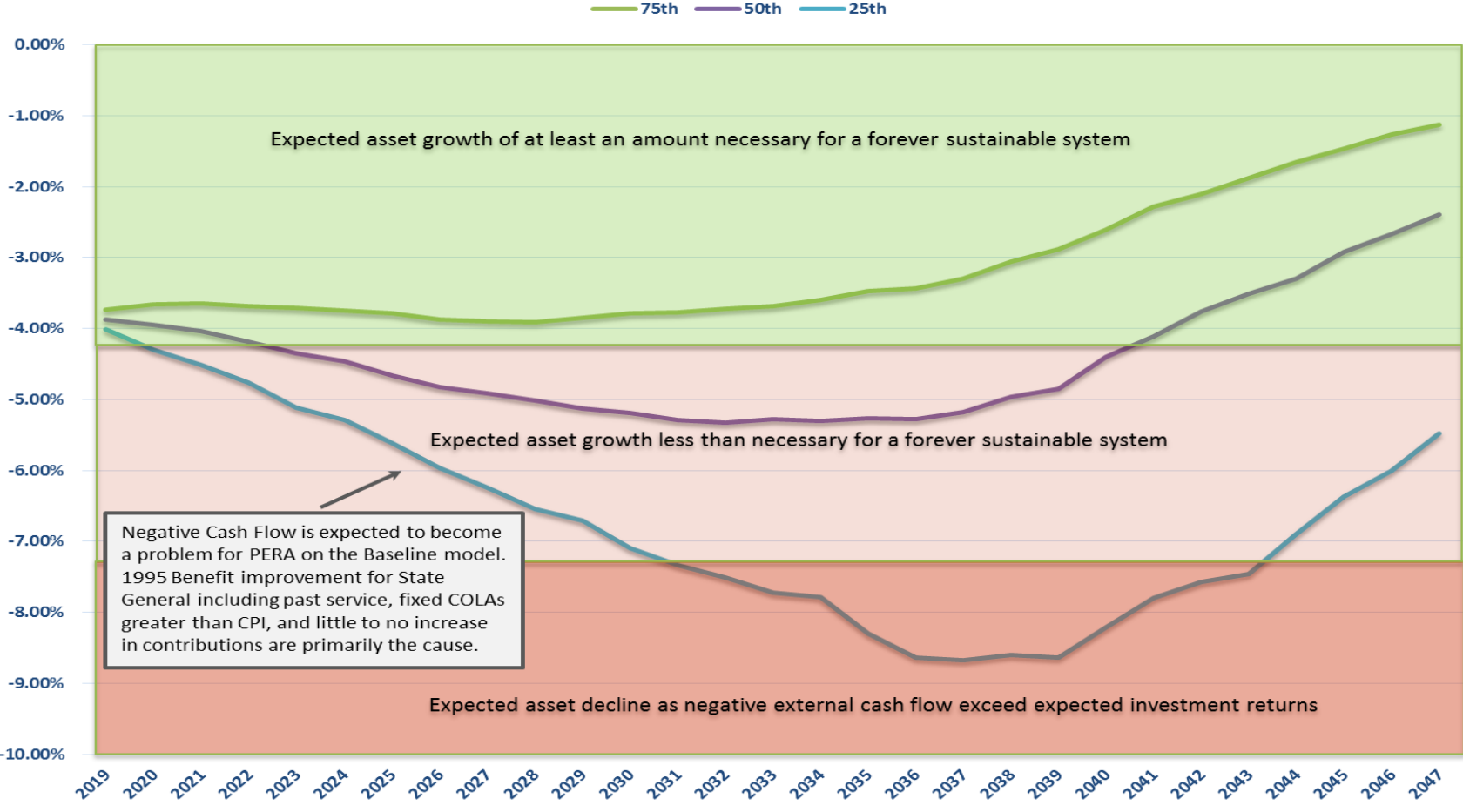
How Did We Get Here? Unfunded Benefit Enhancements and Changing Markets

PE FUND



Our Major Concern: Cash Flow Strain

Net Percent of Negative External Cash Flow by Percentile Rank of Outcomes
Current Plan ALM



Investing our Way Out of Our Liabilities?

75% Funded Ratio	10 Years
Approximate Required Return to “Catch Up” to 100% Funding	10.9% annualized return
Probability of Achieving “Catch Up” Return	
<i>Current Portfolio</i>	11.0% probability
<i>2018 Year End Portfolio</i>	11.2% probability
<i>2019 Year End Portfolio</i>	14.4% probability
<i>2020 Year End Portfolio</i>	18.6% probability

Source: Wilshire Associates

Contributions by Plan

Division	30 Yr. UAAL Contribution Rate	Statutory Rate	Contribution Deficiency	Amortization Period	Funded Ratio
State General	26.98%	16.99%	11.71%	Infinite	63.1%
State Police/Corrections	(2.43%)	25.58%	(28.01%)	0	130.2%
Municipal General	10.55%	9.73%	1.56%	43	76.3%
Municipal Police	23.95%	18.66%	6.41%	Infinite	74.8%
Municipal Fire	36.92%	21.57%	15.73%	Infinite	60.2%
PERA Total	19.57%	14.86%	5.73%	Infinite	71.6%

Possible Contribution Increase Recommendations

1. Employee/Employer Contribution Changes

- *Option A:* 2% Contribution increases to be shared by Employee/Employer
- *Option B:* Trigger, scaled rates based on Funding Ratio

Funded Ratio (x%)	Employer Rate	Employee Rate
$x \leq 80\%$	1.75%	1.50%
$80\% < x < 85\%$	1.50%	1.35%
$85\% \leq x < 90\%$	1.25%	1.15%
$90\% \leq x < 95\%$	1.00%	0.75%
$95\% \leq x < 100\%$	0.50%	0.50%
$x \geq 100\%$	0.00%	0.00%

2. COLA Freeze

- 3 Year COLA freeze

3. Lump Sum Payment from Employer

- \$100m lump sum payment from the State for State General Plan

Possible Cost of Living Adjustment (COLA) Refinements

1. Retirees with annual benefit of \$20,000 or less grandfathered.
2. After 3 Year COLA Suspension, COLA will be calculated:
 - *Option A:* Risk/Reward Share (no age restriction). COLA awarded 0% to 2.5% based on 4-year smoothed investment returns. Increase up to 5% when 100% funded.
 - *Option B:* Triggers, based on Funding Ratio; deferred to age 65 and age 60 for public safety

Funded Ratio	COLA %
$X \leq 80\%$	If CPI $\leq 2\%$: 50% of CPI, if CPI $> 2\%$: 75% of CPI, but NTE 1.50%
$80\% < x < 85\%$	If CPI $\leq 2\%$: 75% of CPI, if CPI $> 2\%$: 80% of CPI, but NTE 1.80%
$85\% \leq x < 90\%$	
$90\% \leq x < 95\%$	If CPI $\leq 2\%$: 100% of CPI, if CPI $> 2\%$: 95% of CPI, but NTE 2.50%
$95\% \leq x < 100\%$	
$X \geq 100\%$	If CPI $\leq 2\%$: 100% of CPI, if CPI $> 2\%$: 95% of CPI but NTE 3.00%

Potential PERA Benefit Design Package

General Consensus:

- 3 Year COLA Freeze
- \$100m Lump Sum Payment
- Retirees with annual benefits \$20,000 or less unaffected
- *Contribution rate increases exempted for State Police and Adult Correctional Officer Division*

To be determined:

- Employee/Employer Contribution Rates
 - Option A: 2% increase shared by Employee/Employer
 - Option B: Trigger, scaled by Funding Status
- COLA re-calculation
 - Option A: Risk/Reward Share (no age restriction)
 - Option B: Trigger, scaled by Funding Status (deferred to age 65 and age 60 for public safety)