



**County Employees Retirement System
Actuarial Committee – Special Meeting
November 8, 2021 at 11:00 AM EST
Live Video Conference/Facebook Live**

AGENDA

- | | |
|--|---|
| 1. Call to Order | Michael Foster |
| 2. Opening Statement | Legal Services |
| 3. Roll Call | Sherry Rankin |
| 4. Public Comment | Sherry Rankin |
| 5. Approval of Minutes* -- May 14, 2021 | Michael Foster |
| 6. Draft Actuarial Valuation | Danny White, GRS
Janie Shaw, GRS |
| 7. COLA Discussion | |
| a. Historical Perspective | Betty Pendergrass |
| b. Legislative Role | Betty Pendergrass |
| c. Actuarial Impact | Danny White, GRS |
| d. PPOB Options for CERS | Janie Shaw, GRS |
| 8. Cybersecurity Awareness Training** | Chris Johnson |
| 9. ADJOURN | Michael Foster |

**Committee Action May Be Taken*

***Trustees Will Receive Education Credit Upon Completion*

**MINUTES OF MEETING
BOARD OF TRUSTEES COUNTY EMPLOYEES RETIREMENT SYSTEM
TRUSTEE EDUCATIONAL SESSION MAY 14, 2021 AT 2:00 P.M.
VIA LIVE VIDEO TELECONFERENCE DUE TO SB 150,
SIGNED INTO LAW BY THE GOVERNOR ON MARCH 30, 2020,
AND EXECUTIVE ORDER 2020-215 DECLARING A STATE OF EMERGENCY
EFFECTIVE MARCH 6, 2020 DUE TO COVID-19**

At the meeting of the County Employees Retirement System Board of Trustees held on May 14, 2021 the following members were present: Michael Foster, Betty Pendergrass, Joe Brothers, George Cheatham, Merl Hackbart, William O'Mara, Jerry Powell, and Patricia Carver. Staff members present were David Eager, Rebecca Adkins, Erin Surratt, Kathy Rupinen, Shaun Case, Phillip Cook, and Alane Foley. Others present included Danny White and Janie Shaw from GRS.

Mr. Foster called the meeting to order.

Ms. Pendergrass read the meeting COVID-19 statement due to SB 150.

Ms. Alane Foley took Roll Call. No public comment was submitted.

Mr. Foster introduced agenda item *Actuarial Training*. Mr. White and Ms. Shaw provided an overview of the actuarial process. Ms. Shaw reviewed the different retirement plan types, defined benefit, hybrid and defined contribution types. Ms. Shaw then reviewed the CERS membership data as of June 30, 2020. Ms. Shaw then illustrated the actuarial model using the known values like age, salary, and service date and assumed values like future salary increases, retirement date, death rates before and after retirement. She indicated that how we calculate this is through actuarial assumptions. The Demographic Assumptions deal with people, like mortality rates, retirement rates, withdrawal rates, disability rates and other assumptions are reviewed every 5 years. The Economic Assumptions deal with money and include Investment Return Assumption which is looked at every year, the payroll growth rate and the salary increases for individuals. Mr. O'Mara asked a question about the economic assumption, the forward looking investment return assumption, how many years forward do you look? Mr. White responded that we look at that in

two different ways, but by using one method. So we look at it in short-term, which is a 7 to 10 year forecast and in the long-term, which is 20 to 30 year forecasts done by investment consultants. And not only do we look at one investment consultant, we gather from multiple consultants. The last one we did back in 2019, we used 11 different investment consultants. Mr. Cheatham asked a question regarding the mortality rate, and that it was indicated that the rate includes both the KRS and CERS members, will that be split out to just include the CERS members. Mr. White indicated that no, it will not be separated due to statistical credibility. By leaving the systems combined as they are, gives a more valid statistical credible assumption. Mr. Cheatham asked about the differences in the payroll growth rate of 2% when the salary increases for individuals was listed at much higher percentages, and was seeking explanations as to why. Mr. White responded that there are 2 main factors. One being headcount of members and how that continues to decrease, most likely due to increases in the employer contributions. Mr. White stated he looks for that to continue as more and more employers will be hiring fewer employees, in an effort to keep their costs low. The second factor is as the higher paid employees retire, employers are replacing those with lower paid new hires. Mr. Foster had a question regarding the mortality rates, in that is it the same as a life-expectancy table. Mr. White indicated that it is exactly what that is. Mr. Foster then indicated that there are several life-expectancy tables and calculations published, is the mortality rate used for this plan from a third-party source, or has it been done in-house by part of the actuarial process. Mr. White answered that these are done in-house as part of the actuarial process. For completeness, there are some of the extremes where you just don't have enough data on the more older retirees or the youngest of the retirees to sometime run the true actuarial figures. In that case, we do use some printed tables for those calculations. Ms. Shaw resumed through the presentation hitting the highlights of how the assumptions and projections are determined. Mr. White then reviewed other information that is provided by the actuary, including the Accounting Reports (GASB Reports), funding projections and risk analysis, actuarial analysis of proposed legislation, actuarial assumption reviews (Demographic and Economic Assumptions) and Ad hoc assistance to the System. Mr. White provided samples of written correspondence and reports that GRS has provided to the systems in the past, to give the Trustees an idea of the information they can provide to the system.

Ms. Shaw then introduced an online tool that they use to make projections. This program will be helpful in showing how the different scenarios will play out and will allow the Trustees a first-hand view in order to make better decisions. Mr. Eager pointed out that the KPPA staff recently had their first training session with Ms. Shaw on this program and he feels it will be a great benefit to the Trustees.

Mr. Cheshire made a motion and Mr. Powell seconded to adjourn the meeting. The motion passed unanimously.

Copies of all documents presented are incorporated as part of the Minutes of the Board of Trustees held May 14, 2021 except documents provided during a closed session conducted pursuant to the open meetings act and exempt under the open records act.

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CERTIFICATION

I do certify that I was present at this meeting, and I have recorded the above actions of the Trustees on the various items considered by it at this meeting. Further, I certify that all requirements of KRS 61.805-61.850 were met in conjunction with this meeting.

Recording Secretary

I, the Chair of the Board of Trustees of the County Employees Retirement System, do certify that the Minutes of Meeting held on May 14, 2021 were approved on November 8, 2021.

Chair of the Board of Trustees

I have reviewed the Minutes of the May 14, 2021 Board of Trustees Meeting for content, form, and legality.

Executive Director
Office of Legal Services



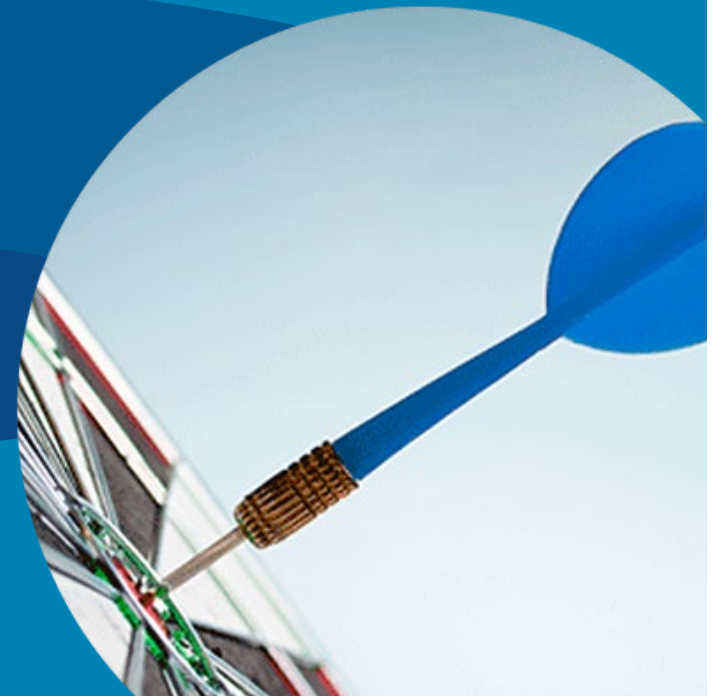
County Employees Retirement System

2021 Actuarial Valuation Results

November 10, 2021

Janie Shaw, ASA, EA, MAAA

Danny White, FSA, EA, MAAA



Comments on Valuation Results

- Overview of legislation passed in 2021
 - SB 169: disability benefit improvements
- Change in active membership and covered payroll
 - Active membership declined across all funds
 - CERS Non-Haz: 1.4% decrease in covered payroll
 - CERS Hazardous: 1.7% increase in covered payroll



Comments on Valuation Results

- FYE 2021 Investment Experience
 - 25% return on market value
 - Assumed rate of return: 6.25%
 - Fund assets \$2,504M more than expected for CERS (\$1,780M pension and \$724M insurance)
 - \$511M in asset gains recognized this year (\$367M pension and \$144M insurance)



Comments on Valuation Results

- Retirement Fund Liability Experience
 - \$47M gain for CERS Non-Hazardous
 - \$53M loss for CERS Hazardous
 - Liability within 1% of expected
- Insurance Fund Liability Experience
 - \$163M gain for both CERS insurance funds combined
 - Both the 2022 non-Medicare and Medicare premiums were lower than expected based on the prior year's actuarial assumptions



Required Employer Contributions

	CERS Non-Hazardous		CERS Hazardous	
	2020 Val	2021 Val	2020 Val	2021 Val
(1)	(2)	(3)	(4)	(5)
Pension Fund	23.88%	23.40%	43.23%	42.81%
Insurance Fund	<u>4.17%</u>	<u>3.39%</u>	<u>8.73%</u>	<u>6.78%</u>
Actuarially Determined Contribution Rate, payable as a percentage of payroll	28.05%	26.79%	51.96%	49.59%
Difference		(1.26)%		(2.37)%
Actual/Recommended Contribution Rate¹	26.95%	26.79%	44.33%	49.59%
Difference		(0.16)%		5.26%

¹ Recommended contribution rates reflect CERS phase-in provisions, which limit the increases in the contribution rates to 12% over the prior fiscal year

¹ 2020 Valuation set the contribution rates for FYE2022. 2021 Valuation will be used to set the contribution rates for FYE2023.



Required Employer Contributions (\$millions)

	CERS Non-Hazardous		CERS Hazardous	
	2020 Val FYE2022	2021 Val FYE2023	2020 Val FYE2022	2021 Val FYE2023
(1)	(2)	(3)	(4)	(5)
<u>Actuarially Determined Employer Contribution</u>				
Pension Fund	\$ 625	\$ 604	\$ 251	\$ 253
Insurance Fund	<u>108</u>	<u>87</u>	<u>50</u>	<u>40</u>
Total Contribution	\$ 733	\$ 691	\$ 301	\$ 293
Change in Contribution		\$(42)		\$(8)
<u>Actual/Recommended Contribution</u>				
Pension Fund	\$ 596	\$ 604	\$ 206	\$ 253
Insurance Fund	<u>108</u>	<u>87</u>	<u>50</u>	<u>40</u>
Total Contribution	\$ 704	\$ 691	\$ 256	\$ 293
Change in Contribution		\$(13)		\$ 37



Change in Required Employer Contributions

CERS Non-Haz – Actuarially Determined Contribution Rate

	CERS Non-Hazardous (% of pay)		
	Pension	Insurance	Total
Contribution Rate – 2020 Val	23.88%	4.17%	28.05%
Contribution Phase-In	0.09 %	0.00 %	0.09 %
Investment Experience	(0.89)%	(0.32)%	(1.21)%
Demographic Experience	0.27 %	(0.48)%	(0.21)%
Plan Change – SB169	<u>0.05 %</u>	<u>0.02 %</u>	<u>0.07 %</u>
Total Change	(0.48)%	(0.78)%	(1.26)%
Contribution Rate – 2021 Val	23.40%	3.39%	26.79%

Actual Contribution Rate: 26.95%

Return on market value of assets
25% pension & insurance

Covered payroll decreased by 1.4%

2022 health insurance premiums
lower than expected



Change in Required Employer Contributions

CERS Haz – Actuarially Determined Contribution Rate

	CERS Hazardous (% of pay)		
	Pension	Insurance	Total
Contribution Rate – 2020 Val	43.23%	8.73%	51.96%
Contribution Phase-In	0.59 %	0.00 %	0.59 %
Investment Experience	(1.52)%	(0.77)%	(2.29)%
Demographic Experience	0.46 %	(1.24)%	(0.78)%
Plan Change – SB169	<u>0.05 %</u>	<u>0.06 %</u>	<u>0.11 %</u>
Total Change	(0.42)%	(1.95)%	(2.37)%
Contribution Rate – 2021 Val	42.81%	6.78%	49.59%

- Actual Contribution Rate: 44.33%
- Return on market value of assets
25% pension & insurance
- Covered payroll increased by 1.7%
- 2022 health insurance premiums
lower than expected

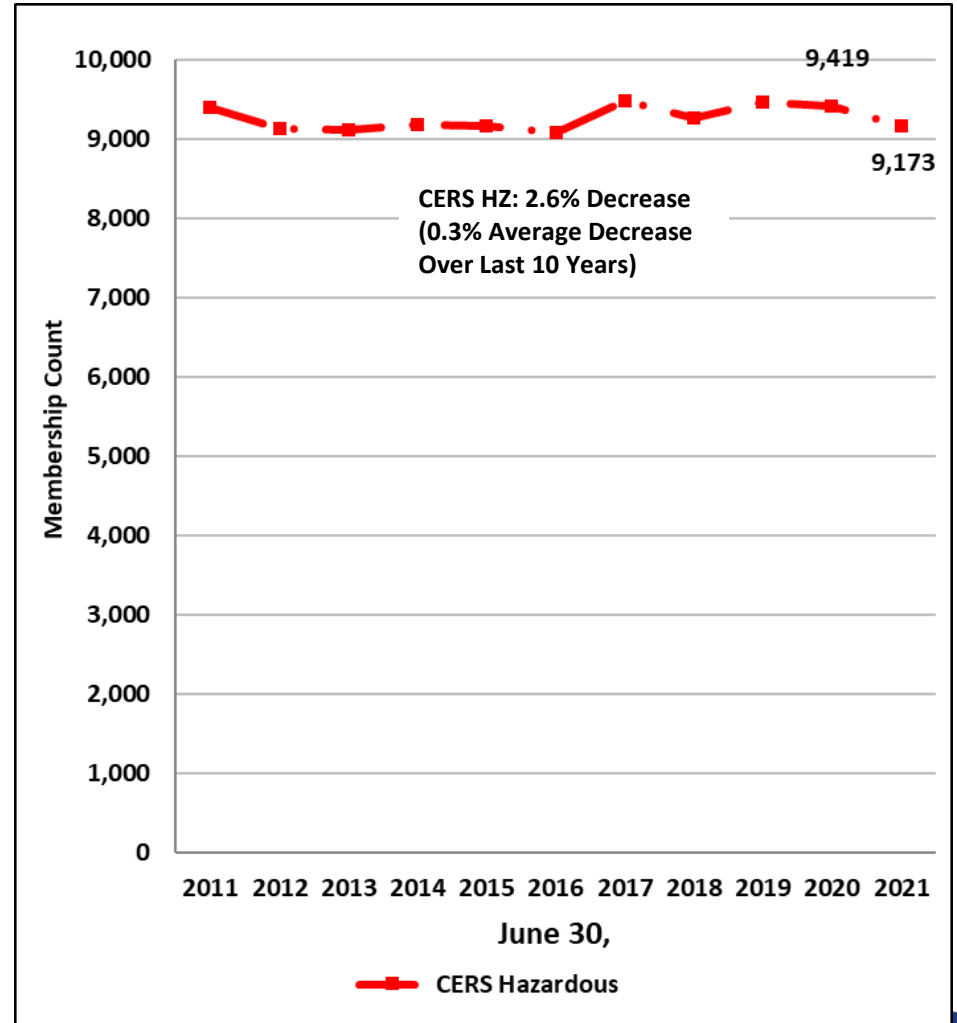
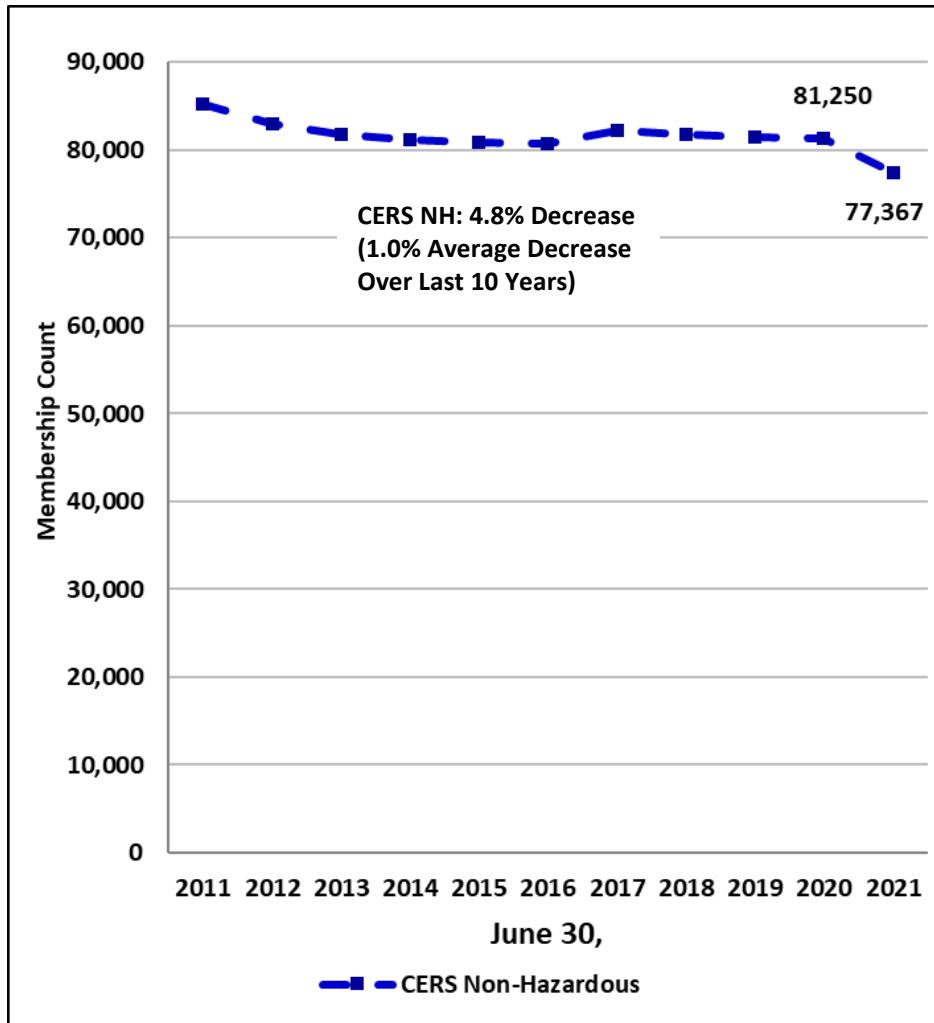


Unfunded Actuarial Accrued Liability – Actuarial Value of Asset Basis (\$ in Billions)

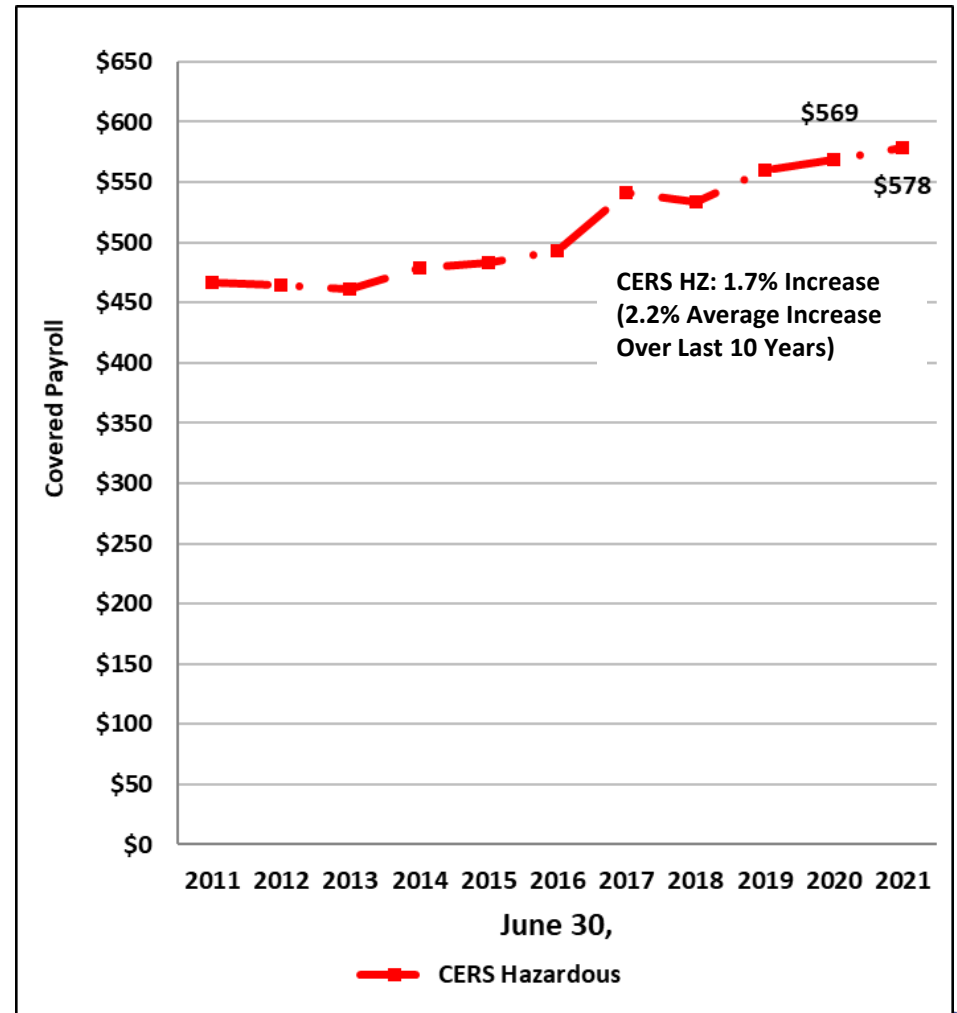
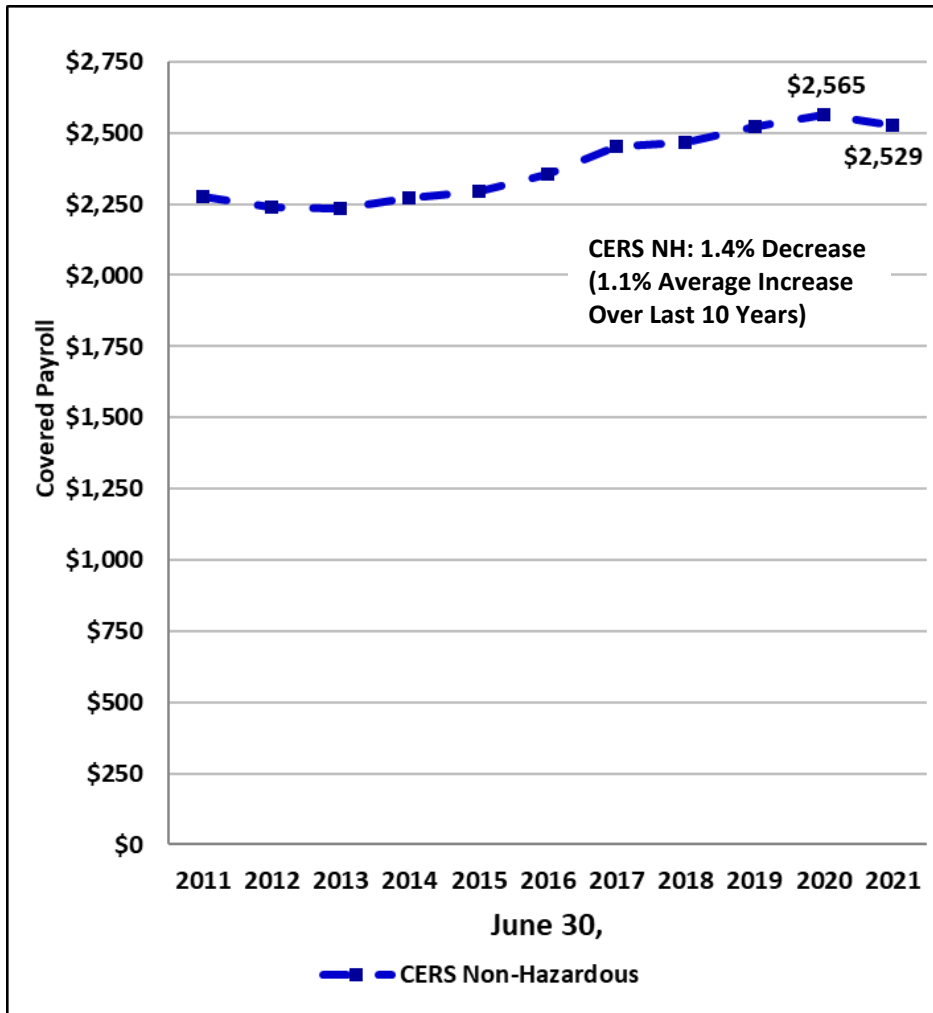
	CERS Non-Hazardous		CERS Hazardous	
	2020 Val	2021 Val	2020 Val	2021 Val
(1)	(2)	(3)	(4)	(5)
Pension Fund	\$ 7.39	\$ 7.18	\$ 2.98	\$ 3.00
Insurance Fund	<u>0.73</u>	<u>0.50</u>	<u>0.38</u>	<u>0.28</u>
Total Unfunded Actuarial Accrued Liability	\$ 8.12	\$ 7.68	\$ 3.36	\$ 3.28
Change in Unfunded Actuarial Accrued Liability		\$ (0.44)		\$ (0.08)



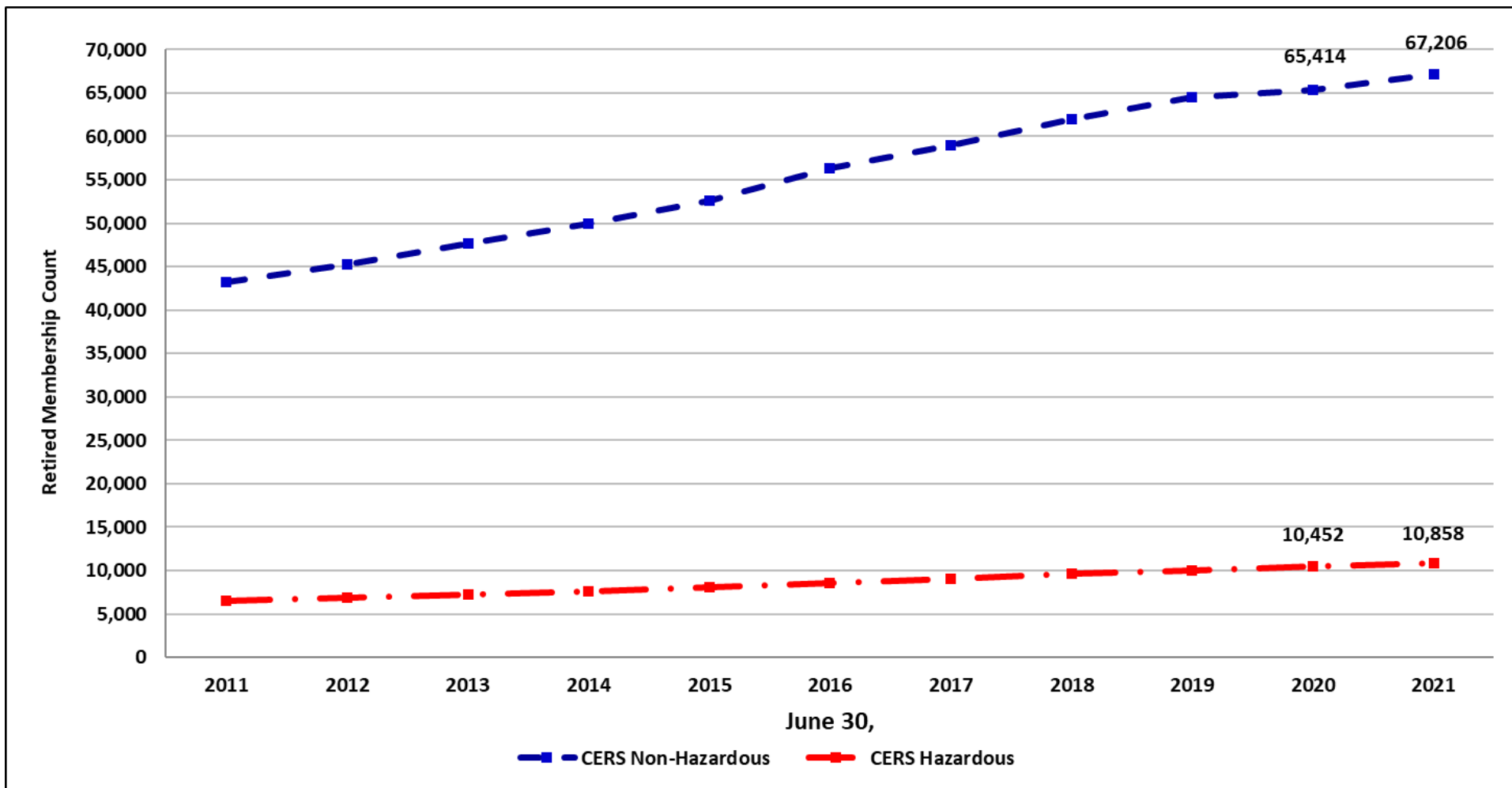
Active Membership Count



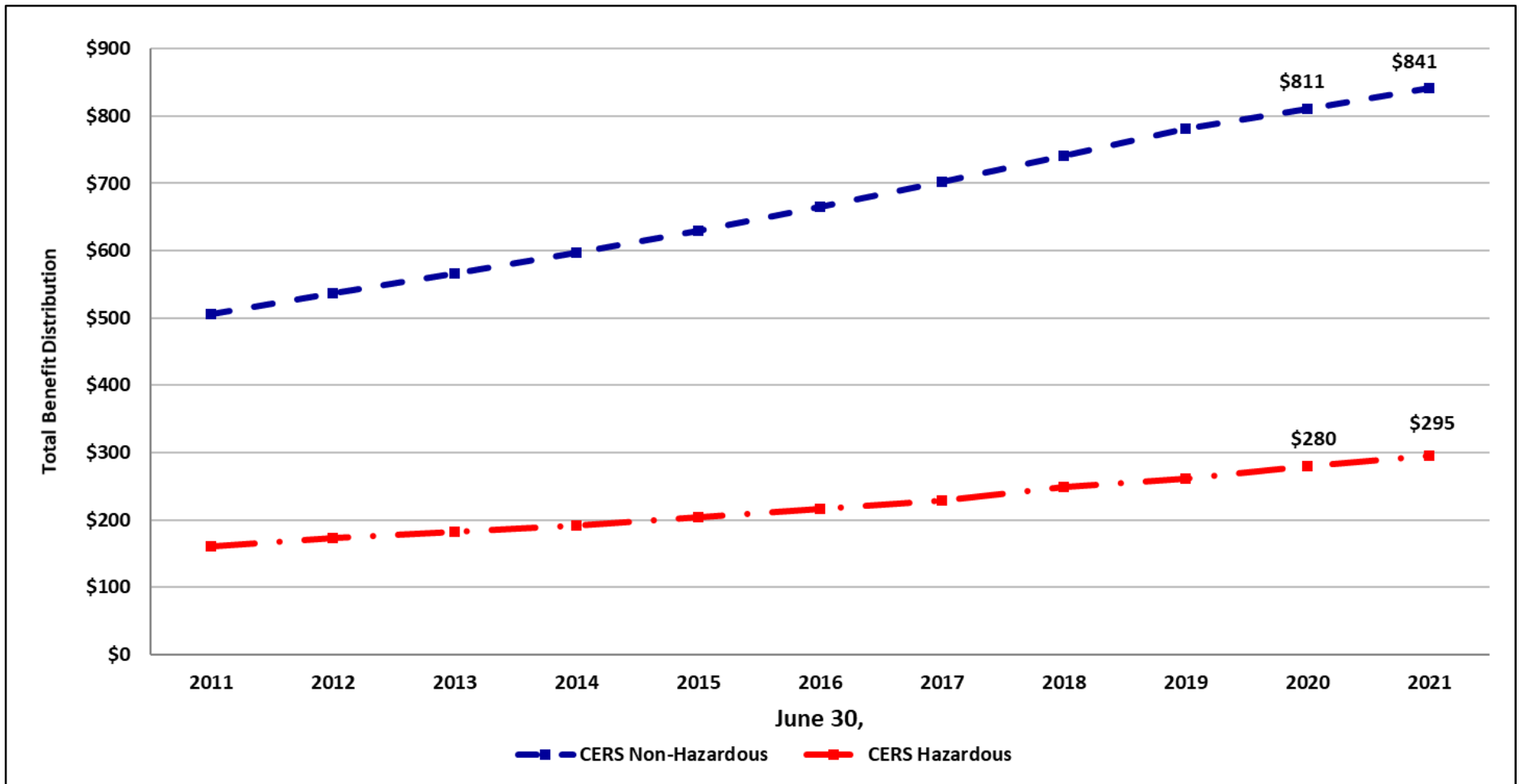
Covered Payroll (\$ in Millions)



Retired Membership Count



Pension Benefit Distributions (\$ in Millions)



Funding Results – CERS (\$ in millions)

Item	Non-Hazardous System				Hazardous System			
	Pension		Insurance		Pension		Insurance	
	2020	2021	2020	2021	2020	2021	2020	2021
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Total Normal Cost Rate	10.59%	10.44%	3.17%	3.07%	18.65%	18.39%	5.33%	4.83%
Member Rate	<u>(5.00%)</u>	<u>(5.00%)</u>	<u>(0.52%)</u>	<u>(0.55%)</u>	<u>(8.00%)</u>	<u>(8.00%)</u>	<u>(0.51%)</u>	<u>(0.55%)</u>
Employer Normal Cost Rate	5.59%	5.44%	2.65%	2.52%	10.65%	10.39%	4.82%	4.28%
Administrative Expenses	0.87%	0.86%	0.04%	0.04%	0.35%	0.32%	0.08%	0.09%
Amortization Cost	<u>17.42%</u>	<u>17.10%</u>	<u>1.48%</u>	<u>0.83%</u>	<u>32.23%</u>	<u>32.10%</u>	<u>3.83%</u>	<u>2.41%</u>
Total Actuarially Determined Rate	23.88%	23.40%	4.17%	3.39%	43.23%	42.81%	8.73%	6.78%
Actuarial Accrued Liability (AAL)	\$14,611	\$14,895	\$3,392	\$3,450	\$5,431	\$5,629	\$1,741	\$1,751
Actuarial Value of Assets	<u>7,221</u>	<u>7,716</u>	<u>2,661</u>	<u>2,947</u>	<u>2,448</u>	<u>2,629</u>	<u>1,362</u>	<u>1,476</u>
Unfunded AAL	\$7,390	\$7,179	\$731	\$503	\$2,983	\$3,000	\$379	\$276
Funded Ratio	49.4%	51.8%	78.5%	85.4%	45.1%	46.7%	78.2%	84.3%



PROJECTION INFORMATION PENSION AND INSURANCE



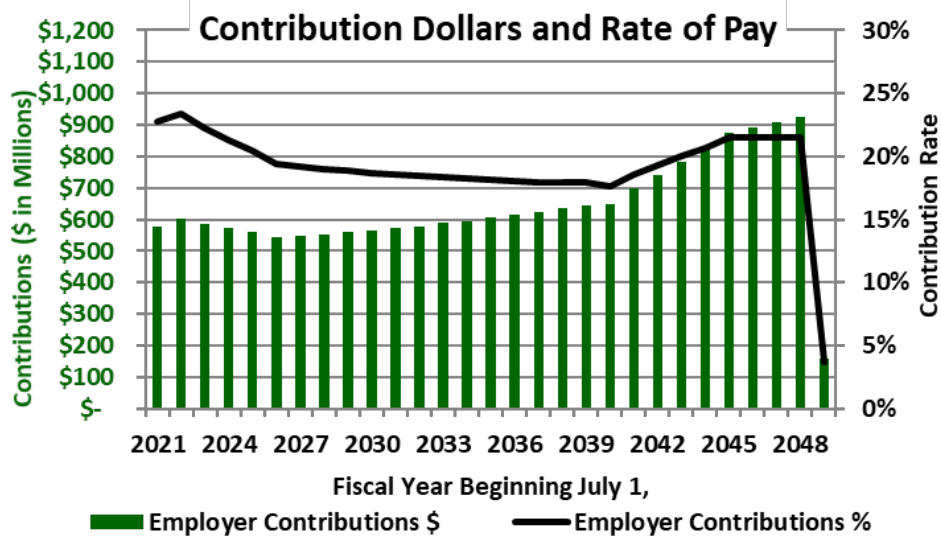
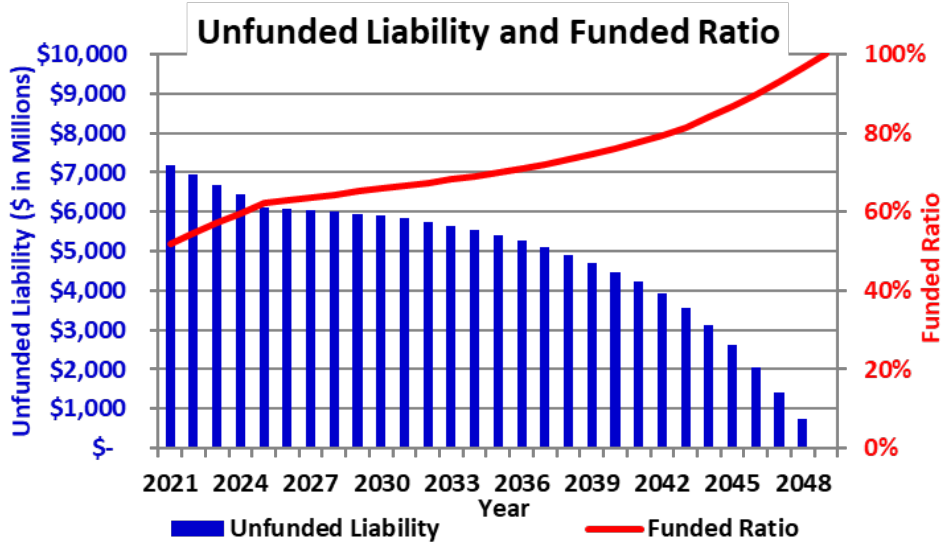
Projection Assumptions

- Assumes that all actuarial assumptions are realized, including the assumed annual asset return of 6.25%
- Full actuarially determined contribution paid each year
- Covered payroll assumed to increase by 2% each year
 - Total active population assumed to remain level

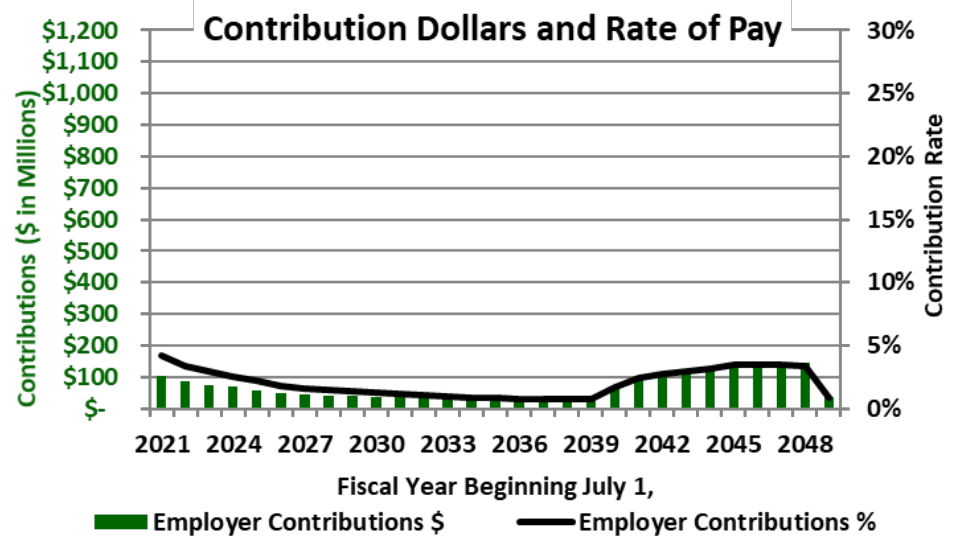
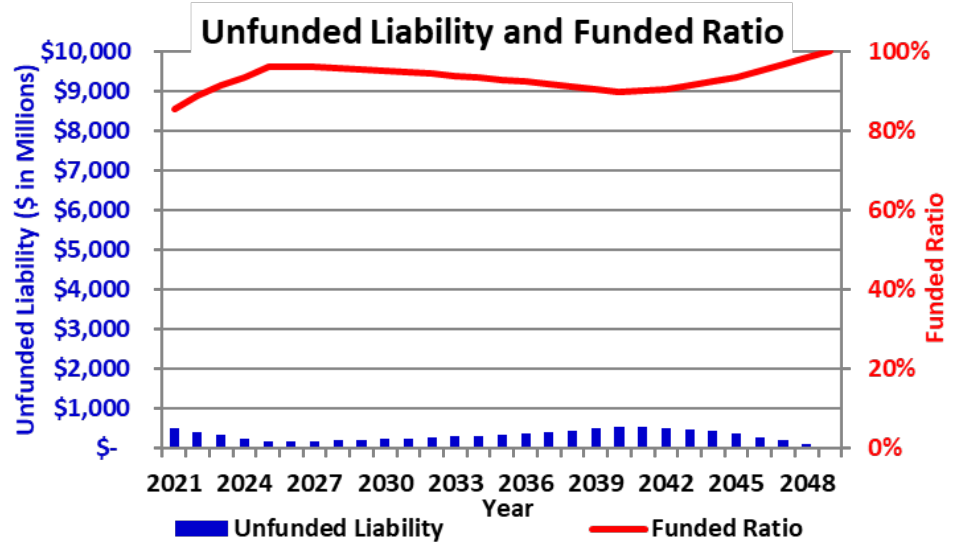


CERS Non-Hazardous Projection

Pension

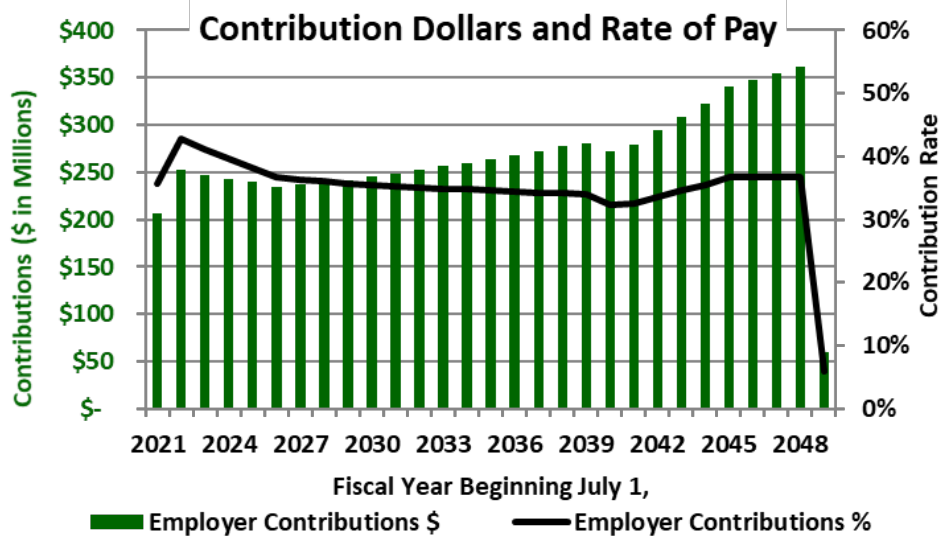
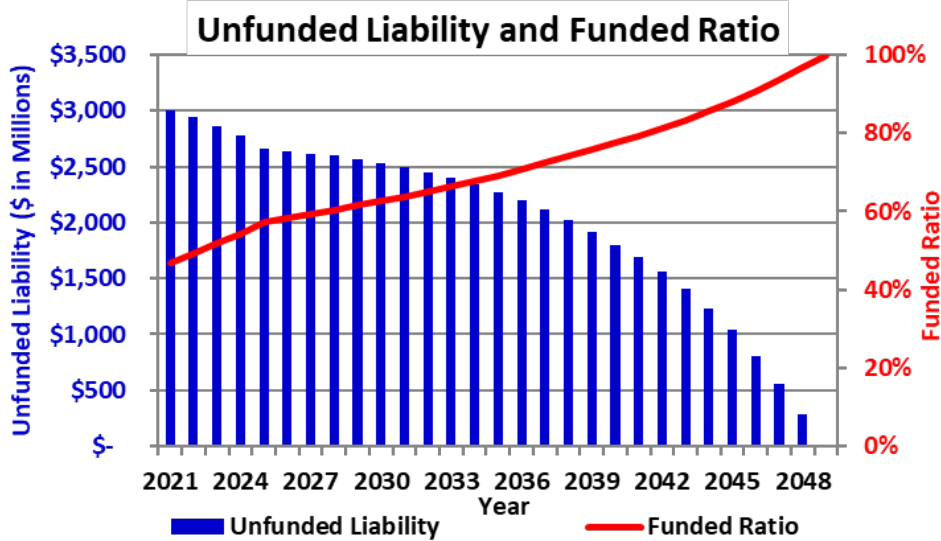


Insurance

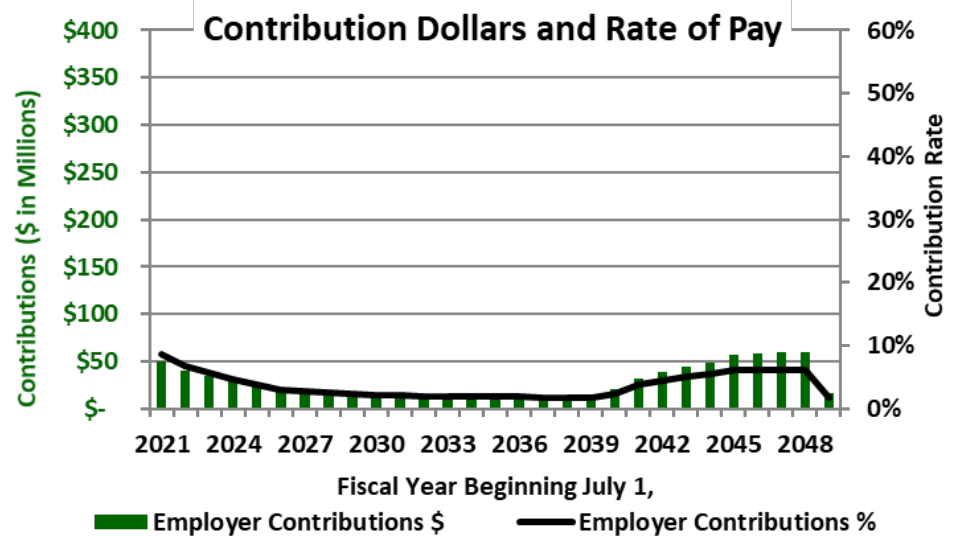
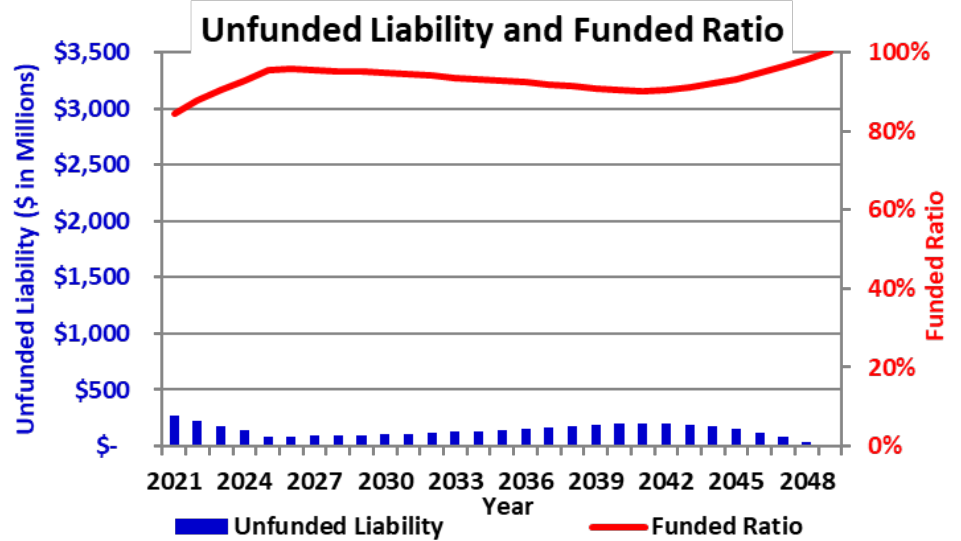


CERS Hazardous Projection

Pension



Insurance



Closing Comments on 2021 Valuation Results

- Favorable investment experience improved the funded status and lowered the required contribution effort across all funds
- Actuarially determined contribution rates are now fully phased in
- It is imperative the participating employers continue contributing the actuarially determined contributions in each future year to improve the System's financial security



Disclaimers

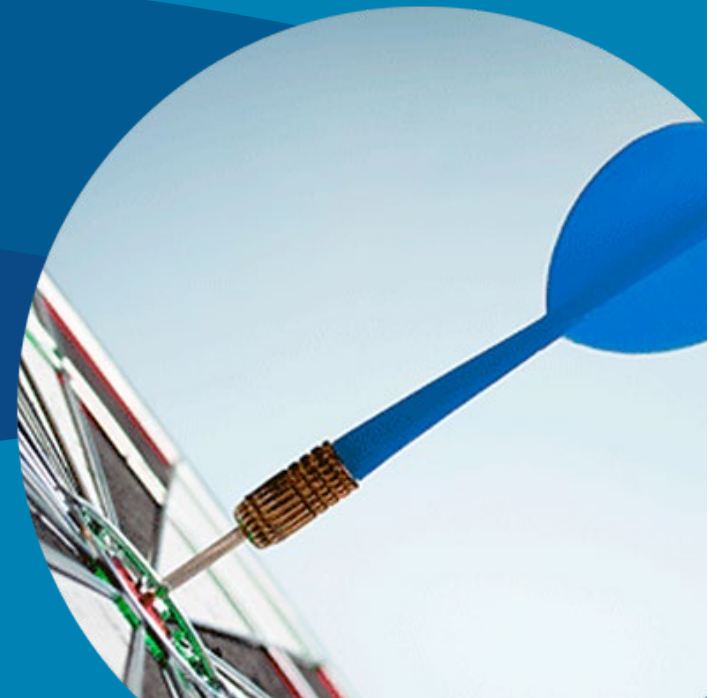
- This presentation is intended to be used in conjunction with the actuarial valuation as of June 30, 2021. This presentation should not be relied on for any purpose other than the purpose described in the valuation report.
- This presentation shall not be construed to provide tax advice, legal advice or investment advice.
- Readers are cautioned to examine original source materials and to consult with subject matter experts before making decisions related to the subject matter of this presentation.





Impact of Benefit Increases County Employees Retirement System (CERS)

November 8, 2021

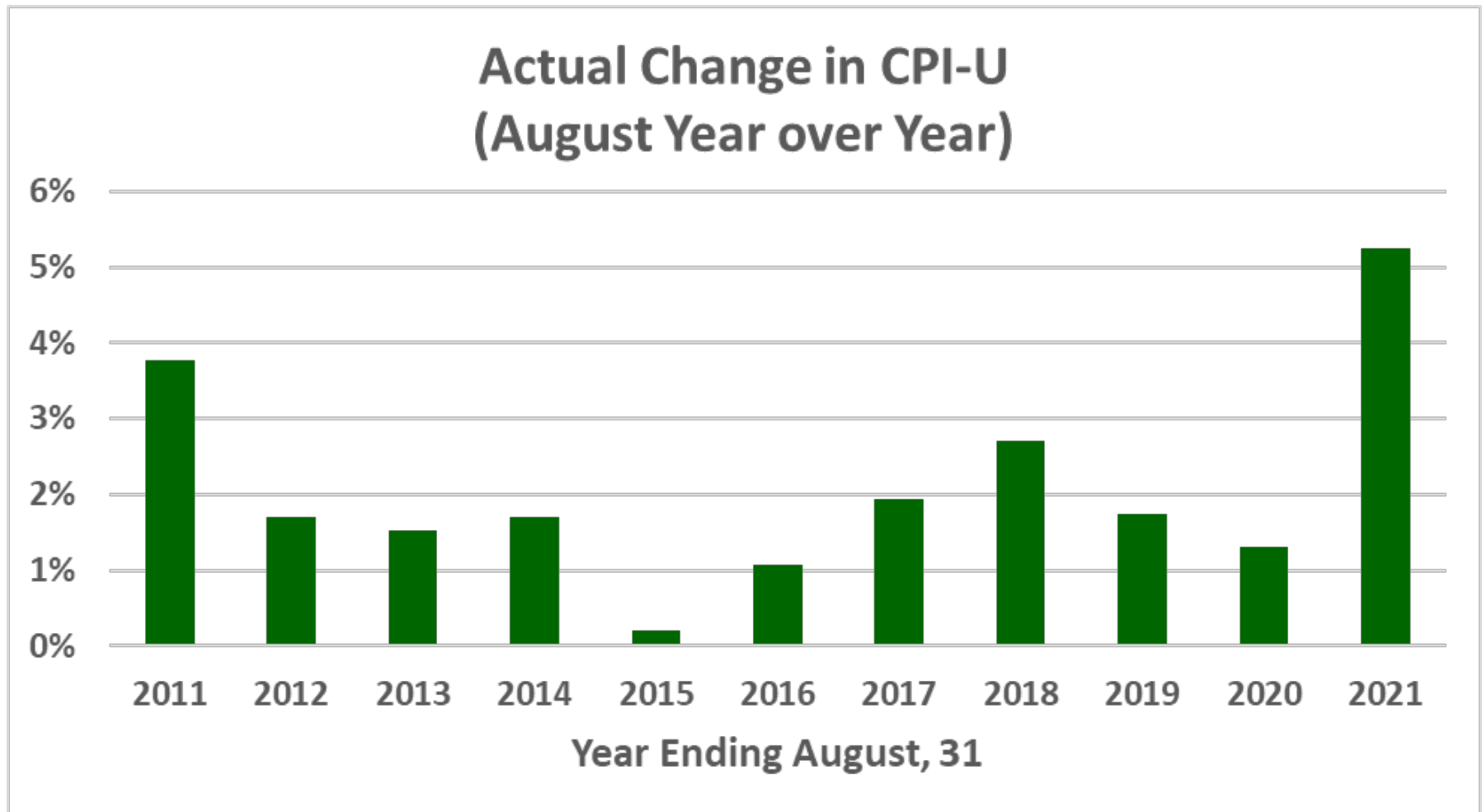


Contents

- Cost-of-Living Adjustment (COLA) Information for the County Employees Retirement System
- Included Information:
 - Historical change in inflation
 - Distribution of plan retirees
 - Estimated decrease in retiree purchasing power
 - Estimated COLA Cost



Actual Historical Change in Inflation

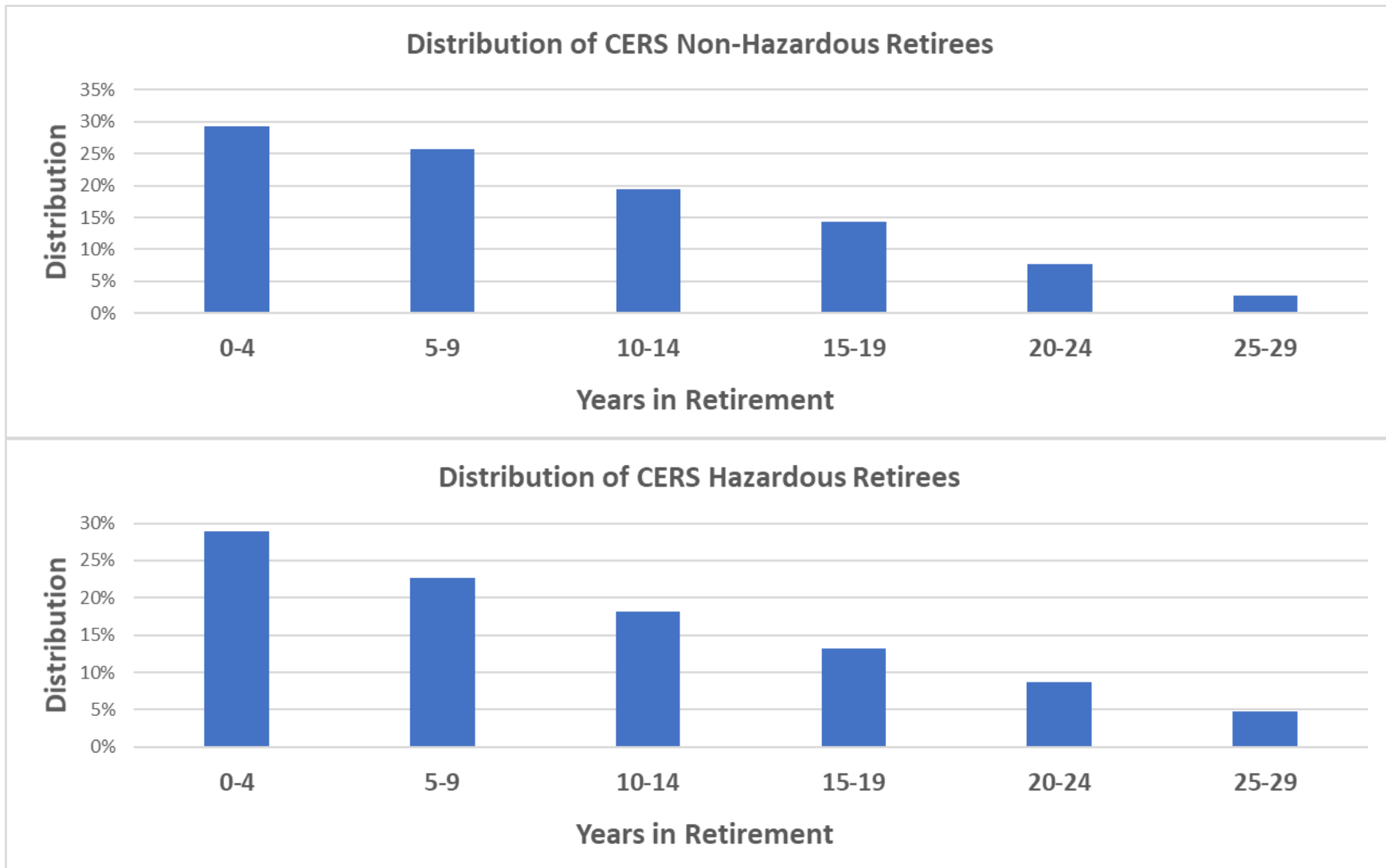


Estimated Change in Retiree Purchasing Power

- The retirement benefits provided by CERS (NonHazardous and Hazardous) does not provide automatic COLA
 - Last ad hoc CPI based COLA provided in 2008
 - Last COLA (1.5%) provided in 2011
- The majority of retirees also participate in Social Security, thus have some inflation protection from their Social Security Benefit

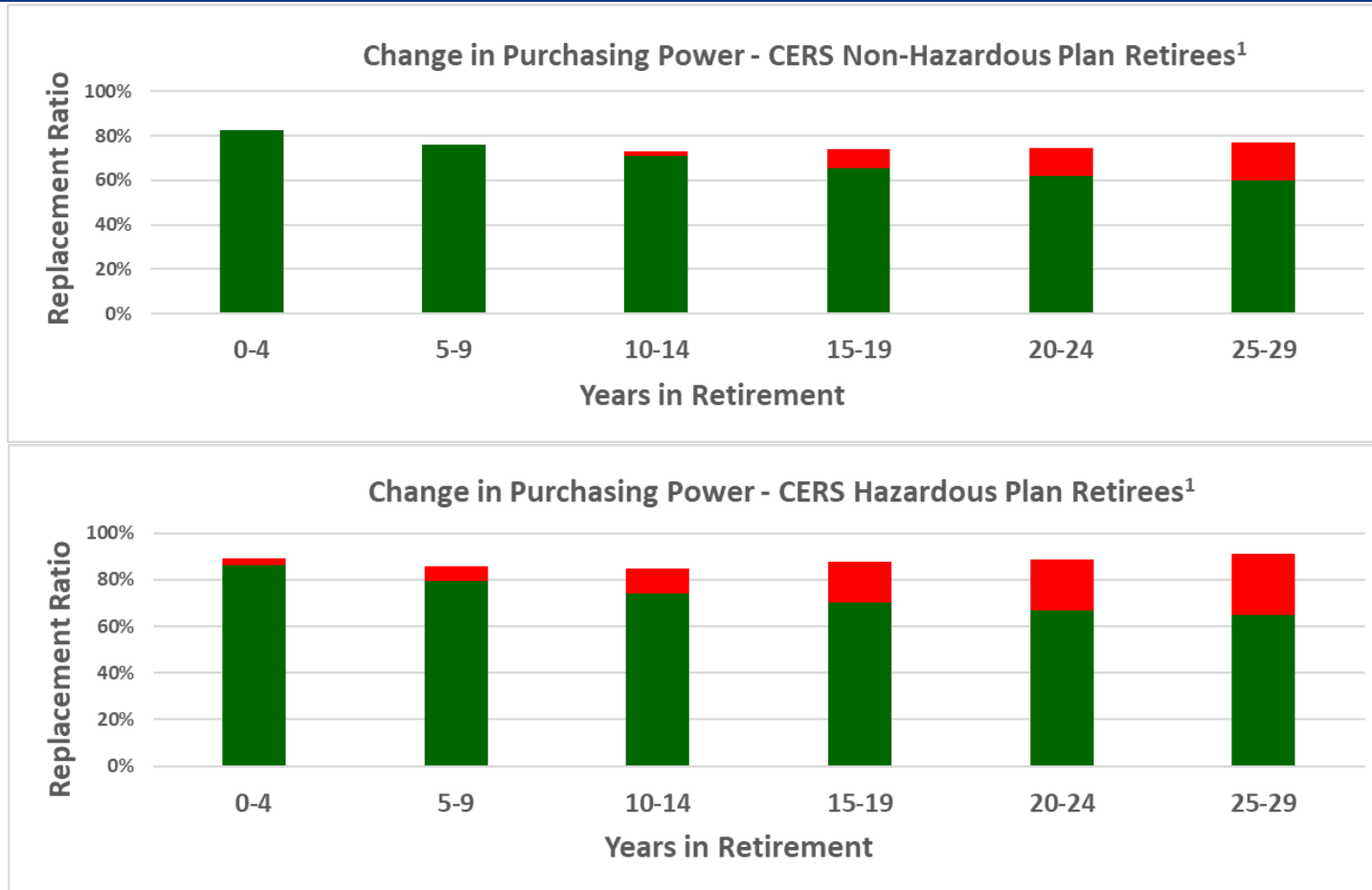


Distribution of Non-Disabled Retirees



¹ Distribution includes all nondisabled retirees regardless of current age as of June 30, 2020. Count is 55,440 Non-Hazardous and 8,639 Hazardous retirees, respectively.

Estimated Decrease in Retiree Purchasing Power of Retirees Currently over Age 65



■ Current Purchasing Power

■ Decrease in Purchasing Power Since Retirement

¹ Analysis limited to nondisabled retirees who retired with 20 or more years of service with a normal retirement benefit (excluding early and disabled retirees) and who are currently over age 65. The analysis assumes the average retiree's age 65 Social Security Benefit is 35% of their final earnings at their retirement date and does not reflect any retirement resources attributable to personal savings. Count is 3,870 Non-Hazardous and 1,057 Hazardous retirees, respectively.

KRS 61.691 and KRS 78.5518

- Effective July 1, 2009, a 1.5% COLA is granted if
 - Funded ratio is greater than 100%, or
 - General Assembly fully prefunds the increase
- Statues also allow for additional increases to be granted to adjust for changes in cost of living if the General Assembly fully prefunds the cost of the benefit increase



Funded Status of Pension Funds (\$millions)

	CERS Non-Haz	CERS Haz	Combined
<u>Funded Status of Pension Funds as of June 30, 2021</u>			
Actuarial Accrued Liability	\$ 14,895	\$ 5,629	\$ 20,524
Actuarial Value of Assets	<u>7,716</u>	<u>2,629</u>	<u>10,345</u>
Unfunded Actuarial Accrued Liability	\$ 7,179	\$ 3,000	\$ 10,179
Funded Ratio at June 30, 2021	52%	47%	50%
FY21 Investment Gain (Market Value) – Pension Fund Only	\$ 1,331	\$ 450	\$ 1,780

Please see the June 30, 2021 Actuarial Valuation report for a summary of the assumptions, methods, plan provisions and data used for this analysis.



Cost of Possible Benefit Increase (\$millions)

	CERS Non-Haz	CERS Haz	Combined
<u>Cost to Fully Fund Benefit Increase</u>			
1.5% "Dividend", or Increase, in Current Retiree Benefits, Increase Payable for Five Years Only*	\$ 62	\$ 22	\$ 84
* Retirees' benefits reduce back to amount prior to 1.5% increase after five years			
One-Time 13 th Check to Current Retirees	69	24	93
One-Time 1.5% Increase in Current Retiree Benefits, Benefit is <u>not</u> Reduced after Increase	116	50	166
Five (5) 1.5% Annual Increases in Current Retiree Benefits, Capped after Five Years, Benefit is <u>not</u> Reduced after Five Years	494	215	709
Permanent Annual 1.5% COLA to Current and Future Retirees	2,105	945	3,050

Except where noted, analysis based on the results of the June 30, 2020 Actuarial Valuation. Please see the June 30, 2020 Actuarial Valuation report for a summary of the assumptions, methods, plan provisions and data used for this analysis. Analysis is further based on June 30, 2021 market value of asset information provided by KPPA on August 20, 2021.



SOCIAL ENGINEERING THE EXECUTIVE



Series, Episode 17

Executive Series: Social Engineering the Executive

This two minute course was created to show executives and board members techniques social engineers and hackers use to trick senior executives and steps they can take to reduce the risk of falling victim to sophisticated phishing attacks.



Series, Episode 3

Using the Phish Alert Button: Report Unsolicited Emails

When using your KRS/KPPA email address, you have access to functionality to report phishing emails. In this module, you'll learn about the Phish Alert Button (PAB), an email plugin that gives you a safe way to handle unsolicited emails (SPAM and Phishing).

Using the PAB will forward any unsolicited emails to your organization's security team for analysis and delete the email from your user's inbox, preventing future exposure.



In the Phish Alert Module, it will ask you which version of email you use. KPPA currently utilizes Exchange, so you will need to choose the Blue icon. We also chose to use the Phish Alert link found in emails that come from outside KPPA.

Phish Alert



2021 Kevin Mitnick Security Awareness Training - 15 Minutes

This module gives you the insider information you need to identify common techniques hackers use against you in an attempt to gain access to your organization's valuable resources. It actually happens way more than you would think. Join Kevin Mitnick as he takes you behind the scenes to demonstrate how the bad guys do what they do. Finally, discover the warning signs of a hacker's attack and the actions you should take to protect yourself and your organization from them.



Internet Security When You Work From Home

The concept “Working From Home” (WFH) has gone mainstream, and is often the preferred way for some positions to get maximum productivity. Apart from that, it’s also an effective way for organizations to assure business continuity when unexpected circumstances like natural disasters or pandemics crop up. This training module helps you understand the challenges and trains you to stay secure online while working from home.