



## Sign-In For Public Guests:

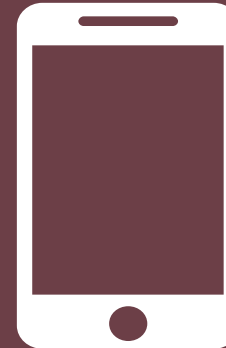
If you would like to be recorded in the minutes as in attendance, please send an email with names and organization represented to:

**ETFSMBoardFeedback@etf.wi.gov.**



## Meeting Materials

- Available at [etf.wi.gov](http://etf.wi.gov)



**Please Mute  
Microphones  
and/or Cell Phone**



# Welcome to the Joint Meeting of the Employee Trust Funds, Teachers Retirement and Wisconsin Retirement Boards

March 25, 2021



# Announcements

Item 1 – No Memo



# Consideration of Open Minutes of September 17, 2020



Item 2 - Memo Only



# 2020 Wisconsin Retirement System Investment Performance and 2021 Outlook

Item 3A – Joint Meeting

State of Wisconsin Investment Board

Rochelle Klaskin, Deputy ED / Chief Administrative Officer

Anne-Marie Fink, Private Markets & Funds Alpha Managing Director





# SWIB Update

*Rochelle Klaskin, Deputy ED/Chief Administrative Officer*

*Anne-Marie Fink, Private Markets & Funds Alpha Managing Director*

*March 25, 2021*

# Agenda

- Leadership
- Performance
- Cost Effectiveness
- Asset Allocation & Peer Performance Comparison
- Private Markets & Funds Alpha
- Questions

# Leadership





# David Villa's Legacy: Building a Strong Team



Edwin Denson  
Interim Co-Chief Investment Officer  
Managing Director  
Asset & Risk Allocation



Mike Jacobs  
Agency Business Director



Brian Hellmer  
Interim Co-Chief Investment Officer  
Managing Director  
Global Public Market Strategies



Rochelle Klaskin  
Interim Executive Director



Anne-Marie Fink  
Interim Co-Chief Investment Officer  
Managing Director  
Private Markets & Funds Alpha

# David Villa's Legacy: Building a Strong Team

152 Years of Collective Leadership and Investment Industry Experience

- Rochelle Klaskin, Acting Executive Director
  - SWIB Deputy Executive Director/Chief Administrative Officer
  - SWIB Chief Legal Counsel
  - Godfrey & Kahn, Corporate Attorney/Madison Office Managing Partner
- Mike Jacobs, Agency Business Director
  - Brinson Partners, Partner/General Counsel/Chief Compliance Officer
  - Adams Street Partners, Partner/General Counsel/Chief Compliance Officer
  - Singer Partners, Managing Partner/General Counsel/Chief Compliance Officer
  - William Blair & Company, Senior Legal Advisor/Operating Manager

# David Villa's Legacy: Building a Strong Team

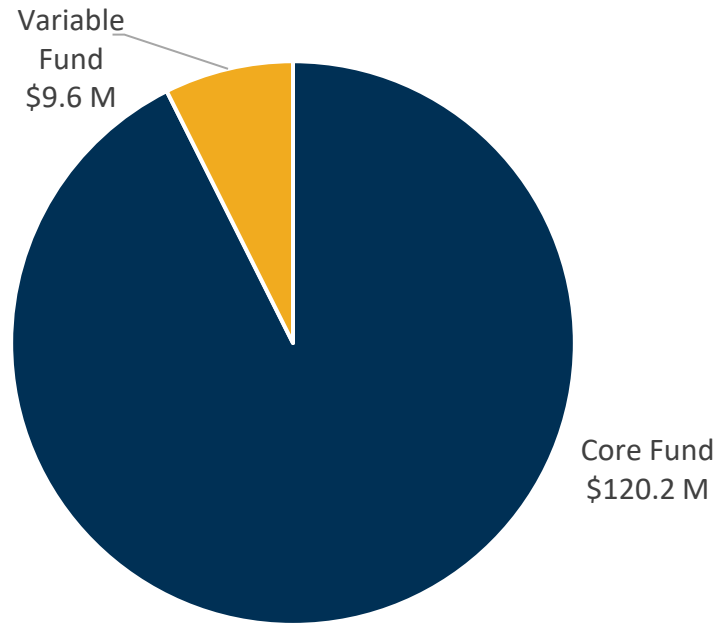
152 Years of Collective Leadership and Investment Industry Experience

- **Brian Hellmer, Acting Chief Investment Officer**
  - SWIB Managing Director, Global Public Market Strategies
  - UW-Madison, Hawk Center for Applied Investment Research/Center Director
  - Northern Capital Management, Principal/Owner/Portfolio Manager
  - Bank of America, Equity Analyst & Investment Analyst
- **Edwin Denson, Acting Chief Investment Officer**
  - SWIB Managing Director, Asset and Risk Allocation
  - Canada Pension Plan Investment Board, Managing Director/Head of Strategic Tilting
  - UBS Global Asset Management, Managing Director/Head of Asset Allocation
- **Anne-Marie Fink, Acting Chief Investment Officer**
  - SWIB Managing Director, Private Markets & Funds Alpha
  - State Street Global Advisors, Managing Director
  - State of Rhode Island, Chief Investment Officer
  - JP Morgan Private Bank, Managing Director

# Performance

# WRS Assets Under Management (AUM)

*As of Dec. 31, 2020*



Fund	12/31/2019 AUM (in millions)	12/31/2020 AUM (in millions)	1-Year AUM Change (in millions)
Total WRS	\$116.5	\$129.8	\$13.2
Core Fund	\$107.8	\$120.2	\$12.4
Variable Fund	\$8.7	\$9.6	\$882

AUM is the gross market value of assets that an investment company or financial institution manages on behalf of investors.

# 2020 Investment Returns

*As of Dec. 31, 2020*

SWIB's investment management has added more than **\$1.9 billion** above benchmark returns over the last five years to the WRS.

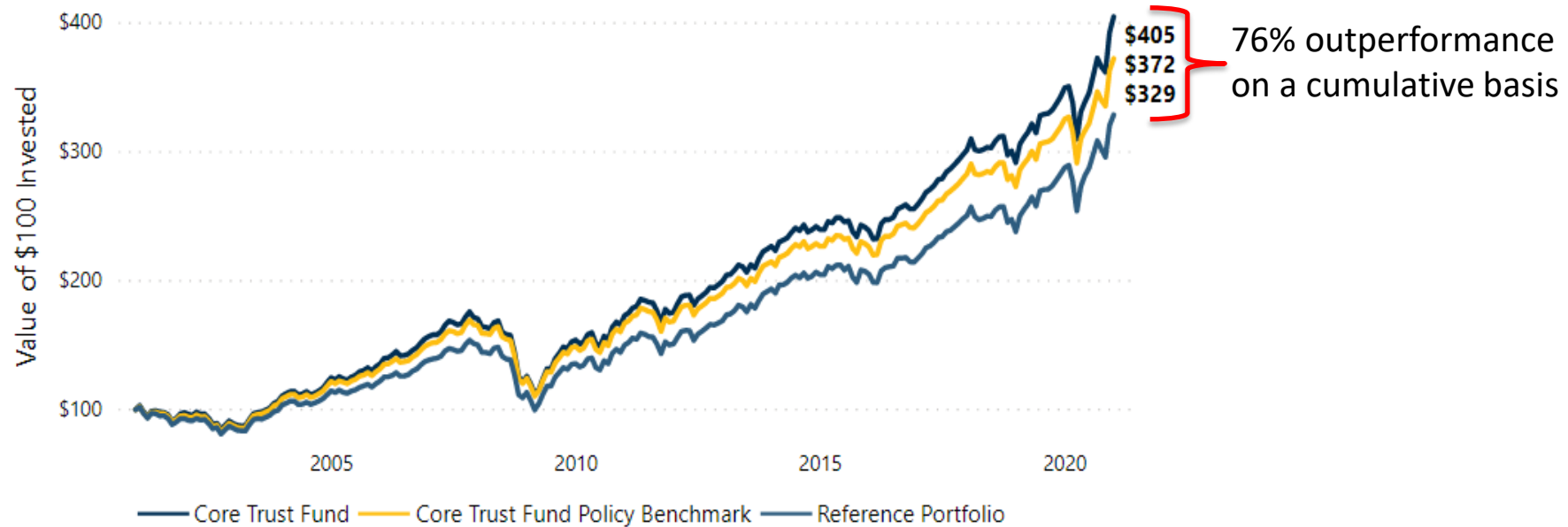
<b>Core Fund</b>	<b>1-Year</b>	<b>5-Year</b>	<b>10-Year</b>	<b>20-Year</b>	<b>30-Year</b>
Performance	15.21%	10.74%	8.51%	6.94%	8.83%
Benchmark	14.15%	10.27%	8.10%	6.62%	8.51%
	1.06%	0.47%	0.41%	0.32%	0.32%
<b>Variable Fund</b>					
Performance	17.51%	13.65%	11.35%	7.08%	9.78%
Benchmark	17.90%	13.62%	11.22%	6.94%	9.61%
	(0.39%)	0.03%	0.13%	0.14%	0.17%

One-year returns are net of all fees. Five-, 10-, 20-, and 30-year returns are net of external manager fees. Thirty-year benchmark returns are presented gross of fees.

# CTF Performance vs. 60/40 Reference Portfolio\*

*January 2001 to December 2020*

Benefit of SWIB's Asset Allocation & Active Management Over Time



**\$34.4bn total**

Reference Portfolio Ending Value	Additional Policy Portfolio Return Above Reference*	Additional Active Portfolio Return	CTF Ending Value**
\$85.7bn	<b>+\$20.9bn</b>	<b>+\$13.5bn</b>	=\$120.2bn

\*The reference portfolio is 60% MSCI World and 40% Bloomberg Barclays Gov't/Credit (domestic)(rebalanced monthly). Core Trust Fund outperformance is calculated using gross returns.

\*\*CTF beginning market value, as of January 1, 2001, was \$54.8 billion.

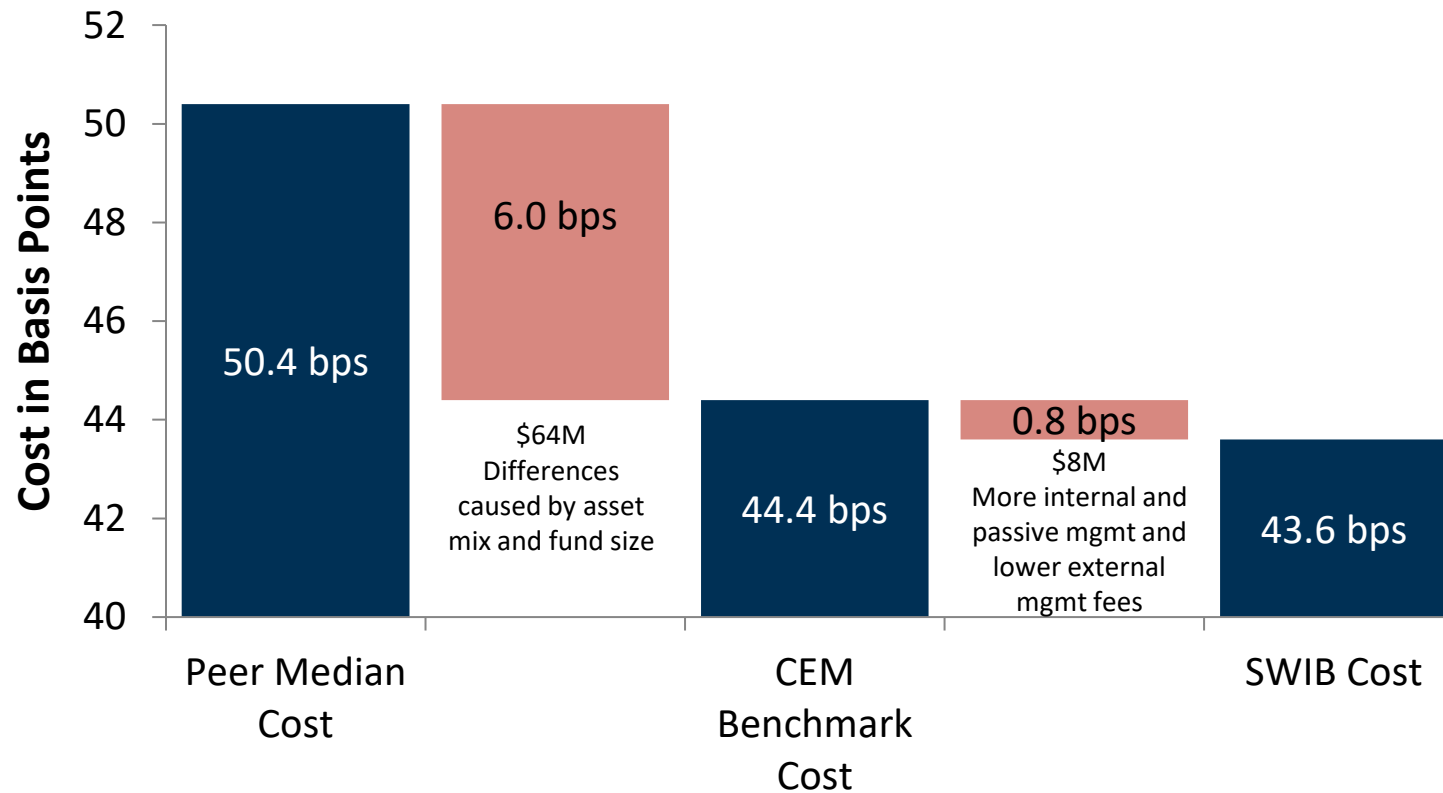
# Cost Effectiveness





# SWIB Saved Approximately \$72 Million In 2019 Compared to Its Peers

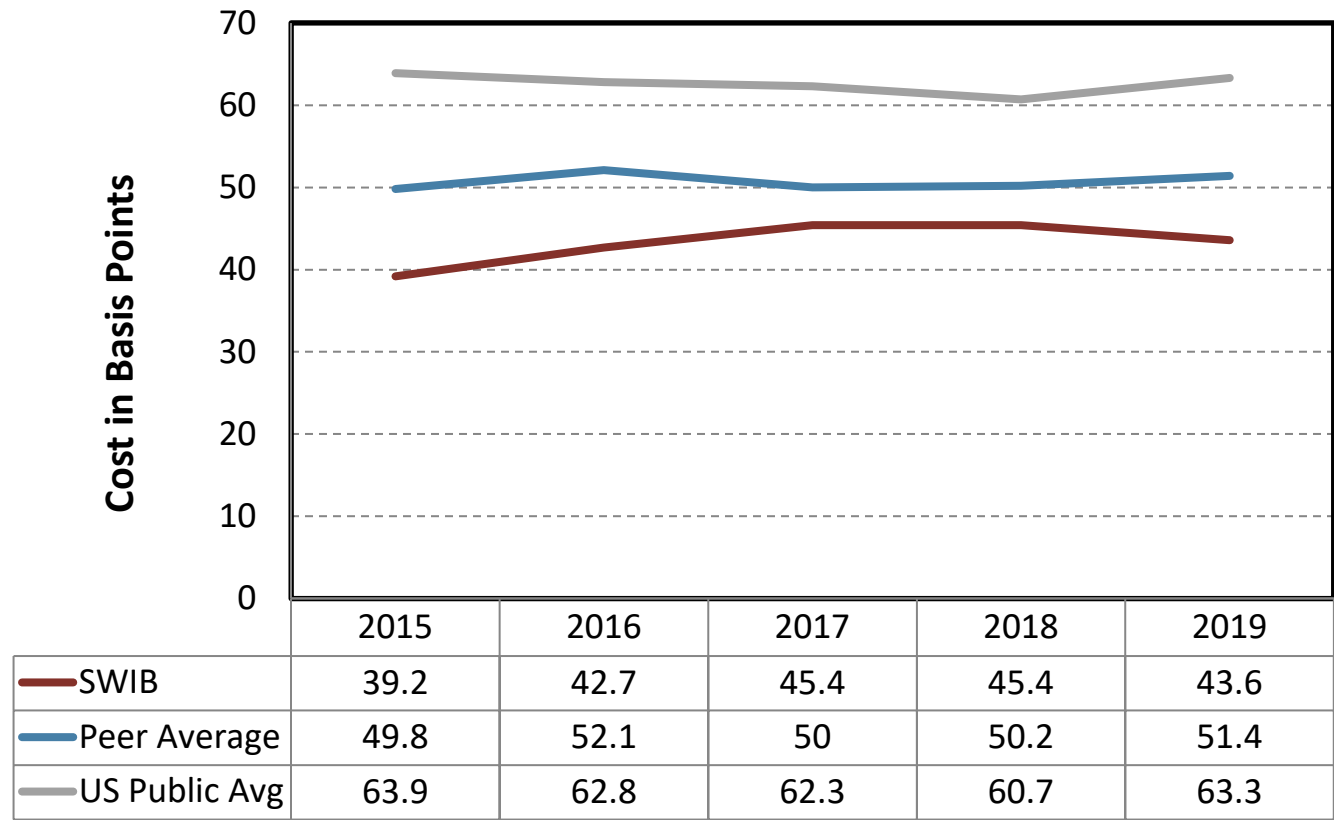
*SWIB's costs are 13.5% lower than its peers*



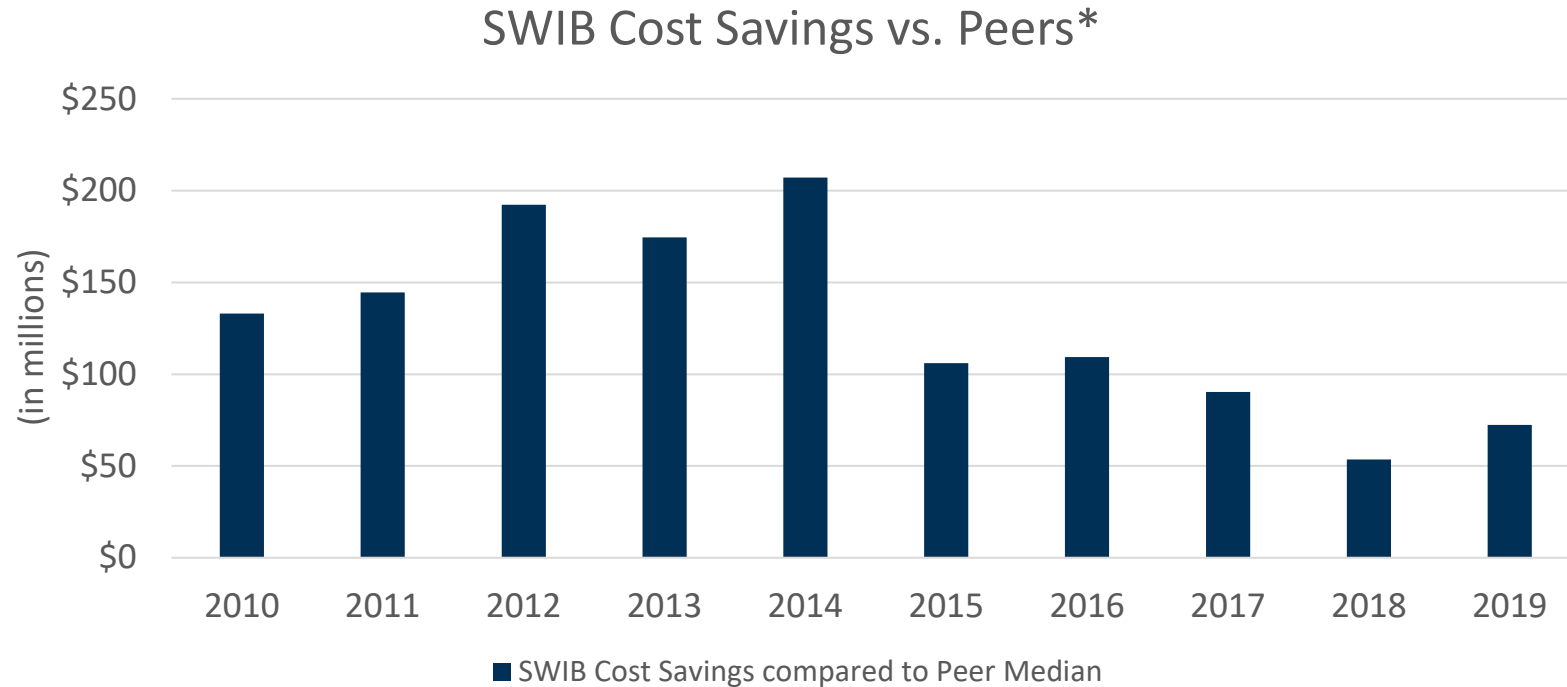
Data source: CEM Benchmarking, Inc. 2019 Report

# SWIB Continues To Remain Lower Cost Compared To Peers & US Public Funds

*SWIB's total costs have remained materially lower than peers due in part to levels of internal management.*



# SWIB Saved \$1.3 Billion vs. Peers From 2010-19

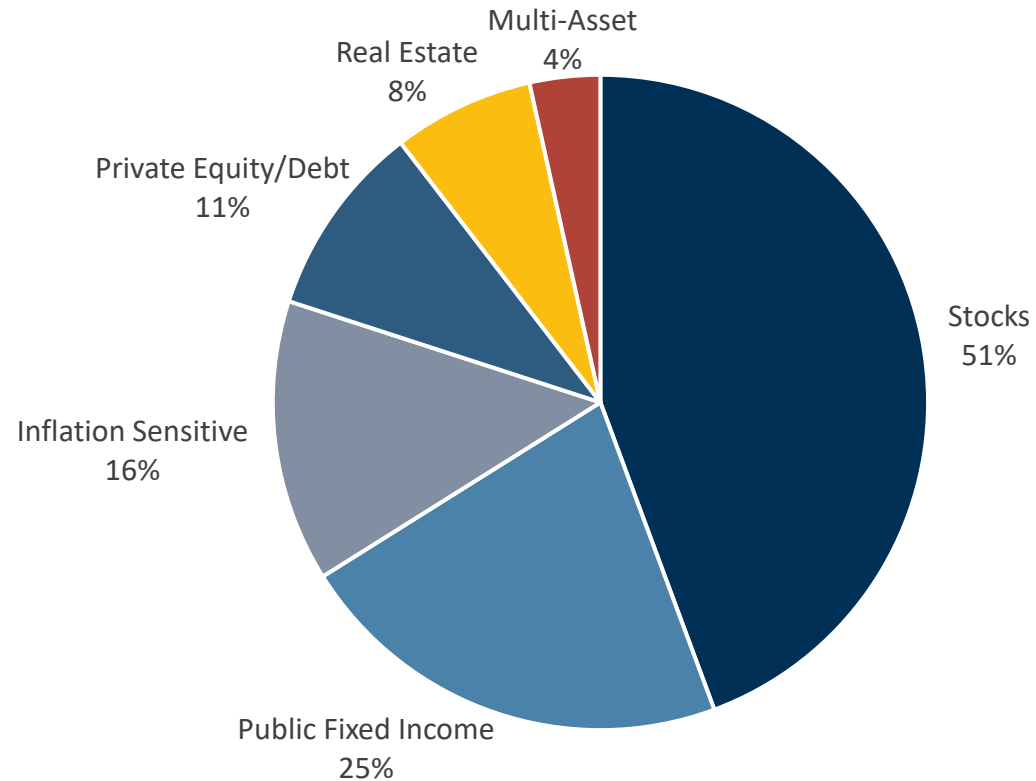


\*This analysis compares SWIB's savings vs. the peer group median costs for every \$100 under management and multiplies that average savings by SWIB's median assets under management.

# Asset Allocation & Peer Performance Comparison



# Core Trust Fund Asset Allocation Targets

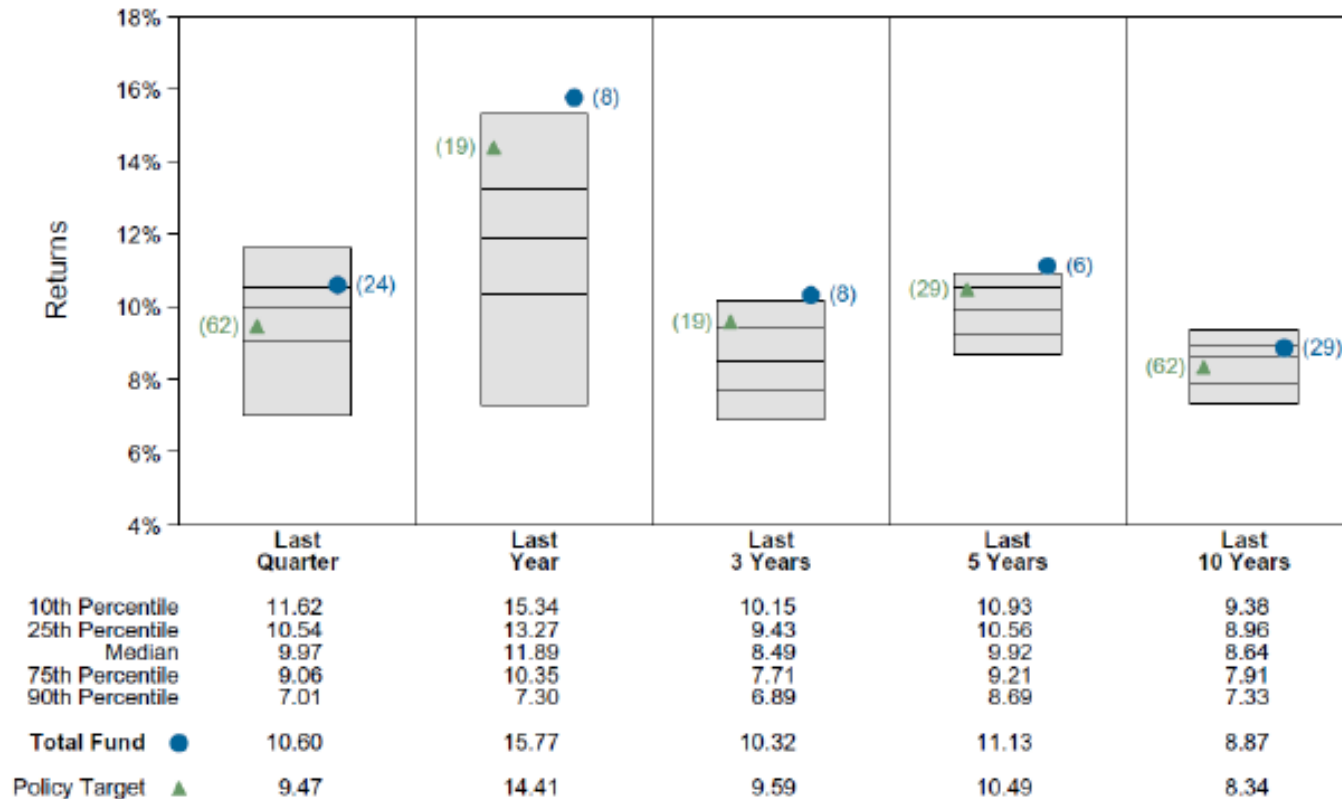


Totals exceed 100% due to SWIB's overall leverage of Core Fund assets. SWIB's actual asset allocation may vary up to +/- 6% from the targets listed.

# Total Fund Ranking-Unadjusted Ranking

*Gross of Fees as of Dec. 31, 2020*

Callan Public Fund Spons- V Lg DB (>10B)



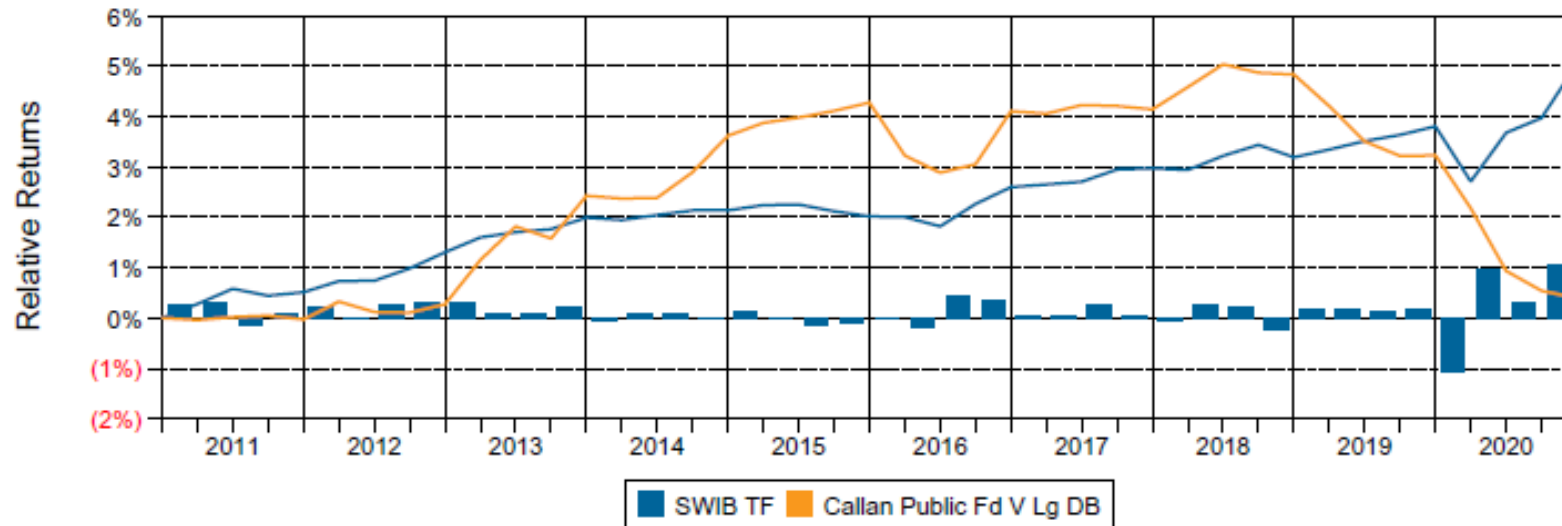
- Total fund unadjusted rankings are in the top quartile of peers for Q4, the top decile of peers for the 1-, 3-, and 5-year periods, and the top half of peers for the 10-year period.
- Recent market volatility benefitted SWIB's risk-balance approach vs. peers.

Source: Callan Investment Measurement Service Quarterly Review, December 2020

# 10 Year Return Consistency vs. Target

2011 to 2020 (Gross, 12/31/20)

Cumulative and Quarterly Relative Return vs Target

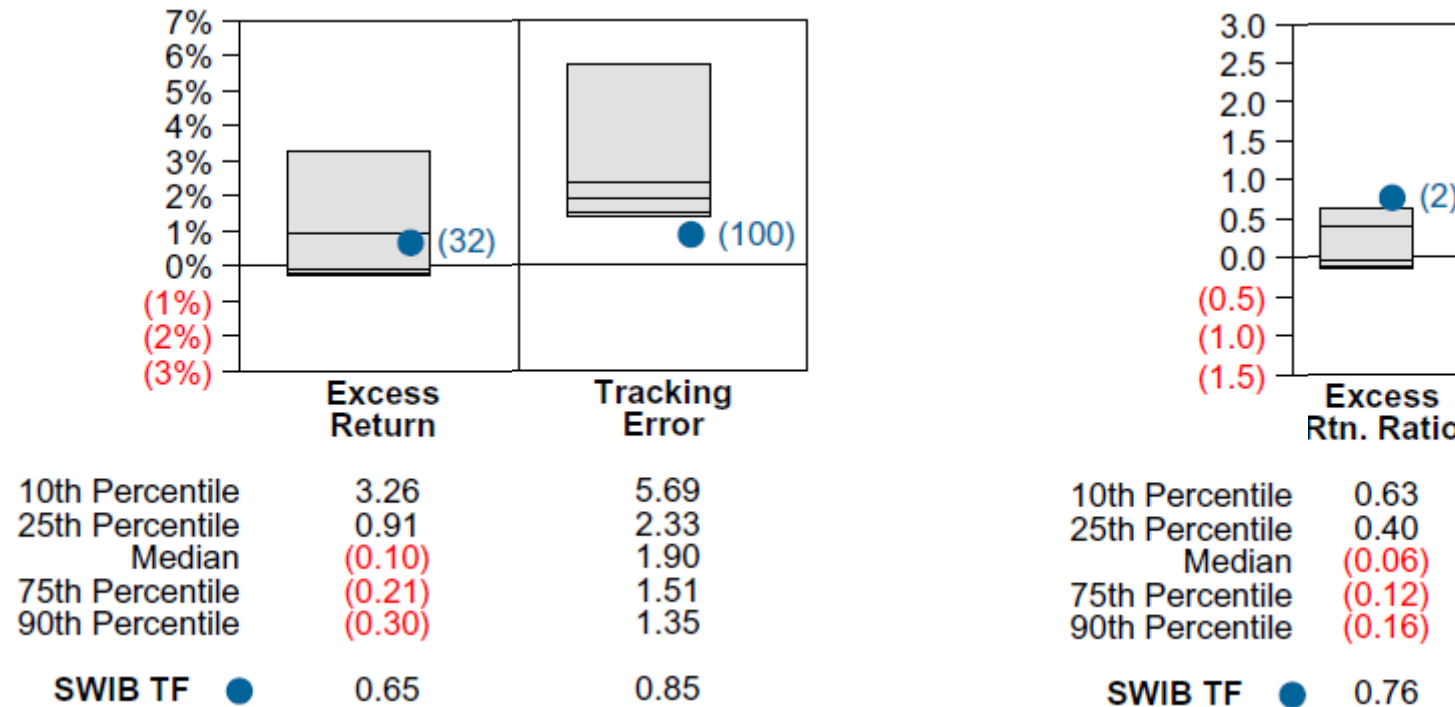


SWIB's risk control and consistency led to a relatively smooth ride over the last 10 years.

# Relative Risk/Reward Tradeoff vs. Target & Peers

*Positive excess return without taking as much active risk as peers*

Rankings Against Callan Public Fund Sponsor Database (Gross); 5 years ending 12/31/2020



Source: Callan Investment Measurement Service Quarterly Review, December 2020

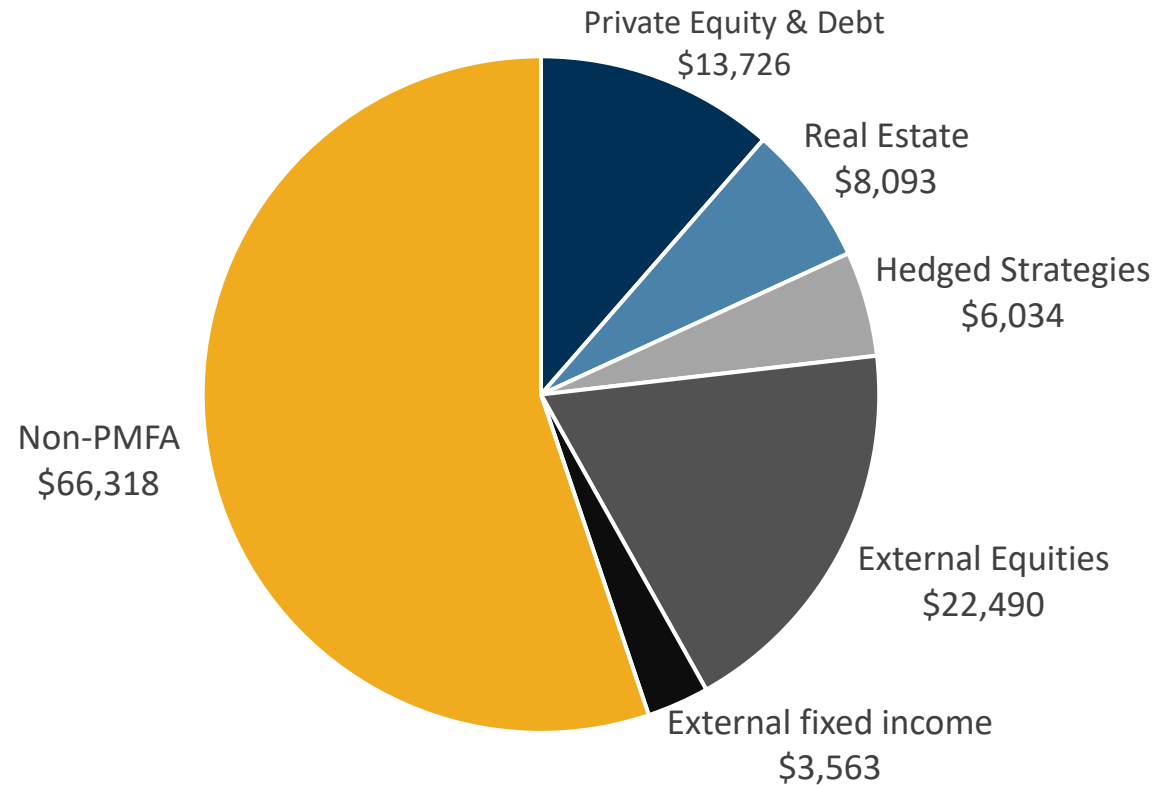


# Private Markets & Funds Alpha (PMFA) Division



# What Is Private Markets & Funds Alpha?

- Investments with external active managers
  - Approximately \$54 billion in assets or 45% of CTF, as of Dec. 31, 2020



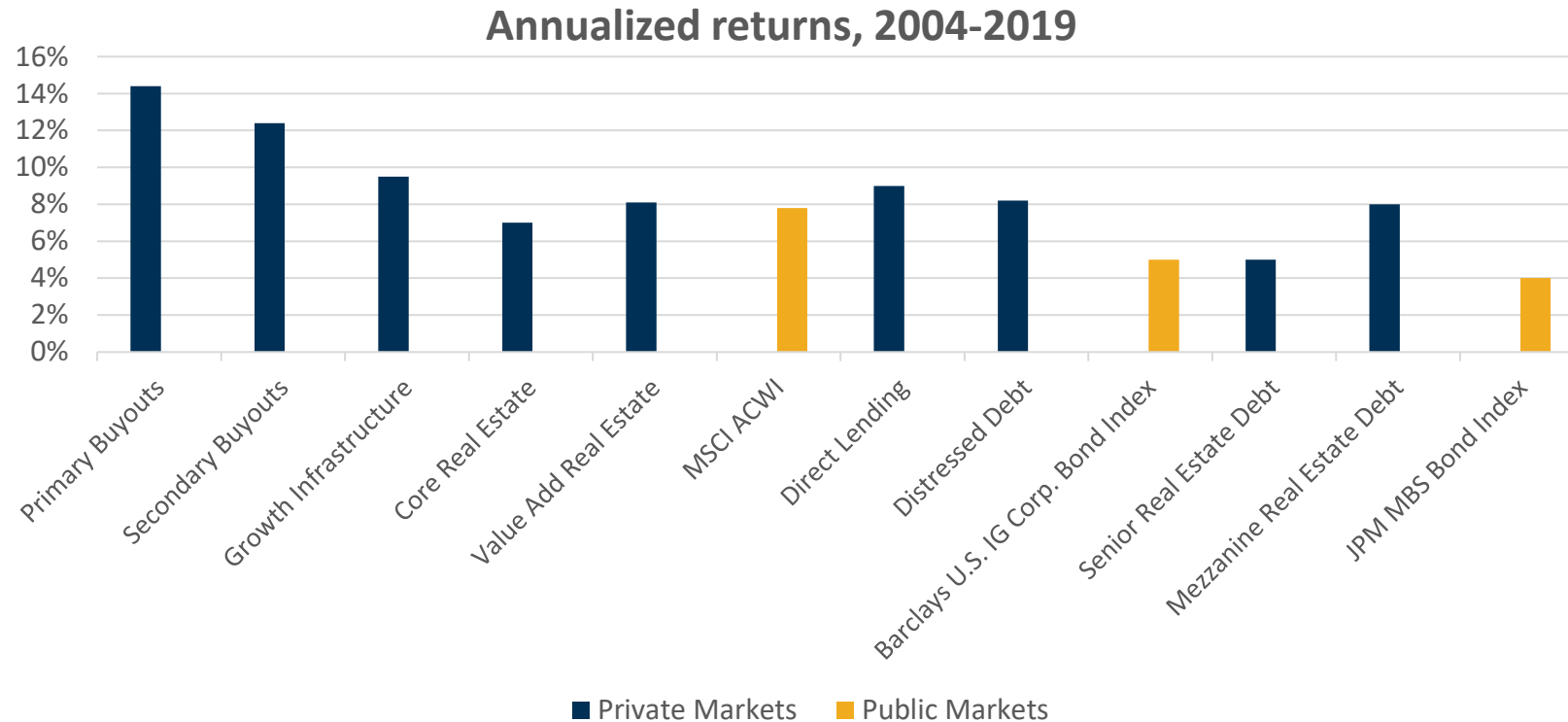
# 2021 Asset Allocation Changes

Increase target allocation to Private Equity/Debt from 9% to 11%

- Continue gradual pacing increase in line with precedent
- Target expected to be reached by the end of 2021, but could be earlier or later depending on market movements

# Why Private Markets?

- Access to strategies not widely available
- Outperformance over the long run
  - Offset by less liquidity than public markets offer



Source: Company Reports, derived from Burgiss Private IQ.

# Questions?



# Wisconsin Retirement System 38<sup>th</sup> Annual Valuation of Retired Lives – December 31, 2020

Joint Meeting of the Employee Trust Funds,  
Teachers Retirement and Wisconsin Retirement Boards  
Item 3B - March 25, 2021

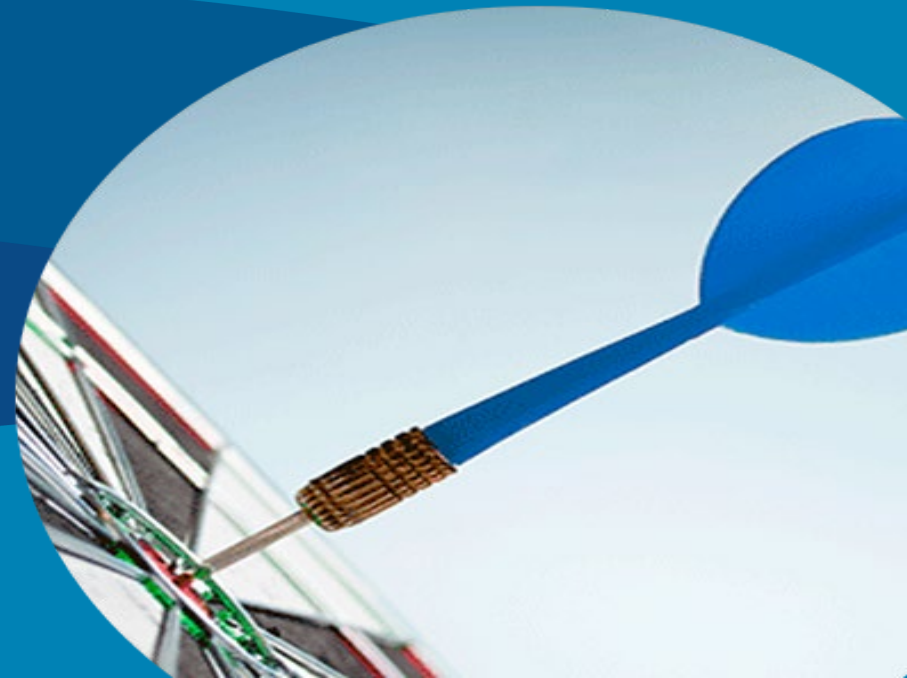
Gabriel Roeder Smith & Company  
Brian Murphy, Senior Consultant  
Jim Anderson, Senior Consultant  
Mark Buis, Senior Consultant





# Wisconsin Retirement System

38<sup>th</sup> Annual Actuarial Valuation of Retired Lives  
December 31, 2020



# Operation of the System (Simplified Description)

	Core Annuities	Variable Annuities
Investment Return Hurdle to Trigger Annuity Adjustment	Returns over/under 5%	Returns over/under 5%
Ratio of Assets to Liabilities	If > 0.5%, dividend may be granted If < -0.5%, prior dividends reduced	If > 2%, variable annuity increased If < -2%, variable annuity decreased
Increase/Decrease Rounding Conventions	Rounded to nearest 0.1%	Truncated, carried to next year
Adjustment Effective Date	April following 12/31 valuation	April following 12/31 valuation



# Smoothing Mechanisms

---

## Core

- Undesirable for retirees to experience wide swings in monthly benefits from year to year (especially downward swings)
- Mitigated in Core division by asset smoothing process and portfolio mix
- Asset smoothing has worked well historically, but could not prevent negative dividends in 2009-2013

# Smoothing Mechanisms

---

## Variable

- Variable fund is marked to market each year and subject to wide swings
- Dropping fractions of a percent from the adjustment is a form of smoothing
- Usually has very little effect due to the magnitude of the gains and losses

# Summary of Results – December 31, 2020

**\$ Millions**

	<b>Core</b>	<b>Variable</b>
Number of Annuitants	222,723	41,753
Annual Amount of Annuities Paid	\$ 5,423.2	\$ 449.7
Fund Balance	63,805.8	4,954.0
Actuarial Reserve	60,691.1	4,383.0
<b>Ratio</b>	<b>1.051</b>	<b>1.130</b>

Core effective earnings rate = 10.9%, dividend adjustment = 5.1%.  
Variable effective earnings rate = 18.0%, and the variable adjustment = 13.0%.

(Report- Cover Letter & Pages 6 and 16)



# Summary of Results

---

Due to smoothing via Market Recognition Account, as of December 31, 2020 there are approximately \$11.1 billion in unrecognized gains in the Core fund

- Last year was \$5.7 billion in unrecognized gains
- Will be recognized over the next four years
- Roughly ½ of gain applies to the annuitant reserve, the other half shared by active members and employers
- May increase probability of future positive annuity adjustments

# Operation of Market Recognition Account (MRA) – \$ Millions

## 2019 Valuation

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Actual Investment Earnings	\$ 17,765				
Assumed Investment Earnings	6,744				
Gain/(Loss) to be phased-in	11,021				
Phased-in recognition					
• Current year	\$ 2,204	?	?	?	?
• First prior year	(2,048)	\$ 2,204	?	?	?
• Second prior year	1,461	(2,048)	\$ 2,204	?	?
• Third prior year	119	1,461	(2,048)	\$ 2,204	?
• Fourth prior year	<u>(1,344)</u>	<u>119</u>	<u>1,461</u>	<u>(2,048)</u>	<u>\$ 2,204</u>
Total recognized gain (loss)	\$ 392	\$ 1,736	\$ 1,617	\$ 156	\$ 2,204

**2020-2023: Expect \$5.7 billion in deferred asset GAINS**  
**-- Shared by annuitants, actives and employers**

# Operation of Market Recognition Account (MRA) – \$ Millions

## 2020 Valuation

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
Actual Investment Earnings	\$ 15,868				
Assumed Investment Earnings	7,000				
Gain/(Loss) to be phased-in	8,868				
Phased-in recognition					
• Current year	\$ 1,774	?	?	?	?
• First prior year	2,204	\$ 1,774	?	?	?
• Second prior year	(2,049)	2,204	\$ 1,774	?	?
• Third prior year	1,461	(2,049)	2,204	\$ 1,774	?
• Fourth prior year	120	1,461	(2,049)	2,204	\$ 1,774
Total recognized gain (loss)	\$ 3,510	\$ 3,390	\$ 1,929	\$ 3,978	\$ 1,774

**2021-2024: Expect \$11.1 billion in deferred asset GAINS**  
**-- Shared by annuitants, actives and employers**

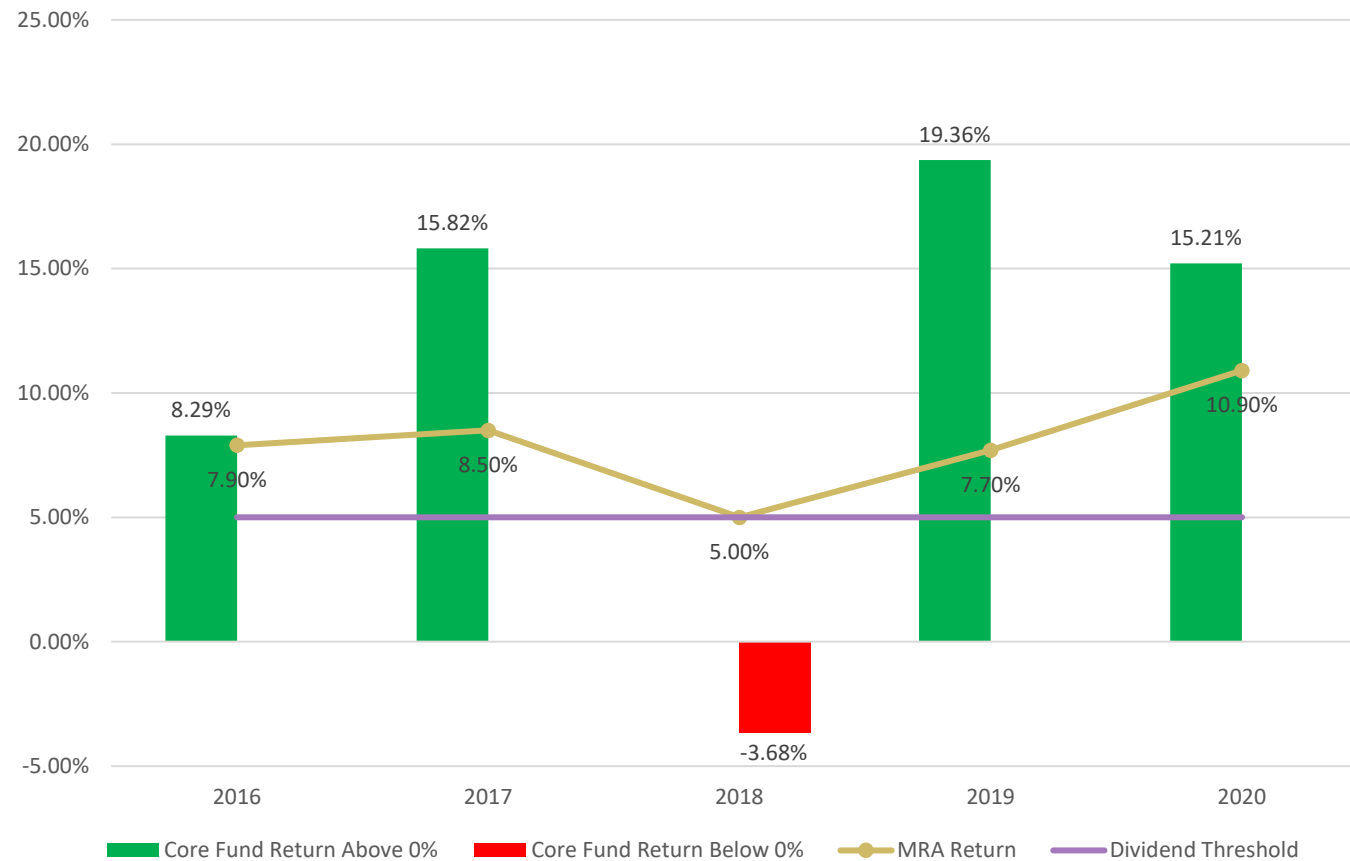
# Asset Rate of Return Calculation

---

$$\text{Rate of Return} = \text{Investment Earnings} / \text{Asset Value}$$

- Rate of Return will vary based on calculation inputs:
  - Asset value could be smoothed or unsmoothed
  - Asset value could be beginning, middle or end of year
  - Timing of Contributions and Benefit Payments will vary
- Result is different Rate of Return calculated by:
  - SWIB (investment manager)
  - ETF (calculations governed by statute)
  - GRS (actuaries)

# Core Fund Returns – Market Value vs. Market Recognition Account





# Translating Asset Rate of Return to Core Dividend “**R-e-S-F-A-P**”

---

**Return: 2020 SWIB net of fee return = 15.21%**

**Smooth vs. 7.0% Investment Return Assumption**

- Return > assumption **S**moothed over 5 years
  - Leads to **\$11 billion unrecognized gains shared by Rets, EEs, ERs**
- Core fund return available for dividend = **10.40%**

**Fund annuities at Investment Return 5% Threshold**

- Core fund return > threshold provides **dividend before adjustments**:  $1.1040/1.05-1 = 5.14\%$

**Adjustments result in 5.1% dividend Paid**

# Primary Sources of Core Dividend

	<u>% of APV</u>
1. SWIB net of fee investment return	15.21%
2. MRA adjustment	<u>(4.31)%</u>
3. Published effective earnings rate	10.90%
4. Adjustment to relate earnings to average core annuity fund balance	<u>(0.50)%</u>
5. Earnings rate based on average balance	10.40%
6. Expected dividend before adjustments: 1.104/1.05-1	5.14%
7. Adjustment to relate average asset to ending liability	0.07%
8. Carryover from last year due to timing of dividend accounting adjustments and rounding	0.07%
9. Experience study/mortality reserve adjustment	(0.20)%
10. Experience and other effects	0.05%
11. Statutory adjustment to round to nearest one-tenth percent	<u>(0.03)%</u>
12. <b>Computed average dividend rate: (6)+(7)+(8)+(9)+(10)+(11)</b>	<b>5.1%</b>
13. Adjustment for members at or near the statutory floor	0.0%
14. <b>Final computed dividend rate: (12)+(13), if greater than 0.5% (or less than -0.5%) of core annuities, otherwise 0%</b>	<b>5.1%</b>

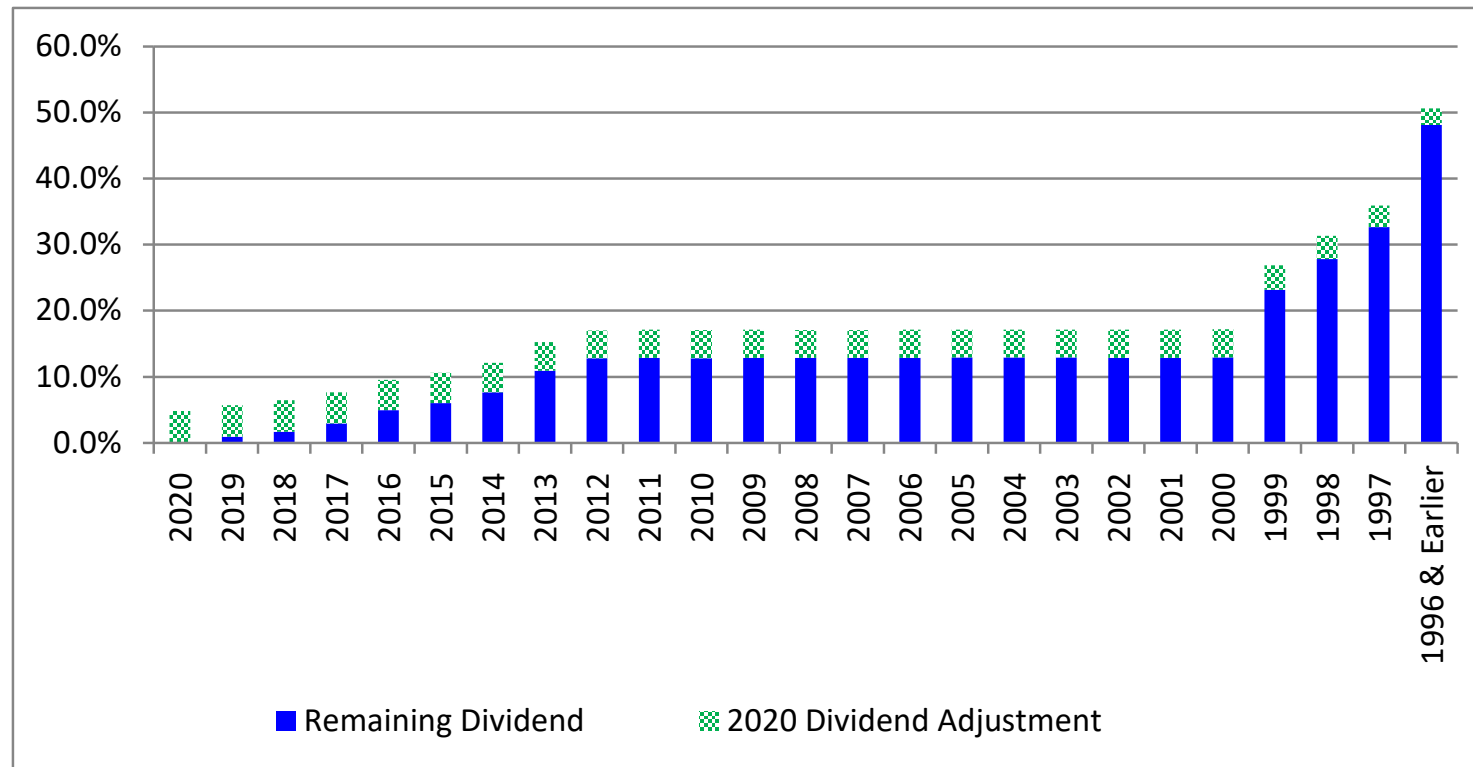


# Liability Attributable to Dividends – “Dividend Liability”

<b>Valuation</b>	<b>Liability for Dividend Remaining (billions)</b>	<b>Liability for Dividend Adjustment (billions)</b>	<b>Liability after Dividend Adjustment (billions)</b>
12/31/2011	\$6.4	\$(1.7)	\$4.7
12/31/2012	4.5	(1.3)	3.2
12/31/2013	3.0	2.0	5.0
12/31/2014	4.6	1.3	5.9
12/31/2015	5.5	0.2	5.7
12/31/2016	5.4	1.0	6.4
12/31/2017	6.1	1.3	7.4
12/31/2018	6.9	0.0	6.9
12/31/2019	6.5	1.0	7.5
12/31/2020	7.0	3.1	10.1
12/31/2021 (est)	9.6		

- “Liability for dividend remaining” = value of all previously granted dividends (=\$9.2B at 12/31/2008)
- 2021 liability for dividends remaining is >2008, BUT as a percentage of total liabilities, it is smaller
- Substantial asset losses could decrease the liability for dividend remaining to low levels

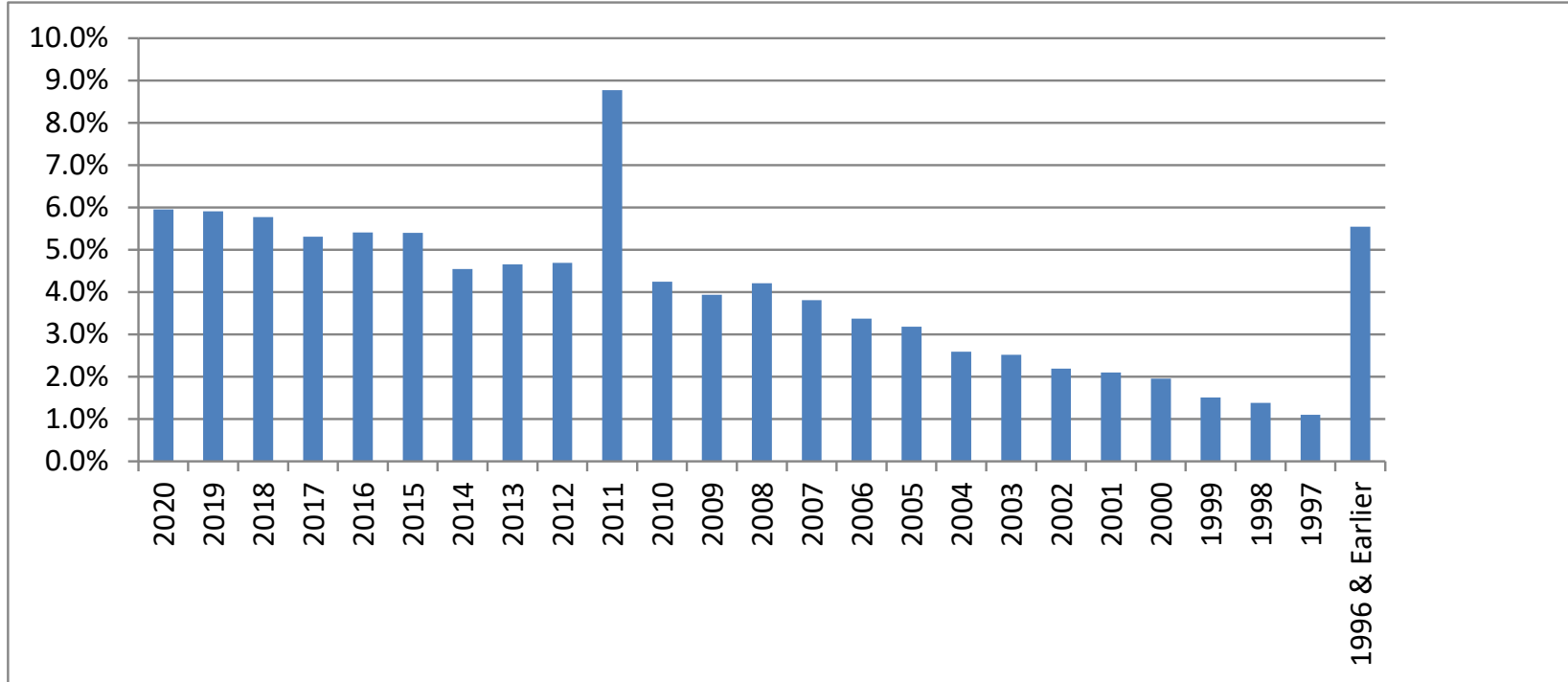
# Dividend Remaining (as a Percentage of Total Benefit) by Year of Retirement



(Report-7)

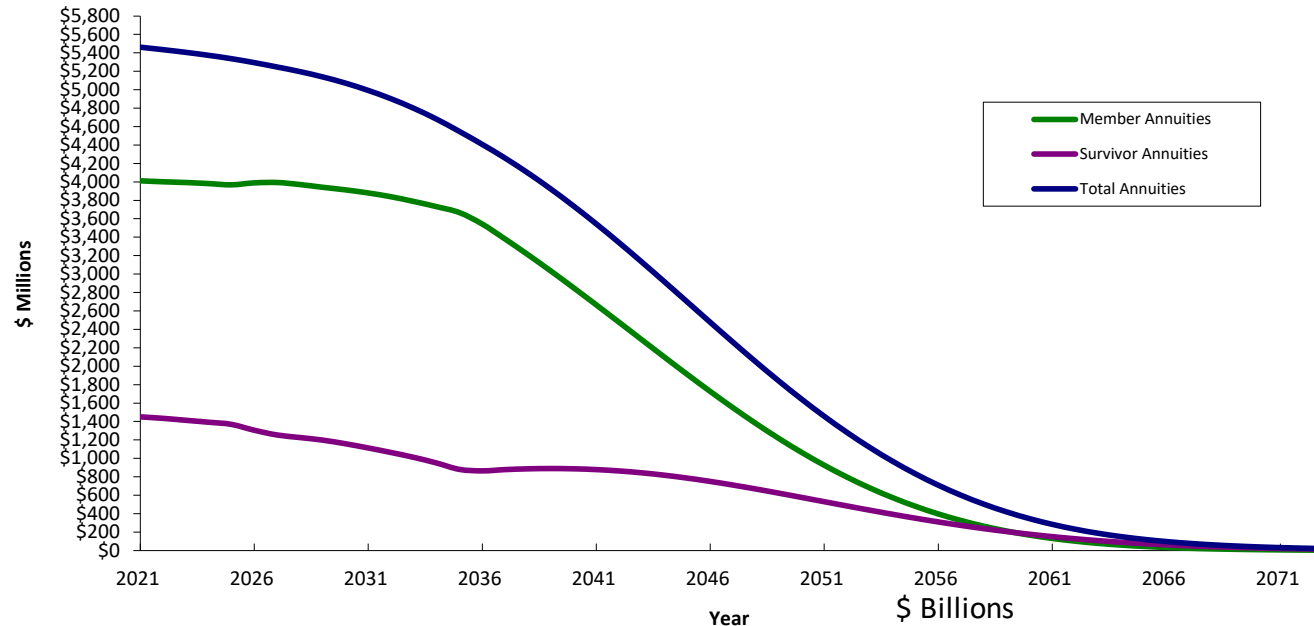


# Liabilities (as a Percentage of Total) by Year of Retirement



(Report-7)

# Projected Future Core Annuities



	<u>With Expected Dividends</u>	<u>Without Expected Dividends</u>
Total Future Benefit Payments	\$132.9	\$102.3
Present Assets	63.8	63.8
Future Investment Return Needed	69.1	38.5

Based upon the assumptions used in the valuation, future dividends are expected to be approximately 1.9% per year. Of course actual dividends will be based upon actual future investment return and the operation of the Market Recognition Account.

(Report-13)



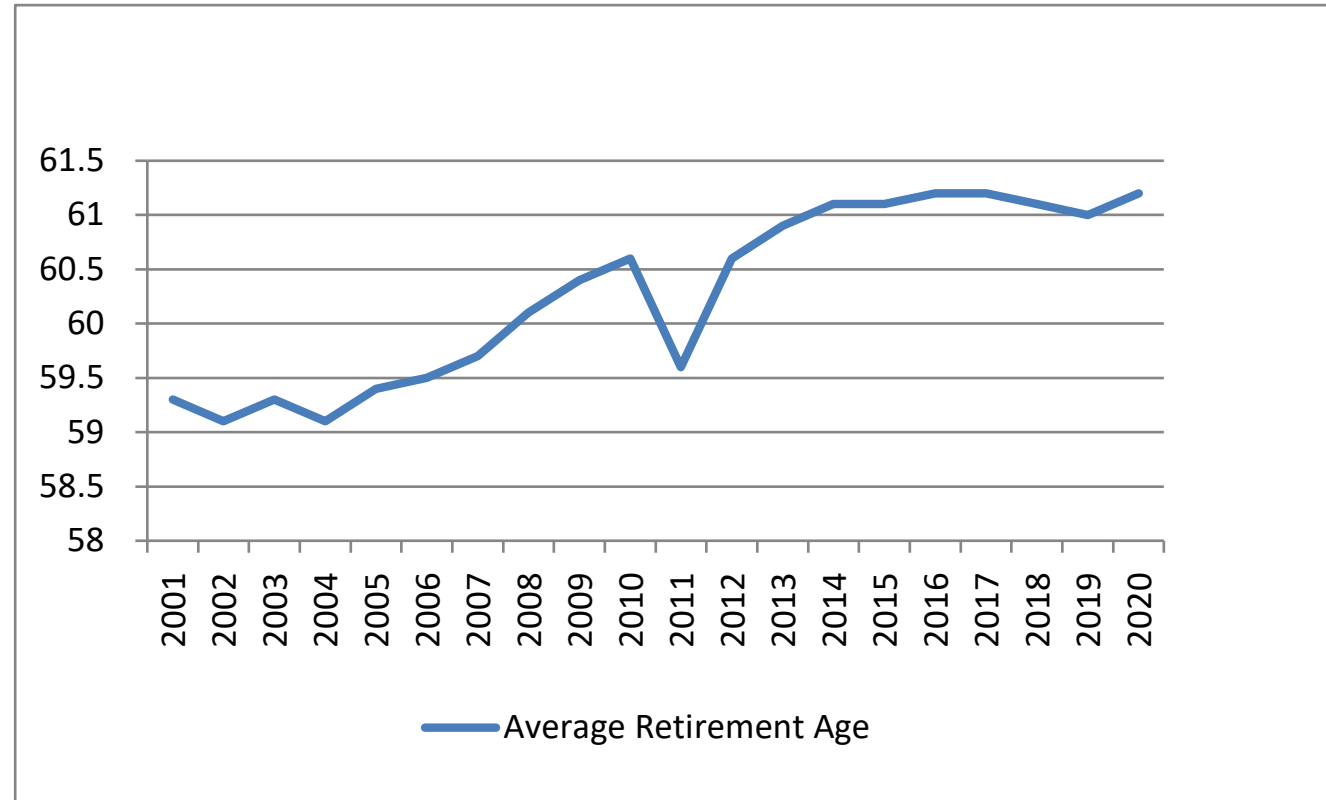
# Primary Sources of Variable Adjustment

	<u>% of APV</u>
1. SWIB net of fee investment return	17.5%
2. Adjustment to published effective rate	<u>0.5%</u>
3. Published effective earnings rate	18.0%
4. Adjustment to relate earnings to average variable annuity fund balance	<u>(0.4)%</u>
5. Earnings rate based on average balance	17.6%
6. Expected change before adjustments: $(1.176)/1.05-1$	12.0%
7. Adjustment to relate average asset to ending liability	0.4%
8. Carryover from last year due to timing of distribution, accounting adjustments and truncation	0.5%
9. Experience study/mortality reserve adjustment	(0.2)%
10. Experience and other effects	0.3%
11. Statutory adjustment: (truncate to whole percent)	<u>0.0%</u>
<b>12. Variable annuity change: (6)+(7)+(8)+(9)+(10)+(11)</b>	<b>13.0%</b>



# Average Retirement Age

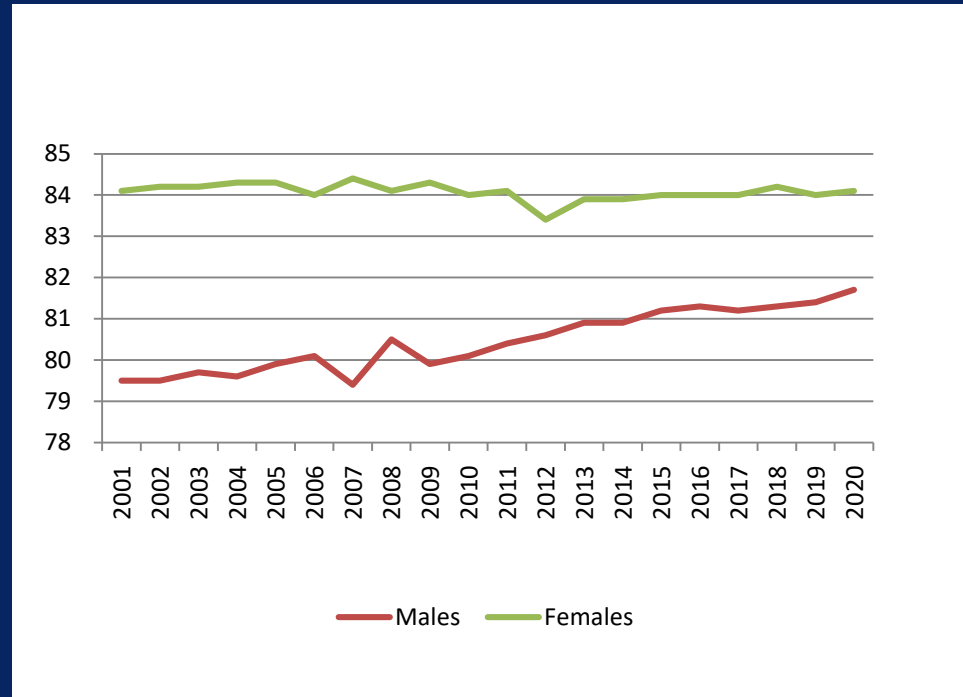
---





# Average Age at Death

Average age at death, while an interesting statistic, is not a proper measure of life expectancy, because it does not include people who have not yet died. The expected age at death for a 65-year-old is 86.4 for males and 88.7 for females.



# Summary of Mortality Experience

<u>Valuation</u>	<u>Expected Deaths</u>	<u>Actual Deaths</u>	<u>Difference</u>	<u>Death Rate</u>
12/31/2017	4,896	4,850	(46)	0.0250
12/31/2018	4,937	5,032	95	0.0251
12/31/2019	5,147	5,147	0	0.0250
12/31/2020	5,384	5,788	404	0.0273

Of the 404 excess expected deaths in 2020, 374 (or 92%) of these were at ages 85 and older.

The liability for members 85 and older is approximately 4% of total retiree liability.



# Summary of Mortality Experience

---

- Actual number of deaths in 2020 increased by about 12%
- Majority of deaths occurred at older ages where liability is smaller
- Overall impact on Core Dividend relatively small
- Only one year of experience at this point
- Typically need three to five years of data to determine if this will be part of a longer term trend or an isolated short term event

# Comparative Statement – Core

Valuation Date	Number	\$ Millions			Ratio	Change in		
		Annual Annuities	Fund Balance	Actuarial Reserve		Annuities		CPI*
						Average	Maximum	
2011	167,453	\$ 3,842.0	\$ 40,411.5	\$ 42,078.3	0.960	(4.0)%	(7.0)%	3.0 %
2012	173,655	3,806.3	40,591.6	41,852.4	0.970	(3.0)%	(9.6)%	1.7 %
2013	180,056	3,800.7	44,273.2	42,300.5	1.047	4.7 %	4.7 %	1.5 %
2014	185,605	4,102.3	47,135.7	45,790.7	1.029	2.9 %	2.9 %	0.8 %
2015	191,795	4,364.9	49,147.0	48,897.5	1.005	0.5 %	0.5 %	0.7 %
2016	197,647	4,523.1	51,972.0	50,941.4	1.020	2.0 %	2.0 %	2.1 %
2017	203,202	4,747.0	54,900.0	53,590.0	1.024	2.4 %	2.4 %	2.1 %
2018	211,126	5,040.9	56,493.8	56,629.3	0.998	0.0 %	0.0 %	1.9 %
2019	216,944	5,183.7	59,138.4	58,157.0	1.017	1.7 %	1.7 %	2.3 %
2020	222,723	5,423.2	63,805.8	60,691.1	1.051	5.1 %	5.1 %	1.4 %
<b>35-Year Average</b>						<b>3.6 %</b>		<b>2.5 %</b>
<b>20-Year Average</b>						<b>1.3 %</b>		<b>2.0 %</b>
<b>10-Year Average</b>						<b>1.2 %</b>		<b>1.7 %</b>
<b>5-Year Average</b>						<b>2.2 %</b>		<b>2.0 %</b>

\*Based on December CPI-U67 index.

(Report-21)

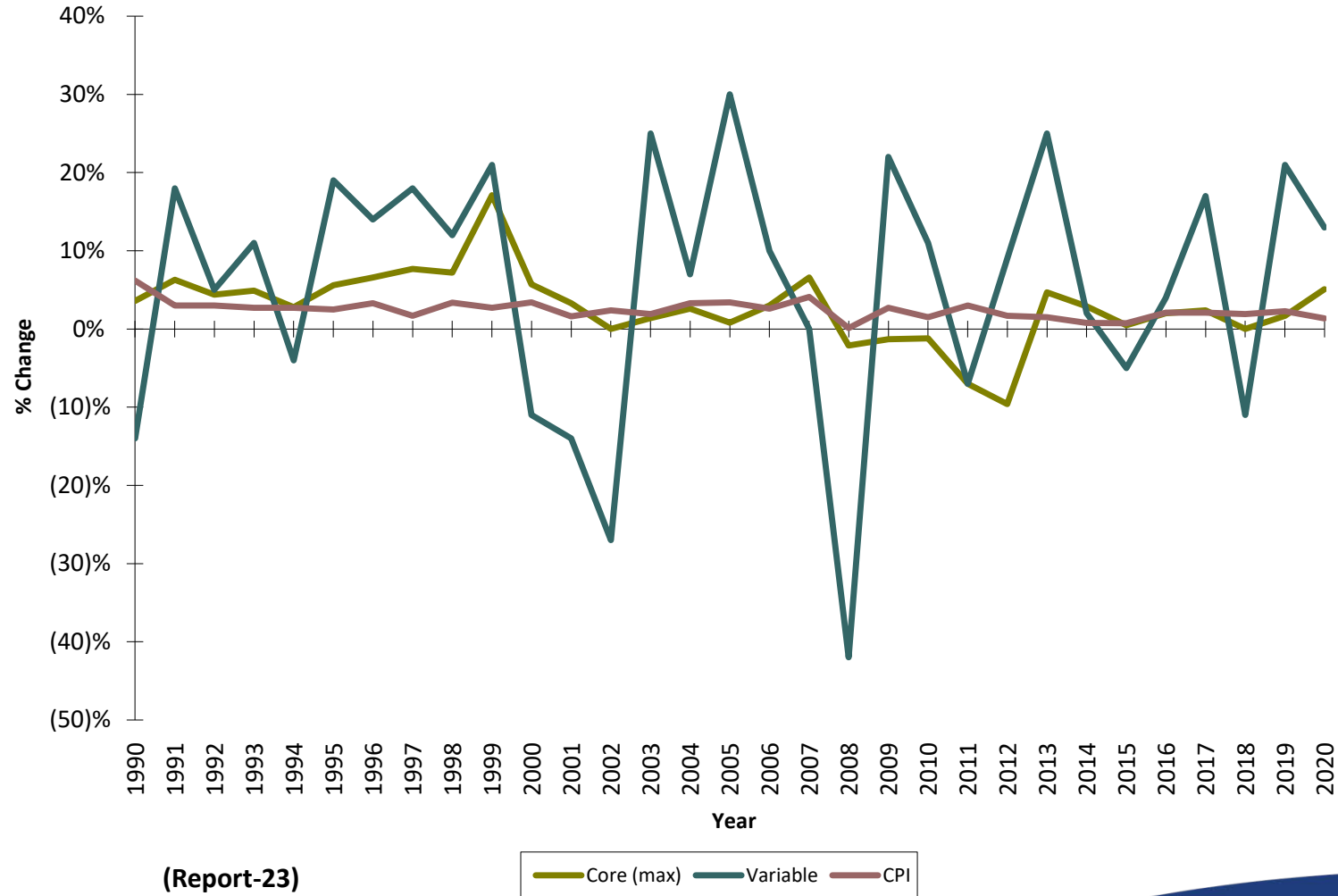
# Comparative Statement – Variable

Valuation Date	Number	\$ Millions				Change in	
		Annual Annuities	Fund Balance	Actuarial Reserve	Ratio	Annuities	CPI*
2011	38,949	\$ 330.3	\$ 3,197.9	\$ 3,462.9	0.924	(7.0)%	3.0 %
2012	39,873	304.6	3,463.9	3,169.6	1.093	9.0 %	1.7 %
2013	40,317	324.5	4,187.3	3,347.0	1.251	25.0 %	1.5 %
2014	39,420	386.5	3,995.4	3,917.1	1.020	2.0 %	0.8 %
2015	40,152	387.8	3,704.8	3,910.1	0.947	(5.0)%	0.7 %
2016	40,647	363.6	3,792.0	3,645.1	1.040	4.0 %	2.1 %
2017	40,877	369.9	4,324.9	3,682.1	1.175	17.0 %	2.1 %
2018	41,187	425.8	3,738.6	4,207.6	0.891	(10.0)%	1.9 %
2019	41,777	379.7	4,519.4	3,728.6	1.212	21.0 %	2.3 %
2020	41,753	449.7	4,954.0	4,383.0	1.130	13.0 %	1.4 %
<b>35-Year Average</b>						<b>4.1 %</b>	<b>2.5 %</b>
<b>20-Year Average</b>						<b>1.6 %</b>	<b>2.0 %</b>
<b>10-Year Average</b>						<b>6.3 %</b>	<b>1.7 %</b>
<b>5-Year Average</b>						<b>8.4 %</b>	<b>2.0 %</b>

*\*Based on December CPI-U67 index.*

**(Report-22)**

# History of % Dividend Adjustments



# Looking Ahead

---

- As of the December 31, 2020 valuation, there are about \$11.1 billion in unrecognized asset gains in the Core fund
  - About half of this will be applied to annuitant reserve
  - Will be recognized over the next four years
  - May increase probability of future positive annuity adjustments
- We will continue monitoring various plan risks, including dividend liability risk

# WRS POTENTIAL DIVIDEND LIABILITY RISK METRIC



# Dividend Risk Measure (MRA)

---

- Dividend Liability (after Dividend adjustment in April) / Total Core Retiree Assets
- Example (2020)
  - Dividend Liability = 10.1 billion
  - Total Retiree Assets (Core) = 63.8 billion
  - Dividend Risk Measure =  $10.1/63.8 = 15.8\%$
- In other words, Retiree Assets (on MRA basis) would need to decrease by 15.8% to deplete the existing Dividend Liability

# Dividend Risk Measure (Market Value or MVA)

---

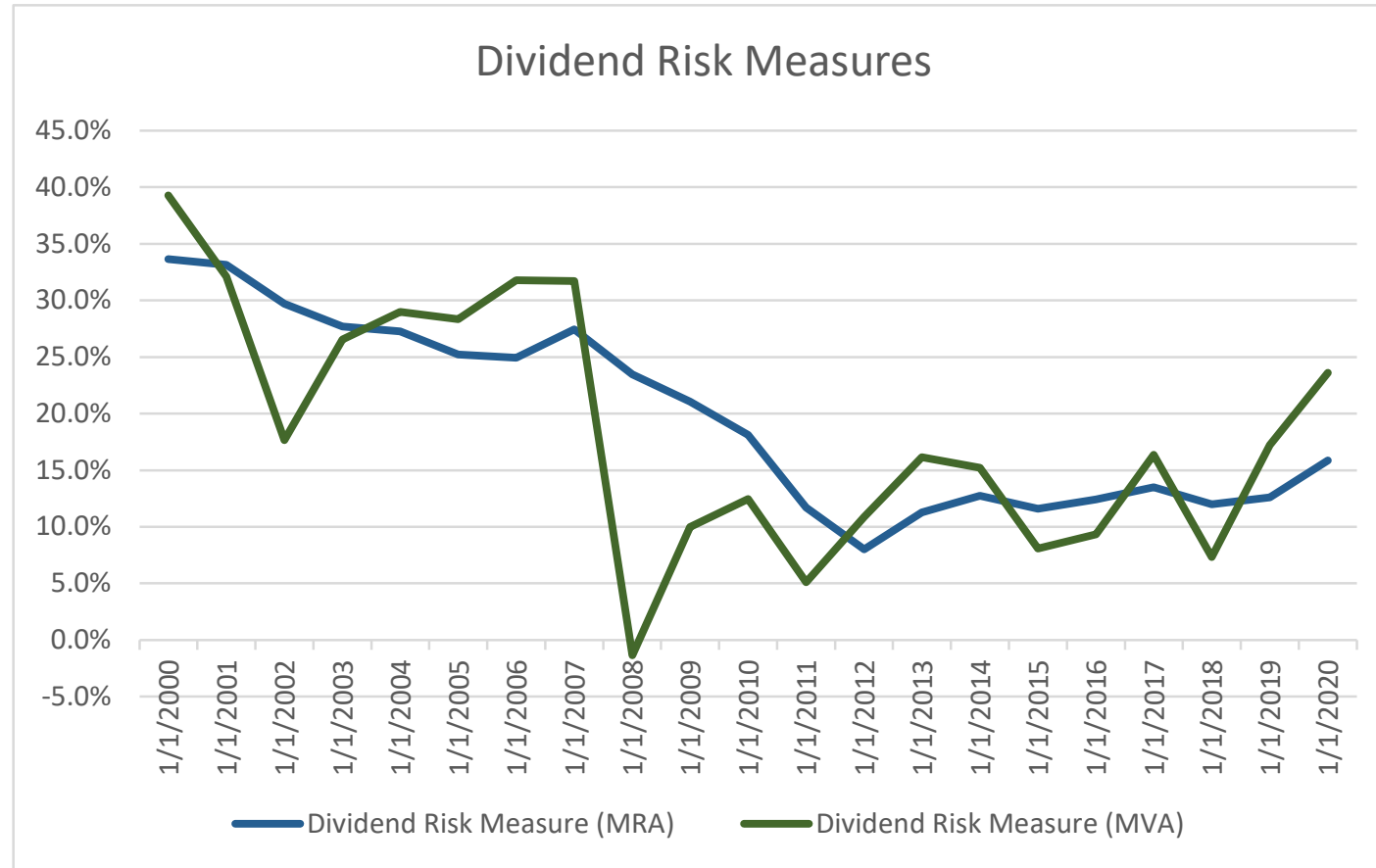
- Dividend Liability (on MVA basis) / Total Core Retiree Assets (on MVA basis)
- Example (2020)
  - Dividend Liability = 10.1 billion
  - Total Retiree Assets (Core) = 63.8 billion
  - Ratio of MVA to MRA = .908
  - Total Retiree Assets (MVA) =  $63.8 / .908 = 70.3$  billion
  - Dividend Liability (MVA) =  $10.1 + 70.3 - 63.8 = 16.6$  billion
  - Dividend Risk Measure (MVA) =  $16.6 / 70.3 = 23.6\%$
- In other words, Retiree Assets (on MVA basis) would need to decrease by 23.8% to deplete the existing Dividend Liability (on MVA basis)

# Why are Both Measures Important?

---

- Dividend Risk Measure (MRA basis) tells us where we are right now
- Dividend Risk Measure (MVA basis) tells us where we are heading directionally absent any future gains or losses
- Example (2008)
  - Dividend Risk Measure (MRA) = 23.5%
  - Dividend Risk Measure (MVA) = -1.2%
- In other words, in 2008, absent future returns above 5%, the dividend liability would have been depleted within 5 years

# Dividend Risk Measures History\*



\*Higher values are desirable



## Disclaimers

- This presentation shall not be construed to provide tax advice, legal advice or investment advice.
- This presentation is intended to be used in conjunction with the actuarial valuation report for retired lives issued on March 4, 2021. This presentation should not be relied on for any purpose other than the purpose described in the valuation report.
- 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.
- This presentation expresses the views of the authors and does not necessarily express the views of Gabriel, Roeder, Smith & Company.

# Core Fund Annuity Adjustments and Effective Rate Projections

Joint Meeting of the Employee Trust Funds,  
Teachers Retirement and Wisconsin Retirement Boards  
Item 3C - March 25, 2021

Cindy Klimke-Armatoski, CPA  
Chief Trust Financial Officer

Division of Trust Finance



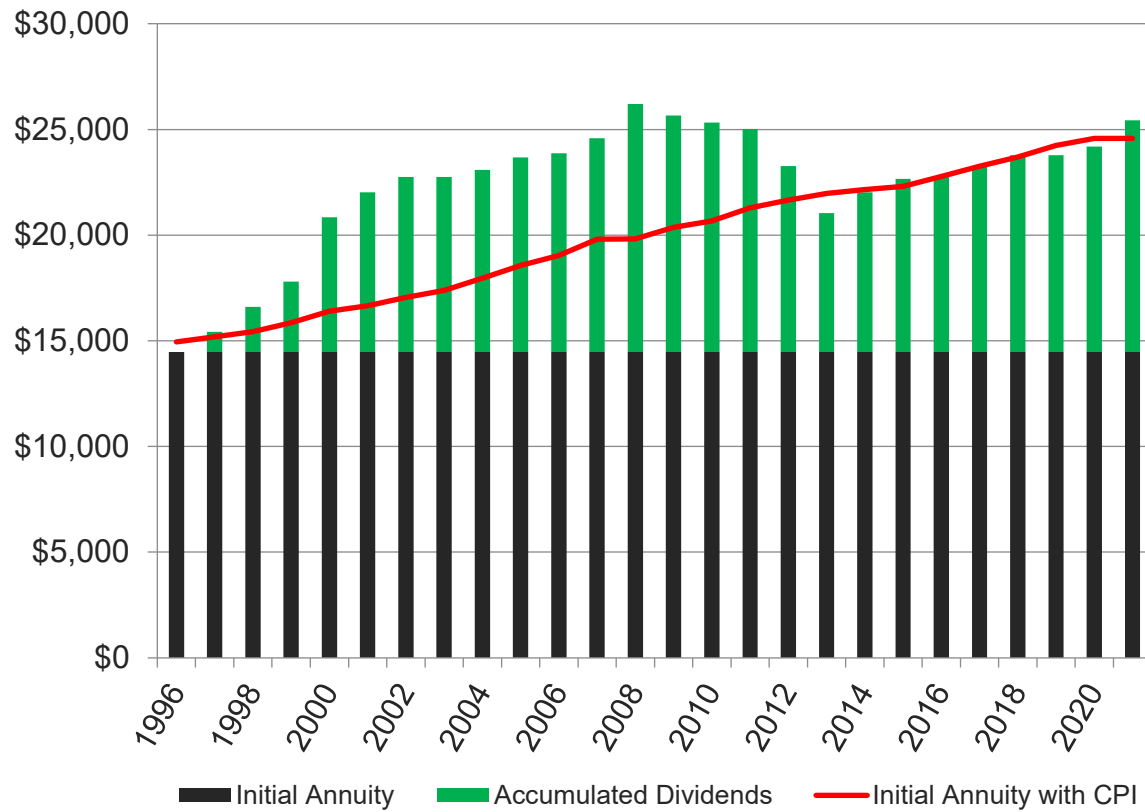
# Current Value of Annuities\*

If You Retired in	A \$1,000 Core Annuity is Receiving	The Annual Rate of Increase is	A \$1,000 Variable Annuity is Receiving	The Annual Rate of Increase is	The Annual Change in CPI is
2016	\$1,116	2.2%	\$1,497	8.4%	2.0%
2011	\$1,209	1.9%	\$1,839	6.3%	1.7%
2006	\$1,209	1.3%	\$1,588	3.1%	1.9%
2001	\$1,209	1.0%	\$1,374	1.6%	2.0%
1996	\$1,758	2.3%	\$2,229	3.3%	2.1%

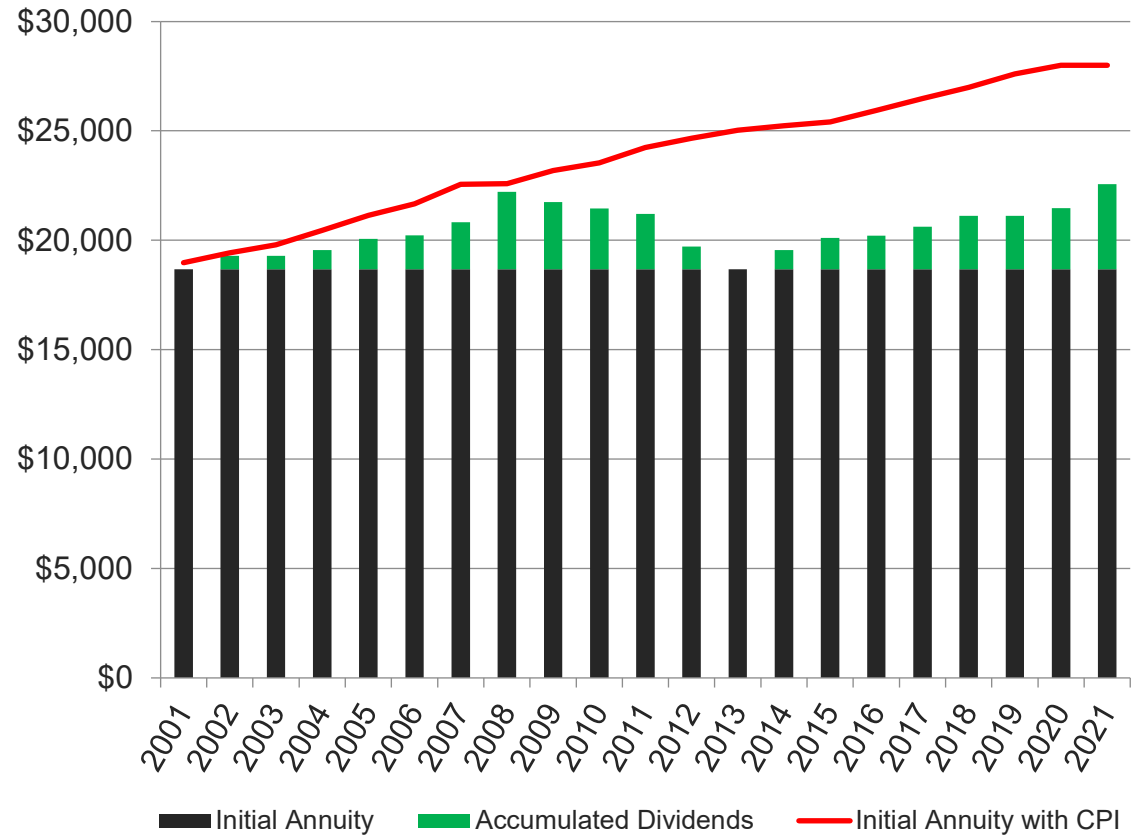
\*Including annuity adjustments (if any) to be made effective April 1, 2021

# A Look at Core Annuity Increases versus Cost of Living

## Change in Value of 1996 Annuity (3,727 annuitants)



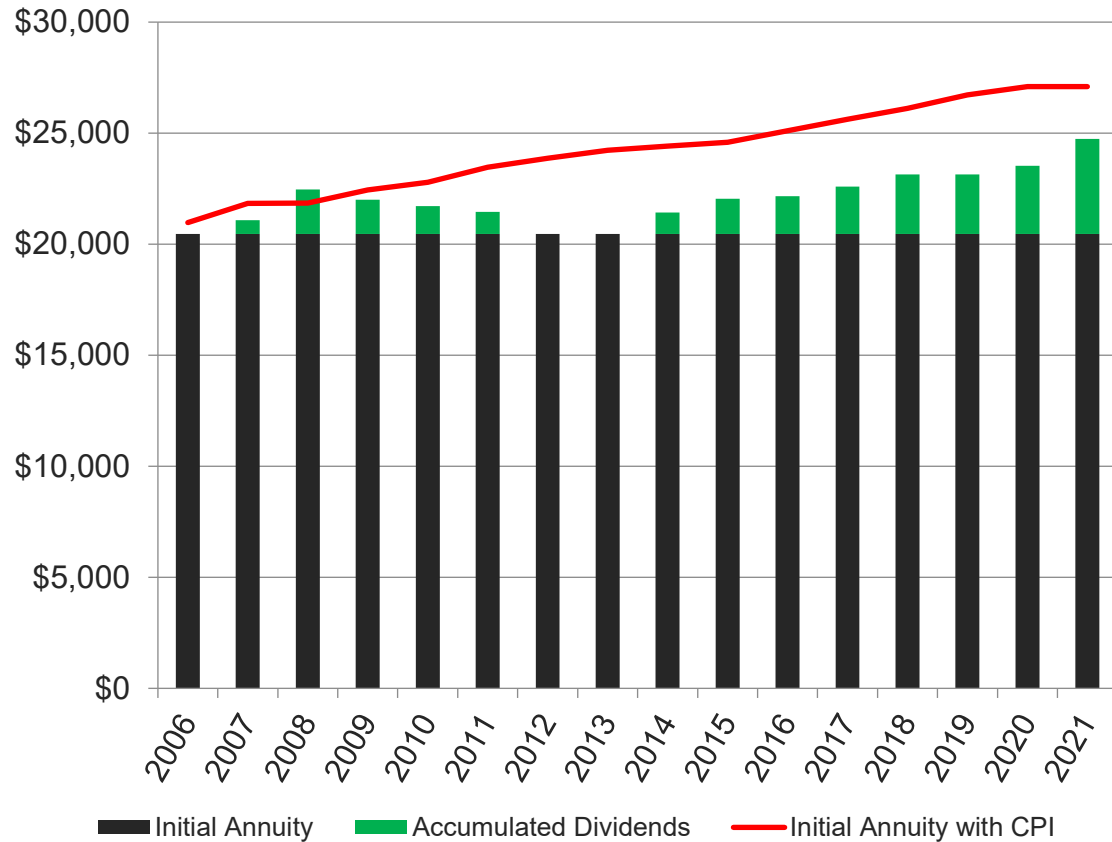
## Change in Value of 2001 Annuity (6,285 annuitants)



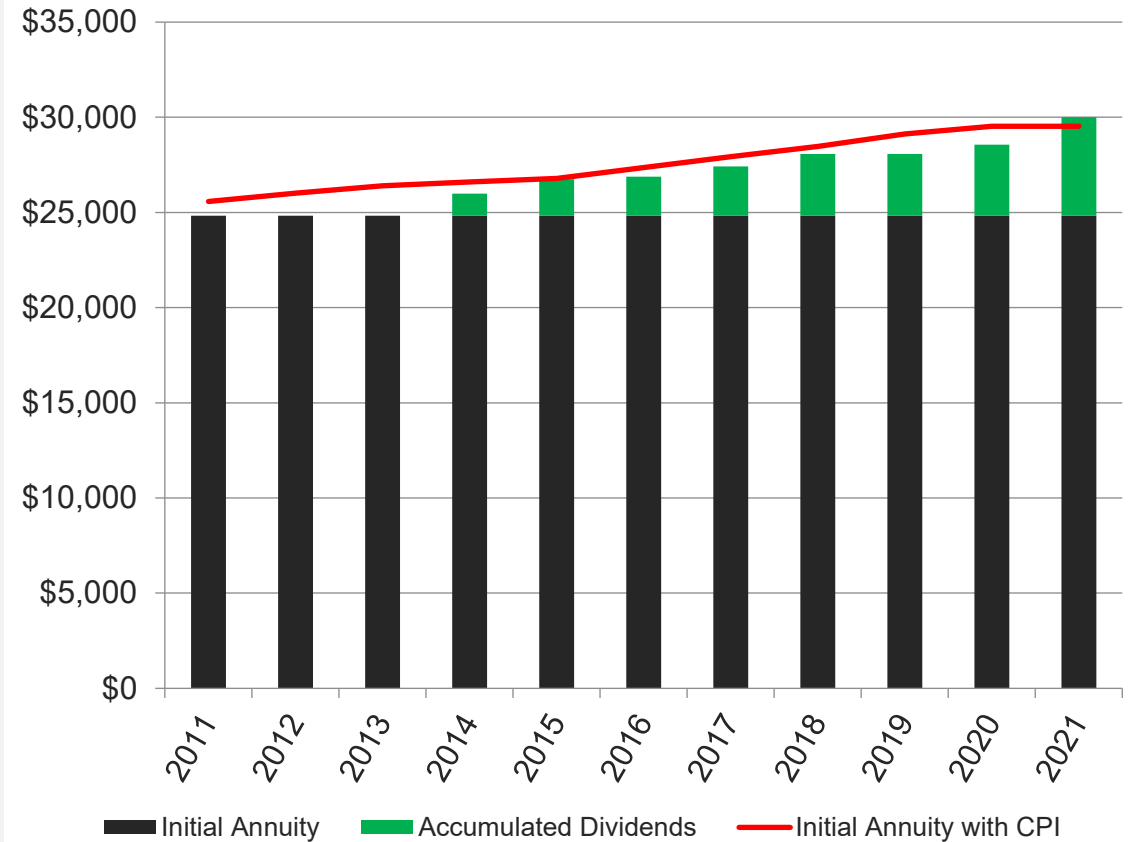


# A Look at Core Annuity Increases versus Cost of Living

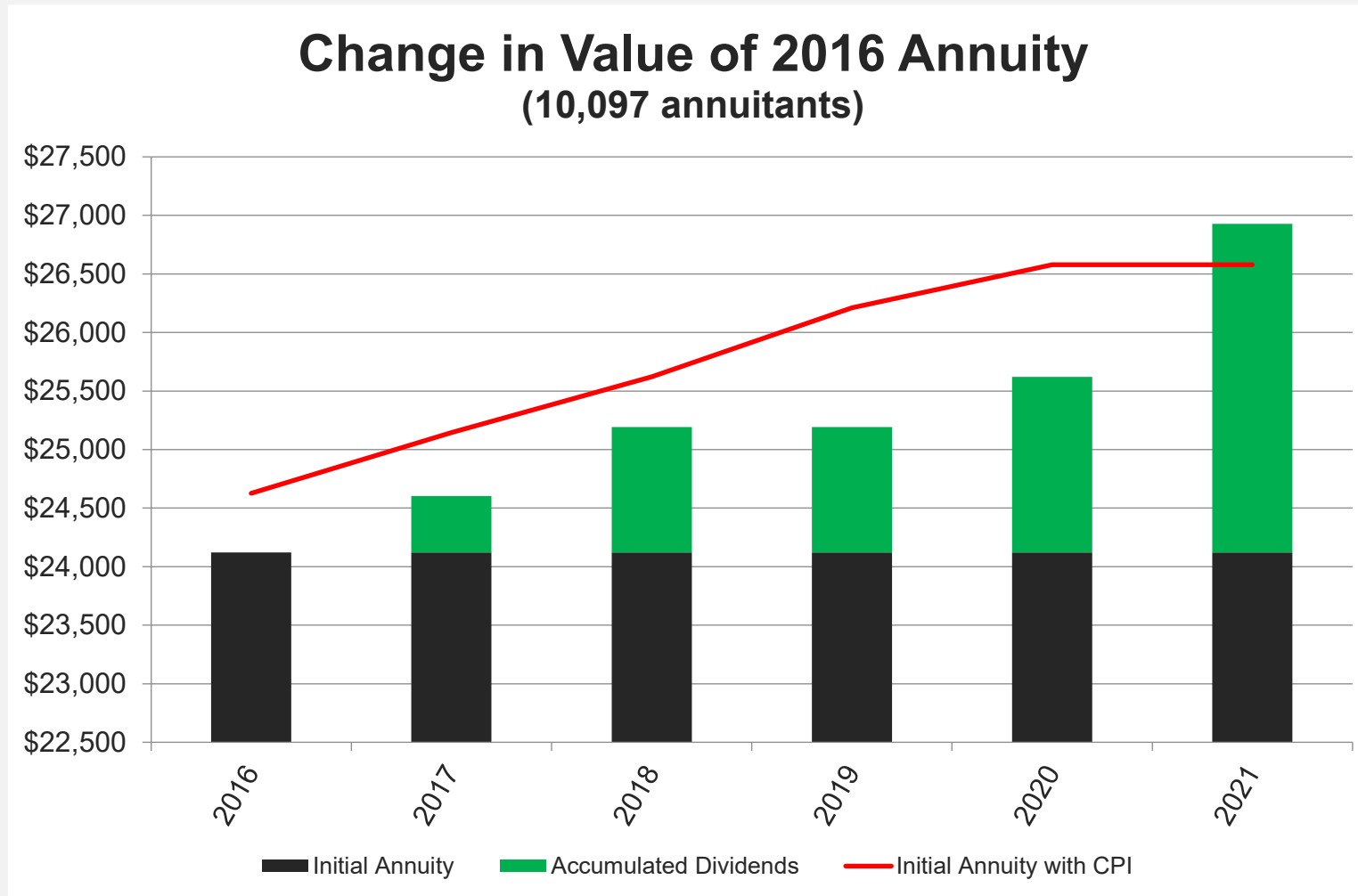
## Change in Value of 2006 Annuity (7,865 annuitants)



## Change in Value of 2011 Annuity (15,068 annuitants)



# A Look at Core Annuity Increases versus Cost of Living





# Annuity Adjustment Projections

# Annuity Adjustment Projections

- Projections only. Several assumptions and estimates used.
- Only an actuarial valuation can accurately calculate the annuity adjustments.
- Useful for anticipating the magnitude, not exact amount, of future adjustments.

# The Basics

- Annuities will be increased if annuity reserve surplus provides at least a 0.5% increase. Annuities will be reduced if annuity reserve shortfall would require at least a -0.5% adjustment.
- Negative adjustments can only reduce increases granted in prior years. A core annuity cannot be reduced below the original value.
- In calculating annuity adjustments, a 5.0% assumed investment return is used to fund the original benefit. Thus, in a world where experience matched assumptions each year perfectly, annuitants would receive a 2.0% adjustment each year (7.0% less 5.0%). We don't live in that world.

# Assumptions

- Based on preliminary 2020 Core Trust Fund net of fee investment return.
- 0.2% per year is reserved for mortality improvement and is not available for annuity adjustments.
- The projections include 2017 - 2020 investment gains and losses carried forward in the Market Recognition Account (MRA).

# Market Recognition Account

- Investment gains / losses are “smoothed” through the Market Recognition Account (MRA):
  - The MRA is intended to give recognition to long-term changes in asset values while minimizing the impact of short-term fluctuations in the capital markets;
  - Investment gains equal to the assumed rate of 7.0% are recognized;
  - The difference between actual gains or losses and the assumed rate is spread equally over 5 years.

# Investment Gain/Loss to be Recognized in Future Years

Year Earned	Year to Be Recognized (\$ millions)					Core Net of Fee Investment Return
	2020	2021	2022	2023	2024	
2021		?	?	?	?	?
2020	1,774	1,774	1,774	1,774	1,774	15.21
2019	2,204	2,204	2,204	2,204		19.36
2018	(2,049)	(2,049)	(2,049)			(3.68%)
2017	1,461	1,461				15.82%
2016	120					8.29%
Totals	3,510	3,390	1,929	3,978	1,774	



# Result of 7.0% Investment Return in 2021 - 2024

	2020	2021	2022	2023	2024
SWIB Net Investment Return	15.21%	7.0%	7.0%	7.0%	7.0%
Effective Rate	10.9%	10.5% to 10.9%	9.0% to 9.4%	10.7% to 11.1%	8.7% to 9.1%
Average Annuity Adjustment	5.1%	4.6% to 5.0%	3.2% to 3.6%	4.8% to 5.2%	3.0% to 3.4%
Dividend Liability*	~\$10.1b	~\$12.7b	~\$14.3b	~\$17.2	~\$18.7

\* Dividend liability is the present value of previously granted post-retirement annuity adjustments. Some refer to this as the 'dividend reserve' although it is not a separate reserve. The funds are part of the annuity reserve.

# Result of 0% Investment Return in 2021 and 7.0% in 2022 - 2024

	2020	2021	2022	2023	2024
SWIB Net Investment Return	15.21%	0%	7.0%	7.0%	7.0%
Effective Rate	10.9%	8.9% to 9.3%	7.4% to 7.8%	9.3% to 9.7%	7.3% to 7.7%
Average Annuity Adjustment	5.1%	3.1% to 3.5%	1.7% to 2.1%	3.4% to 3.8%	1.6% to 2.0%
Dividend Liability*	~\$10.1b	~\$11.7b	~\$12.4b	~\$14.2b	~\$14.8b

\* Dividend liability is the present value of previously granted post-retirement annuity adjustments. Some refer to this as the 'dividend reserve' although it is not a separate reserve. The funds are part of the annuity reserve.

# Result of -18% Investment Return in 2021 and 7.0% in 2022 - 2024

	2020	2021	2022	2023	2024
SWIB Net Investment Return	15.21%	(18%)	7.0%	7.0%	7.0%
Effective Rate	10.9%	4.7% to 5.1%	3.2% to 3.6%	5.0% to 5.4%	2.8% to 3.2%
Average Annuity Adjustment	5.1%	(.5%) to 0%	(2.3%) to (1.9%)	(.8%) to (.5%)	(2.7%) to (2.3%)
Dividend Liability*	~\$10.1b	~\$9.2b	~\$7.3b	~\$6.7b	~\$4.7b

\* Dividend liability is the present value of previously granted post-retirement annuity adjustments. Some refer to this as the 'dividend reserve' although it is not a separate reserve. The funds are part of the annuity reserve.



**Questions?**

---

# Thank you

---



[etf\\_wi](#)



[etf.wi.gov](#)



ETF E-mail Updates



608-266-3285  
1-877-533-5020





# Customer Service Update

Joint Meeting of the Employee Trust Funds,  
Teachers Retirement and Wisconsin Retirement Boards  
Item 4A - March 25, 2021

Anne Boudreau, Deputy Administrator

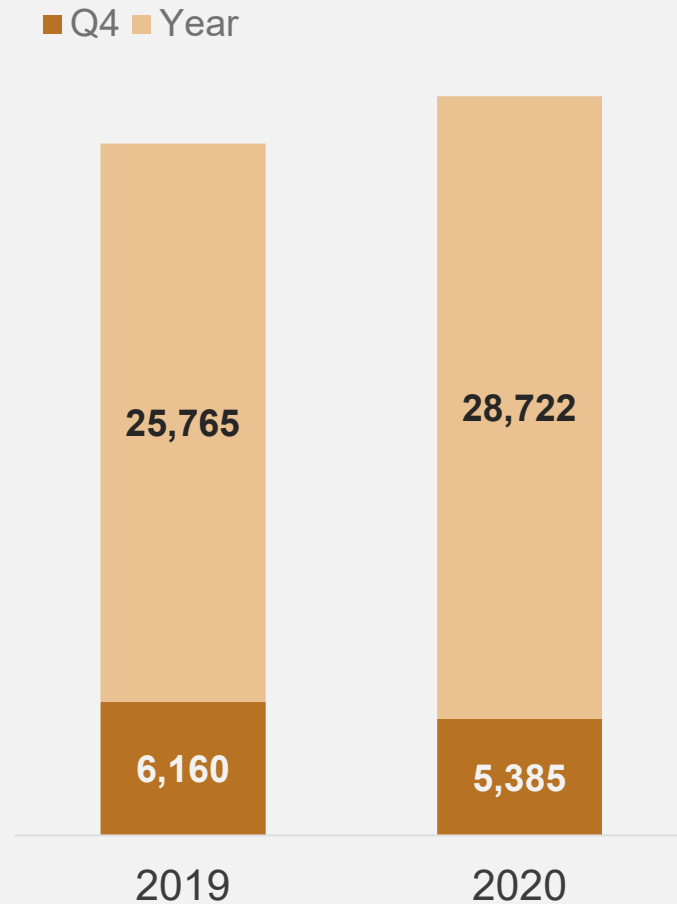
Division of Retirement Services





# Work Volume and Production

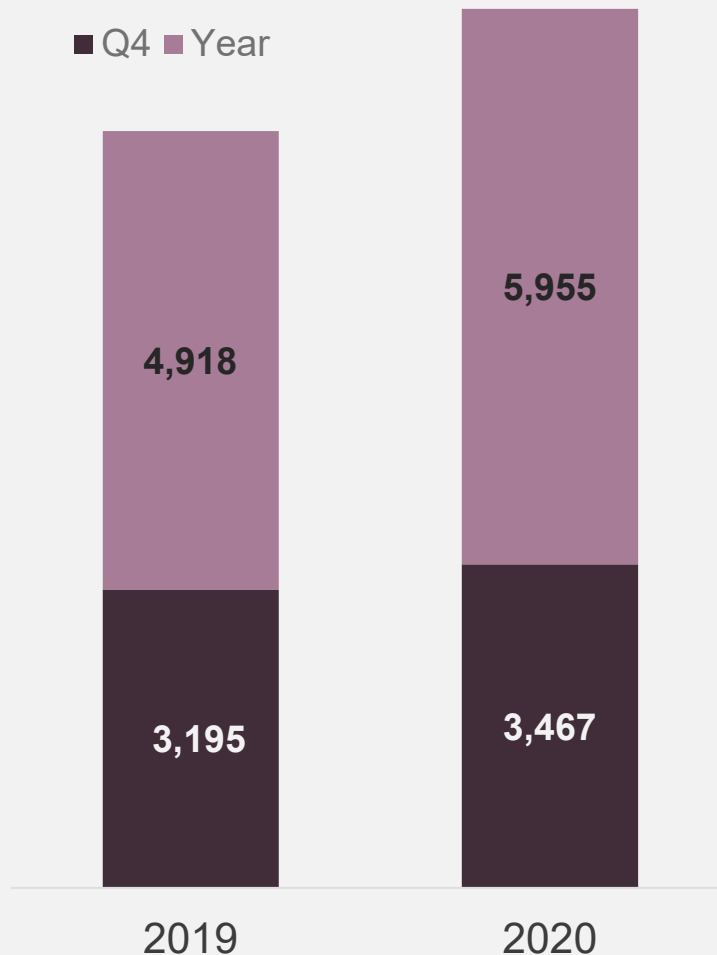
# Retirement Trends



## Retirement Estimates

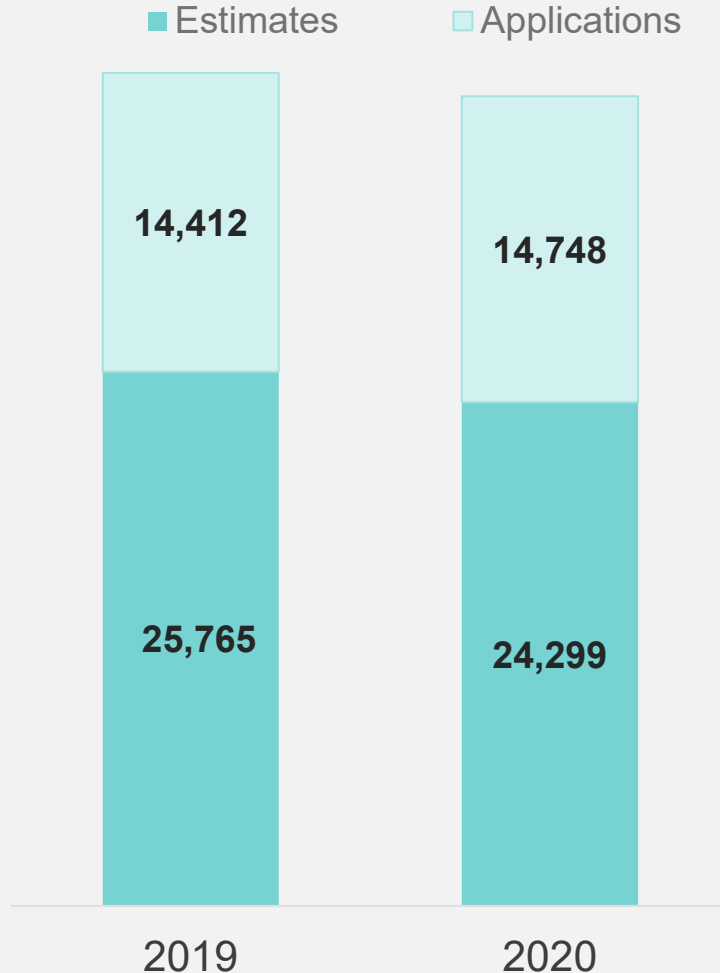


# Retirement Trends



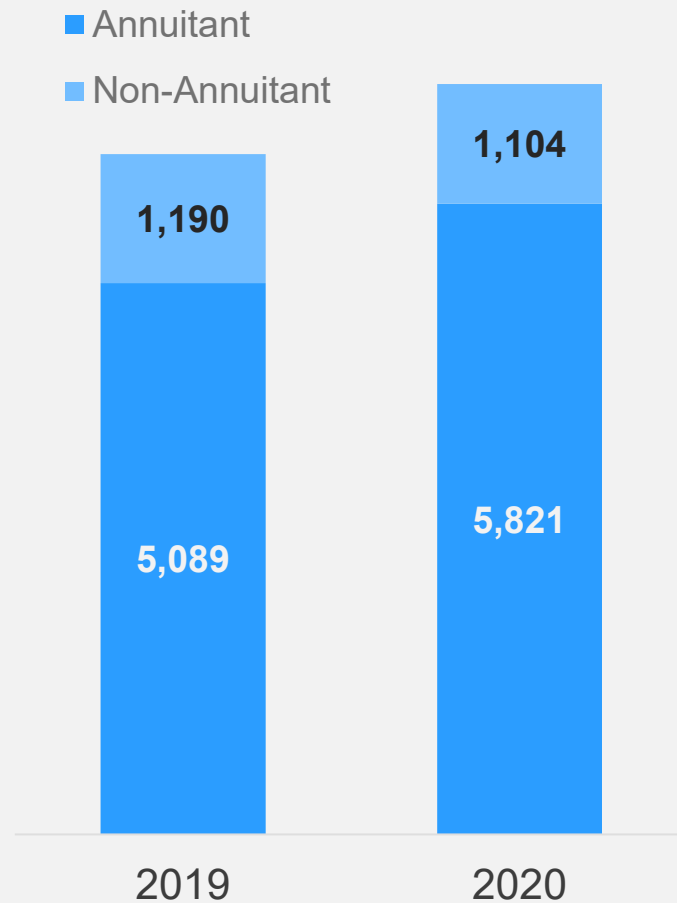
## Retirement Applications

# Retirement Trends



**Adjusted  
Totals**

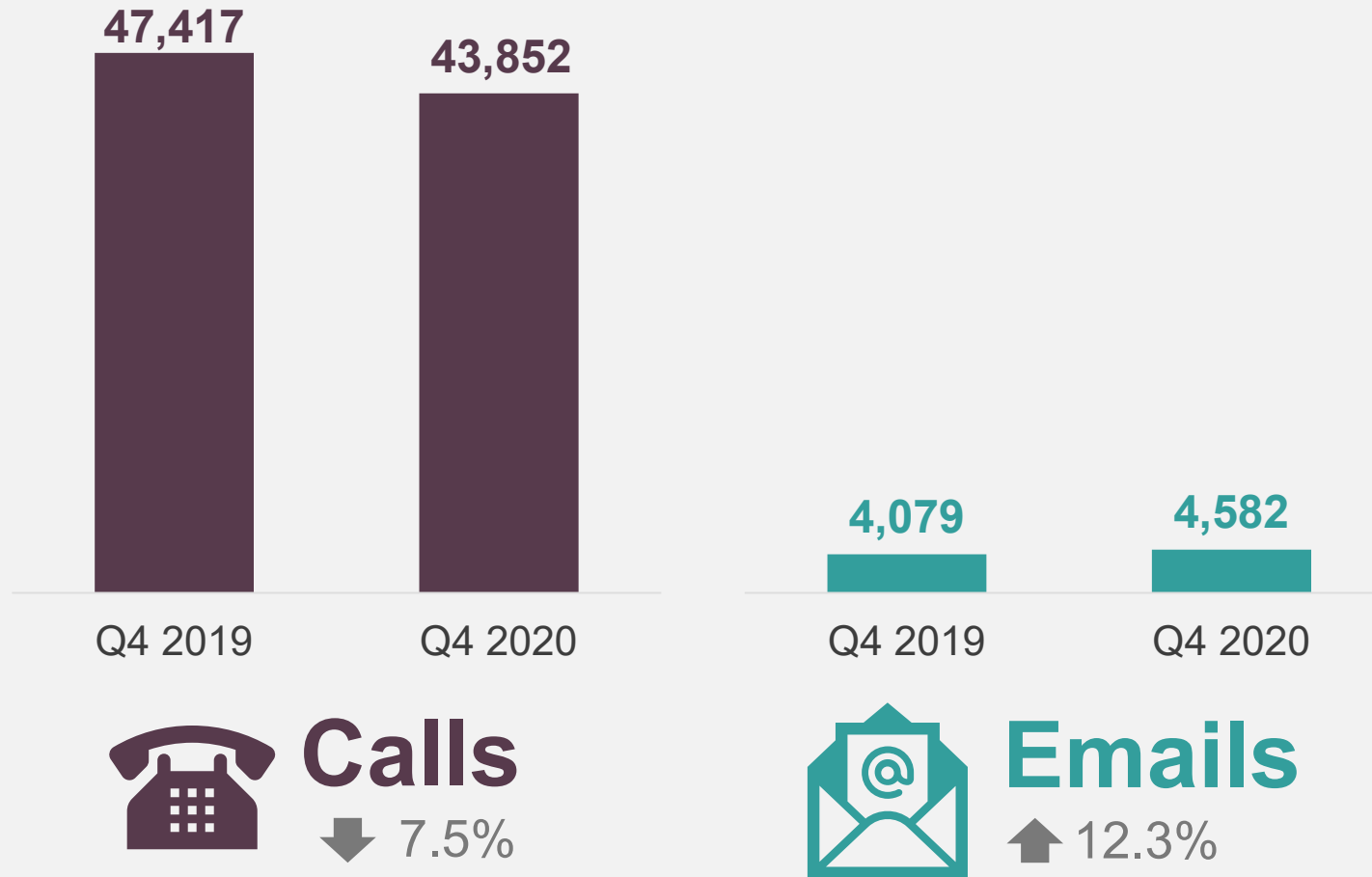
# Member Deaths



**Deaths  
Reported**

↑ 10.3%

# Member Contacts to ETF





# ETF Projects and Accomplishments

# Process Improvement: Purchase of Other Governmental Service



Member Education  
Up Front



Conservation of  
Resources



Better Customer  
Satisfaction

# Process Improvement: Training Plan for Staff



Holistic View



Agile Staff



Better Customer  
Satisfaction



**Questions?**



---

# Thank you

---



[wi\\_etf](#)



[etf.wi.gov](#)



ETF E-mail Updates



608-266-3285  
1-877-533-5020

# 2020 Annual Disability Statistics

Joint Meeting of the Employee Trust Funds,  
Teachers Retirement, and Wisconsin Retirement Boards  
Item 4B – March 25, 2021

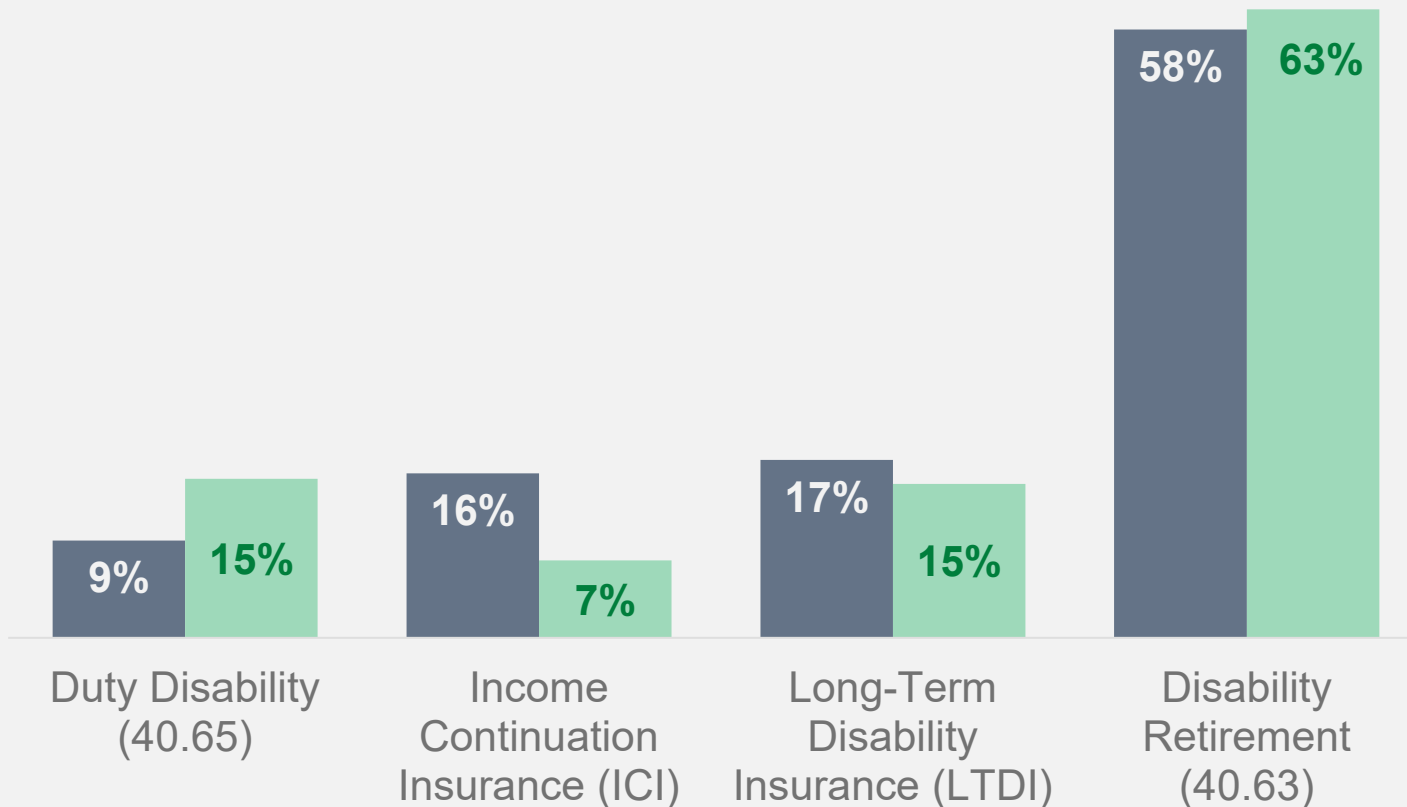
Jim Guidry, Director

Benefit Services Bureau



# Disability Programs

■ Share of benefit recipients   ■ Share of benefit payments



**\$241.5 million**

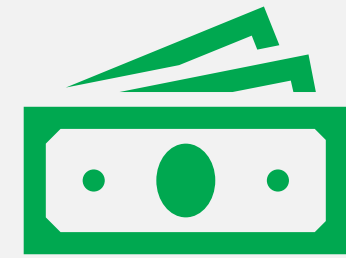
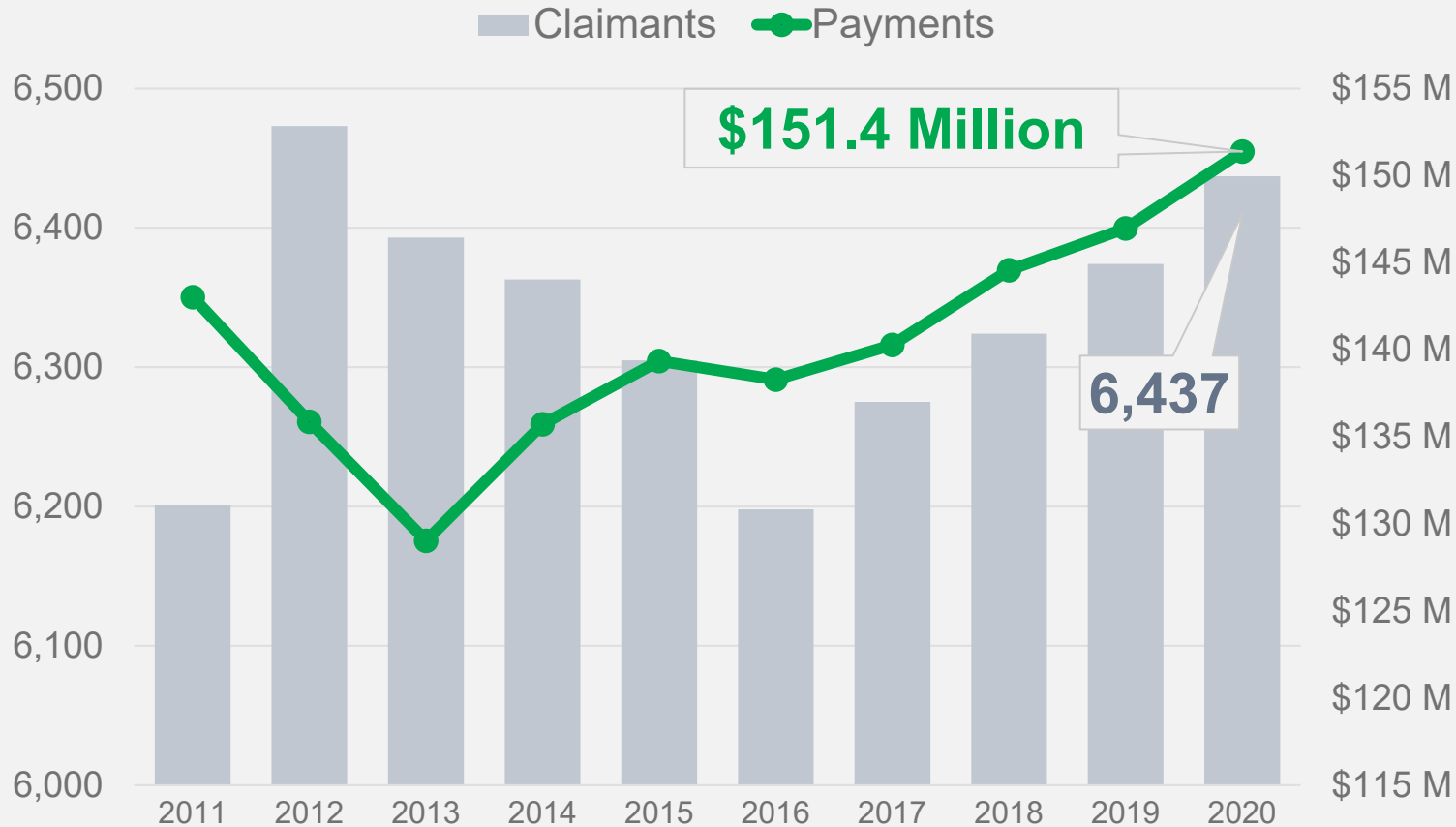
annual benefit payments



**11,085**

separate claims

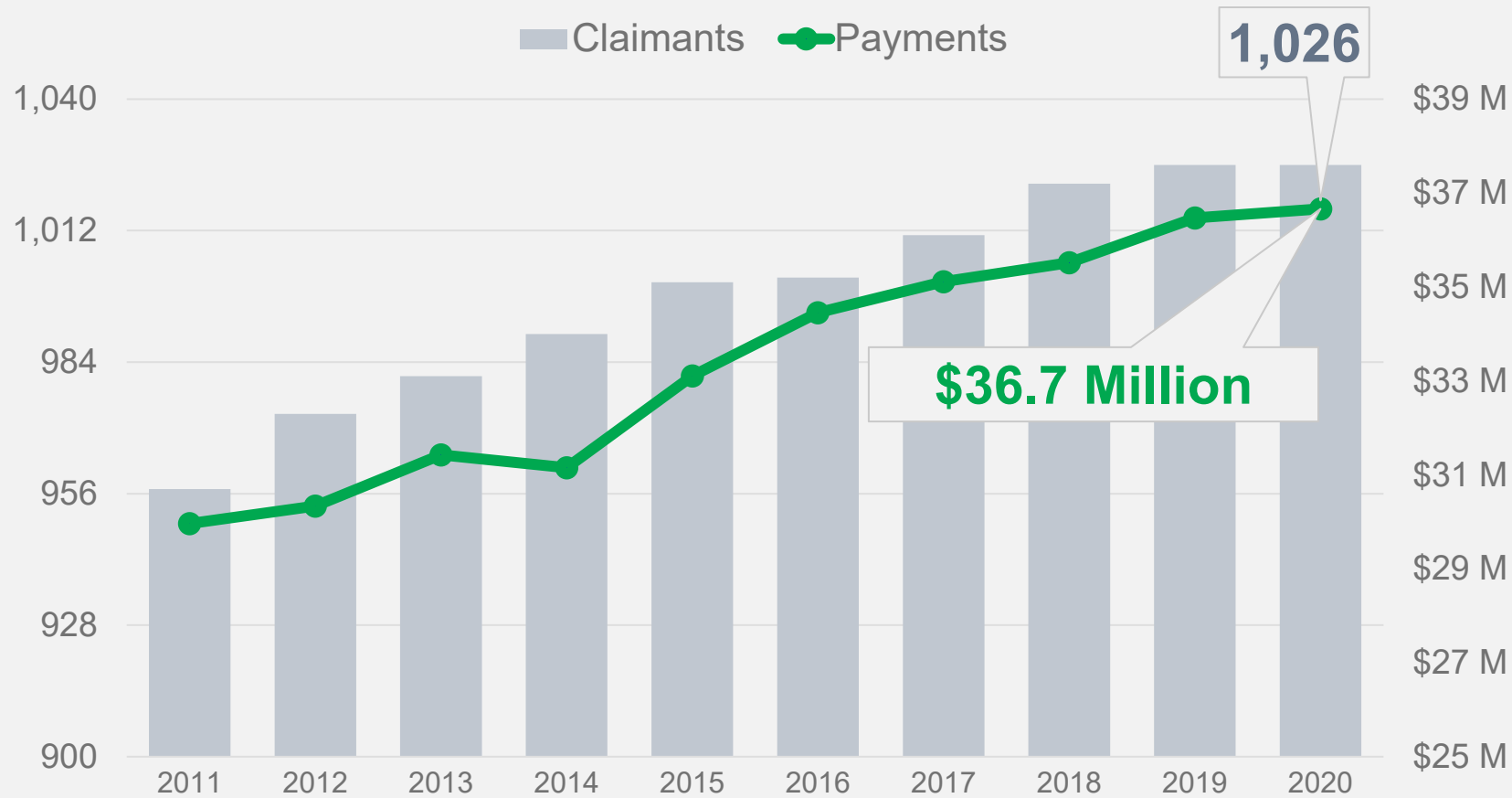
# Disability Retirement (40.63)



**\$1,960/month**  
2020 average benefit

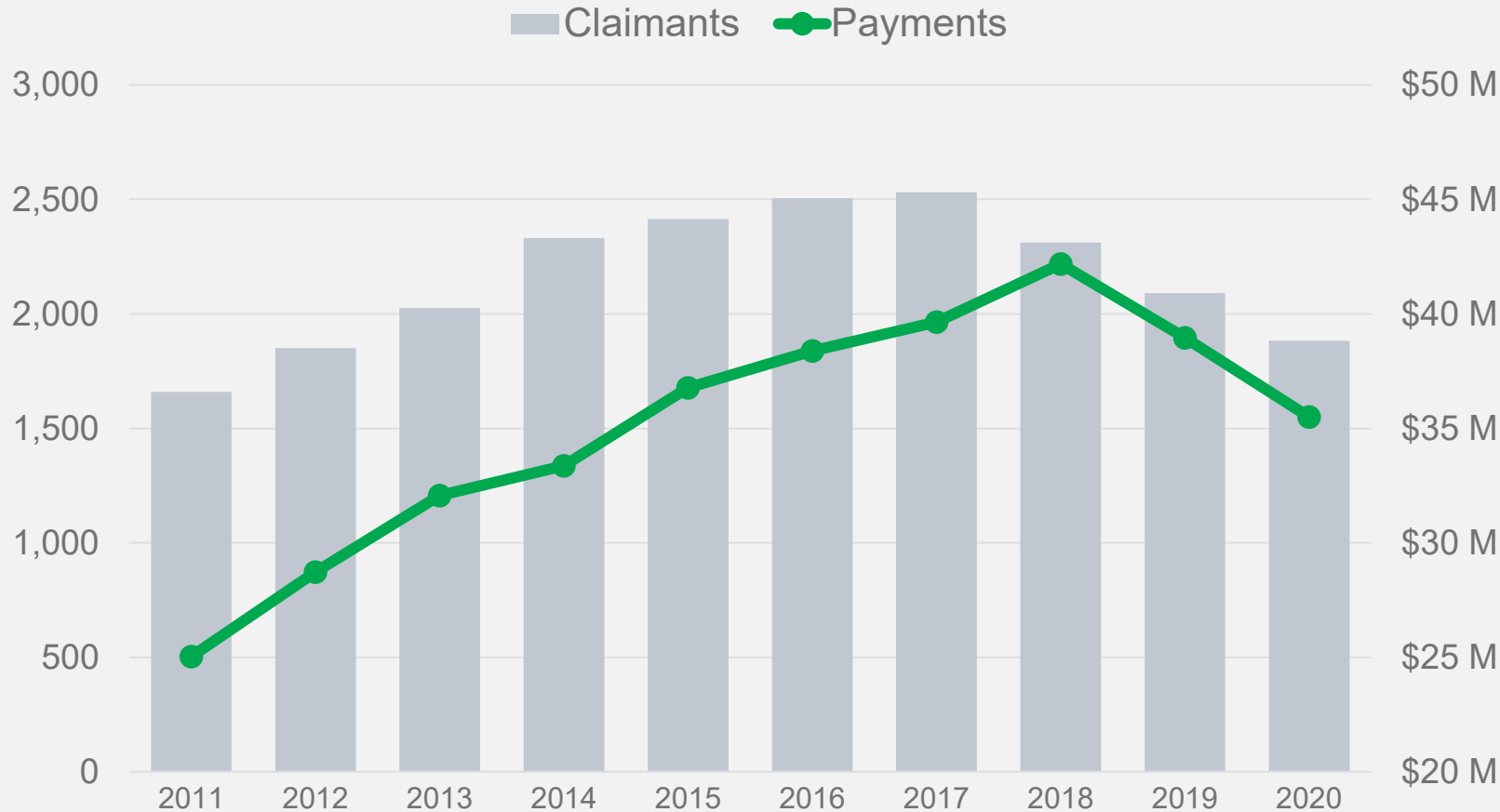
Benefit payments and claim increases reflect re-opening of the program

# Duty Disability (40.65)



**\$2,978/month**  
2020 average benefit

# Long-Term Disability Insurance (LTDI)



32-year run-out



Most claims terminated in 15 years or less

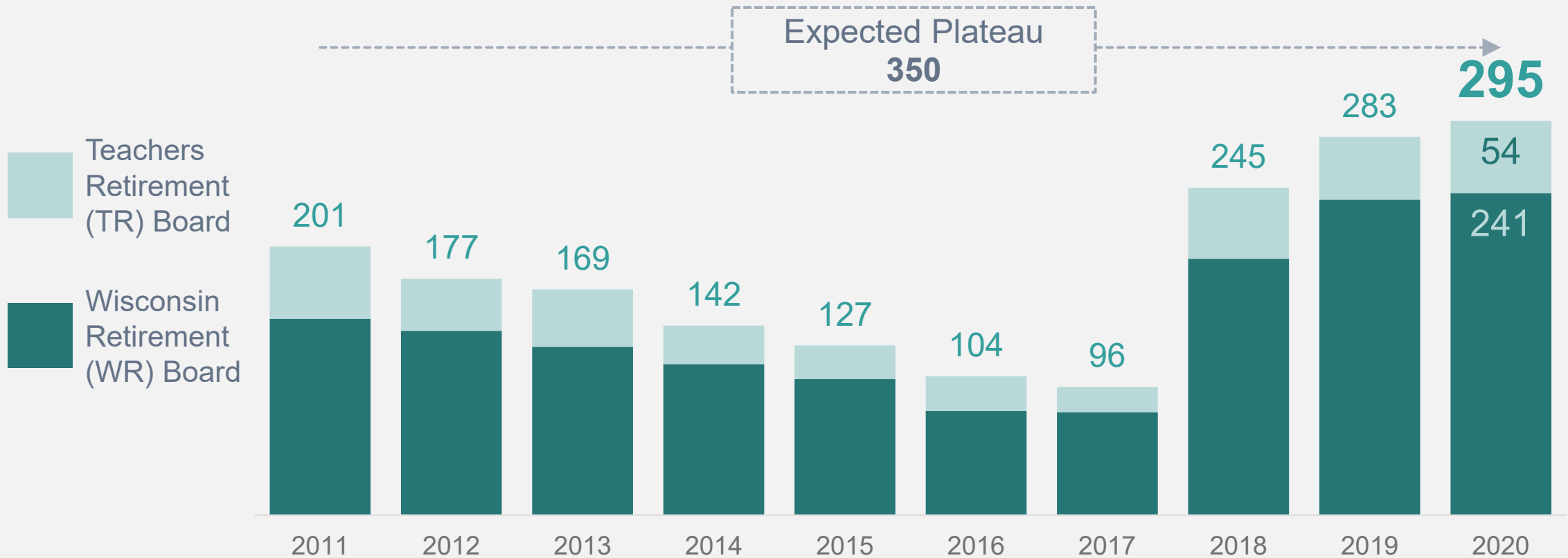


**25.6%**

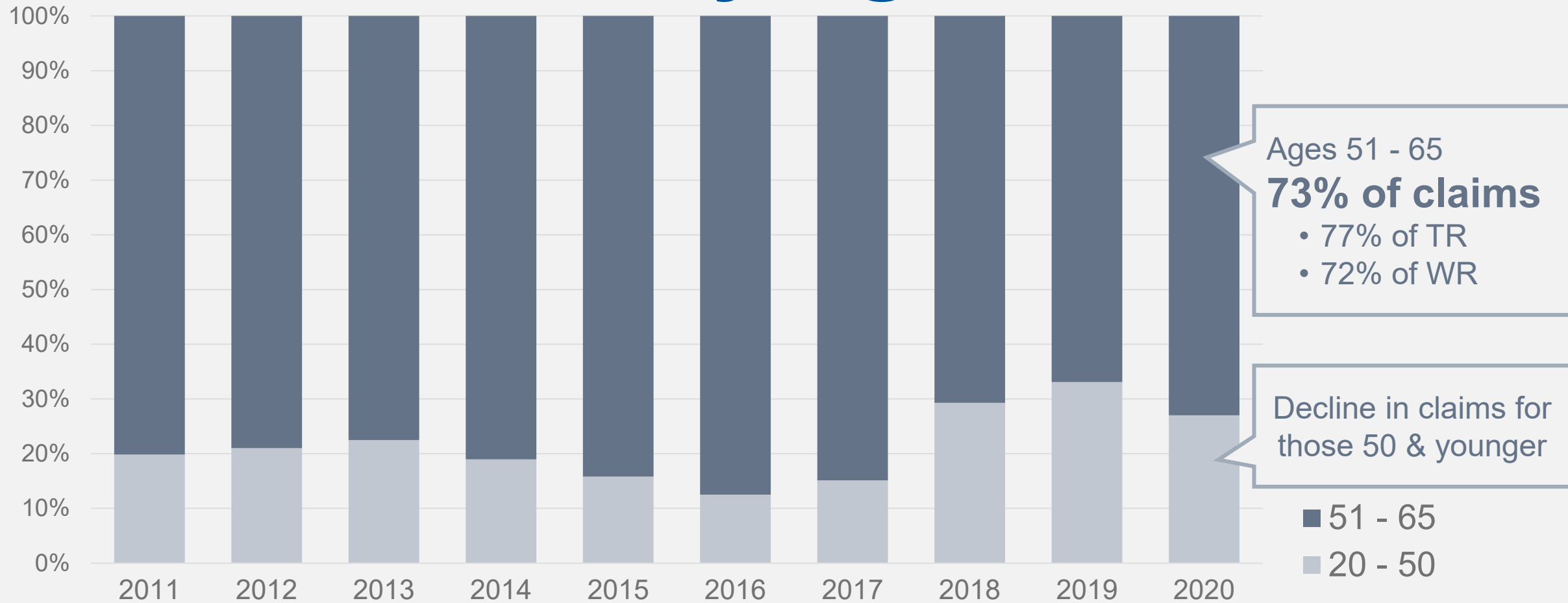
Open claims since closure

# Retirement Disability (40.63)

## Benefits Started

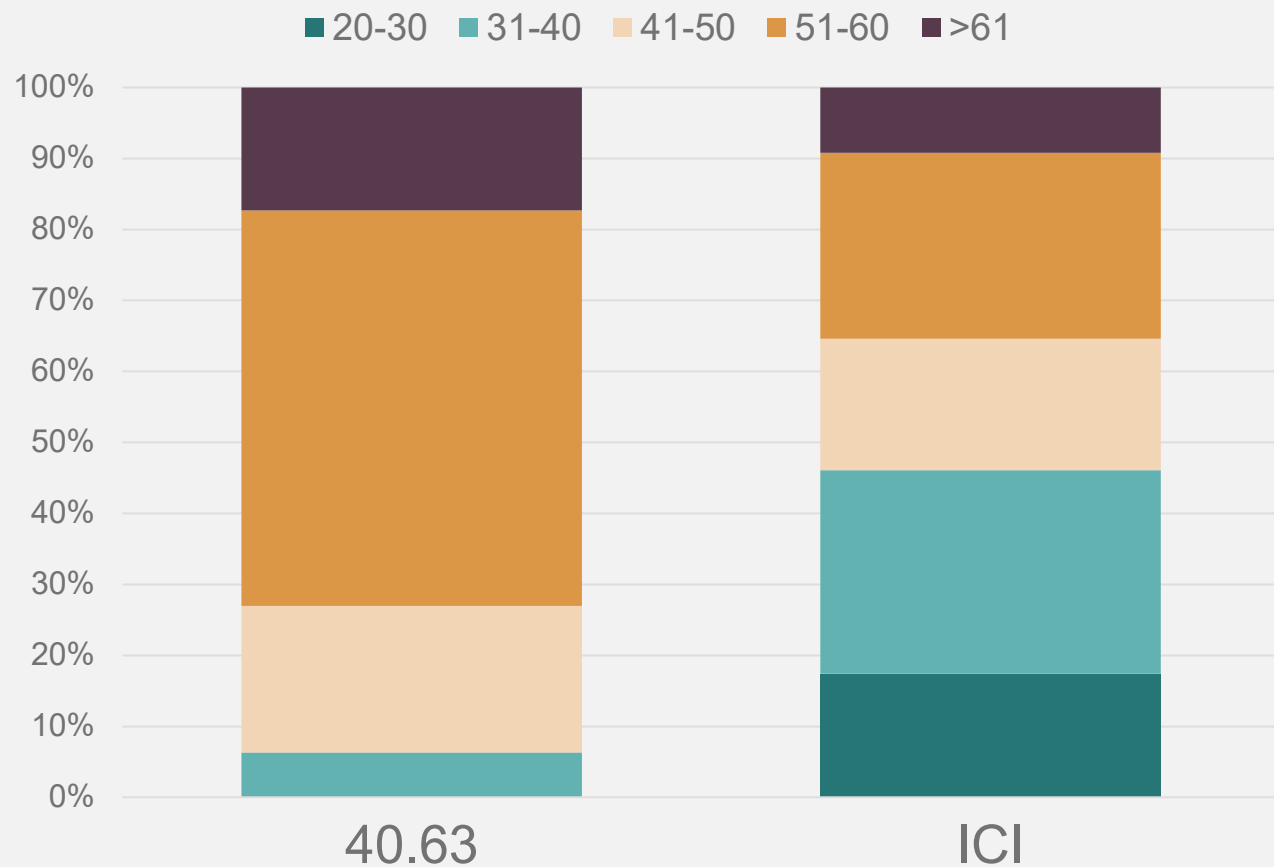


# 40.63 Claims by Age





# Age Distribution by Program



- ICI claims show broader age distribution than 40.63
- ICI includes short-term disabilities
  - Only 40% of claims for 51 & older
- Over time, 40.63 expected to resemble LTDI distribution

# Disability Types

## 40.63 TR Board

- Cancer
- Multiple Medical
- Neurology
- Mental Illness

## 40.63 WR Board

- Multiple Medical
- Neurology
- Cancer
- Orthopedic

## ICI

- Pregnancy
- Orthopedic
- Injury
- Mental Illness

## Duty Disability

- Musculo-skeletal
- Neurology
- Mental Illness
- Cancer

# Program Updates

- Income Continuation Insurance
  - Request to decouple sick leave from state ICI program not included in budget bill
  - Moving Board authority from GIB included in budget bill
  - ICI contract negotiations on going
  - Procedural audit 2018-2020 – Wipfli
- LTDI
  - Administrative rule changes – Eliminates obsolete language
  - Legislative review
- Duty Disability
  - Budget bill restores domestic partner death benefits for eligible DPs

The background is a dark blue gradient with numerous out-of-focus light spots in shades of blue and purple, creating a bokeh effect.

**Questions?**

# Stay Connected



etf\_wi



etf.wi.gov



ETF E-mail Updates



608-266-3285

1-877-533-5020



# Wisconsin Strong Program

Joint Meeting of the Employee Trust Funds,  
Teachers Retirement and Wisconsin Retirement Boards  
Item 4C - March 25, 2021

Mark Lamkins, Director  
Office of Communications



# Agenda

Overview of  
WI Strong

Core  
Components

Marketing &  
Education

KPIs

Timeline



# Overview of WI Strong



# NAST Grant Funding

- Partnered with DFI
- Competitive (one of 24)
- 1 year/\$100,000



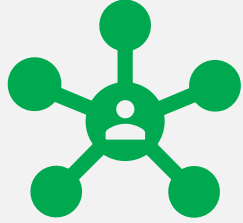
# WI Strong Vision



Holistic



Innovative



Engaging

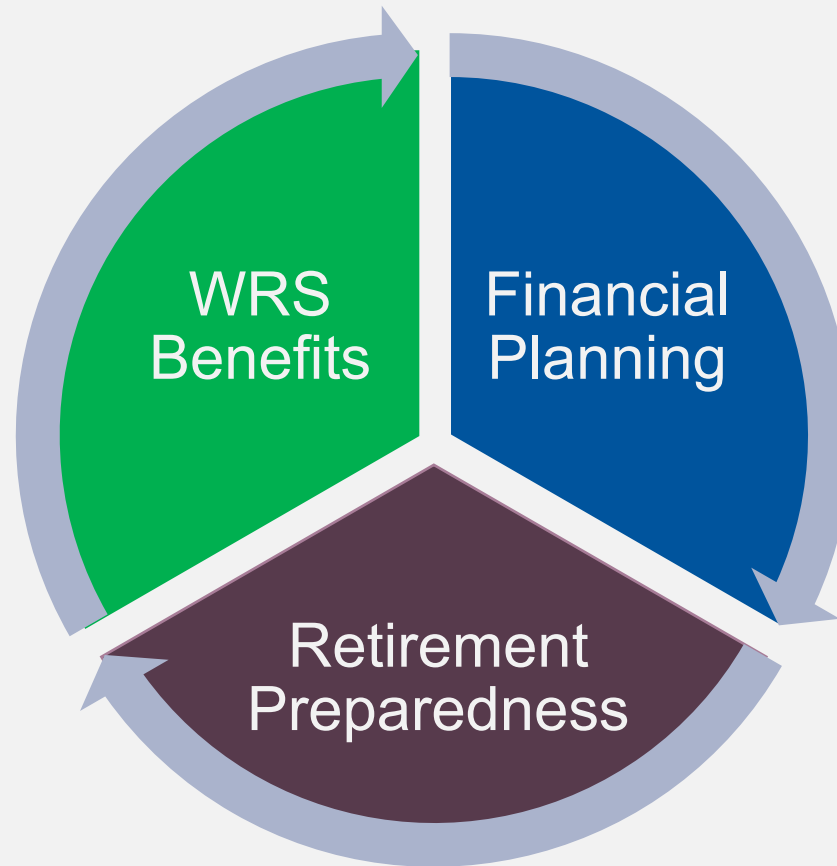


Actionable



Sustainable

# Financial Security + Wellness



# WI Strong Audience: WRS



- **260,000 state and local government employees** and their families
- **215,000 retirees** and their families
- **1,500 government employers** and WI Strong champions

# WI Strong Partners

- Department of Financial Institutions
- Financial Fitness Group
- Summit Credit Union
- America Saves
- State of Iowa
- Wisconsin Deferred Compensation Program (Empower Retirement)
- Edvest (WI 529 plans)
- Savi (student loans)
- Others

# Core Components

# Take the **FINANCIAL FITNESS CHALLENGE!**

**You're Invited to take the Wisconsin Strong Financial Fitness Challenge with free access to the online Checkup and Academy.**

You'll get a personalized playlist of courses on topics such as debt management, budgeting, investments, estate and retirement planning. In just 15 minutes, you could be on your way to building a strong financial future.

### **READY, SET, GO**

Start with a quick Financial Fitness Checkup. Then gain free access to 100s of interactive courses for a limited time (a \$1,000 value).

### **CHALLENGE ON**

Your goal is to complete and pass at least 5 courses with a score of 70% or higher. Can you improve your financial fitness score? Earn points and certificates of completion. It's easy, convenient, and anonymous.

**#WIStrongSecurity**

**WISTRONG**  
YOUR FINANCIAL SECURITY™

Take the challenge now, go to  
[financialfitnessgroup.com/wi-strong](https://financialfitnessgroup.com/wi-strong)



ET-7119 (REV 3/8/2021)

# Financial Wellness Education



*your resource to a richer life*

Offers free virtual seminars, credit counseling, and financial advisors

## Topics:

- Money Management
- Savings and Wealth Building
- Credit and Debt Management
- Maximizing Employee Benefits
- Major Purchases
- Lifestyle and Personal Finance



# Marketing & Education

# WI Strong Brand

- Tagline: **Wisconsin Strong: Your Financial Security™**
- Website: [etf.wi.gov/wi-strong](https://etf.wi.gov/wi-strong)
- Hashtag: #WIStrongSecurity
- Messages and graphics support: Employee work-life events and milestones, value of WRS benefits, financial security and wellness, empowerment, diversity, and financial inclusion



# Build Engagement



Partner with  
Employers –  
WI Strong  
Champions



Mass &  
Targeted  
Digital  
Marketing



Education, Tools  
& Self-  
Awareness



Targeted  
Outreach  
Campaigns

# Financial Wellness at Any Age

New Hire

Mid-Career

Nearing Retirement

Retired



# Targeted Education

Women



Military



People with Disabilities





# Take the Challenge!



#WIStrongSecurity

# Key Performance Indicators

# Key Performance Indicators

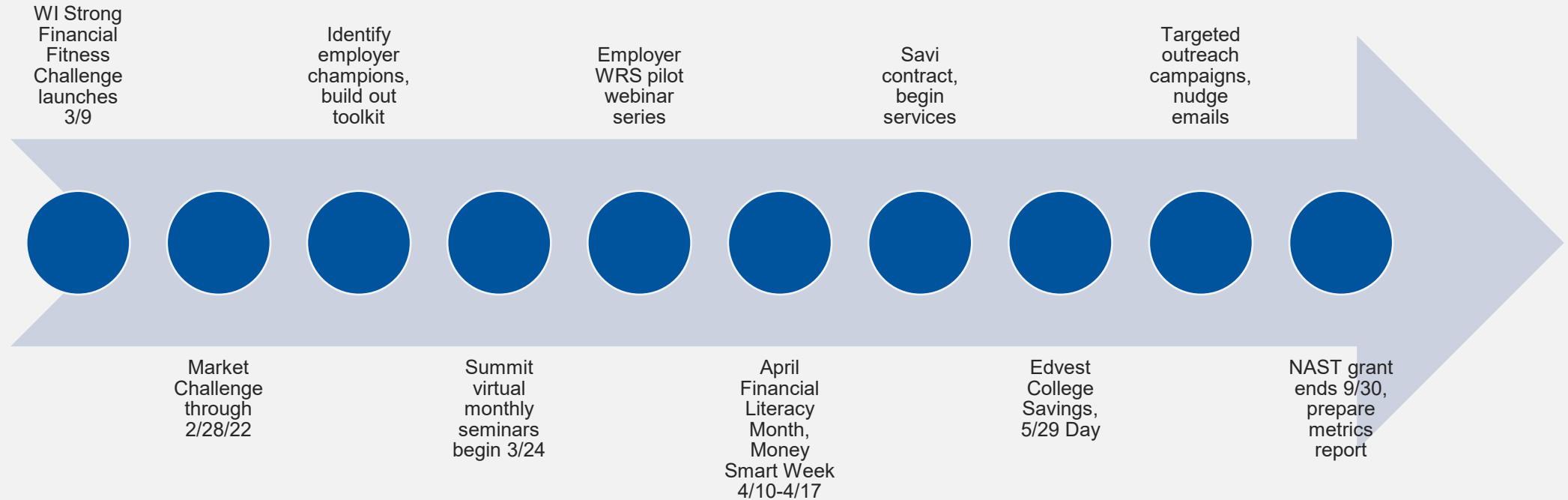


- **25 employers** of various sizes as WI Strong champions and active co-marketers
- **10,000 employees** to access financial wellness education, resources, and tools
- **Participant data** to capture anonymous demographics, interests, changes in behaviors, and actions
- **Participant satisfaction** will be measured via event surveys



# Timeline

# WI Strong Timeline



The background is a dark blue gradient with numerous bokeh light effects in shades of blue and purple, scattered across the frame. The text "Questions?" is centered at the bottom in a large, white, sans-serif font.

**Questions?**

---

# Thank you

---



[etf\\_wi](#)



[etf.wi.gov](#)



ETF E-mail Updates



608-266-3285  
1-877-533-5020

# Written Reports Only

Items 4D – 4L - Memo Only



# Future Items for Discussion

Item 5– No Memo



# Adjournment

Item 6 – No Memo



---

# Thank you

---



[etf\\_wi](#)



[etf.wi.gov](#)



ETF E-mail Updates



608-266-3285  
1-877-533-5020