1. Joint Meeting of the Board of Trustees and Investment Advisory Committee

December 12, 2017

ERS
Employees Retirement System of Texas

ERS

Public Agenda Item #1.1

Call Meeting of the Board of Trustees to Order

December 12, 2017

ERS

Public Agenda Item #2.1

Consideration of Appointment to the Investment Advisory Committee – (Action)

December 12, 2017

Tom Tull, CFA, Chief Investment Officer

IAC Skills Assessment

ERS

	Investment Experience	Global Equity	Fixed Income	Private Equity	Real Estate	Hedge Funds	Infrastructure	Derivatives
IAC Chair **James Hille, CFA, CAIA** CIO - Texas Christian University Endowment	26 years	X	X	X	X	X		
IAC Vice-Chair **Caroline Cooley** CIO - Diversified Funds Crestline Investors, Inc.	33 years					X		X
Bob Alley, CFA Retired - AIM Advisors, Inc. as Chief Fixed Income Officer	42 years	X	X	X				
Ken Mindell Sr. VP, Treasurer & Director of Investments Rosewood Management Corporation	37 years	X	X	X	X	X		X
Dr. Laura Starks Charles E. & Sarah M. Seay Regents Chair in Business Administration Director, AIM Investment Center The University of Texas Austin	29 years	X	X	X	X	X		
Lenore Sullivan Managing Director (Volunteer) TMV Capital Management Formerly, Partner at Perella Weinberg Partners	37 years			X	X		X	
Gene L. Needles, Jr. Chairman, President and CEO American Beacon Advisors	24 years	X	X	X	X	X		X
Margaret "Didi" Weinblatt, Ph.D., CFA Retired – USAA Investment Management Company as Vice President of Mutual Fund Portfolios	37 years	X	X					X
Mari Kooi Retired - Wolf Asset Management International, LLC as Chief Executive Officer	30 years	X	X	X		X		X

ERS

Questions?

(Action Item)

ERS

Public Agenda Item #3.1

Call Meeting of the Investment Advisory Committee to Order

December 12, 2017

ERS

Public Agenda Item #4.1

Review and Approval of the Minutes to the August 23, 2017 Joint Meeting of the Board of Trustees and Investment Advisory Committee – (Action)

December 12, 2017

ERS

Questions?

(Action Item)

ERS

Public Agenda Item #5.1

Educational Presentation: A National Perspective of State and Local Pensions

December 12, 2017

Catherine Terrell, Deputy Executive Director

Keith Brainard, Research Director, National Association of State Retirement Administrators

A National Perspective of State and Local Pensions

Keith Brainard
Research Director
National Association of State Retirement Administrators

Employees Retirement System of Texas
December 2017

Comparison of Retirement Benefits in the U.S.

Private Sector

- 60% of full-time private sector workers participate in an employer-sponsored retirement plan; 21% of part-time workers participate
- In total, 49% of all private sector workers participate in an employer-sponsored retirement plan
- Fewer than one in five have a traditional pension (DB) plan
- Social Security coverage is universal

Public Sector

- Nearly all full-time workers have access to an employer-sponsored retirement benefit; most have access to a traditional pension (DB plan)
- 87% of full-time employees participate in a pension plan, as do 80% of all, including part-time workers; virtually all others are in a DC plan
- Three-fourths participate in Social Security

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Public pensions in the U.S.: Vital Statistics

- ~$4.1 trillion in assets
- ~14 million active (working) participants
  - 10 percent of the nation's workforce
- 10.3 million retirees and their survivors receive ~$280 billion annually in benefits
- Annual contributions = $192 billion
  - $141 billion from employers; $51 billion from employees
  - Approximately 5.0 percent of all state and local government spending goes to public pensions
- Of 6,000+ public retirement systems, the largest 75 account for 80+ percent of assets and members
- Aggregate funding level = ~72%

US Census Bureau, Public Fund Survey

NASRA

Public pensions in Texas: Vital Statistics

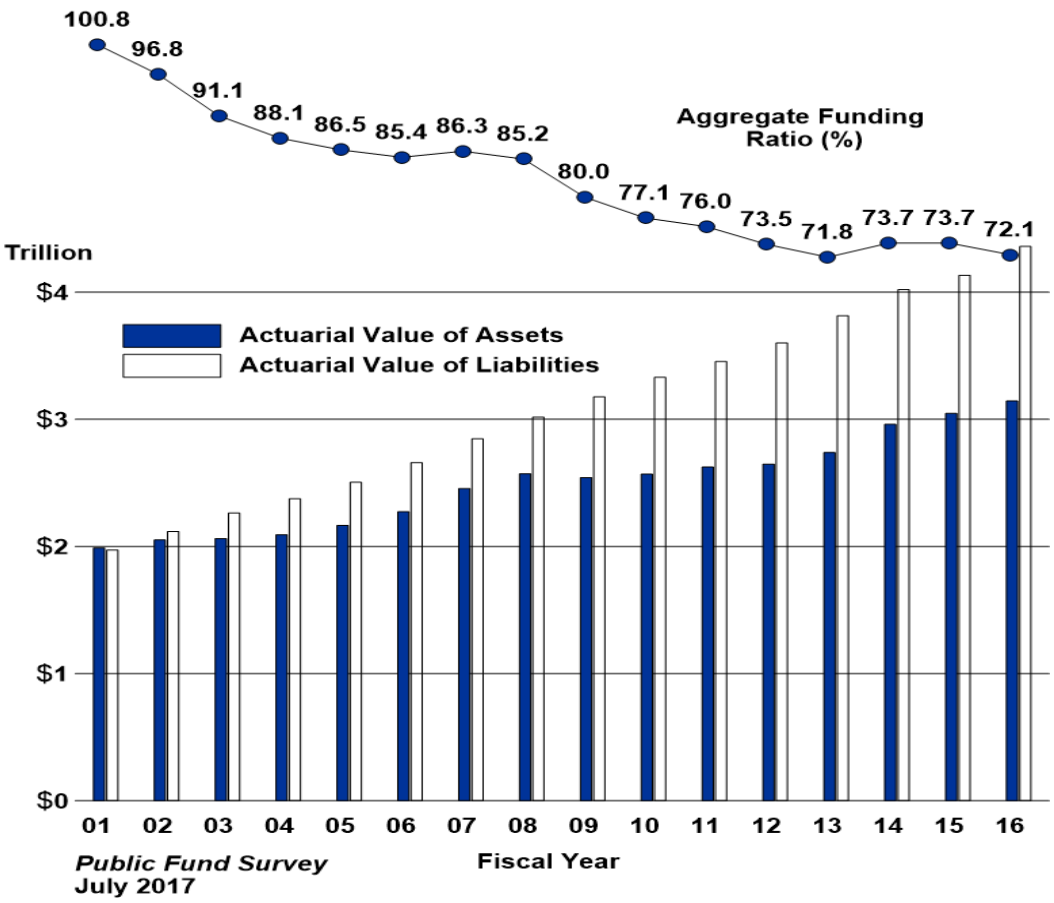
- ~ $240 billion in assets
- ~ 1.35 million active (working) participants
- ~ 680,000 retirees and their survivors receive around $15.9 billion annually in benefits
- Annual contributions = $11.3 billion
  - $6.5 billion from employers; $4.8 billion from employees
- ~93 public retirement systems
- TRS, ERS, TMRS, and TCDRS account for more than 90 percent of all assets and participants
- TRS alone accounts for more than one-half

US Census Bureau, 2016

About the funding data

- Data is culled, analyzed and graphed by NASRA staff from the Public Plan Database, CAFRs and other source documents
- PPD is an online compendium of public pension information maintained by the Center for Retirement Research at Boston College, in collaboration with NASRA and the Center for State & Local Government Excellence
- www.publicplansdata.org
- FY 16 information presented here is not yet complete and is subject to change
- Complete analysis of FY 16 will be published this fall as the Public Fund Survey Summary of Findings for FY 16

NASRA



Change in aggregate actuarial funding level and actuarial values of assets and liabilities, FY 01 to FY 16

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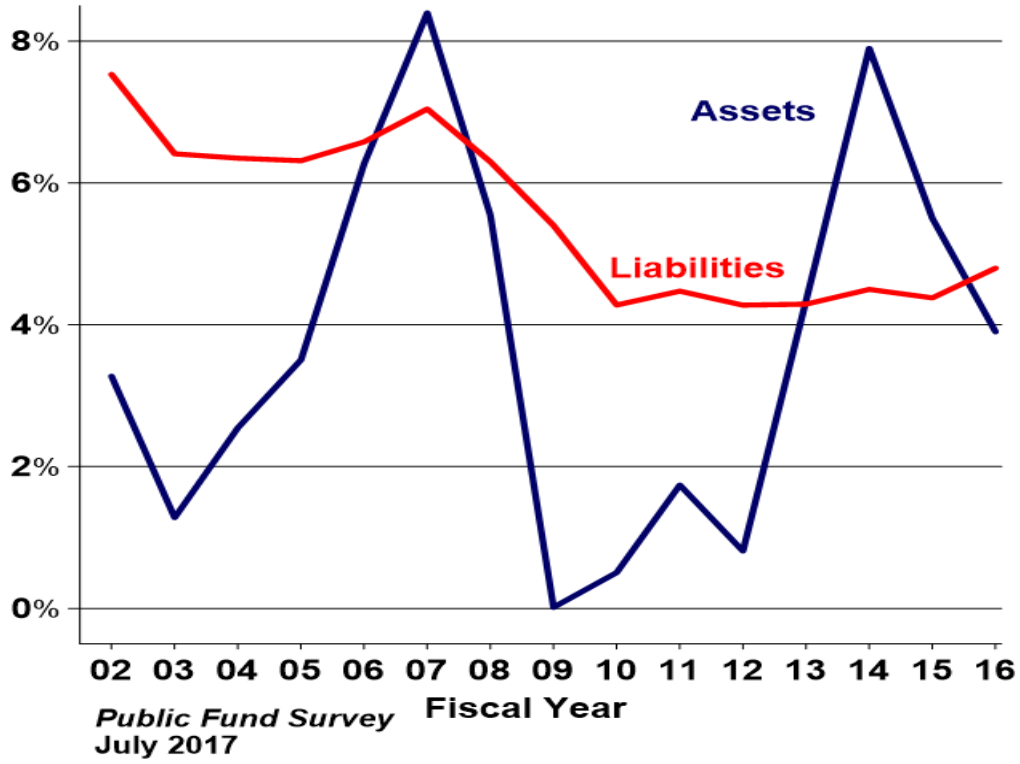
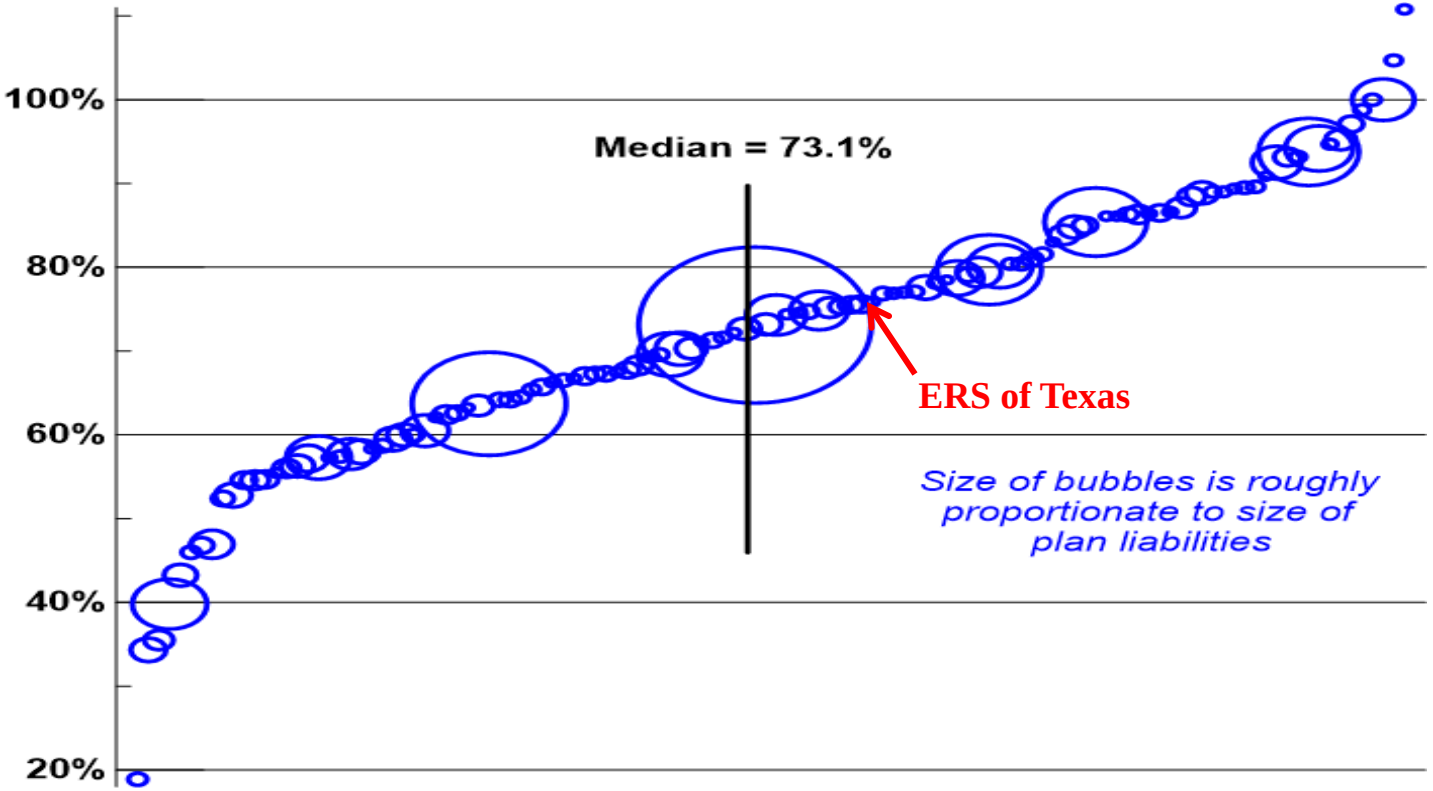


Median change from prior year in actuarial value of assets and liabilities, FY 02 to FY 16

NASRA

Distribution of public pension funding levels, FY 16



Public Plan Database, Public Fund Survey

NASRA

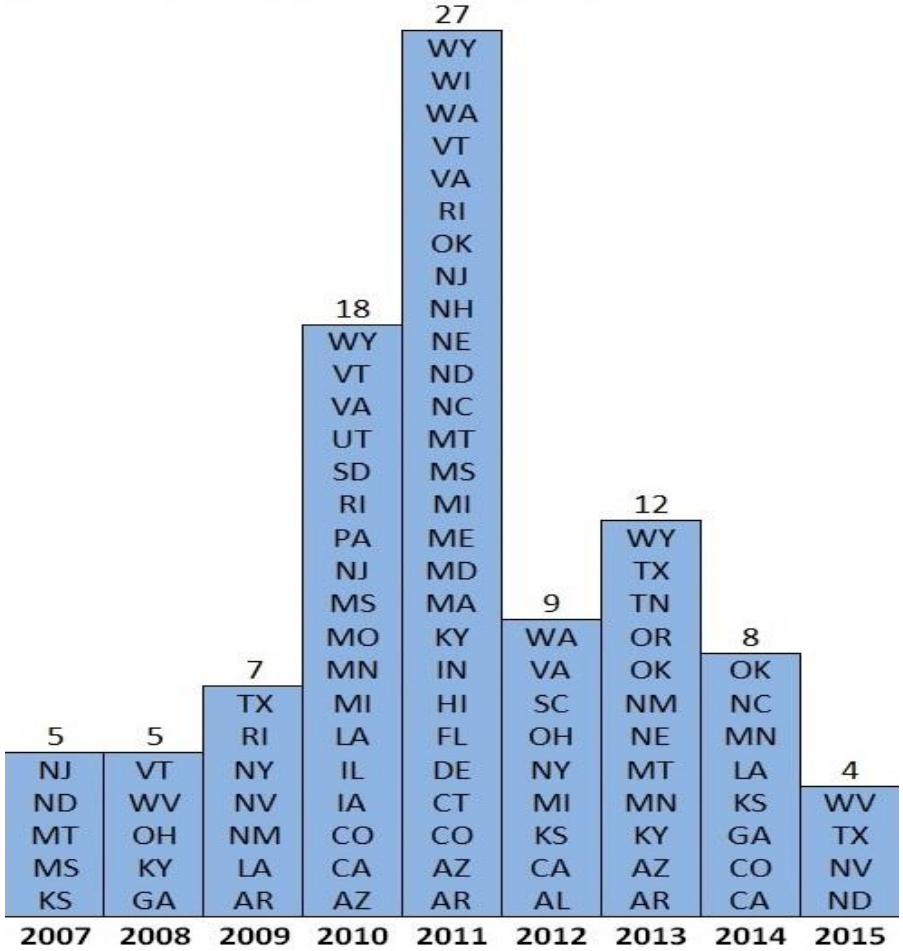
The meaning and implications of an actuarial funding ratio

- An actuarial funding ratio is the most popular and recognized metric of a pension plan's condition
- By itself, this ratio is not a reliable indicator of the condition of a pension plan
- The actuarial funding ratio is akin to a single snapshot of a movie that last for decades
- Other key considerations in evaluating a pension plan's condition:
  - The fiscal condition of the pension plan's sponsoring government(s)
  - The commitment of the sponsoring government to pay required plan costs
  - The current and required cost of the plan
  - The reasonableness of the plan's actuarial assumptions and methods
  - The trend, or direction of the plan's funding condition
  - The plan's demographics

Pension reforms in recent years

- Every state modified public pension benefits or financing arrangements, or both, since 2009
- Lower benefits:
  - higher retirement age
  - more required years of service
  - lower multiplier
  - longer vesting period
  - reduced, suspended or eliminated COLAs
- Increased use of hybrid retirement plans
- Limited use of defined contribution plans
- Many municipal plans also have been reformed

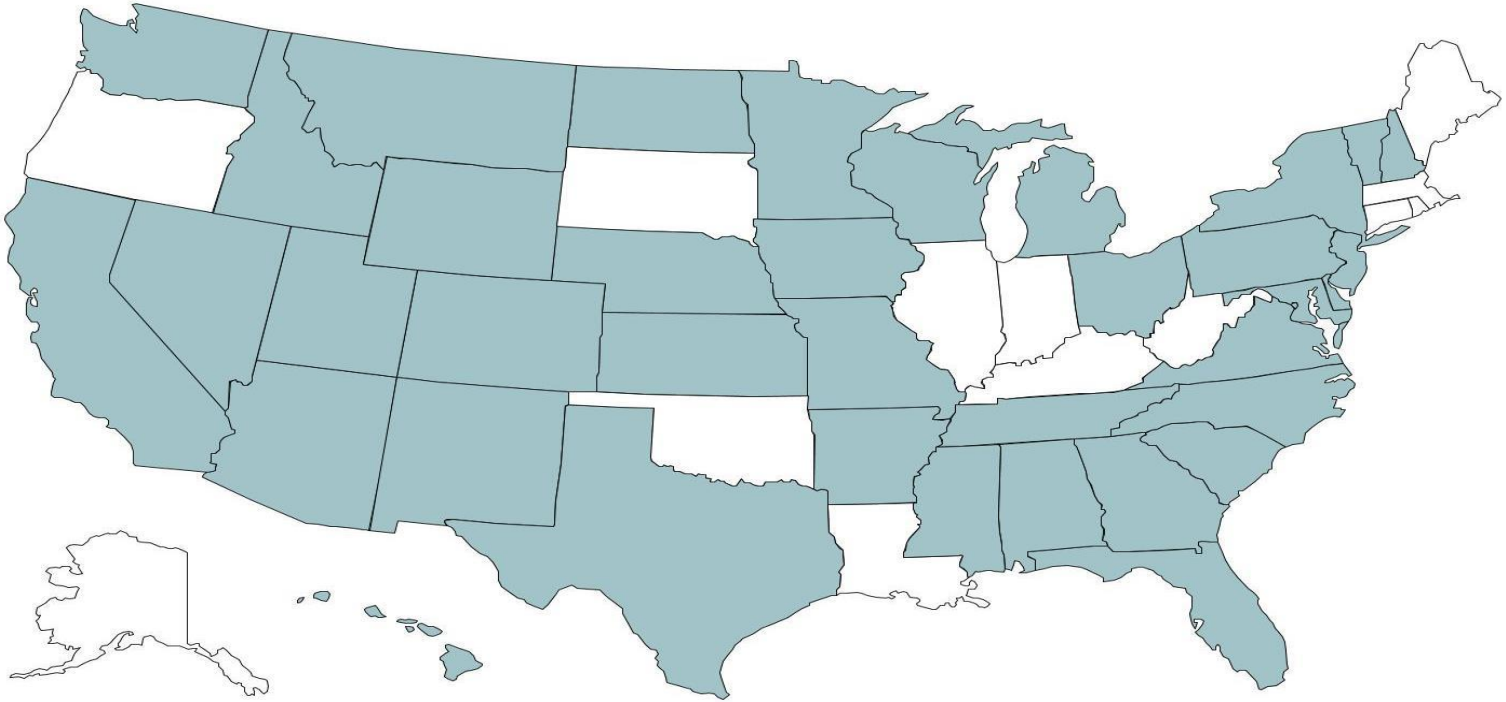
States that reformed pension plans, by year, 2007-2015



"Significant Reforms to State Retirement Systems," NASRA 2016

NASRA

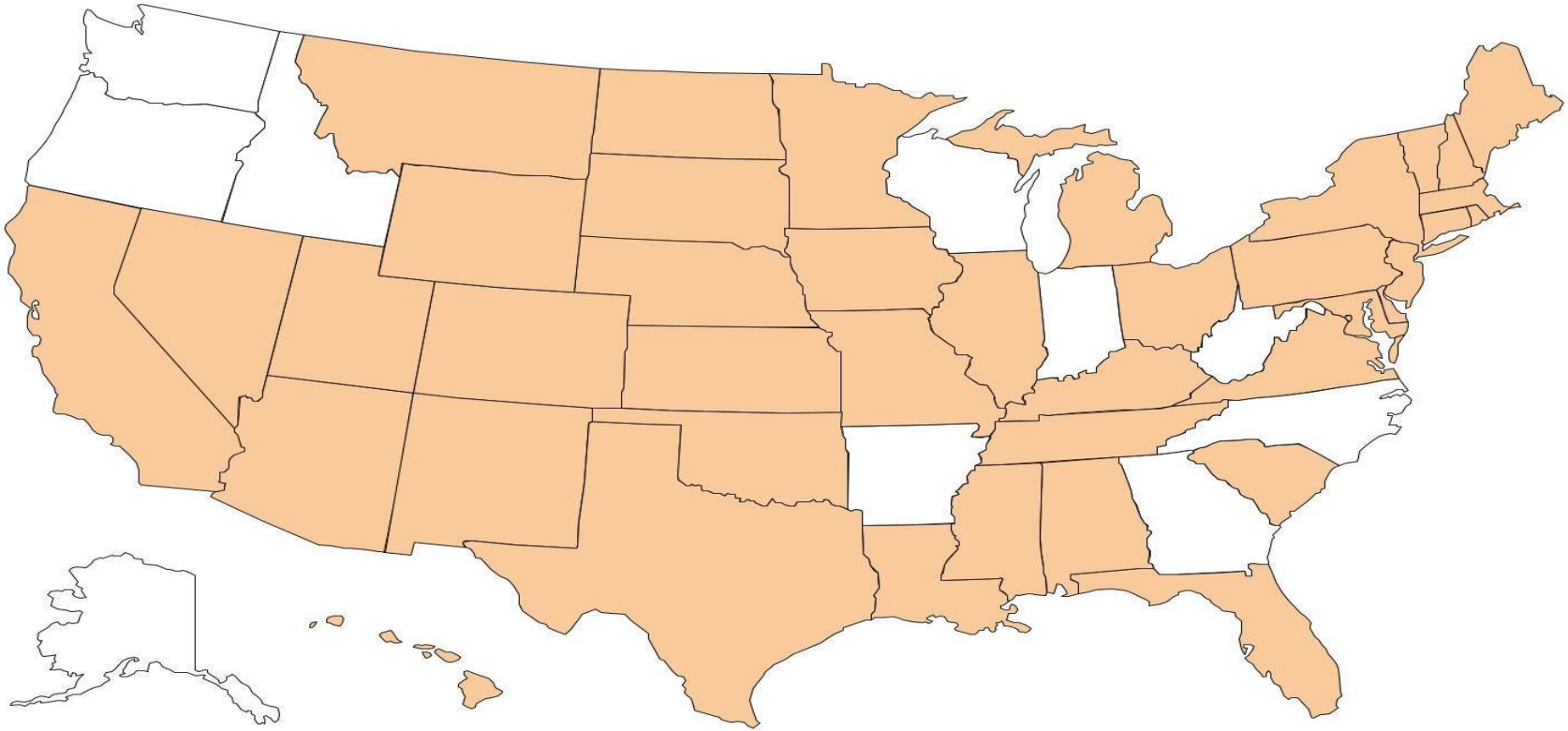
States that increased employee contributions



 "Significant Reforms to State Retirement Systems," NASRA 2016

NASRA

States that reduced pension benefits



 "Significant Reforms to State Retirement Systems," NASRA 2016

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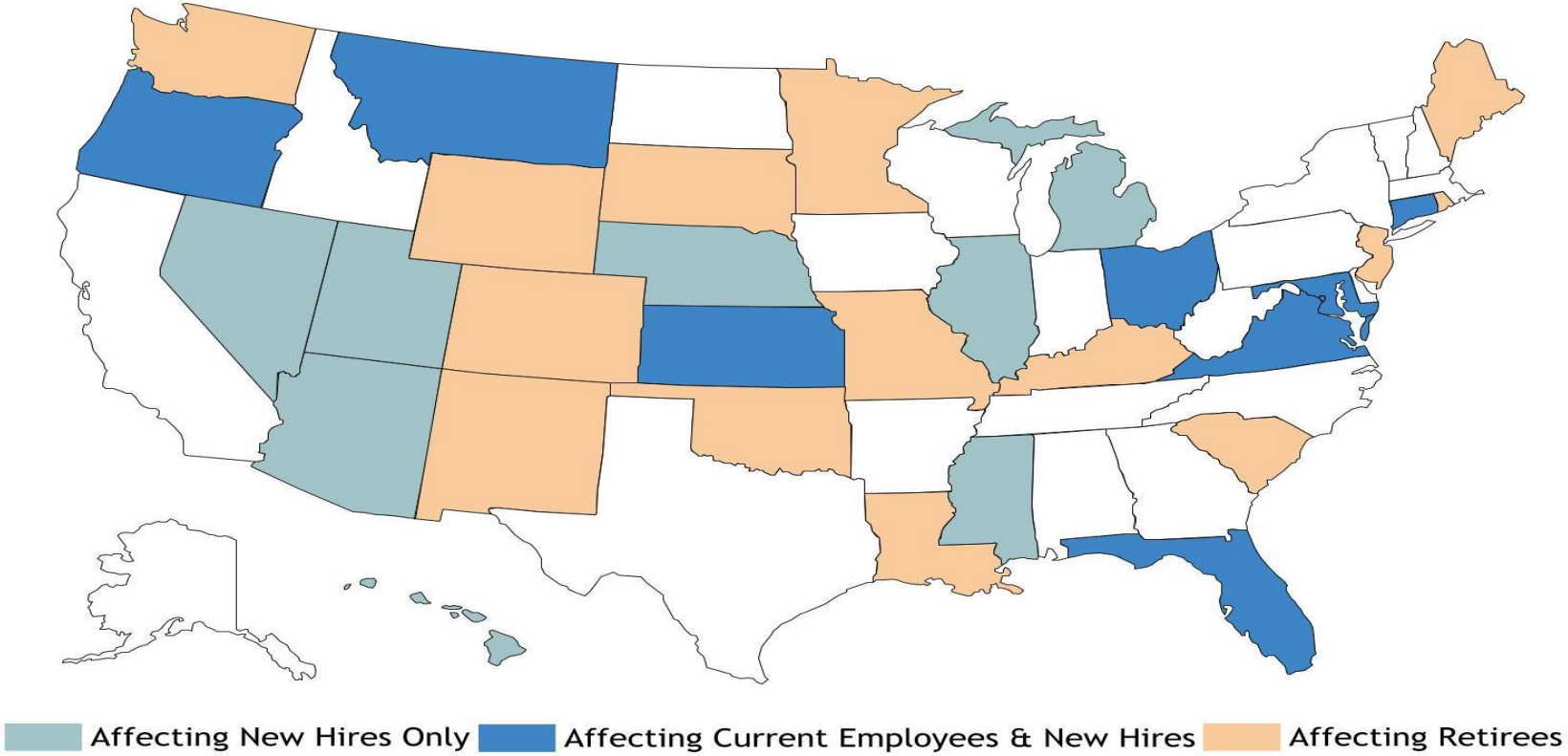
States that reduced automatic COLAs



"Significant Reforms to State Retirement Systems," NASRA 2016

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Hybrid Plans

- New hybrid plans are being created by legislatures nearly every year
- Mostly DB-DC, some cash balance plans
- Usually apply to new hires only
- DB-DC plans maintain a DB component, with a lower benefit accrual rate
- Cash balance plans contain key features of DB plans, but also transfer some investment risk to workers

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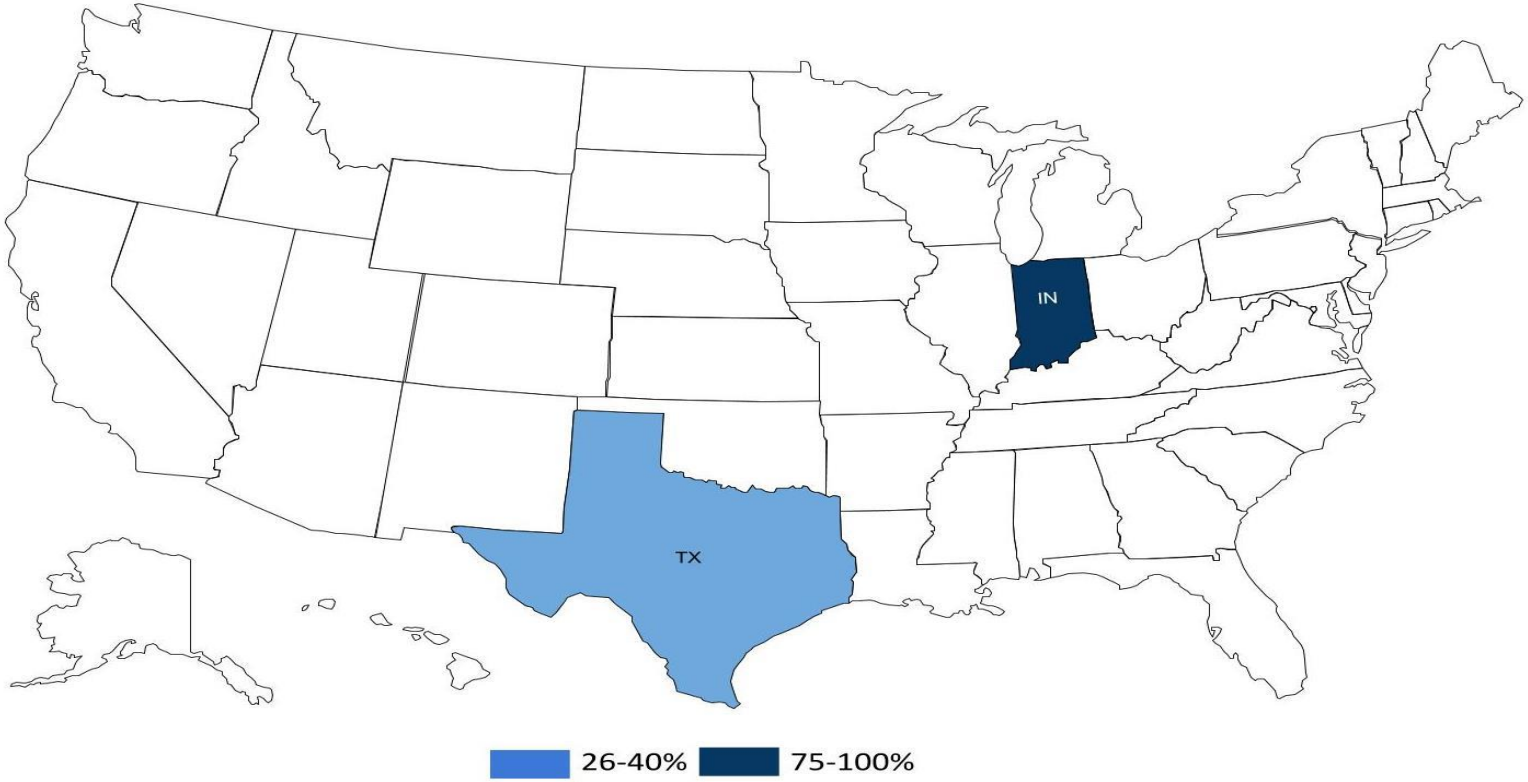
Statewide Hybrid Plans, 1995



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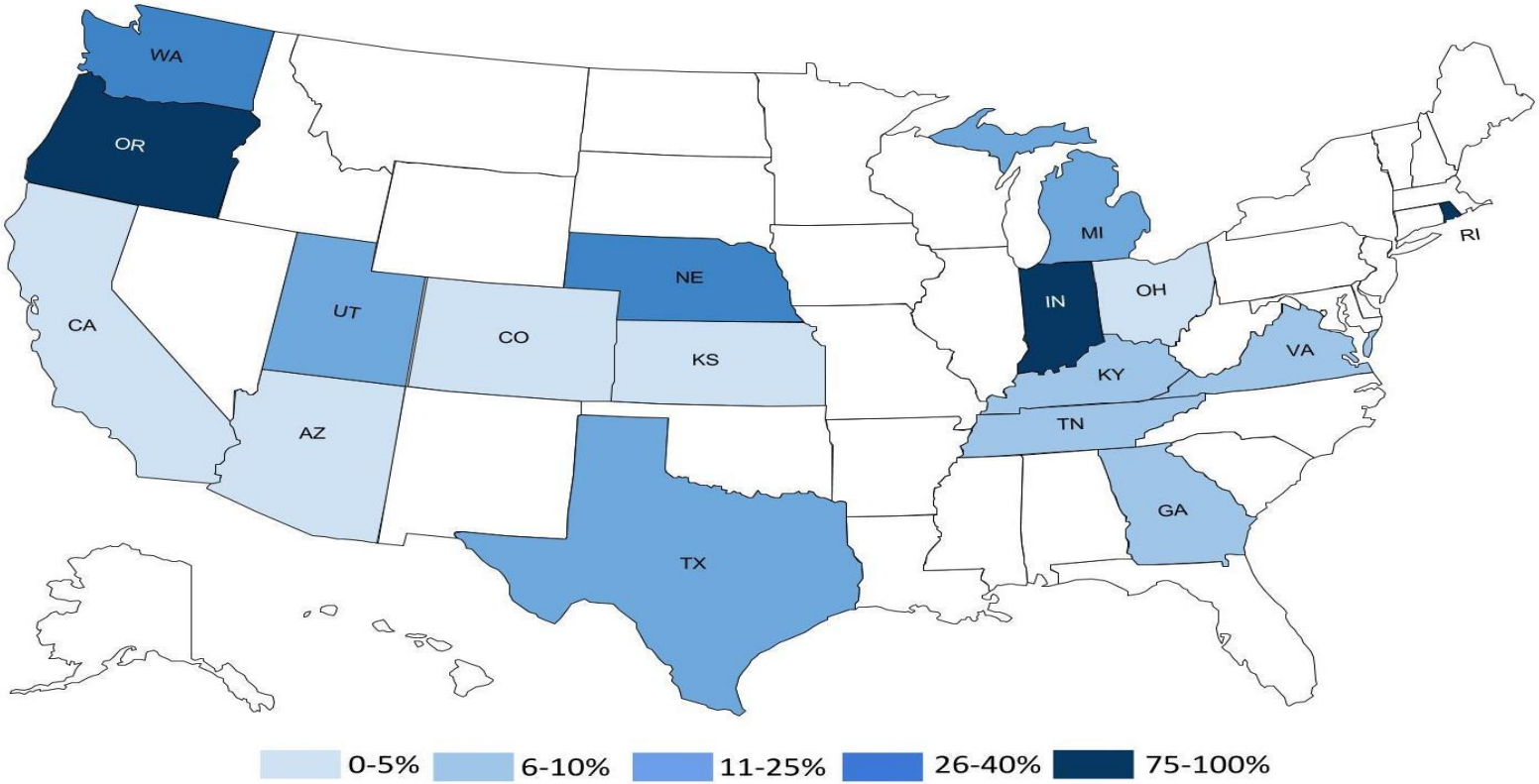
Statewide Hybrid Plans, 2017



"State Hybrid Retirement Plans," NASRA 2016

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Defined Contribution Plans

- The number of mandatory and optional DC plans as workers' primary retirement benefit has grown
- Mandatory:
  - District of Columbia for general employees
  - Michigan for state employees hired since 3/1/97
  - Alaska for all hires since 7/1/06
  - Oklahoma for state employees hired since 11/1/15
- Alaska has a DC plan as the primary retirement benefit, combined with non-Social Security participation
- Two states—Nebraska and West Virginia—moved away from DC plans as the primary retirement benefit

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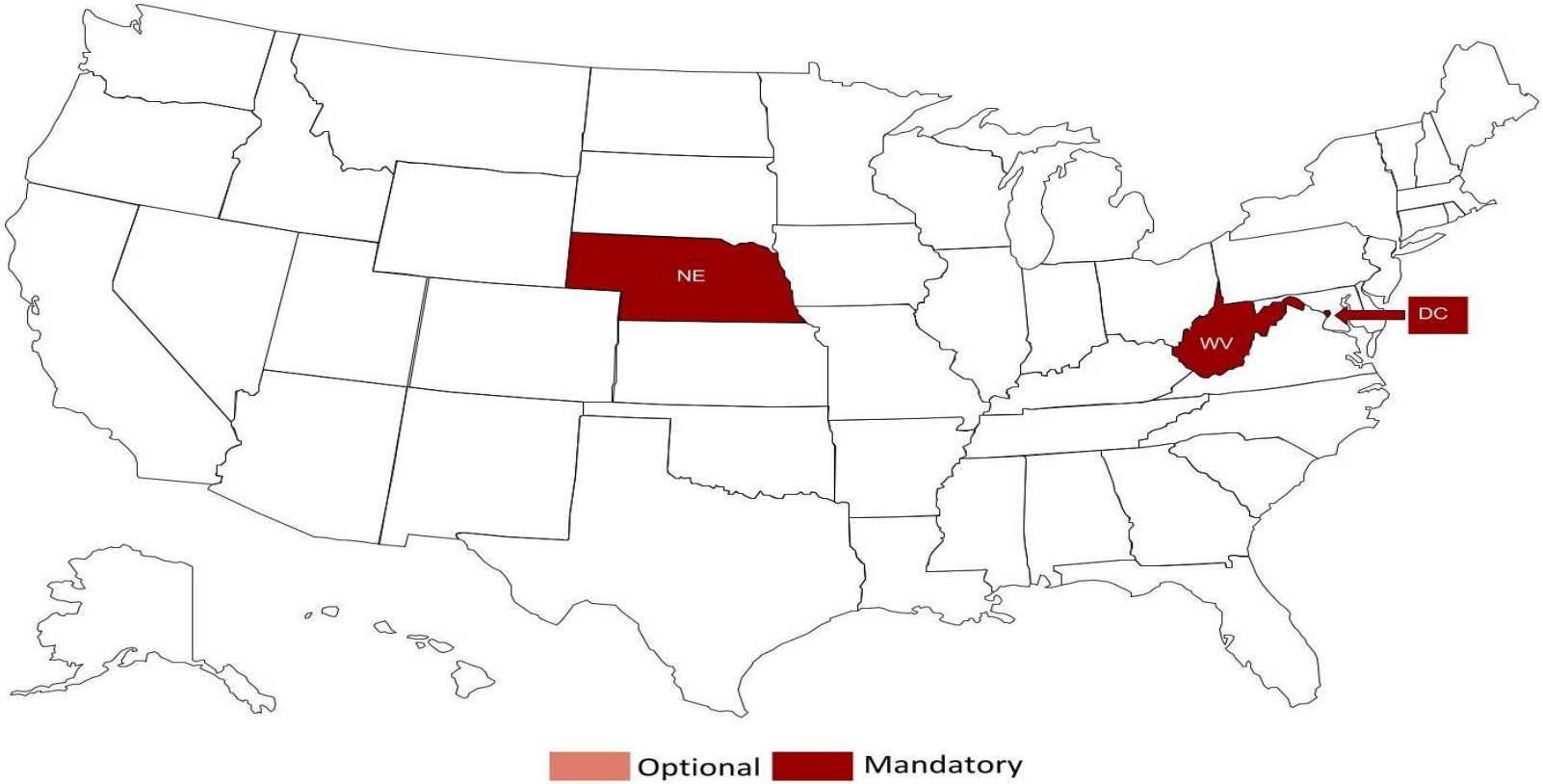
Statewide Defined Contribution Plans, 1995



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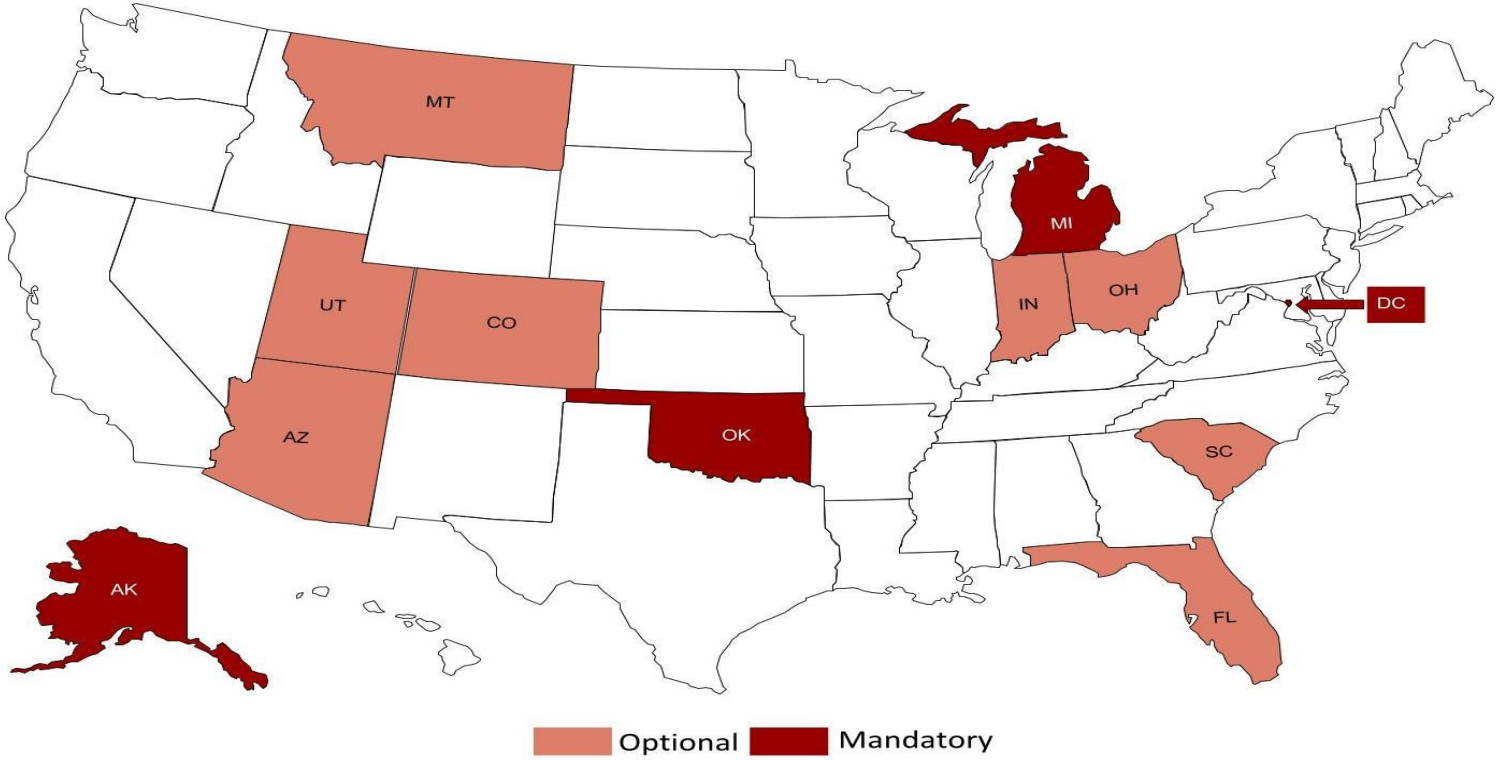
For broad employee groups: teachers, general employees, and public safety personnel

Statewide Defined Contribution Plans, 2017



NASRA

For broad employee groups: teachers, general employees, and public safety personnel

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Legal protections

- Public pension benefits already earned are protected by contract clauses of the US Constitution and state constitutions
- The right to future benefits varies from state to state
- Some states include specific pension protections in their constitutions

Legal rulings

- Many state pension reforms that affected current plan participants provoked lawsuits
- An unprecedented number of legal rulings on public pension issues have been issued since 2010
- Rulings have run the gamut, from affirming to rejecting states' authority to reduce benefits and increase contributions
- Rulings in some states have contradicted rulings in other states on the same basic issues
- Federal bankruptcy rulings in 2014 in Detroit and Stockton, CA permitted reductions in pension benefits despite strong pension legal protections in those states

Texas' 10 Percent Constitutional Cap on Employer Contributions

- Texas is one of five states whose constitution specifically addresses pension contribution requirements
  - Others are Arizona, Louisiana, Maine, Montana
- Texas is unique in imposing a constitutional limit on employer contributions
- Other state constitutional provisions require the pension plan to be adequately funded

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Possible solutions to the Constitutional Cap on Employer Contributions

- Calculate the state pension contribution over multiple years, such as a typical funding period of 30 years
- Funding a pension plan takes place over many years, not one, and measuring that cost over multiple years is a more accurate measure of the cost of the plan
- This approach to measuring pension contributions would permit the employer contribution rate to exceed 10 percent in any one year, as long as it does not exceed that rate for the period

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Possible Solutions to the Constitutional Cap on Employer Contributions (cont.)

- Make a lump sum appropriation to reduce the ERS unfunded pension liability
- An employer pension contribution typically is calculated on an actuarial basis as a percentage of payroll
- A lump sum appropriation would be a considered a payment to reduce the pension debt, not a contribution
- Alaska in 2014 transferred $3 billion from its rainy day fund to the state pension funds

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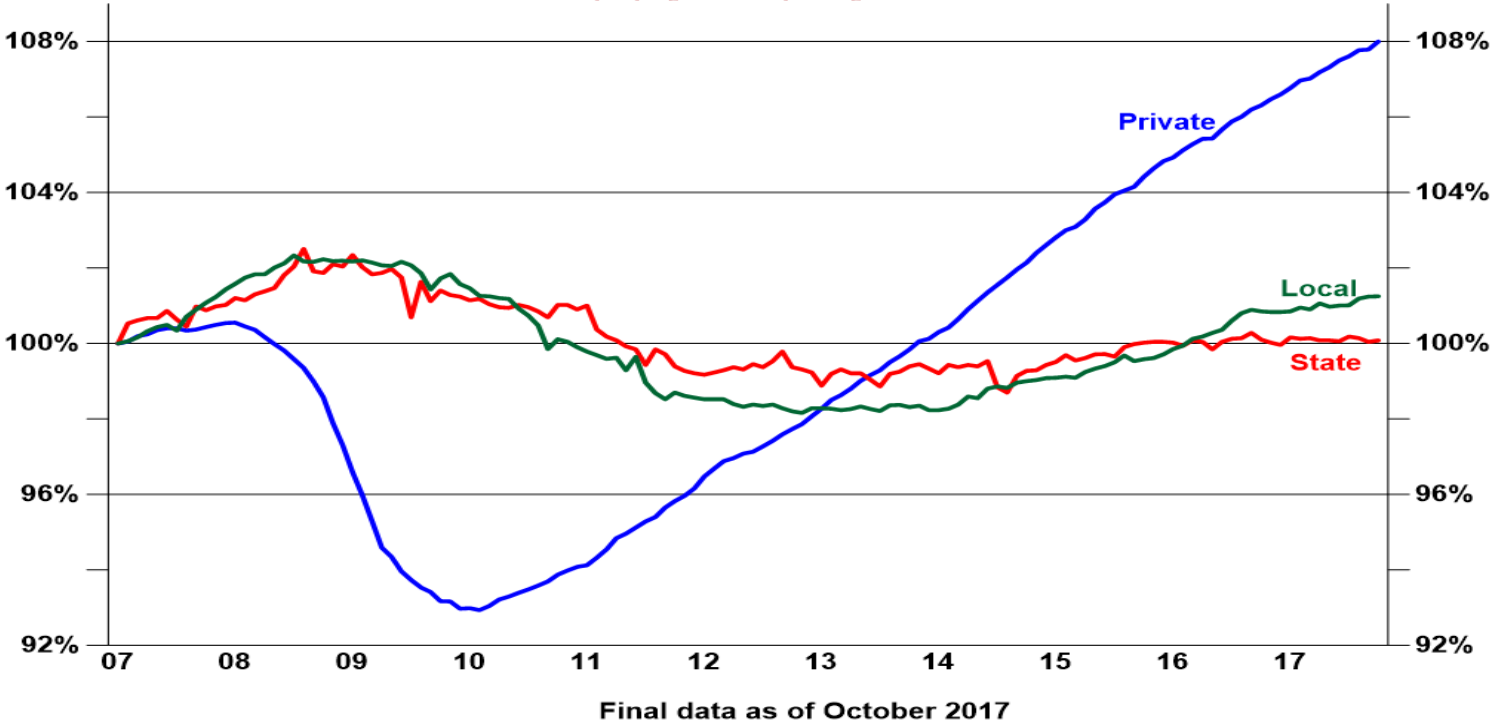
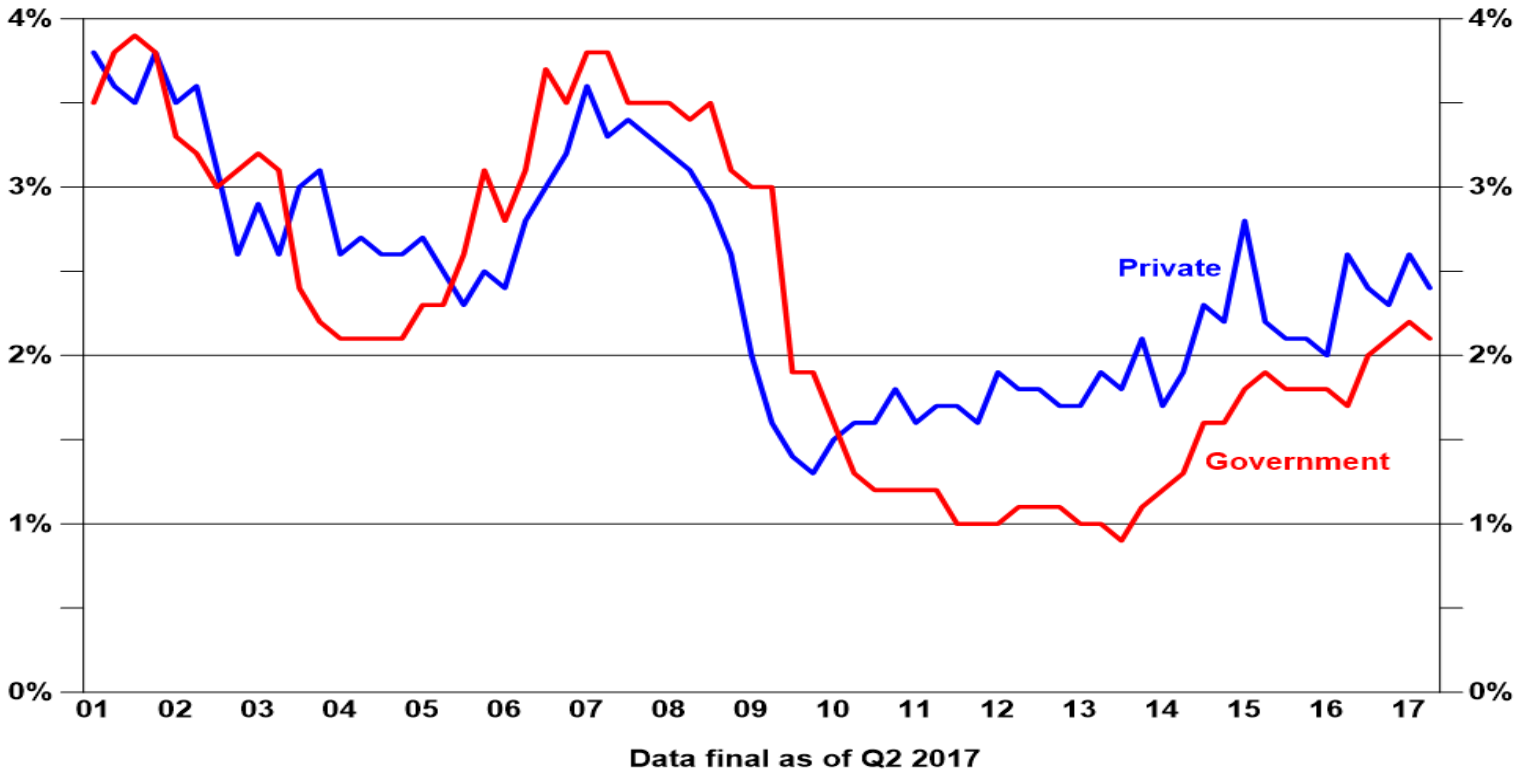
Cumulative change in employment, private sector and state and local government, 2007-2017



US Bureau of Labor Statistics

Annualized quarterly change in wage and salary costs for private and state and local government employees, 01-17



US Bureau of Labor Statistics

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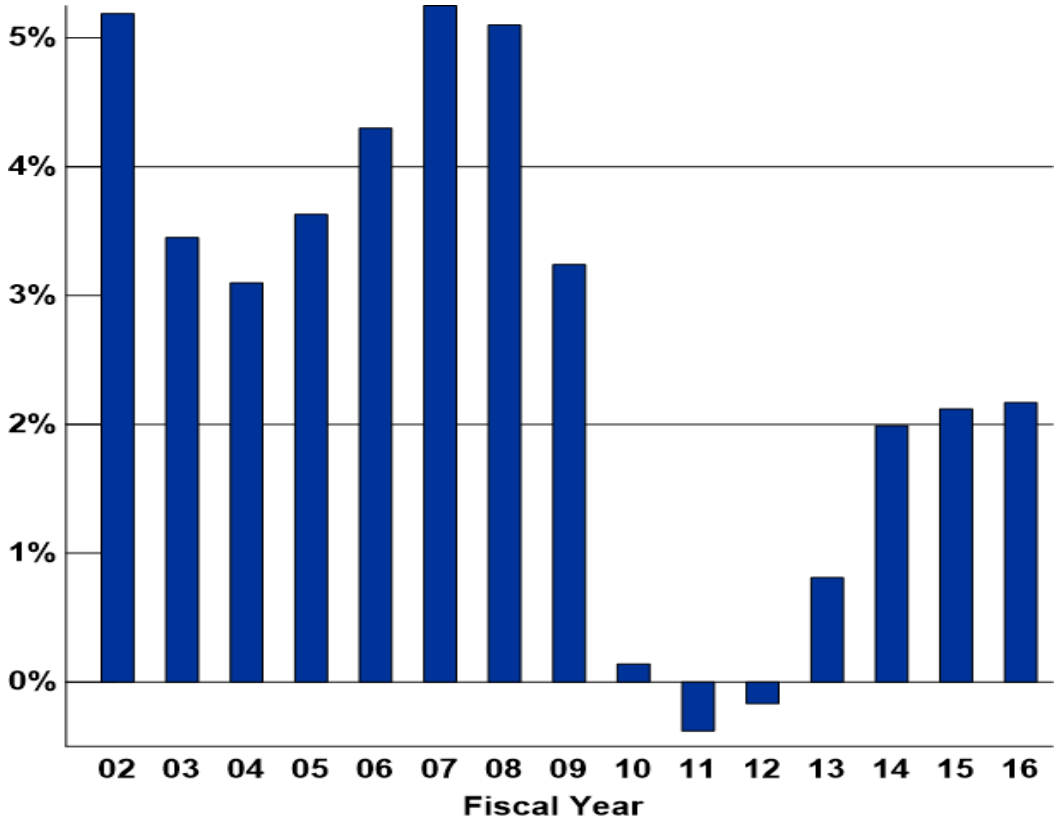
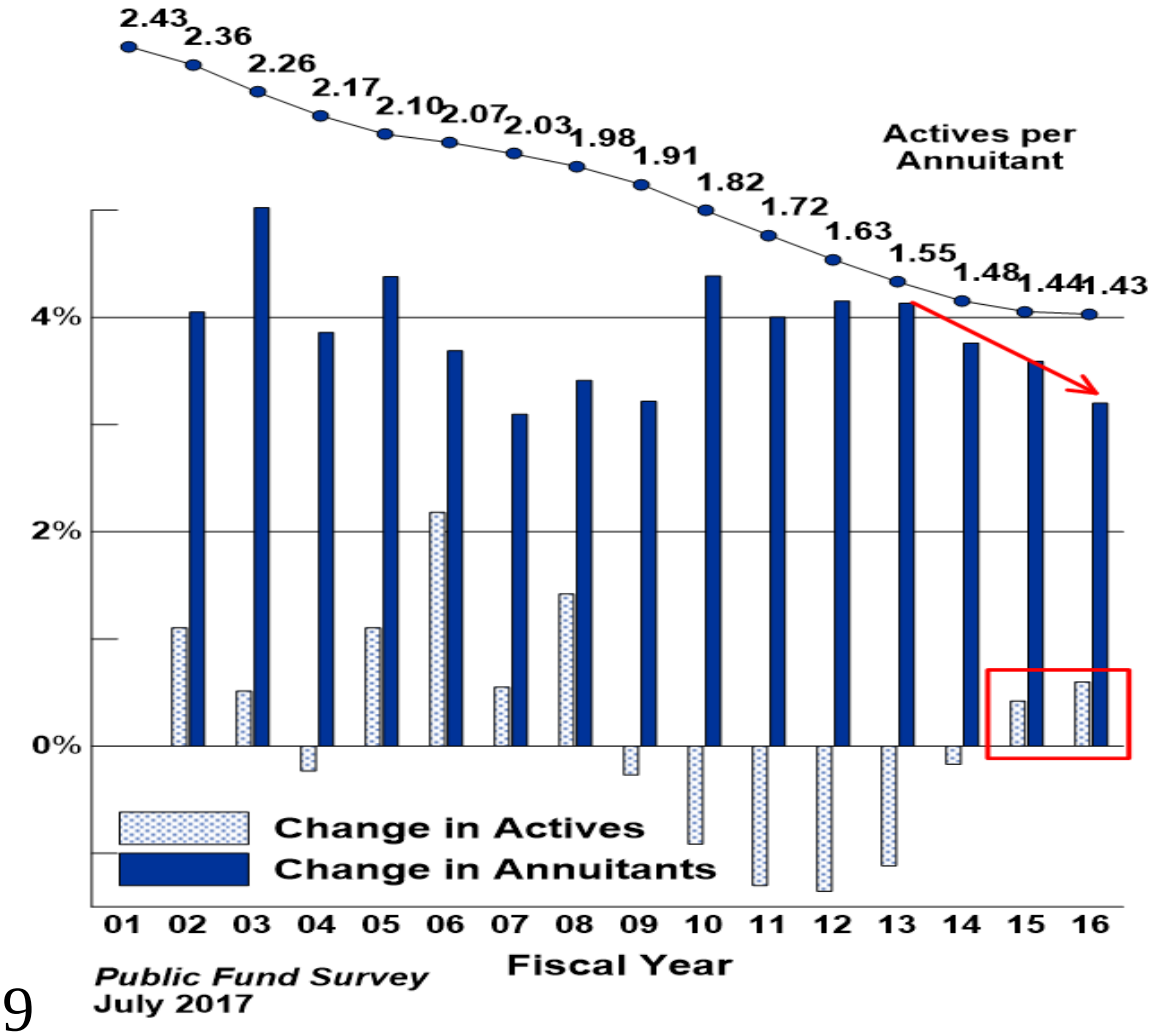
Median annual change in payroll, FY 02 to FY 16



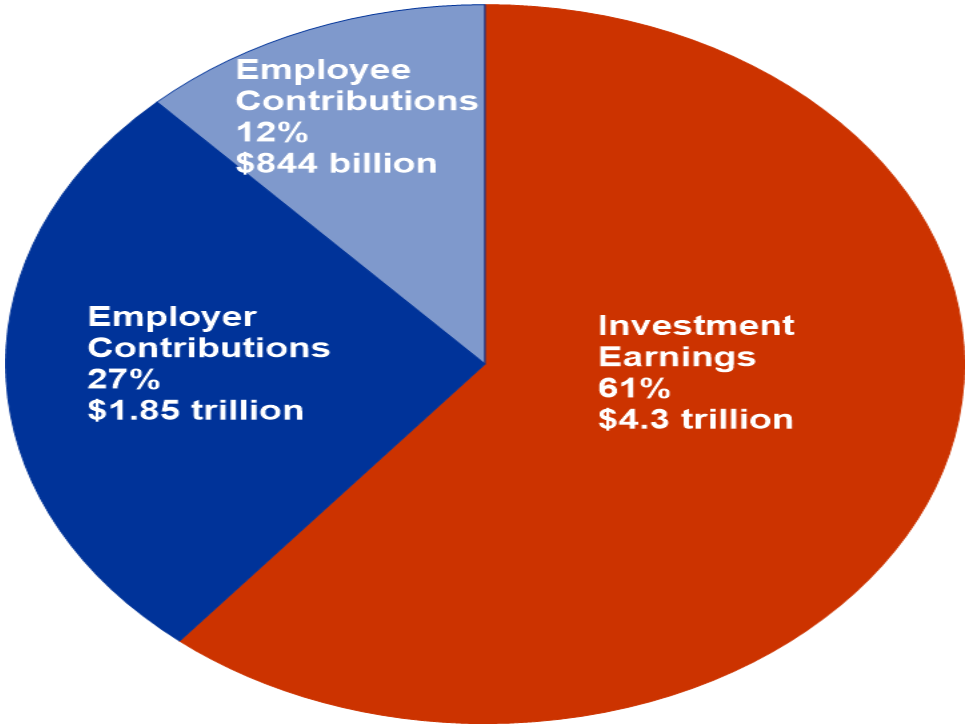
Public Plan Database, Public Fund Survey

NASRA



Median change in number of actives and annuitants, FY 01 to FY 16

NASRA



Sources of public pension revenue, 1987-2016

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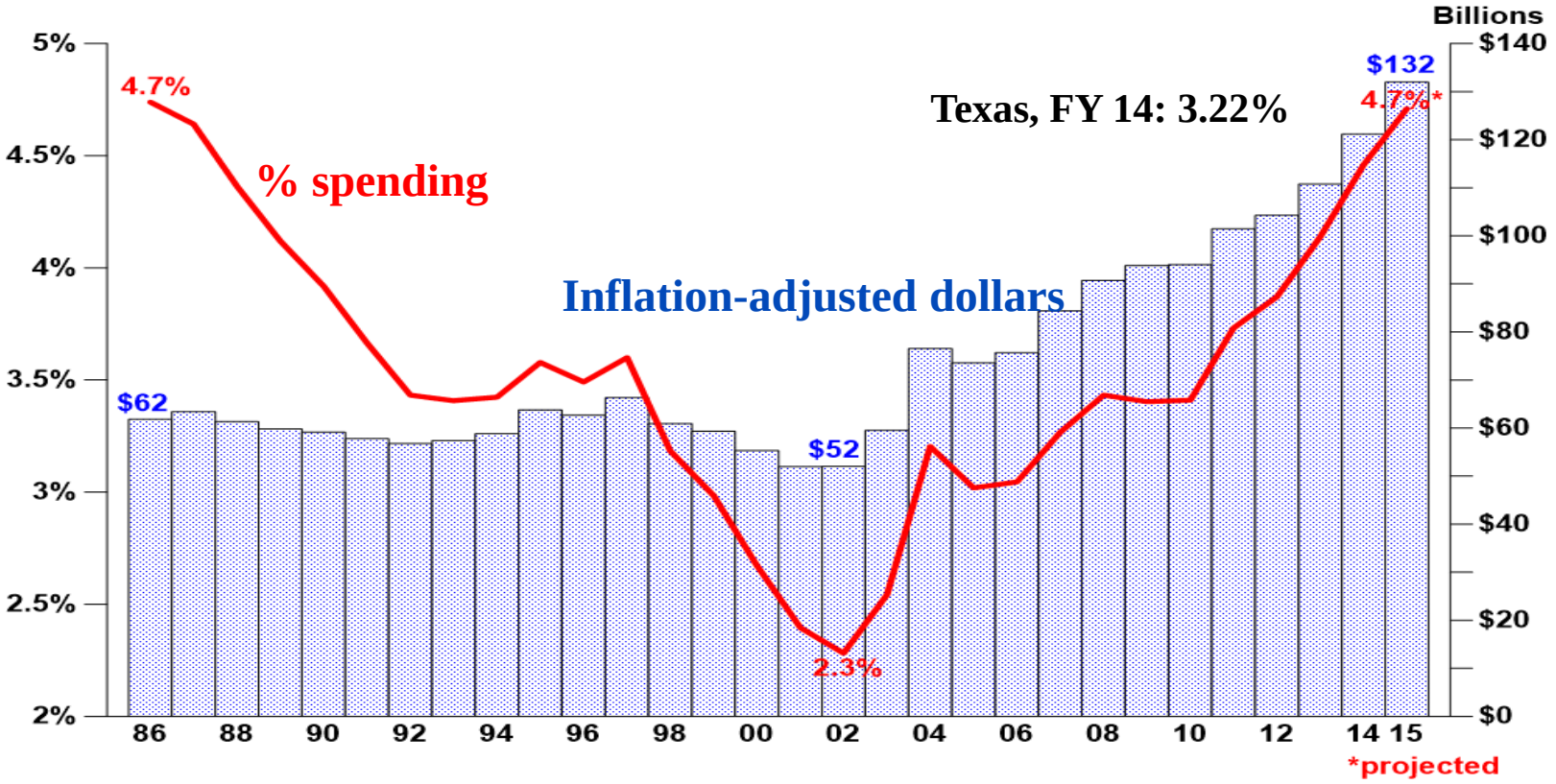
Taxpayer spending on pensions

- Spending varies widely among states
- Pension benefit levels affect the spending number
- Social Security participation is an important factor
- Not all states contribute as much as they should
- Spending is higher for cities than for states
  - A larger portion of city budgets is spent on personnel
  - A larger percentage of municipal employees serve as public safety officers, whose retirement benefits are more expensive due to shorter careers

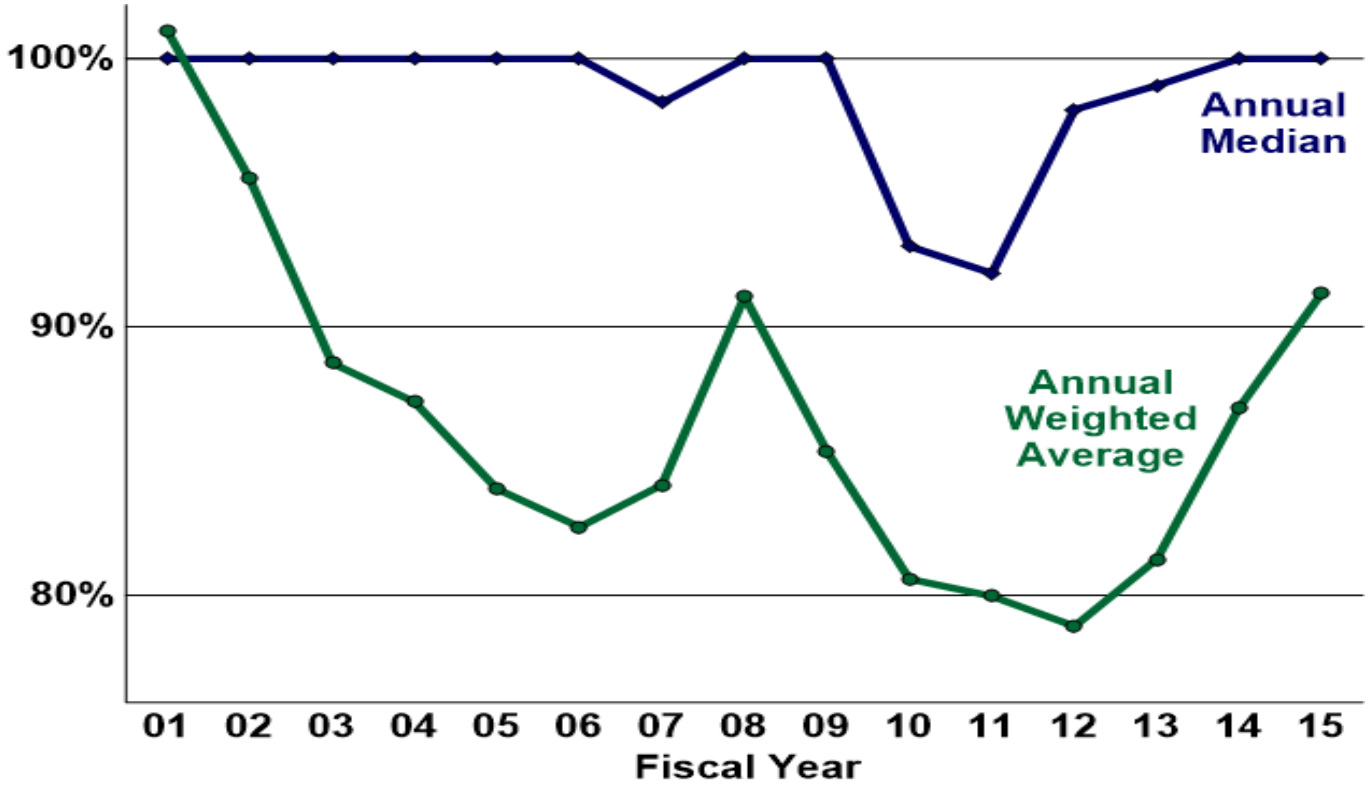
Employer (taxpayer) spending on public pensions, 1986 to 2015



"State and Local Government Spending on Public Employee Retirement Systems," NASRA 2016

NASRA

Annual Required Contribution/Actuarially Determined Employer Contribution Effort, FY 01 to FY 15



"State and Local Government Spending on Public Employee Retirement Systems," NASRA 2016

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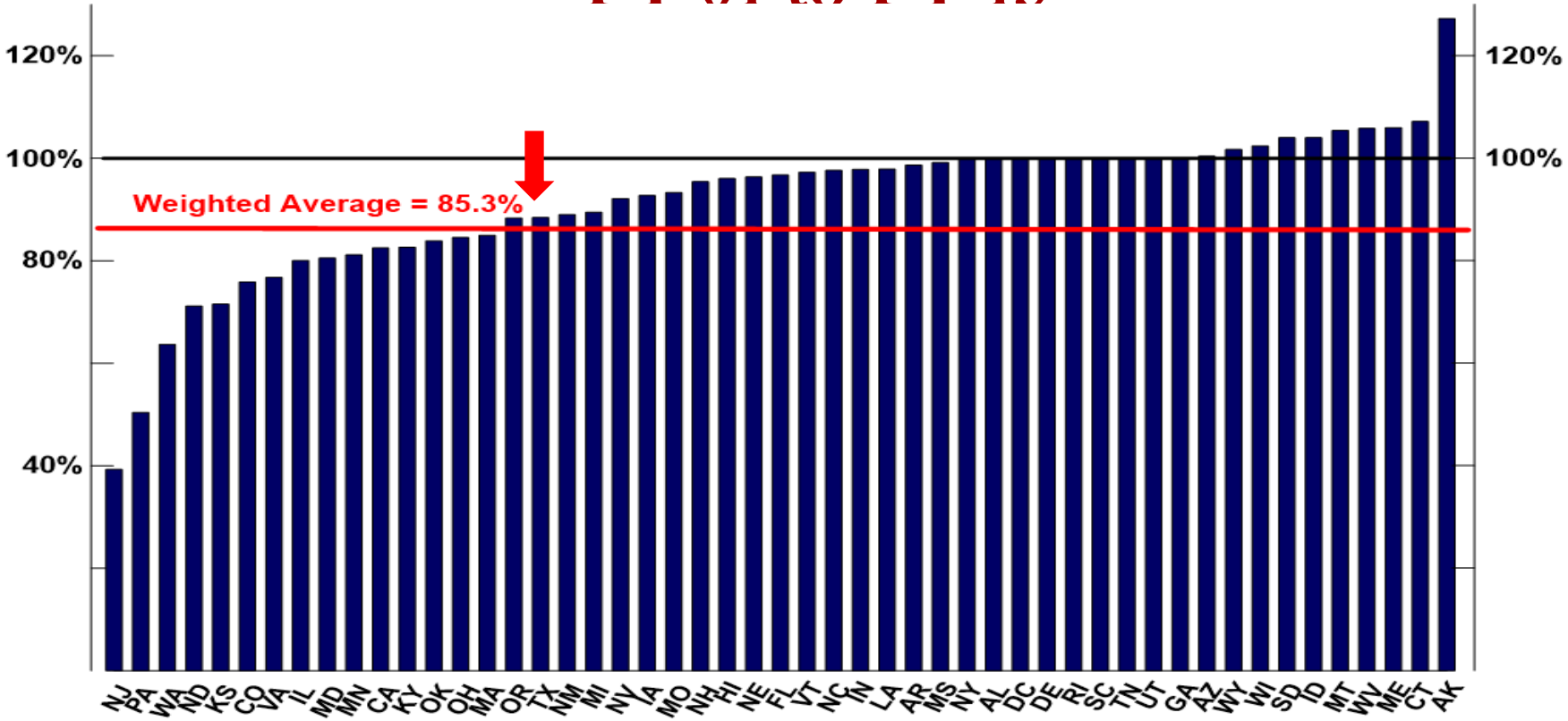
Weighted Average ARC/ADC Paid by State FY 01 to FY 15



"State and Local Government Contributions to Statewide Pension Plans: FY 15," NASRA 2017

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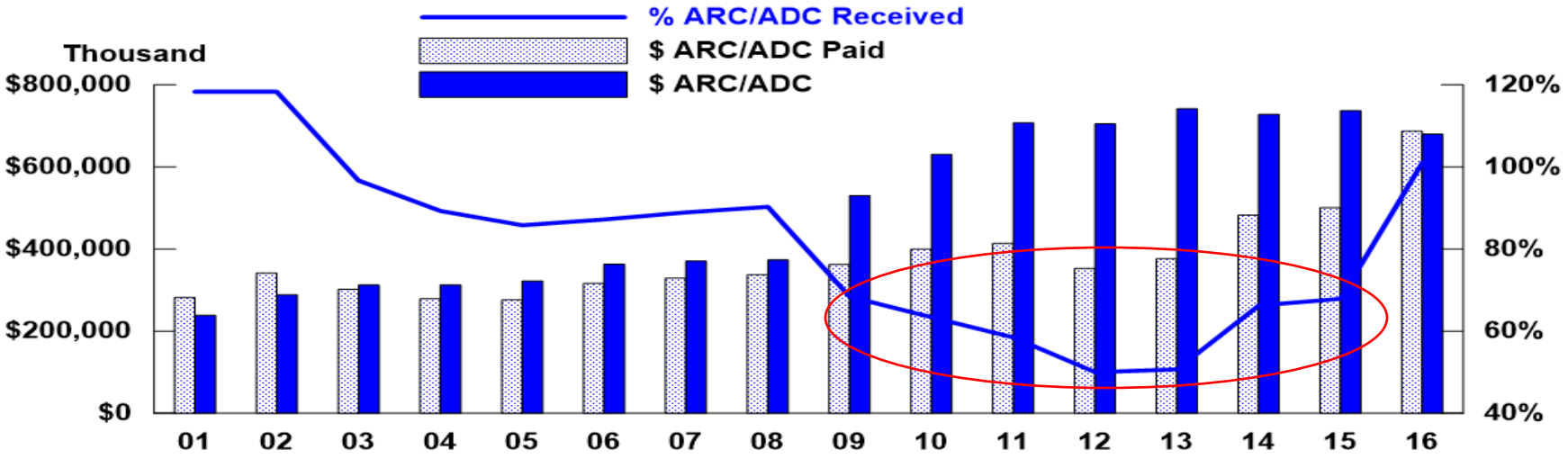
ERS of Texas ARC/ADC Experience, FY 01 to FY 16



NASRA, from ERS of Texas annual financial reports

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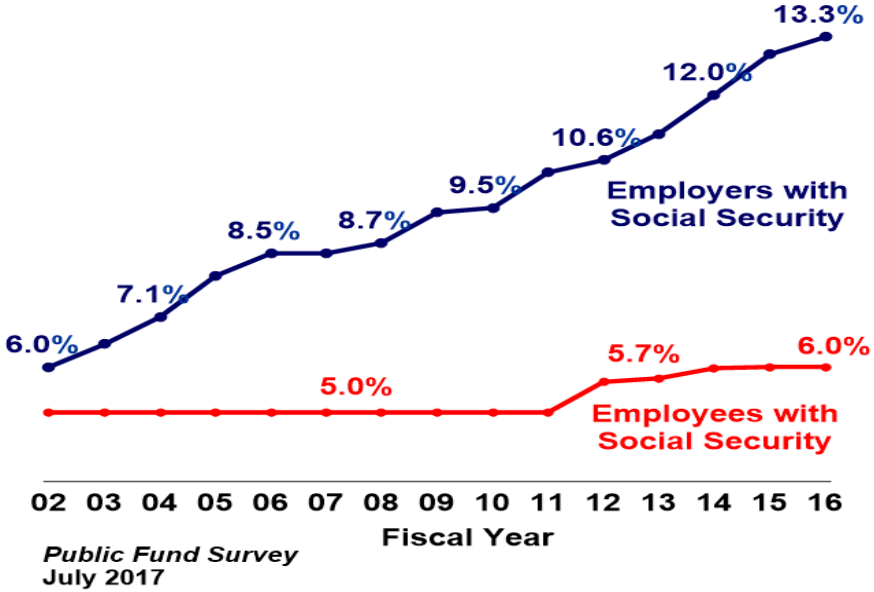
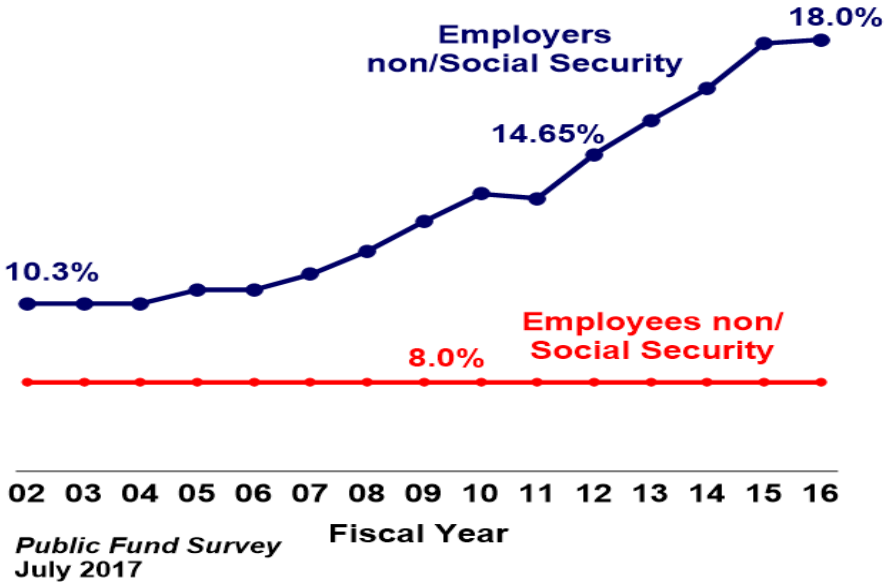
Median contribution rates, Social Security eligible and ineligible





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Methods states are using to amortize unfunded pension liabilities

- Pay the actuarially determined contribution
- Commit a portion of the budget surplus to the unfunded liability, either ad hoc or in statute (AK, HI, RI)
- Issue pension obligation bonds
- Establish a dedicated funding stream, such as revenue from tobacco, liquor, gambling, or severance taxes (KS, MT, OK)
- Dedicate a portion of sales, use, and/or corporate income tax revenues (OK)
- Reduce the funding amortization period/change the method
- Transfer ownership of the state lottery to the pension fund (NJ)
- Funding Policies@NASRA.org http://www.nasra.org/funding

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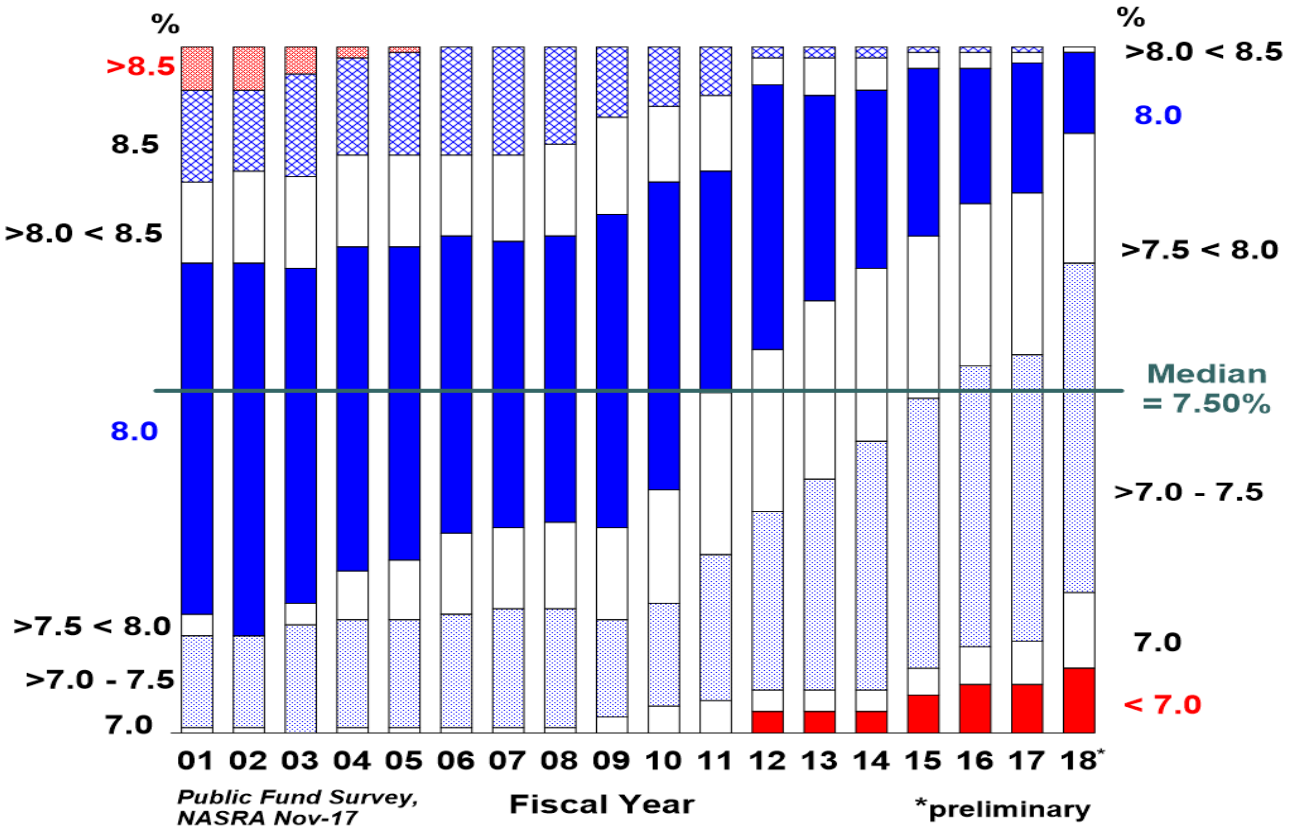
Change in distribution of nominal investment return assumptions, FY 01 to FY 18



ERS of TX: 7.5%

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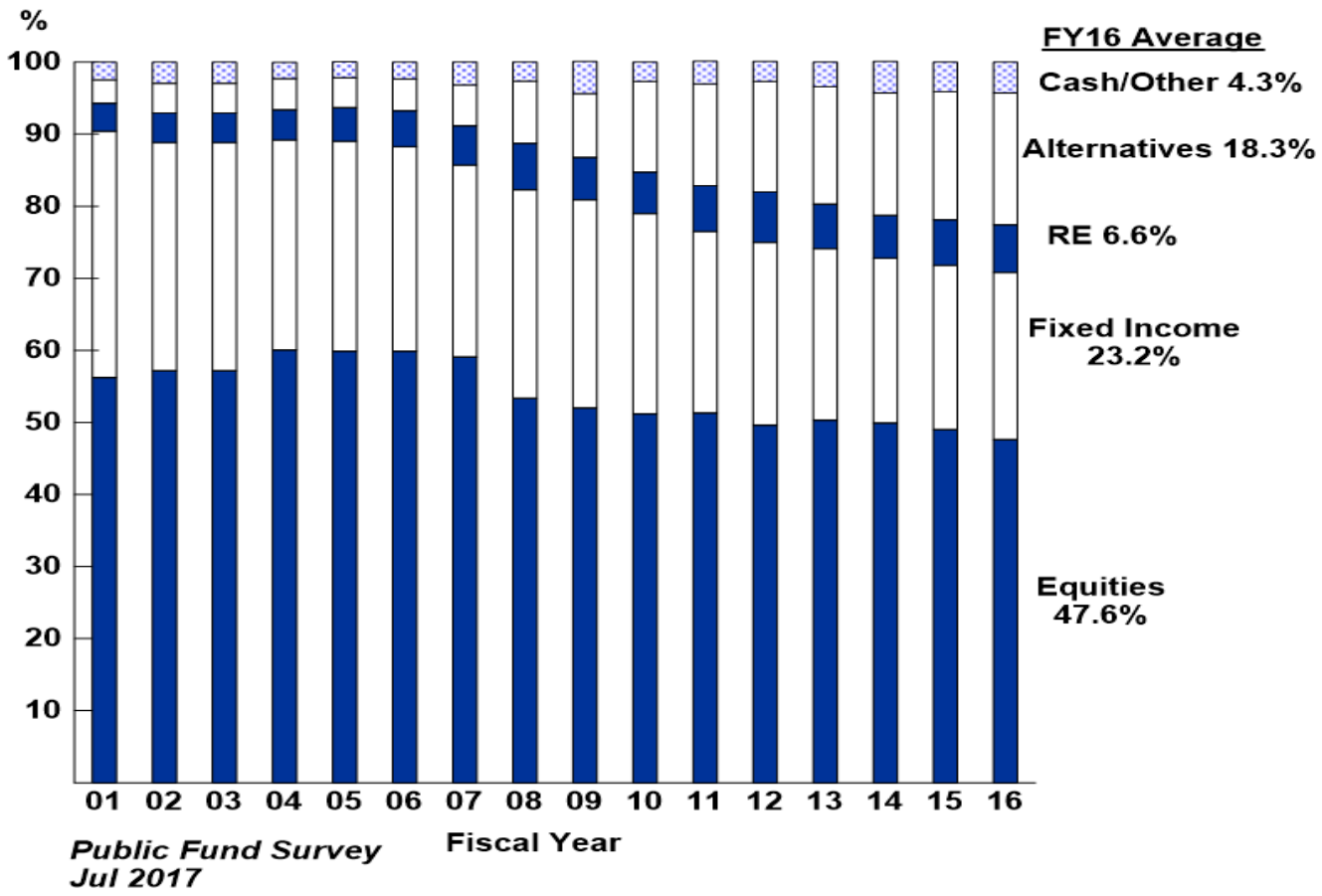
Change in average public pension fund asset allocation, FY 01 to FY 16



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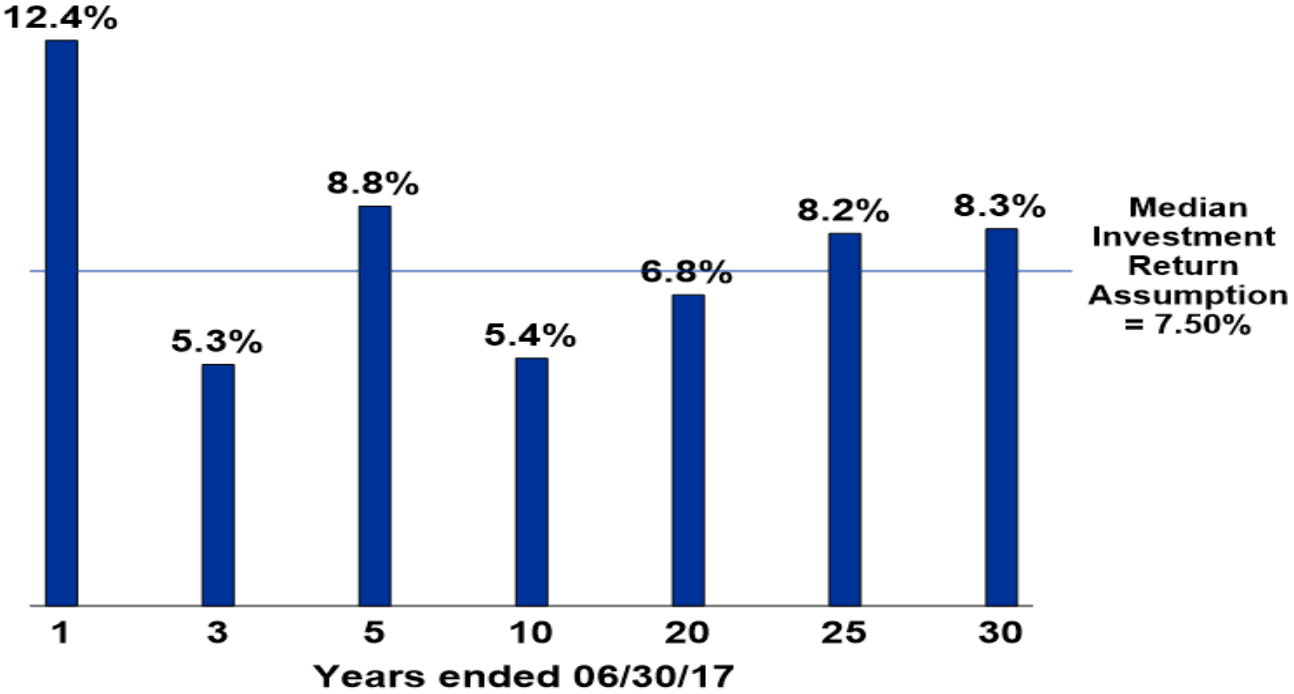
Median annualized public pension fund returns for periods ended 6/30/17



Callan Associates

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Pension challenges facing state and local government

- For some states and cities, adequately funding their pension will be a challenge, especially for those with large unfunded liabilities
- Funding challenges are exacerbated by
  - low interest rates
  - declining projected returns
  - improving mortality
  - maturing population
- Providing a retirement benefit that aligns with key stakeholder objectives

Pension challenges facing state and local governments, continued

- Understanding and responding appropriately to multiple pension measures (books, budgets, and bonds):
  - Books: GASB statements provide standardized financial reporting
  - Budgets: Actuarial funding calculations identify the amount needed to fund the benefit
  - Bonds: Bond rating agencies assess the degree to which pension obligations affect a government's ability to repay bonded debt

- keith@nasra.org
- 202-624-8464

Questions?

ERS

Public Agenda Item #6.1

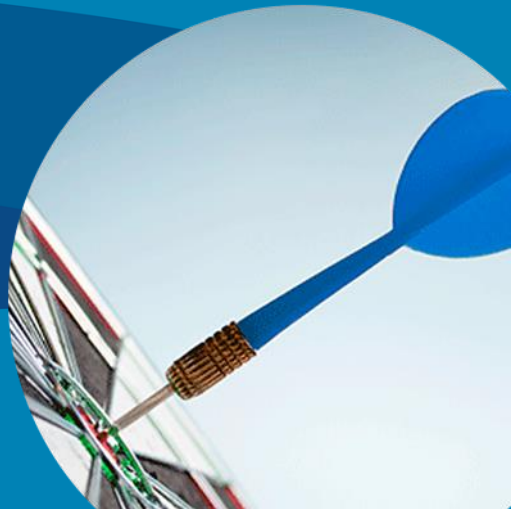
Review of Retirement Program Actuarial Valuations and Financial Status

December 12, 2017

Jen Jones, Senior Program Specialist
Ryan Falls and Joe Newton, Gabriel Roeder Smith

Actuarial Valuations of the ERS Retirement Funds as of August 31, 2017
December 12, 2017

Ryan Falls, FSA, EA, MAAA
Joe Newton, FSA, EA, MAAA



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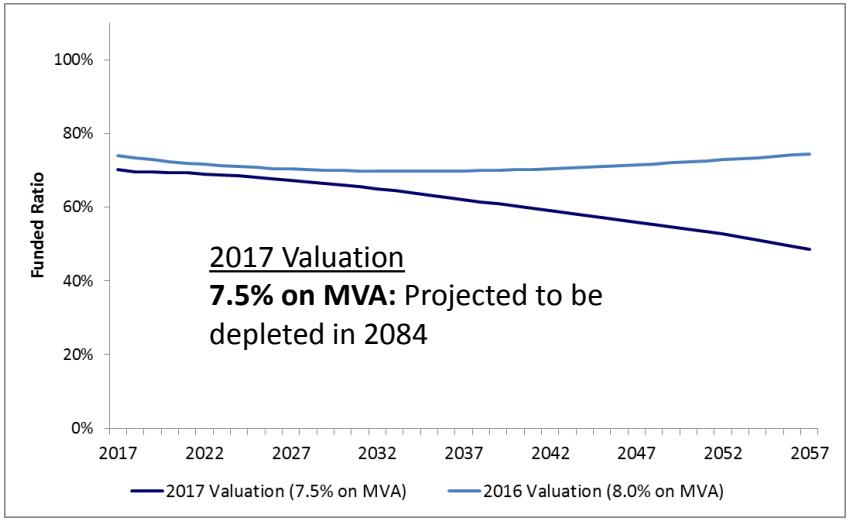
Agenda

- Purpose of Actuarial Valuation
- Summary of Changes in Actuarial Assumptions and Methods
- Impact of Asset Returns
- ERS Funding Valuation Results
- LECOSRF and JRS2 Funding Valuation Results
- Accounting Results at August 31, 2017

GRS Retirement Consulting

Where are we headed now?

- Recently revised expectations about important factors, such as future investment returns and life expectancy, altered the trajectory of the ERS Plan
- Additional contributions or benefit reductions are needed to improve the projected funded status based on the current benefits



2016 Valuation
8.0% on MVA: Projected to eliminate UAAL in 2089

Projections assume that all assumptions are met, including an 7.5% return (8.0% for 2016) on the market value of assets (unless otherwise noted), and future contributions continue at current levels.

Projections on market value and AVA are the same due to resetting the AVA to market as of August 31, 2017.

GRS Retirement Consulting

Purpose of Actuarial Valuation

Purpose of Actuarial Valuation

- Prepared as of August 31, 2017 using member data, financial data, benefit and contribution provisions, actuarial assumptions and methods as of that date
- Purposes:
  - Measure the actuarial liabilities and funding levels
  - Determine adequacy of current statutory contributions
  - Provide other information for reporting
    - GASB 67/68, Consolidated Annual Financial Report
  - Explain changes in actuarial condition of the plans
  - Track changes over time
  - Analyze future outlook

GRS Retirement Consulting

Summary of Changes in Actuarial Assumptions and Methods

Summary of Assumption/Method Changes

- Major Changes
  - Reduced the nominal investment return assumption to 7.50%
  - Decreased core inflation assumption from 3.50% to 2.50%
  - Set the general wage inflation (GWI) assumption to 0.50% above inflation
    - Nominal GWI becomes 3.00% (Inflation + 0.50%)
  - For regular State employees, decreased individual salary increase assumption schedules by the same 1.00% as the change in core inflation
    - Nominal annual increase for long service employees decreased from 5.00% to 4.00%
  - For LECOs, decreased individual salary increase assumption schedules by 0.50%
    - 1.00% decrease due to change in core inflation but 0.5% increase in the individual merit and promotion component
    - Nominal annual increase for long service employees decreases from 5.00% to 4.50%
  - Updated mortality tables, including assumption for continued future mortality improvement
    - New assumption based on actual experience of ERS annuitants

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Summary of Assumption/Method Changes

- Minor Changes
  - Changed the asset smoothing method to a traditional individual year deferral method, but allow direct offsetting of gains and losses
    - Reset the actuarial (smoothed) value market value as of August 31, 2017
    - New method to apply prospectively
  - Changed actuarial cost method to Individual EAN (from Ultimate EAN)
  - Reduced rates of disability and retirement
  - Slightly increased rates of termination
  - Increased administrative expense load from 0.25% of payroll to 0.33% for ERS
    - Lowered LECOSRF from 0.10% to 0.08% and lowered JRS2 from 0.50% to 0.33%

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Impact of Asset Returns

Asset Experience

- Asset returns
  - Market Value (gross): 12.15%
  - Market Value (net): 12.11%
  - Actuarial (or smoothed) Value: 2.8%
    - Primarily due to recognizing $2 billion in unrecognized losses from the prior asset smoothing method
    - Less than expected, thus creates a loss on the unfunded liability
- Gains on the market value
  - Helps offset a portion of liability losses due to assumption/ method changes

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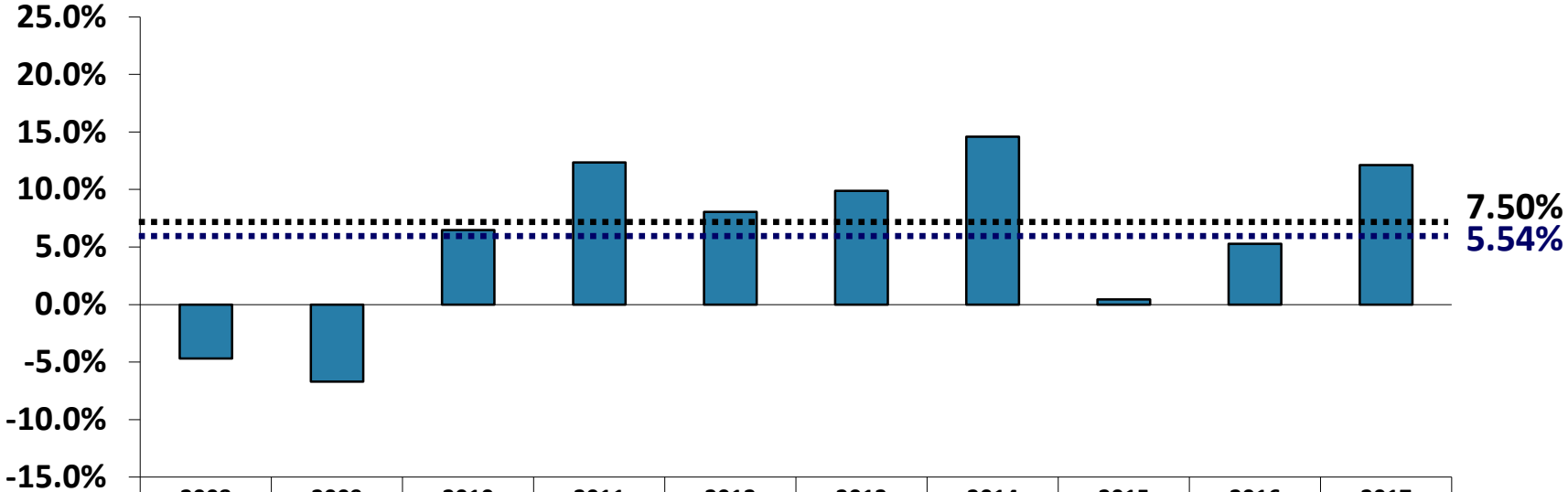
Estimated Yields Based on Market Value of Assets



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Market	-4.69%	-6.71%	6.48%	12.36%	8.04%	9.87%	14.58%	0.44%	5.28%	12.11%

8.34% average compound net return (on market value) over last 5 years.

5.54% average compound net return (on market value) over last 10 years.

6.41% average compound net return (on market value) over last 20 years.

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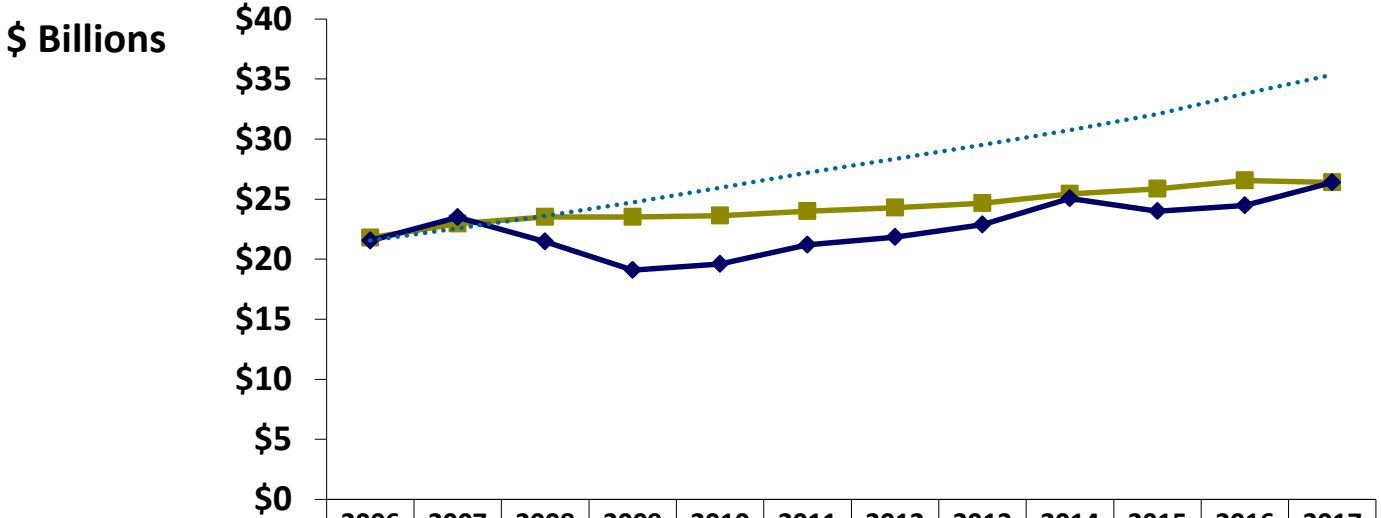
Actuarial, Market and Hypothetical* Values of Assets for ERS



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Actuarial	$21.8	$22.9	$23.5	$23.5	$23.6	$24.0	$24.3	$24.7	$25.4	$25.9	$26.6	$26.4
Market	$21.5	$23.5	$21.5	$19.1	$19.6	$21.2	$21.8	$22.9	$25.1	$24.0	$24.5	$26.4
Hypothetical*	$21.5	$22.6	$23.6	$24.7	$25.9	$27.2	$28.3	$29.5	$30.8	$32.1	$33.8	$35.4

* Hypothetical uses 2006 market value and projects forward using actual cash flows and investment returns consistent with actuarial assumptions in effect.

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ERS
Funding Valuation Results
at August 31, 2017

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Funded Status (ERS)

($ in millions)

Actuarial Valuation as of August 31, 2017		
	AVA	**MVA**
Actuarial Accrued Liability	$37,630	$37,630
AVA / MVA	26,372	26,372
Unfunded Accrued Liability	$11,258	$11,258
Funded Ratio	70.1%	70.1%
Funding Period	Never	Never

Actuarial Valuation as of August 31, 2016		
	AVA	**MVA**
Actuarial Accrued Liability	$35,303	$35,303
AVA / MVA	26,557	24,465
Unfunded Accrued Liability	$8,746	$10,838
Funded Ratio	75.2%	69.3%
Funding Period	35	73

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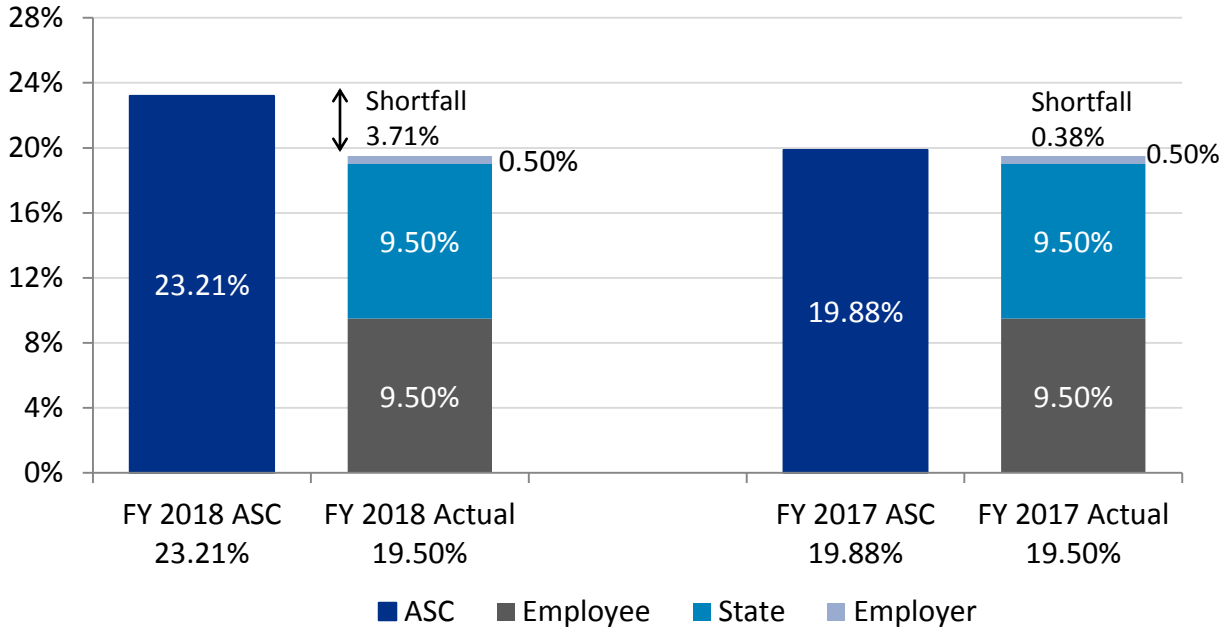
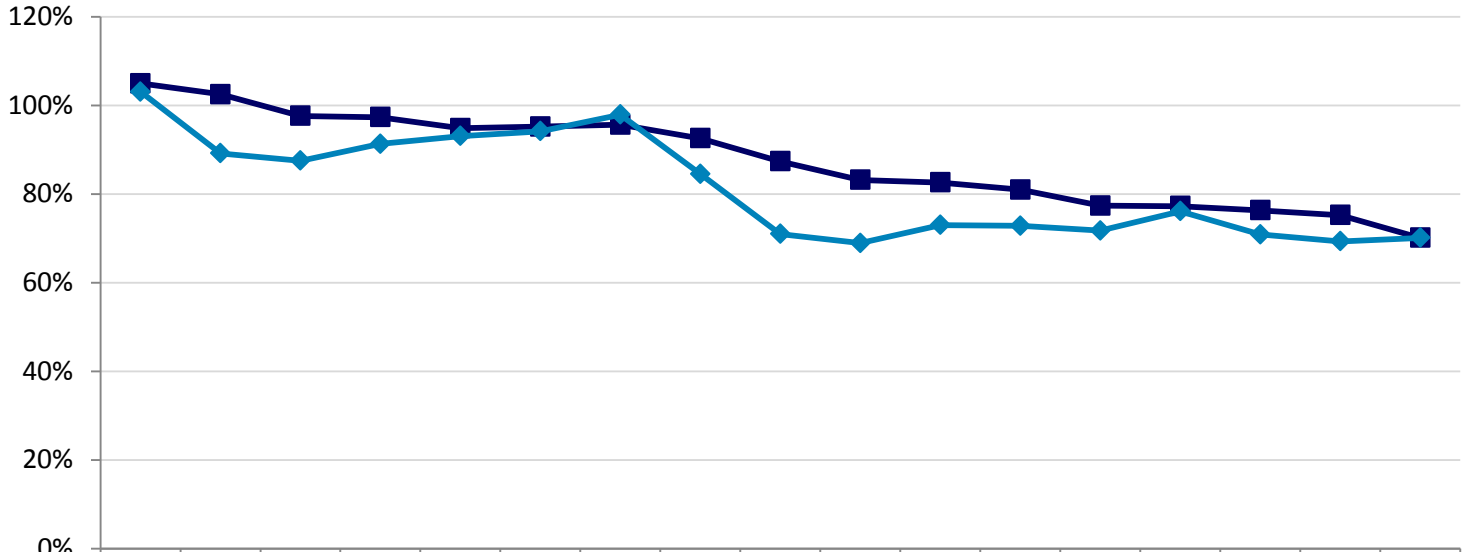
Actuarially Sound Contribution (ERS)



Funded Ratio History (ERS)



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Funded Ratio on AVA	104.9	102.5	97.6%	97.3%	94.8%	95.2%	95.6%	92.6%	87.4%	83.2%	82.6%	81.0%	77.4%	77.2%	76.3%	75.2%	70.1%
Funded Ratio on MVA	103.0	89.1%	87.5%	91.3%	93.1%	94.2%	97.9%	84.5%	71.0%	68.9%	73.0%	72.8%	71.7%	76.1%	70.9%	69.3%	70.1%

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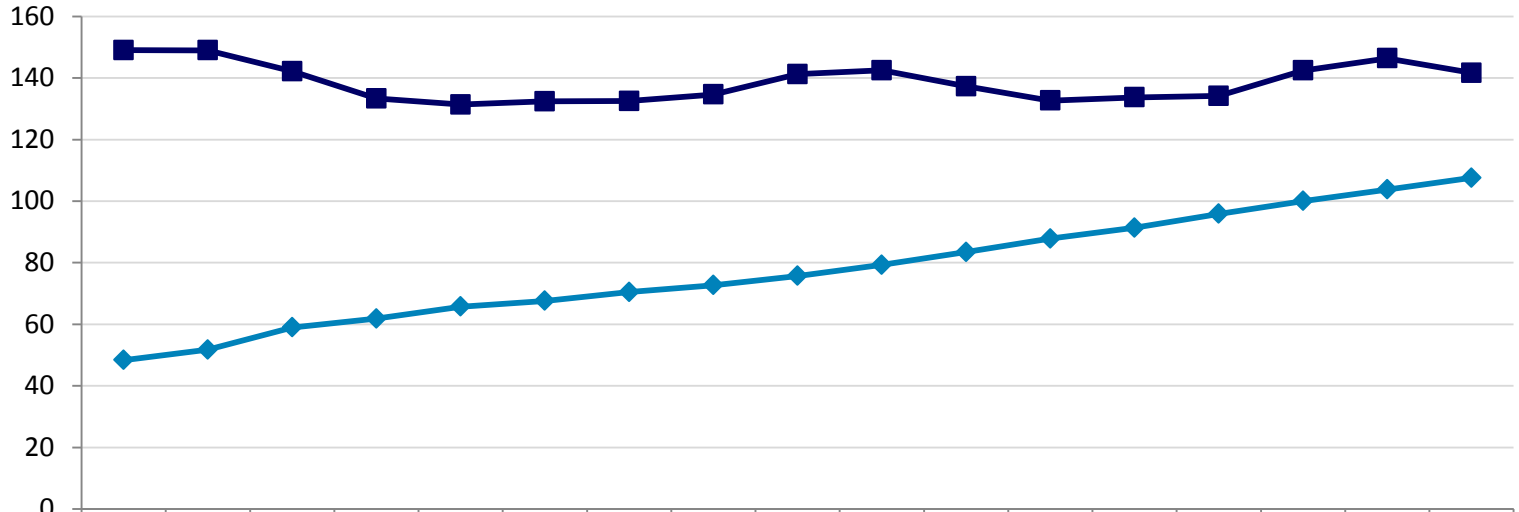
Membership (ERS)

(counts in 1000's)



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Actives	149	149	142	133	131	132	132	135	141	142	137	133	134	134	142	146	142
Payees	48	52	59	62	66	68	70	73	76	79	83	88	91	96	100	104	108

Active membership increase in 2015 includes approximately 7,000 new members from the elimination of the 90-day wait on September 1, 2015.

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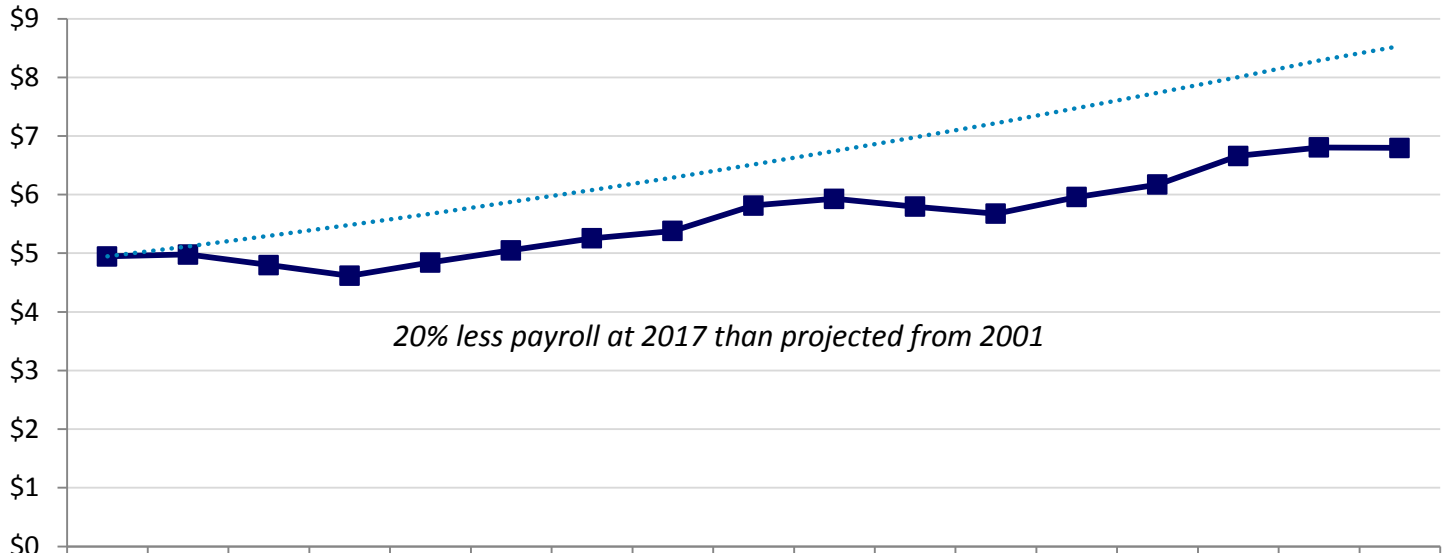
Payroll – Actual vs. Expected* (ERS)

($ in billions)



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Actual Payroll	$4.9	$5.0	$4.8	$4.6	$4.8	$5.1	$5.3	$5.4	$5.8	$5.9	$5.8	$5.7	$6.0	$6.2	$6.7	$6.8	$6.8
Projected Payroll	$4.9	$5.1	$5.3	$5.5	$5.7	$5.9	$6.1	$6.3	$6.5	$6.7	$7.0	$7.2	$7.5	$7.7	$8.0	$8.3	$8.5

**Projected from 2001 using payroll growth assumption in effect*

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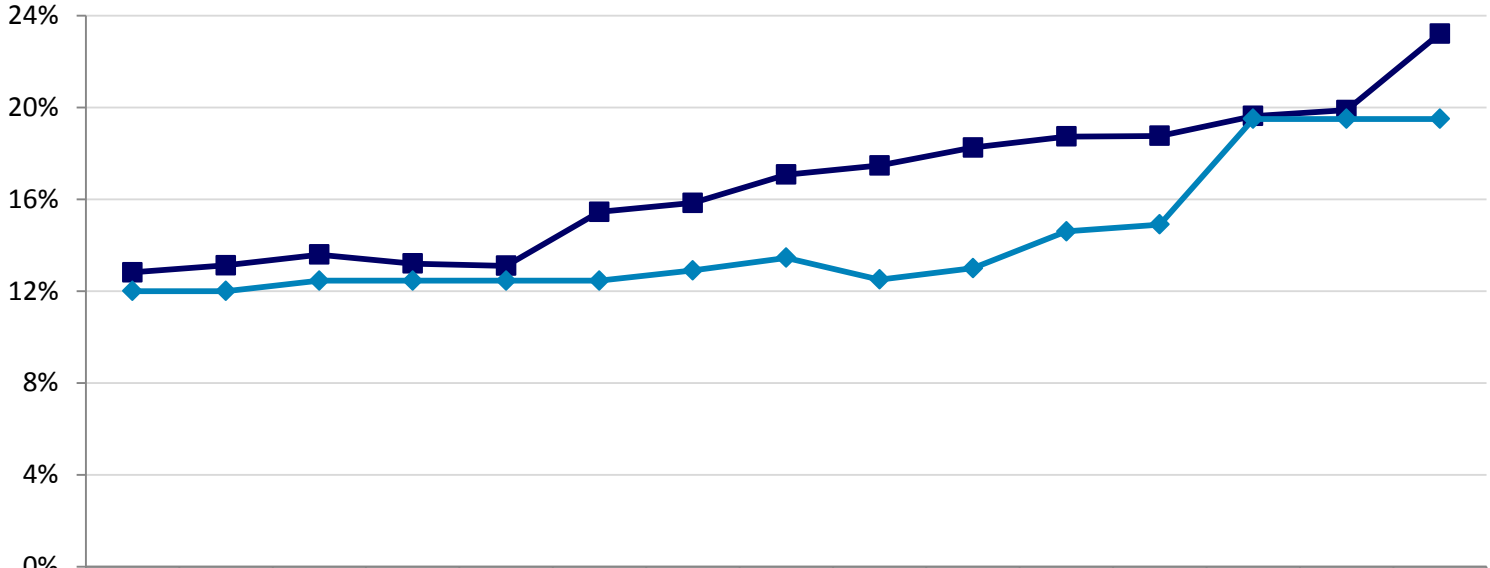
Actual vs. Actuarial Contributions* (ERS)

(% of Payroll, by Fiscal Year)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ASC*	12.82%	13.12%	13.59%	13.20%	13.10%	15.45%	15.84%	17.07%	17.47%	18.25%	18.73%	18.76%	19.62%	19.88%	23.21%
Actual	12.00%	12.00%	12.45%	12.45%	12.45%	12.45%	12.90%	13.45%	12.50%	13.00%	14.60%	14.90%	19.50%	19.50%	19.50%

**Actuarially Sound Contribution defined as normal cost plus 31-year amortization of unfunded*

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Short-term Projections Using Alternate One-Year Investment Returns (ERS)

	August 31, 2017	Market Return for 12 month period ending August 31, 2018				
	Results	**-7.5%**	**0.0%**	**7.5%**	**15.0%**	**22.5%**
UAAL ($ in billions)	$11.3	$12.6	$12.2	**$11.8**	$11.4	$11.0
Funded Ratio on AVA	70.1%	67.6%	68.6%	**69.6%**	70.6%	71.6%
ASC	23.21%	23.93%	23.60%	**23.27%**	22.94%	22.62%
Funding Period on AVA	Never	Never	Never	**Never**	Never	Never
Funded Ratio on MVA	70.1%	59.7%	64.6%	**69.6%**	74.6%	79.6%
Funding Period on MVA	Never	Never	Never	**Never**	88	37

Projections assume that all assumptions are met (except asset returns, as noted) and future contributions continue at current levels.

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5-Year Funded Ratio and ASC Projections (ERS)

Projection Assuming 7.5% Investment Returns			
Actuarial Valuation as of August 31,	Funded Ratio on AVA	ASC	Funding Period on AVA
2017	70.1%	23.21%	Never
2018	69.6%	23.27%	Never
2019	69.6%	23.33%	Never
2020	69.4%	23.40%	Never
2021	69.2%	23.47%	Never

Projections assume that all assumptions are met, including an 7.5% return on the market value of assets, and future contributions continue at current levels.

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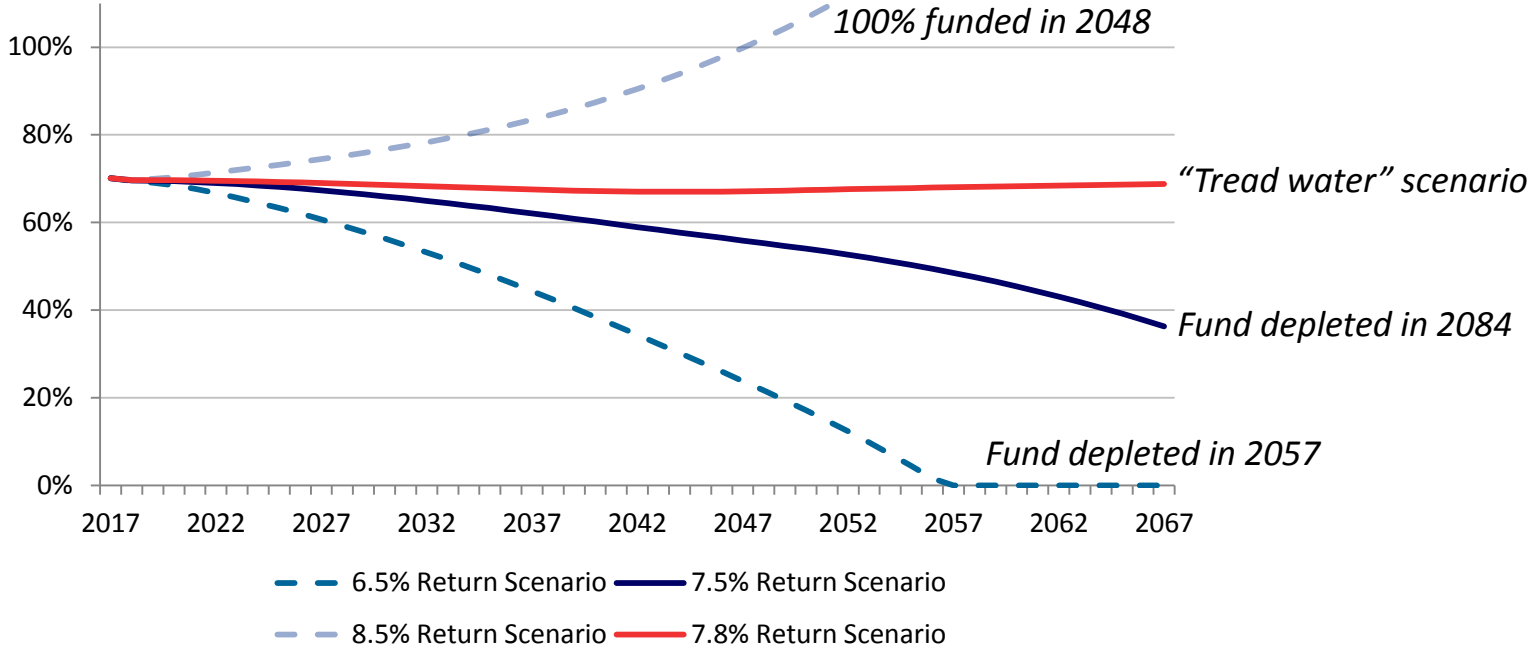
Funded Ratio Projections (ERS)



Projections assume no changes to current assumptions and except actual asset returns, as noted, all other assumptions are met and future contributions continue at current levels.

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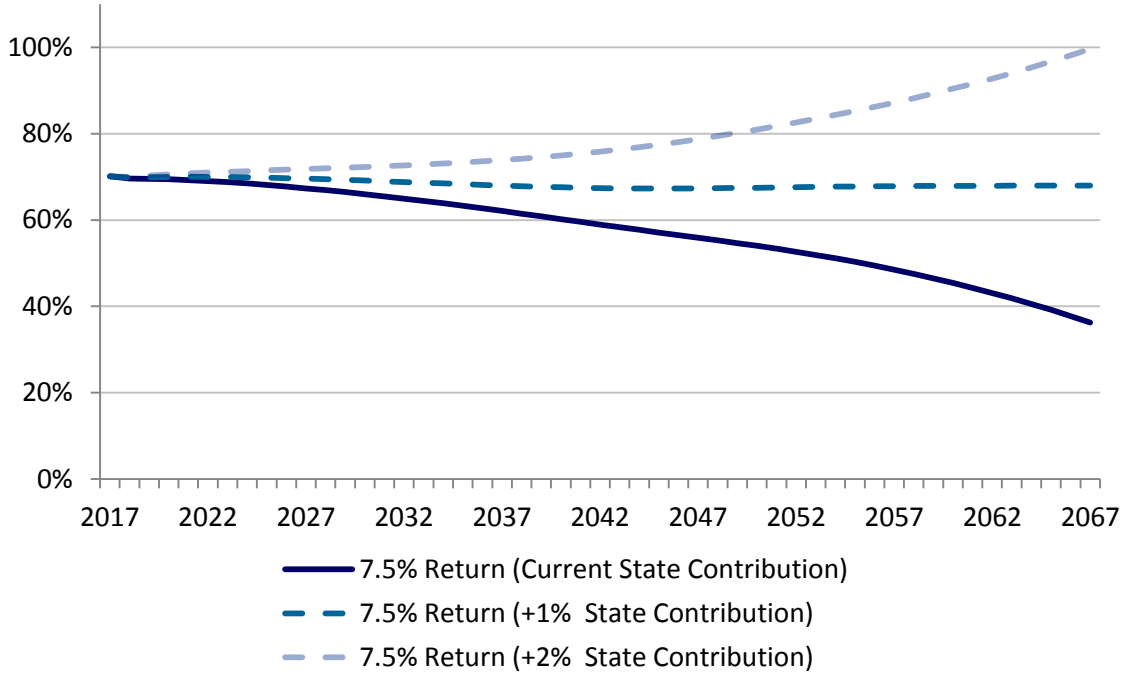
Funded Ratio Projections (ERS)



100% funded in 2068

68% funded after 100 years

Fund depleted in 2084

Projections assume no changes to current assumptions and except State Contribution rates, as noted, all other assumptions are met.

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LECOSRF and JRS2
Funding Valuation Results
at August 31, 2017

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LECOSRF and JRS2 Results

- LECOSRF had a reduction in funded status
  - Contributions are not sufficient to sustain the plan
  - Projected depletion date in 2044
- JRS2 had a reduction in funded status
  - However, current statutory rates sufficient to sustain the plan

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Funded Status

($ in millions)

Actuarial Valuation as of August 31, 2017		
	LECOSRF	**JRS2**
Actuarial Accrued Liability	$1,400	$464
Actuarial Value of Assets	924	421
Unfunded Accrued Liability	$476	$43
Funded Ratio	66.0%	90.8%
Funding Period	Never	63

Actuarial Valuation as of August 31, 2016		
	LECOSRF	**JRS2**
Actuarial Accrued Liability	$1,312	$426
Actuarial Value of Assets	933	396
Unfunded Accrued Liability	$379	$30
Funded Ratio	71.1%	92.9%
Funding Period	Never	49

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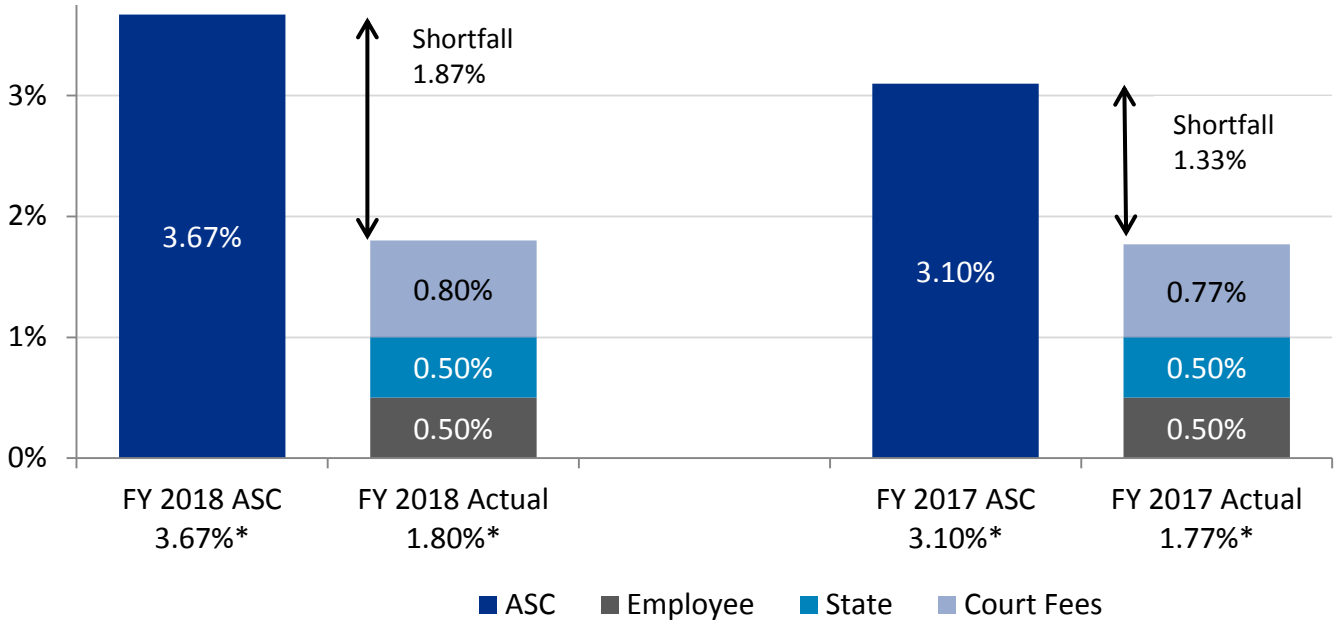
Actuarially Sound Contribution (LECOSRF)



**The 0.80% amount for LECOSRF is projected to be about $18.8 million for FY18, based on a 4-year average of actual revenues. The amount of court fees received by LECOSRF is not based on a percent of payroll and is expected to decline as a percent of payroll going forward.*

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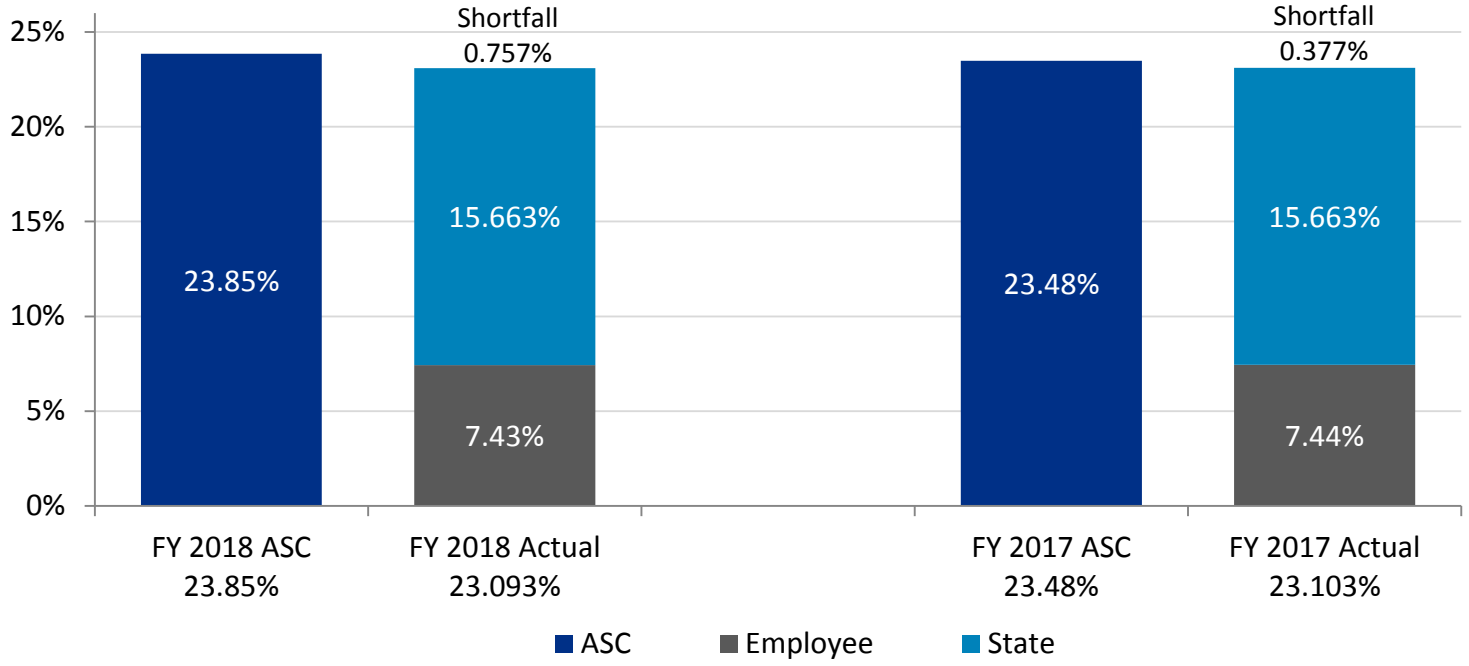
Actuarially Sound Contribution (JRS2)



Accounting Results as of August 31, 2017

Accounting Valuation Results

- ERS adopted GASB 67 for plan year ending August 31, 2014
- GASB 68 measures were included in Texas state reporting starting in fiscal year ending August 31, 2016
  - State has elected to utilize one year reporting lag
    - GASB 67/68 valuation as of August 31, 2016 used for August 31, 2017 reporting
- GASB 73 outlines new reporting for JRS1

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Determining Discount Rate

- Discount rate used in determining the Total Pension Liability (TPL) is a blend of two rates
  - Long-term expected rate of return on pension plan investments (7.50% based on current investment policy)
    - Can be used to discount plan obligations as long as there are projected assets sufficient to pay projected plan benefits
  - Yield or index rate for a 20-year, tax-exempt general obligation municipal bond (3.42% as of August 31, 2017)
    - Used to discount plan obligations after the projected assets have been extinguished
  - JRS1 uses municipal bond rate since there are no trust assets

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Accounting Valuation Results

- ($ in millions)

August 31, 2017	ERS	LECOSRF	JRS2	JRS1
Single Discount Rate (SDR)	5.36%	4.21%	7.50%	3.42%
Total Pension Liability	$48,237	$2,164	$464	$277
Plan Fiduciary Net Position	26,372	924	421	0
Net Pension Liability (NPL)	**21,865**	**1,240**	**43**	**277**
August 31, 2016				
Single Discount Rate (SDR)	5.73%	3.69%	6.53%	2.84%
Total Pension Liability	$44,223	$2,214	$486	$328
Plan Fiduciary Net Position	24,466	860	381	0
Net Pension Liability (NPL)	**19,757**	**1,354**	**105**	**328**

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Summary

Summary

- Changes in future expectations had a large impact on the projected funded status of the plans
- Asset experience exceeded expectations on a market basis
- For ERS and LECOSRF, current contribution level is not sufficient to sustain the system
  - Without an increase of contributions over the current schedule, or a reduction of benefits, the funded status will continue to decline
- Contribution rates and current level of plan benefits are sufficient to sustain JRS2
  - However, there is no margin for adverse deviation or response to additional cost pressures

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Disclaimers

- This presentation is intended to be used in conjunction with the actuarial valuation reports issued in December 2017. This presentation should not be relied on for any purpose other than the purpose described in the valuation reports.
- This presentation shall not be construed to provide tax advice, legal advice or investment advice.

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Questions?

ERS

Public Agenda Item #7.1

Review and Discussion of Investment Performance for 3rd Calendar Quarter of 2017

December 12, 2017

Sharmila Kassam, CPA, Deputy Chief Investment Officer
Steve Voss & Mike McCormick, CFA, Aon Hewitt

ERS Trust Fund Dashboard

Performance

Fund	CYTD	FYTD
Performance:	11.9%	1.3%
Benchmark:	11.2%	1.2%
Excess Return:	0.7%	0.1%

3-Yr Tracking error 1.54

Largest Contributors (quarter):

- Outperformance of domestic and international public equity and real estate

Largest Detractors (quarter):

- Underperformance of the private equity portfolio

Profile

Market Value at 9/30/17:
$27.8 Billion

Actuarial Accrued Liability 8/31/17:
$37.6 Billion

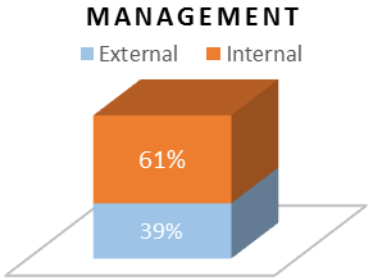
Retirees and Beneficiaries 8/31/17:
107,530

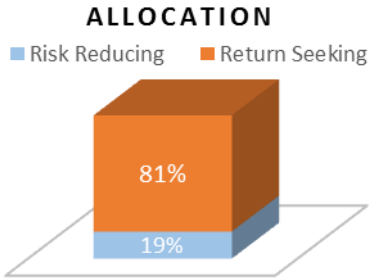
Retirement Payments Annually 8/31/17:
$2.2 Billion

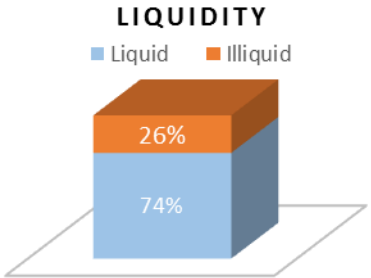
ERS Trust Funding Ratio 8/31/17:
70.1%

Compliance

Asset Allocation Compliance: Yes
Tracking Error Compliance: Yes
Investment Policy Compliance: Yes



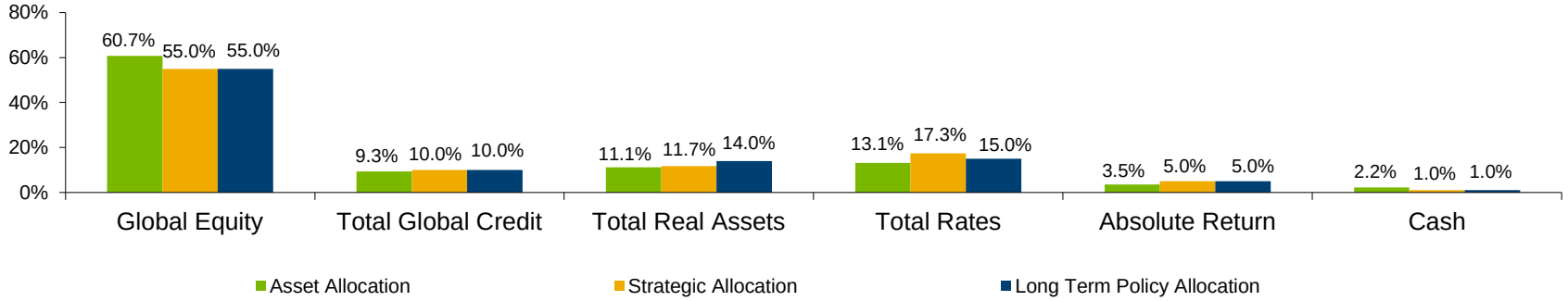




Total Fund: Asset Allocation

Summary of Cash Flow					
	1 Quarter	Fiscal YTD	1 Year	3 Years	5 Years
Total Fund					
Beginning Market Value	26,979,126,647	27,531,798,643	25,570,386,973	25,493,748,098	23,053,697,254
+ Additions / Withdrawals	-267,395,492	-87,308,003	-1,010,234,702	-3,061,382,880	-5,764,697,717
+ Investment Earnings	1,085,590,898	352,831,413	3,237,169,782	5,364,956,834	10,508,322,516
= Ending Market Value	**27,797,322,053**	**27,797,322,053**	**27,797,322,053**	**27,797,322,053**	**27,797,322,053**

Employees Retirement System of Texas -
Quarterly Asset Allocation Including Risk Management vs. Policy Target as of 9/30/2017



[1] All returns contained in this report are shown net of investment management fees. All returns longer than 1-year are annualized.
[2] Source data can be found on pages 31 and 40 of full report.
[3] Due to rounding throughout the report, percentage totals displayed may not sum to 100%.

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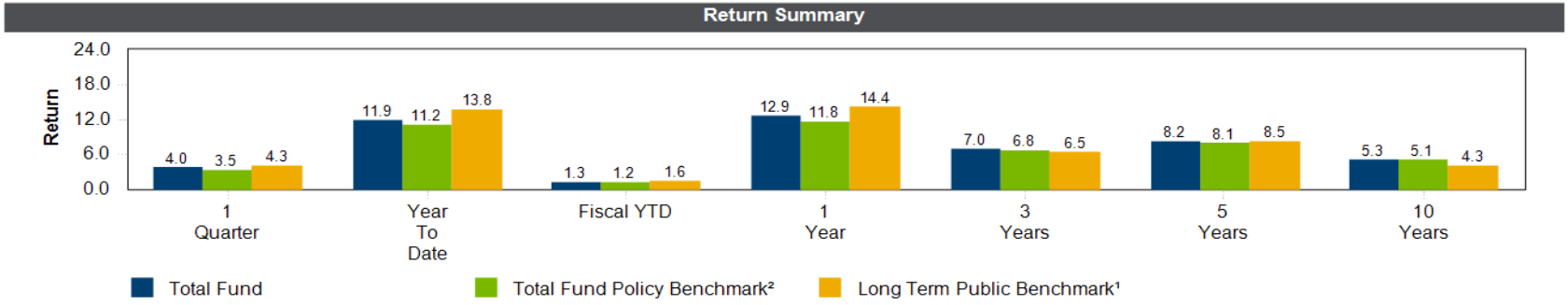
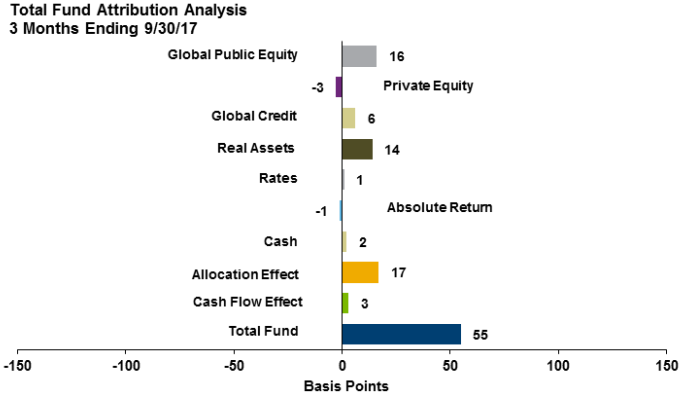
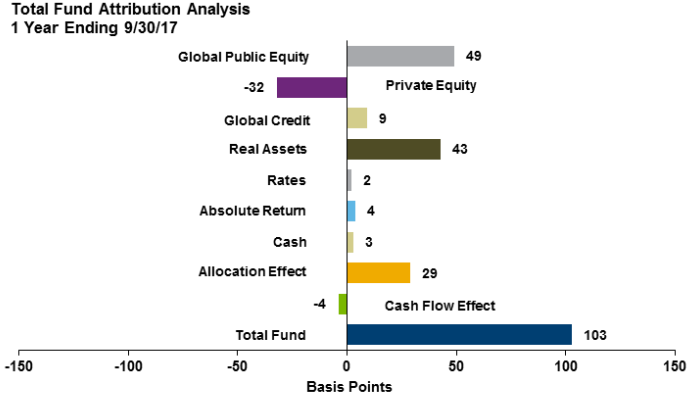
Total Fund: Performance







[1]The Long Term Public Benchmark is a is a combination of 79% MSCI ACW IMI and 21% Barclays Intermediate Treasury Index.
[2]A detailed description of the Policy Index as of 9/30/2017 is provided in the appendix of the full report.
[3]Source data can be found on pages 30 and 32 of full report.

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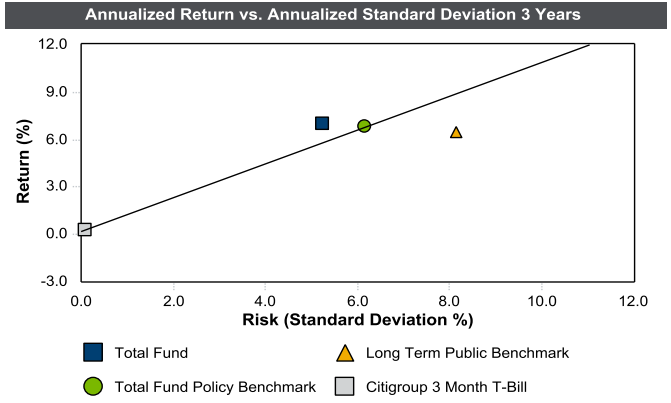
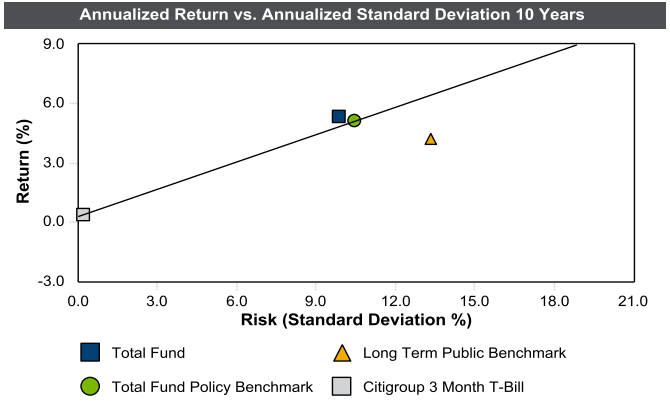
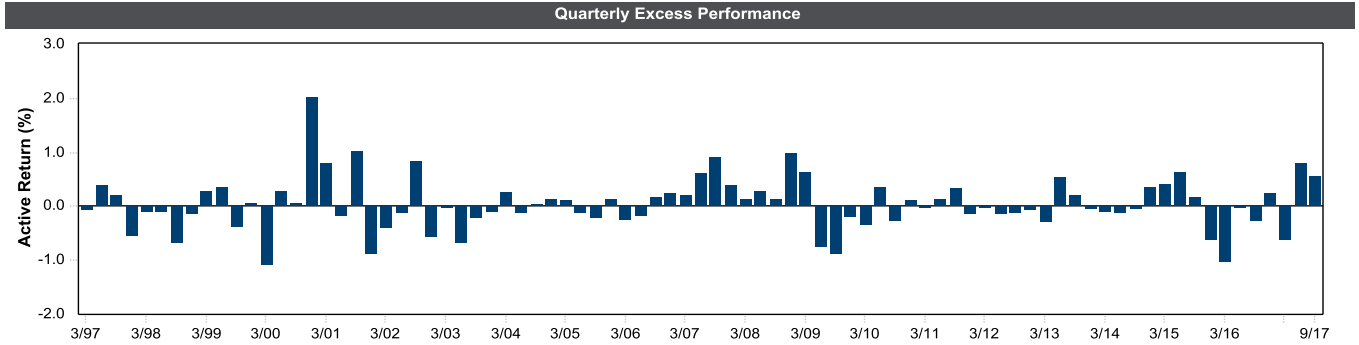
Total Fund: Risk







[1] Source data can be found on page 32 and 39 of full report.

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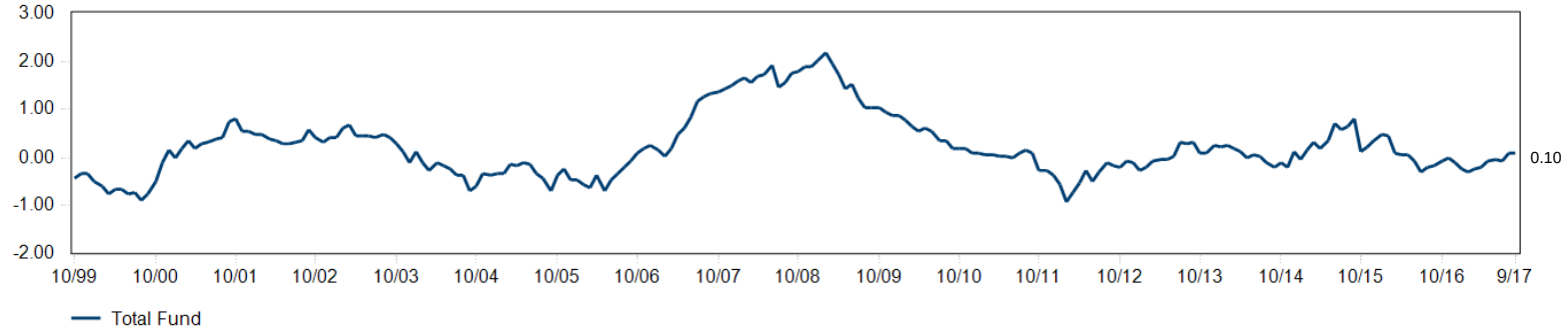
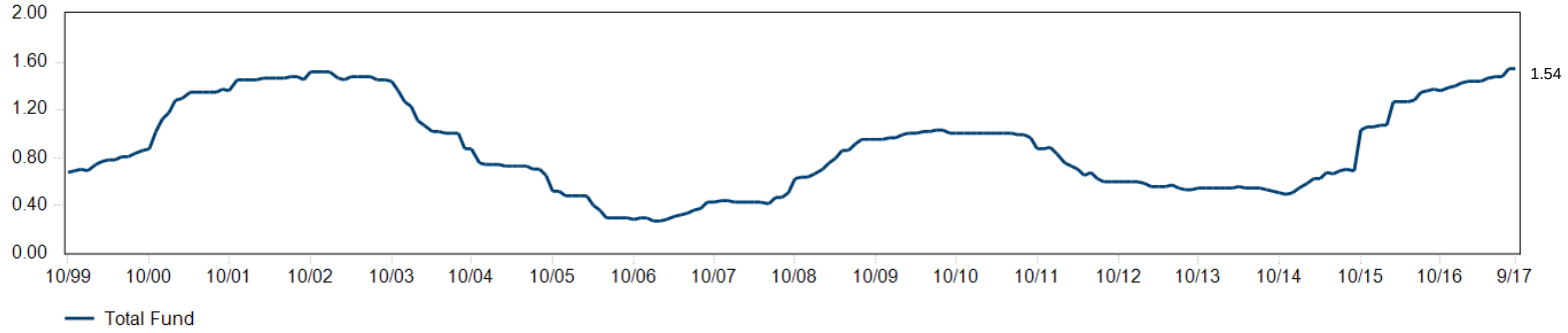
Total Fund: Rolling Information Ratio and Tracking Error (36 months)

Information Ratio (Excess Return Ratio[1])



Tracking Error[2]



[1] Measured by dividing the active rate of return by the tracking error. The higher the Information Ratio, the more value-added contribution by the manager.
[2] A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.

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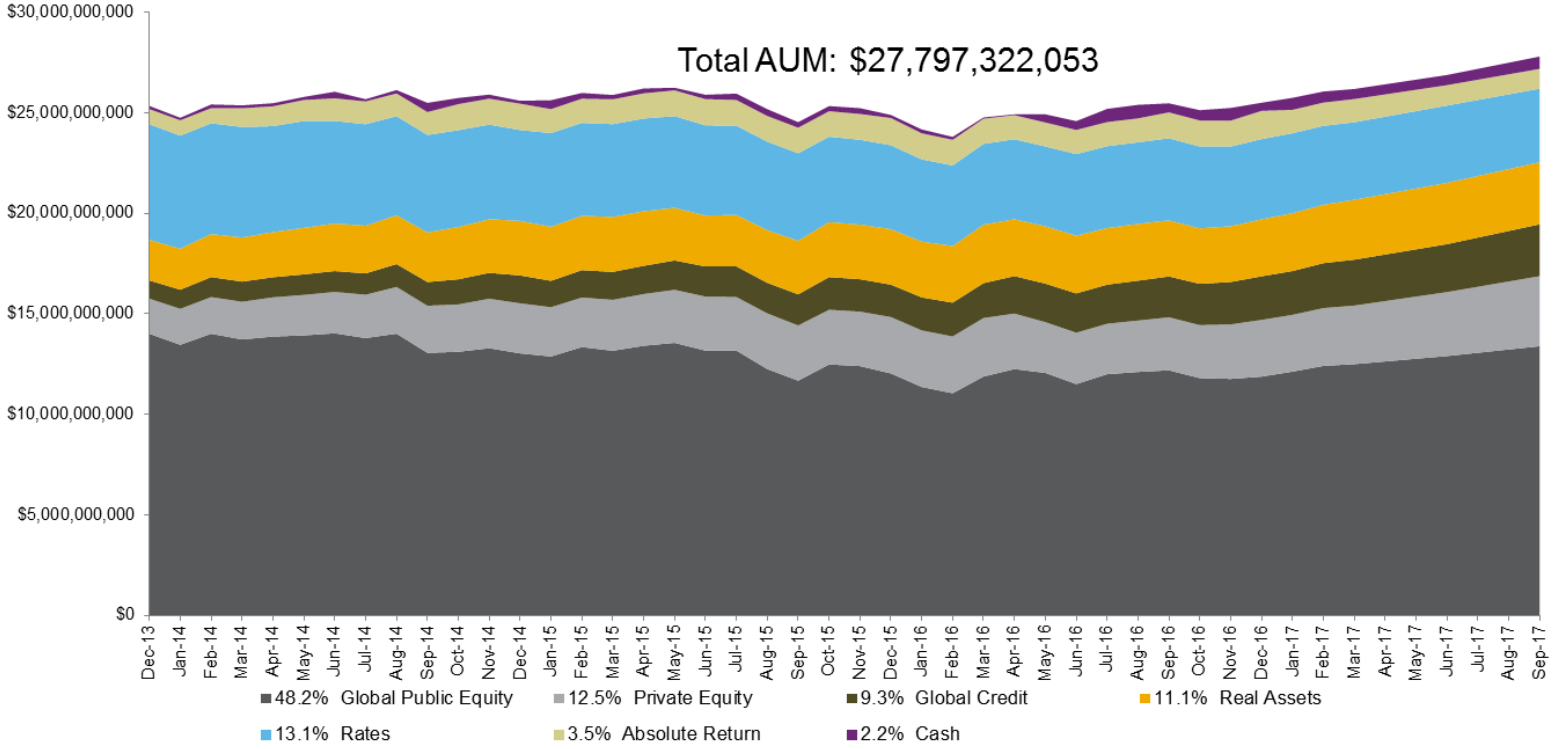
ERS Asset Allocation Evolution



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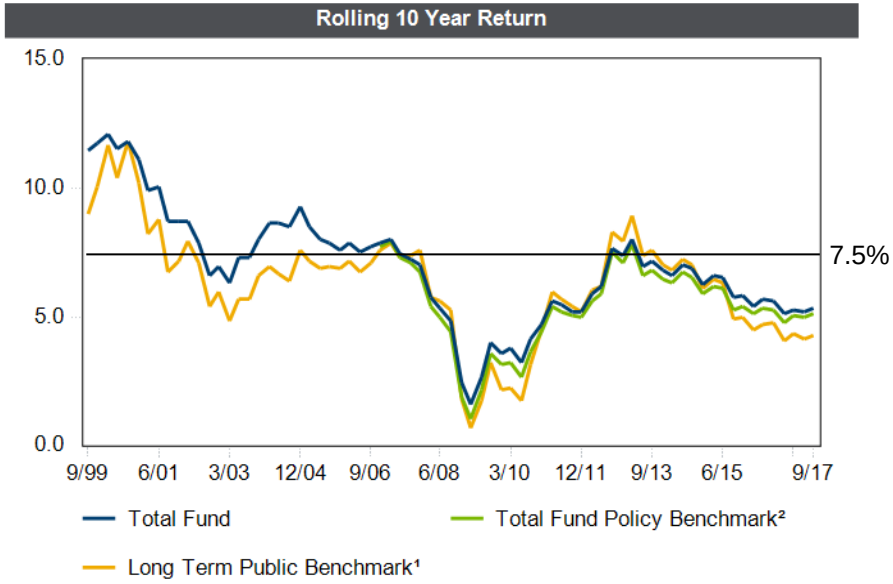
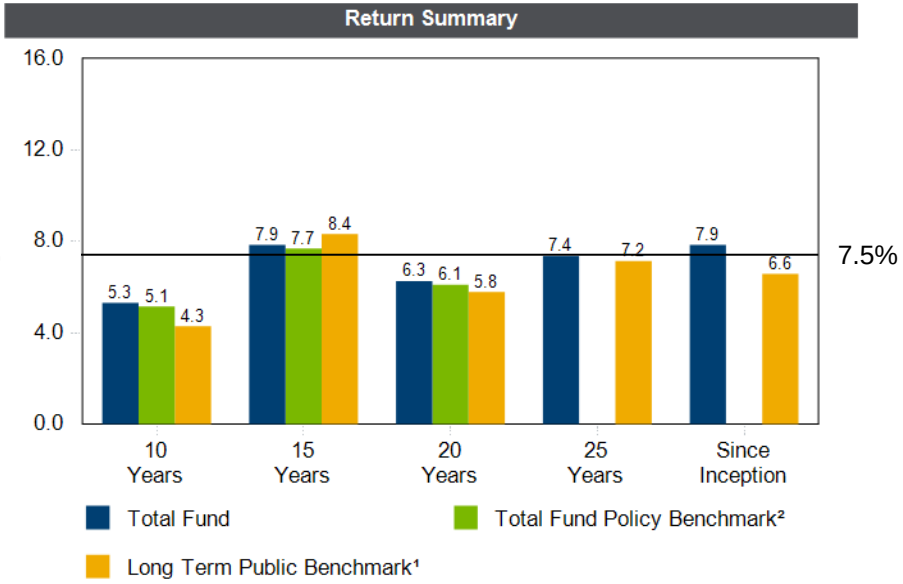
Long Term Investment Results

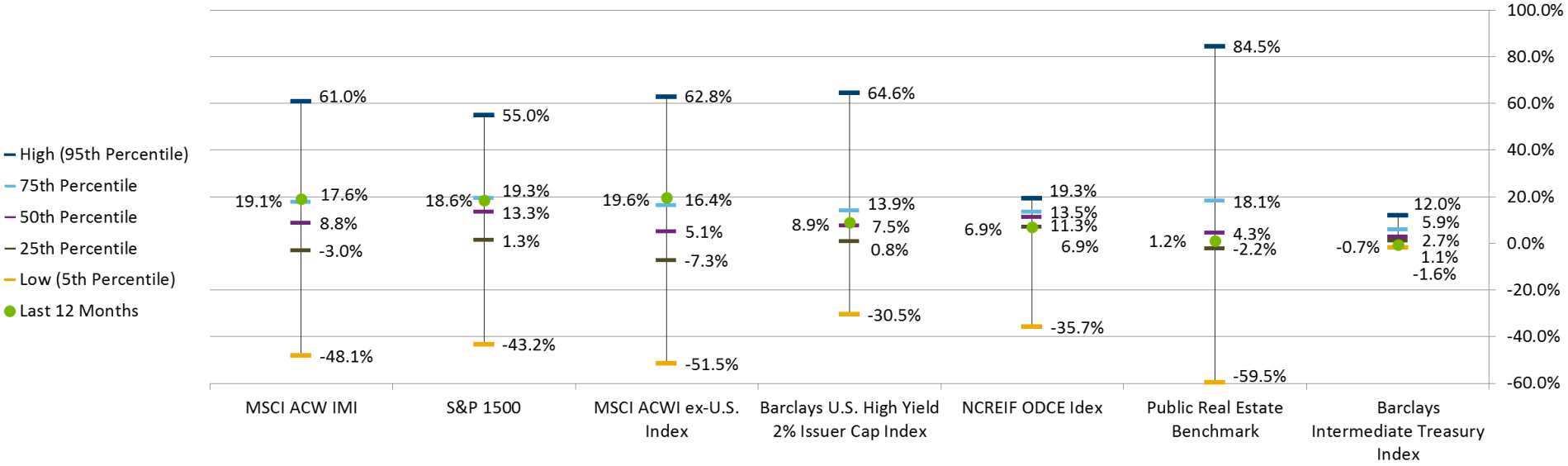




[1]The Long Term Public Benchmark is a is a combination of 79% MSCI ACW IMI and 21% Barclays Intermediate Treasury Index.
[2]The Total Fund Policy Benchmark has an inception date of 11/30/1996.

AON
Empower Results®

Rolling 12-Month Capital Market Returns (10 Years ending 9/30/17)



- The chart above depicts the dispersion of rolling 12 month returns of various capital markets over the last 10 years.

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Asset Class Returns Over Time (Annual Time Weighted Returns)

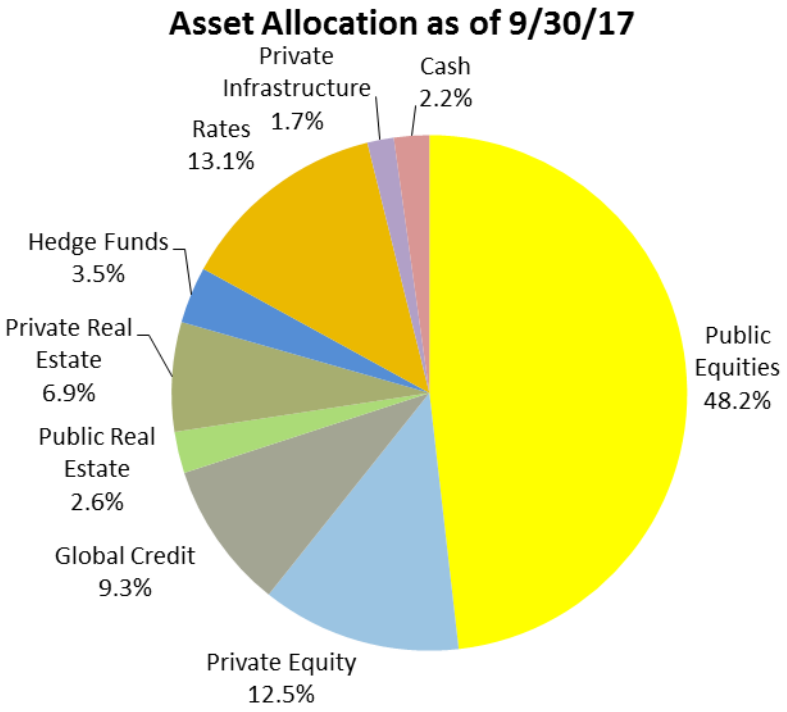
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
			Public Real Estate 20.4		Public Real Estate 28.7		Public Real Estate 15.7		Global Credit 17.1
Private Equity 23.0			Private Equity 18.2		Public Equities 16.8	Public Equities 23.9	Private Real Estate 11.5		Private Equity 9.7
Private Real Estate 14.8		Global Credit 58.8	Private Real Estate 15.3		Global Credit 15.8	Private Equity 19.5	Private Equity 11.3		Public Equities 8.7
Private Infrastructure 14.2		Public Real Estate 38.3	Global Credit 14.9	Private Real Estate 15.0	Private Equity 13.0	Private Real Estate 12.9	Private Infrastructure 8.8		Private Real Estate 7.8
Public Equities 11.4		Public Equities 36.8	Public Equities 14.6	Private Equity 7.8	Private Real Estate 9.8	Private Infrastructure 9.4	Public Equities 4.1	Private Real Estate 14.0	Private Infrastructure 7.3
Hedge Funds 10.0		Hedge Funds 20.0	Private Infrastructure 10.8	Rates 6.6	Private Infrastructure 7.5	Hedge Funds 9.1	Hedge Funds 3.0	Private Equity 7.5	Hedge Funds 5.4
Rates 8.8		Private Equity 15.6	Hedge Funds 10.2	Private Infrastructure 5.2	Hedge Funds 6.4	Global Credit 7.4	Rates 2.6	Private Infrastructure 5.6	Public Real Estate 4.7
Global Credit 2.3	Rates 11.4	Private Infrastructure 0.9	Rates 5.3	Global Credit 5.0	Rates 1.7	Public Real Estate 4.4	Global Credit 2.5	Rates 1.2	Rates 1.1
Public Real Estate -7.0	Private Real Estate -10.7	Rates -1.4		Hedge Funds -5.3		Rates -1.3		Public Real Estate -0.1	
	Private Infrastructure -17.2	Private Real Estate -30.4		Public Real Estate -5.8				Hedge Funds -1.1	
	Hedge Funds -19.0			Public Equities -7.7				Public Equities -1.9	
	Private Equity -25.2							Global Credit -4.4	
	Global Credit -25.9								
	Public Equities -42.2								
	Public Real Estate -47.7								

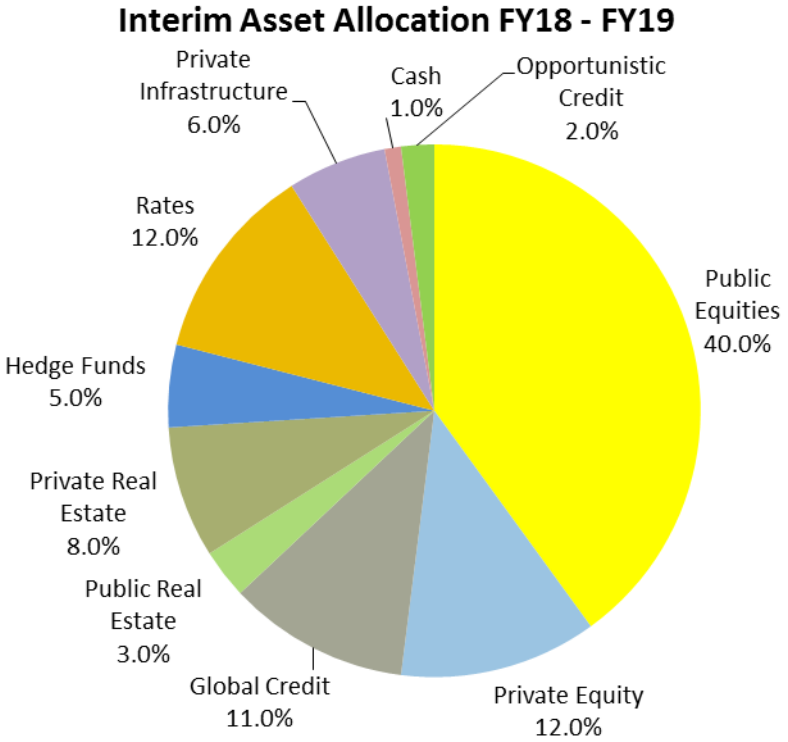
****Private Real Estate -*** NCREIF ODCE, ***Public Equities -*** MSCI ACWI IMI, ***Hedge Fund -*** HFRI Fund Weighted Composite Index, ***High Yield -*** Bloomberg Barclays High Yield, ***Rates -*** Bloomberg Barclays U.S. Treasury Intermediate, ***Private Equity -*** Burgiss Private Equity Time Weighted Return, ***Infrastructure -*** Burgiss Infrastructure Time Weighted Return, ***Public Real Estate -*** FTSE EPRA/NAREIT Developed

**Opportunistic Credit excluded because it is a new allocation

Empower Results®

Interim Asset Allocation Targets (FY 2018 – FY 2019)





AON
Empower Results®

Summary Analysis

- The Total Fund outperformed its benchmark by 103 bps during the trailing 12 month period.
  - The global public equity component contributed 49 bps of relative performance while the real assets component contributed 43 bps.
  - Private equity detracted 32 bps of relative performance while the cash flow effect detracted 4 bps of relative performance.

- At the end of the period global equity and cash were overweight 5.7% and 1.2% respectively while the total rates component was underweight 4.2% and all other asset classes were slightly underweight relative to the policy.

- Longer term investment results have been slightly positive, the Total Fund has produced risk adjusted returns superior to the benchmark and the Long Term Public Benchmark over the five and ten year period.
  - The Total Fund outperformed the benchmark in nominal terms by 16 bps and 20 bps over the trailing five and ten-year periods, respectively.

- The Total Fund has meaningfully outperformed the Long Term Public Benchmark over most longer-term periods.

- Diversification has been effective, the Total Fund Policy Benchmark has produced a return similar to the Long Term Public Benchmark at a meaningfully lower level of risk (volatility) over the trailing five and ten year period.

Questions?

ERS

Public Agenda Item #8.1

Discussion and Training Regarding Ethics

December 12, 2017

Paula A. Jones, Deputy Executive Director and General Counsel
Dr. Robert Prentice, Department Chair and Professor, University of Texas at Austin, McCombs School of Business

ERS

Public Agenda Item #9.1

Private Equity Program Overview and Market Update

December 12, 2017

ERS

Wesley Gipson, *Director of Private Equity*

Ricky Lyra, *Private Equity Portfolio Manager*

Davis Peacock, *Private Equity Portfolio Manager*

Pavilion Alternatives Group

Bradford Young, *MD & Head of Global Advisory Services*

ERS Private Equity Program Overview

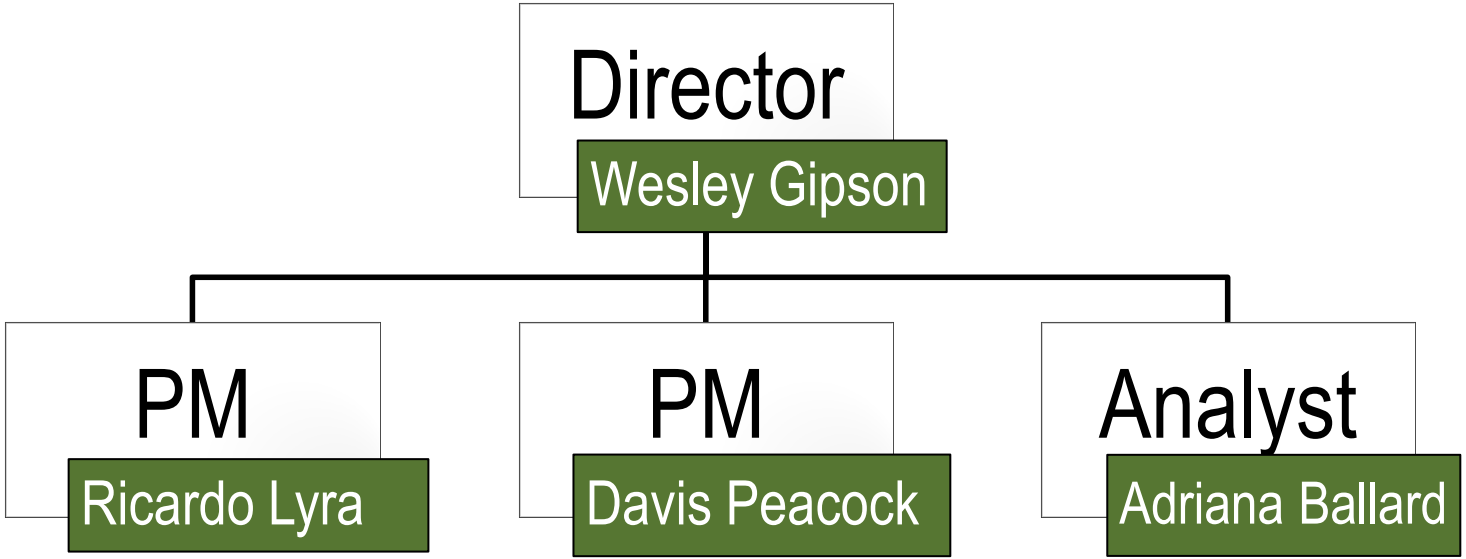
Agenda - Key Topics

ERS

- Private Equity Team
- Private Equity Primer – The Basics
- Strategy Discussion
- Portfolio Update
- Performance
- Savings
- Goals and Objectives for FY 2017/18

Private Equity Program Overview

Team



Private Equity Program Overview

The Basics: Primaries, Secondaries, and Co-investments

ERS

Primary

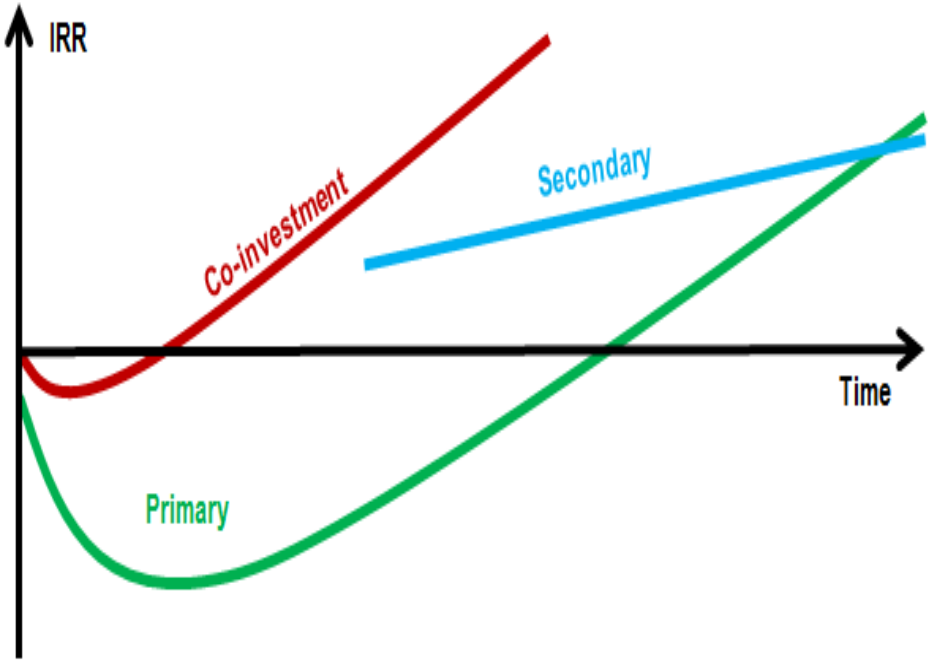
- 5 yrs. Investing, 10 yr. fund life
- "2/20" fees and carried interest
- 10 to 20 companies

Secondary

- Mature, existing LP Interest fund purchase
- 50 to 100% called
- Discounts and short-term liquidity

Co-investment

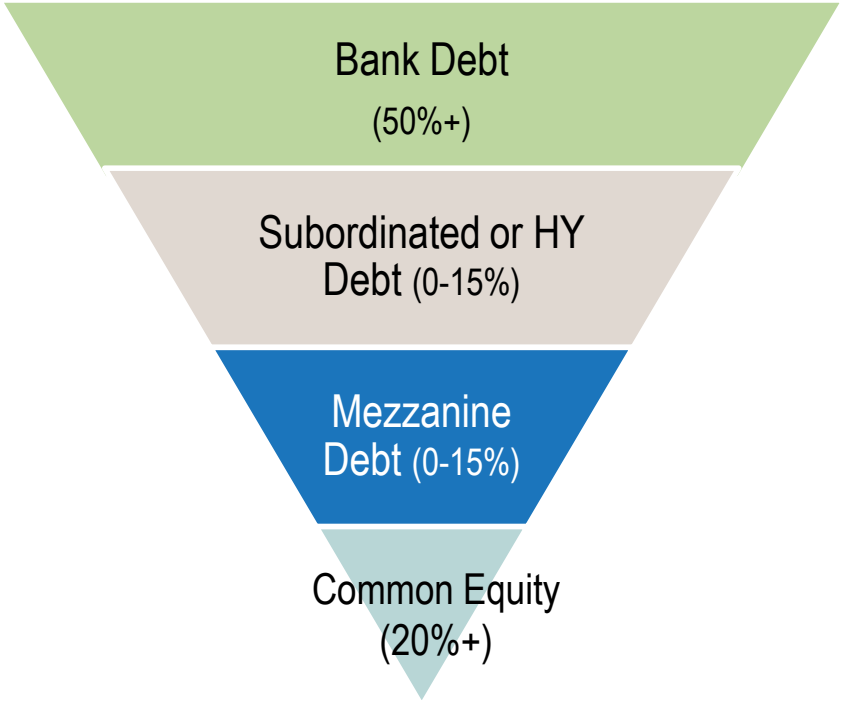
- Single company investment
- Alongside fund manager
- No fees - No carry



Private Equity Program Overview

Basics of a Deal: The Capital Stack

ERS



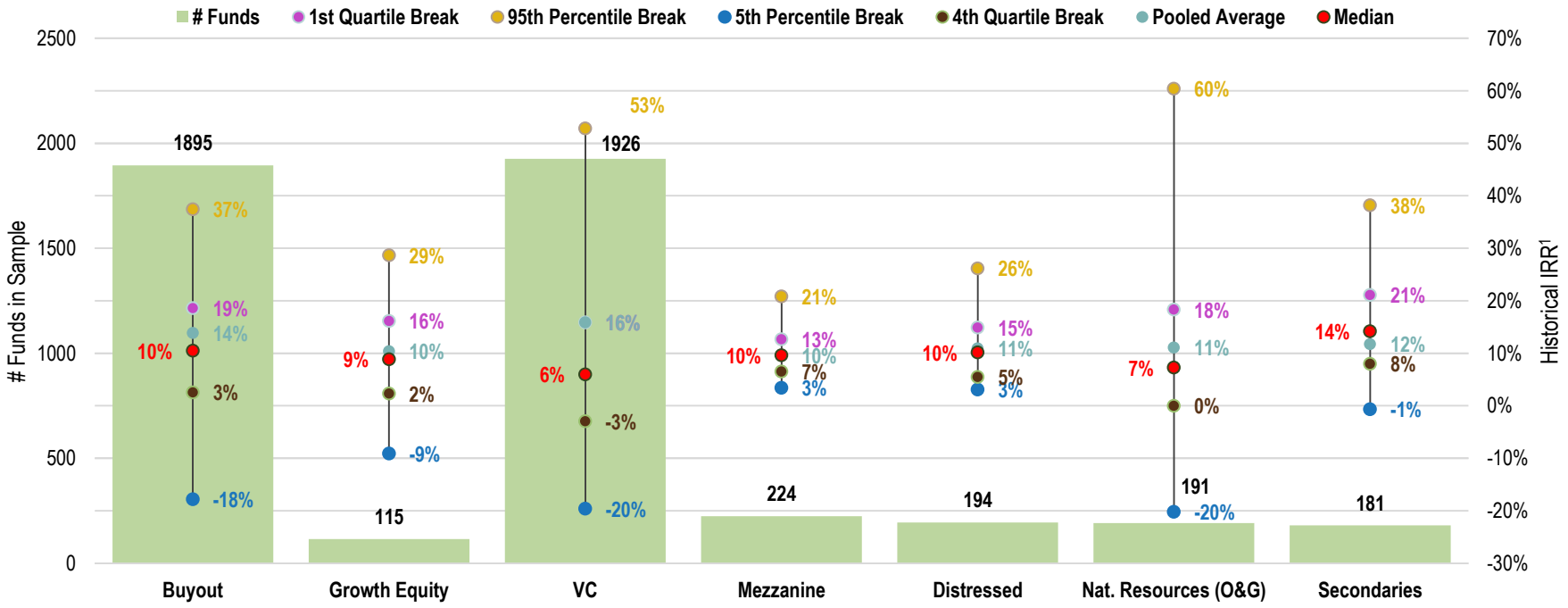
Senior

Junior

Expected Returns	Characteristics
4 – 7%	▪ Highest seniority ▪ Low cost ▪ Floating rate amortized ▪ Restrictive covenants
7-13%	▪ 8 to 10 year term ▪ no prepay ▪ Lower principal amortization ▪ Fixed rate ▪ Usually cash, some PIK
13-20%	▪ High, fixed rate ▪ Cash and/or PIK ▪ No prepayment ▪ Equity “kickers”
20%+	▪ Riskiest security ▪ No downside protection

Private Equity Program Overview

Historical IRR Dispersion by Strategy

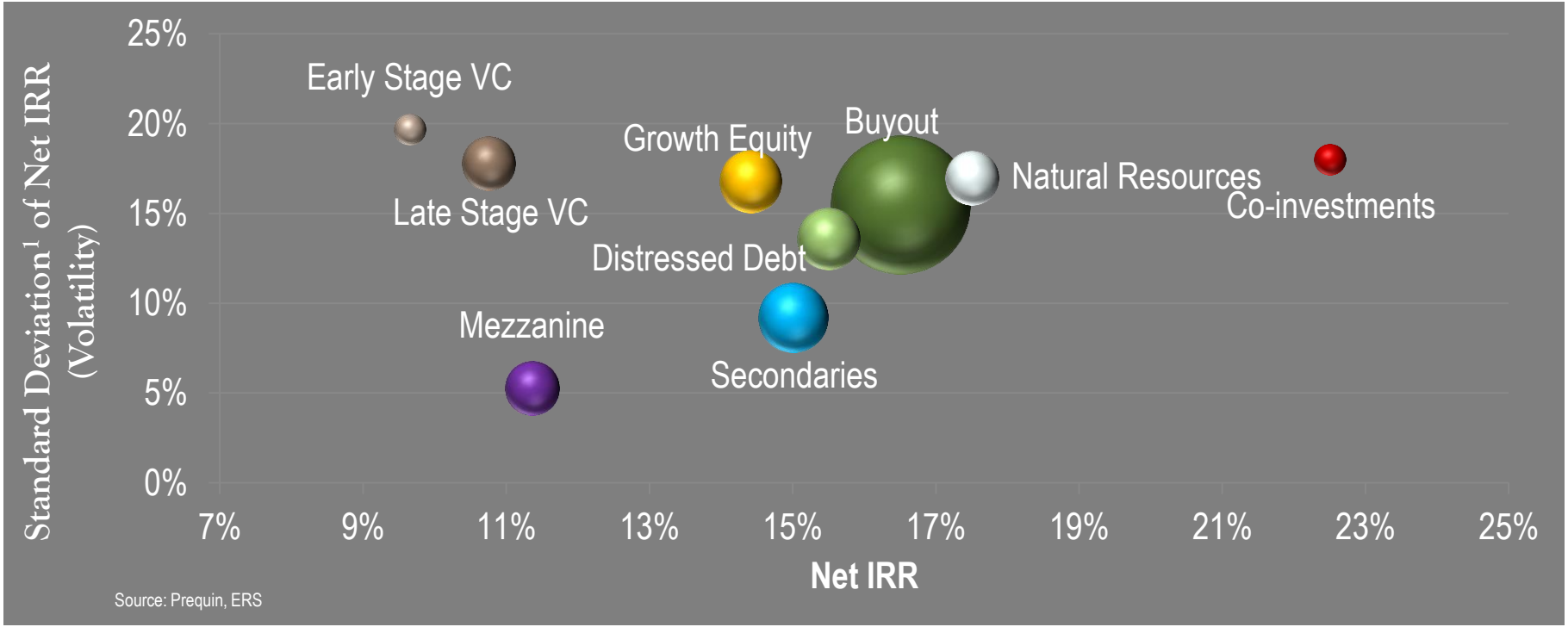


Source: Burgiss Private iQ

1. **IRR, Internal Rate of Return**, is equal to the discount rate that will bring a series of cash flows to a net present value (NPV) of zero (or to the current value of cash invested)

Private Equity Program Overview

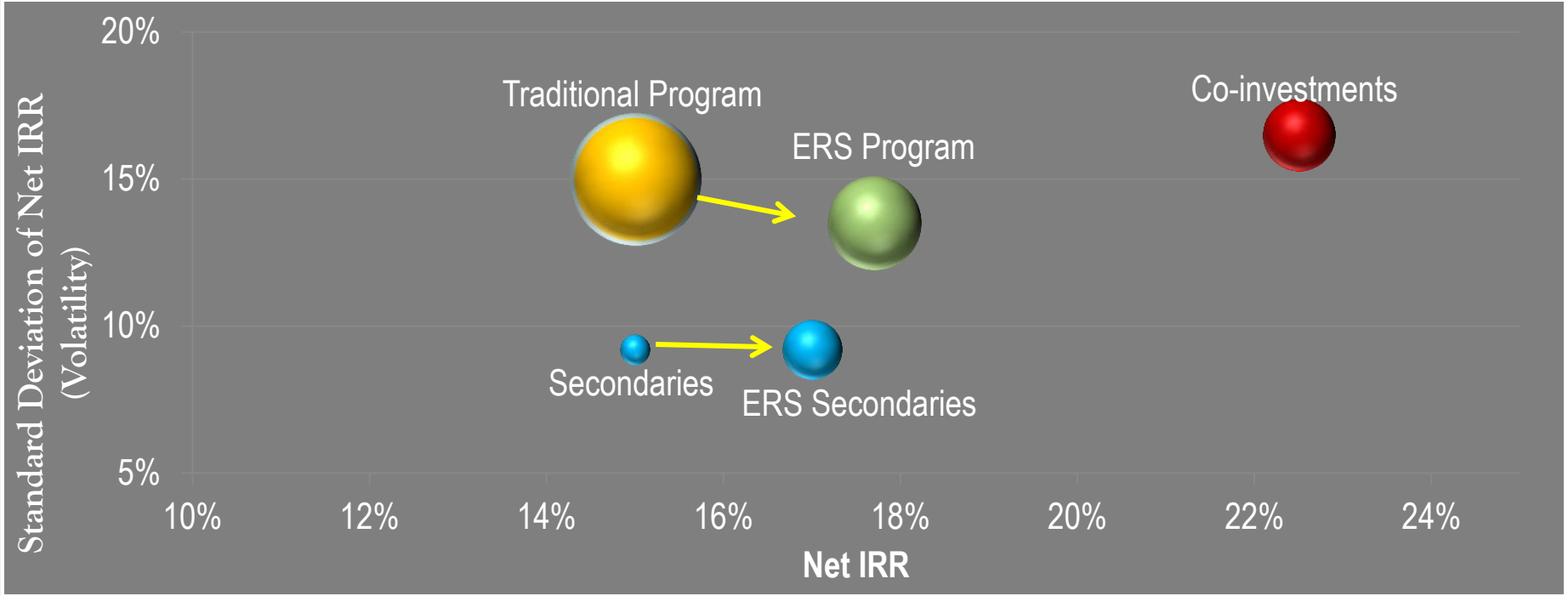
Trailing 10 Year Volatility & Expected Returns



1. **Standard Deviation**, is a measure of volatility calculated by measuring the dispersion of a set of data from its mean.

Private Equity Program Overview

Traditional PE vs. ERS with Secondaries & Co-investments



Private Equity Program Overview

Portfolio Update as of 8/31/17

ERS

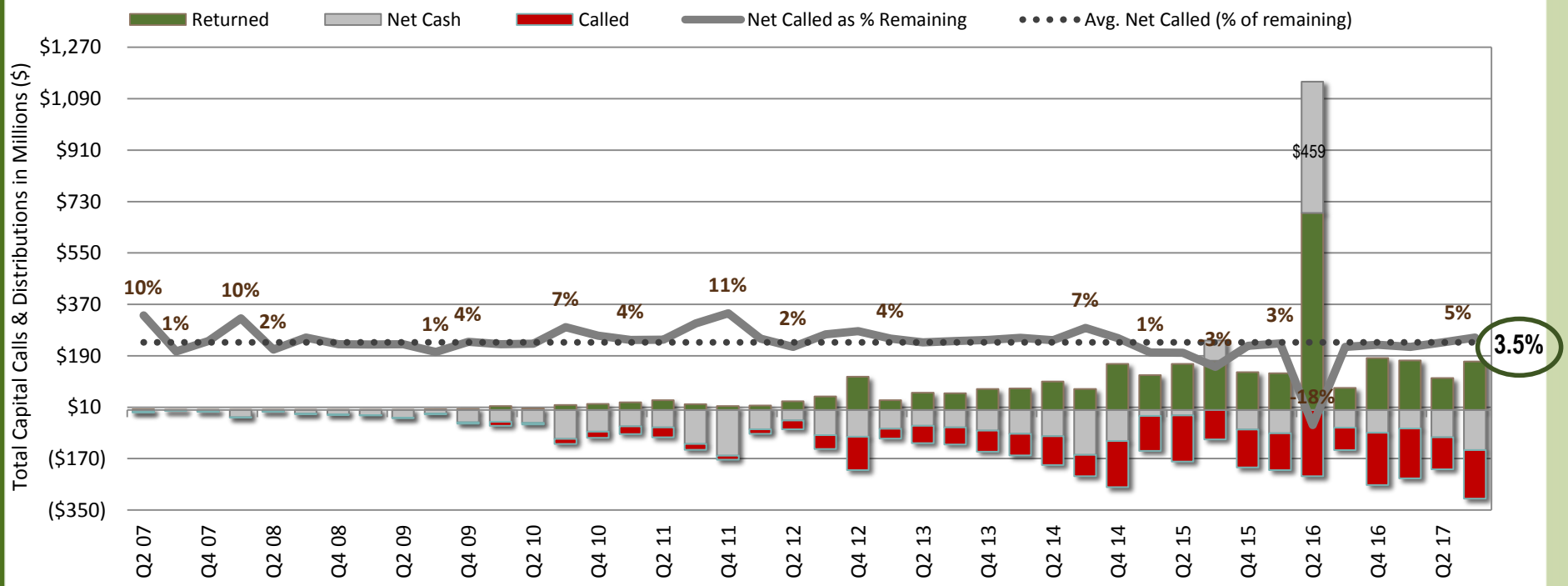
	Inception-FY16	FY17	Inception-FY17
Committed	$6.1 billion	$870 million	$7.04 billion
Called	$4.0 billion	$926 million	$4.9 billion
Distributed	$2.7 billion	$584 million	$3.2 billion
Net Asset Value (NAV)	$2.6 billion	$810 million	$3.4 billion
% of Trust	10.0%	230 bps	12.3%
Total Value Paid in Capital (TVPI)[1]	1.28x	0.04x	1.32x
Distributions Paid in Capital (DPI)[2]	0.64x	0.0x	0.64x
Internal Rate of Return (IRR)[3]	11.0%	16.9%	11.9%

1. **TVPI, Total Value to Paid in Capital**, is equal to (NAV + Distributions) / Paid in Capital;
2. **DPI, Distributions Paid in Capital**, is equal to Distributions / Paid in Capital;
3. **IRR, Internal Rate of Return**, is equal to the discount rate that will bring a series of cash flows to a net present value (NPV) of zero (or to the current value of cash invested)

All values are internally determined by ERS and not the General Partners

Private Equity Program Overview

Cash Flow Since Inception

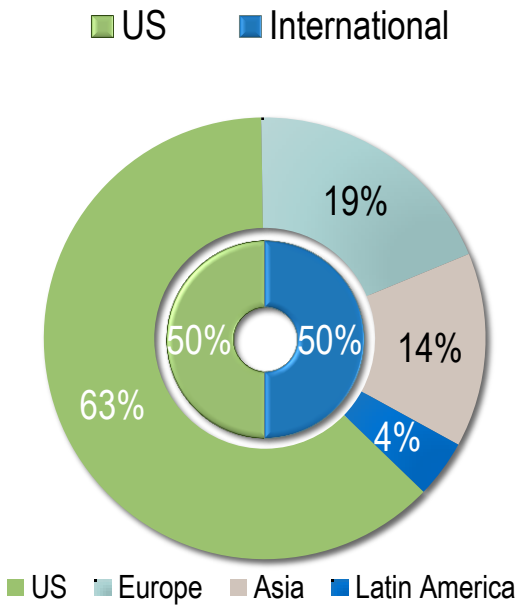


Private Equity Program Overview

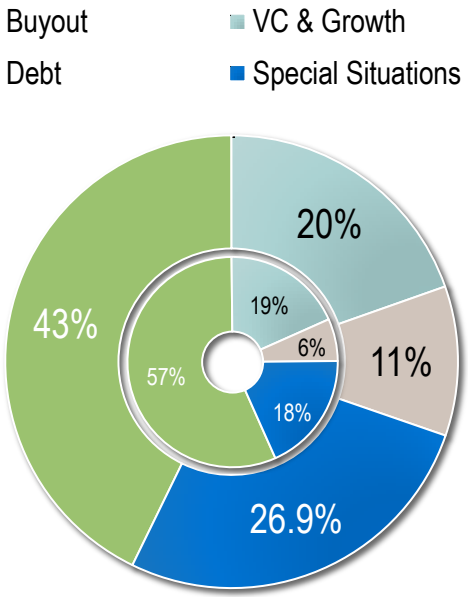
Portfolio Diversification Guidelines vs. NAV

ERS

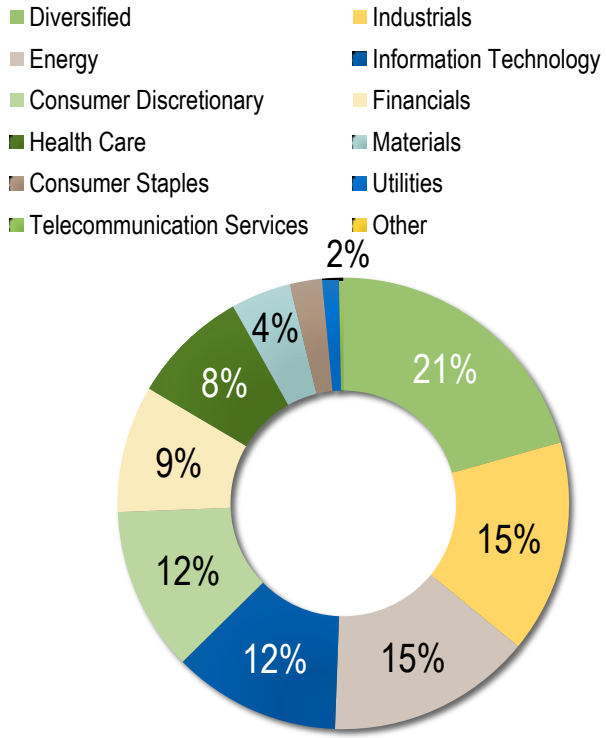
Geography



Strategy

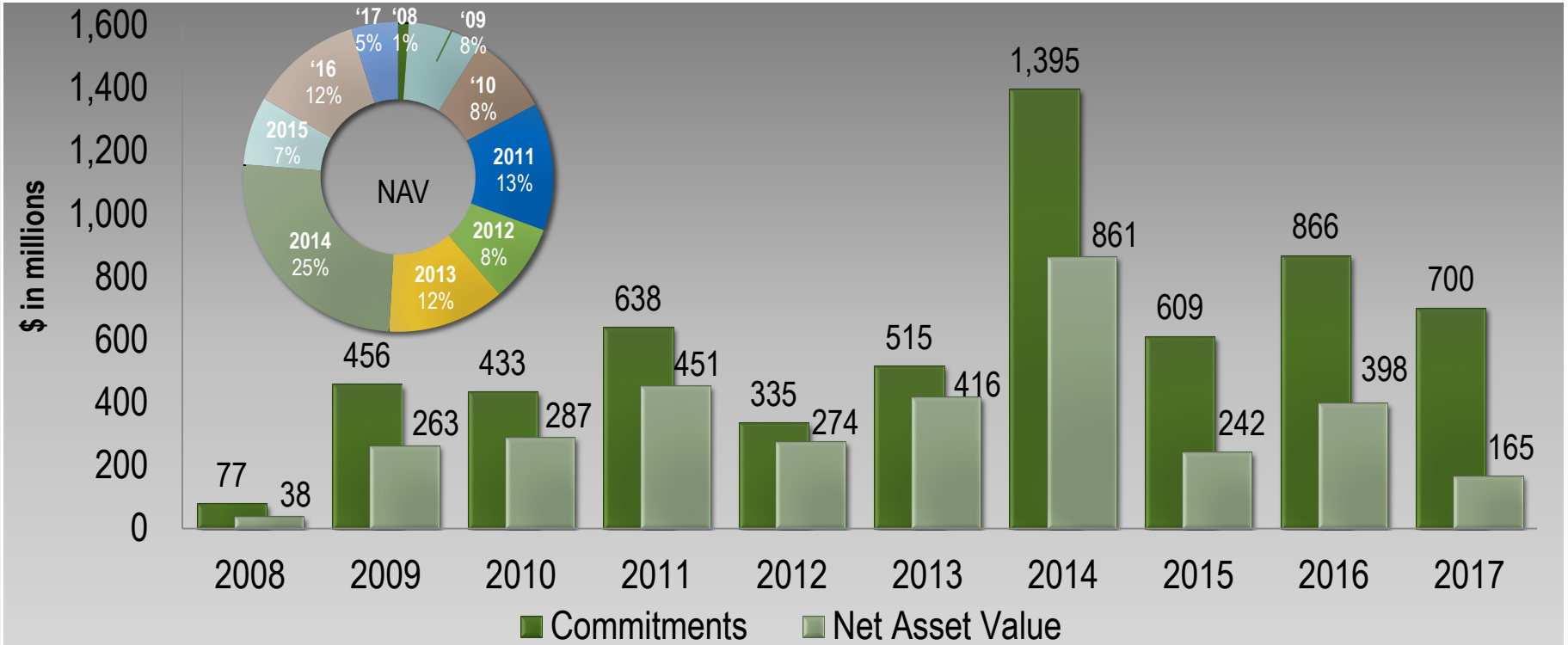


Sector



Private Equity Program Overview

Portfolio Diversification by Vintage Year



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Private Equity Program Overview

Portfolio Diversification by General Partner

ERS

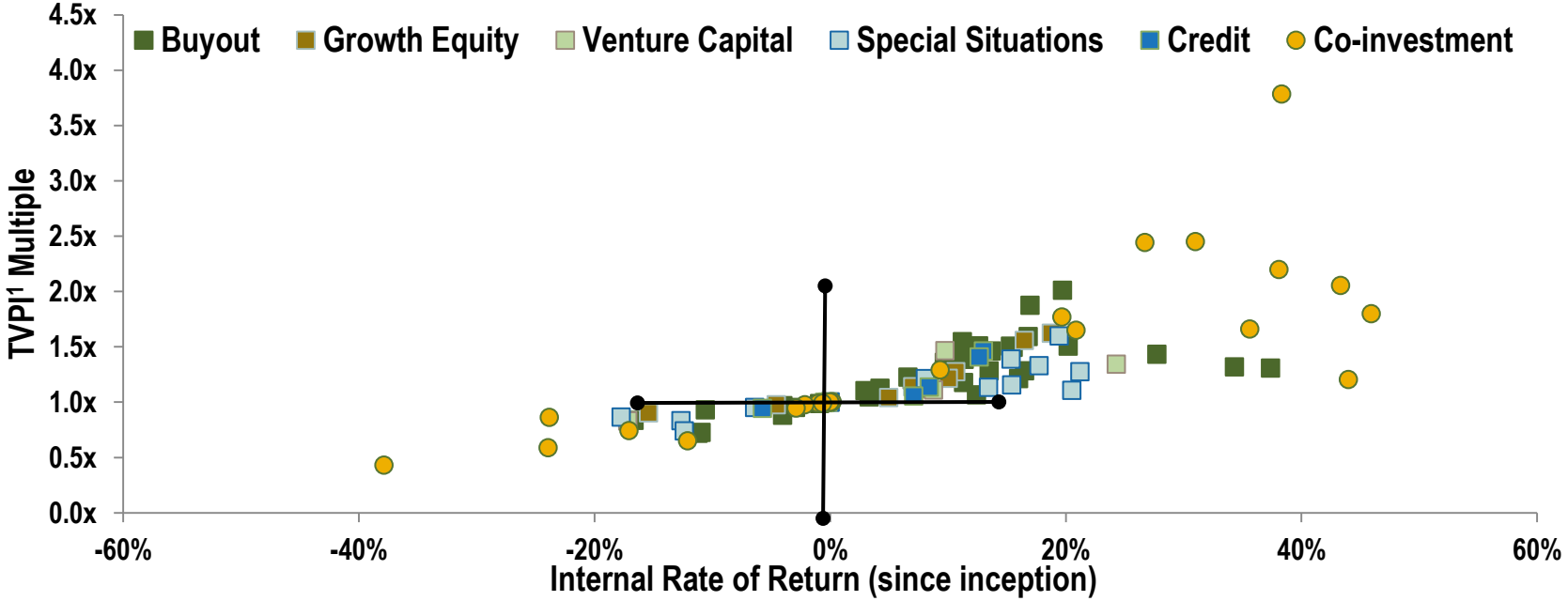
	General Partner	# of Funds	Commitment ($mm)	Uncalled Capital ($mm)	Net Asset Value ($mm)	Economic Exposure ($mm)	Economic Exposure (%)
1	Pavilion Alternatives	2	465.0	227.5	231.0	458.5	7.78%
2	LGT Capital	4	475.0	316.7	127.6	444.3	7.54%
3	Landmark Partners	4	450.0	294.6	119.2	413.8	7.02%
4	Castle Lake Capital	5	349.1	66.8	316.6	383.4	6.50%
5	Quantum Energy	6	309.0	162.9	215.6	378.4	6.42%
6	The Carlyle Group	7	316.3	154.1	171.6	325.7	5.53%
7	Advent International	4	299.2	87.9	216.2	304.1	5.16%
8	KSL Capital	4	300.0	176.4	88.0	264.3	4.48%
9	The Riverside Company	6	283.1	56.4	204.0	260.4	4.42%
10	Triton Partners	6	239.9	77.9	149.9	227.9	3.87%
Total Top 10		**48**	**3,486.6**	**1,621.1**	**1,839.7**	**3,460.8**	**58.72%**
Total		**107**	**6,022.7**	**2,498.3**	**3,395.9**	**5,894.2**	**100.00%**

Notes:
- Amounts in USD
- Funds as of 8/31/17; Valuations as of 6/30/17
- Totals include active funds and co-investments

All values are internally determined by ERS and not the General Partners

Private Equity Program Overview

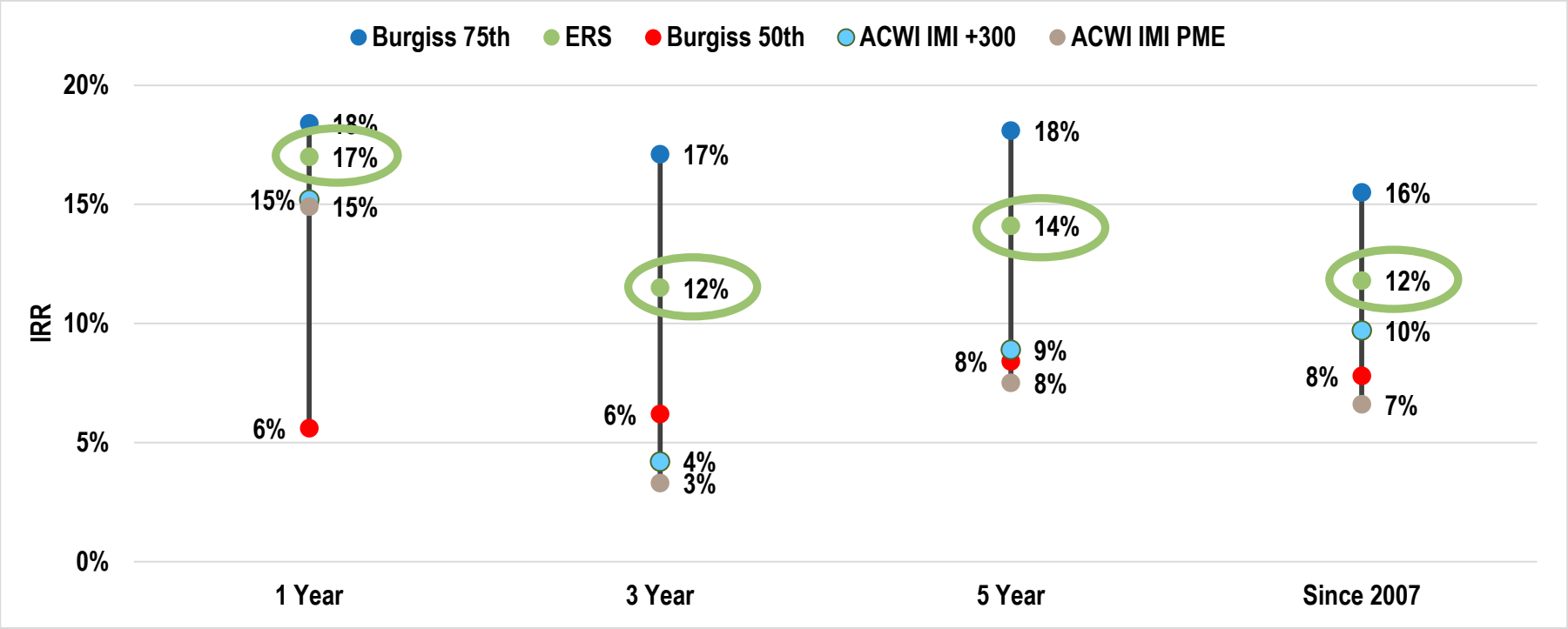
Performance Scatter by Strategy



1: TVPI = TVPI, or Total Value to Paid in Capital, is equal to (NAV + Distributions) / Paid in Capital

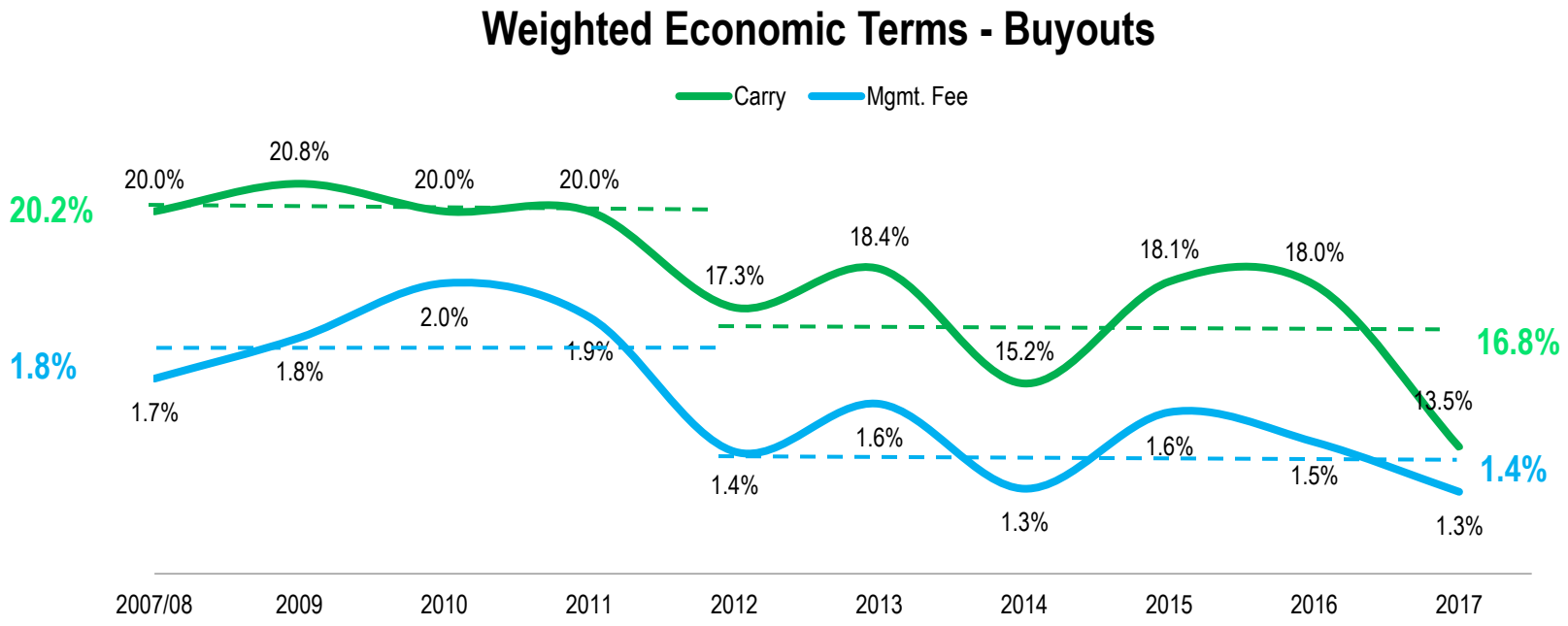
Private Equity Program Overview

Benchmark IRR Comparison as of March 31, 2017



Private Equity Program Overview

Terms Evolution by Fiscal Year



All values are internally determined by ERS and not the General Partners

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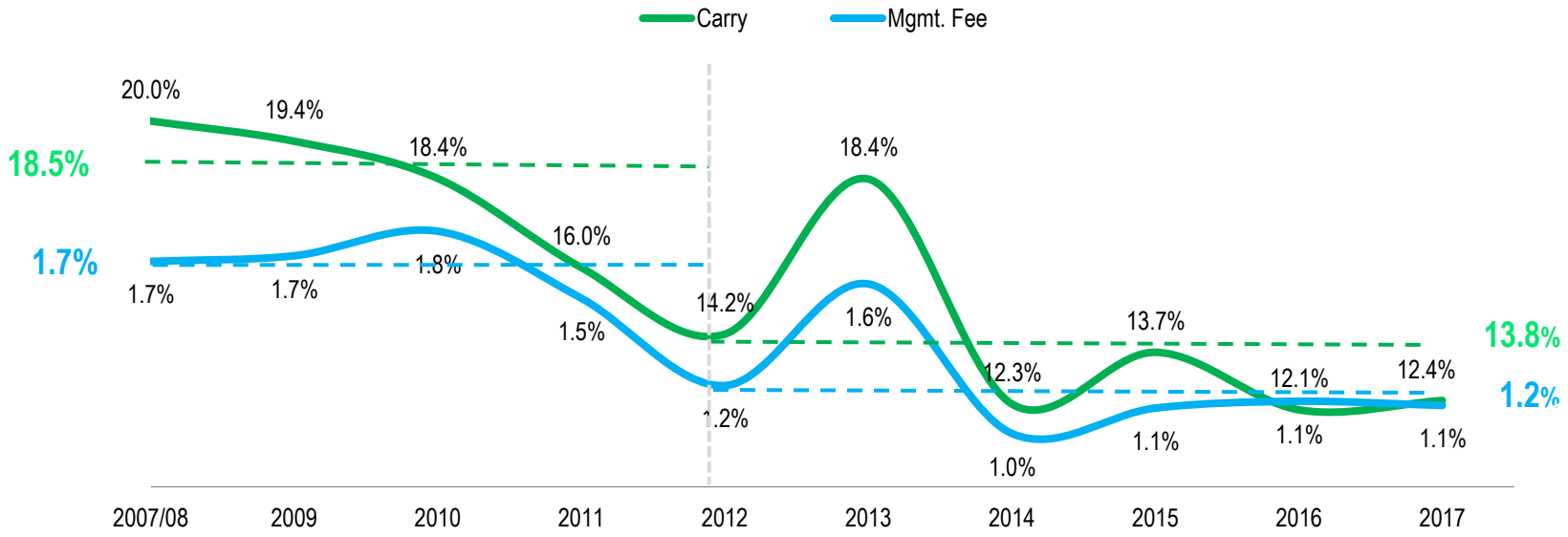
Private Equity Program Overview

Terms Evolution by Fiscal Year

ERS

Weighted Economic Terms – All PE



All values are internally determined by ERS and not the General Partners

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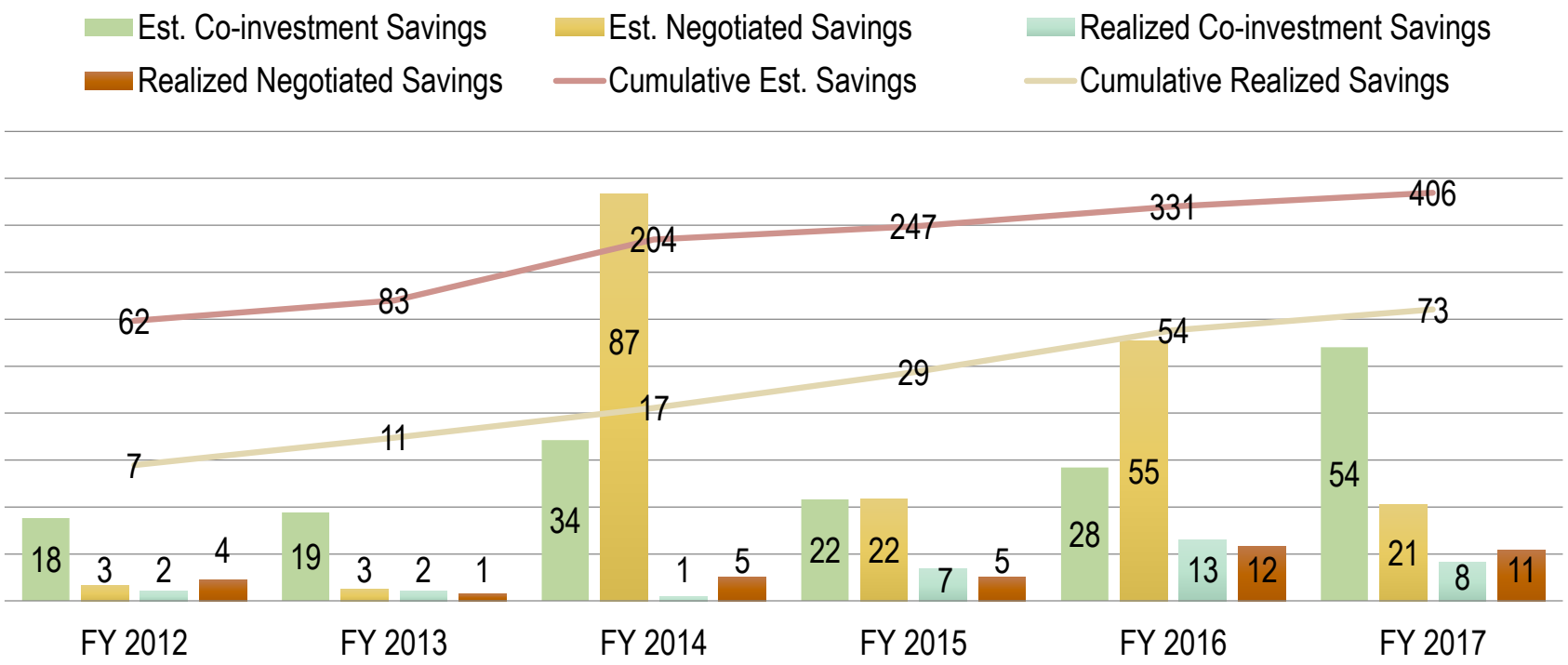
Private Equity Program Overview

Savings by Fiscal Year (Millions)



Private Equity Program Overview

Goals and Objectives for FYs 2017 & 2018

ERS

FY 2017	FY 2018
☑ Rebuild buyout portfolio	❑ Secondaries Program
☑ Multiple Co-investments	❑ Enhance Data & Reporting
	❑ Execute on Tactical plan

Employees Retirement System of Texas

Private Equity Program Review & Market Outlook 2017

December 12-13, 2017

PAVILION

Attending Today

- Brad Young
  - *Managing Director, Head of Global Advisory Services*

- William (Billy) Charlton, Ph.D., CFA
  - *Managing Director, Head of Global Research & Analytics*

Agenda

I. Pavilion Alternatives Group Update

II. ERS Private Equity Program Update

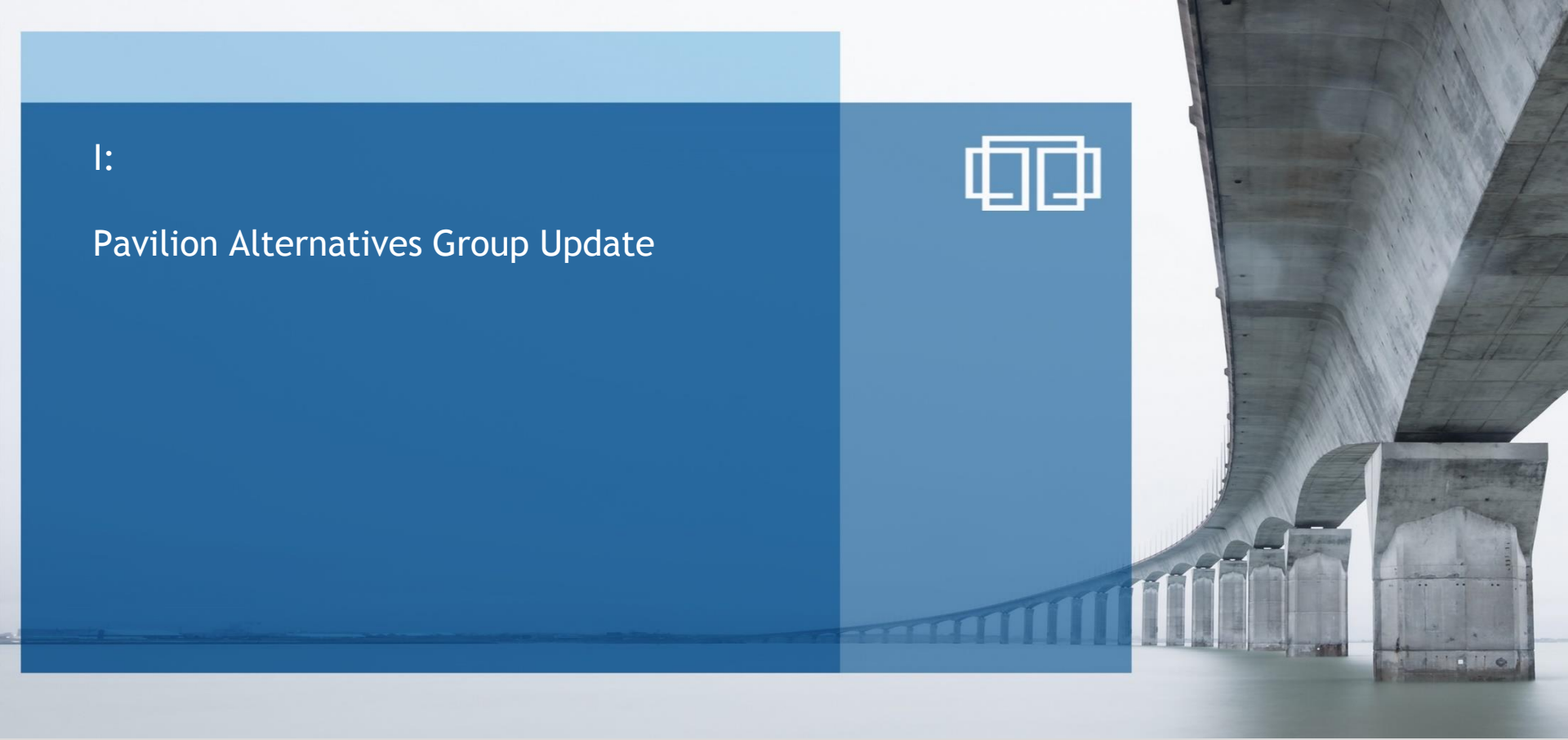
III. Private Equity Market Statistics & Outlook

IV. Summary

V. Appendix

I:

Pavilion Alternatives Group Update



PAVILION

Pavilion Financial Corporation

Broad platform of diverse resources provides deep experience and knowledge-sharing

Pavilion Financial Corporation
An employee owned firm with approximately 290 employees serving institutional and other investors through the business lines described below

Global Investment Consulting and Research

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- *Defined Contribution*
- *Defined Benefit*
- *Health Care*
- *Insurance*
- *Foundations*
- *Endowments*

Implemented Solutions
- *Wealth Management*
- *Discretionary Advisory Solutions*

Pavilion Alternatives Group ™

Alternative Assets
- *Private Equity*
- *Private Credit*
- *Real Assets*
- *Hedge Funds*
- *Co-Investments*

Global Markets

Pavilion Global Markets
- *Macro Research*
- *Transition Management*
- *Agency-Only Trading*

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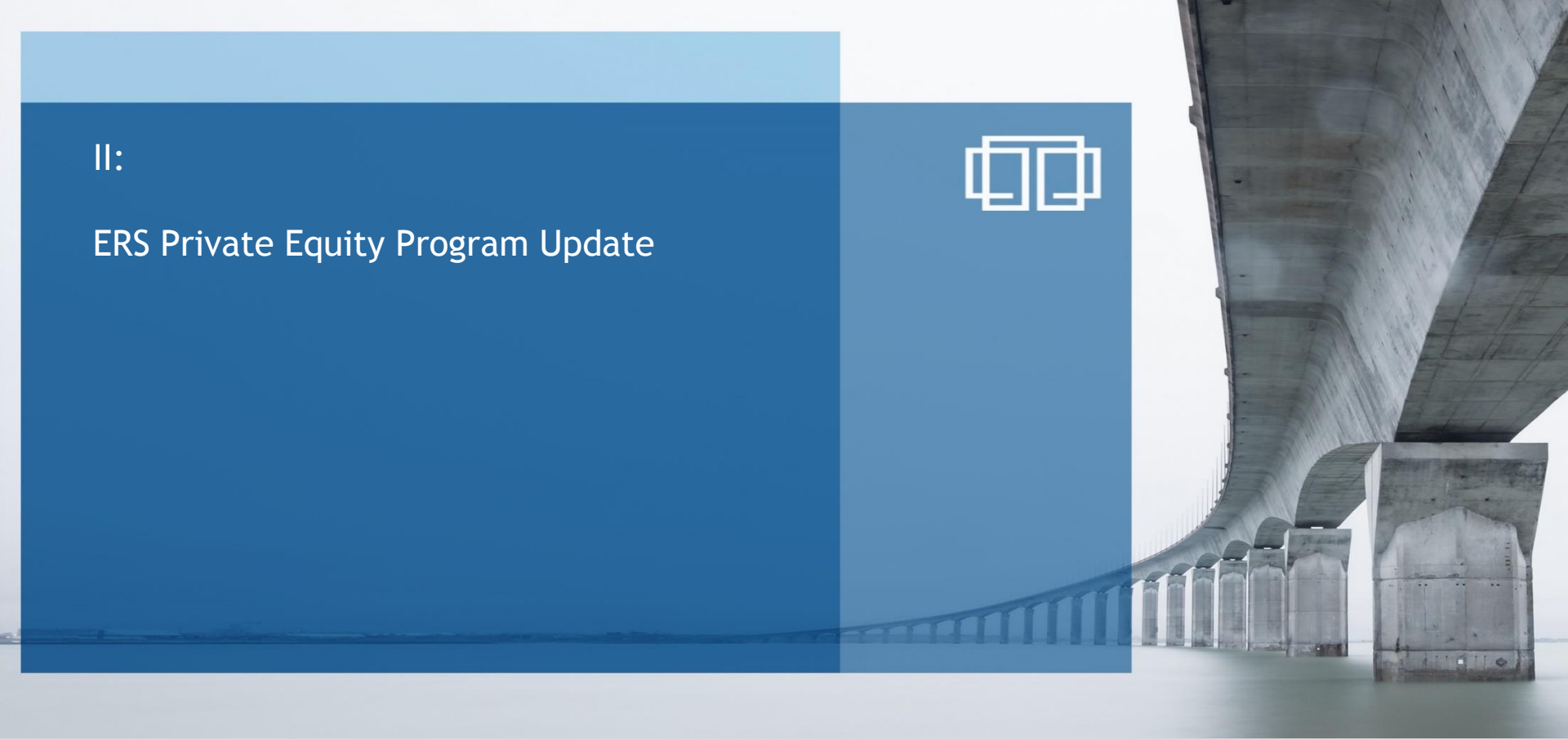
II:

ERS Private Equity Program Update

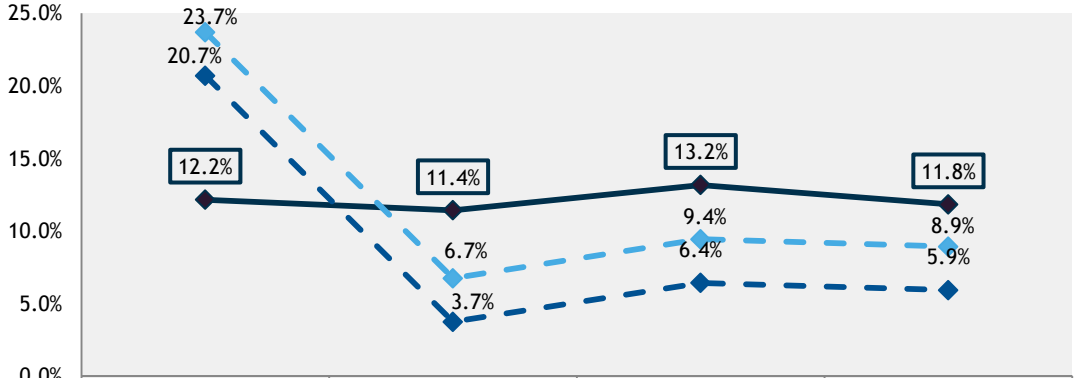


PAVILION

Comparison to Public Markets

The ERS private equity portfolio has outperformed public market equivalents over the longer investment horizons

Portfolio Performance Compared to Public Market Equivalents (PME)



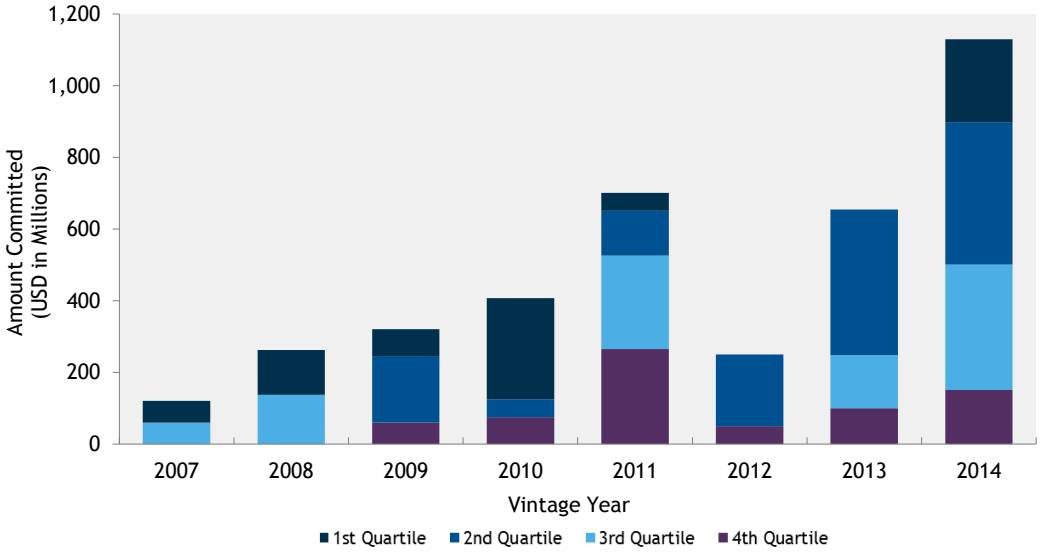
	1 Year	3 Year	5 Year	Since Inception
Portfolio IRR	12.2%	11.4%	13.2%	11.8%
PE MSCI ACWI IMI	20.7%	3.7%	6.4%	5.9%
PE MSCI ACWI IMI + 300 bps	23.7%	6.7%	9.4%	8.9%
Differential Over (Under) Benchmark	(11.5%)	4.7%	3.7%	2.9%

Figures use the Long Nickels PME method. This method runs an IRR using the original cash flows, but the ending value is the total of all the public market adjusted cash flows. The time frame used is since the inception of the Private Equity program on July 31, 2007. All 1, 3, 5, and 10 year figures are using cash flows from March 31, 2017 back until April 1 on the corresponding time frame. All figures are calculated using monthly aggregated cash flows.

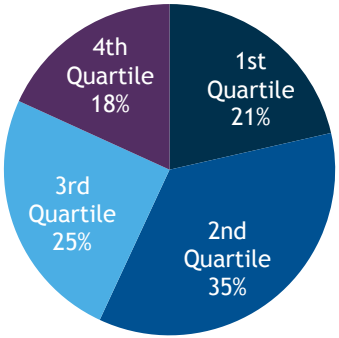
Portfolio Performance: Private Equity Funds

For the 2007-2014 vintage years, over 57% of funds in the ERS portfolio are ranked in the 1st or 2nd quartile as measured by total dollars committed

Portfolio Performance by Amount Committed, Quartile Ranking, and Vintage Year



Ranking by Amount Committed

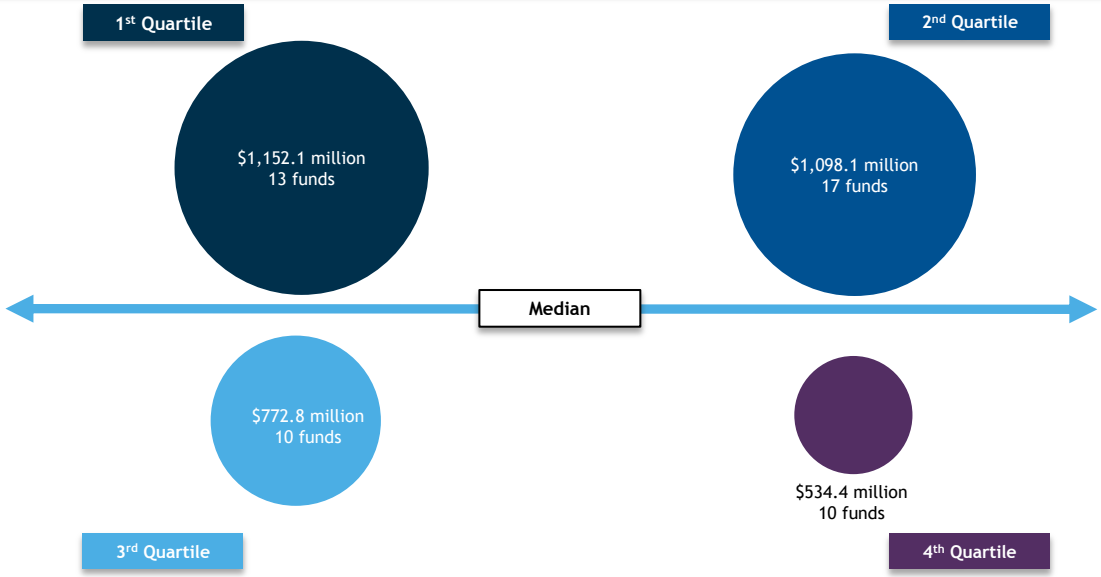


All figures as of March 31, 2017, and benchmark is Burgiss PrivateIQ measured by TVPI. Only includes private equity funds with vintage years 2007-2014. Excludes infrastructure funds and direct co-investments.

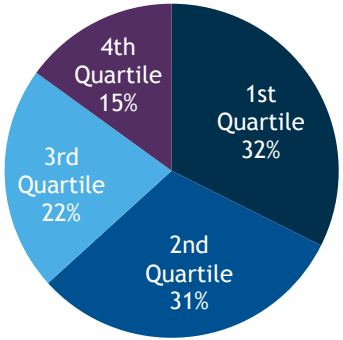
Portfolio Performance: Private Equity Funds

As measured by total value, approximately 63% of the funds in the ERS portfolio with vintages of 2007-2014 are in either the 1st or 2nd quartile

Portfolio Performance by Total Value and Quartile Ranking



Ranking by Total Value

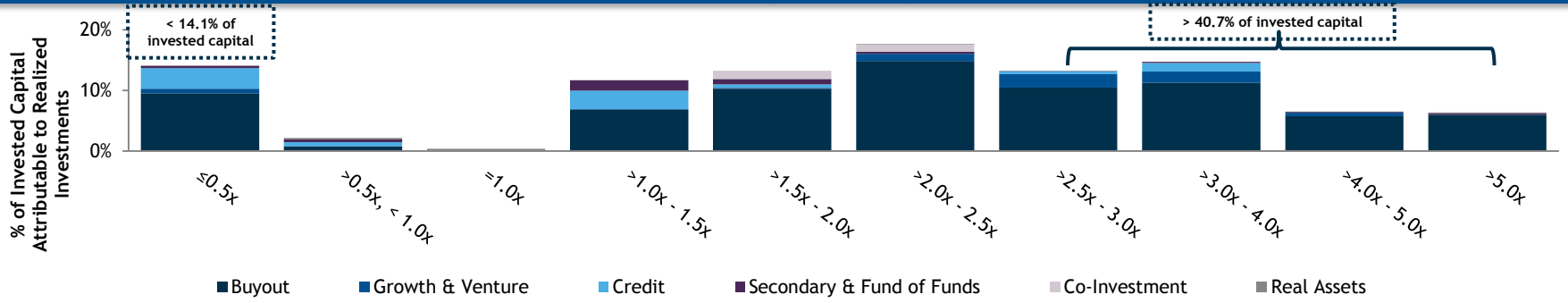


All figures as of March 31, 2017, and benchmark is Burgiss PrivateIQ measured by TVPI. Only includes private equity funds with vintage years 2007-2014. Excludes infrastructure funds and direct co-investments. Bubble size represents aggregate total value (NAV + distributions) by quartile.

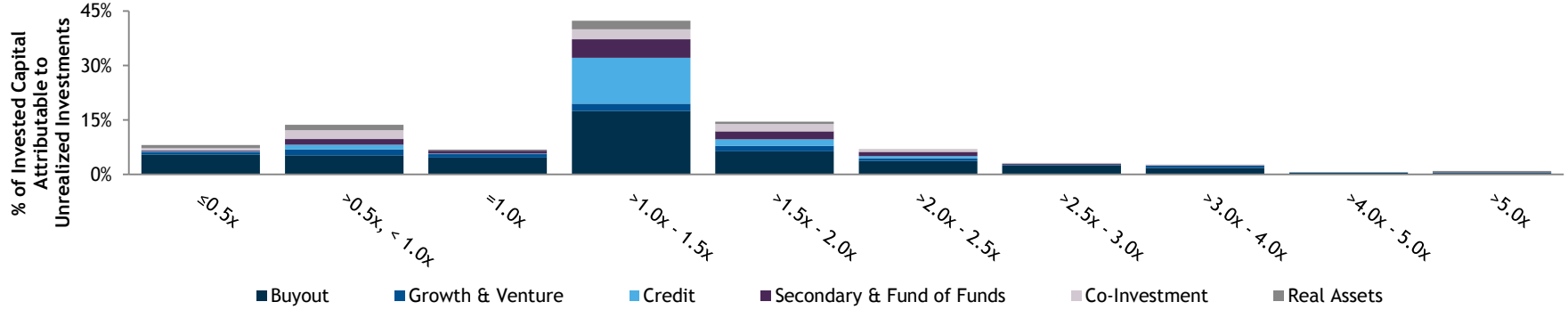
Portfolio Performance: Underlying Holdings Analysis

Volatility Dispersion by Gross Multiple

Realized Underlying Portfolio Companies



Unrealized Underlying Portfolio Companies

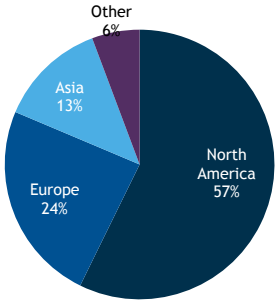


All figures as of March 31, 2017. Underlying companies for ERS PEIF I and ERS PEIF II have been classified as Fund of Funds. Includes co-investments.

Portfolio Performance: Underlying Holdings Analysis

Diversification and Performance

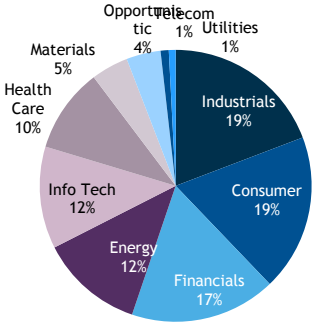
Remaining Value by Geography



Return by Geography

Geography	Realized		Unrealized		Total	
	Gross Gain / Loss	Gross Mult.	Gross Gain / Loss	Gross Mult.	Gross Gain / Loss	Gross Mult.
North America	$ 563.3	2.53x	$ 798.0	1.43x	$ 1,361.3	1.61x
Europe	211.3	2.14x	351.7	1.42x	563.0	1.55x
Asia	40.0	1.87x	111.2	1.26x	151.2	1.32x
Other	9.4	1.95x	39.0	1.17x	48.4	1.21x
Grand Total	**$ 824.0**	**2.35x**	**$ 1,299.8**	**1.38x**	**$ 2,123.8**	**1.53x**

Remaining Value by Industry



Return by Industry

Industry	Realized		Unrealized		Total	
	Gross Gain / Loss	Gross Mult.	Gross Gain / Loss	Gross Mult.	Gross Gain / Loss	Gross Mult.
Consumer	$ 167.6	1.82x	$ 177.1	1.25x	$ 344.7	1.38x
Info Tech	81.5	2.09x	128.0	1.33x	209.4	1.46x
Health Care	89.8	2.66x	185.7	1.59x	275.4	1.75x
Industrials	125.0	2.33x	280.4	1.51x	405.5	1.63x
Financials	58.7	2.37x	235.7	1.36x	294.4	1.42x
Materials	223.0	3.67x	115.1	2.04x	338.1	2.74x
Energy	27.7	1.97x	74.5	1.18x	102.2	1.23x
Telecom	40.1	2.55x	9.2	1.28x	49.2	1.84x
Utilities	10.7	3.73x	5.6	1.18x	16.3	1.47x
Opportunistic	(0.0)	0.24x	88.6	1.46x	88.6	1.46x
Grand Total	**$ 824.0**	**2.35x**	**$ 1,299.8**	**1.38x**	**$ 2,123.8**	**1.53x**

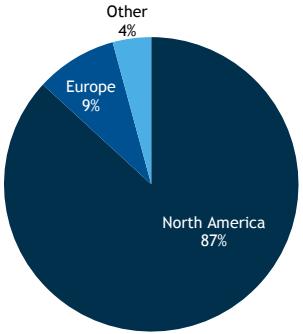
All figures are USD in millions as of March 31, 2017. Includes direct co-investments.

Portfolio Snapshot: Co-Investment Program

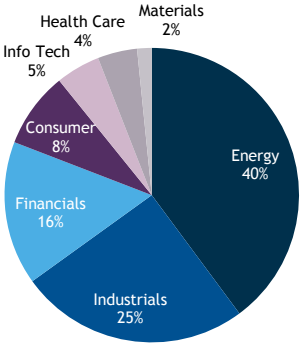
The ERS co-investment program is well-diversified across GPs, strategies and sectors, with an intentional weighting towards buyouts and North America

- From year-end 2011 thru Q1 2017, ERS has committed approximately $425.9 million to 32 co-investments alongside 14 unique sponsors
- Nearly 58% of the co-investment commitments are allocated to buyout strategies
- Aside from The Carlyle Group, no single GP sponsor accounts for more than 11.5% of commitments
  - Carlyle accounts for approximately 24.9% of ERS' co-investment commitments, however these co-investments are diversified across two distinct strategies within the Carlyle platform
  - Approximately two-thirds of these co-investments are in energy assets and the remainder in financial services buyouts

Geographic Exposure by Committed Capital



Sector Exposure by Committed Capital

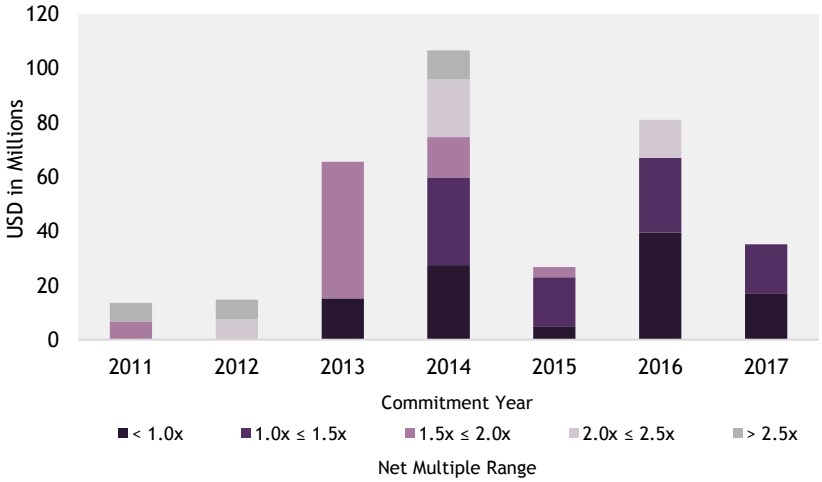


All figures as of March 31, 2017.

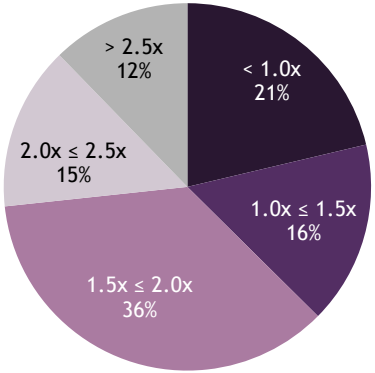
Portfolio Performance: Co-Investment Program

The ERS co-investment program is performing well and generating a 1.5x multiple as of March 31, 2017

Net Multiple by Amount Drawn and Commitment Year (All Direct Co-Investments)



Net Multiple by Amount Drawn (Only Includes Direct Co-Investments from 2011-2014)*

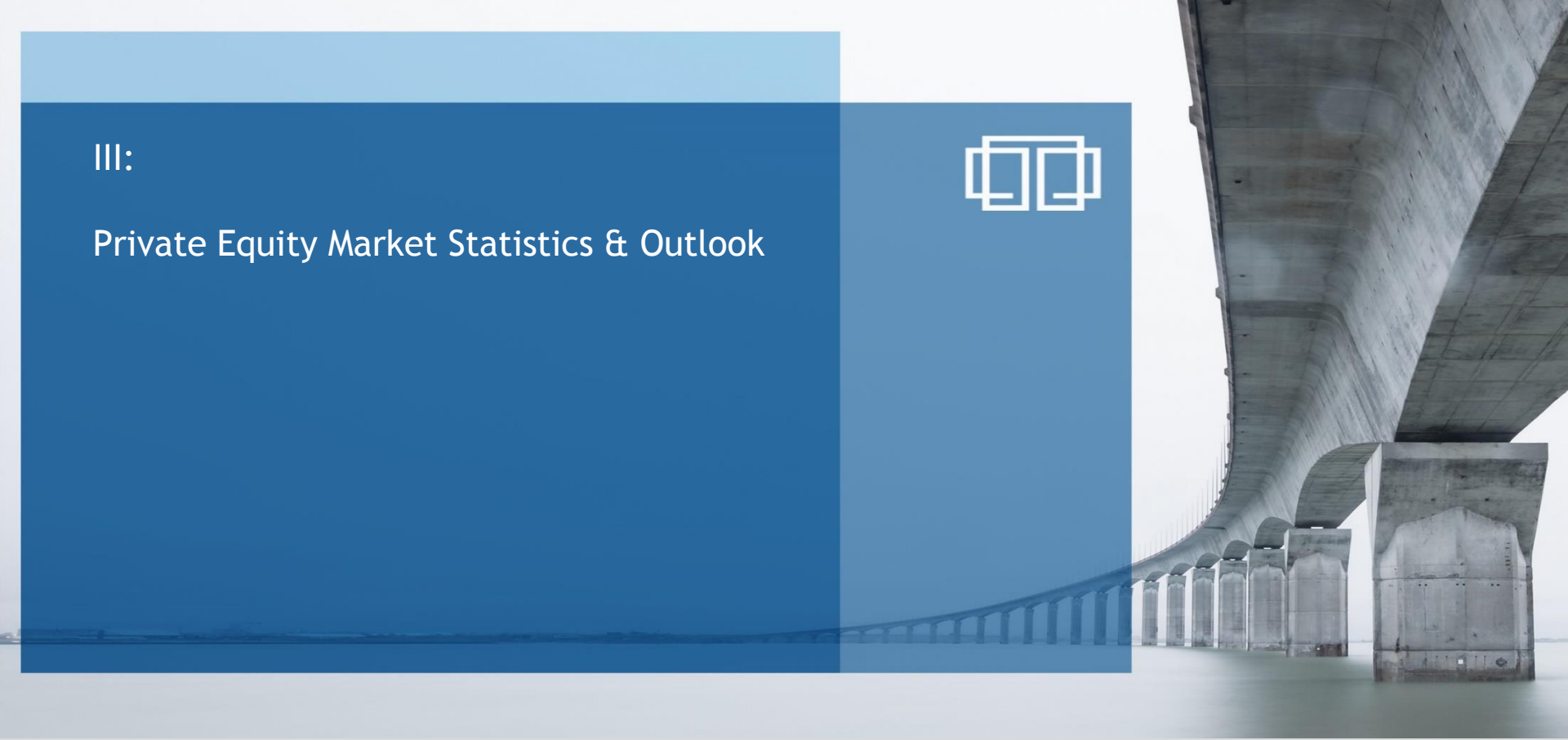


All figures as of March 31, 2017.

* Only includes co-investments made between 2011 and 2014 due to performance lag.

III:

Private Equity Market Statistics & Outlook



PAVILION

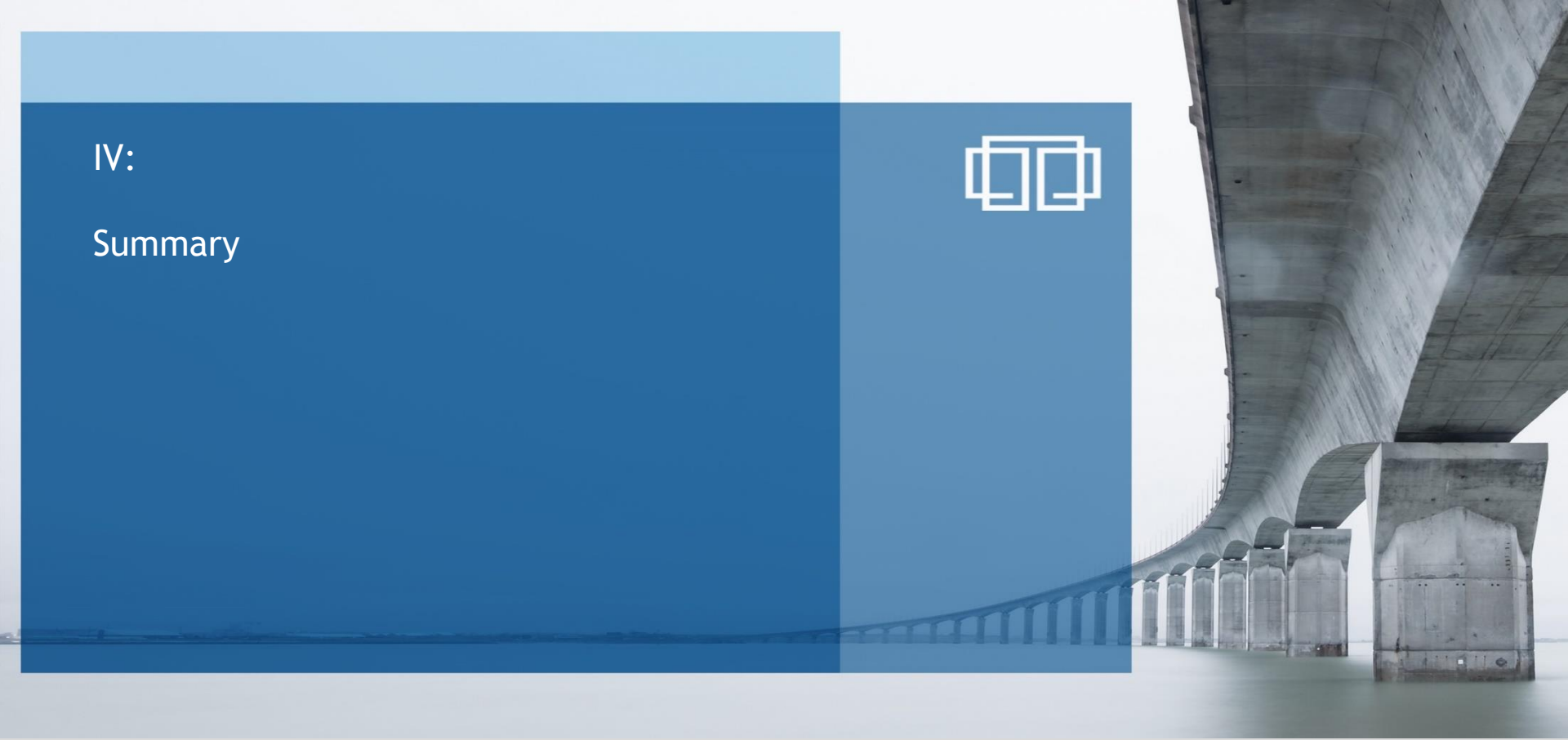
Private Equity Market Snapshot

Fundraising	▪ Private equity fundraising, especially for U.S. and global mega-funds, remains strong ▪ The average time to close funds continues to decline and the number of successful fundraises continues to increase
Deal Flow	▪ Private equity deal flow has remained flat in terms of value and decreased in terms of volume YoY
Pricing	▪ Pricing has remained robust in the U.S. with median EBITDA multiples of 10.5x ▪ Europe has seen a slight decline of EBITDA multiples to just under 9.0x
Credit Markets	▪ Both U.S. and Europe have strong credit markets with median debt levels of 5.9x in the U.S. and 4.7x in Europe
Asset Pricing	▪ Asset prices are expected to remain close to historical highs due to the increase in dry powder and the ready availability of debt
Returns	▪ Over longer investment horizons, private equity funds continue to generate returns above corresponding public equity markets

Source: Pitchbook.

IV:

Summary



PAVILION

Summary

- The ERS private equity portfolio has consistently exceeded its investment benchmark over the longer investment horizons
- The ERS private equity portfolio is well diversified across geographies, sectors, and styles
- The ERS private equity portfolio is primarily populated with high quality fund managers
- The ERS co-investment program continues to provide concentrated exposure to portfolio companies while also decreasing the fees paid
- Pavilion continues to value its relationship with ERS

Questions?

ERS

Public Agenda Item #9.2

Proposed Revisions to the ERS Investment Policy: Private Equity Guidelines and Procedures (Action)

December 12, 2017

Wesley Gipson, Director of Private Equity

Private Equity FY2018 Guidelines and Procedures

Staff Recommendation

ERS

- Recommended Revisions to Private Equity Guidelines and Procedures:
  - SECTION II.A. Propose to create stand alone guidelines for Secondaries and Energy and Natural Resources, removing them from umbrella Special Situations with the following allocation guideline revisions:
    - ***Secondaries***: 5 to 30%
    - ***Energy and Natural Resources***: 5 to 20%
    - ***Special Situations***: 0 to 5%
    - ***Buyouts***: 35 to 60% to account for increased Secondaries allocation

ERS

Questions?

(Action Item)

ERS

Public Agenda Item #9.3

Consideration of Proposed Private Equity Annual Tactical Plan for Fiscal Year 2018 – (Action)

December 12, 2017

Wesley Gipson, Director of Private Equity

Private Equity FY2018 Tactical Plan

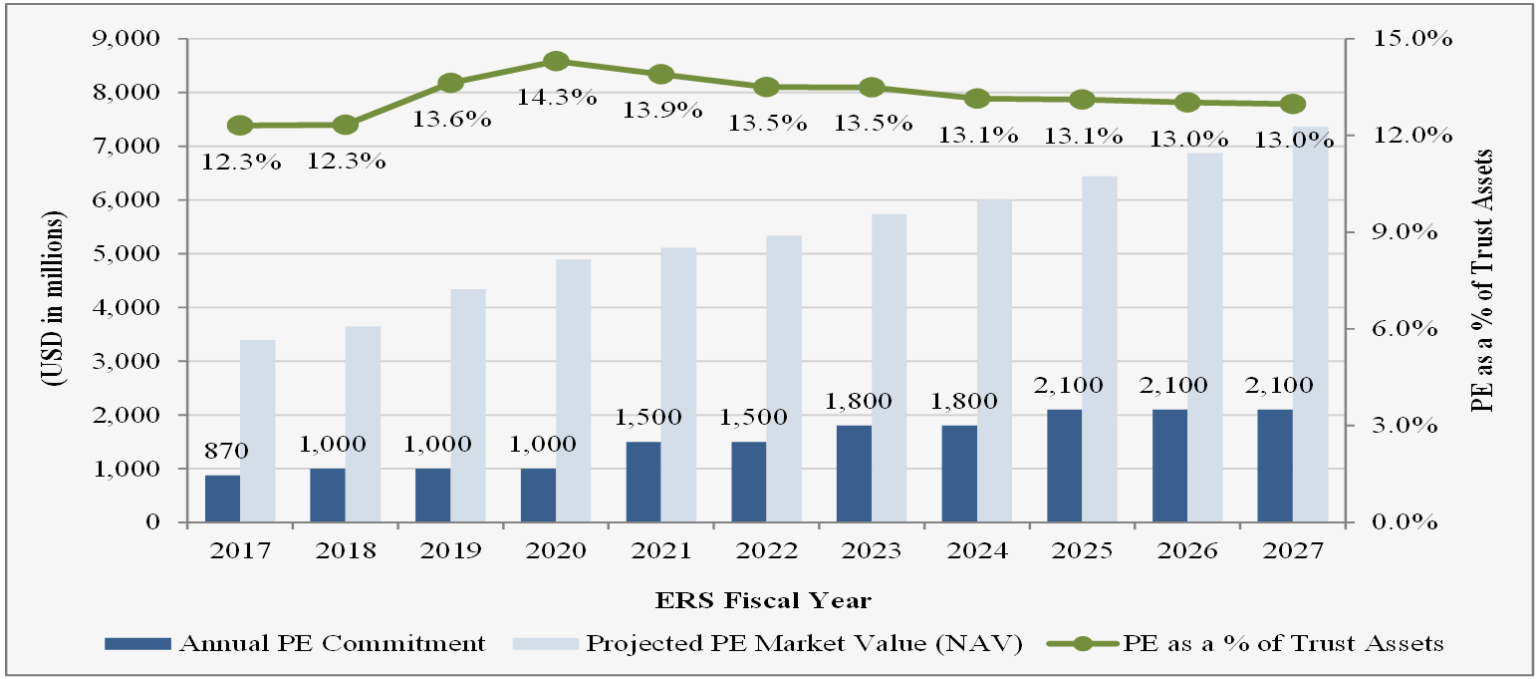
IAC and Board Approval Request

ERS

- Review and consideration of ERS Private Equity Annual Tactical Plan for FY2018:
  - No changes to Interim Tactical Plan approved at August BOT
  - Propose to invest in 6-10 funds with commitments totaling $1.0 billion (including co-investments)
  - Commitment target range +/- 25% ($0.75B - $1.25B)

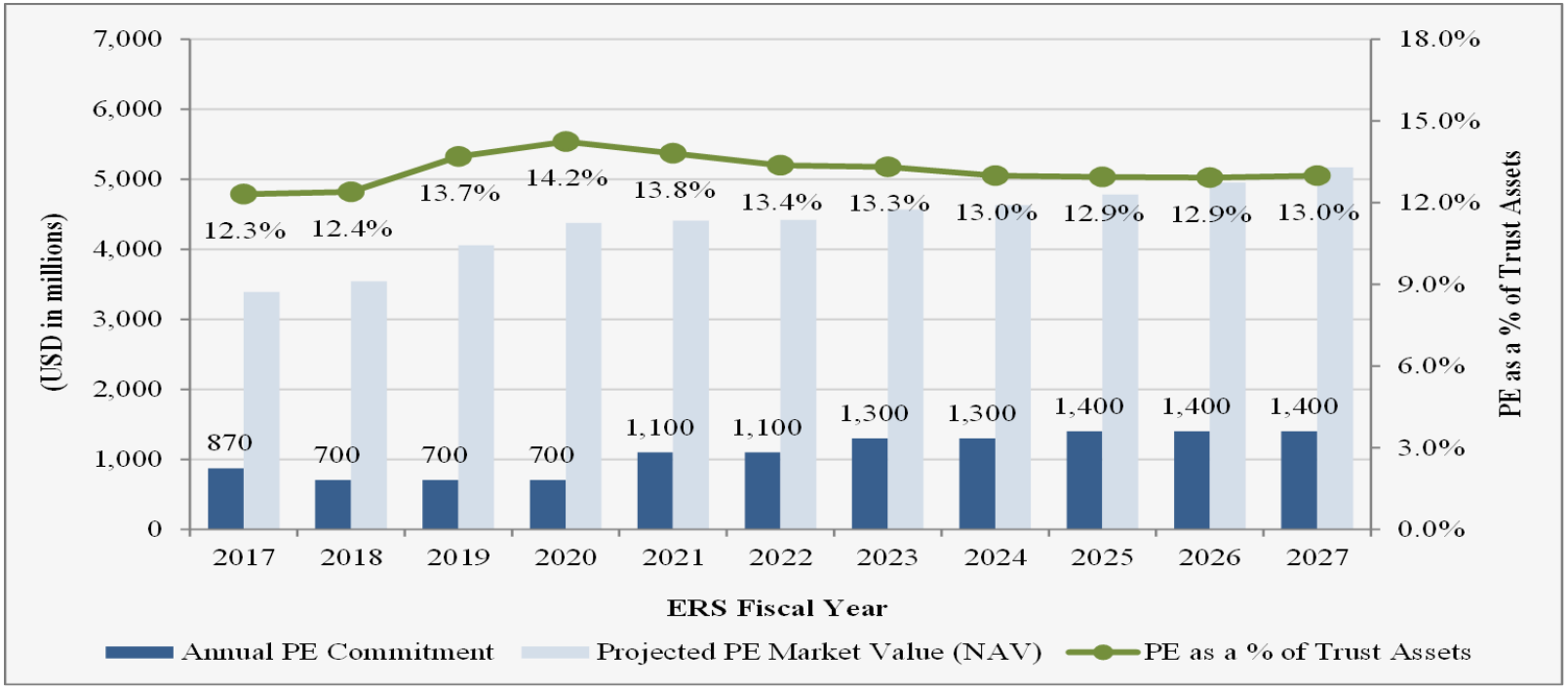
Private Equity FY2018 Tactical Plan

7.5% Trust Growth



Private Equity FY2018 Tactical Plan

Trust Growth Sensitivity - 3.75% (Conservative Scenario)



ERS

Questions?

(Action Item)

ERS

Public Agenda Item #10.1

Discussion of the Risk Management Program

December 12, 2017

Carlos Chujoy, CFA, Portfolio Manager
Stuart Williams, CFA, Portfolio Manager

Risk Management Program

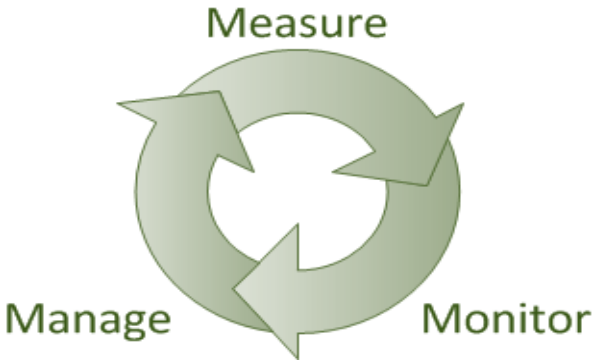
Agenda - Key Topics

ERS

- Risk Management Process
- Overview of Market Signals
- Review of Trust Level Risk
- Update on FY 2017 Initiatives
- Outlook for FY 2018

Risk Management Program

Risk Management Process

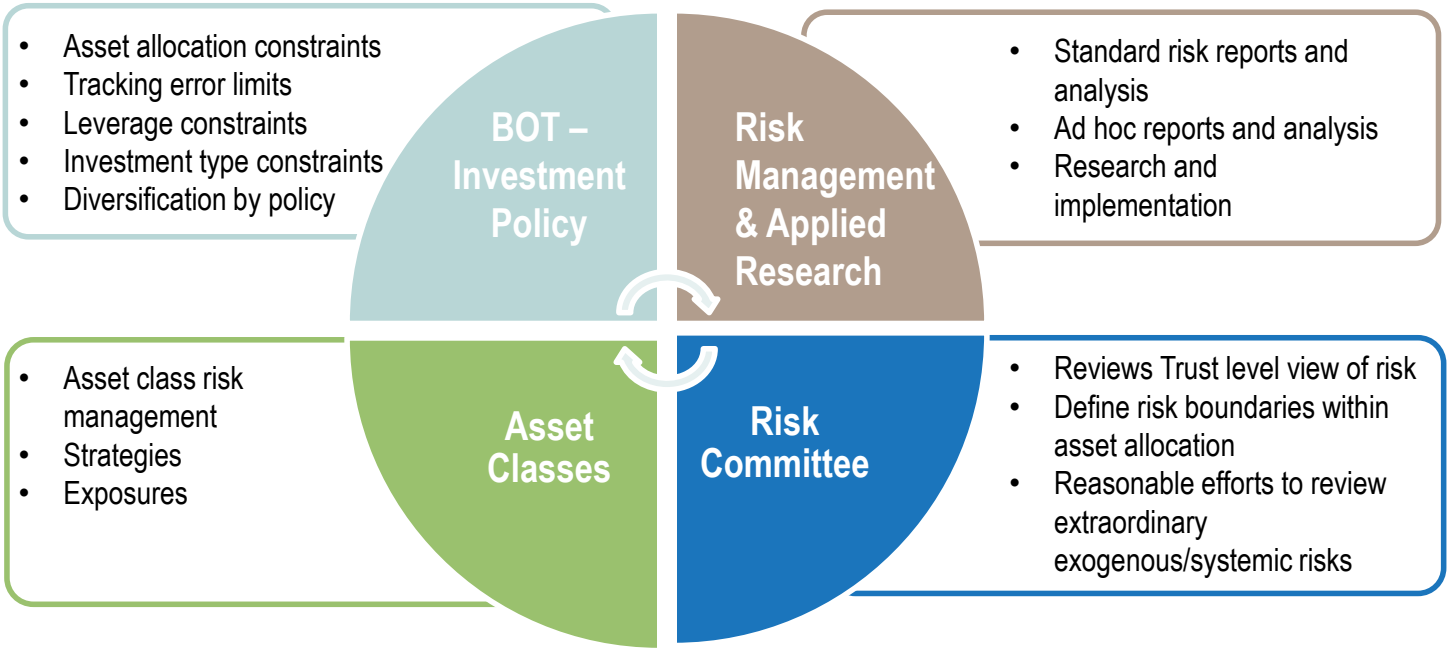


- Identify and **measure** salient investment risks relevant to the trust
- **Monitor** risks (define risk boundaries and tolerances)
- Respond to and **manage** investment risks

Risk Management Program

Integrated Aspects of Risk Management

ERS



Risk Management Program

Team

ERS

RMAR Team

- **Carlos Chujoy, CFA**,
  Portfolio Manager
- **Stuart Williams, CFA**,
  Portfolio Manager
- **Joy Seth, CFA,**
  Investment Analyst
- **Satitpong Chantarajirawong, CFA,**
  Investment Analyst
- **Yu Tang**,
  Investment Analyst

Voting Risk Committee Members

- **Tom Tull, CFA**,
  CIO
- **Sharmila Kassam**, **CPA, Esq.,**
  Deputy CIO
- **Carlos Chujoy, CFA**,
  Portfolio Manager
- **Leighton Shantz, CFA**,
  Director of Fixed Income
- **John Streun, CFA**,
  Director of Public Equities
- **Anthony Curtiss, CFA**,
  Director of Hedge Funds

Risk Management Program

Asset Class and Trust Risk Monitoring

ERS

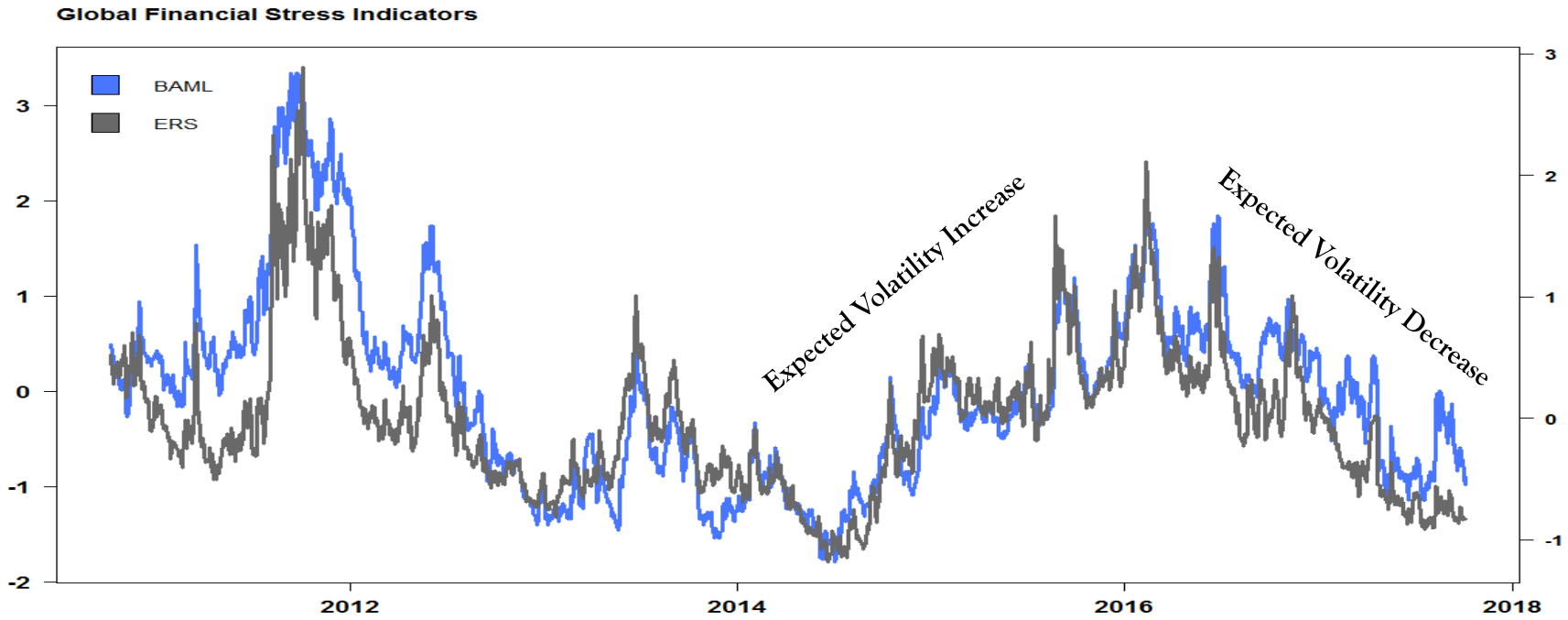
	Asset Allocation	Active Risk	Tail Risk	Sector	Factor Risk	Currency	Stress Test	Financial Leverage	Derivatives	Counterparty	Liquidity
Global Equity											
Public Equity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Private Equity	✓			✓		✓		✓		✓	✓
Fixed Income											
Global Credit	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rates	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cash	✓	✓	✓		✓	✓	✓			✓	✓
Real Assets - Private	✓			✓		✓		✓		✓	✓
Real Assets - REITS	✓	✓		✓	✓	✓		✓		✓	✓
Absolute Return	✓		✓	✓	✓		✓	✓		✓	✓
Overall Trust	✓	✓	✓	✗	✓	✗	✓	✗	✓	✗	✓

✓	**risk is currently measured and monitored**
✗	**Tools and standards under development**
	not currently monitored or available

Agenda item 10.1 - Meeting book dated December 12, 2017

Risk Management Program

Overview of Market Signals



Agenda item 10.1 - Meeting book dated December 12, 2017

Risk Management Program

Overview of Market Signals

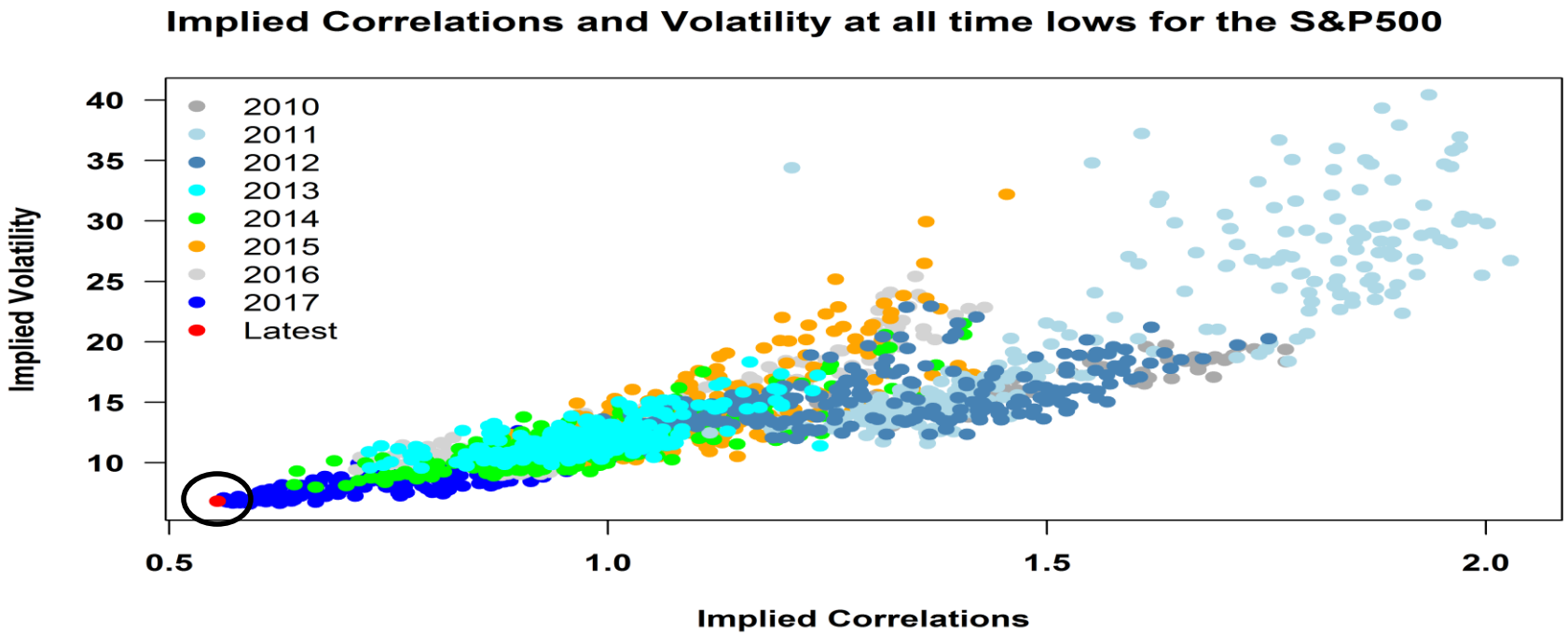
ERS

Cross Asset Class Stress Monitor

Asset	Min	Current	Max
Equity	-1.44		4.34
Credit	-1.54		5.21
Rates	-1.8		3.26
Real Estate	-0.95		5.38
Commodity	-1.48		3.43
Currency	-1.46		2.11
Credit Default Swap	-1.46		2.26
Global Financial Stress Indicator	-1.82		3.38

Risk Management Program

Overview of Market Signals



Risk Management Program

FY2017 in Review

ERS

What could break this low volatility, low correlation environment?

- **More Fed rate hikes than the markets expects in 2018**
  Run the risk of higher real rates and tightening financial conditions
- **Sharp falls in surprise indices**
  A China growth shock could send rippling effects throughout global markets
- **Geopolitical risk coupled with economic concerns**
  Cause volatility to be more than just a temporary issue
- **Concentration risk in certain parts of the market/portfolios**
- **Policy failure and return to deflationary regime (loss of political support)**
  Fiscal spending, tax cuts, health care

Risk Management Program

FY2018 Outlook

ERS

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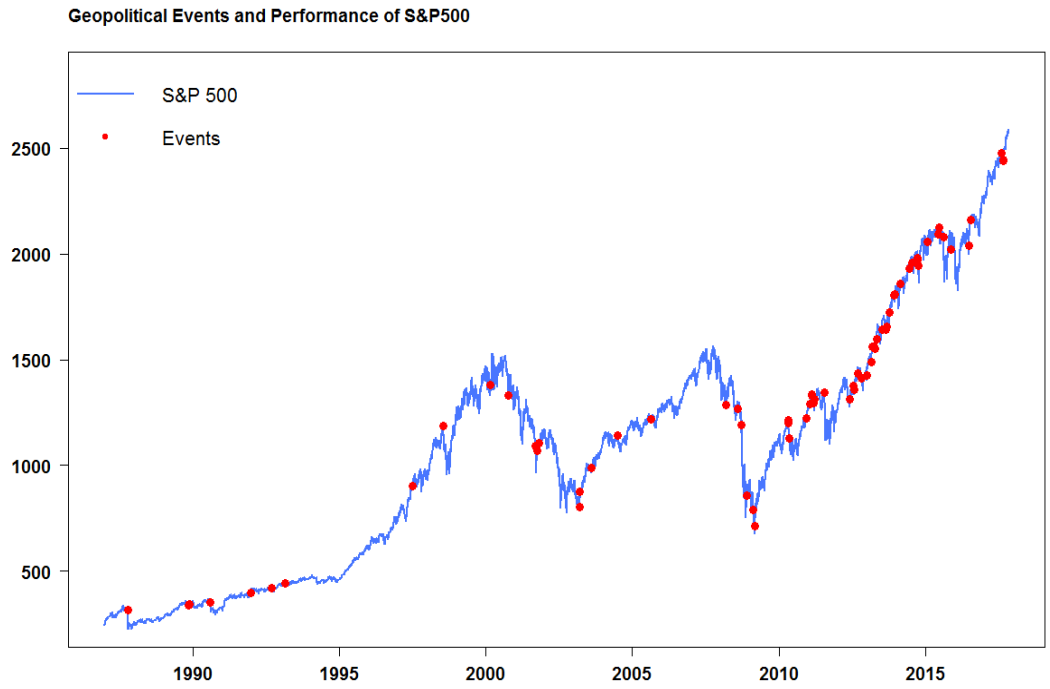
Source: Deutsche Bank

Risk Management Program

FY2017 in Review



Major Events

- Frequency of events increased post the financial crisis in 2008 leading to more uncertainty
- Most recent geopolitical events have been non-material
- Markets are driven primarily by underlying fundamentals

Source: Strategas, Bloomberg, ERS

Risk Management Program

FY2017 Review of Trust Level Risk

ERS

Asset Class	Assets Under Management	Weight	Excess Weight	Annualized SD	T12M Return	T12M Excess Return	Annualized Return	Annualized Excess Return	IR	SR	TE	Beta	R^2
Total Fund	$27,797,322,053	100.0	NA	5.45	12.15	1.07	5.88	0.23	0.15	1.02	1.54	0.84	95.53
Return Seeking Assets	$22,544,049,847	81.1	4.44	7.25	15.21	1.10	6.86	0.23	0.11	0.90	2.03	0.83	96.10
Risk Reduction	$5,253,272,206	18.9	-4.44	1.52	1.76	0.72	2.33	0.31	0.62	1.32	0.51	0.85	91.62

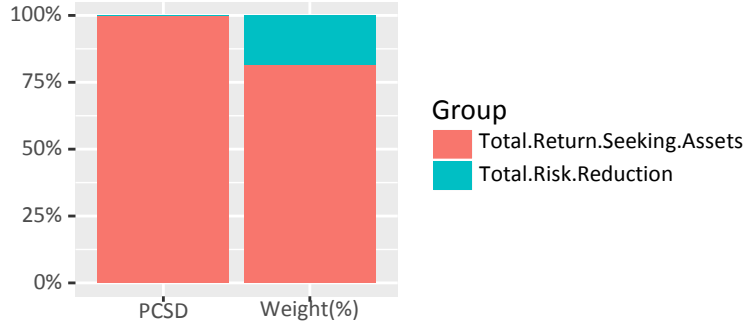
IR, Information Ratio – Ratio of portfolio returns above the returns of the benchmark divided by the volatility of returns.
SR, Sharpe Ratio – Average return earned in excess of the risk free rate per unit of volatility.
TE, Tracking Error – Difference between a portfolios returns and the benchmark.

Risk Management Program

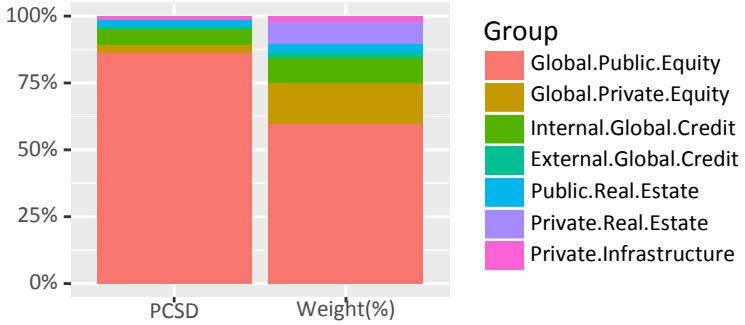
FY2017 Review of Trust Level Risk

ERS

Return Seeking vs Risk Mitigating



Return Seeking

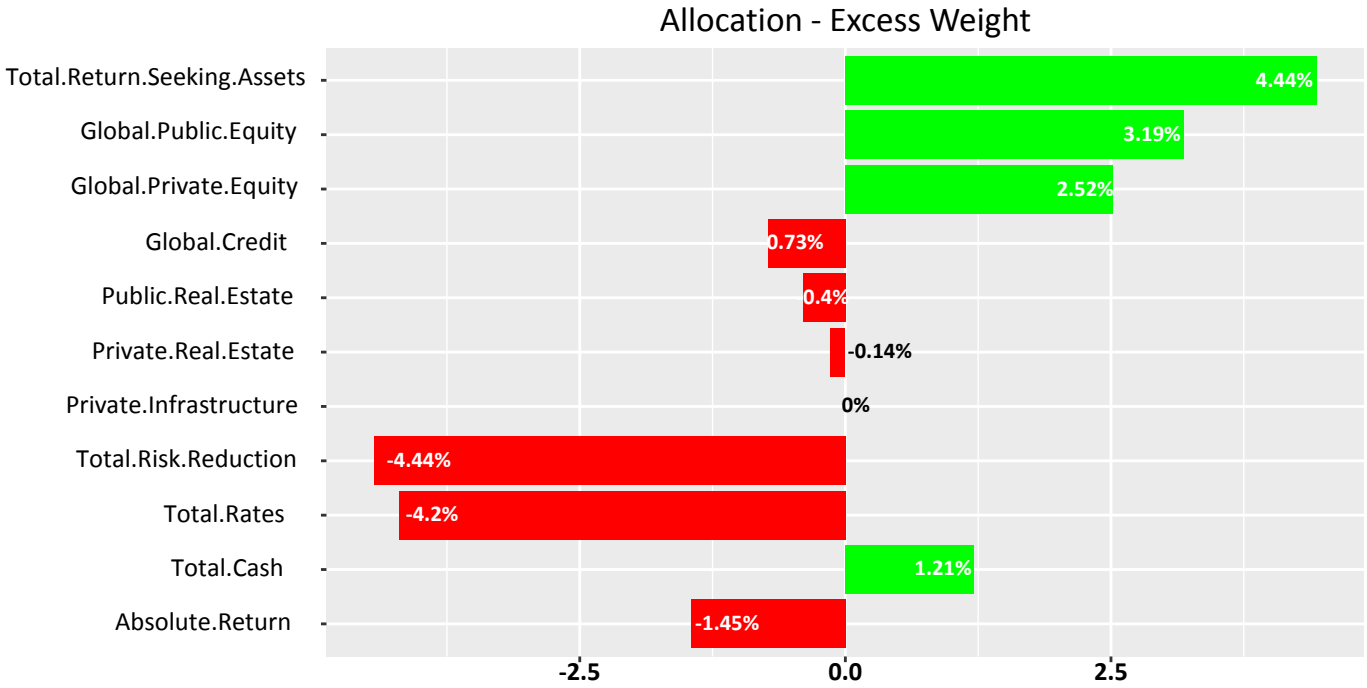


Risk Mitigating

PCSD: Percentage Contribution to Standard Deviation (Volatility)

Risk Management Program

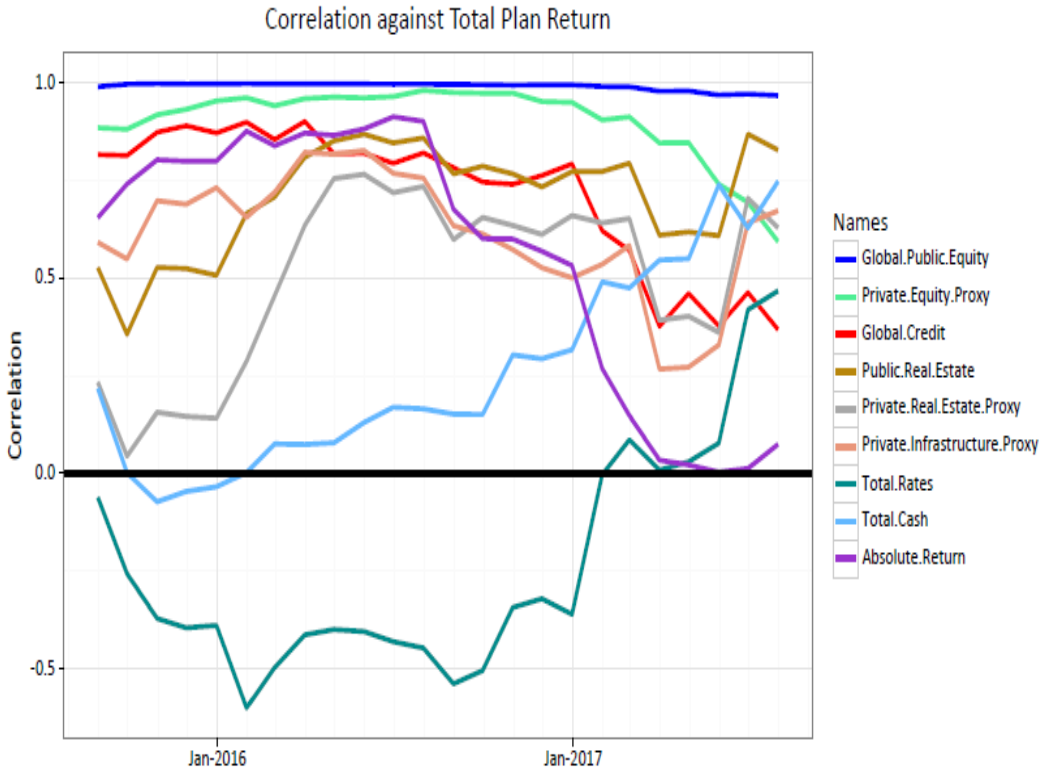
FY2018 Review of Trust Level Risk



Source: BNY Mellon, ERS. Data as of 9/30/2017

Risk Management Program

FY2017 Review of Trust Level Risk



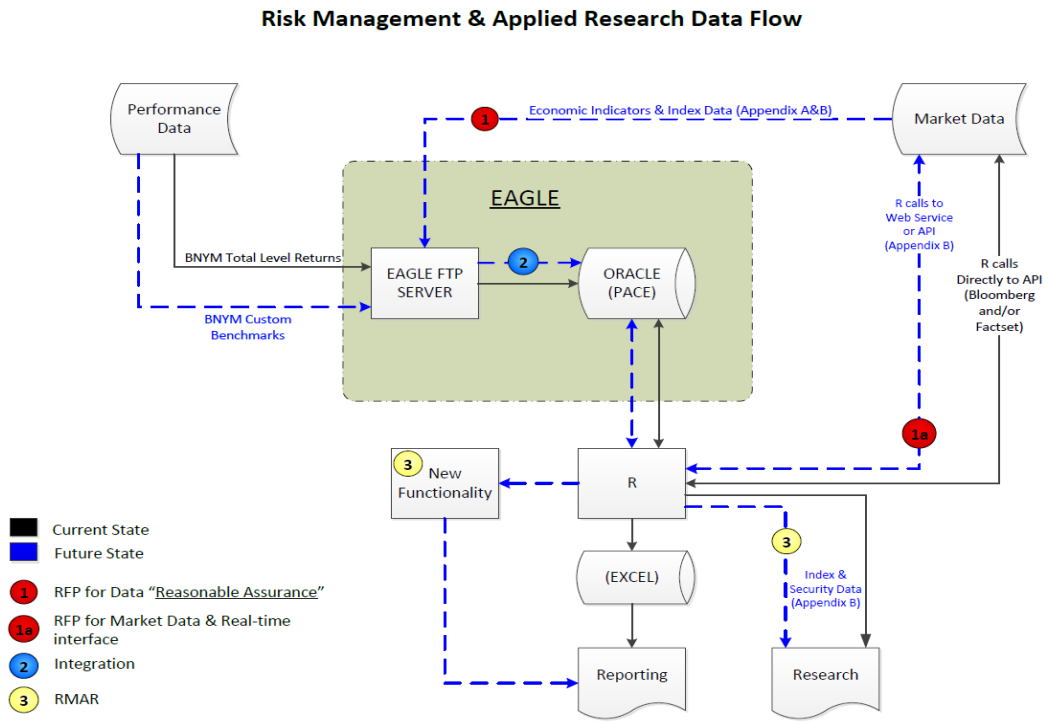
Takeaways

- Global Public Equity has the highest correlation to the Trust
- The correlation of low volatility assets to the Trust increased due to Trust volatility decreasing
- The repositioning of assets within the Absolute Return portfolio lowered its correlation to Trust returns

Risk Management Program

Update on FY 2017 Initiatives

ERS



Big Data Project

- Goal to create a centralized database for all asset classes
- Required to feed internally developed applications
  (ie: risk, tactical asset allocation and derivatives) into one database
- Resulting in ERS owning the data, ensuring control, increased efficiency

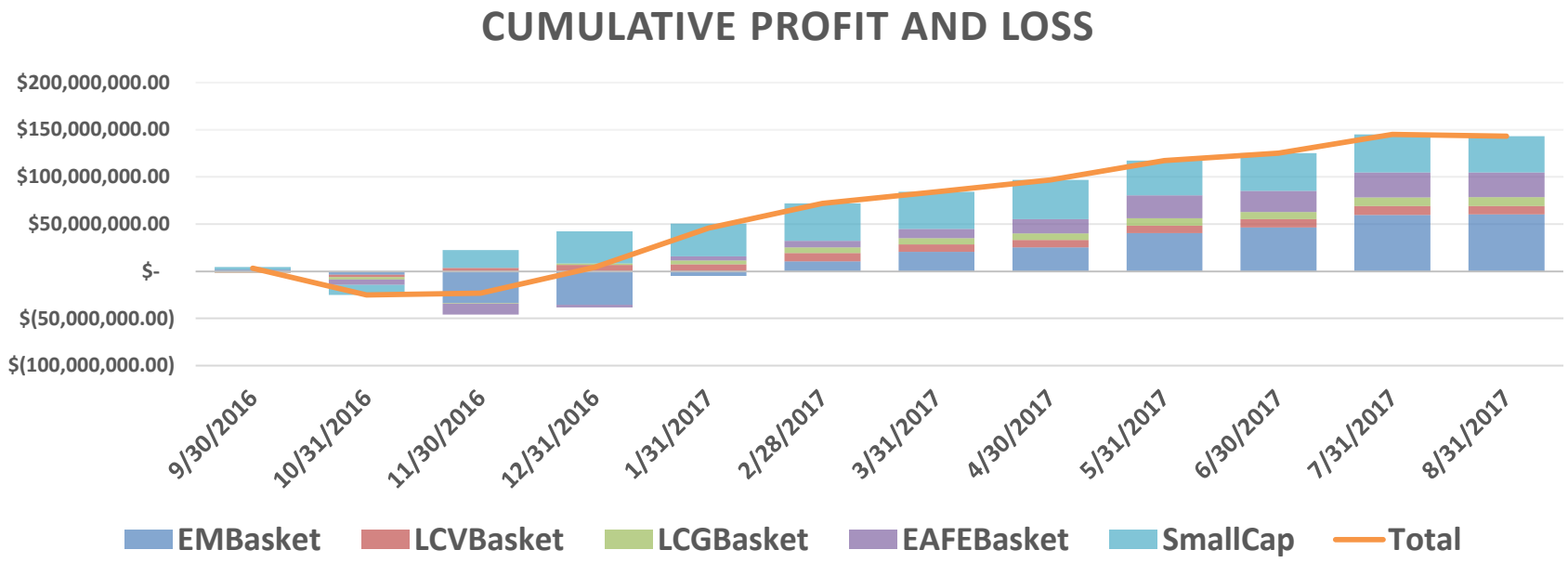
Agenda item 10.1 - Meeting book dated December 12, 2017

Risk Management Program

Update on FY 2017 Initiatives

ERS

Beta Management Tactical Asset Allocation Model – Paper Portfolio Results



Source: Bloomberg, ERS. Data as of 8/31/2017

Risk Management Program

Update on FY 2017 Initiatives

ERS

Equity Portfolio Management + Options Overlay

	Tactical Quantitative Fund Options (Paper Portfolio)	Tactical Quantitative Fund	S & P 500
Annualized Returns	18.19%	17.21%	16.23%
Annualized SD	8.61%	9.35%	8.33%
Max Drawdown	-3.39%	-4.21%	-4.34%
Annualized Sharpe Ratio	2.11	1.84	1.94
Beta	0.94	1.03	1.00

Source: BNY Mellon, Bloomberg, ERS. Data as of 8/31/2017

Risk Management Program

Outlook for FY 2018

ERS

- Dedicate time to perform deeper cross asset class analysis
- Augment the risk management capabilities by incorporating tail hedging and scenario analysis
- Integrate ERS' database with internally developed systems
- Develop systematic investment strategies for risk and exposure management

Questions?

ERS

Public Agenda Item #11.1

ERS' Emerging Manager Program: Market Update and Program Overview

December 12, 2017

Sharmila Kassam, CPA, Deputy Chief Investment Officer
Panayiotis Lambropoulos, CFA, CAIA, FRM, Hedge Fund Portfolio Manager

Emerging Manager Program

Agenda

ERS

- Background
- Investments and Commitments as of September 30, 2017
- Calendar Year 2017 Highlights
- Calendar Year 2018 Initiatives

Emerging Manager Program

Background

Emerging managers, as defined in Statute, are investment managers with assets under management of $2 billion or less.

	Public Equity	Private Equity	Private Real Estate	Hedge Funds	Fixed Income
Current Formal EM Program	Yes	Yes	Yes	No	No
Proposed Program Structure	Hybrid	Hybrid	Hybrid	Direct	Direct
EM Requirements					
Firm AUM	< $2 billion	< $2 billion	< $2 billion	< $2 billion	< $2 billion
Track Record	3 Years	Prefer 3 Years	Prefer 3 Years	3 Years	3 Years
Fund	n/a	I, II, III	I, II, III	n/a	n/a
Fund Size	**n/a**	**< $1 billion**	**< $500 million**	**n/a**	**n/a**

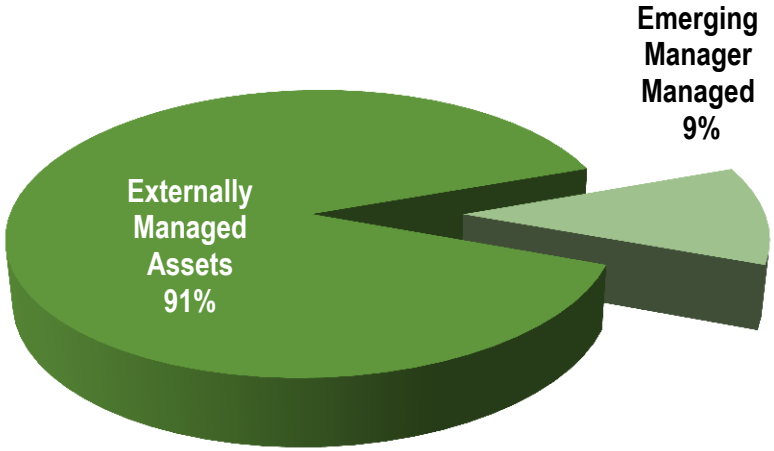
Staff has determined that, over the long term, inclusion of emerging managers should enhance and diversify ERS' portfolio and complement ERS' internal investment management.

Emerging Manager Program

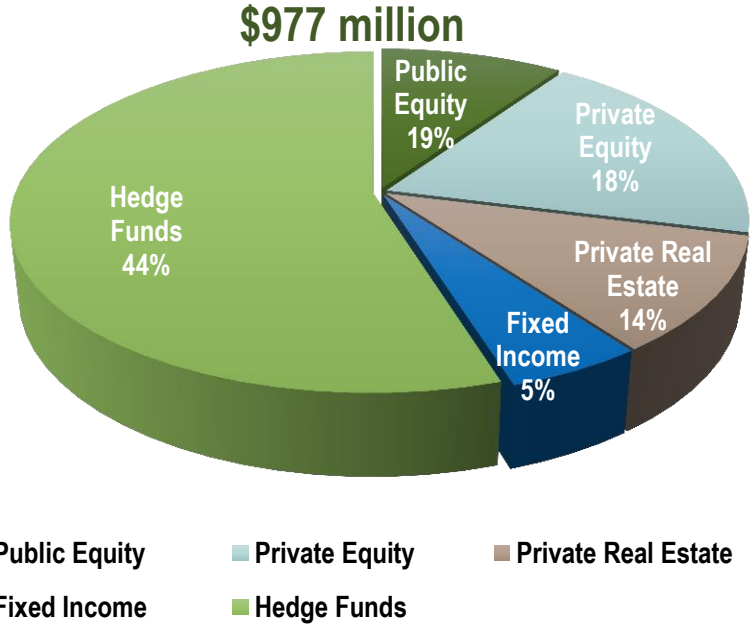
Investments and Commitments as of September 30, 2017

ERS

ERS' Total Externally Managed Assets
$10.8 billion



Current Allocation by Asset Class



Agenda item 11.1 - Meeting book dated December 12, 2017

Emerging Manager Program

Calendar Year 2017 Highlights

ERS

- Refocused Public Equity Emerging Manager Program to better complement internally managed portfolios – international small cap focus
- Continued industry outreach and exposure at conferences seeking to discuss best practices and highlight performance contribution of emerging manager programs
- Dedicated efforts to building a Hedge Fund Emerging Manager Program

Emerging Manager Program

Performance

ERS

Private Real Estate	Net IRR (09/30) Since Inception
Total Emerging Manager Portfolio: inception – December 2010	17.44%
Total Private Real Estate Portfolio	**12.88%**

Source: The Burgiss Group, LLC

Private Equity	Net IRR (09/30) Since Inception
Total Emerging Manager Portfolio: inception - November 2010	18.52%
Total Private Equity Portfolio	**11.77%**

Source: The Burgiss Group, LLC

Global Public Equities	Time Weighted Returns - Gross[1] (09/30) Since Inception
Total Emerging Manager Portfolio: inception - February 2017	21.38%

Source: BNY Mellon

1: Gross returns used as new mandate has not paid out annual performance fee

Hedge Fund Program Highlight

Hedge Fund Program Highlight -

Program Development

ERS

2011

ERS starts direct investments in hedge funds with a target allocation for the Absolute Return Portfolio of 5% (of the overall Trust)

2015

ERS reached the 5% target for the Absolute Return Portfolio by investing in a wide range of hedge fund strategies

2016

ERS explores establishing new definitional parameters and avenues to invest in early stage hedge fund managers and/or a seeding platform

2017

ERS develops ideas for a possible seeding venture with a strategic partner to be launched in 2018

Launch of ERS Hedge Fund Seeding Venture in CY2018

Hedge Fund – Emerging Manager Program:

Paths for Consideration

ERS

Stay Internal	Partnership via a Seeding Venture	Go External
Pros – Seek out managers suited for ERS' investment objective by continuing to build on existing internal database and intellectual capital	**Objective – Customized to align internal goals & external resources through a true Partnership**	Pros – Leverage additional investment and operational resources (especially internationally)
Cons – Limited bandwidth and sourcing capability (especially internationally)	**Opportunities – Benefit from a global network of external resources without sacrificing economics/control** - **Build an internal farm team** - **Create another source of "alpha"** - **Synthetically extend internal staff bandwidth**	Cons – Less customized for ERS (mainly off the shelf products)
Limited operational infrastructure related to managed accounts	**Challenges – Define and execute new model accomplishing the objective** **- Integrate new and innovative value-centric model on the heels of a bold and visionary direction**	Structures/Products are typically more expensive fund of funds

Emerging Manager Program

Key Elements For Success

ERS

- Be Early
- Be Influential
- Develop a True Partnership
- Provide Capital That Meets Necessary Needs
- Make Impactful Investing And Commitment
- Provide Continued Support If Managers Perform
- Actively Participate in the Institutionalization of the Business

Emerging Manager Program

Calendar Year 2018 Initiatives

ERS

- Refine the process for emerging managers to have access to ERS staff
- **2018 REEM Conference** (January 10-11, 2018)
- **ERS Inaugural Open House for Emerging Managers** (February 1, 2018)
- **2018 ERS & TRS Emerging Manager Conference** (February 2, 2018)
- Focus on direct relationships with emerging managers in ERS portfolios
- Promote emerging manager program best practices

ERS

Questions?

(Action Item)

ERS

Public Agenda Item #12.1

ERS Investment Policy :
Proposed Opportunistic Credit Guidelines and Procedures – (Action)

December 12, 2017

Sharmila Kassam, CPA, Deputy CIO
Anthony Curtiss, CFA, Director of Hedge Funds

Current Asset Allocation

Introduction of Opportunistic Credit

ERS

Implementation Timeline	FY2017	1-2 Years	3-4 Years
Asset Class	**Prior Allocation**	**Interim**	**Final**
Global Equity	45.0%	40.0%	37.0%
Private Equity	10.0%	12.0%	13.0%
Global Credit*	10.0%	11.0%	11.0%
Real Estate**	10.0%	11.0%	12.0%
Infrastructure	4.0%	6.0%	7.0%
Opportunistic Credit***	--	2.0%	3.0%
Total Return-Seeking Assets	**79.0%**	**82.0%**	**83.0%**
Rates	15.0%	12.0%	11.0%
Absolute Return	5.0%	5.0%	5.0%
Cash	1.0%	1.0%	1.0%
Total Risk-Reducing Assets	**21.0%**	**18.0%**	**17.0%**
Expected Return (Median)	7.0%	7.1%	7.2%
Expected Risk (Volatility)	12.0%	11.7%	11.6%
Sharpe Ratio (Measure of Risk-Adj. Return)	0.383	0.403	0.413
Liquid Assets****	74%	67%	63%

* **Diversified** (7% high yield and 4% EMD); **Enhanced Return** (7% high yield and 4% EMD)

** **Diversified** (8% private real estate and 3% listed); **Enhanced Return** (9% private real estate and 3% listed)

*** **Diversified** (1% private credit and 1% real estate debt); **Enhanced Return** (1.5% private credit and 1.5% real estate debt)

**** **Liquidity –** Global Equity, Global Credit, Rates, and Cash (noting that certain satellite illiquid investments in Global Credit and Real Estate includes REITs that are liquid)

Opportunistic Credit –
What is it?

ERS

- Opportunistic credit is a unique approach to investing within the credit markets.
- Flexible mandate to identify unique and niche opportunities across the credit spectrum.
- Private credit and opportunistic credit can sometimes be used interchangeably. Although, private credit is often associated with direct lending which is a sub-strategy within opportunistic credit.
- In comparison to liquid market solutions, it could be compared to an unconstrained bond fund.

Opportunistic Credit –

Why does ERS need it?

ERS

- Given the current credit cycle, private opportunities are potentially more attractive relative to public markets.
- Opportunities within private markets occur primarily from the following: structural issues (i.e. banks not lending and Basel III), excess return from illiquid versus liquid, and market dislocations.
- The strategy sleeve can allow ERS to allocate to unique opportunities that do not neatly fit into more traditional asset classes. Hence, it can act as a complement to existing exposures.

Opportunistic Credit –

How does ERS invest?

ERS

- The mandate is flexibly structured through private market investment vehicles.
- In most instances, capital is committed and drawn over a specified period of time.
- At some point in time, the investment vehicle matures and starts returning capital over time. Depending on the strategy, distributions may be periodically received over its life (derisking the initial investment).
- Expectations are for most investments to be self-liquidating; extension risk is limited.

Opportunistic Credit

Diversification Across Strategies

ERS

Direct Lending

U.S. Direct Lending
- Sr. Focus
- Opportunistic
- Lower Middle Market – *(sponsored focus)*
- Lower Middle Market – *(non-sponsored focus)*
- Private BDCs

European Direct Lending
- Sr. Focus
- Opportunistic
- Lower Middle Market
- Country-Specific Funds

Emerging Markets Lending
- Asia Lending
- Africa Lending
- CEE/Middle East Lending
- Latin America Lending
- Pan-EM Lending

Global Middle Market Lending

SBIC Lending

Distressed & Special Situations

Corporate Distressed
- U.S.
- European
- Emerging Markets
- Global
- Single Trade

Stressed Credit

Real Estate Distressed
- U.S.
- European
- Global

Cross-Asset
- U.S.
- European
- Emerging Markets
- Global

Mezzanine

U.S. Mezzanine
- Upper Middle Market
- Middle Market
- Lower Middle Market

European Mezzanine

Specialty Finance

Consumer & SME Lending
- Marketplace Finance
- Lender/Platform Finance

Factoring & Receivables

Regulatory Capital Relief

Royalties

Healthcare Lending

Venture Lending

Insurance Linked

Merger Appraisal Rights

Structured Credit

CLO
- CLO Debt
- CLO Multi
- CLO Risk Retention
- 3rd Party CLO Equity

CRE
- Non-Agency CRE B-Piece
- Agency CRE B-Piece
- CMBS/CRE

RMBS

Consumer ABS

Esoteric ABS

Europe Structured Credit

Structured Credit Multi-Sector

Real Estate Credit

U.S. CRE Lending
- Bridge Lending
- Transitional Lending
- Core Lending

European CRE Lending
- Bridge Lending
- Transitional Lending
- Core Lending

Emerging Markets CRE Lending

Residential Mortgages
- Residential NPLs
- Single Family Rental
- Mortgage Servicing Rights
- Residential Origination

Real Assets Credit

Infrastructure Lending
- Sr. Focus
- Mezz Focus

Energy Credit
- Direct Lending
- Opportunistic Credit

Trade Finance

Metals & Mining Finance

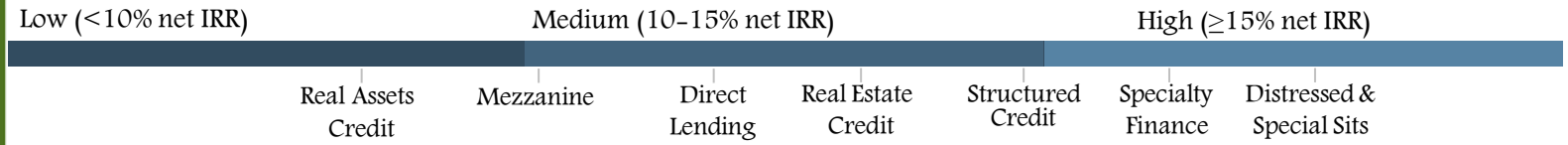
Agriculture Credit

Aviation
- Leasing
- Lending
- Opportunistic

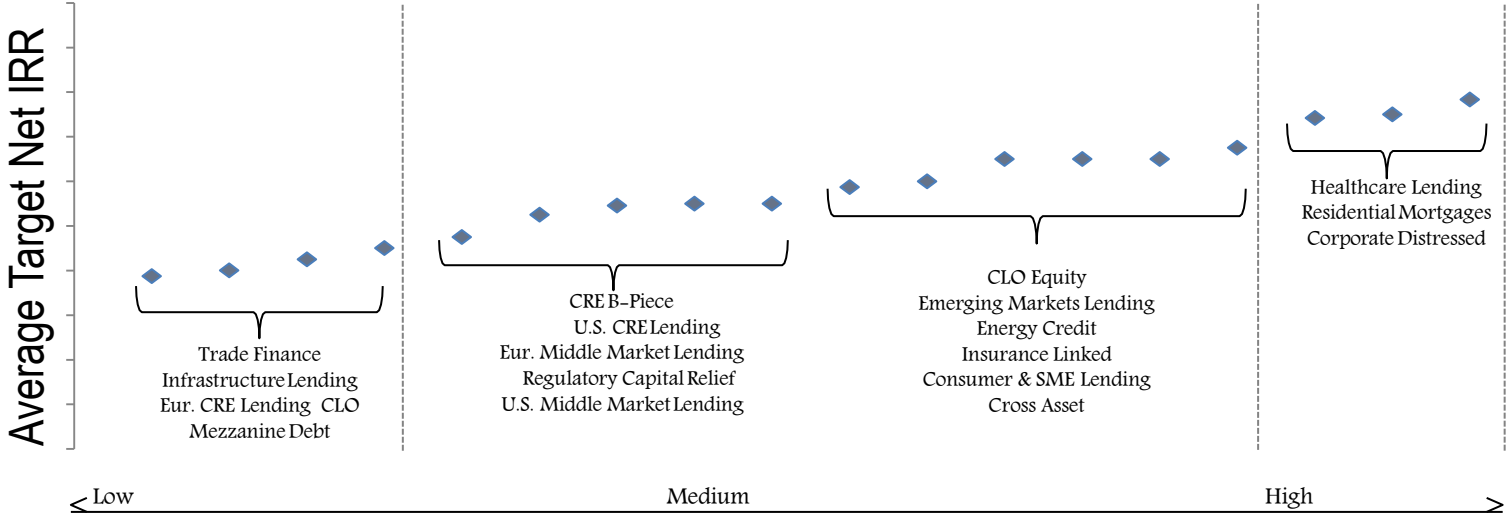
Source: Aksia

Opportunistic Credit

Diversity of Private Credit and Opportunistic Strategies



Strategy Average Net Target Returns*



Source: Aksia

Data is sourced from Aksia's internal Private Credit & Opportunistic Strategies database, as of December 2016. Target Sector and Strategy returns are representative of information provided by the managers of funds that Aksia covers. Not all funds covered are included in the analysis due to insufficient amount of data. Target returns are not indicative of future performance and are provided only for a comparative analysis of target returns.

Opportunistic Credit

Overview

ERS

- **Return Profile –** On an aggregate basis to target 6.5 to 7.0%
- Complement existing asset class exposures
- Facilitate a collaborative effort across different asset classes within the Trust
- Underlying investments and structures will be illiquid
- Some strategies have floating rate components reducing sensitivity to rising interest rates
- Emphasis on cash flows with price appreciation as a secondary focus
- Some investments may provide for either equity kickers or have characteristics that resemble equity holdings

Opportunistic Credit –
Characteristics

ERS

- Underlying investment vehicles will be closed-end
- Terms of investment vehicles will range from 5-10 years
- The portfolio will have long-bias characteristics with limited use of hedging
- Balance sheet leverage should not be greater than 2.5x
- Some strategies may have inherent leverage
- Emphasis on developed markets; emerging market opportunities considered
- Co-investment opportunities might be present to enhance returns
- The overall benchmark to the strategy will be *S&P / LTSA Leveraged Loan Index*

Opportunistic Credit

Characteristics

ERS

J-Curve Mitigation

- Management fees generally paid on invested capital
- Shorter term structures
- Periodic cash distributions

Downside Protection Risk

- Self liquidating
- Capitalization structure seniority
- Emphasis on strategies with consistent cash flows
- Deals have both covenants and collateral

Opportunistic Credit –

Proposed Strategy Target Ranges

ERS

Strategy Class	Target Range*	
Direct Lending	0%	40%
Mezzanine Financing	0%	20%
Specialty Financing	0%	50%
Distressed & Special Situations	0%	15%
Structured Credit	0%	15%
Real Estate Credit	0%	40%
Real Asset Credit	0%	5%

Agenda item 12.1 - Meeting book dated December 12, 2017

ERS

Questions?

(Action Item)

ERS

Public Agenda Item #12.2

Proposed Opportunistic Credit Annual Tactical Plan for Fiscal Year 2018 – (Action)

December 12, 2017

Sharmila Kassam, CPA, Deputy CIO
Anthony Curtiss, CFA, Director of Hedge Funds

Opportunistic Credit

Schedule of Deployment

ERS

January to August 2018 – Research strategies internally and collaborate across asset class teams with limited deployment in FY2018

FY 2019 – Work towards an interim allocation of 2% of the Trust

2017 → 2018 → 2019 → 2020 → **Target Allocation of 3% of Trust by FY 2021**

December 2017- Staff Recommendation for Asset Class Guidelines & Procedures

August 2019 – Recommend a more granular FY 2019 Tactical Plan with Pacing Plan

Agenda item 12.2 - Meeting book dated December 12, 2017

Opportunistic Credit

Tactical Plan FY2018

ERS

- Expectations of 0-2 investments for FY2018
- Current sourcing efforts focused on Specialty Finance and Real Estate Credit
- Areas to monitor include Direct Lending and Mezzanine Financing due to low interest rates and an extremely competitive operating environment
- Expectations are for multiple consultants to be utilized
- Development of a pacing model will be critical to the further development of portfolio

ERS

Questions?

(Action Item)

ERS

Public Agenda Item #13.1

Contract Award Recommendation for Real Estate Consulting Services – (Action)

December 12, 2017

Tom Tull, CFA, Chief Investment Officer
Gabrielle Schreiber, Director of Procurement and Contract Oversight
Robert Sessa, CFA, Director of Real Estate

Real Estate Consulting Services

Background

ERS

- Board approved R.V. Kuhns & Associates (RVK) as the real estate consultant on May 19, 2009 and, with extensions and amendments, the contract term was expected to end May 22, 2017.
- RVK's CEO notified ERS on February 3, 2017 that the real estate team left to start their own firm.
- RVK's contract was terminated on Feb 7, 2017.
- Board selected Aon Hewitt Investment Consulting as the interim consultant under an existing ERS Contract at the February 22, 2017 Board meeting.
  - Contract Effective: April 4, 2017
  - Contract Ends: August 31, 2018

Real Estate Consulting Services

Request for Proposal (RFP)

ERS

- ERS issued RFP on May 10, 2017 for a contract covering 6 years.

- Requested services include, but are not limited to:
  - Assist in the analysis and assessment of prospective managers, co-investments and other real estate investments;
  - Monitor portfolio performance against the designated benchmark;
  - Provide quarterly and annual quantitative and qualitative assessments of each partnership/real estate investment and the real estate portfolio as a whole; and
  - Periodically review ERS' existing policies and procedures and benchmark(s) for the real estate program and recommend changes as appropriate.

- Responses were due June 8, 2017

Real Estate Consulting Services

Request for Proposal (RFP)

ERS

ERS received 11 responses

- Albourne America LLC
- Alignium, LLC
- Callan Associates, LLC
- Cambridge Associates, LLC
- Courtland Partners, Ltd.
- Hamilton Lane Advisors, LLC
- ORG Portfolio Management, LLC
- Pension Consulting Alliance, LLC
- RCLCO Fund Advisors, LLC
- StepStone Group Real Estate LP
- Townsend Holdings LLC, d/b/a The Townsend Group

StepStone's Proposal was disqualified because it was not received by the submission deadline.

Cambridge's Proposal was disqualified due to not passing the Preliminary Review Evaluation

Real Estate Consulting Services

Preliminary Review Evaluation

ERS

Minimum Requirements were verified by ERS' Office of Procurement and Contract Oversight

- ✓ Principal Place of Business in the United States
- ✓ Professional Licenses and Registered Investment Advisor
- ✓ Willingness to Act as a Fiduciary to ERS
- ✓ Authorized to do Business in Texas
- ✓ Requisite Experience – Firm 5 years or greater or Individual with 10 years or more

Cambridge did not pass the Preliminary Review Evaluation

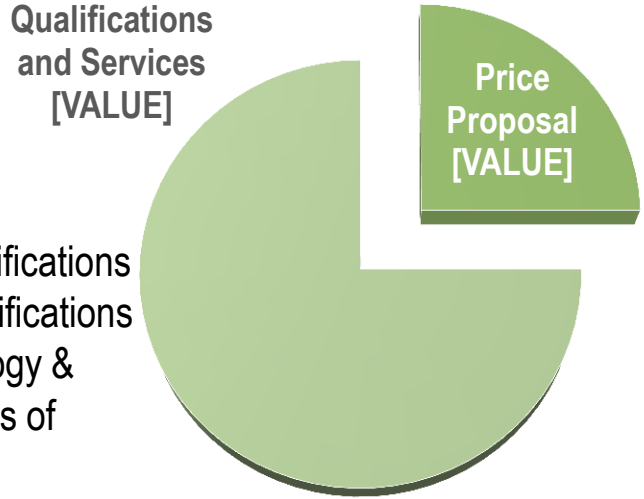
Real Estate Consulting Services

Proposal Review Evaluation

ERS

- Two main categories scored:
  - Price Proposal – scored by OPCO
  - Qualifications and Services – scored by subject matter experts from Investments and Legal

Proposal Evaluation Criteria



- Firm Qualifications
- Staff Qualifications
- Methodology & Soundness of Approach
- Financial Standing
- Optional Services

Real Estate Consulting Services

Proposal Review Evaluation (Continued)

ERS

- Clarification Questions.
  - SMEs identified aspects of the Proposals that required further clarification.
  - Primary objective is to ensure mutual understanding of each vendor's Proposal.
- Reference Checks.
- Legal and Contractibility Review.

Real Estate Consulting Services

Finalist Evaluation

ERS

- Proposal Review Phase winnowed down the list to *three* finalists:

  - Alignium - PCA - Callan

- Finalist Evaluation:
  - Further Clarification Questions.
  - Best and Final Offers.
  - Face to Face Interviews.
  - Continued Legal and Contractibility Review.
  - Continued Reference Checks.

Real Estate Consultant

Finalist Evaluation

ERS

- Staff met with Executive Office.

- Staff and Executive Office discussed:
  - The scoring tool.
  - Risks identified during Finalist Evaluation Phase.

ERS

Questions?

(Action Item)

ERS

Public Agenda Item #14.1

Chief Investment Officer's Report

December 12, 2017

Tom Tull, CFA, Chief Investment Officer

Chief Investment Officer's Report

Investment Advisory Committee Appreciation

ERS

- Expansion of IAC members
- Appreciation and commendation for increased time commitments and involvement include:
  - IAC was an active part of the success of the asset allocation study
  - IAC members are increasing their assistance with the Tex$aver program through Product Review Committee (Laura Starks, Gene Needles, Didi Weinblatt)
  - New Asset Class Investment Committee meeting participation as voting members (as of 10/17, seven meetings to date)

Chief Investment Officer's Report

Investment Challenges for FY2018

ERS

- Improving global growth and profits
- Potential higher interest rates; inflation
- Geopolitical and trade risks (NAFTA and China)
- China, Russia, North Korea
- US mid-term elections
- Brexit

Chief Investment Officer's Report

Investment Opportunities for FY2018

ERS

- Opportunistic Credit
- Private Equity Secondaries
- GTAA (Global Tactical Asset Allocation)
- Infrastructure

Chief Investment Officer's Report

Major Initiatives for FY2018

ERS

- Implementing the new asset allocation mix
- Advancing the derivatives program
- Evaluate the current and future state of investment's systems architecture
- Refresh Select Pool of external advisors/managers and initiate searches to refine mix of internal and external management
- Assess current and future savings through diligent negotiation of best economic deal terms
- Leverage internal investment resources to assist investment product monitoring in the Texa$aver Program

Chief Investment Officer's Report

Major Initiatives for FY2018

ERS

- Support legislative initiatives for addressing unfunded pension liabilities
- Leverage external relationships for strategic resources and opportunities within each asset class to find better risk-adjusted returns
- Develop further the Investment Division career path development, communication, succession planning and team development

Questions?

Adjournment

ERS

Public Agenda Item #16.1

Texa$aver℠ 401(k)/457 Program Review and Consideration of the Target Date Fund Offering

December 12, 2017

Georgina Bouton, CTCM, Assistant Director of Benefit Contracts
Nora Alvarado, CTCM, Manager of Account Management Team
Angelica Torres, CTCM, Program Account Manager

Texa$aver Program

Investment Funds

ERS

- Same investment offerings between plans
- Program uses
  - Mutual Funds - investment vehicles that pool money from many investors
  - Collective Investment Trust (CIT) Funds - investments formed from pooling assets from institutional investors

Texa$aver Program

Investment Funds

ERS

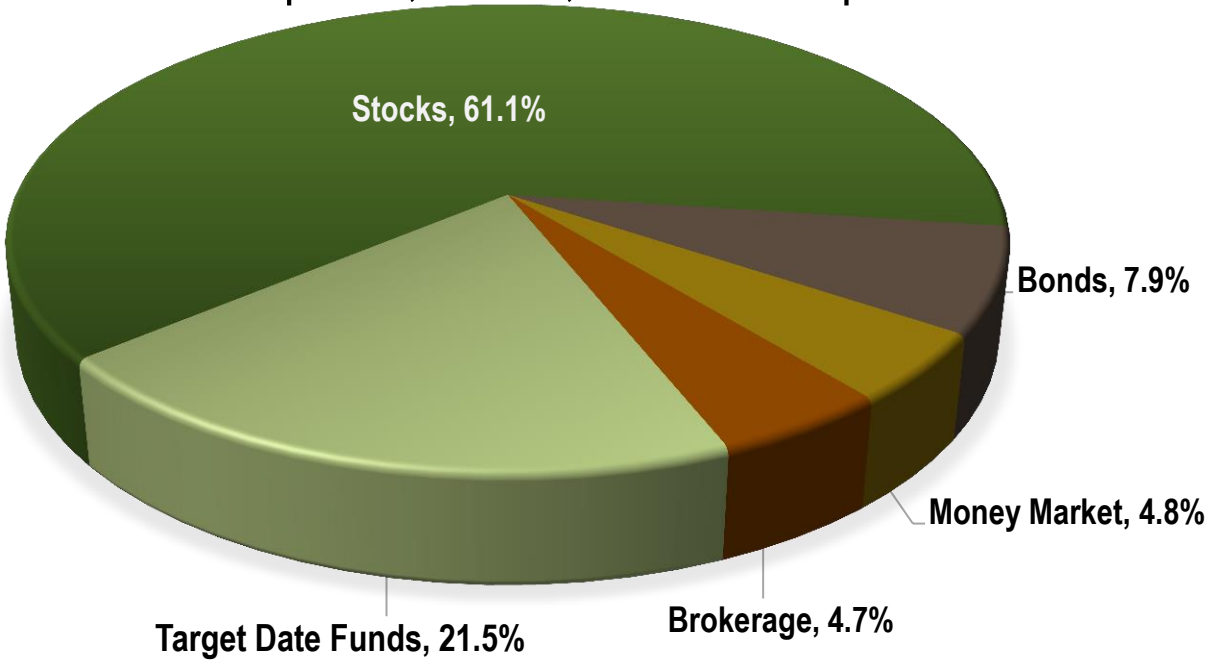
CHARACTERISTICS	MUTUAL FUND	CIT FUND
Professionally managed investments	Yes	Yes
Regulated by governmental agency	SEC	OCC
Fund Information	Publicly Available	Fund Fact Sheets Information available on Texa$aver website
Offering Document	Prospectus	Declaration of Trust
Investor Type	All Investors	Qualified Plans Only
Fund fees	Institutional & Retail Pricing May include 12(b)-1 fees	Low Institutional Pricing, No 12(b)-1 fees

Texa$aver Program

Investment Funds

ERS

Offers diversified investments in equities, bonds, and cash equivalent funds



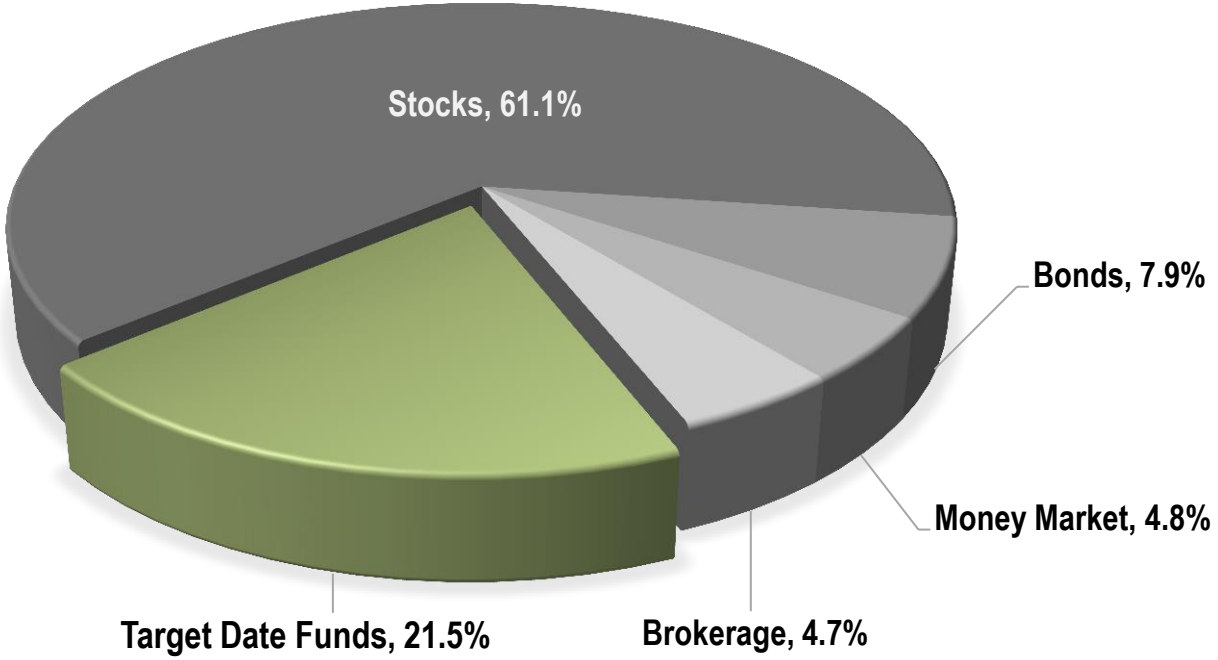
Texa$aver Program

Target Date Funds

ERS

Offers diversified investments in equities, bonds, and cash equivalent funds

The total amount invested in Target Date Funds exceeds $650 million



Texa$aver Program

Product Review Committee (PRC)

ERS

- Executive Director
- Deputy Executive Director
- Director of Benefit Contracts
- Chief Investment Officer
- Deputy Chief Investment Officer
- Director of Fixed Income
- 3 Appointed Investment Advisory Committee members

Texa$aver Program

Interim Target Date Funds

ERS

- July 10, 2017: Board ratified the selection of an interim Target Date Fund
  - Interim Fund: LifePath® Portfolio Index Fund F Series
- Use the fund selection and due diligence process defined within Program's Investment Policy
  - Product Review Committee (PRC) defines criteria
  - Empower Retirement identifies qualified funds (query, questionnaire)
  - PRC evaluates qualified funds; selects finalists
  - PRC conducts interviews; formulates recommendation

Texa$aver Program

Adopted Fund Selection Process: Target Date Funds

ERS

Minimum Requirements and Preferred Criteria

- Empower queried Morningstar Direct using minimums
  - Results: 33 CITs (7 fund managers), 6 mutual funds (5 fund managers)
- Empower remitted fund search questionnaires
  - Responses: 10 CITs, 2 mutual funds

PRC subcommittee met on October 11, 2017

- Performed analysis of fund information
- Identified 4 fund offerings (3 fund managers) as finalists

Texa$aver Program

Fund Selection Process: Target Date Funds Finalists

ERS

Finalist interviews held on November 8, 2017

- BlackRock, Inc.
  LifePath Index Target Date Funds

- T. Rowe Price
  T. Rowe Price Retirement Hybrid Trusts Class T6
  T. Rowe Price Retirement Trusts

- Fidelity Institutional Asset Management (FIAM) Trust Company
  FIAM Target Date

Texa$aver Program

Fund Selection Process: Target Date Funds Finalists

ERS

BlackRock, Inc. LifePath Index Target Date Funds

- Low fees: 8 bps
- Management style: passive
- Equity allocation, retirement: 40%
- Morningstar Analyst Rating™: Gold
- Overall Morningstar Ratings™ : 3★ ; 4★

BlackRock LifePath® Index	2020	2025	2030	2035	2040	2045	2050	2055	2060	Retiremt
Total Return, 3 Years (net)	3.60%	4.01%	4.38%	4.72%	5.00%	5.16%	5.18%	5.12%	%	3.27%
Total Return, 5 Years (net)	6.44%	7.34%	8.08%	8.76%	9.36%	9.87%	10.24%	10.54%	-	5.21%

Texa$aver Program

Fund Selection Process: Target Date Funds Finalists

ERS

T. Rowe Price Retirement Hybrid Trusts Class T6

- Highest fund fees: 34 bps
- Blended Management style:
  60% active management
  40% passive management
- Equity allocation, retirement: 55%
- Overall Morningstar Ratings™: 5★

T.Rowe Price Ret Hybrid Fund	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
Total Return, 3 Years (net)	4.80%	5.38%	5.84%	6.22%	6.47%	6.71%	6.77%	6.77%	6.77%	-
Total Return, 5 Years (net)	8.48%	9.48%	10.33%	11.07%	11.60%	11.97%	12.00%	12.00%	12.00%	-

Texa$aver Program

Fund Selection Process: Target Date Funds Finalists

ERS

Fidelity Institutional Asset Management (FIAM) Trust Company

FIAM Target Date

- Higher fund fees: 28 bps
- Management style: active
- Equity exposure, retirement: 60%
- Overall Morningstar Ratings™ : 1★ (Income Fund); 4★; 5★

FIAM Target Date Fund	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060	Income
Total Return, 3 years	5.15%	5.46%	5.73%	6.35%	6.76%	6.77%	6.77%	6.75%	6.74%		3.48%
Total Return, 5 Years	7.96%	8.53%	9.53%	10.33%	11.27%	11.36%	11.51%	11.56%	11.77%	-	4.75%

Texa$aver Program

Fund Selection Process: Results and Findings

ERS

Key areas considerations reviewed by PRC included

- Historical fund performance
- Glide path
- Equity allocation at retirement
- Investment strategy
- Fund fees

Interim Target Date Fund Offering

Staff Recommendation

ERS

Based on recommendation of the PRC, Staff recommends that the Board adopt the _____ as the Program's Target Date Funds.

Questions?

ERS

Public Agenda Item #17.1

Executive Session – In accordance with Section 551.072, Texas Government Code, the Board of Trustees will meet in executive Session to deliberate the purchase , exchange, lease, or value of real property and the ERS building. Thereafter, the Board may Consider appropriate action in open session.

December 12, 2017

ERS

Public Agenda Item #18.1

Recess of the Board of Trustees –
The Board of Trustees will reconvene as a Committee of the whole on Wednesday, December 13, 2017 at 8:00 a.m. to consider Audit and Board agenda items

December 12, 2017

2. Meeting of the ERS Board of Trustees Audit Committee

December 13, 2017

ERS
EMPLOYEES RETIREMENT SYSTEM OF TEXAS

ERS

Public Agenda Item #1.1

Call Meeting of the ERS Board of Trustees' Audit Committee to Order

December 13, 2017

ERS

Public Agenda Item #2.1

Approval of the minutes to the August 23, 2017 ERS Audit Committee Meeting – (Action)

December 13, 2017

ERS

Questions?
(Action Item)

ERS

Public Agenda Item #3.1

Review of External Audit Reports

December 13, 2017

Tony Chavez, Director of Internal Audit

ERS

Incentive Compensation Audit

Tony Chavez, Director of Internal Audit
Sarah Puerto, State Auditor's Office, Project Manager
Michael Clayton, State Auditor's Office, Audit Manager

Incentive Compensation

State Auditor's Office

ERS

Objective:

To determine whether ERS calculated and paid incentive compensation in accordance with policies and procedures

Scope Areas/Results:

- Plan Year 2016 award calculations
- Fiscal Year 2016 payments (Plan Year 2016 (50%), 2015 (25%) and 2014 (25%)

Questions?

ERS

Public Agenda Item #3.2

Review of Internal Audit Reports

December 13, 2017

Tony Chavez, Director of Internal Audit

ERS

Incentive Compensation Audit

Tony Chavez, Director of Internal Audit
Beth Gilbert, Internal Auditor

Incentive Compensation Audit

ERS

Audit Objective: To determine if recommended incentive compensation awards were in accordance with ERS' Incentive Compensation Plan

Scope: Plan Year 2017 incentive compensation awards recommended to ERS' executive office for approval.

Scope Areas: 1) Participation and Development

2) Award Calculation

Incentive Compensation Audit

ERS

Overall Assessment		Satisfactory
Scope Area	**Result**	**Rating**
Participation and Development	Based on audit scope areas reviewed internal controls are effective to ensure eligible participant performance goals are in accordance with the ICP.	Satisfactory
Award Calculation	Based on audit scope areas reviewed internal controls are effective to ensure accuracy of award calculations.	Satisfactory

ICP Award Roles and Process

- Human Resources Division primary owner of the ICP
- Finance Division calculates ICP awards
- Independent third-party contracted to review for accuracy of recommended awards and compliance with ICP

Plan Year 2017 Award Highlights

ERS

- **71**– Participants recommended to receive ICP
- **$5.30 million** – Plan Year 2017 ICP Awards submitted for approval
- **$7.03 million** – Maximum Plan Year 2017 awards possible
- **$4.4 million** – Payment in fiscal year 2018 (50% - Year 1, 25% -Year 2, 25% -Year 3)

Questions?

ERS

Investment Compliance
July 1 – September 30, 2017

Tony Chavez, Director, Internal Audit Division
Beth Gilbert, Internal Auditor
Jonathan Puckett, Internal Auditor

Securities Lending

ERS

Counterparties are below the 100% collateralization limit – 3 instances:

- 1 of 3 caused by differences between the way the borrowing broker calculates collateral and the industry norm

- 2 of 3 due to rights that were issued on securities that were lent out, which increased the effective loans outstanding.
  - The borrowers were unaware at the time and therefore did not count the rights in their calculation of collateral due

Questions?

ERS

Public Agenda Item #3.3

Executive Session – In accordance with Section 551.076, Texas Government Code, the Audit Committee of the Board of Trustees, a committee of the whole of the Board, will meet in executive session to deliberate: (1) the deployment, or specific occasions for implementation, of security personnel or devices; and (2) a security audit. Thereafter, the Board may consider appropriate action in open session.

December 13, 2017

ERS

Public Agenda Item #3.4

Review of Internal Audit Administrative Items (Action)

December 13, 2017

Tony Chavez, Director of Internal Audit

ERS

Internal Audit Charter

Tony Chavez, Director, Internal Audit Division
Beth Gilbert, Internal Auditor

Internal Audit Charter

ERS

International Professional Practices Framework (IPPF), standard 1000, *Purpose, Authority and Responsibility* requires the Chief Audit Executive to periodically review the internal audit charter and present it to senior management and the Board for approval.

Reasons for revisions:

- Institute of Internal Auditors' Model Internal Audit Activity Charter template was revised March 2017 (noted in red)
- Investment Compliance function was established and reports to the Director, Internal Audit (noted in blue)

ERS

Questions?
(Action Item)

ERS

Public Agenda Item #3.5

Review of Audit Administrative Items – Annual Performance

December 13, 2017

Tony Chavez, Director of Internal Audit

ERS

Annual Internal Audit Report

Tony Chavez, Director of Internal Audit
Beth Gilbert, Internal Auditor

FY2017 Annual Internal Audit Report

ERS

- Statutorily required by Texas Government Code with guidelines prescribed by the Texas State Auditor's Office

- Provides a summary of internal audit activities including:
  - FY2017 Internal Audit Plan Results
  - Consulting and Non-Audit Services Completed
  - FY2018 Internal Audit Plan
  - External Audit Services procured in FY2017
  - Reporting Suspected Fraud, Waste & Abuse

Questions?

ERS

Quality Assurance Improvement Program

Tony Chavez, Director of Internal Audit
Beth Gilbert, Internal Auditor

Audit Standard

ERS

A quality assurance and improvement program is designed to enable an evaluation of the internal audit activity's conformance with the Standards and an evaluation of whether internal auditors apply the Code of Ethics.

The program also assesses the efficiency and effectiveness of the internal audit activity and identifies opportunities for improvement.

The chief audit executive should encourage board oversight in the quality assurance and improvement program.

1) External Assessments 2) Internal Assessments

External Assessment

ERS

External Peer Review performed in October 2016

Objective:
To determine whether the Internal Audit (IA) function is in compliance with professional auditing standards, Texas Internal Auditing Act, and internal auditor codes of ethics.

Results: Generally Conforms (highest rating)
ERS Internal Audit's has controls in place to ensure audit work is performed in accordance with professional standards.

External Quality Assurance Review Recommendation Status

ERS

Management Action Plan Commitment	Implementation Status
Formal independence assessments will be reported annually in August	Fully Implemented August 2017
Review of quality assurance activities will be reported annually in December	Fully Implemented December 2017
Exploration of additional opportunities for supervision, mentoring and specialized knowledge are ongoing. An extra FTE will facilitate teamwork	Fully Implemented February 2017
Working paper documentation is regularly evaluated to ensure efficient and effective process in place	Fully Implemented Continuous evaluation
Consideration of an additional IT audit resource and leveraging internal resources will be given over time and is currently supplemented with co-source projects	Current position good

Internal Self Assessment

ERS

Internal assessments must include:

- *Ongoing monitoring of the performance of the internal audit activity*
- *Periodic self-assessments or assessments by other persons within the organization with sufficient knowledge of internal audit practices*

Internal Self Assessment – Opportunities

ERS

- Identification of key risks
- Timeliness in meeting established milestones
- Effective communication of audit findings
- Documenting and organizing audit evidence to support audit results

Internal Self Assessment – Action Plan

ERS

- Coordinating with process owners to develop an overall program objective if one does not exist
- Utilize preliminary milestone meetings with process owners to gather input on program risks and challenges
- Greater evaluation of audit sub-objectives to ensure alignment with program objective

Questions?

ERS

Internal Audit Performance Measures

Tony Chavez, Director of Internal Audit
Beth Gilbert, Internal Auditor

Internal Audit Performance

ERS

- The Audit Committee is responsible for reviewing the effectiveness of the internal audit function including conformance with audit standards
- Performance measures help assess the effectiveness, efficiency and sustainability of the internal audit function
- FY2017 performance measures were reviewed and discussed with the Board at the December 2016 Audit Committee meeting

Internal Audit Strategic Goals

ERS

Enhance Professional **Practices**

Enhance **Performance** Management and Accountability

Develop **People**

Enhance Professional Practices

ERS

2012 – 2017 Accomplishments

- Building of audit team (4 team members)
- Revised Audit Universe based on core business functions and specific risk criteria
- Implementation of automated audit management software (TeamMate)
- Revised audit report format and established audit ratings
- Quality Assurance Improvement Program

2018 Initiatives:

- Continue improved leverage of co-source audit resources

Enhance Performance Management

ERS

Providing Assurance and Insight

- Aligns with the strategies, objectives and risks of the organization
- Provides risk-based assurance
- Promotes organization improvement

2018 Initiatives

- Coordinating with process owners to develop an overall program objective if one does not exist
- Utilize preliminary milestone meetings with process owners to gather input on program risks and challenges
- Greater evaluation of audit sub-objectives to ensure alignment with program objective

Develop People

ERS

Skilled Team - All staff certified as either Certified Internal Auditor, Certified Government Auditing Professional or both

2017 Highlights:

- State Agency Internal Audit Forum(SAIAF) Internal Auditing Leadership Development Program
- Hosted University of Texas interns
- Committee Co-Chair for IIA Southern Regional Conference held in Austin

2018 Initiatives:

- Training emphasis in ERS core business functions (Investments, IT, Healthcare)

FY2018 Changes

ERS

- Number of Days From End of Fieldwork to Draft Report is Sent to Executive Director (25 business days)
- Percent within Audit Engagement Budgeted Hours (90%)
- Percent of Audit Staff attending 16 (40%) hours of annual training in core business to increase business acumen (100%)

Questions?

ERS

Public Agenda Item #4.1

Adjournment to the ERS Board of Trustees Audit Committee- Following adjournment to the ERS Audit Committee, Board of Trustees will take up the remaining agenda items.

December 13, 2017

3. Meeting of the ERS Board of Trustees

December 13, 2017

ERS
EMPLOYEES RETIREMENT SYSTEM OF TEXAS

ERS

Public Agenda Item #1.1

Call Meeting of the Board of Trustees to Order

December 13, 2017

ERS

Public Agenda Item #2.1

Approval of the minutes to the August 23, 2017 meeting of the Board of Trustees – (Action)

December 13, 2017

ERS

Questions?
(Action Item)

ERS

Public Agenda Item #3.1

Executive Session – In accordance with section 551.074, Texas Government Code, the Board of Trustees will meet in executive session to evaluate the duties, performance and compensation of the Internal Auditor of the Employee Retirement System of Texas. Thereafter the Board may consider appropriate action in open session.

December 13, 2017

ERS

Public Agenda Item #4.1

*Training Regarding the Health Insurance Portability and Accountability Act of 1996 (HIPAA)

December 13, 2017

Nancy Lippa, Assistant General Counsel and HIPAA Privacy Officer
Darcie A Falsioni, Counsel, Nixon Peabody, LLC

ERS

DARCIE FALSIONI, ESQ.

NIXON PEABODY

Why do I need to learn more about HIPAA Privacy and Security?

ERS

- To discuss the practical implications of the law on the operation of the ERS-administered GBP Group Health Plans (collectively, the “Plan”).
- ERS’s unique structure makes it more important to understand when HIPAA applies.

NIXON PEABODY

Who has to Comply with HIPAA?

ERS

- "Covered Entities" are the types of entities that are directly subject to HIPAA regulation of privacy and security:
  - Health Plans
  - Health Care Providers
  - Health Care Clearinghouses

NIXON PEABODY

Group Health Plans are "Covered Entities" Under HIPAA

ERS

- Health Plan*:* any individual or group plan that provides, or pays the cost of medical care, including:
  - Employee Group Health Plans (e.g.: medical, dental, vision, health FSA, EAP) sponsored by an employer or employee organization. For ERS, these plans are part of the Texas Employees Group Benefits Program (GBP).
  - Other types of health plans include HMOs, health insurers, and Medicare and Medicaid programs.
- However, depending on the situation, information received by an employer regarding its employees' health coverage may not be protected by HIPAA.

NIXON PEABODY

Employees Retirement System of Texas
GBP Group Health Plans

ERS

Self-Funded Benefits

- HealthSelect℠ Medical and Prescription Drug Benefit Plans
  - HealthSelect, Consumer Directed HealthSelect, HealthSelect Out of State, and HealthSelect Secondary
- State of Texas Dental Choice PPO
- State of Texas Vision
- TexFlex Health Care Flexible Spending Account Benefits

HIPAA compliance for fully-insured benefits, including HumanaDental DHMO, other GBP HMOs, the HealthSelect Medicare Advantage Plan and, for ERS only, the Employee Assistance Plan, is the responsibility of the insurance carrier.

NIXON PEABODY

Basic Privacy Rule

ERS

- Basic Privacy Rule is that a Covered Entity may not use or disclose an individual's protected health information ("PHI"), without the individual's written authorization,

UNLESS . . .

- The use or disclosure is specifically permitted by the Privacy Rule (for treatment, payment or healthcare operations).

NIXON PEABODY

Protected Health Information

ERS

- **Protected Health Information (PHI)**: Individually identifiable health information transmitted or maintained in any form or medium (electronic, written or oral).

.

NIXON PEABODY

Protected Health Information

ERS

- Individually identifiable health information means information, including genetic information:
  - Collected from an individual;
  - Created or received by a Covered Entity;
  - That relates to the past, present or future physical or mental health or condition of an individual; provision of health care to an individual; or the past present or future payment for the provision of health care; and
  - That identifies the individual or can be used to identify the individual.

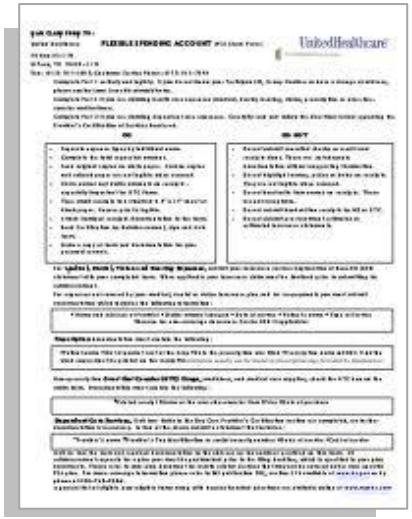
.

NIXON PEABODY

Examples of GBP Group Health Plan PHI

ERS

- Enrollment data showing which members have elected which benefit plans (once provided to the Plan);
- An Explanation of Benefits (EOB) form;
- Information about a Plan participant's covered dependents;
- Conversations about a Plan participant's health information;
- Claims reports;
- Dental claim forms and receipts.



NIXON PEABODY

Not All Medical Information is PHI

ERS

- Family and Medical Leave Act information
- Americans with Disabilities Act information
- Pre-employment screening results
- Workers' compensation information
- Long and short-term disability information

The confidentiality of this information still may be protected by other state or Federal laws.

NIXON PEABODY

Minimum Necessary Standard

ERS

- Minimize the amount of PHI used and disclosed to the amount necessary to carry out the purpose of the use or disclosure; and
- Limit who has access to PHI.
- The Plan is responsible for ensuring that access to PHI is limited to the minimum necessary for each employee's roles and responsibilities.
- To the extent possible, the Plan will use a Limited Data Set, which is PHI that excludes 16 different identifiers (e.g., names, phone numbers, account numbers).
- If the Plan cannot use a Limited Data Set, it will provide only the minimum necessary information for the task.

NIXON PEABODY

Compliance Requirements

ERS

- Covered Entities must provide all plan participants with a copy of its Notice of Privacy Practices ("NOPP") describing all uses and disclosures of PHI that the Covered Entity is permitted or required to make.
- Covered Entities must develop and implement policies and procedures facilitating the individual rights provided under HIPAA.
- Privacy and Security Officials must be designated with responsibility to develop the policies and procedures of the entity with respect to PHI.

NIXON PEABODY

ERS's HIPAA Structure

Employees Retirement System of Texas

GBP Group Health Plan

- Covered Entity

Provides self-funded benefits to state-wide and its own employees

State of Texas

- Participating Employer
  - Plan Sponsor

Why do I need to learn more about HIPAA Privacy and Security?

ERS

- Need to clearly define and understand roles.
- Must create firewalls between entities.
- Cannot use information obtained in one role for another purpose, unless specifically allowed under HIPAA.

  For example, ERS, in its role as an employer, cannot access information about Plan participants that comes through a GBP Group Health Plan.

NIXON PEABODY

Understanding Roles

ERS

When ERS is wearing its **EMPLOYER** hat…

- ERS may not receive PHI from the Plan.
- ERS may not access PHI from the Plan.
- ERS may not request PHI from the Plan.
- ERS may not use PHI for employment-related decisions.

TRUE or FALSE:

An employee enrolled in the health plan was late for work claiming he had a doctor's appointment. His manager can verify this by requesting claims data from the plan.

NIXON PEABODY

Understanding Roles

ERS

When ERS is wearing its **PLAN** administrator hat…

- ERS may not use or disclose PHI from the Plan without an authorization, unless such use is for –
  - Treatment,
  - Payment, or
  - Health Care Operations
- Minimum Necessary standard applies.

TRUE or FALSE:

- ERS can provide other agencies with PHI to help develop cost containment programs for the Plan.

NIXON PEABODY

Compliance Requirements: HIPAA Firewalls

ERS

- Group Health Plans include language in the plan documents governing the Plan designating those employees who need access to PHI for plan administration purposes and restricting its use.
- PHI cannot be disclosed to employees unless the Plan has this language.
- Information gained in the process of health plan administration cannot be used for any other employment purpose:
  - e.g., health claims information cannot be given to another department/agency to determine whether an employee is eligible for disability or FMLA benefits
  - e.g., fraud discovered by the health plan cannot be reported to a participating employer for purposes of employee discipline

NIXON PEABODY

Overview: Security Rule

ERS

- The Plan and its Business Associates are required to implement administrative, physical and technical safeguards to protect PHI.
- The Plan is required to:
  - ›Protect against reasonably anticipated threats or hazards to security;
  - ›Protect against reasonably anticipated wrongful uses or disclosure; and
  - ›Ensure workforce compliance through training and other measures.

NIXON PEABODY

Security Rule

ERS

- The Omnibus Rule imposed significant new requirements for Covered Entities and Business Associates that experience a "Breach."

NIXON PEABODY

Definition: Breach

ERS

- A “Breach” is the unauthorized acquisition, access, use or disclosure of protected health information, which compromises the security or privacy of such information, except where an unauthorized person to whom such information is disclosed would not reasonably have been able to retain such information.
- An unauthorized access, use or disclosure is **presumed** to be a breach unless the Covered Entity can document that there is a **low probability** that the information was compromised.

NIXON PEABODY

Exceptions

ERS

- An unintentional acquisition, access or use of PHI by a workforce member or person acting under the authority of the Plan or Business Associate, if such acquisition was in good faith and within the scope of authority and does not result in further impermissible uses or disclosures.
- An inadvertent disclosure by a person who is authorized to access PHI at the Plan or Business Associate to another person authorized to access PHI at the same Plan or same Business Associate, or organized health care arrangement in which the Covered Entity participates, and the information received as a result of such disclosure is not further used or disclosed in a manner not permitted under HIPAA.
- A disclosure of PHI where the Plan or Business Associate has a good faith belief that an unauthorized person to whom disclosure was made would not reasonably have been able to retain such information.

NIXON PEABODY

Best practices to protect high risk data, including PHI and employer records

ERS

- Paper records
  - Any documents with SSN and medical insurance number
  - W-2s
  - Benefits records
  - Workers' compensation
  - Health records
- Locked filing cabinets
- Locked facility and required keycard access
- Only accessed by authorized personnel with a need to know
- Implement a "Shred Policy"
- Destroy any paper records that don't need to be kept/stored
- Keep computer screen locked when not at workstation

NIXON PEABODY

Assemble a Response Team

ERS

- Information Security Officer
- Legal Counsel
- Representative from management
- Others, depending upon circumstances (IT personnel, etc.)
- ERS Incident Response Team

NIXON PEABODY

Performance of Risk Assessment

ERS

- Based on criteria:
  - › The nature and extent of the PHI involved, including the types of identifiers and the likelihood of re-identification.
  - › The unauthorized person who used the PHI or to whom the disclosure was made.
  - › Whether the PHI was actually acquired or viewed.
  - › The extent to which the risk to the PHI has been mitigated.

NIXON PEABODY

Timeframe for Breach Notification

ERS

- Time for notification of a breach:
  - 60 calendar days after discovery of breach (unless law enforcement requires delay).
  - Clock starts ticking when 1st employee knew or should have known of the breach.
  - The Plan must notify individuals within this time.
  - Business Associates must notify the Plan within this time.
- Different steps must be taken depending on the severity of the breach.
  - May include notifying public officials and the media, and posting on the Web.
- If you believe a breach may have occurred, notify the Privacy Officer, Information Security Officer (ISO) or Privacy Incident Manager immediately!

NIXON PEABODY

Do Not Engage in Legal Analysis

ERS

- If you think a breach or security incident might have occurred, report it immediately even if you think an exception applies!
  - Employees may be subject to discipline for not reporting a suspected HIPAA breach or incident.
  - Employees are more likely to face discipline for covering up a suspected breach than providing notification.
  - HIPAA offers protections against retaliation by the Plan in many cases.
  - IF YOU THINK THERE'S AN ISSUE WITH THE PLAN'S HIPAA POLICIES OR PROCEDURES, REPORT THEM TO THE PLAN'S PRIVACY OR SECURITY OFFICER.

    -The risk is high and they want to do things right.

NIXON PEABODY

Enforcement Audits

ERS

- Secretary of HHS required under HITECH to conduct periodic audits of covered entities and Business Associates for compliance and enforcement purposes.
- Secretary of HHS is required to report the number of audits and a summary of audit findings to Congress.
- Reports will be made available on HHS website.
- Increased enforcement activities by OCR.
- All civil monetary penalties go back to OCR for enforcement proceedings.

NIXON PEABODY

Penalties for Violation

ERS

Penalties are tiered, depending on conduct

- Unknown
  - ›$100 per violation up to $25,000 for all identical violations in a calendar year, with a cap of $1.5 million.
- Reasonable cause that is not willful neglect
  - ›$1,000 for each violation up to $100,000 for all identical violations in a calendar year, with a cap of $1.5 million for all violations of this type in a calendar year.

NIXON PEABODY

Penalties for Violation (Cont'd)

ERS

- Willful neglect
  - ›If violation corrected within 30 days of knowledge: $10,000 for each identical violation, up to $250,000 for all identical violations in a calendar year, with a cap of $1.5 million for all violations of this type in a calendar year
  - ›If violation not corrected: $50,000 for each violation, up to $1.5 million for all identical or non-identical violations in a calendar year

NIXON PEABODY

Enforcement Provisions

ERS

- HIPAA also carries criminal penalties for persons who “knowingly” obtain or disclose PHI in violation of the Privacy Rule, or who improperly use unique health identifiers, under 42 U.S.C. § 1320d–6(a):

	Fine	Prison
Knowingly	$50,000	One year
False Pretenses	$100,000	Five years
For Profit, Gain, or Harm	$250,000	Ten years

NIXON PEABODY

Incident Reporting

ERS

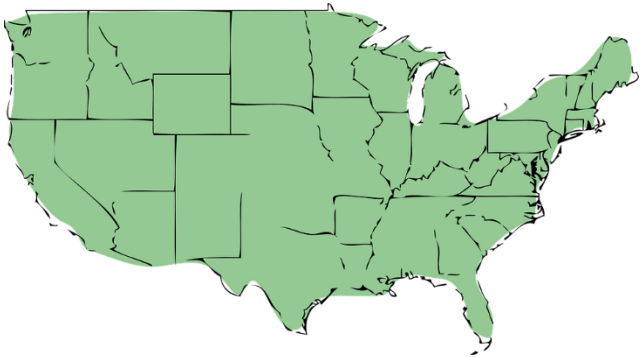
- To report an information security problem, theft of computer equipment or if you suspect there may be a problem, contact the Plan's Privacy Incident Manager, Privacy Officer or Information Security Officer.
- When in doubt REPORT.
- Do not attempt to make investigative or legal decisions.

NIXON PEABODY

Enforcement by State Attorneys General

ERS

- State AGs may commence civil actions in federal district court for violations of HIPAA.
- Damages: $100 per violation with a cap of $25,000.
- Costs and attorneys' fees may be awarded to State.
- OCR has trained State AGs on HIPAA enforcement.
- No private right of action to enforce HIPAA.



NIXON PEABODY

State Breach Notification Laws

ERS

- 46 states have enacted; Texas has the Identity Theft Enforcement and Protection Act.
- Most require reasonable belief that information will be used for identity theft.
- HIPAA does not supersede state law if state law is more stringent.
- Need to comply with both state and HITECH if there is a breach.
- Notification to state authorities.
  - Attorney General
- Civil Penalties differ per State.

NIXON PEABODY

Questions?

ERS

Public Agenda Item #5.1

Discussion and Consideration of the Rules of the Board of Trustees, Texas Administrative Code, Title 34, Part IV, Required Rule Review of Chapter 79 (Social Security) - (Action)

December 13, 2017

Paula A. Jones, Deputy Executive Director and General Counsel

Required Rule Review

Chapter 79 (Social Security)

ERS

- Per Tex. Government Code Ch. 606, ERS is responsible for administration of Social Security for state and local governmental employees in Texas under both state and federal law.
- Governmental employees are covered under Social Security by agreement between the state and federal government under a Section 218 Agreement.
- ERS acts as liaison with the Social Security Administration, oversees modifications of the Section 218 Agreement and maintains modifications and historical referendums.

Required Rule Review

Chapter 79 (Social Security)

ERS

- Texas law requires review of rules every four years. Staff reviewed Chapter 79 per § 2001.039, Tex. Gov't Code

- Notice of rule review was published in the December 2, 2016, issue of the *Texas Register*. No comments were received by ERS.

- No changes to Chapter 79 recommended at this time.

Required Rule Review (Chapter 79)

Staff Recommendation

ERS

- Readopt Chapter 79 (Social Security) with no changes.

Questions?

(Action Item)

ERS

Public Agenda Item #5.2

Discussion and Consideration of the Rules of Board of Trustees, Texas Administration Code, Title 34, Part IV Adoption of Amendments to Chapter 63 (Rule 63.17 GBAC) - (Action)

December 13, 2017

Keith Yawn, Strategic Initiatives Director

Rationale for Rule Amendment

ERS

- Following Sunset Commission passage of a directive for ERS to create a stakeholder advisory committee, in November 2016, and the ERS Board's adoption of a committee charter document, in August 2017, ERS staff developed appropriate rule language to match existing structures for the Medical Board and Investment Advisory Committee.

- The amendment is proposed under the **Texas Insurance Code, §1551.052**, which authorizes the Board to adopt rules to implement group benefits, and **Texas Government Code, §815.509**, which authorizes the Board to establish advisory committees as it considers necessary.

Rule Amendment Language

ERS

- Notice of rule amendment was published in the October 20, 2017 issue of the *Texas Register*.
- No comments were received by ERS.

§63.17 Advisory Committees

(a) The Medical Board (Government Code, §815.204) is created pursuant to law. This committee will be composed of the number of people directed by law and will have the purposes, tasks, and reporting requirements established by law. Remuneration, if any, for committee members will be determined by the board. The committee will perform its tasks until abolished by the legislature.

(b) The Investment Advisory Committee (IAC) is created to consult with and advise the board on investments and investment related issues. The number of members on the IAC, the prerequisites for membership, the remuneration, if any, for IAC members and its reporting requirements will be determined by the board. The IAC will perform its tasks until abolished by the board.

(c) The Group Benefits Advisory Committee (GBAC) is created to advise the board on employee benefits administered by the board within the Texas Employees Group Benefits Program. The number of members on the GBAC, the prerequisites for membership, the remuneration, if any, for GBAC members and its reporting requirements will be determined by the board. The GBAC will perform its tasks until abolished by the board.

Staff Recommendation

ERS

Adopt proposed amendment to Chapter 63 (Advisory Committees) as posted in the *Texas Register* on October 20, 2017.

ERS

Questions?
(Action Item)

ERS

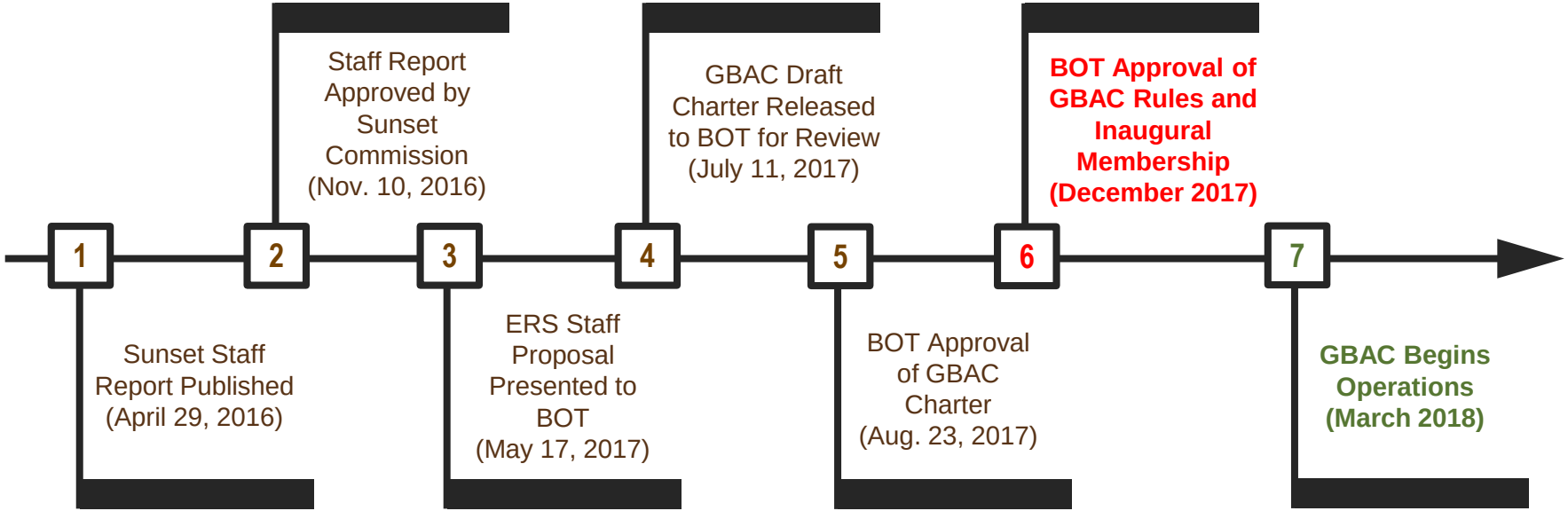
Public Agenda Item #6.1

Discussion and Consideration of the Group Benefits Advisory Committee Appointments – (Action)

December 13, 2017

Bernie Hajovsky, Director of Enterprise Planning
Keith Yawn, Director of Strategic Initiatives

GBAC Development Timeline



GBAC Membership

ERS

- Up to 11 Members
- Requires a minimum of 1 year GBP Enrollment and employer support
- Serve 3-year staggered terms (inaugural terms of 2-4 years to establish staggered schedule)
- ERS staff solicited and reviewed applications to make appointment recommendations to the Board
- **Serve at the will of the Board**

Up to 2 Members Each

Membership Representation Structure:

1. State Agencies, Large (800+ GBP enrollees)
2. State Agencies, Mid-Sized (100 to 799 enrollees)
3. State Agencies, Small (less than 100 enrollees)
4. Institutions of Higher Education, Four-Year
5. Institutions of Higher Education, Community and Junior Colleges
6. Retiree, Medicare
7. Retiree, Non-Medicare
8. Health-Related Institution Academic, Administrator, or Healthcare Practitioner
9. Insurance or Benefit Design Consultant or Professional

No GBP Enrollment Requirement

Application and Nomination Process

ERS

Application Process

- Opened September 13, 2017
  - Website Notices
  - Newsletter Announcements
  - Social Media Postings
  - Included in Stakeholder Presentations
- Closed October 15, 2017

Vetting/Review Process

- 42 applications received

1. Categories and credentials reviewed and confirmed
2. OSI and EPO staff reviewed and made initial recommendations
3. Agency leadership reviewed and approved final recommendations

GBAC Nominee Recommendations

ERS

	Nominee	GBAC Category	Organization	Title
1	Harsh Zadoo	State Agency: Large	Department of Transportation	Operational Excellence Coordinator, Strategic Division
2	Charlene Maresh	State Agency: Large	Department of Criminal Justice	Deputy Director, Human Resources
3	Gene Snelson	State Agency: Mid-sized	Animal Health Commission	General Counsel
4	Megan LaVoie	State Agency: Mid-sized	Office of Court Administration	Director of Public Affairs
5	Dawn Heitman	State Agency: Small	State Soil and Water Conservation Board	Human Resources Coordinator
6	Dr. Janet Bezner	4-year Institution	Texas State University	Associate Professor
7	Missy Kittner	2-year Institution	McLennan Community College	Director, Human Resources
8	Gary White	Retiree		(25-year career with multiple agencies)
9	James Dobbins	Retiree		(32-year career with the Department of Transportation)
10	Dr. Cynthia Jumper	Health Related Institution	Texas Tech University Health Sciences Center	Vice-President, Health Policy and Special Medical Programs and Professor of Internal Medicine

ERS

Questions?
(Action Item)

ERS

Public Agenda Item #7.1

Health Insurance Financial Status Update for Fiscal Year 2017 and Outlook for Fiscal Year 2018, with Network Comment

December 13, 2017

Diana Kongevick, Director of Benefit Contracts
Blaise Duran, ASA, MAAA and Manager of Underwriting, Data Analysis and Reporting
Phil Dial, FSA, Rudd and Wisdom Inc.

Group Benefits Program (GBP)

Background

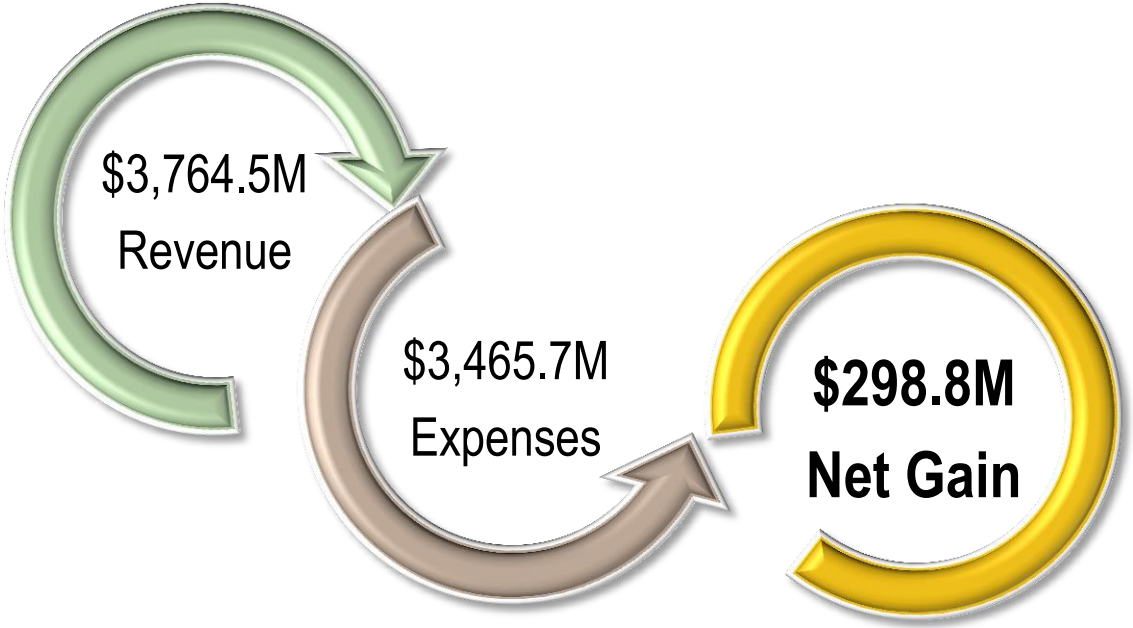
ERS

- 81% of GBP participants are enrolled in the self-funded HealthSelect℠ of Texas (HealthSelect) plan.
- The rest are enrolled in the Consumer Directed HealthSelect℠ plan, a HMO plan or a Medicare Advantage (MA) plan.
- Self-funded HealthSelect pharmacy benefits are provided through HealthSelect Rx.
- Self-funded retiree pharmacy benefits are provided through HealthSelect Medicare Rx (EGWP) to Medicare primary participants enrolled in HealthSelect and those enrolled in the MA plans.

Fiscal Year 2017 Review

GBP Health Plan Performance

ERS



GBP finished the plan year with **$797.7 million** in the Contingency Fund

Includes All Health Plans

Fiscal Year 2017 Review

HealthSelect Performance

ERS

The self-funded program saw favorable experience in FY17:

	FY15	FY16	FY17
Medical Trend	6%	8.1%	5.6%
Pharmacy* Trend	13.3%	11.6%	-.9%
Combined Medical and Pharmacy* Trend	**7.3%**	**8.9%**	**3.7%**

**Self-funded pharmacy includes HealthSelect MedicareRX with EGWP*

Note: Generic dispensing rate 2.0% higher than FY16

Initiatives to Reduce Cost

ERS

Patient-Centered Medical Homes

- Continue to show success
- 9 provider groups in FY18

Virtual visits

- Effective January 2016
- October 2017 highest utilization month since inception (No copay HealthSelect of Texas plan effective September 2017)

Non-Network Free Standing Emergency Room (FSER)*:

- Copay $300
- Effective January 1, 2018, an out-of-network FSER is no longer reimbursed billed charges
- Mediation effective January 1, 2018

*Applies to FSER not affiliated with a hospital emergency room or hospital emergency department.

Network Comments

Provider Network Transition

ERS

- With a change of this magnitude, the transition was very successful.
- The closer we got to September 1, discussion intensified in certain markets.
- Consistent, accurate and fresh messaging was critical.
- Communications occurred via multiple channels.
- We are committed to fair outcomes.
- ERS network access standards are rigorous.

Network Comments

PCP Development – Three Month Snapshot

ERS

PCP Status	Aug 16 2017		Dec 6 2017	
Members Who Select a PCP	339,542	82.5%	346,757	84.5%
Members Who Choose to *Not* Select a PCP	72,028	17.5%	63,739	15.5%
Total PCP	**411,570**	**100%**	**410,496**	**100%**

Network Comments

PCP Development – Three Month Snapshot

ERS

PCP Status	Aug 16 2017		Dec 6 2017	
PCP In-Network	297,631	87.7%	333,952	96.6%
PCP Contingency Plan*	25,263	7.4%	6,943	1.7%
Potential Disruption**	16,648	4.9%	5,862	1.7%
Total	**339,542**	**100%**	**346,757**	**100%**

*PCP contingency Plan: If UHC PCP is in any BCBS network, (even if not HealthSelect network), services are considered in-network through December 31, 2017. Services from that PCP are considered out-of-network if not contracted for HealthSelect effective January 1, 2018. Participant may need to select new PCP.

**Potential disruption: Non-contracted PCP, provider specialty is not PCP, or PCP does not contract. Participant may need to select new PCP.

Network Comments

Member Transition

ERS

- PCP contingency plan through December 31, 2017
- Value of no cost virtual visit - utilization spike started September 1, 2017
- Prior authorizations issued before September 1, 2017 were honored through earlier of established expiration date or December 1, 2017 (Provider in UHC but not BCBSTX)
- Transition of care benefits allowed in-network benefits for certain care in process (maternity in 3rd trimester, certain oncology, etc.)
- Continual communication via multiple channels

Questions?

ERS

Public Agenda Item #7.2

Review and Discussion of Program Updates and Compliance Overview: HealthSelect Plans; Medicare Advantage Plans; Dental Plans; Vision Plan; Basic and Optional Term Life; Accidental Death and Dismemberment Plans; and Disability Plans

December 13, 2017

Diana Kongevick, Director of Benefit Contracts
Lauren Russel, CTCM, Program Account Manager
Megan Hunter, CTCM, Program Account Manager
D'Ann DeLeon, CTCM, Program Account Manager
Bernely Tharp, CTCM, Program Account Manager

Group Benefits Program

Overview

ERS

Health Benefits

HealthSelect℠ of Texas

- Point of Service (POS) plan
- Consumer directed health plan
- Prescription drug program

Health Maintenance Organizations (HMOs)

- Scott & White Health Plan
- Community First Health Plan
- KelseyCare powered by Community Health Choice

Medicare–eligible Retiree Health Benefits

HealthSelect℠ of Texas

- Medicare Advantage PPO, Medicare Advantage HMO plans
- Secondary plan
- Employer Group Waiver Plan + Wrap

Health Maintenance Organizations (HMOs)

- Scott & White Health Plan
- Community First Health Plan
- KelseyCare powered by Community Health Choice

Optional Add-on GBP Benefits

Dental Plans

- Preferred Provider Organization (PPO) plan
- Dental HMO

Vision Insurance

Optional Life, AD&D Insurance

Long-term, Short-term Disability

Group Benefits Program

HealthSelect℠ of Texas (HealthSelect)

ERS

Health Benefits

- **Point of Service (POS) plan**
- Consumer directed health plan
- Prescription drug program

HealthSelect of Texas

- Self-funded, managed-care medical plan
- Covers 81% of all GBP health plan participants
  - FY18 enrollment: 437,922 (257,269 members; 180,653 dependents)
- Requires a primary care physician (PCP)
- Highest level of benefits available with in-network providers
- HealthSelect Out-of-State plan launched FY18
- Administered by Blue Cross Blue Shield of Texas

Monthly Administrative Performance Report
Heat Map Summary

HealthSelect of Texas
United HealthCare Services, Inc.

HEAT MAP COLOR LEGEND
Performance compliance is under review.
Not applicable.
Performance met standards.
Performance did not meet standards; PG assessment waived.
Performance did not meet standards; activity is not a PG metric.
Performance did not meet standards; receipt of the PG assessment is pending.
Performance did not meet standards; ERS has received the PG assessment.

	DESCRIPTION	ASSESSMENT FREQUENCY	09-2016	10-2016	11-2016	12-2016	01-2017	02-2017	03-2017	04-2017	05-2017	06-2017	07-2017	08-2017
ACCOUNT MANAGEMENT	Participant satisfaction survey (satisfaction rating)	Annually	Pending Q4 results; due December 31, 2017											
	Response to satisfaction survey (paper) at or above 15%	*Non PG Item*	Pending Q4 results; due December 31, 2017											
	Communication materials: quality, timeliness	Any Incident	100.0%	<100%	100.0%	<100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Written notice of changes	Any Incident	100.0%	100.0%	100.0%	100.0%	< 100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Program reporting	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Annual enrollment attendance	Any Incident										N/A		
CUSTOMER SERVICE	Respond to written correspondence	Quarterly	100.0%			100.0%			100.0%			100.0%		
	Response to online and/or escalated inquiries	Quarterly	100.0%			100.0%			100.0%			100.0%		
	Answer calls within 20 seconds	Quarterly	87.1%			87.8%			91.3%			87.3%		
	Manage call blockage below 0.5%	Quarterly	100.0%			100.0%			100.0%			100.0%		
OPERATIONS	Network provider turnover rate at or below 10%	Annually	< 10.0%											
	Claims processing: financial accuracy	Monthly	99.8%	99.8%	99.7%	99.8%	99.6%	99.7%	99.8%	99.4%	99.3%	99.9%	99.6%	99.1%
	Claims processing: timeliness	Monthly	99.8%	99.9%	99.9%	99.9%	99.9%	99.9%	99.8%	99.8%	99.8%	99.9%	99.8%	99.6%
	Grievances and appeals: timeliness for pre-service appeals	Monthly	100.0%	96.8%	100.0%	100.0%	97.9%	100.0%	98.3%	100.0%	100.0%	98.4%	100.0%	95.4%
	Grievances and appeals: timeliness for post-service appeals	Monthly	98.8%	99.2%	98.5%	99.6%	99.6%	99.1%	98.9%	98.7%	98.7%	100.0%	99.5%	98.7%
	Grievances and appeals management	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Manage ID card mail-outs, timeliness	Monthly	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Manage ID card mail-outs, accuracy	Monthly	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SYSTEM & DATA MGMT.	Process files accurately and timely	Any Incident	100.0%	100.0%	83.3%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Ensure claims system(s) availability	Annually	99.7%											
	Ensure website availability	Annually	100.0%											
	Provide timely notification of file or transaction errors	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Resolve file or transaction errors accurately, timely	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
LEGAL DISCL.	Reporting: administrative or regulatory issues	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Reporting: legal judgments assessed	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Group Benefits Program

Consumer Directed HealthSelect℠

ERS

Health Benefits

- Point of Service (POS) plan
- **Consumer directed health plan**
- Prescription drug program

CONSUMER DIRECTED HealthSelect™

- Comprised of a high deductible health plan (HDHP) and tax-fee health savings account (HSA)
- Launched September 1, 2016
  - FY18 enrollment: 1,473 (817 members; 656 dependents)
- Higher annual deductible: $2,100 for individual; $4,200 for family
- HSA contributions are not allowed for Medicare-enrolled members (IRS requirement)
- Administered by Blue Cross Blue Shield of Texas

Group Benefits Program

HealthSelect℠ Prescription Drug Program

ERS

Health Benefits

- Point of Service (POS) plan
- Consumer directed health plan
- **Prescription drug program**

HealthSelect of Texas
Prescription Drug Program

- Self-funded, comprehensive prescription drug plan
- FY18 enrollment: 411,565 (235,678 members; 175,887 dependents)
- $50 annual deductible (calendar year)
- Copayments apply after deductible; subject to
  - Drug copayment tier (3 levels)
  - Days' supply
  - Method of delivery (e.g., retail, extended days' supply pharmacy, mail order)
- Administered by OptumRx, effective January 1, 2017

Monthly Administrative Performance Report
Heat Map Summary

HealthSelect of Texas Prescription Drug Plan
Caremark and OptumRx

HEAT MAP COLOR LEGEND
Performance compliance is under review.
Not applicable.
Performance met standards.
Performance did not meet standards; PG assessment waived.
Performance did not meet standards; activity is not a PG metric.
Performance did not meet standards; receipt of the PG assessment is pending.
Performance did not meet standards; ERS has received the PG assessment.

	DESCRIPTION	ASSESSMENT FREQUENCY	Caremark				OptumRx							
			09-2016	10-2016	11-2016	12-2016	01-2017	02-2017	03-2017	04-2017	05-2017	06-2017	07-2017	08-2017
ACCOUNT MANAGEMENT	Participant satisfaction survey (satisfaction rating)	Annually					Pending Results							
	Communication materials: quality, timeliness	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	<100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Written notice of changes	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Program reporting	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	<100.0%	<100.0%	<100.0%	<100%	<100%	<100%	<100%
	Annual enrollment attendance	Any Incident										100.0%	100.0%	
CUST. SRVC.	Respond to written correspondence	Quarterly	100.0%			100.0%	100.0%		100.0%			100.0%		
	Answer calls within 30 seconds	Quarterly	96.3%			94.0%	87.8%		91.3%			87.6%		
OPERATIONS	Claims adjudication: financial accuracy	Monthly	100.0%	100.0%	100.0%	100.0%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Claims adjudication: timeliness	Monthly	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Paper claims processing: financial accuracy	Annually/Monthly	100.0%				100.0%	100.0%	100.0%	100.0%	96.4%	100.0%	100.0%	100.0%
	Paper claims processing: timeliness	Annually	100.0%				99.5%							
	Claims financial accuracy rate (based on audit)	Annually	Pending finalization of external audit results											
	Claims payment accuracy rate (based on audit)	Annually	Pending finalization of external audit results											
	Dispensing accuracy rate	Annually	100.0%				99.9%							
	Dispensing rate: protocol prescriptions	Monthly	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Dispensing rate: non-protocol prescriptions	Monthly	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Manage ID card mail-outs (both initial and reissues)	Monthly	100.0%	100.0%	100.0%	100.0%								
	Manage ID card mail-outs: initial cards	Monthly					100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Manage ID card mail-outs: reissued cards	Monthly					100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SYSTEM & DATA MGMT.	Process files accurately and timely	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Ensure claims system(s) availability	Annually	100.0%				100.0%							
	Ensure website availability	Annually	99.8%				100.0%							
	Provide timely notification of file or transaction errors	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Resolve file or transaction errors accurately, timely	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	System and code changes	Any Incident	100.0%	100.0%	100.0%	100.0%								

Group Benefits Program

HealthSelect℠ Medicare Advantage

ERS

Medicare–eligible Retiree Health Benefits

- **Medicare Advantage PPO**
- Medicare Advantage HMO
- Employer Group Waiver Plan + Wrap

HealthSelect℠ of Texas
Medicare Advantage Plan

- Fully-insured statewide medical plan
- Popular with ERS retirees
  - Provides favorable PPO medical-only benefits
  - CY17 enrollment: 71,430 (56,532 members, 14,898 dependents)
- This plan saves monthly premium cost for those who cover spouses
- Administered by Humana Insurance Company

Monthly Administrative Performance Report
Heat Map Summary

HealthSelect Medicare Advantage Plan
Humana Insurance

HEAT MAP COLOR LEGEND
Performance compliance is under review.
Not applicable.
Performance met standards.
Performance did not meet standards; PG assessment waived.
Performance did not meet standards; activity is not a PG metric.
Performance did not meet standards; receipt of the PG assessment is pending.
Performance did not meet standards; ERS has received the PG assessment.

	DESCRIPTION	ASSESSMENT FREQUENCY	01-2016	02-2016	03-2016	04-2016	05-2016	06-2016	07-2016	08-2016	09-2016	10-2016	11-2016	12-2016
ACCOUNT MANAGEMENT	Communication materials: quality	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	<100.0%	100.0%
	Communication materials: timeliness	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Written notice of changes	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Reporting requirements	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Annual enrollment attendance	Any Incident										100.0%	100.0%	
CUST. SERVICE	Respond to written correspondence	Quarterly	100.0%			100.0%			100.0%			100.0%		
	Answer calls within 30 seconds	Quarterly	90.4%			84.6%			86.1%			88.2%		
	Manage call blockage below 0.5%	Quarterly	0.0%			0.0%			0.0%			0.0%		
OPS	Adherence to CMS program parameters	Monthly	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Manage ID card mail-outs	Quarterly	100.0%			100.0%			100.0%			100.0%		
SYSTEM & DATA MGMT.	Process files accurately and timely	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Ensure claims system(s) availability	Annually	99.8%											
	Ensure website availability	Annually	99.8%											
	Provide timely notification of file or transaction errors	Any Incident	100.0%	100.0%	<100.0%	<100.0%	<100.0%	<100.0%	<100.0%	<100.0%	<100.0%	100.0%	100.0%	100.0%
	Resolve file or transaction errors accurately, timely	Any Incident	100.0%	100.0%	<100.0%	<100.0%	<100.0%	<100.0%	<100.0%	<100.0%	<100.0%	100.0%	100.0%	100.0%

Group Benefits Program

KelseyCare Advantage

ERS

Medicare–eligible Retiree Health Benefits

- Medicare Advantage PPO
- **Medicare Advantage HMO**
- Employer Group Waiver Plan + Wrap

KelseyCare Advantage

- Fully-insured Medicare Advantage HMO medical-only benefits
- CY17 Enrollment: 1,406 (1,165 members; 241 dependents)
- Available in eight Houston–area counties
- Most cost-effective medical benefit for Houston area

Group Benefits Program

HealthSelect℠ Medicare Rx

ERS

Medicare–eligible Retiree Health Benefits

- Medicare Advantage PPO
- Medicare Advantage HMO
- **Employer Group Waiver Plan + Wrap**

HealthSelect of Texas Medicare Rx

- Self-funded prescription drug benefits paired with Medicare Advantage retiree group medical plans
  - HealthSelect MA
  - KelseyCare Advantage HMO
  - HealthSelect Medicare-primary
- CY17 enrollment: 93,184
- Administered by United HealthCare Services, Inc., effective January 1, 2017

Monthly Administrative Performance Report
Heat Map Summary
HealthSelect Medicare Rx Plan
SilverScript Insurance Company

HEAT MAP COLOR LEGEND
Performance compliance is under review.
Not applicable.
Performance met standards.
Performance did not meet standards; PG assessment waived.
Performance did not meet standards; activity is not a PG metric.
Performance did not meet standards; receipt of the PG assessment is pending.
Performance did not meet standards; ERS has received the PG assessment.

	DESCRIPTION	ASSESSMENT FREQUENCY	01-2016	02-2016	03-2016	04-2016	05-2016	06-2016	07-2016	08-2016	09-2016	10-2016	11-2016	12-2016
ACCOUNT MANAGEMENT	Participant Satisfaction Survey	Annually	100.0%											
	Communication materials: quality, timeliness	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Annual enrollment attendance	Any Incident										100.0%	100.0%	
	Written notice of changes	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Program reporting	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
CUSTOMER SERVICE	Respond to written correspondence	Quarterly	100.0%			100.0%			100.0%			100.0%		
	Response online, escalated inquiries	Quarterly	100.0%			100.0%			100.0%			100.0%		
	Manage ID card mail-outs, welcome kits: initial	Quarterly	100.0%			100.0%			100.0%			100.0%		
	Manage ID card mail-outs: reissues	Not a PG	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Manage calls to dedicated toll-fee number	Quarterly	85.3%			88.7%			91.3%			92.3%		
	Answer calls within 30 seconds	Monthly	83.0%	82.0%	79.0%	80.0%	92.0%	89.0%	87.0%	89.0%	91.0%	91.0%	89.0%	90.0%
	Manage call blockage below 0.5%	Quarterly	0.0%			0.0%			0.0%			0.0%		
OPERATIONS	Claims processing: financial accuracy	Annually	100.0%											
	Claims processing: timeliness	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Claims adjudication: financial accuracy, timeliness	Monthly	100.0%	100.0%	100.0%	100.0%	100.0%	<100%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Dispensing rate: accuracy	Annually	100.0%											
	Dispensing Rate: protocol prescriptions	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Dispensing Rate: non-protocol prescriptions	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SYSTEM & DATA MANAGEMENT	Process files accurately, timely	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Ensure claims system(s) availability	Annually	99.9%											
	Ensure website availability	Annually	99.7%											
	Provide timely notification of file or transaction errors	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Resolve file or transaction errors accurately, timely	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Data to be restricted to the United States	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Group Benefits Program

Optional, State of Texas Dental Choice Plan℠

ERS

Optional Add-on GBP Benefits

Dental Plans

- **Preferred Provider Organization (PPO) plan**
- Dental HMO

Vision Insurance

Optional Life, AD&D Insurance

Long-term, Short-term Disability

- Self-funded dental insurance plan
- Highest level of benefits available with in-network use
  - Preventive services: $0 deductible;100% coverage
  - Annual maximum: $1,500; 40% benefit after maximum
  - Basic services: 90% coverage*
  - Major services: 50% coverage*
- Out-of-network benefits at reduced benefit level
- FY18 enrollment: 316,715
- Administered by HumanaDental

*after basic/major deductible is met: $50 individual, $150 family

Monthly Administrative Performance Report
Heat Map Summary

Dental Choice
HumanaDental

HEAT MAP COLOR LEGEND
Performance compliance is under review.
Not applicable.
Performance met standards.
Performance did not meet standards; PG assessment waived.
Performance did not meet standards; activity is not a PG metric.
Performance did not meet standards; receipt of the PG assessment is pending.
Performance did not meet standards; ERS has received the PG assessment.

	DESCRIPTION	ASSESSMENT FREQUENCY	09-2016	10-2016	11-2016	12-2016	01-2017	02-2017	03-2017	04-2017	05-2017	06-2017	07-2017	08-2017
ACCOUNT MANAGEMENT	Participant satisfaction survey (satisfaction rating)	Annually	97.0%											
	Communication materials: quality, timeliness	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Written notice of changes	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Program reporting	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Annual enrollment attendance	Any Incident		100.0%	100.0%							100.0%	100.0%	
CUSTOMER SERVICE	Respond to written correspondence	Quarterly	98.3%			97.3%			99.3%			99.3%		
	Response to online and/or escalated inquiries	Quarterly	100.0%			100.0%			100.0%			100.0%		
	Answer calls within 20 seconds	Quarterly	81.1%			82.2%			82.3%			81.5%		
	Manage call blockage below 0.5%	Quarterly	0.0%			0.1%			0.0%			0.0%		
OPERATIONS	Network provider turnover rate at or below 10%	Annually	<10%											
	Process claim pymts: financial accuracy (dollar basis)	Annually	99.8%											
	Process claim pymts: financial accuracy (claim count basis)	Annually	99.9%											
	Process paper (manual) claims timely	Annually	99.6%											
	Process provider claims payments timely	Monthly	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Grievances and appeals: timely acknowledgement	Annually	98.3%											
	Grievance and appeals: timely resolution	Annually	100.0%											
	Manage ID card mail-outs	Monthly	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SYSTEMS AND DATA MGMT.	Process files accurately, timely: weekend processing	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Process files accurately, timely: week day processing	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Ensure claims system availability	Annually	100.0%											
	Ensure website availability	Annually	100.0%											
	Provide timely notification of file or transaction errors	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Resolve file or transaction errors accurately, timely	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Group Benefits Program

Optional, Dental HMO

ERS

Optional Add-on GBP Benefits

Dental Plans

- Preferred Provider Organization (PPO) plan
- **Dental HMO**

Vision Insurance

Optional Life, AD&D Insurance

Long-term, Short-term Disability

- Fully-insured coverage available in Texas service area
  - Primary care dentist (PCD) selection required
  - No annual plan maximums
  - No annual or lifetime deductibles
  - No waiting periods
  - No patient payments for most diagnostic and preventive services
  - No out-of-network benefits
- FY18 enrollment: 119,991
- Administered by DentiCare, Inc., an affiliate of HumanaDental Insurance Company

Monthly Administrative Performance Report
Heat Map Summary

Dental Health Maintenance Organization
DentiCare, Inc./HumanaDental

HEAT MAP COLOR LEGEND
Performance compliance is under review.
Not applicable.
Performance met standards.
Performance did not meet standards; PG assessment waived.
Performance did not meet standards; activity is not a PG metric.
Performance did not meet standards; receipt of the PG assessment is pending.
Performance did not meet standards; ERS has received the PG assessment.

	DESCRIPTION	ASSESSMENT FREQUENCY	09-2016	10-2016	11-2016	12-2016	01-2017	02-2017	03-2017	04-2017	05-2017	06-2017	07-2017	08-2017
ACCOUNT MANAGEMENT	Participant satisfaction survey (satisfaction rating)	Annually	92.0%											
	Communication materials: quality, timeliness	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Written notice of changes	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Program reporting	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Annual enrollment attendance	Any Incident		100.0%	100.0%							100.0%	100.0%	
CUSTOMER SERVICE	Respond to written correspondence	Quarterly	99.3%			98.3%			100.0%			100.0%		
	Response to online and/or escalated inquiries	Quarterly	100.0%			100.0%			100.0%			100.0%		
	Answer calls within 20 seconds	Quarterly	81.1%			82.2%			82.4%			81.4%		
	Manage call blockage below 0.5%	Quarterly	0.0%			0.0%			0.0%			0.0%		
OPERATIONS	Network provider turnover rate at or below 10%	Annually	<10%											
	Grievances and appeals: timely acknowledgement	Annually	100.0%											
	Grievance and appeals: timely resolution	Annually	100.0%											
	Manage ID card mail-outs	Monthly	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SYSTEMS AND DATA MGMT.	Process files accurately, timely: weekend processing	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Process files accurately, timely: week day processing	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Ensure claims system availability	Annually	99.9%											
	Ensure website availability	Annually	99.9%											
	Provide timely notification of file or transaction errors	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Resolve file or transaction errors accurately, timely	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Group Benefits Program

Optional, State of Texas Vision Plan

ERS

Optional Add-on GBP Benefits

Dental Plans

- Preferred Provider Organization (PPO) plan
- Dental HMO

Vision Insurance

Optional Life, AD&D Insurance

Long-term, Short-term Disability

- Comprehensive vision and eyewear benefits
- Highest level of benefits available with in-network providers
  - Nationwide network
  - Access benefits through retail and internet-based optical stores
- FY18 Enrollment: 168,800 (92,780 members; 76,020 dependents)
- Administered by Superior Vision, effective September 1, 2016

Monthly Administrative Performance Report
Heat Map Summary
State of Texas Vision Plan
Superior Vision

HEAT MAP COLOR LEGEND
Performance compliance is under review.
Not applicable.
Performance met standards.
Performance did not meet standards; PG assessment waived.
Performance did not meet standards; activity is not a PG metric.
Performance did not meet standards; receipt of the PG assessment is pending.
Performance did not meet standards; ERS has received the PG assessment.

	DESCRIPTION	ASSESSMENT FREQUENCY	09-2016	10-2016	11-2016	12-2016	01-2017	02-2017	03-2017	04-2017	05-2017	06-2017	07-2017	08-2017
ACCOUNT MANAGEMENT	Participant satisfaction survey (satisfaction rating)	Annually	91.0%											
	Communication materials: quality, timeliness	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Written notice of changes	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Program reporting	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	66.67%	100.0%
	Annual enrollment attendance	Any Incident		100.0%	100.0%							100.0%	<100.0%	
CUSTOMER SERVICE	Respond to written correspondence	Quarterly	100.0%			100.0%			100.0%			100.0%		
	Manage ID card mail-outs: initial	Monthly	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Manage ID card mail-outs: reissues	Monthly	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Answer calls within 20 seconds	Quarterly	99.6%			99.5%			99.5%			99.4%		
	Manage call blockage below 0.5%	Quarterly	0.0%			0.0%			0.0%			0.0%		
OPERATIONS	Network provider turnover rate at or below 10%	Annually	< 10.0%											
	Claims adjudication	Monthly	99.7%	99.6%	100.0%	98.9%	99.5%	98.2%	99.8%	100.0%	100.0%	99.98%	99.7%	97.4%
	Claims processing: financial accuracy	Monthly	99.8%	99.8%	100.0%	100.0%	99.6%	100.0%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%
	Claims processing: timeliness	Monthly	98.9%	100.0%	100.0%	99.7%	99.5%	98.3%	100.0%	100.0%	100.0%	100.0%	100.0%	98.9%
	Process paper (manual) claims timely	Annually	100.0%											
	Grievances and appeals management	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SYSTEMS AND DATA MGMT.	Process files accurately, timely	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Ensure claims system availability	Annually	99.7%											
	Ensure website availability	Annually	99.9%											
	Provide timely notification of file or transaction errors	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	83.3%
	Resolve file or transaction errors accurately, timely	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Group Benefits Program

Optional Life and AD&D (active employees)

ERS

Optional, Add-on GBP Benefits

Dental Plans

- Preferred Provider Organization (PPO) plan
- Dental HMO

Vision Insurance

Optional Life, AD&D Insurance

Long-term, Short-term Disability

Basic Group Life, AD&D coverage

- Auto enrolled in $5,000 Basic Group Term Life (GBP health coverage required)
- Auto enrolled in $5,000 AD&D coverage

Optional Term Life including AD&D

- Additional coverage; up to 4X annual salary*

Voluntary AD&D

- Additional coverage; up to $200,000

Dependent Term Life including AD&D

- $5,000 coverage for each eligible dependent

Administered by Minnesota Life Insurance Company

*Maximum coverage is $400,000

Group Benefits Program

Optional, Texas Income Protection Plan (TIPP)

ERS

Optional Add-on GBP Benefits

Dental Plans

- Preferred Provider Organization (PPO) plan
- Dental HMO

Vision Insurance

Optional Life, AD&D Insurance

Long-term, Short-term Disability

- Self-funded benefits available to active employees only
- Short-term Disability Benefit
  - Monthly Benefit* is the lesser of 66% of covered monthly salary or $6,600
  - FY18 enrollment: 112,203
- Long-term Disability Benefit
  - Monthly Benefit* is the lesser of 60% of covered monthly salary or $6,000
  - FY18 enrollment: 89,566
- Administered by Reed Group Management LLC

*Monthly benefit will not be less than 10% of monthly salary when combined with all resources

Monthly Administrative Performance Report
Heat Map Summary

Texas Income Protection Plan
Reed Group LLC

HEAT MAP COLOR LEGEND
Performance compliance is under review.
Not applicable.
Performance met standards.
Performance did not meet standards; PG assessment waived.
Performance did not meet standards; activity is not a PG metric.
Performance did not meet standards; receipt of the PG assessment is pending.
Performance did not meet standards; ERS has received the PG assessment.

	DESCRIPTION	ASSESSMENT FREQUENCY	09-2016	10-2016	11-2016	12-2016	01-2017	02-2017	03-2017	04-2017	05-2017	06-2017	07-2017	08-2017
ACCOUNT MANAGEMENT	Participant satisfaction survey (satisfaction rating)	Annually	100%											
	Communication materials: quality, timeliness	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Written notice of changes	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Program reporting	Quarterly	100.0%			69.9%			96.3%			100.0%		
	Annual enrollment attendance	Any Incident										100.0%	100.0%	
CUSTOMER SERVICE	Respond to written correspondence	Not a PG	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Response to online and/or escalated inquiries	Not a PG	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Answer calls within 30 seconds	Quarterly	80.5%			83.2%			86.1%			80.1%		
	Manage call blockage below 0.5%	Not a PG	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Manage call abandonment rate below 5%	Not a PG	3.0%	2.2%	5.5%	3.1%	2.5%	2.2%	1.0%	1.5%	2.6%	2.9%	3.1%	2.6%
	Provide MBPDs timely, upon request (when applicable)	Not a PG	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
OPERATIONS	Claims processing: financial accuracy	Quarterly	96.7%			95.2%			98.5%			98.5%		
	Short-term claims processing: timeliness	Quarterly	96.7%			99%			100%			100%		
	Residual short-term claims processing: timeliness (when applicable)	Not a PG	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Long-term claims processing: timeliness	Quarterly	100.0%			100.0%			98.3%			100.0%		
	Residual long-term claims processing: timeliness (when applicable)	Not a PG	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SYSTEM & DATA MANAGEMENT	Process files accurately, timely	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Ensure claims system availability	Annually	100.0%											
	Ensure website availability	Annually	100.0%											
	Provide timely notification of file or transaction errors	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Resolve file or transaction errors accurately, timely	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Data to be restricted to the United States	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Questions?

ERS

Public Agenda Item #8.1

TexFlex℠ Review and Discussion of Plan Updates and Compliance Overview

December 13, 2017

Diana Kongevick, Director of Benefit Contracts
Lauren Russell, CTCM, Program Account Manager

TexFlex Program

Overview

ERS

TexFlex is a flexible spending arrangement (FSA)

- Funded by participant's pre-tax salary contributions
  - Reduced the state of Texas FICA tax contribution by $44.6 million
    - $38.6 million attributed to premium conversion
- Reimburses participants for eligible out-of-pocket health care and day care expenses
- Administered by Wageworks

TEXFLEX

TexFlex Program

Overview

ERS

Health Care Reimbursement	Limited Purpose Health Care	Dependent Care Reimbursement	Commuter Reimbursement
§125 Reimbursement Plan	§125 Reimbursement Plan	§125 Reimbursement Plan	§132 Reimbursement Plan
Maximum contribution: $2,600 annually	Maximum contribution: $2,600 annually	Maximum contribution: $5,000 or $2,500 annually depending on tax filing status	Qualified Parking Benefit: $255 monthly Qualified Transit Benefit: $255 monthly
Examples of eligible expenses include: • Copays • Dental expenses • Eyeglasses/Lasik/contacts • Medical supplies • Some OTCs	Available to Consumer Directed HealthSelect℠ participants for eligible: • Vision expenses • Dental expenses	Eligible expenses: • Day care expenses	Eligible expenses, parking: • Parking expenses* Eligible expenses, transit: • Mass transit* • Vanpool expenses*
$500 allowable carry-over	Not subject to forfeiture while actively employed	Eligible for grace period	Not subject to forfeiture
Subject to forfeiture		Subject to forfeiture	

*commuting to and/or from work

Monthly Administrative Performance Report
Heat Map Summary

TexFlex Program

WageWorks, Inc.

HEAT MAP COLOR LEGEND
Performance compliance is under review.
Not applicable.
Performance met standards.
Performance did not meet standards; PG assessment waived.
Performance did not meet standards; activity is not a PG metric.
Performance did not meet standards; receipt of the PG assessment is pending.
Performance did not meet standards; ERS has received the PG assessment.

	DESCRIPTION	ASSESSMENT FREQUENCY	09-2016	10-2016	11-2016	12-2016	01-2017	02-2017	03-2017	04-2017	05-2017	06-2017	07-2017	08-2017
ACCOUNT MANAGEMENT	Participant satisfaction survey (satisfaction rating)	Annually	83.7%											
	Communication materials: quality, timeliness	Any Incident	100.0%	100.0%	100.0%	100.0%	<100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Written notice of changes	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	<100.0%
	Program reporting	Monthly	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Fiscal year forfeiture report	Annually	100%											
	Annual enrollment attendance	Any Incident										100.0%	100.0%	
CUSTOMER SERVICE	Respond to written correspondence	Quarterly	100.0%			100.0%			100.0%			100.0%		
	Response to online and/or escalated inquiries	Quarterly	100.0%			100.0%			100.0%			100.0%		
	Response to research requests	Quarterly	100.0%			100.0%			100.0%			100.0%		
	Answer calls within 30 seconds	Quarterly	67.1%			46.3%			94.5%			90.0%		
	Manage call blockage below 0.5%	Quarterly	0.0%			0.7%			0.0%			0.0%		
OPERATIONS	Claim processing: financial accuracy	Monthly	99.4%	99.7%	99.7%	100.0%	100.0%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	99.9%
	Claims processing: timeliness	Monthly	99.5%	100.0%	99.7%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.9%
	Process paper claim reimbursements	Monthly	99.0%	100.0%	99.0%	99.0%	99.0%	99.0%	99.0%	100.0%	100.0%	100.0%	100.0%	86.0%
	Manage debit card mail-outs	Monthly	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SYSTEM & DATA MGMT.	Process files accurately, timely	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Ensure claims system availability	Annually	100.0%											
	Ensure website availability	Annually	100.0%											
	Provide timely notification of file or transaction errors	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Resolve file or transaction errors accurately, timely	Any Incident	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Questions?

ERS

Public Agenda Item #9.1

Texa$aver℠ 401(k)/457 Program Review and Discussion of Program Updates and Compliance Overview

December 13, 2017

Georgina Bouton, CTCM, Assistant Director of Benefit Contracts
Nora Alvarado, CTCM, Manager of Account Management Team
Angelica Torres, CTCM, Deferred Compensation Contract Administrator

Texa$aver Program

Program Overview

ERS

The Texa$aver Program is comprised of 2 separate Plans.

TEXA$AVER 401(k) Program

TEXA$AVER 457 Program

Texa$aver Program

Program Overview

ERS

The Texa$aver Program is comprised of 2 separate Plans.

TEXA$AVER 401(k) Program

- Established in 1985
- Available to state agencies
- Automatic Enrollment feature
- Traditional and Roth contributions
- 195,737 participant accounts
- $2.19 billion in assets

TEXA$AVER 457 Program

- Established in 1974
- Available to higher education and state agencies
- Traditional and Roth contributions
- 33,131 participant accounts
- $759 million in assets

Texa$aver℠ 401(k) / 457 Program

Key Statistics

ERS

401(k) Automatic Enrollment

- 1% default contribution rate
- 87% retention rate
- Plan statistics impacts

Texa$aver 401(k)	August 31, 2016	August 31, 2017	Year-over-Year Change
Plan assets	$1,984.7 million	$2,139.6 million	7.8%
Participant balances, average	$ 10,950	$ 11,196	2.2%
Monthly contributions, average	$ 129	$ 112	-13.2%
No. of accounts, contributing	92,527	95,813	3.6%
No. of accounts, non-contributing	88,722	99,924	12.6%

Texa$aver 457	August 31, 2016	August 31, 2017	Year-over-Year Change
Plan assets	$670.0 million	$759.0 million	13.3%
Participant balances, average	$ 21,252	$ 22,881	7.7%
Monthly contributions, average	$ 238	$ 259	8.8%
No. of accounts, contributing	17,052	19,803	16.1%
No. of accounts, non-contributing	14,463	13,328	-7.8%

Texa$aver^{SM} 401(k) / 457 Program

ERS

Investment products

- Same in both plans
- Institutionally priced funds
  - May include 12(b)-1 or reimbursement fees
- All fee reimbursements are given back to participants
  - $2.4 million in fee reimbursements paid to participants, 3rd quarter 2017
  - Reduces overall fees paid by participants

Texa$aver℠ 401(k) / 457 Program

Administrative Fees

ERS

- 100% funded by participants; no state appropriated funds
- Plan Administrative Fees
  - Must be sufficient to cover all administrative expenses
  - Assessed to the 401(k) and 457 plans separately
  - Assessed to before-tax and Roth after-tax contributions separately
  - Based on account balance

PARTICIPANT MONTHLY ADMINISTRATIVE FEES	
ACCOUNT BALANCE	AMOUNT (per account and per contribution type)
$10.00 or less	No fees
Between $10.01 and $1,000.00	$1.18
Between $1,000.01 and $16,000.00	$3.99
Between $16,000.01 and $32,000.00	$6.00
Between $32,000.01 and $48,000.00	$8.17
Between $48,000.01 and $64,000.00	$10.89
$64,000.01 or more	$13.62

Monthly Monitoring Report (MMR)
Heat Map Summary
Texa$aver Program
Empower Retirement

HEAT MAP COLOR LEGEND
Performance compliance is under review.
Not applicable.
Performance met standards.
Performance did not meet standards; PG assessment waived.
Performance did not meet standards; activity is not a PG metric.
Performance did not meet standards; receipt of the PG assessment is pending.
Performance did not meet standards; ERS has received the PG assessment.

	DESCRIPTION	ASSESSMENT FREQUENCY	09-2016	10-2016	11-2016	12-2016	01-2017	02-2017	03-2017	04-2017	05-2017	06-2017	07-2017	08-2017
ACCOUNT MANAGEMENT	Participant satisfaction survey (satisfaction rating)	Annually	100%											
	Communication materials: quality, timeliness	Any Incident	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Written notice of changes	Any Incident	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Program reporting	Monthly	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Annual enrollment attendance	Any Incident	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
CUST. SERVICE	Respond to written correspondence	Quarterly	100%		100%			100%			100%		100%	
	Response to online and/or escalated inquiries	Quarterly	100%		100%			100%			100%		100%	
	Answer calls within 30 seconds	Quarterly	100%		100%			100%			100%		100%	
OPS	Financial transaction processing: accuracy, timeliness	Monthly	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Statement management: accuracy, timeliness	Any Incident	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Resolve statement errors: accuracy, timeliness (when applicable)	Any Incident	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SYSTEM & DATA MANAGEMENT	Process files accurately, timely	Any Incident	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Ensure system availability	Annually	100%											
	Ensure website availability	Annually	100%											
	Provide timely notification of file or transaction errors	Any Incident	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Resolve file or transaction errors accurately, timely	Any Incident	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Data to be restricted to the United States	Any Incident	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Questions?

ERS

Public Agenda Item #10.1

Review and Discussion of the Texas Employees Group Benefits Program: Actuarial Valuation of Retiree Health Insurance Benefits as of August 31,2017

December 13, 2017

Machelle Pharr, Chief Financial Director

Employees Retirement System of Texas

Texas Employees Group Benefits Program (GBP)

Actuarial Valuation of
Other Post Employment Benefits (OPEB)
Provided Under the GBP
for Fiscal Year 2017

Board of Trustees
December 13, 2017

Philip S. Dial
Mitchell L. Bilbe

Rudd and Wisdom, Inc.
CONSULTING ACTUARIES

FY 2017 GBP OPEB Valuation

General Information

- The GBP provides Other Post Employment Benefits (OPEB) to the retirees of state agencies, certain higher education institutions and other employers (see Appendix for list of other employers).

- OPEB provided through the GBP include the following benefits.
  - Health
  - Basic Life

- OPEB <u>does not include optional benefits</u> available to retirees under the GBP (dental, vision, and life insurance), since those benefits are fully funded by member contributions and, therefore, do not generate employer obligations.

- OPEB <u>does not include retirement benefits</u>.

FY 2017 GBP OPEB Valuation
Application of GASB Reporting Standards – GASB 43/45

- Actuarial valuations of GBP OPEB have been prepared annually from FY 2007 through FY 2017 to satisfy the requirements of Governmental Accounting Standards Board Statement No. 43 (GASB 43).
- Prior to FY 2017, the information required under GASB 43 was reported by ERS in the notes and supplementary information contained in the CAFR.
- ERS provides the information to the Texas Comptroller of Public Accounts (Comptroller).
- The Comptroller uses the ERS GASB 43 information along with similar information provided by TRS to meet the reporting requirements of GASB 45 in preparation of the State's CAFR.

FY 2017 GBP OPEB Valuation
Application of GASB Reporting Standards – GASB 43/45

- GASB 45 does not require the Comptroller to report OPEB expense and liability information for ERS and TRS in the financial statements in the State's CAFR. Instead, certain information regarding both plans is disclosed in the notes to the financial statements.
- GASB 45 requires minimal reporting by participating employers.

FY 2017 GBP OPEB Valuation
Application of GASB Reporting Standards – GASB 74

- GASB Statement No. 74 (GASB 74) replaces GASB 43 effective for FY 2017.
- The FY 2017 valuation is conducted in accordance with the requirements of GASB 74.
- GASB 74 requires significant changes in the OPEB valuation.
  - Since the GBP OPEB is funded on a pay-as-you go (PAYGO) basis, the Discount Rate assumption must be based on yields of 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.
  - As a result, the Discount Rate assumption for FY 2017 is significantly lower than the Discount Rate assumption used for purposes of GASB 43 valuations.
  - The note disclosures and supplementary information required under GASB 74 are more extensive; e.g., GASB 74 requires an analysis of the sensitivity of the Net OPEB Liability to ±1% changes in (a) the Discount Rate assumption and (b) the healthcare trend rate assumption.

FY 2017 GBP OPEB Valuation
Application of GASB Reporting Standards – GASB 74/75

- GASB Statement No. 75 (GASB 75) replaces GASB 45 effective for FY 2018 for purposes of preparation of the State's CAFR.

- GASB 75 requires significant changes in presentation of the OPEB expense and liability information.
  - Under GASB 75 the Comptroller reports OPEB expense and liability information for ERS and TRS in the financial statements in the State's CAFR.

- GASB 74/75 requires increased reporting by GBP participating employers.

FY 2017 GBP OPEB Valuation
Impact of SB 1459

- SB 1459 adopted by the 83rd Texas Legislature amended Article 1551 of the Insurance Code.
- SB 1459 requires insurance contribution rates for retirees to vary based on length of service (LOS) at retirement.
- Amendment applies only to:
  - Employees with less than five years of service on September 1, 2014,
  - Who retire on or after September 1, 2014.

LOS (Years)	State Contribution		Retiree Contribution	
	Retiree	Dependents	Retiree	Dependents
20 or more	100%	50%	0%	50%
15-19	75%	37.5%	25%	62.5%
10-14	50%	25%	50%	75%

FY 2017 GBP OPEB Valuation
Impact of SB 1459

- This is the fifth valuation to reflect the impact of SB 1459.
- SB 1459 has only a small impact on the FY 2017 OPEB liabilities and costs, since it applies to only a small segment of the membership, most of whom will not be eligible to retire for many years.
- But the impact of the bill will gradually grow for many years:
  - As employees to whom the requirements do not apply are replaced by those to whom they do, and
  - As employees to whom the requirements apply get closer to and eventually retire.
- The requirements of SB 1459 will:
  - Reduce the state's liability and cost for applicable employees who retire with less than 20 years of service.
  - Discourage some applicable employees and vested terminated members with less than 20 years of service from enrolling for insurance upon retirement.

FY 2017 GBP OPEB Valuation
Actuarial Cost Method and Assumptions

- Actuarial cost method
  - Entry Age (also known as the Entry Age Normal) actuarial funding method.
  - Although GASB 74 has changed the name, this is same method used since inception of the GASB OPEB reporting requirements.
  - Same method used for ERS retirement plan valuation.
  - Normal cost and 30 year amortization amounts are determined as level percentages of pay.
- Actuarial assumptions
  - Demographic and pay-related assumptions are the same as those used in valuing the retirement plans.
  - Discount Rate assumption for a plan funded on a PAYGO basis must be based on the yields of 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.
  - Health plan benefit cost trend has been established consistent with other economic assumptions as required by GASB.

FY 2017 GBP OPEB Valuation
Demographic Assumptions

- Demographic assumptions include:
  - Mortality
  - Disability
  - Termination
  - Retirement
- State agency employees and retirees:
  - Same demographic assumptions as those utilized by ERS for its retirement plan valuation for FY 2017.
  - These assumptions are being used for the first time.
- Higher education employees and retirees:
  - Same demographic assumptions as those utilized by TRS for its retirement plan valuation for FY 2017.
  - These assumptions are the same as those used for the FY 2016 valuation, except for the inflation component of the salary scale which is now consistent with the inflation assumption utilized by TRS for its retirement plan valuation.

FY 2017 GBP OPEB Valuation
Economic Assumptions

- Economic assumptions include:
  - Inflation
  - Payroll growth and inflationary salary increases
  - Salary increases for merit, promotion and longevity
- State agency employees and retirees:
  - Same economic assumptions as those utilized by ERS for its retirement plan valuation for FY 2017.
  - These assumptions are being used for the first time.
- Higher education employees and retirees:
  - Same economic assumptions as those utilized by TRS for its retirement plan valuation for FY 2017.

FY 2017 GBP OPEB Valuation
Economic Assumptions – Discount Rate Assumption

- Since OPEB benefits provided under the GBP are funded on a PAYGO basis, GASB 74 requires the Discount Rate assumption to be based on yields of 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

- The assumed Discount Rate for the FY 2017 valuation is 3.51% based on the 8/31/17 Bond Buyer Index of general obligation bonds with 20 years to maturity with an average credit quality that is roughly equivalent to Moody's Investors Service's Aa2 rating and Standard & Poor's Corp.'s AA rating.

- This rate is significantly lower than the 5.5% rate used in prior years for the GASB 43 valuation.

FY 2017 GBP OPEB Valuation

Economic Assumptions – FY 2018 Per Capita Health Benefit Costs

- The OPEB valuation is based on projected Per Capita Health Benefit Costs for FY 2018
  - By gender
  - By age

- Since the addition of the Medicare Advantage PPO option effective January 1, 2012, it has been necessary to have two sets of Per Capita Health Benefit Costs:
  - HealthSelect (for participants for whom Medicare is not primary and for Medicare-primary participants who elect to remain in HealthSelect).
  - HealthSelect Medicare Advantage (for Medicare-primary participants who elect HealthSelect Medicare Advantage).

FY 2017 GBP OPEB Valuation

Economic Assumptions – FY 2018 Per Capita Health Benefit Costs

- HealthSelect (medical and prescription drug)
  - The retiree population is such that a great deal of credible data exists.
  - Extensive historical data allows us to examine both current cost as well as evolving cost trends.
  - HealthSelect experience data through FY 2017 is used to establish current gender/age-specific costs for HealthSelect.

- HealthSelect Medicare Advantage
  - Per capita medical costs are based on the HealthSelect Medicare Advantage premiums applicable to the fully insured medical benefits and the associated Health Insurance Provider Fee as required under the Affordable Care Act (ACA).
  - Per capita prescription drug costs are the same as those applicable to HealthSelect participants since HealthSelect Medicare Advantage participants have the same prescription drug coverage as HealthSelect participants.

FY 2017 GBP OPEB Valuation
Economic Assumptions – Health Plan Benefit Cost Trend

- A select and ultimate trend assumption is used which begins at the levels we are using for the current biennium.
- The trends have been revised to reflect updated projections for FY 2019 – FY 2027.
- The trend is expected to be 8.5% through FY 2019 and then decline over the next eight years to a “sustainable” ultimate level.
- The ultimate level is 200 basis points in excess of the assumed rate of inflation (4.5% = 2.5% + 2.0%).
- The ultimate level is 100 basis points below that used in previous OPEB valuations in order to reflect the reduced assumed rate of inflation adopted by the Board.

FY 2017 GBP OPEB Valuation

Economic Assumptions – Health Plan Benefit Cost Trend

Fiscal Year	FY 2016 Valuation	FY 2017 Valuation
2019	8.5%	8.5%
2020	7.5%	8.0%
2021	7.0%	7.5%
2022	6.5%	7.0%
2023	6.0%	6.5%
2024	5.5%	6.0%
2025	5.5%	5.5%
2026	5.5%	5.0%
2027 and beyond	5.5%	4.5%

FY 2017 GBP OPEB Valuation

GBP Membership

Category	Members	Covered Spouses	Covered Dependent Children	Total
Actives	230,199[1]	40,910[2]	125,356	**396,465**
Deferred Vested	11,557	0[2]	0[2]	**11,557[2]**
Retirees and Nominees	117,880[3]	29,767	10,113	**157,760**
Total - August 31, 2017	**359,636**	**70,677**	**135,469**	**565,782**
Total - August 31, 2016	**359,867**	**70,717**	**136,354**	**566,938**
Change	(231)	(40)	(885)	**(1,156)**

1 Includes (a) return-to-work retirees and (b) employees who have not yet satisfied the waiting period.

2 Rather than use current spouse/dependent child coverage information, actuarial assumptions are used to estimate the future number of spouses and dependent children that will be covered at retirement.

3 Includes 4,248 retirees who receive the Opt-Out Credit in lieu of health benefits.

FY 2017 GBP OPEB Valuation

Results (See page II-1 of the Actuarial Valuation Report.)

Member Class	APVPBP	NC (2017)	APVFNC (After 2017)	Total OPEB Liability
Actives	$36,982M	$1,496M	$16,695M	$18,791M
Vested Non-Contributing	1,991M	0	0	1,991M
Retirees	14,001M	0	0	14,001M
Total	$52,974M	$1,496M	$16,695M	$34,783M

Terminology

- APVPBP = Actuarial Present Value of Projected Benefit Payments
- NC = Normal Cost
- APVFNC = Actuarial Present Value of Future Normal Costs
- Total OPEB Liability = APVPBP – NC (2017) – APVFNC (After 2017)

FY 2017 GBP OPEB Valuation

Results (See page II-3 of the Actuarial Valuation Report.)

Actuarially Determined Contribution (ADC) for FY 2017		
OPEB Measure	Amount	Percentage Of Payroll
Normal Cost	$1,496M	12.7%
Amortization of Net OPEB Liability	1,219M	10.4%
Total ADC	$2,715M	23.1%

FY 2017 GBP OPEB Valuation

Reconciliation with FY 2016 (See page II-5 of the Actuarial Valuation Report.)

OPEB Measure	Actual FY 2016	Expected FY 2017 Based on FY 2016 Assumptions	Change Attributable to			Actual FY 2017
			Differences in Actual vs Expected	Assumption Changes	Plan Change	
Total OPEB Liability	$27,091M	$29,035M	($496M)	$6,244M	0	$34,783M
Normal Cost	$1,123M	$1,162M	($25M)	$359M	0	$1,496M

a) Year-to-year increases will occur if actual and expected experience are the same:
   - Total OPEB Liability: Since OPEB is funded on a PAYGO basis, the excess of NC plus interest over the PAYGO amount increases the Total OPEB Liability.
   - Normal Cost (NC): NC is determined as a level percentage of payroll; therefore the dollar amount increases due to growth in active employment and/or inflationary increases in salaries.

b) Gains/losses from differences in actual vs expected will occur to the extent that the assumptions are too pessimistic or optimistic; e.g., fewer retirements than were expected would a create gain.

c) SB1459 has resulted in liabilities and costs that are lower than they would have otherwise been. The impact of SB 1459 will grow over time.

FY 2017 GBP OPEB Valuation
Comparison of FY 2016 and FY 2017 Results

OPEB Measure	FY 2016	FY 2017
Normal Cost - % Payroll	9.5%	12.7%
Amortization - % of Payroll	10.0%	10.4%
ADC - % Payroll	19.5%	23.1%

FY 2017 GBP OPEB Valuation
Impact Of Assumption Changes

Assumption Change	Approximate Increase/ (Decrease)			
	Total OPEB Liability		Normal Cost	
	Amount	Percentage*	Amount	Percentage*
Discount Rate	$8.0 Billion	27.9%	$605 Million	53.2%
Mortality	$1.4 Billion	5.0%	$74 Million	6.5%
Retirement	($0.7 Billion)	(2.4%)	($73 Million)	(6.4%)
Claims and Trend	($3.2 Billion)	(11.2%)	($227 Million)	(20.0%)
Salary	$0.8 Billion	3.0%	$1 Million	0.1%
All Other Changes	($0.1 Billion)	(0.4%)	($21 Million)	(1.8%)
Total	$6.2 Billion	21.9%	$359 Million	31.6%

*As a percentage of corresponding amount prior to assumption changes.

FY 2017 GBP OPEB Valuation

Sensitivity of OPEB Liability to Discount Rate and Trend

Sensitivity to Changes in Discount Rate			
	1% Decrease (2.51%)	Current Discount Rate (3.51%)	1% Increase (4.51%)
Total OPEB Liability	$41.4 Billion	$34.8 Billion	$29.7 Billion

Sensitivity to Changes in Trend			
	1% Decrease (7.50% decreasing to 3.50%)	Current Trend (8.50% decreasing to 4.50%)	1% Increase (9.50% decreasing to 5.50%)
Total OPEB Liability	$29.3 Billion	$34.8 Billion	$41.8 Billion

Appendix

- See Section X of the Actuarial Valuation Report for the definitions of certain terms used in this presentation.
- Other employers include the following:
  - Community Supervision and Corrections Departments
  - Texas Cooperative Inspection Program
  - Texas County and District Retirement System
  - Texas Municipal Retirement System
  - Texas Turnpike Authority
  - University of Texas Medical Branch at Galveston
  - University of Texas Mental Sciences Institute
  - Windham School District

Questions?

ERS

Public Agenda Item #11.1

Executive Director Agency Update

December 13, 2017

Porter Wilson, Executive Director

Executive Director's Report

Sunset: Required Board Training

ERS

- **Government Code §815.009 (a)**: ". . . a member of the board of trustees may not vote, deliberate, or be counted as a member . . . Until the person completes a training program that complies with this section."
- **Government Code §815.009 (d)**: ". . . On receipt of the training manual, each member of the board of trustees shall sign and submit . . . A statement acknowledging receipt of the training manual."

Board Training Manual Contents:

1. Orientation Briefing Book (Sept 2017)
2. ERS Laws Book (May 2016)
3. ERS Rules Book (March 2016)
4. 2018 Operating Budget (August 2017)
5. Investment Policy (May 2017)
6. Audit Information
7. Open Meeting and Public Information Acts
8. Acknowledgement Form

Executive Director's Report

Federal Tax Bill Update

ERS

- House
  - Unrelated Business Income Tax (UBIT) provision
- Senate
  - 457/401(k) provisions
- Will continue to monitor issues as the bill moves through Conference process.

Plan Year 2018 Fall Enrollment

Retirees enrolled in Medicare and their families

ERS

ERS mailed 85,828 PBES packets.

3,775 members made coverage changes.

ERS and ACT handled 2,418 calls:

- **430 by ERS**
- **1,989 by ACT.**

42 people visited ERS in person.

Executive Director's Report

Fall Enrollment Outreach

- **About 190 people attended nine fairs across Texas.**
- **10 people participated in two webinars.**
- **The Fall Enrollment webpages had more than 3,100 views.**

Executive Director's Report

Customer Benefits Performance and Data

ERS

SERVICE DELIVERY

ERS		FY 2016	FY 2017
Calls	Retirement	71,235	77,733
	Insurance	100,554	99,244
	Total	**171,789**	**176,977**
Emails	Retirement	5,562	5,956
	Insurance/Customer Service	5,119	5,144
	Total	**10,681**	**11,100**
Visits	Retirement	3,022	2,756
	Insurance	1,349	1,133
	Total	**4,371**	**3,889**
Avg Speed of Answer/Avg Handletime		8:42/10:25	13:06/11:34

The Virtual Callback feature was deployed in June 2017. 8,636 callbacks were offered; 5,652 callers selected the option.

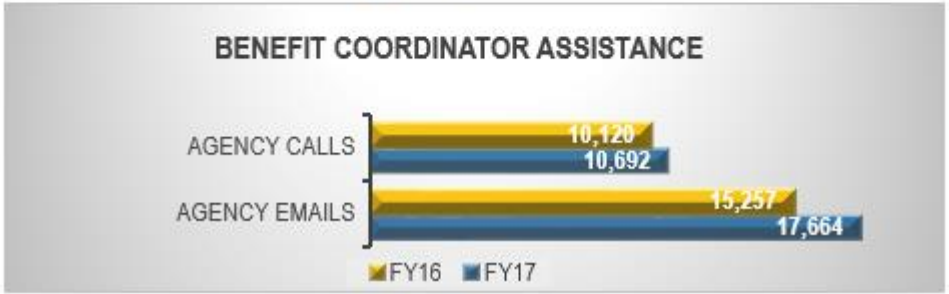
- Over 35K calls related to insurance eligibility, options and the TPA transition to BCBS were handled in FY17.
- Over 32K calls were handled for which members explored retirement eligibility, requested estimates, purchased service and applied for retirement.

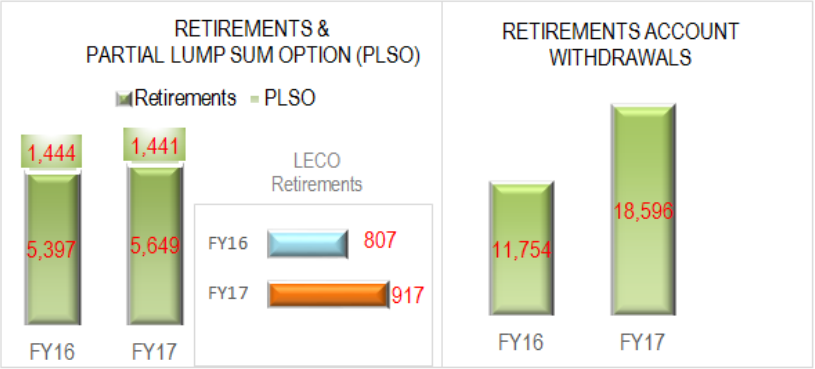
ACT ERS		FY 2016	FY 2017
Calls	Customer Service	148,171	151,970
	Withdrawal	25,579	33,990
	Enrollment	19,026	50,193
	Total	**192,776**	**236,153**
Avg Speed of Answer/ Avg Handletime		0:58/6:10	2:28/6:09

- Rather than closing the Enrollment queue following enrollment periods, it remained open throughout the year to help triage insurance calls, resulting in 163% increase in volume in that queue (over FY17).

Executive Director's Report

Customer Benefits Performance and Data





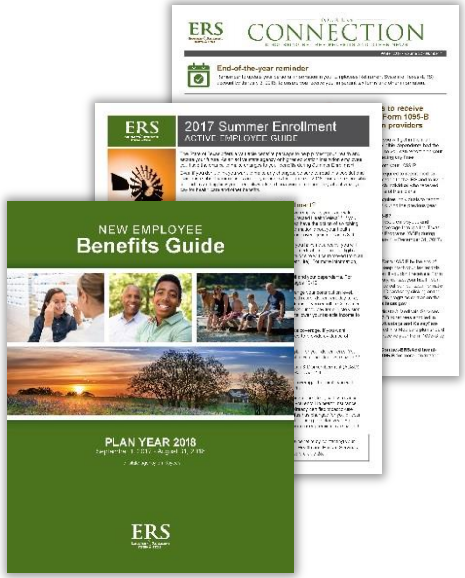
Executive Director's Report

Review of ERS Publications

ERS

Objective – Evaluate and recommend improvements to ERS publications:

- Annual enrollment guides
- *New Employee Benefits Guide*
- *News About Your Benefits* monthly e-newsletter for active employees
- *Your ERS Connection* quarterly newsletter for retirees
- *Coordinator's Update-express* biweekly e-newsletter for agency/institution benefits coordinators



Executive Director's Report

Review of ERS Publications

ERS

Process – ERS has contracted with San Antonio-based Texas Creative to:

1. Review communications industry standards and peer publications ✓
2. Interview key ERS staff ✓
3. Develop evaluation criteria ✓
4. Survey audiences (underway)
5. Review publications against criteria (upcoming)
6. Report findings and recommendations (February 2018)

ERS will implement recommendations in 2018 and continue to make improvements based on findings.

Executive Director's Report

Review of ERS Publications

ERS

Criteria for Publications

Internal Objectives		
Compelling	Mobile-friendly	Sharable
Engaging	Clearly actionable	Interactive

Scored Measures		
Branding	Headlines	Overall look
Relevance	Images	Readability
Prioritization	Table of contents / preview	Believability
Educational aspects	Article / paragraph length	Writing style

Executive Director's Report

Review of ERS Publications

ERS

Ultimate Goal

Publications that function well for audiences to:

- Open and scan
- Click through and read
- Stay subscribed
- Use the ERS website
- Take the right actions

So ERS can:

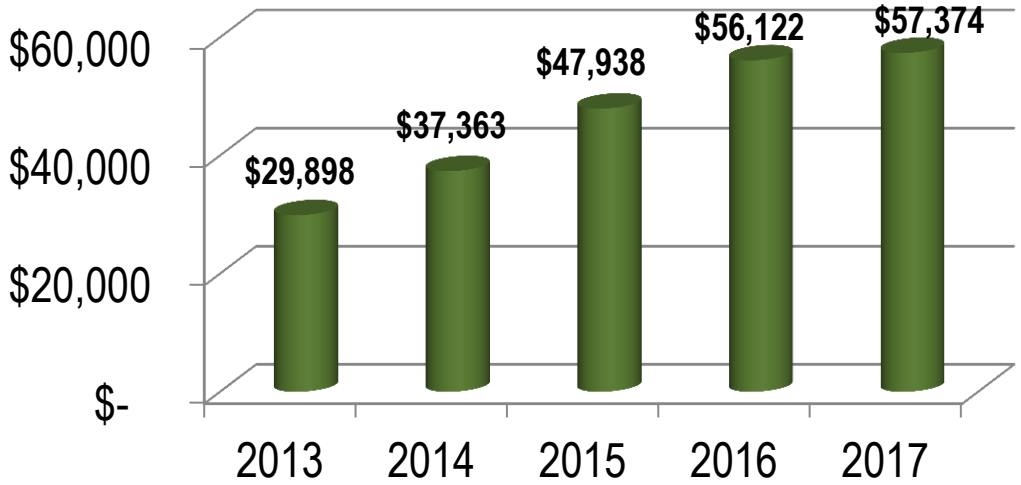
- Engage
- Support
- Educate
- Encourage
- Follow through

Executive Director's Report

State Employee Charitable Campaign 2017

ERS

We are pleased to announce we **EXCEEDED** our fundraising goal.
281 (77%) employees contributed **over $57,370** to the 2017 campaign.



Together We Care

secctexas.org

Questions?

ERS

Public Agenda Item #12.1

Set 2018 Meeting Dates for the Joint Meeting of the ERS Board of Trustees and Investment Advisory Committee, The Meeting of the Board of Trustees, and Meeting of the Audit Committee

December 13, 2017

2018 Meeting Dates

ERS

Proposed 2018 Meeting Dates:

Wednesday, March 7, 2018

Wednesday, May 23, 2018

Wednesday, August 29, 2018

2 Day Workshop:

Tuesday – Wednesday, December 11-12, 2018

ERS

Public Agenda Item #13.1

Adjournment of the ERS Board of Trustees Meeting

December 13, 2017