

Teachers' Retirement System

of the State of Kentucky



Gary L. Harbin, CPA
Executive Secretary

Kentucky Retired Teachers Association

2018 Fall Workshops



Governor Teachers poised for

THE RICHMOND REGISTER

Your local news source since 1917.

Pension reform bill in trouble?

THURSDAY, FEBRUARY 15, 2018 ■ COURIERJOURNAL.COM

PART OF THE USA TODAY NETWORK

Stivers: No 401(k)-style

Senate leader says switching from pensions would add cost

Tom Loftus
Louisville Courier-Journal
USA TODAY NETWORK

Find more inside

Anxious stakeholders are asking these questions about the pending pension bill. Metro, 3A

FRANKFORT, Ky. — The revised pension reform bill will not mandate that any current or future Kentucky public

A move from traditional pension

House Speaker Jeff Hoover.

But that proposal, which also included numerous reductions in benefits, was met with strong opposition. Leaders of the House and Senate Republican majorities have been revising the plan for months.

"We have data that

that it actually does cost more money to switch everyone to a 401(k)-style."

House Speaker David Osborne (he declined to comment on pending bill)

Teachers push new plan



Thousands of teachers gather during a rally for education funding and changes to their pension system Monday at the state Capitol in Frankfort.

Teachers fill Capitol to fight pension changes, education cuts



Teachers, including teachers from school districts around Kentucky, rallied in Frankfort on Monday to protest against a pension reform bill. Photos by Michael Cleveland/CJ.

Ky. pension COLA rollback nixed

HERALD-LEADER led

LEXINGTON, Ky. — Gov. Matt Bevin's plan to roll back the cost-of-living adjustment (COLA) for public employees' pensions was nixed by the House on Thursday.

Bevin's plan: No pensions for most future workers, costly changes for current ones

Lexington looking for a new city hall again; this time it might be serious



Protesters held signs during a rally in Frankfort on Monday. Photos by Michael Cleveland/CJ.



Tom Shelton, executive director of the Kentucky State Retirement System, is seen in a photo. Photos by Michael Cleveland/CJ.

Official: Proposal

VOLUME 36, No. 67
STAY CONNECTED KENTUCKY.COM

FACEBOOK.COM/KENTUCKYCOM
TWITTER.COM/HERALDLEADER

LEXINGTON HERALD-LEADER

kentucky.com

HERALD-LEADER

SATURDAY MARCH 10 2018 \$3 Mostly cloudy 49°/31° SW 8

Protesters cheer as pension bill vote postponed

Senate President Robert Stivers, R-Manchester, fumed from the Senate President's chair as Senate Bill 1 was sent back to committee Friday afternoon. The announcement led to a cheer from the hundreds of protesters who had gathered in front of the state Capitol in Frankfort.

Teachers stormed the Capitol building on Monday morning, and protesters chanted "Hands off my pension" and "No COLA rollback" as they gathered in front of the state Capitol in Frankfort.

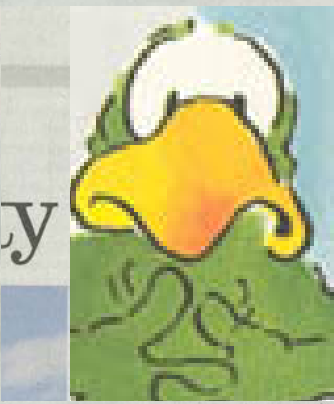
will pay off

accumulated \$876,000 to pass on to his or her family or a charity. They teachers who fully fund their new defined contribution retirement plan can retire with substantial net-

ENSIONS

Courier-Journal

THURSDAY 9.7.17 || COURIER-JOURNAL.COM || METRO EDITION



The Courier-Journal

MONDAY 10.23.17 || COURIER-JOURNAL.COM || METRO EDITION || PART OF THE USA TODAY NETWORK

Does Bevin have votes to pass pension plan?

Governor feels confident, but Democrat isn't so sure

Teachers flood Capitol

Tax reform passes amid protests in Frankfort

Tom Loftus and Deborah Vetter
Louisville Courier-Journal
USA TODAY NETWORK

FRANKFORT, Ky. — INSIDE An eleven-hour bill that establishes a flat income tax rate of 5 percent, applies the sales tax to 17 services, and increases the cigarette tax by 50 cents per pack was unveiled Monday morning and later approved by the



THE RICHMOND REGISTER
Your local news source since 1917.

No vote: State Senate sends pension reform bill back to committee

HERALD-LEADER led

LEXINGTON, Ky. — Gov. Matt Bevin's plan to roll back the cost-of-living adjustment (COLA) for public employees' pensions was nixed by the House on Thursday.

Bevin's plan: No pensions for most future workers, costly changes for current ones

Lexington looking for a new city hall again; this time it might be serious



Protesters held signs during a rally in Frankfort on Monday. Photos by Michael Cleveland/CJ.

breakfast invite calls president 'righteous'

Big News: Full Funding



479 Versailles Road
Frankfort, KY 40601
800-618-1687

Teachers' Retirement System

RETIRED
MEMBER EDITION

JUNE
2018

Thank You

by Gary L. Harbin, CPA, Executive Secretary

INSIDE:

Cash Balance
Benefits Tier
Created

2

New State Budget
Provides Full

As everyone is very well aware, this is a year for pension issues, including the recent legislative session that enacted the new Retirement System of the State of Kentucky. The new system doesn't take stands on legislation. But we

New State Budget Provides Full Funding for TRS; First Time In More Than A Decade

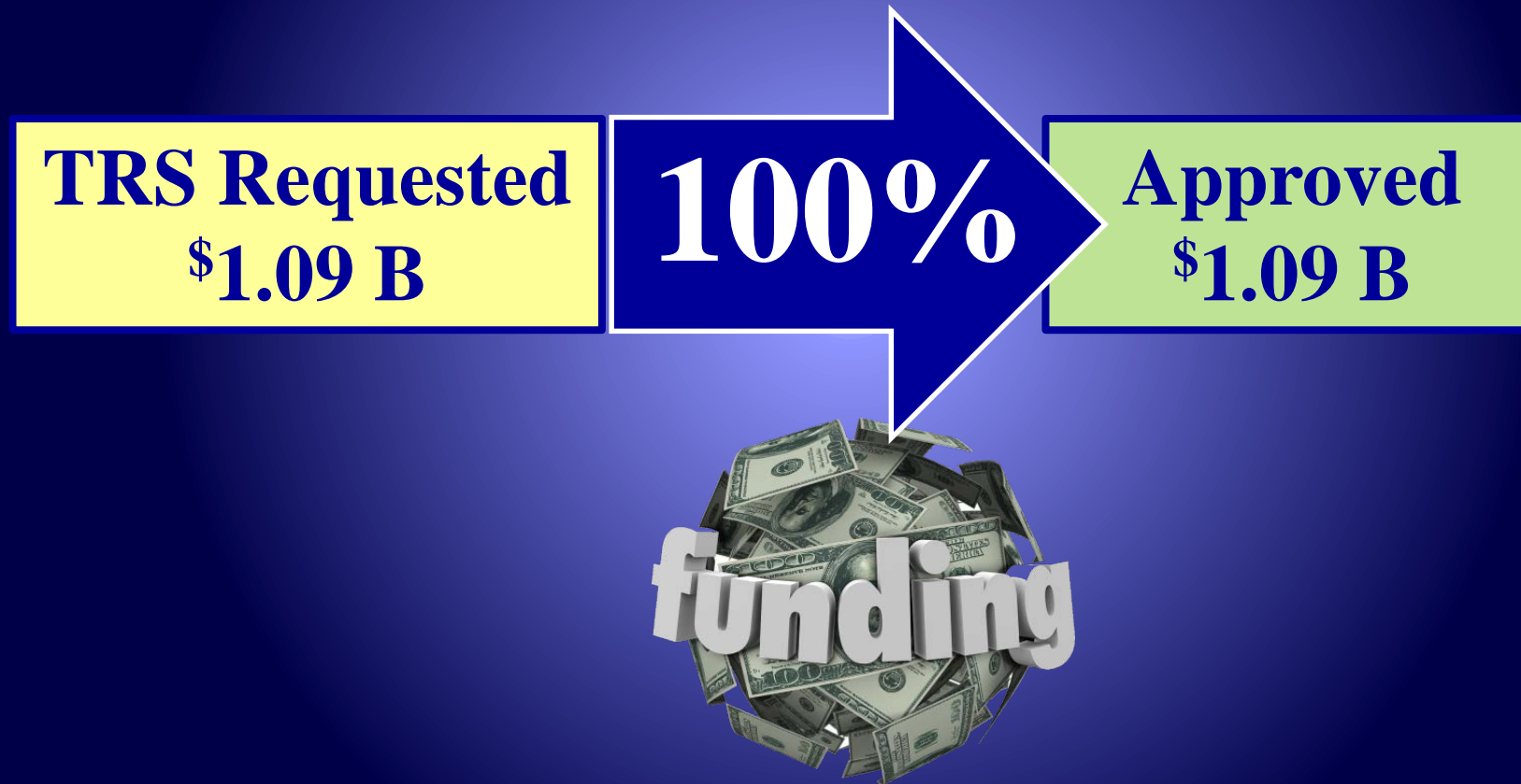
For the first time in a decade, the full required contribution for the Teachers' Retirement System of the State of Kentucky is included in the biennial budget. That consists of about \$2 billion total, including the full \$1.09 billion

two-year spending plan that expires June 30 where TRS received 94 percent of the required contribution.

"These new funds are hugely important for TRS," Executive Secretary Gary Harbin said. "This keeps the system on the path to

\$1.09 billion

2018-20 Additional Funding Summary



State paid nearly all contributions recommended by the actuary for fiscal years 2017 & 2018.

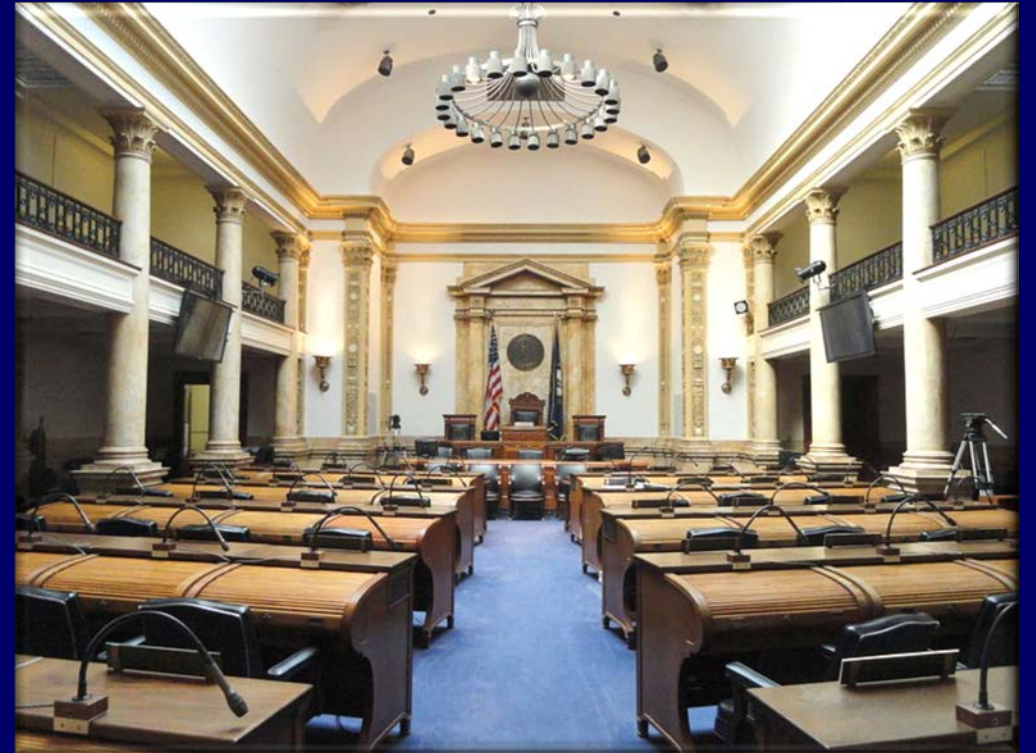
Full Funding

Give Yourself a Round of



Full Funding

Thanks to elected officials





- Statistics
- Board of Trustees
- Investing
- Possible Plan Changes
- Assumptions
- Outreach

Statistics



TRS Established by General Assembly in 1938, Funded in 1940



Defined benefit pension plan provides retirement benefits for employees of school districts and other public educational agencies.



173 school districts



17 Department of Education agencies



KCTCS

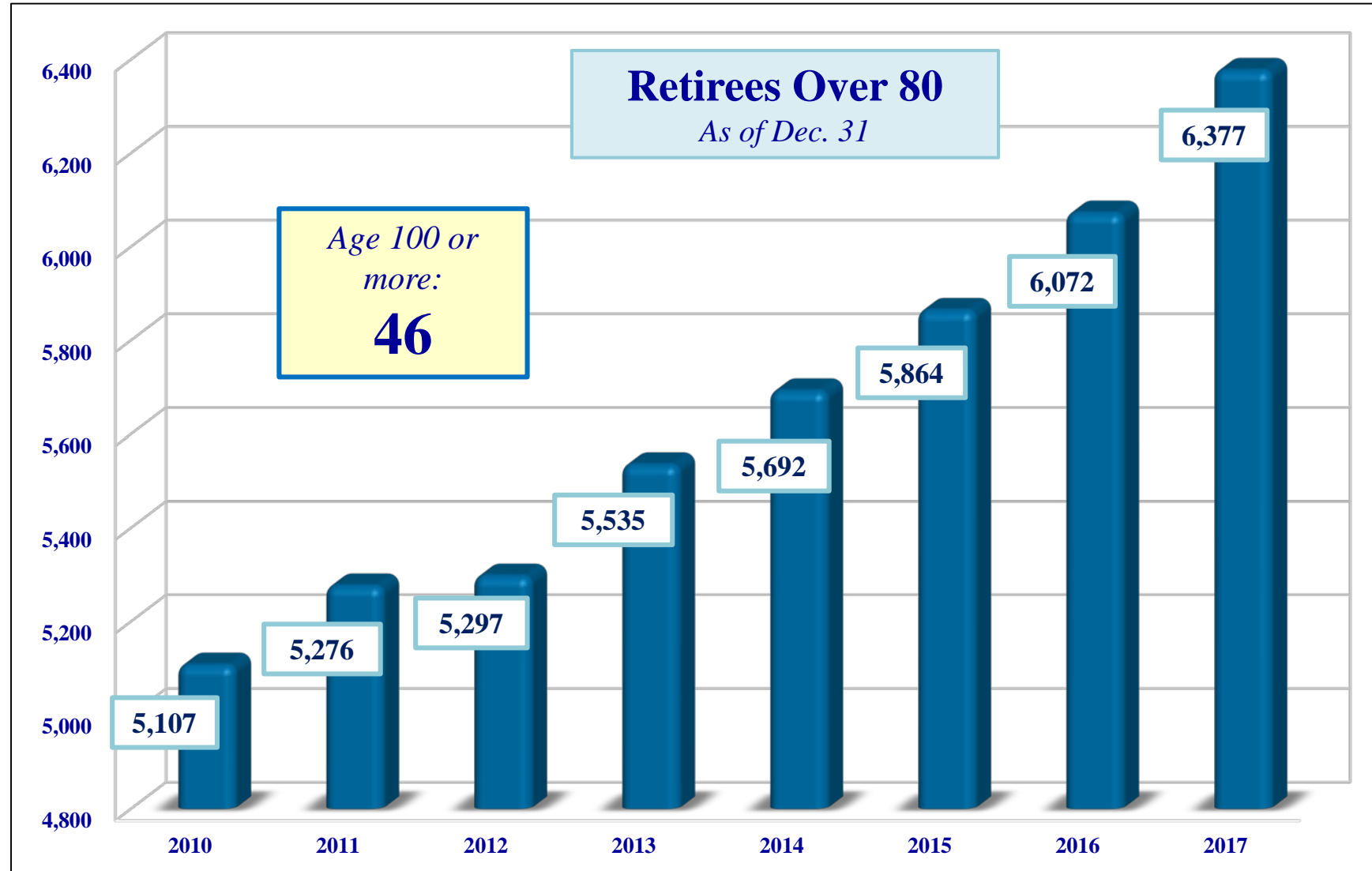


Five regional universities

TRS Benefits Protect At-Risk Population

Member Recipients	
Females	72%
Males	28%

Longevity for TRS Retirees



REAL ECONOMIC IMPACT

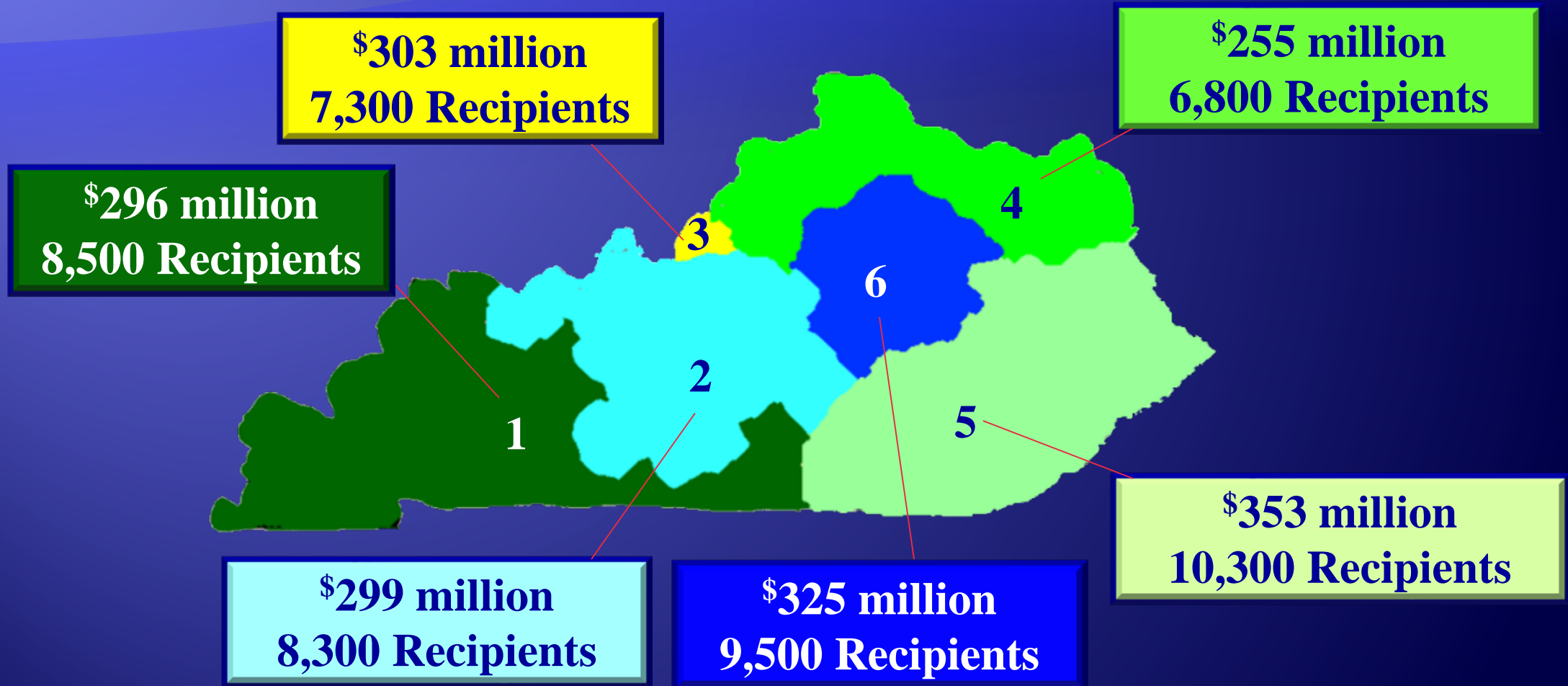


**Retired teachers
have significant
economic impact
in every
Kentucky county**

- TRS pays:
 - \$174 million in retirement annuity benefits (*July 2018*)
 - \$18 million in medical benefits (*monthly average*)
- 91% of TRS pension benefits stay in Kentucky
- Retired teachers would make TRS at least the second-largest employer in many counties
- \$1.9 billion a year paid into Kentucky's economy because of pension benefits

Retired Teachers Impact Across Kentucky

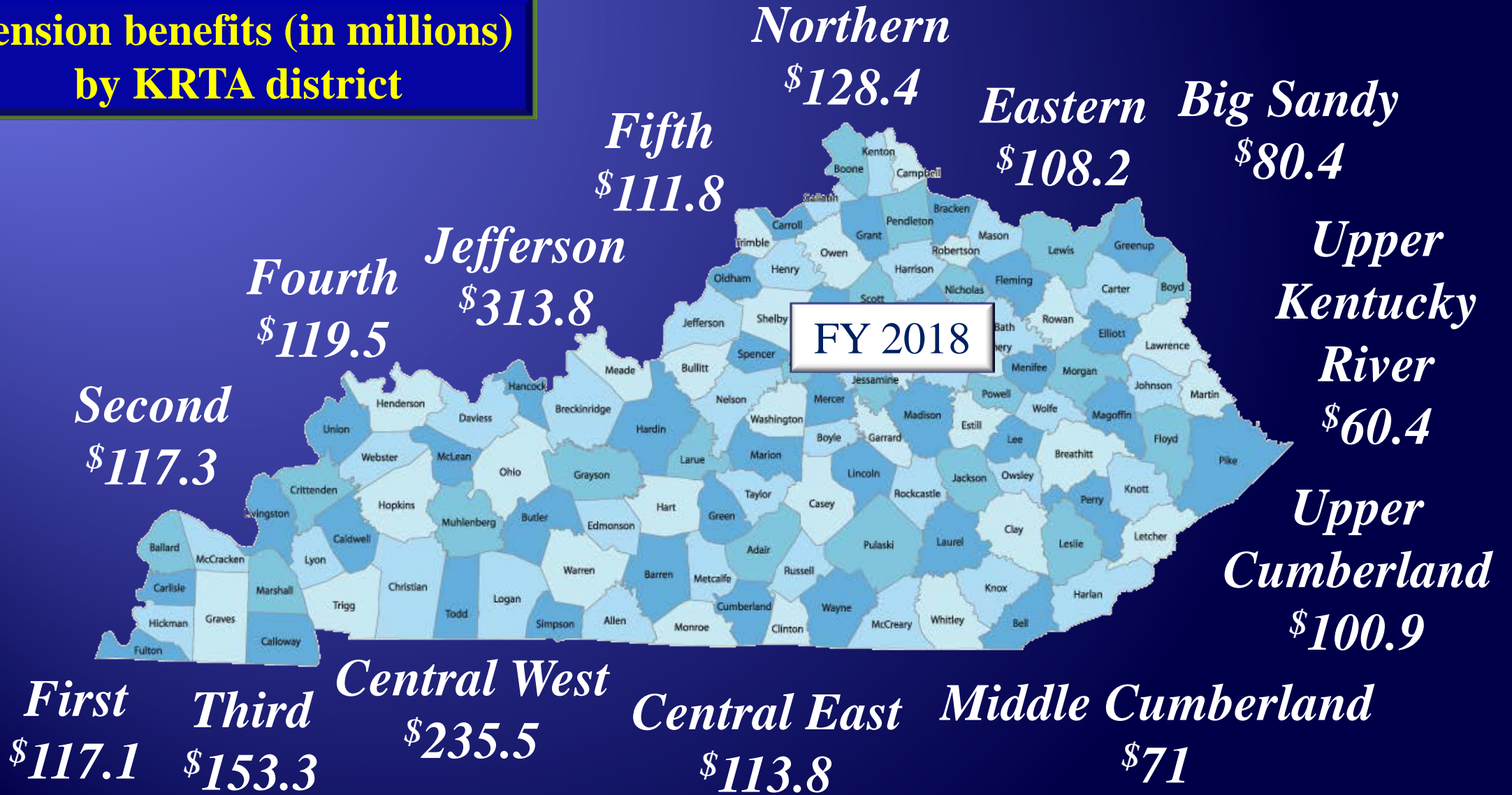
Pension benefits for FY 2018 by congressional district (estimated)



89% of TRS retirees live in Kentucky

Retired Teachers Impact Across Kentucky

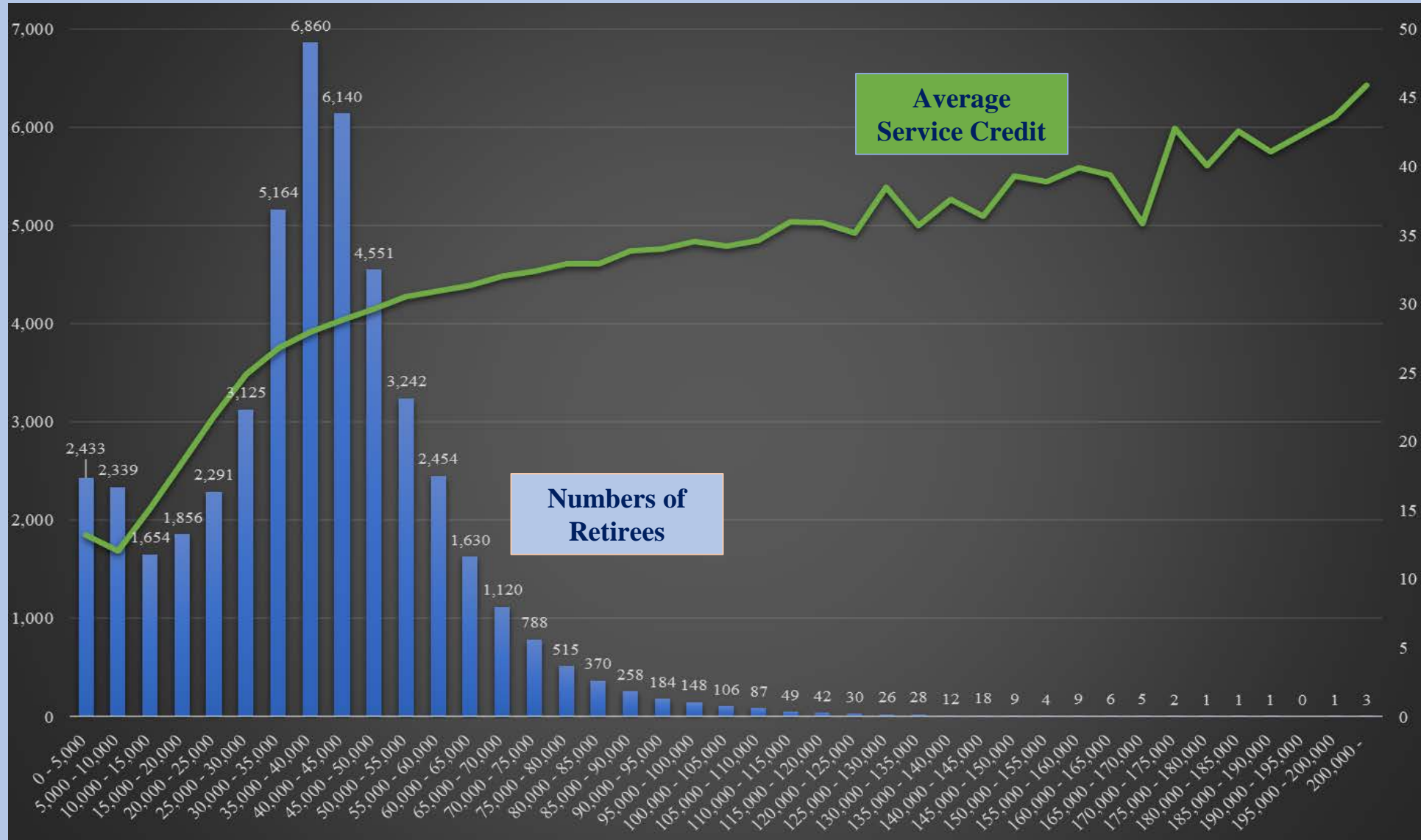
Pension benefits (in millions)
by KRTA district



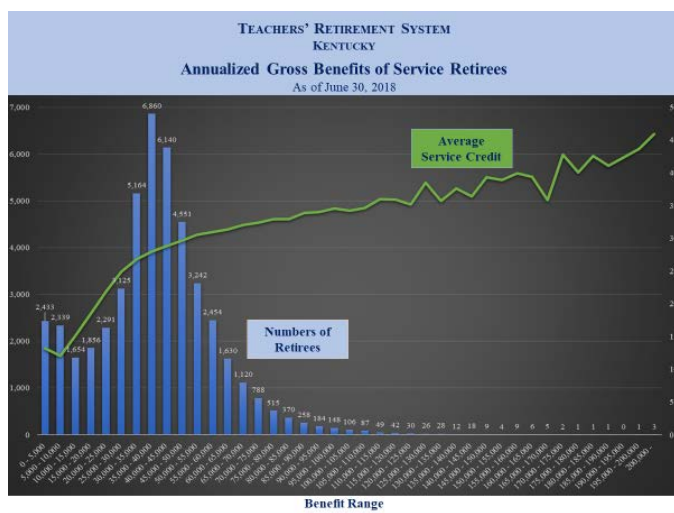
**TEACHERS' RETIREMENT SYSTEM
KENTUCKY**

Annualized Gross Benefits of Service Retirees

As of June 30, 2018



Benefit Range



What the chart shows

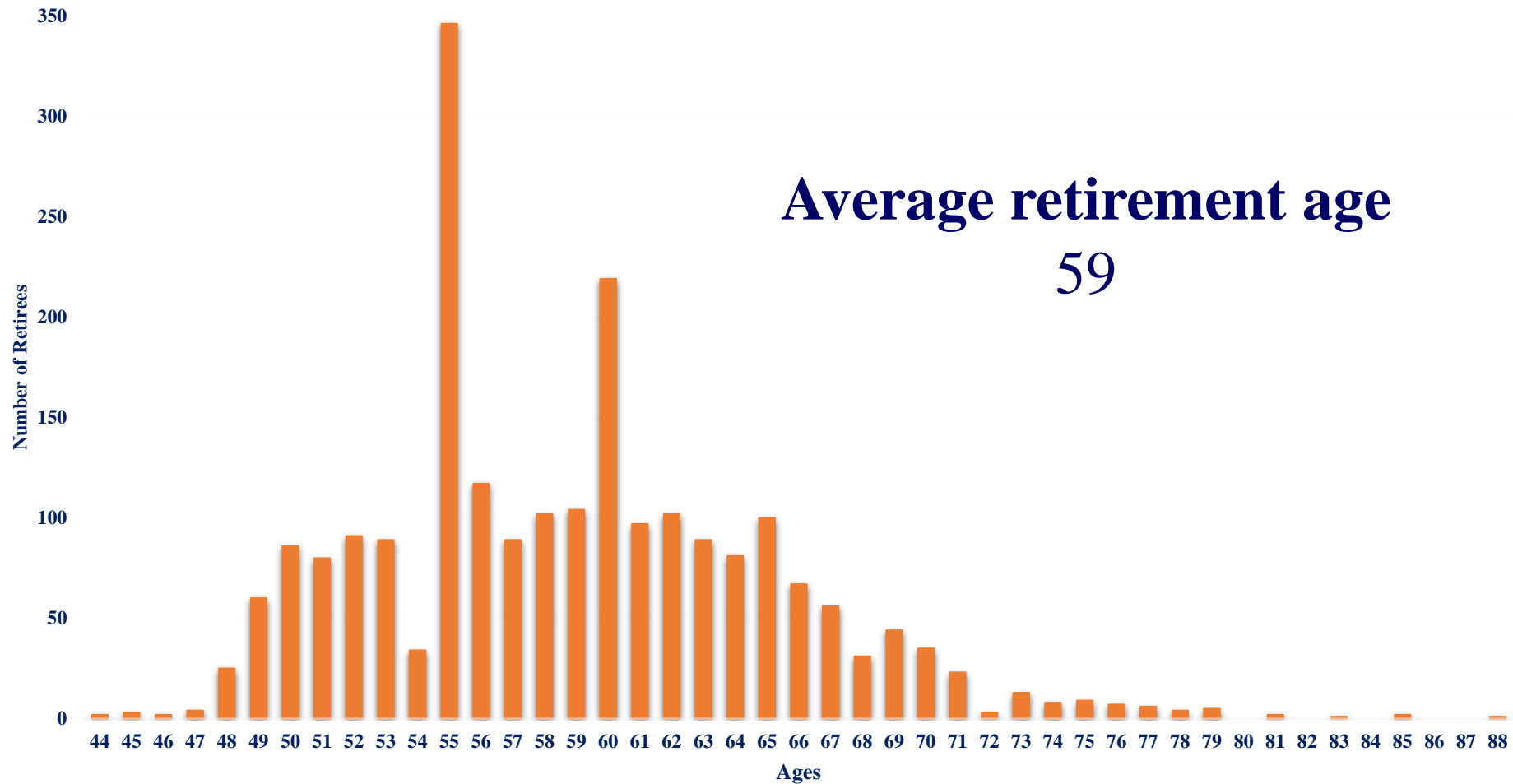
- 54% of retirees received \$40,000 or less in Fiscal Year '18
- 89% of retired teachers receive \$60,000 or less
- Less than 1% of retirees (0.9%) receive more than \$100,000
- Careers of retirees receiving \$20,000 to \$40,000 averaged 26 years
- People receiving higher pensions also worked longer

Remember: TRS replaces Social Security

Note: Excludes disability retirement payments

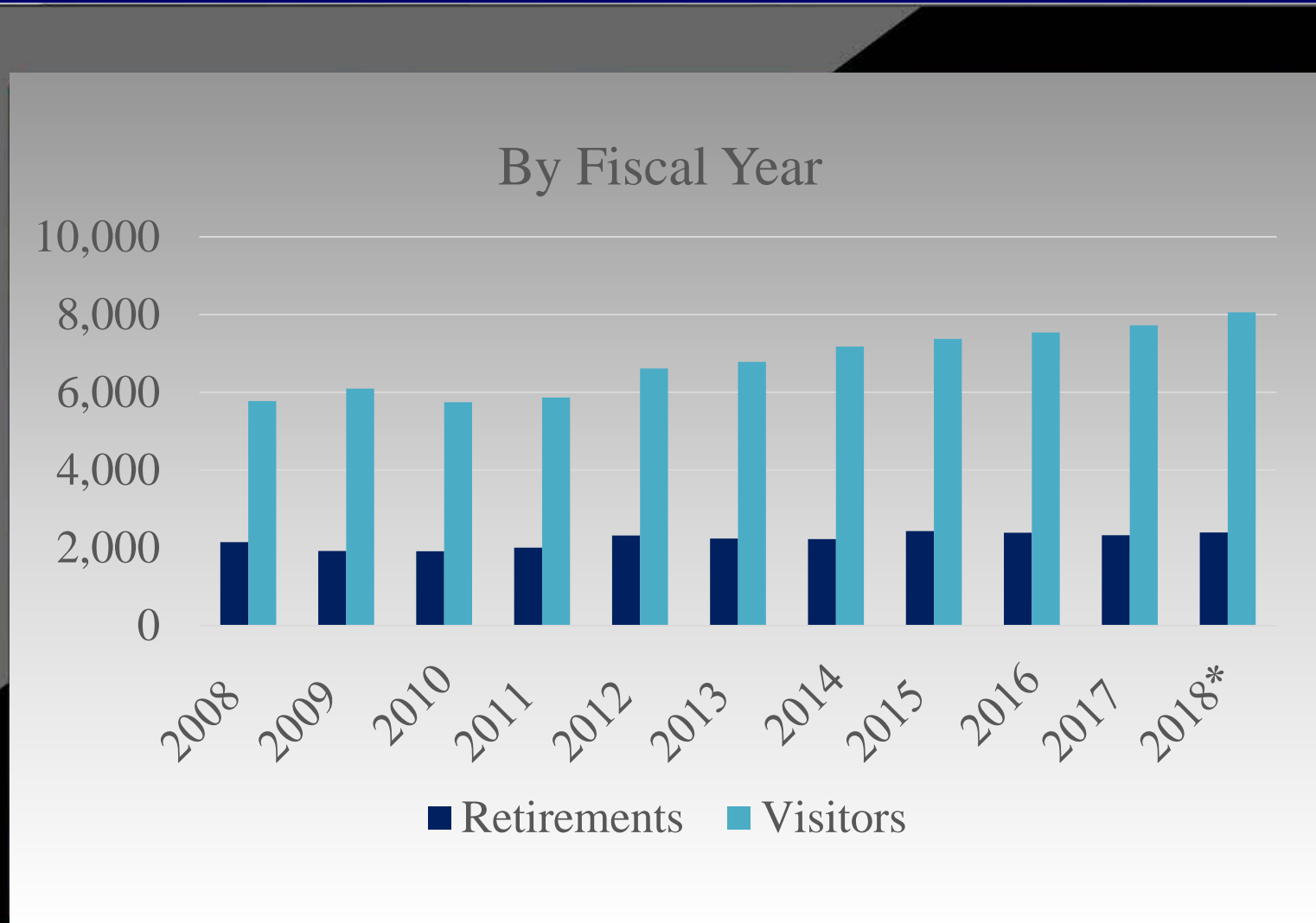
Number of Retirees by Age at Retirement

Fiscal Year 2018: 2,239 Service Retirements



- Only 8% retire before age 50
- More than 4 times as many people retire at 65 & over than under age 50
- Average career teacher retiring in FY 2018 worked more than 29 years

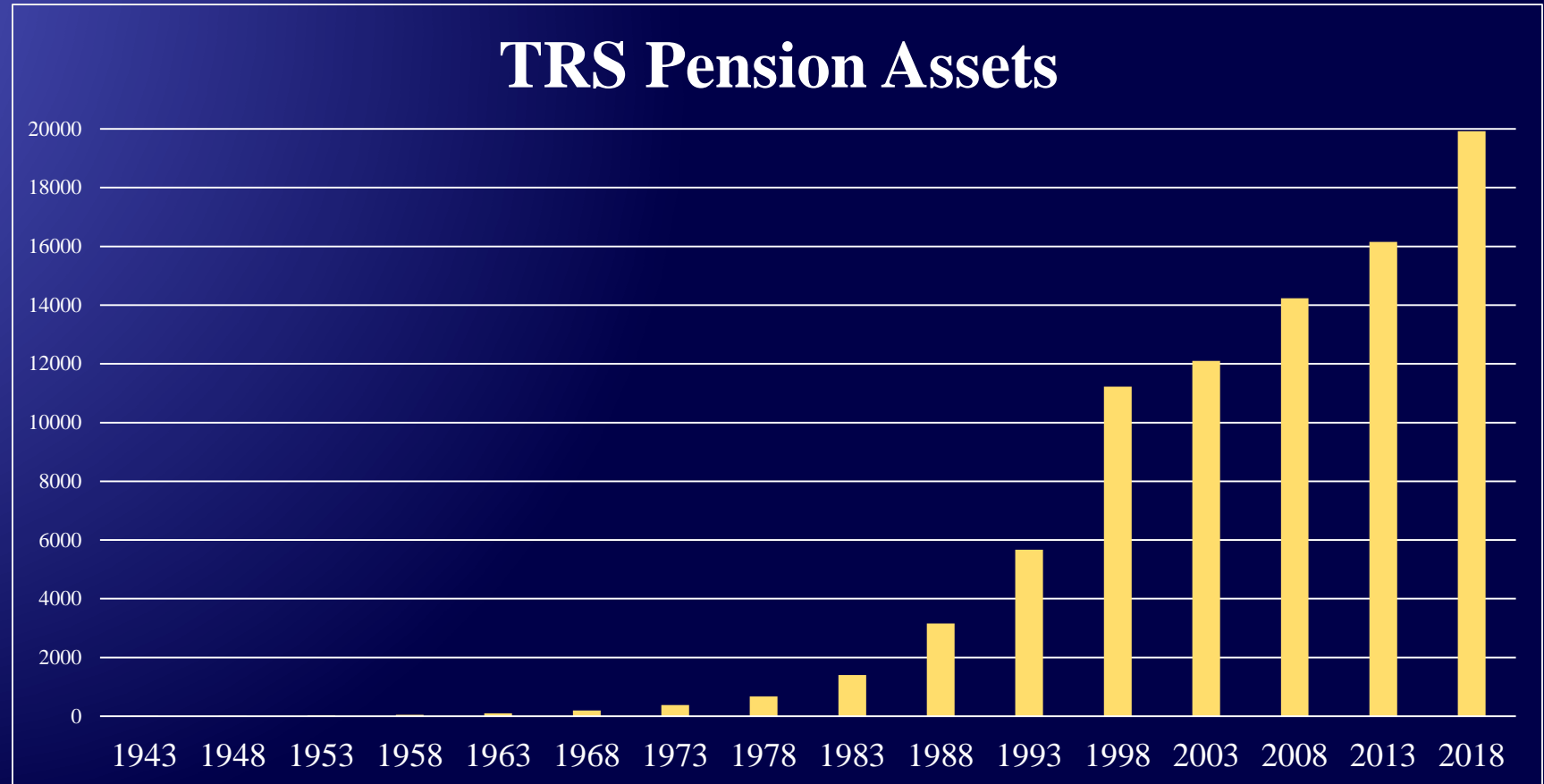
Retirements and Visitors



Record Assets

**Assets of
about \$21
billion**

In pension, health
insurance & life
insurance trusts



Dollars in millions (FY 2018 – preliminary/unaudited)



Actuarial Status

Dollars in millions

	Assets	Liabilities	Unfunded	Percent
PENSION	\$ 18,514.6	\$ 32,819.9	\$ 14,305.3	56.4%
GASB 67	\$ 18,707.7	\$ 46,966.8	\$ 28,259.1	39.8%
	Assets	Liabilities	Unfunded	Percent
MEDICAL	\$ 985.7	\$ 3,691.7	\$ 2,706.0	26.7%
GASB 74	\$ 958.4	\$ 4,524.1	\$ 3,565.7	21.2%

As of June 30, 2017

Board of Trustees



BOARD OF TRUSTEES

Fiduciaries of TRS



RON SANDERS
Chair, Hodgenville



ALISON WRIGHT
Vice Chair, Georgetown



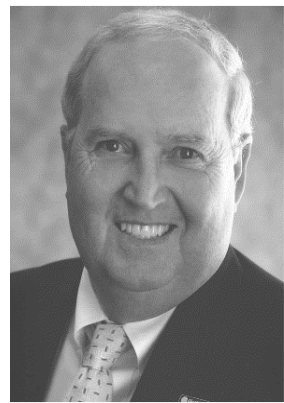
ALLISON BALL
State Treasurer



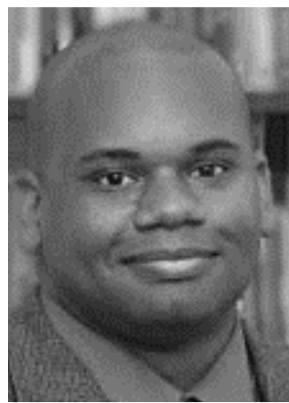
JOHN BOARDMAN
Lexington



FRANK COLLECCHIA
Louisville



HOLLIS GRITTON
Union



WAYNE LEWIS, Ph.D.
Education Commissioner



BRENDA MCGOWN
Bowling Green



LYNN PATTERSON, Ed.D.
Murray




LAURA SCHNEIDER
Walton



JOSH UNDERWOOD
Tollesboro

Trustee Elections Each May

Please complete the ballot below, tear on perforation and mail. NO POSTAGE NECESSARY.



TEACHERS'
Retirement System
TRS
KENTUCKY

OFFICIAL BALLOT
Election of Board of Trustees Members per KRS 161.260
Mail no later than May 31, _____

This year the membership will be selecting one lay trustee and one active teacher trustee.

Please vote for ONLY ONE Lay Trustee and ONLY ONE Active Teacher Trustee.

An extra line is provided if you prefer to vote for a write-in candidate.

Candidates for Lay Trustee	
<input type="checkbox"/>	1. _____
<input type="checkbox"/>	2. _____
<input type="checkbox"/>	3. _____
Candidates for Active Teacher Trustee	
<input type="checkbox"/>	1. _____
<input type="checkbox"/>	2. _____
<input type="checkbox"/>	3. _____

TRS OFFICIAL BALLOT NUMBER: **12345**



All contributing full-time, part-time and substitute members or those retired from TRS have the privilege to vote.

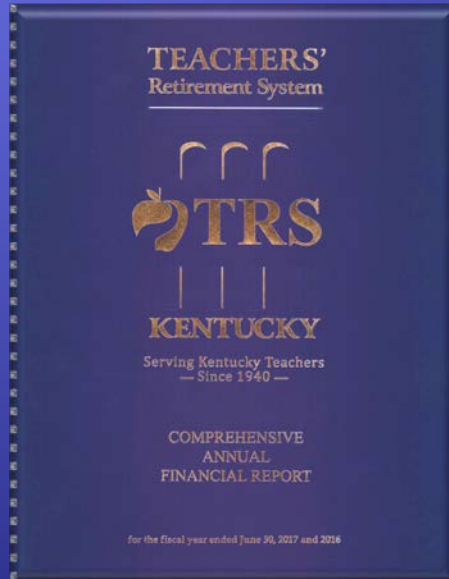


TRS Expenses vs. Other Systems

As of June 30, 2017	Percentage of Liabilities
TRS Kentucky	0.0324%
Kansas Public Employees	0.0428%
Louisiana Teachers	0.0483%
New Mexico Public Employees	0.0569%
Ohio Teachers Retirement System	0.0688%
Kentucky Retirement Systems	0.0758%
Georgia Employees	0.0866%
Indiana Public Employees	0.1281%

Transparent Low Fees & Investment Costs

Fees & investment costs documented annually in the TRS annual report



FY 2017
Total \$58 M
31/100 of 1%
of Assets

Schedule of Contracted and Administrative Investment Expenses
Retirement Annuity Trust
June 30, 2015

INVESTMENT COUNSELOR FEES	
EQUITY MANAGERS	
ALTERNATIVE INVESTMENTS continued...	
L.P.	(210,350)
L.P.	157,271
ro Fund XIV, L.P.	299,845
ro Fund XV, L.P.	300,000
ro Fund VII, L.P.	225,680
ro Fund VIII, L.P.	522,719
Michigan	859,775
Wisconsin	64,734
	577,811
Fund X, L.P.	817,555
Fund XI, L.P.	8,090
Capital Fund III, L.P.	343,776
III, L.P.	265,402
IV, L.P.	31,435
III, L.P.	150,512
	857,363
gy and	127,654
L.P.	
Lower Fund V, L.P.	221,925
Managers	\$ 11,478,820
OPERATIONAL EXPENSES	
Commission	335,800
	\$ 335,800
	358,850
	55,262
	34,134
	\$ 448,246
	84,131
	\$ 84,131
and Operational	\$ 2,639,773
ation	\$ 2,639,773
	\$ 44,892,486

74 Kentucky Teachers' Retirement System • Year Ended June 30, 2015

Investing



INVESTMENT PERFORMANCE

TRS PENSION RETURNS

AS OF JUNE 30, 2018

	Quarter	1-year	3-year	5-year	10-year	20-year
Gross	1.39%	10.81%	8.16%	9.44%	8.02%	6.27%
<i>Benchmarks</i>	1.33%	9.30%	8.15%	8.98%	7.48%	N/A
<i>Rankings</i>	Top 26%	Top 2%	Top 8%	Top 8%	Top 2%	N/A
Net	1.25%	10.51%	7.86%	9.22 %	7.80%	6.14%

30-year compounded gross return

8.39%

TRS Approach

- TRS never has used placement agents.
- TRS has not used hedge funds.
- TRS has fiduciary duty in procurement.
- All fees disclosed in annual report and quarterly on website.

Private Equity

- An adviser/manager pools investors' contributions and uses that money to make investments on behalf of the fund.
- Often focuses on long-term investment opportunities in assets that take time to sell with an investment time horizon typically of 10 or more years. The individual investments, for competitive reasons, are confidential.
- Regulated by the Securities and Exchange Commission
- All private equity fees paid by TRS are disclosed in annual report and quarterly on website.

Private Equity

Recent TRS private equity returns	
2012	9.7%
2013	8.7%
2014	18.6%
2015	11.7%
2016	5.0%
2017	11.7%
2018	20.7%

Possible Plan Changes



Possible Plan Changes

- Senate Bill 151 signed into law
- Circuit court declared SB 151 unconstitutional; appeal filed with Kentucky Supreme Court
- Possible outcomes:
 - SB 151 could be reinstated,
 - a new pension bill could be passed sometime in the future or,
 - possibly, continue the increased funding either with smaller or no changes

Assumptions





Basic Actuarial Assumptions

Assumed investment rate of return 7.5%
Projected wage (teacher salaries) increase. 3.5%



Basic Actuarial Assumptions

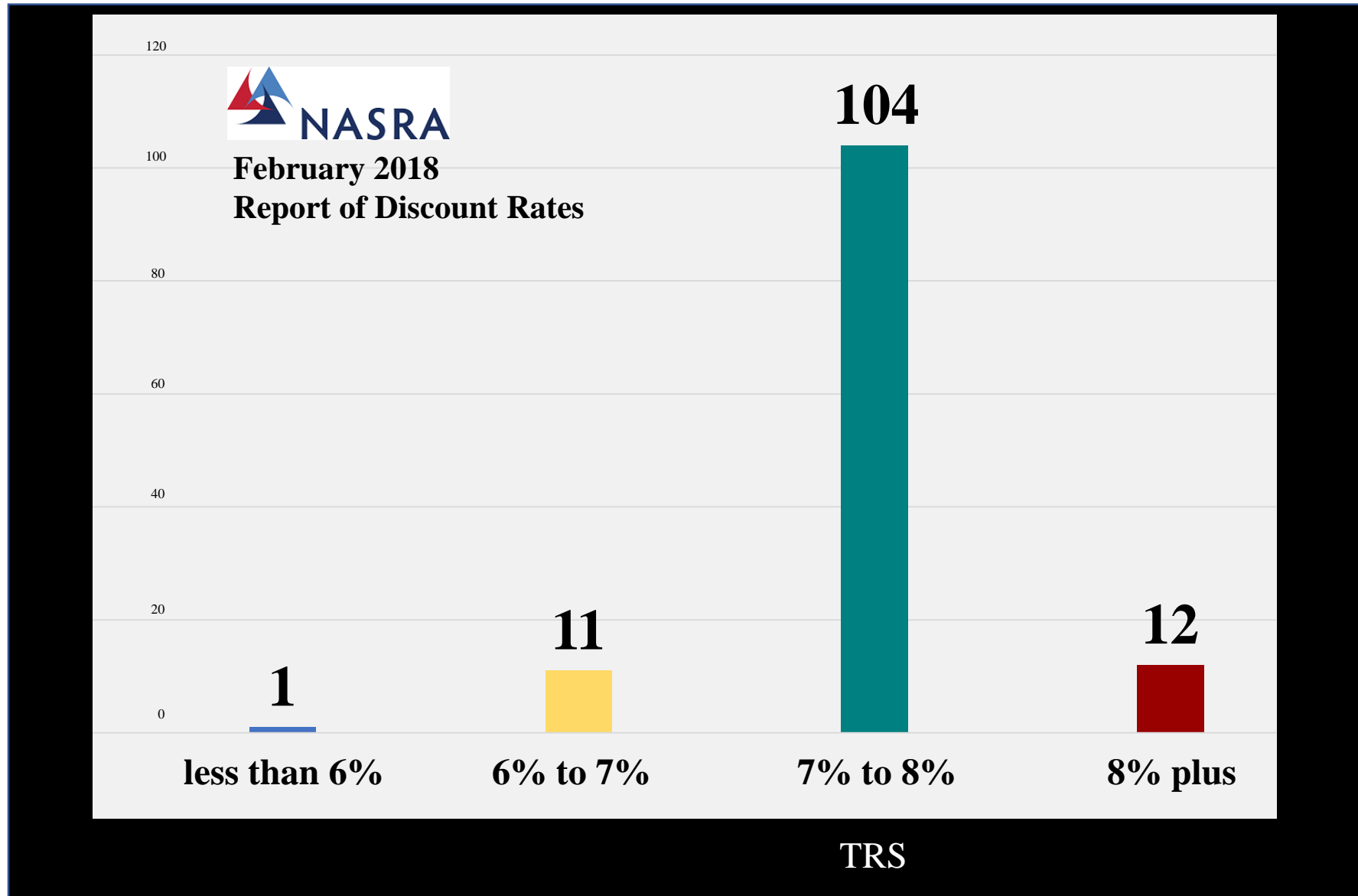
- Assumptions are long-term estimates so short-term fluctuations are expected.
- Most powerful assumption is investment return assumption
- Ongoing analysis of assumptions includes:
 - Peer system comparison
 - Long-term historical information
 - Modeling using market assumptions
 - Recent experience



2016 Study

- Assumed Rate of Return Stayed at 7.5%
- Changes from Experience Study
 - Price Inflation lowered from 3.5% to 3%
 - Wage Inflation (teacher's salaries) lowered from 4% to 3.5%

Peer Comparison



Historical Market Returns

1926-2017

What this is: The annualized return for every 30-year period beginning with 1926 to 1955 and continuing through 1988 to 2017 (63 30-year periods).

	S&P 500 Index	60% S&P/ 40% Corporate Bonds
Average	11.2%	9.1%
Median	10.9%	8.9%
Minimum	8.5%	6.6%
Maximum	13.7%	12.1%

Sources: Dimensional Fund Advisors (using Standard & Poor's Index Services Group & Morningstar Ibbotson SBBI Yearbook)

Current TRS Return Assumption: 7.5%

Historical Price Inflation

1926-2017

For All 30-year Periods	Rate
Average	3.8%
Median	3.6%
Minimum	1.4%
Maximum	5.4%
Source: U.S. Consumer Price Index	

Current TRS Price Inflation Assumption: 3%

Modeling Using Market Assumptions

Horizon Survey 2017 Assumptions

Asset Class	Asset Allocation Target	Projected Return
U.S. Large Cap Equity ¹	37.4%	7.8%
U.S. Small Cap Equity ¹	2.6%	8.4%
Developed Int'l Equity ²	16.5%	7.6%
Emerging Markets Equity ²	5.5%	8.7%
Fixed Income – Inv. Grade	15.0%	4.4%
Real Estate	7.0%	6.7%
Private Equity	7.0%	10.1%
Additional Category: High Yield	2.0%	6.2%
Other Additional Categories ³	5.0%	5.7%
Cash	2.0%	3.2%
Total TRSK⁴	100.0%	7.7%

¹ Domestic mid cap equity is modeled as 80% domestic large cap equity and 20% domestic small cap equity
² International equity is modeled as 75% developed markets and 25% emerging markets
³ Other Additional Categories is modeled as 50% high yield and 50% bank loans
⁴ Inflation rate assumption is 2.4%

Current TRS Return Assumption: 7.5%

Recent Experience

TRS Member Average Wage (Salaries) Increase

10-year	1.84%
20-year	3.15%
30-year	4.04%

- Assumption, which is based on a 30-year projection, remains on target
- 10-year average includes Great Recession and implementation of Shared Responsibility that required districts to contribute to retiree health care
- Charter school teachers to be in TRS

Current TRS Wage Increase Assumption: 3.5%

Outreach





Teachers' Retirement System
 479 Versailles Road, Frankfort, Kentucky 40601
 Monday - Friday 8 a.m. - 5 p.m. ET
 Local 502-848-8500 Toll Free 800-618-1687



TRS Self-Service Login

Use your TRS ID and password to log in to the member self-service portal. If you are a first time user, click on Register and follow the steps to complete registration.

[Privacy policy & Disclaimer](#) | TRS © 2015

TRS ID

Continue

New user click to [Register](#)

Disclaimer: The TRS Pathway System and the TRS Member Self-Service Portal are operated and maintained by the Teachers' Retirement System (an agency of the Commonwealth of Kentucky) and contain confidential information and data. These websites are intended only to be accessed by authorized users. Unauthorized access, unauthorized use, misuse, distribution or abuse of this information is prohibited. Unauthorized attempts to upload information or change information on these services is strictly prohibited and may violate applicable state and federal laws.

**Pathway
self-service portal**

<https://mss.trs.ky.gov/>



*Desktop & Mobile
app access for*

Active Members

Retired Members

Download TRS Pathway app



TRS Keeping In Touch

Special mailings
and newsletters

Teachers' Retirement System
ACTIVE MEMBER EDITION OCTOBER 2016

TRS KENTUCKY

TRS Investing Strategy Working Long Term
by Gary L. Harbin, CPA, Executive Secretary

INSIDE:

New TRS Look	2
Underwood Elected	2
Board Thanks Gov. Bevin	3
Security Dos & Don'ts	3
TRS Website Index	3
Death of an Active or	3
New Contact Info	4
Working Past 65?	4

NEW ADDRESS FOR TRS WEBSITE:
TRS.KY.GOV

PATHWAY <https://ms.trs.ky.gov> [KyTeachersRS](#) facebook.com/KyTeachersRS

Serving Kentucky Teachers Since 1940

- Active Members**
 - Hot Topics: Retirement 101 Workshop, Pre-Retirement Seminars, QDRO Forms
- Retired Members**
 - Hot Topics: Open Enrollment for those under age 65, Open enrollment for age 65 and over, 1099R Information
- Agency Employers**
 - Hot Topics: Pathway System, Annual Report Forms

Online



Information
Center

info@trs.ky.gov

800-618-1687

TRS News & Information



<https://trs.ky.gov>



TEACHERS' RETIREMENT SYSTEM
PATHWAY



<https://mss.trs.ky.gov/>

TRS



facebook.com/KyTeachersRS



[@KyTeachersRS](https://twitter.com/KyTeachersRS)



Teachers' Retirement System
of the State of Kentucky

*Our Members
Come First!*

800-618-1687

502-848-8500

<https://trs.ky.gov>

Protecting & Preserving Teachers' Retirement Benefits