Public Pension Oversight Board 2017 Report

Research Memorandum No. 524

Kentucky Legislative Research Commission

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Public Pension Oversight Board

2017 Report

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Foreword

The health of Kentucky's pension systems has been a topic of urgent concern in Frankfort and across the state. To provide effective legislative oversight over Kentucky's pension system, the 2013 General Assembly passed Senate Bill 2, establishing a 13-member Public Pension Oversight Board. The original structure of the board was refined by Senate Bill 2 of the 2017 General Assembly, which expanded the board's membership to 19 members by adding six legislators.

This 2017 Report of the Public Pension Oversight Board summarizes the work of the board and provides an overview of its component systems: the Kentucky Employees Retirement System, County Employees Retirement System, the State Police Retirement System, and the Judicial Form Retirement System. The report describes the management and policies related to pension benefit eligibility for each of these systems. The report goes on to describe the funding and investments for the plans and the benefits committed to retirees. After summarizing the presentations and proposals made by key constituencies, this report then enumerates the policy recommendations adopted by the Public Pension Oversight Board.

The board's co-chairs would like to thank the board members, all those who attended the board meetings, and those who provided research, testimony, and input to the board. Finding solutions to Kentucky's pension crisis will only be possible through thoughtful participation by board members, the active involvement of constituent groups, and the diligent continuing work of public employees.

David A. Byerman
Director

Legislative Research Commission
Frankfort, Kentucky
December 31, 2017

Contents

Tables

Summary

The 2013 General Assembly passed Senate Bill 2, which established the Public Pension Oversight Board (PPOB) as a statutory committee. The purpose of the board is assist the General Assembly with its review, analysis, and oversight of the administration, benefits, investments, funding, laws, administrative regulations, and legislation pertaining to the state-administered retirement systems. The board's oversight functions were initially limited to the Kentucky Retirement Systems, which administers the Kentucky Employees Retirement System (KERS), the County Employees Retirement System, and the State Police Retirement System (SPRS). However, legislative changes in 2015 expanded the board's oversight functions to include the Teachers' Retirement System (TRS) and the Judicial Form Retirement System, which administers the Legislators' Retirement Plan (LRP) and the Judicial Retirement Plan.

The oversight board met 10 times in 2017, and the material covered included overviews of system funding and cash flows; semiannual investment reviews required by statute; legislative updates; a review of actuarial assumptions and recent changes; an administrative expenses review; testimony from employee groups, retiree groups, and other interested groups; and periodic updates on the Pension Performance And Best Practices Analysis conducted by the PFM Group. A summary of the benefits, funding, investments, and testimony before the Public Pension Oversight Board appears in Chapters 1 to 5 of this publication.

At the December 18, 2017, meeting, the board adopted legislative recommendations for the 2018 Regular Session of the General Assembly and administrative recommendations for PPOB staff. Chapter 6 lists the recommendations in detail.

Legislative recommendations from the board included the following:

- Evaluating the PFM performance audit findings and recommendations and adopting a financially sound approach to address issues facing the state-administered systems
- Enacting legislation to address LRP pension "spiking" issues
- Enacting the TRS housekeeping bill

Additionally, the Public Pension Oversight Board supports measures that would provide additional funding to improve the financial health and cash flow issues facing the KERS nonhazardous, SPRS, and TRS pension funds, while including a long-term statutory funding plan to meet the actuarially required contribution for the TRS pension plan.

Finally, the Public Pension Oversight Board also adopted the following administrative recommendations for staff in 2018:

- Research and review the fiduciary responsibilities and liabilities of pension board members and actuaries.
- Research and review the effectiveness of the 2017 pension transparency reforms to determine if additional transparency or accountability measure should be recommended.

Chapter 1

Overview Of Kentucky Retirement Systems Administration And Benefits

Composition Of Kentucky Retirement Systems

The Public Pension Oversight Board (PPOB) has oversight responsibilities for three systems administered by Kentucky Retirement Systems (KRS): the Kentucky Employees Retirement System (KERS), the County Employees Retirement System (CERS), and the State Police Retirement System (SPRS).

Kentucky Employees Retirement System

KERS was established in 1956, and its membership includes employees of state government, nonteaching staff at regional state-supported universities such as Eastern Kentucky University, and employees of local health departments, regional mental health centers, and other quasi-governmental entities. KERS includes both nonhazardous and hazardous-duty benefits and contribution structures. It is governed by Kentucky Revised Statutes 61.510 to 61.705 and Title 105 of the Kentucky Administrative Regulations.

County Employees Retirement System

CERS was established in 1958, and its membership includes employees of city and county governments, police, firefighters, nonteaching staff of local boards of education, circuit clerks, local library employees, and other local government agency employees. CERS includes both nonhazardous and hazardous-duty benefits and contribution structures. It is governed by Kentucky Revised Statutes 78.510 to 78.852 and Title 105 of the Kentucky Administrative Regulations.

State Police Retirement System

SPRS was established in 1958, and its membership includes all uniformed state police officers. SPRS is governed by Kentucky Revised Statutes 16.505 to 16.652 and Title 105 of the Kentucky Administrative Regulations.

These retirement systems, along with Social Security benefits, if applicable, and other sources of retirement income, such as other retirement accounts and postretirement employment, serve as the basis for providing income to state and local public employees during their retirement years.

Kentucky Retirement Systems Administration

Statute provides that a 17-member board of trustees oversee the administration of KRS, with 6 trustees being elected by the membership, 10 appointed by the governor, and 1 being the secretary of the Personnel Cabinet. The six elected trustees include two trustees elected by the KERS membership, three elected by the CERS membership, and one elected by the SPRS membership. Of the 10 trustees appointed by the governor, 6 must have at least 10 years of investment experience as defined by statute, 1 must be knowledgeable about the effects of pensions on local governments, and 3 are selected from lists submitted by the Kentucky League of Cities (KLC), the Kentucky Association of Counties (KACo), and the Kentucky School Boards Association. Elected and appointed trustees serve 4-year terms and may serve no more than three consecutive terms.

The board annually elects a chair and vice chair, and the chair appoints members to various committees of the board, including the investment committee, insurance committee, governance committee, audit committee, legislative committee, personnel committee, and special committee on benefits and funding. The current composition of the board appears in Table 1.1. The board appoints an executive director to oversee day-to-day operations and to staff the needs of the systems. The current interim executive director is David Eager, and as of June 30, 2017, KRS consisted of 243 full-time employees.

Table 1.1
Members Of Kentucky Retirement Systems Board Of Trustees, December 2017

Member Name	Appointment/Election
John R. Farris	Governor appointee, chair
David L. Harris	Governor appointee, vice chair
John E. Chilton	Governor appointee
William S. Cook	Governor appointee
Matthew Monteiro	Governor appointee
Kelly Downard	Governor appointee
Neil P. Ramsey	Governor appointee
J.T. Fulkerson	Governor appointee, KLC
W. Joe Brothers	Governor appointee, KSBA
David M. Gallagher	Governor appointee, KACo
Vince Lang	KERS elected trustee
Mary Helen Peter	KERS elected trustee
Betty Pendergrass	CERS elected trustee
David Rich	CERS elected trustee
Jerry W. Powell	CERS elected trustee
Keith Peercy	SPRS elected trustee
Thomas Stephens	Personnel Cabinet Secretary
Thomas K. Elliott, chair	Governor appointee, nonvoting*

Note: KLC = Kentucky League of Cities; KSBA = Kentucky School Boards Association; KACo = Kentucky Association of Counties; KERS = Kentucky Employees Retirement System; CERS = County Employees Retirement System; SPRS = State Police Retirement System.
* In May 2016, Gov. Matt Bevin issued an executive order removing Thomas K. Elliott as member of the board. This order is being challenged in a lawsuit by the Attorney General, Elliott, and Mary Helen Peter, who is a current KERS elected member. See *Elliott v. Bevin*, Franklin Circuit Court, 16-CI-656. In September 2016, a Franklin Circuit judge ruled that Elliott could remain on the board of directors, but only as a nonvoting member.
Source: Kentucky Retirement Systems.

Kentucky Retirement Systems Employer And Employee Membership

As of June 30, 2017, 354 agencies participated in KERS and 1,138 agencies participated in CERS. For both systems, state statute defines the types of agencies that are eligible for participation, with final approval in the process being granted or denied by the KRS board. In the case of KERS, an executive order declaring the agency eligible for participation is required, while CERS agencies must meet statutory definitions in order to participate (the board determines whether the agency meets the definition). Once an agency begins participating, the agency is not allowed to discontinue participation, unless the agency is eligible to voluntarily discontinue participation or the systems require it to discontinue participation. If an agency discontinues participation, it must pay all actuarial costs for leaving the system.

All regular full-time employees hired after the agency's participation date are required to contribute to the systems. For KERS and CERS, the term *regular full-time* means an employee who averages 100 hours of work per month over a calendar or fiscal year, except that a school board employee is required to average 80 hours per month over the months represented by the days worked.[a] All regular full-time state police officers participate in SPRS. Table 1.2 shows the numbers of employees (often referred to as active members), former employees who have accounts but are not retired (often referred to as inactive members), and retired members by system.

Table 1.2
Number Of Active, Inactive, And Retired Members, By System
June 30, 2017

System	Active Members	Inactive Members	Retired Members	Total
KERS nonhazardous	36,725	44,848	40,813	122,386
KERS hazardous	4,061	4,363	2,823	11,247
CERS nonhazardous	84,401	78,940	54,018	217,359
CERS hazardous	9,321	2,442	7,186	18,949
SPRS	910	278	1,393	2,581
Total	135,418	130,871	106,233	372,522

Note: KERS = Kentucky Employees Retirement System; CERS = County Employees Retirement System; SPRS = State Police Retirement System.
Source: Kentucky Retirement Systems Comprehensive Annual Financial Report, June 30, 2017.

KRS Employee Participation Requirements

Employees earn service credit for months and days worked in regular full-time positions. With the exception of school board employees, all employees earn 1 month of service credit in the systems for every month worked in a regular full-time position. School board employees working in regular full-time positions earn service credit based on their days worked, with

[a] Certain exceptions apply to the regular full-time requirement such as seasonal, temporary, and interim positions that are not subject to the participation requirements. However, statute limits the duration and frequency of use of these positions by agencies.

180 days worked in a regular full-time position equaling 12 months of service credit (less service credit is given for days worked fewer than 180).

Within KERS and CERS, there are both nonhazardous and hazardous-duty benefit and contribution structures. For a job to be classified as hazardous duty, it must meet the definition and requirements established by state law, the employing agency must request hazardous-duty coverage for the position and agree to pay the higher employer contribution rates, and the KRS board of trustees must review and adopt the position as hazardous. In general, hazardous-duty positions in KERS and CERS primarily cover police, fire, emergency medical services, and corrections employees.

Retirement Eligibility

Employees must meet certain age or service credit requirements before they can retire and begin receiving benefits. In KRS, the retirement eligibility requirements vary based on type of coverage (nonhazardous or hazardous-duty) and the date the employee first began participating in the systems. Table 1.3 shows eligibility requirements for nonhazardous employees, and Table 1.4 shows eligibility requirements for hazardous-duty employees. Both tables show the requirements to earn an unreduced benefit (no penalties) and the requirements for a reduced benefit (penalties are actuarially determined and based on how many years the employee is short of reaching an unreduced benefit).

Table 1.3
Retirement Eligibility Requirements For KERS/CERS Nonhazardous Members

Participation Date	Unreduced Benefit	Reduced Benefit
Prior to Sept. 1, 2008	• Any age with at least 27 years of service or • Age 65 with at least 4 years of service	• Any age with at least 25 years of service or • Age 55 with at least 5 years of service
On or after Sept. 1, 2008, but prior to Jan. 1, 2014	• Must meet rule of 87 (age + service = 87) and must be at least 57 years of age or • Age 65 with at least 5 years of service	Age 60 with at least 10 years of service
On or after Jan. 1, 2014	• Must meet rule of 87 (age + service = 87) and must be at least 57 years of age or • Age 65 with at least 5 years of service	No reduced benefit provisions

Source: Kentucky Retirement Systems.

Table 1.4
Retirement Eligibility Requirements For KERS/CERS Hazardous-Duty And SPRS Members

Participation Date	Unreduced Benefit	Reduced Benefit
Prior to Sept. 1, 2008	• Any age with at least 20 years of service or • Age 55 with at least 5 years of service	Age 50 with at least 15 years of service
On or after Sept. 1, 2008 but prior to Jan. 1, 2014	• Any age with at least 25 years of service or • Age 60 with at least 5 years of service	Age 50 with at least 15 years of service
On or after Jan. 1, 2014	• Any age with at least 25 years of service or • Age 60 with at least 5 years of service	No reduced benefit provisions

Source: Kentucky Retirement Systems.

System Benefits

Each system is designed to provide three types of benefits: a monthly retirement benefit for life, disability/death benefits, and health insurance benefits after retirement. Benefits vary based on type of coverage (nonhazardous or hazardous-duty) and the date the employee first began participating in the system. Information on each of these benefits is provided on the following pages.

Monthly Retirement Benefits For Members Participating Prior To January 1, 2014

Benefits for members who began participating in the systems prior to January 1, 2014, are based on the following formula established by statute:

$$\text{Final compensation} \times \text{Benefit factor} \times \text{Years of service credit} = \text{Annual benefit}$$

Retirement benefit calculations for members under this formula appear in Tables 1.5 to 1.8.

Table 1.5
Retirement Benefit Calculation For KERS/CERS Nonhazardous Employees Participating Prior To September 1, 2008

Final Compensation	Benefit Factor	Service Credit
Average of highest 5 fiscal years of salary	• KERS: 1.97 percent, except that the value is 2 percent for employees with 13 months of service between January 1998 and January 1999 • CERS: 2.2 percent if participating prior to August 1, 2004; 2 percent if participating on or after August 1, 2004, but prior to September 1, 2008	Service earned for time worked in a regular full-time position, purchased service, and service credit for accumulated sick leave at retirement

Note: KERS = Kentucky Employees Retirement System; CERS = County Employees Retirement System.
Source: Kentucky Retirement Systems.

Table 1.6
Retirement Benefit Calculation For KERS/CERS Nonhazardous Employees Participating On Or After September 1, 2008, But Prior To January 1, 2014

Final Compensation	Benefit Factor: Years Of Service	Factor	Service Credit
Average of 5 complete fiscal years of salary immediately preceding retirement	10 or less	1.10%	Service earned for time worked in a regular full-time position, purchased service, and up to 12 months of service credit for accumulated sick leave at retirement
	More than 10, but no more than 20	1.30	
	More than 20, but no more than 26	1.50	
	More than 26, but no more than 30	1.75	
	Additional years above 30	2.00*	

*The 2.00 percent benefit factor applies only to service above 30 years of service credit.
Source: Kentucky Retirement Systems.

Table 1.7
Retirement Benefit Calculation For SPRS And KERS/CERS Hazardous-Duty Employees Participating Prior To September 1, 2008

Final Compensation	Benefit Factor	Service Credit
Average of highest 3 years of salary	• KERS: 2.49% • CERS and SPRS: 2.50%	Service earned for time worked in a regular full-time position, purchased service, and service credit for accumulated sick leave at retirement

Source: Kentucky Retirement Systems.

Table 1.8
Retirement Benefit Calculation For SPRS And KERS/CERS Hazardous-Duty Employees Participating On Or After September 1, 2008, But Prior To January 1, 2014

Final Compensation	Benefit Factor: Years Of Service	Factor	Service Credit
Average of highest 3 complete fiscal years of salary	10 or less	1.30%	Service earned for time worked in a regular full-time position, purchased service, and up to 12 months of service credit for accumulated sick leave at retirement
	More than 10, but no more than 20	1.50	
	More than 20, but less than 25	2.25	
	25 or more years	2.50	

Source: Kentucky Retirement Systems.

The annual benefit resulting from the calculations in Tables 1.5 to 1.8 is paid to the retiree in monthly installments. At retirement, a retiree may choose to take a reduced benefit to provide a monthly benefit to a beneficiary upon death, either for a period certain or for the life of the beneficiary.

Retirement Benefit Calculation For Members Participating On Or After January 1, 2014

Members who began participating in the systems on or after January 1, 2014, are provided retirement benefits through a cash balance plan that provides benefits based on an account balance, rather than on a formula. This change was enacted in Senate Bill 2, during the 2013 Regular Session.

The cash balance plan is not a defined contribution plan, but rather a defined benefit plan that operates as another benefit tier within the retirement systems. While it is a type of defined benefit plan, it does have several characteristics of a defined contribution plan with individual employee accounts, benefits based on the employee's account balance at retirement (employee and employer contributions and investment returns), and some variability in benefits due to investment returns. It differs from a defined contribution plan in that a minimum level of investment return is guaranteed on the employee accounts, the retirement systems rather than the employee manage investments, and employees can annuitize their account balance upon retirement (to receive it in the form of a monthly benefit).

In the cash balance plan, employees contribute the same amount as newer employees, who began participating prior to January 1, 2014, except that the 5 percent of pay (8 percent hazardous-duty) they contribute to fund pension benefits goes into their individual accounts, along with an employer pay credit of 4 percent of their salary (7.5 percent hazardous-duty). Employees receive a guaranteed return of 4 percent annually and 75 percent of the excess returns above 4 percent (the excess returns are calculated on a 5-year smoothed return). The combined guaranteed returns and excess return resulted in an interest credit for FY 2017 of 7.41 percent to 8.07 percent, based on individual system investment return data. In FY 2016, the rate varied from 4.83 percent to 5.01 percent. Former or inactive employees, who did not contribute to the cash balance plan during the year, receive a 4 percent interest credit.

Employees in the cash balance plan are vested for employer contributions and investment returns on those employer contributions after 5 years. Upon reaching retirement eligibility, employees can take their account balance in a lump sum or have it annuitized into one of the monthly benefit payment options currently available through the retirement systems for other members.

Retiree Health Insurance Benefits

The systems also provide access to group rates and medical insurance for retired members, spouses, and dependents. Coverage for retirees not eligible for Medicare is provided through the Kentucky Employees' Health Plan, the same health plan provided to state and school board employees. Coverage for Medicare-eligible retirees is provided through a plan administered by or contracted through KRS, which then coordinates with Medicare for delivery of health benefits.

As provided by statute, the systems also subsidize medical coverage for the retiree and in some cases for the dependents of the retiree, most often if the member retires with hazardous-duty service credit. In general, employees participating prior to July 1, 2003, receive a percentage of the premium paid upon retirement based on their service credit, while employees who begin participating after that date receive a set dollar amount per month for each year of service credit. Tables 1.9 and 1.10 provide details about the benefits for nonhazardous and hazardous-duty members based on their participation dates.

In 2018, the maximum retiree health subsidy for a nonhazardous retiree with 20 years of service who began participating prior to July 1, 2003, is $729.34 per month in the Kentucky Employees' Health Plan and $252.51 per month for the Medicare-eligible plan. For a hazardous-duty retiree on a family plan in the Kentucky Employees Health Plan, the maximum subsidy is $1,767.60 per month.

Table 1.9
Retiree Health Insurance Premium Payments For KERS/CERS Nonhazardous Members

Participation Date In Systems	Eligibility Requirements	Percentage Or Dollars Of Premium Paid For Retiree	
Before July 1, 2003	Must be drawing monthly benefit	Years of service at retirement	% of premium paid for retiree
		Less than 4	0%
		4, but less than 10	25
		10, but less than 15	50
		15, but less than 20	75
		20 or more	100
On or after July 1, 2003, but prior to Sept. 1, 2008	Must be drawing monthly benefit and must have at least 10 years of service	$10 per month paid toward the health premium for each year of earned service. Amount is adjusted by 1.5% annually from date of participation.	
On or after Sept. 1, 2008	Must be drawing monthly benefit and must have at least 15 years of service	$10 per month paid toward the health premium for each year of earned service. Amount is adjusted by 1.5% annually from date of participation.	

Source: Kentucky Retirement Systems.

Table 1.10
Retiree Health Insurance Premium Payments For SPRS And KERS/CERS Hazardous-Duty Members

<table>
<tr><th rowspan="2">Participation Date In Systems</th><th rowspan="2">Eligibility Requirements</th><th colspan="3">Percentage Or Dollars Of Premium Paid For Retiree And Dependents Of Retiree</th></tr>
<tr><th>Years of service at retirement</th><th>% of premium paid for retiree</th><th>% of premium paid for dependents</th></tr>
<tr><td rowspan="5">Before July 1, 2003</td><td rowspan="5">Must be drawing monthly benefit</td><td>Less than 4</td><td>0%</td><td>0%</td></tr>
<tr><td>4, but less than 10</td><td>25</td><td>25</td></tr>
<tr><td>10, but less than 15</td><td>50</td><td>50</td></tr>
<tr><td>15, but less than 20</td><td>75</td><td>75</td></tr>
<tr><td>20 or more</td><td>100</td><td>100</td></tr>
<tr><td>On or after July 1, 2003, but prior to Sept. 1, 2008</td><td>Must be drawing monthly benefit and must have at least 10 years of service</td><td colspan="3">• $15 per month paid toward health premium for each year of earned service.
• Upon death of retiree, surviving spouse receives $10 per month paid toward health premium for each year of earned hazardous-duty service credit.
• Amounts are adjusted by 1.5% annually from date of participation.</td></tr>
<tr><td>On or after Sept. 1, 2008</td><td>Must be drawing monthly benefit and must have at least 15 years of service</td><td colspan="3">• $15 per month paid toward health premium for each year of earned service.
• Upon death of retiree, surviving spouse receives $10 per month paid toward health premium for each year of earned hazardous-duty service credit.
• Amounts are adjusted by 1.5% annually from date of participation.</td></tr>
</table>

Note: Percent/dollar amount paid on behalf of a hazardous-duty retiree's spouse/dependents is based solely on the retiree's hazardous service at retirement.
Source: Kentucky Retirement Systems.

Disability And Death Benefits

Like most defined benefit plans, the systems provide benefits for those employees who become disabled or who die prior to retirement, including in-the-line-of-duty disability and death benefits. After retirement, the benefits left to the retiree's beneficiary vary based on the payment option selected at retirement. For example, retiring employees may select to provide a lifetime benefit to a surviving spouse upon his or her death by taking an actuarially reduced monthly benefit. In addition, the systems provide a $5,000 lump-sum death benefit for members who retire with at least 4 years of service.

Cost Of Living Adjustments On Monthly Retirement Benefits

After the passage of Senate Bill 2 in the 2013 Regular Session of the General Assembly, members of the systems no longer receive automatic annual increases of 1.5 percent on their monthly retirement benefits. Language in SB 2 did provide that a 1.5 percent cost of living adjustment (COLA) could be granted if an individual system is 100 percent funded, and subsequent legislation authorizes the use of surplus funds to provide the 1.5 percent COLA, or if the General Assembly appropriates or directs payment of funds to prefund the COLA in the year it is provided.

Service Purchases And Sick Leave Service Credit

Many employees participating in the systems can choose to purchase service credit for other public employment or service as established by law, such as military service, federal service, university service, and nonqualified service, provided certain requirements established by state statute are met. In addition, employees of KERS/SPRS agencies and many CERS agencies receive additional service credit for accumulated sick leave at retirement. The costs for sick leave service credit are paid by the last participating employer.

Legislative changes in 2002, 2004, 2008, and 2013 have limited the use and impact on retirement eligibility of service purchases and sick leave service credit, particularly for new participants in the systems. The most recent changes in 2013 via SB 2 eliminated service purchases and sick leave service credit for new participants entering the system on or after January 1, 2014, with the exception of omitted service and recontributions of refunds.

Reemployment After Retirement

State statute places restrictions on retirees returning to work after retirement with a participating KRS employer. As a result of House Bill 1, passed during the 2008 Special Session, the following restrictions and requirements are applicable to employees who retire and return to work on or after September 1, 2008.

Required Break In Employment

The employee must have a 3 month break in employment before returning to any position with an employer participating in the systems, except that hazardous-duty KERS or CERS and SPRS retirees who return to work in a full-time hazardous-duty position are required to observe only a 1-month break in employment. If the break is not observed, the employee's retirement is voided and all benefit payments issued in error shall be repaid to the systems. Both the employee and employer must certify that no prearranged agreement for the employee to return to work existed prior to the employee's retirement. For elected officials, a reelection to the same office is considered a prearranged agreement if the official retires following the election but prior to taking office.

How It Works For The Employee

Provided the break is observed, the employee can return to work and draw a pension, but will not contribute to the systems or earn a second pension.

How It Works For The Employer

If the employee has returned to work in a position that would have qualified for participation in the systems, the employer is required to pay contributions to the systems and to reimburse the systems for the cost of health insurance premiums paid by the systems for the retiree (not to exceed the cost of the single premium). If the employee takes health coverage through the employer and waives coverage with the systems, then no reimbursement is required. However, in 2014, 2015, and 2016, the General Assembly passed exemptions to the required employer contributions and health reimbursements for qualifying deputy sheriffs and city police officers and for the required health reimbursements for classified school board employees, who work less than 80 days per year.

Reciprocity

Members who have service in more than one retirement plan administered by the Commonwealth of Kentucky can combine service in the plans to determine eligibility for retirement and final compensation (years of highest salary). Each system will pay a benefit based on the amount of service in that system.

Taxation Of Benefits

Monthly benefits from all systems are subject to federal income tax. If a member made contributions with after-tax dollars (usually service purchases), then a portion of the monthly benefit at retirement will not be subject to federal income tax.

All benefits attributable to service earned on or before December 31, 1997, are exempt from Kentucky income tax. The portion of the member's benefits earned on January 1, 1998, and after is subject to Kentucky income tax. However, an annual pension exclusion of $41,110 applies to this portion and to other retirement income sources.

2017 Legislative Changes

Eight measures that directly affected KRS plans were passed during the 2017 Regular Session: Senate Bills 2, 3, 104, 126, and 197 and House Bills 173, 351, and 520.

SB 2 addressed transparency and reporting issues, board composition, and model procurement requirements. The bill required several reporting enhancements, including net of fee return information, additional investment fee and commission disclosure, and public disclosure of agency contracts. The bill added four new gubernatorially appointed members to the KRS board, each with required investment experience as defined by the bill. The legislation further required KRS to adhere to procurement laws applicable to other state agencies, with the exception of investment management contracts. The bill required KRS to establish an internal procurement policy that would be approved by the secretary of the Finance and Administration Cabinet and used for procurement of investment management services.

SB 3 required the disclosure of retirement benefit information from all state-administered retirement systems for all current and former members of the General Assembly.

SB 104 applied a 10 percent growth cap on compensation used to calculate retirement benefits during the last 5 years of employment, subject to certain exceptions, for prospective compensation earned after July 1, 2017, for members retiring on or after January 1, 2018. The bill also specified that the 10 percent growth cap on compensation would replace the existing "pension spiking" employer charge used for calculation purposes. The legislation also permitted active KRS members the opportunity to make a one-time, irrevocable election to transfer their benefits to the hybrid cash balance plan.

SB 126 redefined the definition of *final compensation* for Tier II state and county employees (new members in KERS/CERS/SPRS on or after September 1, 2008, but prior to January 1, 2014), allowing the use of partial fiscal years in final compensation calculation in order to reach at least a 60-month period for nonhazardous employees and at least 36 months for hazardous employees.

SB 197 transferred certain contract employees of Eastern Kentucky University, who are engaged in providing instructional and support services to the Department of Criminal Justice Training, to state employee status within the Justice and Public Safety Cabinet, thus requiring employees to participate in the KERS nonhazardous retirement plan.

HB 173 was a KRS housekeeping bill. The bill primarily consisted of technical and clerical amendments, while also amending the definition of *creditable compensation*, and changing language to allocate any lump-sum award of creditable compensation resulting from judicial or relevant administrative litigation to those years when the compensation was actually earned or should have been paid by the employer.

HB 351 was a follow-up to HB 62 that was passed in the 2015 Regular Session. HB 62 allows employers to voluntarily cease participation in KERS or CERS by paying the full actuarial costs of exiting the system, but required the exiting employer to provide an alternative retirement plan to employees. HB 351 removed an installment payment option, while also specifying that KRS shall develop separate assumptions for determining employers' cost for ceasing participation. The bill also specified the formula used to determine the assumed rate of return used in calculations of cost.

HB 520, which was related to the establishment of public charter schools, provided the inclusion of noncertified employees of public charter schools in CERS.

Chapter 2

Overview Of Teachers' Retirement System Administration And Benefits

Composition Of Teachers' Retirement System

The Public Pension Oversight Board has oversight responsibilities for the Teachers' Retirement Systems (TRS). TRS is the oldest statewide pension fund in Kentucky, established by the 1938 General Assembly. TRS administers pension, retiree health, and life insurance benefits to certified employees of local school districts, and employees of higher education agencies, educational cooperatives, and other public educational agencies. It is governed by Kentucky Revised Statutes 161.220 to 161.716 and Title 102 of the Kentucky Administrative Regulations.

TRS includes both university and nonuniversity benefit and contribution rate structures, with the majority of nonuniversity membership coming from certified employees of local school districts. University employees include teaching and administrative staff of regional state-supported universities and the community college employees of the Kentucky Community and Technical College System (KCTCS). Nonuniversity employees do not participate in or earn benefits from Social Security while working in a TRS-eligible position. University employees do participate and earn benefits in Social Security while working in a TRS-eligible position.

TRS (along with other sources of retirement income such as personal retirement accounts, postretirement employment, or Social Security, if applicable) serves as the basis for providing income to TRS employees during their retirement years.

TRS Administration

As provided by statute, an 11-member board of trustees oversees the administration of TRS, with 7 trustees being elected by the membership, 2 being appointed by the governor, 1 being the state treasurer, and 1 being the commissioner of education. The seven elected trustees include four active members, one retired member, and two "lay trustees" who are outside of the teaching profession. The two trustees appointed by the governor must have at least 10 years of investment experience as defined by statute. Elected and appointed trustees serve 4-year terms and may serve no more than three consecutive terms.

The board annually elects a chair and vice chair, and the chair appoints members to various committees of the board, including the investment committee, insurance committee, governance and audit committee, legislative committee, personnel committee, and special committee on benefits and funding. The current composition of the board appears in Table 2.1. The board appoints an executive secretary to oversee day-to-day operations and to staff the needs of the system. The current executive secretary is Gary Harbin, and as of June 30, 2017, TRS consisted of 106 full-time and 8 part-time or seasonal employees.

Table 2.1
Members Of Teachers' Retirement System Board Of Trustees
December 2017

Member Name	Appointment/Election
Ron Sanders, chair	Elected lay trustee
Alison Wright, vice chair	Elected active teacher
Josh Underwood	Elected active teacher
Mary Adams	Elected active teacher
Laura Schneider	Elected active teacher
Brenda McGown	Elected retired teacher
Hollis Gritton	Elected lay trustee
John Boardman	Governor appointee
Frank Collecchia	Governor appointee
Stephen Pruitt	Commission of Education
Allison Ball	State Treasurer

Source: Teachers' Retirement System.

TRS Employer And Employee Membership

As of June 30, 2017, 207 employers participated in TRS, including 173 local school districts, 15 state agencies, 6 higher education agencies that include regional state-supported universities and KCTCS, 8 educational cooperatives, and 5 other educational organizations. State statute lists the agencies that are required to participate in TRS.

Table 2.2 shows the number of employees (often referred to as active members), former employees who have accounts but are not retired (often referred to as inactive members), and retired members of TRS. School districts represent more than 95 percent of the active members participating in TRS.

Table 2.2
Number Of Active, Inactive, And Retired Members of TRS
June 30, 2017

	Active Members	Inactive Members	Retired Members	Total
TRS	72,130	51,422	52,966	176,518

Source: June 30, 2017, TRS Actuarial Valuation.

TRS Employee Participation Requirements

For nonuniversity employees, participation is mandatory for full-time positions with a TRS employer that require certification or graduation from a 4-year college. *Full-time* is defined as employment in a position that requires services on a continuing basis equal to at least seven-tenths of the normal full-time contract for any fiscal year. Employees of nonuniversity employers providing part-time or substitute teaching services are also required to participate in TRS.

For university employees, participation is optional for full time positions with a TRS employer that require certification or graduation from a 4-year college.

Retirement Eligibility

Employees must meet certain age or service credit requirements before they can retire and begin receiving benefits. In TRS, the retirement eligibility requirements vary based on the date the employee first began participating in the system. Table 2.3 shows eligibility requirements for TRS members to earn an unreduced benefit (no penalties) and the requirements for a reduced benefit (penalties are based on how many years the employee is short of reaching an unreduced benefit).

Table 2.3
Retirement Eligibility Requirements For Teachers' Retirement System

Participation Date	Unreduced Benefit	Reduced Benefit
Prior to Sept. 1, 2008	• Any age with at least 27 years of service or • Age 60 with at least 5 years of service	Age 55 with at least 5 years of service; reduction set by statute of 5% per year
On or after Sept. 1, 2008	• Any age with at least 27 years of service or • Age 60 with at least 5 years of service	Age 55 with at least 10 years of service; reduction set by statute of 6% per year

Source: Teachers' Retirement System.

System Benefits

TRS is designed to provide three types of benefits: a monthly retirement benefit for life, disability/death benefits, and health insurance benefits after retirement. Benefits vary based on the date the employee first began participating in the system. Information on each of these benefits is provided on the following pages.

Monthly Retirement Benefits For Members

Pension benefits for system members provide a percentage of the employee's salary at retirement for each year of service credit. The formula for calculating the benefit is as follows:

$$\text{Final average salary} \times \text{Benefit factor} \times \text{Years of service credit} = \text{Annual benefit}$$

Retirement benefit calculations for members under this formula appear in Tables 2.4 and 2.5.

Table 2.4
Retirement Benefit Calculation For TRS Nonuniversity Employees

Final Average Salary	Benefit Factor	Service Credit
• Average of the highest 5 years of salary or • Average of the highest 3 years of salary if the member is age 55 or more with at least 27 years of service credit	Participation date prior to July 1, 2002: • 2.0% for service credit prior to July 1, 1983 • 2.5% for service credit on or after July 1, 1983 • 3.0% for service credit in excess of 30 years* Participation date on or after July 1, 2002, but prior to July 1, 2008: • 2.0% if service credit is less than 10 years • 2.5% if service credit is more than 10 years • 3.0% for service credit in excess of 30 years* Participation date on or after July 1, 2008: • 1.70% if service credit is 10 years or less • 2.00% if service credit is more than 10 years, but not more than 20 years • 2.30% if service credit is more than 20, but not more than 26 years • 2.50% if service credit is more than 26, but not more than 30 years • 3.0% for service credit in excess of 30 years*	Earned service; purchased service

*The 3.0 percent benefit factor applies only to service above 30 years of service credit.
Source: Teachers' Retirement System.

Table 2.5
Retirement Benefit Calculation For TRS University Employees

Final Average Salary	Benefit Factor	Service Credit
• Average of the highest 5 years of salary or • Average of the highest 3 years of salary if the member is age 55 or more with at least 27 years of Kentucky service credit	Participation date prior to July 1, 2008: • 2.0% Participation date on or after July 1, 2008: • 1.50% if service credit is 10 years or less • 1.70% if service credit is greater than 10, but not more 20 years • 1.85% if service credit is greater than 20 but not more than 26 years • 2.0% if service credit is 27 or more years	Earned service; purchased service; sick leave service credit

Source: Teachers' Retirement System.

The annual benefit resulting from the calculations in Tables 2.4 and 2.5 is paid to the retiree in monthly installments. At retirement, a retiree may choose to take a reduced benefit to provide a monthly benefit to a beneficiary upon death, either for a period certain or for the life of the beneficiary.

Retiree Health Insurance Benefits

TRS also provides access to group rates and medical insurance for retired members, spouses, and dependents. Coverage for retirees not eligible for Medicare is provided through the Kentucky Employees' Health Plan, the same health plan provided to state and school board employees. Coverage for Medicare-eligible retirees is provided through a plan administered or contracted through TRS, which then coordinates with Medicare for delivery of health benefits.

As provided by statute, the system also subsidizes medical coverage for the retiree. However, the level of subsidy is determined by the TRS board of trustees based on the availability of funding.

Table 2.6 details the percentage of retiree health subsidy provided for TRS members based on years of service. In 2018, the maximum retiree health subsidy on a single plan is $512.96 per month in the Kentucky Employees' Health Plan and $258 per month for the Medicare-eligible plan. In addition, TRS has elected under legislative authorization to extend an additional subsidy for retired members who cover their dependents in the Kentucky Employees' Health Plan.

Table 2.6
Percentage Of Retiree Health Insurance Subsidy Paid For TRS Members

		Participation Date		
Years Of Service	**Retired And Age 65 By 1/1/2005**	**Prior To 7/1/2002**	**On Or After 7/1/2002 But Prior To 7/1/2008**	**On Or After 7/1/2008**
Less than 5	0%	0%	0%	0%
5 but less than 10	70	25	10	0
10 but less than 15	80	50	25	0
15 but less than 20	90	75	45	45
20 but less than 25	100	100	65	65
25 but less than 26	100	100	90	90
26 but less than 27	100	100	95	95
27 or more	100	100	100	100

Source: Teachers' Retirement System.

House Bill 540, which was passed during the 2010 Regular Session to address retiree health funding issues, increased employee contributions, employer contributions, and state appropriations. In addition, retirees not eligible for Medicare were also required to pay the equivalent of the Medicare Part B premium toward their costs of coverage in the Kentucky Employees' Health Plan, in addition to any other costs required by the plan.

Disability And Death Benefits

Like most defined benefit plans, the system provides benefits for those employees who become disabled or who die prior to retirement, including in-the-line-of-duty disability and death benefits as well as minimum benefits payable to the surviving spouse and dependents. After retirement, the benefits left to the retiree's beneficiary vary based on the payment option selected at retirement. For example, retiring employees may select to provide a lifetime benefit to a surviving spouse upon the employee's death by taking an actuarially reduced monthly benefit. In addition, the system provides a $5,000 life insurance benefit for members who retire under service or disability retirement provisions. A $2,000 life insurance benefit is provided for active members prior to retirement.

Cost Of Living Adjustments On Monthly Retirement Benefits

A 1.5 percent annual automatic cost of living adjustment is provided each July to retirees who have been retired at least 12 months, with a pro rata increase provided to retirees who have been retired less than 12 months. In the past, legislative action has created additional ad hoc COLAs; the last one, in 2007, provided an additional 0.6 percent increase in monthly benefits. Costs for prior ad hoc cost of living adjustments are being financed over time with direct appropriations to TRS.

Service Purchases And Sick Leave

Employees participating in TRS can choose to purchase service credit for other public employment or service as established by law (such as military service, federal Head Start service, out-of-state service, and nonqualified service) provided that certain requirements established by state statute are met.

School districts may choose to compensate retiring employees for up to 30 percent of their accumulated sick leave, which is then included in the member's final average salary, or the districts may choose to convert accumulated sick leave to service credit for the employee. Currently, all school districts choose to compensate for accumulated sick leave at retirement. All other employers may choose to convert accumulated sick leave to service credit for their retiring employees. Retirement costs for the inclusion of school districts' payments for sick leave are primarily financed over time with direct state appropriations, and costs to convert sick leave to service credit by other employers are paid by the individual employer.

Reemployment After Retirement

State statute places restrictions on retirees returning to work after retirement with a participating employer of TRS, and the restrictions are different for regional state-supported universities and KCTCS and all other employers.

Except in the case of reemployment with regional state-supported universities and KCTCS, employees who wish to return to work may do so under the following options:

- **Pension Waiver.** Retirees can waive their pension and return to work. During the period of reemployment, additional service and salary is earned and their benefit is recomputed upon subsequent retirement.

- **Part-Time Program.** Retirees can return to work part time after 3 months, retain their pension, and contribute to a second account (part time is no more than 69 percent of the average contract period). If their salary exceeds the daily wage threshold (65 percent of their last annual compensation if they retired with less than 30 years, and 75 percent if they retired with 30 or more years), then their pension benefit is decreased by a corresponding amount.

- **Full-Time Program.** Retirees can return to work full time, retain their pension, and contribute to a second account. The required break in employment is 3 months if returning to work for a different school district or 12 months if returning to work in the same school district. If their salary exceeds the daily wage threshold (65 percent of their last annual compensation if they retired with less than 30 years, and 75 percent if they retired with 30 or more years), then their pension benefit is decreased by a corresponding amount. The full-time program is limited to 3 percent of the agency's employees participating in the system.

- **Critical Shortage Program.** This program is the same as the full-time program except that there are no salary limitations and it is limited to 1 percent of the agency's employees participating in the system.

For reemployment with a regional state-supported university and KCTCS, employees who wish to return to work may do so under the following options:

- **Pension Waiver.** Retirees can waive their pension and return to work. During the period of reemployment, additional service and salary is earned and their benefit is recomputed upon subsequent retirement.

- **Part-Time Program.** Retired employees can return to work immediately (no break) in a part-time position (up to 12 semester hours if teaching or 100 days if in an administrative nonteaching position) while retaining their pension but will not contribute to a second account. If employees exceed the part-time threshold hours or days, their pension will be reduced by the dollar amount earned in excess of the threshold.

- **Full-Time Program.** Retired employees can return to work full-time and retain their pension if they observe a 6 month break in employment. The employees will not contribute to TRS but will instead contribute to the Optional Retirement Plan, a defined contribution plan administered by the university.

Reciprocity

Members who have service in more than one retirement plan administered by the Commonwealth of Kentucky can combine service in the plans to determine eligibility for retirement and final average salary (years of highest salary). Each system will pay a benefit based on the amount of service in that system.

Taxation Of Benefits

Monthly benefits from all systems are subject to federal income tax. If a member made contributions with after-tax dollars (usually service purchases), then a portion of the monthly benefit at retirement will not be subject to federal income tax.

All benefits attributable to service earned on or before December 31, 1997, are exempt from Kentucky income tax. The portion of the member's benefits earned January 1, 1998, and after is subject to Kentucky income tax. However, an annual pension exclusion of $41,110 applies to this portion and to other retirement income sources.

2017 Legislative Changes

Four measures that directly affected the Teachers' Retirement System were passed during the 2017 Regular Session: Senate Bills 2 and 3 and House Bills 471 and 520.

SB 2 addressed transparency and reporting issues, board composition, and model procurement requirements. The bill required several reporting enhancements, including net of fee return information, additional investment fee and commission disclosure, and public disclosure of agency contracts. The bill added two new gubernatorially appointed members to the TRS board, each with required investment experience as defined by the bill. The legislation further required TRS to adhere to procurement laws applicable to other state agencies, with the exception of investment management contracts. The bill required TRS to establish an internal procurement policy that would be approved by the secretary of the Finance and Administration Cabinet and used for procurement of investment management services.

SB 3 required the disclosure of retirement benefit information from all state-administered retirement systems for all current and former members of the General Assembly.

HB 471 provided a funding mechanism for charter schools and participation in the retirement systems. The bill provided the TRS board authority to pay the same dependent subsidy that executive branch agencies pay for active employees who have similar coverage. The bill also required TRS to report the cost of providing the subsidy and its actuarial impact on the unfunded liability to Interim Joint Committee on Appropriations and Revenue.

HB 520, which was related to the establishment of public charter schools, provided the inclusion of qualified teachers employed by boards of directors of public charter schools in TRS.

Chapter 3

Overview Of Judicial Form Retirement System Administration And Benefits

Composition Of Judicial Form Retirement System

The Public Pension Oversight Board has oversight responsibilities for two retirement plans administered by the Judicial Form Retirement System (JFRS): the Legislators' Retirement Plan (LRP) and the Judicial Retirement Plan (JRP).

Judicial Retirement Plan

JRP was established in 1960, and its membership includes justices of the Supreme Court and judges of the Court of Appeals, Circuit Court, family court, and District Court. It is governed by Kentucky Revised Statutes 21.345 to 21.580 and Title 4 of the Kentucky Administrative Regulations.

Legislators' Retirement Plan

LRP was established in 1980 for members of the General Assembly. It is governed by Kentucky Revised Statutes 6.500 to 6.577 and Title 4 of the Kentucky Administrative Regulations.

These retirement plans (along with Social Security benefits, and other sources of retirement income, such as other retirement accounts and postretirement employment) serve as the basis for providing income to members during their retirement years.

Judicial Form Retirement System Administration

As provided by statute, an eight-member board of trustees oversees the administration of JFRS, with three trustees appointed by the Supreme Court, two trustees appointed by the governor, one trustee appointed by the speaker of the House of Representatives, one trustee appointed by the president of the Senate, and one trustee appointed jointly by the president and the speaker. Gubernatorial appointees cannot be members or benefit recipients of the plans. Elected and appointed trustees serve 4-year terms and may serve no more than three consecutive terms.

The board annually elects a chair and has separate investment committees for each plan as provided by statute. The JRP investment committee consists of board trustees appointed by the Supreme Court and governor. The LRP investment committee consists of board trustees appointed by the speaker of the House, the president of the Senate, and the governor.

The current composition of the board appears in Table 3.1. The board appoints an executive director to oversee day-to-day operations and to staff the needs of the system. The current executive director is Donna Early, and as of June 30, 2017, JFRS consisted of two employees.

Table 3.1
Members Of Judicial Form Retirement System Board Of Trustees
December 2017

Member Name	Appointed By
Judge Lewis G. Paisley, chair	Supreme Court
Justice Laurance B. VanMeter	Supreme Court
Judge John R. Grise	Supreme Court
Judge Doughlas M. George	Speaker of House and president of Senate
Rep. Hubert Collins	Speaker of House
[vacant]	President of Senate
A.C. Donahue	Governor
Stephen F. LeLaurin	Governor

Source: Judicial Form Retirement System.

Judicial Form Retirement System Employer And Employee Membership

Membership in JRP and LRP is limited to judges and legislators, respectively. Participation in JRP and LRP is not automatic, and a newly elected judge or legislator must opt to participate in JRP or LRP within 30 days of taking office. If he or she fails to elect participation, then the judge or legislator will participate in the Kentucky Employees Retirement System, the same system covering state employees. Members who began participating prior to January 1, 2014, whose accrued benefit is equal to 100 percent of final compensation, the maximum benefit payable by statute, may elect to cease participating in JRP or LRP, as applicable, and begin participating in KERS.

Table 3.2 shows the numbers of contributing members (referred to as active members), former contributing members who have accounts but are not yet retired (referred to as inactive members), and retired members by plan.

Table 3.2
Number Of Active, Inactive, And Retired Members By Plan
June 30, 2017

System	Active Members	Inactive Members	Retired Members	Total
LRP	80	43	220	343
JRP	227	17	332	576
Total	307	60	552	919

Source: Judicial Form Retirement System Audit Report, June 30, 2017.

Retirement Eligibility

Plan members must meet certain age or service credit requirements before they can retire and begin receiving benefits. For JRP and LRP, the retirement eligibility requirements vary based on the date the member first began participating in the plans. Table 3.3 shows eligibility requirements for plan members to earn an unreduced benefit (no penalties) and the requirements for a reduced benefit (penalties are set by statute and vary based on how many years the employee is short of reaching an unreduced benefit).

Table 3.3
Retirement Eligibility Requirements For JRP And LRP Members

Participation Date	Unreduced Benefit	Reduced Benefit**
Prior to Jan. 1, 2014	• Any age with at least 27 years of service or • Normal retirement age* with at least 5 years of service	• JRP: 8 years of service • LRP: 5 years of legislative service or 8 years of service
On or after Jan. 1, 2014	• Must meet rule of 87 (age + service = 87) and must be at least 57 years of age or • Age 65 with at least 5 years of service	No reduced benefit provisions

*The normal retirement age is 65, except that it is reduced by 1 year for every 5 years of service and for each year the benefit exceeds 100 percent of final compensation. The normal retirement age cannot be reduced below age 60.
** Reduction set by statute of 5 percent per year for the lesser of the difference in years between either the member's age or normal retirement age or years of service and the number 27.
Source: Judicial Form Retirement System.

Plan Benefits

Each plan is designed to provide three types of benefits: a monthly retirement benefit for life, disability/death benefits, and health insurance benefits after retirement. Benefits vary based on the plan (JRP or LRP) and the date the employee first began participating in the plans. Information on each of these benefits is provided on the following pages.

Monthly Retirement Benefits For Members Participating Prior To January 1, 2014

Benefits for members who began participating in the systems prior to January 1, 2014, are based on the following formula established by statute:

$$\text{Final compensation} \times \text{Benefit factor} \times \text{Years of service credit} = \text{Monthly benefit}$$

Retirement benefit calculations for members under this formula appear in Tables 3.4 and 3.5.

Table 3.4
Retirement Benefit Calculation For JRP Members Participating Prior To January 1, 2014

Final Compensation	Benefit Factor	Service Credit
Monthly average of last 60 months preceding retirement	• 5.00% if participating in the plan before July 1, 1978 • 4.15% if participating in the plan on or after July 1, 1978, but prior to June 30, 1980 • 2.75% for all others	Service credited as member of one of the state courts; qualified purchased/ transferred service

Source: Judicial Form Retirement System.

Table 3.5
Retirement Benefit Calculation For LRP Members Participating Prior To January 1, 2014

Final Compensation	Benefit Factor	Service Credit
Monthly average of highest 3 years of salary	Legislators in office as of July 1, 1982: • 5.00% if participating in the plan before July 1, 1978 • 4.15% if participating in the plan on or after July 1, 1978 but prior to June 30, 1980 • 3.50% if participating in the plan on or after July 1, 1980 but prior to June 30, 1982 Legislators electing membership after July 1, 1982: • 2.75%	Service credited as member of the General Assembly; qualified purchased/ transferred service

Source: Judicial Form Retirement System.

At retirement, a retiree may choose to take an optional payout of the statutory lifetime 50 percent annuity to a qualified surviving spouse. If there is no qualified surviving spouse, dependent children until they reach age 21 or disabled children are eligible for survivor's benefits.

Retirement Benefit Calculation For Members Participating On Or After January 1, 2014

Members who begin participating in the plans on or after January 1, 2014, are provided retirement benefits through a cash balance plan that provides benefits based on an account balance, rather than on a formula. This change was enacted in Senate Bill 2, during the 2013 Regular Session.

The cash balance plan is not a defined contribution plan, but rather a defined benefit plan that operates as another benefit tier within the plans. While it is a type of defined benefit plan, it does have several characteristics of a defined contribution plan with individual member accounts, benefits based on the member's account balance at retirement (member and employer contributions and investment returns), and some variability in benefits due to investment returns. It differs from a defined contribution plan in that a minimum level of investment return is guaranteed on the member accounts, the plans rather than the member manage investments, and members can annuitize their account balance upon retirement (to receive it in the form of a monthly benefit).

In the cash balance plan, members contribute the same amount as newer employees, who began participating prior to January 1, 2014, except that 5 percent of pay they contribute to fund pension benefits goes into their individual accounts, along with an employer pay credit of 4 percent of their salary. Members receive a guaranteed return of 4 percent annually and 75 percent of the excess returns above 4 percent (the excess returns are calculated on a 5-year smoothed return). JFRS decided to establish separate funds for hybrid cash balance participants, so the investment return credited as of June 30, 2017 was 4 percent. This was the same interest rate credited as of June 30, 2016.

Members in the cash balance plan are vested for employer contributions and investment returns on those employer contributions after 5 years. Upon reaching retirement eligibility, members can take their account balance in a lump sum or have it annuitized into a monthly benefit optional payment currently available through the plan.

Retiree Health Insurance Benefits

JFRS also provides access to group rates and medical insurance for retired members, spouses, and dependents. Coverage for retirees not eligible for Medicare is provided through the Kentucky Employees' Health Plan, the same health plan provided to state and school board employees. Coverage for Medicare-eligible retirees is provided through a plan contracted through JFRS, which then coordinates with Medicare for delivery of health benefits.

As provided by state statute, the systems also subsidize medical coverage for the retiree and, in the case of members who began participating prior to January 1, 2014, for qualified dependents of the retiree. In general, members participating prior to January 1, 2014, receive a percentage of the premium paid upon retirement based on their service credit, while members who begin participating after that date receive a set dollar amount per month for each year of service credit. Tables 3.6 and 3.7 provide details about the benefits for JRP and LRP members based on their participation dates.

Table 3.6
Retiree Health Insurance Premium Payments For JRP Retirees

Participation Date In Systems	Eligibility Requirements	Percentage Or Dollars Of Premium Paid For Retiree And Qualified Dependents Of Retiree		
Before Jan. 1, 2014	Must be drawing monthly benefit	Years of service at retirement	% of premium paid for retiree	% of premium paid for dependents
		Less than 4	0%	0%
		4, but less than 10	25	25
		10, but less than 15	50	50
		15, but less than 20	75	75
		20 or more	100	100
On or after Jan. 1, 2014	Must be drawing monthly benefit and must have at least 15 years of service	$10 per month paid toward health premium for each year of earned service. Amount is adjusted by 1.5% annually from the date benefits commenced.		

Source: Judicial Form Retirement System.

Table 3.7
Retiree Health Insurance Premium Payments For LRP Retirees

Participation Date In Systems	Eligibility Requirements	Percentage Or Dollars Of Premium Paid For Retiree And Qualified Dependents Of Retiree		
Before January 1, 2014	Must be drawing monthly benefit	Years of service at retirement	% of premium paid for retiree	% of premium paid for dependents
		Less than 4	0%	0%
		4, but less than 10	25	25
		10, but less than 11	50	50
		11, but less than 12	55	55
		12, but less than 13	60	60
		13, but less than 14	65	65
		14, but less than 15	70	70
		15, but less than 16	75	75
		16, but less than 17	80	80
		17, but less than 18	85	85
		18, but less than 19	90	90
		19, but less than 20	95	95
		20 or more	100	100
On or after January 1, 2014	Must be drawing monthly benefit and must have at least 15 years of service	$10 per month paid toward health premium for each year of earned service. Amount is adjusted by 1.5% annually from the date benefits commenced.		

Source: Judicial Form Retirement System.

Disability And Death Benefits

Like most defined benefit plans, the plans provide benefits for those members who become disabled or to the qualified survivors of members who die in office, including in-the-line-of-duty disability and death benefits. After retirement, the statutorily prescribed survivor's benefits may vary based on the payment option selected at the commencement of benefits.

Cost Of Living Adjustments On Monthly Retirement Benefits

After the passage of Senate Bill 2 in the 2013 Regular Session of the General Assembly, members of the plans no longer receive automatic annual increases of 1.5 percent on their monthly retirement benefits. Language in SB 2 did provide that a 1.5 percent cost of living adjustment could be granted if an individual plan is 100 percent funded, and subsequent legislation authorizes the use of surplus funds to provide the 1.5 percent COLA, or the General Assembly may appropriate or direct payment of funds to prefund the COLA in the year it is provided.

Service Purchases And Transfers

Members participating in the plans can choose to transfer service for other public employment or purchase service credit as established by law, such as military service, federal service, and nonqualified service, provided that certain requirements established by state statute are met. However, legislative changes in 2013 eliminated service purchases for new participants entering the plans on or after January 1, 2014, with the exception of recontributions of refunds.

Reciprocity

Members who have service in more than one retirement plan administered by the Commonwealth of Kentucky can combine service in the plans to determine eligibility for retirement. LRP members who began contributing on or after June 20, 2005, but prior to January 1, 2014, may also combine salary in other state retirement plans for purposes of determining final compensation (years of highest salary). Each system will pay a benefit based on the amount of service in that system or plan.

Taxation Of Benefits

Monthly benefits from all systems are subject to federal income tax. If a member made contributions with after-tax dollars (usually service purchases), then a portion of the monthly benefit at retirement will not be subject to federal income tax.

All benefits attributable to service earned on or before December 31, 1997, are exempt from Kentucky income tax. The portion of the member's benefits earned January 1, 1998, and after is subject to Kentucky income tax. However, an annual pension exclusion of $41,110 applies to this portion and to other retirement income sources.

2017 Legislative Changes

Three measures that directly affected Judicial Form Retirement Systems passed during the 2017 Regular Session: Senate Bills 2, 3, and 104.

SB 2 addressed transparency and reporting issues, board composition, and model procurement requirements. The bill required several reporting enhancements, including net of fee return information, additional investment fee and commission disclosure, and public disclosure of agency contracts. The bill required that future gubernatorially appointed members of the board meet required investment experience as defined by the bill. The legislation further required JFRS to adhere to procurement laws applicable to other state agencies, with the exception of investment management contracts. The bill required JFRS to establish an internal procurement policy that would be approved by the secretary of the Finance and Administration Cabinet and used for procurement of investment management services.

SB 3 required the disclosure of retirement benefit information from all state-administered retirement systems for all current and former members of the General Assembly.

SB 104 applied a 10 percent growth cap on compensation used to calculate retirement benefits during the last 5 years of employment for prospective compensation earned after July 1, 2017, for members retiring on or after January 1, 2018. The legislation also permitted members the opportunity to make a one-time, irrevocable election to transfer their benefits to the hybrid cash balance plan.

Chapter 4

Funding And Investments

System And Plan Funding

Funding for benefits and expenses for each of the state-administered retirement systems and plans is provided through three sources: employee contributions, employer contributions, and return on investment. Employee contributions are set by state statute and do not vary. Employer contribution rates vary based on the results of actuarial valuations completed by the systems.

Employee and employer contributions include funding for retirement benefits, which is managed and invested in separate pension funds for each of the systems and plans, and funding for retiree health benefits, which is managed and often invested in funds separate from the pension funds for each of the systems and plans, except for JRP and LRP. However, JRP and LRP each have separate funds for management and investment purposes for members in the traditional defined benefit plan and for members in the hybrid cash balance plan, who began participating on or after January 1, 2014. TRS also manages a separate life insurance fund, which receives a minimal employer contribution.

Employee Contribution Rates

The employee contribution rates are set by state statute for each of the systems and plans. Legislative changes in 2008 increased the employee contribution rate for future members of all state-administered retirement systems, while legislative changes in 2010 increased employee contribution rate for current and future members of TRS. Table 4.1 lists the employee contribution rate, as a percentage of the employee's pay, for each system or plan.

Table 4.1
Employee Contribution Rates By State-Administered Retirement System/Plan

		Employee Contribution Rate (As Percentage Of Pay)		
System/Plan	**Participation Date/Structure**	**Pension**	**Health**	**Total**
KERS/CERS nonhazardous	• Prior to Sept. 1, 2008	5%	0%	5%
	• On or after Sept. 1, 2008	5	1	6
KERS/CERS hazardous and SPRS	• Prior to Sept. 1, 2008	8	0	8
	• On or after Sept. 1, 2008	8	1	9
TRS	• Nonuniversity employees	9.105	3.750	12.855
	• University employees*	5.410	2.775	8.185
JRP/LRP	• Prior to Sept. 1, 2008	5	0	5
	• On or after Sept. 1, 2008, but prior to Jan. 1, 2014	6	0	6
	• On or after Jan. 1, 2014	5	1	6

Note: KERS = Kentucky Employees Retirement System; CERS = County Employees Retirement System; SPRS = State Police Retirement System; TRS = Teachers' Retirement System; JRP = Judicial Retirement Plan; LRP = Legislators' Retirement Plan.
*University employers have elected to pay 2.215 percent of the employee contribution rate as authorized by Kentucky Revised Statutes 161.565. The amount listed is the adjusted employee contribution rate.
Source: Kentucky Retirement Systems; Teachers' Retirement System; Judicial Form Retirement System.

Actuarial Valuation Process

All systems conduct an annual or semiannual actuarial valuation of the systems they administer. The purpose of the valuation, which is completed by an actuary hired by the systems, is to determine three main items:

- **The amount of benefits (liabilities) to be paid out in the future.** To determine the employer contribution rates and to evaluate the financial health of each system or plan, the actuary must first project the amount of benefits, or system liabilities, to be paid out in the future. These benefits are prescribed by law and regulation and, in some cases, the board of trustees. To calculate the amount of benefits that will be paid out in the future, the actuary must make assumptions about factors that affect the system's or plan's money (the rate of return on investments, salary growth of employees, retiree medical inflation rates, etc.) and its people (when will people retire, how long will they live after retirement, etc.). Key actuarial assumptions include investment return, mortality rates, future medical inflation rates, and payroll growth. HB 238, passed in 2016, requires all state-administered retirement systems to perform an actuarial experience study to review the funding methods and assumptions used in the actuarial valuation, once every 5 years.

- **The financial health of the systems/plans.** In the valuation, the actuary reports several statistics useful in evaluating the financial health of the systems or plans as of the valuation date. The two most common actuarial statistics are the unfunded liability and the funding level, which compares the actuarially accrued liability (liability for benefits earned to date) against system assets. The unfunded liability is the dollar amount of the actuarially accrued liabilities that are not covered by system or plan assets. The funding level is the percentage of the actuarially accrued liability covered by system or plan assets. In calculating the unfunded liabilities and funding level as of the valuation date, the actuary uses a smoothed market value known as the actuarial value of assets that smooths actual investment gains or losses over a 5-year period. Both of these statistics are affected by four main factors: the level of benefits payable in the future, the assumptions used by the systems' actuary, the systems' actual experience against those assumptions, and the level of funding made by the employer.

Actuarial value of assets
- actuarially accrued liability
= unfunded liabilities

Actuarial value of assets
÷ actuarially accrued liability
= funding level

- **The level of employer contributions.** The employer contribution for each of the systems and plans includes two contributions: one to fund pension benefits and one to fund retiree health benefits. TRS also has a contribution to fund life insurance benefits. Each of these individual contributions comprises two components: a payment for normal cost (the estimated cost of the upcoming year of service for active employees/members) and a payment to finance the unfunded liability over a specific time period or using a specific method. Employer contributions vary based on the level of unfunded liabilities and financial health of the individual system or plan. As unfunded liabilities increase (or decrease), there is an increase (or decrease) in the level of employer contribution rates needed to adequately fund the system or plan. Employer rates can also vary based on funding policies established by statute, by the biennial state budget, and in some cases by the board of trustees of the systems or plans. Actuarial valuation results are applicable to employer contributions payable in the budgeting period that follows the valuation. For example, the FY 2018 CERS employer rates were determined by the 2016 actuarial valuation.

Amortization Periods And Methods

The various systems and plans use differing amortization periods and methods for paying off unfunded liabilities in their actuarial valuations.

As required by statute, KRS amortizes unfunded liabilities over a 30-year closed period using the level percentage of payroll method and the 2013 valuation as the start of the 30-year period. The level percentage of payroll method sets amortization payments as a set percentage of projected payroll over the 30-year period, with payroll assumed to grow at a set rate each year. For the KRS pension and health funds, a payroll growth assumption of 2.0 percent (CERS) or 0.0 percent (KERS and SPRS) is used. The amortization period was recently reset to a new 30-year period by Senate Bill 2, passed during the 2013 Regular Session.

During the 2017 fiscal year, the KRS board voted to reduce the payroll growth assumption for each underlying plan. For the KERS (both hazardous and nonhazardous) and SPRS plans, the board lowered the assumption for the pension and insurance funds from 4.0 percent to 0.0 percent. The pension and retiree health fund assumptions for both CERS (hazardous and nonhazardous) plans were reduced from 4.0 percent to 2.0 percent.

As provided by board policy, TRS amortizes pension unfunded liabilities accrued as of the 2014 actuarial valuation over a 30-year closed period using the level percentage of payroll method and the 2014 valuation as the start of the 30-year period. Any new source of unfunded liability occurring after the 2014 valuation for the pension fund is amortized over a separate 20-year closed period. However, the policy requires the pension fund to be 100 percent funded in 30 years. Unfunded liabilities of the TRS retiree health and life insurance funds are amortized over closed 23-year and 27-year periods, respectively. Prior to the FY 2017 valuation, both funds were amortized over open, 30-year amortization periods. For all TRS funds, a 3.5 percent payroll growth assumption is used to project payroll. In the 2016 valuation, the TRS board lowered the payroll growth assumption from 4.0 percent to 3.5 percent.

JRP and LRP amortize unfunded liabilities by a formula set in state statute. The formula provides an amortization payment for these plans equal to the investment return assumption plus 1 percent (total of 8 percent) of the dollar value of the plan's unfunded liability.

Review Of Payroll Growth Assumption

During the year, LRC staff provided a review of the payroll growth assumption used in the actuarial process. Staff discussed the assumption's role in financing a plan's unfunded liability, how changes can influence a plan's recommended employer contribution, and recent trends within the industry.

Staff began with a short summary of the actuarial valuation process, noting that the actuarially recommended contribution (ARC) calculation included two primary components: the normal cost of a plan, and the amortized payment required to finance an existing unfunded liability. The amortized payment depends on several components, including a plan's choice to use a level percent of payroll or level dollar method for calculation purposes. The level dollar method sets the amortized payment as a set, or level, dollar amount, while level percent sets the amortized amount as a percentage of payroll, with the assumption that payroll will grow at a constant rate over the course of the amortization period. Staff noted that both TRS and KRS use the level percent of pay method, which requires less dollars in the short term but which also can potentially lead to a problem of negative amortization. Staff referenced a staff-calculated survey, which indicated that 41 other state plans were using the level percent of pay method, while only nine used the level dollar approach. The median payroll growth assumption in the peer group was 3.5 percent, and the assumptions ranged from 2.25 percent to 6.5 percent.

LRC staff reviewed the process that a pension plan uses to determine and set payroll growth assumptions, highlighting the importance of periodic experience studies. KRS and TRS, like most plans, use a building block approach that incorporates a target for inflation and real wage growth, which are combined to form the payroll growth assumption. In addition to using experience studies, plans also will hire outside actuaries to audit or review assumptions. Both KRS and TRS had actuarial audits conducted in 2015, and both audits highlighted the payroll growth assumptions as a bit aggressive above recent actual experience. LRC staff provided a summary of reported payroll growth for each of the plans over the most recent 5 years. Staff highlighted the KERS nonhazardous plan, which has experienced a lack of payroll growth largely driven by a decline in participating employees from certain participating agencies.

Lastly, LRC staff discussed a concern of negative amortization and the impact it could have on a plan's funding health. Negative amortization is a potential problem for plans using a level percent of pay method, where a plan's amortized payment is less than the interest accruing on the unfunded liability. LRC staff noted that this tends to occur early in the amortization period, but can be prolonged if payroll growth is less than assumed or if a plan refinances or resets its amortization period. In Kentucky, both KERS and TRS have recently experienced negative amortization.

As it related to state-administered plans, during the 2017 fiscal year, the KRS board voted to reduce payroll growth assumptions for each of their plans. For the KERS (both hazardous and nonhazardous) and SPRS plans, the assumption was lowered from 4.0 percent to 0.0 percent for both the pension and retiree health funds, while for both CERS plans, the assumption was reduced from a 4.0 percent to 2.0 percent assumed payroll growth.

Investment Return Assumptions

The investment return assumption, which is also the rate used to discount future liabilities in the actuarial valuation, is another key assumption in the actuarial valuation. Table 4.2 shows the actuarial assumed rate of return used in the 2017 actuarial valuation for each system or plan.

Table 4.2
Actuarial Assumed Rate Of Return
By State-Administered Retirement System/Plan

System/Plan	Pension	Health
KERS nonhazardous	5.25%	6.25%
KERS hazardous	6.25	6.25
CERS nonhazardous	6.25	6.25
CERS hazardous	6.25	6.25
SPRS	5.25	6.25
TRS	7.50	8.00
JFRS (JRP and LRP)	6.50	6.50

Note: KERS = Kentucky Employees Retirement System; CERS = County Employees Retirement System; SPRS = State Police Retirement System; TRS = Teachers' Retirement System; JFRS = Judicial Form Retirement System; JRP = Judicial Retirement Plan; LRP = Legislators' Retirement Plan.
Source: KRS, TRS, and LRP, and JRP actuarial valuations.

During the 2017 fiscal year, the KRS and JFRS boards voted to reduce the return assumptions used in pension and retiree health fund valuations. For pension, the KERS nonhazardous and SPRS assumption was reduced to 5.25 percent from 6.75 percent, while KERS hazardous and both CERS plans were reduced to 6.25 percent from 7.5 percent. The JFRS board lowered the return assumption for the LRP and JRP to 6.5 percent from 7.0 percent. For retiree health funds, all five KRS plans were reduced to 6.25 percent, from 7.0 percent, while JRP and LRP were reduced to 6.5 percent, from 7.0 percent. The TRS board did not approve any changes to the system's assumed rate of return.

Review Of Investment Return Assumptions And Board Structure

During the year, LRC staff presented a review and discussed trends regarding investment return assumptions and board structure within the pension industry. The investment return assumption, also known as the discount rate, is a key assumption in the actuarial process used to determine a plan's unfunded liability, funding level, and employer contribution rates. All assumptions, both demographic and economic, are ultimately the responsibility of plan trustees, and several recent legislative changes have been made to ensure that each state-administered plan has adequate knowledge and experience on its board.

Staff began with a short summary of the actuarial valuation process, noting that the assumptions made and methods chosen will influence the output received. Staff discussed the current investment return assumptions being used by the KRS and TRS plans, which ranged from 6.75 percent to 7.5 percent, while also providing a historical review of changes made to the assumption over the prior 30 years. A summary of actual performance over the past 10 and 30 years indicated that the plans had struggled to keep pace over the shorter term, while the plans had slightly exceeded the assumption over the longer 30-year time frame. Outside the state of Kentucky, LRC staff noted that plans across the industry were also struggling to meet assumptions, as the median peer group return over the past 10 years was just 5.9 percent and well below the median return assumption of 7.5 percent.

LRC staff provided a national perspective, comparing assumptions used by other state pension plans across the industry, highlighting a current trend of plans reducing return assumptions. While the median assumption across the industry was 7.5 percent, over half of plans reviewed either had lowered assumptions recently or were planning to do so in upcoming valuations. Additionally, a recent National Association of State Retirement Administrators study reported that almost three-quarters of plans measured had lowered assumptions since 2010. Within Kentucky, staff reviewed historical changes to each KRS plan and TRS, while reviewing a summary of sensitivity analyses provided by each system outlining the impact future changes could have on funding.

Lastly, LRC staff reviewed the current board structure of each state-administered plan and discussed statutory changes made over time. Staff discussed three primary models used within the pension industry with regard to investments, administration, and governance. Staff reviewed statutory requirements across the industry and noted that several plans across the country were addressing the need for additional expertise and investment experience.

Financial Health Of The Systems

A 10-year summary of funding levels and unfunded liabilities for the pension and health insurance funds for each system, as determined from annual actuarial valuations, appears in Tables 4.3 through 4.6. This period begins with the downturn in investment markets that occurred in FY 2008 and FY 2009.

Funding levels for each of the system or plan pension funds have generally fallen over the 10-year period, and the total unfunded liabilities for the combined pension funds grew from

$14.6 billion to $37.5 billion over the period. More recently, some of the pension plans have experienced some level of stabilization, largely due to additional funding or better investment experience. Over the same period, funding levels for each of the retiree health funds have generally improved and unfunded liabilities for the combined retiree health funds have fallen from $15.2 billion to $6.3 billion. However, in 2017 the KERS, CERS, and SPRS pension and retiree health funds declined, primarily because of changes in investment return assumptions.

Table 4.3
Pension Fund Funding Levels (% Actuarial Assets To Actuarial Liabilities)
2008 To 2017

Valuation Year	KERS NH	KERS H	CERS NH	CERS H	SPRS	TRS	JRP	LRP
2008	52.5%	81.3%	78.5%	72.9%	59.8%	68.2%	88.9%	104.1%
2009	45.0	74.5	71.4	67.9	54.8	63.6	72.8	71.4
2010	38.3	73.1	65.6	65.5	49.7	61.0	65.8	64.1
2011	33.3	70.8	63.1	62.2	45.0	57.4	57.0	58.4
2012	27.3	66.1	60.7	58.1	40.1	54.5	55.7	57.2
2013	23.2	64.5	60.1	57.7	37.1	51.9	55.7	57.0
2014	21.0	64.6	62.6	59.8	35.6	53.6	61.8	62.1
2015	19.0	62.2	60.3	58.0	33.8	55.3	63.5	71.4
2016	16.0	59.7	59.0	57.7	30.3	54.6	*	*
2017	13.6	54.1	52.8	48.7	27.0	56.4	76.6	88.8

Note: KERS = Kentucky Employees Retirement System; NH = nonhazardous duty; H = hazardous duty; CERS = County Employees Retirement System; SPRS = State Police Retirement System; TRS = Teachers' Retirement System; JRP = Judicial Retirement Plan; LRP = Legislators' Retirement Plan. Values for JRP and LRP do not include hybrid cash balance plan participants.
*By statute, the Judicial Form Retirement System is required to perform a full actuarial valuation only every other year, to coincide with the biennial state budget. In even years such as 2016, a full actuarial valuation is not required, and the board has a roll-forward valuation completed to produce actuarial data for Governmental Accounting Standards Board reporting purposes only. Data in Table 4.3 show historical values for funding purposes only, and as a result no values are reported for 2016.
Source: KRS, TRS, and LRP, and JRP actuarial valuations.

Table 4.4
Pension Fund Unfunded Liabilities (In Billions)
2008 To 2017

Valuation Year	KERS NH	KERS H	CERS NH	CERS H	SPRS	TRS	JRP	LRP
2008	$4.81	$0.12	$1.57	$0.65	$0.24	$7.14	$0.03	($0.00)
2009	5.86	0.17	2.26	0.83	0.27	8.51	0.08	0.02
2010	6.79	0.19	2.91	0.92	0.31	9.49	0.10	0.02
2011	7.46	0.21	3.29	1.08	0.35	11.06	0.13	0.03
2012	8.26	0.26	3.59	1.26	0.39	12.28	0.14	0.03
2013	8.75	0.28	3.74	1.32	0.41	13.85	0.15	0.03
2014	9.13	0.29	3.66	1.32	0.44	14.01	0.13	0.03
2015	10.01	0.34	4.27	1.52	0.49	13.93	0.11	0.02
2016	11.11	0.38	4.54	1.57	0.54	14.53	*	*
2017	13.47	0.51	6.04	2.41	0.71	14.31	0.08	0.01

Note: KERS = Kentucky Employees Retirement System; NH = nonhazardous duty; H = hazardous duty; CERS = County Employees Retirement System; SPRS = State Police Retirement System; TRS = Teachers' Retirement System; JRP = Judicial Retirement Plan; LRP = Legislators' Retirement Plan. Values for JRP and LRP do not include hybrid cash balance plan participants, which are reported in a separate actuarial valuation.
*By statute, the Judicial Form Retirement System is required to perform a full actuarial valuation only every other year, to coincide with the biennial state budget. In even years such as 2016, a full actuarial valuation is not required, and the board has a roll-forward valuation completed to produce actuarial data for Governmental Accounting Standards Board reporting purposes only. Data in Table 4.4 show historical values for funding purposes only, and as a result no values are reported for 2016.
Source: KRS, TRS, and LRP, and JRP actuarial valuations.

Table 4.5
Retiree Health Fund Funding Levels (% Actuarial Assets To Actuarial Liabilities)
2008 To 2017

Valuation Year	KERS NH	KERS H	CERS NH	CERS H	SPRS	TRS	JRP	LRP
2008	11.1%	53.2%	32.6%	34.7%	27.9%	2.9%	92.7%	106.1%
2009	11.9	61.4	39.6	40.9	33.9	3.5	110.0	132.1
2010	10.6	63.7	40.9	41.4	27.9	7.5	103.2	123.0
2011	10.6	65.1	46.6	46.8	28.2	8.6	95.8	113.7
2012	14.3	89.9	63.8	60.7	37.2	9.4	95.6	112.3
2013	23.4	96.2	66.6	62.1	61.3	11.7	86.6	110.9
2014	27.9	105.6	70.0	66.8	66.4	15.9	95.0	119.9
2015	28.8	120.4	68.7	72.3	65.8	18.1	99.8	123.1
2016	30.3	125.3	69.6	72.9	67.2	21.9	104.7	127.3
2017	30.7	117.6	66.4	66.9	65.2	26.7	144.3	181.3

Note: KERS = Kentucky Employees Retirement System; NH = nonhazardous duty; H = hazardous duty; CERS = County Employees Retirement System; SPRS = State Police Retirement System; TRS = Teachers' Retirement System; JRP = Judicial Retirement Plan; LRP = Legislators' Retirement Plan. Values for JRP and LRP do not include hybrid cash balance plan participants, which are reported in a separate actuarial valuation.
Source: KRS, TRS, and LRP, and JRP actuarial valuations.

Table 4.6
Retiree Health Fund Unfunded Liabilities (In Billions)
2008 To 2017

Valuation Year	KERS NH	KERS H	CERS NH	CERS H	SPRS	TRS	JRP	LRP
2008	$4.83	$0.25	$2.41	$1.16	$0.32	$6.25	$0.004	($0.001)
2009	3.97	0.19	1.85	0.94	0.24	6.23	(0.004)	(0.006)
2010	3.99	0.18	1.87	0.98	0.31	2.97	(0.001)	(0.004)
2011	3.83	0.18	1.64	0.88	0.31	3.13	0.002	(0.003)
2012	2.68	0.04	0.86	0.54	0.21	3.26	0.002	(0.003)
2013	1.63	0.02	0.82	0.54	0.09	3.11	0.007	(0.003)
2014	1.61	(0.02)	0.79	0.50	0.08	2.69	0.003	(0.005)
2015	1.72	(0.08)	0.91	0.42	0.09	2.89	0.000	(0.006)
2016	1.71	(0.10)	0.91	0.42	0.09	2.84	(0.003)	(0.008)
2017	1.86	(0.07)	1.13	0.59	0.10	2.71	(0.023)	(0.018)

Note: KERS = Kentucky Employees Retirement System; NH = nonhazardous duty; H = hazardous duty; CERS = County Employees Retirement System; SPRS = State Police Retirement System; TRS = Teachers' Retirement System; JRP = Judicial Retirement Plan; LRP = Legislators' Retirement Plan. Values for JRP and LRP do not include hybrid cash balance plan participants, which are reported in a separate actuarial valuation.
Source: KRS, TRS, and LRP, and JRP actuarial valuations.

GASB 67 Reporting Requirements

In 2012, the Governmental Accounting Standards Board (GASB) issued two new statements that changed the way public retirement systems such as KRS, TRS, and JFRS, and its participating employers report pension information. One of these statements, GASB 67, effectively divorced pension plan reporting standards from funding standards. The result is that two values may often be discussed relative to the health of a system's pension fund—one for funding purposes and one for GASB 67 reporting purposes.

For the pension funds administered by KRS, the values used for funding purposes and for reporting purposes under GASB 67 are similar.

Regarding the pension funds administered by JFRS, the values used for reporting purposes under GASB 67 in the 2017 reports were slightly higher than values used for funding purposes. In the 2017 GASB reports, the LRP pension fund is 92.9 percent funded compared to 79.0 percent under the 2016 GASB reports. In the same GASB reports, the JRP values are 78.8 percent and 71.0 percent for the 2017 and 2016 reports respectively.

The TRS pension fund values for funding and reporting purposes are significantly different. For funding purposes, the TRS pension fund is 56.4 percent funded and has an unfunded liability of $14.31 billion as of the 2017 actuarial valuation. Under the GASB 67 reporting requirements, the TRS pension fund would be 39.8 percent funded and would have a net pension liability of $28.3 billion. This represents a slight improvement from the 2016 valuation, which reported that the TRS pension funding level was 35.2 percent funded. The primary difference is the discount rate used to value pension liabilities, with 7.50 percent being used for funding purposes and 4.49 percent being used for GASB 67 reporting purposes. The lower discount rate used in the GASB 67 computation is due to the pension plan assets being anticipated to be depleted in the future, which requires an adjustment to the discount rate under these reporting standards. Currently, the TRS pension fund is anticipated to deplete all assets by FY 2038. If a funding plan is developed for the TRS pension plan so that plan assets are not anticipated to be depleted in the future, then the reported values under GASB 67 will more closely resemble the values used for funding purposes.

KERS, CERS, And SPRS Employer Rates

Employer contribution rates paid by participating KRS agencies differ by retirement system and fluctuate based on the financial health of the individual system as determined by the actuarial valuation and the funding policies established by statute and the board of trustees.

For KERS and SPRS, employer contribution rates established by the KRS board vary every 2 years to coincide with the state's biennial budgeting process.[a] The current state biennial budget provides funding for the employer contribution rate established by the KRS board, while also providing a supplemental general fund appropriation to the systems in excess of the ARC. The supplemental appropriation totaled $58.2 million and $67.6 million for the KERS nonhazardous pension fund in FY 2017 and FY 2018, respectively, while $15 million and $10 million were budgeted for the hazardous plan over the same time frame. For the SPRS plan, there were appropriations of an additional contribution of $25 million in FY 2017 and $10 million in FY 2018. FY 2018 represents the fourth consecutive year the budgeted amount has met or exceeded the rate established by the KRS board. However, the six biennial budgets prior to FY 2015 provided a rate less than the amount established by the KRS board.

Tables 4.7 to 4.9 show the KERS and SPRS employer contribution rates established by the KRS board of trustees and the amounts provided in the biennial state budget from FY 2010 to FY 2018.

For FY 2017, the dollar value of the employer contributions for KERS nonhazardous totaled $909.5 million, which included a $58.2 million general fund appropriation and $68.8 million in employer cessation payments. In total, employer contributions increased $260.6 million from the FY 2016 total of $648.9 million.

[a] Senate Bill 2 from 2013 provided that the Kentucky Retirement Systems Board of Trustees could amend the KERS and SPRS employer contribution rates only every 2 years, to coincide with the biennial state budget. This change was effective with KERS and SPRS employer contribution rates payable on or after July 1, 2014.

Table 4.7
KERS Nonhazardous Employer Contribution Rates As A Percentage Of Payroll
FY 2010 To FY 2018

FY Ended	Rate Established By KRS Board: Pension	Retiree Health	Total	Total Budgeted Rate
2010	18.96%	12.33%	31.29%	11.61%
2011	21.77	16.81	38.58	16.98
2012	24.30	16.41	40.71	19.82
2013	28.03	16.52	44.55	23.61
2014	32.57	12.71	45.28	26.79
2015	30.84	7.93	38.77	38.77
2016	30.84	7.93	38.77	38.77
2017	38.93	8.35	47.28*	48.59
2018	38.93	8.35	47.28*	49.47

Note: KRS = Kentucky Retirement Systems.
*For FY 2017 and 2018, the KERS nonhazardous employer rate established by the KRS board, in accordance with the 2015 actuarial valuation, was 47.28 percent of payroll. However, the KRS board decided to lower the investment return assumption for the KERS nonhazardous pension fund from 7.50 percent to 6.75 percent per annum prospectively and provided projected rates using the new assumptions of 48.59 percent and 49.47 percent, which were provided for in the biennial budget.
Source: Kentucky Retirement Systems.

For FY 2019 and FY 2020, the KERS nonhazardous employer rate established by the KRS board, in accordance with the 2017 actuarial valuation, is 83.43 percent of payroll, which includes a rate of 71.03 percent for pension and 12.40 percent for insurance. The significant increase was largely driven by the board’s decision to lower the payroll growth and investment return assumptions.

For FY 2017, the dollar value of the employer contributions for KERS hazardous totaled $58.6 million, which included a $15.0 million general fund appropriation. In total, employer contributions increased $18.1 million from the FY 2016 total of $40.5 million.

Table 4.8
KERS Hazardous Employer Contribution Rates As A Percentage Of Payroll
FY 2010 To FY 2018

FY	Rate Established By KRS Board			Total
Ended	Pension	Retiree Health	Total	Budgeted Rate
2010	11.98%	23.56%	35.54%	24.69%
2011	14.11	20.26	34.37	26.12
2012	14.11	19.73	33.84	28.98
2013	16.16	19.73	35.89	29.79
2014	17.00	11.84	28.84	32.21
2015	16.37	9.97	26.34	26.34
2016	16.37	9.97	26.34	26.34
2017	21.08	2.74	23.82	23.82
2018	21.08	2.74	23.82	23.70*

Note: KRS = Kentucky Retirement Systems.
*For FY 2017 and FY 2018, the KERS hazardous employer rate established by the KRS board, in accordance with the 2015 actuarial valuation, was 23.82 percent of payroll. The rate in FY 2018 is a projected rate that KRS provided to the General Assembly to show what the actuarially recommended contribution would be if the rate could change in the second year of the biennium. The General Assembly adopted this lower rate for FY 2018.
Source: Kentucky Retirement Systems.

For FY 2019 and FY 2020, the KERS hazardous employer rate established by the KRS board, in accordance with the 2017 actuarial valuation results, is 36.85 percent of payroll, which includes a rate of 34.39 percent for pension and 2.46 percent for insurance. The significant increase was largely driven by the board's decision to lower the payroll growth and investment return assumptions.

For FY 2017, the dollar value of the employer contributions for SPRS totaled $72.5 million, which included a $25.0 million general fund. In total, employer contributions increased $36.4 million from the FY 2016 total of $36.1 million.

Table 4.9
SPRS Employer Contribution Rates As A Percentage Of Payroll
FY 2010 To FY 2018

FY	Rate Established By KRS Board			Total
Ended	Pension	Retiree Health	Total	Budgeted Rate
2010	35.23%	26.64%	61.87%	33.08%
2011	35.74	49.89	85.63	45.54
2012	39.80	54.83	94.63	52.13
2013	47.48	55.93	103.41	63.67
2014	53.35	43.17	96.52	71.15
2015	53.90	21.86	75.76	75.76
2016	53.90	21.86	75.76	75.76
2017	66.47	18.87	85.34*	89.21
2018	66.47	18.87	85.34*	91.24

Note: KRS = Kentucky Retirement Systems.
*For FY 2017 and FY 2018, the SPRS employer rate established by the KRS board, in accordance with the 2015 actuarial valuation, was 85.34 percent of payroll. The KRS board decided to lower the investment return assumption for the KERS nonhazardous pension fund from 7.50 percent to 6.75 percent per annum prospectively and provided projected rates using the new assumptions of 85.21 percent and 91.24 percent, which were provided for in the biennial budget.
Source: Kentucky Retirement Systems.

For FY 2019 and FY 2020, the SPRS employer rate established by the KRS board, in accordance with the 2017 actuarial valuation results, is 146.28 percent of payroll, which includes a rate of 119.05 percent for pension and 27.23 percent for insurance. The significant increase was largely driven by the board’s decision to lower the payroll growth and investment return assumptions.

As shown in Tables 4.10 and 4.11, the CERS employer contribution rates established by the KRS board of trustees vary annually based on the results of the most recently completed actuarial valuation. For FY 2019, employers will see rates increase as a result of the board’s decision to lower payroll growth and investment return assumptions in the 2017 valuation.

For FY 2017, the dollar value of the employer contributions to CERS nonhazardous totaled $454.3 million, which represented a decrease of $58.4 million from the FY 2016 total of $395.9 million.

Table 4.10
CERS Nonhazardous Employer Contribution Rates
As A Percentage Of Payroll
FY 2010 To FY 2018

FY Ended	Pension	Retiree Health	Total
2010	8.62%	7.54%	16.16%
2011	10.03	6.90	16.93
2012	11.70	7.26	18.96
2013	12.62	6.93	19.55
2014	13.74	5.15	18.89
2015	12.75	4.92	17.67
2016	12.42	4.64	17.06
2017	13.95	4.73	18.68
2018	14.48	4.70	19.18
2019	21.84	6.21	28.05

Source: Kentucky Retirement Systems.

For FY 2017, the dollar value of the employer contributions to CERS hazardous totaled $167.5 million, which represented a decline of $5.8 million from the FY 2016 total of $173.3 million.

Table 4.11
CERS Hazardous Employer Contribution Rates
As A Percentage Of Payroll
FY 2010 To FY 2018

FY Ended	Pension	Retiree Health	Total
2010	16.11%	16.86%	32.97%
2011	16.79	16.46	33.25
2012	17.91	17.85	35.76
2013	20.10	17.50	37.60
2014	21.77	13.93	35.70
2015	20.73	13.58	34.31
2016	20.26	12.69	32.95
2017	21.71	9.35	31.06
2018	22.20	9.35	31.55
2019	35.69	12.17	47.86

Source: Kentucky Retirement Systems.

TRS Employer Rates

Table 4.12 shows TRS employer contribution rates, which differ for nonuniversity and university employers. The TRS employer rates for FY 2019 and FY 2020 include the following:

- A **fixed statutory rate** payable by participating employers. Prior to the passage of HB 540 in 2010, nonuniversity employers paid a fixed statutory rate of 13.105 percent, which was and is financed primarily by state appropriations. Because of the passage of House Bill 540[b] in 2010, nonuniversity employers must also contribute up to 3.0 percent of pay toward retiree health funding, resulting in a total fixed statutory rate of 16.105 percent of pay. For university employers, the equivalent statutory rate is 13.650 percent of pay.

- A **state special contribution** for both nonuniversity and university employers that consists of state appropriations to TRS to pay amortized payments for specific benefits such as ad hoc COLAs awarded in prior years, minimum benefit provisions, and the costs of additional pension benefits for accumulated sick leave payments made by local school districts for retiring employees. The amount of this contribution changes annually as additional sick leave costs are added and as amortized payments for prior ad hoc COLAs and minimum benefit provisions are paid off. As a percentage of payroll, the values for FY 2019 and FY 2020 equal 2.83 percent and 3.0 percent of pay respectively.

- A **required increase** in the employer contribution rate that TRS has requested to be paid by state appropriations for all nonuniversity and university employers equal to 14.61 percent of pay and 14.10 percent in FY 2019 and FY 2020, respectively, to help fund the pension fund on an actuarially sound basis. TRS began requesting this additional funding in FY 2007; however, the required increase in employer contribution has been fully provided only during FY 2007 and FY 2008. The 2016-2017 state biennial budget provided for a significant portion of the required increase in FY 2017 and FY 2018. Table 4.13 provides a breakdown of this required increase requested and any appropriations made.

In addition to these contributions, the state is also required as part of HB 540 to pay the cost of health insurance coverage of members who retire on or after July 1, 2010, who are not eligible for Medicare. For FY 2017, total employer contributions, which included the statutory rate, state special, general fund appropriation, and health cost payments totaled $1,242.4 million. This represented an increase of $497.3 million from the FY 2016 total of $745.1 million.

Table 4.12
TRS Employer Contribution Rates As A Percentage Of Payroll

	Employer Rates			
	Nonuniversity		University	
Item	FY 2020	FY 2019	FY 2020	FY 2019
Statutory rate	16.105%	16.105%	13.650%	13.650%
State special	3.00	2.83	3.00	2.83
Required increase	14.100	14.610	14.100	14.610
Total	46.060	46.400	41.150	41.490

Source: June 30, 2017, and June 30, 2016, TRS actuarial valuations.

[b] Under HB 540, nonuniversity employers phased into a 3.0 percent employer contribution rate over a 6-year period to help fund retiree health benefits, and university employers phased into a 2.775 percent employer contribution rate over a 6-year period to help fund retiree health benefits.

Table 4.13
TRS Requests For Required Increase In Employer Contribution Rates Since 2007

FY Ended	% Of Payroll	Dollar Value Requested	Dollar Value Appropriated
2007	0.11%	$3,174,600	$3,174,600
2008	1.32	38,965,900	38,965,900
2009	1.88	60,499,800	—
2010	2.46	82,331,200	—
2011	3.59	121,457,000	—
2012	5.81	208,649,000	—
2013	7.27	260,980,000	—
2014	8.02	299,420,000	—
2015	10.42	386,400,000	—
2016	12.97	487,400,000	—
2017	13.80	520,372,000	498,537,600
2018	13.49	512,883,000	474,724,700
2019	14.61	553,597,000	*
2020	14.10	538,253,000	*

Note: — = data not provided.
* Determined by 2019-2020 biennial state budget
Source: June 30, 2017, TRS actuarial valuation, 2016-2018 biennial state budget.

JRP And LRP Employer Rates

Employer contribution rates, which are paid by state appropriations to JRP and LRP, differ based on the financial health of each individual plan as determined by the actuarial valuation and the funding policies established by statute and by the board of trustees.

For JRP and LRP, employer contribution rates established by the JFRS board of trustees vary every 2 years to coincide with the state's biennial budgeting process. The current state biennial budget provided the employer contribution rate established by the JFRS board of trustees for FY 2017 and FY 2018 for JRP and LRP in accordance with state statute and as recommended by the 2015 actuarial valuation. FY 2018 represents the fourth consecutive year that the budgeted amount has met the actuarially required rate. However, the two biennial budgets occurring from FY 2011 to FY 2014 provided for an employer contribution rate less than the amount established by the JFRS board of trustees. Table 4.14 shows the JRP and LRP employer contribution rates, as a percentage of payroll, established by the JFRS board of trustees and the amount provided in the biennial state budget from FY 2010 to FY 2018.

For FY 2017, the dollar value of the employer contributions paid to JRP totaled $13.21 million, which represented a decrease of $3.37 million from the FY 2016 total of $16.58 million. For LRP, the dollar value of the employer contributions paid to in FY 2017 totaled $2.48 million, which represented a decrease of $0.91 million from the FY 2016 total of $3.39 million.

Table 4.14
JRP And LRP Employer Contribution Rates As A Percentage Of Payroll
FY 2010 To FY 2018

	JRP Employer Rates		LRP Employer Rates	
FY Ended	Rate Established By Board	Budgeted Rate	Rate Established By Board	Budgeted Rate
2010	16.57%	16.57%	8.00%	8.00%
2011	36.80	16.19	43.50	19.14
2012	36.80	17.66	43.50	20.88
2013	48.57	25.74	61.91	32.81
2014	48.57	27.68	61.91	35.29
2015	49.77	49.77	67.49	67.49
2016	49.77	49.77	67.49	67.49
2017	41.57	41.57	49.23	49.23
2018	41.23	41.23	49.23	49.23

Note: Employer rates beginning in 2017 represent a total, combined rate for both the defined benefit and cash balance plans. JRP = Judicial Retirement Plan; LRP = Legislators' Retirement Plan.
Source: Judicial Form Retirement System

For FY 2019 and FY 2020, the combined employer rates established by the JFRS board, in accordance with 2017 actuarial valuation results, are 28.83 percent for JRP (31.31 percent for the defined benefit and 3.51 percent for the cash balance plan) and 24.67 percent for LRP (29.75 percent for defined benefit and 4.83% for the cash balance plan.)

Sensitivity Analysis

Under the provisions of HB 238, which was passed during the 2016 Regular Session, all state-administered pension plans are required to incorporate sensitivity analysis into actuarial valuations to show the impact of changing key actuarial assumptions such as the assumed rate of investment return and the payroll growth rate.

Statute requires KRS and TRS to conduct an actuarial valuation annually, and the 2017 valuations included analysis on how sensitive funding was to three primary economic assumptions: investment return, rate of inflation, and payroll growth.

Relative to the investment return assumption, for the KERS nonhazardous pension fund, the analysis showed that reducing the assumed return from 5.25 percent to 4.25 percent would reduce the funding level from 13.6 percent to 12.1 percent, increase unfunded liabilities by an additional $1.0 billion, and require additional employer contributions of 5.7 percent of pay. For the TRS pension fund, reducing the assumed return from 7.5 percent to 6.5 percent would decrease the funding level to 50.6 percent from 56.4 percent, increase unfunded liabilities by an additional $3.82 billion, and require additional employer contributions of 8.4 percent of pay.

Relative to the payroll growth assumption, changes do not immediately affect the funding level or unfunded liability of a plan but will have an impact on required employer contributions. For the TRS pension fund, the analysis showed that reducing the payroll growth assumption from 3.5 percent to 2 percent would require an additional employer contribution of 4.4 percent of pay.

Reducing the payroll growth assumption from 3.5 percent to 0 percent would require an additional employer contribution of 10.9 percent of pay. For the KERS nonhazardous pension fund, the analysis showed that reducing the payroll growth assumption from 0 percent to -1.0 percent would require an additional employer contribution of 6.8 percent of pay.

Statute requires JFRS to complete actuarial valuations only every other fiscal year, with FY 2017 the most recent completed. However, because of the estimated cost required to implement the new requirement, the board chose to not provide the sensitivity analysis until the cost could be appropriately budgeted. JFRS will include the estimated cost in future budget requests and plans to include the required analysis beginning with the 2019 valuation.

2017 Audited Financial Statements

For the fiscal year ended June 30, 2017, the combined net plan assets of all system or plan pension funds grew by $3.0 billion, to a combined total market value of $30.99 billion. Asset growth occurred in every state-administered plan, largely driven by strong investment gains and additional employer funding for the KERS NH and TRS plans. Pension net plan assets at the beginning of year and end of year for the fiscal year ended June 30, 2017, and the additions and deductions that resulted in the net plan asset change over the year appear in Table 4.15.

Table 4.15
Pension Fund Net Plan Assets And Changes In Net Plan Assets (In Millions)

	KERS NH	KERS H	CERS NH	CERS H	SPRS	TRS	LRP	JRP
Net plan assets (BOY)	$1,980	$528	$6,141	$2,010	$218	$16,813	$62	$268
Additions								
Employee contributions	101	17	151	60	5	314	<1	2
Health ins. contributions	5	1	9	2	<1	—	—	—
Employer contributions	757	53	333	116	63	1,061	3	12
Net investment income	221	71	826	270	27	2,475	8	34
Total additions	1,084	142	1,320	448	95	3,850	11	48
Deductions								
Benefit payments	948	61	687	227	57	1,919	4	23
Refunds	12	2	14	2	<1	26	<1	<1
Administrative expenses	11	1	20	1	<1	10	<1	<1
Total deductions	971	64	721	230	57	1,955	4	23
Net plan assets (EOY)	2,093	606	6,739	2,228	256	18,708	69	293

Note: The health insurance contribution is the 1 percent of pay contribution made by employees who began participating in the KRS systems on or after August 1, 2008, as provided in 2008 HB 1. The employee contribution, while required to be part of the pension trust assets, is used to fund retiree health benefits. Because of rounding, figures may not sum to totals shown. KERS, CERS, and SPRS employer contributions include pension spiking charges. KERS = Kentucky Employees Retirement System; NH = nonhazardous duty; H = hazardous duty; CERS = County Employees Retirement System; SPRS = State Police Retirement System; TRS = Teachers' Retirement System; JRP = Judicial Retirement Plan; LRP = Legislators' Retirement Plan; BOY = beginning of year; — = not reported; EOY = end of year.
Source: June 30, 2017, KRS Annual Report, TRS Audit Report, and JFRS Audit Report.

For the fiscal year ended June 30, 2017, the combined net plan assets of all state-administered retiree health funds increased by $789 million to $5.86 billion. Asset growth occurred in every state-administered plan, largely driven by strong investment gains and positive cash flow. Retiree health net plan assets at the beginning of year and end of year for the fiscal year ended June 30, 2017, and the additions and deductions that resulted in the net plan asset change over the year, appear in Table 4.16 for each system and plan.

Table 4.16
Retiree Health Fund Net Plan Assets And Changes In Net Plan Assets (In Millions)

	KERS NH	KERS H	CERS NH	CERS H	SPRS	TRS	LRP	JRP
Net plan assets (BOY)	$668	$437	$1,909	$1,056	$161	$734	$38	$70
Additions								
Employee contributions	<1	<1	1	<1	<1	129	<1	<1
Employer contributions	152	6	120	51	9	180	<1	1
Net investment income	91	59	260	143	21	95	5	9
Total additions	244	65	381	194	30	404	5	11
Deductions								
Health care subsidies	128	17	125	70	13	179	1	2
Other deductions	2	<1	4	<1	<1	—	<1	<1
Administrative expenses	1	<1	<1	<1	<1	1	<1	<1
Total deductions	131	18	129	71	13	180	1	2
Net plan assets (EOY)	781	484	2,161	1,179	178	958	42	79

Note: KERS, CERS, and SPRS employer contributions include retired reemployed health care contributions by employers. KERS, CERS, and SPRS employee contributions include health premiums paid by retirees.
KERS = Kentucky Employees Retirement System; NH = nonhazardous duty; H = hazardous duty; CERS = County Employees Retirement System; SPRS = State Police Retirement System; TRS = Teachers' Retirement System; JRP = Judicial Retirement Plan; LRP = Legislators' Retirement Plan; BOY = beginning of year; — = not reported; EOY = end of year.
Source: June 30, 2017, KRS Annual Report, TRS Audit Report, and JFRS Audit Report.

2017 Investments And Investment Performance

As outlined in Kentucky Revised Statutes 7A.250, the Public Pension Oversight Board conducted semiannual reviews of the state-administered retirement systems investment program. The reviews analyzed asset allocation, performance and volatility, policies, fees and expenses, and securities litigation. In addition to this review, members also heard quarterly investment updates from each retirement system.

State-Administered Retirement Systems Funds

KRS manages two separate pension and retiree health funds for each of the five separate systems it administers. Assets are managed both internally by KRS investment staff and externally by investment managers. The KRS board of directors has authorized and directed a nine-member investment committee required by statute to manage the investment portfolios in accordance with approved policies.

TRS manages separate pension and retiree health funds for the system it administers. Assets are managed both internally by investment staff and externally by investment managers. The TRS board of trustees has authorized and directed a five-member investment committee to manage the investment portfolios in accordance with approved policies and statutes. Two additional nonvoting members added by the TRS board with investment experience also serve on the committee.

JFRS is responsible for managing separate funds for JRP and LRP, with each plan having a fund for the traditional defined benefit plan and the hybrid cash balance plan. Assets are managed by a single external investment manager. Statute provides for a five-member investment committee for each plan to manage and oversee the investment portfolios in accordance with approved policies and statutes.

Asset Allocation

Assets are diversified across various assets classes as determined by the investment committees and boards of trustees of each fund. For KRS and TRS, target asset allocations are driven by asset liability studies, which are conducted typically every 5 years by a third-party consultant. Asset classes currently used by all systems include traditional public markets, such as equities and fixed income, while KRS and TRS also invest in alternative assets, which include absolute return, real return, and private equity.

Actual and targeted asset allocations for all pension funds as of June 30, 2017, along with an LRC staff-calculated peer group, appear in Table 4.17.

Table 4.17
Pension Fund Asset Allocation, June 30, 2017

	State-Administered Plans								LRC Peer Group
	KERS NH	KERS H	CERS NH	CERS H	SPRS	TRS	LRP	JRP	
Public markets	62.3%	66.9%	67.4%	67.8%	67.7%	85.6%	99.9%	99.9%	71.1%
• US equity	18.9	25.1	25.4	25.4	22.7	41.3	76.3	77.5	
• Non US equity	20.7	26.5	26.7	26.8	23.5	21.5	0.0	0.0	
• Fixed income	22.7	15.3	15.3	15.6	21.5	22.8	23.6	22.4	
Alternative markets	33.0	30.0	29.5	29.5	28.4	12.4	0.0	0.0	26.8
• Real estate	4.1	4.6	4.4	4.6	4.6	5.6	0.0	0.0	
• Absolute return	8.1	7.1	7.3	7.6	7.1	0.0	0.0	0.0	
• Real return	8.2	8.8	8.6	8.4	8.2	1.1	0.0	0.0	
• Private assets	12.6	9.5	9.2	8.9	8.5	5.7	0.0	0.0	
Cash	4.7	3.1	3.1	2.7	3.9	2.0	0.1	0.1	1.6

Note: KERS = Kentucky Employees Retirement System; NH = nonhazardous duty; H = hazardous duty; CERS = County Employees Retirement System; SPRS = State Police Retirement System; TRS = Teachers' Retirement System; JRP = Judicial Retirement Plan; LRP = Legislators' Retirement Plan.
Source: LRC Annual Investment Review, September 2017.

As shown in Table 4.17, the KRS funds had a higher allocation to less traditional alternative asset classes, while the TRS and JFRS funds have above average exposure to public equity and fixed income. According to *An Examination of State Pension Performance: 2006 to 2015 Report,* conducted by Cliffwater LLC, a state plan's average exposure to alternative assets was 24 percent, while publicly listed assets accounted for 73 percent of assets. In addition, an LRC staff review of public pension plan asset allocations, which included 45 of 69 state employee or teacher plans, revealed similar results.

Investment Performance

Pension and retiree health fund performance for each retirement system over the trailing 1-, 3-, 5-, and 10-year periods ended June 30, 2017, appears in Table 4.18. Each of the plans provided strong, positive returns for the 2017 fiscal year, with returns ranging from 15.0 percent to 12.1 percent.

All state-administered pension and insurance plans provided strong, positive returns during the 2017 fiscal year and exceed assumed rates of returns for each of the plans.[c] In addition, each of the plans produced returns above or in line with their respective performance benchmarks. Considering the past 3 or 5 years, absolute and relative performance across the pension plans has been mixed. Each of the plans struggled to reach actuarial assumed returns over a 3-year period, with only the JFRS plans exceeding policy benchmarks. Over a 5-year period, pension returns were stronger and largely exceed actuarial targets, with the majority of plans also meeting or exceeding benchmarks.

Over a longer 10-year period, returns from the plans continue to reflect the great recession in 2008-2009, as annualized returns range from just 4.7 percent to 7.9 percent.

Table 4.18
Net Of Fee Investment Returns, June 30, 2017

	Pension Funds				Retiree Health Funds			
	1 Year	3 Year	5 Year	10 Year	1 Year	3 Year	5 Year	10 Year
KERS NH	12.1%	4.5%	7.8%	4.8%	13.8%	4.7%	7.7%	3.7%
Benchmark	11.9	4.8	8.0	5.2	13.9	5.0	8.4	4.3
KERS H	13.4	4.9	8.1	4.9	13.8	4.9	7.9	3.8
Benchmark	13.6	4.8	8.1	5.2	13.7	5.0	8.2	4.2
CERS NH	12.5	4.1	7.7	4.7	13.7	5.0	8.0	3.8
Benchmark	12.6	4.6	8.0	5.1	13.6	5.1	8.2	4.3
CERS H	13.8	4.9	8.1	4.9	13.7	5.1	8.0	3.8
Benchmark	13.6	4.8	8.1	5.2	13.6	5.1	8.2	4.3
SPRS	13.7	4.9	8.1	4.9	13.7	5.0	8.0	3.8
Benchmark	13.6	4.8	8.1	5.2	13.6	5.1	8.3	4.3
TRS	15.0	6.0	9.9	6.1	14.4	4.3	7.6	N/A
Benchmark	14.0	6.2	9.7	—	15.0	N/A	N/A	N/A
LRP*	13.0	9.1	12.5	7.9	13.0	9.1	12.5	7.9
Benchmark	12.2	7.4	10.7	6.5	12.2	7.4	10.7	6.5
JRP*	13.1	8.9	12.4	7.8	13.1	8.9	12.4	7.8
Benchmark	12.2	7.4	10.7	6.5	12.2	7.4	10.7	6.5

Note: The TRS medical trust was established by HB 540 in April 2010. Because of its size and cash flow position, FY 2015 was the first year strategic targets and ranges were established for the fund. FY 2016 was the first year a policy benchmark was measured for the fund. KERS = Kentucky Employees Retirement System; H = hazardous duty; NH = nonhazardous duty; CERS = County Employees Retirement System; SPRS = State Police Retirement System; TRS = Teachers' Retirement System; LRP = Legislators' Retirement Plan; JRP = Judicial Retirement Plan.
*One-year returns are net of fee; longer term are gross.
Source: KRS, TRS, and JFRS.

In addition to evaluating each system relative to stated policy benchmarks, the Public Pension Oversight Board also reviewed investment results against two other public fund peer groups:

[c] See the section labeled Investment Return Assumptions in this chapter for summary of return assumptions and recent changes.

Wilshire TUCS and BNY Mellon. Table 4.19 includes median results from three publicly available peer groups, as well as an LRC staff-generated peer group consisting of only US state employee and teacher plans. The results reflect a volatile decade that included a significant market downturn.

Table 4.19
Peer Group Median Investment Returns, June 30, 2017

	1 Year	3 Year	5 Year	10 Year
LRC calculated	12.9%	5.5%	9.1%	5.5%
Wilshire TUCS	12.6	5.6	9.3	5.6
BNY Mellon	12.5	—	8.9	5.4

Note: For all peer groups shown, returns are reported gross of (or before) fees are applied. "LRC Calculated" includes 45 plans.
Source: LRC Annual Investment Review, September 2017.

Investment Expense

Pension and retiree health care fund investment expense appears in Table 4.20 for the fiscal year ended June 30, 2017.

Pension fund expenses are reported and include management fees by asset class, as well as other incentive fees (if provided by system). For KRS, total management fees equaled $48.2 million, or 40.9 basis points, while the system also reported additional alternative or incentive-based expenses of $38.4 million. When combined, KRS reported expenses of $86.6 million, or 73.6 basis points. TRS reported total management fees of $57.8 million, or 31.1 basis points, but did not disclose any performance-related agreements. Lastly, total fees for JFRS during the fiscal year were $283,900, or 6.4 basis points. All JFRS pension and insurance asset are managed together by a single investment manager; thus, separate fees for pension and insurance are not recorded.

Table 4.20
Investment Expense By System (In Millions), June 30, 2017

	KRS			TRS			JFRS		
	Assets	**Fees**	**BPS**	**Assets**	**Fees**	**BPS**	**Assets**	**Fees**	**BPS**
Pension									
Global equity	$5,841	$10.6	18.1	$11,686	$13.5	15.1	$372	$0.2	5.4
Private assets	1,170	9.4	80.6	1,103	18.6	175.8	0	0	0
Real return	987	5.9	59.4	174	1.5	87.2	0	0	0
Real estate	541	4.1	76.3	1,046	7.0	84.2	0	0	0
Fixed income	1,979	7.4	37.5	4,240	3.5	15.0	109	0.1	5.4
Absolute return	891	8.7	97.9	0	0	0	0	0	0
Cash/other*	363	2.1		366	3.7		<0.1	<0.1	
Total mgmt. fees	11,775	48.2	40.9	18,618	47.7	31.1	481	0.3	5.9
Other fees and incentives**	11,775	38.4	32.6	—	—	—	481	0	N/A
Total pension fund	11,775	86.6	73.6	18,618	47.7	31.1	481	0.3	5.9
Total insurance fund	4,756	34.6	72.6	815	3.2	38.9	*Assets included above*		
Combined fees	16,531	121.2	73.3	19,433	61.0	31.4	481	0.3	5.9

*"Other" includes consultants, custody, legal and other investment operational expenses
**"Other fees and incentives" includes carried interest, profit sharing, or other partnership related fees (if provided).
Source: LRC Annual Investment Review, September 2017.

Review Of System Administrative Expense

LRC staff provided a review and comparison of administrative expenses for each state-administered retirement system. Administrative expenses are the daily costs required to service active and retired members of each system and include items such as personnel, technology, and operating expense. Staff's presentation included background information, a review of recent fiscal year expenses, a report of differences between the systems, and a list highlighting key cost drivers.

Staff began by describing the process each system follows to request and pay administrative expenses, before providing historical expenses for each system over the prior 5 years. Staff highlight several key drivers, most notably personnel costs, which account for approximately two-thirds of overall expenses for each system. The size of the plan or number of underlying members also drives cost, as well as the complexity of a plan. While more difficult to quantify, plans with more reporting employers and multiple plans or benefit tiers can drive higher administrative costs.

The presentation included a summary of administrative expenses reported by each system in its most recent annual report, which LRC staff adjusted to account for a few reporting differences.

Most notably, the systems reported retiree health care administrative fees and investment personnel expenses slightly differently. Staff provided an adjusted administrative fee, which was $30.7 million for KRS, $10.3 million for TRS, and $453,127 for JFRS. For comparison's sake, when evaluated on a cost-per-member basis, the cost was $501 for JFRS, $129 for KRS, and $84 for TRS. Staff noted that JFRS was a unique plan, with a very small staff and limited membership, which made any comparison to KRS and TRS difficult.

With regard to the two larger plans, LRC staff highlighted the fact that the majority of difference in cost-per-member between the two plans was due to salaries and fringe benefits. Staff noted that KRS had a significantly larger employee base, which led to higher total wages and insurance premiums. In addition, structural differences between the two pension plans, such as employer retirement costs and Social Security expenses, accounted for material differences. KRS was subject to an employer rate of 38.77 percent, while TRS paid approximately 23.4 percent. With regard to Social Security expense, only a small portion of TRS' employees participate in the benefit; thus, employer costs were significantly lower.

Lastly, staff noted a 2016 study of KRS expenses conducted by CEM Benchmarking Inc., a third-party benchmarking company. The study, which ranked KRS one of the highest in complexity, indicated that KRS' cost was below the median cost of a custom peer group of 13 similarly sized plans; however, the plan's total service score fell short of its peer group median score.

Chapter 5

2017 Public Pension Oversight Board Meetings

Testimony Before The Board

During 2017, the Public Pension Oversight Board met 10 times. Board members received testimony regarding benefits, funding, and investments at multiple meetings. Benefits, funding, and investment summaries and issues related to these subjects are included in Chapters 1 to 4 of this report. The board also heard testimony regarding CERS separation, actuarial practices, and benefit enhancements, as well as multiple updates on the Pension Performance and Best Practices Analysis conducted during the year. Lastly, the board heard testimony and recommendations from various outside interest groups. A summary of these additional issues and testimony follows.

Bluegrass Institute Pension Review

The PPOB heard testimony from the Bluegrass Institute, a state-based nonprofit, regarding actuarial practices, benefit enhancements, and suggested recommendations for addressing Kentucky's current pension situation. The institute suggested several factors that may have contributed to pension underfunding in Kentucky, while also providing a mathematical analysis of how a defined benefit plan operates and the impact that changes to assumptions or benefits can have. The institute suggested that benefit enhancements given retroactively to employees and retirees were the cause of much underfunding. The Bluegrass Institute emphasized the importance of conducting actuarial analysis on any proposed benefit enhancements and referred to past legislation and analysis provided. Lastly, the institute suggested several recommendations, which included lowering assumptions, increasing contribution rates, adjusting benefit accruals, and enacting a law to prohibit retroactive benefit enhancements.

CERS Separation

The PPOB heard testimony from the Kentucky League of Cities, the Kentucky Professional Firefighters, the Kentucky School Boards Association, and the Kentucky Magistrates and Commissions Association regarding proposed legislation to separate CERS from the administration and management of KRS.

Representatives from KLC emphasized that a top priority of Kentucky cities, associations, and employee groups was the stability of the CERS pension plans. While KERS and SPRS plan funding has deteriorated recently, the CERS plans are on an upward trajectory and have shown improvement since the creation of the cash balance plan in 2013. Given the financial hurdles in front of KERS, members of CERS and KLC believe it is time to separate and ensure local control of pensions. Details of the proposed separation were outlined, which included the creation of a new board of trustees, but no benefit changes or language.

Representatives from Kentucky Professional Firefighters, the Kentucky School Boards Association, and the Kentucky Magistrates and Commissions Association also testified in support of the proposed legislation. All expressed concern over further benefit cuts and the impact those might have on cities' and school boards' ability to hire and retain staff. Given that many cities had made tough budget decisions to fund pensions, separating the plans allows cities opportunity to manage those plans as well.

PFM Pension Performance And Best Practices Analysis

The Public Pension Oversight Board heard testimony throughout the year from the state budget office, PFM Group (PFM), and PRM Consulting Group (PRM) with regard to a Pension Performance and Best Practices Analysis that was conducted.

Discussion On Unfunded Liability Estimates

The Public Pension Oversight Board heard testimony and was provided an update on the pension performance and best practices audit ("performance audit") from the state budget director during the January meeting. The director discussed the various assumptions built into the actuarial process, from both an economic and demographic standpoint, and highlighted how changes to each affect both unfunded liabilities and projected contributions required from employers.

While upcoming performance audit reports would evaluate each assumption and its effect, the director focused the discussion on the assumed rate of return, or discount rate, to highlight the impact that assumptions can have on the financial position of a pension plan. The director noted that all of the plans in Kentucky were using a range from 6.75 percent to 7.5 percent as their assumption. At the current assumptions, the total unfunded liability was $32.7 billion and the combined funding level of all plans was 47 percent. To understand how changes in this assumption can affect the financial health of plans, the director asked PFM to calculate each plan's funding level and unfunded liability using two alternative return assumptions. First, if plans assumed a rate of 4.50 percent, which was the state's estimated borrowing rate, the unfunded liability would grow to $56.9 billion and the plans would have a combined funding level of 34 percent. As a second alternative, if funding levels were recalculated using an assumed rate of 2.70 percent, which was the average yield on a 30-year treasury bond for the past year, the unfunded liability would increase to $82.3 billion, while the combined funding level would drop to just 26 percent.

The director emphasized that the alternative rates were simply chosen for illustrative purposes and did not represent PFM's opinion on what was an appropriate assumption. Discussion on the assumption, along with similar illustrations of other assumptions would be discussed in the future as the consultant finished the performance audit.

Interim Report #2: Historical And Current Assessment

The Public Pension Oversight Board heard testimony during the May meeting from PFM and PRM, which presented an interim report on the performance audit. The interim report #2, which followed an initial report in December 2016 relating to transparency and governance, served to provide a historical perspective and identify factors that have contributed to current funding levels of the plans. PFM highlighted the magnitude of Kentucky's pension challenge and total unfunded liabilities (UAL) that ranged from $33 billion to $84 billion depending on the discount rate used. PFM noted that the unfunded liability of the state's two largest plans, KERS and TRS, had increased dramatically since 2002 despite the increased state expenditures to the plans. Lastly, PFM discussed the added pressure that pension expenditures were placing on the state budget and how using alternative assumptions or a level dollar amortization method to pay UAL would serve to increase that pressure.

PRM Consulting provided a summary of the major factors driving the total unfunded liability across all state-administered plans to grow by $25.4 billion from 2005 to 2016. The most significant factor, which accounted for 25 percent of the growth, was actuarial backloading or the use of level percent of payroll to finance the liabilities. Changes to actuarial assumptions resulted in 22 percent of the change, while investment performance resulted in 23 percent of the growth. Funding less than the required contribution, unfunded COLAs, and other adverse experience against plan assumptions resulted in 15 percent, 9 percent, and 6 percent of the growth respectively. PRM discussed the KERS nonhazardous plan in detail, where underfunding and actuarial assumption changes accounted for over half of the $9 billion increase in UAL. With regard to TRS, underfunding did have impact, but actuarial backloading, assumption changes, and investment performance were the primary factors.

PFM moved next to a discussion of cash flow and solvency and noted that all but one plan (CERS hazardous) had experienced negative cash flow and that the two largest plans (KERS and TRS) had routinely liquidated assets to meet benefit requirements. The most stressed systems had also experienced a net decline in assets, while the plans that did grow in total assets did not grow as much as their corresponding liabilities. Looking into the future, PFM noted that both KERS and TRS actuarial valuations projected the plans to continue experiencing negative cash flows in the near term. Given the current funding of the plans, PRM conducted a solvency analysis for KERS and TRS, testing the plans under several alternative assumptions and scenarios. PFM's analysis indicated that recent funding to KERS had made a significant impact, but that the plan could face insolvency without continued or elevated funding in the future. TRS was in a more stable position, but its solvency also relied on employer contribution levels increasing in the future. Lastly, PFM also modeled the impact that an immediate economic downturn may have on funding.

PFM reviewed benefit benchmark analysis incorporated into the performance audit, which compared the state's benefits to those of the private sector and other public pension plans in surrounding states. PFM noted a trend across plans to contain cost and share risk as plans have moved from traditional defined benefit plans to hybrid or defined contribution approaches. The KERS employee contribution was at the median of plans reviewed, while the TRS employee contribution was below median when compared to other Social Security replacement plans. Comparing the value of retiree benefits, PFM reported the KERS Tier 1 and TRS defined benefit plans provided an above average benefit compared to peers. PFM noted TRS had one of the earlier retirement ages observed during the review. The value of KERS Tier 3 benefits was in line with the value of peers' benefits and competitive with benefits in the private sector.

Lastly, PFM reviewed investment performance of each of the plans and discussed the difficult market environment that led to many pension plans struggling to meet assumptions. KRS assets had suffered from overall market conditions, but also as a result of asset allocation and benchmark underperformance. TRS had provided above average benchmark performance but, given market conditions, was unable to meet assumptions.

Final Report And Recommendations

The Public Pension Oversight Board received a final report on the performance audit during the August meeting from the PFM and PRM, which included recommended options for addressing the commonwealth's pension and retiree health systems. The third and final report was the result of 9 months of analysis and included recommendations addressing four primary factors: actuarial assumptions, benefit levels and risk exposure, funding, and investment practices.

PRM began with several actuarial assumption recommendations. First, it was recommended that statute be modified to convert each retirement system to a level dollar amortization method for purposes of paying down the existing UAL. This approach will more consistently reduce the commonwealth's long-term pension debt and substantially increase the likelihood of steady or meaningful progress toward regaining a healthy funded status. Secondly, PRM recommended that the plans adopt more realistic investment return assumptions ranging from 5.0 percent, for the more stressed plans, to 6.25 percent for the healthier plans. Lastly, it was recommended that TRS and KRS maintain current closed amortization periods and that JFRS apply a closed amortization period going forward.

PFM discussed pension benefit recommendations from the report, which were provided for future hires, current employees, and existing retiree membership groups. With regard to new hires, it was recommended the state provide all new nonhazardous KERS, CERS, and JFRS employees a 401(k)-style defined contribution (DC) plan, which would include a mix of employee and employer contributions. For newly hired hazardous employees, it was recommended that the existing cash balance plan be retained, but modifying a member's eligibility for retirement to age 60. It was recommended all new teachers also be shifted in a DC plan, which then would be complemented by participation in Social Security. For current nonhazardous employees, the recommendations included freezing all accrued benefits, with future service participating in the 401(k)-style DC plan. The recommendation for current hazardous employees and teachers called for current defined-benefit benefits to be retained, but with a modification to a member's age for eligibility purposes and the elimination of some enhanced benefit features available to teachers. Lastly, with regard to current retirees, PFM recommended reducing current benefits for past COLAs, while suspending future adjustments for TRS retirees until minimum funding levels are reached. Lastly, PFM discussed current retiree health benefits and noted that its review found that many retirees were receiving richer, more costly benefits than current active employees or pre-Medicare-eligible retirees. PFM recommended that the commonwealth work to harmonize and align retiree health benefits to better mirror those of current public employees.

In closing, PFM provided recommendations with regard to funding policies and investment and governance practices. It was recommend all future funding be based on the actuarially determined contribution for each plan, with a consideration for limiting the increases for CERS employers to smooth budgetary impacts. Lastly, PFM highlighted potential benefits of aggregating all state-administered pension assets into a single investment team. Benefits included lower overall staff costs, simplified governance and monitoring, improved access and leverage with investment managers, and a coordinated and consistent investment philosophy.

Proposed Pension Reform

The Public Pension Oversight Board heard testimony during its November meeting from the state budget director and the deputy secretary of finance, who provided an overview of proposed pension reform. The director discussed several factors that had led to plans' current health and referred to results of the recently completed Pension Performance and Best Practices Analysis. As a result of the severe underfunding and current cash flow trends for many of the plans, a renewed focus was placed on reforming the state's employee and teacher pension plans.

The director reviewed details of a proposed plan for pension reform that was jointly introduced by the Governor, the Senate President, and the Speaker of the House. The proposed pension reform would create a defined contribution plan for all new nonhazardous employees, teachers, and current nonhazardous cash balance members (Tier 3). Active nonhazardous members (Tier 1 and Tier 2) and teachers would continue to accrue benefits in the defined benefit plans until they qualified for an unreduced benefit (either by years of service or age), after which they would begin to participate in the new DC plan. New hazardous members of KRS would continue to participate in the cash balance plan, while active defined benefit members would continue to participate in their current defined benefit plan. Current KRS retirees would not be affected, but current TRS retirees would see COLAs frozen for 5 years. Other impacts of the pension reform outlined by the director included changes to the use of sick time, compensatory time, and retired reemployment, as well as additional employee contributions for the purpose of funding retiree health care benefits. The measure also included requiring full payment of the actuarially required contribution using a level dollar amortization method for all systems, except that CERS would be provided a temporary phase-in to reduce budgetary problems for local governments.

Testimony And Recommendations From Outside Groups

The Public Pension Oversight Board heard testimony from groups representing employees, employers, teachers, and retirees during its June 24, 2017, meeting. The testimony included the following recommendations and comments from these groups.

Kentucky Public Retirees

Kentucky Public Retirees (KPR) testified on behalf of its members. KPR discussed that the core principle and marker for pension reform discussion should be the inviolable contract guaranteed under Kentucky Revised Statutes 61.692 and related statutes. KPR advised that the inviolable contract serves as the bedrock for public pension policy for the past and as the foundation for the present expectations of public retirees surrounding reform efforts. Further, KPR emphasized that the inviolable contract is a moral and legal obligation that may not be sidestepped as a mere impediment. Kentucky owes this commitment to the hardworking state employees, who have provided and will continue to provide vital services, thereby fulfilling their side of the contract.

As of the end of FY 2017, KPR estimates that the Kentucky Retirement Systems will have paid out $2 billion in benefits to Kentucky residents living in every county of the state. KPR emphasized that these dollars represent both necessary support for families and an economic driver.

Regarding the possibility of adopting defined contribution or 401(k) benefit plans for state employees, KPR offered two comments. First, KPR advised that, if adopted by statute, these new plans should require mandatory participation. Second, KPR expressed concern that these new plans would create individual accounts only, thereby creating an increasingly large hole in the funding stream for current plans.

KPR addressed other ideas being discussed and debated. KPR took no position on the policy proposal to separate CERS from KRS. KPR supports PFM Consulting's finding that the legislative adoption of a level dollar amortization plan, while costing more in the immediate future, would reduce the unfunded liability more quickly.

KPR supports tax reform, which should be broad in scope, equitable to all, and able to produce significant, consistent additional revenue. Finally, KPR expressed its hope that stakeholders be permitted to tender written public comment on the anticipated third report from PFM Consulting.

Kentucky Government Retirees

Kentucky Government Retirees (KGR), a 501(c)(5) labor organization, testified on behalf of its 9,700 members and the more than 90,000 retired and active state employees covered by KRS. KGR appreciates the in-depth analysis conducted by the PFM Group and looks forward to its final report and recommendations. To KGR, one of the significant findings by PFM actuaries related to the root causes of the current pension crisis, which included employer underfunding, backloading, and the lack of prefunding for cost-of-living adjustments. Of particular interest was PFM's conclusion that the benefit structure for KERS had no impact on the current crisis.

KGR discussed the inviolable contract, advising that it would strongly oppose any attempt by the legislature to alter the benefits for active and retired employees. KGR provided a brief legal history of the inviolable contract, citing both the Kentucky Supreme Court's ruling in *Jones v. Ky. Retirement Systems* and Governor Fletcher's 2007 Blue Ribbon Commission on Public Pensions. KGR discussed the sacrifices that state government retirees have already made, including the elimination of cost-of-living adjustments and the impact of inflation.

Regarding the possibility of a transition to a 401(k) savings plan for new workers, KGR indicated its deep concerns about the fiscal impact that such a transition might have on legacy plans. KGR discussed the 2013 pension reforms that led to the hybrid plan. Then, KGR provided the possible impacts that a 401(k) plan would have on KRS, including but not limited to impacts on cash flow and higher contribution rates to meet the accelerated amortization being recommended by the actuaries.

Regarding CERS separation, KGR expressed deep concerns about the administrative burden that such a plan would place on KRS, which is already experiencing high turnover and understaffing.

KGR continues to recommend and advocate for additional funding, above the current required contributions, to ensure long-term stability of the funds. KGR praised the leadership that the Governor has provided regarding additional funding for pensions. KGR believes that the only way to provide a continued funding stream is through the enactment of tax reform.

**Kentucky Association Of Transportation Engineers/
Kentucky Transportation Employee Association**

The Kentucky Association of Transportation Engineers/Kentucky Transportation Employee Association (KTEA) represents transportation engineers and other employees, all of whom are members of KERS. KTEA thanked the Governor and the General Assembly for their work to fund pensions. KTEA believes that tax reform is key to making the pension system solvent. This organization of employees, like all state workers, has relied on the promise of pensions in exchange for wages that historically have been lower than those in the private sector. Discussion points made by KTEA included the inviolable contract and the prior 2013 pension reforms made by the General Assembly. KTEA pointed out that the PFM study has identified several causes for the pension crisis, but that one group—state employees—remains blameless. Finally, KTEA again advocated for tax reform as the method for addressing the crisis.

Kentucky Professional Fire Fighters

Kentucky Professional Fire Fighters (KPFF) presented a series of talking points addressing pension reform. First, KPFF addressed the history of retirement benefit reductions, including changes to health care, benefit factors, and COLAs. Second, they noted that most professional firefighters in Kentucky do not participate in Social Security, leaving state pensions as their only retirement benefit. Third, many fire departments in Kentucky have already seen a decline in applicants and resulting problems with recruitment and retention as a result of the hybrid plan, Tier 3 implementation. Therefore, a 401(k) plan, a rollback of prior COLAs, reductions to health care coverage/increase in premiums, or retirement benefit recalculations would be devastating to the fire service. Finally, KPFF supports CERS separation from KRS, which would put firefighters and other local employees in control of their own retirement system.

Fraternal Order Of Police

The Kentucky Fraternal Order of Police (FOP) discussed the unique public service that law enforcement provides to Kentucky communities. Law enforcement officers from all over the state were in attendance because they have concerns about their pensions. For many of those in law enforcement, the promise of a good retirement has often been a significant factor in making the decision to pursue the career. FOP described how public pensions represent the final benefit in exchange for law enforcement officers' commitment and sacrifice to public safety.

FOP discussed two major concerns. First, FOP addressed the duty of the legislature to protect the retirement benefits guaranteed under the inviolable contract. This statutory guarantee was made in exchange for the commitment to protect and serve from which all citizens benefit. Second, law enforcement leaders expressed concern regarding recruitment and retention and discussed how the current distinctions among Tier 1, Tier 2, and Tier 3 employees already create division in the ranks. FOP also expressed its support for CERS separation.

FOP discussed a comprehensive national study of law enforcement careers that ranked Kentucky 47th out of 51—one of the worst states in which to be a police officer. Further, Kentucky ranked in the bottom 5 with regard to the number of officers per capita and ranked 51st for state and local police protection expenses per capita. As of 2015, the most recent year for which comprehensive statistics are available, the average starting salary for a Kentucky officer was just over $28,000; at least 17 agencies started their officers at $20,000 or less. Finally, FOP reported that end-of-year retirements had doubled since the comparable time in the previous year, demonstrating the concerns about pension changes.

FOP closed by advocating that the legislative and executive branches fulfill their pledge to "keep the promise" for existing employees and ensure that new police officers be afforded retirement benefits commensurate with their commitment and sacrifice.

Kentucky Education Association

The Kentucky Education Association (KEA) represents more than 44,000 active, student, and retired members. The state's defined benefit plan for education employees provides postemployment income security that is critical to the growth and maintenance of a well-trained and stable workforce in Kentucky's public schools.

KEA discussed the unique attributes of public teachers' pensions, distinguishing them from other benefits and even from other state-administered retirement systems, such as CERS. KEA also presented statistics demonstrating the significant, measurable, and positive impact that public pension income has on Kentucky's total economy. Kentucky retirees who receive annuity payments from the public retirement systems contribute $3.4 billion to state and local commerce. Each dollar of retirement income distributed to public school retirees supports $1.43 of state economic activity. Finally, KEA addressed the speculation about pension reform for teachers, including changes to the retirement age, and how such changes could have unintended consequences, including massive retirements immediately prior to the effective date of those changes.

KEA believes that public school employees can partner with state government and their fellow taxpayers to achieve solutions to the pension issue. As it did in 2010, when KEA worked in a bipartisan manner to achieve the shared responsibility plan to help fund retiree health benefits, solutions for pensions are going to take good communication, an open dialogue, paradigm shifts in thinking, and a willingness to compromise for the good of the whole.

KEA commits to help make smart and sound financial decisions that will continue recruitment and retention of high-quality employees for Kentucky public school students. KEA members deserve and have earned the retirement benefits promised.

Kentucky Retired Teachers' Association

Kentucky Retired Teachers' Association (KRTA) testified on behalf of its membership of over 30,000 and emphasized the critical nature of retirement benefits for retired teachers, many of whom are older, single, and relying on TRS as their sole source of income, since they do not receive Social Security. KRTA expressed deep appreciation for the budget commitment that the state took, describing it as a bold and decisive action to help restore fiscal responsibility to TRS. Moving forward, KRTA expressed that it would be a mistake for policy makers to consider switching teachers from a defined benefit pension plan to a 401(k)-type program. KRTA provided examples of other states where the transition to 401(k) plans has led to unintended consequences and even more financial instability. Finally, KRTA recommended that the legislature stay the course for funding the ARC until TRS is fully funded and keep TRS as a defined benefit retirement plan to protect taxpayers, teachers, and education.

Kentucky Association Of School Superintendents

The Kentucky Association of School Superintendents (KASS) represents the 173 public school superintendents of Kentucky. KASS recognizes and understands the problems of both the unfunded liability and the ongoing cost of the ARC and wants to contribute to ongoing conversations that provide a solution.

KASS suggested possible courses of action, including new revenue via tax reform, shared responsibility between members of the retirement systems, such as recent changes to the Missouri state plan, and long-term funding of the ARC to develop and/or maintain an actuarially sound system while structural changes are phased in.

KASS also testified that the average tenure for a superintendent is less than 4 years, a statistic that has been declining every year and is being studied by KASS. KASS has not taken an official position on capping the calculation of a superintendent's pension in order to help enhance a teacher's pension. Further, KASS agreed that revising the actuarial assumptions should be a part of the conversation.

Kentucky League Of Cities

The Kentucky League of Cities testified on behalf of local cities and counties, noting key differences of CERS compared to other state-administered plans. CERS is 62 percent funded, and the remaining KRS plans (SPRS and KERS) are 24 percent funded. CERS has 73 percent of the assets and covers 63 percent of the administrative cost of KRS. Since the passage of SB 2 in 2013, CERS has a higher funding ratio. KLC listed the 20 other city and county employee organizations that are supporting CERS separation.

KLC has committed to a proposal provided in SB 226: that if CERS were to fail after separation, the contract would not change, and CERS would be responsible for any liability. Further, KLC does not object to the CERS system paying its fair portion of any administrative costs attributed to separation.

KLC is concerned with the potential of combination of assets within the KRS managed plans, and it has objections to the current treatment of assets in coordination for investment purposes. Finally, KLC is not completely opposed to a 401(k) plan, but it advocates that such a plan provide an opt-out for mayors.

Kentucky Association Of Counties

The Kentucky Association of Counties joins KLC, KSBA, and KPFF in voicing continued support for SB 226, the CERS separation bill, championed by Chairman Bowen and 13 other co-sponsors during the 2017 Regular Session. The majority of county employees are members of CERS and have 2.5 out of 10 affiliates that are KERS members. KACo has a vested interest in both systems. KACo's legislative committee unanimously voted to support the inviolable contract over and above CERS separation. KACo wants separation of CERS, but not at the expense of the inviolable contract.

State Universities

Representatives from several state universities presented information on behalf of the comprehensive universities and the Kentucky Community and Technical College System, which participate in KERS and TRS. These institutions are the only agencies that do not have a line item in the budget bill for their pension obligation. Those obligations are borne by the institutions themselves, which then have to resolve those payments with the pension systems on a regular basis.

The universities testified that between 2007 and 2016 their gross tuition and fee revenue grew from 57 percent to 71 percent, but net general fund appropriations decreased from 43 percent to 29 percent. Further, between 2008 and 2016, there was exponential growth in the employer contributions for both KERS and TRS, topping out at nearly $90 million by 2016. Currently, 28 percent of the universities' total budgets is committed to pension obligations. As of FY 2018, the employer pension contribution is 49.47 percent of pay. The pension contribution coupled with other employee benefits (health, life, etc.) totals nearly 76 percent to 80 percent of salary, a financial burden that is not sustainable to the organizations. For university administrators, trying to set budgets with the growth seen in this expenditure category has been nearly impossible. The unpredictability of the growth layered on top of the reductions seen in state appropriations has made it almost unsustainable as an institution to be able to accommodate these benefits.

Kentucky Chamber

The Kentucky Chamber provided testimony about the state's public pension challenges, as it has for more than 10 years. In addition to an internal task force, the chamber has issued a number of reports and provided legislative testimony highlighting the negative impact of rising benefit costs on other important areas of state spending, especially education. Further, these past reports advocate changes to make the retirement systems more sustainable.

With the business community paying a significant amount of taxes in Kentucky, the growing pension debt and financial uncertainty are not good for business. Not only does the crisis take away needed dollars from education, transportation, and economic development, it provides a less attractive environment in which to operate. The chamber advocates for public retirement benefits that reflect those available in the private sector.

The chamber believes that pension reform should include a combination of additional financial investments in the retirement system and benefit changes that are legally acceptable. The chamber agrees that additional revenue will be required to meet the commonwealth's financial obligations, both for pensions and other important areas such as education funding. However, the chamber believes that the state should focus on a tax system that improves competitive position, while providing revenue growth.

American Federation of State, Municipal, And County Employees

The American Federation of State, Municipal, and County Employees and the Kentucky Association of State Employees also provided public comment advocating for a realization of the promises made to public employees.

Chapter 6

Public Pension Oversight Board Recommendations

The Public Pension Oversight Board adopted recommendations at its December 18, 2017, meeting. These recommendations included legislative recommendations for the 2018 Regular Session of the General Assembly and administrative recommendations for PPOB staff.

For the 2018 Regular Session of the General Assembly, the board approved the following legislative recommendations:

- The Teachers' Retirement System housekeeping bill, similar to provisions included in House Bill 446 that did not pass into law during the 2017 Regular Session, should be enacted.

- Legislation to eliminate the option for Legislators' Retirement Plan participants to "spike" their legislative pension from salary earned through other public employment should be enacted.

- The General Assembly should evaluate the findings and recommendations of the performance audit being conducted by the PFM group and adopt a financially sound approach to address the funding issues facing the state-administered retirement systems. It should also evaluate how to best allocate the funds in the Kentucky Permanent Pension Fund among the state-administered retirement systems.

- The Public Pension Oversight Board supports measures that would provide additional funding to improve the financial health and cash flow issues facing the Kentucky Employees Retirement System nonhazardous pension fund and the State Police Retirement System pension fund.

- The Public Pension Oversight Board supports measures that would provide additional funding to improve the financial health of the Teachers' Retirement System pension fund and that would include a long-term statutory plan to pay the actuarially required contribution.

The Public Pension Oversight Board also adopted administrative recommendations to require staff to

- research and review the fiduciary responsibilities and liabilities of pension board members and actuaries and

- research and review the effectiveness of the 2017 pension transparency reforms and determine if whether additional transparency or accountability measure should be recommended.