

Kentucky Legislators Retirement Plan

GASB Disclosure Report as of July 1, 2018

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Introduction

An actuarial valuation of the Kentucky Legislators Retirement Plan (“KLRP”) was last performed as of July 1, 2017. The results shown in this report as of July 1, 2018 were developed using a “roll-forward” method that employs generally accepted actuarial techniques. The results in this report have been developed with full reliance on the July 1, 2017 Actuarial Valuation Report. **This report covers only the traditional defined benefit/OPEB tier of KLRP.**

Actuarial valuations are based on the integrity of employee data, plan asset data, plan provisions and an extensive set of assumptions regarding future events. There is necessary uncertainty with any actuarial calculation based on the accuracy of the data provided, the correct interpretation of plan provisions and the realization of the assumptions made. These results were based on participant data and asset information provided by the Kentucky Judicial Form Retirement System. This information was not audited but was reviewed for reasonableness.

Detailed explanations of the actuarial assumptions and methods used in the report are contained in later sections of this report. Also included in this report is a summary of provisions of the plan as we understand them.

Governmental Accounting Standards Board Statement 67 (“GASB 67”) and Statement 74 (“GASB 74”) establish financial reporting standards for defined benefit pension plans and other postemployment benefit (OPEB) plans sponsored by employers that are subject to governmental accounting standards. Governmental Accounting Standards Board Statement 68 (“GASB 68”) and Statement 75 (“GASB 75”) provide standards for reporting pension and OPEB expenditures and expense, and related liabilities and assets for such plans. The purpose of this report is to provide pertinent financial statement disclosure information for the fiscal year ending in 2018. Actuarial computations under Statements 67, 68, 74, and 75 are for purposes of fulfilling plan and employer governmental accounting requirements and may not be appropriate for other purposes. This report has been prepared on a basis consistent with our understanding of the statements and does not constitute legal, accounting, tax or investment advice.

Statements 68 and 75 set forth a methodology for the calculation of the annual Pension Expense for the upcoming fiscal year. GASB 68 and GASB 75 provide a method for reflecting prior gains and losses from asset and plan experience, as well as other areas including plan amendments. Amounts not reflected previously or in the upcoming year are reflected in the Deferred Outflows and Inflows of Resources shown.

Findley, Inc. does not have access to and is not providing information concerning liabilities other than benefits, such as for legal or accounting fees.

Findley, Inc. is not aware of any significant events subsequent to the current year’s measurement date that could materially affect the information contained in this report. However, we are aware that legislation has been passed that makes substantial changes to the state-wide retirement systems, including KLRP, but that legislation has been voided by a court ruling. As of the issuance of this report, that ruling has not been overturned and this report does not consider this piece of legislation.

We are not aware of any relationship between the plan or plan sponsor and Findley, Inc. which would impair or appear to impair our objectivity.

To the best of our knowledge, all information provided in this report is complete and accurate and disclosures for GASB purposes have been determined in accordance with generally accepted accounting principles.

Legislative and Regulatory Background

State statutes were amended in 2013 such that all participants entering KLRP on or after January 1, 2014 will be covered under a hybrid cash balance/OPEB tier; those entering before that date will continue to be covered under the traditional defined benefit/OPEB tier. The legislation making this change also restricted the availability of future cost-of-living adjustments (COLA's) to plan benefits.

Statement No. 43 of the Governmental Accounting Standards Board was amended by Statement No. 74 of the Governmental Accounting Standards Board. Statement No. 74 became effective for the plan's financial statements for the fiscal year beginning after June 15, 2016. Statement No. 74 establishes financial reporting standards for state and local government OPEB plans that are administered through trusts or equivalent arrangements. The objective of this statement is to improve the usefulness of the information included in pension plan reports.

The Governmental Accounting Standards Board amended Statement No. 45 with Statement No. 75; the effective date for Statement No. 75 is for the fiscal year beginning after June 15, 2017. Statement No. 75 of the Governmental Accounting Standards Board requires the determination of the OPEB expense for the fiscal year beginning July 1, 2017. Statement No. 75 provides a new approach to calculating the pension expense which differs significantly from Statement No. 45 methodology.

Actuarial Soundness

A plan that has adopted a reasonable funding method, adopts reasonable assumptions, and contributes at a rate at or above the recommended contribution rate (based on these reasonable methods and assumptions), could be considered to be actuarially sound.

In order to ensure KLRP is funded in an “actuarially sound manner”, we would recommend the following:

1. Reflect a 1.5% future COLA assumption when calculating the funding requirement for KLRP, to the extent future cost-of-living increases are expected to occur, or intended to be provided.
2. Revise the actuarial funding method to amortize all past unfunded as well as new liabilities over a period not more than 30 years (we suggest shorter periods for various sources of new liability) and amortize future gains and losses over a period not more than 15 years. (Note that GASB 68 may require the expensing of liabilities at a faster pace than these amortization periods.)
3. Contribute at least the recommended contribution each year.

Deviations from these recommendations may result in an “actuarially unsound” approach to funding KLRP and may eventually result in KLRP becoming insolvent – that is, exhausting assets at which time all future benefits would be made on a pay as you go basis.

Although the Actuarial Standards of Practice 4 “Measuring Pension Obligations” allows for plan liabilities to be calculated under a legally prescribed method, the statement goes on to say,

“If, in the actuary’s professional judgment, such an actuarial cost method or amortization method is significantly inconsistent with the plan accumulating adequate assets to make benefit payments when due, assuming that all actuarial assumptions will be realized and that the plan sponsor or other contributing entity will make contributions when due, the actuary should disclose this.”

It is our professional actuarial opinion that the current legally prescribed method which requires contributions of normal cost plus interest on the unfunded liability plus 1% of the unfunded liability (per KRS 21.525) and which (per KRS 21.405) does not recognize cost of living increases effective after the most recent valuation (assuming future increases are expected), is inconsistent with the plan accumulating adequate assets to make benefit payments when due, assuming all actuarial assumptions are realized. The current method of amortizing unfunded liabilities will not result in the full amortization of those liabilities.

Summary of Benefits

This summary is not a Summary Plan Description or a plan document. You should not rely solely on this summary in making a determination of eligibility of benefit. Liabilities and plan provisions are based on the plan data and provisions as of July 1, 2017. This report covers only the traditional defined benefit/OPEB tier of KLRP.

Source

Sections 6.500-6.577 of the Kentucky Revised Statutes.

Eligibility for Membership

Members of the General Assembly may elect to make monthly contributions within 30 days after taking office, and thereby become eligible for membership in the plan. Individuals commencing participation on or after January 1, 2014 will participate in the hybrid plan.

Employee Contributions

Members entering the plan on or after September 1, 2008 must contribute 6% of their “creditable compensation”. Members entering the plan prior to September 1, 2008 must contribute 5% of their “creditable compensation”. Once a member has earned sufficient service credit to have accrued a benefit of 100% of final average compensation, then employee contributions shall cease.

Creditable Compensation

Creditable compensation is based on actual compensation received during each year.

Normal Retirement

Condition

Members who have attained age 65 and completed at least 5 years of legislative service, or have additional service credit under other authorized State systems so that when added to legislative service credit equals at least 8 years of credit. However, the age 65 requirement shall be reduced by one year for each five years of service, and one year for each year served beyond the years of service needed to accrue a benefit of 100% of final average compensation, but with total reduction not to reduce the age requirement below 60. The full accrued benefit will also be payable upon completion of 27 years of service credit.

Benefit

A member will receive a retirement income at normal retirement date payable monthly for life equal to a percentage of final average compensation multiplied by years of service. In no event shall retirement income exceed 100% of final average compensation. (Final average compensation means the average monthly compensation of the member for his or her highest 36 months of State salary).

The benefit rates vary according to date of legislative service begins, as follows:

1. If a legislator was a member of the plan on July 1, 1982, and entered legislative service prior to July 1, 1978, the benefit rate is 5.00% for all legislative service prior to July 1, 1978, and for all service that continues without interruption after that date.

2. If a legislator was a member of the plan on July 1, 1982 and entered legislative service between July 1, 1978 and June 30, 1980, the benefit rate is 4.15% for all legislative service that continues without interruption thereafter.
3. If a legislator was a member of the plan on July 1, 1982 and entered legislative service between July 1, 1980 and June 30, 1982, the benefit rate is 3.50% for all legislative service that continues without interruption thereafter.
4. For all other service, the benefit rate is 2.75%.

Early Retirement

A member who retires prior to normal retirement date and has met the service requirement for normal retirement has two alternatives with regard to receiving retirement income as follows:

1. Upon reaching normal retirement age, the member may be vested with the right to receive a monthly service retirement allowance computed and payable on the basis of years of service and applicable average salary, or
2. A member may elect to be paid, commencing as of the date of the election, a monthly service retirement allowance equivalent to the amount of monthly allowance that would have been paid had the member waited until reaching normal retirement age, but reduced in accordance with age at the time of election for each year under normal retirement age at the rate of 5% per year.

If the member has 27 or more years of service credit, there shall be no reduction for benefit commencement prior to normal retirement age. If the difference between the number of years of total governmental service and 27 is less than the difference between actual age and normal retirement age, the reduction shall be 5% for each year of service under 27.

Late Retirement

A legislator may continue service past normal retirement age and will continue to accrue service credits, but cannot receive a benefit in excess of 100% of final average compensation.

Disability Benefit

Condition

No service requirement.

Benefit

Upon determination of disability, a member will be eligible to receive $\frac{1}{2}$ of the monthly retirement income that would have been payable commencing at normal retirement date if this member had continued service until that date and then retired. In calculating the retirement income, average salary for the 3 years preceding disability will be used. When a disabled member reaches normal retirement date, the member may apply and start receiving the full amount of retirement income that would have been payable based upon the actual number of years of service and compensation, in lieu of the disability benefit.

Death Benefit

Upon the death of a member who at the time of death was receiving a retirement income (other than an actuarially reduced income), or was receiving a disability income, the surviving spouse (if married to the member at the time of retirement) is entitled to receive a monthly allowance equal to $\frac{1}{2}$ of what the member was receiving for his/her lifetime.

If a member dies after retirement, and was at the time receiving an actuarially reduced allowance, or was not receiving an allowance, but had acquired a vested right to have received an allowance upon reaching normal retirement date, the surviving spouse (if married to the member at the time of retirement) is entitled to receive $\frac{1}{2}$ of the monthly allowance the member would have received at normal retirement date for his/her lifetime.

If an active member dies before retirement and before reaching normal retirement age, without regard to length of service, the surviving spouse is entitled to receive a monthly allowance payable for his/her lifetime equal to $\frac{1}{2}$ of the monthly retirement income the member would have received commencing at the member's normal retirement date as if the member had continued in service until that date and then retired, computed on the basis of final compensation at the time of death.

If a member dies before retirement and after reaching normal retirement date, the surviving spouse is entitled to receive a monthly allowance payable for his/her lifetime equal to $\frac{1}{2}$ of the monthly allowance the member would have been entitled to on the basis of years of service, had the member retired on his date of death, computed on the basis of final compensation at the time of death.

If a member is not married at the time of death, any death benefits described above to which a surviving spouse would have been entitled will be payable to the children of the deceased member until such time as the youngest child attains age 21, or for the life of a disabled child. Also, a member may designate that survivor benefits shall go in part or in total to minor children instead of the spouse.

If cumulative payments to the member and/or beneficiary do not exceed the member's total contributions to this plan, then the excess of such contributions over cumulative plan benefits paid shall be paid as an additional death benefit.

Termination Benefit

If a legislator ceases to be a member of the plan other than by death or disability prior to meeting the eligibility requirements for normal retirement, the amount of the member's accumulated contributions shall be returned to the member. If, thereafter, this individual again becomes a holder of an office qualifying for membership in this plan, this person shall not be entitled to credit for the prior period of service unless, at the time he again participates in the plan, the amount previously refunded is repaid, with interest.

Cost-of-Living Adjustment

Ad hoc cost-of-living adjustments (COLA's) have been granted as noted below:

Effective Date of Increase	Percentage Increase	Increase Applies To Benefits Based on Service Prior To
7/1/1990	5%	6/30/1990
7/1/1991	5%	6/30/1991
7/1/1992	1%	6/30/1992
7/1/1993	1%	6/30/1993
7/1/1994	5%	6/30/1994
7/1/1995	5%	6/30/1995
7/1/1996	None	N/A
7/1/1997	None	N/A
8/1/1998	2.3%	N/A
7/1/1999	1.6%	N/A
7/1/2000	2.2%	N/A
7/1/2001	3.4%	N/A
7/1/2002	2.85%	N/A
7/1/2003	1.6%	N/A
7/1/2004	2.3%	N/A
7/1/2005	2.7%	N/A
7/1/2006	3.4%	N/A
7/1/2007	3.2%	N/A
7/1/2008	2.8%	N/A
7/1/2009 and later*	1.5%	N/A

*COLA's were suspended for fiscal years beginning in 2012 and 2013; COLA's after 7/1/2013 are not reflected in this valuation. No further COLA's will be granted until the plan is 100% funded, unless a one-time COLA is 100% prefunded.

In addition, a provision for an on-going cost-of-living adjustment is made by statute. Effective August 1, 1998 and each July 1 thereafter, a recipient of a monthly pension shall receive a cost-of-living adjustment keyed to the Consumer Price Index. This COLA is excluded from the inviolable contract and can be repealed by the General Assembly at any time. Beginning July 1, 2009, this cost-of-living adjustment will be 1.50% for all retirees who have been retired in excess of one year and prorated for those retired less than one year.

Pursuant to statutory requirements, COLA increases are not reflected in plan liabilities until actually granted, except for any anticipated COLA adjustments under the provision as in effect prior to August 1, 1998.

Prior Service Credit

Credit in KERS or TRS, for legislative service prior to the creation of this plan on July 1, 1980, can be (and in many instances was) transferred to and become credit in this plan, upon transfer to this plan of the accumulated contributions plus interest (member's and state's) that were made to acquire the credit.

Medical Insurance Premium Supplement

Retired members, in addition to actual retirement benefits, will have a percentage of their (and their dependent's) medical insurance premium paid by the plan. The percentage will vary based on the numbers of years of service credit as follows:

Years of Service Credit at Retirement	Percentage of Medical Insurance Premium Paid by the Plan
20 or more	100%
19, but less than 20	95%
18, but less than 19	90%
17, but less than 18	85%
16, but less than 17	80%
15, but less than 16	75%
14, but less than 15	70%
13, but less than 14	65%
12, but less than 13	60%
11, but less than 12	55%
10, but less than 11	50%
4, but less than 10	25%
Less than 4	0%

The premium rates as of July 1, 2017:

	Monthly Premium
<i>Under age 65</i>	
Family coverage	\$1,738.40
Single coverage	721.14
Parent Plus coverage	1,023.04
Member and Spouse	1,564.20
<i>Age 65 or older</i>	
Medicare Advantage PPO	312.79

Premium rates are approved by the Board.

Actuarial Assumptions

Interest

6.5% per annum – this rate was selected by the Board of Trustees and Findley, Inc. and the Fund Investment Manager believe this to be a reasonable long-term rate of return assumption.

The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at the current statutory contribution rates. Based on those assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current plan members through June 30, 2068. The long-term expected rate of return on pension plan investments was applied to periods of projected benefit payments through this date, and the municipal bond rate was used for the period thereafter to determine the total pension liability. The discount used to measure the total pension liability on the second bases was 6.50% for 51 years and 3.11% thereafter. This is equivalent to an average assumed rate of return of approximately 6.45%.

Mortality

RP-2000 Mortality Tables with white collar adjustment with Pre and Post Commencement Rates with projected mortality improvements after year 2000 under Projection Scale AA (male and female scales); i.e., full generational mortality.

Terminations

Table T-4 from the Actuary’s Pension Handbook. Specimen rates are as follows:

Age	Rate of Termination
20	.054
25	.053
30	.051
35	.047
40	.042
45	.035
50	.025
55	.009
60	.001
65+	.000

Salary Increases

1% for the next five years, and 3.5% thereafter

Liabilities have been adjusted to reflect the potential impact of non-legislative salaries on future pension benefits. The liabilities for members (including terminated members) who could be impacted by non-legislative salaries have been increased by 40% to recognize the potential increase in plan liability.

Disability

None

Retirement Age

Retirements were assumed to occur as follow:

<u>Retirement Age</u>	<u>Percentage of Active Members Retiring</u>
NRA-5	16.67%
NRA-4	20.00%
NRA-3	25.00%
NRA-2	33.33%
NRA-1	50.00%
NRA	100.00%

NRA = Normal Retirement Age

In addition to these rates, an extra 20% rate is assumed at the age a member reaches 27 years of service credit.

Post-Retirement Death Benefit

Assumption is that 80% of the legislators would be married at retirement and the husband would be 3 years older than the wife on average.

Pre-Retirement Death Benefit

Assumption is that 80% of the legislators would be survived by a spouse upon death prior to retirement and that the husband would be 3 years older than the wife on average.

Cost-of-Living Adjustment

Pursuant to statutory requirements, COLA increases are not reflected in plan liabilities until actually granted. For the purposes of the calculation of the Recommended Contribution, a full 1.5% annual COLA has been reflected.

Medical Insurance Premium Supplement

Medical premiums will increase for each year beyond the valuation date at the following rates:

Year 1	8.00%
Year 2	7.75%
Year 3	7.50%
Year 4	7.25%
Year 5	7.00%
Year 6	6.75%
Year 7	6.50%
Year 8	6.25%
Year 9	6.00%
Year 10	5.75%
Year 11	5.50%
Year 12	5.25%
Years 13+	5.00%

It is further assumed that coverage would be split among retirees as follows:

	% of Retirees	% With Spouse Coverage
Pre-Medicare Coverage		
Family	11%	N/A
Single	58%	N/A
Parent Plus	5%	N/A
Member and Spouse	26%	N/A
Medicare Coverage		
Medicare Advantage PPO	100%	75%

The assumed annual claims costs per subscriber as of July 1, 2017:

Pre-65 Cost	Post-65 Cost
\$ 14,848	\$ 6,569

Claims were adjusted downward 3% each year for aging for attained ages 55 to 65.

Retirees are assumed to contribute the difference between the premium rate and the portion of the premium paid by the Plan. Premium rates and Plan contributions are described in the Summary of Benefits.

Non-members

Legislators electing not to participate are assumed to continue as non-members in the future.

Actuarial Methods

Funding Method

Accrued liability and normal cost calculated based on Entry Age Normal funding method. The required contribution is calculated based on KRS 21.525, which requires contributions of normal cost plus interest on the unfunded liability plus 1% of the unfunded liability.

Asset Valuation Method

The determination of the actuarial value of assets is as follows:

1. Investment gains/losses are determined for each year by comparing the expected value of assets based on the assumed interest assumption to the actual market value. Expected value of assets in each year shall be determined by projecting the market value of assets from the prior year using the assumed interest rate, plus contributions less benefit payments and plan expenses (adjusted with interest at the assumed rate). If the expected value of plan assets is different than the actual market value of plan assets then the difference is treated as a gain or loss for that year.
2. The amount of any gain or loss as determined above shall be recognized evenly over the subsequent five years.
3. The actuarial value of assets on any valuation date shall be equal to the market value of assets on that date adjusted as follows:
 - Reduced by 80% of a gain or increased by 80% of a loss from the preceding year
 - Reduced by 60% of a gain or increased by 60% of a loss from the 2nd preceding year
 - Reduced by 40% of a gain or increased by 40% of a loss from the 3rd preceding year
 - Reduced by 20% of a gain or increased by 20% of a loss from the 4th preceding year
4. In no event will the actuarial value of assets be less than 80% or greater than 120% of the current market value of assets.

This asset valuation method is used in the determination of funding levels. The fair market value of assets is used for disclosure purposes under GASB Statement Nos. 67, 68, 74, and 75.

For purposes of GASB Statement Nos. 67, 68, 74, and 75, the market value of assets has been allocated between retirement related and medical premium supplement liabilities. This market value allocation is carried forward each year based on the following:

1. State and member contributions, as well as transfers for purchase of additional service, are allocated pro-rata reflecting the Annual Required Contribution for that year.
2. Benefits paid reflect actual benefits paid relative to retirement related benefits separately from medical premium supplements.
3. Preliminary assets are determined by adjusting beginning value for allocated State and member contributions and actual benefits paid.
4. Net investment return is allocated pro-rata based on the preliminary assets developed in the previous step.
5. Allocated assets as of the valuation date equal the preliminary balance plus the allocated share of investment income.

Actuarial value of assets is developed initially in total and then allocated between retirement related benefits and medical premium supplement benefits on a pro-rata basis reflecting allocated share of market value as of the valuation date.

Actuarial Certification

The information contained in this document (including any attachments) is not intended by Findley, Inc. to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer. The information and valuation results shown in this report are, to the best of our knowledge, complete and accurate and are based upon the following:

1. The liabilities used in this report are based on a roll forward of liabilities from the July 1, 2017 Actuarial Valuation Report.
2. Financial data as of June 30, 2018, submitted by the Kentucky Judicial Form Retirement System. This data was not audited by us but appears to be sufficient and reliable for purposes of the report.
3. Actuarial assumptions and methods are established either by statute or the Board. The actuarial assumptions currently adopted by the Board appear to be reasonable, both individually and in aggregate. However, exclusion of retiree cost-of-living adjustments that can be reasonably anticipated to occur in future years (or for which there is an intent to provide in future years) does not reflect our best estimate of expected experience under the plan. As such, the valuation results presented in this report do not fully reflect the potential liability for future retiree cost-of-living adjustments. For purposes of the calculation of the Recommended Contribution, full future retiree cost-of-living adjustments have been reflected.
4. For purposes of GASB 67, 68, 74, and 75 disclosures, assets were split between pension and retiree medical liabilities on the basis of accrued liability as of July 1, 2008 and have been brought forward each year from that date based on actual cash flows and a prorata allocation of investment return. This methodology, initiated by the prior actuary, was based on guidance from the plan's auditor.

We believe the information is sufficiently complete and reliable. This report provides actuarial advice and does not constitute legal, accounting, tax or investment advice.

The actuarial valuation summarized in this report has been performed utilizing generally accepted actuarial principles. The actuarial valuation is based on actuarial assumptions used in the July 1, 2017 report. It is our opinion that the results fully and fairly disclose the actuarial position of the plan on the valuation date. I am a consulting actuary for Findley, Inc., members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Certified by:

Alan C. Pennington, F.S.A.

Alan C. Pennington, F.S.A., E.A., M.A.A.A.
Consulting Actuary

October 3, 2018

Date

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GASB Statement No. 67

Statement of Changes in Fiduciary Net Position

	<u>June 30, 2018</u>
Additions	
Contributions:	
Employer	\$2,384,500
Employee	<u>185,459</u>
Total Contributions	2,569,959
Transfer In Payments	0
Investment Income	6,257,383
Other	<u>0</u>
Total Additions	8,827,342
Deductions	
Benefit Payments / Refunds	4,525,599
Administrative Expenses	0
Other	<u>0</u>
Total Deductions	<u>4,525,599</u>
Net Increase in Net Position	4,301,743
Net Position Restricted for Pensions	
Beginning of Year Market Value of Assets	<u>68,254,406</u>
End of Year Market Value of Assets	<u><u>\$72,556,149</u></u>

Net Pension Liability

Determination of Net Pension Liability

	June 30, 2018
Total Pension Liability (6.45%)	74,180,011
Plan Fiduciary Net Position (Market Value of Assets)	<u>(72,556,149)</u>
Net Pension Liability	<u><u>\$1,623,862</u></u>
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	97.81%

Sensitivity of Net Pension Liability to Changes in the Discount Rate

	1% Decrease	Current Rate	1% Increase
	(5.45%)	(6.45%)	(7.45%)
Net Pension Liability	<u>\$8,525,653</u>	<u>\$1,623,862</u>	<u>(\$4,260,801)</u>

Schedule of Changes in the Net Pension Liability and Related Ratios (Dollar amounts in millions)

	fiscal year ending June 30									
	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Total Pension Liability										
Service cost	\$1.0	\$1.0	\$0.9	\$0.7	\$0.6					
Interest	4.9	5.1	5.2	5.3	4.6					
Changes of benefit terms	0.0	0.0	0.0	0.0	0.0					
Differences between expected and actual experience	0.0	(3.4)	0.0	(6.4)	0.0					
Changes of assumptions	3.7	(1.5)	0.0	(0.2)	0.0					
Benefit Payments / Refunds	(3.5)	(3.7)	(4.0)	(4.2)	(4.5)					
Net Change in Total Pension Liability	<u>\$6.1</u>	<u>(\$2.5)</u>	<u>2.1</u>	<u>(\$4.8)</u>	<u>\$0.7</u>					
Total Pension Liability - beginning	<u>72.6</u>	<u>78.7</u>	<u>76.2</u>	<u>78.3</u>	<u>73.5</u>					
Total Pension Liability - ending (a)	<u>\$78.7</u>	<u>\$76.2</u>	<u>78.3</u>	<u>\$73.5</u>	<u>\$74.2</u>					
Plan Fiduciary Net Position (Market Value of Assets)										
Contributions - employer	\$1.8	\$3.4	\$3.4	\$2.4	\$2.4					
Contributions - employee	0.2	0.2	0.3	0.3	0.2					
Transfer In Payments	0.0	0.0	0.0	0.1	0.0					
Net investment income	7.9	5.6	2.0	7.9	6.2					
Benefit Payments / Refunds	(3.5)	(3.7)	(4.0)	(4.2)	(4.5)					
Administrative expenses	0.0	0.0	0.0	0.0	0.0					
Other	0.0	0.0	0.0	0.0	0.0					
Net Change in Plan Fiduciary Net Position	<u>\$6.4</u>	<u>\$5.5</u>	<u>\$1.7</u>	<u>\$6.5</u>	<u>\$4.3</u>					
Plan Fiduciary Net Position - beginning	<u>48.2</u>	<u>54.6</u>	<u>60.1</u>	<u>61.8</u>	<u>68.3</u>					
Plan Fiduciary Net Position - ending (b)	<u>\$54.6</u>	<u>\$60.1</u>	<u>\$61.8</u>	<u>\$68.3</u>	<u>\$72.6</u>					
Net Pension Liability - ending (a) - (b)	<u>\$24.1</u>	<u>\$16.1</u>	<u>\$16.5</u>	<u>\$5.2</u>	<u>\$1.6</u>					
Plan Fiduciary Net Position as a % of the Total Pension Liability	69.4%	78.9%	78.9%	92.9%	97.8%					
Covered-employee payroll	\$5.0	\$4.5	\$4.5	\$3.5	\$3.5					
Net Pension Liability as a % of covered-employee payroll	<u>483.2%</u>	<u>357.8%</u>	<u>366.7%</u>	<u>148.6%</u>	<u>45.7%</u>					
Discount Rate	6.50%	6.85%	6.85%	6.45%	6.45%					

Schedule of Contributions

(Dollar amounts in millions)

	fiscal year ending June 30									
	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Actuarially determined contribution	\$3.2	\$3.4	\$3.4	\$2.4	\$2.4					
Contributions in relation to the actuarially determined contribution	1.8	3.4	3.4	2.4	2.4					
Contribution deficiency (excess)	\$1.4	\$0.0	\$0.0	\$0.0	\$0.0					
Covered-employee payroll	\$5.0	\$4.5	\$4.5	\$3.5	\$3.5					
Contributions as a percentage of covered-employee payroll	36.1%	75.6%	75.6%	68.6%	68.6%					

Additional Requirements Under GASB Statement No. 67

GASB Statement No. 67 also requires a Statement of Fiduciary Net Position (which includes a breakdown of current assets by type) and additional investment information, including the annual money-weighted rate of return. In order to satisfy GASB Statement No. 67, these required pieces will need to be provided by the Kentucky Judicial Form Retirement System. Findley, Inc. is prepared to assist the system as needed.

GASB Statement No. 68

Schedule of Changes in NPL, Deferrals, & Pension Expense

	Increase (Decrease)					Pension Expense
	Total Pension Liability	Plan Net Position (Assets)	Net Pension Liability	Deferred Pension Outflows of Resources	Deferred Pension Inflows of Resources	
	(a)	(b)	(a) - (b)			
Balances—at 06/30/17	<u>\$ 73,452,796</u>	<u>\$ 68,254,406</u>	<u>\$ 5,198,390</u>	<u>\$ 3,662,577</u>	<u>\$ 5,925,161</u>	
Changes for the Year:						
Service cost	621,005		621,005			621,005
Interest expense	4,631,809		4,631,809			4,631,809
Benefit changes						
Experience losses (gains)	-		-	-	-	(1,332,499)
Changes of assumptions	-		-	-	-	(32,903)
Contributions—State		2,384,500	(2,384,500)			
Contributions—Members		185,459	(185,459)			(185,459)
Transfer In Payments		-	-			
Net investment income		6,257,383	(6,257,383)			
Expected return on plan investments						(4,363,801)
Current expense of asset gain/loss						(1,972,514)
Non expensed asset gain/loss				-	1,514,865	
Refunds of contributions	-	-	-			
Benefits paid	(4,525,599)	(4,525,599)	-			
Plan administrative expenses						
Recognition of Prior Post-measurement Contribution				(2,384,575)		
Post-measurement Contribution				1,110,669		
Other changes						
Amortization of or change in beginning balances				(426,001)	(3,385,201)	
Net Changes	<u>727,215</u>	<u>4,301,743</u>	<u>(3,574,528)</u>	<u>(1,699,907)</u>	<u>(1,870,336)</u>	<u>(2,634,363)</u>
Balances—at 06/30/18	<u>\$ 74,180,011</u>	<u>\$ 72,556,149</u>	<u>\$ 1,623,862</u>	<u>\$ 1,962,670</u>	<u>\$ 4,054,825</u>	<u>\$ (2,634,363)</u>

Pension Expense & Deferred Outflows/Inflows of Resources

For the year ended June 30, 2019, the recognized pension expense/(income) will be (\$2,634,363). At June 30, 2019, the Kentucky Judicial Form Retirement System reported deferred outflows of resources and deferred inflows of resources in relation to pensions from the following sources:

	As of June 30, 2018		Recognized in Pension Expense	As of June 30, 2019		
	Deferred Outflows of Resources	Deferred Inflows of Resources		Deferred Outflows of Resources	Deferred Inflows of Resources	Remaining Amort. Period
Experience losses (gains)						
- 6/30/2017	-	1,332,499	(1,332,499)	-	-	0.000 years
subtotal	-	1,332,499	(1,332,499)	-	-	
Change of assumptions						
- 6/30/2017	-	32,903	(32,903)	-	-	0.000 years
subtotal	-	32,903	(32,903)	-	-	
Net difference between projected and actual earnings on investments						
- 6/30/2014	-	943,361	(943,361)	-	-	0.000 years
- 6/30/2015	-	689,353	(344,677)	-	344,677	1.000 year
- 6/30/2016	1,278,002	-	426,001	852,001	-	2.000 years
- 6/30/2017	-	2,927,045	(731,761)	-	2,195,283	3.000 years
- 6/30/2018	-	1,893,582	(378,716)	-	1,514,865	4.000 years
subtotal	1,278,002	6,453,341	(1,972,514)	852,001	4,054,825	
Total	\$ 1,278,002	\$ 7,818,743	\$ (3,337,916)	\$ 852,001	\$ 4,054,825	

Actual investment earnings above (or below) projected earnings are amortized over 5 years. Plan experience and changes of assumptions are amortized over the average remaining service period of actives and inactive (0 years of future service is assumed for inactive for this calculation).

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended June 30:	
2020	(1,029,153)
2021	(684,477)
2022	(1,110,478)
2023	(378,716)
2024	-
Thereafter	-

In addition, Governmental Accounting Standards Board Statement 71 ("GASB 71") requires contributions between the measurement date (July 1, 2018) and the disclosure date (June 30, 2019) for GASB 68 be reported as a deferred outflow of resources.

GASB Statement No. 74

Statement of Changes in Fiduciary Net Position

	<u>June 30, 2018</u>
Additions	
Contributions	
Employer	0
Employee	0
Total Contributions	<u>0</u>
Transfer In Payments	0
Investment Income	3,892,398
Other	0
Total Additions	<u>3,892,398</u>
Deductions	
Benefit Payments / Refunds	758,496
Administrative Expenses	0
Other	0
Total Deductions	<u>758,496</u>
Net Increase in Net Position	<u>3,133,902</u>
Net Position Restricted for OPEB	
Beginning of Year Market Value of Assets	<u>41,999,573</u>
End of Year Market Value of Assets	<u><u>\$45,133,475</u></u>

Net OPEB Position

Determination of Net OPEB Liability

Total OPEB Liability	22,961,320
Plan Fiduciary Net Position (Market Value of Assets)	<u>(45,133,475)</u>
Net OPEB Liability	<u><u>(\$22,172,155)</u></u>

Plan Fiduciary Net Position as a Percentage of Total OPEB Liability 196.56%

Sensitivity of Net OPEB Liability to Changes in the Healthcare Cost Trend Rate

	1% Decrease 7% decreasing to 4% over 12 years	Current 8% decreasing to 5% over 12 years	1% Increase 9% decreasing to 6% over 12 years
Net OPEB Liability	(\$24,621,772)	(\$22,172,155)	(\$19,244,366)

Sensitivity of Net OPEB Liability to Changes in the Discount Rate

	1% Decrease 5.50%	Current Rate 6.50%	1% Increase 7.50%
Net OPEB Liability	(\$19,449,545)	(\$22,172,155)	(\$24,437,088)

Schedule of Changes in the Net OPEB Liability and Related Ratios

(Dollar amounts in millions)

	fiscal year ending June 30									
	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>
Total OPEB Liability										
Service cost	\$0.4	\$0.3								
Interest	2.0	1.4								
Changes of benefit terms	0.0	0.0								
Differences between expected and actual experience	(10.6)	0.0								
Changes of assumptions	2.3	0.0								
Benefit Payments / Refunds	(0.7)	(0.8)								
Net Change in Total OPEB Liability	(\$6.6)	\$0.9								
Total OPEB Liability - beginning	28.6	22.0								
Total OPEB Liability - ending (a)	<u>\$22.0</u>	<u>\$23.0</u>								
Plan Fiduciary Net Position (Assets)										
Contributions - employer	\$0.0	\$0.0								
Contributions - employee	0.0	0.0								
Transfer In Payments	0.0	0.0								
Net investment income	4.9	3.9								
Benefit Payments / Refunds	(0.7)	(0.8)								
Administrative expenses	0.0	0.0								
Other	0.0	0.0								
Net Change in Plan Fiduciary Net Position	\$4.2	\$3.1								
Plan Fiduciary Net Position - beginning	37.8	42.0								
Plan Fiduciary Net Position - ending (b)	<u>\$42.0</u>	<u>\$45.1</u>								
Net OPEB Liability - ending (a) - (b)	<u>(\$20.0)</u>	<u>(\$22.1)</u>								
Plan Fiduciary Net Position as a % of the Total OPEB Liability	190.9%	196.1%								
Covered-employee payroll	\$3.5	\$3.5								
Net OPEB Liability as a % of covered-employee payroll	(571.4%)	(631.4%)								
Discount Rate	6.50%	6.50%								

Schedule of Contributions

(Dollar amounts in millions)

	fiscal year ending June 30									
	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>
Actuarially determined contribution	\$0.0	\$0.0								
Contributions in relation to the actuarially determined contribution	0.0	0.0								
Contribution deficiency (excess)	\$0.0	\$0.0								
Covered-employee payroll	\$3.5	\$3.5								
Contributions as a percentage of covered-employee payroll	0.0%	0.0%								

Additional Requirements Under GASB Statement No. 74

GASB Statement No. 74 also requires a Statement of Fiduciary Net Position (which includes a breakdown of current assets by type) and additional investment information, including the annual money-weighted rate of return. In order to satisfy GASB Statement No. 74, these required pieces will need to be provided by the Kentucky Judicial Form Retirement System. Findley, Inc. is prepared to assist the system as needed.

GASB Statement No. 75

Statement of Changes in Net OPEB Liability

	Increase (Decrease)		
	Total OPEB Liability	Plan Net Position (Assets)	Net OPEB Liability
	(a)	(b)	(a) - (b)
Balances—at 06/30/2018	<u>\$22,048,825</u>	<u>\$41,999,573</u>	<u>(\$19,950,748)</u>
Changes for the Year:			
Service cost	269,596		269,596
Interest	1,401,395		1,401,395
Benefit changes	0		0
Difference between expected and actual experience	0		0
Changes of assumptions	0		0
Contributions—Employer		0	0
Contributions—Employee		0	0
Transfer In Payments		0	0
Net investment income		3,892,398	(3,892,398)
Refunds of contributions		0	0
Benefits paid	(758,496)	(758,496)	0
Administrative expenses		0	0
Other changes		0	0
Net Changes	<u>912,495</u>	<u>3,133,902</u>	<u>(2,221,407)</u>
Balances—at 06/30/2019	<u>\$22,961,320</u>	<u>\$45,133,475</u>	<u>(\$22,172,155)</u>

OPEB Expense

	Fiscal Year Ending June 30, 2019
Service cost	\$269,596
Interest	1,401,395
Benefit changes	0
Contributions—Employee	0
Expected investment return	(2,714,498)
Recognition of Deferred Inflows/Outflows of Resources	
Recognition of economic/demographic gains or losses	(2,208,713)
Recognition of investment gains or losses	(696,474)
Recognition of assumption changes or inputs	474,594
Plan administrative expenses	0
OPEB Expense	<u>(\$3,474,100)</u>

Deferred Outflows/Inflows of Resources

For the year ended June 30, 2019, the recognized OPEB expense will be (\$3,474,100). At June 30, 2019, the Employer reported deferred outflows of resources and deferred inflows of resources relation to benefits from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources	Remaining Amort. Period
Experience losses (gains)			
- June 30, 2017	0	0	0.000 years
subtotal	0	0	
Asset losses (gains)			
- June 30, 2017	0	1,382,680	3.000 years
- June 30, 2018	0	942,320	4.000 years
subtotal	0	2,325,000	
Changes of assumptions			
- June 30, 2017	0	0	0.000 years
subtotal	0	0	
Total	\$0	\$2,325,000	

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEBs as of June 30, 2019 will be recognized in OPEB expense as follows:

Year ended June 30:	
2020	(696,474)
2021	(696,474)
2022	(696,472)
2023	(235,580)
2024	0
Thereafter	0

GASB Statement No. 71 requires contributions between the measurement date (June 30, 2018) and the disclosure date (June 30, 2019) for Statement No. 75 to be reported as a deferred outflow of resources.

Schedule of Changes in Deferred Outflows/Inflows

	Deferred Outflows of Resources	Deferred Inflows of Resources
Balances—at 06/30/2018	\$474,594	\$4,052,287
Changes for the Year:		
Contribution (prior year expected)	0	0
Contribution (current year expected)	0	0
Experience gains/losses	0	(2,208,713)
Asset gains/losses	0	481,426
Amortization of gains/losses	(474,594)	0
Net Changes	(474,594)	(1,727,287)
Balances—at 06/30/2019 *	\$0	\$2,325,000

* Deferred OPEB Outflows includes deferred losses of \$0 plus expected contributions of \$0.

* Deferred OPEB Inflows includes deferred gains of \$2,325,000.

Actuarial Asset Value

Determination of Actuarial Asset Value

	2017-18 Plan	2016-17 Plan	2015-16 Plan	2014-15 Plan
	Year	Year	Year	Year
Interest Return Assumption	6.50%	7.00%	7.00%	7.00%
Market Value at Beginning of Year				
Amount	\$ 110,253,979	\$ 99,610,610	\$ 97,264,968	\$ 89,077,557
Interest to End of Year	7,166,509	6,972,743	6,808,548	6,235,429
Employer Contributions				
Amount	2,384,500	2,384,500	3,366,500	3,366,500
Interest to End of Year	77,496	83,458	117,828	117,828
Member Contributions				
Amount	185,459	277,313	310,107	216,777
Interest to End of Year	6,027	9,706	10,854	7,587
Transfers from KERS				
Amount	-	86,235	-	-
Interest to End of Year	-	3,018	-	-
Benefits Paid				
Amount	5,284,095	4,963,167	4,660,118	4,380,271
Interest to End of Year	171,733	173,711	176,696	166,085
Expected End of Year Assets	114,618,142	104,290,705	103,041,991	94,475,322
Market Value at End of Year	117,689,624	110,253,979	99,610,610	97,264,968
Investment Gain (Loss)	3,071,482	5,963,274	(3,431,381)	2,789,646
Adjustment Percentage	80%	60%	40%	20%
Actuarial Asset Value Adjustment	(2,457,186)	(3,577,964)	1,372,552	(557,929)
Actuarial Asset Value (Market Value plus Adjustment)	\$ 112,469,097			

	Retirement	Medical Supplement
Market Value at Beginning of Year	\$68,254,406	\$41,999,573
State Contributions	2,384,500	-
Member Contributions	185,459	-
Transfers In Payments	-	-
Distributions	4,525,599	758,496
Allocated Investment Return	6,257,383	3,892,398
Market Value at End of Year	\$72,556,149	\$45,133,475
Allocation of Actuarial Asset Value	\$69,337,672	\$43,131,425

GASB Notes

Notes to GASB 67, 68, 74, and 75 Disclosures

1. Actuarial accrued liability is based on the entry age normal funding method.
2. Market value of assets as of July 1, 2007 was allocated between pension and OPEB obligations based on proportionate share of accrued liability on that date. Allocations in subsequent years are based on prior year allocated value adjusted for contributions and benefits paid during the year, with investment return (net of expenses) allocated proportionately between retirement and OPEB obligations. Actuarial value of assets is then allocated based on the market value share of retirement and OPEB obligations.
3. Actuarial value of assets uses a 5-year asset smoothing method.
4. Information used in preparing these exhibits has been extracted from past valuation reports.
5. Interest on OPEB Obligation is based on assumed valuation interest assumption for the prior year. The interest rates for prior years are as follows: 7% beginning with 2009 valuation; 6.5% beginning with 2017 valuation.

Note: Above statements are based on information furnished by the prior actuary.

6. The tables in this report account for liabilities and assets only for the traditional defined benefit/OPEB tier under the plan; liabilities and assets pertaining to the hybrid cash balance/OPEB tier are presented in a separate report.
7. Covered payroll reflects payroll for plan members as of the last actuarial valuation, with assumed pay increases as appropriate.
8. ADC based on full actuarial report (odd numbered years) immediately prior to each biennium. ADC amount shown is for basic valuation, without any future COLA reflected but with interest adjustment as appropriate.
9. The valuation date, disclosure date, and measurement date all fall on the same date for purposes of GASB 67.
10. It is assumed the measurement date for GASB 68 will be 12 months before the disclosure date. For the year ending June 30, 2019, the measurement date is July 1, 2018 (the valuation date).
11. The valuation date, disclosure date, and measurement date all fall on the same date for purposes of GASB 74.
12. It is assumed the measurement date for GASB 75 will be 12 months before the disclosure date. For the year ending June 30, 2019, the measurement date is July 1, 2018 (the valuation date).

Glossary of Terms

Amortization – The process of systematically recognizing prior gains and losses as a component of the Pension Expense.

Fiduciary Net Position – The market value of assets as of a specified measurement date.

Funded Status – The difference between the Fiduciary Net Position and the Total Pension Liability as of the measurement date.

Gain/Loss – A change in the value of either the Total Pension Liability or the plan assets resulting from experience different from that assumed or from a change in an actuarial assumption.

Interest Cost – The amount recognized in a period determined as the increase in the Total Pension Liability due to the passage of time.

Pension Expense – The sum of Service Cost, Interest Cost, Expected Return on Assets and amortizations of Actuarial Gain/Loss over the average remaining service period (or the life expectancy) of plan participants expected to receive plan benefits plus a 5-year amortization of Asset Gain/Loss.

Service Cost – is the actuarial present value of benefits attributed to services rendered by employees during the measurement.

Total Pension Liability – The Entry Age Normal Accrued Liability.