

Kentucky Judicial Retirement Plan

GASB Disclosure Report as of July 1, 2018

Contents

Introduction	1
Summary of Benefits	4
Actuarial Assumptions	9
Actuarial Methods	12
Actuarial Certification	13
GASB Statement No. 67	14
Statement of Changes in Fiduciary Net Position	14
Net Pension Liability	
Schedule of Contributions	
Additional Requirements Under GASB Statement No. 67	17
GASB Statement No. 68	18
Schedule of Changes in NPL, Deferrals, & Pension Expense	18
Pension Expense & Deferred Outflows/Inflows of Resources	19
GASB Statement No. 74	20
Statement of Changes in Fiduciary Net Position	20
Net OPEB Liability	
Schedule of Contributions	
Additional Requirements Under GASB Statement No. 74	23
GASB Statement No. 75	24
Statement of Changes in Net OPEB Liability	
OPEB Expense	
Deferred Outflows/Inflows of Resources	
Schedule of Changes in Deferred Outflows/Inflows	26
Actuarial Asset Value	27
GASB Notes	28
Glassary of Terms	20

Introduction

An actuarial valuation of the Kentucky Judicial Retirement Plan ("KJRP") 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 KJRP.

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 KJRP, 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 KJRP 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 KJRP 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 KJRP, 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 KJRP and may eventually result in KJRP becoming insolvent – that is, exhausting assets at which time all future benefits would be provided 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 benefits. 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 KJRP.

Source

Sections 21.345-21.580 of the Kentucky Revised Statutes.

Eligibility for Membership

District, Circuit, Court of Appeals and Supreme Court Judges may, within 30 days after taking office, elect to make monthly contributions, 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 "official salary". Members entering the plan prior to September 1, 2008 must contribute 5% of their "official salary". Once a member has earned sufficient service credit to have accrued a benefit of 100% of final average compensation, then employee contributions shall cease.

Normal Retirement

Condition

Members who have completed at least 8 years of service and have attained age 65. However, the age 65 requirement shall be reduced by one year for each five years of service, and one year for each year 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.

For purposes of determining years of service for vesting only, years of service under other authorized State systems will count.

Benefit Formula

The monthly retirement income, payable for the member's lifetime, is based on the following formula:

Members who first participated before July 1, 1978, 5% of final average compensation multiplied by years of service, so long as his service continues without interruption. In no event shall the monthly retirement benefit exceed 100% of final average compensation. (Final average compensation means the average monthly compensation of the member for the 60 months of service immediately preceding retirement date, except for retirements occurring on or before January 1, 2009 which shall use 36 months).

For an individual who first participated, or renewed former participation, between July 1, 1978 and June 30, 1980 the benefit shall be 4.15% of average compensation multiplied by years of service not to exceed 100% of average compensation.

For all other individuals, the benefit shall be 2.75% of average compensation multiplied by years of service not to exceed 100% of average compensation.

Early Retirement

Members who retire prior to normal retirement date with at least 8 years of service have two alternatives with regard to receiving retirement income as follows:

- 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 average salary for the 60 months prior to retirement, 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 judge 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 ½ 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 5 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 ½ 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 Judge ceases to be a member of the plan other than by death or disability without having completed at least 8 years of service, then 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 then this individual 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
7/1/1986	5%	6/30/1980
7/1/1988	5%	6/30/1982
7/1/1989	5%	6/30/1982
7/1/1990	5%	6/30/1990
7/1/1991	5%	6/30/1991
7/1/1993	3%	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 on-going cost-of-living adjustments 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.

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%
15, but less than 20	75%
10, but less than 15	50%
4, but less than 10	25%
Less than 4	0%

The premium rates as of July 1, 2017:

	Monthly Premium
Under age 65	
Family coverage	\$1,738.40
Single coverage	721.14
Parent Plus coverage	1,023.04
Member and Spouse	1,564.20
Age 65 or older	
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, 2055. 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 38 years and 3.11% thereafter. This is equivalent to an average assumed rate of return of approximately 6.24%.

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

None assumed for Members other than District Judges; for District Judges, turnover assumed to be in accordance with Table T-3 from the Actuary's Pension Handbook. Specimen rates are as follows:

Age	Rate of Termination
20	.066
25	.053
30	.048
35	.045
40	.038
45	.032
50	.015
55	.003
60+	.000

Salary Increases

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

Disability

None

Retirement Age

Retirements were assumed to occur as follow:

Retirement Age	Percentage of Active Members Retiring
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 judges 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 judges 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 was further assumed that coverage would be split among retirees as follows:

	% of Retirees	% With Spouse Coverage
Pre-Medicare Coverage		
Family	17%	N/A
Single	49%	N/A
Parent Plus	10%	N/A
Member and Spouse	24%	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	
\$ 15,152	\$ 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

Judges 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 prorata 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:

- 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, including GASB disclosure information, do not fully reflect the potential liability for future retiree cost-of-living adjustments.
- 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., member 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.

October 3, 2018

Date

Consulting Actuary

Findley, Inc. 5301 Virginia Way, Suite 400 Brentwood, TN 37027 (615) 665-1640

GASB Statement No. 67

Statement of Changes in Fiduciary Net Position

	June 30, 2018
Additions	
Contributions:	
Employer	\$11,884,797
Employee	1,816,178
Total Contributions	13,700,975
Transfer In Payments	574,593
Investment Income	27,014,862
Other	0
Total Additions	41,290,430
Deductions	
Benefit Payments / Refunds	23,193,774
Administrative Expenses	0
Other	0
Total Deductions	23,193,774
Net Increase in Net Position	18,096,656
Net Position Restricted for Pensions	
Beginning of Year Market Value of Assets	292,233,685
End of Year Market Value of Assets	\$310,330,341

Findley .14

Net Pension Liability

Determination of Net Pension Liability

•	June 30, 2018
Total Pension Liability (6.24%)	374,373,265
Plan Fiduciary Net Position (Market Value of Assets)	(310,330,341)
Net Pension Liability	\$64,042,924

Plan Fiduciary Net Position as a Percentage of Total Pension Liability

82.89%

Sensitivity of Net Pension Liability to Changes in the Discount Rate

	1% Decrease	Current Rate	1% Increase
	(5.24%)	(6.24%)	(7.24%)
Net Pension Liability	\$100,481,015	\$64,042,924	\$32,972,859

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

	fiscal year ending June 30							
	<u>2014 2015 2016 2017 2018 2019 2020 2021 2022 20</u>							
Total Pension Liability								
Service cost	\$5.0	\$5.0	\$4.8	\$4.7	\$3.9			
Interest	21.9	22.2	23.4	23.8	22.7			
Changes of benefit terms	0.0	0.0	0.0	0.0	0.0			
Differences between expected and actual experience	0.0	4.4	0.0	(8.9)	0.0			
Changes of assumptions	29.1	(4.4)	0.0	(2.1)	0.0			
Benefit Payments / Refunds	(21.8)	(22.3)	(22.9)	(23.0)	(23.2)			
Net Change in Total Pension Liability	\$34.2	\$4.9	5.3	(\$5.5)	\$3.4	_		
Total Pension Liability - beginning	332.1	366.3	371.2	376.5	371.0			
Total Pension Liability - ending (a)	\$366.3	\$371.2	376.5	\$371.0	\$374.4			
Plan Fiduciary Net Position (Market Value of Assets)								
Contributions - employer	\$10.8	\$15.1	\$15.1	\$11.9	\$11.9			
Contributions - employee	2.8	1.9	1.7	1.5	1.8			
Transfer In Payments	1.6	0.2	0.1	0.0	0.6			
Net investment income	33.2	25.6	8.7	34.6	27.0			
Benefit Payments / Refunds	(21.8)	(22.2)	(22.9)	(23.0)	(23.2)			
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	\$26.6	\$20.6	\$2.7	\$25.0	\$18.1			
Plan Fiduciary Net Position - beginning	217.3	243.9	264.5	267.2	292.2			
Plan Fiduciary Net Position - ending (b)	\$243.9	\$264.5	\$267.2	\$292.2	\$310.3			
Net Pension Liability - ending (a) - (b)	\$122.4	\$106.7	\$109.3	\$78.8	\$64.1			
Plan Fiduciary Net Position as a % of the Total Pension								
Liability	66.6%	71.3%	71.0%	78.8%	82.9%			
Covered-employee payroll	\$32.9	\$30.0	\$30.0	\$27.6	\$27.9			
Net Pension Liability as a % of covered-employee payroll	371.7%	355.7%	364.3%	285.5%	229.7%			
Discount Rate	6.15%	6.41%	6.41%	6.24%	6.24%			

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>	2019 2020 2021 2022 2023
Actuarially determined contribution Contributions in relation to the actuarially determined	\$15.2	\$15.1	\$15.1	\$11.9	\$11.9	
contribution	10.8	15.1	15.1	11.9	11.9	
Contribution deficiency (excess)	\$4.4	\$0.0	\$0.0	\$0.0	\$0.0	
Covered-employee payroll	\$32.9	\$30.0	\$30.0	\$27.6	\$27.9	
Contributions as a percentage of covered-employee payroll	32.8%	50.3%	50.3%	43.1%	42.7%	

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)				_		
		Plan Net		Deferred	Deferred		
	Total Pension	Position	Net Pension	Pension	Pension		
	Liability	(Assets)	Liability	Outflows of	Inflows of	Pension	
	(a)	(b)	(a) - (b)	Resources	Resources	Expense	
Balances-at 06/30/17	\$370,998,166	\$292,233,685	\$ 78,764,481	\$ 17,575,653	\$ 26,154,349		
Changes for the Year:							
Service cost	3,898,939		3,898,939			3,898,939	
Interest expense	22,669,934		22,669,934			22,669,934	
Benefit changes							
Experience losses (gains)	-		-	-	-	(4,151,102)	
Changes of assumptions	-		-	-	-	(966,108)	
Contributions-State		11,884,797	(11,884,797)				
Contributions-Members		1,816,178	(1,816,178)			(1,816,178)	
Transfer In Payments		574,593	(574,593)				
Net investment income		27,014,862	(27,014,862)				
Expected return on plan investments						(18,649,921)	
Current expense of asset gain/loss						(9,255,595)	
Non expensed asset gain/loss				-	6,691,953		
Refunds of contributions	-	-	-				
Benefits paid	(23,193,774)	(23,193,774)	-				
Plan administrative expenses							
Recognition of Prior Post-measurement Co	ontribution			(11,884,810)			
Post-measurement Contribution				9,198,964			
Other changes							
Amortization of or change in beginning bal	lances			(1,896,948)	(14,596,764)		
Net Changes	3,375,099	18,096,656	(14,721,557)	(4,582,794)	(7,904,811)	(8,270,030)	
Balances-at 06/30/18	\$374,373,265	\$310,330,341	\$ 64,042,924	\$ 12,992,859	\$ 18,249,538	\$ (8,270,030)	

Pension Expense & Deferred Outflows/Inflows of Resources

For the year ended June 30, 2019, the recognized pension expense/(income) will be (\$8,270,030). 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			As of June 30, 2019			
	Deferred Outflows	Deferred Inflows	Recognized in	Deferred Outflows	Deferred Inflows	Remaining	
	of Resources	of Resources	Pension Expense	of Resources	of Resources	Amort. Period	
Experience losses (gains)							
- 6/30/2017		4,151,102	(4,151,102)			0.000 years	
subtotal	-	4,151,102	(4,151,102)	-	-		
Change of assumptions							
- 6/30/2017	-	966,108	(966,108)	-	-	0.000 years	
subtotal	-	966,108	(966,108)	-	-		
Net difference between projected and							
actual earnings on investments							
- 6/30/2014	-	4,453,865	(4,453,865)	-	-	0.000 years	
- 6/30/2015	-	3,519,484	(1,759,742)	-	1,759,742	1.000 year	
- 6/30/2016	5,690,843	-	1,896,948	3,793,895	-	2.000 years	
- 6/30/2017	-	13,063,791	(3,265,948)	-	9,797,843	3.000 years	
- 6/30/2018	-	8,364,941	(1,672,988)	-	6,691,953	4.000 years	
subtotal	5,690,843	29,402,081	(9,255,595)	3,793,895	18,249,538		
Total	\$ 5,690,843	\$ 34,519,291	\$ (14,372,805)	\$ 3,793,895	\$ 18,249,538		

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 inactives (0 years of future service is assumed for inactives 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	(4,801,730)
2021	(3,041,988)
2022	(4,938,936)
2023	(1,672,988)
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

	June 30, 2018
Additions	
Contributions	
Employer	1,217,903
Employee	186,114
Total Contributions	1,404,017
Transfer In Payments	58,882
Investment Income	7,603,371
Other	0
Total Additions	9,066,270
Deductions	
Benefit Payments / Refunds	1,962,008
Administrative Expenses	0
Other	0
Total Deductions	1,962,008
Net Increase in Net Position	7,104,262
Net Position Restricted for OPEB	
Beginning of Year Market Value of Assets	79,081,919
End of Year Market Value of Assets	\$86,186,181

Net OPEB Liability

Determination of Net OPEB Liability

Total OPEB Liability	54,323,647
Plan Fiduciary Net Position (Market Value of Assets)	(86,186,181)
Net OPEB Liability	(\$31,862,534)

Plan Fiduciary Net Position as a Percentage of Total OPEB Liability

158.65%

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

	1% Decrease	Current	1% Increase
	7% decreasing to	8% decreasing to	9% decreasing to
_	4% over 12 years	5% over 12 years	6% over 12 years
Net OPEB Liability	(\$38,070,706)	(\$31,862,534)	(\$24,404,628)

Sensitivity of Net OPEB Liability to Changes in the Discount Rate

	1% Decrease	Current Rate	1% Increase
_	5.50%	6.50%	7.50%
Net OPEB Liability	(\$25,068,139)	(\$31,862,534)	(\$37,512,587)

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>	2019 2020 2021 2022 2023 2024 2025 2026
Total OPEB Liability			
Service cost	\$1.2	\$0.9	
Interest	4.6	3.3	
Changes of benefit terms	0.0	0.0	
Differences between			
expected and actual			
experience	(22.1)	0.0	
Changes of assumptions	5.6	0.0	
Benefit Payments / Refunds	(1.9)	(2.0)	
Net Change in Total OPEB		,	
Liability	(\$12.6)	\$2.2	
Total OPEB Liability -	,		
beginning	64.7	52.1	
Total OPEB Liability - ending			
(a)	\$52.1	\$54.3	
,		,,,,,,	
Plan Fiduciary Net Position			
(Assets)			
Contributions - employer	\$1.2	\$1.2	
Contributions - employee	0.1	0.2	
	0.0	0.2	
Transfer In Payments	9.4	7.6	
Net investment income		_	
Benefit Payments / Refunds	(1.9)	(2.0)	
Administrative expenses	0.0	0.0	
Other	0.0	0.0	
Net Change in Plan Fiduciary	ΦΟ Ο	ተ 7 1	
Net Position	\$8.8	\$7.1	
Dian Fiduciany Not Position			
Plan Fiduciary Net Position -	70.3	79.1	
beginning Plan Fiduciary Net Position -	70.3	79.1	
· ·	<u> </u>	\$86.2	
ending (b)	\$79.1	φο 0. 2	
Net OPEB Liability - ending	(407.0)	(404.0)	
(a) - (b)	(\$27.0)	(\$31.9)	
Plan Fiduciary Net Position			
as a % of the Total OPEB			
Liability	151.8%	158.7%	
Covered-employee payroll	\$27.6	\$27.9	
Net OPEB Liability as a % of			
covered-employee payroll	(97.8%)	(114.3%)	
Discount Rate	6.50%	6.50%	

Schedule of Contributions

(Dollar amounts in millions)

	<u>2017</u>	<u>2018</u>	fiscal year ending June 30 2019 2020 2021 2022 2023 2024 2025 2026
Actuarially determined contribution Contributions in relation to the actuarially determined	\$1.2	\$1.2	
contribution	1.2	1.2	
Contribution deficiency (excess)	\$0.0	\$0.0	
Covered-employee payroll Contributions as a percentage of covered-	\$27.6	\$27.9	
employee payroll	4.3%	4.3%	

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)					
	Plan Net	_			
Total OPEB	Position	Net OPEB			
Liability	(Assets)	Liability			
(a)	(b)	(a) - (b)			
\$52,064,012	\$79,081,919	(\$27,017,907)			
906,115		906,115			
3,315,528		3,315,528			
0		0			
0		0			
0		0			
	1,217,903	(1,217,903)			
	186,114	(186,114)			
	58,882	(58,882)			
	7,603,371	(7,603,371)			
	0	0			
(1,962,008)	(1,962,008)	0			
	0	0			
	0	0			
2,259,635	7,104,262	(4,844,627)			
\$54,323,647	\$86,186,181	(\$31,862,534)			
	Liability (a) \$52,064,012 906,115 3,315,528 0 0 0 (1,962,008) 2,259,635	Total OPEB Liability (Assets) (a) (b) \$52,064,012 \$79,081,919 906,115 3,315,528 0 0 0 1,217,903 186,114 58,882 7,603,371 0 (1,962,008) (1,962,008) 0 2,259,635 7,104,262			

OPEB Expense

	Fiscal Year Ending June 30, 2019
Service cost	\$906,115
Interest	3,315,528
Benefit changes	0
ContributionsEmployee	(186,114)
Expected investment return	(5,179,530)
Recognition of Deferred Inflows/Outflows of Resources	
Recognition of economic/demographic gains or losses	(10,256,660)
Recognition of investment gains or losses	(1,369,828)
Recognition of assumption changes or inputs	2,620,829
Plan administrative expenses	0
OPEB Expense	(\$10,149,660)

Deferred Outflows/Inflows of Resources

For the year ended June 30, 2019, the recognized OPEB expense will be (\$10,149,660). 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	Remaining Amort, Period
	or Resources	of Resources	Amort. Period
Experience losses (gains)			
- June 30, 2017	0	0	0.000 years
subtotal	0	0	
Asset losses (gains)			
- June 30, 2017	0	2,655,180	3.000 years
- June 30, 2018	0	1,939,073	4.000 years
subtotal	0	4,594,252	
Changes of assumptions			
- June 30, 2017	0	0	0.000 years
subtotal	0	0	
Total	\$0	\$4,594,252	

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	(1,369,828)
2021	(1,369,828)
2022	(1,369,828)
2023	(484,769)
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	Deferred Inflows
of Resources	of Resources
\$3,838,733	\$13,796,900
_	
(1,217,904)	0
0	0
0	0
0	1,939,073
(2,620,829)	(11,141,720)
(3,838,733)	(9,202,647)
\$0	\$4,594,252
	of Resources \$3,838,733 (1,217,904) 0 0 0 (2,620,829) (3,838,733)

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

^{*} Deferred OPEB Inflows includes deferred gains of \$4,594,252.

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	\$ 371,315,604	\$ 337,461,016	\$ 332,948,126	\$ 306,193,359
Interest to End of Year	24,135,514	23,622,271	23,306,369	21,433,535
Employer Contributions				
Amount	13,102,700	13,102,700	16,389,900	16,389,901
Interest to End of Year	425,838	458,595	573,647	573,647
Member Contributions				
Amount	2,002,292	1,639,675	1,776,150	2,020,278
Interest to End of Year	65,074	57,389	62,165	70,710
Transfers from KERS				
Amount	633,475	41,161	117,590	267,528
Interest to End of Year	20,588	1,441	4,116	9,363
Benefits Paid				
Amount	25,155,782	24,950,417	24,816,275	24,212,316
Interest to End of Year	817,563	873,265	940,950	918,050
Expected End of Year Assets	385,727,740	350,560,566	349,420,838	321,827,955
Market Value at End of Year	396,516,522	371,315,604	337,461,016	332,948,126
Investment Gain (Loss)	10,788,782	20,755,038	(11,959,822)	11,120,171
Adjustment Percentage	80%	60%	40%	20%
Actuarial Asset Value Adjustment	(8,631,026)	(12,453,023)	4,783,929	(2,224,034)
Actuarial Asset Value (Market				
Value plus Adjustment)	\$ 377,992,368			

		Medical
	Retirement	Supplement
Market Value at Beginning of Year	\$292,233,685	\$79,081,919
State Contributions	11,884,797	1,217,903
Member Contributions	1,816,178	186,114
Transfers In Payments	574,593	58,882
Distributions	23,193,774	1,962,008
Allocated Investment Return	27,014,862	7,603,371
Market Value at End of Year	\$310,330,341	\$86,186,181
Allocation of Actuarial Asset Value	\$295,832,566	\$82,159,802

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 of retirement and OPEB assets.
- 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 partially based on information furnished by the prior actuary.

- 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.
- 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.



Kentucky Judicial Retirement Plan – Hybrid Tier

GASB Disclosure Report as of July 1, 2018

Contents

Introduction	1
Summary of Benefits	4
Actuarial Assumptions	6
Actuarial Methods	9
Actuarial Certification	10
GASB Statement No. 67	11
Statement of Changes in Fiduciary Net Position	11
Net Pension Liability	
Schedule of Contributions	14
Additional Requirements Under GASB Statement No. 67	14
GASB Statement No.68	15
Schedule of Changes in NPL, Deferrals, & Pension Expense	15
Pension Expense & Deferred Outflows/Inflows of Resources	16
GASB Statement No. 74	17
Statement of Changes in Fiduciary Net Position	17
Net OPEB Liability	
Schedule of Contributions	
Additional Requirements Under GASB Statement No. 74	20
GASB Statement No. 75	21
Statement of Changes in Net OPEB Liability	21
OPEB Expense	21
Deferred Outflows/Inflows of Resources	
Schedule of Changes in Deferred Outflows/Inflows	23
Actuarial Asset Value	24
GASB Notes	25
Glossary of Terms	26
•	

Introduction

An actuarial valuation of the Kentucky Judicial Retirement Plan - Hybrid Tier ("KJRP-HT") 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 hybrid cash balance/OPEB tier of Kentucky Judicial Retirement Plan ("KJRP").

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 KJRP-HT, 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 KJRP 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 KJRP-HT is funded in an "actuarially sound manner", we would recommend the following:

- 1. Revise the actuarial funding method to amortize all past unfunded as well as new liabilities over a period not more than 15 years 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.)
- 2. Contribute at least the recommended contribution each year.

Deviations from these recommendations may result in an "actuarially unsound" approach to funding KJRP-HT and may eventually result in KJRP-HT becoming insolvent – that is, exhausting assets at which time all future benefits would be provided 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), is inconsistent with the plan accumulating adequate assets to make benefit payments when due, assuming all actuarial assumptions are realized.

In addition, the total cost of the Medical Premium Supplement is approximately 0.75% of pay, compared to the required employee contribution of 1% of pay. As a result, members are paying approximately 0.25% of pay more than the benefits are expected to be worth. The Medical plan is currently 37% overfunded and, without any changes, is expected to be increasingly overfunded going forward.

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 benefits. Liabilities and plan provisions are based on the plan data and provisions as of July 1, 2017. This report covers only the hybrid cash balance/OPEB tier of KJRP.

Source

Sections 21.345-21.580 of the Kentucky Revised Statutes

Eligibility for Membership

District, Circuit, Court of Appeals and Supreme Court Judges may, within 30 days after taking office, elect to make monthly contributions, and thereby become eligible for membership in the plan. Individuals commencing participation before January 1, 2014 became participants in the KJRP.

Hypothetical Member Accounts

The Hypothetical Member Account for each member is credited monthly with 9% of "creditable compensation" (including a 5% employee credit and a 4% State credit), as well as interest as described below. The Hypothetical Member Account balance on June 30 each year is equal to the sum of all prior contribution credits and all prior interest credits.

Employee Contributions

All members contribute 5% of their "creditable compensation" to help fund their pension benefit. Additionally, all members contribute 1% of their "creditable compensation" towards the retiree medical benefit.

State Contributions

The State contributes actuarially determined amounts to finance benefits.

Creditable Compensation

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

Interest on Hypothetical Member Accounts

The Hypothetical Member Account will be credited with 4% annually. The credit will be applied on each June 30 based upon the Hypothetical Member Account balance from the preceding June 30. No interest credit is provided for contribution credits made in the current year.

Additionally, if the geometric average net investment return for the prior five years (or years since the effective date of the hybrid plan, if less) exceed 4%, members who were active and participating in the prior year will have their hypothetical accounts credited with 75% of the amount of the return over 4%. This additional interest credit is applied in the same method as the interest credit in the prior paragraph.

Normal Retirement

Condition

Members who have attained age 65 and completed at least 5 years of service. However, for members who are at least age 57, members may retire if age plus service equals 87 years.

Benefit

A member will receive their accumulated Hypothetical Account as either a lump sum or as one of a variety of annuity options, calculated by dividing their accumulated Hypothetical Account by an actuarial factor.

Early Retirement

A member who retires prior to normal retirement date with at least 5 years of service is eligible for a full refund of their accumulated Hypothetical Account as a lump sum.

Termination Benefit

If a judge ceases to be a member of the plan prior to having 5 years of service, the amount of the member's accumulated contributions shall be returned to the member, including the member contributions and the interest applicable to this portion of the account. A member terminating with less than 5 years of service does not receive a refund of State contributions nor the interest applicable to this portion of the account.

Death Benefit

Upon the death of a member who at the time of death was receiving a retirement income, the named beneficiary shall receive survivor benefits based upon the form of retirement benefits being received.

If a member with at least 5 years of service dies before retirement, the named beneficiary is entitled to receive a full refund of the accumulated Hypothetical Member Account. If a member with less than 5 years of service dies before retirement, the named beneficiary is entitled to receive a refund of the member's accumulated contributions, including the member contributions and the interest applicable to this portion of the account.

Medical Insurance Premium Supplement

Retired members with at least 15 years of service, in addition to actual retirement benefits, will receive a monthly medical insurance benefit of ten dollars per year of service.

The premium rates in effect as of July 1, 2017:

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

Premium rates are approved by the Board.

Actuarial Assumptions

Discount Rate

4% 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.

Interest Crediting Rate

4% per annum

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-3 from the Actuary's Pension Handbook. Specimen rates are as follows:

Age	Rate of Termination
20	.066
25	.053
30	.048
35	.045
40	.038
45	.032
50	.015
55	.003
60+	.000

Salary Increases

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

Disability

None

Retirement Age

Retirements were assumed to occur as follow:

Retirement Age *	Percentage of Active Members Retiring
60	16.67%
61	20.00%
62	25.00%
63	33.33%
64	50.00%
65	100.00%

^{*} The plan also requires 5 years of service to be eligible to retire.

Prior to July 1, 2017, an extra 20% rate was assumed at the age a member reaches 27 years of service credit. No additional retirement rate is currently assumed.

Post-Retirement Death Benefit

Assumption is that 80% of the judges 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 judges 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.

Form of Benefit

All participants are assumed to receive a lump sum.

Medical Insurance Premium Supplement

Medical premiums and claim costs 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%

An annual COLA of 1.5% is applied to the monthly insurance benefit, beginning at retirement.

100% of eligible retirees are assumed to elect the benefit. It was further assumed that coverage would be split among retirees as follows:

	% of Retirees	% With Spouse Coverage
Pre-Medicare Coverage		
Family	49%	N/A
Single	17%	N/A
Parent Plus	24%	N/A
Member and Spouse	10%	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
\$ 15.152	\$ 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

Judges 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 vears.
- 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 prorata 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.

October 3, 2018 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.
- 4. For purposes of GASB 67, 68, 74, and 75 disclosures, assets were split between pension and retiree medical liabilities on the basis of the employee and employer contributions allocated to each part and a prorata allocation of investment return. This methodology was based on the process used to split assets in the traditional defined benefit plan between the pension and retiree medical components.

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., member 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

Findley, Inc.

5301 Virginia Way, Suite 400 Brentwood, TN 37027

(615) 665-1640

GASB Statement No. 67

Statement of Changes in Fiduciary Net Position

	June 30, 2018				
Additions					
Contributions:					
Employer	\$69,300				
Employee	161,112				
Total Contributions	230,412				
Transfer In Payments	0				
Investment Income	52,394				
Other	0				
Total Additions	282,806				
Deductions					
Benefit Payments / Refunds	0				
Administrative Expenses	0				
Other	0				
Total Deductions	0				
Net Increase in Net Position	282,806				
Net Position Restricted for Pensions					
Beginning of Year Market Value of Assets	483,878				
End of Year Market Value of Assets	\$766,684				

Net Pension Liability

Determination of Net Pension Liability

	June 30, 2018
Total Pension Liability (4.00%)	764,022
Plan Fiduciary Net Position (Market Value of Assets)	(766,684)
Net Pension Liability	(\$2,662)

Plan Fiduciary Net Position as a Percentage of Total Pension Liability

100.35%

Sensitivity of Net Pension Liability to Changes in the Discount Rate

	1% Decrease	Current Rate	1% Increase
	(3.00%)	(4.00%)	(5.00%)
Net Pension Liability	\$41,034	(\$2,662)	(\$43,406)

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

	<u>2015</u>	2016	2017	2018	2019	2020	2021	2022	2023	2024
Total Pension Liability										
Service cost	\$0.0	\$166.6	\$166.6	\$227.7						
Interest	0.0	10.1	17.1	29.4						
Changes of benefit terms	85.0	0.0	0.0	0.0						
Differences between expected and actual experience	0.0	0.0	76.8	0.0						
Changes of assumptions	0.0	0.0	(10.9)	0.0						
Benefit Payments / Refunds	0.0	0.0	(4.4)	0.0						
Net Change in Total Pension Liability	\$85.0	\$176.7	\$245.2	\$257.1						
Total Pension Liability - beginning	0.0	85.0	261.7	506.9						
Total Pension Liability - ending (a)	\$85.0	\$261.7	\$506.9	\$764.0						
Plan Fiduciary Net Position (Market Value of Assets)										
Contributions - employer	\$42.3	\$71.3	\$69.3	\$69.3						
Contributions - employee	47.9	99.1	118.5	161.1						
Transfer In Payments	0.0	0.0	0.0	0.0						
Net investment income	0.3	4.1	35.5	52.4						
Benefit Payments / Refunds	0.0	0.0	(4.4)	0.0						
Administrative expenses	0.0	0.0	0.0	0.0						
Other	0.0	0.0	0.0	0.0						
Net Change in Plan Fiduciary Net Position	\$90.5	\$174.5	\$218.9	\$282.8						_
Plan Fiduciary Net Position - beginning	0.0	90.5	265.0	483.9						
Plan Fiduciary Net Position - ending (b)	\$90.5	\$265.0	\$483.9	\$766.7						
Net Pension Liability - ending (a) - (b)	(\$5.5)	(\$3.3)	\$23.0	(\$2.7)						
Plan Fiduciary Net Position as a % of the Total Pension Liability	106.5%	101.3%	95.5%	100.4%						
Covered-employee payroll	\$1,936	\$1,936	\$2,697	\$2,724						
Net Pension Liability as a % of covered-employee payroll	-0.3%	-0.2%	0.9%	-0.1%						
Discount Rate	4.00%	4.00%	4.00%	4.00%						

Schedule of Contributions

(Dollar amounts in thousands)

	fiscal year ending June 30									
	<u>2015</u>	2016	2017	2018	2019	2020	2021	2022	2023	<u>2024</u>
Actuarially determined contribution	\$42.3	\$71.3	\$69.3	\$69.3						
Contributions in relation to the actuarially determined contribution	42.3	71.3	69.3	69.3						
Contribution deficiency (excess)	\$0.0	\$0.0	\$0.0	\$0.0						
Covered-employee payroll	\$1,936	\$1,936	\$2,697	\$2,724						
Contributions as a percentage of covered-employee payroll	2.2%	3.7%	2.6%	2.5%						

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

			Incr	ease (Decreas	e)							
				Plan Net				Deferred		eferred		
	Tot	al Pension		Position Net Pension		Pension		F	Pension			
		Liability		(Assets)	l	Liability		utflows of	In	flows of	ı	Pension
		(a)		(b)	((a) - (b)	Resources		Re	esources	E	Expense
Balances-at 06/30/17	\$	506,939	\$	483,878	\$	23,061	\$	143,170	\$	27,122		
Changes for the Year:												
Service cost		227,697				227,697						227,697
Interest expense		29,386				29,386						29,386
Benefit changes		-				-						-
Experience losses (gains)		-				-		-		-		5,354
Changes of assumptions		-				-		-		-		(761)
ContributionsState				69,300		(69,300)						
ContributionsMembers				161,112		(161,112)						(161,112)
Transfer In Payments				-		-						
Net investment income				52,394		(52,394)						
Expected return on plan investments												(23,914)
Current expense of asset gain/loss												(9,046)
Non expensed asset gain/loss								-		22,784		
Refunds of contributions		-		-		-						
Benefits paid		-		-		-						
Plan administrative expenses												
Recognition of Prior Post-measurement	Contr	ribution						(69,281)				
Post-measurement Contribution								98,539				
Other changes												
Amortization of or change in beginning	baland	es						(6,244)		(5,001)		
Net Changes		257,083		282,806		(25,723)		23,014		17,784		67,604
Balances-at 06/30/18	\$	764,022	\$	766,684	\$	(2,662)	\$	166,184	\$	44,906	\$	67,604

Pension Expense & Deferred Outflows/Inflows of Resources

For the year ended June 30, 2019, the recognized pension expense will be \$67,604. 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							As of June 30, 2019			
	Deferred Outf	lows	Deferred Inflo	ws	Recogn	ized in	Deferr	ed Outflows	Defer	red Inflows	Remaining
	of Resourc	es	of Resources	5	Pension	Expense	of R	esources	of R	esources	Amort. Period
Experience losses (gains)							<u> </u>			_	
- 6/30/2017	71,5	23	-			5,354		66,170		-	12.360 years
subtotal	71,5	23	-			5,354		66,170		-	
Change of assumptions											
- 6/30/2017			10,16	3		(761)		-		9,403	12.360 years
subtotal	-		10,16	3		(761)		-		9,403	
Net difference between projected and											
actual earnings on investments											
- 6/30/2015	6	09	-			305		305		-	1.000 year
- 6/30/2016	1,7	56	-			585		1,171		-	2.000 years
- 6/30/2017			16,95	9		(4,240)		-		12,719	3.000 years
- 6/30/2018			28,48	0		(5,696)		-		22,784	4.000 years
subtotal	2,3	65	45,44	0		(9,046)		1,475		35,504	
Total	\$ 73,8	89	\$ 55,60	3	\$	(4,453)	\$	67,645	\$	44,906	

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 inactives (0 years of future service is assumed for inactives 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	(3,692)
2021	(3,997)
2022	(4,582)
2023	(343)
2024	5,354
Thereafter	33,803

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

	June 30, 2018
Additions	
Contributions	
Employer	0
Employee	32,220
Total Contributions	32,220
Transfer In Payments	0
Investment Income	6,683
Other	0
Total Additions	38,903
Deductions	
Benefit Payments / Refunds	0
Administrative Expenses	0
Other	0
Total Deductions	0
Net Increase in Net Position	38,903
Net Position Restricted for OPEB	
Beginning of Year Market Value of Assets	58,897
End of Year Market Value of Assets	\$97,800

Net OPEB Liability

Determination of Net OPEB Liability

Total OPEB Liability	71,139
Plan Fiduciary Net Position (Market Value of Assets)	(97,800)
Net OPEB Liability	(\$26,661)

Plan Fiduciary Net Position as a Percentage of Total OPEB Liability

137.48%

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

	1% Decrease	Current	1% Increase
	7% decreasing to	8% decreasing to	9% decreasing to
	4% over 12 years	5% over 12 years	6% over 12 years
Net OPEB Liability	(\$27,102)	(\$26,661)	(\$26,103)

Sensitivity of Net OPEB Liability to Changes in the Discount Rate

	1% Decrease	Current Rate	1% Increase
	3.00%	4.00%	5.00%
Net OPEB Liability	(\$12,168)	(\$26,661)	(\$38,365)

Schedule of Changes in the Net OPEB Liability and Related Ratios

(Dollar amounts in thousands)

Discount Rate

,										
			f	iscal ye	ar endin	ng June	30			
	<u> 2017</u>	2018		_		_	2023	2024	2025	2026
Total OPEB Liability										
Service cost	\$15.4	\$21.3								
Interest	1.6	2.7								
Changes of benefit terms	0.0	0.0								
Differences between										
expected and actual										
experience	4.8	0.0								
Changes of assumptions	0.0	0.0								
Benefit Payments / Refunds	0.0	0.0								
Net Change in Total OPEB										
Liability	\$21.8	\$24.0								
Total OPEB Liability -										
beginning	25.3	47.1								
Total OPEB Liability - ending										
(a)	\$47.1	\$71.1								
-										
Plan Fiduciary Net Position										
(Assets)										
Contributions - employer	\$0.0	\$0.0								
Contributions - employee	23.7	32.2								
Transfer In Payments	0.0	0.0								
Net investment income	4.3	6.7								
Benefit Payments / Refunds	0.0	0.0								
Administrative expenses	0.0	0.0								
Other	0.0	0.0								
Net Change in Plan Fiduciary										
Net Position	\$28.0	\$38.9								
Plan Fiduciary Net Position -										
beginning	30.9	58.9								
Plan Fiduciary Net Position -										
ending (b)	\$58.9	\$97.8								
Net OPEB Liability - ending										
(a) - (b)	(\$11.8)	(\$26.7)								
Plan Fiduciary Net Position		_		-		-				
as a % of the Total OPEB										
Liability	125.1%	137.6%								
Covered-employee payroll	\$2,697	\$2,724								
Net OPEB Liability as a % of										
covered-employee payroll	(0.4%)	(1.0%)								

Findley 19

4.00%

4.00%

Schedule of Contributions

(Dollar amounts in thousands)

	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 Contributions in relation to the actuarially determined	\$0.0	\$0.0								
contribution	0.0	0.0								
Contribution deficiency (excess)	\$0.0	\$0.0								
Covered-employee payroll Contributions as a percentage of covered-	\$2,697	\$2,724								
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)					
_		Plan Net				
	Total OPEB	Position	Net OPEB			
	Liability	(Assets)	Liability			
_	(a)	(b)	(a) - (b)			
Balances-at 06/30/2018	\$47,111	\$58,897	(\$11,786)			
Changes for the Year:						
Service cost	21,292		21,292			
Interest	2,736		2,736			
Benefit changes	0		0			
Difference between expected and actual experience	0		0			
Changes of assumptions	0		0			
ContributionsEmployer		0	0			
ContributionsEmployee		32,220	(32,220)			
Transfer In Payments		0	0			
Net investment income		6,683	(6,683)			
Refunds of contributions		0	0			
Benefits paid	0	0	0			
Administrative expenses		0	0			
Other changes		0	0			
Net Changes	24,028	38,903	(14,875)			
Balances-at 06/30/2019	\$71,139	\$97,800	(\$26,661)			

OPEB Expense

	Fiscal Year Ending June 30, 2019
Service cost	\$21,292
Interest	2,736
Benefit changes	0
ContributionsEmployee	(32,220)
Expected investment return	(3,050)
Recognition of Deferred Inflows/Outflows of Resources	
Recognition of economic/demographic gains or losses	335
Recognition of investment gains or losses	(1,240)
Recognition of assumption changes or inputs	0
Plan administrative expenses	0
OPEB Expense	(\$12,147)

Deferred Outflows/Inflows of Resources

For the year ended June 30, 2019, the recognized OPEB expense will be (\$12,147). 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	Deferred Inflows	Remaining		
	of Resources	of Resources	Amort. Period		
Experience losses (gains)					
- June 30, 2017	4,145	0	12.360 years		
subtotal	4,145	0			
Asset losses (gains)					
- June 30, 2017	0	1,537	3.000 years		
- June 30, 2018	0	2,906	4.000 years		
subtotal	0	4,443			
Changes of assumptions					
- June 30, 2018	0	0	0.000 years		
subtotal	0	0			
Total	\$4,145	\$4,443			

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	(905)
2021	(905)
2022	(903)
2023	(390)
2024	335
Thereafter	2,470

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	Deferred Inflows		
	of Resources	of Resources		
Balances-at 06/30/2018	\$4,480	\$2,050		
Changes for the Year:				
Contribution (prior year expected)	0	0		
Contribution (current year expected)	0	0		
Experience gains/losses	0	0		
Asset gains/losses	0	2,906		
Amortization of gains/losses	(335)	(513)		
Net Changes	(335)	2,393		
Balances-at 06/30/2019 *	\$4,145	\$4,443		

^{*} Deferred OPEB Outflows includes deferred losses of \$4,145 plus expected contributions of \$0.

 $[\]star$ Deferred OPEB Inflows includes deferred gains of \$4,443.

Actuarial Asset Value

Determination of Actuarial Asset Value

	20:	17-18 Plan Year	20	16-17 Plan Year	20	15-16 Plan Year	20:	14-15 Plan Year
Interest Return Assumption		4.00%		4.00%		4.00%		4.00%
Market Value at Beginning of Year								
Amount	\$	542,775	\$	295,943	\$	101,127	\$	-
Interest to End of Year		21,711		11,838		4,045		-
Employer Contributions								
Amount		69,300		69,311		71,356		42,320
Interest to End of Year		1,386		1,386		1,427		846
Member Contributions								
Amount		193,332		142,183		118,876		58,494
Interest to End of Year		3,867		2,844		2,378		1,170
Transfers from KERS								
Amount		-		-		-		-
Interest to End of Year		-		-		-		-
Benefits Paid								
Amount		-		4,404		-		-
Interest to End of Year		-		88		-		-
Expected End of Year Assets		832,371		519,013		299,209		102,830
Market Value at End of Year		864,484		542,775		295,943		101,127
Investment Gain (Loss)		32,113		23,762		(3,266)		(1,703)
Adjustment Percentage		80%		60%		40%		20%
Actuarial Asset Value Adjustment		(25,690)		(14,257)		1,307		341
Actuarial Asset Value (Market Value								
plus Adjustment)	\$	826,185						

		Medical		
_	Retirement	Supplement		
Market Value at Beginning of Year	483,878	58,897		
State Contributions	69,300	-		
Member Contributions	161,112	32,220		
Transfers In Payments	-	-		
Distributions	-	-		
Refund of Contributions	-	-		
Allocated Investment Return	52,394	6,683		
Market Value at End of Year	766,684	97,800		
Allocation of Actuarial Asset Value	732,717	93,468		

GASB Notes

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

- The tables in this report account for liabilities and assets only for the hybrid cash balance/OPEB tier under the plan; liabilities and assets pertaining to the traditional defined benefit/OPEB tier are presented in a separate report.
- 2. Actuarial accrued liability is based on the entry age normal funding method.
- 3. OPEB liabilities and allocated assets have been excluded from GASB 67 and 68 disclosures and established in GASB 74 and 75 disclosures.
- 4. Market value of assets were split between pension and OPEB obligations based on the basis of the employee and employer contributions and distributions allocated to each part and a prorata allocation of investment return. Actuarial value of assets is then allocated based on the market value of retirement and OPEB assets.
- 5. Actuarial value of assets uses a 5-year asset smoothing method.
- 6. Information used in preparing these exhibits has been extracted from past valuation reports.
- 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, with interest adjustment as appropriate.
- 9. Interest on OPEB Obligation is based on assumed valuation interest assumption for the prior year, 4% beginning with 2015 valuation.
- 10. The valuation date, disclosure date, and measurement date all fall on the same date for purposes of GASB 67.
- 11. 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).
- 12. The valuation date, disclosure date, and measurement date all fall on the same date for purposes of GASB 74.
- 13. 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.