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Retirement Systems of Alabama

GASB STATEMENT NO. 68 REPORT

FOR THE

ALABAMA JUDICIAL RETIREMENT FUND

PREPARED AS OF SEPTEMBER 30, 2018

March 22, 2019

Board of Control
Alabama Judicial Retirement Fund
Montgomery, Alabama

Ladies and Gentlemen:

Presented in this report is information to assist the Alabama Judicial Retirement Fund (JRF) in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 68 and to identify the information to be provided by the actuary, Cavanaugh Macdonald Consulting (CMC). The information presented is for the period ending September 30, 2018 (the Measurement Date).

GASB Statement Number 68 established accounting and financial reporting requirements for governmental employers that provide pension benefits to their employees through a trust.

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of September 30, 2017. The valuation was based upon data, furnished by the JRF staff, for active, inactive and retired members along with pertinent financial information.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial principles and practices, as well as in conformity with Actuarial Standards of Practice issued by the Actuarial Standards Board. The calculations are based on the current provisions of the Plan, and on actuarial assumptions that are, internally consistent and individually reasonable based on the actual experience of the Plan. In addition, the calculations were completed in compliance with the laws governing the Plan and, in our opinion, meet the requirements of GASB 68. Larry Langer is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 and GASB 68 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

Sincerely yours,

Cathy Turcot

Larry Langer, ASA, EA, FCA, MAAA
Principal and Consulting Actuary

Cathy Turcot
Principal and Managing Director

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REPORT OF THE ANNUAL GASB STATEMENT NO. 68
REQUIRED INFORMATION FOR THE
EMPLOYERS PARTCIPATING IN THE ALABAMA JUDICIAL RETIREMENT FUND

PREPARED AS OF SEPTEMBER 30, 2018

SECTION I – INTRODUCTION

The Governmental Accounting Standards Board issued Statement No. 68 (GASB 68), *"Accounting and Financial Reporting For Pensions"* in June 2012. GASB 68's effective date is for an employer's fiscal year beginning after June 15, 2014. The Alabama Judicial Retirement Fund (JRF) is a cost-sharing multiple employer defined benefit pension plan in a special funding situation.

This report, prepared as of September 30, 2018 (the Measurement Date), presents information to assist the employers participating in JRF in meeting the requirements of GASB 68 for the fiscal year ending in 2019 (Reporting Date). Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of JRF as of September 30, 2017. The results of the valuation were detailed in a report dated June 4, 2018.

The NPL shown in the GASB Statement No. 67 Report for the Alabama Judicial Retirement Fund Prepared as of September 30, 2018, and submitted January 4, 2019, is the collective NPL used for purposes of GASB 68. Please refer to that report for the derivation of the collective NPL.

Pension Expense (PE) includes amounts for service cost (the normal cost under the Entry Age Normal actuarial cost method for the year), interest on the Total Pension Liability (TPL), changes in benefit structure, amortization of increases/decreases in liability due to actuarial experience and actuarial assumption changes, and amortization of investment gains/losses. The actuarial experience and assumption change impacts are amortized over the average expected remaining service life of the Plan membership as of the Measurement Date, and investment gains/losses are amortized over five years. The development of the collective PE is shown in Section IV.

The unrecognized portions of each year's experience, assumption changes and investment gains/losses are used to develop deferred inflows and outflows, which also must be included in the employer's financial statements. The development of the collective deferred inflows and outflows is shown in Section III.

These collective amounts have been allocated based on the proportionate share associated with each participating employer. The State makes contributions to JRF for its employees and also on behalf of employees of the participating county employers. Therefore, these employers are considered to be in a special funding situation as defined by GASB 68 and the State is treated as a non-employer contributing entity in JRF. Since the counties do not contribute directly to the JRF, there is no NPL or deferred inflows or outflows to report in the financial statements of the counties. However, the notes to the financial statements must disclose the portion of the non-employer contributing entities' total proportionate share of the collective NPL that is associated with the employer. In addition, each county must recognize the total PE associated with the county as well as revenue in an amount equal to the non-employer contributing entities' total proportionate share of the collective PE associated with the county.

The proportionate share percentages for the State as the employer and the State as a non-employer contributing entity, have been calculated based on actual contributions to the Fund as shown in the following table:

Contribution Type	Amount	Proportionate Share
Employer Contributions related to special funding employers	$ 2,588,572	15.06751%
Employer Contributions related to State employer	14,591,256	84.93249%
Total Employer Contributions	$ 17,179,828	100.00000%

The proportionate share percentages for each employer in a special funding situation have been determined by allocating the total proportionate share for these employers based on the total salaries of the employees of each employer.

Schedule A of this report shows amount of salaries for the employees of each county employer for the years ending September 30, 2017, and September 30, 2018. Schedule A also shows the proportionate share percentages that have been determined based on these salaries.

Based on these percentages we have determined the proportionate share amounts of the NPL, PE and Deferred Inflows and Outflows for each participating employer. These amounts are shown in Schedule B.

Section II of this report is a summary of the principal results of the collective amounts under GASB 68. Section III provides the results of all the necessary calculations, presented in the order laid out in GASB 68 for note disclosure and Section V shows the Required Supplementary Information (RSI).

SECTION II - SUMMARY OF COLLECTIVE AMOUNTS

	2018	2017
Valuation Date:	September 30, 2017	September 30, 2016
Measurement Date:	September 30, 2018	September 30, 2017
Reporting Date:	September 30, 2019	September 30, 2018
Single Equivalent Interest Rate (SEIR):		
Long-Term Expected Rate of Return	7.65%	7.75%
Municipal Bond Index Rate	4.09%	3.57%
Fiscal Year in which Plan's Fiduciary Net Position is projected to be depleted from future benefit payments for current members	N/A	N/A
Single Equivalent Interest Rate	7.65%	7.75%
Net Pension Liability:		
Total Pension Liability (TPL)	$ 462,040,053	$ 456,927,472
Plan Fiduciary Net Position (FNP)	317,316,314	302,578,132
Net Pension Liability (NPL = TPL – FNP)	$ 144,723,739	$ 154,349,340
FNP as a percentage of TPL	68.68%	66.22%
Collective Pension Expense (PE):	$ 14,604,543	$ 17,790,369
Deferred Outflows of Resources:	$ 7,376,258	$ 8,895,932
Deferred Inflows of Resources:	$ 18,913,216	$ 13,382,574

SECTION III – NOTES TO FINANCIAL STATEMENTS

The material presented herein will follow the order presented in GASB 68. Paragraph numbers are provided for ease of reference. Amounts are shown in aggregate. Please refer to Schedule B of this report for the proportionate share of certain pension amounts as required by GASB 68.

Paragraphs 77 and 78(a)-(f): These paragraphs require information to be disclosed regarding the actuarial assumptions used to measure the TPL. The complete set of actuarial assumptions utilized in developing the TPL are outlined in Schedule E.

The actuarial valuation as of September 30, 2017 was prepared based on an assumed investment rate of return of 7.75%. Subsequent to the valuation, the Board of Trustees adopted an investment rate of return assumption of 7.65% effective as of the Measurement Date. The TPL was determined by an actuarial valuation as of September 30, 2017, using the following key assumptions:

Inflation	2.75 percent
Projected Salary increases	3.25 - 3.50 percent, including inflation
Investment rate of return	7.65 percent, net of pension plan investment expense, including inflation

Mortality rates were based on the RP-2000 White Collar Mortality Table projected to 2020 using scale BB and adjusted 115% for males and 112% for females older than 78. The rates of disabled mortality were based on the RP-2000 Disabled Mortality Table projected to 2020 using scale BB and adjusted 105% for males and 120% for females.

The actuarial assumptions for purposes of determining the TPL were based on the results of an actuarial experience study for the period October 1, 2010 – September 30, 2015 and a discount rate of 7.65%, as adopted by the Board of Trustees on December 19, 2018.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimates of geometric real rates of return for each major asset class, as provided by RSA, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Rate of Return*
Fixed Income	22.0%	4.4%
US Large Stocks	41.0%	8.0%
US Mid Stocks	11.0%	10.0%
US Small Stocks	3.0%	11.0%
Int'l Developed Mkt Stocks	12.0%	9.5%
Int'l Emerging Mkt Stocks	3.0%	11.0%
Alternatives	1.0%	10.1%
Real Estate	2.0%	7.5%
Cash Equivalents	5.0%	1.5%
Total	100.0%	

*Includes assumed rate of inflation of 2.50%.

Discount rate. The discount rate used to measure the total pension liability was 7.65 percent. 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 rates equal to the difference between actuarially determined contribution rates and the member rate. 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. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Paragraph 78 (g): This paragraph requires disclosure of the sensitivity of the NPL to changes in the discount rate. The following presents the NPL of the Fund, calculated using the discount rate of 7.65 percent, as well as what the Fund's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (6.65 percent) or 1-percentage-point higher (8.65 percent) than the current rate:

	1% Decrease (6.65%)	Current Discount Rate (7.65%)	1% Increase (8.65%)
Net Pension Liability	$186,716,450	$144,723,739	$108,355,086

Paragraph 80(a): This paragraph requires disclosure of the employer's proportionate share of the collective NPL and if an employer has a special funding situation the portion of the non-employer contributing entities' proportional share of the collective NPL that is associated with the employer. These amounts are shown in Schedule B.

Paragraph 80(b): This paragraph requires disclosure of the employer's proportion (percentage) of the collective NPL and the changes in proportion since the prior measurement date. These amounts are shown for all entities in Schedule A.

Paragraph 80(c): September 30, 2017, is the actuarial valuation date upon which the TPL is based. An expected TPL is determined as of September 30, 2018, using standard roll forward techniques. The procedure used to determine the TPL as of September 30, 2018, is shown on page 7 of the GASB 67 report for JRF submitted on January 4, 2019.

Paragraph 80(g): Please see Section IV of this report for the development of the collective pension expense. The PE associated with each employer is shown in Schedule B.

Paragraph 80(h): Since certain expense items are amortized over closed periods each year, the deferred portions of these items must be tracked annually. If the amounts serve to reduce pension expense they are labeled deferred inflows. If they will increase pension expense they are labeled deferred outflows. The amortization of these amounts is accomplished on a level dollar basis, with no interest included in the deferred amounts. Experience gains/losses and the impact of changes in actuarial assumptions, if any, are amortized over the average expected remaining service life of the active and inactive Plan members at the beginning of the fiscal year. Investment gains and losses are amortized over a fixed five year period.

The table below provides a summary of the collective deferred inflows and outflows as of the Measurement Date. The allocation of the collective deferred inflows and outflows is provided in Schedule B.

	Collective Deferred Outflows of Resources	Collective Deferred Inflows of Resources
Differences between expected and actual experience	$0	$9,851,220
Changes of actuarial assumptions	7,376,258	0
Net difference between projected and actual earnings on plan investments	0	9,061,996
Total	$7,376,258	$18,913,216

The following tables show the components of the collective deferred outflows of resources and the collective deferred inflows of resources by year.

Collective Deferred Outflows and Inflows for Differences between Expected and Actual Experience

	Initial Balance of Losses / Deferred Outflow	Initial Balance of Gains / Deferred Inflow	Amortization Period	Beginning Balance: Deferred Outflows (a)	Beginning Balance: Deferred Inflows (b)	Losses / Deferred Outflows (c)	Gains / Deferred Inflows (d)	Amounts Recognized in Pension Expense / Deferred Outflow (e)	Amounts Recognized in Pension Expense / Deferred Inflow (f)	Ending Balance: Deferred Outflows (a) + (c) - (e)	Ending Balance: Deferred Inflows (b) + (d) - (f)
2018	$0	$9,133,889	4.1	$0	$0	$0	$9,133,889	$0	$2,227,778	$0	$6,906,111
2017	0	4,398,778	3.9	0	3,270,886	0	0	0	1,127,892	0	2,142,994
2016	0	2,487,337	4.0	0	1,243,669	0	0	0	621,834	0	621,835
2015	0	7,391,432	4.1	0	1,983,068	0	0	0	1,802,788	0	180,280
2014	0	0	4.5	0	0	0	0	0	0	0	0
Total				$0	$6,497,623	$0	$9,133,889			$0	$9,851,220

Collective Deferred Outflows and Inflows for Differences from Assumption Changes

Year	Initial Balance of Losses / Deferred Outflow	Initial Balance of Gains / Deferred Inflow	Amortization Period	Beginning Balance: Deferred Outflows (a)	Beginning Balance: Deferred Inflows (b)	Losses / Deferred Outflows (c)	Gains / Deferred Inflows (d)	Amounts Recognized in Pension Expense / Deferred Outflow (e)	Amounts Recognized in Pension Expense / Deferred Inflow (f)	Ending Balance: Deferred Outflows (a) + (c) - (e)	Ending Balance: Deferred Inflows (b) + (d) - (f)
2018	$3,872,903	$0	4.1	$0	$0	$3,872,903	$0	$944,610	$0	$2,928,293	$0
2017	0	0	3.9	0	0	0	0	0	0	0	0
2016	17,791,866	0	4.0	8,895,932	0	0	0	4,447,967	0	4,447,965	0
2015	0	0	4.1	0	0	0	0	0	0	0	0
2014	0	0	4.5	0	0	0	0	0	0	0	0
Total				$8,895,932	$0	$3,872,903	$0			$7,376,258	$0

Collective Deferred Outflows and Inflows for Differences in Investment Experience

	Initial Balance of Losses / Deferred Outflow	Initial Balance of Gains / Deferred Inflow	Amortization Period	Beginning Balance: Deferred Outflows (a)	Beginning Balance: Deferred Inflows (b)	Losses / Deferred Outflows (c)	Gains / Deferred Inflows (d)	Amounts Recognized in Pension Expense / Deferred Outflow (e)	Amounts Recognized in Pension Expense / Deferred Inflow (f)	Ending Balance: Deferred Outflows (a) + (c) - (e)	Ending Balance: Deferred Inflows (b) + (d) - (f)
2018	$0	$4,674,943	5.0	$0	$0	$0	$4,674,943	$0	$934,989	$0	$3,739,954
2017	0	11,297,613	5.0	0	9,038,090	0	0	0	2,259,523	0	6,778,567
2016	0	7,617,808	5.0	0	4,570,684	0	0	0	1,523,562	0	3,047,122
2015	22,518,239	0	5.0	9,007,295	0	0	0	4,503,648	0	4,503,647	0
2014	0	11,417,364	5.0	0	2,283,472	0	0	0	2,283,472	0	0
Total				$9,007,295	$15,892,246	$0	$4,674,943			$4,503,647	$13,565,643
				Net difference between projected and actual earnings on investments							$9,061,996

Summary of Amortization of Deferred Outflows and Inflows of Resources										
Amortization	Actual and Expected Experience					Assumption Changes				
Year	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
2020	$0	($180,280)	($621,835)	($1,127,892)	($2,227,778)	$0	$0	$4,447,965	$0	$944,610
2021	0	0	0	($1,015,102)	($2,227,778)	0	0	0	0	944,610
2022	0	0	0	$0	($2,227,778)	0	0	0	0	944,610
2023	0	0	0	0	(222,777)	0	0	0	0	94,463
2024	0	0	0	0	0	0	0	0	0	0
Thereafter	0	0	0	0	0	0	0	0	0	0
TOTAL	**$0**	**($180,280)**	**($621,835)**	**($2,142,994)**	**($6,906,111)**	**$0**	**$0**	**$4,447,965**	**$0**	**$2,928,293**

Summary of Amortization of Deferred Outflows and Inflows of Resources						
Amortization	Investment Gains/Losses					
Year	2014	2015	2016	2017	2018	Total
2020	$0	$4,503,647	($1,523,562)	($2,259,523)	($934,989)	$1,020,363
2021	0	0	(1,523,560)	($2,259,523)	($934,989)	($7,016,342)
2022	0	0	0	($2,259,521)	($934,989)	($4,477,678)
2023	0	0	0	0	(934,987)	($1,063,301)
2024	0	0	0	0	0	$0
Thereafter	0	0	0	0	0	$0
TOTAL	**$0**	**$4,503,647**	**($3,047,122)**	**($6,778,567)**	**($3,739,954)**	**($11,536,958)**

Paragraph 80(i): Collective amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (100% of these amounts are allocated to the State):

Deferred Amounts to be Recognized in Fiscal Years Following the Reporting Date:	
Year 1	$1,020,363
Year 2	(7,016,342)
Year 3	(4,477,678)
Year 4	(1,063,301)
Year 5	0
Thereafter	0

Paragraph 80(j): The amount of revenue recognized for the support provided by the non-employer contributing entity for the participating employers is provided in Schedule B.

SECTION IV – PENSION EXPENSE

As noted earlier, the collective Pension Expense (PE) consists of a number of different items. GASB 68 refers to the first as Service Cost which is the Normal Cost using the Entry Age Normal actuarial funding method. The second item is interest on the beginning Total Pension Liability (TPL) and the cash flow during the year at the 7.65% rate of return in effect as of the previous measurement date.

The next three items refer to any changes that occurred in the TPL due to:

- benefit changes, or
- actual versus expected experience, or
- changes in actuarial assumptions.

Benefit changes, which are reflected immediately in PE, can be positive, if there is a benefit enhancement for existing Plan members, or negative if there is a benefit reduction. For the year ended September 30, 2018, there were no benefit changes to be recognized.

The next item to be recognized is the portion of current year changes in TPL due to actual versus expected Plan experience for the year. The portion to recognize in the current year is determined by spreading the total change over the average expected remaining service life of the entire Plan membership determined at the beginning of the year. The average expected remaining service life of active members is the average number of years the active members are expected to remain active. For the year ended September 30, 2018 this number of years for the active members is 9.3. The average expected remaining service life of the inactive members is zero. Therefore, the number of years to use for the amortization is the weighted average for all active and inactive members, or 4.1 years. The amount to be recognized due to actual versus expected experience for the year is ($2,227,778).

The last item under changes in TPL are changes in actuarial assumptions since the last measurement date. Recognition of the change in TPL due to changes in actuarial assumptions, is also spread over the average expected remaining service life of the plan membership. The amount to be recognized due to changes in assumptions for the year is $944,610.

Member contributions for the year and projected earnings on the Fiduciary Net Position (FNP), determined at the discount rate used to calculate the liabilities, are subtracted from the amount determined thus far. One-fifth of current period differences between projected and actual investment earnings on the FNP are recognized in the pension expense. The projected earnings on the FNP, the current difference between projected and actual investment earnings on the FNP, and the amount recognized due to this difference are calculated as shown in the following table.

Investment Earnings (Gain)/Loss Determined as of the Measurement Date	
a. Expected asset return rate	7.75%
b. Beginning of year FNP (BOY)	$ 302,578,132
c. End of year FNP	317,316,314
d. Expected return on BOY for the plan year (a x b)	23,449,805
e. External Cash Flow	
(i) Employer contributions	17,179,828
(ii) Member contributions	3,867,366
(iii) Refunds of contributions	(130,333)
(iv) Benefit Payments	(33,419,168)
(v) Administrative expenses	(326,279)
(vi) Other	(56,494)
(vii) Total net external cash flow	(12,885,080)
f. Expected return on net cash flow (a x 0.5 x (e(vii) – e(vi))) + (a x e(vi))	(501,486)
g. Projected earnings for plan year (d + f)	22,948,319
h. Net investment income (c – b – e(vii))	27,623,262
i. Investment earnings (gain)/loss (g – h)	$ (4,674,943)
j. Amount recognized in Pension Expense (i / 5)	$ (934,989)

The current year portions of previously determined experience, assumption and earnings amounts, recognized as deferred outflows and inflows (see Section III) are included also. Deferred outflows are added to the PE while deferred inflows are subtracted from the PE. Administrative expenses and other miscellaneous items are also included in the PE.

The calculation of the Collective Pension Expense determined as of the measurement date is shown in the following table:

Collective Pension Expense Determined as of the Measurement Date	
Service Cost at end of year	$ 9,811,232
Interest on the TPL and net cash flow	34,111,836
Current-period benefit changes	0
Expensed portion of current-period difference between expected and actual experience in the total pension liability	(2,227,778)
Expensed portion of current-period changes of assumptions	944,610
Member contributions	(3,867,366)
Projected earnings on plan investments	(22,948,319)
Expensed portion of current-period differences between projected and actual earnings on plan investments	(934,989)
Administrative expense	326,279
Other	56,494
Recognition of beginning deferred outflows of resources as pension expense	4,447,967
Recognition of beginning deferred inflows of resources as pension expense	(5,115,423)
Collective Pension Expense	$ 14,604,543

SECTION V – REQUIRED SUPPLEMENTARY INFORMATION

Paragraphs 81(a)-(b): This information was supplied in individual employer reporting.

Paragraph 82:

Changes of benefit terms. The member contribution rate was increased from 6.00% of salary to 8.25% of salary on October 1, 2011, and to 8.50% of salary on October 1, 2012.

All justices, judges, and circuit clerks elected or appointed on or after November 8, 2016 are covered under a new benefit structure. In addition, district attorneys serving in the capacity of district attorney on or after that date will also become members of the Fund and will be covered under the new structure as follows:

(i) A service retirement allowance is payable upon the request of any member who has attained age 62 and completed at least 10 years of creditable service.

(ii) Upon service or disability retirement a member who is a judge with years of service less than 18 years, receives a retirement allowance equal to 4% of the member's average final compensation (the 5 highest years in the last 10 years of creditable service) multiplied by the number of years of creditable service, not to exceed 75% of average final compensation. For a member who is a judge with 18 or more years of service, the allowance is 75% of the member's average final compensation.

(iii) Upon service or disability retirement a member who is a clerk or a district attorney receives a retirement allowance equal to 3% of the member's average final compensation (the 5 highest years in the last 10 years of creditable service), not to exceed 80% of average final compensation.

Changes of assumptions.

In 2018, the discount rate was changed from 7.75% to 7.65%.

In 2016, rates of retirement, disability and mortality were adjusted to more closely reflect actual experience. In 2016, economic assumptions and the assumed rates of salary increase were adjusted to more closely reflect actual and anticipated experience. In 2016 the expectation of retired life mortality was changed to the RP-2000 White Collar Mortality Table projected to 2020 using scale BB and adjusted 115% for males and 112% for females older than 78.

In 2010 and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables rather than the 1994 Group Annuity Mortality Table, which was used prior to 2010. In 2010, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In 2010, assumed rates of salary increase were adjusted to more closely reflect actual and anticipated experience.

SCHEDULE A

Alabama Judicial Retirement Fund
Schedule of Employer Allocations
For the Fiscal Years Ended September 30, 2017 and September 30, 2018

County	2017 Calculated Salary	2017 Employer Allocation Percentage	2018 Calculated Salary	2018 Employer Allocation Percentage
Autauga	$ 124,148	0.28523%	$ 124,148	0.28377%
Baldwin	127,869	0.29378%	129,357	0.29567%
Barbour	52,501	0.12062%	52,501	0.12000%
Bibb	76,365	0.17545%	76,365	0.17455%
Blount	78,805	0.18105%	78,805	0.18012%
Bullock	52,501	0.12062%	52,501	0.12000%
Butler	90,076	0.20695%	90,076	0.20589%
Calhoun	97,289	0.22352%	99,979	0.22852%
Chambers	88,213	0.20267%	88,213	0.20163%
Cherokee	108,995	0.25041%	96,313	0.22014%
Chilton	66,431	0.15262%	66,431	0.15184%
Choctaw	90,476	0.20787%	92,737	0.21197%
Clarke	80,193	0.18424%	81,796	0.18696%
Clay	74,112	0.17027%	74,112	0.16940%
Cleburne	103,379	0.23751%	103,379	0.23629%
Coffee	106,122	0.24381%	108,775	0.24863%
Colbert	73,124	0.16800%	73,124	0.16714%
Conecuh	110,883	0.25475%	110,883	0.25345%
Coosa	73,525	0.16892%	75,641	0.17289%
Covington	88,688	0.20376%	91,246	0.20856%
Crenshaw	94,468	0.21704%	97,359	0.22253%
Cullman	91,029	0.20914%	93,997	0.21485%
Dale	76,594	0.17597%	78,127	0.17858%
Dallas	95,714	0.21990%	110,851	0.25337%
DeKalb	99,193	0.22789%	101,689	0.23243%
Elmore	96,896	0.22262%	97,868	0.22370%
Escambia	74,584	0.17135%	76,663	0.17523%
Etowah	146,574	0.33675%	146,574	0.33502%
Fayette	143,041	0.32863%	144,277	0.32977%
Franklin	125,947	0.28936%	125,947	0.28788%
Geneva	77,877	0.17892%	77,877	0.17800%
Greene	84,222	0.19350%	83,701	0.19132%
Hale	100,888	0.23179%	105,723	0.24165%
Henry	108,448	0.24916%	108,448	0.24788%
Houston	106,009	0.24355%	106,050	0.24240%
Jackson	102,130	0.23464%	106,842	0.24421%
Jefferson	292,370	0.67172%	292,374	0.66828%
Lamar	140,344	0.32244%	121,993	0.27884%
Lauderdale	86,372	0.19844%	87,871	0.20085%
Lawrence	75,553	0.17358%	75,669	0.17296%
Lee	101,959	0.23425%	104,675	0.23926%
Limestone	103,982	0.23890%	107,102	0.24480%

SCHEDULE A (continued)

County	2017 Calculated Salary	2017 Employer Allocation Percentage	2018 Calculated Salary	2018 Employer Allocation Percentage
Lowndes	80,323	0.18454%	83,029	0.18978%
Macon	133,817	0.30744%	136,222	0.31136%
Madison	104,263	0.23954%	104,269	0.23833%
Marengo	111,943	0.25719%	112,396	0.25690%
Marion	107,101	0.24606%	107,101	0.24480%
Marshall	81,851	0.18805%	81,851	0.18709%
Mobile	155,831	0.35802%	155,831	0.35618%
Monroe	132,380	0.30414%	125,970	0.28793%
Montgomery	103,446	0.23767%	95,489	0.21826%
Morgan	87,922	0.20200%	90,656	0.20721%
Perry	71,543	0.16437%	71,543	0.16353%
Pickens	66,358	0.15246%	66,358	0.15167%
Pike	92,600	0.21275%	92,600	0.21166%
Randolph	61,945	0.14232%	61,945	0.14159%
Russell	82,552	0.18966%	82,552	0.18869%
Shelby	121,327	0.27875%	103,136	0.23574%
St. Clair	89,235	0.20501%	91,314	0.20872%
Sumter	75,342	0.17310%	75,642	0.17290%
Talladega	85,488	0.19641%	86,771	0.19833%
Tallapoosa	48,828	0.11218%	36,621	0.08370%
Tuscaloosa	148,928	0.34216%	148,928	0.34041%
Walker	72,552	0.16669%	72,552	0.16583%
Washington	106,501	0.24468%	107,021	0.24462%
Wilcox	77,342	0.17769%	77,342	0.17678%
Winston	104,330	0.23968%	106,868	0.24427%
Total for State Support Provided to the Counties	$ 6,591,637	15.14415%	$ 6,592,066	15.06751%
State Employer		84.85585%		84.93249%
Total State of Alabama		100.00000%		100.00000%

SCHEDULE B

Alabama Judicial Retirement Fund
Schedule of Pension Amounts by Employer
As of and for the Fiscal Year Ended September 30, 2019 with Net Pension Liability as of September 30, 2018

		Deferred Outflows of Resources				Deferred Inflows of Resources					Pension Expense		
County	Net Pension Liability 2018	Difference Between Expected and Actual Experience	Change of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Change of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Plan Pension Expense	Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
Autauga	$ 410,683	$ -	$ 20,932	$ -	$ 20,932	$ 27,955	$ 25,715	$ -	$ 3,466	$ 57,136	$ 41,442	$ (2,637)	$ 38,805
Baldwin	427,905	-	21,809	4,629	26,438	29,127	26,794	-	-	55,921	43,183	3,316	46,499
Barbour	173,668	-	8,852	-	8,852	11,821	10,874	-	1,469	24,164	17,524	(1,119)	16,405
Bibb	252,615	-	12,875	52	12,927	17,195	15,818	-	2,116	35,129	25,492	(958)	24,534
Blount	260,676	-	13,286	9,173	22,459	17,744	16,322	-	1,645	35,711	26,305	3,295	29,600
Bullock	173,668	-	8,852	-	8,852	11,821	10,874	-	1,469	24,164	17,524	(1,119)	16,405
Butler	297,972	-	15,187	2,625	17,812	20,283	18,658	-	1,979	40,920	30,070	800	30,870
Calhoun	330,723	-	16,856	11,478	28,334	22,512	20,708	-	-	43,220	33,375	6,999	40,374
Chambers	291,806	-	14,873	3,411	18,284	19,863	18,272	-	1,254	39,389	29,446	3,647	33,093
Cherokee	318,595	-	16,238	69	16,307	21,686	19,949	-	37,840	79,475	32,151	(12,213)	19,938
Chilton	219,749	-	11,200	-	11,200	14,958	13,760	-	1,853	30,571	22,177	(1,155)	21,022
Choctaw	306,771	-	15,635	9,738	25,373	20,882	19,209	-	-	40,091	30,959	6,799	37,758
Clarke	270,576	-	13,791	5,469	19,260	18,418	16,942	-	3,049	38,409	27,305	3,040	30,345
Clay	245,162	-	12,495	1,964	14,459	16,688	15,351	-	6,559	38,598	24,740	(758)	23,982
Cleburne	341,968	-	17,429	1,250	18,679	23,277	21,413	-	2,268	46,958	34,510	(103)	34,407
Coffee	359,827	-	18,340	9,645	27,985	24,493	22,531	-	-	47,024	36,311	6,647	42,958
Colbert	241,891	-	12,329	-	12,329	16,465	15,146	-	2,044	33,655	24,409	327	24,736
Conecuh	366,802	-	18,695	351	19,046	24,968	22,968	-	3,069	51,005	37,016	4,589	41,605
Coosa	250,213	-	12,753	7,782	20,535	17,032	15,667	-	2,213	34,912	25,250	2,296	27,546
Covington	301,836	-	15,384	15,846	31,230	20,546	18,900	-	8,933	48,379	30,459	592	31,051
Crenshaw	322,054	-	16,414	12,871	29,285	21,922	20,166	-	-	42,088	32,501	10,179	42,680
Cullman	310,939	-	15,848	14,352	30,200	21,165	19,470	-	-	40,635	31,378	10,655	42,033
Dale	258,448	-	13,173	9,944	23,117	17,592	16,183	-	-	33,775	26,079	8,298	34,377
Dallas	366,687	-	18,689	42,901	61,590	24,960	22,960	-	1,113	49,033	37,005	21,540	58,545
DeKalb	336,381	-	17,145	7,843	24,988	22,897	21,063	-	578	44,538	33,945	8,528	42,473
Elmore	323,747	-	16,501	3,385	19,886	22,037	20,272	-	17	42,326	32,670	4,089	36,759
Escambia	253,599	-	12,925	4,690	17,615	17,262	15,879	-	1,467	34,608	25,591	663	26,254
Etowah	484,853	-	24,712	-	24,712	33,004	30,359	-	4,099	67,462	48,929	(3,118)	45,811
Fayette	477,255	-	24,325	3,163	27,488	32,486	29,884	-	910	63,280	48,161	2,419	50,580
Franklin	416,631	-	21,235	103	21,338	28,360	26,088	-	3,440	57,888	42,044	(1,353)	40,691
Geneva	257,608	-	13,130	-	13,130	17,535	16,130	-	2,178	35,843	25,996	(1,043)	24,953
Greene	276,885	-	14,112	16,640	30,752	18,847	17,337	-	11,644	47,828	27,940	(597)	27,343
Hale	349,725	-	17,825	11,841	29,666	23,805	21,898	-	1,387	47,090	35,291	3,909	39,200
Henry	358,741	-	18,284	660	18,944	24,419	22,463	-	1,537	48,419	36,201	(1,079)	35,122
Houston	350,810	-	17,880	18,038	35,918	23,879	21,966	-	1,381	47,226	35,401	19,404	54,805
Jackson	353,430	-	18,014	17,727	35,741	24,058	22,130	-	3,581	49,769	35,665	4,938	40,603
Jefferson	967,160	-	49,291	-	49,291	65,837	60,560	-	8,139	134,536	97,603	(6,217)	91,386

SCHEDULE B (continued)

		Deferred Outflows of Resources				Deferred Inflows of Resources					Pension Expense		
County	Net Pension Liability 2018	Difference Between Expected and Actual Experience	Change of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Change of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Proportionate Share of Plan Pension Expense	Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
Lamar	403,548	-	20,568	116	20,684	27,469	25,268	-	53,199	105,936	40,722	(17,468)	23,254
Lauderdale	290,678	-	14,815	13,706	28,521	19,786	18,201	-	660	38,647	29,332	5,501	34,833
Lawrence	250,314	-	12,758	2,001	14,759	17,039	15,674	-	6,362	39,075	25,260	(2,551)	22,709
Lee	346,266	-	17,648	12,074	29,722	23,570	21,682	-	-	45,252	34,943	8,406	43,349
Limestone	354,284	-	18,057	9,235	27,292	24,116	22,184	-	595	46,895	35,753	7,033	42,786
Lowndes	274,657	-	13,999	16,766	30,765	18,696	17,198	-	596	36,490	27,718	6,530	34,248
Macon	450,612	-	22,967	4,708	27,675	30,673	28,215	-	1,843	60,731	45,473	(717)	44,756
Madison	344,920	-	17,580	-	17,580	23,478	21,597	-	3,383	48,458	34,805	(2,576)	32,229
Marengo	371,795	-	18,950	22,995	41,945	25,308	23,280	-	349	48,937	37,520	13,715	51,235
Marion	354,284	-	18,057	-	18,057	24,116	22,184	-	2,989	49,289	35,752	6,775	42,527
Marshall	270,764	-	13,800	2,189	15,989	18,431	16,954	-	1,656	37,041	27,324	1,096	28,420
Mobile	515,477	-	26,273	-	26,273	35,088	32,277	-	4,355	71,720	52,020	(3,317)	48,703
Monroe	416,703	-	21,238	17,227	38,465	28,365	26,092	-	20,447	74,904	42,052	1,111	43,163
Montgomery	315,874	-	16,099	2,740	18,839	21,501	19,779	-	31,351	72,631	31,876	(10,844)	21,032
Morgan	299,882	-	15,284	6,380	21,664	20,413	18,777	-	1,066	40,256	30,263	2,081	32,344
Perry	236,667	-	12,062	1,891	13,953	16,110	14,819	-	6,323	37,252	23,884	(1,645)	22,239
Pickens	219,502	-	11,188	3,427	14,615	14,941	13,744	-	5,745	34,430	22,149	990	23,139
Pike	306,322	-	15,613	5,974	21,587	20,851	19,181	-	5,851	45,883	30,910	(4,404)	26,506
Randolph	204,914	-	10,444	-	10,444	13,948	12,831	-	1,727	28,506	20,679	(1,319)	19,360
Russell	273,079	-	13,918	-	13,918	18,588	17,099	-	2,303	37,990	27,557	(1,755)	25,802
Shelby	341,172	-	17,389	2,250	19,639	23,223	21,363	-	54,597	99,183	34,428	(17,763)	16,665
St. Clair	302,067	-	15,396	4,530	19,926	20,561	18,914	-	1,218	40,693	30,481	1,705	32,186
Sumter	250,227	-	12,754	5,441	18,195	17,033	15,668	-	819	33,520	25,250	1,866	27,116
Talladega	287,031	-	14,629	2,306	16,935	19,538	17,973	-	1,179	38,690	28,966	(683)	28,283
Tallapoosa	121,134	-	6,174	164	6,338	8,245	7,585	-	70,280	86,110	12,225	(32,751)	(20,526)
Tuscaloosa	492,654	-	25,110	3,947	29,057	33,535	30,848	-	13,175	77,558	49,714	(2,698)	47,016
Walker	239,995	-	12,232	-	12,232	16,336	15,028	-	2,032	33,396	24,219	(1,543)	22,676
Washington	354,023	-	18,044	3,645	21,689	24,098	22,167	-	72	46,337	35,725	4,271	39,996
Wilcox	255,843	-	13,040	1,229	14,269	17,415	16,020	-	1,540	34,975	25,818	4,113	29,931
Winston	353,517	-	18,018	6,815	24,833	24,064	22,136	-	6,331	52,531	35,675	(1,680)	33,995
Total for State Support	$ 21,806,264	$ -	$ 1,111,418	$ 399,396	$ 1,510,814	$ 1,484,334	$ 1,365,417	$ -	$ 424,740	$ 3,274,491	$ 2,200,541	$ 64,979	$ 2,265,520
State Employer	122,917,475	-	6,264,840	92,041	6,356,881	8,366,886	7,696,579	-	66,697	16,130,162	12,404,002	(64,979)	12,339,023
Total State of Alabama	$ 144,723,739	$ -	$ 7,376,258	$ 491,437	$ 7,867,695	$ 9,851,220	$ 9,061,996	$ -	$ 491,437	$ 19,404,653	$ 14,604,543	$ -	$ 14,604,543

SCHEDULE C

Alabama Judicial Retirement Fund
Schedule of Remaining Deferred Outflows/(Inflows)
As of and for the Fiscal Year Ending September 30, 2019

County	2020	2021	2022	2023	2024	Thereafter
Autauga	$ 956	$ (20,816)	$ (13,272)	$ (3,072)	$ -	$ -
Baldwin	5,207	(19,111)	(12,507)	(3,072)	-	-
Barbour	402	(8,802)	(5,613)	(1,299)	-	-
Bibb	657	(12,804)	(8,165)	(1,890)	-	-
Blount	8,741	(11,617)	(8,425)	(1,951)	-	-
Bullock	402	(8,802)	(5,613)	(1,299)	-	-
Butler	2,365	(13,613)	(9,630)	(2,230)	-	-
Calhoun	7,363	(11,718)	(8,295)	(2,236)	-	-
Chambers	4,499	(13,988)	(9,431)	(2,185)	-	-
Cherokee	(10,597)	(27,474)	(21,584)	(3,513)	-	-
Chilton	515	(11,139)	(7,101)	(1,646)	-	-
Choctaw	6,954	(11,673)	(7,903)	(2,096)	-	-
Clarke	3,560	(13,509)	(7,317)	(1,883)	-	-
Clay	450	(14,831)	(7,922)	(1,836)	-	-
Cleburne	1,794	(16,459)	(11,052)	(2,562)	-	-
Coffee	6,798	(14,116)	(9,266)	(2,455)	-	-
Colbert	562	(12,260)	(7,817)	(1,811)	-	-
Conecuh	1,230	(18,591)	(11,853)	(2,745)	-	-
Coosa	2,758	(9,248)	(6,203)	(1,684)	-	-
Covington	494	(8,130)	(7,479)	(2,034)	-	-
Crenshaw	8,617	(11,428)	(7,837)	(2,155)	-	-
Cullman	9,793	(10,758)	(7,408)	(2,062)	-	-
Dale	8,534	(10,411)	(6,985)	(1,796)	-	-
Dallas	17,662	(5,330)	1,621	(1,396)	-	-
DeKalb	6,217	(14,822)	(8,648)	(2,297)	-	-
Elmore	4,195	(14,701)	(9,599)	(2,335)	-	-
Escambia	2,061	(10,998)	(6,343)	(1,713)	-	-
Etowah	1,129	(24,578)	(15,671)	(3,630)	-	-
Fayette	3,943	(21,949)	(14,324)	(3,462)	-	-
Franklin	1,148	(21,115)	(13,463)	(3,120)	-	-
Geneva	598	(13,058)	(8,327)	(1,926)	-	-
Greene	839	(6,385)	(9,411)	(2,119)	-	-
Hale	5,172	(13,408)	(7,000)	(2,188)	-	-
Henry	2,670	(17,865)	(11,595)	(2,685)	-	-
Houston	19,507	(16,896)	(11,300)	(2,619)	-	-
Jackson	5,975	(10,549)	(7,227)	(2,227)	-	-
Jefferson	2,278	(49,022)	(31,261)	(7,240)	-	-
Lamar	(14,385)	(36,838)	(29,377)	(4,652)	-	-
Lauderdale	11,685	(11,709)	(8,059)	(2,043)	-	-
Lawrence	564	(15,030)	(7,985)	(1,865)	-	-
Lee	9,302	(13,709)	(8,772)	(2,351)	-	-
Limestone	6,621	(15,172)	(8,675)	(2,377)	-	-

SCHEDULE C (continued)

County	2020	2021	2022	2023	2024	Thereafter
Lowndes	8,882	(6,325)	(6,468)	(1,814)	-	-
Macon	3,218	(20,692)	(12,423)	(3,159)	-	-
Madison	324	(17,483)	(11,141)	(2,578)	-	-
Marengo	15,700	(8,333)	(11,615)	(2,744)	-	-
Marion	826	(17,956)	(11,449)	(2,653)	-	-
Marshall	3,446	(13,722)	(8,749)	(2,027)	-	-
Mobile	1,203	(26,129)	(16,662)	(3,859)	-	-
Monroe	4,745	(18,321)	(19,173)	(3,690)	-	-
Montgomery	(6,959)	(26,467)	(17,292)	(3,074)	-	-
Morgan	3,430	(12,762)	(7,260)	(2,000)	-	-
Perry	431	(14,311)	(7,648)	(1,771)	-	-
Pickens	2,138	(13,214)	(7,097)	(1,642)	-	-
Pike	5,319	(17,422)	(9,899)	(2,294)	-	-
Randolph	480	(10,385)	(6,623)	(1,534)	-	-
Russell	636	(13,841)	(8,825)	(2,042)	-	-
Shelby	(13,617)	(34,535)	(27,218)	(4,174)	-	-
St. Clair	2,670	(13,454)	(7,909)	(2,074)	-	-
Sumter	3,971	(9,632)	(7,820)	(1,844)	-	-
Talladega	1,824	(13,407)	(8,137)	(2,035)	-	-
Tallapoosa	(33,099)	(29,900)	(14,782)	(1,991)	-	-
Tuscaloosa	903	(29,796)	(15,920)	(3,688)	-	-
Walker	558	(12,166)	(7,758)	(1,798)	-	-
Washington	5,537	(16,605)	(10,976)	(2,604)	-	-
Wilcox	2,445	(12,966)	(8,268)	(1,917)	-	-
Winston	2,231	(18,351)	(9,160)	(2,418)	-	-
Total for State Support Provided to the Counties	$ 176,477	$ (1,072,607)	$ (704,366)	$ (163,181)	$ -	$ -
State Employer	843,886	(5,943,735)	(3,773,312)	(900,120)	-	-
Total State of Alabama	$ 1,020,363	$ (7,016,342)	$ (4,477,678)	$ (1,063,301)	$ -	$ -

SCHEDULE D

SUMMARY OF MAIN PLAN PROVISIONS
AS INTERPRETED FOR ACCOUNTING AND REPORTING VALUATION PURPOSES

The Judicial Retirement Fund was established September 18, 1973. This valuation included amendments to the Fund effective through the valuation date. There is a new tier of benefits (Tier II) for all justices, judges and circuit clerks elected or appointed on or after November 8, 2016. In addition, there is a new tier of benefits (District Attorneys' Plan) for all District Attorneys elected or appointed on or after November 8, 2016. The following summary describes the main benefit and contribution provisions of the Fund as interpreted for the valuation.

Membership

Any justice of the Supreme Court, judge of the Court of Civil Appeals, judge of the Court of Criminal Appeals, judge of the Circuit Court or officeholder of any newly created judicial office receiving compensation from the State treasury became a member of the fund if he was holding office on the effective date of the Act and elected to come under its provisions. Any such justice or judge elected or appointed to office after the effective date of the Act or any district or probate judge elected or appointed to office after October 10, 1975 or October 1, 1976, respectively, automatically becomes a member. Any circuit clerk or district attorney elected or appointed on or after November 8, 2016 automatically becomes a member. Certain other district and probate judges as well as certain former county court judges, district attorneys or assistant district attorneys serving as circuit judges and certain supernumerary judges and justices could also elect to become members.

Average Final Compensation

The average compensation of a Tier II (Group 3) or District Attorney member for the 5 highest years in the last 10 years of credited service.

Credited Service

Credited service is service as a member plus certain periods of previous service credited in accordance with the provisions of the Act.

SCHEDULE D (continued)

Benefits

Service Retirement Benefit

Condition for Benefit

Tier I (Groups 1 and 2):
A retirement benefit is payable upon the request of any member who has:
- Completed 12 years of credited service and attained age 65, or
- Completed 15 years of credited service and whose age plus service equals or exceeds 77, or
- Completed at least 18 years of credited service or three full terms as a judge or justice, or
- Completed 10 years of credited service and attained age 70

However, a judge who became a member on or after July 30, 1979 or who is a district or probate judge must meet the following age and service requirement combinations in order to be eligible to retire:

- Completed 12 years of credited service and attained age 65, or
- Completed at least 15 years of credited service and attained age 60, and whose age plus service equals or exceeds 77, or
- Completed 10 years of credited service and attained age 70, or
- Completed 25 years of credited service (or completed 24 years of credited service provided the member purchases one year of service prior to retirement) regardless of age

Tier II (Group 3) and District Attorneys:
Completed 10 years of service and attained age 62**.**

Amount of Benefit

Tier I (Groups 1 and 2):
The service retirement benefit for a member is equal to:

(a) For a circuit or appellate judge, who was a member prior to July 30, 1979, 75% of the salary prescribed by law for the position from which the member retires.

(b) For a circuit or appellate judge who became a member on or after July 30, 1979, 5% of the member's salary at the time of separation from service.

(c) For a district judge, 75% of the position's salary immediately prior to retirement.

(d) For a probate judge, 75% of the member's salary at the time of separation from service.

Tier II (Group 3) and District Attorneys:
The service retirement benefit for a member is equal to:

(a) For a member who is a judge with years of service less than 18 years, 4% of average final compensation multiplied by years of credited service; for a member who is a judge with 18 or more years of service, 75% of average final compensation, not to exceed 75% of average final compensation**.**

(b) For a member who is a clerk or district attorney, 3% of average final compensation multiplied by years of credited service, not to exceed 80% of average final compensation.

SCHEDULE D (continued)

Disability Retirement Benefit

Condition for Benefit — A disability retirement benefit is payable to any member who becomes permanently, physically or mentally, unable to carry out his duties on a full-time basis, provided the member has completed five or more years of credited service. (ten years for new tier members)

Amount of Benefit

Tier I (Groups 1 and 2):

(a) The disability retirement benefit for a member other than a district or probate judge who was a member prior to July 30, 1979 is equal to 25% of the salary prescribed by law for the position from which the member retires on disability plus 10% of such salary for each year of credited service in excess of five years. The disability retirement benefit is subject to a minimum of 30% and a maximum of 75% of such salary.

(b) The disability retirement benefit for a judge who became a member on or after July 30, 1979 or who is a district or probate judge is equal to 25% of his salary immediately prior to retirement plus 10% of such salary for each year of credited service in excess of five years. The disability retirement benefit is subject to a minimum of 30% and a maximum of 75% of such salary.

Tier II (Group 3) and District Attorneys:

(a) For a member who is a judge with years of service less than 18 years, 4% of average final compensation multiplied by years of credited service; for a member who is a judge with 18 or more years of service, 75% of average final compensation, not to exceed 75% of average final compensation. .

(b) For a member who is a clerk or district attorney, 3% of average final compensation multiplied by years of credited service, not to exceed 80% of average final compensation.

Spouse's Benefit

Tier I (Groups 1 and 2):

Condition for Benefit — Upon the death of an active, inactive or retired member with at least 5 years of credited service, a death benefit is payable to the member’s spouse.

Amount of Benefit — The death benefit payable to the spouse of a judge other than a district or probate judge consists of a yearly benefit equal to 3% of the salary prescribed by law for the position of the former member for each year of service, not to exceed 30% of such salary.

The death benefit payable to the spouse of a district judge consists of a yearly benefit equal to 3% of the position’s salary prescribed by law at the time of death for each year of service not to exceed 30% of such salary.

The death benefit payable to the spouse of a probate judge is a yearly benefit equal to the greater of $480 for each year of credited service to a maximum of 10 years, or 3% of the member’s salary at the time of separation from service for each year of credited service not to exceed 30% of such salary.

The benefit is payable for the spouse's life or until his or her remarriage.

SCHEDULE D (continued)

Death in Active Service Benefit

Amount of Benefit

Tier II (Group 3) and District Attorneys:

(a) In the event of the death of a member who is eligible for service retirement, the designated beneficiary may elect: (1) to exercise option 3 as defined below under "Special Privileges at Retirement – All Employees" or (2) to receive a return of member contributions and total interest earned plus a death benefit payable from the pre-retirement death benefit fund equal to the salary on which the member made retirement contributions for the previous fiscal year (October 1 – September 30).

(b) In the event of the death of a member who is not eligible for retirement, the designated beneficiary shall receive the accumulated contributions not to exceed $5,000 or the accumulated contributions of the member plus an additional death benefit payable from the pre-retirement death benefit payable from the pre- retirement death benefit fund equal to the salary on which their retirement contributions were made for the previous fiscal year. (October 1- September 30)

Benefit Payable on Separation from Service

If a member terminates service and elects not to withdraw his contributions and accrued interest from the Fund, he is eligible to receive any of the benefits for which he has sufficient credited service upon reaching an eligible retirement age.

A member terminating service before reaching eligibility for retirement benefits may elect to receive a return of contributions and accrued interest. "Regular Interest" is 4% which is the rate adopted by the Board and applied to the balance in each member's' account every year; however, if a member receives a refund of contributions, the interest rate applied to the refund is lower than the 4% regular rate (Based on Section 36-27-16.3(c)(1)).

Contributions

By Members

Tier I (Groups 1 and 2):
Prior to October 1, 2011, each member contributed 6.0% of salary.

Beginning October 1, 2011, each member contributed 8.25% of salary.

Beginning October 1, 2012, each member contributes 8.50% of salary.

Tier II (Group 3) and District Attorneys:
Each Tier II member and District Attorney member contributes 8.50% of salary.

If positive investment performance results in a decrease in the total contribution rate paid by employers and employees participating in the Fund, the Retirement Systems of Alabama shall first reduce the employee contribution rate.

By State

The State makes contributions which, in addition to the members' contributions, are sufficient to carry out the provisions of the Act.

SCHEDULE D (continued)

Special Privileges at Retirement

Tier II (Group 3) and District Attorneys:

In lieu of the full retirement allowance, any member may, at retirement, elect to receive a reduced retirement allowance equal in value to the full allowance, with the provision that:

Option 1. If the member dies before the annuity payments equal or exceed the present value of the member's annuity at the date of retirement, the balance is paid to a designated beneficiary or to the estate, or

Option 2. After the member's death, the member's allowance is continued throughout the life of the designated beneficiary, or

Option 3. After the member's death, one half of the member's allowance is continued throughout the life of the designated beneficiary, or

Option 4. Some other benefit is paid either to the member or to the designated beneficiary provided such benefit, together with the reduced retirement allowance, is of equivalent actuarial value to his retirement allowance and is approved by the Board of Control.

SCHEDULE E

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation are based on the actuarial experience study prepared as of September 30, 2015 and adopted by the Board on September 29, 2016 and on an investment rate of return of 7.65% adopted by the Board on December 19, 2018.

Investment Rate of Return: 7.65% per annum, compounded annually, including inflation at 2.75%.

Salary Increases: 3.5% per annum for less than 14 years of service and 3.0% for 14 or greater years of service, compounded annually, including wage inflation at 3.00%.

Separations Before Retirement: Representative values of the assumed annual rates of withdrawal, death and disability are as follows:

	Annual Rate of			
	Withdrawal	Death*		Disability**
Age		Male	Female	
30	2.50%	0.0376%	0.0149%	0.020%
35	2.50	0.0655	0.0268	0.040
40	2.50	0.0914	0.0399	0.068
45	2.50	0.1278	0.0635	0.108
50	2.50	0.1812	0.0947	0.163
55	2.50	0.2567	0.1371	0.250
60	2.50	0.3815	0.1929	0.395
64	2.50	0.5070	0.2558	0.570

* Rates of pre-retirement mortality are according to the sex distinct RP-2000 Employee Mortality Table (with the sex distinct RP-2000 Combined Mortality Table for ages over 70) projected with Scale BB to 2020 with an adjustment factor of 90% for males and 60% for females.

**Disability rates turn off at retirement eligibility.

SCHEDULE E (continued)

Rates of Retirement:

Tier I (Groups 1 and 2): Between the ages of 55 and 59, 25% of members are assumed to retire in the year when first eligible and 10% in each year thereafter. Between the ages of 60 and 69, 30% of members are assumed to retire in the year when first eligible and 15% in each year thereafter. 30% of the remaining members are assumed to retire each year between age 70 and 74, and all remaining members are assumed to retire at age 75.

Tier II (Group 3) and District Attorneys' Plan:

	Judges		Clerks and District Attorneys
Age	<18 years	≥18 years	
62-69	10%	15%*	10%**
70-74	30%	30%	30%
75	100%	100%	100%

*An additional 15% are assumed to retire at 18 years of service

**An additional 20% are assumed to retire when first eligible for retirement and at 27 years of service.

Deaths After Retirement: Rates of mortality for the period after service retirement are according to the sex distinct RP-2000 White Collar Mortality Table projected to 2020 using scale BB and adjusted 115% for males and 112% for females older than age 78. The sex distinct RP-2000 Disabled Mortality Table projected to 2020 using scale BB and adjusted 105% for males and 120% for females is used for the period after disability retirement. Representative values of assumed mortality are as follows:

	Service Retirement		Disability Retirement	
Age	Male	Female	Male	Female
55	0.3575%	0.2339%	3.5044%	1.7959%
60	0.5579	0.3825	3.8359	2.1434
65	0.9991	0.6795	4.1382	2.6417
70	1.6384	1.1928	4.8570	3.5474
75	2.8589	2.0200	6.3692	4.9231
80	5.0501	3.7900	8.4883	6.8160
85	8.8966	6.5271	10.9897	9.4450
90	16.4327	11.3249	15.4359	13.4706

Percent Married: 85% of active members are assumed to be married with the husband 4 years older than the wife.

Actuarial Method: Individual Entry age normal. Gains and losses are reflected in the unfunded accrued liability.

Assets: Market Value.

Liability for Current Inactive Members: Member Contribution Balance is multiplied by a factor of 1.0.

SCHEDULE E (continued)

Post Retirement Increases: Allowances of retired members and spouses who receive benefits based on the salaries prescribed by law for the position are assumed to increase by 3.00% per year. The members' actual salaries at retirement are assumed to be equal to the salary prescribed by law for their position.

Benefits Payable upon Separation from Service: Active members who terminated from service prior to becoming eligible for a benefit are assumed to receive a refund of contributions with interest assumed to be 4% per year.

SCHEDULE F

FUNDING POLICY OF THE EMPLOYEES' RETIREMENT SYSTEM BOARD OF CONTROL FOR THE ADMINISTRATION OF THE JUDICIAL RETIREMENT FUND

The purpose of the funding policy is to state the overall funding objectives for the Judicial Retirement Fund (Fund), the benchmarks that will be used to measure progress in achieving those goals, and the methods and assumptions that will be employed to develop the benchmarks.

The funding policy reflects the Board's long-term strategy for stability in funding of the plan. For that reason, it is critical that this funding policy remain unchanged until its objectives are met.

I. Funding Objectives

The goal in requiring employer and member contributions to the Fund is to accumulate sufficient assets during a member's employment to fully finance the benefits the member is expected to receive throughout retirement. In meeting this objective, the Fund will strive to meet the following funding objectives:

- To maintain an increasing funded ratio (ratio of fund actuarial value of assets to actuarial accrued liabilities) that reflects a trend of improved actuarial condition. The long-term objective is to attain a funded ratio which is consistent with the fiscal health and long-term stability of the Fund.
- To maintain adequate asset levels to finance the benefits promised to members and monitor the future demands for liquidity.
- To develop a pattern of contribution rates expressed as a percentage of member payroll as measured by valuations prepared in accordance with applicable State laws and the principles of practice prescribed by the Actuarial Standards Board. In no event will the employer contribution rate be negative.
- To provide intergenerational equity for taxpayers with respect to Fund costs.

II. Benchmarks

To track progress in achieving the previously outlined funding objectives, the following benchmarks will be measured annually as of the valuation date. The valuation date is the date that the annual actuarial valuation of the Fund's assets and liabilities is prepared. This date is currently September 30th each year with due recognition that a single year's results may not be indicative of long-term trends:

- **Funded ratio** – The funded ratio, defined as the actuarial value of assets divided by the actuarial accrued liability, should increase over time, before adjustments for changes in benefits, actuarial methods, and/or actuarial assumptions. An open amortization period is one for which the amortization period is recalculated on a yearly basis and the ending date of the amortization period is a variable with each recalculation. A closed amortization period is one which is calculated over a fixed period and at the end of that period, the amount is fully amortized.

SCHEDULE F (continued)

- **Unfunded Actuarial Accrued Liability (UAAL)**
  - **Transitional UAAL -** The UAAL established as of the initial valuation date for which this funding policy is adopted shall be known as the Transitional UAAL.
  - **New Incremental UAAL -** Each subsequent valuation will produce a New Incremental UAAL consisting of all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuation.
- **UAAL Amortization Period and Contribution Rates**
  - The Transitional UAAL will be amortized over a closed period. The closed period shall be the amortization period for the valuation preceding the adoption of the funding policy not to exceed 30 years.
  - Each New Incremental UAAL shall be amortized over a closed 30 year period.
  - Employer Normal Contribution Rate – the contribution rate determined as of the valuation date each year based on the provisions of Alabama Code Sections 36-27-24 and

    12-18-2.
  - In each valuation subsequent to the adoption of this funding policy the required employer contribution rate will be determined by the summation of the employer Normal Contribution Rate, a contribution rate for administrative expenses, the individual amortization rate for each of the New Incremental UAAL bases, the amortization rate for the Transitional UAAL.

III. Methods and Assumptions

The actuarial funding method used to develop the benchmarks will be the Entry Age Normal (EAN) actuarial cost method. The actuarial methods and assumptions used will be those last adopted by the Board based upon the advice and recommendation of the actuary. The actuary shall conduct an investigation into the Fund's experience at least every five years and utilize the results of the investigation to form the basis for those recommendations.

IV. Funding Policy Progress

The Board will periodically have projections of funded status performed to assess the current and expected future progress towards the overall funding goals of the Fund.