



Cavanaugh Macdonald
CONSULTING, LLC

The experience and dedication you deserve



Retirement Systems
of Alabama

**Alabama Clerks and Registers
Supernumerary Fund Report
of the Actuary on the
Annual Valuation Prepared as of
September 30, 2021**





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

April 5, 2022

Retirement Systems of Alabama
Alabama Clerks and Registers Supernumerary Fund
Montgomery, AL

Dear Sir or Madam:

In this report are submitted the results of the annual valuation of the assets and liabilities of the Alabama Clerks and Registers Supernumerary Fund (CRSF), prepared as of September 30, 2021. The purpose of this report is to provide a summary of the funded status of the Fund as of September 30, 2021, and to recommend rates of contribution. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The State of Alabama operates a program for Clerks and Registers consisting of the following: (1) pay as you go payments directly from the Administrative Office of Courts to clerks and registers upon election of supernumerary status (retirement), and (2) the Clerks and Registers Supernumerary Fund (CRSF) into which each active clerk and register must contribute six percent (6%) of salary and from which payments are made to surviving spouses of those who meet minimum service requirements.

Since the previous valuation, various assumptions have been revised based on an experience investigation prepared as of September 30, 2020 for the Judicial Retirement Fund (JRF).

We have prepared the valuation results using the average of the Bond Buyer General Obligation 20-year Municipal Bond Index, the Fidelity General Obligation AA 20-year Municipal Bond Index, and the S&P High Grade 20-year Municipal Bond Index as of September 30, 2021 (2.29%) to discount liabilities of the Fund. On this basis the State would need to contribute 311.37% of payroll to the CRSF for the year ending September 30, 2024.

The promised benefits of the Fund are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method. In conjunction with the use of the discount rate described above, we recommend using market value of assets for valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized over a 15-year period as a level dollar amount. The assumptions recommended by the actuary are in the aggregate reasonably related to the experience under the Fund and to reasonable expectations of anticipated experience under the Fund.

We have prepared the Schedule of Active Member Valuation Data, Schedule of Funding Progress, Trend Information and the Solvency Test for the financial section of the Annual Report.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Fund and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Fund.



Retirement Systems of Alabama
April 5, 2022
Page 2

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Since the program is funded primarily on a pay-as-you-go basis, the Fund is not operating in an actuarially prefunded manner. Assuming that contributions to the Fund are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the sufficiency of the retirement fund to provide the benefits called for under the Fund may be safely anticipated.

We note that as we are preparing this report, the world is in the midst of a pandemic. We have considered available information, but do not believe that there is yet sufficient data to warrant the modification of any of our assumptions prior to the upcoming experience study.

In order to prepare the results in this report, we have utilized appropriate actuarial models that were developed for this purpose. These models use assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully Submitted,

A handwritten signature in blue ink, appearing to read 'LL'.

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

A handwritten signature in blue ink, appearing to read 'Cathy Turcot'.

Cathy Turcot
Principal and Managing Director

A handwritten signature in blue ink, appearing to read 'Edward J. Koebel'.

Edward Koebel, EA, FCA, MAAA
Chief Executive Officer



Table of Contents

<u>Section</u>	<u>Item</u>	<u>Page No.</u>
I	Summary of Principal Results	1
II	Membership	3
III	Assets	5
IV	Comments on Valuation	6
V	Contributions Payable by Employer	7
VI	Analysis of Financial Experience	8
VII	Accounting Information	9
VIII	Risk Assessment	11

Schedule

A	Valuation Balance Sheet and Solvency Test	13
B	Summary of Receipts and Disbursements	15
C	Outline of Actuarial Assumptions and Methods	16
D	Actuarial Cost Method	18
E	Summary of Main Plan Provisions as Interpreted for Valuation Purposes	19
F	Tables of Employee Data	21





Section I: Summary of Principal Results

**ALABAMA CLERKS AND REGISTERS SUPERNUMERARY FUND
REPORT OF THE ACTUARY ON THE
ANNUAL VALUATION
PREPARED AS OF SEPTEMBER 30, 2021**

1. For convenience of reference, the principal results of the valuation are summarized below:

VALUATION DATE	September 30, 2021	September 30, 2020
Interest Rate	2.29%	2.25%
Active clerks and registers:		
Number	50	51
Annual compensation	\$4,779,545	\$4,759,183
Supernumerary officials:		
Number	81	83
Annual allowances	\$6,041,258	\$6,166,595
Spouses receiving benefits:		
Number	20	17
Annual allowances	\$638,218	\$564,766
Former clerks and registers eligible for future benefits		
Number	0	1
Estimated Annual allowances	0	76,710
Assets:		
Actuarial Value	\$13,443,947	\$13,185,441
Market Value	13,443,947	13,185,441
Unfunded accrued liability	\$143,115,441	\$148,271,693
Funded Ratio	8.6%	8.2%
CONTRIBUTIONS FOR FISCAL YEAR ENDING	September 30, 2024	September 30, 2023
Actuarially Determined Employer Contribution Rate (ADEC):		
Normal	76.74%	78.58%
Accrued Liability	<u>234.63%</u>	<u>243.40%</u>
Total	<u>311.37%</u>	<u>321.98%</u>
Employer Contribution Rate	311.37%	321.98%
Employee Contribution Rate	<u>6.00%</u>	<u>6.00%</u>
Total	<u>317.37%</u>	<u>327.98%</u>
Amortization Period	15 years	15 years





Section I: Summary of Principal Results

2. Comments on the valuation results as of September 30, 2021 are given in Section IV and further discussion of the contribution levels is set out in Section V.
3. We have prepared valuation results using the average of the Bond Buyer General Obligation 20-year Municipal Bond Index, the Fidelity General Obligation AA 20-year Municipal Bond Index, and the S&P High Grade 20-year Municipal Bond Index. The rates as of September 30, 2021 were 2.26%, 2.43%, and 2.19% for the Bond Buyer, Fidelity, and S&P Municipal Bond Indices, respectively. These three rates resulted in an average Municipal Bond Index Rate of 2.29% for September 30, 2021 to be used to discount liabilities of the Fund. The discount rate used in the previous valuation was 2.25%.
4. Since the previous valuation, various assumptions have been revised based on an experience investigation prepared as of September 30, 2020 for the Judicial Retirement Fund (JRF). Assumed price inflation has been decreased from 2.75% to 2.50%, resulting in a reduction to the assumed rates of salary increase for active and supernumerary members from 3.00% to 2.75%. In addition, the assumed rates of mortality have been revised to the Pub 2010 tables projected generationally with the MP-2019 scale, adjusted by 66-2/3% beginning with year 2019 as follows:

<u>Group</u>	<u>Membership Table</u>	<u>Set Forward(+)</u> / <u>Setback (-)</u>	<u>Adjustment to Rates</u>
Service Retirees	Teacher Retiree-Below Median	Male: +2, Female: +2	Male: 108% ages < 63, 96% ages > 67; Phasing down 63 -67 Female: 112% ages < 69 98% > age 74 Phasing down 69-74
Beneficiaries	Contingent Survivor Below Median	Male: +2, Female: None	None
Disabled Retirees	Teacher Disability	Male: +8, Female: +3	None





Section II: Membership

1. The following table shows the number of active clerks and registers and their annual compensation as of September 30, 2021 on the basis of which the valuation was prepared.

TABLE 1
THE NUMBER AND ANNUAL COMPENSATION OF
ACTIVE CLERKS AND REGISTERS AS OF SEPTEMBER 30, 2021

GROUP	NUMBER	COMPENSATION
Males	16	\$1,519,807
Females	<u>34</u>	<u>3,259,738</u>
Total	50	\$4,779,545

2. The following table shows a history of active member valuation data.

TABLE 2
SCHEDULE OF ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
9/30/2016	67	\$ 5,541,686	\$ 82,712	-0.3%
9/30/2017	66	5,569,651	84,389	2.0%
9/30/2018	58	4,910,933	84,671	0.3%
9/30/2019	51	4,751,963	93,176	10.0%
9/30/2020	51	4,759,183	93,317	0.2%
9/30/2021	50	4,779,545	95,591	2.4%





Section II: Membership

3. The following table shows the number and annual retirement allowances payable to members in supernumerary status and their beneficiaries on the roll of the Retirement Fund as of the valuation date.

TABLE 3

**THE NUMBER AND ANNUAL ALLOWANCES OF CLERKS AND REGISTERS
IN SUPERNUMERARY STATUS AND SPOUSES IN RECEIPT
AS OF SEPTEMBER 30, 2021**

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES
Supernumerary Officials	81	\$6,041,258
Spouses Receiving Benefits	<u>20</u>	<u>638,218</u>
Total	101	\$6,679,476

In addition, there are 3 non-vested former clerks eligible for a refund of contributions.

4. Table 1 of Schedule F gives the distribution by age and by years of service of the active clerks and registers included in the valuation, while Table 2 gives the number and annual retirement allowances of supernumerary officials and spouses receiving benefits included in the valuation, distributed by age.





Section III: Assets

1. As of September 30, 2021, the total market value of assets reported by the System and used for valuation purposes amounted to \$13,443,947 . The actuarial value of assets is equal to the market value of assets.
2. Schedule B shows the receipts and disbursements of the Fund for the two years preceding the valuation date and a reconciliation of the fund balances at market value.





Section IV: Comments On Valuation

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the Fund as of September 30, 2021.
2. The valuation balance sheet shows that the Fund has total prospective liabilities of \$190,407,890 . Of this amount, \$108,508,764 is for the prospective benefits payable on account of present supernumerary officials, spouses receiving benefits and former clerks and registers eligible for future benefits and \$81,899,126 is for the prospective benefits payable on account of present active clerks and registers. Against these liabilities, the Fund has total present actuarial value of assets of \$13,443,947 as of September 30, 2021. The difference of \$176,963,943 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future. Of this amount, \$2,430,968 is the present value of future contributions expected to be made by active clerks and registers, and the balance of \$174,532,975 represents the present value of future contributions payable by the employer.
3. The determination of the employer's required contributions consists of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 76.74% of payroll are required to provide the benefits of the Fund.
4. Prospective normal contributions at the rate of 76.74% have a present value of \$31,417,534 . When this amount is subtracted from \$174,532,975 which is the present value of the total future contributions to be made by the employer, there remains \$143,115,441 as the amount of future accrued liability contributions. Annual accrued liability contributions at the rate of 234.63%of payroll will liquidate the unfunded accrued liability within 15 years from the valuation date.





Section V: Contributions Payable By Employer

1. On the basis of the actuarial valuation prepared as of September 30, 2021, it is recommended that the employer make contributions at the following rates:

TABLE 4
RECOMMENDED CONTRIBUTION RATES

	PERCENTAGE OF ACTIVE CLERKS' AND REGISTERS' COMPENSATION
Interest Rate	2.29%
CONTRIBUTION	
Normal	76.74%
Accrued Liability	<u>234.63%</u>
Total	311.37%





Section VI: Analysis Of Financial Experience

The following table shows the estimated gain or loss from various factors that resulted in a decrease of \$ 5,156,252 in the unfunded accrued liability from \$148,271,693 to \$143,115,441 during the year ending September 30, 2021.

ANALYSIS OF FINANCIAL EXPERIENCE

(in thousands of dollars)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (2.25%) added to previous unfunded accrued liability	\$ 3,336.1
Accrued liability contribution*	(2,396.7)
Experience:	
Valuation asset growth	(337.9)
Pensioners' mortality	(1,678.6)
Turnover and retirements	235.3
New entrants	0.0
Salary increases	(294.4)
Method changes	0.0
COLA**	(3,045.0)
Change in Assumptions***	(1,085.5)
Data Change	0.0
Miscellaneous changes	110.4
Total	\$ (5,156.3)

* Equal to the estimated total employer contributions during the fiscal year (benefit payments from the general fund) less the estimated portion of contributions attributed to normal cost for the year, adjusted for interest to September 30, 2021 $((\$6,107,301 - 3,737,255) \times 1.01125)$.

** (Gain) or Loss resulting from expected benefit increases during the year different from actual benefit increases.

*** The discount rate used to measure the liabilities of the Fund increased from 2.25% in the previous valuation to 2.29% in the current valuation.





Section VII: Accounting Information

The Clerks and Registers Supernumerary Fund comes under the scope of Governmental Accounting Standards Board Statement 73 since benefits to Plan members are not paid from Plan assets. The following information is provided for informational purposes only.

1. The following is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED MEMBERS AS OF SEPTEMBER 30, 2021

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	101
Terminated employees entitled to benefits but not yet receiving benefits	3
Active Members	<u>50</u>
Total	154

2. The schedule of funding progress is shown below.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
9/30/2016 *	\$ 12,280,833	\$ 144,678,722	\$132,397,889	8.5%	\$ 5,541,686	2389.1%
9/30/2017 *	12,212,319	134,117,172	121,904,853	9.1%	5,569,651	2188.7%
9/30/2018 *	11,960,817	128,865,237	116,904,420	9.3%	4,910,933	2380.5%
9/30/2019 *	12,617,024	147,969,560	135,352,536	8.5%	4,751,963	2848.3%
9/30/2020 *	13,185,441	161,457,134	148,271,693	8.2%	4,759,183	3115.5%
9/30/2021 *	13,443,947	156,559,388	143,115,441	8.6%	4,779,545	2994.3%

* Reflects change in the discount rate (20-year high-quality tax-exempt municipal bond index rate).





Section VII: Accounting Information

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at September 30, 2021. Additional information as of the latest actuarial valuation follows.

Valuation date	9/30/2021
Actuarial cost method	Entry Age
Amortization method	Level dollar open
Remaining amortization period	15 years
Asset valuation method	Market value
Actuarial assumptions:	
Investment rate of return (discount rate)*	2.29%
Projected salary increases*	2.75%
Cost-of-living adjustments	2.75%
*Includes inflation at	2.75%





Section VIII: Risk Assessment

Overview

Actuarial Standards of Practice (ASOP) No. 51, issued by the Actuarial Standards Board, provides guidance on assessing and disclosing risks related to pension plan funding. This guidance is binding on all credentialed actuaries practicing in the United States. This standard was issued as final in September 2017 with application to measurement dates on or after November 1, 2018.

Under ASOP 51, the actuary is called upon to identify the significant risks to the pension plan and provide information to help those sponsoring and administering the plan understand the implications of these risks. In this section, we identify some of the key risks for the System and provide information to help interested parties better understand these risks.

Investment Risk

The investment return on assets is the most obvious risk – and usually the largest risk – to funding a pension plan. In the case of the Clerks and Registers Supernumerary Fund, payments to supernumerary members, other than spousal death benefits, are made directly from the Administrative Office of Courts. Since the liabilities of the Fund are based on the 20-year high-quality tax-exempt municipal bond index rate, there is little investment risk associated with the program.

Mortality Risk

The mortality assumption is a significant assumption for valuation results, second only to the investment assumption in most situations. The System's mortality assumption utilizes a mortality table (with separate rates for males and females, as well as different rates by status) and a projection scale for how the mortality table is expected to improve through time.

The future, however, is unknown, and actual mortality improvements may occur at a faster rate than expected, or at a slower rate than expected. Although changes in mortality will affect the benefits paid, this assumption is reviewed carefully during the regular experience studies that the System conducts so that incremental changes can be made to smoothly reflect emerging experience. Since the last valuation, an experience investigation was prepared for RSA, and based on the results of the investigation, new mortality tables with a generational approach to future improvements in mortality were adopted. The next experience investigation will be for the five-year period ending September 30, 2025.





Section VIII: Risk Assessment

Contribution Risk

The System is funded primarily by member contributions to the trust fund, together with the earnings on those accumulated contributions in order to pay for benefits to spouses of deceased members. Employer contributions are made directly to supernumerary members as the benefits become payable. Each year in the valuation, the Actuarial Determined Employer Contribution (ADEC) rate is determined. This rate is the sum of the rates for the normal cost for the plan, and the rate necessary to amortize the UAAL. **Since the ADEC rate has never been made by the plan sponsors, and that procedure is expected to continue, there is a high risk that not enough sufficient assets will be accumulated to pay the promised benefits.**





Schedule A: Valuation Balance Sheet and Solvency Test

VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF
THE ALABAMA CLERKS AND REGISTERS SUPERNUMERARY FUND
AS OF SEPTEMBER 30, 2021

<u>ASSETS</u>	
Actuarial Value of Present Assets	\$ 13,443,947
Present value of future clerks' and registers' contributions	2,430,968
Present value of future employer contributions	
Normal contributions	\$ 31,417,534
Unfunded accrued liability contributions	<u>143,115,441</u>
Total prospective employer contributions	<u>174,532,975</u>
Total Assets	<u>\$190,407,890</u>
<u>LIABILITIES</u>	
Present value of benefits payable on account of Supernumerary officials, spouses receiving benefits, and former clerks and registers eligible for future benefits	\$108,508,764
Present value of prospective benefits payable on account of present active clerks and registers	<u>81,899,126</u>
Total Liabilities	<u>\$190,407,890</u>





Schedule A: Valuation Balance Sheet and Solvency Test

Valuation Date	Aggregate Accrued Liabilities For			Reported Assets	Portion of Accrued Liabilities Covered by Reported Assets		
	(1)	(2)	(3)		(1)	(2)	(3)
	Active Member Contributions	Retirants and Beneficiaries	Active Members (Employer Financed Portion)				
9/30/2016 *	\$3,127,959	\$108,940,905	\$32,609,858	\$12,280,833	100%	8%	0%
9/30/2017 *	3,409,837	98,985,595	31,721,740	12,212,319	100%	9%	0%
9/30/2018 *	3,091,256	100,174,350	25,599,631	11,960,817	100%	9%	0%
9/30/2019 *	2,998,531	111,051,445	33,919,584	12,617,024	100%	9%	0%
9/30/2020 *	3,406,747	115,426,500	42,623,887	13,185,441	100%	8%	0%
9/30/2021 *	3,685,055	108,508,764	44,365,569	13,443,947	100%	9%	0%

* Reflects change in the discount rate (20-year high-quality tax-exempt municipal bond index rate).





Schedule B: Summary of Receipts and Disbursements

<u>Receipts for the Year</u>	YEAR ENDING	
	<u>September 30, 2021</u>	<u>September 30, 2020</u>
Contributions:		
Members	\$281,618	\$283,885
Employer*	0	0
Subtotal	\$281,618	\$283,885
Investment Income	373,800	368,023
Unrealized Gain (Loss)	256,634	527,049
TOTAL	\$912,052	\$1,178,957
<u>Disbursements for the Year</u>		
Benefit Payments**	\$643,067	\$610,540
Refunds to Members	10,479	0
TOTAL	\$653,546	\$610,540
Excess of Receipts over Disbursements	258,506	568,417
<u>Reconciliation of Asset Balances</u>		
Market Value of Assets as of Beginning of Year	\$13,185,441	\$12,617,024
Audit Adjustment	\$0	\$0
Market Value of Assets after Adjustment	\$13,185,441	\$12,617,024
Excess of Receipts over Disbursements	258,506	568,417
Market Value of Assets as of End of Year	<u>\$13,443,947</u>	<u>\$13,185,441</u>

* No employer contributions are made to the Fund. Active members contribute 6% of salary for surviving spouse's benefits.

** Represents benefit payments from the fund for surviving spouse's benefits. Benefit payments to Supernumerary officials are made on a pay-as-you-go basis from the Administrative Office of Courts.





Schedule C: Outline of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of September 30, 2010, submitted to and adopted by the Board on January 27, 2014. The assumed mortality tables and salary increase rates were based on the actuarial experience study prepared for the Judicial Retirement Fund as of September 30, 2020, submitted to and adopted by the Board on September 14, 2021.

INVESTMENT RATE OF RETURN: The average of the Bond Buyer General Obligation 20-year Municipal Bond Index, the Fidelity General Obligation AA 20-year Municipal Bond Index, and the S&P High Grade 20-year Municipal Bond Index, 2.29% as of September 30, 2021, including inflation of 2.50%

SALARY INCREASES: 3.00% per annum for all ages, compounded annually, including wage inflation at 2.75%.

SEPARATIONS BEFORE ELIGIBILITY FOR SUPERNUMERARY STATUS: Representative values of the assumed annual rates of death, withdrawal and disability are as follows:

Age	Annual Rate of			Disability**
	Withdrawal	Death*		
		Male	Female	
30	0.00%	0.030%	0.017%	0.090%
35	0.00	0.041	0.026	0.110
40	0.00	0.057	0.040	0.170
45	5.50	0.090	0.062	0.300
50	2.50	0.149	0.093	0.500
55	2.50	0.232	0.135	0.880
60	2.50	0.357	0.204	1.560
64	2.50	0.529	0.307	2.250

* Rates of pre-retirement mortality are according to the Pub-2010 Teacher Employee Below Median Mortality Table adjusted by 65%; projected with the MP-2020 with an adjustment factor of 66-2/3% beginning with the year 2019.

**Disability rates turn off at retirement eligibility.

RATES OF ATTAINING SUPERNUMERARY STATUS: The assumed annual rates of becoming a Supernumerary official are as follows:

Age	Annual Rate
54 & Under	25.0%
55- 59	22.0
60-64	20.0
65-69	12.0
70-74	15.0
70+	100.0





Schedule C: Outline of Actuarial Assumptions and Methods

DEATHS AFTER BECOMING A SUPERNUMERARY OFFICIAL: Rates of mortality for the period after becoming a supernumerary official are according to the Pub-2010 Family of Tables projected generationally with MP-2019 Scale adjusted by 66-2/3% beginning with year 2019, and with further adjustments are used for post-retirement mortality assumptions as follows:

<u>Group</u>	<u>Membership Table</u>	<u>Set Forward(+)/ Setback (-)</u>	<u>Adjustment to Rates</u>
Service Retirees	Teacher Retiree-Below Median	Male: +2, Female: +2	Male: 108% ages < 63, 96% ages > 67; Phasing down 63 - 67 Female: 112% ages < 69, 98% > age 74 Phasing down 69-74
Beneficiaries	Contingent Survivor Below Median	Male: +2, Female: None	None
Disabled Retirees	Teacher Disability	Male: +8, Female: +3	None

Representative values of the assumed annual rates of mortality are as follows*:

Age	Service Retirement		Disability Retirement		Beneficiaries	
	Male	Female	Male	Female	Male	Female
55	0.4320%	0.3300%	2.7850%	1.8740%	1.1080%	0.7040%
60	0.6070	0.4290	3.5240	2.1100	1.3710	0.9210
65	0.8860	0.6270	4.5990	2.5690	1.9210	1.2430
70	1.5090	1.0940	6.3470	3.4640	2.9500	1.7840
75	2.7990	1.9140	9.2590	5.0750	4.5590	2.6990
80	5.1310	3.6810	13.6030	7.8110	7.1100	4.2580
85	9.3440	7.0020	20.5880	11.8780	11.3610	7.1270
90	16.2380	12.9240	28.7230	16.7400	18.3000	12.0640

* Base mortality rates as of 2010 before application of the improvement scale

ASSETS: Market value.

PERCENT MARRIED: 100% of active members are assumed to be married with the male three years older than his spouse.

VALUATION COST METHOD: Individual entry age actuarial cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

COST OF LIVING: Increases of 2.75% annually.

EXPENSE LOAD: None.





Schedule D: Actuarial Cost Method

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each member's expected benefit payable at retirement or death is determined based on his age, service, sex, and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the probability of his terminating with a service, disability or survivor's benefit. Future salary increases are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected benefits payable from the Fund on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the Fund are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "individual entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of each new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability contributions are determined by subtracting the present value of prospective employer normal contributions and member contributions together with the current assets held from the present value of expected benefits to be paid from the Fund.





Schedule E: Summary of Main Plan Provisions

AS INTERPRETED FOR VALUATION PURPOSES

The following summary describes the main benefit and contribution provisions of The Alabama Clerks and Registers Supernumerary Fund as interpreted for the valuation. The Fund was closed to new members effective November 8, 2016.

1 - DEFINITIONS

A "Supernumerary Official" is a former clerk or register who has met the age and service requirements who takes the oath of office as a Supernumerary Clerk or Register. "Service" is the service, prior service, and any other previous service established as creditable in accordance with the provisions of the retirement law.

2 - BENEFITS

Supernumerary Official Status

Condition for Allowance

A clerk or register may become a supernumerary official after he or she has completed 23 years of service at any age, or according to the following table:

<u>Age</u>	<u>Years of Service</u>
55 to 59	18
60	17
61	16
62 to 64	15
65 to 69	12
70	10

Amount of Allowance

A supernumerary official is paid 75% of the State salary payable to the clerk or register on the date he or she attains a supernumerary status. Increases in allowances are granted when active State Employees receive a cost-of-living salary increase.

Disability Allowance

Condition for Allowance

A disability supernumerary allowance may be granted to a member who becomes totally and permanently disabled while in office and who has 5 years or more of service.

Amount of Allowance

75% of the State salary payable to the clerk or register on the date he or she attains supernumerary status.





Schedule E: Summary of Main Plan Provisions

Benefits Payable on Separation
from Service with 12 or more
Years of Service

Condition for Allowance

Any clerk or register who ceases to be in service who has met the service eligibility for supernumerary status (12 or more years) is entitled to be commissioned a supernumerary clerk or register upon attaining the specified age.

Amount of Allowance

75% of the State salary payable to the clerk or register on the date he or she attains supernumerary status.

Benefits Payable on Separation
From Service with less than
12 Years of Service

Refund employee contributions plus accrued interest.

Benefits Payable upon
Death in Active Service

Condition for Allowance

In case of the death of a clerk or register in active service who is eligible for supernumerary status, a spousal benefit is payable to the surviving spouse.

Amount of Allowance

3% at the salary payable from the State treasury for the position of circuit clerk for each year of service, not to exceed 30%.

Benefits Payable upon
Death in Supernumerary Status

Condition for Allowance

Surviving spouses of clerks and registers who assume supernumerary status on or after January 16, 1989, are eligible for spousal benefits upon the death of the clerk or register.

Amount of Allowance

3% at the salary payable from the State treasury for the position of circuit clerk for each year of service, not to exceed 30%.

Form of Payment

Modified cash refund.

3 - CONTRIBUTIONS

Member Contributions

Each active clerk and register contributes 6% of salary.





Schedule F: Schedule of Membership Data

TABLE 1

NUMBER OF ACTIVE CLERKS AND REGISTERS
BY AGE AND SERVICE AS OF SEPTEMBER 30, 2021

Age	Years of Service									Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 30										
30 to 34			1							1
35 to 39										
40 to 44			4							4
45 to 49			2	4						6
50 to 54			7	3						10
55 to 59			6	2	2		1			11
60 to 64			5	4		1				10
65 to 69			2	4		2				8
70 & Up										
Total			27	17	2	3	1			50

Average Age: 55.90
Average Service: 11.76





Schedule F: Schedule of Membership Data

TABLE 2

NUMBER AND ANNUAL RETIREMENT ALLOWANCES
OF SUPERNUMERARY OFFICIALS AND SPOUSES
RECEIVING BENEFITS AS OF SEPTEMBER 30, 2021

Age	Number of Members	Total Annual Benefits
Under 50	1	\$ 33,438
50 – 54	0	0
55 – 59	1	83,054
60 – 64	6	428,942
65 – 69	21	1,559,542
70 – 74	19	1,425,803
75 – 79	16	1,106,445
80 – 84	20	1,177,601
85 – 89	11	593,406
90 – 94	6	271,245
95 & Over	0	0
Total	101	\$ 6,679,476

Average Age: 75.44

