CONSULTING GROUP

A DEFINED BENEFIT ACTUARIAL VALUATION

For:

Alachua County Library District Pension Plan

As of:

October 1, 2022

Prepared by:

USI Consulting Group

January 12, 2023

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January 12, 2023

CONFIDENTIAL
Ms. Shaney Livingston
Library Director
Alachua County Library District
401 East University Avenue
Gainesville, FL 32601

Re: ALACHUA COUNTY LIBRARY DISTRICT PENSION PLAN

Dear Shaney:

We are pleased to present our Actuarial Valuation Report ("Report") for the Alachua County Library District Pension Plan (the "Plan") for the Plan Year beginning October 1, 2022 and ending September 30, 2023. A summary of the principal results of the valuation is provided for your convenience on pages 1 through 7. Details supporting the cost calculations, as well as other information designed to assist you and your accountant in preparing your reports, are also included.

All of the benefits valued under the Plan are outlined in this report. Any changes in the actuarial assumptions, plan amendments or cost methods, for the current year, are described in the executive summary section.

The recommended Actuarially Determined Contribution (ADC) for the Plan Year beginning October 1, 2022 is $737,073, which represents 67.51% of covered payroll. The estimated member contributions of 4% of payroll are $43,672; therefore, the Library's portion of the ADC is $693,401, or 63.51% of covered payroll. Including the contributions made on behalf of the Library to the Florida Retirement System (FRS) for those employees participating in the FRS Plan, the "blended" contribution rate for the Library is about 18.48% for the 2022 Plan Year. Had the FRS Plan contribution rate not increased (from 10.21% to 11.09%), the "blended" contribution rate would have been 17.73%.

This report includes information related to Actuarial Standard of Practice No. 51 (ASOP 51), Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Contributions, as required for plan years starting after October 31, 2018.

We would be happy to answer any questions you may have regarding this report.

Respectfully submitted,
USI Consulting Group

Frederica S. Daniels, FCA, EA, MAAA
Vice President and Managing Actuary

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ALACHUA COUNTY LIBRARY DISTRICT
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PRINCIPAL RESULTS OF THE VALUATION

Below is a summary of the principal results of this year's valuation compared with the previous valuation. Amounts for each valuation period reflect the actuarial cost method, assumptions and plan benefits in effect at that time.

CONTRIBUTION REQUIREMENTS	As of October 1, 2021	As of October 1, 2022
Actuarially Determined Contribution (ADC)	$ 457,918	$ 737,073
Estimated Member Contributions	$ 52,863	$ 43,672
Determined Library Contribution	$ 405,055	$ 693,401
Normal Cost	$ 197,421	$ 180,746
Covered Payroll	$ 1,321,566	$ 1,091,808
Normal Cost as a percentage of Covered Payroll	14.94%	16.55%
ADC as a percentage of Covered Payroll	34.65%	67.51%
Member Contributions as a percentage of Covered Payroll	4.00%	4.00%
Library Contribution as a percentage of Covered Payroll	30.65%	63.51%
SUPPORTING INFORMATION		
Actuarial Value of Assets (AVA)	$ 31,907,741	$ 31,391,782
Market Value of Assets (MVA)	$ 35,156,008	$ 27,659,517
Actuarial Accrued Liability (AAL)	$ 37,087,508	$ 37,857,645
Unfunded Actuarial Accrued Liability (UAAL)	$ 5,179,767	$ 6,465,863
Present Value of Future Benefits	$ 37,713,784	$ 38,290,907
Present Value of Accumulated Benefits (PVAB)	$ 34,525,804	$ 36,069,638
Funding Ratio: (MVA) / (PVAB)	101.8%	76.7%
Funding Valuation Rate	6.75%	6.75%
Payroll Growth Rate	0.00%	0.00%
Number of lives in the Valuation	201	198

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

EXECUTIVE SUMMARY

Purpose and Scope

The principal purposes of this actuarial valuation report are:

1. To present our calculations of the Actuarially Determined Contribution for the Plan Year beginning October 1, 2022,
2. To review plan experience during the Plan Year ending September 30, 2022 and the funded status of the plan as of October 1, 2022,
3. To provide information required by the reporting and disclosure requirements of the State of Florida and the Internal Revenue Code, and
4. To provide an assessment and disclosure of risk with respect to pension obligations and contributions.

The valuation is based upon employee data and financial information provided by the Library District. This data was not audited or otherwise verified by us other than for tests of reasonable consistency with prior year data.

Risk Assessment

This report includes information related to Actuarial Standard of Practice No. 51 (ASOP 51), Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Contributions – see Section III.

Traditionally, the focus of valuation reports has centered around the current funded status of the Plan, experience during the prior year, and contribution requirements for the current year. This is now supplemented with additional information regarding risks that plan sponsors face as well as more historical information and measurements.

As a note, this report does not provide: risk assessments related to potential legislative and regulatory changes, investment advice, or assessments of the ability or willingness of plan sponsors to make contributions to the Plan. If the plan sponsor is interested in additional assessment of these risks, please contact us to perform additional projections under various scenarios or stochastic forecast modeling on these plan risks.

The next section provides a brief description of the financial risks to the Plan. Please see the ASOP 51 (Risk Assessment) Section of this report for additional information on these topics. The ratio of assets to liabilities is referred to as the funded ratio and the difference is the unfunded liability. The Actuarially Determined Contribution (“ADC”) is the sum of the normal cost (the present value of benefits accruing to active participants, if any, plus expenses), plus an amortization of the unfunded liability, generally over a 10 or 20-year period. Various risks described below can impact the funded ratio and ADC to different degrees.

- Investment Risk
- Interest Rate Risk
- Longevity Risk
- Demographic Risk

Additional information is provided in the ASOP 51 Section of this report.

EXECUTIVE SUMMARY
(Continued)

Plan Contributions

The recommended Actuarially Determined Contribution (ADC) for the Plan Year beginning October 1, 2022 is $737,073, which represents 67.51% of covered payroll. The estimated member contributions of 4% of payroll are $43,672; therefore, the Library's portion of the ADC is $693,401 or 63.51% of covered payroll. Last fiscal year's ADC for the District was $457,918, or 34.65% of covered payroll, and the Library's portion was $405,055 which represented 30.65% of covered payroll.

For budgeting purposes for the next fiscal year, we recommend using an amount that is at least equal to 67.51% of the total projected payroll for the covered members of this Plan. However, the Library's "blended" rate, which includes contributions for members of this Plan and members of the FRS Plan, is about 18.48% for the 2022 Fiscal Year. Prior to the increase in the FRS Plan ADC rate this year (from 10.21% to 11.09%), the "blended" rate would be 17.73%.

Plan Provisions

The valuation results in this report are based on current plan provisions as of October 1, 2022. Prior changes included: a soft freeze as of January 1, 2008 and the opportunity for current members to join the Florida Retirement Systems Pension Plan ("FRS Plan"). Members that transferred out continue to earn vesting service towards their frozen accrued benefit and for retirement eligibility under the ACLD Plan. As of October 1, 2022, there are 22 remaining active employees who participate in the FRS Plan.

Actuarial Methods and Assumptions

All actuarial methods and assumptions used in the October 1, 2022 valuation report remained the same from the prior year. Please see the summary of actuarial methods and assumptions on page 25 for more information.

An experience study was completed in 2020 and assumption changes, as a result of such study, were adopted for the October 1, 2020 actuarial valuation process. Such assumption changes were made to both economic assumptions and non-economic assumptions, including changes to the mortality tables, mortality improvement projection scales, retirement rates, withdrawal rates, expected return on assets rate, compensation increases and COLA/CPI increases.

Assumptions should continue to be reviewed in future years to see if continued use of such assumptions are reasonable based on actual experience trends. An assumption study should be completed approximately every 5 years, or earlier if plan provision changes are made or if actual experience is largely different from what is expected for a consistent period of time.

EXECUTIVE SUMMARY
(Continued)

Plan Experience

During the Plan Year ending September 30, 2022, the number of active participants decreased to 18 from 23, with 5 participants retiring. As of the valuation date, there are 180 inactive participants compared to 178 the prior plan year: 22 inactive/transfers in the FRS Plan, 22 deferred vested terminations and 136 retirees.

The Plan experienced a net actuarial loss of $1,198,835 during the last year. There was an actuarial asset loss of $725,077, and a liability loss of $473,758 due mainly to higher salaries, more subsidized retirements and fewer retiree deaths than expected. The actuarial value of assets decreased from $31,907,741 to $31,391,782. The return (net of investment-related expenses) on the valuation assets was approximately 4.24%, compared to the plan year assumption of 6.75% (net of expenses), creating an investment loss.

Current Funded Status

The market value of plan assets, as a percentage of the present value of accrued benefits, decreased to 76.7% as of October 1, 2022, compared to 101.8% as of October 1, 2021. The funded ratios, calculated using the interest rates shown below, for the past 5 years are:

Valuation Date		Accrued Benefit Funded Ratio	Interest Rate
10/01/2022		76.7%	6.75%
10/01/2021		101.8%	6.75%
10/01/2020	*	93.0%	6.75%
10/01/2019		85.1%	7.00%
10/01/2018	*	86.1%	7.00%

* Change in Actuarial Assumptions/Method/Plan Amendment.

The trend in funded ratios is one indication of the funding progress of the plan. Actuarial gains and losses, plan changes, and assumption changes will affect these ratios, sometimes dramatically. However, a slowly increasing trend over a period of time generally indicates that the plan is being funded in a healthy manner. Funded ratios can be developed based on accrued benefits or projected benefits. These ratios represent the extent the actuarial value of assets covers the present value of the benefits accrued to date for the existing plan participants. The portion of the present value of projected benefits not covered by plan assets will be covered by future contributions to the plan.

In general, a healthy accrued benefit funded ratio for similar defined benefit plans falls in the 110% to 150% range. A ratio above 100% will allow a plan to undergo future changes (i.e. to the benefit structure) more easily than an underfunded plan. This ratio also gives an indication of how well your benefits accrued to date would be funded under a plan termination scenario if valuation assumptions were used in this determination. Valuation assumptions reflect our best prediction of future plan experience assuming the plan is ongoing. Plan termination assumptions are generally much more conservative, so no conclusion should be made from these ratios about plan termination sufficiency or deficiency.

EXECUTIVE SUMMARY
(Continued)

Long Term Plan Solvency

As mentioned earlier, funded ratios can also be developed regarding the long-term solvency of an ongoing plan based on measuring the portion of the projected benefits that have been earned to date. In this case, the actuarial value of assets (as opposed to the market value) is compared to the Plan's Actuarial Accrued Liability (AAL), which is also called "past service liability". These funded ratios mainly differ from the Plan's short-term solvency ratios because the AAL takes into account future salary increases, which are built into the current actuarial assumptions. However, these funded levels are similar to those of the short-term solvency values in that these liabilities are affected immediately by any changes to the benefit structure or assumptions.

Attaining a funded ratio of at least 100% should be a long-term funding goal since it is very likely the plan will continue to undergo benefit changes and make adjustments to the current assumptions. In general, largely because of periodic benefit increases and poor investment returns, very few retirement programs have attained this goal in today's market. Below is a summary of the Plan's long-term solvency ratios over the past 20 years for comparison purposes.

Valuation Date		Actuarial Value of Assets	Actuarial Accrued Liability	% of AAL Covered by Assets
10/1/2022		31,391,782	37,857,645	83%
10/1/2021		31,907,741	37,087,508	86%
10/1/2020	*	30,233,070	36,239,011	83%
10/1/2019		28,781,524	36,576,049	79%
10/1/2018	*	27,309,890	35,949,206	76%
10/1/2017		26,320,764	35,216,750	75%
10/1/2016	*	24,930,790	34,073,410	73%
10/1/2015		23,755,503	31,680,037	75%
10/1/2014	*	21,938,929	30,882,994	71%
10/1/2013		19,838,947	27,271,963	73%
10/1/2012	*	17,941,778	25,710,712	70%
10/1/2011		16,280,074	23,506,704	69%
10/1/2010		15,600,453	21,910,656	71%
10/1/2009		14,693,897	20,410,898	72%
10/1/2008	*	13,754,942	18,965,576	73%
10/1/2007		13,091,612	17,816,678	73%
10/1/2006	*	10,597,250	15,815,888	67%
10/1/2005	*	8,718,771	13,524,327	65%
10/1/2004	*	7,512,159	12,648,547	59%
10/1/2003		6,966,779	10,600,230	66%

* Change in Actuarial Assumptions/Method/Plan Amendment.

EXECUTIVE SUMMARY
(Continued)

Level Contribution Rates

The actuarial assumptions and cost methods have been chosen with the intent of producing actuarially determined contributions, which remain fairly level as a percentage of covered payroll. If this goal is attained, future contribution rates will not have to be raised materially in order to make up for the past. For many defined benefit pension plan sponsors, this measure of the program's soundness is the most important of all. Below is a comparison of the Plan's past contribution rates as a percentage of the expected payroll for the associated Plan Year.

Valuation Date		Normal Cost as % of Payroll	Amortization Payment of UAAL as % of Payroll	Contribution as % of Expected Payroll	
				Total	Library
10/1/2022		16.55	48.79	67.51	63.51
10/1/2021		14.94	18.60	34.65	30.65
10/1/2020	*	13.93	25.23	40.47	36.47
10/1/2019		13.64	31.35	46.54	42.54
10/1/2018	*	10.60	38.43	50.71	46.71
10/1/2017		10.84	35.71	48.15	44.15
10/1/2016	*	10.97	32.89	45.36	41.36
10/1/2015		10.51	23.22	34.92	30.92
10/1/2014	*	10.04	26.90	38.24	34.24
10/1/2013		18.17	22.22	41.80	37.80
10/1/2012	*	17.62	20.30	39.25	35.25
10/1/2011		16.41	16.17	33.84	29.84
10/1/2010		16.88	14.21	32.29	28.29
10/1/2009		16.38	12.83	30.34	26.34
10/1/2008	*	17.14	11.13	29.36	25.36
10/1/2007		14.95	7.26	23.07	19.07
10/1/2006	*	15.51	7.89	24.30	20.30
10/1/2005	*	12.84	5.12	18.66	14.66
10/1/2004	*	11.77	4.74	17.21	13.21
10/1/2003		11.57	3.75	15.97	11.97

* Change in Actuarial Assumptions/Method/Plan Amendment.

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

EXECUTIVE SUMMARY
(Continued)

Other Historical Trends in Plan Experience

5-Year History of Salary Increases

Plan Year Ending	Average Salary Increase	Number of Employees Included
9/30/2022	8.8%	18
9/30/2021	7.9%	23
9/30/2020	4.2%	30
9/30/2019	2.5%	38
9/30/2018	3.3%	41
5-Year Average	**5.3%**	**30**

5-Year History of Net Investment Yields

Plan Year Ending	Valuation Asset Basis	Market Value Basis
9/30/2022	4.2%	-16.6%
9/30/2021	10.7%	18.4%
9/30/2020	8.8%	11.3%
9/30/2019	8.8%	4.3%
9/30/2018	7.5%	8.6%
5-Year Average	**8.0%**	**5.2%**

Certification of Report

This report has been prepared in accordance with generally accepted actuarial standards and procedures and conforms to the Guidelines for Professional Conduct of the American Academy of Actuaries. It is based on the employee data submitted by the plan sponsor and the retirement plan provisions outlined herein.

I, Frederica S. Daniels, FCA, am a member of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. There exists no relationship with the Plan or the Sponsor that would impair the objectivity of my work.

USI CONSULTING GROUP

Frederica S. Daniels, FCA, EA, MAAA
Vice President and Managing Actuary

Nelroy Giddings
Actuarial Consultant

Diane Padernacht
Vice President & Actuarial Manager

ALACHUA COUNTY LIBRARY DISTRICT
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FLORIDA STATE REQUIREMENTS

♦ Florida requires that the funding of pension plans take into account:

1. Subsidized early retirement benefits - benefits are reduced 5% per year for each year that early retirement precedes normal retirement.

2. Benefits continuing to accrue subsequent to expected retirement - the Late Retirement Benefit is the accrued benefit at the Late Retirement Date. The benefit forgone for the year that retirement is delayed is more valuable than the additional accrual.

3. Benefits attributable to the lump sum payment at termination/retirement for PTO (“Paid Time Off”) – the ACLD Plan benefit service takes into account PTO in excess of 240 hours (for wages not directly paid out to participants). However, after 9/30/2013 (last day of the current collectively-bargained agreement entered into on or after July 1, 2011), any wages paid out for PTO earned after such date cannot be included in the calculation of compensation used to determine pension benefits. In addition, effective July 1, 2011, compensation amounts may only include up to 300 hours per year of overtime pay.

4. Contributions to the System - Employee contributions must be deposited to the Fund immediately following each pay period and Library contributions must be deposited on at least a quarterly basis.

♦ A Summary Plan Description is to be distributed to each new member of the Plan, and to all other members, on a biennial basis.

♦ The remainder of this report covers detailed actuarial valuation results, financial information, census information and statistics, and a summary of plan provisions.

♦ A copy of this Report is to be furnished to the Division of Retirement within 60 days of the date the Pension Board of Trustees approves the report presented by the actuary, at the following address:

Division of Retirement
Bureau of Local Retirement Systems
Post Office Box 9000
Tallahassee, Florida 32315-9000

STATEMENT BY ENROLLED ACTUARY

This Actuarial Valuation and/or cost determination was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the Plan and/or paid from the Plan’s assets for which liabilities or current costs have not been established or otherwise taken into account in the Valuation. All known events or trends which may require a material increase in Plan costs or contribution rates have been taken into account in the Valuation.

Signature	Date	Enrollment Number
	01/12/2023	20-07137

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

AUDIT DISCLOSURE INFORMATION

A. Actuarially Determined Contributions for Fiscal Year Ending September 30, 2022:

Plan Normal Cost	197,421
Payment Towards Unfunded Actuarial Accrued Liability	245,783
Interest from Actuarial Valuation Date to Expected Payment Dates	14,714
Total Contribution	457,918
Estimated Member Contribution	52,863
Remaining Library Contribution	405,055
Effect on Contribution of Changes in Actuarial Assumptions or Methods*	0
Effect on Contribution of Changes in Plan Provision	0

* Amount based on changes measured and reported in the actuarial impact statement prior to completing the valuation.

References in the following items refer to a previous actuarial report (PYE 9/30/22).

B. Description of Changes in Actuarial Assumptions or Methods – None.

C. Description of Changes in Plan Provisions – None.

D. Description of Employee Groups Covered – See Section entitled Summary of Plan Provisions.

E. Description of Covered Employees Who Are Not Included in Valuation – None.

F. Number and Compensation of Participants – See section entitled Summary of Valuation Results.

G. Has Actuary Been Notified of Any Decision by Plan Sponsor to Terminate the Plan? – No.

H. Details Regarding Unfunded Actuarial Accrued Liability (Unfunded Prior Service Cost)

1. Equivalent single Amortization Period (if applicable) – N/A.
2. Amortization Method (if applicable) – Level percent of pay method.
3. Amortization Period (if applicable) – Gains and losses are amortized over a various number of years, depending on their source. Please see the Liability Cost Method section of this report for details.

I. Net Actuarial Gain or Loss – See Introduction and Summary of Report under the heading “Actuarial Experience”. See Section of report “Funding of Pension Plans” for methods of recognizing such gains and losses. Any unrealized appreciation (depreciation) included in the actuarial value of assets is recognized in the same manner as any other gains or losses.

J. All responses in this section have been made in accordance with our understanding of FASB ASC 960 (formerly FAS No. 35) and Opinion No. 8.

DEFINITION OF IMPORTANT TERMS

Covered Payroll
The annual rate of pay on the valuation date of all Members included in the valuation that are under the assumed retirement age based on valuation assumptions.

Actuarial Present Value of Total Benefits
The single sum value on the valuation date of all future benefits to be paid to current actively employed Members, Retirees, Beneficiaries, and Vested Terminated Participants.

Unfunded Actuarial Accrued Liability (UAAL)
The single sum amounts necessary to fully fund all costs allocable to prior years, less assets.

Normal (Current Service) Cost
The pension plan cost accruing, or allocated to, the current year, but not including any funding of the Unfunded Actuarial Accrued Liability.

Total Contribution
The amount equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Actuarial Accrued Liability. Please refer to the Liability Cost Method section of this report for details.

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

FINANCIAL STATEMENT AS OF 10/1/2022

	10/1/2021	10/1/2022
Cash and Money Market Funds	940,650	475,893
Receivables	134,689	66,889
Investments		
Mutual Funds - Equities	24,322,268	16,896,188
Mutual Funds - Fixed Income Securities	9,795,750	10,263,987
Corporate Bonds	0	0
Accrued Income	0	0
Total Investments	34,118,018	27,160,175
Buildings & Other Property used in Plan Operation	0	0
Insurance Contracts	0	0
Total Assets	35,193,357	27,702,957
LIABILITIES AND NET ASSETS		
Payables *	37,349	43,440
Other Liabilities	0	0
Total Liabilities	37,349	43,440
Net Assets	35,156,008	27,659,517

* Represent pre-paid participant benefit distributions for the month of October that are allocated to the next plan year.

STATEMENT OF RECEIPTS AND DISBURSEMENTS

Net Assets at Beginning of Year		35,156,008
Contributions Received or Receivable		
Employer	405,055	
Employee	52,390	
Total Contributions		457,445
Stock Dividends		0
Other Dividends		356,193
Fixed Income Interest		222,041
Net Appreciation		(6,125,711)
Total Income		(5,090,032)
Distribution of Benefits		
Retiree Benefit Payments	2,287,224	
Cashout Benefits Paid	0	
Total Distributions		2,287,224
Investment Expenses		25,232
Administrative Expenses		94,003
Total Expenses		2,406,459
Net Income (loss)		(7,496,491)
Market Value of Assets at Year End		27,659,517
Gross Investment Return:		**-16.23%**
Net Investment Return:		**-16.55%**

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

DETERMINATION OF VALUATION ASSETS AS OF 10/1/2022

1. ASSET GAIN/(LOSS) AS OF 10/1/22

(1) Expected market value of assets as of 10/1/22:	
(a) Market value of assets as of 10/1/21	$ 35,156,008
(b) Expected return on assets at 6.75%	$ 2,373,031
(c) Contributions	$ 457,445
(d) Benefit Payments	$ (2,287,224)
(e) Expenses	$ (119,235)
(f) Net interest on (c) + (d) + (e), weighted for timing	$ (64,705)
(g) Total: (a) + (b) + (c) + (d) + (e) + (f)	$ 35,515,320
(2) Actual Market value of assets as of 10/1/22:	$ 27,659,517
(3) Asset gain/(loss) as of 10/1/22: (2) - (1)(g)	$ (7,855,803)

2. DETERMINATION OF VALUATION ASSETS AS OF 10/1/22

(1) Market value of assets as of 10/1/22: $ 27,659,517

(2) Amortization of asset gain/(loss) over a four year period:

Year Ending September 30	Asset Gain/(Loss)	X	Portion Not Yet Recognized	=	Amortization
2020	$ 1,339,654		1/4		$ 334,914
2021	$ 3,649,346		2/4		$ 1,824,673
2022	$(7,855,803)		3/4		$(5,891,852)

Total: $ (3,732,265)

(3) Actuarial Value of Assets as of 10/1/22: (1) - (2)	$ 31,391,782
(4) 80% of Market Value of Assets :	$ 22,127,614
(5) 120% of Market Value of Assets :	$ 33,191,420
(6) Actuarial Value of Assets: greater of (3) or (4), but no larger than (5)	$ 31,391,782

3. DEVELOPMENT OF VALUATION ASSETS AS OF 10/1/22

(1) Actuarial Value of Assets as of 10/1/21:	$ 31,907,741
(2) Contributions as of 10/1/22:	$ 457,445
(3) Benefit payments:	$ (2,287,224)
(4) Expenses:	$ (119,235)
(5) Return on assets:	$ 1,433,055
(6) Actuarial Value of Assets as of 10/1/22: (1) + (2) + (3) + (4) + (5)	$ 31,391,782
Gross Investment Return (Actuarial Value of Assets):	4.63%
Net Investment Return (Actuarial Value of Assets):	4.24%

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

VALUATION RESULTS AS OF 10/1/2022

A. Present Value of Future Benefits

The value of all projected retirement, death and vested termination benefits projected to be pa to current plan participants, discounted to the valuation date with interest, mortality, disability and withdrawal decrements.

Status	Lives	Breakdown
Active	18	6,921,968
Terminated/Inactive/FRS Transfer/Disabled	44	1,872,891
Retired	136	29,496,048
Total	198	38,290,907

B. Actuarial Accrued Liability

The portion of the present value of future benefits attributable to prior service.

Active	6,488,706
Terminated/Disabled	1,872,891
Retired	29,496,048
Total	37,857,645

C. Actuarial Value of Assets	31,391,782
D. Unfunded Actuarial Accrued Liability [(B) - (C)]	6,465,863

E. Derivation of Unfunded Actuarial Accrued Liability

1. Prior Unfunded Accrued Liability	5,179,767
2. Prior Employer Normal Cost	146,257
3. Interest on (1) and (2) at 6.75%	359,507
4. Employer Contributions	405,055
5. Interest on Employer Contributions	13,447
6. Subtotal [(1) + (2) + (3) - (4) - (5)]	5,267,029
7. Increase/(Decrease) due to Assumption/Plan Changes	0
8. Increase/(Decrease) due to Actuarial Loss/(Gain)	1,198,834
9. Increase/(Decrease) due to Excess Contributions	0
10. Total [(6) + (7) + (8) - (9)]	6,465,863

F. Plan Normal Cost - The present value, as of the valuation date, of the benefit expected to be accrued for the current year	83,746
G. Administrative Expenses	97,000
H. Total Plan Normal Cost	180,746

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

AMORTIZATION SCHEDULE OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

	Date	Original	Outstanding	Amortization	Years
Refreshed UAAL	10/1/14	8,944,065	6,694,398	779,058	12
Experience Gain	10/1/15	(267,321)	(99,671)	(35,416)	3
Experience Loss	10/1/16	358,793	172,672	47,485	4
Assumption Change	10/1/16	1,164,506	560,430	154,119	4
Experience Loss	10/1/17	224,220	130,628	29,645	5
Asset Gain	10/1/18	(210,339)	(47,837)	(47,837)	1
Experience Loss	10/1/18	146,721	99,377	19,380	6
Asset Gain	10/1/19	(545,609)	(240,066)	(123,952)	2
Experience Gain	10/1/19	(118,574)	(90,808)	(15,647)	7
Asset Gain	10/1/20	(596,030)	(380,674)	(135,264)	3
Experience Loss	10/1/20	28,632	24,298	3,775	8
Assumption Change	10/1/20	(1,131,392)	(960,080)	(149,160)	8
Asset Gain	10/1/21	(1,239,831)	(1,023,158)	(281,369)	4
Experience Loss	10/1/21	461,303	427,519	60,817	9
Asset Loss	10/1/22	725,077	725,077	164,550	5
Experience Loss	10/1/22	473,758	473,758	62,459	10
TOTAL			**6,465,863**	**532,643**	

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

DETERMINATION OF GAIN/(LOSS) AS OF 10/1/2022

(A) ASSET GAIN/(LOSS) AS OF 10/1/2022

(1) Expected valuation assets as of 10/1/2022:		
(a) Valuation assets as of 10/1/2021	$	31,907,741
(b) Expected return on assets at 6.75%	$	2,153,773
(c) Contributions, including receivable	$	405,055
(d) Benefit Payments	$	(2,287,224)
(e) Net interest on (c) - (d), weighted for timing	$	(62,486)
(f) Total: (a) + (b) + (c) + (d) + (e)	$	32,116,859
(2) Actual valuation assets as of 10/1/2022:	$	31,391,782
(3) Asset gain/(loss) as of 10/1/2022: (2) - (1)(f)	$	(725,077)

(B) LIABILITY GAIN/(LOSS) AS OF 10/1/2022

(1) Expected Entry Age Normal (EAN) accrued liability as of 10/1/2022:		
(a) EAN accrued liability as of 10/1/2021	$	37,087,508
(b) Total normal cost	$	146,257
(c) Expected return at 6.75%	$	2,513,279
(d) Benefit Payments	$	(2,287,224)
(e) Net interest on (d), weighted for timing	$	(75,933)
(f) Total: (a) + (b) + (c) + (d) + (e)	$	37,383,887
(2) Actual EAN accrued liability (before changes) as of 10/1/2022:	$	37,857,645
(3) Liability gain/(loss) as of 10/1/2022: (1)(f) - (2)	$	(473,758)
(4) Liability increase/(decrease) due to assumption change:	$	-
(5) Excess/(deficient) contributions with interest through 09/30/2022:	$	-
(6) Total Liability experience gain/(loss): (3) - (4) + (5)	$	(473,758)

(C) NET ACTUARIAL GAIN/(LOSS) AS OF 10/1/2022: (A) + (B)	**$**	**(1,198,835)**

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

ACTUARIALLY DETERMINED CONTRIBUTION FOR
PLAN YEAR ENDING 9/30/2023

	Plan Year Ending 9/30/2022	Plan Year Ending 9/30/2023
1. Plan Normal Cost	102,421	83,746
2. Administrative Expenses	95,000	97,000
3. Total Plan Normal Cost	197,421	180,746
4. Actuarial Accrued Liability	37,087,508	37,857,645
5. Actuarial Value of Assets	31,907,741	31,391,782
6. Unfunded Actuarial Accrued Liability (UAAL): (4) - (5)	5,179,767	6,465,863
7. Payment Required to Amortize UAAL	245,783	532,643
8. Interest Charge (assuming payments made evenly during plan year)	14,714	23,684
9. Actuarially Determined Contribution (ADC): (3) + (7) + (8)	**457,918**	**737,073**
10. Estimated Member Contributions	52,863	43,672
11. Library Determined Contribution: (9) - (10)	405,055	693,401
12. Covered Payroll	1,321,566	1,091,808
13. ADC as a % of Covered Payroll	34.65%	67.51%
14. Member Contributions as a % of Covered Payroll	4.00%	4.00%
15. Library Contribution as a % of Covered Payroll	30.65%	63.51%

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

PARTICIPANT DATA AS OF 10/1/2022

Active employees under assumed retirement age	
Number of participants	4
Average accrued benefit	1,176.00
Average attained age	59.43
Average prior service	18.02
Other active and inactive employees	
Number	36
Average accrued benefit	1,102.34
Average attained age	54.62
Terminated deferred vested, deceased and disabled employees	
Number	22
Average accrued benefit	467.60
Average attained age	56.80
Retired employees, beneficiaries and contingent annuitants	
Number	136
Average monthly benefit	1,491.23
Average attained age	70.18

RECONCILIATION OF PARTICIPANT STATUS

	Active	FRS Transfer	Deferred Vested	Disabled	Retired	Total
Prior Valuation	23	24	23	0	131	201
Terminated - not vested	0	0	0	0	0	0
Terminated - vested	0	(1)	1	0	0	0
Terminated - Paid Out	0	(1)	0	0	0	(1)
Retired	(5)	0	(2)	0	7	0
Rehired	0	0	0	0	0	0
Period Certain Expired	0	0	0	0	0	0
Annuity Purchase	0	0	0	0	0	0
New Entrants/Spouse	0	0	0	0	1	1
Deaths	0	0	0	0	(3)	(3)
FRS Transfer	0	0	0	0	0	0
Data Correction	0	0	0	0	0	0
Current Valuation	18	22	22	0	136	198

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

This exhibit is intended to satisfy Section 112.63 of the Florida Statutes. Please note that some of the information required by Chapter 22D-1 rules governing actuarial reports is located in attached Exhibits.

	As of October 1, 2021	As of October 1, 2022
A. PARTICIPANT DATA		
1. Number included		
a. Actives	23	18
b. Inactives	24	22
c. Vested Terminations	23	22
d. Retirees (inc. Beneficiaries)	131	136
e. Total Members & Beneficiaries	201	198
2. Total annual payroll of active employees included	1,321,566	1,152,196
3. Balance of employee contributions	821,544	679,713
B. ASSETS		
1. Actuarial value	31,907,741	31,391,782
2. Market value	35,156,008	27,659,517
C. LIABILITIES		
1. Present Value of Benefits		
a. Total accrued	34,525,804	36,069,638
b. Accrued to date vested	34,265,089	36,009,004
2. Unfunded Actuarial Accrued Liability	5,179,767	6,465,863
3. Present Value of Active Members		
a. Future Salaries at Present Age	8,246,687	5,731,998
b. Future Employee Contributions at Present Age	329,867	229,280
4. Breakdown of the Present Value of Benefits		
a. Active Participants	8,570,536	6,921,968
b. Retired Members	26,856,961	29,496,048
c. Terminated Vested / Inactive	2,286,287	1,872,891
d. Total	37,713,784	38,290,907
5. Present Value of Future Contributions from the Library	5,476,176	6,669,845

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS (continued)

C. LIABILITIES (continued)	As of October 1, 2021	As of October 1, 2022
1. Present Value of Benefits for Active Members	**8,570,536**	**6,921,968**
a. Retirement Decrement	8,466,288	6,847,010
b. Termination/Vesting	12,038	0
c. Death Decrement	92,210	74,958
d. Disability	0	0
e. Return of Contributions	0	0
2. Accrued Liability for Active Members	**7,944,260**	**6,488,706**
a. Retirement Decrement	7,850,124	6,419,106
b. Termination/Vesting	9,586	0
c. Death Decrement	84,550	69,600
d. Disability	0	0
e. Return of Contributions	0	0
3. Normal Cost for Active Members	**102,421**	**83,746**
a. Retirement Decrement	98,841	82,686
b. Termination/Vesting	2,335	0
c. Death Decrement	1,245	1,060
d. Disability	0	0
e. Return of Contributions	0	0
D. PENSION COST		
1. Normal Cost	197,421	180,746
2. Payment Required to Amortize Unfunded Actuarial Liabilities	245,783	532,643
3. Net interest on (1) + (2), assuming payment mid-plan year	14,714	23,684
4. Actuarially Determined Contribution: (1) + (2) + (3)	457,918	737,073
(assuming payments made evenly throughout 12-month plan year)		
5. Actuarially Determined Contribution as a % of payroll	34.65%	67.51%
6. Estimated Member Contributions	52,863	43,672
7. Member Contributions as a % of payroll	4.00%	4.00%
8. Remaining Library Contribution	405,055	693,401
9. Library Contribution as a % of payroll	30.65%	63.51%

E. PAST CONTRIBUTIONS	Plan Year Ended September 30, 2021	Plan Year Ended September 30, 2022
1. Actuarially Determined Contributions		
Members	67,278	52,863
Library	613,366	405,055
Total	680,644	457,918
2. Actual Contributions		
Members	61,368	52,390
Library	613,366	405,055
Total	674,734	457,445

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS (continued)

F. SALARY AND INVESTMENT EXPERIENCE COMPARISONS

1. Comparison of Actual and Assumed Salary Increases

Year Ended	Actual	Total Assumed Increases
9/30/2022	8.8%	3.7% for FT / 4.0% for PT **
9/30/2021	7.9%	3.7% for FT / 4.0% for PT **
9/30/2020	4.2%	2.80% + merit scale*
9/30/2019	2.5%	2.80% + merit scale*
9/30/2018	3.3%	2.80% + merit scale*
9/30/2017	4.2%	2.80% + merit scale*
9/30/2016	5.6%	2.80% + merit scale*
9/30/2015	3.0%	2.80% + merit scale*
9/30/2014	3.1%	2.80% + merit scale*
9/30/2013	3.2%	2.80% + merit scale*

* Separate rates for Full-Time (FT) and Part-Time (PT) employees.

** Actuarial blended rates (from CPI and merit increases)

2. Comparison of Actual and Assumed Investment Returns

Year Ended	Actuarial	Market	Assumed
9/30/2022	4.24%	-16.55%	6.75%
9/30/2021	10.74%	18.41%	6.75%
9/30/2020	8.84%	11.28%	7.00%
9/30/2019	8.75%	4.27%	7.00%
9/30/2018	7.50%	8.59%	7.00%
9/30/2017	7.68%	11.67%	7.00%
9/30/2016	7.33%	10.29%	7.00%
9/30/2015	8.91%	-1.09%	7.00%
9/30/2014	10.06%	10.08%	7.00%
9/30/2013	9.37%	12.32%	7.00%

G. DISCLOSURE

All benefits provided by the Plan have been taken into account in preparing the actuarial valuation. Additional participant reconciliation and demographic information is located in separate exhibits in this report. Also, all known trends that may cause increases in future costs have been taken into account in this report.

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS (continued)

H. FOUR YEAR SCHEDULE OF UNAMORTIZED LIABILITIES

Date	10/1/2022	10/1/2023	10/1/2024	10/1/2025	Final Year of Amortization
10/1/2014	6,694,398	6,314,625	5,909,218	5,476,446	2033
10/1/2015	(99,671)	(68,592)	(35,414)	0	2024
10/1/2016	172,672	133,637	91,967	47,485	2025
10/1/2016	560,430	433,737	298,492	154,118	2025
10/1/2017	130,628	107,799	83,429	57,414	2026
10/1/2018	(47,837)	0	0	0	2022
10/1/2018	99,377	85,397	70,473	54,542	2027
10/1/2019	(240,066)	(123,952)	0	0	2023
10/1/2019	(90,808)	(80,234)	(68,947)	(56,898)	2028
10/1/2020	(380,674)	(261,975)	(135,264)	0	2024
10/1/2020	24,298	21,908	19,357	16,634	2029
10/1/2020	(960,080)	(865,657)	(764,861)	(657,261)	2029
10/1/2021	(1,023,158)	(791,860)	(544,949)	(281,372)	2025
10/1/2021	427,519	391,454	352,955	311,857	2030
10/1/2022	725,077	598,363	463,095	318,697	2026
10/1/2022	473,758	439,062	402,024	362,486	2031

All amortization payments are calculated as payable on the first day of the plan year.

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

SUMMARY OF PLAN PROVISIONS

Effective Date	10/1/1986
Plan Year Beginning	10/1/2022
Eligibility	All permanent employees of the Library, who work at least twenty hours per week on a continuous basis, fifty-two weeks per year and for whom the Library is not making contributions to the ICMA plan. Effective January 1, 2008, no new employees, rehired members or inactive members who transferred to the FRS Plan, are allowed to enter (or re-enter) the Plan on or after January 1, 2008.
Member Contributions	Fixed annual contribution rate of 4.0% of pay.
Library Contributions	The amount necessary, over and above Member Contributions, to meet Normal (current year's) Cost and fund the Unfunded Accrued (Past Service) Liability over 30 years.
Normal Retirement Date	The first of the month coinciding with or next following the earlier of completion of 20 years of Credited Service or attainment of age 65 with 5 years of Credited Service. Members who transferred to the FRS Plan can continue to accrue service for Normal retirement eligibility.
Normal Retirement Benefit	
Benefit Formula	2% of Final Average Earnings times Credited Service.
Earnings	Total cash compensation.
Final Average Earnings	Average annual Earnings during the highest consecutive three years preceding retirement or termination (see Plan Document for special treatment in cases of demotion).
Maximum Annual Benefit	$245,000 as adjusted per IRC Sec. 415 for retirement age other than Social Security Retirement Age and annuity form.
Normal Form of Benefit	Life Annuity, ceasing upon death.
Optional Benefit Forms	Reduced annuity amounts that are actuarially equivalent to the Normal Form of Benefit, including annuities that may provide income upon death to a beneficiary. Actuarial Equivalence factors are based on a 7% interest rate and the 1983 Group Annuity Mortality Table for Males.

SUMMARY OF PLAN PROVISIONS
(Continued)

Accrued Benefit	Normal Retirement Benefit based on Earnings and Credited Service to date of separation from employment. For members who transferred to the FRS Plan, their accrued benefit was frozen as of December 31, 2007.
Early Retirement Date	The first of the month coinciding with or next following the attainment of age 55 and 15 years of Credited Service. FRS managers who elected to move from the deferred compensation plan as of October 1, 1996 or as of October 1, 2005, no more than 10 years of past service with the Library will be recognized for eligibility. For members who transferred to the FRS Plan on January 1, 2008, service will continue to accrue for Early retirement eligibility.
Early Retirement Benefit	Accrued pension payable at age 65; or accrued pension, reduced by five-twelfths of one percent (5/12%) per month between determination date and attainment of age 65, payable immediately.
Delayed Retirement	Benefit continues to accrue beyond Normal Retirement Date.
Death Benefit	If a deceased member was eligible for Early or Normal Retirement, benefits shall be payable as though the member had selected the 10-Year Certain & Life form of benefit, or other option selected by the beneficiary, and retired on the day before death. For those vested, but not eligible for Early or Normal Retirement, death benefit payable as a lump sum. For non-vested members, refund of contributions without interest.
Vested Termination Benefit	For members with less than 5 Years of Service, Refund of Member Contributions, if any. For members with 5 Years of Service or more, Accrued Benefit payable at age 65.
Vesting Service	Members who transferred to the FRS Plan effective January 1, 2008 will continue to accrue service for vesting purposes as long as they remain employed by the Library and work the minimum hours requirement. No more than 10 years of past service with the Library will be recognized for vesting purposes for members transferring from the deferred compensation plan, however, vesting service continues to accrue under this Plan. Prior to October 1, 1996, the vesting schedule was 10-year cliff vesting.

SUMMARY OF PLAN PROVISIONS
(Continued)

Cost of Living Adjustment

Effective October 1, 2001, the increases for all retirees and beneficiaries in pay status were based upon the change in the Consumer Price Index, with a maximum of 2.0% annually. Effective October 1, 2004, the maximum was increased to 2.2% annually. Effective October 1, 2009, a minimum COLA "floor" of 0.0% was instated (for years in which the annual adjustment is negative) and future adjustments in the initial year of retirement will be pro-rated based on the number of months that elapse before the first plan year anniversary.

Credited Service

For current Library employees who were City employees on August 1, 1965 and who contributed to the prior plan (predecessor retirement plan for employees of the City of Gainesville), all Service.

For employees on August 1, 1965 who did not contribute to the prior plan, Service from January 1, 1964.

For employees hired after August 1, 1965, all Service.

For Library employees as of October 1, 1986, Credited Service shall include previous employment by the City of Gainesville in non-Library related positions. For all employees, Credited Service shall also include unused sick leave, assigning one day of service for each day of unused sick leave and any period or length of time for which additional compensation is paid upon termination of employment.

For employees who did not sign a waiver of rights to future benefits under the City's pension plan, and who therefore did not have funds transferred on their behalf to the Library plan, Credited Service shall begin as of October 1, 1986.

For managers who elected to move from the deferred compensation plan as of October 1, 1996 or October 1, 2005, Credited Service shall begin as of that date for benefit accrual purposes, unless the manager elected to purchase additional accrual service under the Plan.

For members who transferred to the FRS Plan as of January 1, 2008, Credited Service shall cease to accrue for retirement benefit purposes but will continue to accrue for vesting and retirement eligibility purposes.

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

In order to determine the size of the liabilities and costs for a given level of benefits, an actuary must make certain assumptions as to future experience among the covered group of employees and as to the rate of investment return. In particular, assumptions are made regarding rates of employment termination, disability and mortality, in order to determine the likelihood of each employee reaching retirement age. In addition, since benefits are based in part on salary, it is also necessary to project the amount of each employee's salary at the time he or she retires. Investment earnings are a source of income to the pension plan fund and the actuary makes an assumption as to the rate to be earned each year in the future.

As a result of these assumptions applied to the covered group of participants, a total liability for future retirement benefits is determined. This total liability is then apportioned for payment to future years by use of an actuarial cost method. There are many different cost methods in use, some resulting in increasing annual contributions, some causing decreasing annual contributions, and others which result in level contributions. The level contribution method is the most common. Below is a summary of the actuarial methods and assumptions used in this valuation.

The plan's funding policy enables the plan sponsor to meet contribution requirements. Future measurements may differ significantly from the information contained within this report. These measurements will be based on the market value of assets, which varies based on the underlying portfolio experience, as well as plan sponsor contributions, benefit payments and expenses paid from plan assets. Liability calculations will be produced in accordance with current census data, as well as the interest rates and mortality tables in effect at that time. There has been no analysis of potential future impacts associated with this report. Please refer to the plan's Funding Policy for a more detailed disclosure of how the policy enables the plan sponsor to meet contribution requirements.

LIABILITY COST METHOD

Individual Entry-Age Normal (Level percent of pay) – Under this method, the annual cost is equal to the Normal Cost, plus an amortization of Unfunded Actuarial Accrued Liabilities ("UAAL") over a fixed period of years (depending on the source of liability).

The Normal Cost is the sum of the individual normal costs for active participants. The normal cost for an individual is the present value, as of the valuation date of the retirement, death and withdrawal benefits which he or she is expected to accrue during the current plan year.

The Actuarial Accrued Liability is the sum of the individual present values, for all participants, of the benefits accrued, based on Credited Service to the valuation date.

The UAAL is the excess, if any, of the Actuarial Accrued Liability over the Plan Assets.

Actuarial gains and losses arising from differences between plan experience and that predicted by the actuarial assumptions, as measured by the difference between actual and expected UAAL, are amortized over 5 years if generated from investment gains/losses and 10 years if created by liability sources. Liability fluctuations due to future changes in actuarial assumptions and/or method changes will also be amortized over 10 years. Finally, the effects of Plan Provision changes will be amortized over 20 years.

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS
(Continued)

ATTRIBUTION PARAMETERS
Accrual rate proration, by component – This method attributes the benefit separately for each component of the benefit formula, based on the credited service. If there are no accrual definitions in the benefit formula, then the entire projected benefit is assigned to past service (and considered fully accrued as of the valuation date). This results in "natural" or "direct differencing" attribution.

ASSET VALUATION METHOD
Effective October 1, 2006, the asset valuation method was changed to measure the current market value of assets, as reported by the Trustee, plus any accrued contributions.

Effective October 1, 2008, the asset valuation method was changed again and was developed as outlined in Approval 16 of the IRS Revenue Procedure 2000–42, where the value of plan assets reflects the market value adjustment for actuarial gains and losses phased in over a 4-year period.

ACTUARIAL ASSUMPTIONS
The actuarial assumptions for: rates of termination of employment, retirement rates and trends, future rates of increases in compensation, and rates of investment return (discount rates), first incorporated in the October 1, 2013 valuation, were based on the results of an actuarial experience study for the period October 1, 2006−September 30, 2011, issued on July 24, 2012. A more recent study was completed using experience from the October 1, 2011 – September 30. 2019 and issued on June 26, 2020. The current year assumptions noted below are based on changes adopted from this 2020 recent study.

Pre-Retirement and Post-Retirement Mortality – PUB(G)-2010 Generational Mortality (amounts-weighted) Tables, by gender, with MP-2018 mortality improvement projection scale.

Investment Return – Effective October 1, 2020: 6.75% per annum, net of expenses. This return reflects the anticipated gross long-term rate of return on plan assets based on the plan’s current and expected future asset portfolio, as supported by the plan’s investment manager.

Retirement Age – Normal Retirement Age (earlier of age 65 with 5 Years of Credited Service or 20 Years of Credited Service). However, members already eligible to retire are assumed to retire at the following rates based on their years of eligibility service. This chart of rates is effective October 1, 2020.

Retirement Assumptions	
Years of Eligibility Service	**Percent Retiring**
1	10%
2 and Up	5%
Age/Service Override	**Percent Retiring**
Ages 62 through 71	20%
Ages 72 through 74; Age 75	25%; 100%
20+ Years of Service and Age 53	20%

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS
(Continued)

Termination Rates – Termination rates effective October 1, 2020: Separate tables for part-time and full-time employees based solely on age, as shown in the chart below.

Age	Full-Time	Part-Time
30-34	15.00%	N/A
35-39	10.00%	20.00%
40-44	8.00%	20.00%
45-49	7.00%	15.00%
50-54	5.00%	15.00%
55-59	0.00%	5.00%
60-64	0.00%	5.00%
65 & Up	0.00%	0.00%

Salary Scale Projections – Effective October 1, 2020 – Actuarial blended rate (from CPI and merit increase) of 3.7% for full-time employees and 4.0% for part-time employees.

Disability Rates – None.

Credited Service – Present values (of all benefits except refund of contributions) increased by 5.0% loading to account for unused accumulated vacation and sick leave at retirement or termination.

Expenses – Prior year administrative fees, plus 3%, rounded to nearest $1,000 (measured under one-year term Cost Method). The 3% was decreased from 15% effective October 1, 2008.

Payroll Growth – None (for amortization purposes).

Cost of Living Increases – The Plan provides for a COLA, based on changes in the CPI, with a yearly maximum of 2.2%. Effective October 1,2020, the COLA reflects an updated assumption of 2.0% per annum, as an estimate of the long term COLA increases and is based on results from the recent experience study. Note however, benefits are updated each year using actual CPI experience, as required by provisions in the legal plan document (Article IV, Section 3), which override the assumption.

Long-Term Inflation - The assumption of 2.0%, effective October 1, 2020, reflects the following factors:
- Consumer price indices
- Forecasts of inflation
- Yields on government securities of various maturities
- Yields on nominal and inflation-indexed debt

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS
(Continued)

Marital Assumptions:
A. 80% married
B. 80% of married elect QJSA
C. Spouses are assumed to be of the opposite gender of the participant.
D. Husbands assumed to be 3 years older than wives.

Additional Disclosure Items:
These assumptions are reflective of the participant data. We will continue to periodically review the population and retirement elections and make any appropriate updates to these assumptions.

Vested benefits are based on the plan document's vesting schedule based on Years of Vesting Service. Please refer to the Summary of Plan Provisions section of this report for requirements for particular benefits.

Early retirement subsidies are only valued once participants become eligible by meeting the specified requirements.

Death benefits are treated as vested benefits for liability calculation purposes.

Additional Disclosure Information – Actuarial Modeling Tools (ASOP 56):
The actuarial liabilities shown in this actuarial valuation report are determined using software purchased from an outside vendor which was developed for this purpose. Certain information is entered in this model in order to generate the liabilities specific to your pension plan. These inputs include economic and non-economic assumptions, plan provisions and census information. We rely on the coding within the software to value the liabilities using the actuarial methods and assumptions selected. Both the input to and the output from the model is checked for accuracy and reviewed for reasonableness. No other modeling or projection information is contained in this report, as such this model is used solely to be able to determine the actuarially determined contribution for the current plan year.

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

AGE AND SERVICE DISTRIBUTION AS OF 10/1/2022

Age Group		Years of Service										
		Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	Number	0	0	0	0	0	0	0	0	0	0	0
25 to 29	Number	0	0	0	0	0	0	0	0	0	0	0
30 to 34	Number	0	0	0	0	0	0	0	0	0	0	0
35 to 39	Number	0	0	0	0	0	0	0	0	0	0	0
40 to 44	Number	0	0	0	0	0	1	0	0	0	0	1
45 to 49	Number	0	0	0	0	0	2	0	0	0	0	2
50 to 54	Number	0	0	0	0	0	0	1	0	0	0	1
55 to 59	Number	0	0	0	1	1	2	0	0	0	0	4
60 to 64	Number	0	0	0	0	3	1	0	0	1	0	5
65 to 69	Number	0	0	0	0	1	0	0	0	0	1	2
Over 70	Number	0	0	0	0	1	1	0	0	1	0	3
Totals	Number	0	0	0	1	6	7	1	0	2	1	18

ALACHUA COUNTY LIBRARY DISTRICT
PENSION PLAN
VALUATION AS OF 10/1/2022

FASB ASC 960 ACCOUNTING INFORMATION

The following information has been prepared to assist in meeting the requirements of FASB Accounting Standards Codification No. 960. The information presented is calculated in accordance with our understanding of the Statement. Except as noted below, the actuarial assumptions are set forth in the Summary of Actuarial Methods and Assumptions section of this report.

Actuarial Present Values of Accumulated Plan Benefits	10/1/2021	10/1/2022
Vested Benefits		
Participants currently receiving payments	26,856,961	29,496,048
Other Participants		
Active Employees	5,121,841	4,640,065
Deceased and Disabled Employees	0	0
Vested Terminated and Inactive Employees	2,286,287	1,872,891
Total Other Participants	7,408,128	6,512,956
Total Vested Benefits	34,265,089	36,009,004
Nonvested Benefits	260,715	60,634
Total Actuarial Present Values of Accumulated Plan Benefits	34,525,804	36,069,638

Statement of Changes in Actuarial Plan Benefits		
Actuarial Present Value of Accumulated Plan Benefits at Beginning of Year		34,525,804
Increase (Decrease) during the year attributable to:		
Plan Amendment		0
Change in Actuarial Assumptions		0
Benefits Accumulated (Inc. (gains)/losses)		1,576,500
Increase Due to Change in the Discount Period		2,254,558
Benefits Paid		(2,287,224)
Net Increase		1,543,834
Actuarial Present Value of Accumulated Plan Benefits at End of Year		36,069,638
Discount Rate:	6.75%	6.75%

ASOP 51 - ASSESSMENT AND DISCLOSURE OF RISK

Additional Information Regarding Assessment and Disclosure of Risks

The valuation of pension liabilities requires the use of certain assumptions to estimate events that are expected to occur in the future. These events can be economic, non-economic or demographic in nature. When actual experience in the future differs from the expected experience there is a direct effect on future pension liabilities. This in turn can impact both the funded position of the pension plan as well as the actuarially determined contribution ("ADC").

Certain variables carry more risk than others. Included below is a brief explanation of those variables that can potentially have a significant effect on the plan's future financial condition.

Actuarially Determined Contribution Compared to Actual Contribution

The ADC is calculated using an actuarial funding method. The ADC can vary from year to year as actual experience differs from that expected. The funding method's intent is that if the ADC is deposited by the plan sponsor each year, then the plan would be sufficiently funded over the life of the plan so that promised benefits could be paid to all participants. A 2-year comparison of the ADC vs. contribution deposited by the plan sponsor for each plan year is shown on Page 19. The Sponsor currently contributes as least 100% of the ADC. However, if actual contributions deposited are consistently lower than the ADCs then, barring unexpected actuarial gains, future contributions will need to be greater.

Risk Assessments

Investment volatility risk. There is an expectation that the assets of the pension plan will return an average long-term rate each year. If the actual annual net return on plan assets is consistently below the expected return, then both the funded ratio and ADC would be negatively impacted – the funded ratio would be lower than expected and the ADC would be higher. For example, an asset "loss" of 10% (about $2,766,000 based on current values) in a given year would hypothetically cause the amortization portion of the ADC to increase on average by about $670,000 for each of the next 5 years. Also, the funded ratio would decrease by about 7.3 percentage points.

Investment return risk. The interest rate (which is equal to the Plan's expected return on assets rate) is used to discount the projected benefit payments from the Plan to calculate the present value of the liabilities (Accrued Liability). Decreases in the interest rate (as noted above) will lead to increases in the Accrued Liability and the Normal Cost, which may increase contribution requirements. As an example, a decrease of 25 basis points would lead to an increase in Accrued Liability of about 3% and in Normal Cost of about 7% (prior to expense load), yielding an increase in the ADC of about $142,000 for each of the next 10 years. This dollar amount translates to an increase of 13 percentage points in the ADC as a % of pay.

ASOP 51 - ASSESSMENT AND DISCLOSURE OF RISK (continued)

Longevity risk. To the extent participants live longer than expected relative to the mortality assumptions, liabilities (and, thus, the ADC) will increase. The Florida Retirement System ("FRS") Plan adopted new mortality table and projection scale assumptions a few years ago that are required to be used for other defined benefit pension plans in the state of Florida for funding valuations. The FRS Plan will likely update and adopt new tables every 5 years as data is collected. Future improvements in mortality could further increase Accrued Liability.

Demographic risk. Several other assumptions are made with respect to anticipated plan experience, including rates of termination, disability, and the retirement age. To the extent actual experience differs from expected, plan liabilities and normal cost can vary up or down.

The most significant demographic risk for this Plan is the retirement rate. The plan uses graded age assumptions since active members can retire with an unreduced "subsidized" benefit upon 20 years of service. If participants retire at any age prior to assumed age, plan liabilities may increase due to the subsidy. Also, to the extent participants retire later than assumed, the plan liabilities and the ADC may increase due to unplanned benefit accruals that were not funded for through prior normal costs. This assumption was recently reviewed carefully during the 2020 experience study, which found participants have been retiring slightly later than expected, thus the update to this chart of assumptions effective October 1, 2020.

Another type of demographic risk is related to employee contributions. Mandatory employee contributions for the Library's plan are fixed (a flat 4% of pay), thus by themselves are not a source of significant risk. However, these fixed amounts decrease the total cost of benefit accruals (gross normal cost) each year, leaving the plan sponsor to fund the difference (net normal cost). This has the impact of leveraging other risk factors. For example, if there's a change in gross normal cost due to increased average earnings or a change in assumptions, the plan sponsor's share of the normal cost could increase significantly while the employee's portion remains at 4%.

Salary Increases. Salary increases impact the cost of the plan and are reflected in the liabilities and the normal cost. Increases above that which are assumed will result in experience losses in the following year, while the inverse is true – lower than expected raises can lead to a decrease in normal costs. For example, if the annual salary increase assumption of 3.7% (for full-time employees) was increased to 4.7%, liabilities would increase only 1.0%, but the normal cost would increase about 18% (prior to expense load), adding another $43,000 to the ADC.

Expense Load. Certain expenses related to the administration of the plan are often paid out of plan assets (to the extent allowed by law). As a way to ensure plan assets are not depleted over time due to administrative costs, an expense load (usually a flat dollar amount or a small % of plan assets) is added to the plan's normal cost, which is part of the contribution made by the plan sponsor each year. When actual administrative expenses for a given year are different from the assumed load amount, the plan will experience gains or losses that will be factored into the following year's contribution levels.

ASOP 51 - ASSESSMENT AND DISCLOSURE OF RISK (continued)

Plan Maturity Measures

Certain statistics can help to gauge the financial strength of the pension plan as well as to help identify risk that the plan might be subject to as it matures over time. Certain plan maturity statistics for the current valuation year are included below for your review and analysis. Historical statistics incorporating some of the prior year results may be found in the Executive Summary section of this report.

Ratio of Retiree Liability to Total Plan Liability

Raito = 29,496,048 / 37,857,645 = 77.9%

A pension plan with a high ratio (for example, much more than 50%) is considered to be a relatively mature plan since the primary liability is associated with former employees who are now in pay status. As a result, a large amount of plan assets is disbursed to retired participants to satisfy the monthly payments due to this group. Plan sponsors should consult with the investment advisors to the pension plan to determine whether plan assets are invested accordingly to account for the benefit outflows. For the Library's plan, having a ratio of about 78% (i.e. over 50%) leads to annual contributions below the total benefit payments (a 'negative' cash flow).

Duration of the Actuarial Accrued Liability

The duration for your pension plan is: 9.2

Duration is a measure used to indicate the sensitivity of the pension plan liability to a change in interest rates. In general, pension plans with a younger participant group tend to have a longer duration than pension plans with an older population. Plans with a larger duration are impacted more than pension plans with a lower duration when interest rates change. For example, based on the duration of 9.2 shown above for your pension plan, for every 100-basis point increase in interest rates you could expect the pension plan liability to decrease by approximately 9.2%.

Ratio of Actuarially Determined Contribution to Total Covered Payroll

Ratio = 737,073 / 1,091,808 = 67.5%

Many plan sponsors find it helpful to look at the cost of the pension plan (on a cash basis) as a percentage of total covered payroll. Covered payroll is generally intended to mean total compensation for those employees actively accruing plan benefits during the year plan. An increase in this ratio (ADC/payroll) could be due to a number of different factors which may require further analysis. For example, the increase could be a result of a decline in the active population of a plan where participation for new employees is frozen - as the active group decreases over time, compensation for the remaining population increases due to service/raises/promotions.

ASOP 51 - ASSESSMENT AND DISCLOSURE OF RISK (continued)

Ratio of Expected Outflows to Plan Assets

Ratio = $2,704,615 / $27,659,517 = 9.8%

Outflows are defined as: Benefit Payments + Expenses. This ratio measures the liquidity and time-horizon of the plan's assets. It can be used as one of the considerations of how much of the plan's assets should be allocated to short-term fixed income (or cash). Having sufficient amounts of cash on-hand within plan assets better allows for monthly benefit payments (and expenses, if applicable) to be made throughout the year without having to liquidate funds for cash flow at unexpected points in time.

Ratio of Expected NET Outflows to Plan Assets

Ratio = ($1,967,542) / $27,659,517 = -7.1%

Net Outflows are defined as: Contributions – Outflows. This ratio represents the net cash flow of the Plan. A positive ratio means more cash is coming into plan assets than being paid out during the plan year, which is referred to as 'positive cash flow'. Thus, the opposite is true – a negative ratio means 'negative cash flow'. As a defined benefit plan matures, it (by its nature) becomes a negative net cash flow vehicle, so this ratio can be a measure of plan maturity.

Ratio of Expected (Contributions - Expenses) to Benefit Payments

Ratio = $640,073 / $2,607,615 = 24.6%

This measure helps allow a plan sponsor to better understand how the projected funded ratio may increase or decrease as of the next valuation date. If the above ratio is greater than 100%, the funded ratio is expected to increase, assuming all other plan experiences match expectations. Thus, if the ratio is below 100%, the funded status is expected to decrease (if no gains or losses). However, if this ratio measure is only slightly over/under 100% (i.e. +/- 5-10%), it may be difficult to project the change of direction in the funded status given the likelihood that experience gains or losses could have a similar impact (up or down) on the funded ratio.

Summary of Risk Assessments and Maturity Measures

While the risk due to some variables may easily be understood or predictable, there are many risks that are much more variable in nature, making it quite difficult to hedge against drastic changes in the plan's funded status. While past actuarial and demographic experience is not a perfect indicator of what the future will bring, it does provide a strong foundation for setting assumptions related to risk.

Thus, we recommend that experience studies continue to occur (as completed in 2020) at least once every 4 to 5 years to determine the validity of current assumptions, methods and plan provisions. However, before any decisions are made to adopt plan benefit or funding changes, we suggest discussions with the plan actuary and investment advisor are held (as recently done in 2020) by the plan sponsor to discuss types of potential actuarial or financial risks and impacts to the plan's funded status.