



110 West Berry Street  
Suite 1300  
Fort Wayne, IN 46802

October 6, 2023

Mr. Thomas Causey  
*Executive Director*  
State of North Carolina  
Department of State Treasurer  
Retirement Systems Division  
3200 Atlantic Avenue  
Raleigh, NC 27604

**Consolidated Judicial Retirement System  
GASB 67 Disclosure for Fiscal Year Ending June 30, 2023  
Based on Valuation Date of December 31, 2022 (updated)<sup>1</sup>**

Dear Mr. Causey:

We have prepared the required accounting information for Governmental Accounting Standards Board (GASB) Statement No. 67 for the Consolidated Judicial Retirement System of North Carolina (CJRS) for fiscal year ending June 30, 2023 based on a valuation date of December 31, 2022.

**GASB Statement No. 67**

GASB Statement No. 67 set forth certain items of information to be disclosed in the financial statements of the Plan.

1. One such item is a distribution of the number of employees by type of membership, as follows:

Number of Active and Retired Participants as of 12/31/2022	
Retired members and survivors of deceased members currently receiving benefits	816
Terminated members and survivors of deceased members entitled to benefits but not yet receiving benefits	60
Active members	<u>581</u>
Total	1,457

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<sup>1</sup> This letter is an update to the GASB 67 letter dated August 31, 2023, reflecting the provisions of House Bill 259, which became law on October 3, 2023.

2. Following is the schedule of changes in Net Pension Liability

Schedule of Changes in Net Pension Liability as of June 30, 2023		
<b>Total Pension Liability</b>		
Service Cost	\$	15,796,000
Interest		53,741,000
Changes in Benefit Terms		2,197,000
Differences Between Expected and Actual Experience		29,934,000
Changes of Assumptions		0
Benefits Payments, including Refund of Member Contributions		<u>(57,587,000)</u>
Net Change in Total Pension Liability	\$	44,081,000
Total Pension Liability – Beginning of Year	\$	839,335,000
Total Pension Liability – End of Year	\$	883,416,000
<b>Plan Fiduciary Net Position</b>		
Employer Contributions	\$	34,952,000
Member Contributions		6,103,000
Net Investment Income		34,201,000
Benefit Payments, including Refund of Member Contributions		(57,587,000)
Administrative Expenses		(71,000)
Other		<u>0</u>
Net Change in Plan Fiduciary Net Pension	\$	17,598,000
Plan Fiduciary Net Pension – Beginning of Year	\$	664,764,000
Plan Fiduciary Net Pension – End of Year	\$	682,362,000

Net Pension Liability/(Asset)		
	June 30, 2023	June 30, 2022
Total Pension Liability	\$ 883,416,000	\$ 839,335,000
Plan Fiduciary Net Pension	<u>682,362,000</u>	<u>664,764,000</u>
Net Pension Liability/(Asset)	\$ 201,054,000	\$ 174,571,000
Plan Fiduciary Net Pension as a Percentage of the Total Pension Liability/(Asset)	77.24%	79.20%

3. Following is the sensitivity of the Net Pension Liability to changes in the discount rate.

Sensitivity of the Net Pension Liability to Changes in Discount Rate			
	1% Decrease	Current	1% Increase
Discount Rate	5.50%	6.50%	7.50%
Net Pension Liability (Asset)	\$ 294,847,000	\$ 201,054,000	\$ 121,206,000

4. The discount rate used to measure the total pension liability was 6.50%. The projection of cash flows used to determine the discount rate assumed that System contributions will continue to follow the current funding policy, including “direct-rate smoothing” as adopted by the Board of Trustees on January 28, 2021. In addition, assumed contributions include contributions based on payroll from future employees of the System that are not associated with the accumulation of their plan benefits. Investment earnings are based on actual returns through June 30, 2023, and on the assumed investment rate of return thereafter. In addition, future administrative expenses are assumed to equal 0.05% of projected payroll, but are limited to a flat dollar rate per active and in-pay member as of each valuation date. The flat dollar rate is \$27 in 2022 and increased by 2.5% each year thereafter. Based on those assumptions, the System’s fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Please see Appendix A for additional detail.

Note that the projection of cash flows in Appendix A has not been updated to reflect the provisions of House Bill 259. However, based on the policies described above as well as the benefits and appropriation updates described in HB 259, the System’s fiduciary net position is still projected to be available to make all projected future benefit payments of current plan members.

5. Methods and assumptions used to calculate the actuarially determined contribution rate are as follows:

Valuation Date	12/31/2022
Actuarial Cost Method	Entry Age
Amortization Method	Level dollar closed
Amortization Period	12-year closed period
Asset Valuation Method	Asset returns in excess of or less than the expected return on market value of assets reflected over a five-year period (not greater than 120% of market value and not less than 80% of market value)
Actuarial Assumptions:	
Investment Rate of Return*	6.50%
Projected Salary Increases**	3.25% - 4.75%
*Includes Inflation of	2.50%
**Includes Inflation and Productivity of	3.25%
Cost-of-living Adjustments	N/A

The June 30, 2023 total pension liability was determined by an actuarial valuation as of December 31, 2022, based on the assumptions adopted by the Board of Trustees on January 28, 2021, which are based on the experience study prepared as of December 31, 2019, including a discount rate of 6.50%. The economic assumptions with respect to investment yield, salary increase, and inflation have been based upon a review of the existing portfolio structure as well as recent and anticipated experience.

The plan sponsor selected the assumptions used for the accounting results in this letter. We believe that these assumptions are reasonable and comply with the Actuarial Standards of Practice ("ASOPs") 27 and 35 and the requirements of GASB Statement No. 67. We prepared this letter in accordance with the requirement of this standard.

ASOPs 27 and 35 ask the actuary to disclose the information and analysis used to support the actuary's determination that the assumptions selected by the plan sponsor do not significantly conflict with what, in the actuary's professional judgment, are reasonable for the purpose of the measurement. In the case of the plan sponsor's selection of expected return on assets ("EROA"), the signing actuaries have used economic information and tools provided by the Financial Risk Management ("FRM") practice at Buck, A Gallagher Company (Buck). A spreadsheet tool created by the FRM team converts averages, standard deviations, and correlations from Buck's Capital Markets Assumptions ("CMA") that are used for stochastic forecasting into approximate percentile ranges for the arithmetic and geometric average returns. It is intended to suggest possible reasonable ranges for EROA without attempting to predict or select a specific best estimate rate of return. It takes into account the duration (horizon) of investment and the target allocation of assets in the portfolio to various asset classes. Based on the actuary's analysis, including consistency with other assumptions used in the valuation and the percentiles generated by the spreadsheet described above, the actuary believes the EROA, in the actuary's professional judgment, is reasonable for the purpose of the measurement.

The June 30, 2023 total pension liability is based on the same plan provisions as used in the previous valuation, except that it reflects the provisions of House Bill 259, which became law on October 3, 2023. In particular, the June 30, 2023 total pension liability reflects the one-time supplement for CJRS payees in pay status as of October 1, 2023 that is equal to 4% of their annual allowance and payable in November 2023. All other CJRS provisions enacted by the legislature were reviewed with staff of the Retirement Systems Division and were not considered material to the current valuation.

Other than the 4% supplement described above, full summaries of the assumptions, methods and plan provisions used in the previous valuation and for the June 30, 2023 total pension liability were provided in October 2022 in the "Report on the Actuarial Valuation of the Consolidated Judicial Retirement System of North Carolina Prepared as of December 31, 2021."

The actuarial cost method used to develop the total pension liability is the Entry Age Normal Cost Method, as required by GASB Statement No. 67.

The results of this letter are based upon participant data supplied by the Retirement Systems Division and unaudited financial data supplied by the Financial Operations Division. Buck reviewed the data for reasonableness and consistency with data for the prior valuation but performed no audit of the data. The results of this letter are dependent on the accuracy of the data.

The primary purpose of the letter is to provide information that the Office of the State Controller (OSC) requires for its Annual Comprehensive Financial Report. This letter may also be used in conjunction with other materials for purposes of the pension plan audit. Use of the letter for any other purposes or by anyone other than OSC and its auditors may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods, or inapplicability of the letter for that purpose. Because of the risk of misinterpretation of actuarial results, you should ask us to review any statement you wish to make on the results contained in this report. Buck will not accept any liability for any such statement made without prior review by Buck.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. Because of limited scope, Buck performed no analysis of the potential range of such future differences.

Actuarial Standard of Practice No. 56 ("ASOP 56") provides guidance to actuaries when performing actuarial services with respect to designing, developing, selecting, modifying, using, reviewing, or evaluating models. Buck uses third-party software in the performance of annual actuarial valuations and projections. The model is intended to calculate the liabilities associated with the provisions of the Plan using data and assumptions as of the measurement date under the accounting rules specified in this report. The output from the third-party vendor software is used as input to an internally developed model that applies applicable accounting rules to the liabilities derived and other inputs, such as Plan assets and contributions, to generate many of the exhibits found in this report. Buck has an extensive review process whereby the results of the liability calculations are checked using detailed sample output, changes from year to year are summarized by source, and significant deviations from expectations are investigated. Other accounting outputs and the internal model are similarly reviewed in detail and at a high level for accuracy, reasonability, and consistency with prior results. Buck also reviews the third-party model when significant changes are made to the software. The review is performed by experts within the company who are familiar with applicable accounting rules as well as the manner in which the model generates its output. If significant changes are made to the internal model, extra checking and review are completed. Significant changes to the internal model that are applicable to multiple clients are generally developed, checked and reviewed by multiple experts within the company who are familiar with the details of the required changes.

Where presented, references to "net pension liability" and "fiduciary net position as a percentage of the total pension liability" may be appropriate for evaluating the need and level of future contributions but makes no assessment regarding the funded status of the Fund if the Fund were to settle (i.e., purchase annuities to cover) any portion of its liabilities.

Mr. Thomas Causey  
October 6, 2023

This report was prepared under our supervision and in accordance with all applicable Actuarial Standards of Practice. We are Fellows of the Society of Actuaries, Enrolled Actuaries, Members of the American Academy of Actuaries, and Fellows of the Conference of Consulting Actuaries. We meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. We are available to discuss this report with you at your convenience.

Please let us know if you require additional information.

Sincerely,

Buck, A Gallagher Company



Michael A. Ribble, FSA, EA, MAAA, FCA  
Principal, Consulting Actuary



Elizabeth A. Wiley, FSA, EA, MAAA, FCA  
Senior Actuarial Consultant

## Appendix A

**Table 1 – Projection of Fiduciary Net Positions**  
(\$ in Thousands)

Calendar Year	Beginning Fiduciary Position	Member Contributions	Employer Contributions	Benefit Payments	Administrative Expenses	Investment Earnings	Ending Fiduciary Position
2023	\$ 653,868	\$ 5,000	\$ 30,331	\$ 56,618	\$ 41	\$ 58,416	\$ 690,956
2024	690,956	4,782	28,272	58,791	39	44,088	709,268
2025	709,268	4,580	29,435	60,764	39	45,245	727,725
2026	727,725	4,414	32,306	62,283	39	46,482	748,605
2027	748,605	4,184	36,886	64,272	40	47,916	773,279
2028	773,279	3,979	42,700	65,932	40	49,646	803,632
2029	803,632	3,759	43,668	67,676	40	51,587	834,930
2030	834,930	3,537	40,377	69,283	40	53,457	862,978
2031	862,978	3,315	38,090	70,691	40	55,155	888,807
2032	888,807	3,086	35,407	72,185	41	56,694	911,768
2033	911,768	2,860	33,077	73,514	41	58,061	932,211
2034	932,211	2,653	25,834	74,478	40	59,121	945,301
2035	945,301	2,443	18,046	75,446	40	59,685	949,989
2036	949,989	2,234	8,849	76,257	40	59,663	944,438
2037	944,438	2,040	4,493	76,788	40	59,141	933,284
2038	933,284	1,833	4,040	77,345	39	58,375	920,148
2039	920,148	1,633	3,598	77,728	39	57,490	905,102
2040	905,102	1,462	3,210	77,728	38	56,493	888,501
2041	888,501	1,277	2,807	77,824	38	55,393	870,116
2042	870,116	1,113	2,449	77,583	37	54,187	850,245
2043	850,245	947	2,076	77,307	36	52,889	828,814
2044	828,814	807	1,751	76,635	36	51,502	806,203
2045	806,203	690	1,482	75,594	35	50,054	782,800
2046	782,800	593	1,272	74,289	34	48,564	758,906
2047	758,906	490	1,047	72,958	33	47,043	734,495
2048	734,495	389	830	71,577	32	45,491	709,596
2049	709,596	309	652	69,879	31	43,917	684,564
2050	684,564	245	508	68,008	30	42,345	659,624
2051	659,624	187	386	65,998	30	40,782	634,951
2052	634,951	148	304	63,792	29	39,245	610,827
2053	610,827	109	221	61,573	28	37,744	587,300
2054	587,300	86	171	59,135	27	36,292	564,687
2055	564,687	64	124	56,710	26	34,896	543,035
2056	543,035	48	91	54,189	25	33,569	522,529
2057	522,529	34	64	51,672	24	32,315	503,246
2058	503,246	25	48	49,127	23	31,141	485,310
2059	485,310	14	26	46,658	22	30,053	468,723
2060	468,723	8	15	44,161	21	29,056	453,620
2061	453,620	4	6	41,720	20	28,150	440,040
2062	440,040	2	2	39,283	19	27,345	428,087
2063	428,087	1	2	34,740	18	26,714	420,046
2064	420,046	1	2	32,325	17	26,269	413,976
2065	413,976	1	1	29,980	16	25,949	409,931
2066	409,931	1	1	27,711	15	25,759	407,966
2067	407,966	1	0	25,523	14	25,701	408,131
2068	408,131	0	0	23,426	13	25,778	410,470
2069	410,470	0	0	21,411	12	25,995	415,042
2070	415,042	0	0	19,491	11	26,353	421,893
2071	421,893	0	0	17,669	11	26,858	431,071
2072	431,071	0	0	15,948	10	27,509	442,622



## Appendix A

### Table 1 – Projection of Fiduciary Net Positions (continued)

(\$ in Thousands)

Calendar Year	Beginning Fiduciary Position	Member Contributions	Employer Contributions	Benefit Payments	Administrative Expenses	Investment Earnings	Ending Fiduciary Position
2073	\$ 442,622	\$ 0	\$ -	\$ 14,330	\$ 9	\$ 28,312	\$ 456,595
2074	456,595	0	0	12,814	8	29,268	473,041
2075	473,041	0	0	11,400	7	30,382	492,016
2076	492,016	0	0	10,088	7	31,659	513,580
2077	513,580	0	0	8,876	6	33,099	537,797
2078	537,797	0	0	7,761	6	34,708	564,738
2079	564,738	0	0	6,743	5	36,491	594,481
2080	594,481	0	0	5,819	4	38,455	627,113
2081	627,113	0	0	4,985	4	40,603	662,727
2082	662,727	0	0	4,237	3	42,941	701,428
2083	701,428	0	0	3,573	3	45,478	743,330
2084	743,330	0	0	2,986	3	48,221	788,562
2085	788,562	0	0	2,473	2	51,177	837,264
2086	837,264	0	0	2,029	2	54,358	889,591
2087	889,591	0	0	1,647	2	57,771	945,713
2088	945,713	0	0	1,323	1	61,428	1,005,817
2089	1,005,817	0	0	1,052	1	65,344	1,070,108
2090	1,070,108	0	0	828	1	69,530	1,138,809
2091	1,138,809	0	0	645	1	74,002	1,212,165
2092	1,212,165	0	0	498	1	78,775	1,290,441
2093	1,290,441	0	0	382	1	83,867	1,373,925
2094	1,373,925	0	0	290	0	89,295	1,462,930
2095	1,462,930	0	0	220	0	95,083	1,557,793
2096	1,557,793	0	0	166	0	101,251	1,658,878
2097	1,658,878	0	0	126	0	107,822	1,766,574
2098	1,766,574	0	0	96	0	114,825	1,881,303
2099	1,881,303	0	0	73	0	122,283	2,003,513
2100	2,003,513	0	0	55	0	130,226	2,133,684
2101	2,133,684	0	0	42	0	138,687	2,272,329
2102	2,272,329	0	0	32	0	147,700	2,419,997
2103	2,419,997	0	0	24	0	157,299	2,577,272
2104	2,577,272	0	0	18	0	167,522	2,744,776
2105	2,744,776	0	0	13	0	178,410	2,923,173
2106	2,923,173	0	0	10	0	190,006	3,113,169
2107	3,113,169	0	0	7	0	202,356	3,315,518
2108	3,315,518	0	0	5	0	215,508	3,531,021
2109	3,531,021	0	0	3	0	229,516	3,760,534
2110	3,760,534	0	0	2	0	244,435	4,004,967
2111	4,004,967	0	0	1	0	260,322	4,265,288
2112	4,265,288	0	0	1	0	277,244	4,542,531
2113	4,542,531	0	0	1	0	295,265	4,837,795
2114	4,837,795	0	0	0	0	314,456	5,152,251
2115	5,152,251	0	0	0	0	334,896	5,487,147
2116	5,487,147	0	0	0	0	356,665	5,843,812
2117	5,843,812	0	0	0	0	379,848	6,223,660
2118	6,223,660	0	0	0	0	404,537	6,628,197
2119	6,628,197	0	0	0	0	430,833	7,059,030
2120	7,059,030	0	0	0	0	458,837	7,517,867
2121	7,517,867	0	0	0	0	488,662	8,006,529
2122	8,006,529	0	0	0	0	520,424	8,526,953

## Appendix A

**Table 2 – Actuarial Present Values of Projected Benefit Payments**  
(\$ in Thousands)

Calendar Year	Beginning Fiduciary Position	Benefit Payments	Funded Benefit Payments	Unfunded Benefit Payments	Present Value of Benefit Payments		
					Funded Payments at 6.50%	Unfunded Payments at 3.65%	Using Single Discount Rate of 6.50%
2023	\$ 653,868	\$ 56,618	\$ 56,618	\$ 0	\$ 54,863	\$ 0	\$ 54,863
2024	690,956	58,791	58,791	0	53,492	0	53,492
2025	709,268	60,764	60,764	0	51,913	0	51,913
2026	727,725	62,283	62,283	0	49,963	0	49,963
2027	748,605	64,272	64,272	0	48,412	0	48,412
2028	773,279	65,932	65,932	0	46,631	0	46,631
2029	803,632	67,676	67,676	0	44,943	0	44,943
2030	834,930	69,283	69,283	0	43,202	0	43,202
2031	862,978	70,691	70,691	0	41,390	0	41,390
2032	888,807	72,185	72,185	0	39,685	0	39,685
2033	911,768	73,514	73,514	0	37,949	0	37,949
2034	932,211	74,478	74,478	0	36,100	0	36,100
2035	945,301	75,446	75,446	0	34,337	0	34,337
2036	949,989	76,257	76,257	0	32,588	0	32,588
2037	944,438	76,788	76,788	0	30,812	0	30,812
2038	933,284	77,345	77,345	0	29,142	0	29,142
2039	920,148	77,728	77,728	0	27,498	0	27,498
2040	905,102	77,728	77,728	0	25,820	0	25,820
2041	888,501	77,824	77,824	0	24,274	0	24,274
2042	870,116	77,583	77,583	0	22,722	0	22,722
2043	850,245	77,307	77,307	0	21,259	0	21,259
2044	828,814	76,635	76,635	0	19,788	0	19,788
2045	806,203	75,594	75,594	0	18,328	0	18,328
2046	782,800	74,289	74,289	0	16,913	0	16,913
2047	758,906	72,958	72,958	0	15,596	0	15,596
2048	734,495	71,577	71,577	0	14,367	0	14,367
2049	709,596	69,879	69,879	0	13,170	0	13,170
2050	684,564	68,008	68,008	0	12,035	0	12,035
2051	659,624	65,998	65,998	0	10,966	0	10,966
2052	634,951	63,792	63,792	0	9,953	0	9,953
2053	610,827	61,573	61,573	0	9,020	0	9,020
2054	587,300	59,135	59,135	0	8,135	0	8,135
2055	564,687	56,710	56,710	0	7,325	0	7,325
2056	543,035	54,189	54,189	0	6,572	0	6,572
2057	522,529	51,672	51,672	0	5,884	0	5,884
2058	503,246	49,127	49,127	0	5,253	0	5,253
2059	485,310	46,658	46,658	0	4,685	0	4,685
2060	468,723	44,161	44,161	0	4,163	0	4,163
2061	453,620	41,720	41,720	0	3,693	0	3,693
2062	440,040	39,283	39,283	0	3,265	0	3,265
2063	428,087	34,740	34,740	0	2,711	0	2,711
2064	420,046	32,325	32,325	0	2,369	0	2,369
2065	413,976	29,980	29,980	0	2,063	0	2,063
2066	409,931	27,711	27,711	0	1,790	0	1,790
2067	407,966	25,523	25,523	0	1,548	0	1,548
2068	408,131	23,426	23,426	0	1,334	0	1,334
2069	410,470	21,411	21,411	0	1,145	0	1,145
2070	415,042	19,491	19,491	0	979	0	979
2071	421,893	17,669	17,669	0	833	0	833
2072	431,071	15,948	15,948	0	706	0	706

## Appendix A

**Table 2 – Actuarial Present Values of Projected Benefit Payments (continued)**  
(\$ in Thousands)

Calendar Year	Beginning Fiduciary Position	Benefit Payments	Funded Benefit Payments	Unfunded Benefit Payments	Present Value of Benefit Payments		
					Funded Payments at 6.50%	Unfunded Payments at 3.65%	Using Single Discount Rate of 6.50%
2073	\$ 442,622	\$ 14,330	\$ 14,330	\$ 0	\$ 596	\$ 0	\$ 596
2074	456,595	12,814	12,814	0	500	0	500
2075	473,041	11,400	11,400	0	418	0	418
2076	492,016	10,088	10,088	0	347	0	347
2077	513,580	8,876	8,876	0	287	0	287
2078	537,797	7,761	7,761	0	236	0	236
2079	564,738	6,743	6,743	0	192	0	192
2080	594,481	5,819	5,819	0	156	0	156
2081	627,113	4,985	4,985	0	125	0	125
2082	662,727	4,237	4,237	0	100	0	100
2083	701,428	3,573	3,573	0	79	0	79
2084	743,330	2,986	2,986	0	62	0	62
2085	788,562	2,473	2,473	0	48	0	48
2086	837,264	2,029	2,029	0	37	0	37
2087	889,591	1,647	1,647	0	28	0	28
2088	945,713	1,323	1,323	0	21	0	21
2089	1,005,817	1,052	1,052	0	16	0	16
2090	1,070,108	828	828	0	12	0	12
2091	1,138,809	645	645	0	9	0	9
2092	1,212,165	498	498	0	6	0	6
2093	1,290,441	382	382	0	5	0	5
2094	1,373,925	290	290	0	3	0	3
2095	1,462,930	220	220	0	2	0	2
2096	1,557,793	166	166	0	2	0	2
2097	1,658,878	126	126	0	1	0	1
2098	1,766,574	96	96	0	1	0	1
2099	1,881,303	73	73	0	1	0	1
2100	2,003,513	55	55	0	0	0	0
2101	2,133,684	42	42	0	0	0	0
2102	2,272,329	32	32	0	0	0	0
2103	2,419,997	24	24	0	0	0	0
2104	2,577,272	18	18	0	0	0	0
2105	2,744,776	13	13	0	0	0	0
2106	2,923,173	10	10	0	0	0	0
2107	3,113,169	7	7	0	0	0	0
2108	3,315,518	5	5	0	0	0	0
2109	3,531,021	3	3	0	0	0	0
2110	3,760,534	2	2	0	0	0	0
2111	4,004,967	1	1	0	0	0	0
2112	4,265,288	1	1	0	0	0	0
2113	4,542,531	1	1	0	0	0	0
2114	4,837,795	0	0	0	0	0	0
2115	5,152,251	0	0	0	0	0	0
2116	5,487,147	0	0	0	0	0	0
2117	5,843,812	0	0	0	0	0	0
2118	6,223,660	0	0	0	0	0	0
2119	6,628,197	0	0	0	0	0	0
2120	7,059,030	0	0	0	0	0	0
2121	7,517,867	0	0	0	0	0	0
2122	8,006,529	0	0	0	0	0	0