110 West Berry Street Suite 1300
Fort Wayne, IN 46802

August 31, 2023

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

Registers of Deeds' Supplemental Pension Fund
GASB 67 Disclosure for Fiscal Year Ending June 30, 2023
Based on Valuation Date of December 31, 2022

Dear Mr. Causey:

We have prepared the required accounting information for Governmental Accounting Standards Board (GASB) Statement No. 67 for the Registers of Deeds' Supplemental Pension Fund ("RODSPF") 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
Terminated members and survivors of deceased members entitled to benefits but not yet receiving benefits

Active members ${ }^{1} \quad \underline{104}$

Total membership 205

[^0]2. Following is the schedule of changes in Net Pension Liability.

| Schedule of Changes in Net Pension Liability as of June 30, 2023 |  |  |
| :---: | :---: | :---: |
| Total Pension Liability |  |  |
| Service Cost | \$ | 1,151,000 |
| Interest |  | 1,025,000 |
| Changes in Benefit Terms |  | 0 |
| Differences between Expected and Actual Experience |  | $(618,000)$ |
| Changes of Assumptions |  | 0 |
| Benefits Payments, including Refund of Member Contributions |  | (1,850,000) |
| Net Change in Total Pension Liability | \$ | $(292,000)$ |
| Total Pension Liability - Beginning of Year | \$ | 33,918,000 |
| Total Pension Liability - End of Year | \$ | 33,626,000 |
| Plan Fiduciary Net Position |  |  |
| Employer Contributions | \$ | 892,000 |
| Member Contributions |  | 0 |
| Net Investment Income |  | $(537,000)$ |
| Benefit Payments, including Refund of Member Contributions |  | $(1,850,000)$ |
| Administrative Expenses |  | $(20,000)$ |
| Other |  | 0 |
| Net Change in Plan Fiduciary Net Pension | \$ | $(1,515,000)$ |
| Plan Fiduciary Net Position - Beginning of Year | \$ | 47,158,000 |
| Plan Fiduciary Net Position - End of Year | \$ | 45,643,000 |


| Net Pension Liability/(Asset) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | June 30, 2023 |  | June 30, 2022 |  |
| Total Pension Liability | \$ | 33,626,000 | \$ | 33,918,000 |
| Plan Fiduciary Net Position |  | 45,643,000 |  | 47,158,000 |
| Net Pension Liability/(Asset) | \$ | $(12,017,000)$ | \$ | $(13,240,000)$ |
| Plan Fiduciary Net Pension as a Percentage of the Total Pension Liability/(Asset) |  | 135.74\% |  | 139.04\% |

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 | $2.00 \%$ | $3.00 \%$ | $4.00 \%$ |
| Net Pension Liability/(Asset) | $\$(8,203,000)$ | $\$(12,017,000)$ | $\$(15,233,000)$ |

4. The discount rate used to measure the total pension liability was $3.00 \%$. The projection of cash flows used to determine the discount rate reflects actual contributions made through June 30, 2023 and assumes that System contributions will continue to follow the current funding policy. Investment earnings are based on actual returns through June 30, 2023, and on the assumed investment rate of return 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.
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 | 19 Years* |
| Asset Valuation Method | Asset returns in excess of or less than <br> the expected return on market value of <br> assets reflected over a five-year period (not <br> greater than $120 \%$ of market value and not <br> less than $80 \%$ of market value) |
|  |  |
| Actuarial Assumptions: | $3.00 \%$ |
| Investment Rate of Return* | $3.25 \%-8.25 \%$ |
| Projected Salary Increases** | $2.50 \%$ |
| ${ }^{*}$ Includes Inflation of |  |
| ${ }^{* *}$ Includes Inflation and Productivity of | $3.25 \%$ |
| Cost-of-living Adjustments | N/A |

* If the actuarially determined employer contribution (ADEC) is based on 12-year amortization of the unfunded accrued liability, the ADEC is less than $\$ 0$, which is not a permissible result. Therefore, the accrued liability contribution has been set such that the total ADEC equals $\$ 0$.

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 $3.00 \%$. 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. To the extent there have been changes to RODSPF provisions enacted by the legislature, they have been reviewed with staff of the Retirement Systems Division and were not considered material to the current valuation. To the extent the legislature enacts additional legislation that has a material impact on the valuation, revised GASB 67 disclosures may be required.
Full summaries of the 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 Annual Valuation of Registers of Deeds' Supplemental Pension Fund 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.

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, Retirement Actuary


Elizabeth A. Wiley, FSA, EA, MAAA, FCA Senior Consultant, Retirement Actuary

## Appendix A

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

| Calendar Year |  | Beginning Fiduciary Position | Member Contributions |  | Employer Contributions |  | Benefit Payments |  |  | Investment Earnings | Ending Fiduciary Position |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2023 | \$ | 45,186 | \$ | \$ | 446 | \$ | 1,877 | \$ | 32 | 1,618 | \$ | 45,341 |
| 2024 |  | 45,341 | - |  | - |  | 1,951 |  | 29 | 1,331 |  | 44,692 |
| 2025 |  | 44,692 | - |  | - |  | 2,017 |  | 27 | 1,310 |  | 43,958 |
| 2026 |  | 43,958 | - |  | - |  | 2,080 |  | 25 | 1,287 |  | 43,140 |
| 2027 |  | 43,140 | - |  | - |  | 2,126 |  | 22 | 1,262 |  | 42,254 |
| 2028 |  | 42,254 | - |  | - |  | 2,158 |  | 20 | 1,235 |  | 41,311 |
| 2029 |  | 41,311 | - |  | - |  | 2,180 |  | 18 | 1,207 |  | 40,320 |
| 2030 |  | 40,320 | - |  | - |  | 2,191 |  | 17 | 1,176 |  | 39,288 |
| 2031 |  | 39,288 | - |  | - |  | 2,226 |  | 15 | 1,145 |  | 38,192 |
| 2032 |  | 38,192 | - |  | - |  | 2,241 |  | 13 | 1,113 |  | 37,051 |
| 2033 |  | 37,051 | - |  | - |  | 2,251 |  | 10 | 1,077 |  | 35,867 |
| 2034 |  | 35,867 | - |  | - |  | 2,244 |  | 9 | 1,043 |  | 34,657 |
| 2035 |  | 34,657 | - |  | - |  | 2,219 |  | 7 | 1,007 |  | 33,438 |
| 2036 |  | 33,438 | - |  | - |  | 2,178 |  | 6 | 971 |  | 32,225 |
| 2037 |  | 32,225 | - |  | - |  | 2,129 |  | 5 | 935 |  | 31,026 |
| 2038 |  | 31,026 | - |  | - |  | 2,081 |  | 4 | 900 |  | 29,841 |
| 2039 |  | 29,841 | - |  | - |  | 2,013 |  | 4 | 864 |  | 28,688 |
| 2040 |  | 28,688 | - |  | - |  | 1,942 |  | 3 | 832 |  | 27,575 |
| 2041 |  | 27,575 | - |  | - |  | 1,868 |  | 3 | 800 |  | 26,504 |
| 2042 |  | 26,504 | - |  | - |  | 1,799 |  | 2 | 768 |  | 25,471 |
| 2043 |  | 25,471 | - |  | - |  | 1,724 |  | 2 | 739 |  | 24,484 |
| 2044 |  | 24,484 | - |  | - |  | 1,643 |  | 1 | 711 |  | 23,551 |
| 2045 |  | 23,551 | - |  | - |  | 1,559 |  | 1 | 683 |  | 22,674 |
| 2046 |  | 22,674 | - |  | - |  | 1,481 |  | 1 | 658 |  | 21,850 |
| 2047 |  | 21,850 | - |  | - |  | 1,399 |  | 1 | 635 |  | 21,085 |
| 2048 |  | 21,085 | - |  | - |  | 1,318 |  | - | 612 |  | 20,379 |
| 2049 |  | 20,379 | - |  | - |  | 1,237 |  | - | 593 |  | 19,735 |
| 2050 |  | 19,735 | - |  | - |  | 1,157 |  | - | 575 |  | 19,153 |
| 2051 |  | 19,153 | - |  | - |  | 1,079 |  | - | 559 |  | 18,633 |
| 2052 |  | 18,633 | - |  | - |  | 1,006 |  | - | 543 |  | 18,170 |
| 2053 |  | 18,170 | - |  | - |  | 933 |  | - | 531 |  | 17,768 |
| 2054 |  | 17,768 | - |  | - |  | 863 |  | - | 520 |  | 17,425 |
| 2055 |  | 17,425 | - |  | - |  | 796 |  | - | 511 |  | 17,140 |
| 2056 |  | 17,140 | - |  | - |  | 731 |  | - | 503 |  | 16,912 |
| 2057 |  | 16,912 | - |  | - |  | 670 |  | - | 498 |  | 16,740 |
| 2058 |  | 16,740 | - |  | - |  | 612 |  | - | 493 |  | 16,621 |
| 2059 |  | 16,621 | - |  | - |  | 557 |  | - | 490 |  | 16,554 |
| 2060 |  | 16,554 | - |  | - |  | 505 |  | - | 489 |  | 16,538 |
| 2061 |  | 16,538 | - |  | - |  | 457 |  | - | 490 |  | 16,571 |
| 2062 |  | 16,571 | - |  | - |  | 411 |  | - | 491 |  | 16,651 |
| 2063 |  | 16,651 | - |  | - |  | 368 |  | - | 493 |  | 16,776 |
| 2064 |  | 16,776 | - |  | - |  | 329 |  | - | 499 |  | 16,946 |
| 2065 |  | 16,946 | - |  | - |  | 292 |  | - | 504 |  | 17,158 |
| 2066 |  | 17,158 | - |  | - |  | 258 |  | - | 510 |  | 17,410 |
| 2067 |  | 17,410 | - |  | - |  | 227 |  | - | 520 |  | 17,703 |
| 2068 |  | 17,703 | - |  | - |  | 198 |  | - | 527 |  | 18,032 |
| 2069 |  | 18,032 | - |  | - |  | 172 |  | - | 538 |  | 18,398 |
| 2070 |  | 18,398 | - |  | - |  | 149 |  | - | 550 |  | 18,799 |
| 2071 |  | 18,799 | - |  | - |  | 128 |  | - | 562 |  | 19,233 |
| 2072 |  | 19,233 | - |  | - |  | 109 |  | - | 575 |  | 19,699 |

## Appendix A

Table 1 - Projection of Fiduciary Net Positions (continued) (\$ in Thousands)


## 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 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | ts at \% | Unfunded Payments at 3.65\% |  | gle ate of |
| 2023 | \$ | 45,186 |  |  | \$ | 1,877 |  | \$ | 1,877 | \$ |  | \$ | 1,849 | \$ | \$ | 1,849 |
| 2024 |  | 45,341 |  | 1,951 |  | 1,951 |  |  |  | 1,866 |  |  | 1,866 |
| 2025 |  | 44,692 |  | 2,017 |  | 2,017 |  |  |  | 1,873 | - |  | 1,873 |
| 2026 |  | 43,958 |  | 2,080 |  | 2,080 |  | - |  | 1,876 | - |  | 1,876 |
| 2027 |  | 43,140 |  | 2,126 |  | 2,126 |  |  |  | 1,861 | - |  | 1,861 |
| 2028 |  | 42,254 |  | 2,158 |  | 2,158 |  |  |  | 1,834 | - |  | 1,834 |
| 2029 |  | 41,311 |  | 2,180 |  | 2,180 |  |  |  | 1,799 | - |  | 1,799 |
| 2030 |  | 40,320 |  | 2,191 |  | 2,191 |  | - |  | 1,755 | - |  | 1,755 |
| 2031 |  | 39,288 |  | 2,226 |  | 2,226 |  | - |  | 1,731 | - |  | 1,731 |
| 2032 |  | 38,192 |  | 2,241 |  | 2,241 |  |  |  | 1,692 | - |  | 1,692 |
| 2033 |  | 37,051 |  | 2,251 |  | 2,251 |  |  |  | 1,650 | - |  | 1,650 |
| 2034 |  | 35,867 |  | 2,244 |  | 2,244 |  | - |  | 1,597 | - |  | 1,597 |
| 2035 |  | 34,657 |  | 2,219 |  | 2,219 |  | - |  | 1,534 | - |  | 1,534 |
| 2036 |  | 33,438 |  | 2,178 |  | 2,178 |  | - |  | 1,461 | - |  | 1,461 |
| 2037 |  | 32,225 |  | 2,129 |  | 2,129 |  | - |  | 1,387 | - |  | 1,387 |
| 2038 |  | 31,026 |  | 2,081 |  | 2,081 |  | - |  | 1,316 | - |  | 1,316 |
| 2039 |  | 29,841 |  | 2,013 |  | 2,013 |  | - |  | 1,236 | - |  | 1,236 |
| 2040 |  | 28,688 |  | 1,942 |  | 1,942 |  | - |  | 1,158 | - |  | 1,158 |
| 2041 |  | 27,575 |  | 1,868 |  | 1,868 |  | - |  | 1,081 | - |  | 1,081 |
| 2042 |  | 26,504 |  | 1,799 |  | 1,799 |  | - |  | 1,011 | - |  | 1,011 |
| 2043 |  | 25,471 |  | 1,724 |  | 1,724 |  | - |  | 941 | - |  | 941 |
| 2044 |  | 24,484 |  | 1,643 |  | 1,643 |  | - |  | 870 | - |  | 870 |
| 2045 |  | 23,551 |  | 1,559 |  | 1,559 |  | - |  | 802 | - |  | 802 |
| 2046 |  | 22,674 |  | 1,481 |  | 1,481 |  | - |  | 739 | - |  | 739 |
| 2047 |  | 21,850 |  | 1,399 |  | 1,399 |  | - |  | 678 | - |  | 678 |
| 2048 |  | 21,085 |  | 1,318 |  | 1,318 |  | - |  | 620 | - |  | 620 |
| 2049 |  | 20,379 |  | 1,237 |  | 1,237 |  | - |  | 565 | - |  | 565 |
| 2050 |  | 19,735 |  | 1,157 |  | 1,157 |  | - |  | 513 | - |  | 513 |
| 2051 |  | 19,153 |  | 1,079 |  | 1,079 |  | - |  | 465 | - |  | 465 |
| 2052 |  | 18,633 |  | 1,006 |  | 1,006 |  | - |  | 421 | - |  | 421 |
| 2053 |  | 18,170 |  | 933 |  | 933 |  | - |  | 379 | - |  | 379 |
| 2054 |  | 17,768 |  | 863 |  | 863 |  | - |  | 340 | - |  | 340 |
| 2055 |  | 17,425 |  | 796 |  | 796 |  | - |  | 305 | - |  | 305 |
| 2056 |  | 17,140 |  | 731 |  | 731 |  | - |  | 272 | - |  | 272 |
| 2057 |  | 16,912 |  | 670 |  | 670 |  | - |  | 242 | - |  | 242 |
| 2058 |  | 16,740 |  | 612 |  | 612 |  | - |  | 214 | - |  | 214 |
| 2059 |  | 16,621 |  | 557 |  | 557 |  | - |  | 189 | - |  | 189 |
| 2060 |  | 16,554 |  | 505 |  | 505 |  | - |  | 167 | - |  | 167 |
| 2061 |  | 16,538 |  | 457 |  | 457 |  | - |  | 146 | - |  | 146 |
| 2062 |  | 16,571 |  | 411 |  | 411 |  | - |  | 128 | - |  | 128 |
| 2063 |  | 16,651 |  | 368 |  | 368 |  | - |  | 111 | - |  | 111 |
| 2064 |  | 16,776 |  | 329 |  | 329 |  | - |  | 96 | - |  | 96 |
| 2065 |  | 16,946 |  | 292 |  | 292 |  | - |  | 83 | - |  | 83 |
| 2066 |  | 17,158 |  | 258 |  | 258 |  | - |  | 71 | - |  | 71 |
| 2067 |  | 17,410 |  | 227 |  | 227 |  | - |  | 61 | - |  | 61 |
| 2068 |  | 17,703 |  | 198 |  | 198 |  | - |  | 52 | - |  | 52 |
| 2069 |  | 18,032 |  | 172 |  | 172 |  | - |  | 44 | - |  | 44 |
| 2070 |  | 18,398 |  | 149 |  | 149 |  | - |  | 37 | - |  | 37 |
| 2071 |  | 18,799 |  | 128 |  | 128 |  | - |  | 31 | - |  | 31 |
| 2072 |  | 19,233 |  | 109 |  | 109 |  | - |  | 25 | - |  | 25 |

## Appendix A

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



[^0]:    1 As of the valuation date, there were 100 members serving as registers of deeds. Four former registers of deeds are active employees in the Local Governmental Employees' Retirement System (LGERS) and consequently ineligible to receive a benefit under the RODSPF until retirement from LGERS.

