



Registers of Deeds' Supplemental Pension Fund Principal Results of Actuarial Valuation as of December 31, 2014

Board of Trustees Meeting
Larry Langer and Mike Ribble
October 22, 2015

Registers of Deeds' Supplemental Pension Fund

Principal Results of December 31, 2014 Valuation

Valuation Results as of	12/31/2014	12/31/2013
Active Members		
Number	100	100
Reported Compensation	\$ 5,842,163	\$ 5,960,423
Valuation Compensation**	\$ 6,467,323	\$ 6,333,594
Terminated Members Entitled to Benefits but not yet Receiving Benefits		
Number	0	2
Annual Allowances	\$ 0	\$ 36,000
Retired Members and Survivors of Deceased Members Currently Receiving Benefits		
Number	95	95
Annual Allowances	\$ 1,707,552	\$ 1,696,104
Assets		
Actuarial Value (AVA)	\$ 48,078,302	\$ 46,405,972
Market Value	\$ 47,814,953	\$ 44,804,737
Actuarial Accrued Liability (AAL)	\$ 23,745,153	\$ 24,064,415
Unfunded Accrued Liability (AAL-AVA)	\$ (24,333,149)	\$ (22,341,557)
Funded Ratio (AVA/AAL)***	202.5%	192.8%

Registers of Deeds' Supplemental Pension Fund

Principal Results of December 31, 2014 Valuation

Contributions for Fiscal Year Ending	6/30/2017	6/30/2016
Annual Required Employer Contribution:		
Normal Cost	\$ 634,379	\$ 629,630
Accrued Liability	<u>(634,379)</u>	<u>(629,630)</u>
Total	\$ 0	\$ 0
Liquidation Period	N/A*	N/A*

* If the actuarially determined employer contribution (ADEC) is based on 30 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 employer ADEC equals \$0.

Note: Actual contributions to support the Fund are equal to 1.5% of the monthly receipts collected pursuant to Article 1 of Chapter 161 of the General Statutes (about \$781,000 for calendar year 2014).

Certification

The assumptions, methods, and plan provisions used in the results presented in this presentation were provided in October 2015 in the “Report on the Annual Valuation of the Registers of Deeds’ Supplemental Pension Fund prepared as of December 31, 2014.”

The results were prepared under the direction of Michael Ribble and Larry Langer who meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. These results have been prepared in accordance with all applicable Actuarial Standards of Practice, and we are available to answer questions about them.

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.

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

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

Questions?

THANK YOU

Registers of Deeds' Supplemental Pension Fund

Report on the Annual Valuation

Prepared as of December 31, 2014

October 2015



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Document Version: 1.0 (July 2014).



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October 7, 2015

Board of Trustees
North Carolina Local Governmental
Employees' Retirement System
3200 Atlantic Avenue
Raleigh, NC 27604

Members of the Board:

We submit herewith our report on the actuarial valuation of the Registers of Deeds' Supplemental Pension Fund (referred to as the "Fund"), prepared as of December 31, 2014. The report has been prepared in accordance with North Carolina General Statute 161-50.

The primary purpose of the valuation report is to determine the required member and employer contribution rates, to describe the current financial condition of the Fund, and to analyze changes in such condition. In addition, the report provides information that the Office of the State Controller (OSC) requires for its Comprehensive Annual Financial Report (CAFR) and it summarizes census data. Use of this report 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 report for that purpose. The attached pages should not be provided without a copy of this cover letter. No one may make any representations or warranties based on any statements or conclusions contained in this report without Buck Consultants' written consent.

The valuation is based upon membership data and financial information as furnished by the Retirement Systems Division and the Financial Operations Division and as summarized in this report. Although reviewed for reasonableness and consistency with the prior valuation, these elements have not been audited by Buck and we cannot certify as to the accuracy and completeness of the data supplied. The valuation is also based on benefit and contribution provisions as presented in this report. If you have reason to believe that the plan provisions are incorrectly described, that important plan provisions relevant to this valuation are not described, or that conditions have changed since the calculations were made, you should contact the authors of this actuarial report prior to relying on this information.

The valuation is further based on the actuarial valuation assumptions, approved by the Board of Trustees, as presented in this report. We believe that these assumptions are appropriate and reasonable and also comply with the requirements of GASB Statement No. 67. We prepared this valuation in accordance with the requirements of this standard and in accordance with all applicable ASOPs.

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 latest assumptions were adopted for use with the December 31, 2009 actuarial valuation, based on the experience study for LGERS prepared as of December 31, 2009 and adopted by the Board of Trustees on October 21, 2010. The next experience study will be prepared as of December 31, 2014 and will be presented to the Board in October 2015. Assumptions and methods based on this experience study, as adopted by the Board, will be used with the December 31, 2015 valuation.

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.

The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and we are available to answer questions about it.

Respectfully submitted,


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


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

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Section 1: Summary of Principal Results

1. This report, prepared as of December 31, 2014, presents the results of the actuarial valuation of the system. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below.

Table 1: Summary of Principal Results

Valuation Results as of	12/31/2014	12/31/2013
Active Members		
Number	100	100
Reported Compensation	\$ 5,842,163	\$ 5,960,423
Valuation Compensation**	\$ 6,467,323	\$ 6,333,594
Terminated Members Entitled to Benefits but not yet Receiving Benefits		
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Retired Members and Survivors of Deceased Members Currently Receiving Benefits		
Number	95	95
Annual Allowances	\$ 1,707,552	\$ 1,696,104
Assets		
Actuarial Value (AVA)	\$ 48,078,302	\$ 46,405,972
Market Value	\$ 47,814,953	\$ 44,804,737
Actuarial Accrued Liability (AAL)	\$ 23,745,153	\$ 24,064,415
Unfunded Accrued Liability (AAL-AVA)	\$ (24,333,149)	\$ (22,341,557)
Funded Ratio (AVA/AAL)***	202.5%	192.8%
Contributions for Fiscal Year Ending	6/30/2017	6/30/2016
Annual Required Employer Contribution:		
Normal Cost	\$ 634,379	\$ 629,630
Accrued Liability	(634,379)	(629,630)
Total	\$ 0	\$ 0
Liquidation Period	N/A*	N/A*

* If the actuarially determined employer contribution (ADEC) is based on 30 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 employer ADEC equals \$0.

** Reported compensation adjusted to reflect the assumed rate of pay increase prior to the valuation date.

*** The System's Funded Ratio is not intended to measure the adequacy of funding in any analysis of a possible settlement of plan liabilities, nor is it intended to assess the need for or the amount of future contributions. Additionally, the measurement of a Funded Ratio using the Market Value of Assets would not be materially different.

Section 1: Summary of Principal Results

2. Tables summarizing the membership of the system as of the valuation date are shown in Section 2.
3. An allocation of investments by category is shown in Section 3.
4. Comments on the valuation results are provided in Section 4.
5. Comments on the experience and actuarial gains during the valuation year are provided in Section 5.
6. Accounting information to be disclosed in the financial statements of the System and the employer is provided in Section 6.
7. Appendix A of this report presents a summary of the results of the valuation, including present and prospective assets and liabilities of the Fund as of December 31, 2014.
8. Appendix B of this report presents the development of the actuarial value of assets.
9. Appendix C of this report outlines the full set of actuarial assumptions and methods employed.
10. Appendix D gives a summary of the benefit and contribution provisions of the system.
11. Appendix E provides the projection of cash flows used to determine the discount rate under GASB Statement No. 67.
12. Appendix F provides detailed tabulations of the membership of the system as of the valuation date.

Section 2: Membership Data

Data regarding the membership of the system for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of December 31, 2014 upon which the valuation was based.

Table 2: The Number and Reported Compensation of Active Members Included in the Valuation as of December 31, 2014

Group	Member Count	Average Age	Average Service	Reported Compensation
Males	25	54.77	11.69	\$ 1,601,659
Females	75	55.43	20.66	4,240,504
Total	100	55.27	18.42	\$ 5,842,163

Table 3: The Number and Annual Retirement Allowances of Retired Members and Survivors of Deceased Members Currently Receiving Benefits Included in the Valuation as of December 31, 2014

Group	Member Count	Average Age	Annual Retirement Allowances
Males	14	73.84	\$ 252,000
Females	81	70.53	1,455,552
Total	95	71.02	\$ 1,707,552

Section 3: Asset Allocation

The following table shows an allocation of investments by category for the Register of Deeds' Supplemental Pension Fund as of December 31, 2014.

Table 4: Allocation of Investments by Category for the Register of Deeds' Supplemental Pension Fund as of December 31, 2014

Cash and Receivables	0.5%
Fixed Income (LTIF)	99.5%
Public Equity	0.0%
Other*	<u>0.0%</u>
Total	100.0%

* Real Estate, Alternatives, Inflation and Credit.

Section 4: Comments on Valuation

Appendix A of this report presents a summary of the results of the valuation, including present and prospective assets and liabilities of the Fund as of December 31, 2014.

The results of the valuation show that the Fund has total prospective liabilities of \$27,520,525 of which \$16,393,596 is for the prospective benefits payable on account of retired members currently receiving benefits and \$11,126,929 is for the prospective benefits payable on account of present active members. Against these liabilities, the Fund has present assets of \$48,078,302 leaving a balance of \$(20,557,777) as the present value of contributions to be made in the future.

The employer's contributions consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions totaling \$634,379 are required to provide the benefits of the Fund for the average new member and include the amount required for administrative expenses.

Prospective employer normal contributions have a present value of \$3,775,372. When this amount is subtracted from \$(20,557,777) which is the present value of total contributions, the result is an unfunded actuarial accrued liability of \$(24,333,149).

Section 5: Comments on Experience and Gains

The following table shows a detailed reconciliation of the change in unfunded accrued liability since the prior valuation.

Table 5: Reconciliation of Change in Unfunded Accrued Liability Since the Prior Valuation
(in millions)

Unfunded Actuarial Accrued Liability (UAAL) as of 12/31/2013	\$ (22.3)
Normal Cost during 2014	0.6
Reduction due to Actual Contributions during 2014	(0.8)
Interest on UAAL, Normal Cost, and Contributions	(1.3)
Asset (Gain)/Loss	0.1
Actuarial Accrued Liability (Gain)/Loss	<u>(0.6)</u>
Unfunded Actuarial Accrued Liability (UAAL) as of 12/31/2014	\$ (24.3)

Section 6: Accounting Information

The section contains the accounting information for Governmental Accounting Standards Board (GASB) Statement No. 67 for fiscal year ending June 30, 2015 based on a valuation date of December 31, 2014.

Please note GASB Statement No. 67 (Financial Reporting for Pension Plans) is applicable for fiscal years ending 2014 and later.

The June 30, 2015 total pension liability presented in this section was determined by an actuarial valuation as of December 31, 2014, based on the assumptions, methods and plan provisions described in this report. 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.

GASB Statement No. 67 set forth certain items of information to be disclosed in the financial statements of the Plan. The tables below provide a distribution of the number of employees by type of membership.

**Table 6: Number of Active and Retired Participants
as of December 31, 2014**

Group	Number
Retired members and survivors of deceased members currently receiving benefits	95
Terminated members and survivors of deceased members entitled to benefits but not yet receiving benefits	0
Active participants	<u>100</u>
Total	195

Section 6: Accounting Information

GASB Statement No. 67 set forth certain items of information to be disclosed in the financial statements of the Plan. The tables below provide the schedule of changes in Net Pension Liability (Asset).

Table 7: Schedule of Changes in Net Pension Liability (Asset)

Calculation as of	June 30, 2015
Total Pension Liability	
Service Cost	\$ 578,000
Interest	1,372,000
Changes of Benefit Terms	0
Difference between Expected and Actual Experience	(558,000)
Change of Assumptions	0
Benefit Payments, including Refund of Member Contributions	(1,715,000)
Net Change in Total Pension Liability	\$ (323,000)
Total Pension Liability - Beginning of Year	\$ 24,143,000
Total Pension Liability - End of Year	\$ 23,820,000
Plan Fiduciary Net Position	
Employer Contributions	\$ 802,000
Member Contributions	0
Net Investment Income	1,114,000
Benefit Payments, including Refund of Member Contributions	(1,715,000)
Administrative Expenses	(16,000)
Other	0
Net Change in Fiduciary Net Position	\$ 185,000
Plan Fiduciary Net Position - Beginning of Year	\$ 46,809,000
Plan Fiduciary Net Position - End of Year	\$ 46,994,000

Table 8: Net Pension Liability (Asset)

Calculation as of	June 30, 2015	June 30, 2014
Total Pension Liability	\$ 23,820,000	\$ 24,143,000
Plan Fiduciary Net Position	46,994,000	46,809,000
Net Pension Liability (Asset)	\$ (23,174,000)	\$ (22,666,000)
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	197.29%	193.88%

Section 6: Accounting Information

The table below is the sensitivity of the net pension liability to changes in the discount rate.

Table 9: Sensitivity of the Net Pension Liability (Asset) at June 30, 2015 to Changes in the Discount Rate

	1% Decrease	Current	1% Increase
Discount Rate	4.75%	5.75%	6.75%
Net Pension Liability (Asset)	(20,908,000)	(23,174,000)	(25,124,000)

The discount rate used to measure the total pension liability was 5.75%. The projection of cash flows used to determine the discount rate assumed that System contributions will continue to follow the current funding policy. 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 E for additional detail.

The table below provides the methods and assumptions used to calculate the actuarially determined contribution rate.

Table 10: Additional Information for GASB Statement No. 67

Valuation Date	12/31/2014
Actuarial Cost Method	Entry Age
Amortization Method	Level dollar closed
Amortization Period	N/A*
Asset Valuation Method	20% of market value plus 80% of expected actuarial value (not greater than 120% of market value and not less than 80% of market value)
Actuarial Assumptions	
Investment Rate of Return**	5.75%
Projected Salary Increases***	4.25% - 7.75%
** Includes Inflation of	3.00%
*** Includes Inflation of and productivity of	3.50%
Cost-of-living Adjustments	N/A

- * If the actuarially determined employer contribution (ADEC) is based on 30 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 employer ADEC equals \$0

Appendix A: Results of the Valuation

Valuation Results as of	12/31/2014
1. Present Value of Future Benefits	
a. Members Currently Receiving Benefits	\$ 16,393,596
b. Active Members	<u>11,126,929</u>
c. Total Actuarial Liabilities	\$ 27,520,525
2. Actuarial Value of Assets	\$ 48,078,302
3. Present Value of Future Contributions (1c) - (2)	\$ (20,557,777)
4. Present Value of Future Normal Contributions by Employers	<u>3,775,372</u>
5. Present Value of Unfunded Accrued Liability Contributions by Employers (3) - (4)	\$ (24,333,149)

Appendix B: Development of Actuarial Value of Assets

Asset Data the Year Ending	12/31/2014
(a) Actuarial Value of Assets at 12/31/2013	\$ 46,405,972
(b) Contributions	781,483
(c) Benefit Payments	<u>(1,685,664)</u>
(d) Net Cash Flow: (b) + (c)	(904,181)
(e) Expected Investment Return: [(a) x 5.75%] + [(d) x 2.875%]	2,642,348
(f) Expected End of Year Actuarial Value of Assets: (a) + (d) + (e)	48,144,139
(g) End of Year Market Value of Assets	47,814,953
(h) Excess of Market Value over Expected Actuarial Value of Assets: (g) - (f)	(329,186)
(i) 20% Adjustment toward Market Value: (h) x 20%	(65,837)
(j) Preliminary Actuarial Value of Assets at 12/31/2014: (f) + (i)	48,078,302
(k) Final Actuarial Value of Assets at 12/31/2014: (j) not less than 80% of (g) and not greater than 120% of (g)	48,078,302
(l) Estimated Net Investment Return on Actuarial Value	5.61%
(m) Estimated Net Investment Return on Market Value	8.83%

Appendix C: Actuarial Assumptions and Methods

Assumptions are based on the experience investigation for LGERS prepared as of December 31, 2009 and adopted by the Board of Trustees on October 21, 2010. The next experience investigation will be based on the five-year period ending December 31, 2014. The actuary will present this investigation during the fall of 2015 for adoption by the Board of Trustees with the intent of using the assumptions recommended in the December 31, 2014 experience review beginning with the December 31, 2015 annual valuation.

Interest Rate: 5.75% per annum, compounded annually.

Inflation: Both general and wage inflation are assumed to be 3.00% per annum.

Real Wage Growth: 0.50% per annum.

Separations From Active Service: Representative values of the assumed rates of separation from active service are as follows:

		Annual Rate of Withdrawal	
<u>Service</u>		<u>Male</u>	<u>Female</u>
0		.3000	.3000
1		.1725	.2000
2		.1450	.1600
3		.1200	.1300
4		.1000	.1250

Annual Rates of						
<u>Age</u>	<u>Withdrawal and Vesting*</u>		<u>Base Mortality**</u>		<u>Disability</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
25	.0600	.0800	.0004	.0002	.0004	.0005
30	.0600	.0700	.0006	.0003	.0010	.0009
35	.0600	.0700	.0009	.0005	.0025	.0015
40	.0400	.0500	.0012	.0007	.0045	.0030
45	.0400	.0400	.0017	.0011	.0055	.0040
50	.0400	.0400	.0024	.0017	.0080	.0048
55	.0400	.0400	.0036	.0025	.0100	.0065
60	.0400	.0400	.0059	.0039	.0100	.0085
65			.0086	.0058		
69			.0109	.0073		

* These rates apply only after five years of membership in the system.

** Base mortality rates as of December 31, 2003.

Appendix C: Actuarial Assumptions and Methods

Retirements: Representative values of the assumed rates of retirement from active service are as follows:

Males

Age	Service						
	5	10	15	20	25	30	35
50				0.0500	0.0700	0.3000	0.3000
55				0.0400	0.1000	0.2500	0.1750
60	0.0800	0.0800	0.0800	0.0800	0.2750	0.4000	0.2500
65	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
70	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500
75	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Females

Age	Service						
	5	10	15	20	25	30	35
50				0.0700	0.0500	0.2500	0.2500
55				0.0500	0.1000	0.3250	0.1750
60	0.0900	0.0900	0.0900	0.0900	0.3000	0.4000	0.2750
65	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500	0.3500
70	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500
75	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Salary Increases: Representative values of the assumed annual rates of future salary increase are as follows:

Service	Annual Rate of Salary Increase
0	7.75%
5	6.50
10	5.45
15	5.20
20	5.00
25	5.00
30	5.00
35	5.00
40	4.50
45	4.25
50	4.25

Appendix C: Actuarial Assumptions and Methods

Deaths After Retirement: Representative values of the assumed post-retirement mortality rates as of December 31, 2003 prior to any mortality improvements are as follows:

Annual Rate of Death after Retirement

Age	Retirees (Healthy at Retirement)		Survivors of Deceased Members		Retirees (Disabled at Retirement)	
	Male	Female	Male	Female	Male	Female
55	.0064	.0035	.0061	.0044	.0277	.0176
60	.0099	.0062	.0090	.0077	.0342	.0229
65	.0165	.0104	.0149	.0125	.0407	.0296
70	.0273	.0167	.0246	.0207	.0483	.0401
75	.0469	.0281	.0422	.0341	.0596	.0558
80	.0805	.0459	.0720	.0563	.0775	.0771

Mortality Improvements: Representative values of the assumed mortality improvement rates (applied to pre-retirement mortality rate for active members and post-retirement mortality rates for retirees healthy at retirement and survivors of deceased members) after retirements are as follows:

Age	Male Projection Scale	Female Projection Scale
25	0.010	0.014
30	0.005	0.010
35	0.005	0.011
40	0.008	0.015
45	0.013	0.016
50	0.018	0.017
55	0.019	0.008
60	0.016	0.005
65	0.014	0.005
70	0.015	0.005
75	0.014	0.008
80	0.010	0.007

Deaths After Retirement (Non-Disabled): According to the RP-2000 Mortality tables for retirees. These tables are set forward two years for male employees and unadjusted for female employees. These tables are also set forward one year for male survivors of deceased members and set forward two years for female survivors of deceased members. The base retiree RP-2000 tables have no rates prior to age 50. The active employee rates of RP-2000 are used for ages less than 50 prior to any adjustments for set back or set forward.

Appendix C: Actuarial Assumptions and Methods

Death After Disability: According to the RP-2000 Mortality tables for disabled annuitants set back six years for males and set forward one year for females.

Deaths Prior to Retirement: According to the RP-2000 Mortality tables for active employees. These tables are set forward two years for male employees and unadjusted for female employees. The base RP-2000 tables for active employees have no rates after age 70. The rates from ages 71 to 79 are smoothed based on the active rate at age 70 and the retiree rate at age 80. Retiree rates are used for ages 80 and beyond.

Mortality Projection (Non-Disabled): All mortality rates are projected from December 31, 2003 using generational improvement with Scale AA.

Timing of Assumptions: All withdrawals, deaths, disabilities, retirements and salary increases are assumed to occur July 1 of each year.

Administrative Expenses: Assumed to be 0.15% of the market value of assets at the beginning of each calendar year.

Reported Compensation: Calendar year compensation as furnished by the system's office.

Valuation Compensation: Reported compensation adjusted to reflect the assumed rate of pay as of the valuation date.

Actuarial Cost Method: Entry age normal cost method.

Asset Valuation Method: Actuarial value, as developed in Appendix B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The actuarial value of assets is not allowed to be greater than 120% of the market value of assets or less than 80% of the market value of assets.

Changes Since Prior Valuation: None.

Appendix D: Summary of Main Plan Provisions

The Registers of Deeds' Supplemental Pension Fund was established October 1, 1987 for all county registers of deeds who are retired from the Local Governmental Employees' Retirement System or an equivalent locally sponsored plan.

Benefits

Service Retirement Allowance

Conditions for Allowance	Retirement from the Local Governmental Employees' Retirement System or equivalent locally sponsored plan with 10 or more years of service as a register of deeds.
Amount of Allowance	Benefit payable for the life of the member only, equal to 75% of a registers of deeds equivalent annual salary immediately preceding retirement computed on the latest monthly base rate. Maximum benefit is \$1,500 per month.

Deferred Vested Retirement Allowance

Conditions for Allowance	Separation from service after completing at least 10 years of service as a register of deeds.
Amount of Allowance	Service Retirement Allowance described above commencing upon retirement with the Local Governmental Retirement System.

Contributions

Employer Contributions	1.5% of the monthly receipts collected pursuant to Article 1 of Chapter 161 of the General Statutes.
Employee Contributions	None.
Changes Since Prior Valuation	None.

Appendix E: GASB 67 Fiduciary Net Position Projection

Table E-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
2015	\$ 47,815	\$ 0	\$ 0	\$ 1,751	\$ 74	2,698	\$ 48,688
2016	48,688	0	0	1,828	75	2,746	49,531
2017	49,531	0	0	1,851	76	2,793	50,397
2018	50,397	0	0	1,856	78	2,843	51,306
2019	51,306	0	0	1,876	79	2,894	52,245
2020	52,245	0	0	1,905	81	2,948	53,207
2021	53,207	0	0	1,943	82	3,002	54,184
2022	54,184	0	0	1,956	84	3,058	55,202
2023	55,202	0	0	1,974	85	3,115	56,258
2024	56,258	0	0	1,994	87	3,176	57,353
2025	57,353	0	0	2,014	88	3,238	58,489
2026	58,489	0	0	2,033	90	3,303	59,669
2027	59,669	0	0	2,023	92	3,370	60,924
2028	60,924	0	0	1,999	94	3,444	62,275
2029	62,275	0	0	1,975	96	3,522	63,726
2030	63,726	0	0	1,938	98	3,607	65,297
2031	65,297	0	0	1,912	101	3,698	66,982
2032	66,982	0	0	1,863	103	3,795	68,811
2033	68,811	0	0	1,814	106	3,902	70,793
2034	70,793	0	0	1,747	109	4,018	72,955
2035	72,955	0	0	1,676	113	4,145	75,311
2036	75,311	0	0	1,601	116	4,281	77,875
2037	77,875	0	0	1,523	120	4,432	80,664
2038	80,664	0	0	1,447	124	4,594	83,687
2039	83,687	0	0	1,367	129	4,770	86,961
2040	86,961	0	0	1,287	134	4,959	90,499
2041	90,499	0	0	1,209	140	5,165	94,315
2042	94,315	0	0	1,133	145	5,387	98,424
2043	98,424	0	0	1,060	152	5,625	102,837
2044	102,837	0	0	984	159	5,881	107,575
2045	107,575	0	0	918	166	6,155	112,646
2046	112,646	0	0	847	174	6,448	118,073
2047	118,073	0	0	780	182	6,762	123,873
2048	123,873	0	0	715	191	7,097	130,064
2049	130,064	0	0	653	201	7,454	136,664
2050	136,664	0	0	595	211	7,835	143,693
2051	143,693	0	0	540	222	8,241	151,172
2052	151,172	0	0	488	233	8,672	159,123
2053	159,123	0	0	440	245	9,130	167,568
2054	167,568	0	0	394	258	9,616	176,532
2055	176,532	0	0	352	272	10,133	186,041
2056	186,041	0	0	312	287	10,680	196,122
2057	196,122	0	0	275	303	11,261	206,805
2058	206,805	0	0	242	319	11,875	218,119
2059	218,119	0	0	212	336	12,526	230,097
2060	230,097	0	0	183	355	13,215	242,774
2061	242,774	0	0	158	374	13,944	256,186
2062	256,186	0	0	135	395	14,716	270,372
2063	270,372	0	0	115	417	15,532	285,372
2064	285,372	0	0	97	440	16,393	301,228

Appendix E: GASB 67 Fiduciary Net Position Projection

Table E-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
2065	\$ 301,228	\$ 0	\$ 0	\$ 81	\$ 465	17,306	\$ 317,988
2066	317,988	0	0	67	491	18,269	335,699
2067	335,699	0	0	56	518	19,287	354,412
2068	354,412	0	0	45	547	20,361	374,181
2069	374,181	0	0	38	577	21,498	395,064
2070	395,064	0	0	31	609	22,699	417,123
2071	417,123	0	0	25	643	23,965	440,420
2072	440,420	0	0	20	679	25,304	465,025
2073	465,025	0	0	16	717	26,718	491,010
2074	491,010	0	0	13	757	28,212	518,452
2075	518,452	0	0	9	800	29,787	547,430
2076	547,430	0	0	8	844	31,453	578,031
2077	578,031	0	0	5	892	33,211	610,345
2078	610,345	0	0	5	941	35,069	644,468
2079	644,468	0	0	3	994	37,028	680,499
2080	680,499	0	0	2	1,050	39,099	718,546
2081	718,546	0	0	2	1,108	41,285	758,721
2082	758,721	0	0	2	1,170	43,593	801,142
2083	801,142	0	0	1	1,236	46,031	845,936
2084	845,936	0	0	0	1,305	48,604	893,235
2085	893,235	0	0	0	1,378	51,322	943,179
2086	943,179	0	0	0	1,455	54,191	995,915
2087	995,915	0	0	0	1,536	57,222	1,051,601
2088	1,051,601	0	0	0	1,622	60,421	1,110,400
2089	1,110,400	0	0	0	1,713	63,799	1,172,486
2090	1,172,486	0	0	0	1,809	67,367	1,238,044
2091	1,238,044	0	0	0	1,910	71,134	1,307,268
2092	1,307,268	0	0	0	2,016	75,110	1,380,362
2093	1,380,362	0	0	0	2,129	79,310	1,457,543
2094	1,457,543	0	0	0	2,248	83,745	1,539,040
2095	1,539,040	0	0	0	2,374	88,427	1,625,093
2096	1,625,093	0	0	0	2,507	93,373	1,715,959
2097	1,715,959	0	0	0	2,647	98,592	1,811,904
2098	1,811,904	0	0	0	2,795	104,106	1,913,215
2099	1,913,215	0	0	0	2,951	109,926	2,020,190
2100	2,020,190	0	0	0	3,116	116,072	2,133,146
2101	2,133,146	0	0	0	3,290	122,562	2,252,418
2102	2,252,418	0	0	0	3,474	129,415	2,378,359
2103	2,378,359	0	0	0	3,669	136,652	2,511,342
2104	2,511,342	0	0	0	3,874	144,293	2,651,761
2105	2,651,761	0	0	0	4,090	152,360	2,800,031
2106	2,800,031	0	0	0	4,319	160,879	2,956,591
2107	2,956,591	0	0	0	4,561	169,875	3,121,905
2108	3,121,905	0	0	0	4,816	179,373	3,296,462
2109	3,296,462	0	0	0	5,085	189,403	3,480,780
2110	3,480,780	0	0	0	5,369	199,992	3,675,403
2111	3,675,403	0	0	0	5,669	211,175	3,880,909
2112	3,880,909	0	0	0	5,986	222,982	4,097,905
2113	4,097,905	0	0	0	6,321	235,451	4,327,035
2114	4,327,035	0	0	0	6,675	248,615	4,568,975

Appendix E: GASB 67 Fiduciary Net Position Projection

Table E-2: Actuarial Present Value 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 5.75%	Unfunded Payments at 3.73%	Using Single Discount Rate of 5.75%
2015	\$ 47,815	\$ 1,751	\$ 1,751	\$ 0	\$ 1,703	\$ 0	\$ 1,703
2016	48,688	1,828	1,828	0	1,681	0	1,681
2017	49,531	1,851	1,851	0	1,610	0	1,610
2018	50,397	1,856	1,856	0	1,526	0	1,526
2019	51,306	1,876	1,876	0	1,459	0	1,459
2020	52,245	1,905	1,905	0	1,401	0	1,401
2021	53,207	1,943	1,943	0	1,351	0	1,351
2022	54,184	1,956	1,956	0	1,286	0	1,286
2023	55,202	1,974	1,974	0	1,227	0	1,227
2024	56,258	1,994	1,994	0	1,172	0	1,172
2025	57,353	2,014	2,014	0	1,120	0	1,120
2026	58,489	2,033	2,033	0	1,069	0	1,069
2027	59,669	2,023	2,023	0	1,006	0	1,006
2028	60,924	1,999	1,999	0	940	0	940
2029	62,275	1,975	1,975	0	878	0	878
2030	63,726	1,938	1,938	0	815	0	815
2031	65,297	1,912	1,912	0	760	0	760
2032	66,982	1,863	1,863	0	700	0	700
2033	68,811	1,814	1,814	0	645	0	645
2034	70,793	1,747	1,747	0	587	0	587
2035	72,955	1,676	1,676	0	533	0	533
2036	75,311	1,601	1,601	0	481	0	481
2037	77,875	1,523	1,523	0	433	0	433
2038	80,664	1,447	1,447	0	389	0	389
2039	83,687	1,367	1,367	0	347	0	347
2040	86,961	1,287	1,287	0	309	0	309
2041	90,499	1,209	1,209	0	275	0	275
2042	94,315	1,133	1,133	0	244	0	244
2043	98,424	1,060	1,060	0	215	0	215
2044	102,837	984	984	0	189	0	189
2045	107,575	918	918	0	167	0	167
2046	112,646	847	847	0	146	0	146
2047	118,073	780	780	0	127	0	127
2048	123,873	715	715	0	110	0	110
2049	130,064	653	653	0	95	0	95
2050	136,664	595	595	0	82	0	82
2051	143,693	540	540	0	70	0	70
2052	151,172	488	488	0	60	0	60
2053	159,123	440	440	0	51	0	51
2054	167,568	394	394	0	43	0	43
2055	176,532	352	352	0	37	0	37
2056	186,041	312	312	0	31	0	31
2057	196,122	275	275	0	26	0	26
2058	206,805	242	242	0	21	0	21
2059	218,119	212	212	0	18	0	18
2060	230,097	183	183	0	14	0	14
2061	242,774	158	158	0	12	0	12
2062	256,186	135	135	0	9	0	9
2063	270,372	115	115	0	8	0	8
2064	285,372	97	97	0	6	0	6

Appendix E: GASB 67 Fiduciary Net Position Projection

Table E-2: Actuarial Present Value 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 5.75%	Unfunded Payments at 3.73%	Using Single Discount Rate of 5.75%
2065	\$ 301,228	\$ 81	\$ 81	\$ 0	\$ 5	\$ 0	\$ 5
2066	317,988	67	67	0	4	0	4
2067	335,699	56	56	0	3	0	3
2068	354,412	45	45	0	2	0	2
2069	374,181	38	38	0	2	0	2
2070	395,064	31	31	0	1	0	1
2071	417,123	25	25	0	1	0	1
2072	440,420	20	20	0	1	0	1
2073	465,025	16	16	0	1	0	1
2074	491,010	13	13	0	0	0	0
2075	518,452	9	9	0	0	0	0
2076	547,430	8	8	0	0	0	0
2077	578,031	5	5	0	0	0	0
2078	610,345	5	5	0	0	0	0
2079	644,468	3	3	0	0	0	0
2080	680,499	2	2	0	0	0	0
2081	718,546	2	2	0	0	0	0
2082	758,721	2	2	0	0	0	0
2083	801,142	1	1	0	0	0	0
2084	845,936	0	0	0	0	0	0
2085	893,235	0	0	0	0	0	0
2086	943,179	0	0	0	0	0	0
2087	995,915	0	0	0	0	0	0
2088	1,051,601	0	0	0	0	0	0
2089	1,110,400	0	0	0	0	0	0
2090	1,172,486	0	0	0	0	0	0
2091	1,238,044	0	0	0	0	0	0
2092	1,307,268	0	0	0	0	0	0
2093	1,380,362	0	0	0	0	0	0
2094	1,457,543	0	0	0	0	0	0
2095	1,539,040	0	0	0	0	0	0
2096	1,625,093	0	0	0	0	0	0
2097	1,715,959	0	0	0	0	0	0
2098	1,811,904	0	0	0	0	0	0
2099	1,913,215	0	0	0	0	0	0
2100	2,020,190	0	0	0	0	0	0
2101	2,133,146	0	0	0	0	0	0
2102	2,252,418	0	0	0	0	0	0
2103	2,378,359	0	0	0	0	0	0
2104	2,511,342	0	0	0	0	0	0
2105	2,651,761	0	0	0	0	0	0
2106	2,800,031	0	0	0	0	0	0
2107	2,956,591	0	0	0	0	0	0
2108	3,121,905	0	0	0	0	0	0
2109	3,296,462	0	0	0	0	0	0
2110	3,480,780	0	0	0	0	0	0
2111	3,675,403	0	0	0	0	0	0
2112	3,880,909	0	0	0	0	0	0
2113	4,097,905	0	0	0	0	0	0
2114	4,327,035	0	0	0	0	0	0

Appendix F: Detailed Tabulations of the Data

Table F-1: The Number and Average Reported Compensation of Active Members Distributed by Age and Service as of December 31, 2014

Age	Years of Service										Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	2	0	0	0	0	0	0	0	0	2
	0	75,578	0	0	0	0	0	0	0	0	75,578
35 to 39	0	0	0	1	0	0	0	0	0	0	1
	0	0	0	58,188	0	0	0	0	0	0	58,188
40 to 44	1	0	0	4	3	3	0	0	0	0	11
	6,331	0	0	76,895	24,132	66,145	0	0	0	0	53,158
45 to 49	1	0	2	4	5	5	1	0	0	0	18
	3,360	0	49,787	67,037	49,663	66,944	79,000	0	0	0	57,395
50 to 54	0	1	2	2	2	2	2	3	0	0	14
	0	67,310	75,883	58,000	41,115	51,336	79,415	67,623	0	0	62,977
55 to 59	0	1	5	3	1	4	4	4	2	0	24
	0	52,055	50,177	52,320	74,568	51,045	59,443	65,450	40,956	0	55,006
60 to 64	1	2	0	4	0	5	3	2	0	0	17
	11,041	70,996	0	70,401	0	51,362	66,610	63,878	0	0	59,943
65 to 69	1	0	1	0	1	2	0	0	1	0	6
	3,853	0	58,464	0	53,773	66,196	0	0	63,511	0	51,999
70 & Up	0	1	0	0	2	0	2	0	1	1	7
	0	60,500	0	0	93,429	0	51,200	0	64,021	68,344	68,875
Total	4	7	10	18	14	21	12	9	4	1	100
	6,146	67,573	56,069	66,027	51,296	58,534	64,819	65,825	52,361	68,344	58,422

Appendix F: Detailed Tabulations of the Data

Table F-2: The Number and Annual Retirement Allowances of Retired Members and Survivors of Deceased Members Distributed by Age as of December 31, 2014

Age	Men		Women	
	Number	Allowances	Number	Allowances
51			1	\$ 18,000
52				
53			1	18,000
54				
55			1	18,000
56			2	36,000
57				
58			4	72,000
59			2	36,000
60			1	18,000
61	1	\$ 18,000	2	36,000
62	3	54,000	3	54,000
63			2	36,000
64			1	18,000
65	1	18,000	7	126,000
66			3	54,000
67	1	18,000	4	72,000
68	1	18,000	4	72,000
69			5	90,000
70			5	90,000
71			1	18,000
72			2	36,000
73			1	18,000
74	1	18,000	3	52,650
75			4	72,000
77			3	54,000
78				
79			3	54,000
80	1	18,000	1	18,000
81	1	18,000		
82	1	18,000	1	18,000
83			2	36,000
84			1	18,000
85			2	36,000
86			3	54,000

Appendix F: Detailed Tabulations of the Data

Table F-2: The Number and Annual Retirement Allowances of Retired Members and Survivors of Deceased Members Distributed by Age as of December 31, 2014

Age	Men		Women	
	Number	Allowances	Number	Allowances
87			1	\$ 16,902
88				
88				
89			1	18,000
90			2	36,000
91	2	\$ 36,000		
92	1	18,000		
93				
94				
95			1	18,000
96			1	18,000
Total	14	\$ 252,000	81	\$ 1,455,552