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**PLEASE REMIT A COPY OF THIS  
INVOICE WITH YOUR PAYMENT**

August 20, 2019

Ms. Lisa Hudges  
County Manager  
Yadkin County  
P.O. Box 220  
Yadkinville, NC 27055

**Re: Invoice for the June 30, 2018 GASB Statement No. 75 Report of the Health Care Plan of Yadkin County**

Dear Ms. Hudges:

We have performed the June 30, 2018 GASB Statement No. 75 Report of the Health Care Plan of Yadkin County. The fee for this service is \$9,377.25. Yadkin County should send a check payable to "Cavanaugh Macdonald Consulting, LLC" addressed to my attention at the address shown below.

If any questions should arise, please call us at 678-388-1700.

Sincerely,

A handwritten signature in blue ink, appearing to read "Todd B. Green".

Todd B. Green, ASA, FCA, MAAA  
Principal and Consulting Actuary

TBG:wl



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**GASB STATEMENT NO. 75 REPORT  
FOR THE  
YADKIN COUNTY  
OTHER POSTEMPLOYMENT BENEFITS PLAN  
PREPARED AS OF JUNE 30, 2018  
FOR JUNE 30, 2019 FINANCIAL REPORTING**





# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

August 20, 2019

Ms. Lisa Hedges  
County Manager  
Yadkin County  
P.O. Box 220  
Yadkinville, NC 27055

**Re: June 30, 2018 GASB 75 Report for the Yadkin County Other Postemployment Benefits Plan**

Dear Ms. Hedges:

Presented in this report is information to assist Yadkin County (County) in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 75 for the Yadkin County Other Postemployment Benefits Plan (Plan). GASB Statement No. 75 (GASB 75) establishes accounting and financial reporting requirements for governmental employers who have other postemployment benefits (OPEB) plans. This report has been prepared by the County's actuary, Cavanaugh Macdonald Consulting (CMC), as of June 30, 2018 (Measurement Date) for financial reporting as of June 30, 2019.

The information contained in this report is intended to be used by the County for financial reporting purposes for the fiscal year ending on June 30, 2019 and its use for other purposes may not be appropriate. Calculations for purposes other than satisfying the requirements of GASB 75 may produce significantly different results. This report supersedes all June 30, 2018 actuarial valuation reports for the Plan issued prior to the date of this report.

As of June 30, 2018, our understanding is that the Plan has no financial accounting asset, which is defined as assets held in a separate Trust established for the sole purpose of providing benefits to retirees and their beneficiaries.

The actuarial valuation used as a basis for much of the information presented in this report was performed as of June 30, 2018 (Valuation Date). In preparing the valuation, the actuary relied on data provided by the County as supplemented by data from the North Carolina Local Governmental Employees' Retirement System (NCLGERS), where applicable. This information was reviewed for completeness and internal consistency, but was not audited by us. The valuation results depend on the integrity of the data. If any of the information is inaccurate or incomplete, our results may be different and our calculations may need to be revised. Likewise, this report may need to be revised to reflect any significant event that affects the plan subsequent to the valuation date.

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Offices in Kennesaw, GA • Bellevue, NE



Ms. Lisa Hedges  
August 20, 2019  
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The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial principles and practices, as well as in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board. The calculations are based on the current provisions of the Plan, and on actuarial assumptions other than discount rates under GASB accounting rules that are internally consistent and individually reasonable based on the actual or anticipated experience of the Plan. Discount rates for financial accounting purposes are determined based on the methods prescribed by GASB accounting rules. The actuarial cost and amortization methods are prescribed by the County and/or GASB accounting rules. In addition, we believe that the calculations were completed in compliance with the laws governing the Plan and meet the requirements of GASB 75, including any applicable guidance provided by the County or its audit partners as of the date of this report. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. All sections of this report, including any appendices and attachments, are considered an integral part of the actuarial opinions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: retiree group benefits program experience differing from that anticipated by the assumptions; changes in assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in retiree group benefits program provisions or applicable law. Retiree group benefits models necessarily rely on the use of approximations and estimates, and are sensitive to changes in these approximations and estimates. Small variations in these approximations and estimates may lead to significant changes in actuarial measurements. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein. This report does not consider all possible scenarios.

The funded status measurements included in this report are based on the assumptions and methods used to determine the Plan's obligations and asset values as of the valuation and/or measurement date under GASB accounting rules. Funded status measurements for financial accounting purposes may not be appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations. Likewise, funded status measurements for financial accounting purposes may not be appropriate for assessing the need for or the amount of future actuarially determined contributions. Funded status measurements would also be different if there is any change in the plan's funding vehicle that would allow a market value of assets to be used in these calculations.

Cavanaugh Macdonald Consulting, LLC does not provide legal, investment, or accounting advice. Thus, the information in this report is not intended to supersede or supplant the advice and interpretations of the County or its affiliated legal, investing, or accounting partners.

The undersigned are familiar with the near-term and long-term aspects of other postemployment benefit plan valuations and collectively meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained in this report. All sections of this report, including any appendices and attachments, are considered an integral part of the actuarial opinions.



Ms. Lisa Hudges  
August 20, 2019  
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To the best of our knowledge, no executive or employee of CMC providing services to the County has any direct financial interest or indirect material interest in the County. As a result, we believe that there is no relationship existing that might affect our capacity to prepare and certify these estimates for the County's Plan as of June 30, 2018.

If you have any questions, please call us at 678-388-1700.

Respectfully submitted,

A handwritten signature in blue ink that reads "Todd B. Green".

Todd B. Green, ASA, FCA, MAAA  
Principal and Consulting Actuary

A handwritten signature in blue ink that reads "Alisa Bennett".

Alisa Bennett, FSA, EA, FCA, MAAA  
Principal and Consulting Actuary

TBG/AB:wl



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## **Section I – Summary of Principal Results**

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### **SUMMARY OF PRINCIPAL GASB STATEMENT NO. 75 RESULTS FOR THE YADKIN COUNTY OTHER POSTEMPLOYMENT BENEFITS PLAN**

<b>Valuation Date (VD):</b>		June 30, 2018
<b>Prior Measurement Date:</b>		June 30, 2017
<b>Measurement Date (MD):</b>		June 30, 2018
<b>Reporting Date (RD):</b>		June 30, 2019
<b>Membership Data as of June 30, 2018:</b>		
Inactive Members or Beneficiaries Currently Receiving Benefits		43
Inactive Members Entitled To But Not Yet Receiving Benefits		0
Active Members		<u>276</u>
Total Membership		319
<b>Discount Rates:</b>		
Municipal Bond Index Rate at Prior Measurement Date		3.56%
Municipal Bond Index Rate at Measurement Date		3.89%
<b>Total OPEB Liability as of the Measurement Date:</b>		\$ 7,456,726
<b>OPEB Expense/(Income):</b>		\$ 517,270
<b>Deferred I/O Balances as of the Measurement Date*</b>		
Deferred Inflows of Resources:		\$ 316,464
Deferred Outflows of Resources:		\$ 1,766,932

\* Deferred Outflows and Deferred Inflows of Resources subsequent to the Measurement Date may need to be reported by the employer. CMC did not incorporate these amounts in this report.



## **Section II – Introduction**

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The Governmental Accounting Standards Board issued Statement No. 75 (GASB 75), “*Accounting and Financial Reporting for Postemployment Benefit Plans Other Than Pensions*” in June 2015. GASB 75’s effective date is for an employer’s fiscal year beginning after June 15, 2017. For the purposes of reporting under GASB 75, the Plan is assumed to be a single-employer defined benefit OPEB plan without a special funding situation where no assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB 75.

This report, prepared as of June 30, 2018 (Measurement Date or MD), presents information to assist the County in meeting the requirements of GASB 75. Much of the material provided in this report is based on the data, assumptions and results of the biennial actuarial valuation of the Plan, as of June 30, 2018 (Valuation Date or VD).

GASB 75 requires the plan sponsors to determine the Total OPEB Liability (TOL) utilizing the Entry Age Normal (EAN) actuarial funding method. If the valuation date at which the TOL is determined is before the measurement date, as is the case here, the TOL must be rolled forward to the measurement date. The plan provisions recognized in the determination of the TOL are summarized in Schedule F. The development of the changes in the TOL during the measurement period is shown in Section III.

Among the items needed for the liability calculation is the discount rate, which is defined by GASB 75 to be a 20-year tax-exempt municipal bond (rating AA/Aa or higher) rate (Municipal Bond Index Rate). The Municipal Bond Index Rate selected by the County for this purpose is the June average of the Bond Buyer General Obligation 20-year Municipal Bond Index published weekly by The Bond Buyer ([www.bondbuyer.com](http://www.bondbuyer.com)). On the Prior Measurement Date, the Municipal Bond Index Rate was 3.56%. There was a change in the Municipal Bond Index Rate from the Prior Measurement Date to the Measurement Date. The Municipal Bond Index Rate as of the Measurement Date was 3.89%.

GASB 75 also requires the plan sponsors to determine and disclose an OPEB Expense (OE) in the Notes to Financial Statements. The OE includes amounts for Service Cost (the Normal Cost under EAN for the year), interest, and recognition of increases/decreases in the TOL due to changes in benefit structure, actuarial experience, and actuarial assumption changes. The actuarial experience and assumption change impacts are recognized over the average expected remaining service lives of the plan membership (active employees and inactive employees) at the beginning of the measurement period. The development of the OE is shown in Section IV.

The unrecognized portions of each year’s experience and assumption changes are used to develop the Deferred Outflows of Resources and Deferred Inflows of Resources that must be included on the Statement of Net Position.

The sections that follow provide the results of all the necessary calculations for note disclosure and Required Supplementary Information (RSI) of the reporting entity’s financial report.



### **Section III – Financial Statement Notes**

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#### **SUMMARY OF KEY ACTUARIAL ASSUMPTIONS, METHODS, AND OTHER INPUTS**

The following information has been provided for the purpose of satisfying the disclosure requirements related to the actuarial assumptions and other inputs used in the measurement of the TOL. The complete set of actuarial assumptions and other inputs utilized in developing the TOL are outlined in Schedule C. The TOL was determined based on an actuarial valuation as of June 30, 2018, using the following key actuarial assumptions and other inputs:

Inflation	2.50%
Real wage growth	1.00%
Wage inflation	3.50%
Salary increases, including wage inflation	
General Employees	3.50% - 7.75%
Firefighters	3.50% - 7.75%
Law Enforcement Officers	3.50% - 7.35%
Municipal Bond Index Rate	
Prior Measurement Date	3.56%
Measurement Date	3.89%
Health Care Cost Trend Rates	
Pre-Medicare Medical and Prescription Drug	7.25% for 2018 decreasing to an ultimate rate of 4.75% by 2028

The County selected a Municipal Bond Index Rate equal to the June average of the Bond Buyer 20-year General Obligation Bond Index published weekly by The Bond Buyer, and the discount rate used to measure the TOL is the Municipal Bond Index Rate as of the measurement date.

Mortality rates were based on the RP-2014 mortality tables, with adjustments for LGERS experience and generational mortality improvements using Scale MP-2015.

The demographic actuarial assumptions for retirement, disability incidence, withdrawal, and salary increases used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period January 1, 2010 through December 31, 2014, adopted by the LGERS Board.

The remaining actuarial assumptions (e.g., initial per capita costs, health care cost trends, rate of plan participation, rates of plan election, etc.) used in the June 30, 2018 valuation were based on a review of recent plan experience performed concurrently with the June 30, 2018 valuation.



### **Section III – Financial Statement Notes (continued)**

#### **Sensitivity of the Total OPEB Liability to Health Care Cost Trend Rates**

The following exhibit presents the TOL of the Plan, determined using current health care cost trend rates, as well as what the Plan's TOL would be if it were determined using health care cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than current rates.

<b>Health Care Cost Trend Rate Sensitivity</b>			
	<b>1% Decrease</b>	<b>Current</b>	<b>1% Increase</b>
Total OPEB Liability	\$ 6,740,486	\$ 7,456,726	\$ 8,309,321

#### **Sensitivity of the Total OPEB Liability to Discount Rates**

The following exhibit presents the TOL of the Plan, determined using the discount rate of 3.89%, as well as what the Plan's TOL would be if it were determined using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

<b>Discount Rate Sensitivity</b>			
	<b>1% Decrease (2.89%)</b>	<b>Current Discount Rate (3.89%)</b>	<b>1% Increase (4.89%)</b>
Total OPEB Liability	\$ 8,152,561	\$ 7,456,726	\$ 6,838,547



### ***Section III – Financial Statement Notes (continued)***

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#### **Change in Total OPEB Liability (TOL)**

<b>Changes in the TOL</b>	
<b>Total OPEB Liability as of June 30, 2017</b>	\$ 5,646,468
<b>Changes for the year:</b>	
Service cost at the end of the year*	229,054
Interest on TOL and cash flows	191,535
Change in benefit terms	(80,097)
Difference between expected and actual experience	1,893,807
Changes of assumptions or other inputs	113,197
Net benefit payments	(537,238)
Other	0
<b>Net Changes</b>	<b>\$ 1,810,258</b>
<b>Total OPEB Liability as of June 30, 2018</b>	<b>\$ 7,456,726</b>

\*The service cost includes interest for the year.

There has been a change in benefit terms since the Prior Measurement Date. The plan has new eligibility for employees hired after March 1, 2017, and this change is shown above.



### **Section III – Financial Statement Notes (continued)**

#### **Deferred Inflows of Resources and Deferred Outflows of Resources**

The following table provides a summary of the Deferred Outflows of Resources and Deferred Inflows of Resources as of June 30, 2018:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources*</b>
Differences between expected and actual experience	\$ 1,667,275	\$ 126,912
Changes of assumptions or other inputs	99,657	189,552
<b>Total</b>	<b>\$ 1,766,932</b>	<b>\$ 316,464</b>

\*Deferred Inflows of Resources were reported as negative amounts in prior valuation reports.

*Deferred Outflows and Deferred Inflows of Resources subsequent to the Measurement Date may need to be reported by the employer. CMC will not provide or incorporate these amounts in this report.*

#### **Schedule of the Recognition of Deferred Outflows / (Inflows) of Resources in OPEB Expense**

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB benefits will be recognized in OPEB Expense as follows:

<b>Measurement Period Ended</b>
<b>June 30:</b>
2019 \$ 176,778
2020 \$ 176,778
2021 \$ 176,778
2022 \$ 176,778
2023 \$ 176,784
Thereafter \$ 566,572



## **Section IV – OPEB Expense**

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GASB 75 requires that plan sponsors determine and disclose an OPEB Expense / (Income) (OE) in the Notes to Financial Statements. Generally speaking, OE includes the following components:

<b>COMPONENTS OF OPEB EXPENSE / (INCOME)</b>	
<b>+ Service Cost (SC)</b>	This is equal to the Normal Cost determined using the Entry Age Normal (Level Percentage of Pay) actuarial cost method.
<b>- Active Member Contributions</b>	The total amount of active employee payroll deductions for OPEB benefits, if applicable.
<b>+ Administrative Expenses</b>	The amount, if any, paid during the measurement period for OPEB costs not directly related to the payment of benefits. This amount would include costs such as actuarial fees, audit fees, trust fees, salaries associated with staff time spent on OPEB related tasks, etc.
<b>+ Interest on the TOL (IOT)</b>	IOT is determined based on the Discount Rate that was used to measure the Plan's TOL as of the Prior Measurement Date. Please note that the SC component may include interest to the end of the measurement period, or this interest adjustment may be included with IOT.
<b>+ / - Changes of Benefit Terms</b>	Benefit changes during the period are recognized immediately. Plan amendments increase OE if the change improves benefits for existing Plan members. Likewise, changes that reduce benefits for existing Plan members lower OE.
<b>- Projected Earnings on Plan Investments (XR)</b>	If the Plan has a financial accounting asset, XR is determined based on the long-term expected rate of return assumption at the end of the prior measurement period.
<b>+ / - Other</b>	Miscellaneous and non-standard expense items are included in this component.



## Section IV – OPEB Expense (continued)

COMPONENTS OF OPEB EXPENSE / (INCOME)	
<b>+ / – Recognition of Current Period Deferred Outflows / (Inflows) of Resources for:</b>	<ul style="list-style-type: none"><li>— Differences Between Expected and Actual Experience</li><li>— Changes of Assumptions or Other Inputs</li><li>— Differences Between Actual and Projected Earnings on Plan Investments</li></ul>
	<p>Please note that the results provided in this report reflect the following conventions: Experience losses (“positive amounts”) increase the balances of Deferred Outflows of Resources, and amounts recognized increase OPEB expense. Experience gains (“negative amounts”) decrease the balances of Deferred Inflows of Resources, and amounts recognized decrease OPEB expense.</p>
	<p>For differences between expected and actual experience and changes of assumptions or other inputs, the amounts that must be recognized during the current period are determined by spreading the total changes over the average expected remaining service lives (AERSL) of the entire Plan membership at the beginning of the measurement period. The active member AERSL is the average number of years that the active members are expected to remain in covered employment. AERSL is equal to zero for inactive members. The AERSL of the entire Plan membership is the weighted average of these two values, but cannot be less than one year*.</p>
	<p>For differences between actual and projected earnings on plan investments, if any, the amount that must be recognized during the current period is determined by amortizing the total change over five (5) years.</p>
<b>+ Recognition of Prior Period Deferred Outflows of Resources</b>	<p>The amounts that must be recognized during the current year for those Deferred Outflows of Resources established before the current measurement period.</p>
<b>- Recognition of Prior Period Deferred (Inflows) of Resources</b>	<p>The amounts that must be recognized during the current year for those Deferred (Inflows) of Resources established before the current measurement period.</p>

\* Based on the guidance in GASB Implementation Guide 2017-3, paragraph 4.129.



#### **Section IV – OPEB Expense (continued)**

The calculation of the OPEB Expense (OE) for the year ended June 30, 2019 is shown in the following table:

<b>OPEB Expense For Year Ending June 30, 2019</b>	
Service Cost at end of year*	\$ 229,054
Interest on the Total OPEB Liability	191,535
Current-period benefit changes	(80,097)
Expensed portion of current-period difference between expected and actual experience in the Total OPEB Liability	226,532
Expensed portion of current-period changes of assumptions or other inputs***	13,540
Administrative Costs **	0
Other	0
Recognition of beginning Deferred Outflows of Resources as OPEB Expense	0
Recognition of beginning Deferred Inflows of Resources as OPEB Expense***	<u>(63,294)</u>
<b>OPEB Expense</b>	<b><u>\$ 517,270</u></b>

\*The service cost includes interest for the year.

\*\*Administrative costs to be included in the OE were not provided by the County.

\*\*\*Deferred Inflows are negative because they lower the OPEB expense.

There has been a change in benefit terms since the Prior Measurement Date. The plan has new eligibility for employees hired after March 1, 2017, and this change is shown above.



## **Schedule A – Additional Supporting Information**

### **Plan Membership Information**

The Plan's membership data was furnished by Yadkin County for valuation purposes as of June 30, 2018. The following table summarizes the membership of the Plan as of the June 30, 2018 Valuation Date.

Membership Group	Number
Inactive Employees or Beneficiaries Currently Receiving Benefits	43
Inactive Members Entitled To But Not Yet Receiving Benefits	0
Active Employees	276
Total Membership	319



## ***Schedule B – Required Supplementary Information***

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### **Schedule of Changes in Total OPEB Liability**

A 10-year schedule of changes in Total OPEB Liability and related ratios are shown in the following table. Additional years will be added in the future.

	Measurement Period Ending									
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
<b>Total OPEB Liability</b>										
Service Cost at end of year	\$ 229,054	\$ 246,436								
Interest	191,535	173,706								
Changes of benefit terms	(80,097)	0								
Difference between expected and actual experience	1,893,807	(177,678)								
Changes of assumptions or other inputs	113,197	(265,374)								
Net benefit payments	(537,238)	(201,691)								
Other	0	0	\$							
<b>Net change in Total OPEB Liability</b>	<b>\$ 1,810,258</b>	<b>(224,601)</b>								
<b>Total OPEB Liability – beginning</b>	<b>\$ 5,646,468</b>	<b>\$ 5,871,069</b>								
<b>Total OPEB Liability – ending</b>	<b>\$ 7,456,726</b>	<b>\$ 5,646,468</b>								
<b>Covered-employee payroll</b>	<b>\$ 10,564,860</b>	<b>\$ 8,448,108</b>								
<b>Total OPEB Liability as a percentage of covered-employee payroll</b>	<b>70.58%</b>	<b>66.84%</b>								



## **Schedule C – Statement of Actuarial Assumptions and Methods**

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### **Economic Assumptions**

**DISCOUNT RATE AS OF THE MEASUREMENT DATE:** 3.89% per annum, compounded annually.

**EXPECTED ADMINISTRATIVE EXPENSES INCLUDED IN SERVICE COST:** None

**HEALTH CARE COST TREND RATES:** The following chart details trend assumptions for annual health care claims.

Year	Annual Rate of Increase
	Medical & Prescription Drug
	Under Age 65
2018	7.25%
2019	7.00%
2020	6.75%
2021	6.50%
2022	6.25%
2023	6.00%
2024	5.75%
2025	5.50%
2026	5.25%
2027	5.00%
2028 & Beyond	4.75%

\*No trend is applied to HRA contributions

**ANNUAL EXPECTED MEDICAL/PRESCRIPTION DRUGS CLAIMS (AGE ADJUSTED TO AGE 65):** The following chart details the annual expected claims for the year following the valuation date:

Annual Expected Claims	
<b>Age Adjusted Claims</b>	
Pre-65	\$ 15,203
<b>Non-Age Adjusted Claims</b>	
HRA Contributions	\$ 500

Future experience may differ significantly from the cost estimates presented in this report due to unforeseen and random events. As such, these results should be viewed as having a likely range of variability.



## **Schedule C – Statement of Actuarial Assumptions and Methods (continued)**

**BENEFITS VALUED:** The benefits listed below were valued for the stated upon duration.

**Pre-Medicare Benefits Valued:**

- Medical Coverage
- Prescription Drug Coverage
- HRA Contributions

**AGE RELATED MORBIDITY:** Per capita costs are adjusted to reflect expected cost changes related to age. The age related increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
Under 30	0.0%
30 – 34	1.0%
35 – 39	1.5%
40 – 44	2.0%
45 – 49	2.6%
50 – 54	3.3%
55 – 59	3.6%
60 – 64	4.2%
65 and Older	0.0%



## **Schedule C – Statement of Actuarial Assumptions and Methods (continued)**

### **Demographics Assumptions**

**GENERAL EMPLOYEES:** Description and representative values of the annual rates of salary increases and separation from service are as follows:

Annual Rates of Salary Increases										
Service	0	5	10	15	20	25	30	35	40	45
Rate	7.8%	6.0%	5.0%	4.2%	3.8%	3.5%	3.5%	3.5%	3.5%	3.5%

**DEATHS AFTER RETIREMENT (HEALTHY):** RP-2014 Healthy Annuitant base rates projected to 2015 using MP-2015, projected forward generationally from 2015 using MP-2015. Rates are adjusted by 115% (male) and 79% (female) for ages under 78 and by 135% (male) and 116% (female) for age 78 and older.

Annual Rates of							
Service	Withdrawal		Age	Withdrawal and Vesting*		Disability	
	Male	Female		Male	Female	Male	Female
0	18.5%	20.5%	25	7.5%	10.0%	0.04%	0.05%
1	15.5%	17.5%	30	6.0%	9.0%	0.05%	0.05%
2	13.0%	15.0%	35	4.5%	6.5%	0.05%	0.05%
3	10.5%	12.5%	40	4.0%	5.0%	0.30%	0.20%
4	8.5%	10.5%	45	4.0%	4.5%	0.40%	0.30%
			50	4.0%	4.5%	0.60%	0.35%
			55	4.0%	4.5%	0.80%	0.60%
			60	4.0%	4.5%	0.80%	0.60%
			65	4.0%	4.5%	0.00%	0.00%

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

Annual Rates of Retirement – Males							
Age	5	10	15	20	25	30	35
50				3.0%	7.0%	27.5%	15.0%
55				5.0%	10.0%	25.0%	15.0%
60	10.0%	10.0%	10.0%	10.0%	27.5%	30.0%	25.0%
65	30.0%	30.0%	30.0%	30.0%	35.0%	35.0%	35.0%
70	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
75	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Annual Rates of Retirement – Females							
Age	5	10	15	20	25	30	35
50				4.5%	6.0%	30.0%	20.0%
55				6.0%	8.5%	30.0%	20.0%
60	11.0%	11.0%	11.0%	11.0%	30.0%	35.0%	25.0%
65	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
70	15.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
75	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



## **Schedule C – Statement of Actuarial Assumptions and Methods (continued)**

**LAW ENFORCEMENT OFFICERS:** Description and representative values of the annual rates of salary increases and separation from service are as follows:

Annual Rates of Salary Increases											
Service	0	5	10	15	20	25	30	35	40	45	50
Rate	7.4%	6.2%	5.2%	4.5%	4.0%	3.9%	3.8%	3.7%	3.5%	3.5%	3.5%

**DEATHS AFTER RETIREMENT (HEALTHY):** RP-2014 Healthy Annuitant base rates projected to 2015 using MP-2015, projected forward generationally from 2015 using MP-2015. Rates are adjusted by 104% for males and 100% for females.

Annual Rates of							
Service	Withdrawal		Age	Withdrawal and Vesting*		Disability	
	Male	Female		Male	Female	Male	Female
0	12.0%	12.0%	25	5.00%	5.00%	0.06%	0.25%
1	8.5%	8.5%	30	5.00%	5.00%	0.10%	0.30%
2	8.0%	8.0%	35	4.00%	4.00%	0.20%	0.40%
3	7.5%	7.5%	40	3.00%	3.00%	0.30%	0.50%
4	7.0%	7.0%	45	3.50%	3.50%	0.40%	0.60%
			50	3.50%	3.50%	0.40%	0.70%
			55	3.50%	3.50%	0.40%	0.70%
			60	3.50%	3.50%	0.40%	0.70%
			65	3.50%	3.50%	0.00%	0.00%

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

Annual Rates of Retirement							
Age	5	10	15	20	25	30	35
50			8.0%	8.0%	8.0%	40.0%	40.0%
55	10.0%	32.5%	32.5%	32.5%	32.5%	75.0%	40.0%
60	10.0%	20.0%	20.0%	20.0%	20.0%	22.5%	20.0%
65	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
70	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
75	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



## **Schedule C – Statement of Actuarial Assumptions and Methods (continued)**

**FIREFIGHTERS:** Description and representative values of the annual rates of salary increases and separation from service are as follows:

Annual Rates of Salary Increases											
Service	0	5	10	15	20	25	30	35	40	45	50
Rate	7.8%	6.0%	4.9%	4.1%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%

**DEATHS AFTER RETIREMENT (HEALTHY):** RP-2014 Healthy Annuitant base rates projected to 2015 using MP-2015, projected forward generationally from 2015 using MP-2015.

Service	Annual Rates of						
	Withdrawal		Age	Withdrawal and Vesting*		Disability	
	Male	Female		Male	Female	Male	Female
0	13.0%	13.0%	25	3.50%	3.50%	0.10%	0.06%
1	10.5%	10.5%	30	4.00%	4.00%	0.10%	0.09%
2	9.5%	9.5%	35	3.00%	3.00%	0.15%	0.24%
3	8.5%	8.5%	40	2.50%	2.50%	0.40%	0.38%
4	7.5%	7.5%	45	2.50%	2.50%	0.55%	0.48%
			50	2.50%	2.50%	1.00%	0.76%
			55	2.50%	2.50%	1.50%	1.76%
			60	2.50%	2.50%	1.50%	2.76%
			65	2.50%	2.50%	0.00%	0.00%

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

Annual Rates of Retirement							
Age	5	10	15	20	25	30	35
50				2.5%	8.5%	32.5%	32.5%
55	2.5%	2.5%	2.5%	2.5%	13.0%	50.0%	27.5%
60	5.8%	5.8%	5.8%	5.8%	32.5%	32.5%	32.5%
65	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%
70	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%
75	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



## **Schedule C – Statement of Actuarial Assumptions and Methods (continued)**

### **ALL MEMBERS:**

**DEATHS BEFORE RETIREMENT:** RP-2014 Employee base rates projected to 2015 using MP-2015, projected forward generationally from 2015 using MP-2015.

**DEATHS AFTER RETIREMENT (BENEFICIARY):** RP-2014 Healthy Annuitant base rates projected to 2015 using MP-2015, projected forward generationally from 2015 using MP-2015. Rates are adjusted by 123% for all ages.

**DEATHS AFTER RETIREMENT (DISABLED):** RP-2014 Disabled Retiree base rates projected to 2015 using MP-2015, projected forward generationally from 2015 using MP-2015. Rates are adjusted by 103% (male) and 99% (female) for all ages.

**LEAVE CONVERSION:** Creditable service for unreduced retirement from NCLGERS has been increased by one year.

**ASSET VALUATION METHOD:** Market Value. However, our understanding is that the Plan is funded on a “pay-as-you-go” basis and does not have any assets that can be considered for financial accounting purposes.

**ANTICIPATED PLAN PARTICIPATION:** Representative values of the assumed annual rates of member participation and spouse coverage are as follows:

Anticipated Plan Participation	
Member Participation	100.00%
Spouse Coverage	10.00%

**SPOUSE AGE DIFFERENCE:** Wives are assumed to be four years younger than husbands.

**AFFORDABLE CARE ACT:** The impact of the Affordable Care Act (ACA) was addressed in this valuation. Review of the information currently available did not identify any specific provisions of the ACA that are anticipated to significantly impact results. While the impact of certain provisions such as the future implementation of the excise tax on high-value health insurance plans (if applicable), mandated benefits and participation changes due to the individual mandate should be recognized in the determination of liabilities, overall future plan costs and the resulting liabilities are driven by amounts employers and retirees can afford (i.e., trend). The trend assumption forecasts the anticipated increase to initial per capita costs, taking into account health care cost inflation, increases in benefit utilization, plan changes, government-mandated benefits, and technological advances. Given the uncertainty regarding the ACA’s implementation (e.g., the impact of excise tax on high-value health insurance plans, changes in participation resulting from the implementation of state-based health insurance exchanges), continued monitoring of the ACA’s impact on the Plan’s liability will be required.



## ***Schedule D – Actuarial Cost Method***

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The valuation is prepared on the projected benefit basis, which is used to determine the present value of each member's expected benefit payable at retirement, disability or death. The calculations are based on the member's age, years of service, sex, compensation, expected future salary increases, and an assumed future investment rate of return. The calculations consider the probability of a member's death or termination of employment prior to becoming eligible for a benefit and the probability of the member terminating with a service, disability, or survivor's benefit. The present value of the expected benefits payable to active members is added to the present value of the expected future payments to current benefit recipients to obtain the present value of all expected benefits payable to the present group of members and survivors.

The actuarial cost method is a procedure for allocating the actuarial present value of postemployment benefits and expenses to time periods. The method used for financial accounting purposes is known as the Entry Age Normal (Level Percentage of Pay) actuarial cost method, and has the following characteristics:

- (i) The annual service costs for each individual active participant are sufficient to accumulate the value of the participant's postemployment benefits at time of retirement.
- (ii) Each annual service cost is a constant percentage of the participant's year-by-year projected covered compensation.

The Entry Age Normal (Level Percentage of Pay) actuarial cost method allocates the actuarial present value of each participant's projected benefits on a level basis over the participant's assumed compensation rates between the entry age of the participant and the assumed ages at which the participant will leave active service. However, as required under GASB rules, this period may be cut short when both the member and spouse can no longer be members of the plan as of some future date.

The portion of the actuarial present value allocated to the valuation year is called the service cost (SC). The portion of the actuarial present value of expected benefits not provided for by the actuarial present value of future service costs is called the Total OPEB Liability (TOL). The difference between the TOL and the Plan Fiduciary Net Position (PFNP)—the market value of the financial accounting asset—is the Net OPEB Liability (NOL).

The actuarial cost method is prescribed by GASB 75 for financial accounting purposes.



### **Schedule E – Balances of Deferred Outflows and Deferred Inflows of Resources**

The following schedules provide the balances of Deferred Outflows of Resources and Deferred Inflows of Resources that are reported for differences between expected and actual experience and changes of assumptions or other inputs. For the following exhibits:

- There are no differences between expected and actual experience to be recognized from periods prior to June 30, 2017
- Deferred Outflows of Resources are presented as positive amounts, and amounts recognized increase OPEB Expense (income).
- Deferred Inflows of Resources are presented as positive amounts, and amounts recognized decrease OPEB Expense (income).



## Schedule E – Balances of Deferred Outflows and Deferred Inflows of Resources (continued)

### DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES ARISING FROM DIFFERENCES BETWEEN EXPECTED AND ACTUAL EXPERIENCE

Measure- ment Period Ending	Initial Balance of Deferred Outflow	Initial Balance of Deferred Inflow	Recog- -nition Period (Years)	Beginning Balance Deferred Outflows (a)	Beginning Balance Deferred Inflows (b)	Losses / Deferred Outflows (c)	Gains / Deferred Inflows (d)	Amounts Recognized in OPEB Expense / Deferred Outflow (e)	Amounts Recognized in OPEB Expense / Deferred Inflow (f)	Balances as of June 30, 2018	
										Deferred Outflows of Resources (a) + (c) – (e)	Deferred Inflows of Resources (b) + (d) – (f)
2017*	\$ 0	\$ 177,678	7.00	\$ 0	\$ 152,295	\$ 0	\$ 0	\$ 0	\$ 25,383	\$ 0	\$ 126,912
2018	\$ 1,893,807	\$ 0	8.36	\$ 0	\$ 0	\$ 1,893,807	\$ 0	\$ 226,532	\$ 0	\$ 1,667,275	\$ 0
				\$ 0	\$ 152,295	\$ 1,893,807	\$ 0	\$ 226,532	\$ 25,383	\$ 1,667,275	\$ 126,912

\*Deferred Inflows of Resources were reported as negative amounts in prior valuation reports.

### DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES ARISING FROM CHANGES OF ASSUMPTIONS OR OTHER INPUTS

Measure- ment Period Ending	Initial Balance of Deferred Outflow	Initial Balance of Deferred Inflow	Recog- -nition Period (Years)	Beginning Balance Deferred Outflows (a)	Beginning Balance Deferred Inflows (b)	Losses / Deferred Outflows (c)	Gains / Deferred Inflows (d)	Amounts Recognized in OPEB Expense / Deferred Outflow (e)	Amounts Recognized in OPEB Expense / Deferred Inflow (f)	Balances as of June 30, 2018	
										Deferred Outflows of Resources (a) + (c) – (e)	Deferred Inflows of Resources (b) + (d) – (f)
2017*	\$ 0	\$ 265,374	7.00	\$ 0	\$ 227,463	\$ 0	\$ 0	\$ 0	\$ 37,911	\$ 0	\$ 189,552
2018	\$ 113,197	\$ 0	8.36	\$ 0	\$ 0	\$ 113,197	\$ 0	\$ 13,540	\$ 0	\$ 99,657	\$ 0
				\$ 0	\$ 227,463	\$ 113,197	\$ 0	\$ 13,540	\$ 37,911	\$ 99,657	\$ 189,552

\*Deferred Inflows of Resources were reported as negative amounts in prior valuation reports.



## **Schedule F – Summary of Main Plan Provisions**

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### **Eligibility for Allowance**

County paid health and life insurance coverage will be provided to employees qualifying for full unreduced retirement as a member of the North Carolina Local Governmental Employees' Retirement System and the North Carolina Law Enforcement Retirement System.

**For those hired after July 1, 2011**, County paid Health and Life Insurance coverage will be provided to employees who have been a Yadkin County employee for a minimum of five (5) years and qualifying for full retirement as a member of the North Carolina Local Governmental Employees' Retirement System and the North Carolina Law Enforcement Retirement System.

**For those hired after March 1, 2017**, County paid Health and Life Insurance coverage will be provided to employees who have been a Yadkin County employee for a minimum of ten (10) years and qualifying for full retirement as a member of the North Carolina Local Governmental Employees' Retirement System and the North Carolina Law Enforcement Retirement System.

### **Amount of Allowance**

Health and life insurance coverage will be paid at the same level as for active employees and will be provided to retired employees until they become eligible for Medicare. The life insurance policy is \$10,000 at retirement and reduces to \$6,500 at age 65, at which time the County will no longer pay for life insurance. Health and Rx coverage are provided through the County's self-insured group plan.

### **Other Post-Employment Benefits**

Health care, prescription drug coverage and life insurance are provided by the County. The County contributions \$500 for each retirees per year towards the HRA plan. Medicare eligible retirees may continue life insurance coverage until age 70 if they pay the full rate.

### **Dependent Coverage**

The retiree may continue dependent coverage (and pay the full premium for this coverage) if enrolled in dependent coverage at the time of retirement. Dependent coverage terminates upon the dependent attaining age 65.

### **Representative Monthly Retiree Premium Amounts**

Effective June 23, 2018:

Tier	Health Premiums
Employee Only	\$ 683.34
Employee + One	\$1,183.34
Family	\$1,563.34