



October 12, 2021

**VIA E-Mail**

Mr. Stephen J. Miller, SPHR  
Director, Human Resources  
Durham City Transit Company  
1903 Fay Street  
Durham, NC 27704

**Re: Durham Retirement Plan**

Dear Mr. Miller:

We are pleased to provide the January 1, 2021 actuarial valuation report for the plan year ending December 31, 2021 for the aforementioned retirement plan. The report develops the minimum required and estimated maximum tax deductible contributions for the plan year ending December 31, 2021.

The minimum required contribution for the 2021 plan year is \$433,710 payable January 1, 2021. The estimated maximum tax deductible contribution for the 2021 plan year is \$21,220,858.

We will be happy to meet at your convenience to discuss the results of the report. If you have any questions regarding the enclosed report, please contact me via email at [michael.raker@futureplan.com](mailto:michael.raker@futureplan.com).

Sincerely,

A handwritten signature in blue ink that reads "Michael C. Raker".

Michael C. Raker, ASA, EA, MAAA  
Consulting Actuary

MR/loc  
Enclosures

Copy: Ms. Tonya Dupree (w/enclosure via e-mail)  
Mr. Steve Meyer, Cherry Bekaert LLP (w/enclosure via e-mail)  
Ms. Sara Mylin, Cherry Bekaert LLP (w/enclosure via e-mail)

# Durham Retirement Plan

Actuarial Valuation Report  
for the Plan and Taxable Year

January 1, 2021  
through  
December 31, 2021

October 2021

# Durham Retirement Plan

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# Durham Retirement Plan

## Preface

We are pleased to present the actuarial valuation report for the Durham Retirement Plan for the January 1, 2021 to December 31, 2021 plan year. This valuation report has been prepared as required by the applicable laws and regulations currently in effect. Please see the glossary at the end of the report for a list of terms and their definitions. Below is a summary of the principal results.

### Range of Contributions

We compare below the minimum required and maximum tax deductible contributions for 2020 and 2021.

Plan Year Beginning	<i>January 1, 2020</i>	<i>January 1, 2021</i>
Minimum Required Contribution (prior to any balance usage)	\$980,568	\$433,710
Maximum Tax Deductible Contribution	\$17,650,003	\$21,220,858

The minimum required contribution for the 2021 plan year is \$433,710, payable January 1, 2021. Payments made after January 1, 2021 must be interest adjusted. For example, if the entire contribution is deposited on December 31, 2021, the required amount is \$458,518. The maximum tax deductible contribution for the 2021 fiscal year of \$21,220,858 is an estimate. If the plan sponsor contributes to more than one qualified retirement plan, tax counsel should review the appropriateness of the deduction as determined in this report.

# Durham Retirement Plan

## Preface (continued)

Contributions shown on the preceding page are calculated based upon the difference between the values of Plan assets and liabilities on the valuation date.

- Plan assets equal the trust value plus any prior year receivable contributions, discounted from the dates received to the valuation date.
- Plan liabilities equal expected payments from the Plan discounted from each expected payment date to the valuation date. Liability discount rates are based upon the recent 24-month average of investment grade corporate bond yields, constrained to keep them from being too high or low. All other things being equal, lower discount rates increase Plan liabilities and higher discount rates decrease Plan liabilities.

### **Funding Stabilization**

Corporate bond yields are at historically low levels. The 2012 *Moving Ahead for Progress in the 21st Century Act* (MAP-21), as modified by the *Highway and Transportation Funding Act of 2014* (HATFA), the *Bipartisan Budget Act of 2015*, and most recently, the *American Rescue Plan Act of 2021* (ARPA), constrain the liability discount rates to be within a corridor about the 25-year-trailing average of investment grade corporate bond yields. This so-called funding stabilization corridor is 10% in 2012 through 2019, 5% in 2020 through 2025, with 5% per year increases beginning in 2026 until the permanent 30% corridor is reached in 2030.

The funding stabilization corridor is used to calculate the minimum required contribution, which currently makes it less than it otherwise would have been.

The corridor does not apply for calculating maximum deductible contributions, minimum lump sum distributions under IRC §417(e)(3), nor—for plans covered by the Pension Benefit Guaranty Corporation—the variable rate premium.

# Durham Retirement Plan

## Preface (continued)

### **Carryover/Prefunding Balances**

In general, a credit balance can occur if the plan sponsor contributes more than the minimum required contribution for a given year. Prior to PPA '06, any credit would automatically be established. Any credit existing for plan years prior to 2008 became the carryover balance. Under PPA '06, any contribution in excess of the minimum required contribution can be added to the prefunding balance with an election by the Plan Sponsor. These credits, the carryover balance and the prefunding balance, may be used to reduce the minimum required contribution if the plan's funding target attainment percentage (FTAP) in the prior year is at least 80%.

The plan's FTAP for the 2020 plan year was 93.63% (see Section 9(A)). Based on this FTAP, any existing credit is allowed to be used to reduce the required contribution. An irrevocable Plan Sponsor election prior to the contribution due date is required in order to use the balance(s) in this manner.

### **Changes This Year**

- **Plan Changes:** There were no changes to the provisions of the Plan this year other than the increase in maximum benefit and compensation levels as required.
- **Methods and Assumptions:** The segment rates and mortality tables were updated as required.
- **Future Plan Changes:** No plan amendment after the valuation date has been incorporated in this report.
- **Unpredictable Contingent Event Benefits (UCEB):** We are not aware of any event resulting in UCEB. Additionally, we are not aware of any decision by the plan sponsor to terminate this plan. We are not aware of any bankruptcy proceedings in place at this time.

# Durham Retirement Plan

## Preface (continued)

### Quarterly Contributions

Accelerated payment of the total required contribution in the form of quarterly contributions is required if the Plan's funded percentage is less than 100% for the preceding plan year. The funding target attainment percentage was less than 100% for the 2020 plan year; therefore, quarterly contributions for the 2021 plan year are required. Quarterly contributions are not required for the 2022 plan year because the 2021 FTAP is greater than 100% (see Section 9(B)). We provide below the minimum contribution schedule for 2021 and estimated quarterly contribution requirements for the 2022 plan year.

2021 Plan Year		2022 Plan Year	
Due Date	Required Quarterly Contribution	Due Date	Estimated Quarterly Contribution
April 15, 2021	\$97,585	April 15, 2022	\$0
July 15, 2021	\$97,585	July 15, 2022	\$0
October 15, 2021	\$97,585	October 14, 2022	\$0
January 14, 2022	\$97,585	January 13, 2023	\$0
September 15, 2022	<i>Remaining Balance</i>	September 15, 2023	<i>Unknown</i>

In addition to the required quarterly contributions shown above, a final remaining contribution (if any) will be required on or before September 15, 2022. The required final contribution amount will be determined based on the exact dates and amounts of any contributions made prior to the funding deadline.

Please note that for purposes of minimum funding, the minimum required contribution must be made within 8½ months after the end of the plan year. If the minimum required contribution for the 2021 plan year is not made on or before September 15, 2022, the Internal Revenue Service will assess a non-deductible excise tax equal to 10% of the deficit amount. In order to deduct the employer contribution, it must be paid before the due date of the employer's tax return including extensions.

# Durham Retirement Plan

Preface (continued)
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## **Benefit Restrictions**

The Internal Revenue Code generally provides for restrictions on the payment and accrual of benefits based on the Adjusted Funding Target Attainment Percentage (AFTAP) as outlined below:

AFTAP less than 80% but at least 60%:

- (1) Plan cannot be amended to increase benefits, and
- (2) Lump sum distributions and other accelerated payments are partially restricted.

AFTAP less than 60%:

- (1) Benefit accruals are frozen, and
- (2) Lump sum distributions and other accelerated payments are fully restricted.

Because the AFTAP is 103.61%, the Plan is not subject to benefit restrictions.

*This report is intended for the internal use of Durham City Transit Company and its management to assist in their decisions regarding this pension plan. The report is to be used to assist in determining appropriate funding levels for the plan and reporting to government agencies. Further distribution or use is not authorized without our prior consent.*



October 12, 2021

## Actuarial Valuation Certificate

This report presents the actuarial valuation of the Durham Retirement Plan as of January 1, 2021. To the best of our knowledge, this report is complete and accurate and contains sufficient information to disclose, fully and fairly, the actuarial position of the plan on an ongoing basis. This report is not an AFTAP certification.

### *Certification of Data, Assumptions, Methods and Plan Provisions*

Durham City Transit Company supplied the employee census data and Plan document, upon which the valuation was based. Durham City Transit Company, Wells Fargo, and Voya provided the asset information for the valuation. We rely on this information as provided, without audit.

The actuarial computations and report have been prepared in accordance with generally accepted actuarial principles and practices, with full reliance on the accuracy and completeness of information provided for this purpose. The actuarial assumptions and methods have been selected in accordance with the requirements of ERISA and the Internal Revenue Code and are appropriate for the intended purposes of the report. Each actuarial assumption reasonably relates to the experience of the plan and to reasonable expectations, and represents my best estimate of the anticipated experience of the plan.

I am a consulting actuary whose practice primarily encompasses the actuarial aspects of US pension and similar retirement plans. This report constitutes a statement of actuarial opinion as defined by the American Academy of Actuaries, of which I am a Member of, and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

On the basis of the above, we hereby certify the results set forth in this report:

FuturePlan by Ascensus



By: \_\_\_\_\_

Michael C. Raker, ASA, MAAA, EA  
Enrolled Actuary #20-06940

# Durham Retirement Plan

## Section 1 – Summary of Report

We summarize below the results of this actuarial valuation and the financial status of the Durham Retirement Plan.

<b>Membership</b>	<b>January 1, 2020</b>	<b>January 1, 2021</b>
Active	181	210
Retired Participants Receiving Benefits	72	75
Terminated Participants with Deferred Vested Benefits	<u>95</u>	<u>89</u>
<b>Total</b>	<b>348</b>	<b>374</b>

<b>Plan Assets (Section 3)</b>	<b>January 1, 2020</b>	<b>January 1, 2021</b>
Total Plan Assets	\$ 12,918,729	\$ 15,650,596
Market Value	\$ 12,899,953	\$ 15,648,749
Actuarial Value	\$ 12,899,953	\$ 15,648,749

# Durham Retirement Plan

## Section 1 – Summary of Report (continued)

<b>Funding Results</b>	<b>January 1, 2020</b>	<b>January 1, 2021</b>
Funding Target	\$ 14,196,223	\$ 15,103,443
Target Normal Cost	\$ 858,866	\$ 979,016
Funding Shortfall	\$ 1,296,270	\$ 0
Effective Interest Rate	5.87%	5.72%

<b>Range of Employer Contributions (Section 2)</b>	<b>January 1, 2020</b>	<b>January 1, 2021</b>
Minimum Required Contribution	\$ 980,568	\$ 433,710
Maximum Tax Deductible Contribution	\$ 17,650,003	\$ 21,220,858

# Durham Retirement Plan

## Section 2 – Range of Employer Contributions

### A. Minimum Required Contribution for the Plan Year Beginning January 1, 2021

1. Target Normal Cost (Section 4)	\$	979,016
2. Shortfall Amortization (Section 5)		0
3. Funding Surplus (Section 5(A)(7))		545,306
4. At-Risk Load (Section 7)		<u>0</u>
5. Minimum Contribution as of January 1, 2021 before Offset by Credits: (1) + (2) - (3) + (4), not less than zero	\$	433,710

The minimum required contribution must be interest adjusted for payment after January 1, 2021. For example, if the contribution was deposited on December 31, 2021, the amount would be \$458,518 (exclusive of any late quarterly contribution charge).

### B. Maximum Tax Deductible Contribution for Fiscal Year Ending December 31, 2021

1. Funding Target (based on segment rates without corridor)	\$	21,347,278
2. Target Normal Cost (based on segment rates without corridor)		1,549,510
3. Cushion Amount		13,972,819
4. Actuarial Value of Assets (Section 3)		<u>15,648,749</u>
5. <i>Estimated</i> Maximum Deductible Contribution (1) + (2) + (3) – (4), but not less than A(5)	\$	21,220,858

For determining the maximum tax deductible contribution, the Funding Target and Target Normal Cost are calculated using the unconstrained segment rates, namely, 1.75%, 3.04%, and 3.65%.

*Because the plan sponsor may contribute to more than one qualified retirement plan, your tax counsel should review the appropriateness of the deduction.*

# Durham Retirement Plan

## Section 3 – Plan Assets

<b>A. Statement of Plan Assets</b>	<b>January 1, 2020</b>	<b>January 1, 2021</b>
1. Investments		
a. Cash and Cash Equivalents	\$ 292,190	\$ 172,010
b. Fixed Income	0	0
c. Equity Investments	10,595,488	13,169,785
d. ING/Voya Financial Account	1,226,962	1,263,771
e. Other	<u>459</u>	<u>25</u>
f. Trust Value	\$ 12,115,099	\$ 14,605,591
2. Employer Contribution Receivable	<u>803,630</u>	<u>1,045,005</u>
3. Total Plan Assets	\$ 12,918,729	\$ 15,650,596

# Durham Retirement Plan

Section 3 – Plan Assets (continued)
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## **B. Reconciliation of Plan Assets**

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1.	Trust Value of Assets as of January 1, 2020	\$	12,115,099
2.	Discounted Employer Contribution Receivable		784,854
3.	Market Value of Assets as of January 1, 2020 (1) + (2)		12,899,953
4.	Receipts:		
	Employer Contribution	\$ 348,335	
	Net Investment Experience	2,052,581	2,400,916
5.	Disbursements:		
	Benefit Payments	\$ (651,452)	
	Administrative Fees	(43,826)	(695,278)
6.	Trust Value of Assets as of January 1, 2021 (3) + (4) + (5)		\$ 14,605,591
7.	Discounted Receivable Contributions (see Section D)		1,043,158
8.	Market Value of Assets as of January 1, 2021 (6) + (7)		\$ 15,648,749

# Durham Retirement Plan

Section 3 – Plan Assets (continued)
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**C. Actuarial Value of Assets at January 1, 2021**

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The Actuarial Value of Assets is equal to the Market Value of total investments as of the beginning of the plan year plus the discounted value of receivable contributions shown below. The resulting Actuarial Value of Assets is:

1. Total Investments	\$ 14,605,591
2. Discounted Employer Contribution Receivable	<u>1,043,158</u>
3. Actuarial Value of Assets	\$ 15,648,749

# Durham Retirement Plan

## Section 3 – Plan Assets (continued)

### D. Receivable Contributions

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Receivable contributions included in asset value at January 1, 2021 are discounted using the effective rate of 5.87% based on the following payment dates and amounts:

<b>Payment Date</b>	<b>Payment Amount</b>	<b>Discounted Contribution</b>
January 4, 2021	\$ 696,670	\$ 696,344
January 29, 2021	<u>348,335</u>	<u>346,814</u>
<b>Total Deposits</b>	\$ 1,045,005	\$ 1,043,158

### E. Investment Return

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The estimated investment return on the market value of assets for 2020 (derived from this report) is 16.62%.

The estimated investment return on the actuarial value of assets for 2020 (derived from this report) is 16.62%.



# Durham Retirement Plan

Section 4 – Funding Target and Target Normal Cost
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**A. Funding Target as of January 1, 2021**

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1. Retired participants and beneficiaries in receipt		\$	5,367,815
2. Terminated Vested Participants			2,613,373
3. Active Participants			
a. Non-vested benefits	\$	449,924	
b. Vested benefits		<u>6,672,331</u>	
c. Total active			<u>7,122,255</u>
4. Total Funding Target: (1) + (2) + (3)		\$	15,103,443

**B. Target Normal Cost as of January 1, 2021**

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1. Normal Cost		\$	935,016
2. Anticipated Plan Administrative Expenses			<u>44,000</u>
3. Target Normal Cost		\$	979,016

# Durham Retirement Plan

## Section 5 – Funding Shortfall and Amortization Schedules

### A. Funding Shortfall (Excess) as of January 1, 2021

1. Funding Target	\$	15,103,443
2. Actuarial Value of Assets		15,648,749
3. Carryover Balance (Section 6)		0
4. Prefunding Balance (Section 6)		<u>0</u>
5. Adjusted Actuarial Value of Assets (2) – (3) – (4)	\$	15,648,749
6. Funding Shortfall for Amortization (1) – (5), not less than zero	\$	0
7. Funding Surplus (5) – (1), not less than zero	\$	545,306

### B. Amortization Schedules

The Plan is exempt from establishing a new shortfall amortization base this year as detailed in Section 9(C). Additionally, all funding shortfall amortization bases were eliminated as detailed in Section 9(D).

# Durham Retirement Plan

## Section 6 – Development of Carryover and Prefunding Balances

	<u>Carryover Balance</u>	<u>Prefunding Balance</u>
1. Balance at beginning of prior year after applicable adjustments	\$ 0	\$ 0
2. Portion used to offset prior year's funding requirement	0	0
3. Amount remaining: (1) – (2)	\$ <u>0</u>	\$ <u>0</u>
4. Interest on (3) using actual return on market value of assets during the prior year of 16.62%	0	0
5. Prior Year's excess contributions to be added to prefunding balance		
a. Excess contributions	N/A	341,765
b. Interest on (a) using prior year's effective rate of 5.87%	N/A	20,062
c. Total available at beginning of current year to add to prefunding balance	N/A	361,827
d. Portion of (c) to be added to prefunding balance	N/A	0
6. Voluntary reduction	<u>0</u>	<u>0</u>
7. Balance at beginning of current year: (3) + (4) + (5)(d) – (6)	\$ 0	\$ 0

# Durham Retirement Plan

## Section 7 – Determination of At-Risk Status

The Plan is not subject to the at-risk regulations for the 2021 plan year since the preceding plan year funding target attainment percentage (not considering at risk assumptions) for 2020 is 93.63%.

# Durham Retirement Plan

## Section 8 – ASC 960 Disclosure Information for Plan’s Auditor

### A. Actuarial Present Value of Accumulated Plan Benefits as of January 1, 2021

1. Actuarial Present Value of Vested Accumulated Plan Benefits for Active Participants	\$ 6,852,215
2. Actuarial Present Value of Vested Benefits for Inactive Participants	
a. Retirees and beneficiaries, currently receiving benefits	5,356,232
b. Vested terminated employees not yet receiving benefits	<u>2,670,700</u>
c. Total Inactive Liability: (a) + (b)	\$ 8,026,932
3. Actuarial Present Value of Vested Benefits: (1) + (2)	\$ 14,879,147
4. Actuarial Present Value of Non-Vested Benefits	<u>437,786</u>
5. Actuarial Present Value of Accumulated Plan Benefits: (3) + (4)	\$ 15,316,933
6. Market Value of Fund at January 1, 2021*	<u>15,650,596</u>
7. Excess of Actuarial Present Value of Accumulated Plan Benefits over Net Assets Available: (5) – (6); minimum \$0	\$ 0

### B. Statement of Changes in Accumulated Plan Benefits

1. Actuarial Present Value of Accumulated Plan Benefits as of January 1, 2020	\$ 14,630,143
2. Increase (decrease) during the Year Attributable to:	
a. Change in actuarial assumptions	\$ (80,822)
b. Benefits accumulated	842,983
c. Gains and losses **	(257,026)
d. Increase for interest due to the decrease in discount period	833,107
e. Benefits paid	(651,452)
f. Plan Change	<u>0</u>
g. Net Change	\$ 686,790
3. Actuarial Present Value of Accumulated Plan Benefits as of January 1, 2021	\$ 15,316,933

\* Includes the full value of any receivable contributions.

\*\* Balancing item.

# Durham Retirement Plan

## Section 8 – ASC 960 Disclosure Information for Plan’s Auditor (continued)

### C. Participant Counts as of January 1, 2021

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Active Participants:

Fully Vested	115
Partially Vested	0
Non-Vested	<u>95</u>
Total Active	210
Retirees and Beneficiaries Receiving Benefits	75
Terminated Participants with Deferred Vested Benefits	<u>89</u>
Total Participants	374

### D. Assumptions

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Actuarial present values of Accumulated Plan Benefits were determined in accordance with FASB Accounting Standard Codification Topic 960. Summaries of the actuarial assumptions used and plan provisions valued are found, respectively, in Sections 11 and 12, except as shown below:

Interest: IRC 430(h) funding segment rates as of the valuation date.

<u>Rates for payments expected to be made:</u>	
4.75%	within the current or next 4 plan years
5.36%	within the subsequent 15 plan years
6.11%	in all later plan years

Mortality: Pri-2012 Blue Collar Mortality Tables projected with scale MP-2019 for annuitants and non-annuitants.

The Section 11 interest rate and mortality assumptions are mandated by ERISA and the Internal Revenue Code as further detailed in related Treasury regulations and do not necessarily reflect expected plan demographic experience or expected investment returns, which are criteria for ASC 960 measurement purposes.

*This report is intended for the internal use of Durham City Transit Company and its management to assist in their decisions regarding this pension plan. The report is to be used to assist in determining appropriate funding levels for the plan and reporting to government agencies. Further distribution or use is not authorized without our prior consultation.*

# Durham Retirement Plan

## Section 9 – Funding Target Attainment Percentages

### A. FTAP for Restriction on Use of Carryover/Prefunding Balances to Offset Minimums

In order to use the carryover or prefunding balance to offset the minimum required contribution, the prior year's funding target attainment percentage must be at least 80%.

#### For the 2021 Plan Year

1. Funding Target for the prior plan year as of January 1, 2020	\$ 13,776,667
2. Actuarial Value of Assets as of January 1, 2020	\$ 12,899,953
3. Prefunding Balance as of January 1, 2020	<u>0</u>
4. Adjusted Assets for Determining Funding Percentage (2) – (3)	\$ 12,899,953
5. Funding Target Attainment Percentage at January 1, 2020 (4) ÷ (1)	93.63%

For the current plan year, the Plan is allowed to use the carryover/prefunding balance to offset the minimum required contribution.

#### For the 2022 Plan Year

1. Funding Target for Determining Funding Percentage as of January 1, 2021	\$ 15,103,443
2. Actuarial Value of Assets as of January 1, 2021	\$ 15,648,749
3. Prefunding Balance as of January 1, 2021	<u>0</u>
4. Adjusted Assets for Determining Funding Percentage (2) – (3)	\$ 15,648,749
5. FTAP as of January 1, 2021 (4) ÷ (1)	103.61%

For the plan year beginning January 1, 2022, the Plan will be allowed to use the carryover/prefunding balance to offset the minimum required contribution.

# Durham Retirement Plan

## Section 9 – Funding Target Attainment Percentages (continued)

### **B. FTAP for Exemption from Quarterly Contributions**

The quarterly contribution requirements of the Internal Revenue Code do not apply to plans whose funded target attainment percentage is at least 100% in the preceding plan year.

#### **For the 2021 Plan Year**

1. Funding Target as of January 1, 2020	\$ 13,776,667
2. Actuarial Value of Assets as of January 1, 2020	\$ 12,899,953
3. Carryover Balance as of January 1, 2020	0
4. Prefunding Balance as of January 1, 2020	<u>0</u>
5. Adjusted Assets for Determining Funding Percentage (2) – (3) – (4)	\$ 12,899,953
6. FTAP at January 1, 2020 (5) ÷ (1)	93.63%

Quarterly contributions are required for the 2021 plan year.

#### **For the 2022 Plan Year**

1. Funding Target for Determining Funding Percentage as of January 1, 2021	\$ 15,103,443
2. Actuarial Value of Assets as of January 1, 2021	\$ 15,648,749
3. Carryover Balance as of January 1, 2021	0
4. Prefunding Balance as of January 1, 2021	<u>0</u>
5. Adjusted Assets for Determining Funding Percentage (2) – (3) – (4)	\$ 15,648,749
6. FTAP as of January 1, 2021 (5) ÷ (1)	103.61%

Quarterly contributions are not required for the 2022 plan year.



# Durham Retirement Plan

## Section 9 – Funding Target Attainment Percentages (continued)

### C. FTAP for Shortfall Base Exemption

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The Plan does not establish the funding target shortfall base if this FTAP is 100% or greater.

1. Funding Target for Determining Funding Percentage as of January 1, 2021	\$ 15,103,443
2. Actuarial Value of Assets as of January 1, 2021	\$ 15,648,749
3. Prefunding Balance as of January 1, 2021, if any Portion is used to Offset the Minimum Required Contribution	<u>0</u>
4. Adjusted Assets for Determining Funding Percentage (2) – (3)	\$ 15,648,749
5. FTAP as of January 1, 2021 (4) ÷ (1)	103.61%

For the plan year beginning January 1, 2021, no funding target shortfall base was established.

# Durham Retirement Plan

## Section 9 – Funding Target Attainment Percentages (continued)

### D. FTAP for Shortfall Base Elimination

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All shortfall amortization bases are eliminated if this FTAP is 100% or greater.

1. Funding Target for Determining Funding Percentage as of January 1, 2021	\$ 15,103,443
2. Actuarial Value of Assets as of January 1, 2021	\$ 15,648,749
3. Carryover Balance as of January 1, 2021	0
4. Prefunding Balance as of January 1, 2021	<u>0</u>
5. Adjusted Assets for Determining Funding Percentage (2) – (3) – (4)	\$ 15,648,749
6. FTAP as of January 1, 2021 (5) ÷ (1)	103.61%

For the plan year beginning January 1, 2021, all funding shortfall amortization bases were eliminated.

# Durham Retirement Plan

## Section 9 – Funding Target Attainment Percentages (continued)

### **E. FTAP for Exemption from Benefit Restrictions**

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The Plan is exempt from all benefit restrictions for the 2021 plan year if this FTAP is at least 100% or if the Plan was frozen before September 1, 2005.

1. Funding Target as of January 1, 2021	\$ 15,103,443
2. Liability required to be recognized for any annuity purchases	_____0
3. Total Liability for Determining Funding Percentage (1) + (2)	\$ 15,103,443
4. Actuarial Value of Assets as of January 1, 2021	\$ 15,648,749
5. Adjusted Assets (4) + (2)	\$ 15,648,749
6. FTAP as of January 1, 2021 (5) ÷ (3)	103.61%

Because the FTAP is greater than 100%, the Plan is not subject to benefit restrictions.

# Durham Retirement Plan

## Section 9 – Funding Target Attainment Percentages (continued)

### **F. Preliminary AFTAP for Benefit Restrictions Determination**

1. Funding Target as of January 1, 2021	\$ 15,103,443
2. Liability required to be recognized for any annuity purchases	_____ 0
3. Total Liability for Determining Funding Percentage (1) + (2)	\$ 15,103,443
4. Actuarial Value of Assets as of January 1, 2021	\$ 15,648,749
5. Carryover Balance as of January 1, 2021	_____ 0
6. Prefunding Balance as of January 1, 2021	_____ 0
7. Adjusted Assets for Determining Funding Percentage (4) – (5) – (6) + (2)	\$ 15,648,749
8. Preliminary AFTAP as of January 1, 2021 (7) ÷ (3)	103.61%

# Durham Retirement Plan

## Section 10 – Participant Information

### A. Schedule of Active Participants

Attained Age	Years of Benefit Service									
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40+
< 25	1	2	0	0	0	0	0	0	0	0
25 – 29	4	12	3	0	0	0	0	0	0	0
30 – 34	6	8	2	0	0	0	0	0	0	0
35 – 39	1	7	5	3	0	0	0	0	0	0
40 – 44	1	7	9	2	1	0	0	0	0	0
45 – 49	3	14	9	6	2	3	0	0	0	0
50 – 54	6	7	6	8	7	2	2	0	0	0
55 – 59	2	9	6	2	7	4	2	0	0	0
60 – 64	1	4	4	6	3	1	0	1	1	1
65 – 69	0	3	0	1	0	0	0	0	0	0
70 +	0	2	0	0	0	1	0	0	0	0
Total	25	75	44	28	20	11	4	1	1	1

# Durham Retirement Plan

## Section 10 – Participant Information (continued)

### B. Reconciliation of Participants from January 1, 2020 to January 1, 2021

	Active Participants	Terminated Participants	Retirees & Beneficiaries	Total
Participants as of January 1, 2020	181	95	72	348
New Entrants	40	0	0	40
Non-Vested Terminations	(10)	0	0	(10)
Vested Terminations	(2)	2	0	0
Retirement	(4)	(3)	7	0
Deaths	0	0	(1)	(1)
Disabled	0	0	0	0
Rehires	4	(4)	0	0
Benefits Expired	0	0	(3)	(3)
Beneficiaries	0	0	0	0
Data Adjustments	1	(1)	0	0
Participants as of January 1, 2021	210	89	75	374

# Durham Retirement Plan

## Section 10 – Participant Information (continued)

### C. Participant Statistics

#### Active Participant Statistics

<u>As of</u>	<u>Count</u>	<u>Average Age</u>	<u>Average Service</u>	<u>Average Pay</u>
1/1/2021	210	48.6	8.7	\$ 55,238
1/1/2020	181	49.1	8.1	\$ 54,619

#### Inactive Participant Statistics

	<u>Count</u>	<u>Average Age</u>	<u>Average Benefit</u>
<b>Receiving Payments</b>			
1/1/2021	75	70.9	\$637/ month
1/1/2020	72	68.6	\$618/ month
<b>With Deferred Payments</b>			
1/1/2021	89	54.1	\$302/ month
1/1/2020	95	53.3	\$294/ month

### D. Expected Benefit Payments

2021	\$	709,700	2026	\$	861,000
2022		729,300	2027		966,600
2023		735,300	2028		1,041,300
2024		759,200	2029		1,166,400
2025		751,700	2030		1,215,500

# Durham Retirement Plan

## Section 11 – Description of Actuarial Methods and Assumptions

The costs of the plan are derived by making certain specific assumptions as to the rates of interest, mortality, turnover, disability, etc., that are assumed to hold for many years into the future. Since actual experience differs somewhat from the assumptions, the costs determined by the valuation must be regarded as estimates of the true costs of the plan.

We describe below the actuarial cost method, asset method and the specific actuarial assumptions used in this valuation.

### **A. Actuarial Cost Method: Traditional Unit Credit**

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The unit credit actuarial cost method is used to determine the actuarial liabilities of the plan: the funding target and the target normal cost.

The funding target for any participant is the actuarial present value of plan benefits being paid or that will become payable in the event of death, disability, termination, retirement, or the attainment of benefit commencement age, calculated based on compensation and service as of the beginning of the current plan year.

The target normal cost for each active participant is the excess of the actuarial present value of plan benefits, similar to the funding target, but calculated including compensation and service expected through the end of current plan year, over the participant's funding target. The target normal cost for an inactive participant is zero.

The plan's funding target and target normal cost are the respective totals of the amounts determined for the plan participants. The plan's target normal cost also includes provision for any plan-related expenses to be paid during the current plan year from plan assets.

### **B. Asset Valuation Method**

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For reporting purposes, the total assets equal the Trust value at the end of the prior year plus any receivable contribution for prior years, as long as they were actually received within 8½ months of the end of the prior year.

For actuarial purposes, the market value of assets is similarly obtained, except that receivable contributions are discounted back to the beginning of the Plan Year. No smoothing method is used; therefore, the actuarial value of assets is the same amount.



# Durham Retirement Plan

## Section 11 – Description of Actuarial Methods and Assumptions (continued)

### C. Actuarial Assumptions

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- |   |  |
|---|--|
| 1. Assumed Retirement Age:                  | Age 65 or age at valuation date, if later.   |
| Interest (total investment return):         | IRC 430(h) funding segment rates, constrained to be within the 5% corridor of the 25-year average segment rates (minimum of 5%) per ARPA, as of the valuation date. Rates for January 1, 2021:<br><br><u>Rates for payments expected to be made:</u><br>4.75%      within the current or next 4 plan years<br>5.36%      within the subsequent 15 plan years<br>6.11%      in all later plan years |
| 2. Mortality (before and after retirement): | IRC 430(h) prescribed mortality table as of the valuation date. Separate rates for males and females.  |
| 3. Turnover:                                | Sarason T-8 Table.   |
| 4. Salary Scale:                            | Salaries are assumed to increase at the rate of 2.5% per year.   |
| 5. Marital Assumption:                      | 100% of participants are assumed to be married. Spouses are assumed to be the same age as the participant.   |
| 6. Expenses:                                | Administrative expenses are assumed to be \$44,000 per year.   |
| 7. Taxable Wage Base Increases:             | The Taxable Wage Base is assumed to increase at 3% per year.   |

# Durham Retirement Plan

## Section 12 – Summary of Plan Provisions

**Effective Date:** January 1, 1991.

**Eligibility:** Employees who have attained age twenty-one will be eligible to enter the plan as of the first day of the month coincident with or next following their date of hire.

**Year of Service:** A participant is granted one year of service upon accumulation of 1,000 hours of service with the company (or predecessor company) during twelve consecutive months of employment. No service is granted prior to age 18.

**Year of Minimum Benefit Service:** Service for calculating the minimum benefit is granted based on the number of hours of service worked in accordance with the following schedule:

<u>Hours Worked During the Year</u>	<u>Vesting Service Granted</u>
Less than 1,000	0.00
1,000- 1,249	0.50
1,250-1,499	0.75
1,500 or more	1.00

**Average Monthly Compensation:** The average rate of monthly compensation during the highest paid five consecutive plan years out of the total period of participation.

**Normal Retirement Benefit Formula:** The retirement benefit is (a)-(b)-(c) where (a) equals 2.0% of average monthly compensation, multiplied by total years of service (b) equals .75% of average monthly compensation during the final three years of participation (not to exceed covered compensation), multiplied by total years of service (maximum of 30 years). The offset percentage is reduced by 1/15 for each year that a participant's Social Security retirement age is greater than 65 and (c) equals the amount of the participant's vested accrued benefit under the Duke Power Company Employees' Retirement Plan.

**Minimum Benefit:** If the participant has 10 or more years of service, a minimum benefit of \$15 times years of minimum benefit service applies.

**Normal Retirement:** A participant is eligible for normal retirement benefits at age sixty-five. The normal form of benefit is a straight life annuity.

# Durham Retirement Plan

## Section 12 – Summary of Plan Provisions (continued)

**Accrued Benefit:** A participant's accrued benefit will be determined in the same manner as his normal retirement benefit, calculated using his completed years of service and average compensation at the determination date.

**Early Retirement:** A participant is eligible for early retirement benefits after the attainment of age fifty-five (55) with ten (10) Years of Service. The Accrued Benefit payable at Early Retirement Date reduced 6% per year to reflect early payment if payment begins before age 60.

**Late Retirement:** Normal Retirement Benefit increased actuarially to actual commencement date. In no effect will this benefit be less than the benefit resulting from application of the normal retirement formula at the Late Retirement Date.

**Termination Benefit:** A participant who terminates employment before becoming eligible for retirement is eligible for a percentage of his Accrued Benefit as of the date of termination in accordance with the following schedule:

<u>Years of Vesting Service</u>	<u>Percent of Accrued Benefit</u>
Less than 5	0%
5 or more	100%

**Disability Benefit:** A participant who terminated for reasons of total disability will become fully vested in his accrued benefit.

**Death Benefit:** If a married person dies before retirement, his beneficiary will be entitled to receive a monthly benefit equal to the beneficiary's portion of the joint and survivor benefit. After reaching age 35, a married participant may designate a beneficiary other than the spouse with the spouse's written consent.

# Durham Retirement Plan

## Glossary of Selected Terms

### **Accrued Benefit**

Plan benefits earned by all participants as of the beginning of the plan year.

### **Actuarial Cost Method**

Sometimes called “funding method”, this is the mechanism for determining the amount and incidence of the annual actuarial cost of pension plan benefits, or Normal Cost, and the related Unfunded Actuarial Accrued Liability. Ordinarily, the annual contribution to the Plan comprises (1) the Normal Cost and (2) an amount for amortization of the Unfunded Actuarial Accrued Liability.

### **Actuarial Present Value**

The current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The Actuarial Present Value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

### **Actuarial Value of Assets**

The value of assets used to determine plan funding requirements. May be averaged over time in order to minimize the effect of asset value changes.

### **Adjusted Funding Target Attainment Percentage (AFTAP)**

The Funding Target Attainment Percentage, adjusted for the value of annuities purchased for non-highly compensated employees over the past two years.

### **ARPA**

The American Rescue Plan Act of 2021 (ARPA) included provisions that reduce minimum required contributions by (a) narrowing the 10% corridor on the 25-year average segment rates to 5% from 2020 until 2025, with 5% per year increases beginning in 2026 until reaching 30% in 2030, and (b) restarting amortization of the Funding Shortfall and increasing the amortization periods to 15 years.

### **At-Risk Actuarial Assumptions**

Prescribed assumptions used to determine liabilities for plans that do not meet required funding thresholds.

### **At-Risk Funding Target**

The Funding Target calculated using At-Risk Actuarial Assumptions and, in some cases, the At-Risk load. Any participant eligible to commence payment within the next eleven years is assumed to do so and to elect the most valuable optional form of payment at that date.

### **At-Risk Load**

Additional contribution requirement added to a plan which is at-risk for 2 out of the preceding 4 years.

# Durham Retirement Plan

## Glossary of Selected Terms (continued)

### **At-Risk Status**

The Plan's prior year Funding Target Attainment Percentage is less than 80% and the funding Target Attainment Percentage with At-Risk Actuarial Assumptions is less than 70%.

### **BBA**

The Bipartisan Budget Act of 2015 (BBA) included provisions that reduce minimum required contributions by extending the 10% corridor on the 25-year average segment rates until 2020, with 5% per year increases beginning in 2021 until reaching 30% in 2024. This corridor was subsequently narrowed and extended by ARPA.

### **Carryover Balance**

The funding standard account credit balance as of the last day of the plan year before PPA applies.

### **Cushion Amount**

50% of the plan's funding target for the plan year plus the amount by which the funding target would increase, based on future compensation increases.

### **Effective Interest Rate**

The single rate of interest which, if used to determine the present value of the plan's accrued benefits, would result in an amount equal to the non-at-risk funding target of the plan for such plan year.

### **Full Yield Curve**

Treasury High Quality Market Corporate bonds yields used to value liabilities as prescribed by PPA.

### **Funding Shortfall**

The excess of the Funding Target over assets.

### **Funding Target**

The present value of all benefits accrued as of the beginning of the plan year.

### **Funding Target Attainment Percentage (FTAP)**

Assets (reduced by any Carryover Balance or Prefunding Balance), as a percentage of the Funding Target.

### **HATFA**

The Highway and Transportation Funding Act of 2014 (HATFA) included provisions that reduce minimum required pension contributions by extending the 10% corridor on the 25-year average Segment rates until 2017, indexing to 30% in 2021. This corridor was subsequently extended by BBA.

# Durham Retirement Plan

## Glossary of Selected Terms (continued)

### **MAP-21**

The Moving Ahead for Progress in the 21st Century Act (MAP-21) included provisions that reduce minimum required pension contributions by allowing pension liabilities to be calculated using the interest rates that are within a 10% corridor (widening to 30% in 2016) of the higher interest rates prevalent over the last twenty-five (25) years. Using higher interest rates produce lower pension liabilities and costs. This corridor was subsequently extended by HAFTA and BBA, with further narrowing and extension by ARPA.

### **Plan Liability**

The present value of all benefits payable to employees and their beneficiaries under the Plan. The Internal Revenue Code specifies interest and mortality assumptions which must be used to measure Plan Liability.

### **Prefunding Balance**

The excess of contributions made over the minimum funding requirements beginning the first day of the plan year in which PPA applies.

### **Present Value**

Sometimes called “Actuarial Present Value”, this is the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The Present Value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

### **Presumed AFTAP**

For purposes of benefit restrictions, the Adjusted Funding Target Attainment Percentage for the prior plan year, adjusted at certain trigger dates. This AFTAP is in place until the current year’s AFTAP is certified.

### **Segment Rates**

The three-tiered interest rates used to value liabilities as prescribed by PPA based on a 24 month average yield curve of long term corporate bonds. Starting in 2012, these rates are constrained to be within a corridor of the 25-year average of such rates: see MAP-21, HAFTA, BBA, and ARPA above for details.

### **Shortfall Amortization**

The difference between plan assets and the Funding Target, amortized over seven years. The amortization period was lengthened to 15 years by ARPA, effective in the 2022 plan year or, at the plan sponsor’s election, as early as the 2019 plan year.

### **Target Normal Cost**

The present value of the benefits which will accrue during the plan year plus any expense load assumption.