

Form 5500-SF

Department of the Treasury Internal Revenue Service

Department of Labor Employee Benefits Security Administration Pension Benefit Guaranty Corporation

Short Form Annual Return/Report of Small Employee Benefit Plan

This form is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA), and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code).

Complete all entries in accordance with the instructions to the Form 5500-SF.

OMB Nos. 1210-0110 1210-0089

2023

This Form is Open to Public Inspection

Part I Annual Report Identification Information

For calendar plan year 2023 or fiscal plan year beginning 09/01/2023 and ending 08/31/2024

- A This return/report is for: [X] a single-employer plan [ ] a multiple-employer plan (not multiemployer) (Pension Plan filers checking this box must attach Schedule MEP. Other plans must attach a list of participating employer information in accordance with the form instructions.)
B This return/report is [ ] the first return/report [X] the final return/report [ ] an amended return/report [ ] a short plan year return/report (less than 12 months)
C Check box if filing under: [ ] Form 5558 [ ] automatic extension [ ] DFVC program [ ] special extension (enter description)
D If the plan is a collectively-bargained plan, check here [ ]
E If this is a retroactively adopted plan permitted by SECURE Act section 201, check here [ ]

Part II Basic Plan Information—enter all requested information

1a Name of plan: ARC DEFINED BENEFIT PENSION PLAN
1b Three-digit plan number (PN): 003
1c Effective date of plan: 09/01/1989
2a Plan sponsor's name (employer, if for a single-employer plan): ACTUARIAL RESEARCH CORPORATION
2b Employer Identification Number (EIN): 54-0994930
2c Sponsor's telephone number: 703-941-7400
2d Business code (see instructions): 541600
3a Plan administrator's name and address: [X] Same as Plan Sponsor.
3b Administrator's EIN
3c Administrator's telephone number
4 If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report.
4b EIN
4d PN
5a Total number of participants at the beginning of the plan year: 36
5b Total number of participants at the end of the plan year: 0
5c(1) Number of participants with account balances as of the beginning of the plan year (only defined contribution plans complete this item)
5c(2) Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)
5d(1) Total number of active participants at the beginning of the plan year: 24
5d(2) Total number of active participants at the end of the plan year: 0
5e Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested: 0

Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established. Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including, if applicable, a Schedule SB or Schedule MB completed and signed by an enrolled actuary, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

Table with 4 columns: SIGN HERE, Signature of plan administrator, Date, and Name of individual signing as plan administrator. Includes entries for GORDON R TRAPNELL dated 10/04/2024.

- 6a** Were all of the plan's assets during the plan year invested in eligible assets? (See instructions.).....  Yes  No
- b** Are you claiming a waiver of the annual examination and report of an independent qualified public accountant (IQPA) under 29 CFR 2520.104-46? (See instructions on waiver eligibility and conditions.).....  Yes  No
- If you answered "No" to either line 6a or line 6b, the plan cannot use Form 5500-SF and must instead use Form 5500.**
- c** If the plan is a defined benefit plan, is it covered under the PBGC insurance program (see ERISA section 4021)? .....  Yes  No  Not determined
- If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 529900. (See instructions.)

<b>Part III Financial Information</b>			
<b>7</b>		<b>(a) Beginning of Year</b>	<b>(b) End of Year</b>
<b>7</b>	Plan Assets and Liabilities		
<b>a</b>	Total plan assets .....	<b>7a</b> 8175495	0
<b>b</b>	Total plan liabilities .....	<b>7b</b> 0	0
<b>c</b>	Net plan assets (subtract line 7b from line 7a) .....	<b>7c</b> 8175495	0
<b>8</b>		<b>(a) Amount</b>	<b>(b) Total</b>
<b>8</b>	Income, Expenses, and Transfers for this Plan Year		
<b>a</b>	Contributions received or receivable from:		
	(1) Employers .....	<b>8a(1)</b> 0	
	(2) Participants.....	<b>8a(2)</b> 0	
	(3) Others (including rollovers) .....	<b>8a(3)</b> 0	
<b>b</b>	Other income (loss).....	<b>8b</b> -5136510	
<b>c</b>	Total income (add lines 8a(1), 8a(2), 8a(3), and 8b).....	<b>8c</b>	-5136510
<b>d</b>	Benefits paid (including direct rollovers and insurance premiums to provide benefits).....	<b>8d</b> 5740333	
<b>e</b>	Certain deemed and/or corrective distributions (see instructions) .	<b>8e</b>	
<b>f</b>	Administrative service providers (salaries, fees, commissions) .....	<b>8f</b>	
<b>g</b>	Other expenses .....	<b>8g</b>	
<b>h</b>	Total expenses (add lines 8d, 8e, 8f, and 8g) .....	<b>8h</b>	5740333
<b>i</b>	Net income (loss) (subtract line 8h from line 8c).....	<b>8i</b>	-10876843
<b>j</b>	Transfers to (from) the plan (see instructions) .....	<b>8j</b> 2701348	

<b>Part IV Plan Characteristics</b>	
<b>9a</b>	If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristic Codes in the instructions: 1A 1I 1H 3D
<b>b</b>	If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristic Codes in the instructions:

<b>Part V Compliance Questions</b>				
<b>10</b>		<b>Yes</b>	<b>No</b>	<b>Amount</b>
<b>10</b>	During the plan year:			
<b>a</b>	Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program) .....	<b>10a</b>	X	
<b>b</b>	Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 10a.).....	<b>10b</b>	X	
<b>c</b>	Was the plan covered by a fidelity bond? .....	<b>10c</b>	X	500000
<b>d</b>	Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty? .....	<b>10d</b>	X	
<b>e</b>	Were any fees or commissions paid to any brokers, agents, or other persons by an insurance carrier, insurance service, or other organization that provides some or all of the benefits under the plan? (See instructions.).....	<b>10e</b>	X	
<b>f</b>	Has the plan failed to provide any benefit when due under the plan? .....	<b>10f</b>	X	
<b>g</b>	Did the plan have any participant loans? (If "Yes," enter amount as of year-end.) .....	<b>10g</b>	X	
<b>h</b>	If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.) .....	<b>10h</b>		
<b>i</b>	If 10h was answered "Yes," check the box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.....	<b>10i</b>		

**Part VI Pension Funding Compliance**

**11** Is this a defined benefit plan subject to minimum funding requirements? (If "Yes," see instructions and complete Schedule SB (Form 5500) and lines 11a and b below.) If this is a defined contribution pension plan, leave line 11 blank and complete line 12 below.  Yes  No

**a** Enter the unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40 ..... **11a** 0

**b PBGC missed contribution reporting requirements.** If the plan is covered by PBGC and the amount reported on line 11a is greater than \$0, has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box:

Yes.

No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date.

No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date.

No. Other. Provide explanation \_\_\_\_\_

**12** Is this a defined contribution plan subject to the minimum funding requirements of section 412 of the Code or section 302 of ERISA? .....  Yes  No

(If "Yes," complete line 12a or lines 12b, 12c, 12d, and 12e below, as applicable.) If this is a defined benefit pension plan, leave line 12 blank and complete line 11 above.

**a** If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions, and enter the date of the letter ruling granting the waiver. .... Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

**If you completed line 12a, complete lines 3, 9, and 10 of Schedule MB (Form 5500), and skip to line 13.**

**b** Enter the minimum required contribution for this plan year ..... **12b**

**c** Enter the amount contributed by the employer to the plan for this plan year ..... **12c**

**d** Subtract the amount in line 12c from the amount in line 12b. Enter the result (enter a minus sign to the left of a negative amount) ..... **12d**

**e** Will the minimum funding amount reported on line 12d be met by the funding deadline?.....  Yes  No  N/A

**Part VII Plan Terminations and Transfers of Assets**

**13a** Has a resolution to terminate the plan been adopted in any plan year? .....  Yes  No

**a** If "Yes," enter the amount of any plan assets that reverted to the employer this year..... **13a** 0

**b** Were all the plan assets distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC? .....  Yes  No

**c** If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

<b>13c(1)</b> Name of plan(s):	<b>13c(2)</b> EIN(s)	<b>13c(3)</b> PN(s)
ACTUARIAL RESEARCH CORPORATION RETIREMENT SAVINGS PLAN	54-0994930	002

**Part VIII IRS Compliance Questions**

**14a** Does the plan satisfy the coverage and nondiscrimination tests of Code sections 410(b) and 401(a)(4) by combining this plan with any other plans under the permissive aggregation rules?  Yes  No

**14b** If this is a Code section 401(k) plan, check all boxes that apply to indicate how the plan is intended to satisfy the nondiscrimination requirements for employee deferrals and employer matching contributions (as applicable) under Code sections 401(k)(3) and 401(m)(2).

Design-based safe harbor method

"Prior year" ADP test

"Current year" ADP test

N/A

**15** If the plan sponsor is an adopter of a pre-approved plan that received a favorable IRS Opinion Letter, enter the date of the Opinion Letter 03/30/2018 (MM/DD/YYYY) and the Opinion Letter serial number J501862A.

<b>SCHEDULE SB</b> <b>(Form 5500)</b>  <small>Department of the Treasury Internal Revenue Service</small>  <small>Department of Labor Employee Benefits Security Administration</small>  <small>Pension Benefit Guaranty Corporation</small>	<b>Single-Employer Defined Benefit Plan</b> <b>Actuarial Information</b>  This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).  <b>▶ File as an attachment to Form 5500 or 5500-SF.</b>	<small>OMB No. 1210-0110</small>  <b>2023</b>  <b>This Form is Open to Public Inspection</b>
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For calendar plan year 2023 or fiscal plan year beginning 09/01/2023 and ending 08/31/2024

▶ **Round off amounts to nearest dollar.**  
 ▶ **Caution:** A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

<b>A</b> Name of plan <u>ARC DEFINED BENEFIT PENSION PLAN</u>	<b>B</b> Three-digit plan number (PN) ▶	<u>003</u>
<b>C</b> Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF <u>ACTUARIAL RESEARCH CORPORATION</u>	<b>D</b> Employer Identification Number (EIN) <u>54-0994930</u>	
<b>E</b> Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B	<b>F</b> Prior year plan size: <input checked="" type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input type="checkbox"/> More than 500	

**Part I Basic Information**

<b>1</b>	Enter the valuation date: Month <u>09</u> Day <u>01</u> Year <u>2023</u>		
<b>2</b>	Assets:		
	<b>a</b> Market value .....	<b>2a</b>	<u>8175495</u>
	<b>b</b> Actuarial value .....	<b>2b</b>	<u>8175495</u>
<b>3</b>	Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target
	<b>a</b> For retired participants and beneficiaries receiving payment .....	<u>7</u>	<u>4931006</u>
	<b>b</b> For terminated vested participants .....	<u>5</u>	<u>100152</u>
	<b>c</b> For active participants .....	<u>24</u>	<u>2221778</u>
	<b>d</b> Total .....	<u>36</u>	<u>7252936</u>
<b>4</b>	If the plan is in at-risk status, check the box and complete lines (a) and (b) .....		
	<b>a</b> Funding target disregarding prescribed at-risk assumptions .....	<b>4a</b>	
	<b>b</b> Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor .....	<b>4b</b>	
<b>5</b>	Effective interest rate .....	<b>5</b>	<u>5.21</u> %
<b>6</b>	Target normal cost		
	<b>a</b> Present value of current plan year accruals .....	<b>6a</b>	<u>0</u>
	<b>b</b> Expected plan-related expenses .....	<b>6b</b>	<u>0</u>
	<b>c</b> Target normal cost .....	<b>6c</b>	<u>0</u>

**Statement by Enrolled Actuary**  
 To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

<b>SIGN HERE</b>		
	Signature of actuary	<u>10/04/2024</u> Date
	<u>LAWRENCE S. BUTCHER</u> Type or print name of actuary	<u>23-05843</u> Most recent enrollment number
	<u>NEWPORT GROUP, INC.</u> Firm name	<u>312-488-6756</u> Telephone number (including area code)
	<u>PO BOX 56034</u> <u>BOSTON, MA 02205</u> Address of the firm	

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions

<b>Part II Beginning of Year Carryover and Prefunding Balances</b>		(a) Carryover balance	(b) Prefunding balance
<b>7</b>	Balance at beginning of prior year after applicable adjustments (line 13 from prior year) .....	0	366672
<b>8</b>	Portion elected for use to offset prior year's funding requirement (line 35 from prior year) .....	0	0
<b>9</b>	Amount remaining (line 7 minus line 8) .....	0	366672
<b>10</b>	Interest on line 9 using prior year's actual return of <u>5.40</u> % .....	0	19800
<b>11</b>	Prior year's excess contributions to be added to prefunding balance:		
	<b>a</b> Present value of excess contributions (line 38a from prior year) .....		999631
	<b>b(1)</b> Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>5.37</u> % .....		53680
	<b>b(2)</b> Interest on line 38b from prior year Schedule SB, using prior year's actual return .....		0
	<b>c</b> Total available at beginning of current plan year to add to prefunding balance .....		1053311
	<b>d</b> Portion of (c) to be added to prefunding balance .....		0
<b>12</b>	Other reductions in balances due to elections or deemed elections .....	0	19800
<b>13</b>	Balance at beginning of current year (line 9 + line 10 + line 11d - line 12) .....	0	366672

<b>Part III Funding Percentages</b>			
<b>14</b>	Funding target attainment percentage .....	<b>14</b>	107.66 %
<b>15</b>	Adjusted funding target attainment percentage .....	<b>15</b>	112.71 %
<b>16</b>	Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement .....	<b>16</b>	97.27 %
<b>17</b>	If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage .....	<b>17</b>	%

<b>Part IV Contributions and Liquidity Shortfalls</b>		<b>18 Contributions made to the plan for the plan year by employer(s) and employees:</b>					
(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees	(a) Date (MM-DD-YYYY)	(b) Amount paid by employer(s)	(c) Amount paid by employees		
<b>Totals ▶</b>			<b>18(b)</b>	0	<b>18(c)</b>	0	

<b>19</b>	Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:	
	<b>a</b> Contributions allocated toward unpaid minimum required contributions from prior years. ....	<b>19a</b> 0
	<b>b</b> Contributions made to avoid restrictions adjusted to valuation date .....	<b>19b</b> 0
	<b>c</b> Contributions allocated toward minimum required contribution for current year adjusted to valuation date .....	<b>19c</b> 0
<b>20</b>	Quarterly contributions and liquidity shortfalls:	
	<b>a</b> Did the plan have a "funding shortfall" for the prior year? .....	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<b>b</b> If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? .....	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<b>c</b> If line 20a is "Yes," see instructions and complete the following table as applicable:	
Liquidity shortfall as of end of quarter of this plan year		
(1) 1st	(2) 2nd	(3) 3rd
(4) 4th		

**Part V Assumptions Used to Determine Funding Target and Target Normal Cost**

**21** Discount rate:

<b>a</b> Segment rates:	1st segment: 4.75 %	2nd segment: 5.00 %	3rd segment: 5.74 %	<input type="checkbox"/> N/A, full yield curve used
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**b** Applicable month (enter code)..... **21b** 0

**22** Weighted average retirement age ..... **22** 65

**23** Mortality table(s) (see instructions)  Prescribed - combined  Prescribed - separate  Substitute

**Part VI Miscellaneous Items**

**24** Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment.....  Yes  No

**25** Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment. ....  Yes  No

**26** Demographic and benefit information

**a** Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment. ....  Yes  No

**b** Is the plan required to provide a projection of expected benefit payments? If "Yes," see instructions regarding required attachment ...  Yes  No

**27** If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment..... **27**

**Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years**

<b>28</b> Unpaid minimum required contributions for all prior years .....	<b>28</b>	0
<b>29</b> Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a).....	<b>29</b>	0
<b>30</b> Remaining amount of unpaid minimum required contributions (line 28 minus line 29) .....	<b>30</b>	0

**Part VIII Minimum Required Contribution For Current Year**

**31** Target normal cost and excess assets (see instructions):

<b>a</b> Target normal cost (line 6c).....	<b>31a</b>	0
<b>b</b> Excess assets, if applicable, but not greater than line 31a .....	<b>31b</b>	0

<b>32</b> Amortization installments:	Outstanding Balance	Installment
<b>a</b> Net shortfall amortization installment .....	0	0
<b>b</b> Waiver amortization installment .....	0	0

**33** If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_) and the waived amount ..... **33**

<b>34</b> Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33).....	<b>34</b>	0
	Carryover balance	Prefunding balance
<b>35</b> Balances elected for use to offset funding requirement .....	0	0
	0	0

**36** Additional cash requirement (line 34 minus line 35)..... **36** 0

**37** Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)..... **37** 0

**38** Present value of excess contributions for current year (see instructions)

<b>a</b> Total (excess, if any, of line 37 over line 36)	<b>38a</b>	0
<b>b</b> Portion included in line 38a attributable to use of prefunding and funding standard carryover balances .....	<b>38b</b>	

**39** Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37) ..... **39** 0

**40** Unpaid minimum required contributions for all years ..... **40** 0

**Part IX Pension Funding Relief Under the American Rescue Plan Act of 2021 (See Instructions)**

**41** If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies.  2019  2020  2021

**Schedule SB, Line 26 – Schedule of Active Participant Data**

The following table shows the distribution of the plan's active participant population by age and service and other demographic statistics.

Age	Years of Service										Total
	< 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 +	
Under 25	0	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	0	0	0	0	0	0	0
30 - 34	0	0	3	2	0	0	0	0	0	0	5
35 - 39	0	0	0	1	3	0	0	0	0	0	4
40 - 44	0	0	0	0	2	1	0	0	0	0	3
45 - 49	0	0	1	1	2	2	0	0	0	0	6
50 - 54	0	0	0	0	0	0	1	1	0	0	2
55 - 59	0	0	0	0	1	0	0	1	0	0	2
60 - 64	0	0	0	0	0	0	0	1	0	0	1
65 - 69	0	0	0	0	0	0	0	0	0	0	0
Over 70	0	0	0	0	0	0	0	0	0	1	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>24</b>
Average age		45.24									
Average past service		17.04									
Average future service		20.00									

## Schedule SB, Part V – Statement of Actuarial Methods and Assumptions

Summary of Methods	
<b>Valuation date:</b>	September 1.
<b>Actuarial cost method:</b>	The actuarial cost method is defined in Code Section 430 by the Pension Protection Act of 2006 (PPA).
<b>Actuarial value of assets:</b>	The actuarial value of assets is equal to the market value of assets plus contributions received after September 1, 2023 but discounted back to September 1, 2022 by the 2022 plan year effective interest rate as required under PPA.
<b>Changes since last valuation:</b>	None.

**Schedule SB, Part V – Statement of Actuarial Methods and Assumptions (continued)**

Primary Assumptions	
<b>Interest:</b>	
<b>Funding:</b> Pre and post-retirement:	Annuities: IRC 430(h) Funding Segment Rates reflecting ARPA relief for September 2022; 4.75% per year for 1 <sup>st</sup> segment, 5.00% for 2 <sup>nd</sup> segment and 5.74% thereafter. Lump Sums: 5.00%
<b>ASC 960:</b>	6.00%
<b>Mortality:</b>	
<b>Funding:</b> Pre and post-retirement:	Annuities: 2023 required mortality table under PPA Lump Sums: IRS 2022 Applicable Mortality Table for 417(e)
<b>ASC 960:</b> Pre and post-retirement:	PRI-2012 Total Dataset Combined Mortality with Scale MP-2021.
<b>Salary increases:</b>	N/A. The plan was frozen as of September 1, 2016.
<b>Retirement:</b>	Age 65 or the 5 <sup>th</sup> anniversary of initial plan entry, if later.
<b>Termination:</b>	4.00% per year during an employee's first 5 years of service; none thereafter.
<b>Disability:</b>	None.
<b>Percentage married:</b>	Males 80%, females 80%.
<b>Age difference:</b>	Husbands are assumed to be three years older than their wives.
<b>Maximum benefit:</b>	Limited as set forth by IRC Section 415.
<b>Maximum compensation:</b>	Limited as set forth by IRC Section 401(a)(17).
<b>Form of payment:</b>	20% of both active and terminated vested participants are assumed to elect a 100% Joint Life annuity and 80% are assumed to elect a lump sum distribution.
<b>Expenses:</b>	No expense provision has been included. It is assumed that expenses will be provided for separately.
<b>Changes since the last valuation:</b>	Funding calculations as mandated by the Pension Protection Act of 2006 (PPA) have been reflected in this valuation. The mortality table and funding methods were updated due to changes as required per PPA. Also interest rates are based on new funding rules under MAP-21 as amended by the American Rescue Plan Act (ARPA).  All other assumptions are identical to the assumptions used in the prior valuation.

**Form 5500-SF**

Department of the Treasury  
Internal Revenue Service

Department of Labor  
Employee Benefits Security Administration  
Pension Benefit Guaranty Corporation

**Short Form Annual Return/Report of Small Employee Benefit Plan**

This form is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA), and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code).

▶ **Complete all entries in accordance with the instructions to the Form 5500-SF.**

OMB Nos. 1210-0110  
1210-0089

**2023**

**This Form is Open to Public Inspection**

**Part I Annual Report Identification Information**

For calendar plan year 2023 or fiscal plan year beginning 09/01/2023 and ending 08/31/2024

**A** This return/report is for:  a single-employer plan  a multiple-employer plan (not multiemployer) (Pension Plan filers checking this box must attach Schedule MEP. Other plans must attach a list of participating employer information in accordance with the form instructions.)

**B** This return/report is  the first return/report  the final return/report  
 an amended return/report  a short plan year return/report (less than 12 months)

**C** Check box if filing under:  Form 5558  automatic extension  DFVC program  
 special extension (enter description)

**D** If the plan is a collectively-bargained plan, check here.....▶

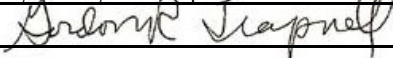
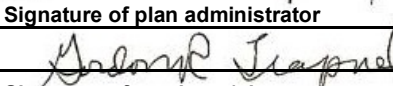
**E** If this is a retroactively adopted plan permitted by SECURE Act section 201, check here.....▶

**Part II Basic Plan Information—enter all requested information**

<b>1a</b> Name of plan ARC DEFINED BENEFIT PENSION PLAN	<b>1b</b> Three-digit plan number (PN) ▶ 003
<b>2a</b> Plan sponsor's name (employer, if for a single-employer plan) Mailing address (include room, apt., suite no. and street, or P.O. Box) City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions) Actuarial Research Corporation  6928 Little River Turnpike Suite E Annandale VA 22003	<b>1c</b> Effective date of plan 09/01/1989
	<b>2b</b> Employer Identification Number (EIN) 54-0994930
	<b>2c</b> Sponsor's telephone number 703-941-7400
<b>3a</b> Plan administrator's name and address <input checked="" type="checkbox"/> Same as Plan Sponsor.	<b>2d</b> Business code (see instructions)  541600
	<b>3b</b> Administrator's EIN
<b>4</b> If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report. <b>a</b> Sponsor's name <b>c</b> Plan Name	<b>3c</b> Administrator's telephone number
	<b>4b</b> EIN
<b>5a</b> Total number of participants at the beginning of the plan year..... <b>b</b> Total number of participants at the end of the plan year..... <b>c(1)</b> Number of participants with account balances as of the beginning of the plan year (only defined contribution plans complete this item)..... <b>c(2)</b> Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item)..... <b>d(1)</b> Total number of active participants at the beginning of the plan year..... <b>d(2)</b> Total number of active participants at the end of the plan year..... <b>e</b> Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested.....	<b>4d</b> PN
	<b>5a</b> 36
	<b>5b</b> 0
	<b>5c(1)</b>
	<b>5c(2)</b>
<b>5d(1)</b> 24	
<b>5d(2)</b> 0	
<b>5e</b> 0	

**Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.**

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including, if applicable, a Schedule SB or Schedule MB completed and signed by an enrolled actuary, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

<b>SIGN HERE</b>		10/04/2024	GORDON R. TRAPNELL
	Signature of plan administrator	Date	Enter name of individual signing as plan administrator
<b>SIGN HERE</b>		10/04/2024	GORDON R. TRAPNELL
	Signature of employer/plan sponsor	Date	Enter name of individual signing as employer or plan sponsor

- 6a** Were all of the plan's assets during the plan year invested in eligible assets? (See instructions.) .....  Yes  No
- b** Are you claiming a waiver of the annual examination and report of an independent qualified public accountant (IQPA) under 29 CFR 2520.104-46? (See instructions on waiver eligibility and conditions.) .....  Yes  No
- If you answered "No" to either line 6a or line 6b, the plan cannot use Form 5500-SF and must instead use Form 5500.**
- c** If the plan is a defined benefit plan, is it covered under the PBGC insurance program (see ERISA section 4021)? .....  Yes  No  Not determined
- If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 529900. (See instructions.)

<b>Part III Financial Information</b>			
<b>7</b>		<b>(a) Beginning of Year</b>	<b>(b) End of Year</b>
<b>a</b>	Total plan assets.....	8,175,495	0
<b>b</b>	Total plan liabilities.....	0	0
<b>c</b>	Net plan assets (subtract line 7b from line 7a).....	8,175,495	0
<b>8</b>		<b>(a) Amount</b>	<b>(b) Total</b>
<b>a</b>	Contributions received or receivable from:		
<b>(1)</b>	Employers.....	0	
<b>(2)</b>	Participants.....	0	
<b>(3)</b>	Others (including rollovers).....	0	
<b>b</b>	Other income (loss).....	-5,136,510	
<b>c</b>	Total income (add lines 8a(1), 8a(2), 8a(3), and 8b).....		-5,136,510
<b>d</b>	Benefits paid (including direct rollovers and insurance premiums to provide benefits).....	5,740,333	
<b>e</b>	Certain deemed and/or corrective distributions (see instructions).....		
<b>f</b>	Administrative service providers (salaries, fees, commissions).....		
<b>g</b>	Other expenses.....		
<b>h</b>	Total expenses (add lines 8d, 8e, 8f, and 8g).....		5,740,333
<b>i</b>	Net income (loss) (subtract line 8h from line 8c).....		-10,876,843
<b>j</b>	Transfers to (from) the plan (see instructions).....	2,701,348	

<b>Part IV Plan Characteristics</b>	
<b>9a</b>	If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristic Codes in the instructions: 1A 1I 1H 3D
<b>b</b>	If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristic Codes in the instructions:

<b>Part V Compliance Questions</b>				
<b>10</b>		<b>Yes</b>	<b>No</b>	<b>Amount</b>
<b>a</b>	Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program).....		X	
<b>b</b>	Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 10a.).....		X	
<b>c</b>	Was the plan covered by a fidelity bond?.....	X		500,000
<b>d</b>	Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?.....		X	
<b>e</b>	Were any fees or commissions paid to any brokers, agents, or other persons by an insurance carrier, insurance service, or other organization that provides some or all of the benefits under the plan? (See instructions.).....		X	
<b>f</b>	Has the plan failed to provide any benefit when due under the plan?.....		X	
<b>g</b>	Did the plan have any participant loans? (If "Yes," enter amount as of year-end.).....		X	
<b>h</b>	If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.).....			
<b>i</b>	If 10h was answered "Yes," check the box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3.....			

**Part VI Pension Funding Compliance**

**11** Is this a defined benefit plan subject to minimum funding requirements? (If "Yes," see instructions and complete Schedule SB (Form 5500) and lines 11a and b below.) If this is a defined contribution pension plan, leave line 11 blank and complete line 12 below.  Yes  No

**a** Enter the unpaid minimum required contributions for all years from Schedule SB (Form 5500) line 40..... **11a** 0

**b PBGC missed contribution reporting requirements.** If the plan is covered by PBGC and the amount reported on line 11a is greater than \$0, has PBGC been notified as required by ERISA sections 4043(c)(5) and/or 303(k)(4)? Check the applicable box:

- Yes.
- No. Reporting was waived under 29 CFR 4043.25(c)(2) because contributions equal to or exceeding the unpaid minimum required contribution were made by the 30th day after the due date.
- No. The 30-day period referenced in 29 CFR 4043.25(c)(2) has not yet ended, and the sponsor intends to make a contribution equal to or exceeding the unpaid minimum required contribution by the 30th day after the due date.
- No. Other. Provide explanation \_\_\_\_\_

**12** Is this a defined contribution plan subject to the minimum funding requirements of section 412 of the Code or section 302 of ERISA? (If "Yes," complete line 12a or lines 12b, 12c, 12d, and 12e below, as applicable.) If this is a defined benefit pension plan, leave line 12 blank and complete line 11 above.  Yes  No

**a** If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions, and enter the date of the letter ruling granting the waiver. \_\_\_\_\_ Month \_\_\_\_\_ Day \_\_\_\_\_ Year

**If you completed line 12a, complete lines 3, 9, and 10 of Schedule MB (Form 5500), and skip to line 13.**

**b** Enter the minimum required contribution for this plan year ..... **12b**

**c** Enter the amount contributed by the employer to the plan for this plan year ..... **12c**

**d** Subtract the amount in line 12c from the amount in line 12b. Enter the result (enter a minus sign to the left of a negative amount) ..... **12d**

**e** Will the minimum funding amount reported on line 12d be met by the funding deadline? .....  Yes  No  N/A

**Part VII Plan Terminations and Transfers of Assets**

**13a** Has a resolution to terminate the plan been adopted in any plan year? .....  Yes  No

**a** If "Yes," enter the amount of any plan assets that reverted to the employer this year..... **13a** 0

**b** Were all the plan assets distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC? .....  Yes  No

**c** If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

<b>13c(1)</b> Name of plan(s):	<b>13c(2)</b> EIN(s)	<b>13c(3)</b> PN(s)
Actuarial Research Corporation Retirement Savings Plan	54-0994930	002

**Part VIII IRS Compliance Questions**

**14a** Does the plan satisfy the coverage and nondiscrimination tests of Code sections 410(b) and 401(a)(4) by combining this plan with any other plans under the permissive aggregation rules?  Yes  No

**14b** If this is a Code section 401(k) plan, check all boxes that apply to indicate how the plan is intended to satisfy the nondiscrimination requirements for employee deferrals and employer matching contributions (as applicable) under Code sections 401(k)(3) and 401(m)(2).

- Design-based safe harbor method
- "Prior year" ADP test
- "Current year" ADP test
- N/A

**15** If the plan sponsor is an adopter of a pre-approved plan that received a favorable IRS Opinion Letter, enter the date of the Opinion Letter 03/30/2018 (MM/DD/YYYY) and the Opinion Letter serial number J501862a.

## **Schedule SB, Line 22 – Description of Weighted Average Retirement Age**

Participants are assumed to retire at their Normal Retirement Date, described in Plan Provisions as “The first day of the month following attainment of age 65.”

<b>SCHEDULE SB</b> <b>(Form 5500)</b> <small>Department of the Treasury Internal Revenue Service</small> <hr/> <small>Department of Labor Employee Benefits Security Administration</small> <hr/> <small>Pension Benefit Guaranty Corporation</small>	<b>Single-Employer Defined Benefit Plan</b> <b>Actuarial Information</b>  This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).  <b>▶ File as an attachment to Form 5500 or 5500-SF.</b>	<small>OMB No. 1210-0110</small> <hr/> <b>2023</b> <hr/> <b>This Form is Open to Public Inspection</b>
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For calendar plan year 2023 or fiscal plan year beginning 09/01/2023 and ending 08/31/2024

▶ **Round off amounts to nearest dollar.**

▶ **Caution:** A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

<b>A</b> Name of plan ARC DEFINED BENEFIT PENSION PLAN	<b>B</b> Three-digit plan number (PN) ▶	003
<b>C</b> Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF Actuarial Research Corporation	<b>D</b> Employer Identification Number (EIN) 54-0994930	
<b>E</b> Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B	<b>F</b> Prior year plan size: <input checked="" type="checkbox"/> 100 or fewer <input type="checkbox"/> 101-500 <input type="checkbox"/> More than 500	

<b>Part I Basic Information</b>			
<b>1</b> Enter the valuation date:	Month <u>09</u>	Day <u>01</u>	Year <u>2023</u>
<b>2</b> Assets:			
<b>a</b> Market value.....	<b>2a</b>	8,175,495	
<b>b</b> Actuarial value .....	<b>2b</b>	8,175,495	
<b>3</b> Funding target/participant count breakdown	(1) Number of participants	(2) Vested Funding Target	(3) Total Funding Target
<b>a</b> For retired participants and beneficiaries receiving payment .....	7	4,931,006	4,931,006
<b>b</b> For terminated vested participants.....	5	100,152	100,152
<b>c</b> For active participants.....	24	2,221,778	2,221,778
<b>d</b> Total .....	36	7,252,936	7,252,936
<b>4</b> If the plan is in at-risk status, check the box and complete lines (a) and (b)..... <input type="checkbox"/>			
<b>a</b> Funding target disregarding prescribed at-risk assumptions.....	<b>4a</b>		
<b>b</b> Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor .....	<b>4b</b>		
<b>5</b> Effective interest rate.....	<b>5</b>	5.21%	
<b>6</b> Target normal cost			
<b>a</b> Present value of current plan year accruals.....	<b>6a</b>	0	
<b>b</b> Expected plan-related expenses .....	<b>6b</b>	0	
<b>c</b> Target normal cost.....	<b>6c</b>	0	

**Statement by Enrolled Actuary**

To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

<b>SIGN HERE</b>	 Signature of actuary	<u>10/4/2024</u> Date
	<u>LAWRENCE S. BUTCHER</u> Type or print name of actuary	<u>2305843</u> Most recent enrollment number
	<u>NEWPORT GROUP, INC.</u> Firm name	<u>312-488-6756</u> Telephone number (including area code)
	<u>PO Box 56034</u> <u>Boston MA 02205</u> Address of the firm	

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions



**Part V Assumptions Used to Determine Funding Target and Target Normal Cost**

**21** Discount rate:

<b>a</b> Segment rates:	1st segment: 4.75 %	2nd segment: 5.00 %	3rd segment: 5.74 %	<input type="checkbox"/> N/A, full yield curve used
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**b** Applicable month (enter code)..... **21b** 0

**22** Weighted average retirement age ..... **22** 65

**23** Mortality table(s) (see instructions)  Prescribed - combined  Prescribed - separate  Substitute

**Part VI Miscellaneous Items**

**24** Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment. ....  Yes  No

**25** Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment.....  Yes  No

**26** Demographic and benefit information

**a** Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment. ....  Yes  No

**b** Is the plan required to provide a projection of expected benefit payments? If "Yes," see instructions regarding required attachment ...  Yes  No

**27** If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment ..... **27**

**Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years**

<b>28</b> Unpaid minimum required contributions for all prior years.....	<b>28</b>	0
<b>29</b> Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a).....	<b>29</b>	0
<b>30</b> Remaining amount of unpaid minimum required contributions (line 28 minus line 29) .....	<b>30</b>	0

**Part VIII Minimum Required Contribution For Current Year**

**31** Target normal cost and excess assets (see instructions):

<b>a</b> Target normal cost (line 6c).....	<b>31a</b>	0
<b>b</b> Excess assets, if applicable, but not greater than line 31a .....	<b>31b</b>	0

<b>32</b> Amortization installments:	Outstanding Balance	Installment
<b>a</b> Net shortfall amortization installment .....	0	0
<b>b</b> Waiver amortization installment .....	0	0

**33** If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_) and the waived amount ..... **33**

**34** Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33).... **34** 0

	Carryover balance	Prefunding balance	Total balance
<b>35</b> Balances elected for use to offset funding requirement.....	0	0	0

**36** Additional cash requirement (line 34 minus line 35) ..... **36** 0

**37** Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c)..... **37** 0

**38** Present value of excess contributions for current year (see instructions)

<b>a</b> Total (excess, if any, of line 37 over line 36)	<b>38a</b>	0
<b>b</b> Portion included in line 38a attributable to use of prefunding and funding standard carryover balances .....	<b>38b</b>	

**39** Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37) ..... **39** 0

**40** Unpaid minimum required contributions for all years..... **40** 0

**Part IX Pension Funding Relief Under the American Rescue Plan Act of 2021 (See Instructions)**

**41** If an election was made to use the extended amortization rule for a plan year beginning on or before December 31, 2021, check the box to indicate the first plan year for which the rule applies.  2019  2020  2021

## Schedule SB, Part V – Summary of Plan Provisions

This summary of plan provisions as of September 1, 2022, has been prepared for valuation purposes only. It outlines the major plan provisions used to perform the actuarial valuation.

Summary of Plan Provisions	
<b>Plan effective date:</b>	September 1, 1989; most recently amended effective September 1, 2016.
<b>Plan year anniversary date:</b>	September 1.
<b>Eligibility requirements for plan participation:</b>	Employees enter the plan on the first of the month coincident with or next following completion of 1 year of eligibility service and attainment of age 21. The plan was frozen effective September 1, 2016.
<b>Normal retirement date:</b>	The first day of the month following attainment of age 65.
<b>Vesting service:</b>	Vesting service is credited for complete years and fractional parts of a year (to 2 decimal places) on the basis that 365 days equal one year. Service is measured from the participant's date of employment to his separation from service.
<b>Accrual service:</b>	Accrual service is credited for complete years and fractional parts of a year (to 2 decimal places) on the basis that 365 days equal one year. Service is measured from the participant's entry date to his separation from service. Accrual service was frozen effective September 1, 2016.
<b>Plan compensation:</b>	Wages, salaries and fees for professional services and other amounts received for personal services actually rendered in the course of employment to the extent such amounts are includible in gross income. Compensation shall also include elective contributions under Code Sections 125, 402(e)(3), 402(h)(1)(B), 403(b) and 132(f)(4). Elective contributions also include compensation deferred under a Code Section 457 plan. For any self-employed individual, compensation means earned income. Compensation shall not include "merit compensation". Annual compensation is limited to Internal Revenue Code maximum amount.
<b>Average compensation:</b>	The average of the highest five consecutive years of compensation. The plan will exclude years in which an employee terminates employment with the employer.

**Schedule SB, Part V – Summary of Plan Provisions (continued)**

Summary of Plan Provisions (continued)													
<b>Accrued benefit:</b>	<p>The product of (a), (b) and (c) below:</p> <ul style="list-style-type: none"> <li>(a) 1.25% of Average Compensation</li> <li>(b) Expected Vesting Service (maximum of 28 years) at Normal Retirement Date</li> <li>(c) Accrual Service to September 1, 2016 divided by expected Accrual Service at Normal Retirement Date</li> </ul> <p>Subject to Fresh-Start Rules described in Section 4.01A of the plan document.</p>												
<b>Normal retirement benefit:</b>	The accrued benefit.												
<b>Late retirement benefit:</b>	Greater of the accrued benefit on the late retirement date or the actuarial equivalent of the normal retirement benefit.												
<b>Early retirement benefit:</b>	None.												
<b>Disability benefit:</b>	None.												
<b>Normal form of benefit:</b>	Straight life annuity if single and a qualified joint & survivor annuity if married.												
<b>Post-retirement benefit increases:</b>	For active employees as of December 26, 1995, periodic payments upon retirement will increase on the anniversary of the first payment and annually thereafter on each subsequent anniversary based on increases in the Consumer Price Index, with a maximum increase of 4% per year.												
<b>Vesting schedule:</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Vesting Service (whole years)</th> <th style="text-align: center;">Vesting Percentage</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Less than 2</td> <td style="text-align: center;">0%</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">25%</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">50%</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">75%</td> </tr> <tr> <td style="text-align: center;">5 or more</td> <td style="text-align: center;">100%</td> </tr> </tbody> </table>	Vesting Service (whole years)	Vesting Percentage	Less than 2	0%	2	25%	3	50%	4	75%	5 or more	100%
Vesting Service (whole years)	Vesting Percentage												
Less than 2	0%												
2	25%												
3	50%												
4	75%												
5 or more	100%												
<b>Death benefit:</b>	The single-sum death benefit shall be equal to the present value of the participant's vested Accrued Benefit as of the date of death beginning on the participant's Normal Retirement Date and payable under the Normal Form.												

## Schedule SB, Part V – Summary of Plan Provisions (continued)

Summary of Plan Provisions (continued)	
<b>Actuarial equivalent:</b>	Based upon 8% interest and 1951 Group Annuity Mortality Table for males, projected to 1990.
<b>Changes:</b>	None.

**Summary of any changes in principal eligibility or benefit provisions since the last valuation:**

There were no changes since the last valuation.

**Description of any significant events:**

To the best of our knowledge, there were no significant events that occurred during the year.

**Benefits not included in the valuation:**

To the best of our knowledge, no benefits were excluded from the valuation.

**Statement of changes in assumptions and/or methods and justifications for such changes:**

The mortality table and interest rates were updated due to changes in the required mortality and interest rate as required by the Pension Protection Act of 2006 (PPA) and MAP-21, as amended by the American Rescue Plan Act (ARPA). All other assumptions are identical to the assumptions used in the prior valuation.