

Beaver Valley Geriatric Center Administrative Employee Retirement System

Actuarial Report January 1, 2025





August 8, 2025

Board of Trustees
Beaver Valley Geriatric Center Administrative Employee Retirement System

**Re: Beaver Valley Geriatric Center Administrative Employee Retirement System Annual Actuarial Valuation
as of January 1, 2025 Actuarial Disclosures**

Ladies and Gentlemen:

The results of the January 1, 2025 Annual Actuarial Valuation of the Beaver Valley Geriatric Center Administrative Employee Retirement System are presented in this report.

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The purposes of the valuation are to measure the System's funding progress and to determine the employer contribution rate for the fiscal year ending December 31, 2025 and to fully and fairly disclose the actuarial position of the Beaver Valley Geriatric Center Administrative Employee Retirement System as of January 1, 2025. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results associated with the benefits described in this report, for purposes other than those identified above, may be significantly different.

The contribution rate in this report is determined using the actuarial cost methods and assumptions disclosed in Schedule E of this report. This report includes the required Low-Default-Risk Obligation Measure (LDRM) on page 4, but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

The findings in this report are based on data and other information through December 31, 2024. The actuarial valuation was based upon information furnished by the County, concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the County.

This report was prepared using assumptions adopted by the Board. All actuarial assumptions used in this report are reasonable for the purposes of this valuation. The combined effect of the assumptions, excluding prescribed assumptions or methods set by law, is expected to have no significant bias (i.e., not significantly optimistic or pessimistic). All actuarial assumptions and methods used in the valuation follow the guidance in the applicable Actuarial Standards of Practice. Additional information about the actuarial assumptions is included in the section entitled "Actuarial Assumptions and Actuarial Cost Method for Funding Purposes."

Valuation results are developed through the use of multiple models.

Valuation liabilities were prepared using ProVal's valuation model, a software product of Winklevoss Technologies. We are relying on the ProVal model. We performed tests of the ProVal model with this assignment and made a reasonable attempt to understand the developer's intended purpose of, general operation of, major sensitivities and dependencies within, and key strengths and limitations of the ProVal model. In our professional judgment, the ProVal valuation model has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses.

Financial results were prepared using our financing model which, in our professional judgment, has the capability to provide results that are consistent with the purposes of the valuation, and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems and collaboratively with others outside of Gabriel, Roeder, Smith & Company. To the best of our knowledge, the information contained in this report is accurate and fairly presents the actuarial position of the Beaver Valley Geriatric Center Administrative Employee Retirement System as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board.

Michael Spadaro and Heidi G. Barry are Members of the American Academy of Actuaries (MAAA) and meet the Academy's Qualification Standards to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

Gabriel, Roeder, Smith & Company will be pleased to review this valuation and report with the Board and to answer any questions pertaining to the valuation.

Respectfully submitted,
Gabriel, Roeder, Smith & Company

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MS/HGB:rmn

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Beaver County Employees' Retirement Board



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I. Valuation Highlights

	January 1, 2022	January 1, 2023	January 1, 2024	January 1, 2025
Range of Contributions:				
Standard	\$ 0	\$ 0	\$ 0	\$ 0
Actuarial Value of Assets**	11,605,617	7,299,236	7,867,468	8,376,512
Actuarial Present Value of Accumulated Plan Benefits:				
Vested benefits*	5,036,246	4,284,264	4,105,708	3,941,560
Non-Vested Benefits	0	0	0	0
Total	5,036,246	4,284,264	4,105,708	3,941,560
Active Participants:				
Number	0	0	0	0
Average Compensation	0	0	0	0
Total Compensation	0	0	0	0
Pensioners and Beneficiaries:				
Number	43	39	26	23
Total Annual Pension	691,936	620,606	507,749	450,723
Terminated Vested Participants:				
Number	3	3	3	3
Total Annual Pension	\$ 11,299	\$ 11,299	\$ 11,299	\$ 11,299

* Does not include employee contributions.

** Market Value.



II. Schedules

Schedule A

Plan Assets

Plan Assets December 31, 2024

	<u>Market Value</u>
Cash Equivalents	\$ 208,866.17
Receivables	\$ (1,637.30)
Government Securities	\$ 59,960.85
Equities	\$ 5,484,061.57
Fixed Income	\$ 1,422,517.27
Real Estate / Alternatives	\$ 1,202,743.07
Payables	\$ 0.00
Net Assets (Market Value) Available for Benefits, December 31, 2024	<u>\$ 8,376,511.63</u>



Schedule A – Concluded

Reconciliation of Assets

	<u>Market Value</u>
1. Total Assets December 31, 2023	\$ 7,867,467.57
2. Increases	
(a) Employer Appropriation for 2024	\$ 0.00
(b) Employee Contributions	\$ 0.00
(c) Net Investment Income	\$ 1,150,527.17
(d) Miscellaneous	\$ <u>30,419.15</u>
(e) Total Increase	\$ 1,180,946.32
3. Decreases	
(a) Refund of Employee Contributions	\$ 0.00
(b) Retirement Allowances Paid (including withholding taxes)	\$ 615,853.96
(c) Death Benefits	\$ 0.00
(d) Administrative Expenses	\$ 7,120.89
(e) Investment Expenses	\$ 19,142.21
(f) Miscellaneous	\$ <u>29,785.20</u>
(g) Total Decreases	\$ 671,902.26
4. Total Assets (Market Value) December 31, 2024 (1) + (2e) - (3g)	\$ <u><u>8,376,511.63</u></u>

Actuarial Value of Assets January 1, 2025: The December 31, 2024 market value of assets, \$8,376,511.63 was used as the actuarial value of assets as of January 1, 2025.



Schedule B

Actuarial Balance Sheet January 1, 2025

Assets

Present Assets

Huntington Trust	\$ 8,376,511.63
Reserve for Future Liabilities	\$ <u>(4,434,951.63)</u>
<i>Total Assets</i>	\$ <u><u>3,941,560.00</u></u>

Liabilities

Actuarial Present Value of Accumulated Plan Benefits

Vested Benefits:

Active Participants	\$ 0.00
Retired Participants	\$ 3,846,752.00
Terminated Participants	\$ 94,808.00
Employee Contributions	\$ <u>0.00</u>
Total Vested Benefits	\$ 3,941,560.00

Non-Vested Benefits: \$ 0.00

Total Accumulated Benefits \$ 3,941,560.00

Actuarial Present Value of Future Benefit Accruals 0.00

Active Participants \$ 0.00

Total Liabilities \$ 3,941,560.00

Low-Default-Risk Obligation Measure (LDRM)

*Total Liabilities – 5.20%** \$ 4,528,271.00

*For purposes of the LDRM, the discount rate as of the measurement date was set to 5.20%. This discount rate is based on the projected benefit payments for the Plan and the HQM Corporate Bond Yield Curve Spot Rates published as of December 31, 2024. All other assumptions and methods remained the same to measure the LDRM.



Schedule C

Development of Normal Cost January 1, 2025

1. Actuarial present value of projected benefits		
(a) Retired participants and beneficiaries	\$	3,846,752.00
(b) Terminated vested participants		94,808.00
(c) Employee contributions		0.00
(d) Total	\$	<u>3,941,560.00</u>
2. Actuarial value of assets (see Schedule A)		8,376,511.63
3. Actuarial present value of future normal costs: (1) - (2) (not less than zero)		0.00
4. Actuarial present value of future compensation		0.00
5. Normal cost accrual rate: (3) / (4)		0.00%
6. Current compensation for active participants under age 62 (nearest birthday)	\$	0.00
7. Total normal cost (ARC) as of January 1, 2025: (5) x (6)	\$	0.00



Schedule D

Summary of Principal Plan Provisions

1. **Type of Plan** - The Plan is a defined benefit plan.
2. **Effective Date** – The Plan became effective January 21, 1975.
3. **Eligibility for Participation** - All full time, non-union employees of the Beaver Valley Geriatric Center as of May 20, 1978 are eligible.

4. Definitions

Plan Year: A Plan Year is a 12-month period beginning on January 1 and ending on December 31.

Past Service: Years and portions of a year (number of days over 365) through 1971.

Future Years: The number of calendar years after 1971 during which a participant works 1,000 hours.

Accrued Benefit: A monthly benefit equal to 1.0% of Average Monthly Earnings multiplied by Past Service, plus 1.5% of Average Monthly Earnings multiplied by Future Service, reduced by any monthly amount payable from the Beaver County Retirement Plan.

Compensation: Total compensation, not to exceed that of the highest paid elected official.

Average Monthly Earnings: The total compensation of the participant in the 36 consecutive months of employment which produce the highest total, divided by 36.

5. Retirement Benefits

Normal Retirement

Normal Retirement Date: The first day of the month coincident with or next following a participant's 60th birthday.

Normal Retirement Benefit: A monthly benefit equal to the Accrued Benefit.



Schedule D – Concluded

Early Retirement

Early Retirement Date: The first day of any month after the participant has both attained age 50 and completed at least 20 Vesting Years.

Early Retirement Benefit: The Accrued Benefit commencing at age 60, or a benefit reduced by 1/180 per month for each of the first 60 months, and 1/360 per month for each additional year by which the Early Retirement Date precedes the Normal Retirement Date.

Postponed Retirement

Postponed Retirement Date: The first day of any month after the participant's Normal Retirement Date.

Postponed Retirement Benefit: The accrued benefit as of the Postponed Retirement Date.

6. Termination Benefit

Eligibility: Eight years of service.

Termination Benefit: The Accrued Benefit, with payments commencing the first day of the month coincident with or next following the participant's 60th birthday.

Death Benefits

Pre-retirement Spouse's Benefit

Eligibility: Ten years of service.

Spouse's Benefit: A lump sum equal to the actuarial present value of the participant's Accrued Benefit as of the date of his death.

Post-retirement Spouse's Benefit: None, except as provided by the election of an optional form of payment.

Disability Benefit

Eligibility: Five years of service and permanently and totally disabled in accordance with the Federal Social Security Act.

Disability Benefit: The Accrued Benefit as of the date of disability.



Schedule E

Actuarial Assumptions

Actuarial Assumptions for Cost Calculations

Interest: 7.25% per annum, compounded annually.

Salary Increases: 4.5% per annum.

Mortality: SOA Pub-2010 for general employees with female ages set forward one year with generational projection using Scale MP-2020.

Withdrawal: Withdrawal rates from Table T-2 of the Actuary's Pension Handbook were assumed. Sample rates are illustrated below:

<u>Age</u>	<u>Rates of Withdrawal</u>
25	5.3%
30	5.1
35	4.7
40	3.5
45	1.8
50	0.4

Retirement: All active employees were assumed to retire at age 62, or immediately if over age 62.

Disability: Rates of disability as adopted from 1964 OASDI experience (Males).

Disabled Life Mortality: Pragmatic Disabled Life Continuance Table.

Expenses: None.

Asset Valuation Method: Market value.

Actuarial Assumptions for Calculation of Actual Present Value of Accumulated Plan Benefits: Same as previous except no future salary or taxable wage base increases were assumed.

Actuarial Cost Methods: The Aggregate Actuarial Cost Method was used to determine liabilities and costs related to retirement termination, death and disability benefits. Under this method the value of present assets are subtracted from the present value of all future benefit payments. The difference is spread evenly over the future service of all members as a level percent of covered earnings. The normal cost includes an adjustment for gains and losses due to actuarial experience.

Benefits related to nonvested terminated participants are not valued even though benefits might be reinstated if any such participants are rehired.



Schedule E – Concluded

Actuarial Software: The valuation results were produced using an actuarial valuation system, ProVal, that is widely used within the industry. ProVal is actively used by a large number of retirement systems to perform annual funding/accounting valuations, gain and loss analyses, and cost studies. ProVal was created specifically to value pension plan liabilities and uses the applicable assumptions and methods along with the pension plan census data to produce appropriate results. Test lives are generated to review the accuracy of both the input and output, allowing users to confirm, with a high degree of accuracy, how the programmed benefit is applied to an individual along with the applicable decrements and other assumptions. The actuarial team loads the participant data, programs the benefit provisions, enters the applicable assumptions into the model, and reviews sample life output and results under the supervision of a credentialed actuary or actuaries who are proficient users of the software. We are not aware of any material limitations in the model nor any material inconsistencies in the assumptions used within the model.

Changes from Prior Valuation: None.

