DAUPHIN COUNTY EMPLOYEE RETIREMENT FUND

SUMMARY REPORT FOR 2022



PREPARED BY THE OFFICE OF THE DAUPHIN COUNTY CONTROLLER MARY K. BATEMAN, SECRETARY, DAUPHIN COUNTY RETIREMENT BOARD



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A Message from the Controller

With great pleasure, I present to you the Dauphin County Employee Retirement Fund Summary Report which contains fund activity from January 1, 2022 through December 31, 2022. I have strived to continue the work done by our previous Controller, Timothy L. DeFoor, to present this report to bring information to the public in an easy-to-understand format to improve the transparency of government activities which includes historical data and statistics.

The 2022 summary report includes a glossary at the beginning to help the reader understand important investment and pension terminology. You will also find helpful information on the County's retirement plan membership, the fund's portfolio, the fund's investments and the rate of return, fund expenses and contributions, the unfunded actuarial pension liability, and information on the investment managers for 2022.

The Dauphin County Retirement Board operates under the County Pension Law, Act of August 31, 1971, P.L. 398, No. 96, as amended, 16 P.S. §11651, et seq. As provided by law, the Retirement Board members are the three County Commissioners, the County Controller and the County Treasurer. The Chairman of the Board of Commissioners is the Chairman of the Retirement Board, and the Controller is the Secretary. The members of the Retirement Board are the trustees of the Fund and are responsible for the management and investment of the Fund.

I am truly grateful to have the opportunity to work alongside the many dedicated and hardworking employees of Dauphin County. It is an honor to be a member of the Dauphin County Retirement Board and to have the trust of the employees and retirees to serve in this capacity. It is my hope that this report provides you with a better understanding and affords you the opportunity to see exactly what is happening with the Pension Fund.



Sincerely,

Mary K. Bateman Dauphin County Controller

Dauphin County Retirement Board Members*





Chad Saylor Board Member



Mary Bateman Secretary

Mike Pries Chairman



George P. Hartwick III Board Member



Janis Creason Board Member

Terminology

<u>Actuary</u>

A professional who assesses the expected value and potential risks of pension plans by recommending appropriate actuarial assumptions and developing a pattern of future contributions to help ensure assets are available to provide the benefits when due to members.

Actuarial Assumption

An assumed rate or likelihood of an unknown future occurrence. Key actuarial assumptions for pension plans include the assumed rate of future investment returns, the assumed rates of future retirements, and the assumed rates of future mortality for members.

Actuarial Valuation

A measurement that estimates the present value of benefits that are expected to be paid from a pension plan. The estimated future benefit payments are based on the member demographics and a set of actuarial assumptions for the future experience of the plan and the members.

Appreciation

An increase in the value of an asset over time. The increase can occur for a number of reasons, including increased demand or weakening supply, or as a result of changes in inflation or interest rates. This is the opposite of depreciation, which is a decrease over time.

Fiduciary

A person or organization that acts on behalf of another person or persons to manage assets. Essentially, a fiduciary owes to that other entity the duties of good faith and trust. The highest legal duty of one party to another, being a fiduciary requires being bound ethically to act in the other's best interests.

Fixed-Income Investments

A type of investment in which real return rates or periodic income is received at regular intervals and at reasonably predictable levels. Fixed-income investments can be used to diversify one's portfolio, as they pose less risk than equities and derivative investments. Retired individuals tend to invest heavily in fixed-income investments because of the reliable returns they offer.

<u>Fund Custodian</u>

A financial institution that holds customers' securities for safekeeping so as to minimize the risk of their theft or loss. A custodian holds securities and other assets in electronic or physical form. Since they are responsible for the safety of assets and securities that may be worth hundreds of millions or even billions of dollars, custodians tend to be large and reputable firms. A custodian is sometimes referred to as a "custodian bank."

Market Value

The price an asset would fetch in the marketplace. Market value is also commonly used to refer to the market capitalization of a publicly traded company and is obtained by multiplying the number of its outstanding shares by the current share price.

Net Position

The value of one's investment position, calculated as the position's market value less the initial cost of entering that position.

Present Value

The current value of a future sum of money or stream of cash flows given a specified interest rate, commonly referred to as the discount rate or the investment return rate. For a pension plan, a lower discount rate or investment return rate will increase the present value of future benefit payments and require additional expected contributions to fund the benefits. Determining an appropriate discount rate is key to properly valuing future benefits.

Rate of Return

The net gain or loss on an investment over a specified time period, expressed as a percentage of the investment's initial cost plus any additional contributions or minus any withdrawals. Gains on investments are defined as income received plus any capital gains realized on the sale of the investment.

Volatility

A statistical measure of the dispersion of returns for a given security or market index. In most cases, the higher the volatility, the riskier the security. Volatility is usually measured using the standard deviation of returns. Usually, the higher the volatility, the riskier the security.

Yield

The income return on an investment, such as the interest or dividends received from holding a particular security. The yield is usually expressed as an annual percentage rate based on the investment's cost, current market value, or face value. Yields may be considered known or anticipated depending on the security in question as certain securities may experience fluctuations in value.

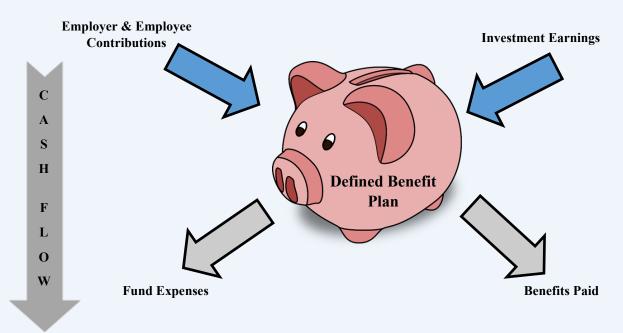
*Many terms and definitions in the Glossary of Terminology were sourced from Investopedia.com

Defined Benefit Pension Plan

The Dauphin County Retirement Trust Fund (Fund) is a single employer contributory defined benefit plan covering all full-time employees of the County and part-time employees exceeding 1,000 hours per year. Management of the Fund is vested in the Retirement Board, which consists of five members: the three County Commissioners, the County Controller, and the County Treasurer. The Plan provides retirement, disability, and death benefits to its members and their beneficiaries.

The pension plan is identified as a "defined benefit" plan because it provides a benefit that is specified by a calculation that accounts for length of employment, salary history, and benefit class. A defined benefit plan differs from a defined contribution plan as employees are provided a specific benefit upon retirement. Additionally, retirement benefits for plan members are calculated as a percentage of the member's highest 3-year average salary multiplied by the member's years of service multiplied by class basis. Annual County contributions are calculated and recommended by the County's actuary.

In addition to the county benefits, employees contribute a minimum 5% of annual pay, which provides an additional employee benefit "cash balance." Employees may also choose to contribute up to an additional 10% of gross pay after taxes. Plan members with 20 years of service are eligible to retire at age 55, while any plan member that has attained age 60 is eligible to retire. All plan members are eligible for disability benefits after 5 years of service if disabled while in service and unable to continue as a County employee. Disability retirement benefits are equal to 25% of the highest average salary at the time of retirement. The death benefits for a member who dies with 10 years of service prior to retirement is the total present value of the member's retirement paid in a lump sum.



Plan Membership Status

The graph below displays membership status for employees participating in the plan from 2019 through 2022. At December 31, 2022 there were 1,326 active members, 1,291 retired members or beneficiaries currently receiving benefits, and 301 are terminated Plan participants entitled to but not yet receiving benefits.

Active member- An individual currently employed by the County that is contributing to the Pension Plan. An active member does not include a member receiving disability benefits.

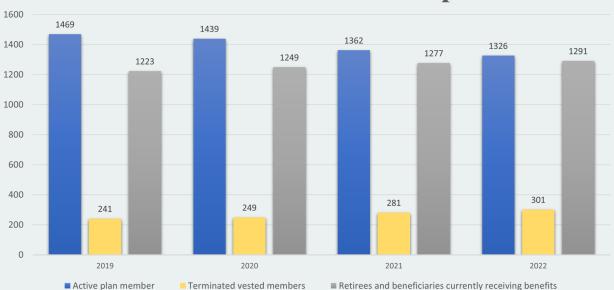
• Includes full time employees and part time employees exceeding 1,000 hours per year

Terminated vested member- Former employee who earned vested benefits by working for five (5) years or more has terminated employment with the County and is not yet receiving retirement benefits.

• Such participants can receive benefit payments from the Plan once they reach the Plan's normal retirement age or, if the Plan allows, the Plan's early retirement age

Retiree/beneficiary- A Plan member who is retired and receiving benefits, or their beneficiary.

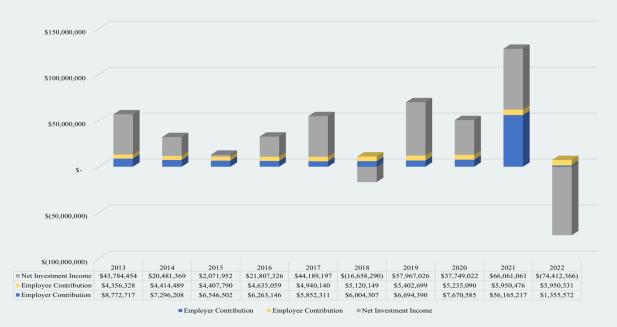
• Eligible for retirement at age 60, or age 55 with 20 years of credited service



Retirement Plan Membership Status

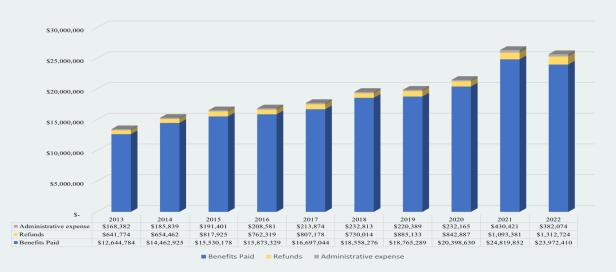
Pension Plan Cash Flow Additions by Type

In 2022, Dauphin County reported total Pension Plan additions of (\$67,106,262). The net negative additions consist of net investment income, employee contributions, and employer contributions. The primary reason for the negative additions was the negative net investment income of (\$74,412,366). This amount decreased by 152.4% since 2021.



Deductions by Type

Dauphin County has accounted for a total of \$25,667,208 in deductions for the year 2022, a value 2.6% less than expenses from the previous year. These deductions are broken into the categories of benefits paid, refunds, and administrative expenses.



Cost of Living Adjustment (COLA)

The cost-of-living adjustment is an increase to a retiree's pension payment to account for inflation. The cost-of-living must be reviewed at least once in every three (3) years and adjustments are provided at the discretion of the Dauphin County Employees' Retirement Board. Only pension plans with an 80% or higher funded ratio can approve a COLA. The Board granted its first cost-of-living increase in January of 1972, and since then as follows:

| Effective Dates of Increase | | |
|--|--|--|
| 1/1/1973 2/1/1975 7/1/1979 1/1/1985 1/1/1992 1/1/1997 | 1/1/1998 1/1/1999 1/1/2006 1/1/2007 1/1/2019 | |

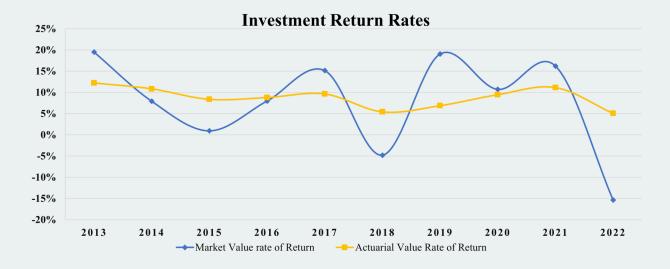
Although no COLA was approved for 2022, the estimated adjustment would have been 8.1%. This adjustment would have increased the amount payable to those members who retired in 2021 and prior years by \$16,403,466. To fund this adjustment, the County's actuarially determined contribution would have increased by \$4,027,469 for each year over a five (5) year period, beginning with 2023 contributions. This funding requirement would have also increased the present value of future benefits for retired members.

| 2021 COLA Calculation | | | | |
|--|--|--|--|--|
| Step 1. | $(294.130)^{\mathrm{A}} - (272.044)^{\mathrm{B}} = 22.086$ | Calculation for the change in CPI from August 31, 2021 to August 31, 2022. These figures reflect the average CPI for the 12-month period ending August 31. | | |
| Step 2. | 22.086 / 272.044 = .081 x 100 = 8.1% COLA | Taking the figure from step 1, divide it by the CPI from the earlier year. Multi- ply by 100 to calculate percentage change and arrive at COLA. | | |
| Applying COLA to Benefits | | | | |
| Step 3. (1.081) x (Monthly Benefit Payment) = Adjusted Benefit Payment Taking the COLA as a decimal, add 1 to represent your current monthly payment. Multiply by monthly payment to arrive at adjusted payment. | | | | |
| A: 294.130 = 12 Month Average CPI Ending August 31, 2022 B: 272.044 = 12 Month Average CPI Ending August 31, 2021 | | Data derived from Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U) for the PA, NJ, DE, & MD areas. | | |

History of Investment Returns

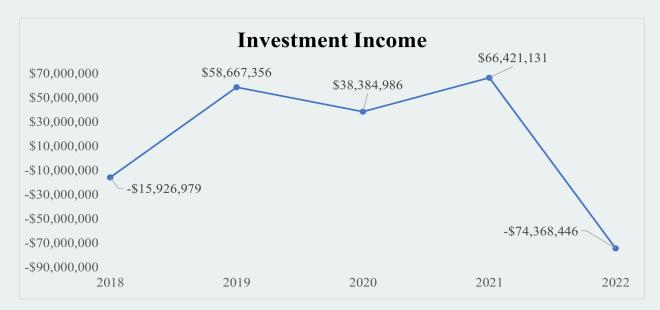
As of December 31, 2022, the market value of the investment portfolio was \$400,770,868. In 2022 the portfolio experienced a net investment loss of (\$92,773,470). In 2022, the economy experienced rising inflation with the Federal Reserve increasing interest rates to try and slow down the economy. In 2022, the real GDP decreased 2.1% compared to an increase of 5.7% in 2021, which combined with the war in Ukraine, rising inflation, and increasing interest rates caused the market to contract producing a loss in the portfolio. Growth had been improving coming out of the pandemic period accounting for a 16.2% return for 2021, but the effects of market conditions resulted in a -15.35% return in 2022.

Throughout the past 10 years, from 2013 to 2022, the plan averaged a market value rate of return of 7.7%. From 2018 to 2022, a span of 5 years, the average rate of return was 5.2%. Within the past 3 years, the plan realized an average rate of return of 3.9%.



Schedule of Investment Returns

For the year ending December 31, 2022, the County's Fund had an investment loss of (\$74,368,446). This compares to a 2021 investment gain of \$66,421,131.



Schedule of Investment Related Expenses

Investment related expenses include fees paid to Investment Managers, the Fund Custodian, and various consulting fees. For the year ending December 31, 2022, the County's "out of pocket" investment expenses were \$43,920 compared to \$360,070 in 2021.



Statement of Changes in Fiduciary Net Position

County of Dauphin, Pennsylvania

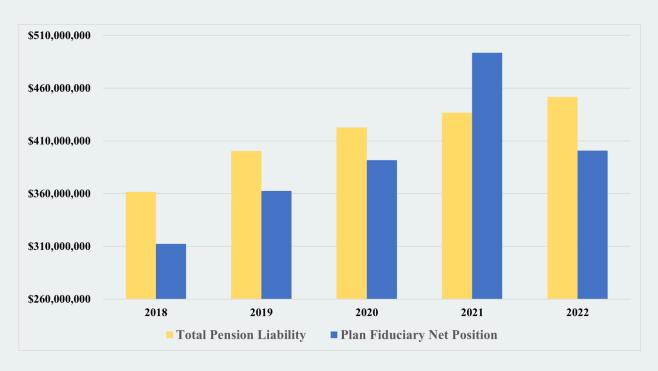
Year Ended December 31, 2022

| Additions: | |
|--|--------------------|
| Contributions: | |
| County | \$ 1,355,572 |
| Plan Members | 5,950,531 |
| Total Contributions | 7,306,103 |
| Investment Income: | |
| Net Loss in Fair Value of Investments | \$ (83,179,769) |
| Interest | 8,811,314 |
| Dividends | 10 |
| Net Accrued Interest/ Other | 0 |
| Total Investment Income | (74,368,445) |
| Less: Investment Expense | 43,920 |
| Net Investment Income | (74,412,365) |
| Total Additions | (67,106,262) |
| Deductions: | |
| Pension Benefits | \$ 23,972,410 |
| Refunds of Member Contributions | 1,312,724 |
| Administrative Expenses | 382,074 |
| Total Deductions | 25,667,208 |
| Increase in Net Position | (92,773,470) |
| Net Assets Held In Trust For Pension Benefits: | |
| Beginning of Year | \$ 493,544,339 |
| End of Year | \$ 400,770,868 |

Statement of Plan Assets

December 31, 2022

| Assets | | 2022 Totals |
|--------------------------------------|--------|-------------|
| Cash and Cash Equivalents | \$ | 19,825,423 |
| Investment by Fain Value Level. | | |
| Investment by Fair Value Level: | | |
| International Equities | | 99,970,024 |
| Equity Funds | | 172,158,573 |
| Fixed Income Mutual Funds | | 53,987,798 |
| Real Estate/Alternative | | 54,968,262 |
| | - | 381,084,657 |
| | | |
| Interest and Dividend Receivable | | 67,382 |
| Employee Contribution Receivable | | 2,321 |
| | - | 69,703 |
| | | |
| Benefits Payable | | (208,915) |
| | - - | |
| Total Assets as of December 31, 2022 | \$ | 400,770,868 |

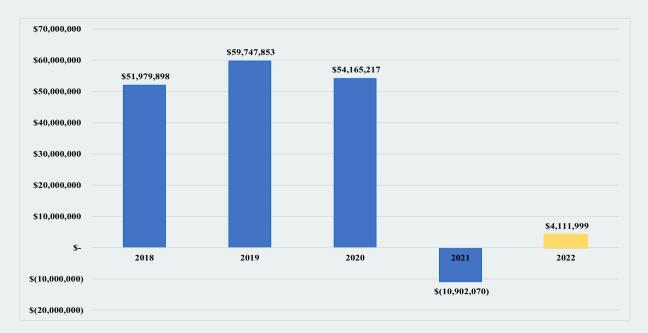


County's Net Pension Liability

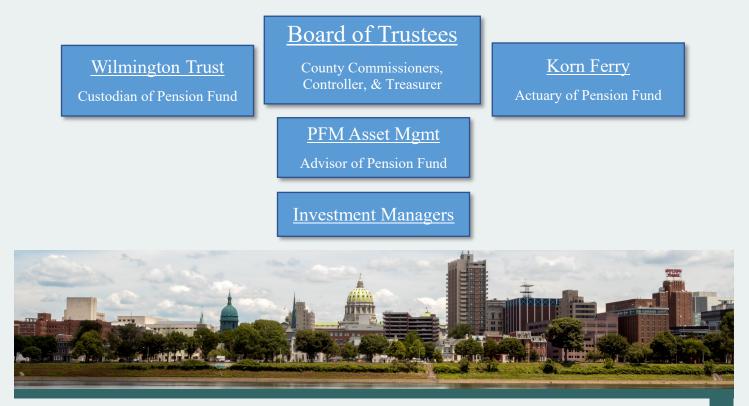
See Page 42 in the Annual Comprehensive Financial Report for more information.

Unfunded Actuarial Pension Liability

The chart below shows the unfunded actuarial pension liability since 2018. An actuarial pension liability occurs when the total future calculated benefits of the participants in the pension plan is greater than the actuarial assets in the pension plan. The chart below shows an unfunded liability amount of \$4,111,999 at December 31, 2022. The plan is 99.1% funded at December 31, 2022.



Pension Plan Management Structure

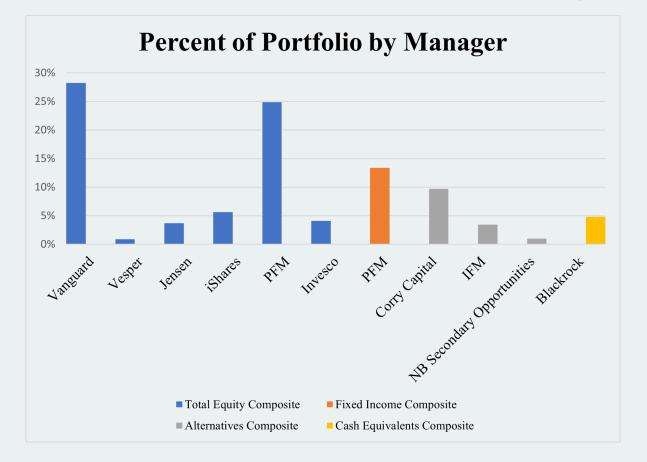


Dauphin County Pension Plan Portfolio

Asset Allocation by Percentage As of December 2022

| Asset Allocation Type | Percentage Allocated |
|--------------------------|----------------------|
| U.S. Equity | 39.1 |
| Global Equity | 24.9 |
| U.S. Fixed Income | 13.4 |
| Life Settlement | 9.7 |
| Growth | 3.7 |
| Infrastructure | 3.4 |
| Private Equity | 1.0 |
| Cash Equivalent | 4.8 |

The primary principle behind portfolio allocation is to minimize risk and maximize returns. Risk is broadly defined as the chance that the return on an investment will differ from the expected rate of return. In this case, risk accounts for the variance of expected contributions, volatility of investments, and the standard deviation of plan returns. The plan's current allocation of assets is mostly a factor of meeting the assumed rate of return and doing so at



2022 Dauphin County Retirees

Theresa Adigwu Ben Akwanoo Mary Almy Pamela Arboast James Beard Nancy Bechtel **Douglas Boswell** Paul Boyer Gary Branch Matthew Burns Dann Caldwell Barbara Carlton Thomas Cassell Sandra Crankfield Janis Creason Susan Crouser Jerome Curtis Anthony DiFrancesco Lynn Farina Tina Fissel Harry Folkes **Ricky Foose** Melissa Frank Robert Fry Jr. Dwayne Garfield Sr. Gary Grenoble

Laura Heemer. **Crystal Hitchcock** Todd Hostetter Martin Isaacman Charles Johnson James Karl Carol Kiner Paul Kompare Kathy Koppenhaver Noime Legrand Scott Lewis Robert Lucas Christine Malone Sharon Manton Clair Martin Jr. Jodie Martin Theresa McGeehan Diane McNaughton Michael Miller Sandra Moore Rebecca Murcia Alfy Narouz-Gerges Christina Pollard John Popp Jr. Lesa Rittner Kim Robison

Renee Robison **Robert Runkle Stefany Scales** Diane Scheidler Clara Schucker Joseph Senior **Douglas Senott** Debra Shope Steven Smith Thomas Swank Jr. **Robert Swords** Marianne Tadych John Torres Kenneth Via Brian Wagner Joel Ward Michael Welker Marlene Williams Mark Willits Kevin Winter Lorenzo Woodard

Thank you for your service!



The information contained within this report was compiled from the Dauphin County Employees' Retirement System Quarterly Performance Reports produced by PFM Asset Management, Dauphin County Retirement Trust Fund reports produced by Zelenkofske Axelrod LLC, and Actuarial Valuation reports produced by Korn Ferry.

DISCLAIMER: The sources of information used in this report are believed to be reliable. Dauphin County has not independently verified all of the information and its accuracy cannot be guaranteed. Opinions, estimates, projections and comments constitute our judgement and are subject to change without notice. References to specific securities are for illustrative purposes only and do not constitute recommendations. Past Performance does not guarantee future results.