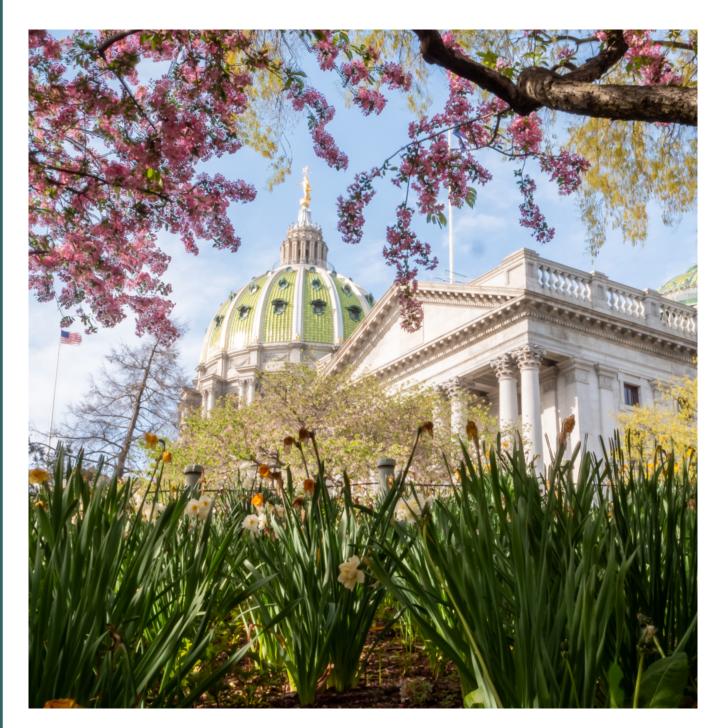
DAUPHIN COUNTY EMPLOYEE RETIREMENT FUND

SUMMARY REPORT FOR 2023



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



Table of Contents



Message from the Controller
Dauphin County Retirement Board Members
Terminology
Defined Benefit Pension Plan 6
Plan Membership Status 7
Pension Plan Cash Flow 8
Cost of Living Adjustment9
History of Investment Return
Schedule of Investment Income & Expenses11
Statement of Changes in Fiduciary Net Position
Statement of Plan Assets
Pension Plan Management Structure 14
Dauphin County Pension Plan Portfolio15
2023 Dauphin County Retirees

A Message from the Controller

It is with great pleasure that I present the Dauphin County Employee Retirement Fund Summary Report, which covers fund activity from January 1, 2023, through December 31, 2023. I have worked diligently to continue the efforts of our former Controller, Timothy L. DeFoor, in presenting this report in a clear and accessible format. Our goal is to enhance transparency in government activities by making this information easier to understand, including historical data and statistics.

The 2023 report includes a glossary to help readers familiarize themselves with key investment and pension terminology. Additionally, it offers detailed information on the County's retirement plan membership, the fund's portfolio, investments, rate of return, fund expenses, contributions, and the unfunded actuarial pension liability.

The Dauphin County Retirement Board operates in accordance with the County Pension Law, Act of August 31, 1971, P.L. 398, No. 96, as amended, 16 P.S. §11651, et seq. The Board consists of the three County Commissioners, the County Controller, and the County Treasurer. The Chairman of the Board of Commissioners serves as the Chairman of the Retirement Board, with the Controller acting as Secretary. As trustees of the Fund, the members of the Retirement Board are responsible for its management and investments.

I am truly grateful for the opportunity to work alongside the dedicated and hard-working employees of Dauphin County. It is an honor to serve as a member of the Dauphin County Retirement Board, and I deeply appreciate the trust placed in me by both employees and retirees. My hope is that this report provides you with a clearer understanding of the Pension Fund and offers insight into its current status.



Sincerely,

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Mary K. Bateman Dauphin County Controller

Dauphin County Retirement Board Members*



Mike Pries Chairman



Chad Saylor Board Member



George P. Hartwick III Board Member



Mary Bateman Secretary



Vincent Paese Acting 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.

Fund Custodian

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.

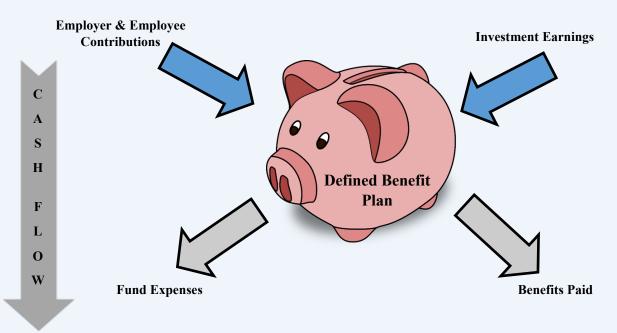
*Many terms and definitions in the Glossary of Terminology were sourced from Investopedia.com

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 2020 through 2023. At December 31, 2023 there were 1,307active members, 1,341 retired members or beneficiaries currently receiving benefits, and 321 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

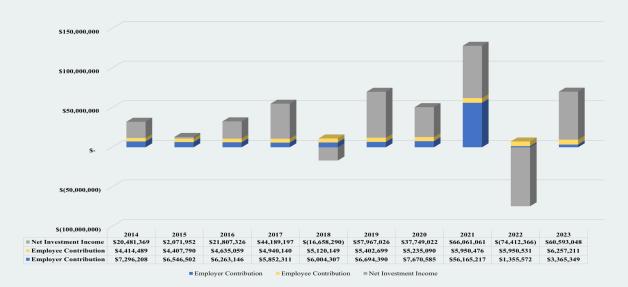


Retirement Plan Membership Status

Pension Plan Cash Flow

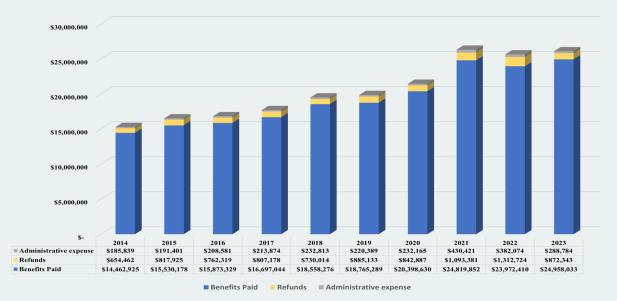
Additions by Type

In 2023, Dauphin County reported total Pension Plan additions of \$70,215,608. The net positive additions consist of net investment income, employee contributions, and employer contributions. The primary reason for the positive additions was the net investment income of \$60,593,048. This amount increased by 181.4% over 2022.



Deductions by Type

Dauphin County has accounted for a total of \$26,119,160 in deductions for the year 2023, a value 1.8% more 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		

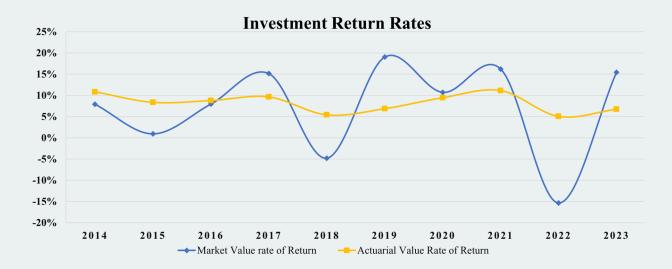
Although no COLA was approved for 2023, the estimated adjustment would have been 3.9%. This adjustment would have increased the amount payable to those members who retired in 2022 and prior years by \$8,146,017. To fund this adjustment, the County's actuarially determined contribution would have increased by \$2,000,055 for each year over a five (5) year period, beginning with 2024 contributions. This funding requirement would have also increased the present value of future benefits for retired members.

2023 COLA Calculation				
Step 1.	$(305.742)^{A} - (294.130)^{B} = 11.612$	Calculation for the change in CPI from August 31, 2022 to August 31, 2023. These figures reflect the average CPI for the 12-month period ending August 31.		
Step 2.	11.612 / 294.130 = .039 x 100 = 3.9% 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. (1.039) x (Monthly Benefit Payment) = Adjusted Benefit PaymentTaking the COLA as a decimal, add 1 to represent your current month payment. Multiply by monthly payment to arrive at adjusted payment.				
	= 12 Month Average CPI Ending August 31, 2023= 12 Month Average CPI Ending August 31, 2022	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

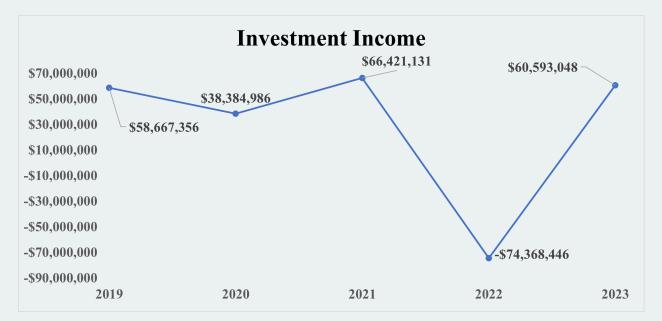
As of December 31, 2023, the market value of the investment portfolio was \$444,867,316. In 2023 the portfolio experienced a net investment gain of \$44,096,448. During 2023, the economy experienced continued rising inflation, although year over year inflation increases continued dropping, the Federal Reserve continued raising interest rates to try and slow down the economy. In 2023, the real GDP increased 2.5% compared to an decrease of 1.9% in 2022. A combination of the stronger economy, slowing inflation and a strong labor market, consumer confidence improved helping fuel an increase in the markets, although, the driving force behind market gains were the Info Tech and Telecom sectors during 2023. Growth took a -15.35% dip in 2022, but rebounded strongly with a 15.44% gain in 2023.

Throughout the past 10 years, from 2014 to 2023, the plan averaged a market value rate of return of 7.3%. From 2019 to 2023, a span of 5 years, the average rate of return was 9.2%. Within the past 3 years, the plan realized an average rate of return of 5.4%.



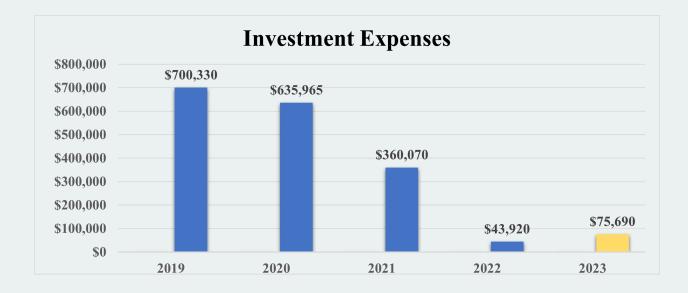
Schedule of Investment Returns

For the year ending December 31, 2023, the County's Fund had an investment gain of \$60,593,048. This compares to a 2022 investment loss of (\$74,368,446).



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, 2023, the County's "out of pocket" investment expenses were \$75,690 compared to \$43,920 in 2022.



Statement of Changes in Fiduciary Net Position

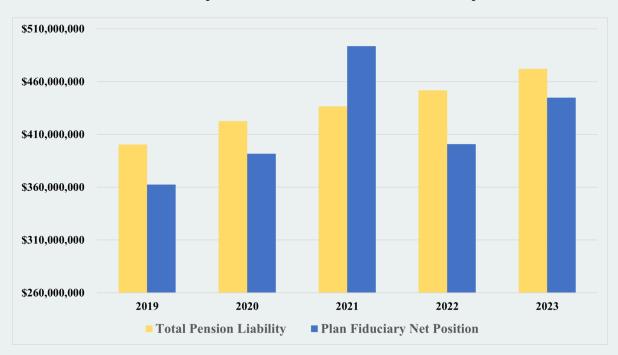
County of Dauphin, Pennsylvania Year Ended December 31, 2023

Additions:		
Contributions:		
County	\$	3,365,349
Plan Members		6,257,211
Total Contributions	_	9,622,560
Investment Income:		
Net Gain in Fair Value of Investments	\$	50,868,172
Interest		7,620,931
Dividends		15
Net Accrued Interest/ Other		2,103,930
Total Investment Income		60,593,048
Less: Investment Expense		75,690
Net Investment Income		60,517,358
Total Additions		70,139,918
Deductions:		
Pension Benefits	\$	24,958,033
Refunds of Member Contributions		872,343
Administrative Expenses		288,784
Total Deductions		26,119,160
Increase in Net Position		44,096,448
Net Assets Held In Trust For Pension Benefits:		
Beginning of Year	\$	400,770,868
End of Year	\$	444,867,316

Statement of Plan Assets

December 31, 2023

Assets		2023 Totals
Cash and Cash Equivalents	\$	4,470,314
Investment by Fair Value Level:		
Global Funds		116,763,899
Equity Funds		208,263,301
Partnerships		53,015,766
Fixed Income Funds		62,909,396
		445,422,676
Interest and Dividend Receivable		18,771
Employee Contribution Receivable and Other Assets	_	6,676
		25,447
Benefits Payable		(580,807)
Total Assets as of December 31, 2023	\$	444,867,316

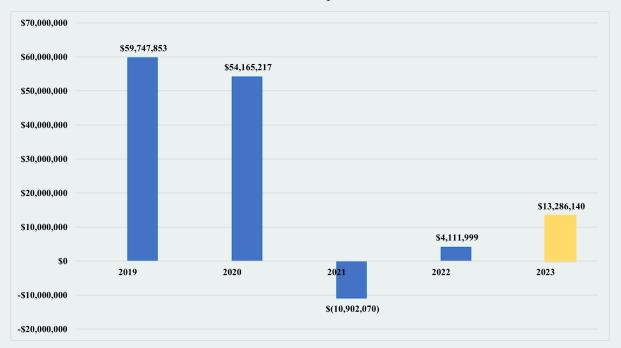


County's Net Pension Liability

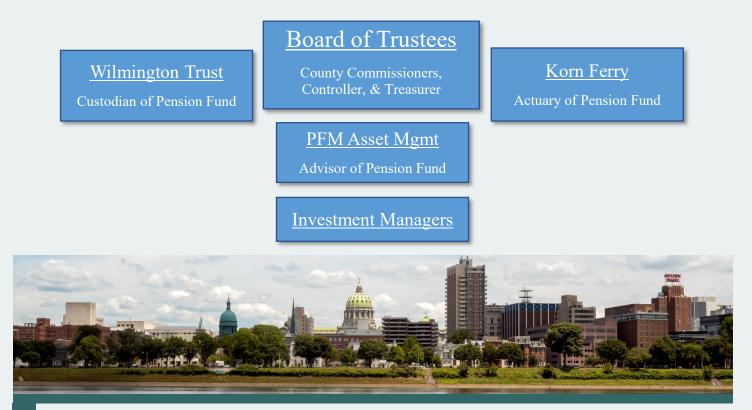
See Page 42 in the Annual Comprehensive Financial Report for more information.

Unfunded Actuarial Pension Liability

The chart below shows the unfunded actuarial pension liability since 2019. 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 \$13,286,140 at December 31, 2023. The plan is 97.2% funded at December 31, 2023.



Pension Plan Management Structure



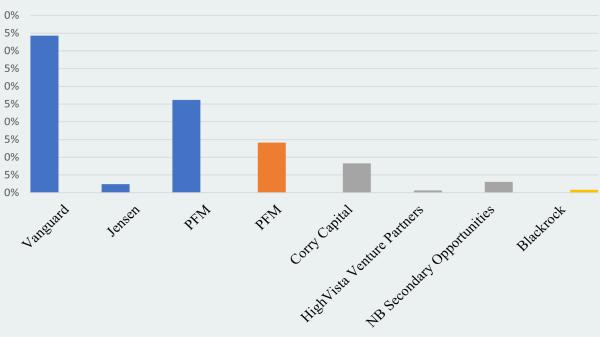
Dauphin County Pension Plan Portfolio

Asset Allocation by Percentage

As of December 2023

Asset Allocation Type	Percentage Allocated
U.S. Equity	44.3
Global Equity	26.2
U.S. Fixed Income	14.1
Life Settlement	8.3
Growth	2.4
Private Equity	3.8
Cash Equivalent	0.9

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 the lowest level of risk.



Percent of Portfolio by Manager

Total Equity Composite Fixed Income Composite Alternatives Composite Cash Equivalents Composite

2023 Dauphin County Retirees

Tammy Adams John Addison Jr Daniel Allen Jennifer Balthaser Cathy Blecker Steven Charest John Duignan Brenda Fazzolari Kelly Gallatin Anthony Goles Jr John Goshert Edison Grove Julia Hair Todd Hall Cheryl Hansberry Derek Harter Lori Henninger **Cheryl Holmes** Patrick Horner Marlin Hudson Ryan Jackson Todd Johnson Elva Jones

Keith Kepler **Richard Kohl** Jaime Leone Sherri Magnuson Stefano Malfara Chad McConnell Meleva Mcfadden **Edward Miller** George Miller III Nan Miller Pamela Miller Jackyann Murphy Marlene Nailor Jeffrey Noggle Emil Notarfrancesco Teri Ozog Norman Patterson Treasa Perrier Jodi Pottiger **Ronica Pouncy Doris Ramos** Robert Ream **Richard Reiner**

James Rettinger Maria Reyes Michael Rozman Michelle Schaaf Richard Shaw Stephen Snesavage Gregory Spence Wendy Sponsler Jean Staznik Ronna Valerio Wendelin Weaver Carter

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.