

DAUPHIN COUNTY EMPLOYEE RETIREMENT FUND

SUMMARY REPORT FOR 2021



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, 2021 through December 31, 2021. I am working to continue the work done by our previous Controller, Timothy L. DeFoor. He began presenting this report to bring information to the public in an easy-to-understand format to improve the transparency of government activities, including historical data and statistics.

The 2021 summary report includes a glossary at the beginning to help the reader understand the 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 2021.

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 with such an awe-inspiring group of employees. 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,

A handwritten signature in black ink that reads "Mary K. Bateman". The signature is fluid and cursive, with a large loop at the end.

Mary K. Bateman
Dauphin County Controller

Dauphin County Retirement Board Members*



Mike Pries
Chairman



Chad Saylor
Board Member



George P. Hartwick III
Board Member



James Markel
Acting Secretary



Janis Creason
Board Member

* Board Members as of December 31, 2021

Terminology

Actuary

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.

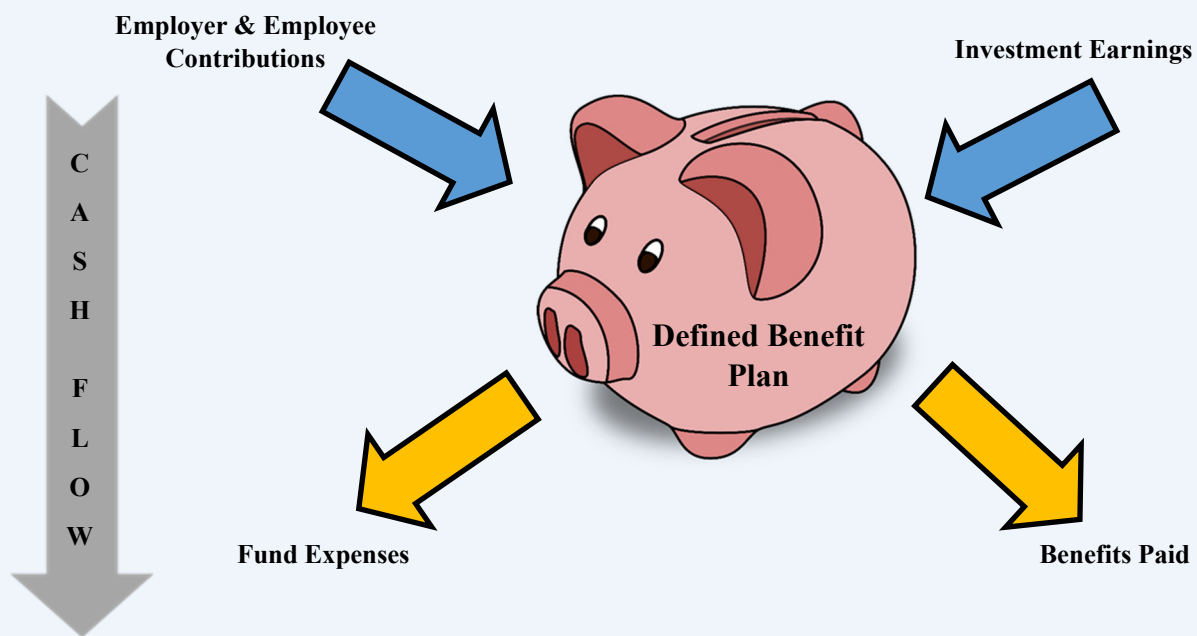
*Many terms and definitions in the Glossary of Terminology were sourced from Investopedia.com

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 2018 through 2021. As of December 31, 2021, there were 2,933 Plan members. Of these members, 1,469 were active members, 1,223 were retired members or beneficiaries currently receiving benefits, and 241 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

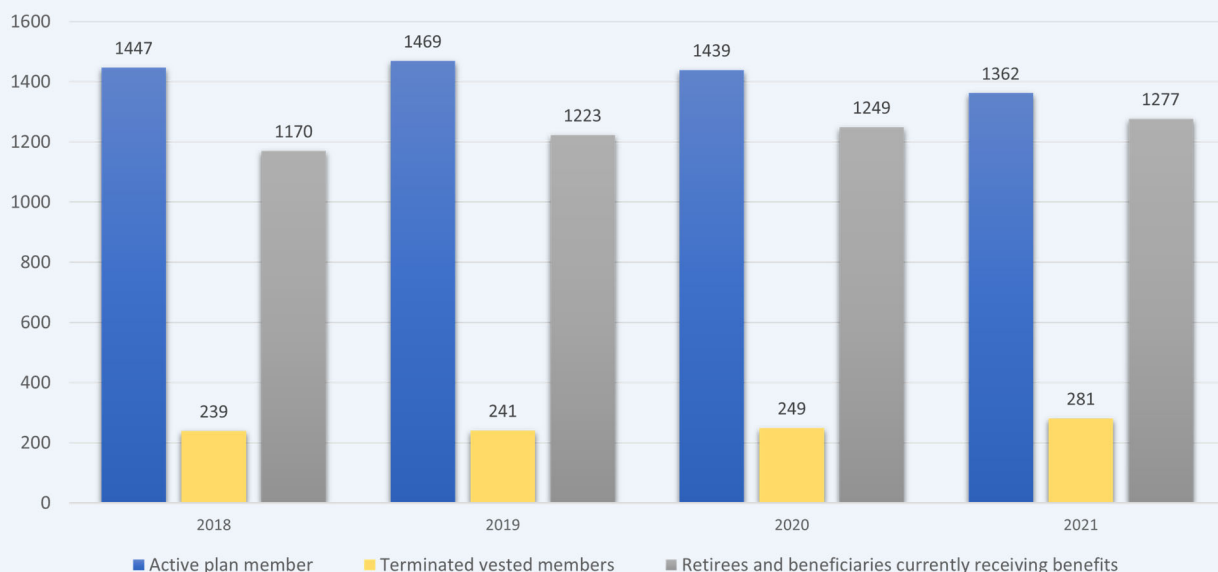
Terminated vested member- Former employee who earned vested benefits by working for five (5) years or more has terminated employment with the County and is not yet receiving retirement benefits.

- 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

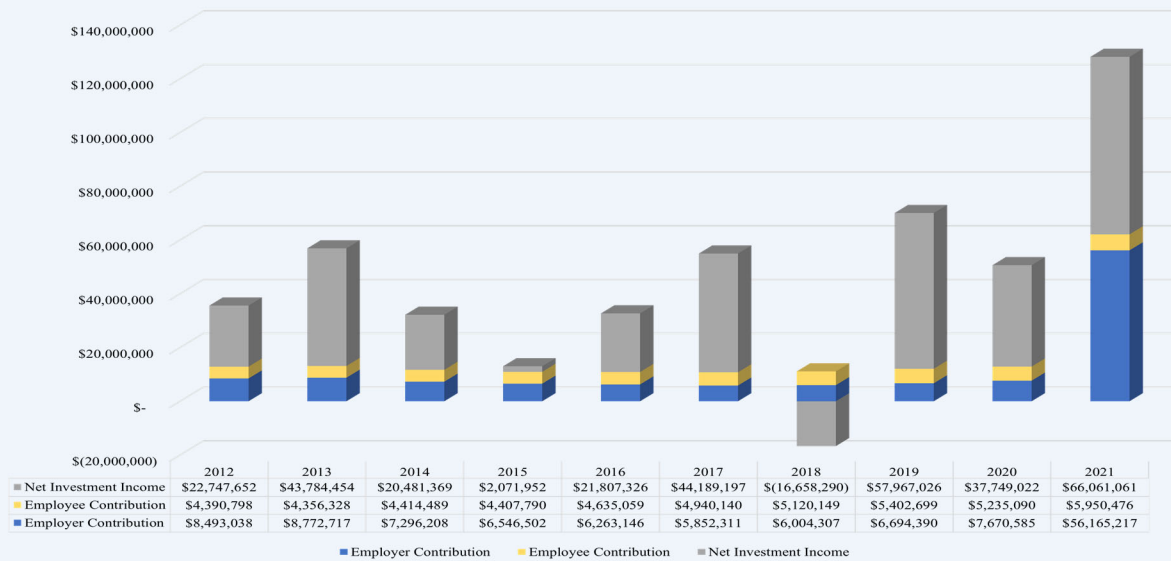
Retirement Plan Membership Status



Pension Plan Cash Flow

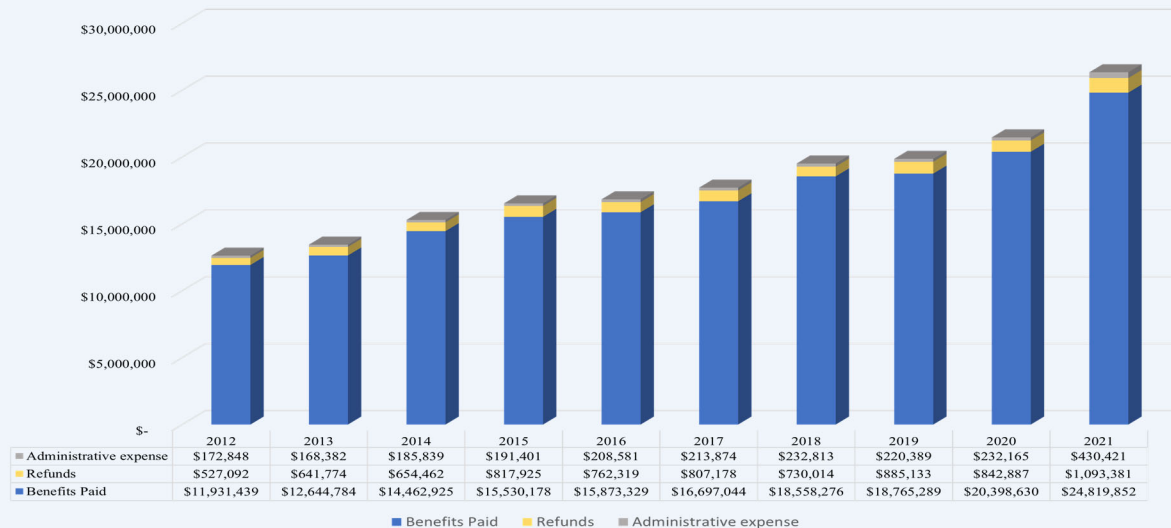
Additions by Type

In 2021, Dauphin County reported total Pension Plan additions of \$128,176,754. The additions consist of net investment income, employee contributions, and employer contributions. Employer contributions included a pension obligation bond issued to put money into the Fund equal to the unfunded pension liability. This amount increased by 150.6% since 2020.



Deductions by Type

Dauphin County has accounted for a total of \$26,343,654 in deductions for the year 2021, a value 20.8% greater 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	1/1/1998
2/1/1975	1/1/1999
7/1/1979	1/1/2006
1/1/1985	1/1/2007
1/1/1992	1/1/2019
1/1/1997	

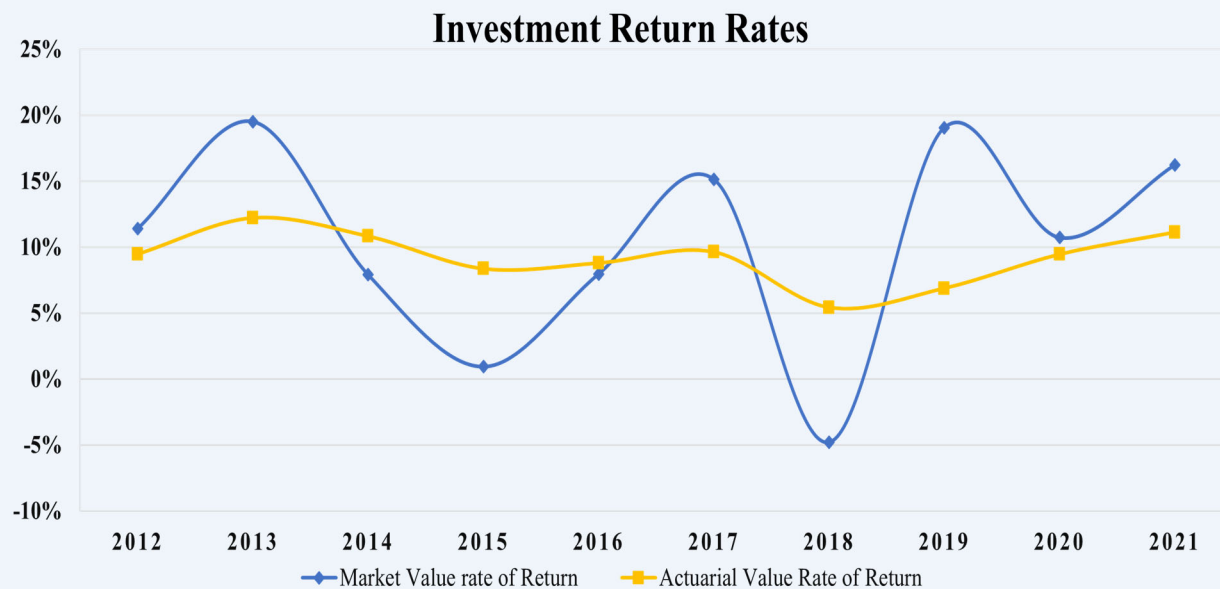
Although no COLA was approved for 2021, the estimated adjustment would have been 4.6%. This adjustment would have increased the amount payable to those members who retired in 2020 and prior years by \$8,287,581. To fund this adjustment, the County’s actuarially determined contribution would have increased by \$2,034,812 for each year over a five (5) year period, beginning with 2022 contributions. This funding requirement would have also increased the present value of future benefits for retired members.

2021 COLA Calculation	
Step 1. $(272.044)^A - (259.965)^B = 12.079$	Calculation for the change in CPI from August 31, 2020 to August 31, 2021. These figures reflect the average CPI for the 12-month period ending August 31.
Step 2. $12.079 / 259.965 = .046 \times 100 = 4.6\% \text{ COLA}$	Taking the figure from step 1, divide it by the CPI from the earlier year. Multiply by 100 to calculate percentage change and arrive at COLA.
Applying COLA to Benefits	
Step 3. $(1.046) \times (\text{Monthly Benefit Payment}) = \text{Adjusted Benefit Payment}$	Taking the COLA as a decimal, add a 1 to represent your current monthly payment. Multiply by monthly payment to arrive at adjusted payment.
A: 272.044 = 12 Month Average CPI Ending August 31, 2021 B: 259.965 = 12 Month Average CPI Ending August 31, 2020	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

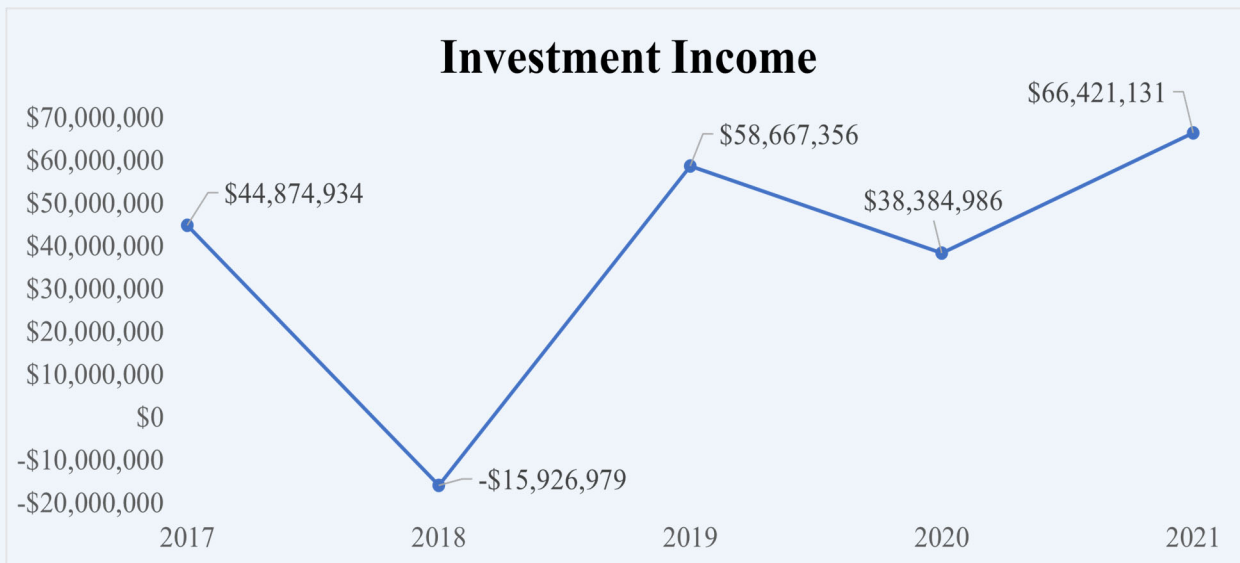
As of December 31, 2021, the market value of the investment portfolio was \$493,544,339. In 2021 the portfolio experienced a net investment gain of \$101,833,100. In 2021, the economy continued to prosper aided by the Federal Reserve injecting liquidity into the market and keeping interest rates low throughout the year. In 2021, the real GDP increased 5.7% compared to a decrease in 2020, which all helped the investment market produce a positive rate of return. Also, in 2021 the Board of Commissioners approved issuing a general obligation bond in which the proceeds were put into the retirement fund for the purpose of reducing the unfunded actuarial pension liability, which is part of the investment gain for 2021.

With growth improving during 2021, the investment portfolio had a 16.2% return for the year. Throughout the past 10 years, from 2012 to 2021, the plan averaged a market value rate of return of 10.4%. From 2017 to 2021, a span of 5 years, the average rate of return was 11.3%. Within the past 3 years, the plan realized an average rate of return of 15.3%.



Schedule of Investment Returns

For the year ending December 31, 2021, the County's Fund had an investment gain of \$66,421,131. This compares to a 2020 investment gain of \$38,384,986.



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, 2021, the County's "out of pocket" investment expenses were \$360,070 compared to \$635,965 in 2020.



Statement of Changes in Fiduciary Net Position

County of Dauphin, Pennsylvania

Year Ended December 31, 2021

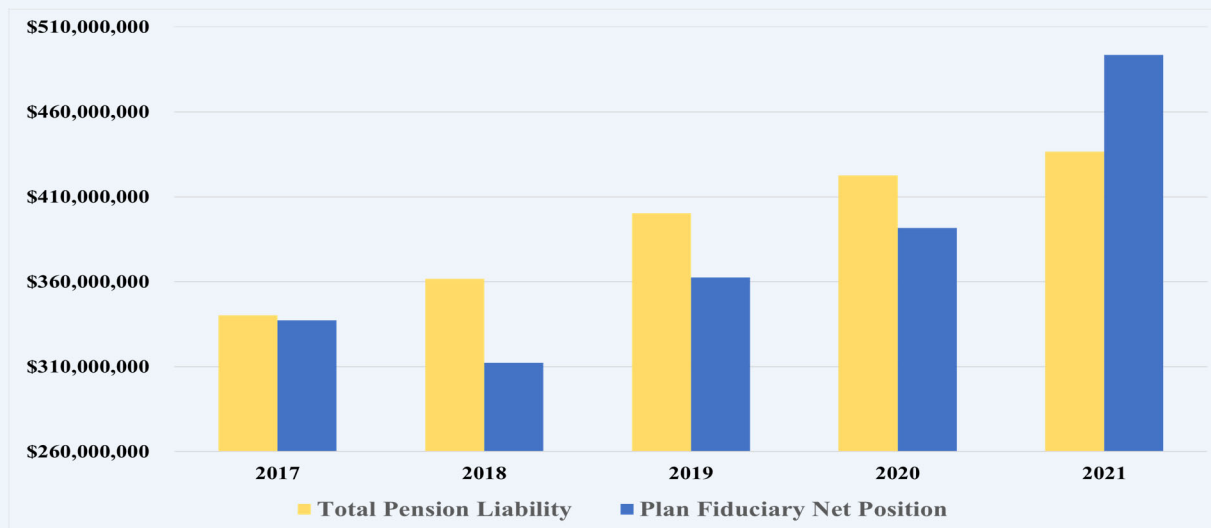
Additions:	
Contributions:	
County	\$ 56,165,217
Plan Members	5,950,476
Total Contributions	<u>62,115,693</u>
Investment Income:	
Net Gain in Fair Value of Investments	\$ 60,985,258
Interest	5,435,859
Dividends	14
Net Accrued Interest/ Other	0
Total Investment Income	<u>66,421,131</u>
Less: Investment Expense	360,070
Net Investment Income	<u>66,061,061</u>
Total Additions	<u>128,176,754</u>
Deductions:	
Pension Benefits	\$ 24,819,852
Refunds of Member Contributions	1,093,381
Administrative Expenses	430,421
Total Deductions	<u>26,343,654</u>
Increase in Net Position	<u>101,833,100</u>
Net Assets Held In Trust For Pension Benefits:	
Beginning of Year	\$ 391,711,239
End of Year	<u>\$ 493,544,339</u>

Statement of Plan Assets

December 31, 2021

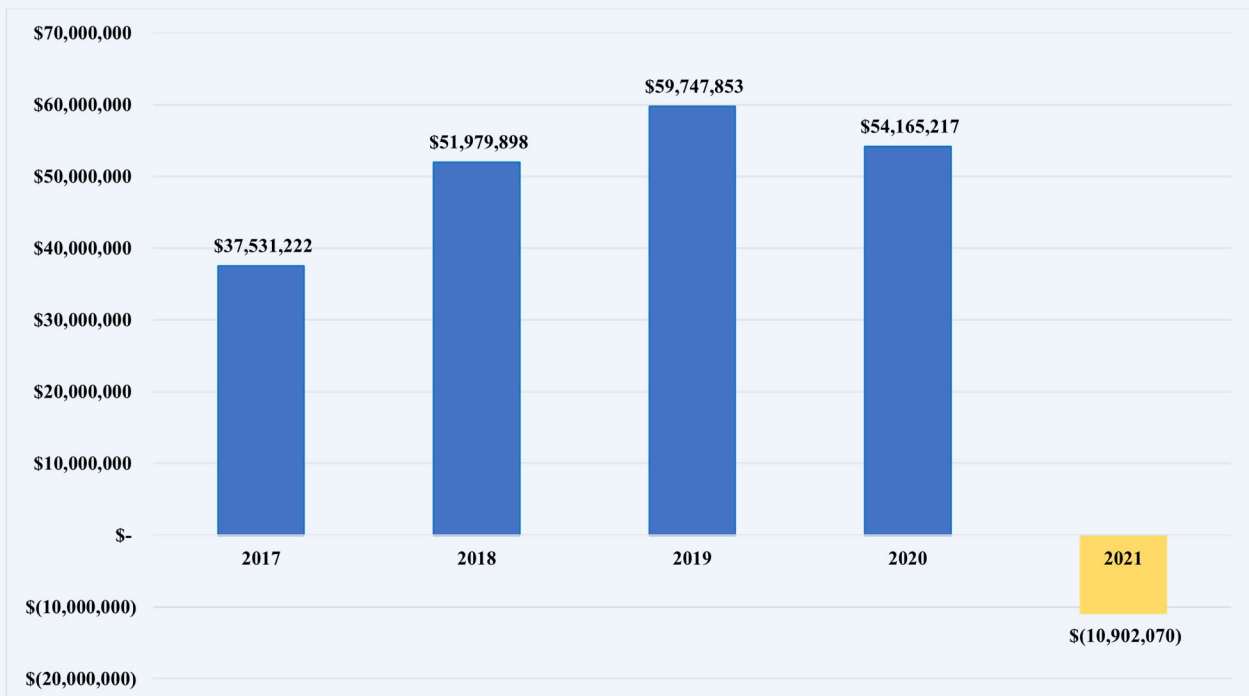
Assets	2021 Totals
Cash and Cash Equivalents	\$ 4,857,857
Investment by Fair Value Level:	
Bond Mutual Funds	61,028,750
Equity Funds:	
Global Funds	113,549,801
Domestic Funds	233,875,951
Investments Measured at the Net Asset Level:	
Limited Partnership	15,141,471
CCA Life Settlements II Fund	28,347,579
Hancock Timberland and Farmland Fund LP	6,608,415
IFM Global Infrastructure LP Class A Interests	12,771,358
JPNCB Strategic Property Fund	18,827,949
Total Investment	490,151,274
Interest and Dividend Receivable	83
Employee Contribution Receivable	1,181
Benefits Payable	(1,466,056)
Total Assets as of December 31, 2021	\$ 493,544,339

County's Net Pension Liability



Unfunded Actuarial Pension Liability

The chart below shows the unfunded actuarial pension liability since 2017. 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. As was previously mentioned, the Dauphin County Board of Commissioners approved issuing a general obligation bond in 2021. The proceeds from the bond issue were deposited into the retirement fund for the purpose of reducing the unfunded actuarial pension liability. The debt from this bond issue will be paid from the General Fund of Dauphin County and not the retirement fund. With the inclusion of the bond proceeds into the Fund, the pension liability is (\$10,902,070), which means it was overfunded at December 31, 2021.



Dauphin County Pension Plan Portfolio

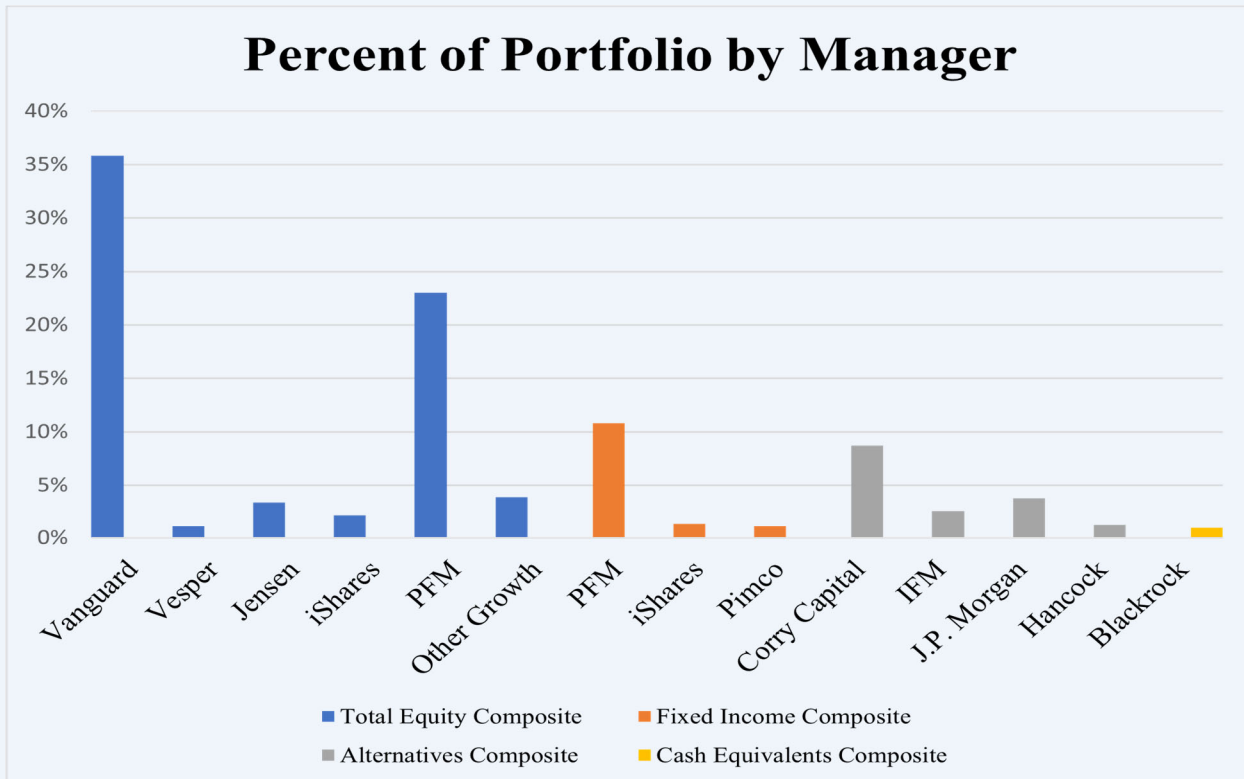
Asset Allocation by Percentage

As of December 2021

Asset Allocation Type	Percentage Allocated
U.S. Equity	42.5
Global Equity	23.0
U.S. Fixed Income	10.8
Life Settlement	8.7
Growth	3.9
Real Estate	3.8
Infrastructure	2.6
Other Income	1.4
Timberland/Farmland	1.3
Commodities	1.1
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



2021 Dauphin County Retirees

Charles Acre	Walter Hostetter, Jr.	Hope Rohde
Randy Baratucci	Steven Howe	Jacqueline Russ
Michael Bateman	William Jackson	Mark Salvatore
Darwin Beale	Karen Johnson	Jack Sellers
Stanley Brown	Mariatu Jones	Gale Sherrid
Richard Cagno	Linda Keller	Laurie Sinclair
Godofredo Carranza	George Kuharic	Steven Singleton
Lynn Choborda	Gail Kuhn	Robert Skiles
Dana Compton	Shana Langione	Maria Slabonik
Randy Confair	Deborah Louie	Joanne Sosnowski
Michael Cryder	Tracy Markham	Scott Sowers
Tommy Cuckovic	Frederick Martsof	Nancy Spincken
Timothy DeFoor	Susan Mason-Jones	Grant Steele
Carl Dickson	Freddie McNeal	John Stoner
John Doebling	Lynn McNeil	Bonnie Taylor
Olivia Edwards	Miles Miller	Linda Thompson
Daniel Eisenhaur	Kimberly Monk	Richard Vukmanic
Donald Fockler, Jr.	Ralph Moyer III	Brian Walborn
Joseph Gaughan	Deanna Muller	Paul Wentz
Angel Gonzalez	Mark Neidigh	Joseph Whalen
Lucinda Gore	Robert Orris	Neal Williard
Cheryl Gundrum	Sandra Parrish	Garry Wright
John Harlacker	Lori Paul	Michael Yohe
Jeffrey Haste	Randy Pope	Tracy Yohn
Ann Hess	Seth Reeser	
Brenda Hoffer	Stephen Reidlinger	

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 Marquette Associates, 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.