

East Lampeter Township Police Retirement Plan

Actuarial Valuation as of January 1, 2023



M*unicipal*

F*inance*

P*artners, Inc.*

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Executive Summary

The purpose of this report is to establish the pension plan's funding requirements under Act 205 of 1984 as well as to satisfy the reporting requirements of the Act.

Contribution Requirements: the Minimum Municipal Obligation

[Act 205 of 1984](#) requires plan sponsors to contribute a minimum amount to the plan each year called the [Minimum Municipal Obligation](#), or MMO. These charts show the plan's financial requirements, as determined by the MMO, for the last several years through 2024, plus projected MMOs for 2025 and 2026, based upon this actuarial valuation, and how the MMO is funded.

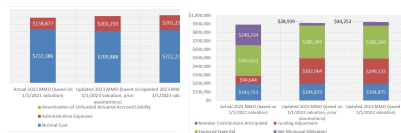


(Click on chart for larger version)

The MMO is the sum of the plan's normal cost, administrative expenses and any amortization payment, less expected member contributions and any funding adjustment. The MMO may be funded by general municipal pension system State Aid allocated to the plan; however,

the municipality is ultimately responsible for funding the MMO.

The MMO for 2023 was determined in 2022, based on the January 1, 2021 actuarial valuation and estimated 2022 compensation. These charts show what the 2023 MMO would have been based on the January 1, 2023 actuarial valuation and actual 2022 compensation compared to the actual 2023 MMO, including the impact of a change in benefits.



MMO Components:

- **Normal Cost: 18.5%** of active member compensation
- **Administrative Expenses: 5.2%** of active member compensation
- A **Funding Adjustment of \$299,133** reduces the MMO
- **Member Contributions of 5.0%** of active member compensation reduce the MMO

The impact of the January 1, 2023 actuarial valuation on the MMO is as follows:

- The Normal Cost has decreased from 18.9% to 18.5% of compensation, due to changes in demographics, but offset slightly by impact of the

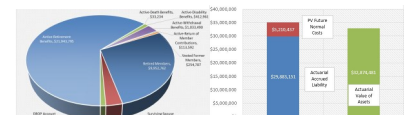
benefit change, which increased costs.

- Administrative expenses have increased from 4.1% to 5.2% of compensation.
- [Page 8](#) shows how the plan's overfunding (the excess of the actuarial value of assets over the actuarial accrued liability) has increased from \$946,442 to \$2,991,330 since the prior actuarial valuation, due mostly to actuarial gains. This has resulted in an increase in funding adjustment (10% of the excess) from \$94,644 to \$299,133.

The plan experienced an actuarial gain of \$2,064,979, which was the sum of:

- Investment gains of \$1,148,407, and
- Experience gains of \$916,572.

These charts show the makeup of plan assets and liabilities as of the valuation date.

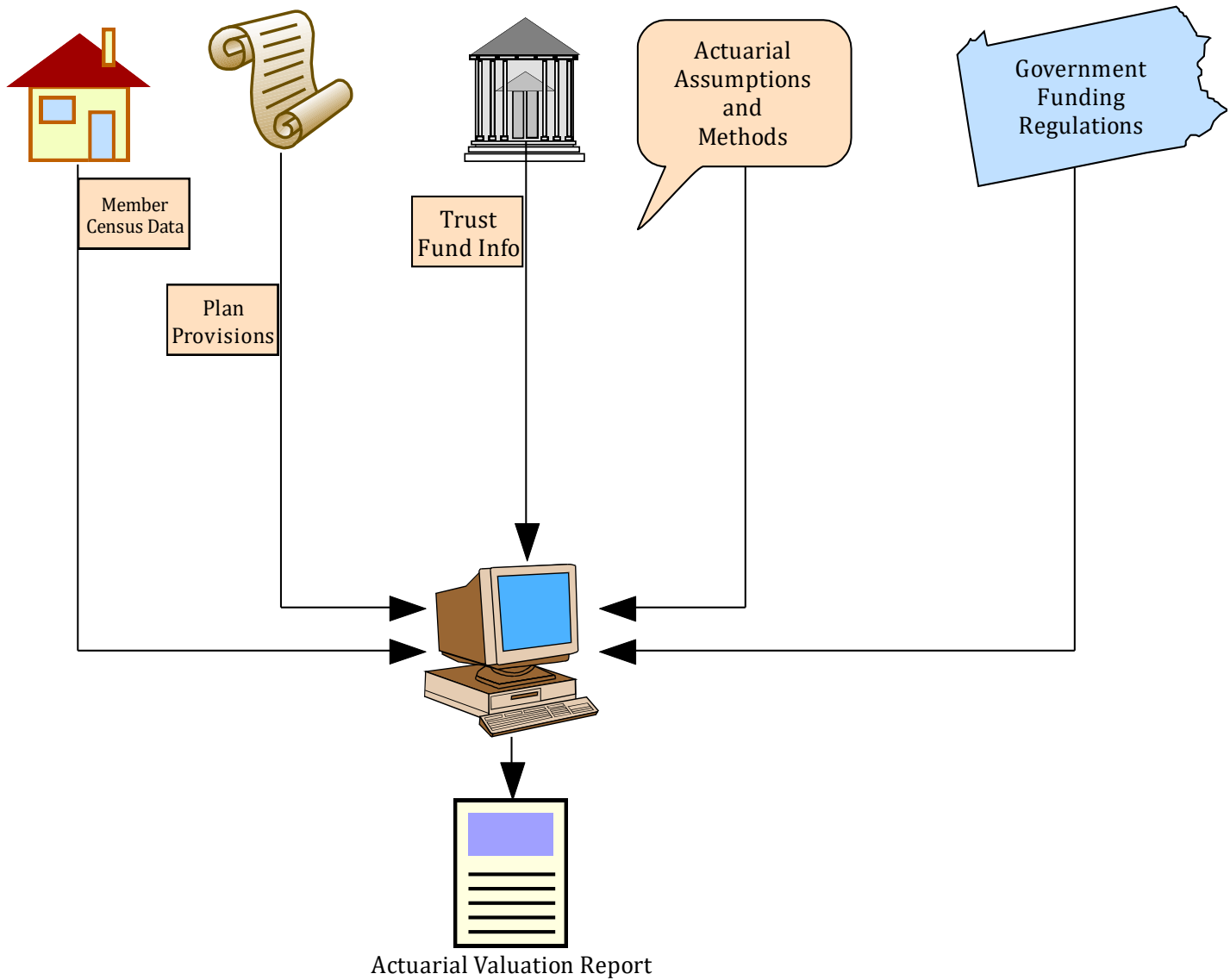


The actuarial valuation is based upon the following inputs:

- Investment performance
- Participant information
- Plan provisions
- Actuarial assumptions

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- and methods
- [Act 205](#) funding rules

The remainder of this report details how these inputs impact the plan's funding requirements. The detailed MMO calculations for 2021 and 2022 are found on page 13. The determination of the MMO components for future years is shown on pages [7-10](#).

Investment Performance

The plan's contribution requirements are dependent upon the relative sizes of its assets and its liabilities. In most years, the fluctuations in assets are greater than changes in liabilities, which tend to grow more predictably. This valuation reflects the plan's investment performance during 2021 and 2022.

The market value of plan assets has decreased from

\$30,491,186 at December 31, 2020 to \$29,191,813 at December 31, 2022. The fund earned returns of 14.37% in 2021 and -16.16% in 2022.

The plan uses an *actuarial smoothing* method to reduce the impact of year-to-year fluctuations in investment returns. The actuarial value of assets under the smoothing method is \$32,874,481 as of January 1, 2023.

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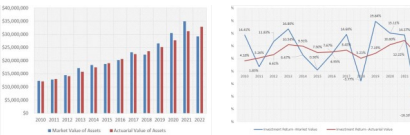
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On an actuarial basis, the fund earned 12.22% in 2021 and 5.71% in 2022, compared to the actuarially assumed rate of 7.0%.

The greater than expected returns caused an investment gain of \$1,148,407 (about 3.5% of plan assets) during 2021 and 2022.

[Page 11](#) of this report contains information regarding the pension fund activity. [Page 12](#) shows how the fund was invested at the end of 2021 and 2022.

These charts show the fund balance and investment return histories.



Plan Membership

The plan's liabilities are determined based on the plan membership information and the plan's benefit provisions, projected into the future using actuarial assumptions. Changes in plan membership, such as deaths, terminations, new hires and changes in salaries will cause *liability* or *experience* gains and losses to the extent that experience differs from the assumptions.

During 2021 and 2022, 6 new officers joined the plan, 1 officer retired, 2 en-

tered the DROP plan and 1 terminated without vesting and received a refund of his member contributions. This increased the active membership from 37 to 39 officers. In addition, 2 retired officers died leaving a pension for their spouse beneficiaries. As of January 1, 2023 the plan membership consisted of 39 active officers, 1 vested former member entitled to a future pension, 3 DROP plan members, 17 retired officers and 4 spouse beneficiaries receiving a pension.

Since the prior actuarial valuation, the plan had an experience gain of \$916,572 (3.1% of liabilities). This was due mostly to salary increases that were less than expected, offset by losses from fewer than expected terminations and other, smaller offsetting gains and losses, including the retiree deaths.

[Pages 14-15](#) contain information regarding changes in plan membership during 2021 and 2022. The final pages of the report contain detailed member information.

Actuarial Assumptions and Methods

Once we have calculated the

actuarial value of liabilities at the valuation date, we use an Actuarial Cost Method to determine how those liabilities (net of current plan assets) will be funded in the future.

For this actuarial valuation, we are using the [Entry Age Normal Actuarial Cost Method](#) which determines a set of annual costs (the Normal Cost) to fund the member's pension from his plan entry date to his expected retirement date. These normal costs are equal as a percentage of expected payroll; i.e., they increase each year at the rate of assumed increase in salary.

Under the Entry Age method, the actuarial value of past normal costs at the valuation date, called the *actuarial accrued liability*, is compared to the plan assets and any shortfall is amortized over future years. The Minimum Municipal Obligation (MMO) is calculated as the sum of each year's normal costs, plus expected administrative expenses and the amortization payment, less any expected member contributions and any funding adjustment when assets exceed liabilities.

The method used to deter-

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mine the actuarial value of assets is also a part of the plan's funding method. This valuation uses a method that recognizes market value gains and losses over a five-year period.

The detailed calculation of the actuarial value of assets is shown on [page 10](#).

There have been no changes in the plan's actuarial assumptions or methods since the prior actuarial valuation.

A full description of the actuarial assumptions and methods can be found on [page 18](#).

Under Act 205 requirements, we amortize each component of the unfunded liability based upon its source. The amortization period is equal to the average future service of the active plan members; however, it may not exceed the following periods:

- Experience gains and losses: 20 years
- Changes in Plan Benefits—Active Members: 10 years (20 years if change was mandated by law)
- Changes in Plan Benefits—Retired Members: 1 year (10 years if change was mandated

by law)

- Changes in Actuarial Assumptions and Methods: 15 years

Since the assets exceed the actuarial accrued liability, the amortization payment is replaced by a *funding adjustment*, equal to 10% of the excess, which reduces the Minimum Municipal Obligation.

Plan Benefit Provisions

The provisions of the plan as of the valuation date are based on the plan document and the provisions of Act 600 of 1956, as amended, as well as state and federal law.

The plan's provisions are described in detail on [pages 16-17](#) of this report.

The actuarial valuation recognizes a change in the retirement age for officers hired after 2018 from age 55 with 25 years of service to age 50 with 25 years of service.

There have been no other changes in plan benefits since the prior actuarial valuation.

Funded Status

A plan's funded status can be measured in a number of ways, such as:

- The level of contributions required to actuarially fund promised plan benefits, as discussed above, or
- Comparing plan assets to plan liabilities (i.e., the *funding percentage*).

The plan's funding percentage has increased from 103.5% as of January 1, 2021 to 110.0% at January 1, 2023 due to the impact of the actuarial gains, again slightly offset by the impact of the benefit change. On a market value of assets basis, the funding percentage was 97.7%. The recent history of the funding percentage is shown in this chart.



A Discussion of Risk

The projections that make up an actuarial valuation are expected values which are based on the average, or mean, of the distribution of potential results. Actual results will vary over time. These variances, or deviations from the mean, represent the potential risks (and rewards) inherent in the operation of a pension plan.

Below are five basic types of risk that are characteristic to pension plans and

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how we work to manage them:

- Investment Risk** is the potential that investment returns will differ from expectations and is the largest risk a plan faces. We moderate this risk by using actuarial asset smoothing and amortizing gains and losses over future years.
- **Asset/Liability Mismatch Risk** is the potential that changes in assets and liabilities do not match. As financial instruments, pension liabilities behave like bonds; their market value rising and falling as interest rates fall and rise. Equity investments achieve larger returns as a *risk premium*. This risk could be defeased by investing solely in fixed income investments that match the duration of the liabilities, but at the cost of dramatically lower fund returns, leading to significantly higher contributions.
- **Interest Rate Risk** works in two ways: Higher yields will benefit new investments in bonds or other fixed income investments, while decreasing the value of bonds currently held. It is important to understand the cause of the

change; for example, if interest rates rise due to inflationary pressures, the plan's equity investments will generally rise, offsetting the drop in fixed income investments.

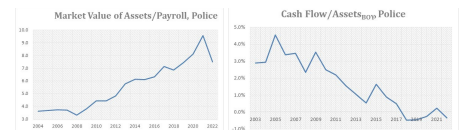
- **Longevity and Demographic Risk** is the potential for losses (and gains) on the liability side of the pension balance sheet when plan member experience differs from the demographic assumptions used to predict it. This risk can be mitigated by updating mortality assumptions as new tables are released, reviewing the impact of deviations from expectations and changing assumptions when these reviews and/or experience studies indicate.

- **Contribution Risk** is the potential that contributions will deviate from actuarial requirements or recommendations. Due to the nature and timing of the [MMO process](#) that applies to municipal pension plans governed by Act 205 of 1984, these losses should be immaterial to a large extent. For plans not governed by Act 205, such as County and State

plans, this is a *moral hazard*.

There are many ways that we can measure risk and one of them is to measure the maturity of the plan members. As a plan's membership retires or gets closer to retirement, plan asset levels must grow to fund their benefits, increasing investment risk. In addition, net cash flow (contributions less benefit payments and expenses) decrease and can go negative, increasing the importance of investment returns in supporting the fund.

The charts below show the changes in two maturity measures over recent years.



Actuarial Certification

The purpose of this actuarial valuation report is to determine the plan funding status and project future funding requirements as of January 1, 2023. The report is the basis for satisfying the funding requirements of Act 205 of 1984.

The normal cost, administrative expense and amortization payment amounts calculated within this report will be the basis for computing the Plan's Minimum

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Municipal Obligation (MMO, or required contribution) for 2024 and 2025 and may be used for calculating the MMO for 2026.

The report also summarizes the pension fund and participant activity during 2021 and 2022.

Determinations for purposes other than determining the plan's funding requirements may differ significantly from the results in this report. Additional determinations are needed for other purposes, such as the plan sponsor's financial statements.

The actuarial valuation is a projection of liabilities based on the plan provisions, financial information, participant data and actuarial assumptions and methods as described within the report. The actuarial valuation is not an exact statement of the Plan's ultimate benefits and liabilities.

The actuarial valuation is based on actuarial assumptions as to future economic and demographic experience. Future results may differ significantly from the results of the actuarial valuation. Analysis of the sensitivity of the valuation re-

sults to future experience was beyond the scope of this assignment.

To the best of my knowledge, this report is complete and accurate, based upon the data furnished to us. The financial data regarding the pension fund, as well as the participant and beneficiary data was provided by East Lampeter Township.

The participant census and plan asset information used to prepare the January 1, 2023 actuarial valuation were as of January 1, 2023. The actuarial assumptions and methods used to prepare the actuarial valuation were arrived at by consensus among the Township management and the actuary.

I, Charles B. Friedlander, am President & Chief Actuary, for Municipal Finance Partners, Inc. I am a Member of the American Academy of Actuaries, a Fellow of the Society of Actuaries, a Fellow of the Conference of Consulting Actuaries, and an Enrolled Actuary under ERISA, and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

I am available to discuss this report and can be contacted at:

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Charles B. Friedlander, F.S.A.
President & Chief Actuary
Enrolled Actuary No. 23-04194

January 16, 2024
Date

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Plan Funding Detail

This section contains the development of the plan's funding requirements. The funding components calculated in this section will be the basis for determining the plan's Minimum Municipal Obligation for future years.

The tables below show the development of the plan's normal cost percentage and unfunded actuarial accrued liability.

Normal Cost

Normal Cost (\$ amount)	\$722,271
Normal Cost (% of Payroll)	18.5%

Present Value of Future Benefits

Active Members		
Retirement Benefits	\$21,943,795	
Death Benefits	33,234	
Disability Benefits	412,961	
Withdrawal Benefits	1,033,490	
Return of Member Contributions	113,592	
Total Active Members		\$23,537,072
Vested Former Members		254,707
Retired Members		9,952,762
Disabled Members		0
Surviving Spouse Members		1,018,998
DROP Account Balances		330,049
Total Present Value of Future Benefits		\$35,093,588
Present Value of Future Normal Costs		(5,210,437)
Actuarial Accrued Liability		\$29,883,151
Actuarial Value of Assets		(32,874,481)
Unfunded Actuarial Accrued Liability		(\$2,991,330)

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The table below shows changes in the plan's unfunded actuarial accrued liability since the prior actuarial valuation.

Unfunded Actuarial Accrued Liability at 1/1/2021		(\$946,442)
Normal Cost	1,384,002	
Administrative Expense	402,518	
Interest on Above Items	41,555	
Total		1,828,075
Employer Contributions	(594,410)	
Member Contributions	(397,902)	
General Municipal Pension System State Aid	(717,631)	
Interest on Contributions	(127,346)	
Total		(1,837,289)
Adjustment for Funding Deviation		0
Modification to Actuarial Assumptions		0
Modification to Active Member Benefits		29,305
Modification to Retired Member Benefits		0
Actuarial (Gain) or Loss		
Investment (Gain) or Loss	(\$1,148,407)	
Experience (Gain) or Loss	(916,572)	
Adjustment for Funding Deviation	0	
Total		(2,064,979)
Unfunded Actuarial Accrued Liability at 1/1/2023		(\$2,991,330)

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The Plan's 2022 Minimum Municipal Obligation (MMO) was calculated based on the January 1, 2021 actuarial valuation and 2022 pay as estimated in the fall of 2022. This illustration, based on the January 1, 2023 actuarial valuation and actual 2022 pay, shows how the valuation results impact the calculation of the MMO.

Illustrated Minimum Municipal Obligation

Normal Cost	\$722,271
Administrative Expenses ¹	201,259
Amortization of Unfunded Actuarial Accrued Liability	0
Total Financial Requirement	\$923,530
Member Contributions Anticipated	\$194,875
Funding Adjustment	299,133
Expected State Aid	385,269
Net Municipal Obligation	44,253
Total Financial Requirement	\$923,530

¹ Average of administrative expenses over two prior years:
2021: \$204,300, 2022: \$198,217

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The valuation uses an asset smoothing method to even out the year-to-year fluctuations in the investment markets. Under the method being used for this valuation, the investment gains or losses (i.e., actual vs. expected performance) are recognized over a five-year period. The actuarial value of assets determined under this method is limited to 20% above or below the market value of assets.

	2019	2020	2021	2022
Market Value at January 1	\$22,245,307	\$26,549,405	\$30,491,186	\$34,947,168
Contributions	695,678	761,316	942,402	767,541
Benefit Payments and Expenses	(796,125)	(827,039)	(872,505)	(886,366)
Expected Investment Income	<u>1,553,656</u>	<u>1,856,158</u>	<u>2,136,829</u>	<u>2,442,143</u>
Expected Value at 12/31	\$23,698,516	\$28,339,840	\$32,697,912	\$37,270,486
Market Value at 12/31	<u>26,549,405</u>	<u>30,491,186</u>	<u>34,947,168</u>	<u>29,191,813</u>
Gain or (Loss) ¹	\$2,850,889	\$2,151,346	\$2,249,256	(\$8,078,673)
Recognition Percentage Deferred	<u>20%</u>	<u>40%</u>	<u>60%</u>	<u>80%</u>
Gain or (Loss) to be Recognized in Future Years	\$570,178	\$860,538	\$1,349,554	(\$6,462,938)
Market Value of Assets at 12/31/2022			\$29,191,813	
Total (Gain) or Loss to be Recognized in Future Years			<u>3,682,668</u>	
Actuarial Value of Assets at 1/1/2023			<u><u>\$32,874,481</u></u> ²	

¹ Market Value less Expected Value

² Limited to between 80% and 120% of Market Value

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Pension Fund and Member Information

The table below shows the pension fund activity for 2021 and 2022. The following pages show how the pension fund was invested at the end of 2021 and 2022, the development and funding of the 2021 and 2022 Minimum Municipal Obligations, and plan membership activity during 2021 and 2022.

	<u>2022</u>	<u>2021</u>
Market Value of Assets as of Beginning of Year	\$34,947,168.38	\$30,491,186.31
<u>Gross Revenues:</u>		
Member Contributions:	\$196,487.75	\$201,414.09
Municipal Contributions		
State Aid Portion	\$362,631.62	\$354,998.91
Local Portion	208,421.38	385,989.09
Total Municipal Contribution	<u>\$571,053.00</u>	<u>\$740,988.00</u>
Interest and Dividend Income:	752,177.26	614,051.58
Realized/(Unrealized) Gains and (Losses) on Investments	<u>(6,388,707.07)</u>	<u>3,772,033.81</u>
Total Revenues	<u>(\$4,868,989.06)</u>	<u>\$5,328,487.48</u>
<u>Expenses:</u>		
Member Distributions:		
Total Benefit Payments (Lump Sums)	\$0.00	\$0.00
Total Benefit Payments (Monthly)	(687,241.25)	(668,205.08)
Refund of Member Contributions	<u>(907.25)</u>	<u>0.00</u>
Total Member Distributions	<u>(\$688,148.50)</u>	<u>(\$668,205.08)</u>
Plan Expenses:		
Actuarial Costs	(\$14,800.00)	(\$3,475.00)
Investment Costs	(180,367.49)	(195,900.33)
Other Administrative Expenses	<u>(3,050.00)</u>	<u>(4,925.00)</u>
Total Plan Expenses	<u>(\$198,217.49)</u>	<u>(\$204,300.33)</u>
Total Expenses	<u>(\$886,365.99)</u>	<u>(\$872,505.41)</u>
Market Value of Assets as of End of Year	<u>\$29,191,813.33</u>	<u>\$34,947,168.38</u>
Investment Return Percentage	<u>-16.16%</u>	<u>14.37%</u>

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The table below shows how the pension fund was invested as of December 31, 2021 and December 31, 2022.

<u>Assets:</u>	<u>12/31/2022</u>	<u>12/31/2021</u>
Cash	(\$10,791.54)	(\$46,955.99)
Receivables:		
Accrued Interest and Dividends Receivable	\$72,875.03	\$72,556.20
Prepaid Pensions	52,827.63	51,977.23
Total Receivables	\$125,702.66	\$124,533.43
Investments:		
Money Market and Other Cash Investments	\$912,306.23	\$1,252,569.77
Mutual Funds	1,383,221.62	1,379,581.10
Stocks and Other Equities	16,409,899.78	21,215,406.12
Bonds and Other Fixed Income	7,387,287.70	7,915,430.55
Total Investments	\$26,092,715.33	\$31,762,987.54
Other Assets:		
Alternative Investments	\$2,994,937.02	\$3,106,603.40
Total Other Assets	\$2,994,937.02	\$3,106,603.40
Total Fund Assets	\$29,202,563.47	\$34,947,168.38
<u>Current Liabilities:</u>		
Accounts Payable and Accrued Administrative Expenses	\$0.00	\$0.00
Benefits Payable	0.00	0.00
Net Unsettled Purchases	(10,750.14)	0.00
Overpayment Due to General Fund	0.00	0.00
Total Current Liabilities	(\$10,750.14)	\$0.00
Net Assets for Benefits at End of Year	\$29,191,813.33	\$34,947,168.38

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The table below shows the determination and funding of the plan's Minimum Municipal Obligation (MMO) for 2021 and 2022.

<u>Determination of Minimum Municipal Obligation:</u>	2022	2021
Based on Actuarial Valuation as of:	1/1/2021	1/1/2019
Normal Cost Percentage	18.9%	18.9%
Administrative Expense Percentage	4.1%	4.7%
Estimated W-2 Payroll for Previous Year	\$3,701,189	\$3,879,992
Normal Cost	\$699,524	\$733,318
Administrative Expense	151,749	182,360
Annual Cost	<u>\$851,273</u>	<u>\$915,678</u>
Amortization Payment	0	17,093
Total Financial Requirement	<u>\$851,273</u>	<u>\$932,771</u>
Member Contributions Anticipated	(185,576)	(191,783)
Funding Adjustment	<u>(94,644)</u>	<u>0</u>
Minimum Municipal Obligation	<u><u>\$571,053</u></u>	<u><u>\$740,988</u></u>
<u>Municipal Contributions:</u>		
State Aid Portion	\$362,632	\$354,999
Local Portion	208,421	385,989
Total Municipal Contributions	<u><u>\$571,053</u></u>	<u><u>\$740,988</u></u>
Excess or (Shortfall)	\$0	\$0
<u>State Aid Allocations</u>		
Police Pension Plan Allocation	\$362,631.62	\$354,998.91
Non-Uniformed Pension Plan Allocation	150,233.11	129,526.63
Total State Aid Allocated	<u><u>\$512,864.73</u></u>	<u><u>\$484,525.54</u></u>

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The changes in the plan membership during 2021 and 2022 are shown below.

Active Members

Active Members as of January 1, 2021	37
New Members	6
Returned to Active	0
Members No Longer Active:	
Retired	(1)
Entered DROP Plan	(2)
Disabled	0
Terminated with Full Vesting	0
Terminated with Partial Vesting	0
Terminated without Vesting	(1)
Total	(4)
Active Members as of January 1, 2023	39
Annual Payroll	\$3,897,492
Average Future Service	12

Vested Former Members

Vested Former Members as of January 1, 2021	1
Terminated with Vested Pension	0
Retired	0
Deceased	0
Returned to Active	0
Vested Former Members as of January 1, 2023	1
Annual Pension	\$16,194

DROP Members

DROP Members as of January 1, 2021	1
New DROP Members	2
Retired	0
Retired Members as of January 1, 2023	3
Annual Pension	\$165,440

Retired Members

Retired Members as of January 1, 2021	18
New Retirees	1
Deceased Retirees	(2)
Returned to Active	0
Retired Members as of January 1, 2023	17
Annual Pension	\$640,905

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Spouse Beneficiaries of Deceased Members	
Spouse Beneficiaries of Deceased Members as of January 1, 2021	2
New Spouse Beneficiaries	2
Deceased Spouse Beneficiaries	0
Returned to Active	0
Spouse Beneficiaries of Deceased Members as of January 1, 2023	<hr/> 4
Annual Pension	<hr/> <hr/> \$76,194

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Summary of Plan Provisions

The Plan is governed by a plan document which was restated in its entirety effective January 1, 2003. The following is a summary of the document's provisions; actual benefits are determined by the plan document itself.

Plan Membership

An employee enters the plan on the day he becomes a full-time police officer.

Normal Retirement Benefit

In a defined benefit pension plan, the normal retirement benefit is the basis of all plan benefits. The pension that a member earns under the benefit formula is payable monthly beginning on his normal retirement date and continuing for the remainder of his lifetime. Payments will continue after the retired member's death to his surviving spouse or to dependent children under the age of 18 (or under the age of 24 if attending college) in the amount of 50% of the benefit the member was receiving at the time of his death. Benefits payable before normal retirement are actuarially adjusted from this normal retirement benefit to reflect a longer period of payment.

A member's Normal Retirement Date is the first day of the month after a member turns age 50 and completes 25 years of vesting service. Officers hired prior to January 1, 1994 are eligible for normal retirement benefits at age 50 and completion of 20 years of vesting service.

The Normal Retirement Benefit is calculated as 50% of average compensation. Officers hired after January 1, 1994 and before January 1, 2009 will receive an additional service increment of \$20.00 per month for each completed year of benefit service year of service in excess of 25 years, up to a maximum service increment of \$100.00 per month. For officers hired prior to January 1, 1994, the service increment is \$100.00 per month if more than 21 years of benefits service are completed.

Average compensation is calculated as the average of all earnings paid by the Township, excluding unused sick and

vacation pay paid at termination, over the final 36 months of employment.

A member's earned or accrued benefit prior to his normal retirement date is equal to the benefit calculated under the normal retirement benefit formula, multiplied by the ratio of his years of benefit service to date to the total years of benefit service he would have worked had he continued employment to his normal retirement date.

DROP Benefit

A member is eligible to enter the DROP program on or after his normal retirement date. Upon entering the DROP program, the member's retirement benefit is frozen and his member contributions will cease. The DROP member's retirement benefit payments will be deposited into an account that will be credited with interest and paid to the participant in a lump sum at his actual retirement, in addition to his future monthly pension payments. The interest rate credited to the DROP account is equal to the fund's investment return for the year, limited to 0%-4.5%. The maximum period of participation in the DROP program is 36 months. Election to enter the DROP program are irrevocable.

Late Retirement Benefit

If a member continues to work beyond his normal retirement date, he will be eligible to receive his accrued pension payable at his late retirement date.

Postretirement Cost-of-Living Increase

Members are eligible to receive an annual cost-of-living adjustment effective each January 1 after retirement, based on the increase in the Consumer Price Index (CPI-U, U.S. City Average) during the 12 months ended the prior September, with the following limitations:

- the total cost-of-living increase cannot exceed the lesser of 30% of the initial pension payable at retirement or the increase in the Consumer Price Index since the member's retirement date,
- the total pension payable may not exceed 75% of the average salary used to determine his retirement benefit, and
- if the increase in the Consumer Price Index for the year is less than 1%, there will be no cost-of-living increase to benefits for that year.
- if the increase in the Consumer Price Index for the year is greater than 3%, the increase in retirement pensions will be limited to 3%.
- no cost-of-living increase will be granted that will impair the actuarial soundness of the Plan.

Disability Benefit

If a member is disabled in the line of duty, he will receive a disability retirement pension equal to 50% of the salary he was receiving at the time of his disablement reduced by any Social Security disability benefits payable due to the same illness or injury.

Death Benefit

The surviving spouse or eligible dependent child of a member who is killed in the line of duty will receive a pension of 100% of the member's monthly salary at the time of his death; however, effective January 1, 2012, this benefit is payable from the Commonwealth general fund and not from the pension plan.

If a member who is vested in his retirement pension or eligible for retirement under the plan dies but is not killed in the line of duty, his surviving spouse or eligible child will receive a pension payable at his normal retirement date equal to 50% of the pension the member would have received had he terminated

East Lampeter Township Police Retirement Plan

Actuarial Valuation as of January 1, 2023

at the time of his death and survived to his normal retirement date.

If a member dies and is not eligible for a monthly death benefit described above, his designated beneficiary will receive a refund of his accumulated member contributions with interest.

Termination of Employment Benefits

If a member terminates employment prior to retirement eligibility, but after completing 12 or more years of benefit service, he will be eligible for a benefit from the plan equal to his accrued pension at the date of his termination. The benefit will be deferred to his normal retirement date.

If a member terminates employment prior to completing 12 or more years of benefit service, he will receive a refund of his accumulated member contributions with interest.

Contributions

Member contributions are established at 5% of compensation, but may be reduced or eliminated on an annual basis by resolution. Members currently contribute 5.0% of their compensation. Member contributions are credited with 5% compound interest from the end of the year of deposit.

Service

Vesting service is credited for all continuous years of employment as a full-time police officer with the Township.

Benefit service is credited for all years and completed months of employment as a full-time police officer with the Township.

East Lampeter Township Police Retirement Plan

Actuarial Valuation as of January 1, 2023

Actuarial Assumptions and Methods

The following is a summary of the actuarial assumptions and methods used for this actuarial valuation.

Interest Rate

7.0% per year

The valuation interest rate represents the expected long-term investment return on pension fund assets. This rate is used to discount expected future benefit payments to the valuation date to determine the present value of plan liabilities and to calculate required plan funding levels

Salary Increases

4.0% per year

Inflation

3.0% per year

Mortality

Assumed rates of employee mortality are based on the PUB-2010 table, uniformed employee rates, with mortality projection based on table MP-2019. 25% of active member deaths are assumed to be in the line of duty.

Turnover

The assumed rates of employee turnover are from table T-2 of the *Actuaries Pension Handbook* Sample rates are shown below:

Age	Rate
20	5.4384%
25	5.2917%
30	5.0672%
35	4.6984%
40	3.5035%
45	1.7686%
50	0.4048%
55	0.0000%

Disability

The assumed rates of disablement are from the SOA 1987 Group LTD Table - Males, 6 month elimination. The following is a list of the annual rates of disability at selected ages.

Age	Rate
20	0.0764%
25	0.0854%
30	0.0986%
35	0.1224%
40	0.1760%
45	0.2944%
50	0.5396%
55	0.9770%
60	1.4774%

50% of disabilities are assumed to be in-service disabilities.

Retirement

50% of members are assumed to retire on their normal retirement date, with 50% of those remaining assumed to retire each year thereafter, with 100% of eligible members retiring at age 55. Members eligible and assumed to retire on the valuation date are assumed to retire one year from the valuation date.

Percent Married

100% of employees are assumed to be married. Male spouses are assumed to be the three years older than their female spouses.

Administrative Expenses

An amount is added to the plan's annual normal cost to represent the administrative expenses expected to be paid during the plan year.

Actuarial Value of Assets

The valuation uses an asset smoothing method to even out the year-to-year fluctuations in the investment markets. Under the method being used for this valuation, the investment gains or losses (i.e., actual vs. expected performance) are recognized over a five-year period. The actuarial value of assets determined under this method is limited to 20% above or below the market value of assets.

Funding Method

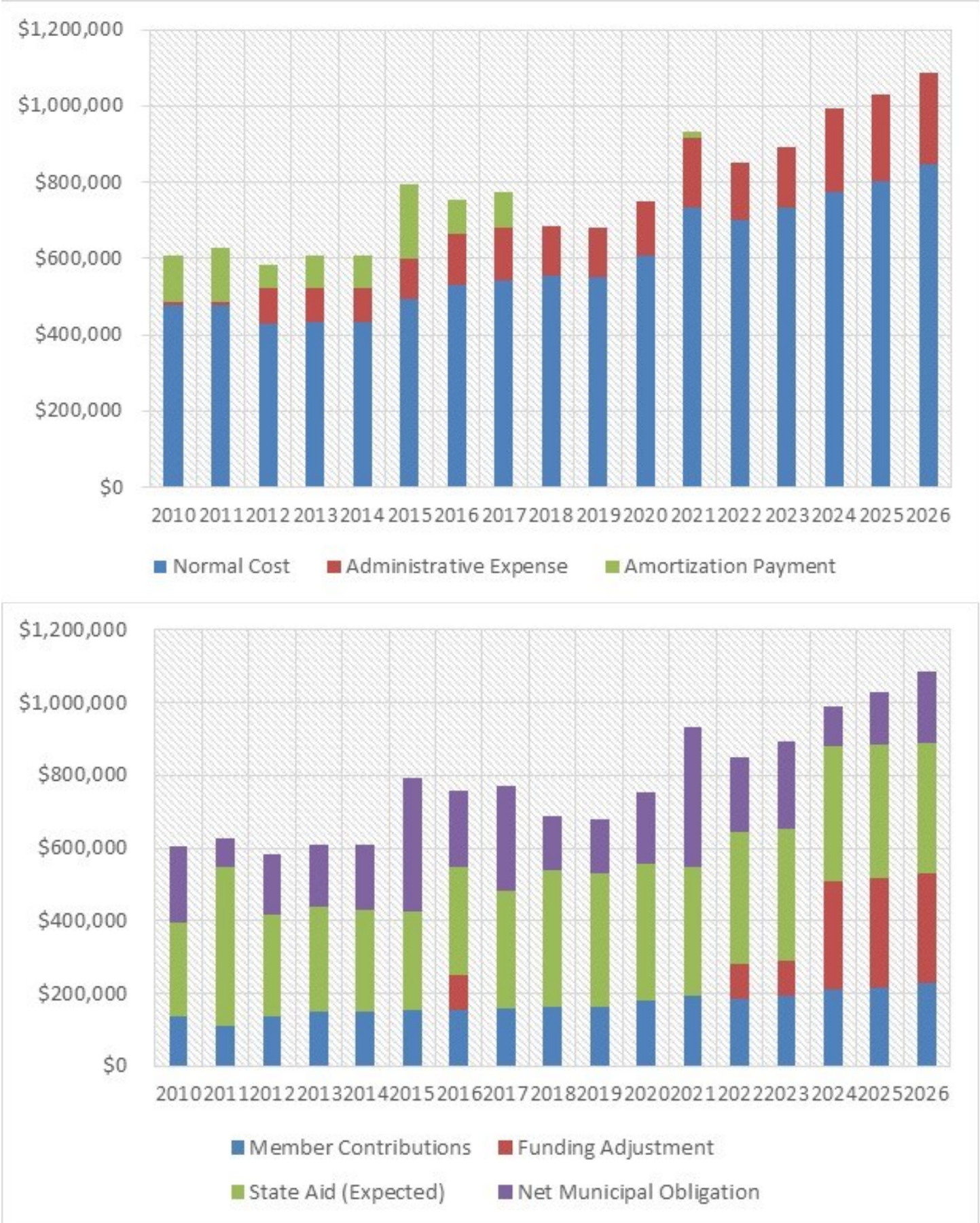
The actuarial cost method is the way that unfunded plan costs are allocated over future years, including the current year. This actuarial valuation uses the *Entry Age Normal Actuarial Cost Method*, as required under Act 205 of 1984. Under this method, the normal cost and actuarial accrued liability are determined on an individual basis. The unfunded actuarial accrued liability is determined as the excess of the actuarial accrued liability over the actuarial value of assets. If the actuarial accrued liability exceeds the actuarial value of plan assets, the unfunded actuarial accrued liability is amortized over future years as part of the annual contribution requirement. The amortization amounts are determined based on the source of each piece of the unfunded actuarial accrued liability (e.g., actuarial gains and losses, plan amendments, changes in assumptions, etc.). If the actuarial value of assets exceeds the actuarial accrued liability, 10% of this excess is used to reduce the plan's financial requirement.

Changes in the Plan's Actuarial Assumptions

None.

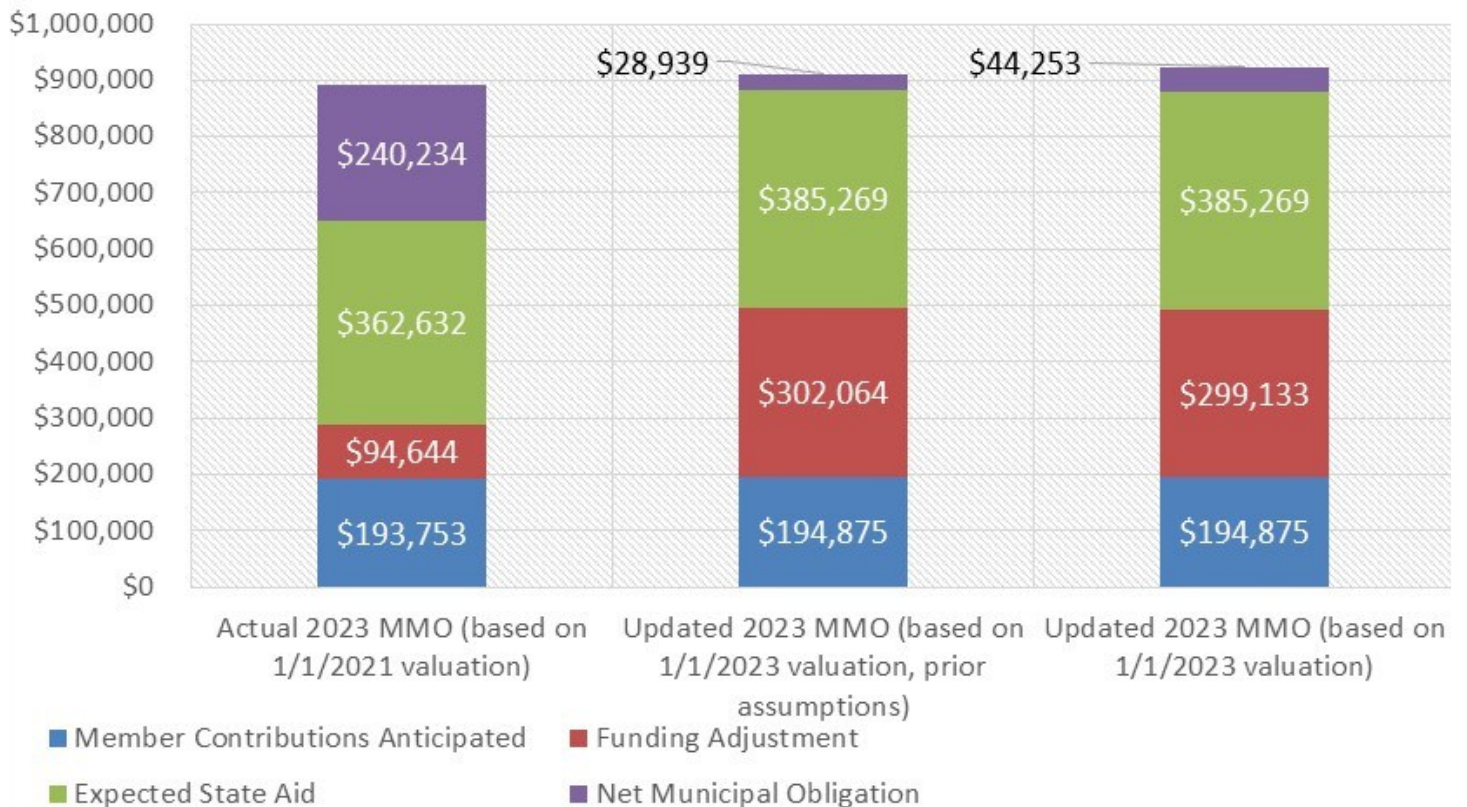
East Lampeter Township Police Retirement Plan

Actuarial Valuation as of January 1, 2023



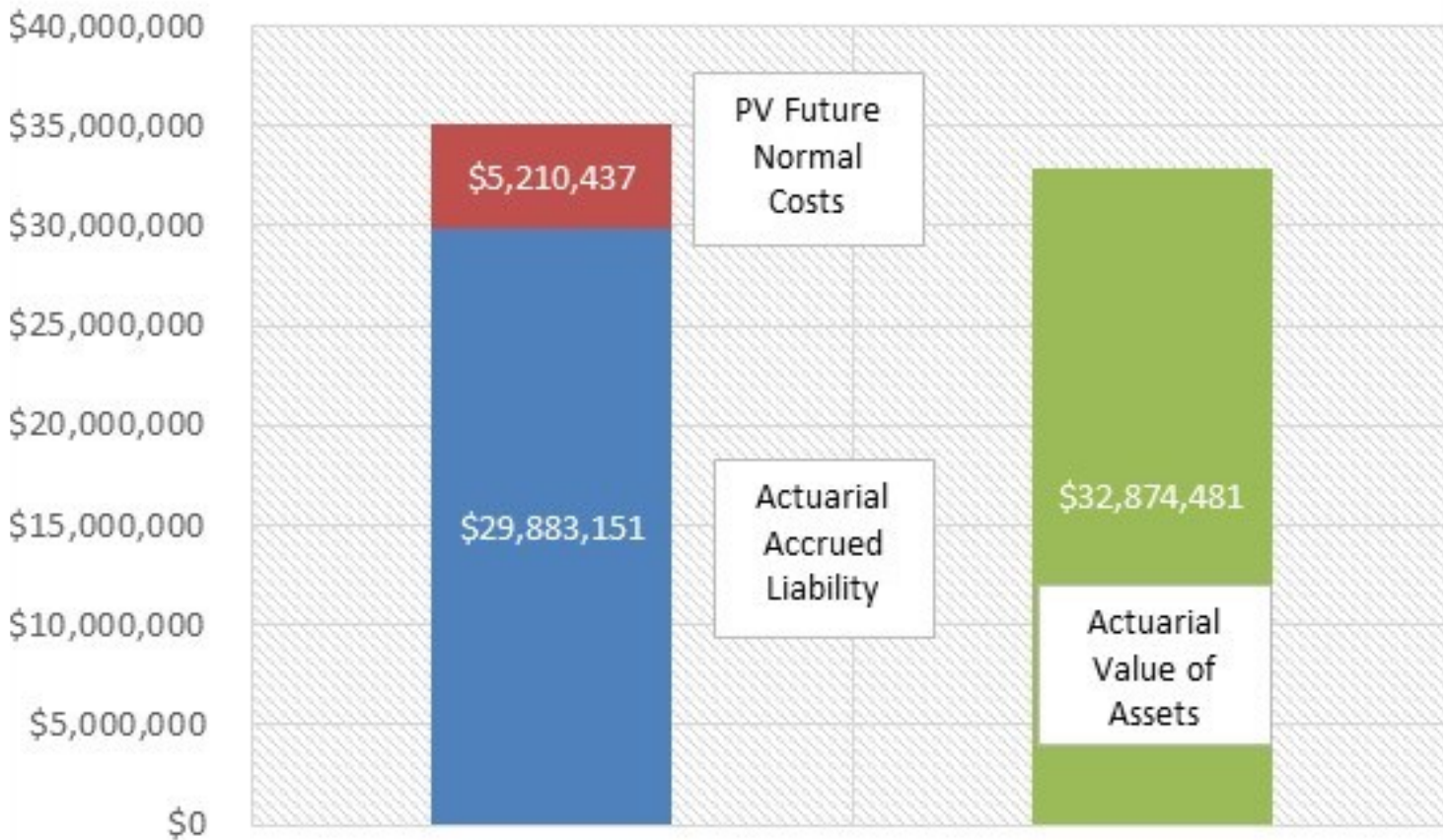
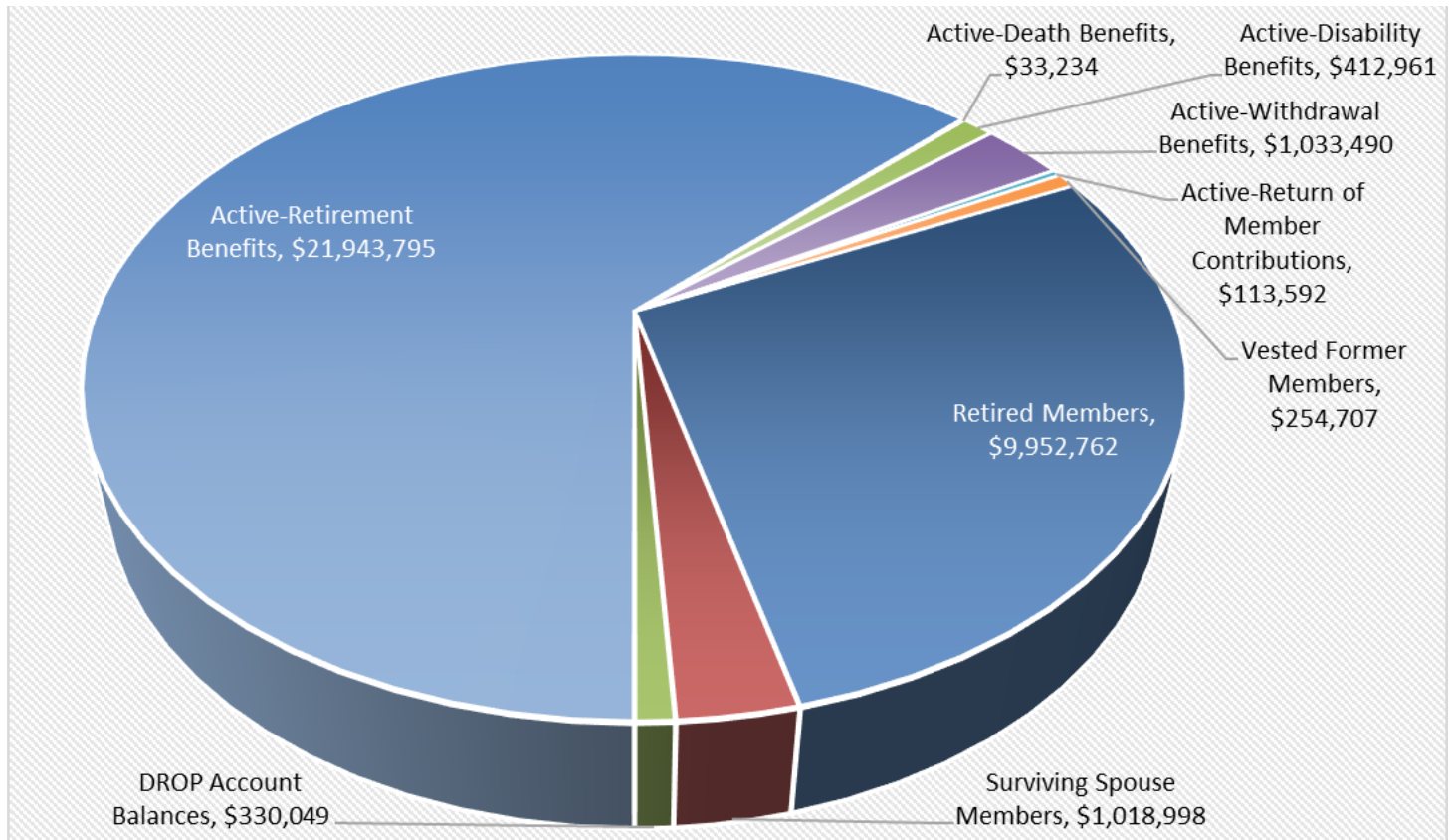
East Lampeter Township Police Retirement Plan

Actuarial Valuation as of January 1, 2023



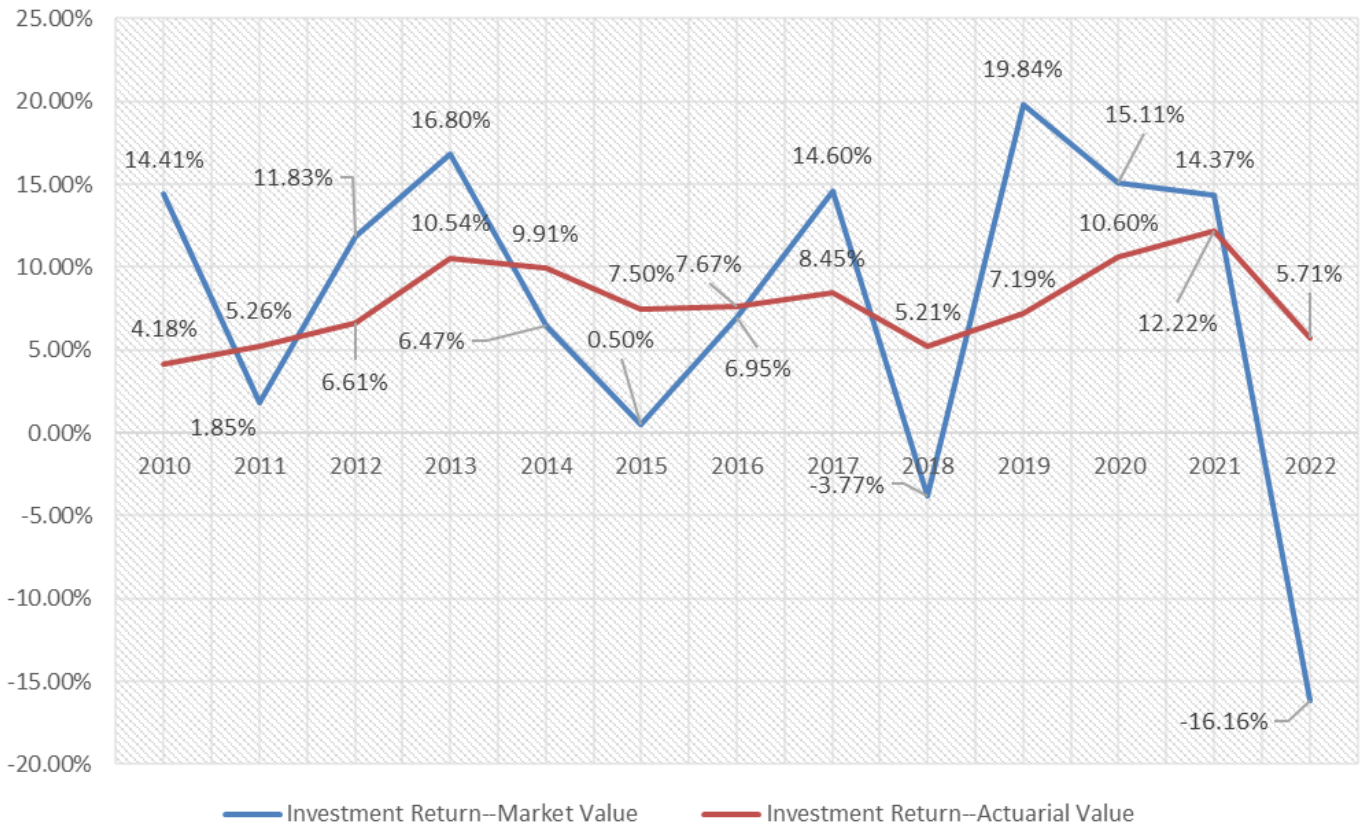
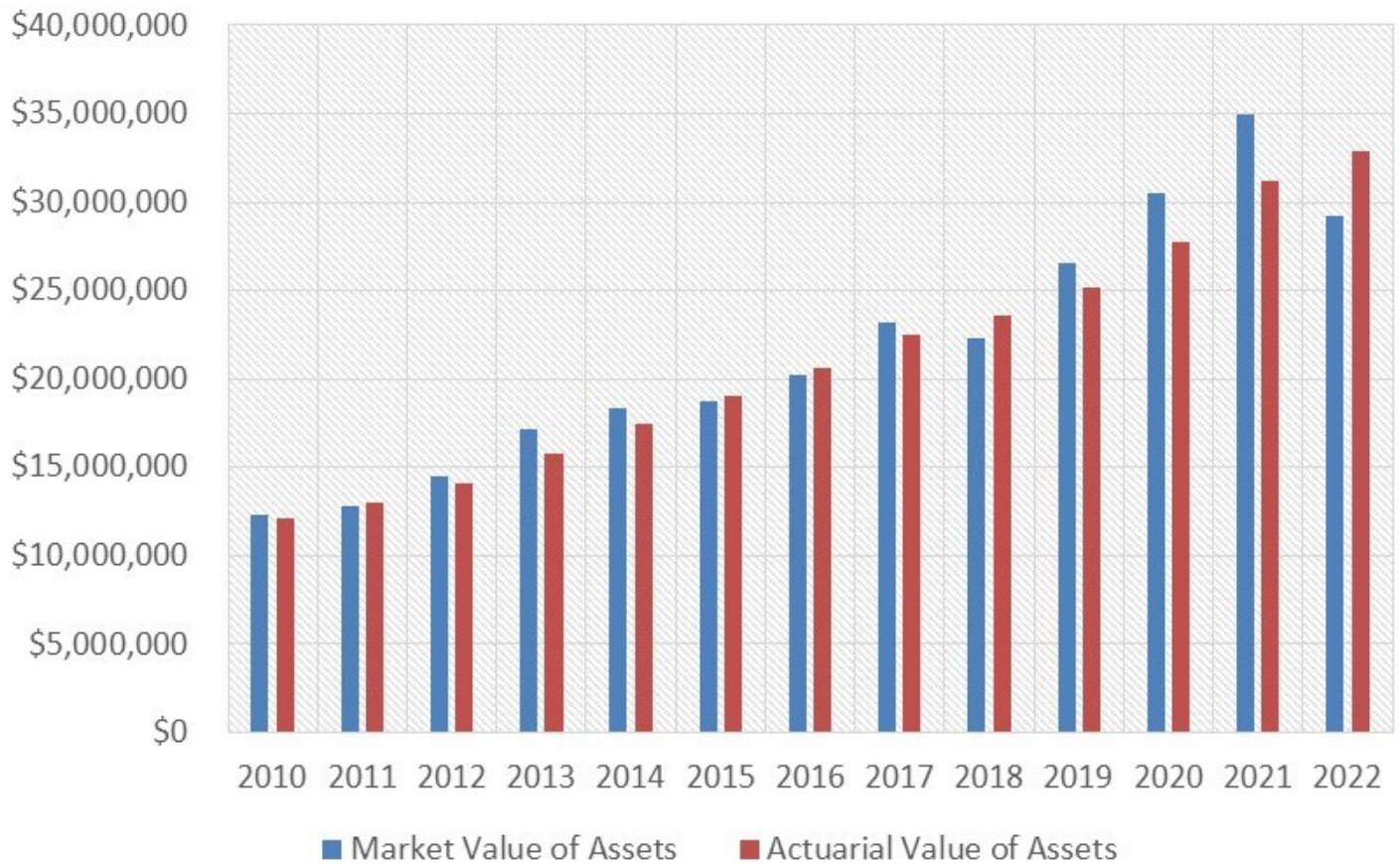
East Lampeter Township Police Retirement Plan

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East Lampeter Township Police Retirement Plan

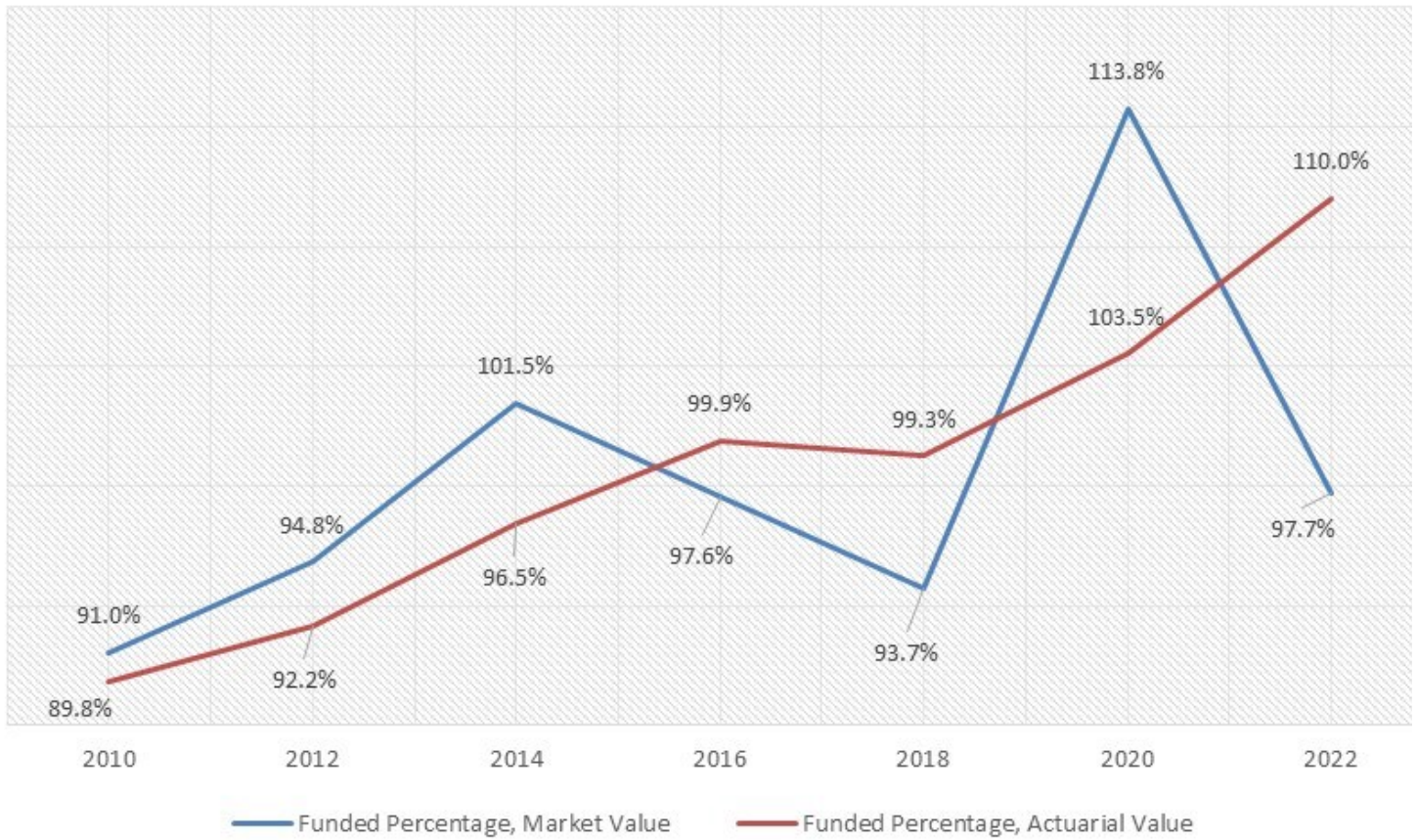
Actuarial Valuation as of January 1, 2023



East Lampeter Township Police Retirement Plan

Actuarial Valuation as of January 1, 2023

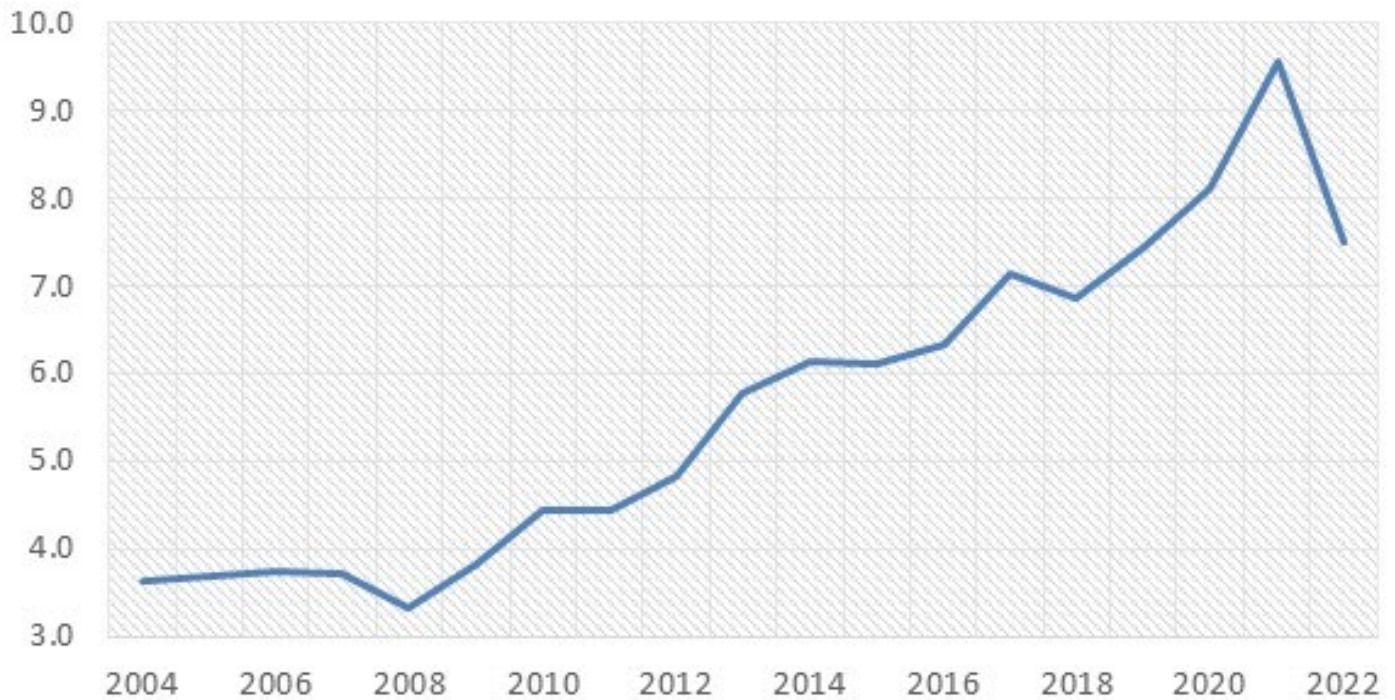
Funded Percentage



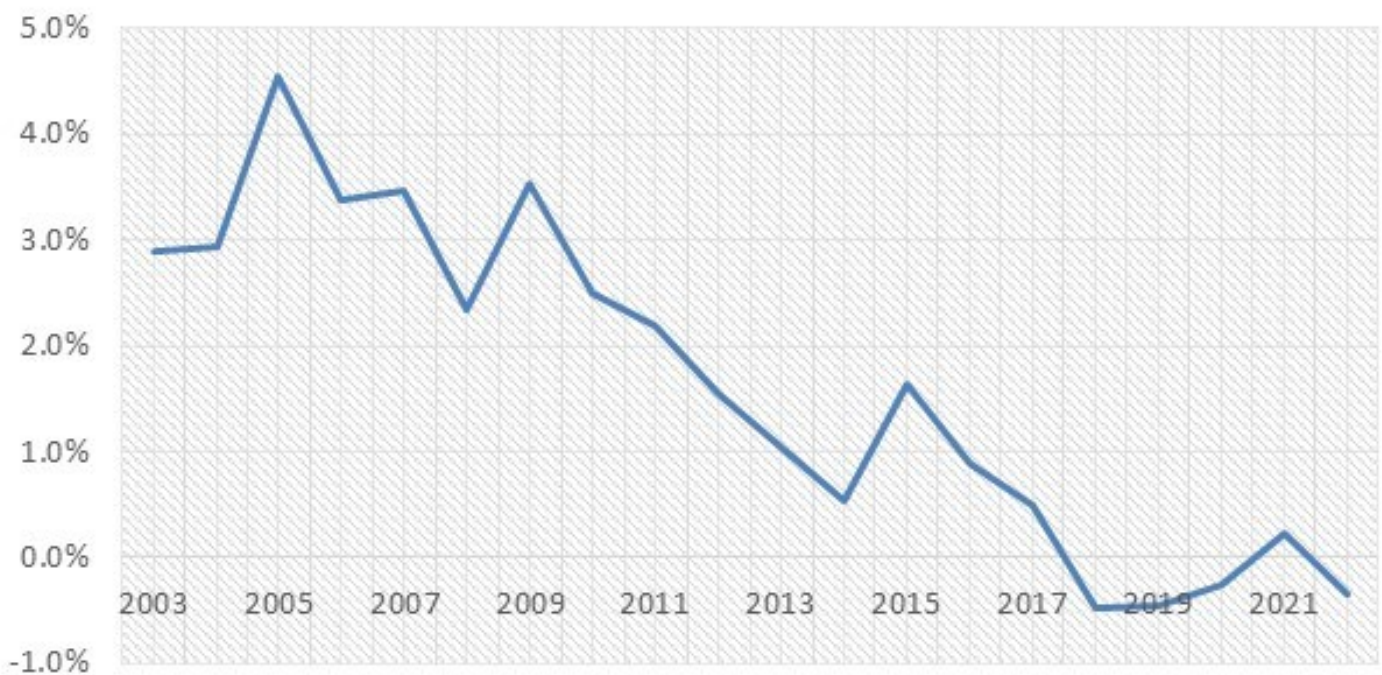
East Lampeter Township Police Retirement Plan

Actuarial Valuation as of January 1, 2023

Market Value of Assets/Payroll, Police



Cash Flow/Assets_{BOY}, Police



East Lampeter Township Police Retirement Plan
Active Members as of January 1, 2023

Name	Sex	Dates			Service				Current Pay	Accrued Monthly Pension	Monthly Pension at Ret.	Accumulated Member Contributions	
		Birth	Hire	Retirement	Past Vesting	Past Benefit	Future Benefit	Total Benefit				w/o int.	w/ int.
Auerbeck, Tyler A.	M	6/25/1993	3/18/2019	4/1/2044	3.7896	3.7500	21.2500	25.0000	\$100,117	\$572	\$4,172	\$16,313.42	\$17,374.27
Berry, Shawn R.	M	2/3/1971	7/9/2001	8/1/2026	21.4809	21.4167	3.5833	25.0000	102,899	3,558	4,287	64,724.03	95,739.77
Cloonan, Brian T.	M	8/28/1970	9/14/1998	10/1/2023	24.2978	24.2500	0.7500	25.0000	152,010	5,877	6,275	93,980.88	140,487.22
Dolk, Gregory R.	M	1/23/1974	1/20/1998	2/1/2024	24.9481	24.9167	1.0833	26.0000	123,216	4,787	5,154	78,171.76	119,453.78
Dusellier, Emily N.	F	9/20/1994	5/6/2019	10/1/2044	3.6557	3.5833	21.7500	25.3333	84,812	461	3,534	13,622.77	14,488.24
Eachus II, Sidney R.	M	9/11/1968	1/4/1994	1/1/2023	28.9918	28.9167	0.0000	28.9167	120,719	5,115	5,115	88,580.63	145,124.43
Fazekas, Stephen L.	M	10/20/1973	1/20/2003	2/1/2028	19.9481	19.9167	5.0833	25.0000	101,749	3,263	4,240	63,763.54	92,624.30
Fletcher, Anthony S.	M	12/5/1976	7/6/2004	8/1/2029	18.4891	18.4167	6.5833	25.0000	108,454	3,289	4,519	65,883.36	92,775.58
Garman, Andrew C.	M	2/15/1980	5/19/2006	6/1/2031	16.6202	16.5833	8.4167	25.0000	103,843	2,853	4,327	58,718.89	80,806.56
Gentzler, Preston K.	M	9/28/1977	6/10/2002	10/1/2027	20.5601	20.5000	4.7500	25.2500	108,983	3,654	4,541	70,615.85	104,067.56
Goss, Sam M.	M	3/6/1978	7/9/2001	4/1/2028	21.4809	21.4167	5.2500	26.6667	106,265	3,367	4,468	66,399.23	98,541.60
Heistand, Ryan	M	11/15/1990	4/25/2016	5/1/2041	6.6858	6.6667	18.3333	25.0000	125,394	1,228	5,225	30,732.97	34,744.20
Hess, Matthew E.	M	5/8/1977	7/5/2005	8/1/2030	17.4918	17.4167	7.5833	25.0000	121,656	3,466	5,069	66,328.07	91,284.13
Immel, Douglas M.	M	1/28/1977	6/12/2006	7/1/2031	16.5546	16.5000	8.5000	25.0000	100,472	2,691	4,186	57,710.52	79,563.70
Jacoby, Andrew J.	M	10/21/1992	12/5/2022	1/1/2048	0.0738	0.0000	25.0000	25.0000	4,611	0	192	230.53	230.53
Jaquith, Douglas L.	M	7/22/1969	1/18/1994	1/1/2023	28.9536	28.9167	0.0000	28.9167	108,199	4,428	4,428	78,817.41	130,499.86
Jones, Christopher D.	M	8/6/1978	9/24/2001	9/1/2028	21.2705	21.2500	5.6667	26.9167	108,762	3,565	4,572	73,574.69	107,849.28
Koser, Genna R.	F	12/18/1995	1/17/2022	2/1/2047	0.9563	0.9167	24.0833	25.0000	73,751	113	3,073	3,687.53	3,687.53
Lapp, Dalton M.	M	10/25/1999	12/15/2022	11/1/2049	0.0464	0.0000	26.8333	26.8333	2,203	0	92	110.16	110.16
Manley, Mark E.	M	10/25/1977	1/22/2002	11/1/2027	20.9426	20.9167	4.8333	25.7500	104,398	3,456	4,350	66,769.96	98,006.28
Mauro, Olivia N.	F	1/22/1997	3/22/2020	2/1/2047	2.7787	2.7500	24.0833	26.8333	83,476	292	3,478	10,252.44	10,684.79
Miller, Jordan W.	M	4/6/1978	7/5/2005	8/1/2030	17.4918	17.4167	7.5833	25.0000	103,791	3,018	4,325	63,768.41	89,044.29
Misiura, Josiah D.	M	1/26/1992	3/27/2017	4/1/2042	5.7650	5.7500	19.2500	25.0000	96,144	687	4,006	18,912.72	21,001.03
Neff, Michael R.	M	7/25/1973	5/19/1997	8/1/2023	25.6202	25.5833	0.5833	26.1667	125,539	5,065	5,261	86,090.71	134,108.13
Nikolaus, Jeffrey S.	M	4/21/1974	9/14/1998	5/1/2024	24.2978	24.2500	1.3333	25.5833	125,910	4,662	5,266	78,914.05	120,239.77
Redden, Michael D.	M	7/27/1968	5/17/1999	6/1/2024	23.6257	23.5833	1.4167	25.0000	123,518	4,450	5,147	73,518.61	110,580.96
Reimers, Joshua G.	M	7/11/1984	6/4/2018	7/1/2043	4.5765	4.5000	20.5000	25.0000	101,433	722	4,226	20,560.75	22,347.24
Sanger, Samuel A.	M	8/22/1977	1/20/2003	2/1/2028	19.9481	19.9167	5.0833	25.0000	128,172	3,959	5,341	73,474.48	104,683.35
Shank, James D.	M	11/19/1967	9/6/1994	1/1/2023	28.3197	28.2500	0.0000	28.2500	126,152	5,201	5,201	84,713.68	136,591.70
Shrom, Randy S.	M	1/24/1979	7/6/2004	8/1/2029	18.4891	18.4167	6.5833	25.0000	120,518	3,629	5,022	70,075.99	97,788.36
Smith, Kaleb L.	M	1/24/1996	12/15/2022	1/1/2048	0.0464	0.0000	25.0000	25.0000	993	0	41	49.65	49.65
Snader, Chad	M	9/6/1991	4/10/2016	10/1/2041	6.7268	6.6667	18.7500	25.4167	106,531	1,077	4,439	27,887.93	31,636.73
Wahlberg, Blake E.	M	2/3/1997	3/18/2019	3/1/2047	3.7896	3.7500	24.1667	27.9167	84,831	448	3,535	14,400.18	15,364.32
Waltman, Heather L.	F	6/23/1982	7/5/2006	7/1/2032	16.4918	16.4167	9.5000	25.9167	110,924	2,775	4,642	61,251.00	84,156.53
Werner, Jonathan L.	M	9/19/1970	9/14/1998	10/1/2023	24.2978	24.2500	0.7500	25.0000	104,413	4,191	4,354	73,504.14	113,322.37
Westerman, Nathan L.	M	5/12/1970	2/27/1995	1/1/2023	27.8443	27.8333	0.0000	27.8333	100,604	4,273	4,273	75,743.41	123,661.64
Wiegand, Ryan M.	M	6/13/1994	6/18/2017	7/1/2044	5.5383	5.5000	21.5000	27.0000	99,702	797	4,154	23,361.89	25,908.22
Zerbe, Stephen B.	M	11/26/1968	9/9/1991	1/1/2023	31.3115	31.2500	0.0000	31.2500	132,483	5,499	5,499	92,500.84	154,018.37
Zollner, Nicholas J.	M	5/19/1998	2/16/2022	6/1/2048	0.8743	0.8333	25.4167	26.2500	59,845	79	2,494	2,992.24	2,992.24
Totals									\$3,897,492	\$106,567	\$162,523	\$2,010,709.32	\$2,945,638.67

East Lampeter Township Police Retirement Plan
Vested Former Members as of January 1, 2023

Name	Sex	Age	Retirement	Dates				Monthly Pension	Pension Form
			Age	Birth	Hire	Termination	Retirement		
Wildt, III, Charles H.	M	50	50	5/11/1973	5/19/1997	6/1/2010	6/1/2023	\$1,349.53	J & 50% Surv.
Totals								\$1,349.53	

East Lampeter Township Police Retirement Plan
Retired Members as of January 1, 2023

Name	Sex	Ret. Type	Age	Dates				Monthly Pension	Pension Form
				Birth	Hire	Retirement	Spouse Birth		
Bezzard, Ronald S.	M		57	11/8/1965	5/20/1991	6/1/2016	4/24/1959	\$3,909.34	J & 50% Surv.
Bougher, Renee L.	F		64	8/13/1958	12/31/1981	9/1/2008	6/16/1961	2,833.54	J & 50% Surv.
Bowman, John M.	M		57	10/14/1965	6/28/1989	4/1/2018	3/14/1969	5,294.00	J & 50% Surv.
Brinkman, Richard L.	M		81	3/16/1942	6/27/1982	7/1/2002		1,244.62	Life
Crouse, Kenneth A.	M		70	4/20/1953	1/20/1986	11/1/2011	10/18/1953	3,646.13	J & 50% Surv.
Edgell, Joseph W.	M	D	57	6/30/1966		4/1/2020	4/22/1964	4,358.25	J & 50% Surv.
Eelman, Scott J.	M	D	52	4/24/1971		5/1/2021	9/9/1964	4,314.22	J & 50% Surv.
Ely, James R.	M		66	11/21/1956	11/18/1981	1/1/2016	1/17/1965	4,928.25	J & 50% Surv.
Flory, Clarence L.	M		84	6/26/1939	2/1/1976	1/1/1999	7/15/1939	2,656.69	J & 50% Surv.
Gehr, Lisa A.	F		54	1/7/1969		3/1/2022	3/7/1972	3,926.14	J & 50% Surv.
Hamill, Kenneth A.	M		74	10/19/1948		9/1/1990		1,487.10	Life
Jerchau, Dale E.	M		72	7/21/1950		2/1/2006	5/4/1952	4,276.68	J & 50% Surv.
Kondras, Bryan S.	M	D	54	7/1/1969	9/15/1997	4/1/2021	7/3/1972	5,114.21	J & 50% Surv.
Lawrence, Michael D.	M		78	11/16/1944		1/1/1997	8/24/1951	2,498.59	J & 50% Surv.
Leighty, Marlene F.	F		61	6/11/1962		8/1/2013	6/9/1959	3,978.88	J & 50% Surv.
Lutz, John R.	M		70	10/9/1952		10/9/2002		1,909.47	Life
Mcelheny, Sr., James D.	M		62	6/2/1961		7/1/2017	4/12/1953	4,601.30	J & 50% Surv.
Reed, Robert S.	M		64	5/26/1959		6/1/2009	5/26/1959	1,022.16	J & 50% Surv.
Savage, Ronald W.	M		79	4/9/1944		5/3/1994	12/10/1949	2,478.84	J & 50% Surv.
Velez, Michelle R.	F		57	5/6/1966		6/1/2016	5/6/1966	2,717.01	J & 50% Surv.
Glick*, Marguerite E.	F	S	87	6/30/1936		4/1/1995		1,598.37	Life
Heffner, Daureen	M	S	70	11/29/1952		9/14/2007		869.08	Life
Orr-Sensenig, Audrey	M	S	59	11/24/1963		5/1/2013		1,606.32	Life
Weaver, Louwana R	F	S	54	2/9/1969		6/1/2017		2,275.69	Life
Total								\$73,544.88	

* Benefit partially funded by annuity.

D = DROP Member, S = Survivor Pension