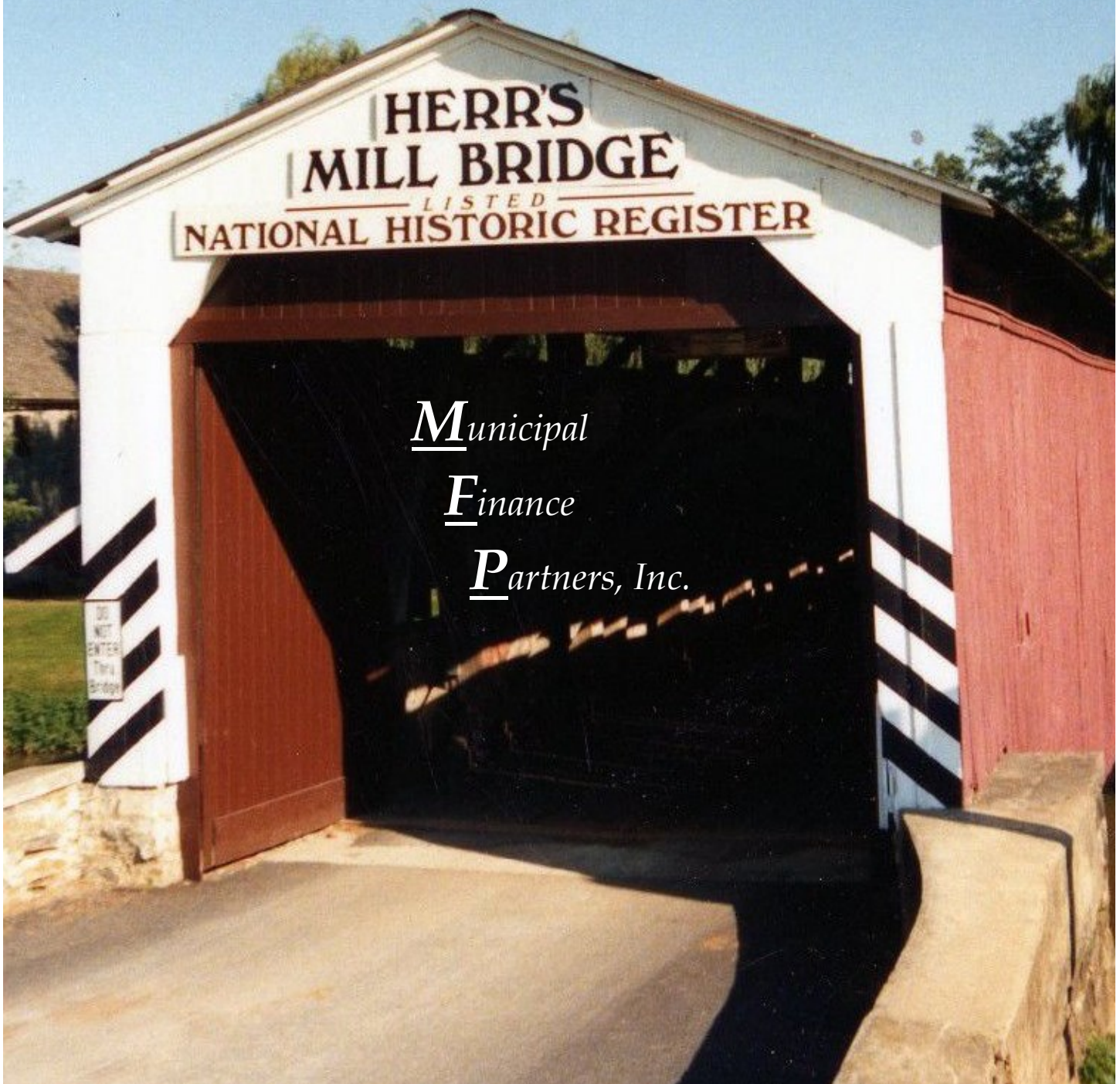


East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021



M*unicipal*

F*inance*

P*artners, Inc.*

Table of Contents

Page

<u>Executive Summary</u>	<u>1-4</u>
<u>A Discussion of Risk</u>	<u>4-5</u>
<u>Actuarial Certification</u>	<u>5-6</u>
<u>Plan Funding Detail</u>	<u>7-10</u>
<u>Normal Cost and Unfunded Liability</u>	<u>7</u>
<u>Changes in Unfunded Actuarial Accrued Liability</u>	<u>8</u>
<u>Illustrative Minimum Municipal Obligation</u>	<u>9</u>
<u>Actuarial Value of Assets</u>	<u>10</u>
<u>Pension Fund Activity</u>	<u>11</u>
<u>Fund Assets and Liabilities</u>	<u>12</u>
<u>MMOs for 2019 & 2021</u>	<u>13</u>
<u>Plan Membership Activity</u>	<u>14</u>
<u>Summary of Plan Provisions</u>	<u>15-16</u>
<u>Actuarial Assumptions and Methods</u>	<u>17</u>
<u>Charts</u>	<u>18-23</u>
Participant Listings	Appendix

East Lampeter Township Defined Benefit Plan

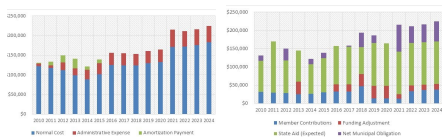
Actuarial Valuation as of January 1, 2021

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 2022, plus projected MMOs for 2023 and 2024, 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; how-

ever, the municipality is ultimately responsible for funding the MMO.

The MMO for 2021 was determined in 2020, based on the January 1, 2019 actuarial valuation and estimated 2020 compensation. These charts show what the 2021 MMO would have been based on the January 1, 2021 actuarial valuation and actual 2020 compensation compared to the actual 2021 MMO.



MMO Components:

- **Normal Cost: 10.2%** of active member compensation
- **Administrative Expenses: 2.3%** of active member compensation
- **A Funding Adjustment of \$15,519** reduces the MMO
- **Member Contributions of 2.05%** of active member compensation reduce the MMO.

The impact of the January 1, 2021 actuarial valuation on the MMO is as follows:

- The Normal Cost has decreased from 10.8% to 10.2% of compensation due to changes in the active member demographics.
- Administrative expenses have decreased from

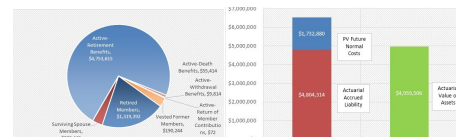
2.8% to 2.3% of compensation.

- The funding adjustment has increased from \$11,933 to \$15,519 due to actuarial gains that have increased the plan's overfunding.

The plan experienced an actuarial gain of \$120,388, which was the net of:

- Investment gains of \$173,580 and
- Experience losses of \$53,242.

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



The actuarial valuation is based upon the following inputs:

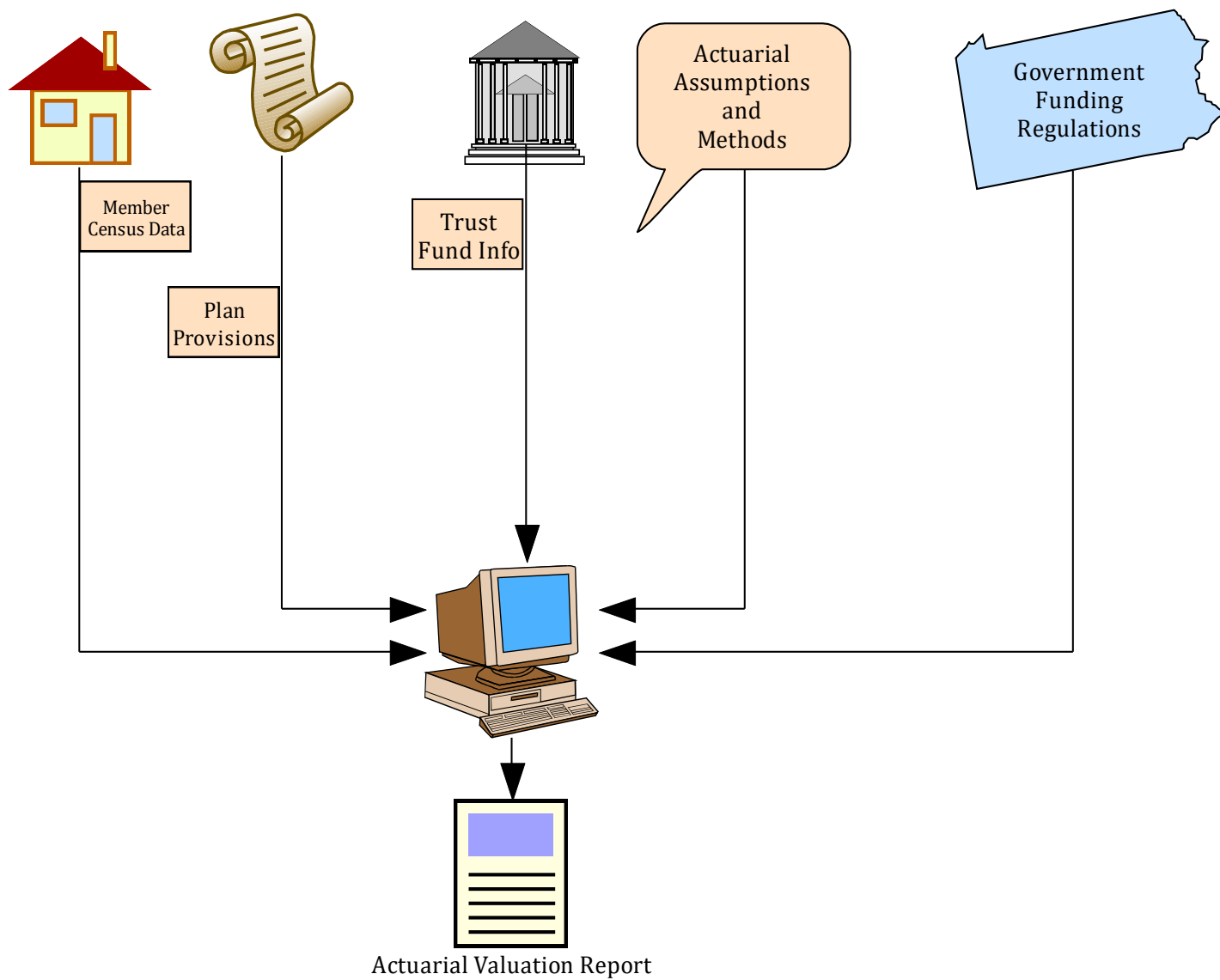
- Investment performance
- Participant information
- Plan provisions
- Actuarial assumptions and methods
- [Act 205](#) funding rules

The remainder of this report details how these inputs impact the plan's funding requirements.

The detailed MMO calculations for 2019 and 2020 are found on [page 13](#). The de-

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021



termination 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 per-

formance during 2019 and 2020.

The market value of plan assets has grown from \$4,026,866 at December 31, 2018 to \$5,455,817 at December 31, 2020. The fund earned returns of 20.07% in 2019 and 15.08% in 2020.

The plan uses an *actuarial smoothing* method to reduce the impact of year-to-year fluctuations in invest-

ment returns. Under this method the actuarial valuation of assets is \$4,959,506 at January 1, 2021.

On an actuarial basis, the fund earned 7.22% in 2019 and 10.64% in 2020, compared to the actuarially assumed rate of 7.0%.

The greater than expected returns caused an investment gain of \$173,580 (about 3.5% of plan assets)

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

during 2019 and 2020.

[Page 11](#) of this report contains detailed information regarding the pension fund activity. [Page 12](#) shows how the fund was invested at the end of 2019 and 2020.

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 2019 and 2020, 5 new employees entered the plan, compared to 3 non-vested terminations of employment, increasing the active membership from 25 to 27 employees. As of January 1, 2021 the plan membership consist-

ed of 27 active employees, 7 vested former members, 14 retired employees and 3 surviving spouses of retired members.

Since the prior actuarial valuation, the plan had an experience loss of \$53,242 (about 1.1% of liabilities). This was due mostly to the absence of retiree deaths, salary increases that were greater than expected and new members, partially offset by the gains from the employee terminations.

[Page 14](#) contains information regarding changes in plan membership during 2019 and 2020. 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 determine 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 valuation.

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

The actuarial assumptions are described on [page 17](#) of this report.

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

Plan Benefit Provisions

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

The plan's provisions are described in detail on [pages 15-16](#) of this report.

The member contribution rate has increased from 1.0% of compensation in

2019 to 2.05% of compensation for 2021, as the rate is adjusted to equalize the Township and member contributions, based upon the current Collective Bargaining Agreement.

In prior years, the member contribution rate was adjusted based on the previous year's fund investment return.

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

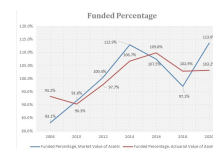
Funded Status

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 102.9% as of January 1, 2019 to 103.2% at January 1, 2021, due to the actuarial gains discussed above. On a market value basis, the funding percentage was 113.6%. 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 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 val-

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

ue rising and falling as interest rates fall and rise. Equity investments achieve larger returns as investing solely in fixed income investments that match the 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 these 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, 2021. 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 Municipal Obligation (MMO, or required contribution) for 2022 and 2023 and may be used for calculating the MMO for 2024.

The report also summarizes the pension fund and participant activity during 2019 and 2020.

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.

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

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 results 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 the East Lampeter Township.

The participant census and plan asset information used to prepare the January 1, 2021 actuarial valuation were as of January 1,

2021.

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:

Municipal Finance Partners, Inc.
830 Sir Thomas Court, Suite 150
Harrisburg, PA 17109
(717) 909-8400, x5015
cfriedlander@mfpinc.biz



Charles B. Friedlander, F.S.A.
President & Chief Actuary
Enrolled Actuary No. 20-04194

January 18, 2022

Date

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

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)	\$163,616
Normal Cost (% of Payroll)	10.2%

Present Value of Future Benefits

Active Members		
Retirement Benefits	\$4,753,615	
Death Benefits	55,414	
Disability Benefits	0	
Withdrawal Benefits	9,814	
Return of Member Contributions	72	
Total Active Members		\$4,818,915
Vested Former Members		190,244
Retired Members		1,319,392
Disabled Members		0
Surviving Spouse Members		208,643
Total Present Value of Future Benefits		\$6,537,194
Present Value of Future Normal Costs		(1,732,880)
Actuarial Accrued Liability		\$4,804,314
Actuarial Value of Assets		(4,959,506)
Unfunded Actuarial Accrued Liability		(\$155,192)

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

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

Unfunded Actuarial Accrued Liability at 1/1/2019		(\$119,331)
Normal Cost	\$291,461	
Administrative Expense	72,405	
Interest on Above Items	18,814	
Total		382,680
Employer Contributions	(20,482)	
Member Contributions	(22,808)	
General Municipal Pension System State Aid	(234,041)	
Interest on Contributions	(20,872)	
Total		(298,203)
Adjustment for Funding Deviation		0
Modification to Actuarial Assumptions		0
Modification to Active Member Benefits		0
Modification to Retired Member Benefits		0
Actuarial (Gain) or Loss		
Investment (Gain) or Loss	(\$173,580)	
Experience (Gain) or Loss	53,242	
Adjustment for Funding Deviation	0	
Total		(120,338)
Unfunded Actuarial Accrued Liability at 1/1/2021		(\$155,192)

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

The Plan's 2021 Minimum Municipal Obligation (MMO) was calculated based on the January 1, 2019 actuarial valuation and 2020 pay as estimated in the fall of 2020. This illustration, based on the January 1, 2021 actuarial valuation and actual 2020 pay, shows how the valuation results impact the calculation of the MMO.

Illustrated Minimum Municipal Obligation

Normal Cost	\$163,616
Administrative Expenses ¹	36,202
Amortization of Unfunded Actuarial Accrued Liability	0
Total Financial Requirement	<u>\$199,818</u>
Member Contributions Anticipated	\$32,725
Funding Adjustment	15,519
Expected State Aid	116,270
Net Municipal Obligation	<u>35,304</u>
Total Financial Requirement	<u>\$199,818</u>

¹ Average of administrative expenses over two prior years:
2019: \$36,419, 2020: \$35,985

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

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.

	2017	2018	2019	2020
Market Value at January 1	\$3,698,415	\$4,250,358	\$4,026,866	\$4,793,367
Contributions	150,408	134,617	148,308	129,023
Benefit Payments and Expenses	(143,310)	(195,790)	(186,182)	(185,093)
Expected Investment Income	<u>259,137</u>	<u>295,384</u>	<u>280,555</u>	<u>333,573</u>
Expected Value at 12/31	\$3,964,650	\$4,484,569	\$4,269,547	\$5,070,870
Market Value at 12/31	<u>4,250,358</u>	<u>4,026,866</u>	<u>4,793,367</u>	<u>5,455,817</u>
Gain or (Loss) ¹	\$285,708	(\$457,703)	\$523,820	\$384,947
Recognition Percentage Deferred	<u>20%</u>	<u>40%</u>	<u>60%</u>	<u>80%</u>
Gain or (Loss) to be Recognized in Future Years	\$57,142	(\$183,081)	\$314,292	\$307,958
Market Value of Assets at 12/31/2020			\$5,455,817	
Total (Gain) or Loss to be Recognized in Future Years			<u>(496,311)</u>	
Actuarial Value of Assets at 1/1/2021			<u><u>\$4,959,506</u></u> ²	

¹ Market Value less Expected Value

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

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

Pension Fund and Member Information

The table below shows the pension fund activity for 2019 and 2020. The following pages show how the pension fund was invested at the end of 2019 and 2020, the development and funding of the 2019 and 2020 Minimum Municipal Obligations, and plan membership activity during 2019 and 2020.

	<u>2020</u>	<u>2019</u>
Market Value of Assets as of Beginning of Year	\$4,793,367.28	\$4,026,865.95
<u>Gross Revenues:</u>		
Member Contributions:		
Member Contributions Received	\$12,862.51	\$10,054.87
Receivable at End of Year	(109.25)	0.00
Total Member Contributions	<u>\$12,753.26</u>	<u>\$10,054.87</u>
Municipal Contributions		
State Aid Portion	\$116,270.00	\$117,771.47
Local Portion	0.00	20,482.01
Total Municipal Contribution	<u>\$116,270.00</u>	<u>\$138,253.48</u>
Interest and Dividend Income:	94,439.98	92,039.56
Realized/(Unrealized) Gains and (Losses) on Investments	<u>624,079.87</u>	<u>712,335.27</u>
Total Revenues	<u>\$847,543.11</u>	<u>\$952,683.18</u>
<u>Expenses:</u>		
Member Distributions:		
Total Benefit Payments (Lump Sums)	\$0.00	\$0.00
Total Benefit Payments (Monthly)	(148,931.40)	(149,054.18)
Refund of Member Contributions	(176.46)	(708.34)
Total Member Distributions	<u>(\$149,107.86)</u>	<u>(\$149,762.52)</u>
Plan Expenses:		
Actuarial Costs	(\$3,050.00)	(\$9,450.00)
Investment Costs	(27,505.67)	(23,320.16)
Other Administrative Expenses	(5,429.78)	(3,649.17)
Total Plan Expenses	<u>(\$35,985.45)</u>	<u>(\$36,419.33)</u>
Total Expenses	<u>(\$185,093.31)</u>	<u>(\$186,181.85)</u>
Market Value of Assets as of End of Year	<u>\$5,455,817.08</u>	<u>\$4,793,367.28</u>
Investment Return Percentage	<u>15.08%</u>	<u>20.07%</u>

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

The table below shows how the pension fund was invested as of December 31, 2019 and December 31, 2020.

<u>Assets:</u>	<u>12/31/2020</u>	<u>12/31/2019</u>
Cash	(\$13,161.34)	\$1,362.53
Receivables:		
Accrued Interest and Dividends Receivable	\$10,177.31	\$11,369.29
Employee Contributions Receivable	0.00	0.00
Employer Contributions Receivable	0.00	0.00
Prepaid Benefits	12,390.50	0.00
Total Receivables	\$22,567.81	\$11,369.29
Investments:		
Money Market and Other Cash Investments	\$148,370.57	\$136,610.39
Mutual Funds	304,836.59	214,855.08
Stocks and Other Equities	3,425,349.14	2,837,962.79
Bonds and Other Fixed Income	1,088,817.08	1,136,694.40
Total Investments	\$4,967,373.38	\$4,326,122.66
Other Assets:		
Alternative Investments	\$479,817.43	\$456,844.90
Total Other Assets	\$479,817.43	\$456,844.90
Total Fund Assets	\$5,456,597.28	\$4,795,699.38
<u>Current Liabilities:</u>		
Accounts Payable and Accrued Administrative Expenses	\$0.00	\$0.00
Benefits Payable	(176.46)	(1.02)
Member Contribution Overpayment	(109.25)	0.00
Net Unsettled Purchases/Sales	(494.49)	(2,331.08)
Total Current Liabilities	(\$780.20)	(\$2,332.10)
Net Assets for Benefits at End of Year	\$5,455,817.08	\$4,793,367.28

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

The table below shows the determination and funding of the plan's Minimum Municipal Obligation (MMO) for 2019 and 2020.

	<u>2020</u>	<u>2019</u>
<u>Determination of Minimum Municipal Obligation:</u>		
Based on Actuarial Valuation as of:	1/1/2017	1/1/2017
Normal Cost Percentage	9.3%	9.3%
Administrative Expense Percentage	2.2%	2.2%
Estimated W-2 Payroll for Previous Year	\$1,429,892	\$1,396,943
Normal Cost	\$132,980	\$129,915
Administrative Expense	31,458	30,733
Annual Cost	<u>\$164,438</u>	<u>\$160,648</u>
Amortization Payment	<u>0</u>	<u>0</u>
Total Financial Requirement	<u>\$164,438</u>	<u>\$160,648</u>
Member Contributions Anticipated	(14,299)	(13,969)
Funding Adjustment	<u>(33,869)</u>	<u>(33,869)</u>
Minimum Municipal Obligation	<u><u>\$116,270</u></u>	<u><u>\$112,810</u></u>
<u>Municipal Contributions:</u>		
State Aid Portion	\$116,270	\$117,771
Local Portion	<u>0</u>	<u>20,482</u>
Total Municipal Contributions	<u><u>\$116,270</u></u>	<u><u>\$138,253</u></u>
Excess or (Shortfall)	\$0	\$25,443
<u>State Aid Allocations</u>		
Non-Uniformed Pension Plan Allocation	\$116,270.00	\$117,771.47
Police Pension Plan Allocation	<u>376,113.32</u>	<u>368,675.94</u>
Total State Aid Allocated	<u><u>\$492,383.32</u></u>	<u><u>\$486,447.41</u></u>

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

The changes in the plan membership during 2019 and 2020 are shown below.

Active Members

Active Members as of January 1, 2019	25
New Members	5
Returned to Active	0
Members No Longer Active:	
Retired	0
Deceased	0
Terminated with Full Vesting	0
Terminated with Partial Vesting	0
Terminated without Vesting	(3)
Total	(3)
Active Members as of January 1, 2021	27
Annual Payroll	\$1,596,361
Average Future Service	17

Vested Former Members

Vested Former Members as of January 1, 2019	7
Terminated with Vested Pension	0
Retired	0
Deceased	0
Returned to Active	0
Vested Former Members as of January 1, 2021	7
Annual Pension	\$29,507

Retired Members

Retired Members as of January 1, 2019	14
New Retirees	0
Deceased Retirees	0
Returned to Active	0
Retired Members as of January 1, 2021	14
Annual Pension	\$134,613

Spouse Beneficiaries of Deceased Members

Spouse Beneficiaries of Deceased Members as of January 1, 2019	3
New Spouse Beneficiaries	0
Deceased Spouse Beneficiaries	0
Returned to Active	0
Spouse Beneficiaries of Deceased Members as of January 1, 2021	3
Annual Pension	\$22,130

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

Section 3 – Summary of Plan Provisions

The Plan is governed by a plan document which was restated in its entirety effective January 1, 1997.

The following is a summary of the provisions of the plan document; actual benefits are determined by the document itself.

Plan Membership

A non-uniformed employee of the Township enters the plan on the December 31 after age 20½ and completion of 6 months of eligibility service.

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. Benefits payable in a different form (e.g., with payments continued for the life of a designated beneficiary after the member's death) and benefits beginning before or after normal retirement are actuarially adjusted from this normal retirement benefit to reflect the different period of payment.

A member's Normal Retirement Date is the first day of the month after the member turns age 65 and completes 5 years of plan membership.

For employees hired prior to January 1, 2014, the Normal Retirement Benefit is calculated as 1.9% of average compensation multiplied by the member's benefit service, but no greater than 60% of average compensation. For employees hired on or after January 1, 2014, the Normal Retirement Benefit is calculated as 1.5% of average compensation multiplied by the member's benefit service, but no greater than 60% of average compensation.

Average compensation is calculated as the average of total pay over the 5 consecutive year period during the last 10 years of employment as a non-uniformed employee with the Township that produces the highest average. Pay during partial years of employment will be annualized for this purpose.

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 using compensation and service to the date of determination. The accrued benefit at any date will be no less than the accrued benefit at December 31, 1983 and no greater than 60% of average compensation.

Payment of Benefits

Upon retirement, the member may elect to receive his pension benefits under one of the following payment forms:

- Under the Life Annuity payment form, benefits are payable for the member's lifetime with payments ceasing upon his death.
- Under the Joint and Survivor payment form, a portion (50%, 66 2/3% or 100%) of the member's pension is payable to his spouse or other designated beneficiary.
- Under the Life with 60, 120 or 180 Payments Guaranteed payment form, if a member dies before the guaranteed monthly benefit payments have been made, the full pension will continue to his designated beneficiary after his death until the guaranteed payments have been made.

Benefits under the plan are calculated as a monthly pension under the Life Annuity option. If a benefit is paid in a different form, the benefit amount is actuarially adjusted to reflect the potential additional benefit payments.

Early Retirement Benefit

If a member terminates within 10 years of his normal retirement, he will be eligible to receive a monthly pension payable immediately equal to the benefit accrued at the date of termination, reduced actuarially.

As described above, benefits under the

plan are calculated as a monthly pension beginning at the member's normal retirement date. If a benefit is paid at a date prior to normal retirement, the benefit amount is actuarially adjusted to reflect the additional benefit payments.

Late Retirement Benefit

If a member continues employment after his normal retirement date, he will be eligible to receive a monthly pension payable immediately equal to the greater of the benefit accrued at the date of actual retirement, or the actuarial equivalent of his normal retirement pension.

As described above, benefits under the plan are calculated as a monthly pension beginning at the member's normal retirement date. If a benefit is paid at a date after normal retirement, the benefit amount is actuarially adjusted to reflect the lost benefit payments and compared to the increase in the accrued pension to determine the larger benefit amount.

Death Benefit

If a member dies after being at least partially vested in his accrued benefit, his surviving spouse or eligible child will receive a pension at his earliest retirement date equal to 50% of the pension the member would have received had he terminated at the time of his death, survived to his earliest retirement date and retired with a joint and 50% survivor form of payment.

If a member dies and is not at least partially vested in his accrued pension, his designated beneficiary will receive the value of assets allocated at December 31, 1983 under the prior plan provisions in effect at that time.

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

Termination of Employment Benefits

If a member terminates employment prior to retirement eligibility, he will be eligible for a benefit from the plan equal to his accrued pension at the date of his termination multiplied by the vesting percentage from the table below. The benefit will be deferred to his earliest retirement date.

<i>Years of Ser- vice</i>	<i>Vested Percent- age</i>
0-2	0%
3	20%
4	40%
5	60%
6	80%
7+	100%

Contributions

Members are required to contribute 2.05% of their compensation for 2021. The rate will be adjusted each year based on the Minimum Municipal Obligation to equalize the Township and member contribution amounts. The contribution rate shall not be less than 1% nor greater than 5%. Member contributions earn 5.0% interest from the end of the plan year in which it was deposited.

Service

Eligibility service is credited for all years and months employed with the Township, plus periods of military service.

Vesting service is credited for all calendar years of employment with the Township in which the employee works 1,000 or more hours.

Benefit service is credited for all years and months (calculated to the completed month) of membership in the plan.

East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

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

5.5% per year

Mortality

Assumed rates of employee mortality are based on the PUB-2010 table, non-uniformed rates, with mortality improvement using Table MP-2019.

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

None Assumed.

Retirement

Members are assumed to retire on their normal retirement date or on the valuation date, if later.

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

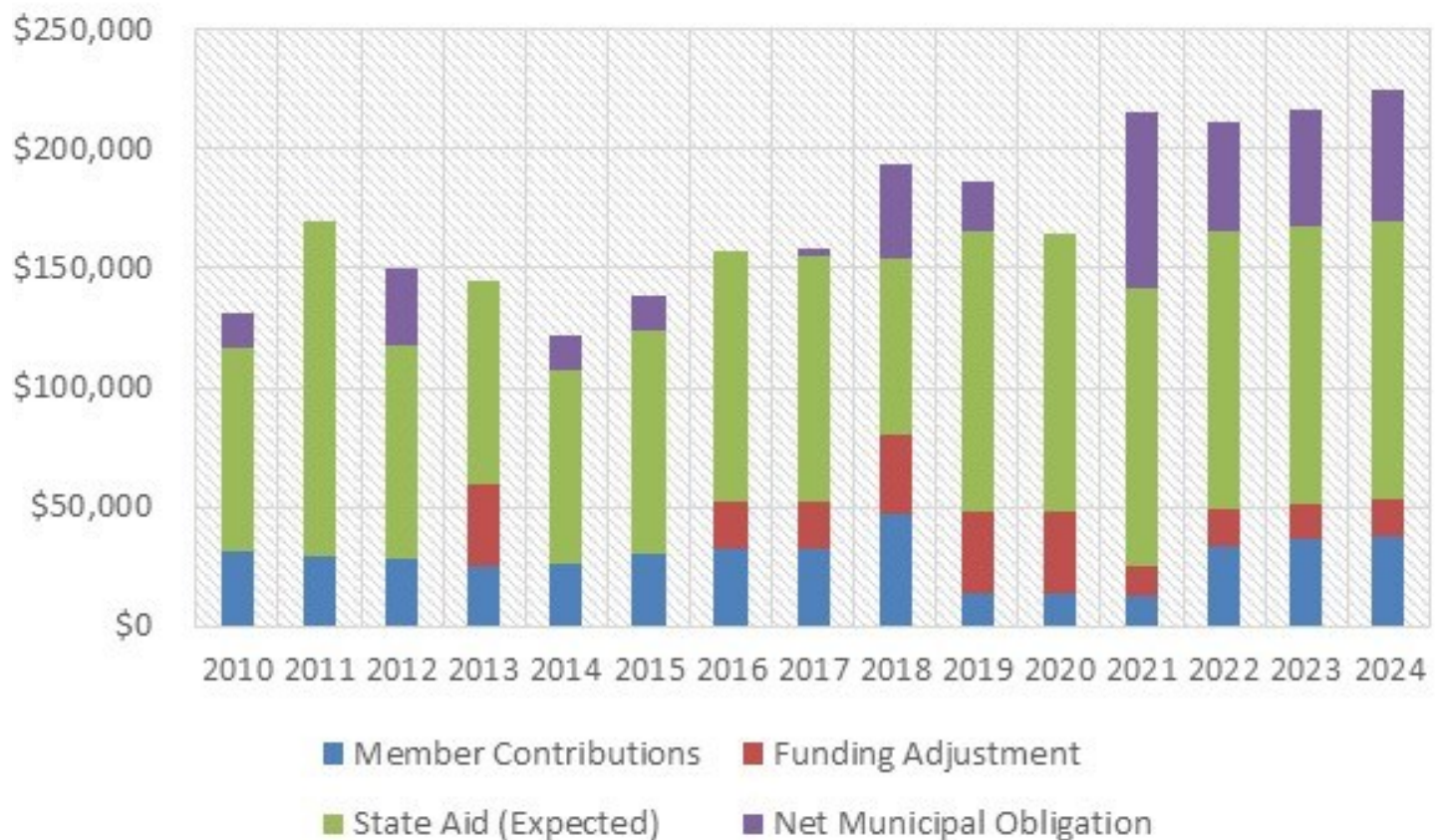
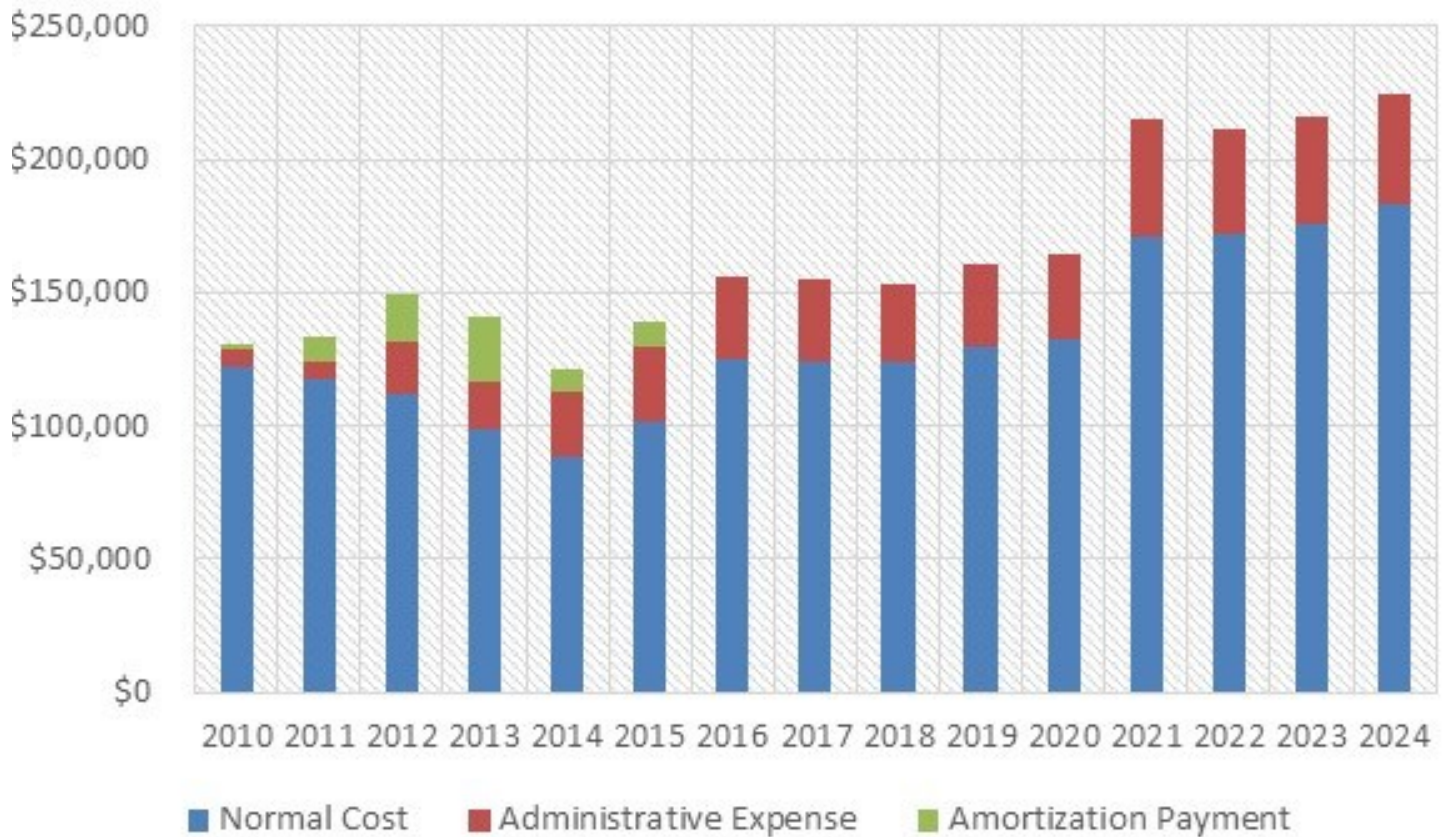
The actuarial cost method is the way that unfunded plan costs are allocated over future years, including the current year. This actuarial valuation uses the *Entry Age Normal Actuarial Cost Method*, as required under Act 205 of 1984. Under this method, the normal cost and actuarial accrued liability 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.

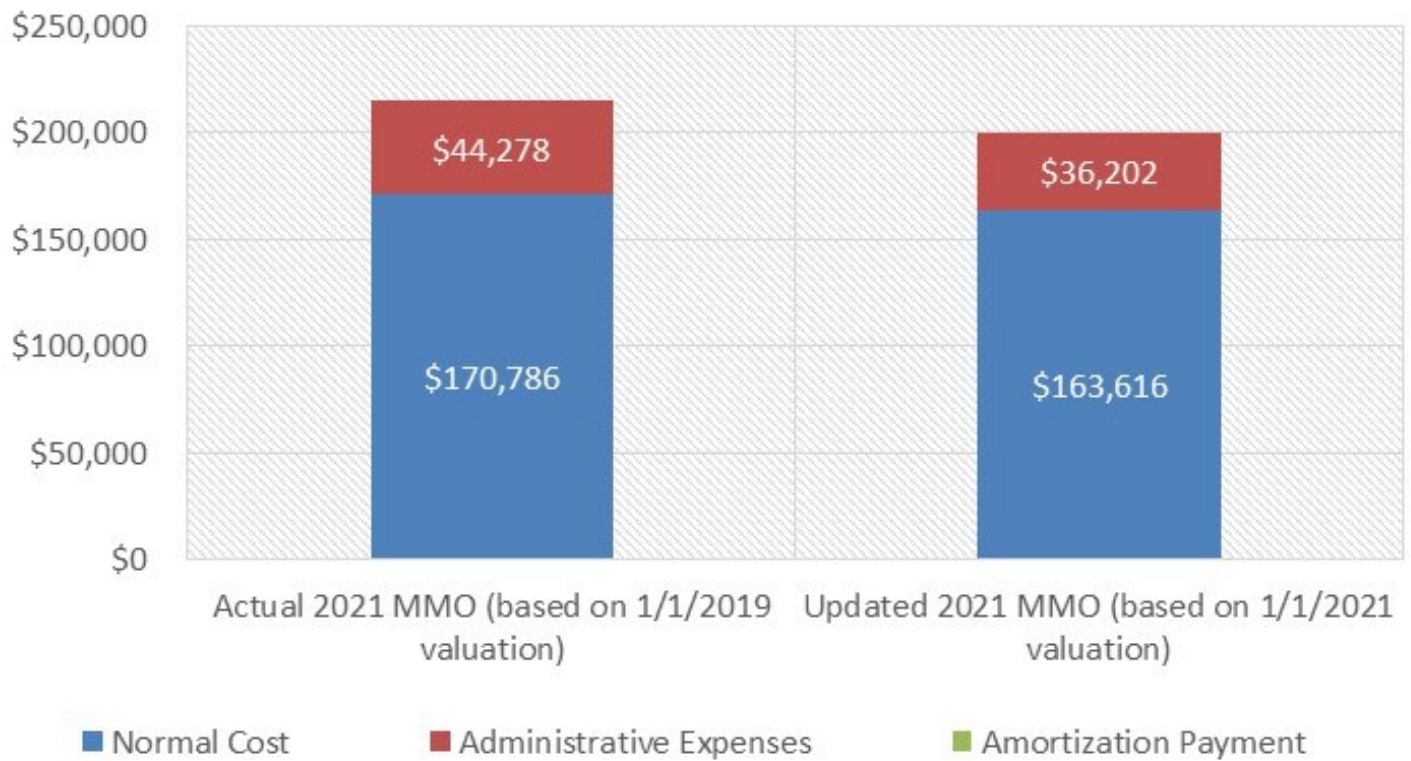
East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021



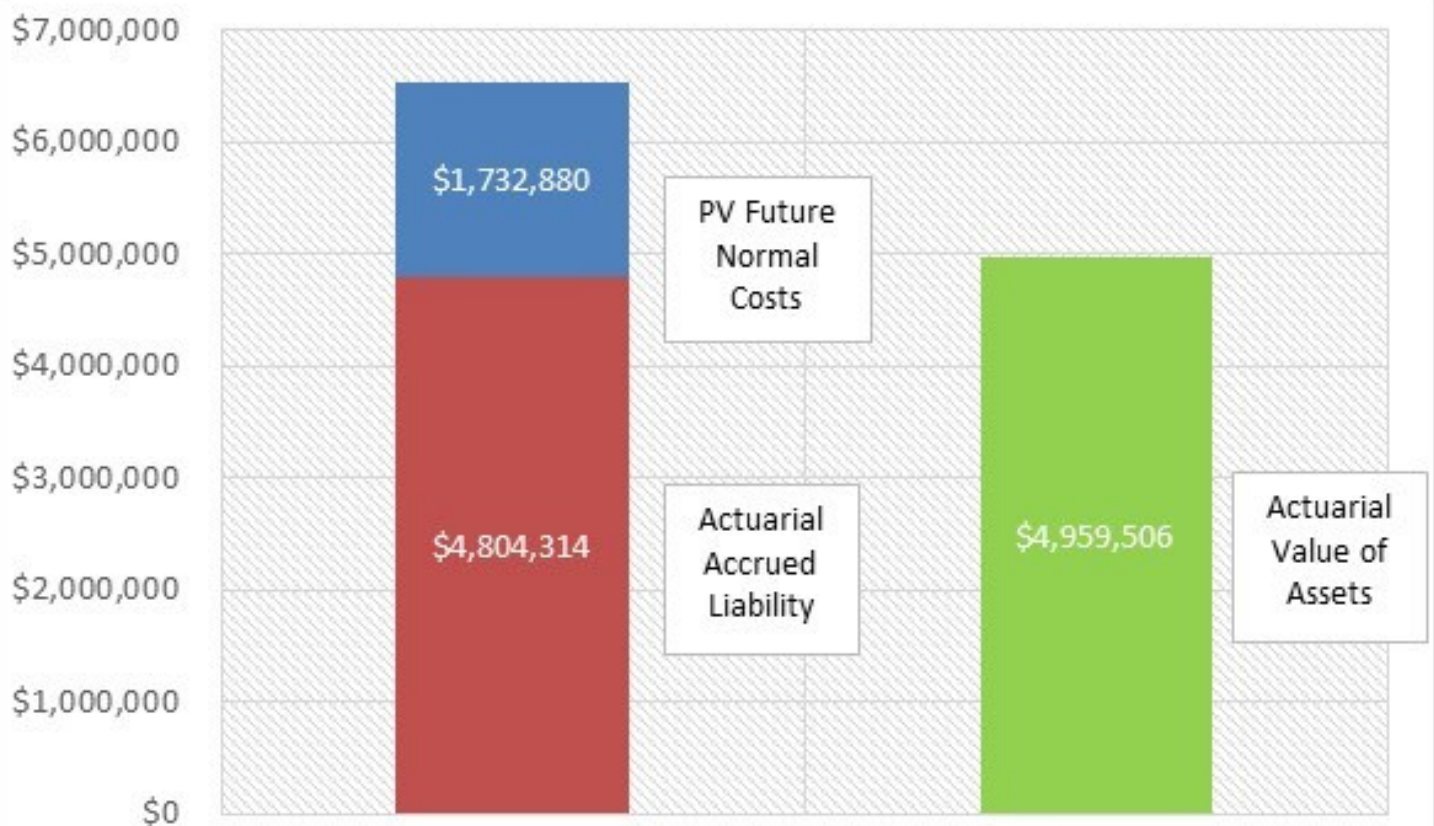
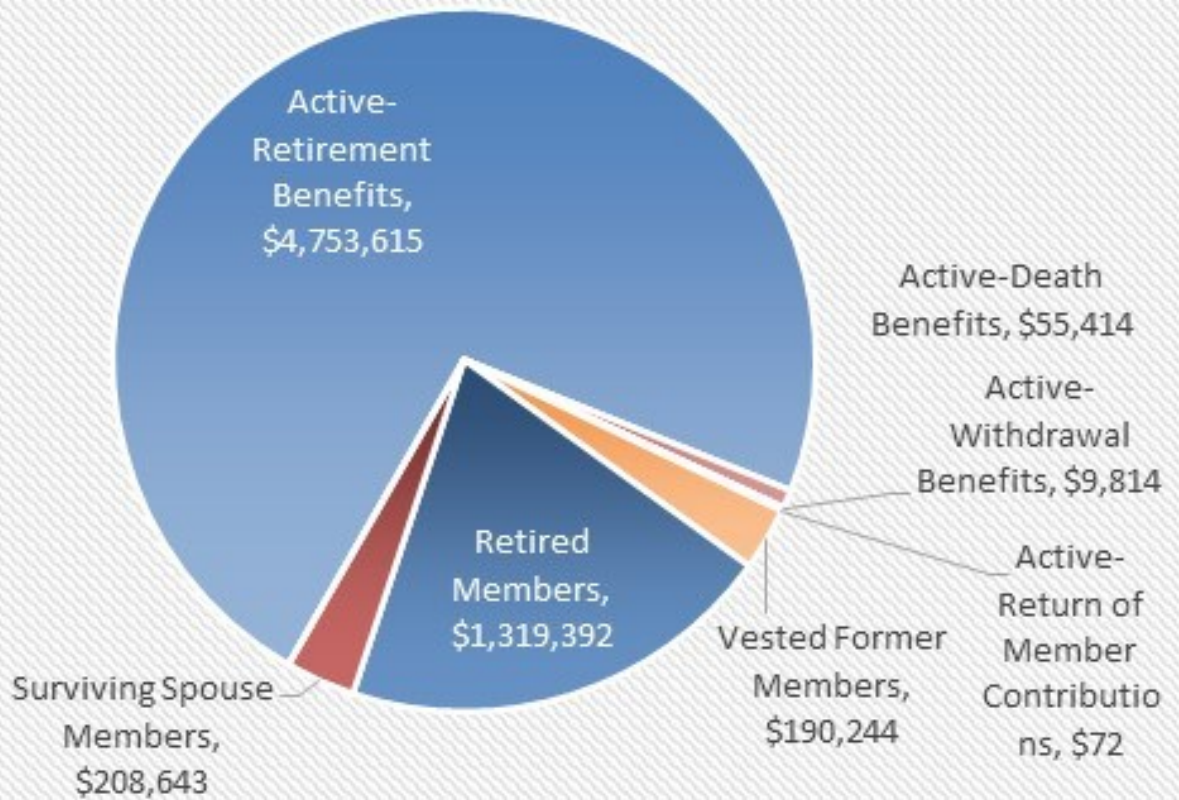
East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021



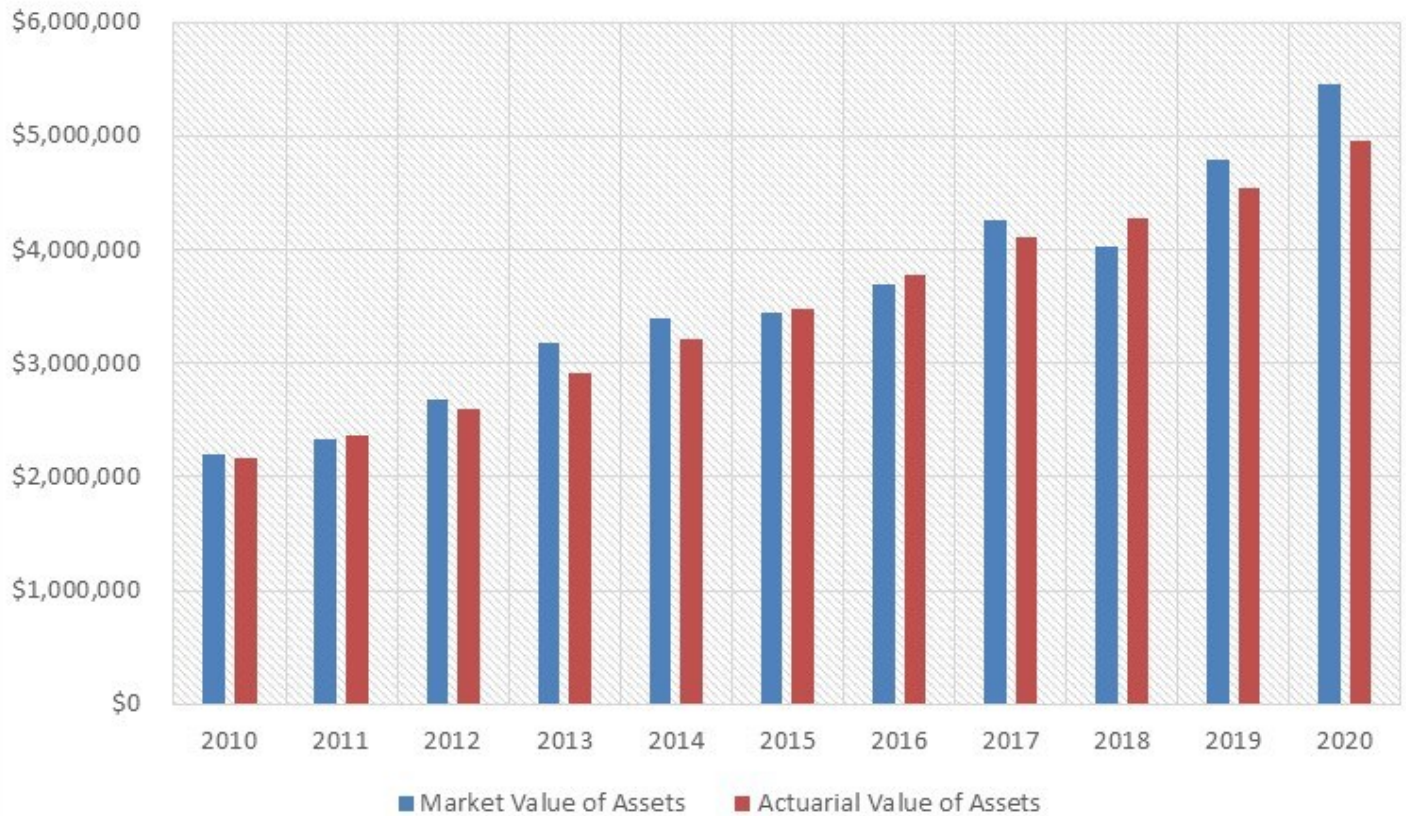
East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021



East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021



East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

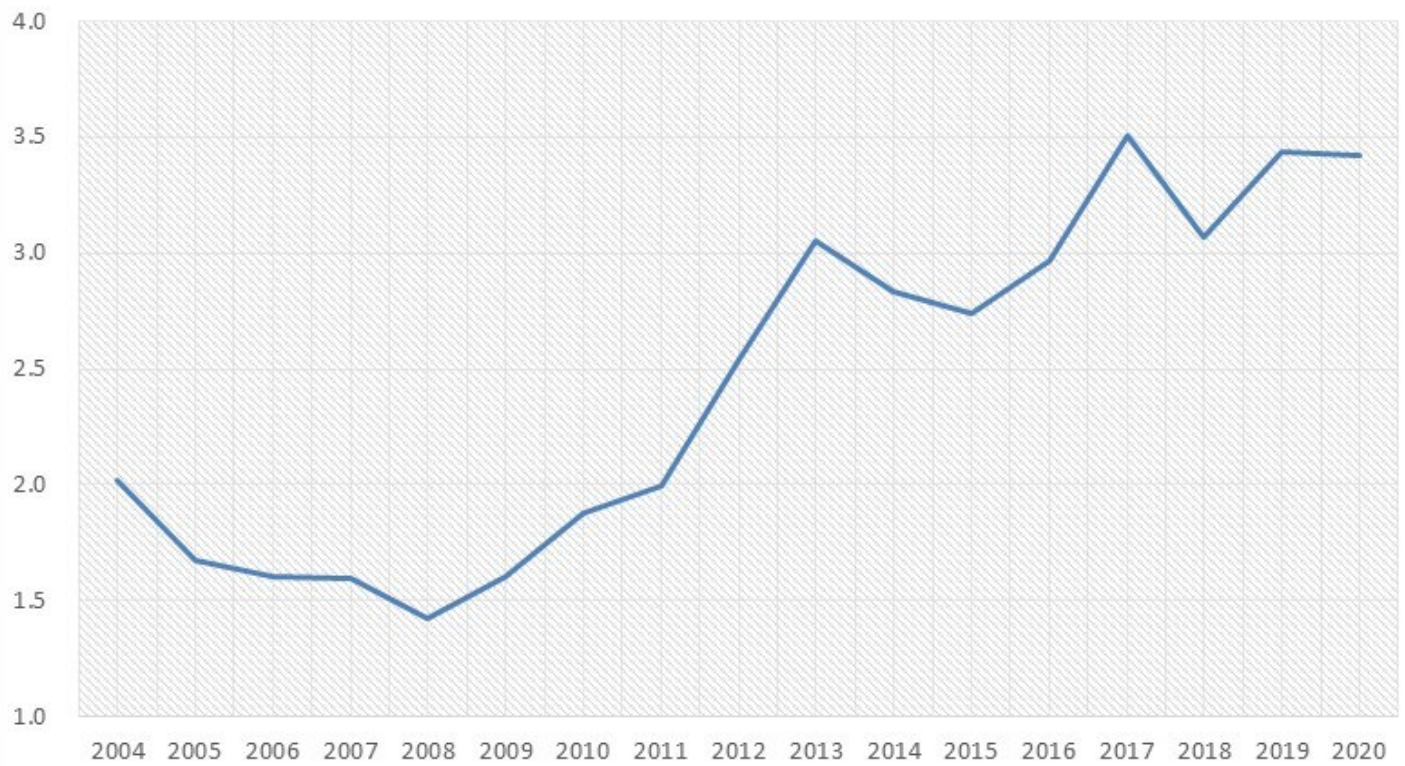
Funded Percentage



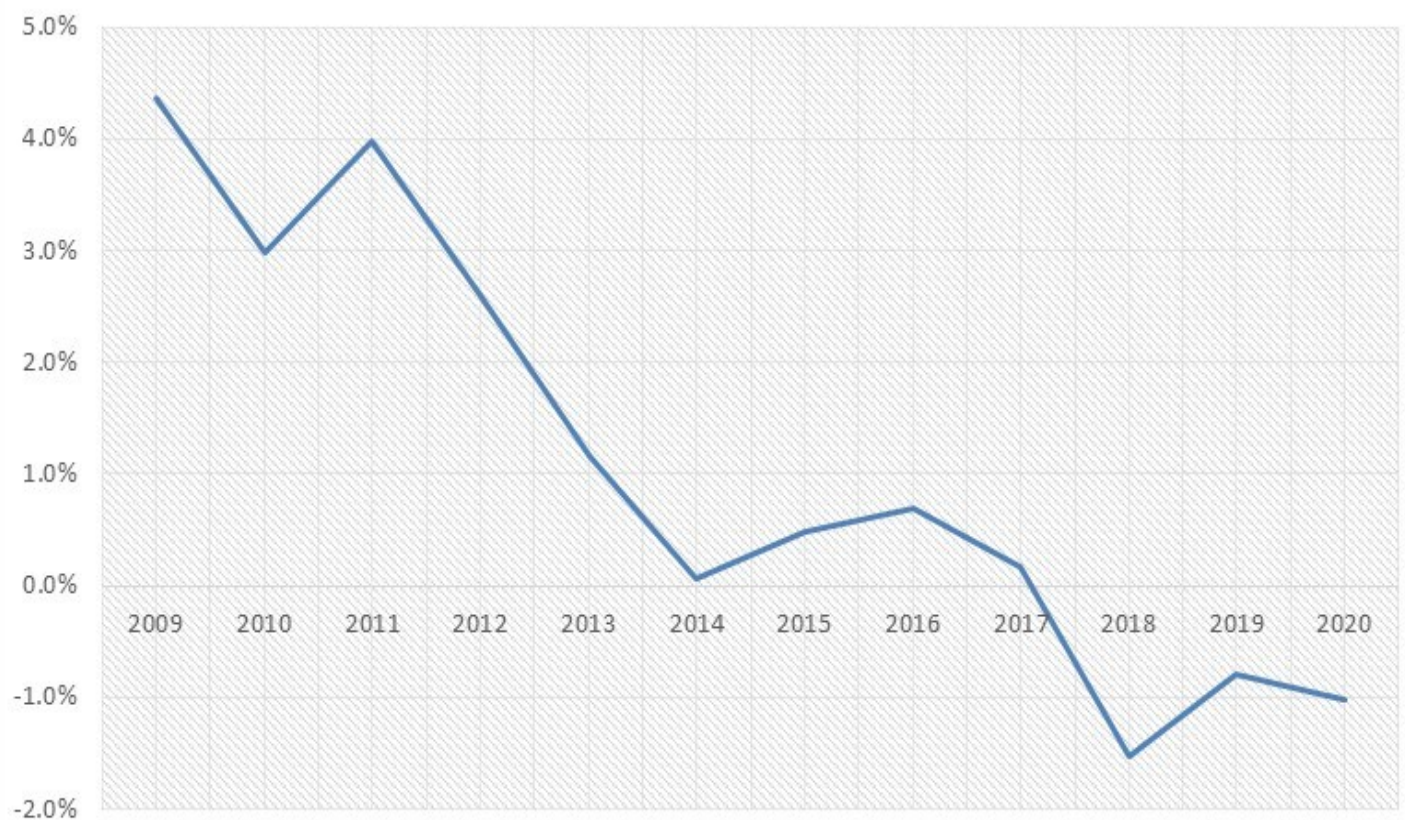
East Lampeter Township Defined Benefit Plan

Actuarial Valuation as of January 1, 2021

MV Assets/Payroll, Non-Uniformed



Cash Flow/MV Assets_{BOY}, Non-Uniformed



East Lampeter Township Defined Benefit Plan
Active Members as of January 1, 2021

Name	Sex	Dates				Service				Current Pay	Accrued	Monthly	Accumulated Member	
		Birth	Hire	Entry	Retirement	Past Vesting	Past Benefit	Future Benefit	Total Benefit		Monthly Pension	Pension at Ret.	w/o int.	w/ int.
Aument, Jaybin C.	M	12/4/1999	1/27/2020	12/31/2020	1/1/2065	1	0.0000	44.0000	44.0000	37,441	0	2,015	0.00	0.00
Bitts, Anthony S.	M	10/14/1969	7/10/2006	12/31/2007	11/1/2034	14	13.0000	13.8333	26.8333	67,402	1,302	2,864	16,794.21	23,754.10
Bresch, Troy W.	M	10/29/1973	4/12/2004	1/1/2005	11/1/2038	17	16.0000	17.8333	33.8333	71,913	1,642	3,596	18,297.46	25,655.40
Brooks, John L.	M	5/14/1962	6/5/1995	1/1/1996	6/1/2027	26	25.0000	6.4167	31.4167	73,760	2,709	3,620	19,956.12	28,188.40
Frankford Jr., Larry G.	M	8/20/1969	2/26/2001	1/1/2002	9/1/2034	20	19.0000	13.6667	32.6667	72,326	2,016	3,616	19,477.09	27,484.65
Good, Derek K.	M	8/18/1994	5/29/2018	12/31/2018	9/1/2059	3	2.0000	38.6667	40.6667	46,925	112	2,346	895.92	923.91
Hair, Alecia J.	F	7/22/1984	10/24/2016	12/31/2017	8/1/2049	4	3.0000	28.5833	31.5833	38,328	129	1,513	1,641.78	1,863.18
Hershey, Dwight A.	M	9/18/1967	6/11/2014	12/31/2014	10/1/2032	7	6.0000	11.7500	17.7500	56,496	368	1,254	5,735.63	6,783.69
Hillegas, Keith M.	M	7/3/1970	6/9/2014	12/31/2014	8/1/2035	7	6.0000	14.5833	20.5833	56,365	365	1,450	5,691.66	6,723.02
Hitchens, Tara	F	12/21/1973	3/12/2013	12/31/2013	1/1/2039	8	7.0000	18.0000	25.0000	78,123	759	3,092	9,873.17	12,195.45
Hostetter, Kevin L.	M	1/28/1964	9/25/2017	1/1/2019	2/1/2029	3	2.0000	8.0833	10.0833	81,567	194	1,020	1,582.58	1,692.08
Hutchison, Ralph M.	M	7/4/1960	12/2/1991	1/1/1993	8/1/2025	29	28.0000	4.5833	32.5833	133,782	5,477	6,689	34,069.25	47,639.39
Leakway, Stephanie A.	F	3/2/1967	4/22/2019	12/31/2019	4/1/2032	2	1.0000	11.2500	12.2500	41,265	47	619	412.78	412.78
Mallory, Angelic T.	F	11/5/1980	3/25/2019	12/31/2019	12/1/2045	2	1.0000	24.9167	25.9167	33,072	39	1,071	330.84	330.84
Martin, Lashawnda R.	F	6/24/1976	3/12/2018	12/31/2018	7/1/2041	3	2.0000	20.5000	22.5000	37,767	87	1,039	726.12	753.72
McPhail, Mark D.	M	12/28/1970	2/26/2001	1/1/2002	1/1/2036	20	19.0000	15.0000	34.0000	67,096	1,900	3,355	18,556.94	26,170.29
Race, Daniel A.	M	3/24/1965	4/4/2005	1/1/2006	4/1/2030	16	15.0000	9.2500	24.2500	67,065	1,493	2,548	17,854.60	24,966.40
Reath, Gina L.	F	5/26/1957	1/31/2000	1/1/2001	6/1/2022	21	20.0000	1.4167	21.4167	42,649	1,261	1,358	11,723.50	16,577.88
Rhine Jr., William M.	M	10/11/1965	2/14/2005	1/1/2006	11/1/2030	16	15.0000	9.8333	24.8333	67,385	1,502	2,650	18,014.55	25,198.39
Shenk, Cindy E.	F	3/19/1957	1/13/1992	1/1/1993	4/1/2022	29	28.0000	1.2500	29.2500	37,969	1,556	1,658	10,312.83	14,583.55
Shirk, Jeffrey W.	M	8/21/1973	6/23/2008	12/31/2008	9/1/2038	13	12.0000	17.6667	29.6667	69,220	1,200	3,251	14,289.26	19,332.08
Shoemaker, Lance E.	M	12/19/1990	9/9/2019	12/31/2020	1/1/2056	1	0.0000	35.0000	35.0000	43,537	0	1,905	0.00	0.00
Sinopoli, David	M	2/8/1966	4/10/2006	1/1/2007	3/1/2031	15	14.0000	10.1667	24.1667	57,968	1,160	2,203	14,353.45	20,116.81
Thomas, Charles H.	M	6/18/1965	7/19/2004	1/1/2006	7/1/2030	16	15.0000	9.5000	24.5000	92,435	1,991	3,513	23,826.03	33,515.88
Treier, Katherine G.	F	1/9/1952	9/7/1999	1/1/2001	1/1/2021	21	20.0000	0.0000	20.0000	50,922	1,507	1,507	13,821.20	19,479.76
Vivaldi, Kurt R.	M	6/23/1979	3/18/2019	12/31/2019	7/1/2044	2	1.0000	23.5000	24.5000	38,317	47	1,150	383.26	383.26
Wasilewski, Alexander J.	M	4/11/1989	5/22/2017	12/31/2017	5/1/2054	4	3.0000	33.3333	36.3333	35,265	128	1,587	1,183.98	1,334.14
Totals										1,596,361	28,991	62,489	279,804.21	386,059.05

East Lampeter Township Defined Benefit Plan
Vested Former Members as of January 1, 2021

Name	Sex	Age	Retirement		Dates			Monthly Pension	Pension Form
			Age	Birth	Hire	Termination	Retirement		
Amway, Anita L.	F	59	65	11/4/1961	5/5/2008	10/4/2013	12/1/2026	\$112.80	Life
Beyer, Jay L.	M	61	65	6/14/1960	2/10/1997	10/15/2005	7/1/2025	497.06	Life
Burkey, Renee L.	F	59	65	4/20/1962	4/8/1982	10/5/1995	5/1/2027	419.25	Life
Fritz, Tracey A.	F	62	65	5/29/1959	7/7/2008	10/19/2016	6/1/2024	315.26	Life
Miller, Jill D.	F	56	65	2/11/1965	4/9/1992	8/18/1999	3/1/2030	245.61	Life
Nelson, Jeanne S.	F	50	65	9/12/1970	1/1/2014	10/27/2017	10/1/2035	30.10	Life
Wile, Rodney Scott	M	55	65	10/4/1965	2/22/2005	4/11/2018	11/1/2030	838.87	Life
Totals								\$2,458.95	

East Lampeter Township Defined Benefit Plan
Retired Members as of January 1, 2021

Name	Sex	Ret. Type ¹	Annuity Code ²	Age	Dates				Monthly Pension	Pension Form
					Birth	Hire	Retirement	Spouse Birth		
Eshleman, C. Leroy	M			72	2/6/1949	5/1/1975	1/1/2010		\$1,834.09	Life
Glick, Jeanne L.	F			73	5/9/1948	5/1/1975	11/1/2017		1,255.42	Life
Graybill, Clyde R.	M			75	4/28/1946		5/1/2011	8/27/1963	840.73	J & 100% Surv.
Hohenwarter, Helen L.	F			81	8/9/1939	8/8/1999	1/1/2005	1/13/1938	1,013.15	J & 50% Surv.
Kreider, Betsy A.	F			81	6/22/1940		1/1/2006	12/18/1940	175.03	J & 50% Surv.
Kreider, H Laverne	F		A	84	3/24/1937		4/1/1993		329.16	Life
Kreider, Susan	F			75	8/22/1945		3/1/2012		214.43	Life
Latschar, Russell E.	M			85	7/28/1935		9/1/2000		108.00	Life
Mcfalls, Ronald L.	M			65	8/8/1955		1/1/2019	12/30/1953	1,461.05	J & 67% Surv.
Millhouse, L. Dennis	M			73	11/10/1947		1/1/2014		760.68	Life
Silcox, Ann I.	F			70	8/15/1950		4/1/2017		1,165.80	Life
Weaver, Jr., William H.	M			65	6/22/1956		6/1/2014	12/11/1993	439.81	J & 100% Surv.
Windle, Marianne	F			59	5/24/1962		7/1/2018		573.05	Life
Young, R. Lee	M			73	11/25/1947		5/1/2013	11/3/1980	1,047.34	J & 67% Surv.
Reiff, Cynthia	F	S		61	9/29/1959		9/1/2018		977.38	Life
Shutter, Shirley M.	F	S	A	83	8/28/1937		1/1/1996		321.77	Life
Sydnor, Sandra L.	F	S		61	11/22/1959		2/1/2005		544.99	Life
Total									\$13,061.88	

¹ Retirement Type: S = Surviving Spouse Pension

² Annuity Code: A = Annuity purchased to pay entire monthly pension.