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Actuarial Valuation as of January 1, 2023

#### **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.

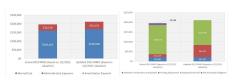


(Click on chart for larger version)

The MMO is the sum of the 2 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 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.



#### **MMO Components:**

- Normal Cost: 10.4% of active member compensation
- Administrative Expenses: 2.7% of active member compensation
- A Funding Adjustment of \$62,521 reduces the MMO
- Member Contributions of 1.33% 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 ininputs: creased from 10.2% to Inventor 10.4% of compensation Part due to changes in the active member demographics.
- Administrative expenses
  have increased from

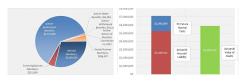
- 2.3% to 2.7% of compensation.
- Page 8 shows how the plan's overfunding (the excess of the actuarial value of assets over the actuarial accrued liability) has increased from \$155,192 to \$625,212 since the prior actuarial valuation, due mostly to actuarial gains. This has resulted in an increase in funding adjustment (10%) the excess) from \$15,519 to \$62,521.

The plan experienced an actuarial gain of \$448,539, which was the sum of:

- Investment gains of \$210,071 and
- Experience gains of \$238,468.

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

The actuarial valuation is

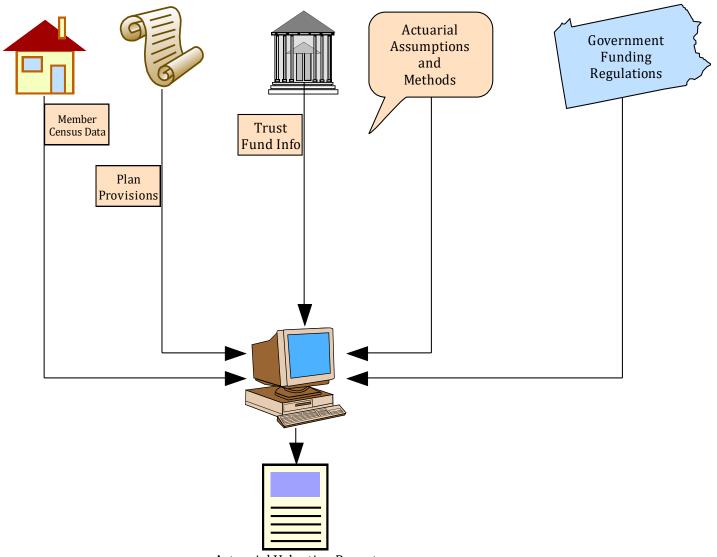


based upon the following inputs:

- Investment performance
- Participant information
- Plan provisions
- Actuarial assumptions and methods
- Act 205 funding rules



Actuarial Valuation as of January 1, 2023



**Actuarial Valuation Report** 

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 \$5,455,817 at December 31, 2020 to \$5,236,905 at December 31, 2022. The

Table of

fund earned returns of 14.39% in 2021 and -16.13% in 2022.

The plan uses an actuarial smoothing method to reduce the impact of year-to-year fluctuations in investment returns. Under this method the actuarial valuation of assets is \$5,895,123 at January 1, 2023.

On an actuarial basis, the fund earned 12.28% in 2021 and 5.72% in 2022,



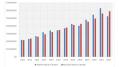
Actuarial Valuation as of January 1, 2023

compared to the actuarially assumed rate of 7.0%.

The greater than expected returns caused an investment gain of \$210,071 about 3.6% of plan assets) during 2021 and 2022.

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 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, 5 new employees entered

the plan, compared to 4 retirements and 1 vested termination of employment. The active membership remained constant at 27 em-In addition, 1 ployees. vested former member retired, 2 retired employees died leaving survivor pensions, and 1 survivor died. As of January 1, 2023 the plan membership consisted of 27 active employees, 7 vested former members. 17 retired employees and 4 surviving spouses of retired members.

Since the prior actuarial valuation, the plan had an experience gain of \$238,468 (about 4.5% of liabilities). This was due mostly to salary increases that were less than expected, employee terminations and postponed retirements, partially offset by the losses from new member and other small gains and losses.

Page 14 contains 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 liabili-

ties 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 salarv.

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



Actuarial Valuation as of January 1, 2023

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. 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

Since the assets exceed the actuarial accrued liability, the amortization payment is replace 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, 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 decreased from 2.05% of compensation in 2021 to 1.33% of compensation for 2023 as the rate is adjusted annually, based upon the current Collective Bargaining Agreement.

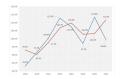
There have been no other changes in the plan provisions since the prior actuarial valuation.

#### **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 103.2% as of January 1, 2021 to 111.9% at January 1, 2023, due to the acgains tuarial discussed above. On a market value basis, the funding percentage was 99.4%. 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



Actuarial Valuation as of January 1, 2023

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 As financial inmatch. struments, 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 premi*um*. This risk could be defeased by 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 vields 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 the maturity of the plan vestments.

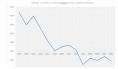
- Longevity and Demographic Risk is the potential for losses (and gains) on the liability side of the pension balance sheet when plan member experience difthe demofrom graphic assumptions use to predict it. This risk can be mitigated by updating mortality assumptions as new tables are impact of deviations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

we can measure risk and MMO for 2026. one of them is to measure

drop in fixed income in- 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 released, reviewing the measures over recent years.





#### **Actuarial Certification**

The purpose of this actuari-**Contribution Risk** is the al valuation report is to depotential that contribu- termine the plan funding tions will deviate from status and project future requirements funding requirements as of recommendations. January 1, 2023. The report Due to the nature and is the basis for satisfying the timing of the MMO pro- 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 2024 and 2025 and may There are many ways that be used for calculating the

Actuarial Valuation as of January 1, 2023

MMO for 2026.

The report also summarizes To the pension fund and partic-knowledge, this report is ipant activity during 2021 complete and 2022.

cantly from the results in peter Township. this report. Additional determinations are needed The participant census and for other purposes, such as plan asset information used the plan sponsor's financial to prepare the January 1, statements.

The actuarial valuation is a projection of liabilities based on the plan provifinancial inforsions. mation, 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 actuarial valuation. Analysis of the sensitivity of the valuation results to future experience was beyond the scope of this assignment.

the of best my and accurate. based upon the data furnished to us. The financial Determinations for purpos- data regarding the pension es other than determining fund, as well as the particithe plan's funding require- pant and beneficiary data ments may differ signifi- was provided by East Lam-

> 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 the **Oualification** meet 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

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

<u>January 16, 2024</u> Date

Actuarial Valuation as of January 1, 2023

#### 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)		\$168,508
Normal Cost (% of Payroll)	<u> </u>	10.4%
Present Value of Future Benefits		
Active Members		
Retirement Benefits	\$4,372,894	
Death Benefits	52,081	
Disability Benefits	0	
Withdrawal Benefits	14,313	
Return of Member Contributions	157	
Total Active Members		\$4,439,445
Vested Former Members		286,507
Retired Members		2,065,834
Disabled Members		0
Surviving Spouse Members		321,934
Total Present Value of Future Benefits		\$7,113,720
Present Value of Future Normal Costs		(1,843,809)
Actuarial Accrued Liability		\$5,269,911
Actuarial Value of Assets		(5,895,123)
Unfunded Actuarial Accrued Liability		(\$625,212)

Actuarial Valuation as of January 1, 2023

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		(\$155,192)
Normal Cost	\$332,667	
Administrative Expense	86,351	
Interest on Above Items	19,079	
Total	<u>,                                      </u>	438,097
Employer Contributions	(84,466)	
Member Contributions	(64,052)	
General Municipal Pension System State Aid	(279,760)	
Interest on Contributions	(31,300)	
Total		(459,578)
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	(\$210,071)	
Experience (Gain) or Loss	(238,468)	
Adjustment for Funding Deviation	0	
Total		(448,539)
Unfunded Actuarial Accrued Liability at 1/1/2023		(\$625,212)

Actuarial Valuation as of January 1, 2023

The Plan's 2023 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	\$168,508
Administrative Expenses <sup>1</sup>	43,176
Amortization of Unfunded Actuarial Accrued Liability	0
Total Financial Requirement	\$211,684
Member Contributions Anticipated	\$21,567
Funding Adjustment	62,521
Expected State Aid	127,596
Net Municipal Obligation	0
Total Financial Requirement	\$211,684

<sup>&</sup>lt;sup>1</sup> Average of administrative expenses over two prior years:

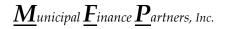
2021: \$42,166, 2022: \$44,185



Actuarial Valuation as of January 1, 2023

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.

Market Value at January 1	<b>2019</b> \$4,026,866	<b>2020</b> \$4,793,367	<b>2021</b> \$5,455,817	<b>2022</b> \$6,286,501
Contributions	148,308	129,023	233,822	194,455
Benefit Payments and Expenses	(186,182)	(185,093)	(191,097)	(233,133)
Expected Investment Income	280,555	333,573	383,403	438,701
Expected Value at 12/31	\$4,269,547	\$5,070,870	\$5,881,945	\$6,686,524
Market Value at 12/31	4,793,367	5,455,817	6,286,501	5,236,905
Gain or (Loss) <sup>1</sup>	\$523,820	\$384,947	\$404,556	(\$1,449,619)
Recognition Percentage Deferred	20%	40%	60%	80%
Gain or (Loss) to be Recognized in Future Years	\$104,764	\$153,979	\$242,734	(\$1,159,695)
Market Value of Assets at 12/31/202		\$5,236,905		
Total (Gain) or Loss to be Recognized	in Future Years	_	658,218	
Actuarial Value of Assets at 1/1/2023	}	_	\$5,895,123 2	





<sup>&</sup>lt;sup>1</sup> Market Value less Expected Value

<sup>&</sup>lt;sup>2</sup> Limited to between 80% and 120% of Market Value

Actuarial Valuation as of January 1, 2023

#### **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.

Market Value of Assets as of Beginning of Year	<u>2022</u> \$6,286,501.26	<u>2021</u> \$5,455,817.08
Gross Revenues:		
Member Contributions:		
Member Contributions Received	\$31,798.82	\$32,143.54
Receivable at Beginning of Year	0.00	109.25
Receivable at End of Year	0.00	0.00
Total Member Contributions	\$31,798.82	\$32,252.79
Municipal Contributions		
State Aid Portion	\$150,233.11	\$129,526.63
Local Portion	12,422.89	72,043.03
Total Municipal Contribution	\$162,656.00	\$201,569.66
Interest and Dividend Income:	134,085.22	108,629.66
Realized/(Unrealized) Gains and (Losses) on Investments	(1,145,003.60)	679,329.22
Total Revenues	(\$816,463.56)	\$1,021,781.33
Expenses:		
Member Distributions:		
Total Benefit Payments (Lump Sums)	\$0.00	\$0.00
Total Benefit Payments (Monthly)	(187,368.11)	(148,931.40)
Refund of Member Contributions	(1,579.99)	0.00
Total Member Distributions	(\$188,948.10)	(\$148,931.40)
Plan Expenses:		
Actuarial Costs	(\$6,100.00)	(\$5,700.00)
Investment Costs	(31,720.71)	(34,518.99)
Other Administrative Expenses	(6,364.16)	(1,946.76)
Total Plan Expenses	(\$44,184.87)	(\$42,165.75)
Total Expenses	(\$233,132.97)	(\$191,097.15)
Market Value of Assets as of End of Year	\$5,236,904.73	\$6,286,501.26
Investment Return Percentage	-16.13%	14.39%

Actuarial Valuation as of January 1, 2023

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

Assets: Cash	<u>12/31/2022</u> (\$10,180.70)	12/31/2021 (\$11,066.21)
Receivables:		
Accrued Interest and Dividends Receivable	\$12,266.84	\$0.00
Unsettled Trades	800.87	0.00
Prepaid Benefits	17,999.30	12,400.50
Total Receivables	\$31,067.01	\$12,400.50
Investments:		
Money Market and Other Cash Investments	\$230,483.60	\$267,633.80
Mutual Funds	248,396.58	247,929.72
Stocks and Other Equities	2,941,975.45	3,807,792.18
Bonds and Other Fixed Income	1,261,650.15	1,408,356.25
Total Investments	\$4,682,505.78	\$5,731,711.95
Other Assets:		
Alternative Investments	\$533,645.45	\$553,631.48
Total Other Assets	\$533,645.45	\$553,631.48
Total Fund Assets	\$5,237,037.54	\$6,286,677.72
Current Liabilities:		
Accounts Payable and Accrued Administrative Expenses	\$0.00	\$0.00
Benefits Payable	(132.81)	(176.46)
Total Current Liabilities	(\$132.81)	(\$176.46)
Net Assets for Benefits at End of Year	\$5,236,904.73	\$6,286,501.26

Actuarial Valuation as of January 1, 2023

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

	<u>2022</u>	<u>2021</u>
Determination of Minimum Municipal Obligation:		
Based on Actuarial Valuation as of:	1/1/2021	1/1/2019
Normal Cost Percentage	10.2%	10.8%
Administrative Expense Percentage	2.3%	2.8%
Estimated W-2 Payroll for Previous Year	\$1,690,427	\$1,581,355
Normal Cost	\$172,423	\$170,786
Administrative Expense	38,880	44,278
Annual Cost	\$211,303	\$215,064
Amortization Payment	0	0
Total Financial Requirement	\$211,303	\$215,064
Member Contributions Anticipated	(33,128)	(13,311)
Funding Adjustment	(15,519)	(11,933)
Minimum Municipal Obligation	\$162,656	\$189,820
Municipal Contributions:		
State Aid Portion	\$150,233	\$129,527
Local Portion	12,423	72,043
Total Municipal Contributions	\$162,656	\$201,570
Excess or (Shortfall)	\$0	\$11,750
State Aid Allocations		
Non-Uniformed Pension Plan Allocation	\$150,233.11	\$129,526.63
Police Pension Plan Allocation	362,631.62	354,998.91
Total State Aid Allocated	\$512,864.73	\$484,525.54

Actuarial Valuation as of January 1, 2023

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

Active Members		
Active Members as of January 1, 2021		27
New Members		5
Returned to Active		0
Members No Longer Active:	(4)	
Retired	(4)	
Deceased	0	
Terminated with Full Vesting	(1)	
Terminated with Partial Vesting	0	
Terminated without Vesting	0	(5)
Total	-	(5)
Active Members as of January 1, 2023	=	27
Annual Payroll	=	\$1,621,565
Average Future Service	=	19
Vested Former Members		
Vested Former Members as of January 1, 2021		7
Terminated with Vested Pension		1
Retired		(1)
Deceased		0
Returned to Active	-	0
Vested Former Members as of January 1, 2023	=	7
Annual Pension	=	\$42,923
Detined Manahava		
Retired Members		1.4
Retired Members as of January 1, 2021		14
New Retirees		5
Deceased Retirees		(2)
Returned to Active	-	0
Retired Members as of January 1, 2023	=	17
Annual Pension	=	\$202,596
Spouse Beneficiaries of Deceased Members		
Spouse Beneficiaries of Deceased Members as of January 1, 2021		3
New Spouse Beneficiaries		2
Deceased Spouse Beneficiaries		(1)
Returned to Active		0
Spouse Beneficiaries of Deceased Members as of January 1, 2023	-	4
Annual Pension	=	\$32,218
	-	. , -

Actuarial Valuation as of January 1, 2023

#### 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

Township enters the plan on the Decem-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 nonuniformed 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 As described above, benefits under the

A non-uniformed employee of the normal retirement benefit formula us- beginning at the member's normal retireber 31 after age 20½ and completion of date of determination. The accrued prior to normal retirement, the benefit the accrued benefit at December 31, the additional benefit payments. 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:

- 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 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 paya- sions in effect at that time. ble immediately equal to the benefit accrued at the date of termination, reduced actuarially.

equal to the benefit calculated under the plan are calculated as a monthly pension ing compensation and service to the ment date. If a benefit is paid at a date benefit at any date will be no less than amount is actuarially adjusted to reflect

#### Late Retirement Benefit

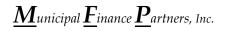
If a member continues employment after his normal retirement date, he will be eligible to receive a monthly pension payable immediately equal to the greater of the benefit accrued at the date of actual retirement, or the actuarial Under the Life Annuity payment equivalent of his normal retirement pension.

> 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 beneficiary after his death until the surviving spouse or eligible child will guaranteed payments have been 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 provi-





Actuarial Valuation as of January 1, 2023

#### **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.

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

#### **Contributions**

Members are required to contribute 1.33% of their compensation for 2023. 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.



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.

#### <u>Interest Rate</u>

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.

#### <u>Turnover</u>

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**

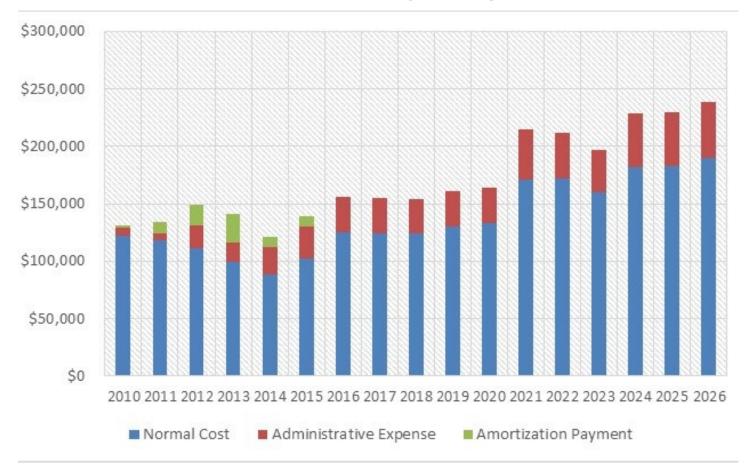
The actuarial cost method is the way that unfunded plan costs are allocated over future years, including the current year. This actuarial valuation uses the Entry Age Normal Actuarial Cost Method, as required under Act 205 of 1984. Under this method, the normal cost and actuarial accrued liability are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

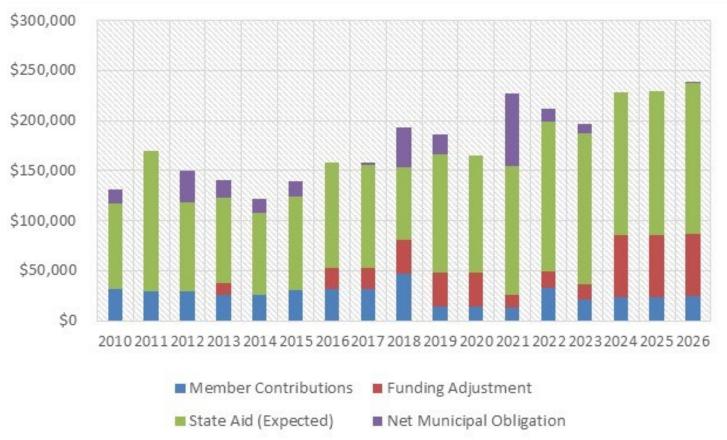
### <u>Changes in the Plan's Actuarial Assumptions</u>

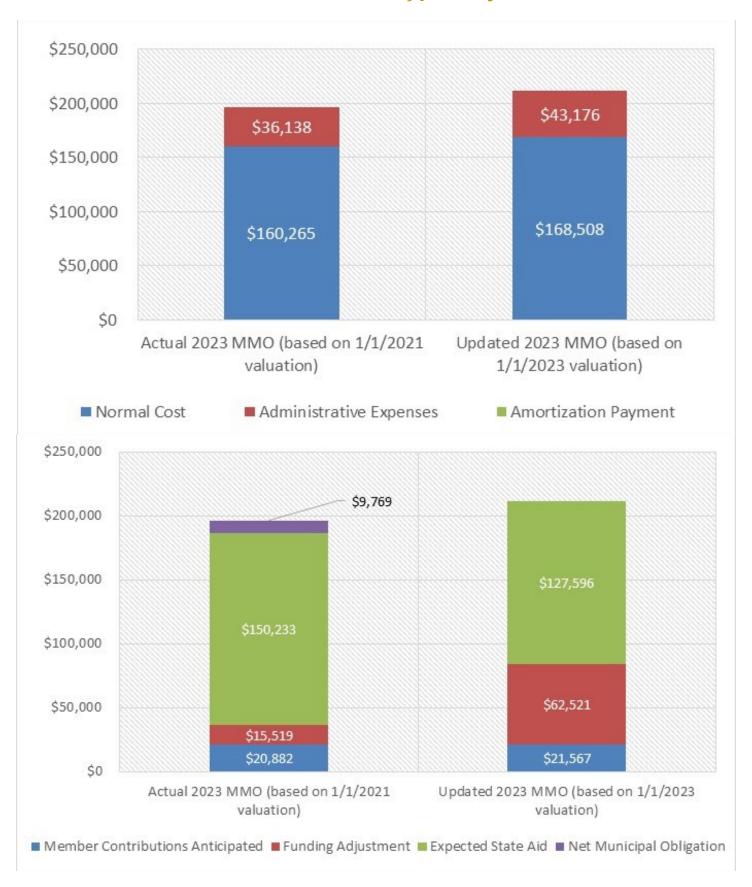
None.

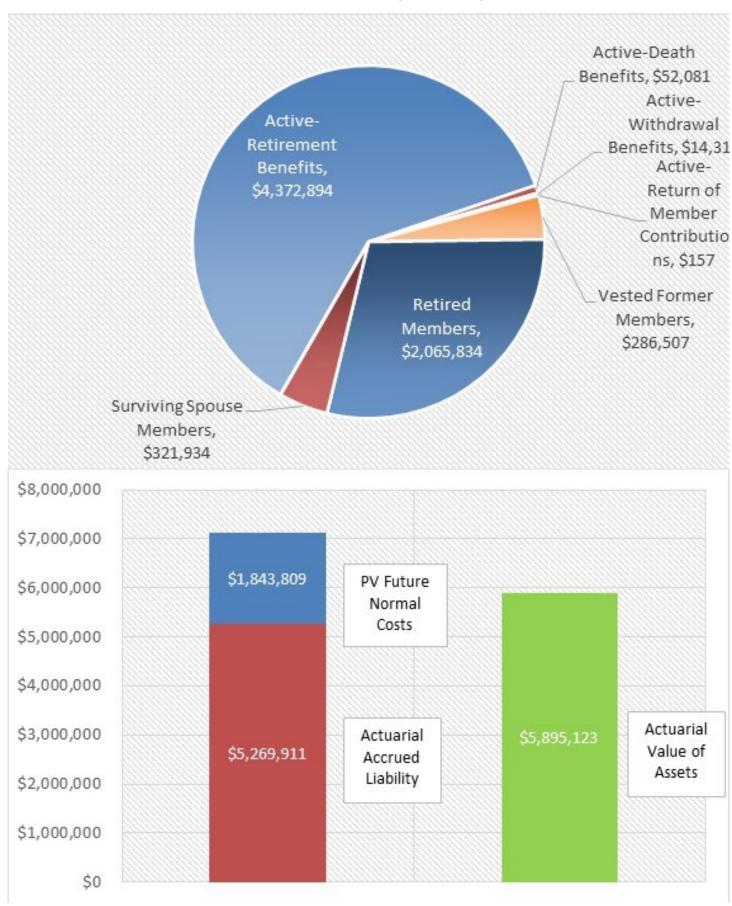


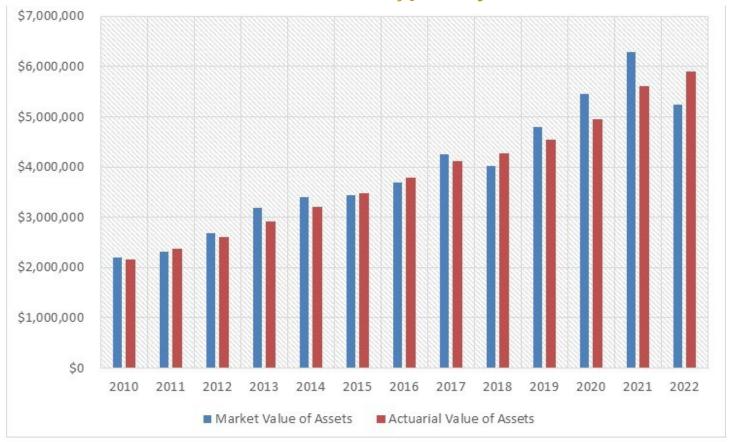




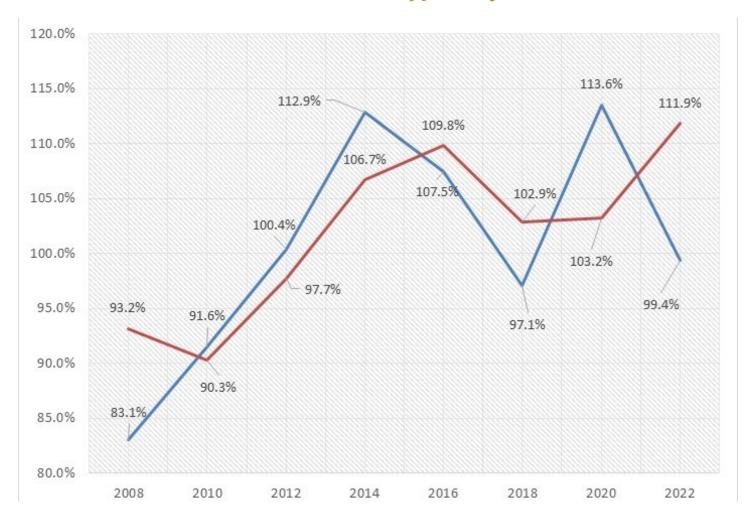


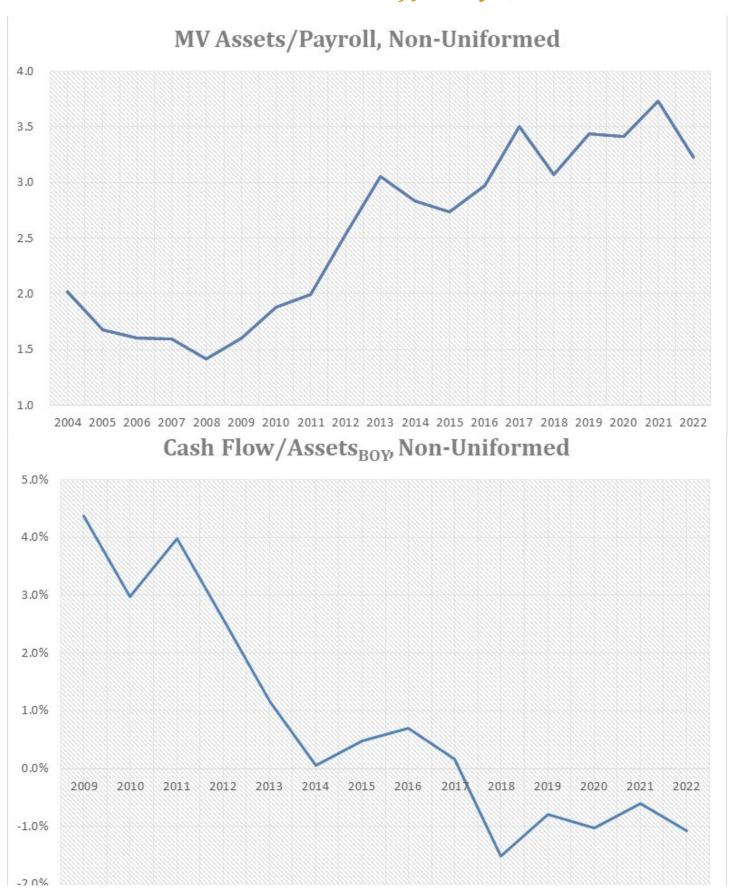












#### East Lampeter Township Defined Benefit Plan Active Members as of January 1, 2023

						Service				Accrued	Monthly	Accumulate	d Member	
	_		Date	es		Past	Past	Future	Total	Current	Monthly	Pension	Contrib	utions
Name	Sex	Birth	Hire	Entry	Retirement	Vesting	Benefit	Benefit	Benefit	Pay	Pension	at Ret.	w/o int.	w/ int.
Aument, Jaybin C.	M	12/4/1999	1/27/2020	12/31/2020	1/1/2065	3	2.0000	42.0000	44.0000	51,679	114	2,584	1,931.82	1,977.77
Bitts, Anthony S.	M	10/14/1969	7/10/2006	12/31/2007	11/1/2034	16	15.0000	11.8333	26.8333	69,503	1,580	2,953	19,553.75	29,018.30
Bresch, Troy W.	M	10/29/1973	4/12/2004	1/1/2005	11/1/2038	19	18.0000	15.8333	33.8333	71,690	1,975	3,585	21,152.12	31,212.21
Brooks, Winifred P.	F	3/20/1979	1/10/2022	12/31/2022	4/1/2044	1	0.0000	21.2500	21.2500	32,787	0	882	0.00	0.00
Frankford Jr., Larry G.	M	8/20/1969	2/26/2001	1/1/2002	9/1/2034	22	21.0000	11.6667	32.6667	72,941	2,346	3,647	22,382.56	33,281.08
Good, Derek K.	M	8/18/1994	5/29/2018	12/31/2018	9/1/2059	5	4.0000	36.6667	40.6667	57,411	245	2,871	3,029.64	3,202.76
Gregg, Matthew R.	M	3/8/1990	4/11/2022	12/31/2022	4/1/2055	1	0.0000	32.2500	32.2500	32,171	0	1,777	0.00	0.00
Hair, Alecia J.	F	7/22/1984	10/24/2016	12/31/2017	8/1/2049	6	5.0000	26.5833	31.5833	41,261	230	1,629	2,765.10	3,193.21
Hayes, Charles P.	M	7/2/1962	9/14/2020	12/31/2021	8/1/2027	2	1.0000	4.5833	5.5833	57,442	70	359	1,125.86	1,125.86
Hershey, Dwight A.	M	9/18/1967	6/11/2014	12/31/2014	10/1/2032	9	8.0000	9.7500	17.7500	61,793	554	1,371	8,096.66	9,897.54
Hillegas, Keith M.	M	7/3/1970	6/9/2014	12/31/2014	8/1/2035	9	8.0000	12.5833	20.5833	61,259	551	1,576	8,049.42	9,827.74
Hitchens, Tara	F	12/21/1973	3/12/2013	12/31/2013	1/1/2039	10	9.0000	16.0000	25.0000	84,476	1,079	3,344	13,176.01	16,830.68
Hostetter, Kevin L.	M	1/28/1964	9/25/2017	1/1/2019	2/1/2029	5	4.0000	6.0833	10.0833	81,898	395	1,024	4,832.44	5,197.61
Hutchison, Ralph M.	M	7/4/1960	12/2/1991	1/1/1993	8/1/2025	31	30.0000	2.5833	32.5833	134,165	6,156	6,681	39,392.47	57,980.33
Leakway, Stephanie A.	F	3/2/1967	4/22/2019	12/31/2019	4/1/2032	4	3.0000	9.2500	12.2500	42,540	149	638	2,087.41	2,171.76
Leighty, Christopher D.	M	3/13/1991	3/28/2022	12/31/2022	4/1/2056	1	0.0000	33.2500	33.2500	28,262	0	1,529	0.00	0.00
Mallory, Angelic T.	F	11/5/1980	3/23/2019	12/31/2022	12/1/2045	4	0.0000	22.9167	22.9167	26,292	0	753	0.00	0.00
Martin, Lashawnda R.	F	6/24/1976	3/12/2018	12/31/2018	7/1/2041	5	4.0000	18.5000	22.5000	42,458	185	1,168	2,335.36	2,479.07
McPhail, Mark D.	M	12/28/1970	2/26/2001	1/1/2002	1/1/2036	22	21.0000	13.0000	34.0000	67,609	2,196	3,380	21,257.92	31,622.51
Rhine Jr., William M.	M	10/11/1965	2/14/2005	1/1/2006	11/1/2030	18	17.0000	7.8333	24.8333	71,522	1,806	2,812	20,831.74	30,669.18
Shirk, Jeffrey W.	M	8/21/1973	6/23/2008	12/31/2008	9/1/2038	15	14.0000	15.6667	29.6667	69,730	1,490	3,275	17,019.61	24,112.15
Shoemaker, Lance E.	M	12/19/1990	9/9/2019	12/31/2020	1/1/2056	3	2.0000	33.0000	35.0000	54,512	119	2,385	1,991.59	2,037.75
Siesholtz, Colin	M	3/26/1985	6/21/2021	12/31/2021	4/1/2050	2	1.0000	27.2500	28.2500	66,535	81	2,329	1,304.14	1,304.14
Sinopoli, David	M	2/8/1966	4/10/2006	1/1/2007	3/1/2031	17	16.0000	8.1667	24.1667	58,114	1,417	2,208	16,660.57	24,544.30
Thomas, Charles H.	M	6/18/1965	7/19/2004	1/1/2006	7/1/2030	18	17.0000	7.5000	24.5000	92,793	2,391	3,526	27,510.23	40,728.73
Vivaldi, Kurt R.	M	6/23/1979	3/18/2019	12/31/2019	7/1/2044	4	3.0000	21.5000	24.5000	47,831	152	1,435	2,121.06	2,200.36
Wasilewski, Alexander J.	М	4/11/1989	5/22/2017	12/31/2017	5/1/2054	6	5.0000	31.3333	36.3333	42,892	223	1,930	2,719.88	3,041.55
Totals										1,621,565	25,504	61,651	261,327.36	367,656.59

#### East Lampeter Township Defined Benefit Plan Vested Former Members as of January 1, 2023

		F	Retirement		Dates			Monthly	Pension
Name	Sex	Age	Age	Birth	Hire	Termination	Retirement	Pension	Form
Amway, Anita L.	F	61	65	11/4/1961	5/5/2008	10/4/2013	12/1/2026	\$112.80	Life
Burkey, Renee L.	F	61	65	4/20/1962	4/8/1982	10/5/1995	5/1/2027	419.25	Life
Fritz, Tracey A.	F	64	0	5/29/1959	7/7/2008	10/19/2016	6/1/2024	315.26	Life
Miller, Jill D.	F	58	65	2/11/1965	4/9/1992	8/18/1999	3/1/2030	245.61	Life
Nelson, Jeanne S.	F	52	0	9/12/1970	1/1/2014	10/27/2017	10/1/2035	30.10	Life
Race, Daniel A.	M	58	0	3/24/1965	4/4/2005	5/16/2022	4/1/2030	1,615.04	Life
Wile, Rodney Scott	М	57	0	10/4/1965	2/22/2005	4/11/2018	11/1/2030	838.87	Life
Totals								\$3,576.93	

#### East Lampeter Township Defined Benefit Plan Retired Members as of January 1, 2023

		Ret.	Annuity	_	Dates				Monthly	Pension
Name	Sex	Type <sup>1</sup>	Code <sup>2</sup>	Age	Birth	Hire	Retirement	Spouse Birth	Pension	Form
Beyer, Jay L.	M			63	6/14/1960	5/1/1975	7/1/2022	8/10/1959	\$352.35	J & 100% Surv.
Brooks, John L.	M			61	5/14/1962	5/1/1975	6/1/2022	6/26/1966	1,869.48	J & 67% Surv.
Eshleman, C. Leroy	M			74	2/6/1949		1/1/2010		1,834.09	Life
Glick, Jeanne L.	F			75	5/9/1948	8/8/1999	11/1/2017		1,255.42	Life
Hohenwarter, Helen L.	F			83	8/9/1939		1/1/2005	1/13/1938	1,013.15	J & 50% Surv.
Kreider, Betsy A.	F			83	6/22/1940		1/1/2006	12/18/1940	175.03	J & 50% Surv.
Kreider, H Laverne	F		Α	86	3/24/1937		4/1/1993		329.16	Life
Kreider, Susan	F			77	8/22/1945		3/1/2012		214.43	Life
Mcfalls, Ronald L.	M			67	8/8/1955		1/1/2019	12/30/1953	1,461.05	J & 67% Surv.
Millhouse, L. Dennis	M			75	11/10/1947		1/1/2014		760.68	Life
Reath, Gina L.	F			66	5/26/1957		7/1/2022	5/31/1957	1,327.15	J & 50% Surv.
Shenk, Cindy E.	F			66	3/19/1957		6/1/2022	9/18/1956	1,546.58	J & 100% Surv.
Silcox, Ann I.	F			72	8/15/1950		4/1/2017		1,165.80	Life
Treier, Katherine G.	F			71	1/9/1952		10/1/2022	6/20/1950	1,518.43	J & 67% Surv.
Weaver, Jr., William H.	M			67	6/22/1956		6/1/2014	12/11/1993	439.81	J & 100% Surv.
Windle, Marianne	F			61	5/24/1962		7/1/2018		573.05	Life
Young, R. Lee	M			75	11/25/1947		5/1/2013	11/3/1980	1,047.34	J & 67% Surv.
Graybill, Tara	F	S		59	8/27/1963		5/1/2011		840.73	Life
Reiff, Cynthia	F	S		63	9/29/1959		9/1/2018		977.38	Life
Shutter, Shirley M.	F	S	Α	85	8/28/1937		1/1/1996		321.77	Life
Sydnor, Sandra L.	F	S		63	11/22/1959		2/1/2005		544.99	Life

Total \$19,567.87

<sup>&</sup>lt;sup>1</sup>Retirement Type: S = Surviving Spouse Pension

<sup>&</sup>lt;sup>2</sup> Annuity Code: A = Annuity purchased to pay entire monthly pension.