

City of Allentown Police Pension Plan

Actuarial Valuation Report as of January 1, 2025

Produced by Cheiron

September 2025

TABLE OF CONTENTS

<i>Section</i>	<i>Page</i>
Letter of Transmittal	i
Foreword	ii
Section I Board Summary	1
Section II Assets	12
Section III Liabilities	17
Section IV Minimum Municipal Obligation	21
 <i>Appendices</i>	
Appendix A Supplemental Information Excluding Bond Proceeds	25
Appendix B Membership Information.....	29
Appendix C Summary of Plan Provisions	36
Appendix D Actuarial Assumptions and Methods	39

September 29, 2025

City of Allentown Pension Board
Department of Finance, Room 227
435 Hamilton Street
Allentown, PA 18101-1699

Dear Members of the Board:

At your request, we have conducted our annual actuarial valuation of the City of Allentown Pension Plan as of January 1, 2025. The purpose of this report is to present the annual actuarial valuation of the City of Allentown Police Pension Plan. This report is for the use of the City of Allentown's Pension Board and its auditors in preparing financial reports in accordance with applicable law and accounting requirements. The report does not include calculations under GASB Statements No. 67 and No. 68 which are provided in a separate report.

Your attention is called to the Foreword in which we refer to the general approach employed in the preparation of this report. We also comment on the sources and reliability of both the data and the actuarial assumptions on which our findings are based. The results of this report are only applicable to the funded status of the Plan as of January 1, 2025 and will be used to determine the Plan's 2026 and 2027 Minimum Municipal Obligation (MMO). The final MMOs are dependent upon the payroll of the active population as provided by the City.

Future actuarial valuation results may differ significantly from the current actuarial valuation results presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law. The results and projections provided in this report rely on future plan experience conforming to the underlying assumptions and methods outlined in this report. To the extent that the actual plan experience deviates from the underlying assumptions and methods, or there are any changes in plan provisions or applicable laws, the results would vary accordingly and projections may change materially.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

This report was prepared exclusively for the City of Allentown's Pension Board for the purpose described herein. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to such other users.

Sincerely,
Cheiron



Karen Zangara, FSA, EA, MAAA
Principal Consulting Actuary



Brett Warren, FSA, EA, MAAA
Consulting Actuary

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

FOREWORD

Cheiron has performed the actuarial valuation of the City of Allentown Police Pension Plan as of January 1, 2025. The purpose of this report is to:

- 1) **Measure and disclose**, as of the valuation date, the financial condition of the Plan, in compliance with Act 205;
- 2) **Indicate trends** in the financial progress of the Plan; and
- 3) **Determine an estimated Minimum Municipal Obligation (MMO)** for calendar year 2027 and to provide the actual MMOs for 2025 and 2026 in accordance with Act 44 and Act 205.

An actuarial valuation establishes and analyzes Plan assets and liabilities on a consistent basis and traces the progress of both from one year to the next. It includes measurement of the Plan's investment performance, as well as an analysis of actuarial liability gains and losses.

Section I presents a summary containing our findings and disclosing important trends experienced by the Plan in recent years as well as a risk assessment, which includes a review of potential risk and projected financial outlook associated with the Plan.

Section II contains details on Plan assets, together with pertinent performance measurements.

Section III provides details on the Plan's liabilities.

Section IV provides the amortization requirements, the actual MMOs for 2025 and 2026, and the estimated MMO for 2027. The actual 2027 MMO amount will be finalized once the payroll for the 2027 year is provided by the City of Allentown. The 2026 and 2027 MMOs are based on the January 1, 2025 actuarial valuation results.

The appendices to this report contain supplemental information based upon assets excluding proceeds from pension obligation bonds, a summary of the Plan's membership at the valuation date, a summary of the major provisions of the Plan, and the actuarial methods and assumptions used in the valuation.

In preparing our report, we relied on information (some oral and some written) supplied by the City of Allentown ("City") and its auditors, Zelenkofske Axelrod LLC. This information includes, but is not limited to, plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for the reasonableness and consistency in accordance with Actuarial Standards of Practice No. 23.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION I – BOARD SUMMARY

The following table sets out the principal results of this year’s valuation and compares them to last year’s results.

Table I-1 Summary of Principal Plan Results			
Valuation as of:	1/1/2023	1/1/2025	% Change
<u>Participant Counts</u>			
Actives	212	211	-0.5%
Terminated Vested and Inactive Members	18	18	0.0%
In Pay Status	309	319	3.2%
Total	539	548	1.7%
W-2 Pay for Active Members (from prior year)	\$ 21,258,794	\$ 23,647,084	11.2%
Average Annual W-2 Pay	100,277	112,071	
Annual Retirement Allowances for Retired Members and Beneficiaries	\$ 13,938,172	\$ 15,133,594	8.6%
Average Monthly Retirement Benefit	3,759	3,953	5.2%
<u>Financial Information</u>			
Market Value of Assets (MVA)	\$ 196,260,438	\$ 243,455,437	24.0%
Actuarial Value of Assets (AVA)	214,824,093	241,021,362	12.2%
Actuarial Liability	\$ 249,207,880	\$ 268,441,095	7.7%
Unfunded Actuarial Liability (AVA basis)	34,383,787	27,419,733	-20.3%
Funding Ratio (MVA)	78.8%	90.7%	
Funding Ratio (AVA)	86.2%	89.8%	

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION I – BOARD SUMMARY

General Comments

- For plans that are either not distressed or minimally distressed, the future gains and losses of the Plan are required to be amortized over the lesser of the maximum amortization periods, as outlined in Appendix D, or the average future service for the active participants in the Plan which is 10.96 years as of January 1, 2025 and, per Act 205, rounded up to 11 years. The City of Allentown was determined to be not distressed (90% funded on an aggregate AVA basis for all plans) by the Pennsylvania Auditor General in 2024 and in accordance with Act 205 Section 502. Plan distress categories as outlined by Act 44 are provided below:

Funding Ratio	Distress Level
90% and above	None
70% to 89%	Minimal
50% to 69%	Moderate
Less than 50%	Severe

- The Market Value of Assets returned 14.36% in 2023 and 12.39% in 2024.
- The Actuarial Value of Asset (AVA) method, which smooths gains and losses over 5 years was applied. Over the two-year period covering 2023 and 2024, there was an AVA gain of \$2.03 million.
- On the liability side, the Plan experienced a two-year loss totaling \$2.07 million primarily due to higher than expected salary for continuing actives and higher than expected COLA rank for retirees.
- Overall, the Plan experienced a net loss (investment gain and liability loss) of \$0.05 million during the two-year period covering 2023 and 2024.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION I – BOARD SUMMARY

Risk Assessment

Significant risks that may result in actual future measurements deviating from those expected by this valuation include investment risk, as well as longevity and other demographic risk. Investment risk is the potential that future investment returns will deviate from those that are expected. Longevity and other demographic risk is the potential that mortality or other demographic experience will deviate from that which is expected by the valuation assumptions.

The volatility of the measurements due to differences in the actual investment returns is examined later in this section with projections that assume rates of return other than the valuation assumption. We anticipate that for this plan the demographic assumption that presents the most risk to future actual measurements deviating from expected is the rate of salary increase, which impacts the Cost of Living Adjustment (COLA) growth for retirees, and potentially the mortality rate and the retirement rates.

- If salary/rank pay growth is generally lower than anticipated, the plan’s future financial status will be improved while if salary/rank pay is generally higher than anticipated, it will be degraded from that expected by this valuation. Salary/rank pay growth is especially a risk for the plan because of how this impacts not only liabilities for active participants, but for retirees as well because their COLA increase occurs when the pension allowance falls below half of the current salary for a patrol officer.
- If mortality rates are generally higher than anticipated, the plan’s future financial status will be improved while if mortality rates are generally lower than anticipated, then it will decline from that expected by this valuation.
- In 2021, the Board updated the retirement assumptions for this Plan to better align with the recent retirement rates under this plan. However, if future retirement rates are greater than expected under this updated retirement rate table, then future losses will occur. We recommend that this retirement assumption continues to be monitored to determine if future modifications may be needed.

In the “Trends” part of this section, historical measures shown demonstrate the potential volatility of the Plan’s actuarial measurements as a result of deviation of actual experience. For example, the proportion of the Plan’s members that are in payment status has grown, which makes the volatility of mortality risk greater.

The remainder of this section analyzes past trends in the Plan’s funding and presents projections under various economic outlooks.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

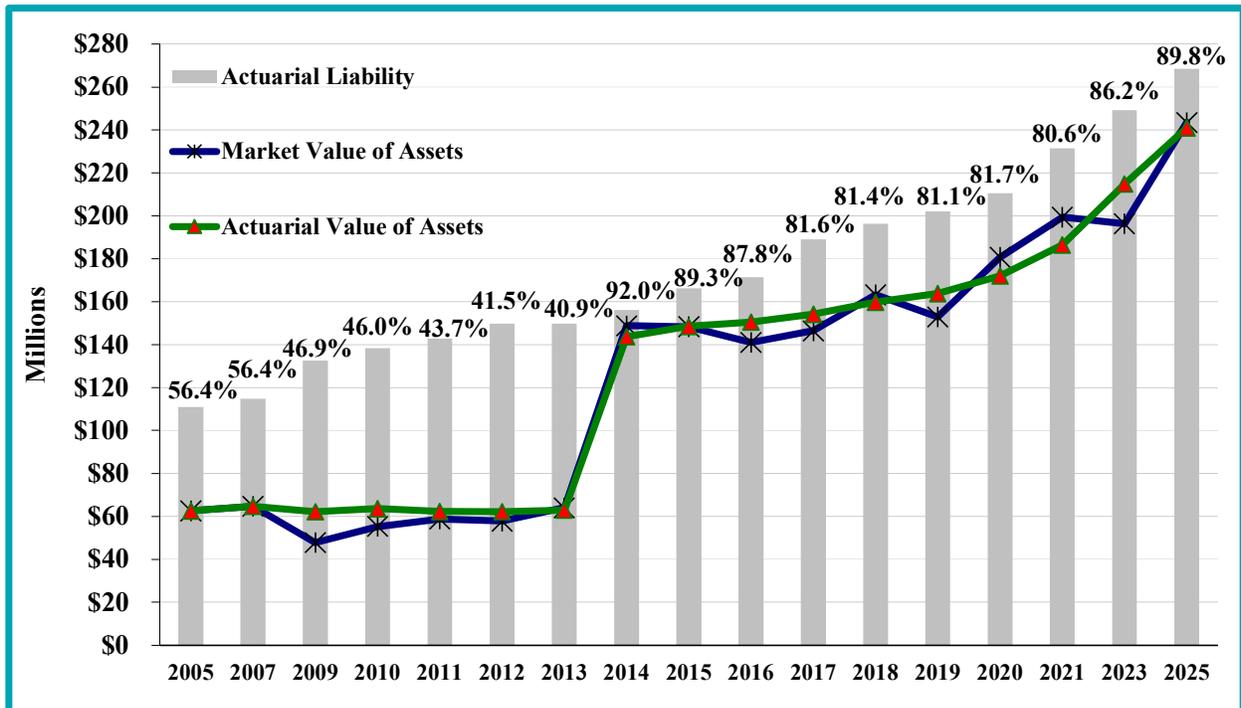
SECTION I – BOARD SUMMARY

Trends

It is important to take a step back from the latest results and view them in the context of the Plan’s recent history. Below we present a series of charts which display key factors in the valuations over the last several years.

Assets and Liabilities

The gray bars represent the Actuarial Liability mentioned in this report. The green and blue lines represent the asset values. Prior to 2007, the Actuarial Value of Assets equaled the Market Value of Assets. The funding ratios shown in the graph above each gray bar are equal to the Actuarial Value of Assets divided by the Actuarial Liability. The January 1, 2014 assets reflect the \$84.5 million Note contribution in 2013 and increased the funding ratio to 92.0%.



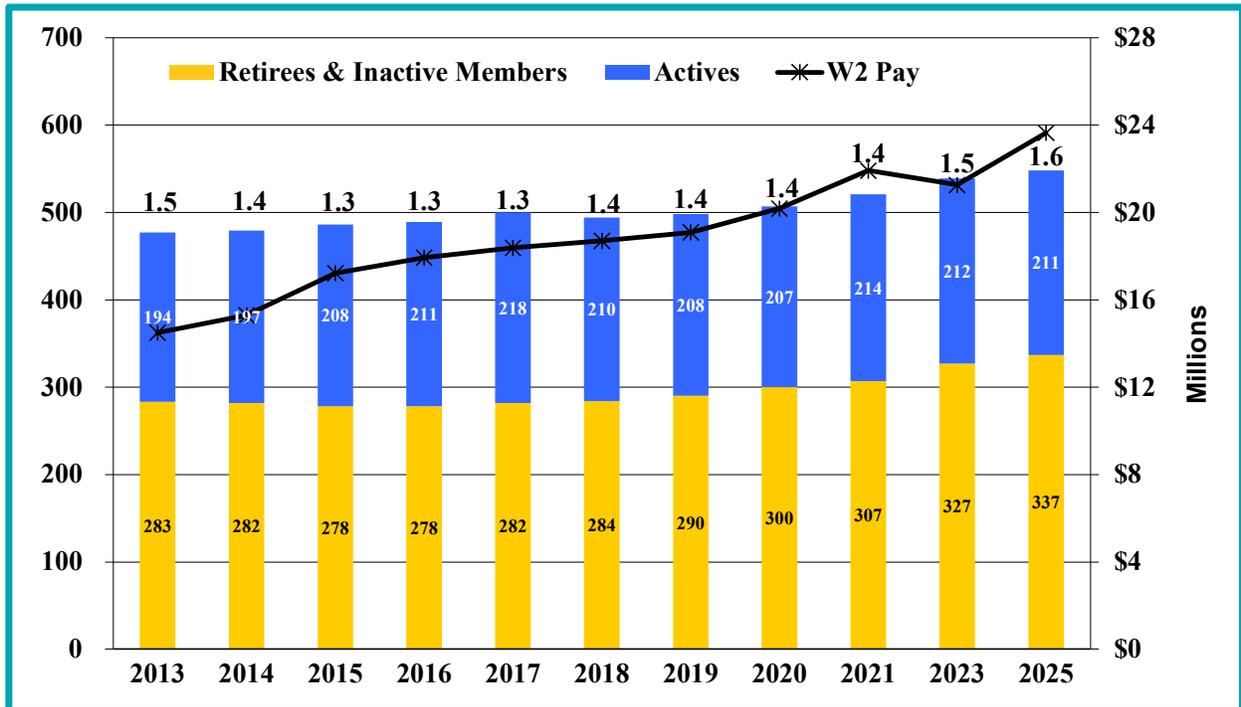
Results before 2010 are from the prior actuary. Valuations performed biennially from 2005 – 2009 and 2021 – 2025. The Actuarial Liability results for 2014 and 2016 reflect the 2013 and 2015 actuarial assumptions (respectively) in order that the 2015 and 2017 Act 205 results reflect all assumption changes since the prior Act 205 filing. This is required under Act 205.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION I – BOARD SUMMARY

Participant Trends

Here we compare the membership counts (left-hand scale) and the W-2 pay (right-hand scale). The ratio (at the top of each bar) is the number of inactive participants divided by the number of active participants. The ratio of inactive to active participants is a measure of the maturity of the plan. When this ratio is above one, the fund is more mature and potentially at a higher risk. This is because the assets backing the retiree benefits have become large relative to the contribution base, i.e., the active participant payroll. As assets grow relative to the pensionable payroll, any asset gain or loss can have a significant impact, resulting in volatile costs from year-to-year even with the application of asset smoothing methods.



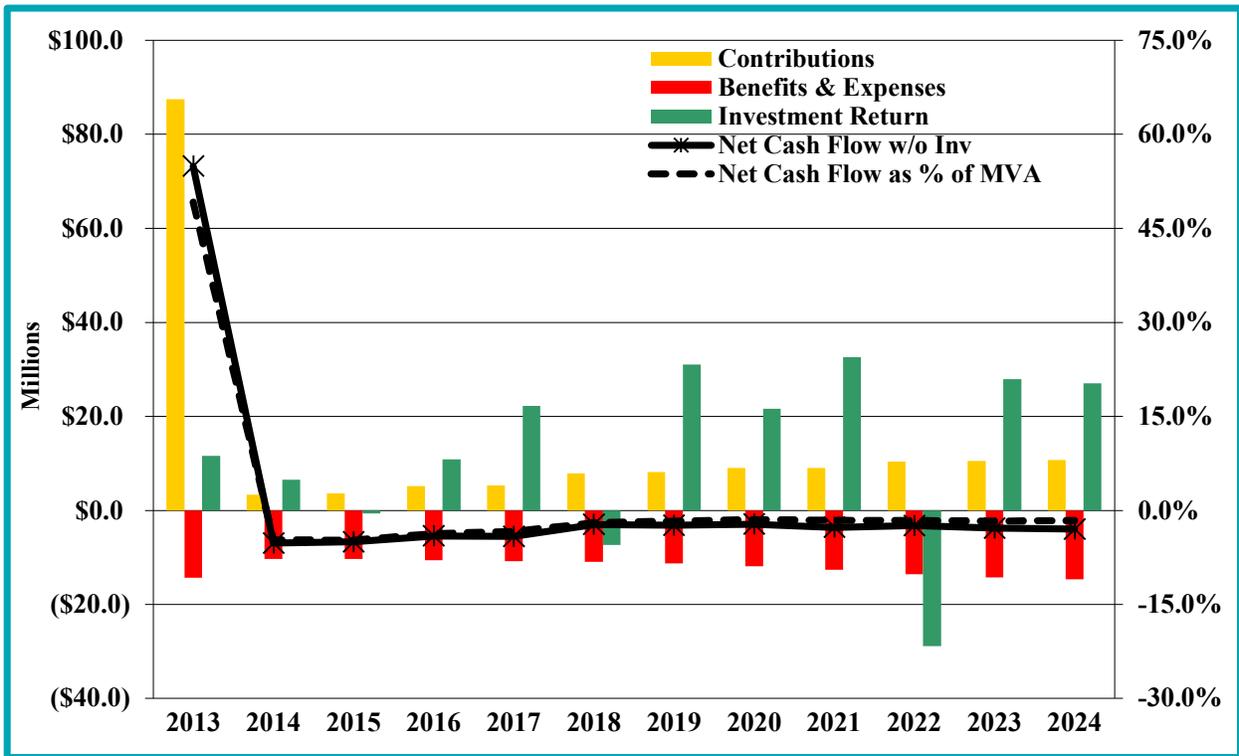
**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION I – BOARD SUMMARY

Cash Flows

Plan cash flow is a critical measure, as it reflects the ability to make benefit payments without necessitating difficult investment decisions, especially during volatile markets. The laddered bond approach the Board has adopted for this plan helps to mitigate this risk. Cash flow is defined as contributions received less benefit payments and expenses.

The Plan’s net cash flow (NCF) has been negative except for 2013. Due to the \$87.5 million contribution, which includes a \$84.5 million Note payment (under section 404(h) of Act 205) from the City’s water and sewer lease proceeds, the plan had a substantial positive net cash flow in 2013. As anticipated, the plan experienced negative net cash flows from 2014-2024. The implication of a plan in a negative cash flow position is that return on investment must first cover the negative cash flow before the assets can increase. The NCF as a percentage of the Market Value of Assets (right vertical axis) was about negative 1.6% in 2024, so the net assets will not increase unless investment returns exceed 1.6%, if there are similar cash flows in 2025.



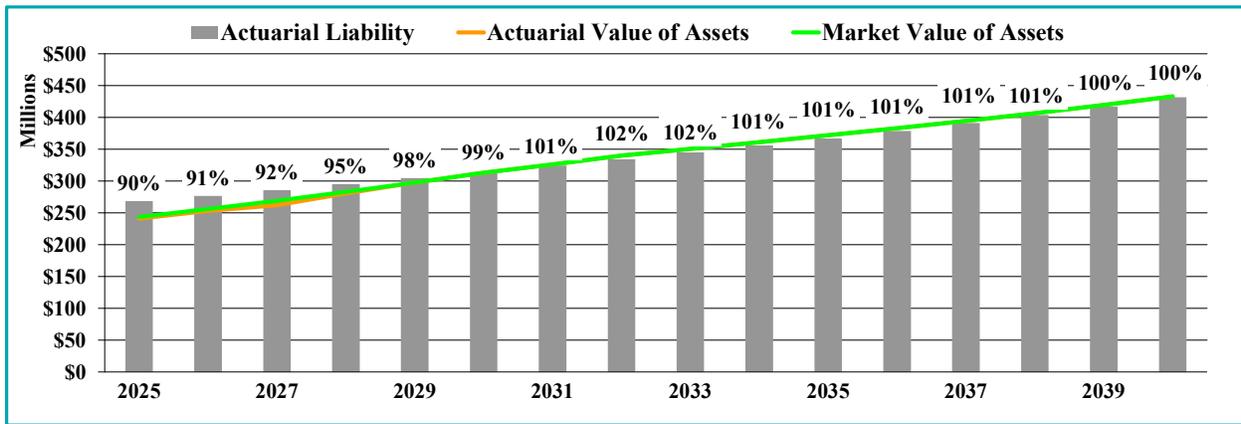
**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION I – BOARD SUMMARY

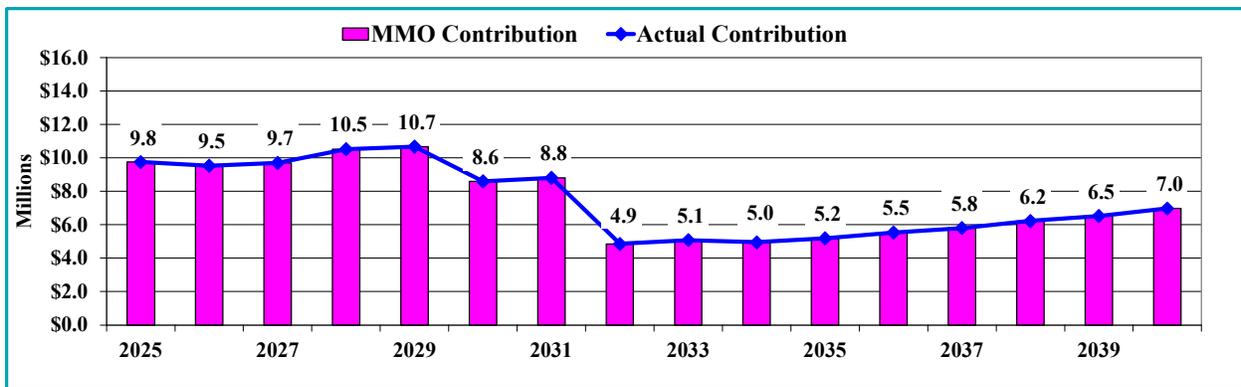
Baseline Projections - Asset Returns of 7.30% per year

We have included two charts projecting the funded ratio and Minimum Municipal Obligations for the next 15 years, assuming that the Plan’s assets earn 7.30%.

The gray bars represent the liabilities with the orange and green lines representing the asset values. The Actuarial Value of Assets and the Market Value of Assets are expected to converge over the next five years. This projection assumes all assumptions outlined in Appendix D are fully realized and that the MMO is paid in full each year. The funded ratio (Actuarial Value of Assets divided by liabilities) listed on top of each of the bars increases to over 100% in 2031.



This next chart projects the MMO over the same period. On top of each bar is the projected MMO amount in millions of dollars. If all assumptions are met, the projected MMO will increase to \$10.7 million in 2029 primarily due to the deferred recognition of the investment gains/losses. The MMO will then decrease to \$4.9 million in 2032 as there is no amortization of unfunded liability once the Plan reaches a 100% funded ratio in 2031. When the plan is projected to become over 100% funded, 10% of the surplus assets above the liabilities are used to reduce the MMO.



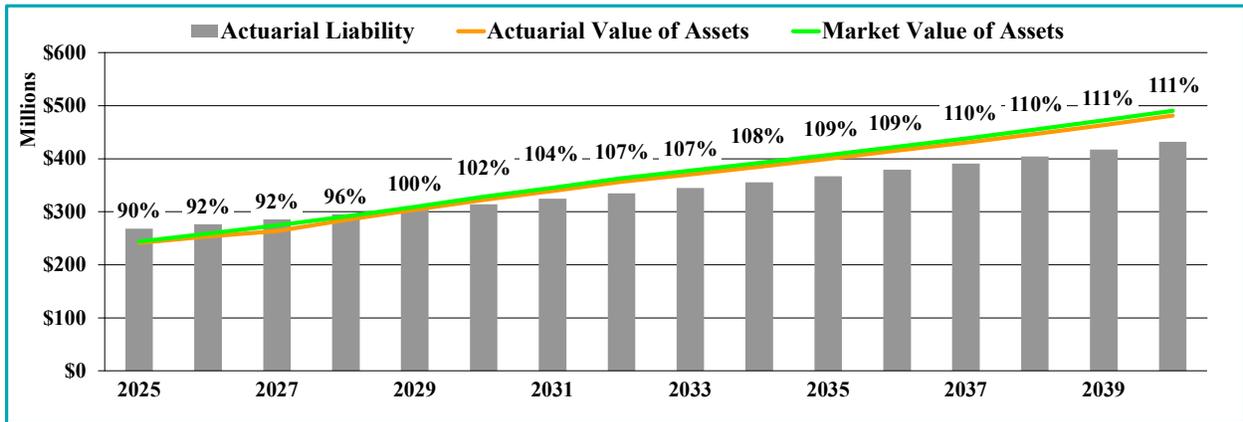
**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION I – BOARD SUMMARY

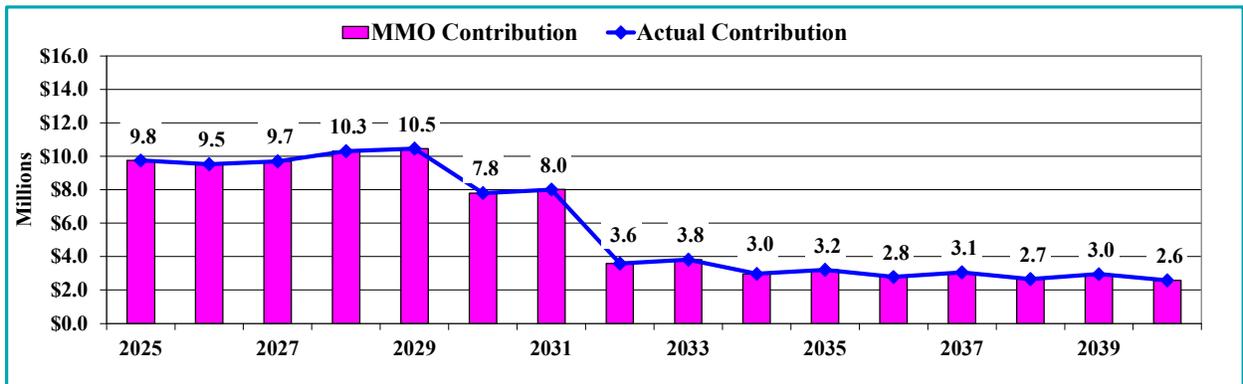
Optimistic Projections - Asset Returns of 8.30% per year

The charts below show the expected progress of the Plan over 15 years, assuming that the Plan’s assets earn 8.30%, 1.0% higher than the valuation assumption. All other assumptions are consistent with the Baseline projections.

The funded ratio (Actuarial Value of Assets divided by liabilities) listed on top of each of the bars increases to 100% in 2029 and then to 111% at the end of the 15-year projection period.



This next chart projects the MMO over the same period. On top of each bar is the projected MMO amount in millions of dollars. When the plan is projected to become over 100% funded, 10% of the surplus assets above the liabilities are used to reduce the MMO.



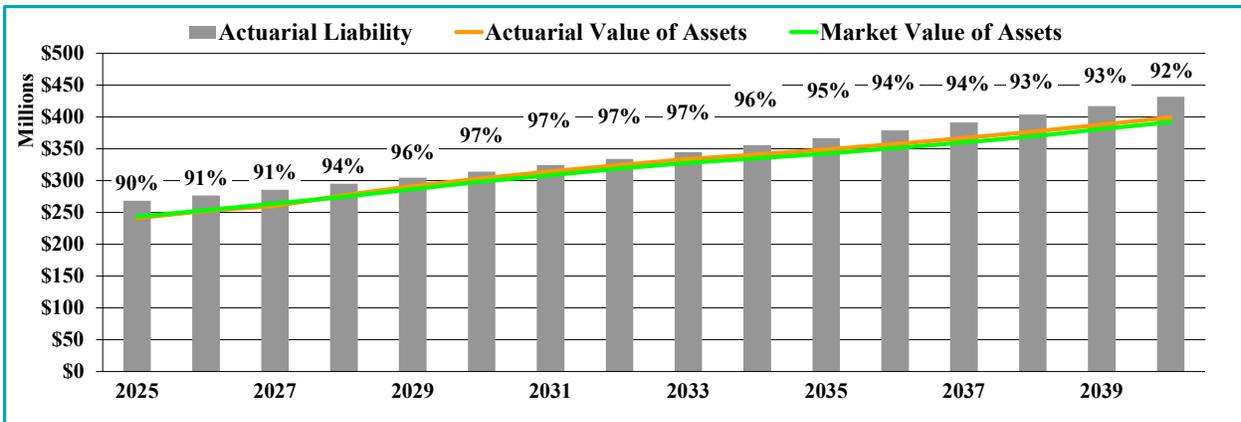
**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION I – BOARD SUMMARY

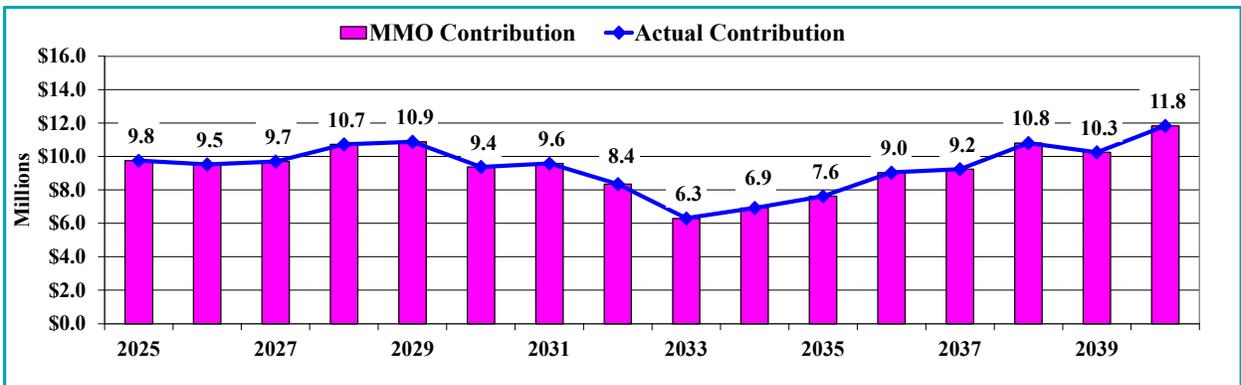
Pessimistic Projections - Asset Returns of 6.30% per year

The charts below show the expected progress of the Plan over 15 years, assuming that the Plan’s assets earn 6.30%, 1.0% lower than the valuation assumption. All other assumptions are consistent with the Baseline projections.

The funded ratio (Actuarial Value of Assets divided by liabilities) listed on top of each of the bars initially increases to 97% in 2030 as deferred investment gains are recognized but then gradually decreases to 92% at the end of the 15-year projection period due to the lower than expected returns. If in fact this scenario occurred, discussion with the pension board over the reduction in the discount rate assumption would likely occur.



This next chart projects the MMO over the same period. On top of each bar is the projected MMO amount in millions of dollars.



**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION I – BOARD SUMMARY

The projections provided above are based upon the January 1, 2025 valuation and the methods, assumptions, plan provisions and data as outlined in this report. To the extent that the actual plan experience deviates from the underlying assumptions and methods, (for example, if the asset returns are less than expected, the demographic data experience is different from the assumptions, or there are any changes in plan provisions or applicable laws) *the results will vary accordingly and possibly materially*, resulting in potentially larger MMOs than currently expected. Please note that these projections should be replaced once new data and valuations are completed in the future.

The MMO Pay used in the MMO calculation in the table below is provided by the City of Allentown and may differ from the valuation pay provided throughout this report which is based on actual participant data included in the actuarial valuation as of January 1 of each year.

Table I-2			
Minimum Municipal Obligation (Actual and <i>Estimated</i>)			
Based Upon Valuation Report	1/1/2023	1/1/2025	1/1/2025
Calendar Year	2025	2026	2027
(1) MMO Pay (<i>Estimated</i>)	\$ 24,093,535	\$ 23,860,080	\$ 24,934,000
(2) Normal Cost %	21.21%	20.70%	20.70%
(3) Total Normal Cost	5,110,239	4,939,037	5,161,338
(4) Amortization of UAL	5,720,666	5,650,936	5,650,936
(5) Total Administration Expense	120,000	130,000	130,000
(6) Total Financial Requirement	<u>\$ 10,950,905</u>	<u>\$ 10,719,973</u>	<u>\$ 10,942,274</u>
(7) Estimated Employee Contributions	1,204,677	1,193,004	1,246,700
(8) Minimum Municipal Obligation	<u>\$ 9,746,228</u>	<u>\$ 9,526,969</u>	<u>\$ 9,695,574</u>
[(6)-(7)]			

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION I – BOARD SUMMARY

Low-Default-Risk Obligation Measure (LDROM)

The Plan invests in a diversified portfolio to achieve the best possible return at an acceptable level of risk. The lowest investment risk portfolio for a pension plan would be composed entirely of low-default-risk fixed income securities whose cash flows match the cash flows needs of the Plan. However, such a portfolio would have a lower expected rate of return (5.54% as of December 31, 2024) than the diversified portfolio (7.30%). Low-Default-Risk Obligation Measure (LDROM) represents what the Actuarial Liability would be if the Plan’s assets were invested in such a portfolio.

As of January 1, 2025, the LDROM is \$333.3 million¹ compared to the Actuarial Liability of \$268.4 million for the City. The \$64.9 million difference can be viewed as the expected savings from taking on the investment risk of the diversified portfolio. Alternatively, it can be viewed as the potential cost of eliminating the investment risk of the non-fixed income allocations of the diversified portfolio.

If the Plan were to invest in the LDROM portfolio, the funded ratios would decrease, and contribution requirements would increase for the City. The security of the Plan’s pension benefits relies on the current assets, future investment earnings, and the ability and willingness of the City to make future contributions. If the Plan were to invest in the LDROM portfolio, it would not change the current assets, but it would reduce future investment earnings and increase future City contributions. However, the volatility of future investment earnings and future contributions would be significantly reduced.

¹ Based on a discount rate equal to the December 31, 2024 FTSE Pension Liability Index of 5.54%, and all other assumptions and methods as used to calculate the Actuarial Liability.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION II – ASSETS

Pension Plan assets play a key role in the financial operation of the Plan and in the decisions the Board may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely have an impact on benefit levels, contributions, and the ultimate security of participants’ benefits.

In this section, we present detailed information on Plan assets including:

- **Disclosure** of Plan assets at January 1, 2024 and January 1, 2025;
- Statement of the **changes** in market values during the year;
- An assessment of **investment performance**; and
- Development of the **actuarial value of assets**.

Disclosure

The market value of assets represents the “snap-shot” or “cash-out” values which provide the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace.

Table II-1 Disclosure of Plan Assets*		
	1/1/2024	1/1/2025
<u>Assets</u>		
Investments	\$ 220,347,909	\$ 243,383,750
Receivables	70,731	111,482
Due from City's General Fund	386	386
Total Assets	\$ 220,419,026	\$ 243,495,618
<u>Liabilities</u>		
Accounts Payable	\$ 9,826	\$ 40,181
Due to City's General Fund	0	0
Total Liabilities	\$ 9,826	\$ 40,181
Net Assets Available for Benefits	\$ 220,409,200	\$ 243,455,437

*Assets are based on the Annual Comprehensive Financial Report (ACFR) for each year end.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION II – ASSETS

Changes in Market Value

The components of asset change are:

- Contributions
- Benefit payments
- Expenses (administrative and investment consulting)
- Investment income (realized and unrealized)

The specific changes during the 2023 and 2024 plan years are presented below:

Table II-2 Changes in Market Value		
	2023	2024
Beginning of Year Assets	\$ 196,260,438	\$ 220,409,200
<u>Additions</u>		
Employer Contributions	\$ 9,254,353	\$ 9,407,824
Member Contributions	1,230,499	1,286,804
Interest and Dividends	4,989,221	5,683,639
Net Appreciation / (Depreciation)	22,928,466	21,369,987
Total Additions	\$ 38,402,539	\$ 37,748,254
<u>Deductions</u>		
Benefit Payments	\$ 14,128,583	\$ 14,575,340
Administrative expense	125,194	126,677
Total Deductions	\$ 14,253,777	\$ 14,702,017
Net Change in Market Value of Assets	\$ 24,148,762	\$ 23,046,237
End of Year Assets	\$ 220,409,200	\$ 243,455,437

The two-year average of the administrative expenses paid from the plan assets, rounded to the nearest \$10,000, is \$130,000, which includes the investment consultant fees as reported as a separate line item on the asset statements. This is the projected expense estimate for the 2026 and 2027 MMO determinations.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION II – ASSETS

Investment Performance

The following table calculates the investment related gain/loss for the most recent two calendar years on a market value basis. The market value gain/loss is an appropriate measure for comparing the actual asset performance to the long-term 7.30% assumption.

Table II-3 Market Value of Assets Gain/(Loss)			
Item	2023	2024	Total Period
Beginning of Year Market Value	\$ 196,260,438	\$ 220,409,200	\$ 196,260,438
Contributions	10,484,852	10,694,628	21,179,480
Benefit Payments	(14,128,583)	(14,575,340)	(28,703,923)
Administrative Expenses	(125,194)	(126,677)	(251,871)
Expected Investment Earnings (7.30%)	14,191,869	15,946,178	29,136,063
Expected Market Value on December 31	\$ 206,683,382	\$ 232,347,989	\$ 217,620,187
Investment Gain / (Loss)	13,725,818	11,107,448	25,835,250
End of Year Market Value	\$ 220,409,200	\$ 243,455,437	\$ 243,455,437
Return	14.36%	12.39%	13.38%

The Total Period reconciliation reflects total benefit payments, contributions and expenses during this two-year period. Investment earnings do not follow the additive property and instead are calculated based on the beginning and end of Total Period values.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION II – ASSETS

Assets at Actuarial Value

The Actuarial Value of Asset (AVA) method smooths gains and losses over five years. The resulting value is then limited to be no greater than 120% and no less than 80% of the Market Value of Assets on the valuation date. Additional details regarding this actuarial methodology are included in Appendix D of the report.

The table below shows the development of the actuarial asset value applied to this valuation.

Table II-4 Development of Actuarial Value of Assets 5-Year Smoothing Method					
Market Value of Assets as of January 1, 2025					\$ 243,455,437
<u>Plan Year</u>	<u>Investment Gains / (Losses)</u>	<u>Percent Recognized</u>	<u>Percent Deferred</u>	<u>Amount Deferred</u>	
2020	\$ 8,218,081	100%	0%	\$ 0	
2021	17,962,871	80%	20%	3,592,574	
2022	(45,699,870)	60%	40%	(18,279,948)	
2023	13,725,818	40%	60%	8,235,491	
2024	11,107,448	20%	80%	8,885,958	
					\$ 2,434,075
Preliminary Actuarial Value as of January 1, 2025					\$ 241,021,362
Corridor for Actuarial Value					
- Lower Limit					80% \$ 194,764,350
- Upper Limit					120% \$ 292,146,524
Actuarial Value of Assets as of January 1, 2025					\$ 241,021,362
- as a percent of Market Value of Assets					99.0%

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION II – ASSETS

The following table calculates the investment related gain/loss for the most recent two calendar years on an actuarial value basis.

Table II-5 Actuarial Value of Assets Gain/(Loss)			
Item	2023	2024	Total Period
Beginning of Year Actuarial Value	\$ 214,824,093	\$ 228,019,703	\$ 214,824,093
Contributions	10,484,852	10,694,628	21,179,480
Benefit Payments	(14,128,583)	(14,575,340)	(28,703,923)
Administrative Expenses	(125,194)	(126,677)	(251,871)
Expected Investment Earnings (7.30%)	15,547,016	16,501,745	31,945,282
Expected Actuarial Value on December 31	\$ 226,602,184	\$ 240,514,059	\$ 238,993,061
Investment Gain / (Loss)	1,417,519	507,303	2,028,301
End of Year Actuarial Value	\$ 228,019,703	\$ 241,021,362	\$ 241,021,362
Return	7.97%	7.53%	7.75%

The Total Period reconciliation reflects total benefit payments, contributions and expenses during this two-year period. Investment earnings do not follow the additive property and instead are calculated based on the beginning and end of Total Period values.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION III – LIABILITIES

In this section, we present detailed information on Plan liabilities including:

- **Disclosure** of Plan liabilities at January 1, 2023 and January 1, 2025; and
- Statement of **changes** in these liabilities during the two-year period.

Disclosure

Two types of liabilities are calculated and presented in this report.

- **Present Value of Benefits:** Used for analyzing the financial outlook of the Plan, this represents the amount of money needed today to fully fund all future benefits and expenses of the Plan, assuming participants continue to accrue benefits.
- **Actuarial Liability:** Used for funding calculations, this liability is calculated by taking the Present Value of Benefits above and subtracting the present value of future Member Contributions and future Employer Normal Costs under an acceptable actuarial funding method. Employer Normal Costs are developed under the **Entry Age Normal** funding method, with normal cost as a percent of pay determined to be level at each active participant's entry age.

The following table discloses both of these liabilities for the current and prior valuations. The liability is also compared to the Plan's assets to determine the **net surplus** or **unfunded liability**. The net surplus or unfunded liability shown in this report is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan's benefit obligation in the event of a plan termination or other similar actions.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION III – LIABILITIES

Table III-1		
Liabilities/Net (Surplus)/Unfunded		
	January 1, 2023	January 1, 2025
Present Value of Future Benefits		
(1) Active Participant Benefits		
Retirement Benefits	\$ 111,888,958	\$ 119,912,414
Disability Benefits	\$ 2,278,569	\$ 2,735,675
Survivor Benefits	\$ 2,086,276	\$ 2,400,019
Refund of Members Contribution with Interest	0	0
Other: Vested Benefits	<u>3,937,264</u>	<u>4,324,932</u>
Total Active Participant Benefits*	\$ 120,191,067	\$ 129,373,040
(2) Inactive Participant Benefits		
Retirement Benefits	\$ 148,195,436	\$ 163,286,218
Disability Benefits	\$ 4,942,050	\$ 5,512,748
Survivor Benefits	16,018,316	\$ 14,588,711
Terminated Vested and Inactive Members	<u>765,649</u>	<u>1,297,394</u>
Total Inactive Participant Benefits	\$ 169,921,451	\$ 184,685,071
(3) Present Value of Benefits (PVFB) [(1) +(2)]	\$ 290,112,518	\$ 314,058,111
Actuarial Value of Assets (AVA)	\$ 214,824,093	\$ 241,021,362
Present Value of Future Contributions	<u>75,288,425</u>	<u>73,036,749</u>
Total Resources	\$ 290,112,518	\$ 314,058,111
Actuarial Liability		
Present Value of Benefits (PVFB)	\$ 290,112,518	\$ 314,058,111
Present Value of Future Normal Costs (PVFNC)	<u>40,904,638</u>	<u>45,617,016</u>
Actuarial Liability (AL = PVFB – PVFNC)	\$ 249,207,880	\$ 268,441,095
Actuarial Value of Assets (AVA)	<u>214,824,093</u>	<u>241,021,362</u>
Net (Surplus)/Unfunded (AL – AVA)	\$ 34,383,787	\$ 27,419,733

* The amount of the accumulated member contributions without accrued interest is \$10,232,624 for all active members as of January 1, 2025.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION III – LIABILITIES

Changes in Liabilities

The Liabilities disclosed in the prior table are expected to change at each valuation. The components of that change, depending upon which liability is analyzed, can include:

- Benefits accrued since the last valuation
- Plan amendments changing benefits
- Passage of time which adds interest to the prior liability
- Benefits paid to retirees since the last valuation
- Participants retiring, terminating, or dying at rates different than expected
- A change in actuarial or investment assumptions
- A change in the actuarial funding method

Unfunded liabilities will change because of all of the above, and also due to changes in Plan assets resulting from:

- Contributions different than expected
- Investment earnings different than expected

In each valuation, we report on those elements of change which are of particular significance, potentially affecting the long-term financial outlook of the Plan. In the following table we present key changes in liabilities since the valuation as of January 1, 2023. The accrual of benefits is the normal cost under the Entry Age Normal cost method.

Table III-2 Change in Actuarial Liability	
Liabilities on 01/01/2023	\$ 249,207,880
Liabilities on 01/01/2025	<u>268,441,095</u>
Liability Increase (Decrease)	\$ 19,233,215
Change Due to:	
Plan Amendment	\$ 0
Assumption Change	0
Method Change	0
Accrual of Benefits	9,221,773
Benefit Payments	(28,703,923)
Passage of Time	36,641,177
Liability (Gain)/Loss	<u>2,074,188</u>
Total	\$ 19,233,215

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION III – LIABILITIES

The following table provides the Normal Cost, which is the cost for the additional benefit accrued during the year. The Normal Cost as a percent of payroll as of January 1, 2023 is used to calculate the 2025 MMO. The Normal Cost as a percent of payroll as of January 1, 2025 is used to calculate the 2026 and 2027 MMO.

Table III-3		
Normal Cost and Normal Cost as Percentage of W-2 Payroll		
	2023	2025
Normal Cost	\$ 4,509,424	\$ 4,894,713
W-2 Wages for active members	\$ 21,258,794	\$ 23,647,084
Normal Cost as a Percent of the Estimated Payroll	21.21%	20.70%

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION IV – MINIMUM MUNICIPAL OBLIGATION

The actuarial funding method used to determine the normal cost and the unfunded actuarial liability is the **Entry Age Normal** (EAN) cost method. The normal cost is based on the normal cost rate determined by taking the value, as of entry age into the plan, of each member's projected future benefits. This value is then divided by the value, also at entry age, of each member's expected future salary producing a normal cost rate as a percent of salary that should remain relatively constant over a participant's career. The normal cost rate is multiplied by current salary to determine each member's normal cost. The total normal cost of the plan is the summation of each member's normal cost. Finally, the normal cost is reduced by the total member contributions to produce the employer normal cost.

The actuarial liability for active participants is the present value of all future benefits expected to be earned under the plan minus the present value of future normal costs. The actuarial liability for inactive participants is the present value of all future pension benefits to be paid from the plan to the retirees and vested terminated participants. The unfunded actuarial liability is the difference between the EAN actuarial liability and the actuarial value of assets.

The amortization requirement is the annual contribution to reduce the unfunded actuarial liability recognized over a certain time period, as outlined in Act 205 and revised by Act 44. The amortization time periods are provided in Appendix D of this report.

In the following charts, we show the actual MMOs for 2025 and 2026. The payroll amounts shown reflect the information provided by the City for those years. The MMO for 2027 has been estimated based on the results of this valuation and the 2026 estimated payroll. The actual amount will vary based on actual payroll as provided by the City of Allentown.

The actuarially determined contribution (ADC) which is represented by the MMO in Table IV-1 on the next page is a reasonable actuarially determined contribution in accordance with Actuarial Standard of Practice (ASOP) No. 4. The actuarial methods have been selected to balance benefit security, intergenerational equity, and stability of actuarially determined contributions. The selection of the actuarial methods has taken into account the demographics of plan members, the funding goals and objectives of the Board, and the need to accumulate assets to make benefit payments when due. The actuarial methods and assumptions are shown in Appendix D of this report.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION IV – MINIMUM MUNICIPAL OBLIGATION

The MMO pay used in the MMO calculation in the table below is provided by the City of Allentown and may differ from the valuation pay provided throughout this report which is based upon actual participant data included in the actuarial valuation as of January 1 of each year.

Table IV-1				
Minimum Municipal Obligation (Actual and <i>Estimated</i>)				
Based on Valuation Report: Calendar Year:	1/1/2023 2025	1/1/2025 2026	1/1/2025 2027	
1. MMO pay (actual/ <i>estimated</i>) (prior year W2 pay reported by the City)	\$ 24,093,535	\$ 23,860,080	\$ 24,934,000	
2. Total Normal Cost Percentage	21.21%	20.70%	20.70%	
3. Total Normal Cost [(1) x (2)]	\$ 5,110,239	\$ 4,939,037	\$ 5,161,338	
4. Total Amortization Requirement	5,720,666	5,650,936	5,650,936	
5. Total Administrative Expenses	<u>120,000</u>	<u>130,000</u>	<u>130,000</u>	
6. Total Financial Requirement [(3) + (4) + (5)]	\$ 10,950,905	\$ 10,719,973	\$ 10,942,274	
7. Estimated Member Contribution Rate	5.00%	5.00%	5.00%	
8. Estimated Member Contributions [(1) x Member Contribution Rate]	<u>1,204,677</u>	<u>1,193,004</u>	<u>1,246,700</u>	
9. Estimated Employer Portion of MMO [(6) - (8)]	\$ 9,746,228	\$ 9,526,969	\$ 9,695,574	

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION IV – MINIMUM MUNICIPAL OBLIGATION

The following table summarizes the development of the gains and losses from 2023 to 2025.

Table IV-2	
Development of Actuarial Gain / (Loss)	
Unfunded Liability as of 01/01/2023	\$ 34,383,787
Normal Cost	\$ 9,221,773
Contributions made	
a. Employee Contributions	\$ (2,517,303)
b. Local Portion	(18,662,177)
Actual Expenses	\$ 251,871
Interest on above	4,695,895
Plan Changes	\$ 0
Assumption Changes	0
Method Changes	0
Expected Unfunded Liability as of 01/01/2025	\$ 27,373,846
Actual Unfunded Liability as of 01/01/2025	<u>27,419,733</u>
Actuarial Gain / (Loss)	\$ (45,887)
- Investment Gain / (Loss)	2,028,301
- Liability Gain / (Loss)	(2,074,188)

This table provides the gains/(losses) for the new amortization base.

Table IV-3	
Total Gain/(Loss)	
Investment Gain / (Loss)	\$ 2,028,301
Liability Gain / (Loss)	(2,074,188)
Timing and interest Gain / (Loss)	<u>(511,437)</u>
Total Gain/(Loss)	\$ (557,324)

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

SECTION IV – MINIMUM MUNICIPAL OBLIGATION

The following table provides the schedule of amortization bases as of January 1, 2025. The total \$557,324 actuarial loss reflects the explicit loss for the two-year period as provided above along with the timing and interest loss due to the delayed contribution method as followed under Act 205.

Table IV-4 Schedule of Amortization Bases Including Bond Proceeds for Minimum Contributions as of January 1, 2025							
Original Date	Type	Original Amount	Original Period	Remaining Period	Payment	Balance	Date Fully Amortized
1/1/2002	Investment Loss	\$ 480,106	30	7	\$ 2,637	\$ 15,091	12/31/2031
1/1/2003	Investment Loss	7,174,076	30	8	39,320	249,026	12/31/2032
1/1/2009	Assumption Change	(14,353,695)	20	4	(91,011)	(328,548)	12/31/2028
1/1/2009	Actuarial Loss	38,047,505	20	4	241,244	870,889	12/31/2028
1/1/2011	Actuarial Loss	15,354,171	20	6	96,909	491,082	12/31/2030
1/1/2013	Assumption Change	4,976,960	15	3	36,284	101,614	12/31/2027
1/1/2013	Actuarial Loss	11,938,286	20	8	75,025	475,162	12/31/2032
1/1/2015	Assumption Change	4,837,709	14	4	528,291	1,907,128	12/31/2028
1/1/2015	Actuarial Loss	7,193,083	14	4	785,503	2,835,666	12/31/2028
1/1/2017	Assumption Change	8,027,201	14	6	873,864	4,428,283	12/31/2030
1/1/2017	Actuarial Loss	10,841,897	14	6	1,180,280	5,981,033	12/31/2030
1/1/2019	Actuarial Loss	6,999,770	13	7	795,510	4,552,473	12/31/2031
1/1/2021	Assumption Change	8,273,246	11	7	1,044,398	5,976,793	12/31/2031
1/1/2021	Actuarial Loss	3,374,747	11	7	426,022	2,438,000	12/31/2031
1/1/2023	Assumption Change	2,847,507	11	9	359,207	2,479,423	12/31/2033
1/1/2023	Actuarial Gain	(6,443,646)	11	9	(812,852)	(5,610,706)	12/31/2033
1/1/2025	Actuarial Loss	557,324	11	11	70,305	557,324	12/31/2035
					\$ 5,650,936	\$ 27,419,733	

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX A – SUPPLEMENTAL INFORMATION EXCLUDING BOND PROCEEDS

Allentown received the proceeds of a Pension Obligation Bond in 1996 and Note payment in 2013 which improved the financial status of the Plan. This section provides the development of the unfunded liability based upon assets without the bond proceeds and the Note payment and the amortization amount of this unfunded liability.

Under Act 205 section 404, municipalities that issue bonds (or notes) to fund the unfunded actuarial liabilities must complete Exhibit I of the Act 205 form reflecting the funded status and MMO determination of the plan as if the bond issuance (or notes) had not occurred. The contributions used for determining the assets excluding the bonds and the Note payment as of the valuation date are based upon “hypothetical amortization contributions that would have been made had bond issue proceeds not been deposited”, as described on the Act 205 form. In addition, investment earnings exclude earnings on bond issue proceeds (as instructed) by applying the rate of market returns for the year on the assets excluding the bonds.

The tables in this section consist of:

- Market Value of Assets without Bond Proceeds
- Actuarial Value of Assets without Bond Proceeds
- Unfunded Liability without Bond Proceeds
- Actuarial (Gain)/Loss without Bond Proceeds
- Schedule of Amortization bases without Bond Proceeds

Table A-1			
Market Value of Assets with Gain/(Loss) without Bond			
	2023	2024	Total Period
Beginning of Year Market Value	\$ 167,860,445	\$ 194,386,806	\$ 167,860,445
Contributions	16,513,937	16,878,482	33,392,419
Benefit Payments	(14,128,583)	(14,575,340)	(28,703,923)
Administrative Expenses	(125,194)	(126,677)	(251,871)
Investment Earnings*	<u>24,266,201</u>	<u>24,209,323</u>	<u>48,475,524</u>
Estimated Market Value on December 31	\$ 194,386,806	\$ 220,772,594	\$ 220,772,594
Expected Investment Earnings (7.30%)	<u>12,334,855</u>	<u>14,268,279</u>	<u>25,732,146</u>
Expected Market Value on December 31	\$ 182,455,460	\$ 210,831,550	\$ 198,029,216
Investment Gain / (Loss)	<u>11,931,346</u>	<u>9,941,044</u>	<u>22,743,378</u>
End of Year Market Value	\$ 194,386,806	\$ 220,772,594	\$ 220,772,594

* Based upon market value with bond returns in Table II - 3

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX A – SUPPLEMENTAL INFORMATION EXCLUDING BOND PROCEEDS

Table A-2				
Development of Actuarial Value of Assets Without Bond 5-Year Smoothing Method				
Market Value of Assets as of January 1, 2025				\$ 220,772,594
<u>Plan Year</u>	<u>Investment Gains / (Losses)</u>	<u>Percent Recognized</u>	<u>Percent Deferred</u>	<u>Amount Deferred</u>
2020	\$ 6,364,396	100%	0%	\$ 0
2021	14,534,686	80%	20%	2,906,937
2022	(38,317,189)	60%	40%	(15,326,876)
2023	11,931,346	40%	60%	7,158,808
2024	9,941,044	20%	80%	7,952,835
				\$ 2,691,704
Preliminary Actuarial Value as of January 1, 2025				\$ 218,080,890
Corridor for Actuarial Value				
- Lower Limit				80% \$ 176,618,075
- Upper Limit				120% \$ 264,927,113
Actuarial Value of Assets as of January 1, 2025				\$ 218,080,890
- as a percent of Market Value of Assets				98.8%

Table A-3	
Liabilities/Net (Surplus)/Unfunded Based upon Assets without Bond	
	January 1, 2025
Actuarial Liability	\$ 268,441,095
Actuarial Value of Assets without Bond	218,080,890
Net (Surplus)/Unfunded without Bond (AL – AVA)	\$ 50,360,205

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX A – SUPPLEMENTAL INFORMATION EXCLUDING BOND PROCEEDS

The following table provides the explicit gains/(losses) of the unfunded liability based upon the assets without the bond.

Table A-4 Development of Actuarial Gain/(Loss) without the Bond	
Unfunded Liability without Bond as of 01/01/2023	\$ 64,841,874
Normal Cost	\$ 9,221,773
Contributions made	
a. Employee Contributions	\$ (2,517,303)
b. Local Portion	(30,875,116)
Actual Expense	\$ 251,871
Interest on above	8,411,262
Plan Changes	\$ 0
Assumption Changes	0
Method Changes	0
Expected Unfunded Liability as of 01/01/2025	\$ 49,334,361
Actual Unfunded Liability as of 01/01/2025	<u>50,360,205</u>
Actuarial Gain / (Loss)	\$ (1,025,844)
- Investment Gain / (Loss)	1,048,344
- Liability Gain / (Loss)	(2,074,188)

Table A-5 Total Gain/(Loss) without Bond	
Investment Gain / (Loss)	\$ 1,048,344
Liability Gain / (Loss)	(2,074,188)
Timing and interest Gain / (Loss)	<u>(1,574,456)</u>
Total Gain/(Loss)	\$ (2,600,300)

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX A – SUPPLEMENTAL INFORMATION EXCLUDING BOND PROCEEDS

The following table provides the schedule of amortization bases as of January 1, 2025 without bond proceeds. Plan amendments and assumption changes prior to January 1, 2015 have not been adjusted by the 2013 Cancellation Ratio based on the 2013 Note contribution paid by the City, which triggered the application of Act 205 Section 404(h) to the Amortization Bases Including Bond Proceeds.

Table A-6							
Schedule of Amortization Bases Excluding Bond for Minimum Contributions as of January 1, 2025							
Original Date	Type	Original Amount	Original Period	Remaining Period	Annual Payment	Remaining Balance	Date Fully Amortized
1/1/2002	Investment Loss	\$ 480,106	30	7	\$ 38,136	\$ 218,240	12/31/2031
1/1/2003	Investment Loss	7,174,076	30	8	568,635	3,601,382	12/31/2032
1/1/2009	Assumption Change	(13,527,285)	20	4	(1,240,409)	(4,477,874)	12/31/2028
1/1/2009	Actuarial Loss	36,459,820	20	4	3,343,248	12,069,120	12/31/2028
1/1/2011	Actuarial Loss	15,012,528	20	6	1,370,294	6,943,924	12/31/2030
1/1/2013	Assumption Change	4,976,960	15	3	524,742	1,469,556	12/31/2027
1/1/2013	Actuarial Loss	12,911,978	20	8	1,173,502	7,432,228	12/31/2032
1/1/2015	Assumption Change	4,837,709	14	4	528,291	1,907,128	12/31/2028
1/1/2015	Actuarial Loss	6,935,306	14	4	757,354	2,734,048	12/31/2028
1/1/2017	Assumption Change	8,027,201	14	6	873,864	4,428,282	12/31/2030
1/1/2017	Actuarial Loss	5,711,586	14	6	621,780	3,150,851	12/31/2030
1/1/2019	Actuarial Loss	3,041,750	13	7	345,689	1,978,277	12/31/2031
1/1/2021	Assumption Change	8,273,246	11	7	1,044,398	5,976,793	12/31/2031
1/1/2021	Actuarial Loss	3,188,811	11	7	402,550	2,303,676	12/31/2031
1/1/2023	Assumption Change	2,847,507	11	9	359,207	2,479,423	12/31/2033
1/1/2023	Actuarial Gain	(5,116,539)	11	9	(645,440)	(4,455,149)	12/31/2033
1/1/2025	Actuarial Loss	2,600,300	11	11	328,022	2,600,300	12/31/2035
					\$ 10,393,863	\$ 50,360,205	

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX B – MEMBERSHIP INFORMATION

The data for this valuation was provided by the City as of January 1, 2025. Cheiron did not audit any of the data; however, we performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standards of Practice No. 23.

The following is a list of data charts contained in this section:

- Summary of Participant Data
- Age/Service Distribution for Active Participants, including counts and total salary
- Counts and Total Benefit Amount by Age for Retirees, Beneficiaries, and Disabled Participants
- Reconciliation of Active, Terminated Vested, and In-Pay Participants

SUMMARY OF PARTICIPANT DATA		
	1/1/2023	1/1/2025
Active Participants		
Count	212	211
New Entrants	27	24
Average Age	39.0	39.4
Average Benefit Service	11.2	11.1
Annual Payroll*	\$ 19,398,732	\$ 21,109,263
Retirees and Beneficiaries Receiving Payments		
Count	309	319
Average Age	64.9	65.2
Annual Benefits	\$ 13,938,172	\$ 15,133,594
Average Monthly Benefit	\$ 3,759	\$ 3,953
Terminated Vested Participants and Inactive Members		
Count**	18	18
Accumulated Member Contributions w/o Interest	\$ 138,980	\$ 72,980
Annual Benefits	\$ 63,024	\$ 127,330
Average Monthly Benefit	\$ 2,626	\$ 2,653

The estimated benefit payments for the current plan year are \$15,760,158.

*Includes base pay plus the lesser of the overtime pay and 10% of base pay.

** In 2023, sixteen members entitled to only contributions without interest and two members entitled to a monthly benefit. In 2025, fourteen members entitled to only contributions without interest and four members entitled to a monthly benefit.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX B – MEMBERSHIP INFORMATION

Summary of Active Data with Base Pay as of January 1, 2025

Attained Age	YEARS OF CREDITED SERVICE																			
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 & up	
	No.	Average Comp.	No.	Average Comp.	No.	Average Comp.	No.	Average Comp.	No.	Average Comp.	No.	Average Comp.	No.	Average Comp.	No.	Average Comp.	No.	Average Comp.	No.	Average Comp.
Under 25	1	\$ 68,231	5	\$ 65,019	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
25 to 29	4	62,547	25	87,475	6	100,231	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 to 34	2	68,952	14	89,368	17	99,587	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 to 39	1	68,673	1	98,602	10	101,930	18	101,917	4	110,779	0	0	0	0	0	0	0	0	0	0
40 to 44	3	60,229	3	86,074	4	98,884	7	100,996	22	106,992	3	119,053	0	0	0	0	0	0	0	0
45 to 49	2	68,189	2	91,548	1	98,841	3	101,340	11	103,614	19	113,251	0	0	0	0	0	0	0	0
50 to 54	0	0	1	98,458	1	99,339	3	102,611	7	101,102	3	108,941	0	0	0	0	0	0	0	0
55 to 59	0	0	0	0	0	0	0	2	100,165	3	122,798	0	0	1	106,485	0	0	0	0	0
60 to 64	0	0	0	0	0	0	0	0	0	1	112,835	0	0	0	0	0	0	0	0	0
65 to 69	0	0	0	0	0	0	0	1	107,229	0	0	0	0	0	0	0	0	0	0	0
70 & up	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX B – MEMBERSHIP INFORMATION

Summary of Inactive Data as of January 1, 2025

AGE DISTRIBUTION OF INACTIVE PARTICIPANTS PENSIONERS AND BENEFICIARIES RECEIVING BENEFITS AS OF JANUARY 1, 2025									
Age	Disability		Normal, Early		Surviving Spouses		Total		
	Retirements		Deferred Vested		and Beneficiaries		Total		
	Number	Monthly Benefit	Number	Monthly Benefit	Number	Monthly Benefit	Number	Monthly Benefit	
Under 55	7	\$ 26,838	49	\$ 288,464	6	\$ 9,362	62	\$ 324,664	
55-59	2	5,519	55	285,852	7	18,550	64	309,921	
60-64	1	1,746	32	148,470	8	13,013	41	163,229	
65-69	1	922	43	182,833	6	13,154	50	196,909	
70-74	1	1,490	23	86,150	11	26,625	35	114,265	
75-79	0	0	23	70,044	9	17,308	32	87,352	
80 & Over	0	0	11	23,053	24	41,740	35	64,793	
Total	12	\$ 36,515	236	\$ 1,084,866	71	\$ 139,752	319	\$ 1,261,133	

CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025

APPENDIX B – MEMBERSHIP INFORMATION

Participant Reconciliation from January 1, 2023 to January 1, 2025

	Term.						Total
	Actives	Inactive	Vested	Disabled	Retired	Beneficiary	
January 1, 2023 valuation	212	16	2	11	227	71	539
Additions / QDROs	24					3	27
Reductions							
a. Terminated - not vested, refund due	(1)	1					
b. Terminated - not vested, refund paid	(5)	(2)					(7)
c. Deaths without beneficiary					(2)	(9)	(11)
Total	(6)	(1)			(2)	(9)	(18)
Changes in status							
b. Terminated - vested	(2)		2				
c. Retired	(16)				16		
d. Disabled	(1)			1			
e. Died with beneficiary					(6)	6	
f. Data corrections		(1)			1		
Total	(19)	(1)	2	1	11	6	
January 1, 2025 valuation	211	14	4	12	236	71	548

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX B – MEMBERSHIP INFORMATION

Active Members	Count	Annual Pay
As of last valuation date	212	\$ 19,398,732
Separations from active service		
Refund of contributions	5	\$ 398,614
Separation with deferred benefit	2	186,932
Separation due refund	1	33,360
Disability	1	84,185
Death	0	0
Retirement with service retirement benefit	16	1,587,472
Total separations	25	\$ 2,290,563
As of current valuation date using prior pay	187	\$ 17,108,169
As of current valuation date using current pay	187	\$ 19,530,019
New entrants	24	1,579,244
As of current valuation date	211	\$ 21,109,263

Service retirement benefit recipients	Count	Annual Benefit
As of last valuation date	227	\$ 11,779,985
New Benefit recipients	17	1,366,558
Total	244	\$ 13,146,543
Terminations	0	\$ 0
Deaths	8	196,039
Others	0	0
Total terminations	8	\$ 196,039
COLA increase		77,244
QDRO Decrease		9,354
As of current valuation date	236	\$ 13,018,394

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX B – MEMBERSHIP INFORMATION

Disability benefit recipients	Count	Annual Benefit
As of last valuation date	11	\$ 381,677
New Benefit recipients	1	38,437
Total	12	\$ 420,114
Terminations	0	\$ 0
Deaths	0	0
Others	0	0
Total terminations	0	\$ 0
COLA increase		18,066
As of current valuation date	12	\$ 438,180

Surviving Spouses	Count	Annual Benefit
As of last valuation date	71	\$ 1,776,510
New Benefit recipients	9	185,809
Total	80	\$ 1,962,319
Terminations	0	\$ 0
Deaths	9	285,299
Others	0	0
Total terminations	9	\$ 285,299
As of current valuation date	71	\$ 1,677,020

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX B – MEMBERSHIP INFORMATION

Inactive Refund Due	Count	Balance
As of last valuation date	16	\$ 138,980
New recipients	1	574
Total	17	\$ 139,554
Refund	3	\$ 66,574
Total terminations	3	\$ 66,574
As of current valuation date	14	\$ 72,980

Deferred Benefits	Count	Annual Benefit
As of last valuation date	2	63,025
New recipients	2	64,305
Total	4	\$ 127,330
Retirees	0	\$ 0
Deaths	0	0
Others	0	0
Total terminations	0	\$ 0
As of current valuation date	4	\$ 127,330

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

1. Normal Retirement

Participants hired prior to January 1, 2009:

Eligibility: 20 years of service.

Basic Benefit: The retirement benefit shall be 50.5% of the rate of monthly pay of the employee at the time of retirement or the highest average annual salary during any five years of service.

Service Increment: 7.5% of salary for the first full year of service over 20 years, plus 3.0% of salary for each of the next four full years of service up to a maximum of 19.5% of salary. Service after attaining age 65 is excluded.

The maximum benefit is 70% of salary.

Salary will include base pay, longevity, holiday pay, festive pay, shift differential and overtime. Overtime shall be limited to 10% of base pay, but overtime is not limited in the determination of the highest average annual salary during any five years of service.

The minimum benefit is \$10,400 per year.

Participants hired on or after January 1, 2009:

Eligibility: 20 years of service.

Basic Benefit: The retirement benefit shall be 50% of the rate of monthly pay of the employee at the time of retirement or the highest average annual salary during any five years of service.

Service Increment: One-fortieth (1/40th) times the Basic Benefit for each year of service in excess of 20 years. The total Service Increment cannot exceed \$6,000 in total annual benefit increase (i.e., \$500 additional monthly benefit). Service after attaining age 65 is excluded.

Salary will include base pay, longevity, holiday pay, festive pay, shift differential and overtime. Overtime shall be limited to 10% of base pay, but overtime is not limited in the determination of the highest average annual salary during any five years of service.

The minimum benefit is \$10,400 per year.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

2. Early Retirement

None permitted.

3. Termination Benefits

Vesting: 100% after 12 years of service: Termination before normal retirement eligibility: Member becomes eligible for retirement at the point he would have attained eligibility for normal retirement had he continued in employment. Prior to 20 years, the benefit is based upon a pro-rated portion of the normal retirement benefit. After 20 years, the benefit is the normal retirement benefit.

Non-Vested Benefit: Refund of contributions (including any military buy-back contributions, if applicable) without interest.

4. Survivor Benefits

Members retired on or after December 17, 1969, active members dying in the line of duty, active members dying not in the line of duty with 10 or more years of service: 100% of the pension benefit applicable to the member.

Active members not dying in the line of duty with less than 10 years of service: 50% of the pension benefit applicable to the member.

Survivors include the spouse of the member, domestic partner, dependent children, or dependent parents approved by the Pension Board. If the spouse dies leaving dependent children, then the dependent children will continue to receive survivor benefits until age 18.

Killed-in-Service - The survivor shall receive 62.5% of officer's wages or 50.5% plus service increments which the officer would be entitled to receive at the time of death, whichever is higher.

5. Disability Benefits

Annual Benefit prior to Normal Retirement Eligibility: 50.5% of Salary plus any Service Increment earned.

Annual Benefit if Retirement Eligible: The normal retirement benefit.

6. Credit for Military Service

Any member with military service prior to becoming a member in the Plan may purchase credited military service, not to exceed five (5) years of such service.

7. Purchased Service

Not applicable.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX C – SUMMARY OF PLAN PROVISIONS

8. Employee Contributions

5% of salary. Salary will include base pay, longevity, holiday pay, festive pay, shift differential and overtime.

9. Cost of Living Adjustment

Participants and their beneficiaries retiring after January 1, 2007 shall receive an annual cost of living adjustment (COLA) once each retiree is eligible for the COLA. Annual COLAs do not occur until the pension allowance is less than half of the current salary for a patrol officer. Such increases shall be in conformity with the uniform scale, which may be based on the cost of living, but the total of such allowances shall not at any time exceed ½ of the current salary benefit paid to the patrolmen of the highest grade.

Participants and their beneficiaries retiring between January 1, 2005 and December 31, 2006 will receive the same COLA as those retiring after January 1, 2007 unless they opted out as of their benefit commencement date.

10. Changes Since Last Valuation (i.e., since January 1, 2023 under Act 205)

None.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX D – ACTUARIAL ASSUMPTIONS AND METHODS

A. Demographic and Economic Assumptions

1. Mortality Rates

Healthy Mortality: RP-2000 Blue Collar Combined Healthy Mortality Table projected generationally from base year 2000 using 50% of Scale AA.

Disabled Mortality: RP-2000 Disabled Mortality Table.

The mortality assumption was set by the City of Allentown Pension Board, which has control over the selection of the pension valuation assumptions, rather than the actuary. Based upon limited data, this mortality assumption was reviewed and appears to be reasonable in terms of reflecting projected mortality improvement in the future. The Board may want to consider updating the mortality assumptions for the next actuarial valuation to reflect more recently published mortality rates.

2. Disability Rates

100% of the 1955 United Auto Workers Table.

Age	Male	Female
30	0.04%	0.06%
35	0.05%	0.08%
40	0.07%	0.10%
45	0.10%	0.15%
50	0.18%	0.26%
55	0.36%	0.49%
60	0.90%	1.21%
>=65	0.00%	0.00%

3. Termination Rates

Plan specific rates based, in part, on the following table:

Age	Male	Female
25	5.00%	7.50%
30	3.75%	5.00%
35	2.50%	3.75%
40	1.50%	2.50%
45	0.75%	1.25%
>=50	0.00%	0.00%

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX D – ACTUARIAL ASSUMPTIONS AND METHODS

4. Retirement Rates for Active Employees

Service	Rate
0-19	0.00%
20	20.0%
21	30.0%
22-28	15.0%
>=29	100.0%

Assumed retirement date for active participants who are assumed to terminate prior to attaining retirement eligibility or current terminated vested participants is the date the Member would have attained eligibility for normal retirement had the member continued in employment.

5. Percent Married

80% of active members are assumed to be married.

6. Age of Spouse

Female spouse is assumed to be two years younger than male spouse.

7. Investment Return

7.30% per annum, net of investment expenses.

8. Low-Default-Risk Obligation Measure (LDRM) Discount Rate

5.54%

9. Salary Increase

Salary increases:

With Merit Increases: 4.5% compounded annually.
Without Merit Increases: 3.5% compounded annually.

10. Overtime

Participants are assumed to attain overtime pay equal to a ratio of base pay at retirement. The ratio is calculated separately for each participant. The numerator of the ratio is the average of the participant's overtime earnings during the three-year period prior to the valuation. The denominator is the individual's base pay during the year immediately preceding the valuation.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX D – ACTUARIAL ASSUMPTIONS AND METHODS

11. Credit for Military Service

Military service purchased as of the valuation date, as provided by the City, is reflected in the valuation results. Future possible military service purchases are not assumed.

12. Form of Annuity

Married participants: 100% Joint and Survivor Annuity.

Single participants: Life Annuity.

13. Cost of Living Adjustment

2.4% per year upon eligibility to receive a COLA.

For participants eligible to receive a COLA, the pay of the patrol officer is projected into the future to determine the date that future benefit increases are expected to begin.

Active participants:

If hired after 2008: COLA increases assumed to begin four years after retirement date.

If hired prior to 2009: COLA increases assumed to begin 15 years after retirement date.

14. Expenses

Expenses are assumed to equal the two-year average of paid administrative expenses from the most recent actuarial valuation, rounded to the nearest \$10,000. Expenses are assumed to increase based on without merit salary scale in the future for MMO projections.

15. Rationale for Assumptions

In accordance with Actuarial Standard of Practice No. 27, the rationale for the 7.30% discount rate is based on the Board's investment risk preference, the Plan's current asset allocation, and the investment manager's capital market outlook. The LDRM discount rate of 5.54% is based on the December 31, 2024 FTSE Pension Liability Index.

The demographic assumptions were selected by the City of Allentown Pension Board. Some of these assumptions including the retirement rates in 2021 and mortality rates in 2017 have been updated since Cheiron became the actuary to the Plan to reflect plan experience and the Board's expectations. These assumptions are monitored for reasonability.

16. Changes since last biennial valuation (i.e., since January 1, 2023 under Act 205)

None.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX D – ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

1. Funding Method

Under the entry age normal actuarial cost method, the individual entry age normal cost is determined for each participant by calculating the annual contribution rate as a level percent of pay required to fund that individual's expected benefits, based on the current plan provisions, over the participant's expected active working lifetime with the Plan at entry.

At the valuation date, the present value of future normal cost is calculated for each individual participant by multiplying the entry age normal cost by the present value of the participant's expected future salary with the Plan. The cost for each participant is then summed to yield the present value of future normal costs.

The excess of the present value of future benefits for all individuals at the valuation date over the present value of future normal costs is called the actuarial liability, or past service liability.

2. Amortization Method

Under Act 44 of 2009, the unfunded actuarial liability is amortized as a level dollar amount over the lesser of:

- (a) (i) 30 years, with respect to the initial liability as of 1/1/85 (or first valuation);
- (ii) 20 years, with respect to actuarial gains and losses;
- (iii) 15 years, with respect to changes due to actuarial assumptions;
- (iv) 10 years, with respect to changes in benefits not mandated by the state for active members;
- (v) 1 year, with respect to changes in benefits not mandated by the state for currently retired members;
- (vi) 20 years, with respect to state mandated benefit changes;

or

- (b) The average assumed working lifetime of active employees as of the date the liability was established, rounded to the next highest whole year.

If the Plan for the prior biennial valuation was determined to be moderately or severely distressed, then the amortization period is only determined by (a).

If the Actuarial Value of Assets exceeds the Actuarial Liability, then 10% of the excess assets are applied to reduce the Normal Cost plus expenses for the MMO.

**CITY OF ALLENTOWN POLICE PENSION PLAN
ACTUARIAL VALUATION AS OF JANUARY 1, 2025**

APPENDIX D – ACTUARIAL ASSUMPTIONS AND METHODS

3. Actuarial Value of Assets

The actuarial value of assets is determined in accordance with Section 3.16 of Revenue Procedure 2000-40, using a five-year smoothing period. The resulting actuarial value of assets is then limited to be no greater than 120% and no less than 80% of the market value of assets on the valuation date.

4. Disclosure regarding Models Used

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

Projections in this report were developed using R-scan, our proprietary tool for the intended purpose of developing projections. The model is also used to stress test the impact of volatile asset returns over the projection period. While the assumptions individually are reasonable for the underlying report that supports the projections, specifically for projection purposes, they are also considered reasonable in the aggregate.

5. Changes in Method Since Last Valuation

None.