

TriMet Defined Benefit Retirement Plan for Management and Staff Employees

Actuarial Valuation Report as of June 30, 2024

Produced by Cheiron

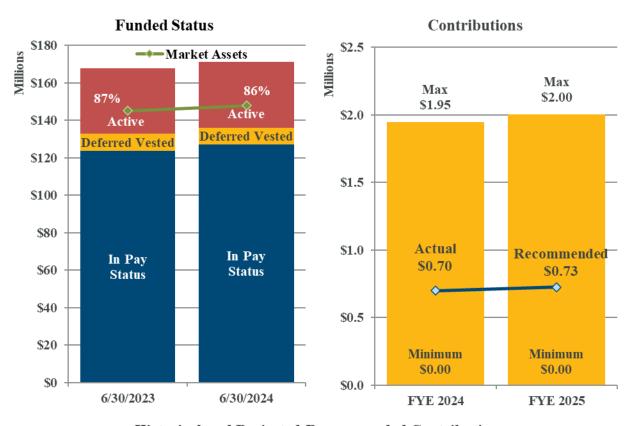
September 2024

TABLE OF CONTENTS

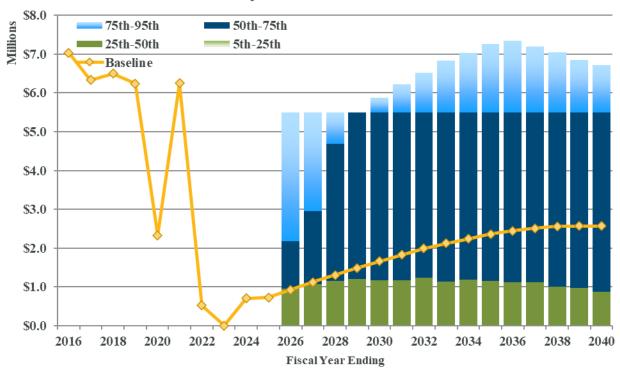
<u>Section</u>		<u>Page</u>
Section I	Board Summary	1
Section II	Assessment and Disclosure of Risk	9
Section III	Certification	20
Section IV	Assets	22
Section V	Measures of Liability	25
Section VI	Contributions	29
Section VII	GASB 67 and 68 Disclosures	34
<u>Appendices</u>		
Appendix A	Membership Information	46
Appendix B	Actuarial Assumptions and Methods	54
Appendix C	Summary of Plan Provisions	60
Appendix D	GASB 67/68 Crossover Test	65
Appendix E	Glossary of Terms	68



SECTION I – BOARD SUMMARY



Historical and Projected Recommended Contributions





SECTION I – BOARD SUMMARY

Funded Status

The chart in the upper left corner of the dashboard on the prior page shows the assets, Actuarial Liability, and funded status for the current and prior valuations. These measures are to assess funding progress in a budgeting context. They are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations. For many pension plans, the liability measures for financial reporting under GASB 67 and 68 are different, but they are the same for TriMet.

The bars represent the Actuarial Liability (or Total Pension Liability), which is used as a funding target and is separated between the liability for members currently receiving benefits (dark blue), inactive members entitled to future benefits (gold), and active members (red). About 74% of the liability is for members currently receiving benefits. The green line shows the Market Value of Assets (or Fiduciary Net Position). The percentage on the top of the bar represents the funded status, which decreased from 87% to 86%.

Table I-1 below summarizes the Actuarial Liability, assets, and funded status as of June 30, 2023 and 2024.

Table I-1

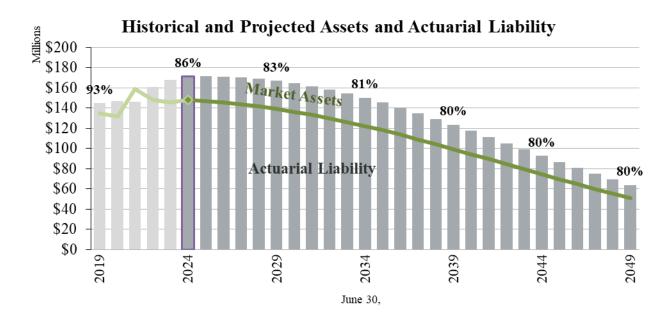
Summary of Funded Status								
	J	une 30, 2024	J	une 30, 2023	% Change			
Actuarial Liability								
Actives	\$	35,103,395	\$	34,939,144	0.5%			
Deferred Vested		8,926,904		8,968,900	-0.5%			
In Pay Status		127,102,435		123,732,818	<u>2.7</u> %			
Total	\$	171,132,734	\$	167,640,862	2.1%			
Market Value of Assets	\$	147,813,867	\$	145,162,348	1.8%			
Unfunded Actuarial Liability	\$	23,318,867	\$	22,478,514	3.7%			
Funding Ratio		86.4%		86.6%	-0.2%			

The Actuarial Liability represents the target amount of assets the plan should have in the trust as of the valuation date based on the actuarial cost method. In aggregate, the Actuarial Liability increased by 2.1%, primarily reflecting larger-than-expected salary and COLA increases as well as mortality and retirement losses. The Market Value of Assets increased by 1.8% due to investment returns offset by benefit payments and expenses. As a result, the Unfunded Actuarial Liability (UAL) increased from approximately \$22.5 million to \$23.3 million, and the funding ratio decreased from 86.6% to 86.4%.



SECTION I – BOARD SUMMARY

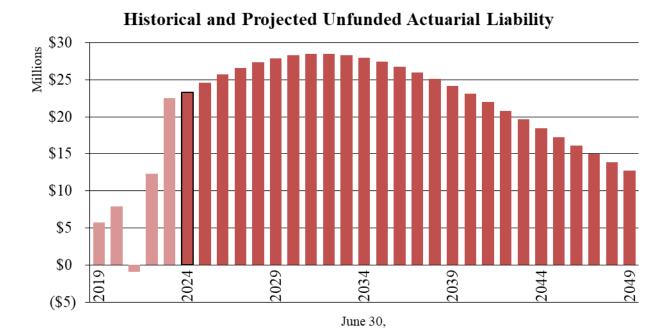
Because the Plan has been closed to new entrants since April 27, 2003, and the Actuarial Liability is projected to begin declining as benefits are paid out, the Plan's funding policy differs significantly from what would be used for an ongoing pension plan. The funding policy adopted by the trustees seeks to maintain a well-funded pension plan without developing a surplus that could not be used efficiently until all benefits have been paid. The Recommended contributions under the funding policy will cause the funded ratio to converge to 80% and maintain that funded percentage level as benefits are paid out. The chart below shows the historical and projected trends for assets versus Actuarial Liability, assuming TriMet contributes the Recommended contribution and all other assumptions are met. The historical Actuarial Liability is in light gray, while the projected Actuarial Liability is in darker gray. The Actuarial Liability is projected to reach its peak in 2025, and the funded ratio, shown at the top of the bars, is expected to decline gradually until it reaches 80%.



With the funded ratio gradually declining, the UAL is expected to increase in the short term. As shown in the chart below, however, as the Actuarial Liability also declines, the UAL is expected to begin declining in 2032 even as the funded ratio continues to decline to 80%. Once the funded ratio reaches 80%, the Recommended contribution includes a component to pay the unfunded portion of benefit payments during the year, so the funded ratio will be maintained, and the UAL will decline each year if all assumptions are met. After 25 years, the UAL is expected to decrease to about \$13 million from the current \$23 million.



SECTION I – BOARD SUMMARY



Section IV of this report provides more detail on the assets, and Section V provides more detail on the liability measures.

Contributions and Pension Expense

Under the funding policy, three different Actuarially Determined Contributions (ADCs) are calculated in each actuarial valuation: the Minimum, the Maximum, and the Recommended contributions. As long as the plan remains above 80% funded, the Minimum contribution is \$0. While the Plan's funded ratio is between 80% and 90%, the Maximum contribution is the amount needed to maintain the funded ratio if all assumptions are met. The Recommended contribution is a blend between the Minimum and Maximum contributions. At 80% funded, the Recommended contribution equals the Maximum; at 90% funded, the Recommended contribution equals the Minimum. For more details on the funding policy in different situations, please refer to Section VI and Appendix B.

The chart in the upper right corner of the dashboard on page 1 shows the range (gold bars) from the Minimum to Maximum and the Recommended contribution, assuming it is paid monthly throughout the year. For FYE 2025, the funded ratio was below 90% but remained above 80%. Consequently, under the funding policy, the Minimum contribution is still \$0, but the Maximum contribution is \$2.00 million – the amount needed to keep the same funded ratio if all assumptions are met. The Recommended contribution based on being 86.4% funded is \$0.73 million.

The Tread Water Cost equals the normal cost plus interest on the UAL or surplus. The normal cost represents the expected cost of the benefits attributed to the next year of service, and the



SECTION I – BOARD SUMMARY

interest on the UAL represents the amount that would need to be contributed to keep the UAL or surplus at the same dollar amount if all assumptions are met. To the extent actual contributions exceed the Tread Water Cost, the UAL is expected to decline, or the surplus is expected to increase.

While the Maximum contribution for FYE 2025 exceeds the Tread Water Cost, the Minimum and Recommended contributions do not. Assuming Recommended contributions are made each year, contributions are expected to exceed the Tread Water Cost beginning in 2033. We note that this is part of the design of the funding policy to limit the probability that a surplus develops. When the plan is well-funded, the Recommended contribution will be less than the Tread Water Cost. However, higher contributions that exceed the Tread Water Cost would be Recommended if the funding ratio drops. Under the funding policy, Recommended contributions ramp up quickly if the plan's funded ratio drops below 80%. Above 80%, the Recommended contributions aim to let the funded ratio gradually decline to 80% and maintain a funded ratio of 80% after that. At 80% funded, a component of the Recommended contribution is the unfunded portion (20%) of the next year's benefit payments, ensuring that there will always be sufficient assets to pay benefits. This approach limits the likelihood of developing surplus assets while reducing the amount of the UAL over time. However, it also means that the UAL is not expected to be completely paid off until the last benefit is paid.

Under GASB 68, the annual pension expense or income equals the Tread Water Cost plus the cost of any benefit changes and the recognized portion of prior experience gains and losses and assumption changes. Details of this calculation are shown in Section VII of the report.

Table I-2 compares the Recommended contribution under the Plan's funding policy to actual contribution amounts and pension expense for the fiscal years ending in 2023 and 2024. The pension expense decreased from \$8.2 million in FYE 2023 to \$4.4 million in FYE 2024. The Recommended contribution and actual contributions increased from \$0 in the prior year.

Table I-2

Annual Contributions and Pension Expense								
		FYE 2024		FYE 2023	% Change			
Pension Expense (\$ Amount)	\$	4,449,811	\$	8,170,113	-45.5%			
Recommended Contribution ¹ Actual Contribution	\$	663,816 700,000	\$	0	N/A N/A			
Contribution Deficiency/(Excess)	\$	(36,184)	\$	0				

¹ Amounts assume monthly contributions made throughout the year



SECTION I – BOARD SUMMARY

As shown by the chart at the bottom of the dashboard (page 1), actual contributions have exceeded \$6 million for five of the last 10 years, significantly more than the ADC, but have been much lower the last three years. For FYE 2025 and in the future, the projections in the chart assume that the Recommended contribution is made. The baseline represents the projected Recommended contribution if all assumptions are met, and it shows the Recommended contribution gradually increasing to about \$2.6 million over the projection period. The range of the bars represents the range of the Recommended contribution based on the potential range of actual investment returns. We used an expected return of 6.0% and a standard deviation of 7.5% for these projections. The dark blue bars show potential contributions in moderately poor investment scenarios, and the top of the dark blue bar for FYE 2029 through 2040 is the assumed TriMet budget amount of \$5.5 million, which becomes the Recommended contribution as soon as the plan is less than 80% funded unless the Minimum is larger or the Maximum is smaller. The light blue bars show potential contributions under very poor investment return scenarios.

Section II of this report provides more detailed information on the risks to contribution amounts, and Section VI provides additional detail on the development of the range of contribution amounts.



_

¹ Standard deviation provided in Meketa's August 1, 2024 Board of Trustees meeting materials.

SECTION I – BOARD SUMMARY

Changes

During FYE 2024, the UAL (or Net Pension Liability in GASB 67/68) increased by \$0.8 million. Table I-3 below shows the breakdown of the changes in the UAL in the last year by source.

Table I-3

Changes in UAL or NPL		
		Amount
UAL/NPL, June 30, 2024	\$	23,318,867
UAL/NPL, June 30, 2023		22,478,514
Change in UAL/NPL	\$	840,353
Sources of Changes		
Plan Changes	\$	0
Assumption Changes		0
Contributions vs. Tread Water Cost		1,261,037
Investment (gain) or loss		(3,967,596)
Liability (gain) or loss		
COLA	\$	608,982
Salaries		1,596,608
Retirement		679,255
Termination		(103,499)
Mortality		958,639
Other	_	(193,073)
Total Liability (gain) or loss	\$	3,546,912
Total Changes	\$	840,353

The most significant source of the increase in UAL is the higher-than-expected employee salaries (\$1.6 million). There was also a mortality loss (\$1.0 million), a retirement loss (\$0.7 million), and a loss due to higher COLAs than expected (\$0.6 million). Investment returns were the key driving factor decreasing the UAL, outperforming assumed returns by approximately \$4.0 million. The lower level of Recommended contributions caused an increase in UAL of \$1.3 million. Other demographic experience including terminations and other experience reduced the UAL by about \$0.3 million.



SECTION I – BOARD SUMMARY

Table I-4 below summarizes the results of this valuation compared to the prior valuation.

Table I-4

Summary of Valuation Results								
	J	une 30, 2024	J	une 30, 2023	% Change			
Membership								
Actives		45		51	-11.8%			
Deferred		50		55	-9.1%			
In Pay Status		<u>361</u>		<u>352</u>	2.6%			
Total		456		458	-0.4%			
Expected Active Member Payroll	\$	5,757,470	\$	5,636,366	2.1%			
Actuarial Liability or Total Pension Liability	\$	171,132,734	\$	167,640,862	2.1%			
Market Value of Assets or Fiduciary Net Position		147,813,867		145,162,348	1.8%			
Unfunded Actuarial Liability or Net Pension Liability	\$	23,318,867	\$	22,478,514	3.7%			
Deferred Outflows of Resources		0		(1,491,679)	-100.0%			
Deferred Inflows of Resources		1,417,779		0				
Net Impact on Statement of Net Position	\$	24,736,646	\$	20,986,835	17.9%			
Funding Ratio		86.4%		86.6%	-0.2%			
		FYE 2024		FYE 2023				
Minimum Contribution	\$	0	\$	0				
Maximum Contribution	\$	2,003,844	\$	1,947,396	2.9%			
Recommended Contribution	\$	726,636	\$	663,816	9.5%			

Contribution amounts assume monthly contributions made throughout the year



SECTION II - ASSESSMENT AND DISCLOSURE OF RISK

Actuarial valuations are based on assumptions about future economic and demographic experience. These assumptions represent a reasonable estimate of future experience, but actual future experience will undoubtedly be different and may be significantly different. This section of the report is intended to identify the primary risks to the plan, provide some background information about those risks, and assess those risks.

Identification of Risks

The fundamental risk to a pension plan is that the contributions needed to pay the benefits become unaffordable. Given the size of the Plan compared to TriMet as a whole, we believe it is unlikely that the Plan by itself would become unaffordable. Nevertheless, the contributions needed to support the Plan may differ significantly from expectations. While there are several factors that could lead to contribution amounts deviating from expectations, we believe the primary sources are:

- Investment risk, and
- Inflation risk.

Other risks that we have not identified may also turn out to be important.

Investment Risk is the potential for investment returns to be different than expected. Lower investment returns than anticipated will increase the Unfunded Actuarial Liability, necessitating higher contributions in the future unless other gains offset these investment losses. In contrast, higher investment returns than anticipated may create a potentially significant surplus that could be difficult to use until all benefits have been paid. The Plan's asset allocation determines expected future investment returns and their potential volatility.

Inflation risk is the potential for actual inflation to be different than expected. Retirement benefits under the plan are increased yearly by 90% of inflation (CPI-W) up to a maximum of 7.00%. Higher inflation than expected will result in the payment of greater benefits, and lower inflation than expected will result in the payment of lower benefits.

The table on the next page shows a 10-year history of changes in the UAL by source.



SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Table II-1

	UAL Change by Source								
FYE	Plan Changes	Assumption Changes	Contributions vs. Tread Water	Investment Experience	Liability Experience	Total UAL Change			
2015	0	(2,178)	(5,022)	5,018	3,592	1,411			
2016	0	474	(4,668)	5,819	(1,293)	334			
2017	0	0	(4,051)	(724)	1,441	(3,333)			
2018	0	0	(4,674)	(293)	(29)	(4,996)			
2019	0	0	(4,932)	4,511	397	(24)			
2020	0	(959)	(928)	6,608	928	5,649			
2021	(32)	0	(4,711)	(21,994)	(1,697)	(28,434)			
2022	0	7,170	(625)	11,414	7,111	25,070			
2023	0	0	1,436	2,649	6,096	10,182			
2024	0	0	1,261	(3,968)	3,547	840			
Total	\$ (32)	\$ 4,508	\$ (26,913)	\$ 9,042	\$ 20,094	\$ 6,698			

Amounts in Thousands

Over the last 10 years, the UAL has increased by approximately \$6.7 million. Contributions reduced the UAL by \$26.9 million, while assumption changes, investment experience, and liability experience increased the UAL by \$4.5 million, \$9.0 million, and \$20.1 million, respectively. The losses for liability experience have mostly occurred in the last three years due to inflation's impact on the COLA and salary increases.

Plan Maturity Measures

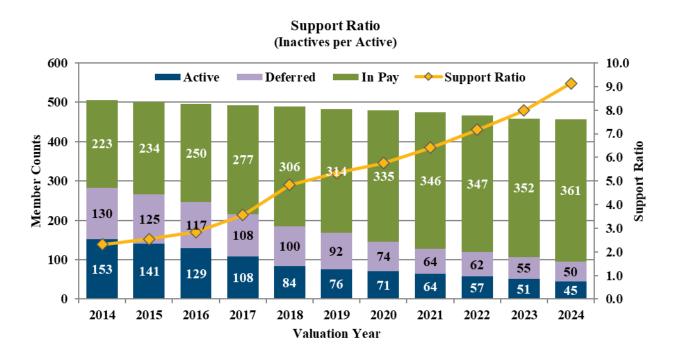
Plan maturity can be measured in various ways, but there is one very important dynamic – the larger the plan is compared to the contribution or revenue base that supports it, the more sensitive the plan will be to risk. Given that the Plan has been closed to new entrants since 2003, maturity measures isolated on the Plan show significant increases in maturity.



SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Support Ratio (Inactives per Active)

One simple measure of plan maturity is the ratio of the number of inactive members (those receiving benefits or entitled to a deferred benefit) to the number of active members. For a closed plan, the Support Ratio is expected to increase significantly unless active employees who the Plan does not cover are included. The chart below shows the growth in the Support Ratio for the closed Plan for the current and prior 10 years.





SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Net Cash Flow

The plan's net cash flow as a percentage of the beginning-of-year assets indicates the sensitivity of the plan to short-term investment returns. Net cash flow is equal to contributions minus benefit payments and administrative expenses. Mature plans can have large amounts of benefit payments compared to contributions, particularly if they are well-funded.

The chart below shows the projected net cash flow for the next ten fiscal years. The bars represent the dollar amounts of the different components of the projected net cash flow, and the line represents the net cash flow as a percentage of the assets as of the beginning of the fiscal year.

Projected Net Cash Flow Contributions ■Benefits Expenses →Net Cash Flow % \$4 0.0% \$2 -1.0% Net Cash Flow Amounts \$0 -2.0% -3.0% (\$2)(\$4)-5.0% (\$6)(\$8)-6.0% (\$10)-7.0% -8.0% (\$12)(\$14)-9.0% (\$16) -10.0% 2025 2026 2028 2029 2030 2027 2031 2032 2033 2034 Fiscal Year Ending

When TriMet contributed larger amounts to improve the Plan's funded status, the net cash flow was positive. Future contributions are projected to be much smaller even as benefit payments continue to grow. As a result, the net cash flow is expected to become increasingly negative. To the extent benefit payments exceed the cash income generated by the investment portfolio, investments must be liquidated. Benefit payments are expected to grow, further increasing the need for liquidity. The negative cash flow can be exacerbated in any given year by lump sum payments, and any volatility in contributions can cause significant variation in net cash flow from year to year. Managing the varying liquidity requirements may become challenging.

The sensitivity to short-term investment returns is the other potential issue related to large negative net cash flow. Investment losses in the short term are compounded by the net withdrawal from the plan, leaving a smaller asset base to try to recover from the investment losses. On the other hand, large investment gains in the short term also tend to have a longer beneficial effect as any future losses are relative to a smaller liability base due to the negative cash flow.



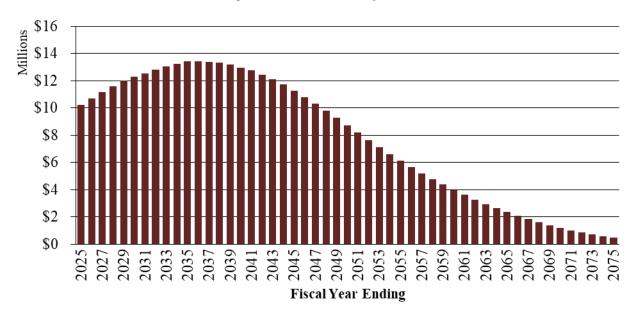
SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Assessing Costs and Risks

A closed pension plan will ultimately either end up with excess assets after all benefits have been paid or run out of assets before all benefits have been paid. If the Plan develops surplus assets, it may be able to reduce the risk in its investment portfolio, immunize investments, or purchase annuities to settle the remaining obligation. If the surplus assets exceed the additional amounts needed to buy annuities or immunize the portfolio, it is unclear how they could be used until after all benefits have been paid.

If the Plan, on the other hand, were to run out of assets, TriMet would be forced to pay benefits directly on a pay-as-you-go basis. As long as TriMet can afford the pay-as-you-go costs, benefits would remain unchanged. The chart below shows a projection of expected benefit payments for the closed plan. The peak level of benefit payments is not expected to be reached until 2035.

Projected Benefit Payments

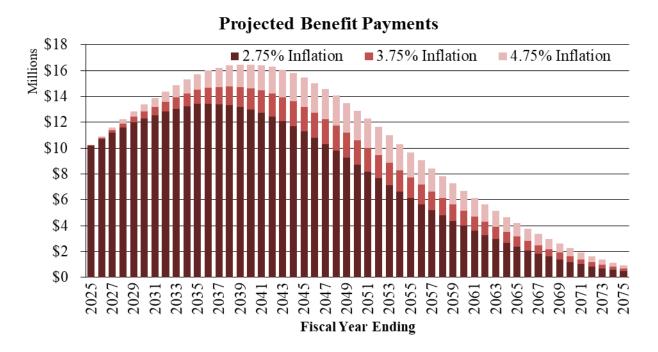




SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Sensitivity to Inflation

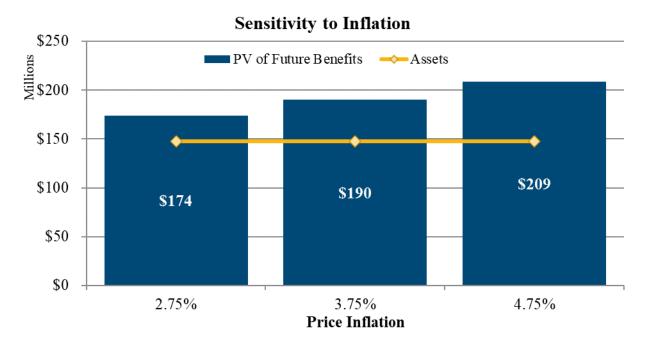
The chart below illustrates the sensitivity of projected benefit payments to inflation. The darkest bars show the projected benefit payments with the assumed inflation of 2.75%; the medium bars show the additional benefit payments if inflation is 3.75% each year; and the lightest bars show the additional benefit payments if inflation is 4.75% each year.



Higher inflation could result in materially higher benefit payments, requiring more assets in the plan. The following chart compares assets to the present value of all projected future benefit payments, assuming inflation of 2.75%, 3.75%, and 4.75%. The present value of future benefits is shown as a dark blue bar. The Market Value of Assets is shown by the gold line.



SECTION II - ASSESSMENT AND DISCLOSURE OF RISK



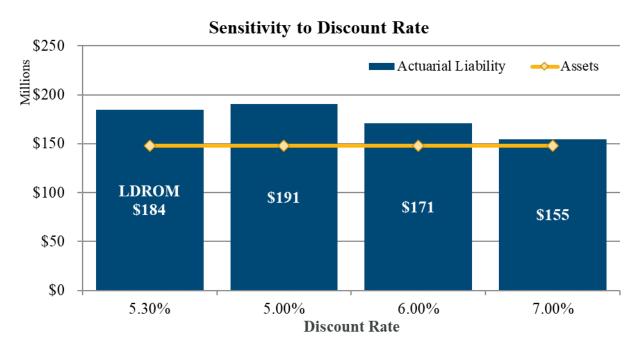
The COLA granted to retirees and beneficiaries receiving benefits equals 90 percent of the inflation rate. If inflation is 2.75%, annual COLAs would be 2.475%, and the Plan would need approximately \$174 million in assets today to pay all projected benefits compared to current assets of \$148 million. If inflation is 3.75%, annual COLAs would be 3.375%, and the Plan would need approximately \$190 million in assets today. Finally, if inflation is 4.75%, annual COLAs would be 4.275%, and the Plan would need \$209 million in assets to pay all projected benefits. These estimates assume that all other assumptions are met.



SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Sensitivity to Discount Rate

The chart below compares the Market Value of Assets (gold line) to the Actuarial Liability (blue bar) using discount rates equal to the current expected rate of return and 100 basis points above and below the expected rate of return. In addition, the chart shows the low-default-risk obligation measure (LDROM), which is the Actuarial Liability using a discount rate derived from low-default-risk fixed income securities that approximately match the benefit payments of the plan.



The Plan invests in a diversified portfolio with the objective of maximizing investment returns at a reasonable level of risk. If investments return 6.0% annually, the Plan would need approximately \$171 million in assets today to pay all benefits attributable to past service compared to current assets of \$148 million. If investment returns are only 5.0%, the Plan would need approximately \$191 million in assets today, and if investment returns are 7.0%, the Plan would only need \$155 million in assets. The lowest-risk portfolio for a pension plan with fixed cash flows would be composed entirely of low-default-risk fixed income securities whose cash flows match the benefit cash flows of the Plan. As of June 30, 2024, we estimate that such a portfolio would have an expected return of 5.30%, and the Plan would need \$184 million to pay all benefits attributed to past service. This amount is the LDROM. The \$13 million difference between the LDROM and the Actuarial Liability at 6.00% represents the expected savings from bearing the risk of investing in the Plan's diversified portfolio. Alternatively, it also represents the cost of eliminating the investment risk.

Because the Plan invests in a diversified portfolio, not the LDROM portfolio, the reported funded status is higher, and expected employer contributions are lower. Benefit security for Plan members depends on a combination of the Plan's assets, the investment returns generated on those assets, and TriMet's ability to make any needed future contributions. An LDROM portfolio would generate more predictable but lower expected investment returns, potentially changing the level of reliance on future TriMet contributions to secure benefits.



SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

However, the liability measures on page 15 assume an annual inflation of 2.75%. As noted, if annual inflation is higher, more assets would be needed to pay the benefits; if inflation is lower, fewer assets would be needed. In this case, it is better to think of the sensitivity based on the investment return in excess of inflation. The assumption of 6.0% nominal investment returns and 2.75% inflation equates to a real investment return assumption of 3.25%. Similarly, expected nominal investment returns of 5.0% and 7.0% equate to 2.25% and 4.25% real investment returns, respectively.

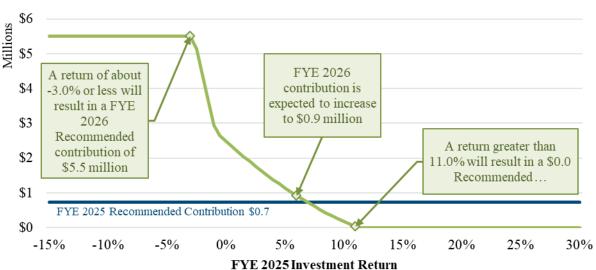


SECTION II – ASSESSMENT AND DISCLOSURE OF RISK

Sensitivity to Investment Returns

Contribution amounts are very sensitive to investment returns. The chart below shows the FYE 2026 contribution amount depending on the investment return earned during FYE 2025, assuming all other assumptions are met. While the Recommended contribution is expected to increase from \$0.8 million in FYE 2025 to \$0.9 million in FYE 2026, it could range anywhere from \$0 to \$5.5 million depending on investment returns for FYE 2025.

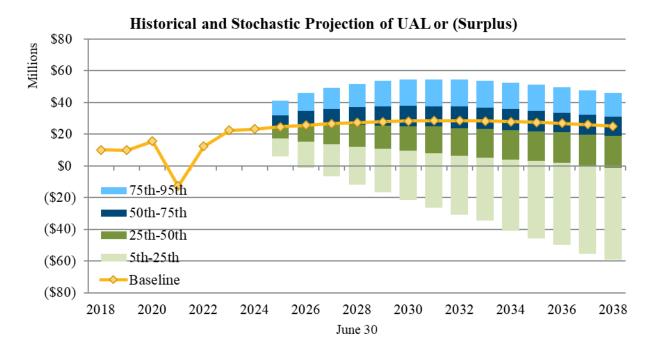
Projected FYE 2026 Employer Contribution Amount Based on FYE 2025 Investment Return



Recommended contributions would exceed the \$5.5 million TriMet budget for pension and OPEB trust contributions in FYE 2026 if investments lose 3.0% or more of the assets. The stochastic projections of contributions shown at the bottom of the dashboard (page 1) shows the range of potential future Recommended contributions. This range is driven by the volatility of investment returns. The chart below shows the projected range of the UAL or surplus on the same basis. Surplus amounts are shown as negative numbers.



SECTION II - ASSESSMENT AND DISCLOSURE OF RISK



The UAL is projected to remain above \$20 million for the next 15 years under the new funding policy if all assumptions are met. However, the range of potential outcomes depends on actual investment returns. Poor investment returns could increase the UAL, but the funding policy increases contributions to pay for the larger UAL. Good investment returns, however, can grow the surplus unrestrained once the minimum contribution is \$0. The current funding policy shows a potential surplus of up to \$59 million in 2038. On the other hand, in really poor investment scenarios under the current funding policy, the UAL in 2038 could reach \$46 million. Both the UAL and surplus could be further constrained by managing the investment policy.

More Detailed Assessment

While a more detailed assessment of risk is always valuable to enhance the understanding of the risks identified above, given the small size of the closed plan compared to TriMet and regular asset-liability studies, the advantages of a more detailed assessment may not justify its costs at this time.



SECTION III - CERTIFICATION

The purpose of this report is to present the June 30, 2024 Actuarial Valuation of the TriMet Defined Benefit Retirement Plan for Management and Staff Employees ("Plan"). This report is for the use of the Plan and TriMet.

In preparing our report, we relied on information, some oral and some written, supplied by TriMet. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

The Plan trustees selected most of the actuarial assumptions based on our analysis and recommendations at the May 6, 2020 trustee meeting. Based on our recommendations, the economic assumptions were updated by the trustees at their June 13, 2022 meeting. Please refer to the presentations of the analysis at those meetings for the rationale for the assumptions.

The liability measures and funding ratios in this report are for the purpose of establishing contribution rates. These measures are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan's benefit obligations.

Future actuarial measurements may differ significantly from the current measurements due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and, changes in plan provisions or applicable law.

Cheiron utilizes ProVal 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 a basic understanding of ProVal 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 valuation.

Deterministic projections in this report were developed using P-scan, a proprietary tool used to illustrate the impact of changes in assumptions, methods, plan provisions, or actual experience (particularly investment experience) on the future financial status of the Plan. P-scan uses standard roll-forward techniques that implicitly assume a stable active population.

Stochastic projections in this presentation were developed using R-scan, our proprietary tool for assessing the probability of different outcomes based on the range of potential investment returns.

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



SECTION III – CERTIFICATION

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 for the Plan and TriMet for the purposes 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 any other user.

William R. Hallmark, ASA, EA, MAAA, FCA

William R. Hallank

Consulting Actuary

Steven M. Hastings, FSA, EA, MAAA, FCA Consulting Actuary

Stem Mr Hustrys



SECTION IV – ASSETS

This section shows the changes in the Market Value of Assets and calculates the money-weighted investment return for GASB 67 and 68. The Actuarial Value of Assets is equal to the Market Value of Assets.

Statement of Change in Market Value of Assets

Table IV-1 shows the changes in the Market Value of Assets for the current and prior fiscal years.

Table IV-1

Change in Market Value of Assets									
	FYE 2024 FYE 2023								
Market Value, Beginning of Year	\$ 145,162,348 \$ 148,261,434								
Contributions	700,000 0								
Net Investment Earnings	12,389,454 5,978,052								
Benefit Payments	(10,351,782) (8,969,022)								
Administrative Expenses	(86,153) (108,116)								
Market Value, End of Year	\$ 147,813,867 \$ 145,162,348								

The Market Value of Assets increased from approximately \$145.2 million as of June 30, 2023 to \$147.8 million as of June 30, 2024. Contributions of \$0.7 million were made, and investment earnings exceeded benefit payments and administrative expenses by approximately \$1.9 million.

The rate of return during the year is calculated on a money-weighted basis, which reflects the effect of external cash flows (contributions less benefit payments and administrative expenses) on a monthly basis. Table IV-2 on the next page shows the external cash flows by month, the number of months each cash flow was considered invested, and the external cash flows with interest at the money-weighted rate of return of 8.78% to the end of the year. The sum of the external cash flows with interest equals the Market Value of Assets at the end of the year.



SECTION IV – ASSETS

Table IV-2

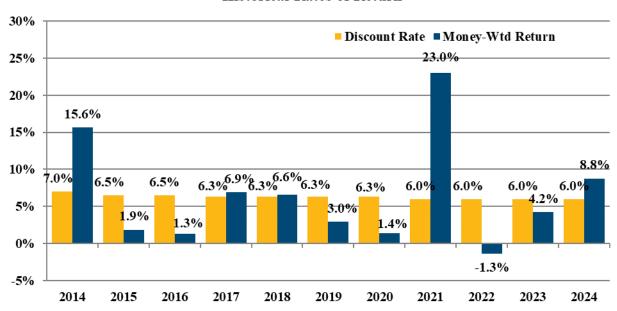
Money-Weighted Rate of Return Fiscal Year Ending June 30, 2024								
	Net External M Cash Flows In							
Beginning Value, July 1, 2023	\$ 145,162,348	12	\$ 157,902,643					
Monthly Net External Cash Flows								
July	(787,974)	11	(851,143)					
August	(791,787)	10	(849,287)					
September	(793,289)	9	(844,954)					
October	(132,801)	8	(140,462)					
November	(799,682)	7	(839,904)					
December	(803,576)	6	(838,098)					
January	(793,274)	5	(821,574)					
February	(800,740)	4	(823,512)					
March	(803,425)	3	(820,501)					
April	(1,567,701)	2	(1,589,836)					
May	(827,164)	1	(832,984)					
June	(836,521)	0	(836,521)					
Ending Value, June 30, 2024			\$ 147,813,867					
Money-Weighted Rate of Return	8.78%							

The money-weighted rate of return for the year ended June 30, 2024, was 8.78% compared to an expected return of 6.00%. As shown in the chart on the following page, over the last 10 years, the money-weighted rate of return has varied significantly from 22.95% in 2021 to -1.3% in 2022. For FYE 2024, the 8.78% return compared to the expected return of 6.00% produced an investment gain of approximately \$4.0 million.



SECTION IV – ASSETS

Historical Rates of Return





SECTION V – MEASURES OF LIABILITY

This section presents detailed information on liability measures for the Plan for funding purposes, including:

- Present value of future benefits,
- Actuarial Liability, and
- Normal cost.

Present Value of Future Benefits: The present value of future benefits represents the expected amount of money needed today if all assumptions are met to pay for all benefits earned as of the valuation date and expected to be earned in the future by current plan members under the current plan provisions. Table V-1 below shows the present value of future benefits as of the current and prior valuations.

Table V-1

Present Value of Future Benefits								
	Jur	ne 30, 2024	Ju	me 30, 2023	% Change			
Actives	\$	37,596,550	\$	37,694,953	-0.3%			
Deferred		8,926,904		8,968,900	-0.5%			
In Pay Status	1	27,102,435		123,732,818	<u>2.7</u> %			
Total	\$ 1	73,625,889	\$	170,396,671	1.9 %			



SECTION V – MEASURES OF LIABILITY

Actuarial Liability

The Actuarial Liability represents the expected amount of money needed today if all assumptions are met to pay for benefits attributed to service before the valuation date under the Entry Age Actuarial Cost Method. As such, it is the amount of assets targeted by the actuarial cost method for the Plan to hold as of the valuation date. It is not the amount necessary to settle the obligation. Under GASB 67 and 68, the Entry Age Actuarial Liability is referred to as the Total Pension Liability. Table V-2 below shows the Actuarial Liability as of the current and prior valuations.

Table V-2

Actuarial Liability									
	June 30, 2024 June 30, 202				% Change				
Actives									
Retirement	\$	35,144,766	\$	34,977,769	0.5%				
Termination		(41,371)		(38,625)	7.1%				
Death		0		0					
Disability		0		0					
Total Actives	\$	35,103,395	\$	34,939,144	0.5%				
Deferred									
Vested Terminated	\$	8,033,185	\$	8,132,899	-1.2%				
Transfers		872,214		815,714	6.9%				
Leaves and Disabled		21,505		20,287	6.0%				
Total Deferred	\$	8,926,904	\$	8,968,900	-0.5%				
In Pay Status	\$	127,102,435	\$	123,732,818	2.7%				
Total	\$	171,132,734	\$	167,640,862	2.1%				



SECTION V – MEASURES OF LIABILITY

The Actuarial Liability is expected to increase each year due to interest and the accrual of an additional year of service for active members. It is expected to decrease each year due to benefits that have been paid. Differences between the actual experience and assumed experience also contribute to the change in Actuarial Liability. Table V-3 provides a history of the experience gains and losses attributable to each primary demographic assumption. Consistent patterns of gains or losses provide an indication that an assumption may need to be updated.

Table V-3

History of Demographic (Gains) and Losses											
		Fiscal Year Ending									
		2020		2021	2022		2023		2024		
Salary Increases	\$	565,704	\$	(187,263) \$	2,626,921	\$	2,445,920	\$	1,596,608		
Retirement		(389,591)		(207,128)	120,990		(169,338)		679,255		
Termination		41,255		(158,737)	(376,371)		31,091		(103,499)		
Mortality		515,435		(759,665)	(118,313)		180,084		958,639		
COLAs		(159,486)		(702,979)	5,047,751		3,539,640		608,982		
Other		354,498		318,775	(189,618)		68,964		(193,073)		
Total	\$	927,815	\$	(1,696,997) \$	7,111,360	\$	6,096,361	\$	3,546,912		



SECTION V - MEASURES OF LIABILITY

Normal Cost

Under the Entry Age (EA) Actuarial Cost Method, the present value of future benefits for each individual is spread over the individual's expected working career under the Plan as a level percentage of the individual's expected pay. The normal cost rate is determined by taking the value, as of entry age into the Plan, of each member's projected future benefits divided by the present value, also at entry age, of each member's expected future salary. The normal cost rate is multiplied by the current salary to determine each member's normal cost. The Plan's normal cost is the sum of the normal costs for each individual. The normal cost represents the expected amount of money needed to fund the benefits attributed to the next year of service under the Entry Age Actuarial Cost Method. Under GASB 67 and 68, the EA normal cost is called the service cost. Table V-4 below shows the total normal cost as of the current and prior valuations.

Table V-4

Normal Cost										
June 30, 2024 June 30, 2023 % Change										
Retirement	\$	465,311	\$	473,022	-1.6%					
Termination		38,186		40,488	-5.7%					
Death		0		0						
Disability		0		0						
Total Normal Cost	\$	503,497	\$	513,510	-1.9%					



SECTION VI - CONTRIBUTIONS

This section of the report develops Minimum, Maximum, and Recommended contribution amounts in accordance with the Plan's Funding Policy. Because the Plan has been closed to new entrants since April 27, 2003, and the Actuarial Liability is projected to begin declining as benefits are paid out, the Plan's funding policy differs significantly from what would be used for an ongoing pension plan. The objective is to maintain a well-funded pension plan without developing a surplus that could not be used efficiently until all benefits have been paid. Consequently, the funding policy targets maintaining a funded ratio between 80% and 90% rather than the normal target of 100%.

The Funding Policy is designed to protect benefit security while managing intergenerational equity. The year-to-year stability of pension contributions is not critical to TriMet as long as pension contributions do not exceed the combined budgets for contributions to the pension and OPEB trusts. Consequently, the Funding Policy does not attempt to control contribution volatility through asset smoothing, allowing contributions to adjust quickly to changes in funding levels to prevent the accumulation of surplus and to rapidly restore funding levels if the funded ratio falls below 80%.

The Recommended contribution is designed to target and maintain a funded ratio of 80%. If the funded ratio falls below 80%, the Recommended contribution increases rapidly, taking advantage of the full sponsor budget for contributions to the pension and OPEB trusts and going even higher if needed to restore an 80% funded ratio within 10 years. If the funded ratio exceeds 80%, the Recommended contribution is reduced to allow the funded ratio to gradually decline to 80% over several years. At a funded ratio of 80%, the Recommended contribution is the amount needed to maintain an 80% funded ratio. As the Actuarial Liability of the closed plan decreases, the Recommended contribution reduces the UAL by contributing the full amount of the next year's unfunded benefit payments. This contribution also ensures that the plan will always accumulate sufficient assets to make benefit payments when due.

Minimum Contribution

If the funded percentage is less than 80%, the Minimum contribution is equal to the sum of:

- Normal cost.
- Assumed administrative expenses,
- 10-year layered amortization payment to reach 80% funded, and
- The UAL payment amount needed to maintain the UAL or funded percentage at 80%.

If the funded percentage is greater than or equal to 80%, the Minimum contribution is \$0. The funded percentage was greater than 80% in the current and immediately prior valuations, and the minimum contribution was \$0.

Maximum Contribution

Contributions greater than the Maximum are acceptable and could, in certain circumstances, be desirable. The Maximum contribution amount is designed to indicate when additional



SECTION VI - CONTRIBUTIONS

contributions may increase the probability of accumulating a surplus more than is needed to protect the security of benefits. However, judgment should be applied, weighing the circumstances at the time.

If the funded percentage is less than 80%, the Maximum contribution is the amount needed to raise it to 80% in one year.

If the funded percentage is greater than or equal to 90%, the Maximum contribution is \$0 to limit the accumulation of any surplus.

If the funded percentage is greater than or equal to 80% and less than 90%, the Maximum contribution is the amount needed to "maintain funded status," which is the sum of:

- Normal cost.
- Assumed administrative expenses, and
- The UAL payment amount needed to "maintain funded status."

The UAL payment amount needed to "maintain funded status" is defined as the greater of the amount needed to keep the UAL from growing as a dollar amount (interest on the UAL) and the amount needed to keep the funded percentage from declining (benefit payments times (1 minus funded percentage)). Table VI-1 shows the calculation of the Maximum contribution for FYE 2025 as of the beginning of the fiscal year. In the prior valuation, the funded percentage was 86.6%, and the Maximum contribution was \$1.9 million.

Table VI-1

Development of Maximum Contribution Payment Needed to Maintain Funded Status							
			FYE 2025				
1.	Normal Cost	\$	503,497				
2.	Administrative Expenses		97,129				
3.	Unfunded Actuarial Liability		23,318,867				
4.	Interest on (3)		1,319,936				
5.	Expected Benefit Payments (One Year)		10,205,494				
6.	Funded Percentage		86.4%				
7.	Unfunded Portion of Benefit Payments: (5) x [100% - (6)]		1,350,689				
8.	Payment Needed to Maintain Funded Status (1) + (2) + [Maximum of (4) and (7)]	\$	1,951,315				



SECTION VI - CONTRIBUTIONS

Recommended Contribution

If the funded percentage is less than 80%, the Recommended contribution is the greater of the Minimum contribution or TriMet's budgeted amount for pension and OPEB trust contributions but not more than the Maximum contribution. We understand that TriMet's current budgeted amount for the pension and currently unfunded OPEB trust contributions is \$5.5 million.

If the funded percentage is greater than or equal to 90%, the Recommended contribution is \$0 to limit the accumulation of any surplus.

If the funded percentage is between 80% and 90%, the Recommended contribution is prorated from the Maximum contribution if the plan is 80% funded to \$0 if the plan is 90% funded. Table VI-2 below shows the calculation of the Recommended contribution for FYE 2025 as of the beginning of the fiscal year.

Table VI-2

FYE 2025 Recommended Contribution						
	Contribution		Weight		Weighted Contribution	
Minimum	\$	0	63.7%	\$	0	
Maximum		1,951,315	36.3%		707,583	
Recommende	d			\$	707,583	

The FYE 2025 Recommended contribution is less than normal cost plus interest on the UAL, and continuing to make Recommended contributions is expected to result in a gradual decrease in the funded ratio until the plan is 80% funded. The Recommended contribution is expected to exceed normal cost plus interest on the UAL beginning in FYE 2033.

If Recommended contributions are made each year and all assumptions are met, the UAL is expected to decrease after 2033. However, the UAL is not expected to be completely paid off until shortly before the last benefit is paid. Since this plan is closed, the GASB 67/68 crossover test shown in Appendix D provides a full projection of the expected benefit payments, contributions, and asset levels until the final benefits are expected to be paid in 2102.

Reasonable Actuarially Determined Contribution (Reasonable ADC)

The Plan's funding policy will not always satisfy the requirements for a Reasonable ADC under the newly issued Actuarial Standards of Practice No. 4, particularly when the Plan is relatively well funded. For purposes of disclosing a Reasonable ADC, it is defined as the greater of the Recommended contribution described above or the sum of:



SECTION VI - CONTRIBUTIONS

- Normal cost,
- Assumed administrative expenses, and
- A payment on the UAL equal to a 25-year amortization with annual payments increasing with assumed inflation (level real dollar amortization).

The 25-year amortization period will decline by one year in each future valuation until the period reaches 20 years. Note that the effective amortization period becomes shorter when the plan is less well-funded due to the Recommended contribution. This structure was selected to balance generational equity with the predictability and stability of contributions while also minimizing the likelihood of a surplus and ensuring assets are available to pay benefits when due. Table VI-3 below shows the calculation of the Reasonable ADC as of the beginning of the fiscal year.

Table VI-3

Development of Reasonable Actuarially Determined Contribution					
]	FYE 2025 FYE		FYE 2024	% Change
1. Recommended Contribution	\$	707,583	\$	646,414	9.5%
2. Normal Cost		503,497		513,510	-1.9%
3. Administrative Expenses		97,129		97,129	0.0%
4. 25-Year Amortization Payment on UAL		1,321,786		1,242,177	6.4%
5. Minimum Reasonable ADC [(2) + (3) + (4)]	\$	1,922,412	\$	1,852,816	3.8%
6. Reasonable ADC [Max of (1) and (5)]	\$	1,922,412	\$	1,852,816	3.8%

Table VI-4 summarizes each contribution amount for FYE 2025 and 2024. The amounts are shown assuming contributions are made at the beginning of the fiscal year or at the beginning of each month.



SECTION VI - CONTRIBUTIONS

Table VI-4

Actuarially Determined Contribution Amounts						
	FYE 2025			FYE 2024	% Change	
Funded Percentage		86.4%		86.6%	-0.2%	
Minimum Contribution						
Beginning of Year	\$	0	\$	0		
Equivalent Monthly Contribution		0		0		
Annual Amount	\$	0	\$	0		
Maximum Contribution						
Beginning of Year	\$	1,951,315	\$	1,896,346	2.9%	
Equivalent Monthly Contribution		166,987		162,283	2.9%	
Annual Amount	\$	2,003,844	\$	1,947,396	2.9%	
Recommended Contribution						
Beginning of Year	\$	707,583	\$	646,414	9.5%	
Equivalent Monthly Contribution		60,553		55,318	9.5%	
Annual Amount	\$	726,636	\$	663,816	9.5%	
Reasonable ADC						
Beginning of Year	\$	1,922,412	\$	1,852,816	3.8%	
Equivalent Monthly Contribution		164,514		158,558	3.8%	
Annual Amount	\$	1,974,168	\$	1,902,696	3.8%	

Annual Amount equals Equivalent Monthly Contribution x 12



SECTION VII – GASB 67 AND 68 DISCLOSURES

This section of the report provides accounting and financial reporting information under Governmental Accounting Standards Board Statements 67 and 68 for the Plan and TriMet. This information includes:

- Determination of Discount Rate,
- Changes in the Net Pension Liability,
- Calculation of the Net Pension Liability at the discount rate as well as discount rates 1% higher and lower than the discount rate,
- Schedule of Employer Contributions,
- Disclosure of Deferred Inflows and Outflows, and
- Calculation of the Annual Pension Expense for TriMet.

Determination of Discount Rate

The discount rate used to measure the Total Pension Liability was 6.0%.

We have assumed that contributions to the Plan will follow the Recommended contribution in the Plan's Funding Policy.

We performed a formal cash flow projection as described under Paragraph 41 of GASB Statement 67, which can be found in Appendix D. All benefit payments in the projection are paid from the Fiduciary Net Position. Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.



SECTION VII – GASB 67 AND 68 DISCLOSURES

Note Disclosures

Table VII-1 below shows the changes in the Total Pension Liability, the Plan Fiduciary Net Position (i.e., fair value of Plan assets), and the Net Pension Liability during the Measurement Year.

Table VII-1

		I	ncre	ase (Decrease	e)			
	To	otal Pension Liability (a)		an Fiduciary let Position (b)	Net Pension Liability (a) - (b)			
Balances at 6/30/2023	\$	167,640,862	\$	145,162,348	\$	22,478,514		
Changes for the year:								
Service cost		513,510				513,510		
Interest		9,783,232				9,783,232		
Changes of benefits		0				0		
Differences between expected and actual								
experience		3,546,912				3,546,912		
Changes of assumptions		0				0		
Contributions - employer				700,000		(700,000)		
Contributions - member				0		0		
Net investment income				12,389,454		(12,389,454)		
Benefit payments		(10,351,782)		(10,351,782)		0		
Administrative expense				(86,153)		86,153		
Net changes	\$	3,491,872	\$	2,651,519	\$	840,353		
Balances at 6/30/2024	\$	171,132,734	\$	147,813,867	\$	23,318,867		

During the measurement year, the NPL increased by approximately \$0.8 million. The service cost and interest cost increased the NPL by approximately \$10.3 million. Liability experience losses also increased the NPL by approximately \$3.5 million. Contributions and investment returns, net of administrative expenses, decreased the NPL by approximately \$13.0 million.



SECTION VII – GASB 67 AND 68 DISCLOSURES

Changes in the discount rate affect the measurement of the TPL. Lower discount rates produce a higher TPL, and higher discount rates produce a lower TPL. Because the discount rate does not affect the measurement of assets, the percentage change in the NPL can be very significant for a relatively small change in the discount rate. The table below shows the sensitivity of the NPL to the discount rate.

Table VII-2

Sensitivity of Net Pension	Lia	ability to Ch	an	ges in Disco	ur	ıt Rate
		1% Decrease 5.00%		Discount Rate 6.00%		1% Increase 7.00%
Total Pension Liability Plan Fiduciary Net Position Net Pension Liability	\$ 	190,617,905 147,813,867 42,804,038	\$ 	171,132,734 147,813,867 23,318,867	\$ 	154,728,195 147,813,867 6,914,328
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	<u> </u>	77.5%	=	86.4%	<u> </u>	95.5%

A one percent decrease in the discount rate increases the TPL by approximately 11% and the NPL by approximately 84%. A one percent increase in the discount rate decreases the TPL by approximately 10% and the NPL by approximately 70%.



SECTION VII – GASB 67 AND 68 DISCLOSURES

Required Supplementary Information

The schedules below and on the following page show the changes in NPL and related ratios required by GASB for the last 10 years.

Table VII-3a

Schedule of Ch	an	ges in No	et	Pension l	Li	ability an	d I	Related F	la	tios
	F	YE 2024	I	FYE 2023	I	FYE 2022	Ι	FYE 2021	Ι	FYE 2020
Total Pension Liability (TPL)										
Service cost	\$	513,510	\$	553,735	\$	547,822	\$	633,466	\$	650,713
Interest		9,783,232		9,401,566		8,531,083		8,603,520		8,938,724
Changes of benefit terms		0		0		0		(32,015)		0
Differences between										
expected and actual experience		3,546,912		6,096,361		7,111,360		(1,696,996)		927,815
Changes of assumptions		0		0		7,169,761		0		(958,655)
Benefit payments		(10,351,782)		(8,969,022)		(8,749,955)		(8,512,730)		(7,563,462)
Net change in TPL	\$	3,491,872	\$	7,082,640	\$	14,610,071	\$	(1,004,755)	\$	1,995,135
TPL - beginning	_1	67,640,862	_1	60,558,222	_1	145,948,151	_1	46,952,906	_1	144,957,771
TPL - ending	\$1	71,132,734	\$1	67,640,862	\$ 1	160,558,222	\$1	45,948,151	\$1	146,952,906
Plan fiduciary net position										
Contributions - employer	\$	700,000	\$	0	\$	522,208	\$	6,250,264	\$	2,327,160
Contributions - member		0		0		0		0		0
Net investment income		12,389,454		5,978,052		(2,136,569)		29,801,322		1,726,906
Benefit payments		(10,351,782)		(8,969,022)		(8,749,955)		(8,512,730)		(7,563,462)
Administrative expense		(86,153)		(108,116)		(95,356)		(109,851)		(144,268)
Net change in plan fiduciary										
net position	\$	2,651,519	\$	(3,099,086)	\$	(10,459,672)	\$	27,429,005	\$	(3,653,664)
Plan fiduciary net position - beginning	1	45,162,348	1	48,261,434	1	158,721,106	1	131,292,101	1	134,945,765
Plan fiduciary net position -		45,102,540		140,201,434		130,721,100		131,272,101		134,743,703
ending	<u>\$1</u>	47,813,867	<u>\$1</u>	45,162,348	\$ 1	148,261,434	\$1	58,721,106	\$1	131,292,101
Net pension liability - ending	\$	23,318,867	\$	22,478,514	\$	12,296,788	\$	(12,772,955)	\$	15,660,805
Plan fiduciary net position as a percentage of the TPL		86.4%		86.6%		92.3%		108.8%		89.3%
Covered payroll	\$	7,403,935	\$	7,640,705	\$	7,462,831	\$	7,964,901	\$	8,104,672
Net pension liability as a percentage of covered payroll		315.0%		294.2%		164.8%		-160.4%		193.2%



SECTION VII – GASB 67 AND 68 DISCLOSURES

Table VII-3b

Schedule of Ch	anges in Net Pension Liability and Related Ratios									
	F	YE 2019	I	YE 2018	I	FYE 2017	I	FYE 2016	F	YE 2015
Total Pension Liability (TPL)										
Service cost	\$	685,276	\$	919,497	\$	1,161,815	\$	1,224,152	\$	505,463
Interest		8,784,109		8,621,492		8,308,518		8,326,815		7,931,015
Changes of benefit terms		0		0		0		0		0
Differences between										
expected and actual experience		396,899		(28,774)		1,441,063		(1,292,524)		3,591,955
Changes of assumptions		0		0		0		474,280		(2,177,859)
Benefit payments		(7,197,158)		(6,211,442)		(5,285,890)		(4,502,096)		(4,457,981)
Net change in TPL	\$	2,669,126	\$	3,300,773	\$	5,625,506	\$	4,230,627	\$	5,392,593
TPL - beginning	1	42,288,645	1	38,987,872	1	133,362,366	1	129,131,739	1	23,739,146
TPL - ending	\$1	44,957,771	\$1	42,288,645	\$1	138,987,872	\$ 1	133,362,366	\$1	29,131,739
Plan fiduciary net position										
Contributions - employer	\$	6,240,470	\$	6,496,842	\$	6,330,108	\$	7,036,203	\$	6,559,317
Contributions - member		0		0		0		0		0
Net investment income		3,786,540		8,108,016		7,990,589		1,459,796		2,003,914
Benefit payments		(7,197,158)		(6,211,442)		(5,285,890)		(4,502,096)		(4,457,981)
Administrative expense		(136,675)		(96,686)		(76,230)		(96,799)		(123,346)
Net change in plan fiduciary		_		_						
net position	\$	2,693,177	\$	8,296,730	\$	8,958,577	\$	3,897,104	\$	3,981,904
Plan fiduciary net position -										
beginning	_1	32,252,588	_1	23,955,858	_1	114,997,281	_1	111,100,177	_1	07,118,273
Plan fiduciary net position -										
ending	<u>\$1</u>	34,945,765	<u>\$1</u>	32,252,588	\$ 1	123,955,858	\$ 1	14,997,281	<u>\$1</u>	11,100,177
Net pension liability - ending	\$	10,012,006	\$	10,036,057	\$	15,032,014	\$	18,365,085	\$	18,031,562
Plan fiduciary net position as a percentage of the TPL		93.1%		92.9%		89.2%		86.2%		86.0%
Covered payroll	\$	8,279,708	\$	9,445,518	\$	10,592,830	\$	12,722,153	\$	12,751,216
Net pension liability as a percentage of covered payroll		120.9%		106.3%		141.9%		144.4%		141.4%



SECTION VII – GASB 67 AND 68 DISCLOSURES

The schedule below compares the Actuarially Determined Contribution (ADC) to actual contributions. Beginning in FYE 2024, the ADC shown in this exhibit is the Recommended contribution under the Plan's funding policy. By comparison, the Reasonable ADC calculated for FYE 2024 was \$1,902,696.

Table VII-4

Sche	dule of Em	ployer Con	tributions		
	FYE 2024	FYE 2023	FYE 2022	FYE 2021	FYE 2020
Actuarially Determined Contribution Contributions in Relation to the	\$ 663,816	\$ 0	\$ 197,340	\$ 3,569,676	\$ 2,327,160
Actuarially Determined Contribution	700,000	0	522,208	6,250,264	2,327,160
Contribution Deficiency/(Excess)	\$ (36,184)	\$ 0	\$ (324,868)	\$ (2,680,588)	<u>\$</u> 0
Covered Payroll	\$ 7,403,935	\$ 7,640,705	\$ 7,462,831	\$ 7,964,901	\$ 8,104,672
Contributions as a Percentage of Covered Payroll	9.45%	0.00%	7.00%	78.47%	28.71%
	FYE 2019	FYE 2018	FYE 2017	FYE 2016	FYE 2015
Actuarially Determined Contribution	\$ 2,442,684	\$ 3,252,729	\$ 3,734,975	\$ 4,242,000	\$ 4,219,000
Contributions in Relation to the					
Actuarially Determined Contribution	6,240,470	6,496,842	6,330,108	7,036,203	6,559,317
Contribution Deficiency/(Excess)	\$ (3,797,786)	\$ (3,244,113)	\$ (2,595,133)	\$ (2,794,203)	\$ (2,340,317)
Covered Payroll	\$ 8,279,708	\$ 9,445,518	\$10,592,830	\$12,722,153	\$12,751,216
Contributions as a Percentage of Covered Payroll	75.37%	68.78%	59.76%	55.31%	51.44%

Key methods and assumptions used to determine the ADC for FYE 2024. A complete description of the assumptions and the funding method can be found in the 2023 actuarial valuation report.

Actuarial Cost Method	Individual Entry Age as a level percent of pay
Asset Valuation Method	The actuarial value of assets is equal to the market value.
Other	When the plan is 80% funded, payments on the unfunded liability equal the amount needed to maintain the funded status. Recommended contributions grade down to \$0 when the funded ratio is 90% or higher.
Discount Rate	6.00%



SECTION VII – GASB 67 AND 68 DISCLOSURES

Salary Increases	3.00%
Inflation	2.75%
Healthy Mortality	PubG-2010(A) Mortality Table with generational mortality projection using MP-2019



PENSION PLAN FOR BARGAINING UNIT EMPLOYEES OF TRIMET ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2024

SECTION VII – GASB 67 AND 68 DISCLOSURES

Employer Accounting

The schedules in this section are to be used by TriMet for its employer accounting for FYE 2024. These schedules develop the annual pension expense, including the amounts of deferred inflows and outflows. Experience gains and losses and assumption changes are recognized over the average future working life of active and inactive members, which is one year. Investment gains and losses are recognized over five years.

The table below summarizes the current balances of deferred outflows and deferred inflows of resources along with the net recognition over the next five years.

Table VII-5

¢	
\$	0
	0
	1,417,779
\$	1,417,779
,	\$ soe reco

The tables on the following pages provide details on the current balances of deferred inflows and outflows of resources along with the recognition of each base for each of the current and following five years, as well as the total for any years thereafter.

2027

2028

2029

Thereafter \$

(263,661)

(793,520)

0

0



SECTION VII – GASB 67 AND 68 DISCLOSURES

Table VII-6

			1	Rec	cognition	1 0	f Experi	ence (Ga	ins	s) and l	Lo	osses						
Experience	Recognition		Total		eginning emaining		Ending emaining					Recogni	itio	n Year				
Year	Period		Amount	1	Amount	I	Amount	2024		2025		2026		2027		2028	There	eafter
2024	1.0	\$	3,546,912	\$	3,546,912	\$	0	\$ 3,546,912	\$	0	\$	0	\$	0	\$	0	\$	0
Deferred Out	flows				3,546,912		0	3,546,912		0		0		0		0		0
Deferred (Infl	lows)				0	_	0	0		0	_	0	_	0	_	0		0
Net Change in	n Pension Exper	ise		\$	3,546,912	\$	0	\$ 3,546,912	\$	0	\$	0	\$	0	\$	0	\$	0

Table VII-7

					Recog	niti	on of A	ssu	mptio	n	Chang	es	S					
Change Year	Recognition Period		Total mount	Ren	inning naining nount	Re	Ending maining mount	2	2024		2025		Recogn 2026	itio	on Year 2027	2028	Th	ereafter
2024	1.0	\$	0	\$	0	\$	0	\$	0	\$	\$ 0		\$ 0	\$	0	\$ 0	\$	0
Deferred Ou	tflows				0		0		0		0		0		0	0		0
Deferred (In	flows)				0		0		0	_	0		0		0	0		0
Net Change	in Pension Exper	ise		\$	0	\$	0	\$	0	\$	\$ 0	:	\$ 0	\$	0	\$ 0	\$	0



SECTION VII – GASB 67 AND 68 DISCLOSURES

Table VII-8

				В	eginning		Ending								
Experience	Recognition		Total	R	emaining	R	emaining			Recogni	tio	n Year			
Year	Period		Amount		Amount		Amount	2024	2025	2026		2027	2028	The re aft	er
2024	5.0	\$	(3,967,596)	\$	(3,967,596)	\$	(3,174,077)	\$ (793,519)	\$ (793,519)	\$ (793,519)	\$	(793,519)	\$ (793,520)	\$	0
2023	5.0		2,649,286		2,119,429		1,589,572	529,857	529,857	529,857		529,858	0		0
2022	5.0		11,413,779		6,848,267		4,565,511	2,282,756	2,282,756	2,282,755		0	0		0
2021	5.0		(21,993,929)		(8,797,571)		(4,398,785)	(4,398,786)	(4,398,785)	0		0	0		0
2020	5.0		6,607,778	_	1,321,554	_	0	1,321,554	0	0	_	0	 0		0
Net Change i	n Pension Expen	se		\$	(2,475,917)	\$	(1,417,779)	\$(1,058,138)	\$(2,379,691)	\$ 2,019,093	\$	(263,661)	\$ (793,520)	\$	0



SECTION VII – GASB 67 AND 68 DISCLOSURES

The annual pension expense recognized by TriMet can be calculated two different ways. First, it is the change in the amounts reported on TriMet's Statement of Net Position that relate to the Plan and are not attributable to employer contributions. That is, it is the change in NPL plus the changes in deferred outflows and inflows plus employer contributions.

Alternatively, annual pension expense can be calculated by its components. While GASB does not require or suggest organizing the individual components shown in the table below, we believe it helps to understand the level and volatility of pension expense.

Table VII-9

Calculation	of	Pension Ex	kpei	nse		
		Meas	sure	ment Year Ei	nding	
		2025		2024	C	2023
Change in Net Pension Liability	\$	1,287,678	\$	840,353	\$	10,181,726
Change in Deferred Outflows		0		1,491,679		(1,491,679)
Change in Deferred Inflows		(2,379,691)		1,417,779		(519,934)
Employer Contributions		726,636	_	700,000		0
Pension Expense	\$	(365,377)	\$	4,449,811	\$	8,170,113
Operating Expenses						
Service cost	\$	503,497	\$	513,510	\$	553,735
Employee contributions		0		0		0
Administrative expenses		100,000		86,153		108,116
Total	\$	603,497	\$	599,663	\$	661,851
Financing Expenses						
Interest cost	\$	9,996,469	\$	9,783,232	\$	9,401,566
Expected return on assets		(8,585,652)		(8,421,858)		(8,627,338)
Total	\$	1,410,817	\$	1,361,374	\$	774,228
Changes						
Benefit changes	\$	0	\$	0	\$	0
Recognition of assumption changes		0		0		0
Recognition of liability gains and losses		0		3,546,912		6,096,361
Recognition of investment gains and losses		(2,379,691)		(1,058,138)		637,673
Total	\$	(2,379,691)	\$	2,488,774	\$	6,734,034
Pension Expense	\$	(365,377)	\$	4,449,811	\$	8,170,113

Figures for the 2025 measurement year are projected



SECTION VII – GASB 67 AND 68 DISCLOSURES

Operating expenses are items directly attributable to the operation of the plan during the measurement year. Service cost less employee contributions represents the increase in employer-provided benefits attributable to the year, and administrative expenses are the cost of operating the plan for the year.

Financing expenses equal the interest on the Total Pension Liability less the expected return on assets. Since the discount rate is equal to the long-term expected return on assets, the financing expense is primarily the interest on the Net Pension Liability with an adjustment for the difference between the interest on the service cost and contributions.

The recognition of changes drives most of the volatility in pension expense from year to year. Changes include any changes in benefits made during the year and the recognized amounts due to assumption changes, gains or losses on the TPL, and investment gains or losses.

The total pension expense decreased by about \$3.7 million from the prior year. While financing expenses increased by \$0.6 million, operating expenses and the recognition of changes decreased by \$4.3 million due to the reduction in the recognition of liability losses and the recognition of investment gains.

The projected expense for FYE 2025 reflects a decrease in service cost as members are expected to retire, a slight increase in financing expenses, and a decrease in recognition of changes as the 2024 liability losses and 2019 investment losses are fully recognized this year. Actual experience during FYE 2025 may have a significant impact on this projection.



APPENDIX A – MEMBERSHIP INFORMATION

Data Assumptions and Methods

In preparing our data, we relied on information supplied by TriMet. This information includes but is not limited to, plan provisions, employee data, and financial information. Our methodology for obtaining the data used for the valuation is based upon the following assumptions and practices:

- All active employees are assumed to accrue a full year of service in all future years.
- The most recent annual salary for actives is calculated to be "Hourly Rate" multiplied by 2,080.
- The annual benefit for inactives is set to be the accrued benefit provided. If an accrued benefit is not provided, then the annual benefit is calculated to be 1.75% of final compensation per year of credited service, plus one half of the hours in their Sick Leave Bank, divided by 101.9, multiplied by their "Hourly Rate." The final compensation is adjusted for a three-year average.

Table A-1

Active	Me	ember Data			
	Ju	ne 30, 2024	Ju	ne 30, 2023	% Change
Count					
Accruing Service		32		38	-15.8%
Frozen Service		13		13	0.0%
Total		45		51	-11.8%
Average Current Age		58.1		58.0	0.2%
Average Eligibility Service		28.5		27.7	2.9%
Average Benefit Service		20.0		19.5	2.6%
Annual Expected Pensionable Earnings	\$	6,885,451	\$	7,058,984	-2.5%
Average Expected Pensionable Earnings	\$	153,010	\$	138,411	10.5%



Table A-2

In Pay	Statu	ıs Member I	Data		
	Ju	ne 30, 2024	Ju	ne 30, 2023	% Change
Retired & Disabled					
Count		330		325	1.5%
Average Age		73.1		72.6	0.7%
Total Annualized Benefits	\$	9,500,228	\$	9,067,058	4.8%
Average Annual Benefit	\$	28,789	\$	27,899	3.2%
Beneficiaries & Alternate Payees					
Count		31		27	14.8%
Average Age		75.4		73.8	2.2%
Total Annualized Benefits	\$	375,065	\$	338,494	10.8%
Average Annual Benefit	\$	12,099	\$	12,537	- 3.5%
Total					
Count		361		352	2.6%
Average Age		73.3		72.7	0.8%
Total Annualized Benefits	\$	9,875,292	\$	9,405,552	5.0%
Average Annual Benefit	\$	27,355	\$	26,720	2.4%



Table A-3

Defe	erred Me	ember Dat	a		
	Jun	ne 30, 2024	Jun	ne 30, 2023	%Change
Vested Terminated Members					
Count		40		45	-11.1%
Average Age		59.1		59.0	0.2%
Total Annualized Benefits	\$	630,105	\$	657,473	-4.2%
Average Annual Benefit	\$	15,753	\$	14,611	7.8%
Transfers to Union					
Count		10		10	0.0%
Average Age		56.9		55.9	1.8%
Disability					
Count		0		0	N/A
Average Age					N/A
Deferred Beneficiaries					
Count		0		0	N/A
Average Age					N/A



Table A-4

		Cha	ange in P	lan Me	mbership				
	Active	Active Frozen	Terminated Vested	Transfer to Union	Transfer to Union - Disabled	Retiree	Beneficiary	Alternate Payee	Totals
June 30, 2023	38	13	45	9	1	325	22	5	458
New Entrants	0	0	0	0	0	0	0	0	0
Rehires	0	0	0	0	0	0	0	0	0
Vested Terminations	(1)	0	1	0	0	0	0	0	0
Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(4)	0	(6)	0	(1)	11	0	0	0
Deaths	0	0	0	0	0	(6)	0	0	(6)
New Beneficiaries	0	0	0	0	0	0	4	0	4
Benefit Ceased/Lump Sum	(1)	0	0	0	0	0	0	0	(1)
Transfers to Union	0	0	0	0	0	0	0	0	0
Adjustments	0	0	0	0	1	0	0	0	1
June 30, 2024	32	13	40	9	1	330	26	5	456



Table A-5

		I	Distribu	tion of A	ctive Mer	nbers as	of June 3	30, 2024			
Age	Under 1	1 to 4	5 to 9	10 to 14	Years of 15 to 19	Service 20 to 24	25 to 29	30 to 34	35 to 39 4	0 and up	Total
Under 45	0	0	0	0	0	0	0	0	0	0	0
45 to 49	1	1	0	0	1	0	0	0	0	0	3
50 to 54	0	6	1	0	1	3	1	0	0	0	12
55 to 59	0	0	2	2	1	2	3	4	1	0	15
60 to 64	0	0	1	0	0	7	0	1	1	1	11
65 to 69	0	0	0	1	1	1	0	0	0	0	3
70 and up	0	0	0	0	0	0	0	0	0	1	1
Total Count	1	7	4	3	4	13	4	5	2	2	45

Table A-6

	Dist	tribution	of Activ	e Membe	ers Avera	ge Expec	ted Salar	y as of J	une 30, 2	024	
					Years o	f Service					
Age	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 and up	Total
Under 45	0	0	0	0	0	0	0	0	0	0	0
45 to 49	129,102	204,116	0	0	148,890	0	0	0	0	0	160,703
50 to 54	0	157,074	148,925	0	127,420	192,514	139,349	0	0	0	161,307
55 to 59	0	0	158,954	133,869	119,116	107,985	157,835	137,145	221,669	0	144,299
60 to 64	0	0	154,923	0	0	153,291	0	148,108	172,125	156,190	154,944
65 to 69	0	0	0	132,024	129,212	153,168	0	0	0	0	138,135
70 and up	0	0	0	0	0	0	0	0	0	184,394	184,394
Avg. Salary	\$ 129,102	\$ 163,794	\$ 155,439	\$ 133,254	\$ 131,160	\$ 155,363	\$ 153,213	\$ 139,337	\$ 196,897	\$ 170,292	\$ 153,010



APPENDIX A – MEMBERSHIP INFORMATION

Chart A-1

Active Count Distribution

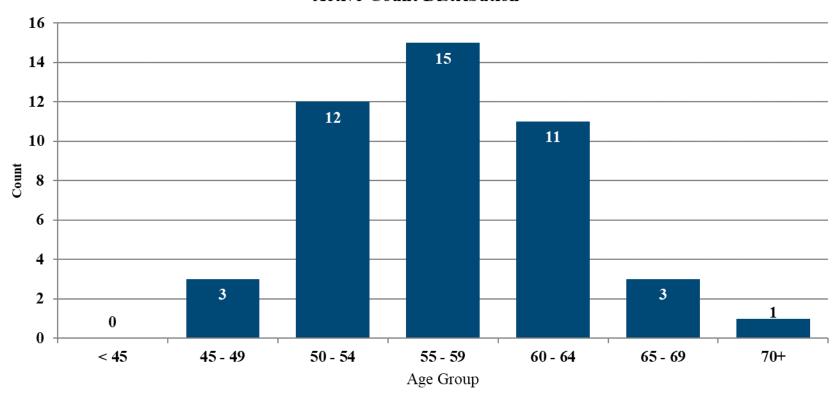




Table A-7

							ıd Ben	efit Ef	fective	Date
				as of Ju	ne 30, 2	2024				
FYE Benefit										
Effective U	nder 55	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 Plus	Total
Prior to 1997	0	0	0	0	1	0	1	1	4	7
1997	0	0	0	0	0	0	2	2	1	5
1998	0	0	0	0	0	0	1	0	1	2
1999	0	0	0	0	0	0	2	1	0	3
2000	0	0	0	0	0	0	0	1	0	1
2001	0	0	0	0	0	0	0	1	0	1
2002	0	0	0	0	0	1	2	0	0	3
2003	0	0	0	0	1	2	4	1	0	8
2004	0	0	0	0	1	3	9	1	0	14
2005	0	0	0	0	1	1	2	1	0	5
2006	0	0	0	0	2	2	4	0	0	8
2007	0	0	0	0	2	3	0	0	0	5
2008	0	0	0	0	4	11	1	0	0	16
2009	0	0	0	0	7	7	2	0	0	16
2010	0	0	0	0	5	6	0	0	0	11
2011	0	0	1	0	1	6	0	0	0	8
2012	0	0	0	0	19	4	0	0	0	23
2013	0	0	0	1	16	5	0	0	0	22
2014	0	0	0	2	19	3	0	0	0	24
2015	0	0	1	2	14	2	0	0	0	19
2016	0	0	0	1	13	1	1	0	0	16
2017	0	0	1	15	17	2	0	0	0	35
2018	0	0	4	17	7	2	0	0	0	30
2019	0	0	0	11	5	1	0	0	0	17
2020	0	0	2	14	3	0	0	1	0	20
2021	0	0	1	11	2	0	0	0	0	14
2022	0	0	5	3	1	0	0	0	1	10
2023	0	0	8	2	1	0	0	0	0	11
2024	0	0	3	2	1	0	0	1	0	7
Total	0	0	26	81	143	62	31	11	7	361
Average Age at	Dotino	nont		62.2						
0 0		nem		62.2 73.3						
Average Curre Average Annua	_	n	\$	27,355						



APPENDIX A – MEMBERSHIP INFORMATION

Chart A-2

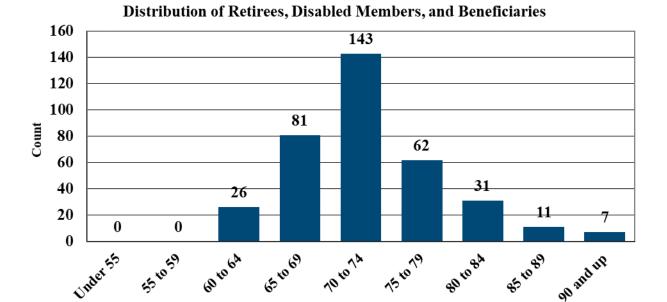
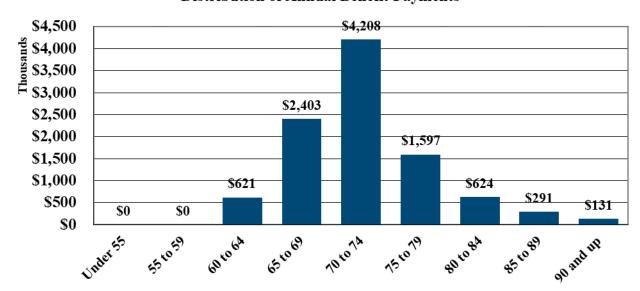


Chart A-3

Distribution of Annual Benefit Payments





APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial Assumptions

The inflation and salary increase assumptions were adopted by the trustees at their June 13, 2022 meeting based on our recommendations. Other actuarial assumptions were selected by the Plan trustees based on our analysis, review, and recommendations at the May 6, 2020 trustee meeting. Please refer to our presentations for the rationale for each assumption. More detail on the rationale for assumptions that were not changed can be found in the analyses performed by the prior actuary and communicated in letters dated May 14, 2015, February 18, 2016, and May 31, 2017.

1. Long-Term Expected Return on Assets (effective June 30, 2020)

6.00% compounded annually net of investment management and custodial fees.

2. Low-Default-Risk Obligation Measure Discount Rate (effective June 30, 2024)

The discount rate used to calculate the Low-Default-Risk Obligation Measure (LDROM) is calculated as the single equivalent rate (rounded to the nearest 10 basis points) from matching projected future benefit cash flows to the FTSE Pension Discount Curve as of June 30th. This curve was selected because it reflects the types of fixed income securities the Plan would likely invest in if the Trustees wanted to match cash flows. The single equivalent rate for this valuation is 5.30%.

3. Salary Increases (effective June 30, 2022)

3.00%, compounded annually.

4. Price Inflation (effective June 30, 2022)

2.75%, compounded annually.

5. Post-Retirement Benefit Increases (effective June 30, 2022)

2.475% (90% of price inflation), compounded annually and effective each April 1.

6. Administrative Expenses (effective June 30, 2016)

\$100,000 per year payable midyear.

7. Mortality (effective June 30, 2020)

Pre-Retirement and Pre-Disability: None.

Post-Retirement: PubG-2010(A) with generational projection using MP-2019.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

8. Rates of Retirement (effective June 30, 2015)

All active and disabled participants are assumed to retire by age 67. The assumed annual rates of retirement from active status are as follows:

	Active Rates	of Retirement	
Age	Rate	Age	Rate
55 – 57	2.0%	62	35.0%
58 - 60	7.0	63 – 66	30.0
61	15.0	67	100.0

Terminated vested members are assumed to retire at age 62, or present age if greater.

9. Form of Benefit (effective June 30, 2015)

Upon retirement, participants are assumed to elect the following form of payment:

Form of Payment	Election Rate
Single Life Annuity	50.0%
66 2/3% Joint & Survivor Annuity	50.0

10. Rates of Disability (effective June 30, 2015)

None.

11. Rates of Termination (effective June 30, 2015)

Participants are assumed to leave active employment for reasons other than retirement and death. Assumed termination rates are shown below:

Rates of Ter Years of	mination
Vesting Service	Rate
2 or less	12.0%
3 - 4	9.0
5 – 6	5.0
7 - 10	3.5
11 – 15	2.5
16 or more	1.0



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

12. Unused Sick Leave Benefits (effective June 30, 2020)

Active participants are assumed to increase their current bank of sick leave by 45 hours per year in future years. The schedule of maximum accumulated sick leave hours is shown in Appendix C. At retirement, active members are assumed to elect to convert their unused sick leave into a monthly annuity supplement.

13. Probability of Marriage/Domestic Partner (effective June 30, 2015)

85% of non-retired participants are assumed to be married or have a domestic partner.

14. Age of Spouse/Domestic Partner (effective June 30, 2015)

Spouses and domestic partners of male retirees are assumed to be female and three years younger than the retiree. Spouses and domestic partners of female retirees are assumed to be male and two years older than the retiree. Actual spouse demographic data is reflected following benefit commencement.

15. Changes Since the Last Valuation

The LDROM discount rate assumption was changed from 4.90% to 5.30%.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

Contribution Allocation Procedure (effective for FYE 2023 contributions)

The contribution allocation procedure determines a range of actuarially determined contribution amounts, including a Minimum contribution, a Maximum contribution, a Recommended contribution, and a Reasonable Actuarially Determined Contribution. Because the Plan has been closed to new entrants since April 27, 2003, and the Actuarial Liability is projected to begin declining as benefits are paid out, the Plan's funding policy differs significantly from what would be used for an ongoing pension plan. The objective of the funding policy is to maintain a well-funded pension plan without developing a surplus that could not be used efficiently until all benefits have been paid. Consequently, the funding policy targets maintaining a funded ratio between 80% and 90% rather than the normal target of 100%. The Recommended contribution is designed to target and maintain a funded ratio of 80%. Because the Actuarial Liability for the closed plan is expected to decline, the dollar amount of the UAL is also expected to decline as the funded ratio remains at 80%. Because a component of the Recommended contribution is to contribute the unfunded portion of the next year's benefit payments, contributing the Recommended contribution ensures that sufficient assets will accumulate to pay benefits when due. However, the UAL is not expected to be completely paid off until just before the last benefit is paid. Please refer to the GASB 67/68 crossover test in Appendix D for the full projection of benefits, contributions, and asset levels.

The contribution allocation procedure uses various components as described below. All components were adopted as part of the Plan's Funding Policy by the Trustees on July 31, 2023.

1. Actuarial Cost Method

The Entry Age Actuarial Cost Method was used for active employees, whereby the normal cost is computed as the level annual percentage of pay required to fund all benefits between each member's date of hire and last assumed date of employment. The Actuarial Liability is the difference between the present value of future benefits and the present value of future normal costs. Or, equivalently, it is the accumulation of normal costs for all periods prior to the valuation date. The normal cost and Actuarial Liability are calculated on an individual basis. The sum of the individual amounts is the normal cost and Actuarial Liability for the Plan. The Actuarial Liability for the Plan represents the target amount of assets the Plan should have as of the valuation date according to the actuarial cost method. The assumed administrative expenses are added to the normal cost each year.

2. Asset Valuation Method

The Actuarial Value of Assets is equal to the Market Value of Assets.

3. Amortization Method

Amortization payments are developed separately for amounts needed to reach an 80% funded ratio. If the funded ratio is less than 80%, the difference between 80% of the Actuarial Liability and the Market Value of Assets is amortized using a 10-year layered amortization as



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

a level dollar amount. Once the Plan reaches 80% funded, all amortization layers are eliminated.

4. Payment to Maintain Funded Status

For any UAL amount between 80% and 100% funding levels, a payment to maintain the funded status is calculated equal to the greater of (1) interest on this portion of the UAL and (2) the benefit payments expected to be made during the year multiplied by one minus the funded percentage.

5. Adjustments to Outputs

Funding Level	Less than 80%	80% to 90%	90% or More
Minimum Contribution	 Normal cost, plus Administrative expenses, plus 10-year layered amortization payment to reach 80%, plus The payment to maintain the funded status. 	• \$0.	• \$0.
Maximum Contribution	• The amount necessary to reach 80% funded in one year if all assumptions are met.	 Normal cost, plus Administrative expenses, plus The payment to maintain the funded status. 	• \$0.
Recommended Contribution	The greater of the Minimum Contribution or TriMet's budget for pension and OPEB trust contributions, but no greater than the Maximum Contribution.	Prorated based on funded percentage between Maximum contribution at 80% funded and Minimum Contribution at 90% funded.	• \$0.

As noted above, these methods are not designed to fund the Plan completely to 100% until just before the final benefits are paid. As such, the payments on the UAL under the Plan's Funding Policy may not always comply with Section 3.14 of Actuarial Standard of Practice No. 4.



APPENDIX B – ACTUARIAL ASSUMPTIONS AND METHODS

6. Reasonable Actuarially Determined Contribution

The Reasonable Actuarially Determined Contribution equals the Recommended contribution but cannot be less than normal cost plus administrative expenses plus an amortization payment on the UAL based on a 25-year amortization as a level real dollar amount. The 25-year period will decrease by one year in each future valuation until the period reaches 20 years.

7. Changes Since the Last Valuation

The minimum Reasonable ADC was increased from the Minimum contribution to the Recommended contribution and the amortization payment growth rate was reduced to assumed inflation. In addition, future amortization periods for the Reasonable ADC were scheduled to decrease until the period reaches 20 years.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

1. Eligibility

Prior to April 27, 2003: an employee became a participant upon being employed as an eligible employee and was regularly scheduled to work at least 20 hours per week.

On and after April 27, 2003: Employees hired on or after April 27, 2003 are not eligible to participate in this Plan. Active participants on April 27, 2003 with credited service prior to that date made an irrevocable election to either (1) continue earning benefits under this Plan after April 26, 2003 and not earn benefits under the Defined Contribution Plan, or (2) cease earning benefits under this Plan as of April 27, 2003 and earn future benefits under the Defined Contribution Plan.

Inactive participants who are rehired after April 26, 2003 may resume participation in the Plan if certain requirements are met. Employees hired prior to April 27, 2003 who are participants in the Pension Plan for Bargaining Unit Employees of TriMet ("Union Plan") may become participants in this Plan if they transfer to a management position.

An eligible employee is any management or staff (non-bargaining) common-law employee except those covered by a collective bargaining agreement that does not provide for participation in this Plan, leased employees, employees classified to work less than half time, employees hired on or after April 27, 2003, and employees who transferred their accrued benefit to the Defined Contribution Plan.

2. Credited Service

Credited service includes all periods of service while a participant in the Plan, including military service, authorized vacation, periods of disability (if entitled to benefits under the TriMet Long-Term Disability Policy), periods of service in the Oregon State Legislative Assembly, authorized leave of absence (subject to return to work rules), part time work (i.e., at least 20 but less than 40 hours per week), and work for predecessor employers.

Credited service does not include periods in which TriMet is required to make contributions to Oregon PERS or to any other state mandated retirement program, periods in which the employee is covered by another TriMet retirement plan (including the Defined Contribution Plan and the Union Plan), and service prior to a break in service.

Periods of service are measured in years and whole months. Each twelve month period of credited service equals one year of credited service and partial years are based on the number of complete months worked divided by 12. Part-time employees earn partial credited service based on the percentage of full-time employment.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

3. Vesting Service

All credited service plus any period of service (not already counted as credited service) when an employee is entitled to payment for services rendered to TriMet, excluding service preceding a permanent break in service.

Periods of service are measured in years and whole months. Each twelve-month period of vesting service equals one year of vesting service and partial years are based on the number of complete months worked divided by 12.

4. Contributions

Member 1

There are no member contributions.

Employer

TriMet makes contributions in accordance with its funding policy which is to be determined in accordance with accepted actuarial principles.

5. Normal Retirement

Eligibility

Age 62

Basic Benefit

The basic benefit is a monthly benefit payable for life equal to 1/12 of 1.75% of final average salary multiplied by credited service. Certain executives who became participants on or before July 1, 2008 receive a different percentage of final average earnings.

Final average salary means 1/3 of the 36 highest consecutive months of base earnings. If the employee is totally disabled, final average salary includes only base earnings paid prior to the onset of disability. Final average salary during a period when an employee is part-time is the employee's salary during the period divided by the percentage of time the part-time employee worked relative to a full-time employee.

Sick Leave Supplement

For participants who retire on or after July 1, 2000, hours of unused sick leave are converted to either a monthly annuity supplement or a lump sum distribution.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

- The monthly annuity supplement is equal to 50% of hours of sick leave multiplied by the final average hourly rate, divided by 101.9.
- The lump sum distribution is equal to 50% of hours of sick leave multiplied by the final average hourly rate, multiplied by 1.107.

The final average hourly rate is the participant's final average salary divided by 2,080.

Hours of sick leave are the lesser of the participant's hours of unused sick leave or the maximum hours of sick leave from the table below.

Effective	Maximum Hours of Sick Leave
July 1, 2000	1,400 hours
March 22, 2005	1,500 hours
December 1, 2005	1,550 hours
December 1, 2006	1,600 hours
December 1, 2007	1,650 hours
December 1, 2008	1,700 hours

6. Early Retirement

Eligibility

Age 55 and 5 years of vesting service.

Benefit

The normal retirement benefit is actuarially reduced.

7. Disability Retirement

The Plan does not provide for a disability benefit. However, participants who become entitled to receive disability benefits under the TriMet Long-Term Disability Policy continue to earn credited service toward their normal retirement benefit while disabled.

8. Termination Benefit

Eligibility

5 Years of vesting service.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

Benefit

Normal retirement benefit commencing at age 62 or early retirement benefit commencing as early as age 55.

9. Forms of Payment

The following forms of payment are available:

- Single Life Annuity
- 66-2/3% Joint and Survivor Annuity
- Lump Sum

10. Pre-Retirement Death Benefit

The monthly payment payable to the surviving spouse or domestic partner of a vested participant is equal to the survivor portion of the 66 2/3% joint and survivor annuity which the spouse or domestic partner would have received had the participant retired at the time of his or her death (if eligible for retirement), otherwise as if the participant terminated employment on his or her date of death (if not already terminated), survived to the earliest age at which he or she could have elected to retire, retired with a 66 2/3% joint and survivor annuity, and died the following day.

The payment to the surviving spouse commences on the later of the participant's normal retirement date, or the participant's date of death. However, the spouse may commence actuarially reduced benefits following the earliest date the participant could have elected early retirement.

The payment to the domestic partner must commence no later than the December 31 of the calendar year following the participant's death. If the commencement date is earlier than the participant's age 55, the survivor benefit will be actuarial reduced to the commencement date.

11. Post-retirement Cost-of-Living Benefit

Post-retirement benefits for participants who retire after May 31, 1984 are increased each April 1 by 90% of the percentage increase in the U.S. Urban Wage Earners and Clerical Workers Consumer Price Index (CPI-W) (annual average) for the previous calendar year. Annual increases will not be more than 7% per year and benefits will not be decreased if the annual CPI decreases.

12. Changes Since the Last Valuation

None.



APPENDIX C – SUMMARY OF PLAN PROVISIONS

Note: The summary of major plan provisions is designed to outline principal plan benefits. If TriMet should find the plan summary not in accordance with the actual provisions, the actuary should immediately be alerted so the proper provisions are valued.



APPENDIX D – GASB 67/68 CROSSOVER TEST

FYE	Projected Beginning Fiduciary Net Position	Projected Contribution	Projected Admin Expenses	Projected Benefit Payments	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2025	147,813,867	728,501	100,000	10,205,494	8,585,707	146,822,581	10,205,494	0
2026	146,822,581	915,199	102,750	10,728,233	8,516,214	145,423,011	10,728,233	0
2027	145,423,011	1,099,519	105,577	11,217,165	8,423,151	143,622,940	11,217,165	0
2028	143,622,940	1,279,947	108,480	11,622,443	8,308,414	141,480,377	11,622,443	0
2029	141,480,377	1,462,597	111,464	12,035,433	8,172,963	138,969,041	12,035,433	0
2030	138,969,041	1,635,561	114,529	12,329,442	8,018,613	136,179,243	12,329,442	0
2031	136,179,243	1,803,483	117,678	12,581,913	7,848,633	133,131,769	12,581,913	0
2032	133,131,769	1,953,037	120,914	12,860,861	7,661,863	129,764,894	12,860,861	0
2033	129,764,894	2,085,028	124,239	13,077,328	7,457,255	126,105,610	13,077,328	0
2034	126,105,610	2,215,493	127,656	13,271,945	7,235,701	122,157,203	13,271,945	0
2035	122,157,203	2,339,664	131,166	13,453,687	6,996,991	117,909,005	13,453,687	0
2036	117,909,005	2,429,326	134,774	13,458,301	6,744,506	113,489,762	13,458,301	0
2037	113,489,762	2,495,406	134,496	13,430,505	6,482,135	108,902,303	13,430,505	0
2038	108,902,303	2,539,367	133,899	13,370,884	6,209,967	104,146,854	13,370,884	0
2039	104,146,854	2,562,754	132,384	13,219,675	5,929,847	99,287,396	13,219,675	0
2040	99,287,396	2,567,564	130,286	13,010,177	5,644,677	94,359,175	13,010,177	0
2041	94,359,175	2,560,733	128,136	12,795,519	5,355,191	89,351,444	12,795,519	0
2042	89,351,444	2,527,765	125,057	12,487,971	5,062,936	84,329,116	12,487,971	0
2043	84,329,116	2,478,060	121,472	12,129,996	4,770,816	79,326,524	12,129,996	0
2044	79,326,524	2,416,520	117,702	11,753,512	4,480,082	74,351,913	11,753,512	0
2045	74,351,913	2,339,413	113,287	11,312,654	4,192,490	69,457,874	11,312,654	0
2046	69,457,874	2,251,747	108,568	10,841,496	3,910,324	64,669,881	10,841,496	0
2047	64,669,881	2,155,532	103,596	10,344,939	3,635,027	60,011,905	10,344,939	0
2048	60,011,905	2,052,739	98,424	9,828,500	3,367,930	55,505,650	9,828,500	0
2049	55,505,650	1,945,247	93,113	9,298,066	3,110,215	51,169,933	9,298,066	0
2050	51,169,933	1,834,854	87,723	8,759,836	2,862,879	47,020,108	8,759,836	0
2051	47,020,108	1,723,239	82,317	8,219,995	2,626,709	43,067,744	8,219,995	0
2052	43,067,744	1,611,901	76,953	7,684,380	2,402,269	39,320,581	7,684,380	0
2053	39,320,581	1,502,148	71,684	7,158,259	2,189,904	35,782,689	7,158,259	0
2054	35,782,689	1,395,051	66,555	6,646,090	1,989,757	32,454,852	6,646,090	0



APPENDIX D – GASB 67/68 CROSSOVER TEST

FYE	Projected Beginning Fiduciary Net Position	Projected Contribution	Projected Admin Expenses	Projected Benefit Payments	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2055	32,454,852	1,291,462	61,602	6,151,459	1,801,794	29,335,047	6,151,459	0
2056	29,335,047	1,191,978	56,849	5,676,912	1,625,834	26,419,098	5,676,912	0
2057	26,419,098	1,096,996	52,315	5,224,142	1,461,588	23,701,225	5,224,142	0
2058	23,701,225	1,006,708	48,006	4,793,922	1,308,693	21,174,697	4,793,922	0
2059	21,174,697	921,124	43,924	4,386,227	1,166,744	18,832,414	4,386,227	0
2060	18,832,414	840,160	40,062	4,000,618	1,035,328	16,667,222	4,000,618	0
2061	16,667,222	763,631	36,413	3,636,161	914,036	14,672,316	3,636,161	0
2062	14,672,316	691,324	32,965	3,291,836	802,485	12,841,325	3,291,836	0
2063	12,841,325	623,073	29,710	2,966,831	700,313	11,168,170	2,966,831	0
2064	11,168,170	558,722	26,642	2,660,406	607,170	9,647,014	2,660,406	0
2065	9,647,014	498,165	23,754	2,372,064	522,721	8,272,082	2,372,064	0
2066	8,272,082	441,346	21,044	2,101,510	446,623	7,037,497	2,101,510	0
2067	7,037,497	384,509	18,511	1,848,502	378,423	5,933,416	1,848,502	0
2068	5,933,416	339,458	16,153	1,613,055	317,876	4,961,542	1,613,055	0
2069	4,961,542	293,695	13,974	1,395,459	264,708	4,110,512	1,395,459	0
2070	4,110,512	251,743	11,977	1,195,993	218,362	3,372,647	1,195,993	0
2071	3,372,647	213,646	10,163	1,014,883	178,371	2,739,618	1,014,883	0
2072	2,739,618	179,431	8,534	852,248	144,234	2,202,501	852,248	0
2073	2,202,501	149,061	7,089	707,903	115,419	1,751,990	707,903	0
2074	1,751,990	122,442	5,822	581,407	91,379	1,378,581	581,407	0
2075	1,378,581	99,428	4,727	472,061	71,559	1,072,781	472,061	0
2076	1,072,781	79,798	3,793	378,807	55,415	825,394	378,807	0
2077	825,394	63,288	3,007	300,396	42,425	627,704	300,396	0
2078	627,704	49,600	2,357	235,386	32,100	471,662	235,386	0
2079	471,662	38,406	1,824	182,230	23,994	350,008	182,230	0
2080	350,008	29,375	1,395	139,365	17,708	256,331	139,365	0
2081	256,331	22,190	1,053	105,261	12,893	185,099	105,261	0
2082	185,099	16,546	786	78,470	9,252	131,642	78,470	0
2083	131,642	12,164	578	57,679	6,536	92,085	57,679	0
2084	92,085	8,806	418	41,745	4,539	63,267	41,745	0



APPENDIX D – GASB 67/68 CROSSOVER TEST

FYE	Projected Beginning Fiduciary Net Position	Projected Contribution	Projected Admin Expenses	Projected Benefit Payments	Projected Investment Earnings	Projected Ending Fiduciary Net Position	"Funded" Portion of Benefit Payments	"Unfunded" Portion of Benefit Payments
2085	63,267	6,269	298	29,711	3,094	42,621	29,711	0
2086	42,621	4,381	208	20,755	2,067	28,106	20,755	0
2087	28,106	3,000	142	14,212	1,351	18,103	14,212	0
2088	18,103	2,008	95	9,510	862	11,368	9,510	0
2089	11,368	1,308	62	6,192	536	6,957	6,192	0
2090	6,957	830	39	3,927	325	4,146	3,927	0
2091	4,146	512	24	2,421	192	2,405	2,421	0
2092	2,405	306	14	1,447	110	1,359	1,447	0
2093	1,359	179	8	845	62	747	845	0
2094	747	101	5	478	34	398	478	0
2095	398	56	3	261	18	207	261	0
2096	207	31	2	139	9	106	139	0
2097	106	15	1	74	5	51	74	0
2098	51	8	1	38	2	23	38	0
2099	23	5	1	19	1	9	19	0
2100	9	2	0	9	0	3	9	0
2101	3	1	0	3	0	1	3	0
2102	1	0	0	1	0	0	1	0
2103	0	0	0	0	0	0	0	0



APPENDIX E – GLOSSARY OF TERMS

1. Actuarial Liability

The Actuarial Liability is the difference between the present value of future benefits and the present value of total future normal costs. This is also referred to as the "accrued liability" or "actuarial accrued liability." The Actuarial Liability represents the targeted amount of assets a plan should have as of a valuation date according to the actuarial cost method.

2. Actuarial Assumptions

Estimates of future experience with respect to rates of mortality, disability, turnover, retirement rate or rates of investment income, and salary increases. Demographic actuarial assumptions (rates of mortality, disability, turnover, and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (price inflation, wage inflation, and investment income) are generally based on expectations for the future that may differ from the Plan's past experience.

3. Actuarial Cost Method

A mathematical budgeting procedure for allocating the dollar amount of the present value of future benefits between future normal cost and Actuarial Liability.

4. Actuarial Gain (Loss)

The difference between actual experience and the anticipated experience based on the actuarial assumptions during the period between two actuarial valuation dates.

5. Actuarial Present Value

The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at the discount rate and by probabilities of payment.

6. Actuarial Valuation Date

The date as of which an actuarial valuation is performed. For GASB purposes, this date may be up to 24 months prior to the GASB 67/68 measurement date and up to 30 months prior to the employer's financial reporting date.

7. Actuarially Determined Contribution

The payment to the Plan as determined by the actuary using a contribution allocation procedure. It may or may not be the actual amount contributed to the Plan.



APPENDIX E – GLOSSARY OF TERMS

8. Amortization Method

A method for determining the amount, timing, and pattern of payments on the Unfunded Actuarial Liability.

9. Asset Valuation Method

The method used to develop the Actuarial Value of Assets from the Market Value of Assets typically by smoothing investment returns above or below the assumed rate of return over a period of time.

10. Contribution Allocation Procedure

A procedure typically using an actuarial cost method, an asset valuation method, and an amortization method to develop the Actuarially Determined Contribution.

11. Deferred Inflow of Resources

An acquisition of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience gains on the Total Pension Liability, assumption changes reducing the Total Pension Liability, or investment gains that are recognized in future reporting periods.

12. Deferred Outflow of Resources

A consumption of net assets by a government employer that is applicable to a future reporting period. In the context of GASB 68, these are experience losses on the Total Pension Liability, assumption changes increasing the Total Pension Liability, or investment losses that are recognized in future reporting periods.

13. Discount Rate

The rate of interest used to discount future benefit payments to determine the actuarial present value. For purposes of determining an Actuarially Determined Contribution, the discount rate is typically based on the long-term expected return on assets.

14. Entry Age Actuarial Cost Method

The actuarial cost method required for GASB 67 and 68 calculations. Under this method, the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this actuarial present value allocated to a valuation year is called the service cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future service costs is called the Total Pension Liability.



APPENDIX E – GLOSSARY OF TERMS

15. Funded Status or Funding Ratio

The Market or Actuarial Value of Assets divided by the Actuarial Liability. For purposes of this report, the funded status represents the proportion of the actual assets compared to the target established by the actuarial cost method as of the valuation date. These measures are for contribution budgeting purposes and are not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.

16. Measurement Date

The date as of which the Total Pension Liability and Plan Fiduciary Net Position are measured. The Total Pension Liability may be projected from the actuarial valuation date to the measurement date. The measurement date must be the same as the reporting date for the plan.

17. Net Pension Liability

The liability of employers and non-employer contributing entities to plan members for benefits provided through a defined benefit pension plan. It is calculated as the Total Pension Liability less the Plan Fiduciary Net Position.

18. Normal Cost

The portion of the present value of future benefits allocated to the current year by the actuarial cost method.

19. Plan Fiduciary Net Position

The fair or Market Value of Assets.

20. Present Value of Future Benefits

The actuarial present value of all benefits both earned as of the valuation date and expected to be earned in the future by current plan members based on current plan provisions and actuarial assumptions.

21. Reporting Date

The last day of the plan or employer's fiscal year.

22. Service Cost

The portion of the actuarial present value of projected benefit payments that is attributed to the current period of employee service in conformity with the requirements of GASB 67 and



APPENDIX E – GLOSSARY OF TERMS

68. The service cost is the normal cost calculated under the Entry Age Actuarial Cost Method.

23. Total Pension Liability

The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB 67 and 68. The Total Pension Liability is the Actuarial Liability calculated under the Entry Age Actuarial Cost Method.

24. Unfunded Actuarial Liability (UAL)

The Unfunded Actuarial Liability is the difference between Actuarial Liability and either the Market or the Actuarial Value of Assets. This value is sometimes referred to as "unfunded actuarial accrued liability." It represents the difference between the actual assets and the amount of assets expected by the actuarial cost method as of the valuation date.





Classic Values, Innovative Advice